2019





GUIDE D'ACHAT POUR VOS PRODUITS INDUSTRIELS

BERCOR
industriel inc.

Tél.: 819.820.7477

www.bercor.ca





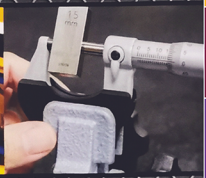


Table of Contents

SECTION	CATEGORY
A	Cutting Tools
B	Carbide
C	Abrasives
D	Measuring Tools
E	Power Tools
F	Hand Tools
G	Chemicals
H	Plant & Safety
I	Material Handling
J	Workholding
K	Machinery
L	Index

Fractional, Number, Letter and Metric Sizes

Recommended Tap Drill Sizes Based on Approximately 75% Thread

Inch	Decimal	Wire	mm	Tap sizes to be used with drills as indicated
	.0059	97	.15	
	.0063	96	.16	
	.0067	95	.17	
	.0071	94	.18	
	.0075	93	.19	
	.0079	92	.20	
	.0083	91	.21	
	.0087	90	.22	
	.0091	89	.23	
	.0094		.24	
	.0095	88		
	.0098		.25	
	.0100	87		
	.0102		.26	
	.0105	86		
	.0106		.27	
	.0110	85	.28	
	.0114		.29	
	.0115	84		
	.0118		.30	
	.0120	83		
	.0125	82		
	.0126		.32	
	.0130	81		
	.0134		.34	
	.0135	80		
	.0138		.35	
	.0142		.36	
	.0145	79		
	.0150		.38	
1/64	.0156			
	.0157		.40	
	.0160	78		
	.0165		.42	
	.0173		.44	
	.0177		.45	
	.0180	77		
	.0181		.46	
	.0189		.48	
	.0197		.50	
	.0200	76		
	.0210	75		
	.0217		.55	
	.0225	74		
	.0236		.60	
	.0240	73		
	.0250	72		
	.0256		.65	
	.0260	71		
	.0276		.70	
	.0280	70		
	.0292	69		
	.0295		.75	
	.0310	68		
1/32	.0312			
	.0315		.80	
	.0320	67		
	.0330	66		
	.0335		.85	
	.0350	65		
	.0354		.90	
	.0360	64		
	.0370	63		
	.0374		.95	
	.0380	62		
	.0390	61		
	.0394		1.00	
	.0400	60		
	.0410	59		
	.0413		1.05	
	.0420	58		
	.0430	57		
	.0433		1.10	
	.0453		1.15	
	.0465	56		#0-80
3/64	.0469		1.20	
	.0472			
	.0492		1.25	
	.0512		1.30	
	.0520	55		
	.0531		1.35	
	.0550	54		#1-64
	.0551		1.40	
	.0571		1.45	
	.0591		1.50	
	.0595	53		#1-72
	.0610		1.55	
1/16	.0625			
	.0630		1.60	
	.0635	52		
	.0650		1.65	
	.0669		1.70	
	.0670	51		#2-56
	.0689		1.75	
	.0700	50		#2-64
	.0709		1.80	
	.0728		1.85	
	.0730	49		
	.0748		1.90	
	.0760	48		#3-48
	.0768		1.95	
5/64	.0781			
	.0785	47		
	.0787		2.00	
	.0807		2.05	
	.0810	46		#3-56
	.0820	45		
	.0827		2.10	
	.0846		2.15	
	.0860	44		#4-40
	.0866		2.20	
	.0886		2.25	
	.0890	43		
	.0906		2.30	
	.0925		2.35	
	.0935	42		#4-48
3/32	.0938			
	.0945		2.40	
	.0960	41		
	.0965		2.45	
	.0980	40		#5-40
	.0984		2.50	
	.0995	39		
	.1015	38		#5-44
	.1024		2.60	
	.1040	37		
	.1063		2.70	
	.1065	36		#6-32
	.1083		2.75	
7/64	.1094			
	.1100	35		
	.1102		2.80	
	.1110	34		#6-40
	.1130	33		
	.1142		2.90	
	.1160	32		
	.1181		3.00	
	.1200	31		
	.1220		3.10	
1/8	.1250			5/32-32NS
	.1260		3.20	
	.1280		3.25	
	.1285	30		5/32-36NS
	.1299		3.30	
	.1339		3.40	
	.1360	29		#8-32
	.1378		3.50	
	.1405	28		
9/64	.1406			
	.1417		3.60	
	.1440	27		
	.1457		3.70	
	.1470	26		#10-24
	.1476		3.75	
	.1495	25		
	.1496		3.80	
	.1520	24		
	.1535		3.90	
	.1540	23		
5/32	.1562			
	.1570	22		#10-32
	.1575		4.00	
	.1590	21		
	.1610	20		
	.1614		4.10	
	.1654		4.20	
	.1660	19		
	.1673		4.25	
	.1693		4.30	
	.1695	18		
11/64	.1719			
	.1730	17		
	.1732		4.40	#12-24
	.1770	16		
	.1772		4.50	7/32-24NS
	.1800	15		
	.1811		4.60	#12-28
	.1820	14		
	.1850	13	4.70	
	.1870		4.75	
3/16	.1875			
	.1890	12	4.80	
	.1910	11		7/32-32NS
	.1929		4.90	
	.1935	10		
	.1960	9		
	.1969		5.00	
	.1990	8		
	.2008		5.10	
	.2010	7		
13/64	.2031			1/4-20
	.2040	6		
	.2047		5.20	
	.2055	5		
	.2067		5.25	
	.2087		5.30	
	.2090	4		
	.2126		5.40	
	.2130	3		
	.2165		5.50	1/4-28
7/32	.2188			
	.2205		5.60	
	.2210	2		
	.2244		5.70	
	.2264		5.75	
	.2280	1		
	.2283		5.80	
	.2323		5.90	
	.2340	A		
15/64	.2344			
	.2362		6.00	
	.2380	B		
	.2402		6.10	
	.2420	C		
	.2441		6.20	
	.2460	D		
	.2461		6.25	
	.2480		6.30	
	.2500	E		
1/4	.2520			
	.2559		6.50	
	.2570	F		
	.2598		6.60	5/16-18NC
	.2610	G		
	.2638		6.70	
17/64	.2656			
	.2657		6.75	
	.2660	H		
	.2677		6.80	
	.2717		6.90	5/16-24NF
	.2720	I		
	.2756		7.00	
	.2770	J		
	.2795		7.10	
	.2810	K		5/16-32NS
9/32	.2812			
	.2835		7.20	
	.2854		7.25	
	.2874		7.30	
	.2900	L		
	.2913		7.40	
	.2950	M		
	.2953		7.50	
19/64	.2969			
	.2992		7.60	
	.3020	N		
	.3031		7.70	
	.3051		7.75	
	.3071		7.80	
	.3110		7.90	3/8-16NC
5/16	.3125			
	.3150		8.00	
	.3160	O		
	.3189		8.10	
	.3228		8.20	
	.3230	P		
	.3248		8.25	
	.3268		8.30	
21/64	.3281			
	.3307		8.40	3/8-24NF
	.3320	Q		
	.3346		8.50	
	.3386		8.60	1/8-27 Pipe
	.3390	R		
	.3425		8.70	
11/32	.3438			
	.3445		8.75	
	.3465		8.80	
	.3480	S		
	.3504		8.90	
	.3543		9.00	
	.3580	T		
	.3583		9.10	
23/64	.3594			
	.3622		9.20	
	.3642		9.25	
	.3661		9.30	7/16-14NC
	.3680	U		
	.3701		9.40	
	.3740		9.50	
3/8	.3750			
	.3770	V		
	.3780		9.60	
	.3819		9.70	
	.3839		9.75	
	.3858		9.80	7/16-20
	.3860	W		
	.3898		9.90	
25/64	.3906			
	.3937		10.00	
	.3970	X		
	.4040	Y		
13/32	.4062			
	.4130	Z		
	.4134		10.50	1/2-13
27/64	.4219			
	.4331		11.00	1/4-18 Pipe
7/16	.4375			
	.4528		11.50	1/2-20
29/64	.4531			
15/32	.4688			
	.4724		12.00	9/16-12
31/64	.4844			
	.4921		12.50	
1/2	.5000			
	.5118		13.00	
33/64	.5156			9/16-18
17/32	.5312			5/8-11
	.5315		13.5	
35/64	.5469			
	.5512		14.0	
9/16	.5625			5/8-18NF
	.5709		14.5	
37/64	.5781			
	.5906		15.0	3/8-18 Pipe
19/32	.5938			
39/64	.6094			
	.6102		15.5	
5/8	.6250			11/16-16NS
	.6299		16.0	
41/64	.6406			
	.6496		16.5	
21/32	.6562			3/4-10NC
	.6693		17.0	
43/64	.6719			
11/16	.6875			3/4-16NF
45/64	.7031			
	.7087		18.0	
23/32	.7188			1/2-14 Pipe
	.7283		18.5	
47/64	.7344			
	.7480		19.0	
3/4	.7500			
49/64	.7656			7/8-9NC
	.7677		19.5	
25/32	.7812			
	.7874		20.0	
	.7969			
	.8071		20.5	
13/16	.8125			7/8-14NF
	.8268		21.0	
53/64	.8281			
27/32	.8438			
	.8465		21.5	
55/64	.8594			
	.8661		22.0	
7/8	.8750			1-8NC
	.8858		22.5	
57/64	.8906			
	.9055		23.0	
29/32	.9062			
59/64	.9219			3/4-14 Pipe
	.9252		23.5	
15/16	.9375			1-14 NF
	.9449		24.0	
61/64	.9531			
	.9646		24.5	
31/32	.9688			
	.9843		25.0	
63/64	.9844			1-1/8-7NC
1	1.0000			
	1.0039		25.5	
1-1/64	1.0156			
	1.0236		26.0	
1-1/32	1.0312			
	1.0433		26.5	
1-3-64	1.0469			1-1/8-12NF
1-1/16	1.0625			
	1.0630		27.0	
1-5/64	1.0781			
	1.0827		27.5	
1-3/32	1.0938			
	1.1024		28.0	
1-7/64	1.1094			1-1/4-7NC
	1.1220		28.5	
1-1/8	1.1250			
1-9/64	1.1406			
	1.1417		29.0	
1-5/32	1.1562			1-11-1/2 Pipe
	1.1614		29.5	
1-11/64	1.1719			1-1/4-12NF

Cutting Tools



Broaches & Sets....A364-A366
Burrs & Routers....A367-A378
Center Drills....A107-A111
Chamfering Mills....A121-A123, A346
Corner Rounding End Mills A347-A348
Counterbores & Pilots A124-A128
Countersinks....A112-A121
Deburring - Hand....A378-A386
Deburring - Hole....A105-A106
Die Stocks & Holders A225
Dies A218-A220
Drill & Reamer Blanks A32-A33
Drill Extension Systems....A104
Drill Mills A345-A346
Drill Sets A4-A6
Drills - Carbide A61-A68
Drills - Carbide - High Performance A69-A89
Drills - Carbide Tipped....A58-A60
Drills - High Speed Steel & Cobalt....A7-A57
Drills - Spade....A90-A103
Drills - Spotting & Centering....A107-A111
Drills - Steps....A126
End Mills - Carbide A256-A290
End Mills - Carbide - High Performance A305-A344
End Mills - Corner Rounding....A347-A348
End Mills - High Speed Steel & Cobalt ..A228-A255
End Mills - Miniature....A291-A304
End Mills - Roughing....A245-A254, A340-A344
End Mills - Tapered A255
Keyseat Cutters....A349-A352
Milling Cutters - Arbor Type....A356-A363
Milling Cutters - Shank Type A352-A356
Miniature End Mills....A291-A305
Reamers....A129-A146
Saws - Milling A361-A363
Spade Drill Blades & Holders....A90-A103
Tap & Die Sets A215-A217
Tap Extractors A226-A227
Tapping Tools & Accessories....A224-A225
Taps - Extension & Pulley A111-A173
Taps - General Purpose A146-A177
Taps - High Performance A178-A211
Taps - Pipe A174-A177
Taps - Screw Thread Insert (STI)....A167-A170
Thread Mills....A212-A214
Thread Repair A221-A223

118° Standard Point High Speed Steel Jobber Drill Sets

- Complete with index
- Drills ground from solid

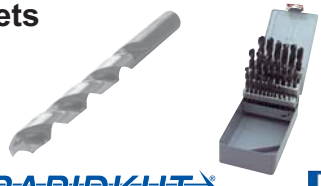


			Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
No. of Pieces	Set Range	Finish	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
13	1/16" - 1/4" by 64ths	Bright Finish	MT1218148	Price	AP50C164H	Price	-	-	-	-
13	1/16" - 1/4" by 64ths	Surface Treated	MT1218105	Price	-	-	-	-	AP50029B	Price
21	1/16" - 3/8" by 64ths	Bright Finish	MT1218143	Price	-	-	-	-	-	-
21	1/16" - 3/8" by 64ths	Surface Treated	MT1218100	Price	-	-	-	-	-	-
21	1/16" - 3/8" by 64ths	Roll Forged	-	-	-	-	-	-	AP50S21E	Price
15	1/16" - 1/2" by 32nds	Bright Finish	MT1218145	Price	AP50C163H	Price	PT2790163	Price	AP50C163SP	Price
15	1/16" - 1/2" by 32nds	Surface Treated	MT1218102	Price	AP50C163HB	Price	PT2799978	Price	AP50C163S	Price
29	1/16" - 1/2" by 64ths	Bright Finish	MT1218144	Price	AP50C162H	Price	PT2790162	Price	AP50E29P	Price
29	1/16" - 1/2" by 64ths	Surface Treated	MT1218101	Price	AP50C162HB	Price	PT2799977	Price	AP50E29	Price
29	1/16" - 1/2" by 64ths	TiN Coated	MT1218183	Price	-	-	-	-	AP50C162TI	Price
29	1/16" - 1/2" by 64ths	Bright Finish-LH	MT1218005†	316.92	-	-	-	-	-	-
29	1/16" - 1/2" by 64ths	Surface Treated	-	-	-	-	PT2799935†	392.70	-	-
13	1mm - 7mm by .5mm	Surface Treated	MT1218108	Price	-	-	-	-	-	-
25	1mm - 13mm by .5mm	Bright Finish	-	-	-	-	PT2799987	Price	AP50EC2AH	Price
25	1mm - 13mm by .5mm	Surface Treated	MT1218107	Price	-	-	-	-	AP50EC2AHB	Price

† Left hand

135° Heavy Duty Split Point High Speed Steel Jobber Drill Sets

- Complete with metal index
- Drills ground from solid



			Morse Cutting Tools		Rapidkut		Price	
No. of Pieces	Set Range	Finish	Order No.	Price	Order No.	Price	Order No.	Price
29	1/16" - 1/2" by 64ths	Gold & Black Finish	MT1218182	Price	AP50DY162HD	Price	-	-
29	1/16" - 1/2" by 64ths	Surface Treated	MT1218172	Price	AP50C162HDSP	Price	AP50E29HD	Price

118º Standard & 135° Split Point Wire Gage High Speed Steel Jobber Drill Sets

- Complete with index
- Drills ground from solid except roll forged



					Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
No. of Pieces	Set Range	Finish	Point	Type	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
20	#61 - #80 Wire Gage	Bright Finish	118° Standard Point	Jobber Drills	-	-	AP50C61H	Price	PT2790161	Price	AP50E61	Price
20	#61 - #80 Wire Gage	Surface Treated	118° Standard Point	Jobber Drills	MT1218106	Price	-	-	PT2799981	Price	-	-
60	#1 - #60 Wire Gage	Bright Finish	118° Standard Point	Jobber Drills	MT1218146	Price	AP50C1H	Price	PT2790101	Price	AP50E60	Price
60	#1 - #60 Wire Gage	Surface Treated	118° Standard Point	Jobber Drills	MT1218103	Price	-	-	PT2799976	Price	-	-
60	#1 - #60 Wire Gage	Surface Treated	118° Standard Point	Roll Forged Jobber Drills	-	-	-	-	-	-	AP50ER60V	Price
60	#1 - #60 Wire Gage	Surface Treated	135° Split Point	Heavy Duty Jobber Drills	MT1218174	Price	AP50C1HDSP	Price	-	-	-	-

‡ In plastic pouch

118º Standard & 135° Split Point A-Z Letter Size High Speed Steel Jobber Drill Sets

- Complete with index
- Drills ground from solid



				Morse Cutting Tools		Rapidkut		Precision Twist Drill	
No. of Pieces	Set Range	Finish	Point	Order No.	Price	Order No.	Price	Order No.	Price
26	A - Z Letter Size	Bright Finish	118° Standard Point	MT1218147	Price	AP50CAZH	Price	PT2790126	Price
26	A - Z Letter Size	Surface Treated	118° Standard Point	MT1218104	Price	AP50CAZHB	Price	PT2799983	Price
26	A - Z Letter Size	Surface Treated	135° Split Point	-	-	AP50CAZHDSP	Price	-	-

29 Pc. 3/8" Reduced Shank High Speed Steel Jobber Drill Sets

- 118° Surface treated
- 1/16" - 1/2" by 64ths
- Complete with metal index
- Sizes over 3/8" have 3/8" shank



	Morse Cutting Tools		ProCut	
Material	Order No.	Price	Order No.	Price
High Speed Steel - Ground	**MT1218400**	Price	**AP50S29**	Price

3-in-1 118° Standard & 135° Split Point Combination High Speed Steel Jobber Drill Sets

- Complete with index
- Drills ground from solid





				Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
No. of Pieces	Set Range	Finish	Point	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
114	3 in 1 Combo Set (1/16" - 1/2" by 64ths / 1-60 / 1mm thru 13mm x.5mm)	Bright Finish	118° Standard Point	-	-	-	-	**PT2790114**	Price	-	-
115	3 in 1 Combo Set (1/16" - 1/2" by 64ths / A-Z / 1-60)	Bright Finish	118° Standard Point	**MT1218004**	Price	**AP50C123H**	Price	**PT2790123**	Price	-	-
115	3 in 1 Combo Set (1/16" - 1/2" by 64ths / A-Z / 1-60)	Surface Treated	118° Standard Point	**MT1218003**	Price	**AP50C123HB**	Price	**PT2799982**	Price	**AP50S115E**	Price
115	3 in 1 Combo Set (1/16" - 1/2" by 64ths / A-Z / 1-60)	Surface Treated	135° Split Point	-	-	**AP50C123HDSP**	Price	-	-	-	-
115	3 in 1 Combo Set (1/16" - 1/2" by 64ths / A-Z / 1-60)	TiN Coated	118° Standard Point	-	-	-	-	-	-	**AP50S115TI**	Price

135° Heavy Duty Split Point Cobalt Jobber Drill Sets

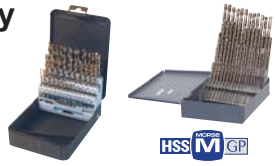
- Complete with index
- Drills ground from solid



			Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
No. of Pieces	Set Range	Finish	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
13	1/16" - 1/4" by 64ths	Surface Treated	-	-	-	-	**PT2799944**	Price	-	-
15	1/16" - 1/2" by 32nds	Bronze Oxide	-	-	-	-	**PT2790291**	Price	-	-
15	1/16" - 1/2" by 32nds	Surface Treated	**MT1218167**	Price	-	-	-	-	-	-
21	1/16" - 3/8" by 64ths	Bronze Oxide	-	-	-	-	**PT2799701**	Price	-	-
25	1mm - 13mm by .5mm	Surface Treated	-	-	-	-	-	-	**AP50COE25**	Price
29	1/16" - 1/2" by 64ths	Bronze Oxide	-	-	**AP50C162CO**	Price	**PT2790290**	Price	**AP50COE29**	Price
29	1/16" - 1/2" by 64ths	Straw Finish	**MT1218166**	Price	-	-	-	-	-	-

135º Split Point Wire Gage Heavy Duty Cobalt Jobber Drill Sets

- Complete with index
- Drills ground from solid



				Morse Cutting Tools		Rapidkut		Precision Twist Drill		Price	
No. of Pieces	Set Range	Finish	Set Material	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
60	#1 - #60 Wire Gage	Bronze Oxide	Cobalt	-	-	**AP50C1CO**	Price	**PT2790600**	Price	**AP50COE60**	Price
60	#1 - #60 Wire Gage	Surface Treated	Cobalt	**MT1218168**	Price	-	-	-	-	-	-

Note: Sizes #53 thru #60 are not split point

135° Split Point A-Z Letter Size Heavy Duty Cobalt Jobber Drill Sets

- Complete with index
- Drills ground from solid



				Morse Cutting Tools		Rapidkut		Precision Twist Drill	
No. of Pieces	Set Range	Finish	Set Material	Order No.	Price	Order No.	Price	Order No.	Price
26	A - Z Letter Size	Bronze Oxide	Cobalt	-	-	**AP50CAZCO**	Price	**PT2790292**	Price
26	A - Z Letter Size	Surface Treated	Cobalt	**MT1218169**	Price	-	-	-	-

3-in-1 135° Split Point Combination Cobalt Jobber Drill Sets

- Complete with index
- Drills ground from solid



				Rapidkut		Precision Twist Drill		ProCut	
No. of Pieces	Set Range	Finish	Set Material	Order No.	Price	Order No.	Price	Order No.	Price
114	3 in 1 Combo Set (1/16" - 1/2" by 64ths / 1-60 / 1mm thru 13mm x.5mm)	Bronze Oxide	Cobalt	-	-	PT2799705	Price	-	-
115	3 in 1 Combo Set (1/16" - 1/2" by 64ths / A-Z / 1-60)	Bronze Oxide	Cobalt	AP50CO123H	Price	PT2799706	Price	AP50COE115	Price

Note: Sizes #53 thru #60 are not split point

118º Standard Point High Speed Steel Screw Machine Drill Sets

- Complete with index
- Drills ground from solid



		Morse Cutting Tools		Price		Precision Twist Drill		ProCut	
No. of Pieces	Set Range	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
13	1/16" - 1/4" by 64ths	MT1218181	Price	-	-	-	-	-	-
15	1/16" - 1/2" by 32nds	MT1218178	Price	-	-	-	-	-	-
26	A - Z Letter Size	-	-	AP50S72H	Price	PT2790173	Price	-	-
29	1/16" - 1/2" by 64ths	MT1218177	Price	AP50S70H	Price	PT2790170	Price	AP50S70SM	Price
60	#1 - #60 Wire Gage	-	-	AP50S71H	Price	PT2790174	Price	AP50S71SM	Price
115	3 in 1 Combo Set (1/16" - 1/2" by 64ths / A-Z / 1-60)	-	-	AP50SM115H	Price	-	-	-	-

135º Split Point Heavy Duty Screw Machine Drill Sets

- Complete with index
- Drills ground from solid



				Rapidkut		Precision Twist Drill		ProCut	
No. of Pieces	Set Range	Finish	Set Material	Order No.	Price	Order No.	Price	Order No.	Price
26	A - Z Letter Size	Bronze Oxide	Cobalt	AP50S72CO	Price	PT2799961	Price	-	-
26	A - Z Letter Size	Surface Treated	High Speed Steel	AP50S72HDSP	Price	-	-	-	-
29	1/16" - 1/2" by 64ths	Bronze Oxide	Cobalt	AP50S70CO	Price	PT2799962	Price	AP50COS29	Price
29	1/16" - 1/2" by 64ths	Surface Treated	High Speed Steel	AP50S70HDSP	Price	-	-	AP50S70SMHD	Price
60	#1 - #60 Wire Gage	Bronze Oxide	Cobalt	AP50S71CO	Price	PT2799960	Price	-	-

Note: Sizes #53 thru #60 are not split point

RAPIDKUT® 118° Standard Point Carbide Tipped Jobber Length Drill Sets

- Heavy duty construction
- Used in drilling of cast iron, metals and many composite materials
- Complete with index
- **NOT FOR STEEL**



No. of Pieces	Set Range	Order No.	Price
13	1/8" - 1/2" by 32nds	AP50C162CT	Price
26	A - Z Letter Size	AP50CAZCT	Price
32	#1 - #32	AP50C1CT	Price

PROCUT Taper Shank Drill Sets

High Speed Steel

- All drills furnished with standard taper shanks
- Complete with index



No. of Pieces	Set Range	Order No.	Price
16	33/64" - 3/4" by 64ths	AP50T31	Price
16	49/64" - 1" by 64ths	AP50T32	Price

Taper Length Drill Sets

- High speed steel
- Ground from solid
- 118° Bright finish
- Complete with index
- Longer length drills for deep hole applications



		Morse Cutting Tools		Precision Twist Drill		ProCut	
No. of Pieces	Set Range	Order No.	Price	Order No.	Price	Order No.	Price
29	1/16" - 1/2" by 64ths	MT1218184†	323.24	PT2790154	Price	AP50104E	Price

† Surface treated

Jobber Drills

High Speed Steel • 118° Standard Point • Bright Finish

- General purpose drills suitable for most applications
- Ground from solid
- Bright finish - works well in a wide variety of materials
- Polished flutes help with chip evacuation
- Designed for high production drilling of a wide variety of materials and under many different operating conditions
- Morse List #1330B
- Precision Twist List #R10P



MORSE CUTTING TOOLS — Designed for production drilling in a wide variety of materials. Consistent performance for lower overall tooling costs. Made in USA.

PROCUT — General purpose cutting tools, imported from world class manufacturers, that provide productivity at the most economical prices.

PRECISION — Precision - Performance - Productivity
Cutting tools engineered for application versatility and maximum productivity.

RAPIDKUT — Manufactured in the USA to exacting tolerances. High quality tooling at the most competitive price in the industry!

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/64	.0156	3/16	3/4	MT1011553	Price	AC50001P	Price	PT1010601	Price	AC40001	Price
1/32	.0312	1/2	1-3/8	MT1011565	Price	AC50002P	Price	PT1010602	Price	AC40002	Price
3/64	.0469	3/4	1-3/4	MT1011578	Price	AC50003P	Price	PT1010603	Price	AC40003	Price
1/16	.0625	7/8	1-7/8	MT1011582	Price	AC50004P	Price	PT1010604	Price	AC40004	Price
5/64	.0781	1	2	MT1011588	Price	AC50005P	Price	PT1010605	Price	AC40005	Price
3/32	.0938	1-1/4	2-1/4	MT1011595	Price	AC50006P	Price	PT1010606	Price	AC40006	Price
7/64	.1094	1-1/2	2-5/8	MT1011602	Price	AC50007P	Price	PT1010607	Price	AC40007	Price
1/8	.1250	1-5/8	2-3/4	MT1011608	Price	AC50008P	Price	PT1010608	Price	AC40008	Price
9/64	.1406	1-3/4	2-7/8	MT1011612	Price	AC50009P	Price	PT1010609	Price	AC40009	Price
5/32	.1562	2	3-1/8	MT1011618	Price	AC50010P	Price	PT1010610	Price	AC40010	Price
11/64	.1719	2-1/8	3-1/4	MT1011624	Price	AC50011P	Price	PT1010611	Price	AC40011	Price
3/16	.1875	2-5/16	3-1/2	MT1011630	Price	AC50012P	Price	PT1010612	Price	AC40012	Price
13/64	.2031	2-7/16	3-5/8	MT1011637	Price	AC50013P	Price	PT1010613	Price	AC40013	Price
7/32	.2188	2-1/2	3-3/4	MT1011642	Price	AC50014P	Price	PT1010614	Price	AC40014	Price
15/64	.2344	2-5/8	3-7/8	MT1011646	Price	AC50015P	Price	PT1010615	Price	AC40015	Price
1/4	.2500	2-3/4	4	MT1011650	Price	AC50016P	Price	PT1010616	Price	AC40016	Price
17/64	.2656	2-7/8	4-1/8	MT1011654	Price	AC50017P	Price	PT1010617	Price	AC40017	Price
9/32	.2812	2-15/16	4-1/4	MT1011659	Price	AC50018P	Price	PT1010618	Price	AC40018	Price
19/64	.2969	3-1/16	4-3/8	MT1011662	Price	AC50019P	Price	PT1010619	Price	AC40019	Price
5/16	.3125	3-3/16	4-1/2	MT1011664	Price	AC50020P	Price	PT1010620	Price	AC40020	Price
21/64	.3281	3-5/16	4-5/8	MT1011667	Price	AC50021P	Price	PT1010621	Price	AC40021	Price
11/32	.3438	3-7/16	4-3/4	MT1011670	Price	AC50022P	Price	PT1010622	Price	AC40022	Price
23/64	.3594	3-1/2	4-7/8	MT1011673	Price	AC50023P	Price	PT1010623	Price	AC40023	Price
3/8	.3750	3-5/8	5	MT1011675	Price	AC50024P	Price	PT1010624	Price	AC40024	Price
25/64	.3906	3-3/4	5-1/8	MT1011678	Price	AC50025P	Price	PT1010625	Price	AC40025	Price
13/32	.4062	3-7/8	5-1/4	MT1011681	Price	AC50026P	Price	PT1010626	Price	AC40026	Price
27/64	.4219	3-15/16	5-3/8	MT1011683	Price	AC50027P	Price	PT1010627	Price	AC40027	Price
7/16	.4375	4-1/16	5-1/2	MT1011684	Price	AC50028P	Price	PT1010628	Price	AC40028	Price
29/64	.4531	4-3/16	5-5/8	MT1011685	Price	AC50029P	Price	PT1010629	Price	AC40029	Price
15/32	.4688	4-5/16	5-3/4	MT1011686	Price	AC50030P	Price	PT1010630	Price	AC40030	Price
31/64	.4844	4-3/8	5-7/8	MT1011687	Price	AC50031P	Price	PT1010631	Price	AC40031	Price
1/2	.5000	4-1/2	6	MT1011688	Price	AC50032P	Price	PT1010632	Price	AC40032	Price
33/64	.5156	4-13/16	6-5/8	-	-	-	-	PT1010633	Price	-	-
17/32	.5312	4-13/16	6-5/8	-	-	-	-	PT1010634	Price	-	-
35/64	.5469	4-13/16	6-5/8	-	-	-	-	PT1010635	Price	-	-
9/16	.5625	4-13/16	6-5/8	-	-	-	-	PT1010636	Price	-	-
37/64	.5781	4-13/16	6-5/8	-	-	-	-	PT1010637	Price	-	-
19/32	.5938	5-3/16	7-1/8	-	-	-	-	PT1010638	Price	AC40038	Price
39/64	.6094	5-3/16	7-1/8	-	-	-	-	PT1010639	Price	-	-
5/8	.6250	5-3/16	7-1/8	-	-	-	-	PT1010640	Price	-	-
41/64	.6406	5-3/16	7-1/8	-	-	-	-	PT1010641	Price	-	-
21/32	.6562	5-3/16	7-1/8	-	-	-	-	PT1010642	Price	-	-
43/64	.6719	5-5/8	7-5/8	-	-	-	-	PT1010643	Price	-	-
11/16	.6875	5-5/8	7-5/8	-	-	-	-	PT1010644	Price	-	-

Jobber Drills

High Speed Steel • 118° Standard Point • Bright Finish

- General purpose drills suitable for most applications
- Ground from solid
- Bright finish - works well in a wide variety of materials
- Polished flutes help with chip evacuation
- Morse List #1340B
- Precision Twist List #R18P



MORSE CUTTING TOOLS — Designed for production drilling in a wide variety of materials. Consistent performance for lower overall tooling costs. Made in USA.

PRECISION — Precision - Performance - Productivity
Cutting tools engineered for application versatility and maximum productivity.

PROCUT — General purpose cutting tools, imported from world class manufacturers, that provide productivity at the most economical prices.

RAPIDKUT — Manufactured in the USA to exacting tolerances. High quality tooling at the most competitive price in the industry!

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	.2280	2-5/8	3-7/8	MT1011644	Price	AC50101P	Price	PT1018601	Price	AC40101	Price
2	.2210	2-5/8	3-7/8	MT1011643	Price	AC50102P	Price	PT1018602	Price	AC40102	Price
3	.2130	2-1/2	3-3/4	MT1011641	Price	AC50103P	Price	PT1018603	Price	AC40103	Price
4	.2090	2-1/2	3-3/4	MT1011640	Price	AC50104P	Price	PT1018604	Price	AC40104	Price
5	.2055	2-1/2	3-3/4	MT1011639	Price	AC50105P	Price	PT1018605	Price	AC40105	Price
6	.2040	2-1/2	3-3/4	MT1011638	Price	AC50106P	Price	PT1018606	Price	AC40106	Price
7	.2010	2-7/16	3-5/8	MT1011636	Price	AC50107P	Price	PT1018607	Price	AC40107	Price
8	.1990	2-7/16	3-5/8	MT1011635	Price	AC50108P	Price	PT1018608	Price	AC40108	Price
9	.1960	2-7/16	3-5/8	MT1011634	Price	AC50109P	Price	PT1018609	Price	AC40109	Price
10	.1935	2-7/16	3-5/8	MT1011633	Price	AC50110P	Price	PT1018610	Price	AC40110	Price
11	.1910	2-5/16	3-1/2	MT1011632	Price	AC50111P	Price	PT1018611	Price	AC40111	Price
12	.1890	2-5/16	3-1/2	MT1011631	Price	AC50112P	Price	PT1018612	Price	AC40112	Price
13	.1850	2-5/16	3-1/2	MT1011629	Price	AC50113P	Price	PT1018613	Price	AC40113	Price
14	.1820	2-3/16	3-3/8	MT1011628	Price	AC50114P	Price	PT1018614	Price	AC40114	Price
15	.1800	2-3/16	3-3/8	MT1011627	Price	AC50115P	Price	PT1018615	Price	AC40115	Price
16	.1770	2-3/16	3-3/8	MT1011626	Price	AC50116P	Price	PT1018616	Price	AC40116	Price
17	.1730	2-3/16	3-3/8	MT1011625	Price	AC50117P	Price	PT1018617	Price	AC40117	Price
18	.1695	2-1/8	3-1/4	MT1011623	Price	AC50118P	Price	PT1018618	Price	AC40118	Price
19	.1660	2-1/8	3-1/4	MT1011622	Price	AC50119P	Price	PT1018619	Price	AC40119	Price
20	.1610	2-1/8	3-1/4	MT1011621	Price	AC50120P	Price	PT1018620	Price	AC40120	Price
21	.1590	2-1/8	3-1/4	MT1011620	Price	AC50121P	Price	PT1018621	Price	AC40121	Price
22	.1570	2	3-1/8	MT1011619	Price	AC50122P	Price	PT1018622	Price	AC40122	Price
23	.1540	2	3-1/8	MT1011617	Price	AC50123P	Price	PT1018623	Price	AC40123	Price
24	.1520	2	3-1/8	MT1011616	Price	AC50124P	Price	PT1018624	Price	AC40124	Price
25	.1495	1-7/8	3	MT1011615	Price	AC50125P	Price	PT1018625	Price	AC40125	Price
26	.1470	1-7/8	3	MT1011614	Price	AC50126P	Price	PT1018626	Price	AC40126	Price
27	.1440	1-7/8	3	MT1011613	Price	AC50127P	Price	PT1018627	Price	AC40127	Price
28	.1405	1-3/4	2-7/8	MT1011611	Price	AC50128P	Price	PT1018628	Price	AC40128	Price
29	.1360	1-3/4	2-7/8	MT1011610	Price	AC50129P	Price	PT1018629	Price	AC40129	Price
30	.1285	1-5/8	2-3/4	MT1011609	Price	AC50130P	Price	PT1018630	Price	AC40130	Price
31	.1200	1-5/8	2-3/4	MT1011607	Price	AC50131P	Price	PT1018631	Price	AC40131	Price
32	.1160	1-5/8	2-3/4	MT1011606	Price	AC50132P	Price	PT1018632	Price	AC40132	Price
33	.1130	1-1/2	2-5/8	MT1011605	Price	AC50133P	Price	PT1018633	Price	AC40133	Price
34	.1110	1-1/2	2-5/8	MT1011604	Price	AC50134P	Price	PT1018634	Price	AC40134	Price
35	.1100	1-1/2	2-5/8	MT1011603	Price	AC50135P	Price	PT1018635	Price	AC40135	Price
36	.1065	1-7/16	2-1/2	MT1011601	Price	AC50136P	Price	PT1018636	Price	AC40136	Price
37	.1040	1-7/16	2-1/2	MT1011600	Price	AC50137P	Price	PT1018637	Price	AC40137	Price
38	.1015	1-7/16	2-1/2	MT1011599	Price	AC50138P	Price	PT1018638	Price	AC40138	Price
39	.0995	1-3/8	2-3/8	MT1011598	Price	AC50139P	Price	PT1018639	Price	AC40139	Price
40	.0980	1-3/8	2-3/8	MT1011597	Price	AC50140P	Price	PT1018640	Price	AC40140	Price
41	.0960	1-3/8	2-3/8	MT1011596	Price	AC50141P	Price	PT1018641	Price	AC40141	Price
42	.0935	1-1/4	2-1/4	MT1011594	Price	AC50142P	Price	PT1018642	Price	AC40142	Price
43	.0890	1-1/4	2-1/4	MT1011593	Price	AC50143P	Price	PT1018643	Price	AC40143	Price
44	.0860	1-1/8	2-1/8	MT1011592	Price	AC50144P	Price	PT1018644	Price	AC40144	Price
45	.0820	1-1/8	2-1/8	MT1011591	Price	AC50145P	Price	PT1018645	Price	AC40145	Price
46	.0810	1-1/8	2-1/8	MT1011590	Price	AC50146P	Price	PT1018646	Price	AC40146	Price
47	.0785	1	2	MT1011589	Price	AC50147P	Price	PT1018647	Price	AC40147	Price
48	.0760	1	2	MT1011587	Price	AC50148P	Price	PT1018648	Price	AC40148	Price
49	.0730	1	2	MT1011586	Price	AC50149P	Price	PT1018649	Price	AC40149	Price
50	.0700	1	2	MT1011585	Price	AC50150P	Price	PT1018650	Price	AC40150	Price
51	.0670	1	2	MT1011584	Price	AC50151P	Price	PT1018651	Price	AC40151	Price
52	.0635	7/8	1-7/8	MT1011583	Price	AC50152P	Price	PT1018652	Price	AC40152	Price
53	.0595	7/8	1-7/8	MT1011581	Price	AC50153P	Price	PT1018653	Price	AC40153	Price
54	.0550	7/8	1-7/8	MT1011580	Price	AC50154P	Price	PT1018654	Price	AC40154	Price
55	.0520	7/8	1-7/8	MT1011579	Price	AC50155P	Price	PT1018655	Price	AC40155	Price
56	.0465	3/4	1-3/4	MT1011577	Price	AC50156P	Price	PT1018656	Price	AC40156	Price
57	.0430	3/4	1-3/4	MT1011576	Price	AC50157P	Price	PT1018657	Price	AC40157	Price
58	.0420	11/16	1-5/8	MT1011575	Price	AC50158P	Price	PT1018658	Price	AC40158	Price
59	.0410	11/16	1-5/8	MT1011574	Price	AC50159P	Price	PT1018659	Price	AC40159	Price
60	.0400	11/16	1-5/8	MT1011573	Price	AC50160P	Price	PT1018660	Price	AC40160	Price

Jobber Drills

High Speed • 118° Standard Point • Bright Finish

All drills are ground from the solid

- Morse List #1340B
- Precision Twist List #R18P



				Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
61	.0390	11/16	1-5/8	MT1011572	Price	AC50161P	Price	PT1018661	Price	AC40161	Price
62	.0380	5/8	1-1/2	MT1011571	Price	AC50162P	Price	PT1018662	Price	AC40162	Price
63	.0370	5/8	1-1/2	MT1011570	Price	AC50163P	Price	PT1018663	Price	AC40163	Price
64	.0360	5/8	1-1/2	MT1011569	Price	AC50164P	Price	PT1018664	Price	AC40164	Price
65	.0350	5/8	1-1/2	MT1011568	Price	AC50165P	Price	PT1018665	Price	AC40165	Price
66	.0330	1/2	1-3/8	MT1011567	Price	AC50166P	Price	PT1018666	Price	AC40166	Price
67	.0320	1/2	1-3/8	MT1011566	Price	AC50167P	Price	PT1018667	Price	AC40167	Price
68	.0310	1/2	1-3/8	MT1011564	Price	AC50168P	Price	PT1018668	Price	AC40168	Price
69	.0292	1/2	1-3/8	MT1011563	Price	AC50169P	Price	PT1018669	Price	AC40169	Price
70	.0280	3/8	1-1/4	MT1011562	Price	AC50170P	Price	PT1018670	Price	AC40170	Price
71	.0260	3/8	1-1/4	MT1011561	Price	AC50171P	Price	PT1018671	Price	AC40171	Price
72	.0250	5/16	1-1/8	MT1011560	Price	AC50172P	Price	PT1018672	Price	AC40172	Price
73	.0240	5/16	1-1/8	MT1011559	Price	AC50173P	Price	PT1018673	Price	AC40173	Price
74	.0225	1/4	1	MT1011558	Price	AC50174P	Price	PT1018674	Price	AC40174	Price
75	.0210	1/4	1	MT1011557	Price	AC50175P	Price	PT1018675	Price	AC40175	Price
76	.0200	3/16	7/8	MT1011556	Price	AC50176P	Price	PT1018676	Price	AC40176	Price
77	.0180	3/16	7/8	MT1011555	Price	AC50177P	Price	PT1018677	Price	AC40177	Price
78	.0160	3/16	7/8	MT1011554	Price	AC50178P	Price	PT1018678	Price	AC40178	Price
79	.0145	1/8	3/4	MT1011552	Price	AC50179P	Price	PT1018679	Price	AC40179	Price
80	.0135	1/8	3/4	MT1011551	Price	AC50180P	Price	PT1018680	Price	AC40180	Price
81	.0130	3/32	3/4	-	-	-	-	PT1018681	Price	-	-
82	.0125	3/32	3/4	-	-	-	-	PT1018682	Price	-	-
83	.0120	3/32	3/4	-	-	-	-	PT1018683	Price	-	-
84	.0115	3/32	3/4	-	-	-	-	PT1018684	Price	-	-
85	.0110	3/32	3/4	-	-	-	-	PT1018685	Price	-	-
86	.0105	3/32	3/4	-	-	-	-	PT1018686	Price	-	-
87	.0100	5/64	3/4	-	-	-	-	PT1018687	Price	-	-
88	.0095	5/64	3/4	-	-	-	-	PT1018688	Price	-	-
89	.0091	5/64	3/4	-	-	-	-	PT1018689	Price	-	-
90	.0087	5/64	3/4	-	-	-	-	PT1018690	Price	-	-
91	.0083	5/64	3/4	-	-	-	-	PT1018691	Price	-	-
92	.0079	1/16	3/4	-	-	-	-	PT1018692	Price	-	-
93	.0075	1/16	3/4	-	-	-	-	PT1018693	Price	-	-
94	.0071	1/16	3/4	-	-	-	-	PT1018694	Price	-	-
95	.0067	1/16	3/4	-	-	-	-	PT1018695	Price	-	-
96	.0063	1/16	3/4	-	-	-	-	PT1018696	Price	-	-
97	.0059	1/16	3/4	-	-	-	-	PT1018697	Price	-	-

Jobber Drills

High Speed Steel • 118° Standard Point • Bright Finish

- All drills ground from the solid
- Bright finish - works well in a wide variety of materials
- Polished flutes help with chip evacuation
- Morse List #1332B
- Precision Twist List #R15P



				Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
A	.2340	2-5/8	3-7/8	MT1011645	Price	AC50201P	Price	PT1015601	Price	AC40201	Price
B	.2380	2-3/4	4	MT1011647	Price	AC50202P	Price	PT1015602	Price	AC40202	Price
C	.2420	2-3/4	4	MT1011648	Price	AC50203P	Price	PT1015603	Price	AC40203	Price
D	.2460	2-3/4	4	MT1011649	Price	AC50204P	Price	PT1015604	Price	AC40204	Price
1/4, E	.2500	2-3/4	4	MT1011650	Price	AC50205P	Price	-	-	AC40205	Price
F	.2570	2-7/8	4-1/8	MT1011652	Price	AC50206P	Price	PT1015606	Price	AC40206	Price
G	.2610	2-7/8	4-1/8	MT1011653	Price	AC50207P	Price	PT1015607	Price	AC40207	Price
H	.2660	2-7/8	4-1/8	MT1011655	Price	AC50208P	Price	PT1015608	Price	AC40208	Price
I	.2720	2-7/8	4-1/8	MT1011656	Price	AC50209P	Price	PT1015609	Price	AC40209	Price
J	.2770	2-7/8	4-1/8	MT1011657	Price	AC50210P	Price	PT1015610	Price	AC40210	Price
K	.2810	2-15/16	4-1/4	MT1011658	Price	AC50211P	Price	PT1015611	Price	AC40211	Price
L	.2900	2-15/16	4-1/4	MT1011660	Price	AC50212P	Price	PT1015612	Price	AC40212	Price
M	.2950	3-1/16	4-3/8	MT1011661	Price	AC50213P	Price	PT1015613	Price	AC40213	Price
N	.3020	3-1/16	4-3/8	MT1011663	Price	AC50214P	Price	PT1015614	Price	AC40214	Price
O	.3160	3-3/16	4-1/2	MT1011665	Price	AC50215P	Price	PT1015615	Price	AC40215	Price
P	.3230	3-5/16	4-5/8	MT1011666	Price	AC50216P	Price	PT1015616	Price	AC40216	Price
Q	.3320	3-7/16	4-3/4	MT1011668	Price	AC50217P	Price	PT1015617	Price	AC40217	Price
R	.3390	3-7/16	4-3/4	MT1011669	Price	AC50218P	Price	PT1015618	Price	AC40218	Price
S	.3480	3-1/2	4-7/8	MT1011671	Price	AC50219P	Price	PT1015619	Price	AC40219	Price
T	.3580	3-1/2	4-7/8	MT1011672	Price	AC50220P	Price	PT1015620	Price	AC40220	Price
U	.3680	3-5/8	5	MT1011674	Price	AC50221P	Price	PT1015621	Price	AC40221	Price
V	.3770	3-5/8	5	MT1011676	Price	AC50222P	Price	PT1015622	Price	AC40222	Price
W	.3860	3-3/4	5-1/8	MT1011677	Price	AC50223P	Price	PT1015623	Price	AC40223	Price
X	.3970	3-3/4	5-1/8	MT1011679	Price	AC50224P	Price	PT1015624	Price	AC40224	Price
Y	.4040	3-7/8	5-1/4	MT1011680	Price	AC50225P	Price	PT1015625	Price	AC40225	Price
Z	.4130	3-7/8	5-1/4	MT1011682	Price	AC50226P	Price	PT1015626	Price	AC40226	Price

Jobber Drills

High Speed Steel • 118° Standard Point • Surface Treated



- General purpose drills suitable for most applications
- Ground from solid
- Surface treated - provides high resistance to abrasion and helps reduce the tendency of soft materials to load on the drill
- Designed for high production drilling of a wide variety of materials
- Perform well under many different operating conditions
- Morse List #1330
- Precision Twist List #R10

MORSE CUTTING TOOLS — Designed for production drilling in a wide variety of materials. Consistent performance for lower overall tooling costs. Made in USA.

PRECISION — Precision - Performance - Productivity. Cutting tools engineered for application versatility and maximum productivity.

PROCUT — General purpose cutting tools, imported from world class manufacturers, that provide productivity at the most economical prices.

RAPIDKUT — Manufactured in the USA to exacting tolerances. High quality tooling at the most competitive price in the industry!

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/64	.0156	3/16	3/4	MT1011353	Price	AC50001B	Price	PT1010001	Price	AC40001B	Price
1/32	.0312	1/2	1-3/8	MT1011365	Price	AC50002B	Price	PT1010002	Price	AC40002B	Price
3/64	.0469	3/4	1-3/4	MT1011378	Price	AC50003B	Price	PT1010003	Price	AC40003B	Price
1/16	.0625	7/8	1-7/8	MT1011382	Price	AC50004B	Price	PT1010004	Price	AC40004B	Price
5/64	.0781	1	2	MT1011388	Price	AC50005B	Price	PT1010005	Price	AC40005B	Price
3/32	.0938	1-1/4	2-1/4	MT1011395	Price	AC50006B	Price	PT1010006	Price	AC40006B	Price
7/64	.1094	1-1/2	2-5/8	MT1011402	Price	AC50007B	Price	PT1010007	Price	AC40007B	Price
1/8	.1250	1-5/8	2-3/4	MT1011408	Price	AC50008B	Price	PT1010008	Price	AC40008B	Price
9/64	.1406	1-3/4	2-7/8	MT1011412	Price	AC50009B	Price	PT1010009	Price	AC40009B	Price
5/32	.1562	2	3-1/8	MT1011418	Price	AC50010B	Price	PT1010010	Price	AC40010B	Price
11/64	.1719	2-1/8	3-1/4	MT1011424	Price	AC50011B	Price	PT1010011	Price	AC40011B	Price
3/16	.1875	2-5/16	3-1/2	MT1011430	Price	AC50012B	Price	PT1010012	Price	AC40012B	Price
13/64	.2031	2-7/16	3-5/8	MT1011437	Price	AC50013B	Price	PT1010013	Price	AC40013B	Price
7/32	.2188	2-1/2	3-3/4	MT1011442	Price	AC50014B	Price	PT1010014	Price	AC40014B	Price
15/64	.2344	2-5/8	3-7/8	MT1011446	Price	AC50015B	Price	PT1010015	Price	AC40015B	Price
1/4	.2500	2-3/4	4	MT1011450	Price	AC50016B	Price	PT1010016	Price	AC40016B	Price
17/64	.2656	2-7/8	4-1/8	MT1011454	Price	AC50017B	Price	PT1010017	Price	AC40017B	Price
9/32	.2812	2-15/16	4-1/4	MT1011459	Price	AC50018B	Price	PT1010018	Price	AC40018B	Price
19/64	.2969	3-1/16	4-3/8	MT1011462	Price	AC50019B	Price	PT1010019	Price	AC40019B	Price
5/16	.3125	3-3/16	4-1/2	MT1011464	Price	AC50020B	Price	PT1010020	Price	AC40020B	Price
21/64	.3281	3-5/16	4-5/8	MT1011467	Price	AC50021B	Price	PT1010021	Price	AC40021B	Price
11/32	.3438	3-7/16	4-3/4	MT1011470	Price	AC50022B	Price	PT1010022	Price	AC40022B	Price
23/64	.3594	3-1/2	4-7/8	MT1011473	Price	AC50023B	Price	PT1010023	Price	AC40023B	Price
3/8	.3750	3-5/8	5	MT1011475	Price	AC50024B	Price	PT1010024	Price	AC40024B	Price
25/64	.3906	3-3/4	5-1/8	MT1011478	Price	AC50025B	Price	PT1010025	Price	AC40025B	Price
13/32	.4062	3-7/8	5-1/4	MT1011481	Price	AC50026B	Price	PT1010026	Price	AC40026B	Price
27/64	.4219	3-15/16	5-3/8	MT1011483	Price	AC50027B	Price	PT1010027	Price	AC40027B	Price
7/16	.4375	4-1/16	5-1/2	MT1011484	Price	AC50028B	Price	PT1010028	Price	AC40028B	Price
29/64	.4531	4-3/16	5-5/8	MT1011485	Price	AC50029B	Price	PT1010029	Price	AC40029B	Price
15/32	.4688	4-5/16	5-3/4	MT1011486	Price	AC50030B	Price	PT1010030	Price	AC40030B	Price
31/64	.4844	4-3/8	5-7/8	MT1011487	Price	AC50031B	Price	PT1010031	Price	AC40031B	Price
1/2	.5000	4-1/2	6	MT1011488	Price	AC50032B	Price	PT1010032	Price	AC40032B	Price
33/64	.5156	4-13/16	6-5/8	MT1011489	Price	AC50033B	Price	PT1010033	Price	AC40033B	Price
17/32	.5312	4-13/16	6-5/8	MT1011490	Price	AC50034B	Price	PT1010034	Price	AC40034B	Price
35/64	.5469	4-13/16	6-5/8	MT1011491	Price	AC50035B	Price	PT1010035	Price	AC40035B	Price
9/16	.5625	4-13/16	6-5/8	MT1011492	Price	AC50036B	Price	PT1010036	Price	AC40036B	Price
37/64	.5781	4-13/16	6-5/8	MT1011493	Price	AC50037B	Price	PT1010037	Price	AC40037B	Price
19/32	.5938	5-3/16	7-1/8	MT1011494	Price	AC50038B	Price	PT1010038	Price	AC40038B	Price
39/64	.6094	5-3/16	7-1/8	MT1011495	Price	AC50039B	Price	PT1010039	Price	AC40039B	Price
5/8	.6250	5-3/16	7-1/8	MT1011496	Price	AC50040B	Price	PT1010040	Price	AC40040B	Price
41/64	.6406	5-3/16	7-1/8	MT1011497	Price	AC50041B	Price	PT1010041	Price	AC40041B	Price
21/32	.6562	5-3/16	7-1/8	MT1011498	Price	AC50042B	Price	PT1010042	Price	AC40042B	Price
43/64	.6719	5-5/8	7-5/8	MT1011499	Price	AC50043B	Price	PT1010043	Price	AC40043B	Price
11/16	.6875	5-5/8	7-5/8	MT1011500	Price	AC50044B	Price	PT1010044	Price	AC40044B	Price

Jobber Drills



High Speed Steel • 118° Standard Point • Surface Treated

- Ground from solid
- Surface treated - provides high resistance to abrasion and helps to reduce the tendency of soft materials to load on the drill
- Designed for high production drilling of a wide variety of materials
- Perform well under many different operating conditions
- Morse List #1340
- Precision Twist List #R18

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	.2280	2-5/8	3-7/8	MT1011444	Price	AC50101B	Price	PT1018001	Price	AC40101B	Price
2	.2210	2-5/8	3-7/8	MT1011443	Price	AC50102B	Price	PT1018002	Price	AC40102B	Price
3	.2130	2-1/2	3-3/4	MT1011441	Price	AC50103B	Price	PT1018003	Price	AC40103B	Price
4	.2090	2-1/2	3-3/4	MT1011440	Price	AC50104B	Price	PT1018004	Price	AC40104B	Price
5	.2055	2-1/2	3-3/4	MT1011439	Price	AC50105B	Price	PT1018005	Price	AC40105B	Price
6	.2040	2-1/2	3-3/4	MT1011438	Price	AC50106B	Price	PT1018006	Price	AC40106B	Price
7	.2010	2-7/16	3-5/8	MT1011436	Price	AC50107B	Price	PT1018007	Price	AC40107B	Price
8	.1990	2-7/16	3-5/8	MT1011435	Price	AC50108B	Price	PT1018008	Price	AC40108B	Price
9	.1960	2-7/16	3-5/8	MT1011434	Price	AC50109B	Price	PT1018009	Price	AC40109B	Price
10	.1935	2-7/16	3-5/8	MT1011433	Price	AC50110B	Price	PT1018010	Price	AC40110B	Price
11	.1910	2-5/16	3-1/2	MT1011432	Price	AC50111B	Price	PT1018011	Price	AC40111B	Price
12	.1890	2-5/16	3-1/2	MT1011431	Price	AC50112B	Price	PT1018012	Price	AC40112B	Price
13	.1850	2-5/16	3-1/2	MT1011429	Price	AC50113B	Price	PT1018013	Price	AC40113B	Price
14	.1820	2-3/16	3-3/8	MT1011428	Price	AC50114B	Price	PT1018014	Price	AC40114B	Price
15	.1800	2-3/16	3-3/8	MT1011427	Price	AC50115B	Price	PT1018015	Price	AC40115B	Price
16	.1770	2-3/16	3-3/8	MT1011426	Price	AC50116B	Price	PT1018016	Price	AC40116B	Price
17	.1730	2-3/16	3-3/8	MT1011425	Price	AC50117B	Price	PT1018017	Price	AC40117B	Price
18	.1695	2-1/8	3-1/4	MT1011423	Price	AC50118B	Price	PT1018018	Price	AC40118B	Price
19	.1660	2-1/8	3-1/4	MT1011422	Price	AC50119B	Price	PT1018019	Price	AC40119B	Price
20	.1610	2-1/8	3-1/4	MT1011421	Price	AC50120B	Price	PT1018020	Price	AC40120B	Price
21	.1590	2-1/8	3-1/4	MT1011420	Price	AC50121B	Price	PT1018021	Price	AC40121B	Price
22	.1570	2	3-1/8	MT1011419	Price	AC50122B	Price	PT1018022	Price	AC40122B	Price
23	.1540	2	3-1/8	MT1011417	Price	AC50123B	Price	PT1018023	Price	AC40123B	Price
24	.1520	2	3-1/8	MT1011416	Price	AC50124B	Price	PT1018024	Price	AC40124B	Price
25	.1495	1-7/8	3	MT1011415	Price	AC50125B	Price	PT1018025	Price	AC40125B	Price
26	.1470	1-7/8	3	MT1011414	Price	AC50126B	Price	PT1018026	Price	AC40126B	Price
27	.1440	1-7/8	3	MT1011413	Price	AC50127B	Price	PT1018027	Price	AC40127B	Price
28	.1405	1-3/4	2-7/8	MT1011411	Price	AC50128B	Price	PT1018028	Price	AC40128B	Price
29	.1360	1-3/4	2-7/8	MT1011410	Price	AC50129B	Price	PT1018029	Price	AC40129B	Price
30	.1285	1-5/8	2-3/4	MT1011409	Price	AC50130B	Price	PT1018030	Price	AC40130B	Price
31	.1200	1-5/8	2-3/4	MT1011407	Price	AC50131B	Price	PT1018031	Price	AC40131B	Price
32	.1160	1-5/8	2-3/4	MT1011406	Price	AC50132B	Price	PT1018032	Price	AC40132B	Price
33	.1130	1-1/2	2-5/8	MT1011405	Price	AC50133B	Price	PT1018033	Price	AC40133B	Price
34	.1110	1-1/2	2-5/8	MT1011404	Price	AC50134B	Price	PT1018034	Price	AC40134B	Price
35	.1100	1-1/2	2-5/8	MT1011403	Price	AC50135B	Price	PT1018035	Price	AC40135B	Price
36	.1065	1-7/16	2-1/2	MT1011401	Price	AC50136B	Price	PT1018036	Price	AC40136B	Price
37	.1040	1-7/16	2-1/2	MT1011400	Price	AC50137B	Price	PT1018037	Price	AC40137B	Price
38	.1015	1-7/16	2-1/2	MT1011399	Price	AC50138B	Price	PT1018038	Price	AC40138B	Price
39	.0995	1-3/8	2-3/8	MT1011398	Price	AC50139B	Price	PT1018039	Price	AC40139B	Price
40	.0980	1-3/8	2-3/8	MT1011397	Price	AC50140B	Price	PT1018040	Price	AC40140B	Price
41	.0960	1-3/8	2-3/8	MT1011396	Price	AC50141B	Price	PT1018041	Price	AC40141B	Price
42	.0935	1-1/4	2-1/4	MT1011394	Price	AC50142B	Price	PT1018042	Price	AC40142B	Price
43	.0890	1-1/4	2-1/4	MT1011393	Price	AC50143B	Price	PT1018043	Price	AC40143B	Price
44	.0860	1-1/8	2-1/8	MT1011392	Price	AC50144B	Price	PT1018044	Price	AC40144B	Price
45	.0820	1-1/8	2-1/8	MT1011391	Price	AC50145B	Price	PT1018045	Price	AC40145B	Price
46	.0810	1-1/8	2-1/8	MT1011390	Price	AC50146B	Price	PT1018046	Price	AC40146B	Price
47	.0785	1	2	MT1011389	Price	AC50147B	Price	PT1018047	Price	AC40147B	Price
48	.0760	1	2	MT1011387	Price	AC50148B	Price	PT1018048	Price	AC40148B	Price
49	.0730	1	2	MT1011386	Price	AC50149B	Price	PT1018049	Price	AC40149B	Price
50	.0700	1	2	MT1011385	Price	AC50150B	Price	PT1018050	Price	AC40150B	Price
51	.0670	1	2	MT1011384	Price	AC50151B	Price	PT1018051	Price	AC40151B	Price
52	.0635	7/8	1-7/8	MT1011383	Price	AC50152B	Price	PT1018052	Price	AC40152B	Price
53	.0595	7/8	1-7/8	MT1011381	Price	AC50153B	Price	PT1018053	Price	AC40153B	Price
54	.0550	7/8	1-7/8	MT1011380	Price	AC50154B	Price	PT1018054	Price	AC40154B	Price
55	.0520	7/8	1-7/8	MT1011379	Price	AC50155B	Price	PT1018055	Price	AC40155B	Price
56	.0465	3/4	1-3/4	MT1011377	Price	AC50156B	Price	PT1018056	Price	AC40156B	Price
57	.0430	3/4	1-3/4	MT1011376	Price	AC50157B	Price	PT1018057	Price	AC40157B	Price

(Continued on next page)

Jobber Drills (cont.)

High Speed Steel • 118° Standard Point • Surface Treated



				Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
58	.0420	11/16	1-5/8	MT1011375	Price	AC50158B	Price	PT1018058	Price	AC40158B	Price
59	.0410	11/16	1-5/8	MT1011374	Price	AC50159B	Price	PT1018059	Price	AC40159B	Price
60	.0400	11/16	1-5/8	MT1011373	Price	AC50160B	Price	PT1018060	Price	AC40160B	Price
61	.0390	11/16	1-5/8	MT1011372	Price	AC50161B	Price	PT1018061	Price	AC40161B	Price
62	.0380	5/8	1-1/2	MT1011371	Price	AC50162B	Price	PT1018062	Price	AC40162B	Price
63	.0370	5/8	1-1/2	MT1011370	Price	AC50163B	Price	PT1018063	Price	AC40163B	Price
64	.0360	5/8	1-1/2	MT1011369	Price	AC50164B	Price	PT1018064	Price	AC40164B	Price
65	.0350	5/8	1-1/2	MT1011368	Price	AC50165B	Price	PT1018065	Price	AC40165B	Price
66	.0330	1/2	1-3/8	MT1011367	Price	AC50166B	Price	PT1018066	Price	AC40166B	Price
67	.0320	1/2	1-3/8	MT1011366	Price	AC50167B	Price	PT1018067	Price	AC40167B	Price
68	.0310	1/2	1-3/8	MT1011364	Price	AC50168B	Price	PT1018068	Price	AC40168B	Price
69	.0292	1/2	1-3/8	MT1011363	Price	AC50169B	Price	PT1018069	Price	AC40169B	Price
70	.0280	3/8	1-1/4	MT1011362	Price	AC50170B	Price	PT1018070	Price	AC40170B	Price
71	.0260	3/8	1-1/4	MT1011361	Price	AC50171B	Price	PT1018071	Price	AC40171B	Price
72	.0250	5/16	1-1/8	MT1011360	Price	AC50172B	Price	PT1018072	Price	AC40172B	Price
73	.0240	5/16	1-1/8	MT1011359	Price	AC50173B	Price	PT1018073	Price	AC40173B	Price
74	.0225	1/4	1	MT1011358	Price	AC50174B	Price	PT1018074	Price	AC40174B	Price
75	.0210	1/4	1	MT1011357	Price	AC50175B	Price	PT1018075	Price	AC40175B	Price
76	.0200	3/16	7/8	MT1011356	Price	AC50176B	Price	PT1018076	Price	-	-
77	.0180	3/16	7/8	MT1011355	Price	AC50177B	Price	PT1018077	Price	AC40177B	Price
78	.0160	3/16	7/8	MT1011354	Price	AC50178B	Price	PT1018078	Price	AC40178B	Price
79	.0145	1/8	3/4	MT1011352	Price	AC50179B	Price	PT1018079	Price	AC40179B	Price
80	.0135	1/8	3/4	MT1011351	Price	-	-	PT1018080	Price	AC40180B	Price

Jobber Drills

High Speed Steel • 118° Standard Point • Surface Treated



- Ground from solid
- Surface treated - provides high resistance to abrasion and helps to reduce the tendency of soft materials to load on the drill
- Designed for high production drilling of a wide variety of materials
- Perform well under many different operating conditions
- Morse List #1332
- Precision Twist List #R15

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
A	.2340	2-5/8	3-7/8	MT1011445	Price	AC50201B	Price	PT1015001	Price	AC40201B	Price
B	.2380	2-3/4	4	MT1011447	Price	AC50202B	Price	PT1015002	Price	AC40202B	Price
C	.2420	2-3/4	4	MT1011448	Price	AC50203B	Price	PT1015003	Price	AC40203B	Price
D	.2460	2-3/4	4	MT1011449	Price	AC50204B	Price	PT1015004	Price	AC40204B	Price
1/4, E	.2500	2-3/4	4	MT1011450	Price	AC50205B	Price	PT1010016	Price	AC40205B	Price
F	.2570	2-7/8	4-1/8	MT1011452	Price	AC50206B	Price	PT1015006	Price	AC40206B	Price
G	.2610	2-7/8	4-1/8	MT1011453	Price	AC50207B	Price	PT1015007	Price	AC40207B	Price
H	.2660	2-7/8	4-1/8	MT1011455	Price	AC50208B	Price	PT1015008	Price	AC40208B	Price
I	.2720	2-7/8	4-1/8	MT1011456	Price	AC50209B	Price	PT1015009	Price	AC40209B	Price
J	.2770	2-7/8	4-1/8	MT1011457	Price	AC50210B	Price	PT1015010	Price	AC40210B	Price
K	.2810	2-15/16	4-1/4	MT1011458	Price	AC50211B	Price	PT1015011	Price	AC40211B	Price
L	.2900	2-15/16	4-1/4	MT1011460	Price	AC50212B	Price	PT1015012	Price	AC40212B	Price
M	.2950	3-1/16	4-3/8	MT1011461	Price	AC50213B	Price	PT1015013	Price	AC40213B	Price
N	.3020	3-1/16	4-3/8	MT1011463	Price	AC50214B	Price	PT1015014	Price	AC40214B	Price
O	.3160	3-3/16	4-1/2	MT1011465	Price	AC50215B	Price	PT1015015	Price	AC40215B	Price
P	.3230	3-5/16	4-5/8	MT1011466	Price	AC50216B	Price	PT1015016	Price	AC40216B	Price
Q	.3320	3-7/16	4-3/4	MT1011468	Price	AC50217B	Price	PT1015017	Price	AC40217B	Price
R	.3390	3-7/16	4-3/4	MT1011469	Price	AC50218B	Price	PT1015018	Price	AC40218B	Price
S	.3480	3-1/2	4-7/8	MT1011471	Price	AC50219B	Price	PT1015019	Price	AC40219B	Price
T	.3580	3-1/2	4-7/8	MT1011472	Price	AC50220B	Price	PT1015020	Price	AC40220B	Price
U	.3680	3-5/8	5	MT1011474	Price	AC50221B	Price	PT1015021	Price	AC40221B	Price
V	.3770	3-5/8	5	MT1011476	Price	AC50222B	Price	PT1015022	Price	AC40222B	Price
W	.3860	3-3/4	5-1/8	MT1011477	Price	AC50223B	Price	PT1015023	Price	AC40223B	Price
X	.3970	3-3/4	5-1/8	MT1011479	Price	AC50224B	Price	PT1015024	Price	AC40224B	Price
Y	.4040	3-7/8	5-1/4	MT1011480	Price	AC50225B	Price	PT1015025	Price	AC40225B	Price
Z	.4130	3-7/8	5-1/4	MT1011482	Price	AC50226B	Price	PT1015026	Price	AC40226B	Price

TiN Tip and TiN Coated Jobber Length Drills

High Speed Steel • 118° Split Point

- TiN tip increases tool hardness and improves tool life
- Dormer List #A012

TiN Coated 118° Jobber Drills



- High speed steel
- Titanium nitride coated
- Offers outstanding wear resistance, reduces friction and prevents galling
- Increased lubricity and chip low
- Provides better surface finish
- Allows for increased speeds and feeds to improve productivity

DORMER PROCUT

Type - Fractional Size							
				Dormer		ProCut	
Size	Decimal Equiv. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/64	.0156	3/16	3/4	PT450573952†	3.41	AC75001	Price
1/32	.0312	1/2	1-3/8	PT450573969†	2.38	AC75002	Price
3/64	.0469	3/4	1-3/4	PT450573976†	2.38	AC75003	Price
1/16	.0625	7/8	1-7/8	PT450578636†	2.19	AC75004	Price
5/64	.0781	1	2	PT450578643†	2.19	AC75005	Price
3/32	.0938	1-1/4	2-1/4	PT450572061	Price	AC75006	Price
7/64	.1094	1-1/2	2-5/8	PT450572184	Price	AC75007	Price
1/8	.1250	1-5/8	2-3/4	PT450571897	Price	AC75008	Price
9/64	.1406	1-3/4	2-7/8	PT450572214	Price	AC75009	Price
5/32	.1562	2	3-1/8	PT450572146	Price	AC75010	Price
11/64	.1719	2-1/8	3-1/4	PT450571910	Price	AC75011	Price
3/16	.1875	2-5/16	3-1/2	PT450572054	Price	AC75012	Price
13/64	.2031	2-7/16	3-5/8	PT450571934	Price	AC75013	Price
7/32	.2188	2-1/2	3-3/4	PT450572177	Price	AC75014	Price
15/64	.2344	2-5/8	3-7/8	PT450571958	Price	AC75015	Price
1/4	.2500	2-3/4	4	PT450571125	Price	AC75016	Price
17/64	.2656	2-7/8	4-1/8	PT450571972	Price	AC75017	Price
9/32	.2812	2-15/16	4-1/4	PT450572207	Price	AC75018	Price
19/64	.2969	3-1/16	4-3/8	PT450571996	Price	AC75019	Price
5/16	.3125	3-3/16	4-1/2	PT450572139	Price	AC75020	Price
21/64	.3281	3-5/16	4-5/8	PT450572009	Price	AC75021	Price
11/32	.3438	3-7/16	4-3/4	PT450571903	Price	AC75022	Price
23/64	.3594	3-1/2	4-7/8	PT450572016	Price	AC75023	Price
3/8	.3750	3-5/8	5	PT450572078	Price	AC75024	Price
25/64	.3906	3-3/4	5-1/8	PT450572023	Price	AC75025	Price
13/32	.4062	3-7/8	5-1/4	PT450571927	Price	AC75026	Price
27/64	.4219	3-15/16	5-3/8	PT450572030	Price	AC75027	Price
7/16	.4375	4-1/16	5-1/2	PT450572160	Price	AC75028†	8.75
29/64	.4531	4-3/16	5-5/8	PT450572047	Price	AC75029	Price
15/32	.4688	4-5/16	5-3/4	PT450571941	Price	AC75030	Price
31/64	.4844	4-3/8	5-7/8	PT450572085	Price	AC75031	Price
1/2	.5000	4-1/2	6	PT450571880	Price	AC75032	Price

DORMER PROCUT

Type - Letter Size							
				Dormer		ProCut	
Size	Decimal Equiv. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
A	.2340	2-5/8	3-7/8	PT450571163	5.32	AC75201	3.90
B	.2380	2-3/4	4	PT450571170	5.32	AC75202	3.90
C	.2420	2-3/4	4	PT450571187	5.32	AC75203	3.90
D	.2460	2-3/4	4	PT450571194	5.32	AC75204	3.90
F	.2570	2-7/8	4-1/8	PT450571217	5.66	AC75206	4.25
G	.2610	2-7/8	4-1/8	PT450571224	6.35	AC75207	4.65
H	.2660	2-7/8	4-1/8	PT450571231	6.35	AC75208	4.65
I	.2720	2-7/8	4-1/8	PT450571248	6.35	AC75209	4.65
J	.2770	2-7/8	4-1/8	PT450571255	6.85	AC75210	4.95
K	.2810	2-15/16	4-1/4	PT450571262	7.57	AC75211	5.50
L	.2900	2-15/16	4-1/4	PT450571279	7.57	AC75212	5.50
M	.2950	3-1/16	4-3/8	PT450571286	7.97	AC75213	5.80
N	.3020	3-1/16	4-3/8	PT450571293	7.97	AC75214	5.80
O	.3160	3-3/16	4-1/2	PT450571767	8.07	AC75215	5.90
P	.3230	3-5/16	4-5/8	PT450571774	9.10	AC75216	6.60
Q	.3320	3-7/16	4-3/4	PT450571781	9.10	AC75217	6.60
R	.3390	3-7/16	4-3/4	PT450571798	9.72	AC75218	7.15
S	.3480	3-1/2	4-7/8	PT450571804	10.38	AC75219	7.50
T	.3580	3-1/2	4-7/8	PT450571811	11.79	AC75220	8.50
U	.3680	3-5/8	5	PT450571828	11.79	AC75221	8.50

DORMER PROCUT

Type - Letter Size							
				Dormer		ProCut	
Size	Decimal Equiv. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
V	.3770	3-5/8	5	PT450571835	12.07	AC75222	8.80
W	.3860	3-3/4	5-1/8	PT450571842	12.38	AC75223	9.05
X	.3970	3-3/4	5-1/8	PT450571859	15.07	AC75224	10.95
Y	.4040	3-7/8	5-1/4	PT450571866	16.97	AC75225	12.35
Z	.4130	3-7/8	5-1/4	PT450571873	18.04	AC75226	13.05

DORMER PROCUT

Type - Wire Gage Size							
				Dormer		ProCut	
Size	Decimal Equiv. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1	.2280	2-5/8	3-7/8	PT450571309	Price	AC75101	Price
2	.2210	2-5/8	3-7/8	PT450571415	Price	AC75102	Price
3	.2130	2-1/2	3-3/4	PT450571521	Price	AC75103	Price
4	.2090	2-1/2	3-3/4	PT450571637	Price	AC75104	Price
5	.2055	2-1/2	3-3/4	PT450571712	Price	AC75105	Price
6	.2040	2-1/2	3-3/4	PT450571729	Price	AC75106	Price
7	.2010	2-7/16	3-5/8	PT450571736	Price	AC75107	Price
8	.1990	2-7/16	3-5/8	PT450571743	Price	AC75108	Price
9	.1960	2-7/16	3-5/8	PT450571750	Price	AC75109	Price
10	.1935	2-7/16	3-5/8	PT450571316	Price	AC75110	Price
11	.1910	2-5/16	3-1/2	PT450571323	Price	AC75111	Price
12	.1890	2-5/16	3-1/2	PT450571330	Price	AC75112	Price
13	.1850	2-5/16	3-1/2	PT450571347	Price	AC75113	Price
14	.1820	2-3/16	3-3/8	PT450571354	Price	AC75114	Price
15	.1800	2-3/16	3-3/8	PT450571361	Price	AC75115	Price
16	.1770	2-3/16	3-3/8	PT450571378	Price	AC75116	Price
17	.1730	2-3/16	3-3/8	PT450571385	Price	AC75117	Price
18	.1695	2-1/8	3-1/4	PT450571392	Price	AC75118	Price
19	.1660	2-1/8	3-1/4	PT450571408	Price	AC75119	Price
20	.1610	2-1/8	3-1/4	PT450571422	Price	AC75120	Price
21	.1590	2-1/8	3-1/4	PT450571439	Price	AC75121	Price
22	.1570	2	3-1/8	PT450571446	Price	AC75122	Price
23	.1540	2	3-1/8	PT450571453	Price	AC75123	Price
24	.1520	2	3-1/8	PT450571460	Price	AC75124	Price
25	.1495	1-7/8	3	PT450571477	Price	AC75125	Price
26	.1470	1-7/8	3	PT450571484	Price	AC75126	Price
27	.1440	1-7/8	3	PT450571491	Price	AC75127	Price
28	.1405	1-3/4	2-7/8	PT450571507	Price	AC75128	Price
29	.1360	1-3/4	2-7/8	PT450571514	Price	AC75129	Price
30	.1285	1-5/8	2-3/4	PT450571538	Price	AC75130	Price
31	.1200	1-5/8	2-3/4	PT450571545	Price	AC75131	Price
32	.1160	1-5/8	2-3/4	PT450571552	Price	AC75132	Price
33	.1130	1-1/2	2-5/8	PT450571569	Price	AC75133	Price
34	.1110	1-1/2	2-5/8	PT450571576	Price	AC75134	Price
35	.1100	1-1/2	2-5/8	PT450571583	Price	AC75135	Price
36	.1065	1-7/16	2-1/2	PT450571590	Price	AC75136	Price
37	.1040	1-7/16	2-1/2	PT450571606	Price	AC75137	Price
38	.1015	1-7/16	2-1/2	PT450571613	Price	AC75138	Price
39	.0995	1-3/8	2-3/8	PT450571620	Price	AC75139	Price
40	.0980	1-3/8	2-3/8	PT450571644	Price	AC75140	Price
41	.0960	1-3/8	2-3/8	PT450571651	Price	AC75141	Price
42	.0935	1-1/4	2-1/4	PT450571668	Price	AC75142	Price
43	.0890	1-1/4	2-1/4	PT450571675	Price	AC75143	Price
44	.0860	1-1/8	2-1/8	PT450571682	Price	AC75144	Price
45	.0820	1-1/8	2-1/8	PT450571699	Price	AC75145	Price
46	.0810	1-1/8	2-1/8	PT450571705	Price	AC75146	Price
47	.0785	1	2	PT450578650†	2.41	AC75147	Price
48	.0760	1	2	PT450578667†	2.41	AC75148	Price
49	.0730	1	2	PT450578674†	2.41	AC75149	Price
50	.0700	1	2	PT450578681†	2.41	AC75150	Price
51	.0670	1	2	PT450578698†	2.41	AC75151	Price
52	.0635	7/8	1-7/8	PT450578704†	2.41	AC75152	Price
53	.0595	7/8	1-7/8	PT450573983†	2.57	AC75153†	2.75
54	.0550	7/8	1-7/8	PT450573990†	2.57	AC75154†	2.75
55	.0520	7/8	1-7/8	PT450574003†	2.57	AC75155†	2.75
56	.0465	3/4	1-3/4	PT450574010†	2.57	AC75156†	2.75
57	.0430	3/4	1-3/4	PT450574027†	2.57	AC75157†	2.75
58	.0420	11/16	1-5/8	PT450574034†	2.57	AC75158†	2.75
59	.0410	11/16	1-5/8	PT450574041†	2.57	AC75159†	2.75
60	.0400	11/16	1-5/8	PT450574058†	2.57	AC75160†	2.75

†Sizes smaller than #46 (.0810) have a 118° 4-facet point and are bright finish

HSS MORSE M GP Metric Jobber Drills

High Speed Steel • 118° Point • Surface Treated
Cobalt • 135° Split Point • Bronze Color

- Designed for the drilling of a wide variety of materials
- Perform well under many different operating conditions
- Morse List #1333 (high speed steel) - 2345 (cobalt)



Standard Package Quantities:
.35mm thru 9.5mm — 12 each
9.6mm thru 13mm — 6 each
13.5mm thru 17.5mm — 1 each

		High Speed Steel		Cobalt	
Size (mm)	OAL (in.)	Order No.	Price	Order No.	Price
0.5mm	22mm	MT5613004	Price	-	-
0.55mm	24mm	MT5613005	Price	-	-
0.6mm	24mm	MT5613006	Price	-	-
0.65mm	26mm	MT5613007	Price	-	-
0.7mm	28mm	MT5613008	Price	-	-
0.75mm	28mm	MT5613009	Price	-	-
0.8mm	30mm	MT5613010	Price	-	-
0.85mm	30mm	MT5613011	Price	-	-
0.9mm	32mm	MT5613012	Price	MT2417600	Price
0.95mm	32mm	MT5613013	Price	MT2417601	Price
1mm	34mm	MT5613014	Price	MT2417602	Price
1.05mm	34mm	MT5613015	Price	MT2417603	Price
1.1mm	36mm	MT5613016	Price	MT2417604	Price
1.15mm	36mm	MT5613017	Price	-	-
1.5mm	38mm	MT5613018	Price	MT2417605	Price
1.25mm	38mm	MT5613019	Price	-	-
1.3mm	38mm	MT5613020	Price	MT2417606	Price
1.35mm	40mm	MT5613021	Price	-	-
1.4mm	40mm	MT5613022	Price	MT2417607	Price
1.45mm	40mm	MT5613023	Price	-	-
1.5mm	40mm	MT5613024	Price	MT2417608	Price
1.55mm	43mm	MT5613025	Price	-	-
1.6mm	43mm	MT5613026	Price	MT2417609	Price
1.65mm	43mm	MT5613027	Price	-	-
1.7mm	43mm	MT5613028	Price	MT2417610	Price
1.75mm	46mm	MT5613029	Price	-	-
1.8mm	46mm	MT5613030	Price	MT2417611	Price
1.85mm	46mm	MT5613031	Price	-	-
1.9mm	46mm	MT5613032	Price	MT2417612	Price
1.95mm	49mm	MT5613033	Price	-	-
2mm	49mm	MT5613034	Price	MT2417613	Price
2.05mm	49mm	MT5613035	Price	MT2417614	Price
2.1mm	49mm	MT5613036	Price	MT2417615	Price
2.15mm	53mm	MT5613037	Price	-	-
2.2mm	53mm	MT5613038	Price	MT2417616	Price
2.25mm	53mm	MT5613039	Price	-	-
2.3mm	53mm	MT5613040	Price	MT2417617	Price
2.35mm	53mm	MT5613041	Price	-	-
2.4mm	57mm	MT5613042	Price	MT2417618	Price
2.45mm	57mm	MT5613043	Price	-	-
2.5mm	57mm	MT5613044	Price	MT2417619	Price
2.6mm	57mm	MT5613045	Price	MT2417620	Price
2.7mm	61mm	MT5613046	Price	MT2417621	Price
2.75mm	61mm	MT5613047	Price	-	-
2.8mm	61mm	MT5613048	Price	MT2417622	Price
2.9mm	61mm	MT5613049	Price	MT2417623	Price
3mm	61mm	MT5613050	Price	MT2417624	Price
3.1mm	65mm	MT5613051	Price	MT2417625	Price
3.2mm	65mm	MT5613052	Price	MT2417626	Price
3.25mm	65mm	MT5613053	Price	-	-
3.3mm	65mm	MT5613054	Price	MT2417627	Price
3.4mm	70mm	MT5613055	Price	MT2417628	Price
3.5mm	70mm	MT5613056	Price	MT2417629	Price
3.6mm	70mm	MT5613057	Price	MT2417630	Price
3.7mm	70mm	MT5613058	Price	MT2417631	Price
3.75mm	70mm	MT5613059	Price	-	-
3.8mm	75mm	MT5613060	Price	MT2417632	Price
3.9mm	75mm	MT5613061	Price	MT2417633	Price
4mm	75mm	MT5613062	Price	MT2417634	Price
4.1mm	75mm	MT5613063	Price	MT2417635	Price
4.2mm	75mm	MT5613064	Price	MT2417636	Price
4.25mm	75mm	MT5613065	Price	-	-
4.3mm	80mm	MT5613066	Price	MT2417637	Price
4.4mm	80mm	MT5613067	Price	MT2417638	Price
4.5mm	80mm	MT5613068	Price	MT2417639	Price
4.6mm	80mm	MT5613069	Price	MT2417640	Price
4.7mm	80mm	MT5613070	Price	MT2417641	Price
4.75mm	80mm	MT5613071	Price	-	-
4.8mm	86mm	MT5613072	Price	MT2417642	Price
4.9mm	86mm	MT5613073	Price	MT2417643	Price
5mm	86mm	MT5613074	Price	MT2417644	Price
5.1mm	86mm	MT5613075	Price	MT2417645	Price
5.2mm	86mm	MT5613076	Price	MT2417646	Price
5.25mm	86mm	MT5613077	Price	-	-
5.3mm	86mm	MT5613078	Price	MT2417647	Price
5.4mm	93mm	MT5613079	Price	MT2417648	Price
5.5mm	93mm	MT5613080	Price	MT2417649	Price
5.6mm	93mm	MT5613081	Price	MT2417650	Price
5.7mm	93mm	MT5613082	Price	MT2417651	Price
5.75mm	93mm	MT5613083	Price	-	-
5.8mm	93mm	MT5613084	Price	MT2417652	Price
5.9mm	93mm	MT5613085	Price	MT2417653	Price
6mm	93mm	MT5613086	Price	MT2417654	Price
6.1mm	101mm	MT5613087	Price	MT2417655	Price
6.2mm	101mm	MT5613088	Price	MT2417656	Price
6.25mm	101mm	MT5613089	Price	-	-
6.3mm	101mm	MT5613090	Price	MT2417657	Price
6.4mm	101mm	MT5613091	Price	MT2417658	Price
6.5mm	101mm	MT5613092	Price	MT2417659	Price
6.6mm	101mm	MT5613093	Price	MT2417660	Price
6.7mm	101mm	MT5613094	Price	MT2417661	Price
6.75mm	109mm	MT5613095	Price	-	-
6.8mm	109mm	MT5613096	Price	MT2417662	Price
6.9mm	109mm	MT5613097	Price	MT2417663	Price
7mm	109mm	MT5613098	Price	MT2417664	Price
7.1mm	109mm	MT5613099	Price	MT2417665	Price
7.2mm	109mm	MT5613100	Price	MT2417666	Price
7.25mm	109mm	MT5613101	Price	-	-
7.3mm	109mm	MT5613102	Price	MT2417667	Price
7.4mm	109mm	MT5613103	Price	MT2417668	Price
7.5mm	109mm	MT5613104	Price	MT2417669	Price
7.6mm	117mm	MT5613105	Price	MT2417670	Price
7.7mm	117mm	MT5613106	Price	MT2417671	Price
7.75mm	117mm	MT5613107	Price	-	-
7.8mm	117mm	MT5613108	Price	MT2417672	Price
7.9mm	117mm	MT5613109	Price	MT2417673	Price
8mm	117mm	MT5613110	Price	MT2417674	Price
8.1mm	117mm	MT5613111	Price	MT2417675	Price
8.2mm	117mm	MT5613112	Price	MT2417676	Price
8.25mm	117mm	MT5613113	Price	-	-
8.3mm	117mm	MT5613114	Price	MT2417677	Price
8.4mm	117mm	MT5613115	Price	MT2417678	Price
8.5mm	117mm	MT5613116	Price	MT2417679	Price
8.6mm	125mm	MT5613117	Price	MT2417680	Price
8.7mm	125mm	MT5613118	Price	MT2417681	Price
8.75mm	125mm	MT5613119	Price	-	-
8.8mm	125mm	MT5613120	Price	MT2417682	Price
8.9mm	125mm	MT5613121	Price	MT2417683	Price
9mm	125mm	MT5613122	Price	MT2417684	Price
9.1mm	125mm	MT5613123	Price	MT2417685	Price
9.2mm	125mm	MT5613124	Price	MT2417686	Price
9.25mm	125mm	MT5613125	Price	-	-
9.3mm	125mm	MT5613126	Price	MT2417687	Price
9.4mm	125mm	MT5613127	Price	MT2417688	Price
9.5mm	125mm	MT5613128	Price	MT2417689	Price
9.6mm	133mm	MT5613129	Price	MT2417690	Price
9.7mm	133mm	MT5613130	Price	MT2417691	Price
9.75mm	133mm	MT5613131	Price	-	-
9.8mm	133mm	MT5613132	Price	MT2417692	Price
9.9mm	133mm	MT5613133	Price	-	-
10mm	133mm	MT5613134	Price	MT2417693	Price
10.2mm	133mm	MT5612858	Price	MT2417694	Price
10.3mm	133mm	MT5612859	Price	-	-
10.5mm	133mm	MT5613135	Price	MT2417695	Price
10.8mm	142mm	MT5612863	Price	MT2417696	Price
11mm	142mm	MT5613136	Price	MT2417697	Price
11.2mm	142mm	MT5612866	Price	MT2417698	Price
11.5mm	142mm	MT5613137	Price	MT2417699	Price
11.8mm	142mm	MT5612871	Price	MT2417700	Price
12mm	151mm	MT5613138	Price	MT2417701	Price
12.2mm	151mm	MT5612874	Price	MT2417702	Price
12.5mm	151mm	MT5613139	Price	MT2417703	Price
13mm	151mm	MT5613140	Price	MT2417704	Price
13.5mm	160mm	MT5612881	Price	-	-
14mm	160mm	MT5612882	Price	-	-
14.5mm	169mm	MT5612883	Price	-	-
15mm	169mm	MT5612884	Price	-	-
15.5mm	178mm	MT5612885	Price	-	-
16mm	178mm	MT5612886	Price	-	-
16.5mm	184mm	MT5612887	Price	-	-
17mm	184mm	MT5612888	Price	-	-
17.5mm	191mm	MT5612890	Price	-	-

PROCUT Metric Jobber Drills

High Speed Steel • 118° Point
Cobalt • 135° Split Point



High Speed Steel - 118° Point
- Designed to perform satisfactorily under a wide variety of normal conditions
- Will work in a broad range of materials and in various types of drilling equipment, both machine and portable

Cobalt - 135° Split Point
- Designed for drilling in stainless steel, titanium and other high tensile strength materials
- Manufactured to NAS 907 Type J Aerospace standards

				High Speed Steel		Cobalt	
Size (mm)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
.15mm	.0059	3/64	3/4	**AD50015**	Price	-	-
.16mm	.0063	3/64	3/4	**AD50016**	Price	-	-
.17mm	.0067	3/64	3/4	**AD50017**	Price	-	-
.18mm	.0071	1/16	3/4	**AD50018**	Price	-	-
.19mm	.0075	1/16	3/4	**AD50019**	Price	-	-
.2mm	.0079	1/16	3/4	**AD50020**	Price	-	-
.21mm	.0083	1/16	3/4	**AD50021**	Price	-	-
.22mm	.0087	1/16	3/4	**AD50022**	Price	-	-
.23mm	.0091	5/64	3/4	**AD50023**	Price	-	-
.24mm	.0094	5/64	3/4	**AD50024**	Price	-	-
.25mm	.0098	5/64	3/4	**AD50025**	Price	-	-
.26mm	.0102	5/64	3/4	**AD50026**	Price	-	-
.27mm	.0106	5/64	3/4	**AD50027**	Price	-	-
.28mm	.0110	3/32	3/4	**AD50028**	Price	-	-
.29mm	.0114	3/32	3/4	**AD50029**	Price	-	-
.3mm	.0118	3/32	3/4	**AD50030**	Price	-	-
.32mm	.0126	3/32	3/4	**AD50032**	Price	-	-
.34mm	.0134	1/8	3/4	**AD50034**	Price	-	-
.35mm	.0138	1/8	3/4	**AD50035**	Price	-	-
.36mm	.0142	1/8	3/4	**AD50036**	Price	-	-
.38mm	.0150	3/16	3/4	**AD50038**	Price	-	-
.4mm	.0158	3/16	7/8	**AD50040**	Price	-	-
.42mm	.0165	3/16	7/8	**AD50042**	Price	-	-
.44mm	.0173	3/16	7/8	**AD50044**	Price	-	-
.45mm	.0177	3/16	7/8	**AD50045**	Price	-	-
.46mm	.0181	3/16	7/8	**AD50046**	Price	-	-
.48mm	.0189	3/16	7/8	**AD50048**	Price	-	-
.5mm	.0197	3/16	7/8	**AD50050**	Price	-	-
.55mm	.0217	1/4	1	**AD50055**	Price	-	-
.6mm	.0236	5/16	1-1/8	**AD50060**	Price	**AD55060**	Price
.65mm	.0256	3/8	1-1/4	**AD50065**	Price	-	-
.7mm	.0276	3/8	1-1/4	**AD50070**	Price	-	-
.75mm	.0295	1/2	1-3/8	**AD50075**	Price	-	-
.8mm	.0315	1/2	1-3/8	**AD50080**	Price	-	-
.85mm	.0335	5/8	1-1/2	**AD50085**	Price	-	-
.9mm	.0354	5/8	1-1/2	**AD50090**	Price	-	-
.95mm	.0374	5/8	1-1/2	**AD50095**	Price	**AD55095**	Price
1mm	.0394	11/16	1-5/8	**AD50100**	Price	**AD55100**	Price
1.05mm	.0413	11/16	1-5/8	**AD50105**	Price	**AD55105**	Price
1.1mm	.0433	3/4	1-3/4	**AD50110**	Price	**AD55110**	Price
1.15mm	.0453	3/4	1-3/4	**AD50115**	Price	**AD55115**	Price
1.2mm	.0472	7/8	1-7/8	**AD50120**	Price	**AD55120**	Price
1.25mm	.0492	7/8	1-7/8	**AD50125**	Price	**AD55125**	Price
1.3mm	.0512	7/8	1-7/8	**AD50130**	Price	**AD55130**	Price
1.35mm	.0531	7/8	1-7/8	**AD50135**	Price	-	-
1.4mm	.0551	7/8	1-7/8	**AD50140**	Price	**AD55140**	Price
1.45mm	.0571	7/8	1-7/8	**AD50145**	Price	**AD55145**	Price
1.5mm	.0591	7/8	1-7/8	**AD50150**	Price	**AD55150**	Price
1.55mm	.0610	7/8	1-7/8	**AD50155**	Price	**AD55155**	Price
1.6mm	.0630	7/8	1-7/8	**AD50160**	Price	**AD55160**	Price
1.65mm	.0650	1	2	**AD50165**	Price	**AD55165**	Price
1.7mm	.0669	1	2	**AD50170**	Price	**AD55170**	Price
1.75mm	.0689	1	2	**AD50175**	Price	**AD55175**	Price
1.8mm	.0709	1	2	**AD50180**	Price	**AD55180**	Price
1.85mm	.0728	1	2	**AD50185**	Price	**AD55185**	Price
1.9mm	.0748	1	2	**AD50190**	Price	**AD55190**	Price
1.95mm	.0768	1	2	**AD50195**	Price	**AD55195**	Price
2mm	.0787	1-1/8	2-1/8	**AD50200**	Price	**AD55200**	Price
2.05mm	.0807	1-1/8	2-1/8	**AD50205**	Price	**AD55205**	Price
2.1mm	.0827	1-1/8	2-1/8	**AD50210**	Price	**AD55210**	Price
2.15mm	.0846	1-1/8	2-1/8	**AD50215**	Price	**AD55215**	Price
2.2mm	.0866	1-1/4	2-1/4	**AD50220**	Price	**AD55220**	Price
2.25mm	.0886	1-1/4	2-1/4	**AD50225**	Price	**AD55225**	Price
2.3mm	.0906	1-1/4	2-1/4	**AD50230**	Price	**AD55230**	Price
2.35mm	.0925	1-1/4	2-1/4	**AD50235**	Price	**AD55235**	Price
2.4mm	.0945	1-3/8	2-3/8	**AD50240**	Price	**AD55240**	Price
2.45mm	.0965	1-3/8	2-3/8	**AD50245**	Price	**AD55245**	Price
2.5mm	.0984	1-3/8	2-3/8	**AD50250**	Price	**AD55250**	Price
2.6mm	.1024	1-7/16	2-1/2	**AD50260**	Price	**AD55260**	Price
2.7mm	.1063	1-7/16	2-1/2	**AD50270**	Price	**AD55270**	Price
2.75mm	.1083	1-7/16	2-1/2	**AD50275**	Price	**AD55275**	Price
2.8mm	.1102	1-1/2	2-5/8	**AD50280**	Price	**AD55280**	Price
2.9mm	.1142	1-5/8	2-3/4	**AD50290**	Price	**AD55290**	Price
3mm	.1181	1-5/8	2-3/4	**AD50300**	Price	**AD55300**	Price
3.1mm	.1220	1-5/8	2-3/4	**AD50310**	Price	**AD55310**	Price
3.2mm	.1260	1-5/8	2-3/4	**AD50320**	Price	**AD55320**	Price
3.25mm	.1280	1-5/8	2-3/4	**AD50325**	Price	**AD55325**	Price
3.3mm	.1299	1-3/4	2-7/8	**AD50330**	Price	**AD55330**	Price
3.4mm	.1339	1-3/4	2-7/8	**AD50340**	Price	**AD55340**	Price
3.5mm	.1378	1-3/4	2-7/8	**AD50350**	Price	**AD55350**	Price
3.6mm	.1417	1-7/8	3	**AD50360**	Price	**AD55360**	Price
3.7mm	.1457	1-7/8	3	**AD50370**	Price	**AD55370**	Price
3.75mm	.1476	1-7/8	3	**AD50375**	Price	**AD55375**	Price
3.8mm	.1496	2	3	**AD50380**	Price	**AD55380**	Price
3.9mm	.1535	2	3-3/8	**AD50390**	Price	**AD55390**	Price
4mm	.1575	2-1/8	3-1/4	**AD50400**	Price	**AD55400**	Price
4.1mm	.1614	2-1/8	3-1/4	**AD50410**	Price	**AD55410**	Price
4.2mm	.1654	2-1/8	3-1/4	**AD50420**	Price	**AD55420**	Price
4.25mm	.1673	2-1/8	3-1/4	**AD50425**	Price	**AD55425**	Price
4.3mm	.1693	2-1/8	3-1/4	**AD50430**	Price	**AD55430**	Price
4.4mm	.1732	2-3/16	3-3/8	**AD50440**	Price	**AD55440**	Price
4.5mm	.1772	2-3/16	3-3/8	**AD50450**	Price	**AD55450**	Price
4.6mm	.1811	2-3/16	3-3/8	**AD50460**	Price	**AD55460**	Price
4.7mm	.1850	2-5/16	3-1/2	**AD50470**	Price	**AD55470**	Price
4.75mm	.1870	2-5/16	3-1/2	**AD50475**	Price	**AD55475**	Price
4.8mm	.1890	2-5/16	3-1/2	**AD50480**	Price	**AD55480**	Price
4.9mm	.1929	2-7/16	3-5/8	**AD50490**	Price	-	-
5mm	.1968	2-7/16	3-5/8	**AD50500**	Price	**AD55500**	Price
5.1mm	.2008	2-7/16	3-5/8	**AD50510**	Price	**AD55510**	Price
5.2mm	.2047	2-1/2	3-3/4	**AD50520**	Price	**AD55520**	Price
5.25mm	.2067	2-1/2	3-3/4	**AD50525**	Price	**AD55525**	Price
5.3mm	.2087	2-1/2	3-3/4	**AD50530**	Price	**AD55530**	Price
5.4mm	.2126	2-1/2	3-3/4	**AD50540**	Price	**AD55540**	Price
5.5mm	.2165	2-1/2	3-3/4	**AD50550**	Price	**AD55550**	Price
5.6mm	.2205	2-5/8	3-7/8	**AD50560**	Price	**AD55560**	Price
5.7mm	.2244	2-5/8	3-7/8	**AD50570**	Price	**AD55570**	Price
5.75mm	.2264	2-5/8	3-7/8	**AD50575**	Price	**AD55575**	Price
5.8mm	.2283	2-5/8	3-7/8	**AD50580**	Price	**AD55580**	Price
5.9mm	.2323	2-5/8	3-7/8	**AD50590**	Price	**AD55590**	Price
6mm	.2362	2-3/4	4	**AD50600**	Price	**AD55600**	Price

PROCUT Metric Jobber Drills



High Speed Steel • 118° Point
Cobalt • 135° Split Point

High Speed Steel - 118° Point

- Designed to perform satisfactorily under a wide variety of normal conditions
- Will work in a broad range of materials and in various types of drilling equipment, both machine and portable

Cobalt - 135° Split Point

- Designed for drilling in stainless steel, titanium and other high tensile strength materials
- Manufactured to NAS 907 Type J Aerospace standards

				High Speed Steel		Cobalt	
Size (mm)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
6.1mm	.2402	2-3/4	4	**AD50610**	Price	**AD55610**	Price
6.2mm	.2441	2-3/4	4	**AD50620**	Price	**AD55620**	Price
6.25mm	.2461	2-3/4	4	**AD50625**	Price	**AD55625**	Price
6.3mm	.2480	2-3/4	4	**AD50630**	Price	**AD55630**	Price
6.4mm	.2520	2-7/8	4-1/8	**AD50640**	Price	**AD55640**	Price
6.5mm	.2559	2-7/8	4-1/8	**AD50650**	Price	**AD55650**	Price
6.6mm	.2598	2-7/8	4-1/8	**AD50660**	Price	**AD55660**	Price
6.7mm	.2638	2-7/8	4-1/8	**AD50670**	Price	**AD55670**	Price
6.75mm	.2657	2-7/8	4-1/8	**AD50675**	Price	**AD55675**	Price
6.8mm	.2677	2-7/8	4-1/8	**AD50680**	Price	**AD55680**	Price
6.9mm	.2717	2-7/8	4-1/8	**AD50690**	Price	**AD55690**	Price
7mm	.2756	2-7/8	4-1/8	**AD50700**	Price	**AD55700**	Price
7.1mm	.2795	2-15/16	4-1/4	**AD50710**	Price	**AD55710**	Price
7.2mm	.2835	2-15/16	4-1/4	**AD50720**	Price	**AD55720**	Price
7.25mm	.2854	2-15/16	4-1/4	**-**	-	**AD55725**	Price
7.3mm	.2874	2-15/16	4-1/4	**AD50730**	Price	**AD55730**	Price
7.4mm	.2913	3-1/16	4-3/8	**AD50740**	Price	**AD55740**	Price
7.5mm	.2953	3-1/16	4-3/8	**AD50750**	Price	**AD55750**	Price
7.6mm	.2992	3-1/16	4-3/8	**AD50760**	Price	**-**	-
7.7mm	.3031	3-3/16	4-1/2	**AD50770**	Price	**AD55770**	Price
7.75mm	.3051	3-3/16	4-1/2	**AD50775**	Price	**AD55775**	Price
7.8mm	.3071	3-3/16	4-1/2	**AD50780**	Price	**AD55780**	Price
7.9mm	.3110	3-3/16	4-1/2	**AD50790**	Price	**AD55790**	Price
8mm	.3150	3-3/16	4-1/2	**AD50800**	Price	**AD55800**	Price
8.1mm	.3189	3-5/16	4-5/8	**AD50810**	Price	**AD55810**	Price
8.2mm	.3228	3-5/16	4-5/8	**AD50820**	Price	**AD55820**	Price
8.25mm	.3248	3-5/16	4-5/8	**AD50825**	Price	**AD55825**	Price
8.3mm	.3268	3-5/16	4-5/8	**AD50830**	Price	**AD55830**	Price
8.4mm	.3307	3-7/16	4-3/4	**AD50840**	Price	**AD55840**	Price
8.5mm	.3346	3-7/16	4-3/4	**AD50850**	Price	**AD55850**	Price
8.6mm	.3386	3-7/16	4-3/4	**AD50860**	Price	**AD55860**	Price
8.7mm	.3425	3-7/16	4-3/4	**AD50870**	Price	**AD55870**	Price
8.75mm	.3445	3-7/16	4-3/4	**AD50875**	Price	**AD55875**	Price
8.8mm	.3465	3-1/2	4-7/8	**AD50880**	Price	**AD55880**	Price

				High Speed Steel		Cobalt	
Size (mm)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
8.9mm	.3504	3-1/2	4-7/8	**AD50890**	Price	**AD55890**	Price
9mm	.3543	3-1/2	4-7/8	**AD50900**	Price	**AD55900**	Price
9.1mm	.3583	3-1/2	4-7/8	**AD50910**	Price	**AD55910**	Price
9.2mm	.3622	3-5/8	5	**AD50920**	Price	**AD55920**	Price
9.25mm	.3642	3-5/8	5	**AD50925**	Price	**AD55925**	Price
9.3mm	.3661	3-5/8	5	**AD50930**	Price	**AD55930**	Price
9.4mm	.3701	3-5/8	5	**AD50940**	Price	**AD55940**	Price
9.5mm	.3740	3-5/8	5	**AD50950**	Price	**AD55950**	Price
9.6mm	.3780	3-3/4	5-1/8	**AD50960**	Price	**AD55960**	Price
9.7mm	.3819	3-3/4	5-1/8	**AD50970**	Price	**AD55970**	Price
9.75mm	.3839	3-3/4	5-1/8	**AD50975**	Price	**AD55975**	Price
9.8mm	.3858	3-3/4	5-1/8	**AD50980**	Price	**-**	-
9.9mm	.3898	3-3/4	5-1/8	**AD50990**	Price	**AD55990**	Price
10mm	.3937	3-3/4	5-1/8	**AD501000**	Price	**AD551000**	Price
10.2mm	.4016	3-7/8	5-1/4	**AD501020**	Price	**AD551020**	Price
10.5mm	.4134	3-15/16	5-3/8	**AD501050**	Price	**AD551050**	Price
10.8mm	.4252	4-1/16	5-1/2	**AD501080**	Price	**AD551080**	Price
11mm	.4331	4-1/16	5-1/2	**AD501100**	Price	**AD551100**	Price
11.2mm	.4409	4-3/16	5-5/8	**AD501120**	Price	**-**	-
11.5mm	.4528	4-3/16	5-5/8	**AD501150**	Price	**AD551150**	Price
11.8mm	.4646	4-5/16	5-3/4	**AD501180**	Price	**AD551180**	Price
12mm	.4724	4-3/8	5-7/8	**AD501200**	Price	**AD551200**	Price
12.2mm	.4803	4-3/8	5-7/8	**AD501220**	Price	**AD551220**	Price
12.5mm	.4921	4-1/2	6	**AD501250**	Price	**AD551250**	Price
13mm	.5118	4-1/2	6	**AD501300**	Price	**AD551300**	Price
13.5mm	.5315	4-13/16	6-5/8	**AD501350**	Price	**-**	-
14mm	.5512	4-13/16	6-5/8	**AD501400**	Price	**-**	-
14.5mm	.5709	4-13/16	6-5/8	**AD501450**	Price	**-**	-
15mm	.5906	5-3/16	7-1/8	**AD501500**	Price	**-**	-
15.5mm	.6102	5-3/16	7-1/8	**AD501550**	Price	**-**	-
16mm	.6299	5-3/16	7-1/8	**AD501600**	Price	**-**	-
16.5mm	.6496	5-3/16	7-1/8	**AD501650**	Price	**-**	-
17mm	.6693	5-5/8	7-5/8	**AD501700**	Price	**-**	-
17.5mm	.6890	5-5/8	7-5/8	**AD501750**	Price	**-**	-

Huot Metric Folding Indexes



- Drills not included

Size Range	Order No.	Price
1 to 10mm x 0.5mm	**AP534019**	Price
1 to 13mm x 0.5mm	**AP534025**	Price
1 to 6mm x 0.5mm	**AP534011**	Price
1 to 7mm x 0.5mm	**AP534013**	Price

PROCUT Metric HSS Jobber Drill Sets

with Steel Indexes • Ground from Solid M-2
Bright Finish



Set Range	Finish	Order No.	Price
1mm - 13mm by .5mm	Bright Finish	**AP50EC2AH**	Price
1mm - 13mm by .5mm	Surface Treated	**AP50EC2AHB**	Price

Heavy Duty Jobber Drills

High Speed Steel • 135° Split Point

- Heavy duty (NAS 907 Type B)
- Originally designed to drill cotter pin holes, these heavy duty drills are suitable for drilling high tensile strength steels
- 135° split point is self-centering, and reduces “walking” at the drill point
- Designed for high production drilling of a wide variety of materials
- Perform well under many different operating conditions
- **Fractional sizes 3/64 and smaller are NOT split point**
- Morse List #1385
- Precision Twist List #R10B



		Morse Cutting Tools		Rapidkut		Precision Twist Drill	
Size (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1-3/8	**MT5514315†**	Price	**AC51002†**	Price	**-**	-
3/64	1-3/4	**MT5514328†**	Price	**AC51003†**	Price	**-**	-
1/16	1-7/8	**MT5514451**	Price	**AC51004**	Price	**PT1210204**	Price
5/64	2	**MT5514457**	Price	**AC51005**	Price	**PT1210205**	Price
3/32	2-1/4	**MT5514464**	Price	**AC51006**	Price	**PT1210206**	Price
7/64	2-5/8	**MT5514471**	Price	**AC51007**	Price	**PT1210207**	Price
1/8	2-3/4	**MT5514477**	Price	**AC51008**	Price	**PT1210208**	Price
9/64	2-7/8	**MT5514481**	Price	**AC51009**	Price	**PT1210209**	Price
5/32	3-1/8	**MT5514487**	Price	**AC51010**	Price	**PT1210210**	Price
11/64	3-1/4	**MT5514493**	Price	**AC51011**	Price	**PT1210211**	Price
3/16	3-1/2	**MT5514499**	Price	**AC51012**	Price	**PT1210212**	Price
13/64	3-5/8	**MT5514506**	Price	**AC51013**	Price	**PT1210213**	Price
7/32	3-3/4	**MT5514511**	Price	**AC51014**	Price	**PT1210214**	Price
15/64	3-7/8	**MT5514515**	Price	**AC51015**	Price	**PT1210215**	Price
1/4, E	4	**MT5514519**	Price	**AC51016**	Price	**PT1210216**	Price
17/64	4-1/8	**MT5514523**	Price	**AC51017**	Price	**PT1210217**	Price
9/32	4-1/4	**MT5514528**	Price	**AC51018**	Price	**PT1210218**	Price
19/64	4-3/8	**MT5514531**	Price	**AC51019**	Price	**PT1210219**	Price
5/16	4-1/2	**MT5514533**	Price	**AC51020**	Price	**PT1210220**	Price
21/64	4-5/8	**MT5514536**	Price	**AC51021**	Price	**PT1210221**	Price
11/32	4-3/4	**MT5514539**	Price	**AC51022**	Price	**PT1210222**	Price
23/64	4-7/8	**MT5514542**	Price	**AC51023**	Price	**PT1210223**	Price
3/8	5	**MT5514544**	Price	**AC51024**	Price	**PT1210224**	Price
25/64	5-1/8	**MT5514547**	Price	**AC51025**	Price	**PT1210225**	Price
13/32	5-1/4	**MT5514550**	Price	**AC51026**	Price	**PT1210226**	Price
27/64	5-3/8	**MT5514552**	Price	**AC51027**	Price	**PT1210227**	Price
7/16	5-1/2	**MT5514553**	Price	**AC51028**	Price	**PT1210228**	Price
29/64	5-5/8	**MT5514554**	Price	**AC51029**	Price	**PT1210229**	Price
15/32	5-3/4	**MT5514555**	Price	**AC51030**	Price	**PT1210230**	Price
31/64	5-7/8	**MT5514556**	Price	**AC51031**	Price	**PT1210231**	Price
1/2	6	**MT5514557**	Price	**AC51032**	Price	**PT1210232**	Price

† Sizes not split point

Heavy Duty 135° Jobber Drills - Letter Sizes

High Speed Steel • 135° Split Point

- Heavy duty (NAS 907 Type B)
- Originally designed to drill cotter pin holes, these heavy duty drills are suitable for drilling high tensile strength steels
- 135° split point is self-centering, and reduces “walking” at the drill point
- Designed for high production drilling of a wide variety of materials
- Perform well under many different operating conditions
- Morse List #1385
- Precision Twist List #R15B



		Morse Cutting Tools		Rapidkut		Precision Twist Drill	
Size	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
A	3-7/8	**MT5514514**	Price	**AC51201**	Price	**PT1215201**	Price
B	4	**MT5514516**	Price	**AC51202**	Price	**PT1215202**	Price
C	4	**MT5514517**	Price	**AC51203**	Price	**PT1215203**	Price
D	4	**MT5514518**	Price	**AC51204**	Price	**PT1215204**	Price
E	4	**MT5514519**	Price	**AC51205**	Price	**-**	-
F	4-1/8	**MT5514521**	Price	**AC51206**	Price	**PT1215206**	Price
G	4-1/8	**MT5514522**	Price	**AC51207**	Price	**PT1215207**	Price
H	4-1/8	**MT5514524**	Price	**AC51208**	Price	**PT1215208**	Price
I	4-1/8	**MT5514525**	Price	**AC51209**	Price	**PT1215209**	Price
J	4-1/8	**MT5514526**	Price	**AC51210**	Price	**PT1215210**	Price
K	4-1/4	**MT5514527**	Price	**AC51211**	Price	**PT1215211**	Price
L	4-1/4	**MT5514529**	Price	**AC51212**	Price	**PT1215212**	Price
M	4-3/8	**MT5514530**	Price	**AC51213**	Price	**PT1215213**	Price
N	4-3/8	**MT5514532**	Price	**AC51214**	Price	**PT1215214**	Price
O	4-1/2	**MT5514534**	Price	**AC51215**	Price	**PT1215215**	Price
P	4-5/8	**MT5514535**	Price	**AC51216**	Price	**PT1215216**	Price
Q	4-3/4	**MT5514537**	Price	**AC51217**	Price	**PT1215217**	Price
R	4-3/4	**MT5514538**	Price	**AC51218**	Price	**PT1215218**	Price
S	4-7/8	**MT5514540**	Price	**AC51219**	Price	**PT1215219**	Price
T	4-7/8	**MT5514541**	Price	**AC51220**	Price	**PT1215220**	Price
U	5	**MT5514543**	Price	**AC51221**	Price	**PT1215221**	Price
V	5	**MT5514545**	Price	**AC51222**	Price	**PT1215222**	Price
W	5-1/8	**MT5514546**	Price	**AC51223**	Price	**PT1215223**	Price
X	5-1/8	**MT5514548**	Price	**AC51224**	Price	**PT1215224**	Price
Y	5-1/4	**MT5514549**	Price	**AC51225**	Price	**PT1215225**	Price
Z	5-1/4	**MT5514551**	Price	**AC51226**	Price	**PT1215226**	Price

† Precision Dormer “E” use PT1210216

Ambore™ Wide Land Parabolic Flute Jobber Length Drills

High Speed Steel • 135° Split Point • Heavy Duty



- 135° Self-centering point eliminates “walking” and reduces thrust
- Parabolic flute design enhances chip flow, coolant flow, and heat dissipation especially in deeper drilling operations
- Recommended for a wide range of material types
- Morse List #1354

Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	.0625	7/8	1-7/8	**MT7815401**	Price
5/64	.0781	1	2	**MT7815402**	Price
3/32	.0938	1-1/4	2-1/4	**MT7815403**	Price
7/64	.1094	1-1/2	2-5/8	**MT7815404**	Price
1/8	.1250	1-5/8	2-3/4	**MT7815405**	Price
9/64	.1406	1-3/4	2-7/8	**MT7815406**	Price
5/32	.1562	2	3-1/8	**MT7815407**	Price
11/64	.1719	2-1/8	3-1/4	**MT7815408**	Price
3/16	.1875	2-5/16	3-1/2	**MT7815409**	Price
13/64	.2031	2-7/16	3-5/8	**MT7815410**	Price
7/32	.2188	2-1/2	3-3/4	**MT7815411**	Price
15/64	.2344	2-5/8	3-7/8	**MT7815412**	Price
1/4	.2500	2-3/4	4	**MT7815413**	Price
17/64	.2656	2-7/8	4-1/8	**MT7815414**	Price
9/32	.2812	2-15/16	4-1/4	**MT7815415**	Price
19/64	.2969	3-1/16	4-3/8	**MT7815416**	Price
5/16	.3125	3-3/16	4-1/2	**MT7815417**	Price
21/64	.3281	3-5/16	4-5/8	**MT7815418**	Price
11/32	.3438	3-7/16	4-3/4	**MT7815419**	Price
23/64	.3594	3-1/2	4-7/8	**MT7815420**	Price
3/8	.3750	3-5/8	5	**MT7815421**	Price
25/64	.3906	3-3/4	5-1/8	**MT7815422**	Price
13/32	.4062	3-7/8	5-1/4	**MT7815423**	Price
27/64	.4219	3-15/16	5-3/8	**MT7815424**	Price
7/16	.4375	4-1/16	5-1/2	**MT7815425**	Price
29/64	.4531	4-3/16	5-5/8	**MT7815426**	Price
15/32	.4688	4-5/16	5-3/4	**MT7815427**	Price
31/64	.4844	4-3/8	5-7/8	**MT7815428**	Price
1/2	.5000	4-1/2	6	**MT7815429**	Price

Heavy Duty Jobber Drills

High Speed Steel • 135° Split Point • Black Oxide Finish



- Originally designed to drill cotter pin holes, these heavy duty drills are suitable for drilling high tensile strength steels
- 135° split point is self-centering, and reduces “walking” at the drill point
- Designed for high production drilling of a wide variety of materials
- Perform well under many different operating conditions
- Heavy duty (NAS907 Type B)
- **Wire gage sizes #53 thru #80 are NOT split point**
- Morse List #1385
- Precision Twist List #R18B

		Morse Cutting Tools		Rapidkut		Precision Twist Drill	
Size	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1	3-7/8	MT5514513	Price	AC51101	Price	PT1218201	Price
2	3-7/8	MT5514512	Price	AC51102	Price	PT1218202	Price
3	3-3/4	MT5514510	Price	AC51103	Price	PT1218203	Price
4	3-3/4	MT5514509	Price	AC51104	Price	PT1218204	Price
5	3-3/4	MT5514508	Price	AC51105	Price	PT1218205	Price
6	3-3/4	MT5514507	Price	AC51106	Price	PT1218206	Price
7	3-5/8	MT5514505	Price	AC51107	Price	PT1218207	Price
8	3-5/8	MT5514504	Price	AC51108	Price	PT1218208	Price
9	3-5/8	MT5514503	Price	AC51109	Price	PT1218209	Price
10	3-5/8	MT5514502	Price	AC51110	Price	PT1218210	Price
11	3-1/2	MT5514501	Price	AC51111	Price	PT1218211	Price
12	3-1/2	MT5514500	Price	AC51112	Price	PT1218212	Price
13	3-1/2	MT5514498	Price	AC51113	Price	PT1218213	Price
14	3-3/8	MT5514497	Price	AC51114	Price	PT1218214	Price
15	3-3/8	MT5514496	Price	AC51115	Price	PT1218215	Price
16	3-3/8	MT5514495	Price	AC51116	Price	PT1218216	Price
17	3-3/8	MT5514494	Price	AC51117	Price	PT1218217	Price
18	3-1/4	MT5514492	Price	AC51118	Price	PT1218218	Price
19	3-1/4	MT5514491	Price	AC51119	Price	PT1218219	Price
20	3-1/4	MT5514490	Price	AC51120	Price	PT1218220	Price
21	3-1/4	MT5514489	Price	AC51121	Price	PT1218221	Price
22	3-1/8	MT5514488	Price	AC51122	Price	PT1218222	Price
23	3-1/8	MT5514486	Price	AC51123	Price	PT1218223	Price
24	3-1/8	MT5514485	Price	AC51124	Price	PT1218224	Price
25	3	MT5514484	Price	AC51125	Price	PT1218225	Price
26	3	MT5514483	Price	AC51126	Price	PT1218226	Price
27	3	MT5514482	Price	AC51127	Price	PT1218227	Price
28	2-7/8	MT5514480	Price	AC51128	Price	PT1218228	Price
29	2-7/8	MT5514479	Price	AC51129	Price	PT1218229	Price
30	2-3/4	MT5514478	Price	AC51130	Price	PT1218230	Price
31	2-3/4	MT5514476	Price	AC51131	Price	PT1218231	Price
32	2-3/4	MT5514475	Price	AC51132	Price	PT1218232	Price
33	2-5/8	MT5514474	Price	AC51133	Price	PT1218233	Price
34	2-5/8	MT5514473	Price	AC51134	Price	PT1218234	Price
35	2-5/8	MT5514472	Price	AC51135	Price	PT1218235	Price
36	2-1/2	MT5514470	Price	AC51136	Price	PT1218236	Price
37	2-1/2	MT5514469	Price	AC51137	Price	PT1218237	Price
38	2-1/2	MT5514468	Price	AC51138	Price	PT1218238	Price
39	2-3/8	MT5514467	Price	AC51139	Price	PT1218239	Price
40	2-3/8	MT5514466	Price	AC51140	Price	PT1218240	Price
41	2-3/8	MT5514465	Price	AC51141	Price	PT1218241	Price
42	2-1/4	MT5514463	Price	AC51142	Price	PT1218242	Price
43	2-1/4	MT5514462	Price	AC51143	Price	PT1218243	Price
44	2-1/8	MT5514461	Price	AC51144	Price	PT1218244	Price
45	2-1/8	MT5514460	Price	AC51145	Price	PT1218245	Price
46	2-1/8	MT5514459	Price	AC51146	Price	PT1218246	Price
47	2	MT5514458	Price	AC51147	Price	PT1218247	Price
48	2	MT5514456	Price	AC51148	Price	PT1218248	Price
49	2	MT5514455	Price	AC51149	Price	PT1218249	Price
50	2	MT5514454	Price	AC51150	Price	PT1218250	Price
51	2	MT5514453	Price	AC51151	Price	PT1218251	Price
52	1-7/8	MT5514452	Price	AC51152	Price	PT1218252	Price
53	1-7/8	MT5514331†	Price	AC51153†	Price	-	-
54	1-7/8	MT5514330†	Price	AC51154†	Price	-	-
55	1-7/8	MT5514329†	Price	AC51155†	Price	-	-
56	1-3/4	MT5514327†	Price	AC51156†	Price	-	-
57	1-3/4	MT5514326†	Price	AC51157†	Price	-	-
58	1-5/8	MT5514325†	Price	AC51158†	Price	-	-
59	1-5/8	MT5514324†	Price	AC51159†	Price	-	-
60	1-5/8	-	-	AC51160†	Price	-	-
61	1-5/8	MT5514322†	Price	AC51161†	Price	-	-
62	1-1/2	MT5514321†	Price	AC51162†	Price	-	-
63	1-1/2	MT5514320†	Price	AC51163†	Price	-	-
64	1-1/2	MT5514319†	Price	AC51164†	Price	-	-
65	1-1/2	MT5514318†	Price	AC51165†	Price	-	-
66	1-3/8	MT5514317†	Price	AC51166†	Price	-	-
67	1-3/8	MT5514316†	Price	AC51167†	Price	-	-
68	1-3/8	MT5514314†	Price	AC51168†	Price	-	-
69	1-3/8	MT5514313†	Price	AC51169†	Price	-	-
70	1-1/4	MT5514312†	Price	AC51170†	Price	-	-
71	1-1/4	MT5514311†	Price	AC51171†	Price	-	-
72	1-1/8	MT5514310†	Price	AC51172†	Price	-	-
73	1-1/8	MT5514309†	Price	AC51173†	Price	-	-
74	1	MT5514308†	Price	AC51174†	Price	-	-
75	1	MT5514307†	Price	AC51175†	Price	-	-
76	3/4	MT5514306†	Price	-	-	-	-
76	7/8	-	-	AC51176†	Price	-	-
77	3/4	MT5514305†	Price	-	-	-	-
77	7/8	-	-	AC51177†	Price	-	-
78	3/4	MT5514304†	Price	-	-	-	-
78	7/8	-	-	AC51178†	Price	-	-
79	3/4	MT5514302†	Price	AC51179†	Price	-	-
80	3/4	MT5514301†	Price	AC51180†	Price	-	-

† Sizes not split point

Heavy Duty Jobber Drill Sets

High Speed Steel • 135° Split Point • Surface Treated

- Includes 29 Pieces 1/16” - 1/2” x 64ths
- Complete with index
- 135° Split point is self-centering and reduces “walking” at the drill point
- Drills ground from solid



Brand	Set Range	Order No.	Price
RAPIDKUT	1/16" - 1/2" by 64ths	AP50C162HDSP	Price
HSS M GP	1/16" - 1/2" by 64ths	MT1218172	Price

Drill Stop Sets

- For twist or brad point drills
- Assures exact hole depth
- Prevents damage from excessive drill penetration



6 Piece Set



7 Piece Set

No. of Pieces	Sizes (in.)	Order No.	Price
6	3/16, 1/4, 5/16, 3/8, 7/16, 1/2	NE50S838	Price
7	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2	NE60100	Price

Heavy Duty Jobber Drills

High Speed Steel • 135° Split Point

- Unique surface treatment for improved wear resistance in hard ferrous alloys
- Low thrust design self-centering split point for easier penetration
- Precision Twist List #HX10 (fractional sizes), HX18 (wire gage sizes), HX15 (letter sizes)



Size Type - Fractional Size					
Size	Decimal Equivalent	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	.0625	7/8	1-7/8	**PT1222004**	Price
5/64	.0781	1	2	**PT1222005**	Price
3/32	.0938	1-1/4	2-1/4	**PT1222006**	Price
7/64	.1094	1-1/2	2-5/8	**PT1222007**	Price
1/8	.1250	1-5/8	2-3/4	**PT1222008**	Price
9/64	.1406	1-3/4	2-7/8	**PT1222009**	Price
5/32	.1562	2	3-1/8	**PT1222010**	Price
11/64	.1719	2-1/8	3-1/4	**PT1222011**	Price
3/16	.1875	2-5/16	3-1/2	**PT1222012**	Price
13/64	.2031	2-7/16	3-5/8	**PT1222013**	Price
7/32	.2188	2-1/2	3-3/4	**PT1222014**	Price
15/64	.2344	2-5/8	3-7/8	**PT1222015**	Price
1/4	.2500	2-3/4	4	**PT1222016**	Price
17/64	.2656	2-7/8	4-1/8	**PT1222017**	Price
9/32	.2812	2-15/16	4-1/4	**PT1222018**	Price
19/64	.2969	3-1/16	4-3/8	**PT1222019**	Price
5/16	.3125	3-3/16	4-1/2	**PT1222020**	Price
21/64	.3281	3-5/16	4-5/8	**PT1222021**	Price
11/32	.3438	3-7/16	4-3/4	**PT1222022**	Price
23/64	.3594	3-1/2	4-7/8	**PT1222023**	Price
3/8	.3750	3-5/8	5	**PT1222024**	Price
25/64	.3906	3-3/4	5-1/8	**PT1222025**	Price
13/32	.4062	3-7/8	5-1/4	**PT1222026**	Price
27/64	.4219	3-15/16	5-3/8	**PT1222027**	Price
7/16	.4375	4-1/16	5-1/2	**PT1222028**	Price
29/64	.4531	4-3/16	5-5/8	**PT1222029**	Price
15/32	.4688	4-5/16	5-3/4	**PT1222030**	Price
31/64	.4844	4-3/8	5-7/8	**PT1222031**	Price
1/2	.5000	4-1/2	6	**PT1222032**	Price

Size Type - Letter Size					
Size	Decimal Equivalent	Flute Length (in.)	OAL (in.)	Order No.	Price
A	.2340	2-5/8	3-7/8	**PT1222201**	Price
B	.2380	2-3/4	4	**PT1222202**	Price
C	.2420	2-3/4	4	**PT1222203**	Price
D	.2460	2-3/4	4	**PT1222204**	Price
F	.2570	2-7/8	4-1/8	**PT1222206**	Price
G	.2610	2-7/8	4-1/8	**PT1222207**	Price
H	.2660	2-7/8	4-1/8	**PT1222208**	Price
I	.2720	2-7/8	4-1/8	**PT1222209**	Price
J	.2770	2-7/8	4-1/8	**PT1222210**	Price
K	.2810	2-15/16	4-1/4	**PT1222211**	Price
L	.2900	2-15/16	4-1/4	**PT1222212**	Price
M	.2950	3-1/16	4-3/8	**PT1222213**	Price
N	.3020	3-1/16	4-3/8	**PT1222214**	Price
O	.3160	3-3/16	4-1/2	**PT1222215**	Price
P	.3230	3-5/16	4-5/8	**PT1222216**	Price
Q	.3320	3-7/16	4-3/4	**PT1222217**	Price
R	.3390	3-7/16	4-3/4	**PT1222218**	Price
S	.3480	3-1/2	4-7/8	**PT1222219**	Price
T	.3580	3-1/2	4-7/8	**PT1222220**	Price
U	.3680	3-5/8	5	**PT1222221**	Price
V	.3770	3-5/8	5	**PT1222222**	Price
W	.3858	3-3/4	5-1/8	**PT1222223**	Price
X	.3969	3-3/4	5-1/8	**PT1222224**	Price
Y	.4039	3-7/8	5-1/4	**PT1222225**	Price
Z	.4130	3-7/8	5-1/4	**PT1222226**	Price

Size Type - Wire Gage Size					
Size	Decimal Equivalent	Flute Length (in.)	OAL (in.)	Order No.	Price
1	.2280	2-5/8	3-7/8	**PT1222101**	Price
2	.2210	2-5/8	3-7/8	**PT1222102**	Price
3	.2130	2-1/2	3-3/4	**PT1222103**	Price
4	.2090	2-1/2	3-3/4	**PT1222104**	Price
5	.2055	2-1/2	3-3/4	**PT1222105**	Price
6	.2040	2-1/2	3-3/4	**PT1222106**	Price
7	.2010	2-7/16	3-5/8	**PT1222107**	Price
8	.1990	2-7/16	3-5/8	**PT1222108**	Price
9	.1960	2-7/16	3-5/8	**PT1222109**	Price
10	.1935	2-7/16	3-5/8	**PT1222110**	Price
11	.1910	2-5/16	3-1/2	**PT1222111**	Price
12	.1890	2-5/16	3-1/2	**PT1222112**	Price
13	.1850	2-5/16	3-1/2	**PT1222113**	Price
14	.1820	2-3/16	3-3/8	**PT1222114**	Price
15	.1800	2-3/16	3-3/8	**PT1222115**	Price
16	.1770	2-3/16	3-3/8	**PT1222116**	Price
17	.1730	2-3/16	3-3/8	**PT1222117**	Price
18	.1695	2-1/8	3-1/4	**PT1222118**	Price
19	.1660	2-1/8	3-1/4	**PT1222119**	Price
20	.1610	2-1/8	3-1/4	**PT1222120**	Price
21	.1590	2-1/8	3-1/4	**PT1222121**	Price
22	.1570	2	3-1/8	**PT1222122**	Price
23	.1540	2	3-1/8	**PT1222123**	Price
24	.1520	2	3-1/8	**PT1222124**	Price
25	.1495	1-7/8	3	**PT1222125**	Price
26	.1470	1-7/8	3	**PT1222126**	Price
27	.1440	1-7/8	3	**PT1222127**	Price
28	.1405	1-3/4	2-7/8	**PT1222128**	Price
29	.1360	1-3/4	2-7/8	**PT1222129**	Price
30	1285	1-5/8	2-3/4	**PT1222130**	Price
31	.1200	1-5/8	2-3/4	**PT1222131**	Price
32	.1160	1-5/8	2-3/4	**PT1222132**	Price
33	.1130	1-1/2	2-5/8	**PT1222133**	Price
34	.1110	1-1/2	2-5/8	**PT1222134**	Price
35	.1100	1-1/2	2-5/8	**PT1222135**	Price
36	.1065	1-7/16	2-1/2	**PT1222136**	Price
37	.1040	1-7/16	2-1/2	**PT1222137**	Price
38	.1015	1-7/16	2-1/2	**PT1222138**	Price
39	.0995	1-3/8	2-3/8	**PT1222139**	Price
40	.0980	1-3/8	2-3/8	**PT1222140**	Price
41	.0960	1-3/8	2-3/8	**PT1222141**	Price
42	.0935	1-1/4	2-1/4	**PT1222142**	Price
43	.0890	1-1/4	2-1/4	**PT1222143**	Price
44	.0860	1-1/8	2-1/8	**PT1222144**	Price
45	.0820	1-1/8	2-1/8	**PT1222145**	Price
46	.0810	1-1/8	2-1/8	**PT1222146**	Price
47	.0785	1	2	**PT1222147**	Price
48	.0760	1	2	**PT1222148**	Price
49	.0730	1	2	**PT1222149**	Price
50	.0700	1	2	**PT1222150**	Price
51	.0670	1	2	**PT1222151**	Price
52	.0635	7/8	1-7/8	**PT1222152**	Price

Heavy Duty Jobber Drill Set

High Speed Steel • 135° Split Point

- 29 Piece set, includes 1/16" - 1/2" x 64ths, plastic index
- Unique surface treatment for improved wear resistance in hard ferrous alloys
- Precision Twist List #HX10



Order No.	Price
PT2791010	Price

RAPIDKUT® Premium Heavy Duty "Dyno Drill" & Morse Ambore Jobber Drills

High Speed Steel • 135° Split Point • Gold with Black Oxide Surface Treatment



- Suitable for drilling high tensile strength steels
- The 135° split points are self-centering and prevent "walking"
- Available in fractional sizes only
- Morse List #1384

HSS MORSE M GP RAPIDKUT®

			Morse Cutting Tools		Rapidkut	
Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/16	7/8	1-7/8	MT7812062	Price	AC80004	Price
5/64	1	2	MT7812063	Price	AC80005	Price
3/32	1-1/4	2-1/4	MT7812064	Price	AC80006	Price
7/64	1-1/2	2-5/8	MT7812065	Price	AC80007	Price
1/8	1-5/8	2-3/4	MT7812066	Price	AC80008	Price
9/64	1-3/4	2-7/8	MT7812067	Price	AC80009	Price
5/32	2	3-1/8	MT7812068	Price	AC80010	Price
11/64	2-1/8	3-1/4	MT7812069	Price	AC80011	Price
3/16	2-5/16	31/2	MT7812070	Price	AC80012	Price
13/64	2-7/16	3-5/8	MT7812071	Price	AC80013	Price
7/32	2-1/2	3-3/4	MT7812072	Price	AC80014	Price
15/64	2-5/8	3-7/8	MT7812073	Price	AC80015	Price
1/4	2-3/4	4	MT7812074	Price	AC80016	Price
17/64	2-7/8	4-1/8	MT7812075	Price	AC80017	Price
9/32	2-15/16	4-1/4	MT7812076	Price	AC80018	Price
19/64	3-1/16	4-3/8	MT7812077	Price	AC80019	Price
5/16	3-3/16	4-1/2	MT7812078	Price	AC80020	Price
21/64	3-5/16	4-5/8	MT7812079	Price	AC80021	Price
11/32	3-7/16	4-3/4	MT7812080	Price	AC80022	Price
23/64	3-1/2	4-7/8	MT7812081	Price	AC80023	Price
3/8	3-5/8	5	MT7812082	Price	AC80024	Price
25/64	3-3/4	5-1/8	MT7812083	Price	AC80025	Price
13/32	3-7/8	5-1/4	MT7812084	Price	AC80026	Price
27/64	3-15/16	5-3/8	MT7812085	Price	AC80027	Price
7/16	4-1/16	5-1/2	MT7812086	Price	AC80028	Price
29/64	4-3/16	5-5/8	MT7812087	Price	AC80029	Price
15/32	4-5/16	5-3/4	MT7812088	Price	AC80030	Price
31/64	4-3/8	5-7/8	MT7812089	Price	AC80031	Price
1/2	4-1/2	6	MT7812090	Price	AC80032	Price

Heavy Duty Jobber Drills

Cobalt • 135° Split Point



- For drilling in tough, high tensile strength materials like stainless steels, titanium and inconel
- Made of heat resistant cobalt high speed steel
- Made to NAS907 Type J specifications
- Designed for high production drilling of a wide variety of materials
- Perform well under many different operating conditions
- Morse List #2330
- Precision Twist List #R10CO

HSS MORSE M GP RAPIDKUT® PRECISION TWIST DRILL PROCUT

		Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/64	3/4	-	-	AC52001†	Price	PT1110301†	Price	-	-
1/32	1-3/8	-	-	AC52002†	Price	PT1110302†	Price	-	-
3/64	1-3/4	MT1117106†	2.26	AC52003†	Price	PT1110303†	Price	-	-
1/16	1-7/8	MT1117110	Price	AC52004	Price	PT1110304	Price	AC45004	Price
5/64	2	MT1117116	Price	AC52005	Price	PT1110305	Price	AC45005	Price
3/32	2-1/4	MT1117123	Price	AC52006	Price	PT1110306	Price	AC45006	Price
7/64	2-5/8	MT1117130	Price	AC52007	Price	PT1110307	Price	AC45007	Price
1/8	2-3/4	MT1117136	Price	AC52008	Price	PT1110308	Price	AC45008	Price
9/64	2-7/8	MT1117140	Price	AC52009	Price	PT1110309	Price	AC45009	Price
5/32	3-1/8	MT1117146	Price	AC52010	Price	PT1110310	Price	AC45010	Price
11/64	3-1/4	MT1117152	Price	AC52011	Price	PT1110311	Price	AC45011	Price
3/16	3-1/2	MT1117158	Price	AC52012	Price	PT1110312	Price	AC45012	Price
13/64	3-5/8	MT1117165	Price	AC52013	Price	PT1110313	Price	AC45013	Price
7/32	3-3/4	MT1117170	Price	AC52014	Price	PT1110314	Price	AC45014	Price
15/64	3-7/8	MT1117174	Price	AC52015	Price	PT1110315	Price	AC45015	Price
1/4, E	4	MT1117178	Price	AC52016	Price	PT1110316	Price	AC45016	Price
17/64	4-1/8	MT1117182	Price	AC52017	Price	PT1110317	Price	AC45017	Price
9/32	4-1/4	MT1117187	Price	AC52018	Price	PT1110318	Price	AC45018	Price
19/64	4-3/8	MT1117190	Price	AC52019	Price	PT1110319	Price	AC45019	Price
5/16	4-1/2	MT1117192	Price	AC52020	Price	PT1110320	Price	AC45020	Price
21/64	4-5/8	MT1117195	Price	AC52021	Price	PT1110321	Price	AC45021	Price
11/32	4-3/4	MT1117198	Price	AC52022	Price	PT1110322	Price	AC45022	Price
23/64	4-7/8	MT1117201	Price	AC52023	Price	PT1110323	Price	AC45023	Price
3/8	5	MT1117203	Price	AC52024	Price	PT1110324	Price	AC45024	Price
25/64	5-1/8	MT1117206	Price	AC52025	Price	PT1110325	Price	AC45025	Price
13/32	5-1/4	MT1117209	Price	AC52026	Price	PT1110326	Price	AC45026	Price
27/64	5-3/8	MT1117211	Price	AC52027	Price	PT1110327	Price	AC45027	Price
7/16	5-1/2	MT1117212	Price	AC52028	Price	PT1110328	Price	AC45028	Price
29/64	5-5/8	MT1117213	Price	AC52029	Price	PT1110329	Price	AC45029	Price
15/32	5-3/4	MT1117214	Price	AC52030	Price	PT1110330	Price	AC45030	Price
31/64	5-7/8	MT1117215	Price	AC52031	Price	PT1110331	Price	AC45031	Price
1/2	6	MT1117216	Price	AC52032	Price	PT1110332	Price	AC45032	Price
33/64	6-5/8	-	-	AC52033	Price	PT1110333	Price	AC45033	Price
17/32	6-5/8	-	-	AC52034	Price	PT1110334	Price	AC45034	Price
35/64	6-5/8	-	-	AC52035	Price	PT1110335	Price	-	-
9/16	6-5/8	-	-	AC52036	Price	PT1110336	Price	AC45036	Price
37/64	6-5/8	-	-	AC52037	Price	PT1110337	Price	AC45037	Price
19/32	7-1/8	-	-	AC52038	Price	PT1110338	Price	AC45038	Price
39/64	7-1/8	-	-	AC52039	Price	PT1110339	Price	AC45039	Price
5/8	7-1/8	-	-	AC52040	Price	PT1110340	Price	AC45040	Price
41/64	7-1/8	-	-	AC52041	Price	PT1110341	Price	-	-
21/32	7-1/8	-	-	AC52042	Price	PT1110342	Price	AC45042	Price
43/64	7-5/8	-	-	-	-	PT1110343	Price	-	-
11/16	7-5/8	-	-	AC52044	Price	PT1110344	Price	-	

† Sizes not split point

Heavy Duty Jobber Drills

Cobalt • 135° Split Point

- For drilling in tough, high tensile strength materials like stainless steels, titanium and inconel
- Made of heat resistant cobalt high speed steel
- Made to NAS907 Type J specifications
- Designed for high production drilling of a wide variety of materials
- Perform well under many different operating conditions
- Morse List #2340
- Precision Twist List #R18CO

		Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	3-7/8	MT1117172	Price	AC52101	Price	PT1118301	Price	AC45101	Price
2	3-7/8	MT1117171	Price	AC52102	Price	PT1118302	Price	AC45102	Price
3	3-3/4	MT1117169	Price	AC52103	Price	PT1118303	Price	AC45103	Price
4	3-3/4	MT1117168	Price	AC52104	Price	PT1118304	Price	AC45104	Price
5	3-3/4	MT1117167	Price	AC52105	Price	PT1118305	Price	AC45105	Price
6	3-3/4	MT1117166	Price	AC52106	Price	PT1118306	Price	AC45106	Price
7	3-5/8	MT1117164	Price	AC52107	Price	PT1118307	Price	AC45107	Price
8	3-5/8	MT1117163	Price	AC52108	Price	PT1118308	Price	AC45108	Price
9	3-5/8	MT1117162	Price	AC52109	Price	PT1118309	Price	AC45109	Price
10	3-5/8	MT1117161	Price	AC52110	Price	PT1118310	Price	AC45110	Price
11	3-1/2	MT1117160	Price	AC52111	Price	PT1118311	Price	AC45111	Price
12	3-1/2	MT1117159	Price	AC52112	Price	PT1118312	Price	AC45112	Price
13	3-1/2	MT1117157	Price	AC52113	Price	PT1118313	Price	AC45113	Price
14	3-3/8	MT1117156	Price	AC52114	Price	PT1118314	Price	AC45114	Price
15	3-3/8	MT1117155	Price	AC52115	Price	PT1118315	Price	AC45115	Price
16	3-3/8	MT1117154	Price	AC52116	Price	PT1118316	Price	AC45116	Price
17	3-3/8	MT1117153	Price	AC52117	Price	PT1118317	Price	AC45117	Price
18	3-1/4	MT1117151	Price	AC52118	Price	PT1118318	Price	AC45118	Price
19	3-1/4	MT1117150	Price	AC52119	Price	PT1118319	Price	AC45119	Price
20	3-1/4	MT1117149	Price	AC52120	Price	PT1118320	Price	AC45120	Price
21	3-1/4	MT1117148	Price	AC52121	Price	PT1118321	Price	AC45121	Price
22	3-1/8	MT1117147	Price	AC52122	Price	PT1118322	Price	AC45122	Price
23	3-1/8	MT1117145	Price	AC52123	Price	PT1118323	Price	AC45123	Price
24	3-1/8	MT1117144	Price	AC52124	Price	PT1118324	Price	AC45124	Price
25	3	MT1117143	Price	AC52125	Price	PT1118325	Price	AC45125	Price
26	3	MT1117142	Price	AC52126	Price	PT1118326	Price	AC45126	Price
27	3	MT1117141	Price	AC52127	Price	PT1118327	Price	AC45127	Price
28	2-7/8	MT1117139	Price	AC52128	Price	PT1118328	Price	AC45128	Price
29	2-7/8	MT1117138	Price	AC52129	Price	PT1118329	Price	AC45129	Price
30	2-3/4	MT1117137	Price	AC52130	Price	PT1118330	Price	AC45130	Price
31	2-3/4	MT1117135	Price	AC52131	Price	PT1118331	Price	AC45131	Price
32	2-3/4	MT1117134	Price	AC52132	Price	PT1118332	Price	AC45132	Price
33	2-5/8	MT1117133	Price	AC52133	Price	PT1118333	Price	AC45133	Price
34	2-5/8	MT1117132	Price	AC52134	Price	PT1118334	Price	AC45134	Price
35	2-5/8	MT1117131	Price	AC52135	Price	PT1118335	Price	AC45135	Price
36	2-1/2	MT1117129	Price	AC52136	Price	PT1118336	Price	AC45136	Price
37	2-1/2	MT1117128	Price	AC52137	Price	PT1118337	Price	AC45137	Price
38	2-1/2	MT1117127	Price	AC52138	Price	PT1118338	Price	AC45138	Price
39	2-3/8	MT1117126	Price	AC52139	Price	PT1118339	Price	AC45139	Price
40	2-3/8	MT1117125	Price	AC52140	Price	PT1118340	Price	AC45140	Price
41	2-3/8	MT1117124	Price	AC52141	Price	PT1118341	Price	AC45141	Price
42	2-1/4	MT1117122	Price	AC52142	Price	PT1118342	Price	AC45142	Price
43	2-1/4	MT1117121	Price	AC52143	Price	PT1118343	Price	AC45143	Price
44	2-1/8	MT1117120	Price	AC52144	Price	PT1118344	Price	AC45144	Price
45	2-1/8	MT1117119	Price	AC52145	Price	PT1118345	Price	AC45145	Price
46	2-1/8	MT1117118	Price	AC52146	Price	PT1118346	Price	AC45146	Price
47	2	MT1117117	Price	AC52147	Price	PT1118347	Price	AC45147	Price
48	2	MT1117115	Price	AC52148	Price	PT1118348	Price	AC45148	Price
49	2	MT1117114	Price	AC52149	Price	PT1118349	Price	AC45149	Price
50	2	MT1117113	Price	AC52150	Price	PT1118350	Price	AC45150	Price
51	2	MT1117112	Price	AC52151	Price	PT1118351	Price	AC45151	Price
52	1-7/8	MT1117111	Price	AC52152	Price	PT1118352	Price	AC45152	Price
53	1-7/8	MT1117109†	Price	AC52153†	Price	PT1118353†	Price	AC45153†	Price
54	1-7/8	MT1117108†	Price	AC52154†	Price	PT1118354†	Price	AC45154†	Price
55	1-7/8	MT1117107†	Price	AC52155†	Price	PT1118355†	Price	AC45155†	Price
56	1-3/4	MT1117105†	Price	AC52156†	Price	PT1118356†	Price	AC45156†	Price
57	1-3/4	MT1117104†	Price	AC52157†	Price	PT1118357†	Price	AC45157†	Price
58	1-5/8	MT1117103†	Price	AC52158†	Price	PT1118358†	Price	AC45158†	Price
59	1-5/8	MT1117102†	Price	AC52159†	Price	PT1118359†	Price	AC45159†	Price
60	1-5/8	MT1117101†	Price	AC52160†	Price	PT1118360†	Price	AC45160†	Price
61	1-5/8	-	-	AC52161†	Price	PT1118361†	Price	-	-
62	1-1/2	-	-	AC52162†	Price	PT1118362†	Price	-	-
63	1-1/2	-	-	AC52163†	Price	PT1118363†	Price	-	-
64	1-1/2	-	-	AC52164†	Price	PT1118364†	Price	-	-
65	1-1/2	-	-	AC52165†	Price	PT1118365†	Price	-	-
66	1-3/8	-	-	AC52166†	Price	PT1118366†	Price	-	-
67	1-3/8	-	-	AC52167†	Price	PT1118367†	Price	-	-
68	1-3/8	-	-	AC52168†	Price	PT1118368†	Price	-	-
69	1-3/8	-	-	AC52169†	Price	PT1118369†	Price	-	-
70	1-1/4	-	-	AC52170†	Price	PT1118370†	Price	-	-
71	1-1/4	-	-	AC52171†	Price	PT1118371†	Price	-	-
72	1-1/8	-	-	AC52172†	Price	PT1118372†	Price	-	-
73	1-1/8	-	-	AC52173†	Price	PT1118373†	Price	-	-
74	1	-	-	AC52174†	Price	PT1118374†	Price	-	-
75	1	-	-	AC52175†	Price	PT1118375†	Price	-	-
76	7/8	-	-	AC52176†	Price	PT1118376†	Price	-	-
77	7/8	-	-	AC52177†	Price	PT1118377†	Price	-	-
78	7/8	-	-	AC52178†	Price	PT1118378†	Price	-	-
79	3/4	-	-	AC52179†	Price	PT1118379†	Price	-	-
80	3/4	-	-	AC52180†	Price	PT1118380†	Price	-	-

†Sizes not split point

Heavy Duty Jobber Drills

Cobalt • 135° Split Point

- For drilling in tough, high tensile strength materials like stainless steels, titanium and inconel
- Made of heat resistant cobalt high speed steel
- Made to NAS907 Type J specifications
- Designed for high production drilling of a wide variety of materials
- Perform well under many different operating conditions
- Morse List #2332
- Precision Twist List #R15CO



HSS M GP RAPIDKUT

		Morse Cutting Tools		Price		Precision Twist Drill	
Size (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
A	3-7/8	**MT1117173**	Price	**AC52201**	Price	**PT1115301**	Price
B	4	**MT1117175**	Price	**AC52202**	Price	**PT1115302**	Price
C	4	**MT1117176**	Price	**AC52203**	Price	**PT1115303**	Price
D	4	**MT1117177**	Price	**AC52204**	Price	**PT1115304**	Price
1/4, E	4	**MT1117178**	Price	**AC52205**	Price	**PT1110316**	Price
F	4-1/8	**MT1117180**	Price	**AC52206**	Price	**PT1115306**	Price
G	4-1/8	**MT1117181**	Price	**AC52207**	Price	**PT1115307**	Price
H	4-1/8	**MT1117183**	Price	**AC52208**	Price	**PT1115308**	Price
I	4-1/8	**MT1117184**	Price	**AC52209**	Price	**PT1115309**	Price
J	4-1/8	**MT1117185**	Price	**AC52210**	Price	**PT1115310**	Price
K	4-1/4	**MT1117186**	Price	**AC52211**	Price	**PT1115311**	Price
L	4-1/4	**MT1117188**	Price	**AC52212**	Price	**PT1115312**	Price
M	4-3/8	**MT1117189**	Price	**AC52213**	Price	**PT1115313**	Price
N	4-3/8	**MT1117191**	Price	**AC52214**	Price	**PT1115314**	Price
O	4-1/2	**MT1117193**	Price	**AC52215**	Price	**PT1115315**	Price
P	4-5/8	**MT1117194**	Price	**AC52216**	Price	**PT1115316**	Price
Q	4-3/4	**MT1117196**	Price	**AC52217**	Price	**PT1115317**	Price
R	4-3/4	**MT1117197**	Price	**AC52218**	Price	**PT1115318**	Price
S	4-7/8	**MT1117199**	Price	**AC52219**	Price	**PT1115319**	Price
T	4-7/8	**MT1117200**	Price	**AC52220**	Price	**PT1115320**	Price
U	5	**MT1117202**	Price	**AC52221**	Price	**PT1115321**	Price
V	5	**MT1117204**	Price	**AC52222**	Price	**PT1115322**	Price
W	5-1/8	**MT1117205**	Price	**AC52223**	Price	**PT1115323**	Price
X	5-1/8	**MT1117207**	Price	**AC52224**	Price	**PT1115324**	Price
Y	5-1/4	**MT1117208**	Price	**AC52225**	Price	**PT1115325**	Price
Z	5-1/4	**MT1117210**	Price	**AC52226**	Price	**PT1115326**	Price

Ex-Gold® Jobber Length Drills

Cobalt • 130° Point • TiN Coated EXOCARB®

- Patented drill point eliminates the need for a center drill
- Recommended for cast iron, carbon steels, alloy steels and die steels up to 20 HrC
- OSG List #1500



Size	Decimal Equiv.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/32	.0938	1/8	1-1/4	2-1/2	**TP3215093805**	Price
1/8	.1250	3/16	1-5/8	3-1/16	**TP3215125005**	Price
9/64, #28	.1406	3/16	1-3/4	3-3/16	**TP3215140605**	Price
5/32	.1562	3/16	2	3-7/16	**TP3215156205**	Price
11/64	.1719	3/16	2-1/8	3-9/16	**TP3215171905**	Price
3/16	.1875	3/16	2-5/16	3-3/4	**TP3215187505**	Price
13/64	.2031	1/4	2-7/16	4-1/4	**TP3215203105**	Price
7/32	.2188	1/4	2-1/2	4-5/16	**TP3215218805**	Price
1/4, E	.2500	1/4	2-3/4	4-9/16	**TP3215250005**	Price
17/64	.2656	3/8	2-7/8	4-11/16	**TP3215265605**	Price
9/32, K	.2812	3/8	2-15/16	4-3/4	**TP3215281205**	Price
19/64	.2969	3/8	3-1/16	4-7/8	**TP3215296905**	Price
5/16	.3125	3/8	3-3/16	5	**TP3215312505**	Price
21/64	.3281	3/8	3-5/16	5-1/8	**TP3215328105**	Price
11/32	.3438	3/8	3-7/16	5-1/4	**TP3215343805**	Price
3/8	.3750	3/8	3-5/8	5-7/16	**TP3215375005**	Price
25/64	.3906	1/2	3-3/4	5-27/32	**TP3215390605**	Price
13/32	.4062	1/2	3-7/8	5-31/32	**TP3215406205**	Price
27/64	.4219	1/2	3-15/16	6-1/32	**TP3215421905**	Price
7/16	.4375	1/2	4-1/16	6-5/32	**TP3215437505**	Price
29/64	.4531	1/2	4-3/16	6-9/32	**TP3215453105**	Price
15/32	.4688	1/2	4-5/16	6-13/32	**TP3215468805**	Price
31/64	.4844	1/2	4-3/8	6-15/32	**TP3215484405**	Price
1/2	.5000	1/2	4-1/2	6-19/32	**TP3215500005**	Price
17/32	.5312	5/8	4-13/16	7-3/16	**TP3215531205**	Price
9/16	.5625	5/8	4-13/16	7-3/16	**TP3215562505**	Price
5/8	.6250	3/4	5-3/16	7-27/32	**TP3215625005**	Price
11/16	.6875	3/4	5-5/8	8-9/32	**TP3215687505**	Price
3/4	.7500	7/8	5-7/8	8-17/32	**TP3215750005**	Price

EX-SUS-GOLD® Jobber Length Drills



Vanadium High Speed Steel • TiN Coated

- Recommended for aluminum, low carbon and medium carbon steels, 300 and 400 series stainless steels
- OSG List #1600

Type - Fractional Size						
Size	Decimal Equiv.	Shank Dia. (mm)	Flute Length (mm)	OAL (mm)	Order No.	Price
3/32	.0937	3mm	30mm	62mm	**TP318597238**	Price
7/64	.1094	3mm	33mm	65mm	**TP318597278**	Price
1/8	.1252	4mm	36mm	68mm	**TP318597318**	Price
9/64	.1406	4mm	39mm	71mm	**TP318597357**	Price
5/32	.1563	4mm	43mm	75mm	**TP318597397**	Price
3/16	.1874	6mm	52mm	96mm	**TP318597476**	Price
15/64	.2343	6mm	57mm	101mm	**TP318597595**	Price
1/4, E	.2500	8mm	63mm	107mm	**TP318597635**	Price
17/64	.2657	8mm	69mm	113mm	**TP318597675**	Price
1/2	.5000	12mm	101mm	158mm	**TP3162627**	Price

Type - Letter Size						
Size	Decimal Equiv.	Shank Dia. (mm)	Flute Length (mm)	OAL (mm)	Order No.	Price
P	.3228	10mm	75mm	125mm	**TP3262582**	Price

Type - Metric Size						
Size	Decimal Equiv.	Shank Dia. (mm)	Flute Length (mm)	OAL (mm)	Order No.	Price
2mm	.0787	3mm	24mm	56mm	**TP3162520**	Price
2.04mm	.0803	3mm	24mm	56mm	**TP318597204**	Price
2.4mm	.0945	3mm	30mm	62mm	**TP3162524**	Price
2.5mm	.0984	3mm	30mm	62mm	**TP3162525**	Price
2.83mm	.1114	3mm	33mm	65mm	**TP318597283**	Price
3mm	.1181	3mm	33mm	65mm	**TP3162530**	Price
3.1mm	.1220	4mm	36mm	68mm	**TP3162531**	Price
3.2mm	.1260	4mm	36mm	68mm	**TP3162532**	Price
3.25mm	.1280	4mm	36mm	68mm	**TP318597325**	Price
3.3mm	.1299	4mm	36mm	68mm	**TP3162533**	Price
3.4mm	.1339	4mm	39mm	71mm	**TP3162534**	Price
3.7mm	.1457	4mm	39mm	71mm	**TP3162537**	Price
3.96mm	.1559	4mm	43mm	75mm	**TP318597396**	Price
4mm	.1575	4mm	43mm	75mm	**TP3162540**	Price
4.07mm	.1602	6mm	43mm	87mm	**TP318597407**	Price
4.36mm	.1717	6mm	47mm	91mm	**TP318597436**	Price
5mm	.1969	6mm	52mm	96mm	**TP3162550**	Price
5.04mm	.1984	6mm	52mm	96mm	**TP318597504**	Price
5.1mm	.2008	6mm	52mm	96mm	**TP3162551**	Price
6mm	.2362	6mm	57mm	101mm	**TP3162560**	Price
7mm	.2756	8mm	69mm	113mm	**TP3162570**	Price
7.05mm	.2776	8mm	69mm	113mm	**TP318597705**	Price
8mm	.3150	8mm	75mm	119mm	**TP3162580**	Price
9.5mm	.3740	10mm	81mm	131mm	**TP3162595**	Price
10mm	.3937	10mm	87mm	137mm	**TP3162600**	Price
12mm	.4724	12mm	101mm	158mm	**TP3162620**	Price

Type - Wire Gage Size						
Size	Decimal Equiv.	Shank Dia. (mm)	Flute Length (mm)	OAL (mm)	Order No.	Price
#30	.1283	4mm	36mm	68mm	**TP318597326**	Price
#26	.1469	4mm	39mm	71mm	**TP318597373**	Price
#25	.1496	4mm	43mm	75mm	**TP3162538**	Price
#20	.1610	6mm	43mm	87mm	**TP318597409**	Price
#16	.1772	6mm	47mm	91mm	**TP3162545**	Price

Left Hand Jobber Drills



High Speed Steel • 118° Point

- General purpose drills
- Left hand helix for screw machine applications where adjacent spindles operate alternately - left and right hand
- Procut is bright finish, Morse is surface treated
- Some sizes not listed and certain fractional sizes thru 1" are available while supplies last
- Morse List #1330L

HSS M GP PROCUT

Type - Fractional Size							
				Morse Cutting Tools		ProCut	
Size (in.)	Decimal Equiv.	Flute Length (in.)	Overall Length (in.)	Order No.	Price	Order No.	Price
1/32	.0312	1/2	1-3/8	-	-	AC53002	Price
3/64	.0469	3/4	1-3/4	-	-	AC53003	Price
1/16	.0625	7/8	1-7/8	MT1011981	Price	AC53004	Price
5/64	.0781	1	2	MT1011987	Price	AC53005	Price
3/32	.0938	1-1/4	2-1/4	MT1011994	Price	AC53006	Price
7/64	.1094	1-1/2	2-5/8	MT1012001	Price	AC53007	Price
1/8	.1250	1-5/8	2-3/4	MT1012007	Price	AC53008	Price
9/64	.1406	1-3/4	2-7/8	MT1012011	Price	AC53009	Price
5/32	.1562	2	3-1/8	MT1012017	Price	AC53010	Price
11/64	.1719	2-1/8	3-1/4	MT1012023	Price	AC53011	Price
3/16	.1875	2-5/16	3-1/2	MT1012029	Price	AC53012	Price
13/64	.2031	2-7/16	3-5/8	MT1012036	Price	AC53013	Price
7/32	.2188	2-1/2	3-3/4	MT1012041	Price	AC53014	Price
15/64	.2344	2-5/8	3-7/8	MT1012044	Price	AC53015	Price
1/4	.2500	2-3/4	4	MT1012045	Price	AC53016	Price
17/64	.2656	2-7/8	4-1/8	MT1012046	Price	AC53017	Price
9/32	.2812	2-15/16	4-1/4	MT1012047	Price	AC53018	Price
19/64	.2969	3-1/16	4-3/8	MT1012048	Price	AC53019	Price
5/16	.3125	3-3/16	4-1/2	MT1012049	Price	AC53020	Price
21/64	.3281	3-5/16	4-5/8	MT1012050	Price	AC53021	Price
11/32	.3438	3-7/16	4-3/4	MT1012051	Price	AC53022	Price
23/64	.3594	3-1/2	4-7/8	MT1012052	Price	AC53023	Price
3/8	.3750	3-5/8	5	MT1012053	Price	AC53024	Price
25/64	.3906	3-3/4	5-1/8	MT1012054	Price	AC53025	Price
13/32	.4062	3-7/8	5-1/4	MT1012055	Price	AC53026	Price
27/64	.4219	3-15/16	5-3/8	MT1012056	Price	AC53027	Price
7/16	.4375	4-1/16	5-1/2	MT1012057	Price	AC53028	Price
29/64	.4531	4-3/16	5-5/8	MT1012058	Price	AC53029	Price
15/32	.4688	4-5/16	5-3/4	MT1012059	Price	AC53030	Price
31/64	.4844	4-3/8	5-7/8	MT1012060	Price	AC53031	Price
1/2	.5000	4-1/2	6	MT1012061	Price	AC53032	Price

HSS M GP PROCUT

Type - Wire Gage Size							
				Morse Cutting Tools		ProCut	
Size (in.)	Decimal Equiv.	Flute Length (in.)	Overall Length (in.)	Order No.	Price	Order No.	Price
1	.2280	2-5/8	3-7/8	MT1112043	Price	AC53101	Price
2	.2210	2-5/8	3-7/8	MT1112042	Price	AC53102	Price
3	.2130	2-1/2	3-3/4	MT1112040	Price	AC53103	Price
4	.2090	2-1/2	3-3/4	MT1112039	Price	AC53104	Price
5	.2055	2-1/2	3-3/4	MT1112038	Price	AC53105	Price
6	.2040	2-1/2	3-3/4	MT1112037	Price	AC53106	Price
7	.2010	2-7/16	3-5/8	MT1112035	Price	AC53107	Price
8	.1990	2-7/16	3-5/8	MT1112034	Price	AC53108	Price
9	.1960	2-7/16	3-5/8	MT1112033	Price	AC53109	Price
10	.1935	2-7/16	3-5/8	MT1112032	Price	AC53110	Price
11	.1910	2-5/16	3-1/2	MT1112031	Price	AC53111	Price
12	.1890	2-5/16	3-1/2	MT1112030	Price	AC53112	Price
13	.1850	2-5/16	3-1/2	MT1112028	Price	AC53113	Price
14	.1820	2-3/16	3-3/8	MT1112027	Price	AC53114	Price
15	.1800	2-3/16	3-3/8	MT1112026	Price	AC53115	Price
16	.1770	2-3/16	3-3/8	MT1112025	Price	AC53116	Price
17	.1730	2-3/16	3-3/8	MT1112024	Price	AC53117	Price
18	.1695	2-1/8	3-1/4	MT1112022	Price	AC53118	Price
19	.1660	2-1/8	3-1/4	MT1112021	Price	AC53119	Price
20	.1610	2-1/8	3-1/4	MT1112020	Price	AC53120	Price

HSS M GP PROCUT

Type - Wire Gage Size							
				Morse Cutting Tools		ProCut	
Size (in.)	Decimal Equiv.	Flute Length (in.)	Overall Length (in.)	Order No.	Price	Order No.	Price
21	.1590	2-1/8	3-1/4	MT1112019	Price	AC53121	Price
22	.1570	2	3-1/8	MT1112018	Price	AC53122	Price
23	.1540	2	3-1/8	MT1112016	Price	AC53123	Price
24	.1520	2	3-1/8	MT1112015	Price	AC53124	Price
25	.1495	1-7/8	3	MT1112014	Price	AC53125	Price
26	.1470	1-7/8	3	MT1112013	Price	AC53126	Price
27	.1440	1-7/8	3	MT1112012	Price	AC53127	Price
28	.1405	1-3/4	2-7/8	MT1112010	Price	AC53128	Price
29	.1360	1-3/4	2-7/8	MT1112009	Price	AC53129	Price
30	.1285	1-5/8	2-3/4	MT1112008	Price	AC53130	Price
31	.1200	1-5/8	2-3/4	MT1112006	Price	AC53131	Price
32	.1160	1-5/8	2-3/4	MT1112005	Price	AC53132	Price
33	.1130	1-1/2	2-5/8	MT1112004	Price	AC53133	Price
34	.1110	1-1/2	2-5/8	MT1112003	Price	AC53134	Price
35	.1100	1-1/2	2-5/8	MT1112002	Price	AC53135	Price
36	.1065	1-7/16	2-1/2	MT1112000	Price	AC53136	Price
37	.1040	1-7/16	2-1/2	MT1111999	Price	AC53137	Price
38	.1015	1-7/16	2-1/2	MT1111998	Price	AC53138	Price
39	.0995	1-3/8	2-3/8	MT1111997	Price	AC53139	Price
40	.0980	1-3/8	2-3/8	MT1111996	Price	AC53140	Price
41	.0960	1-3/8	2-3/8	MT1111995	Price	AC53141	Price
42	.0935	1-1/4	2-1/4	MT1111993	Price	AC53142	Price
43	.0890	1-1/4	2-1/4	MT1111992	Price	AC53143	Price
44	.0860	1-1/8	2-1/8	MT1111991	Price	AC53144	Price
45	.0820	1-1/8	2-1/8	MT1111990	Price	AC53145	Price
46	.0810	1-1/8	2-1/8	MT1111989	Price	AC53146	Price
47	.0785	1	2	MT1111988	Price	AC53147	Price
48	.0760	1	2	MT1111986	Price	AC53148	Price
49	.0730	1	2	MT1111985	Price	AC53149	Price
50	.0700	1	2	MT1111984	Price	AC53150	Price
51	.0670	1	2	MT1111983	Price	AC53151	Price
52	.0635	7/8	1-7/8	MT1111982	Price	AC53152	Price
53	.0595	7/8	1-7/8	-	-	AC53153	Price
55	.0520	7/8	1-7/8	-	-	AC53155	Price
56	.0465	3/4	1-3/4	-	-	AC53156	Price
57	.0430	3/4	1-3/4	-	-	AC53157	Price
58	.0420	11/16	1-5/8	-	-	AC53158	Price
59	.0410	11/16	1-5/8	-	-	AC53159	Price
60	.0400	11/16	1-5/8	-	-	AC53160	Price
62	.0380	5/8	1-1/2	-	-	AC53162	Price
63	.0370	5/8	1-1/2	-	-	AC53163	Price
64	.0360	5/8	1-1/2	-	-	AC53164	Price
65	.0350	5/8	1-1/2	-	-	AC53165	Price
66	.0330	1/2	1-3/8	-	-	AC53166	Price
67	.0320	1/2	1-3/8	-	-	AC53167	Price
68	.0310	1/2	1-3/8	-	-	AC53168	Price
77	.0180	3/16	7/8	-	-	AC53177	Price
79	.0145	1/8	3/4	-	-	AC53179	Price
80	.0135	1/8	3/4	-	-	AC53180	Price

HSS M GP Left Hand Jobber Drill Set



High Speed Steel • 118° Point

- Complete with index
- Drills ground from solid
- Morse List #8020

No. of Pieces	Set Range	Finish	Order No.	Price
29	1/16" - 1/2" by 64ths	Bright Finish-LH	MT1218005	Price

Screw Machine Drills



High Speed Steel • 118° Standard Point • Bright Finish

- Developed primarily for use in screw machines
- The short length of these drills offers increased rigidity for strength, in machine and portable uses
- Morse List #1435
- Precision Twist List #R40

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		Procut	
Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/64	.0469	1/2	1-3/8	-	-	-	-	PT1640003	Price	AE80003	Price
1/16	.0625	5/8	1-5/8	MT1415110	Price	AE50004	Price	PT1640004	Price	AE80004	Price
5/64	.0781	11/16	1-11/16	MT1415116	Price	AE50005	Price	PT1640005	Price	AE80005	Price
3/32	.0938	3/4	1-3/4	MT1415123	Price	AE50006	Price	PT1640006	Price	AE80006	Price
7/64	.1094	13/16	1-13/16	MT1415130	Price	AE50007	Price	PT1640007	Price	AE80007	Price
1/8	.1250	7/8	1-7/8	MT1415136	Price	AE50008	Price	PT1640008	Price	AE80008	Price
9/64	.1406	15/16	1-15/16	MT1415140	Price	AE50009	Price	PT1640009	Price	AE80009	Price
5/32	.1562	1	2-1/16	MT1415146	Price	AE50010	Price	PT1640010	Price	AE80010	Price
11/64	.1719	1-1/16	2-1/8	MT1415152	Price	AE50011	Price	PT1640011	Price	AE80011	Price
3/16	.1875	1-1/8	2-3/16	MT1415158	Price	AE50012	Price	PT1640012	Price	AE80012	Price
13/64	.2031	1-3/16	2-1/4	MT1415165	Price	AE50013	Price	PT1640013	Price	AE80013	Price
7/32	.2188	1-1/4	2-3/8	MT1415170	Price	AE50014	Price	PT1640014	Price	AE80014	Price
15/64	.2344	1-5/16	2-7/16	MT1415174	Price	AE50015	Price	PT1640015	Price	AE80015	Price
1/4	.2500	1-3/8	2-1/2	MT1415178	Price	AE50016	Price	PT1640016	Price	AE80016	Price
17/64	.2656	1-7/16	2-5/8	MT1415182	Price	AE50017	Price	PT1640017	Price	-	-
9/32	.2812	1-1/2	2-11/16	MT1415187	Price	AE50018	Price	PT1640018	Price	AE80018	Price
19/64	.2969	1-9/16	2-3/4	MT1415190	Price	AE50019	Price	PT1640019	Price	AE80019	Price
5/16	.3125	1-5/8	2-13/16	MT1415192	Price	AE50020	Price	PT1640020	Price	AE80020	Price
21/64	.3281	1-11/16	2-15/16	MT1415195	Price	AE50021	Price	PT1640021	Price	AE80021	Price
11/32	.3438	1-11/16	3	MT1415198	Price	AE50022	Price	PT1640022	Price	AE80022	Price
23/64	.3594	1-3/4	3-1/16	MT1415201	Price	AE50023	Price	PT1640023	Price	AE80023	Price
3/8	.3750	1-13/16	3-1/8	MT1415203	Price	AE50024	Price	PT1640024	Price	AE80024	Price
25/64	.3906	1-7/8	3-1/4	MT1415206	Price	AE50025	Price	PT1640025	Price	AE80025	Price
13/32	.4062	1-15/16	3-5/16	MT1415209	Price	AE50026	Price	PT1640026	Price	AE80026	Price
27/64	.4219	2	3-3/8	MT1415211	Price	AE50027	Price	PT1640027	Price	AE80027	Price
7/16	.4375	2-1/16	3-7/16	MT1415212	Price	AE50028	Price	PT1640028	Price	AE80028	Price
29/64	.4531	2-1/8	3-9/16	MT1415213	Price	AE50029	Price	PT1640029	Price	AE80029	Price
15/32	.4688	2-1/8	3-5/8	MT1415214	Price	AE50030	Price	PT1640030	Price	AE80030	Price
31/64	.4844	2-3/16	3-11/16	MT1415215	Price	AE50031	Price	PT1640031	Price	AE80031	Price
1/2	.5000	2-1/4	3-3/4	MT1415216	Price	AE50032	Price	PT1640032	Price	AE80032	Price
33/64	.5156	2-3/8	3-7/8	MT1415217	Price	AE50033	Price	PT1640033	Price	AE80033	Price
17/32	.5312	2-3/8	3-7/8	MT1415218	Price	AE50034	Price	PT1640034	Price	AE80034	Price
35/64	.5469	2-1/2	4	MT1415219	Price	AE50035	Price	PT1640035	Price	AE80035	Price
9/16	.5625	2-1/2	4	MT1415220	Price	AE50036	Price	PT1640036	Price	AE80036	Price
37/64	.5781	2-5/8	4-1/8	MT1415221	Price	AE50037	Price	PT1640037	Price	AE80037	Price
19/32	.5938	2-5/8	4-1/8	MT1415222	Price	AE50038	Price	PT1640038	Price	AE80038	Price
39/64	.6094	2-3/4	4-1/4	MT1415223	Price	AE50039	Price	PT1640039	Price	-	-
5/8	.6250	2-3/4	4-1/4	MT1415224	Price	AE50040	Price	PT1640040	Price	AE80040	Price
41/64	.6406	2-7/8	4-1/2	MT1415225	Price	AE50041	Price	PT1640041	Price	AE80041	Price
21/32	.6562	2-7/8	4-1/2	MT1415226	Price	AE50042	Price	PT1640042	Price	AE80042	Price
43/64	.6719	2-7/8	4-5/8	MT1415227	Price	AE50043	Price	PT1640043	Price	AE80043	Price
11/16	.6875	2-7/8	4-5/8	MT1415228	Price	AE50044	Price	PT1640044	Price	AE80044	Price
45/64	.7031	3	4-3/4	MT1415229	Price	AE50045	Price	PT1640545	Price	AE80045	Price
23/32	.7188	3	4-3/4	MT1415230	Price	AE50046	Price	PT1640546	Price	AE80046	Price
47/64	.7344	3-1/8	5	MT1415231	Price	AE50047	Price	PT1640547	Price	AE80047	Price
3/4	.7500	3-1/8	5	MT1415232	Price	AE50048	Price	PT1640548	Price	AE80048	Price
49/64	.7656	3-1/4	5-1/8	MT1415233	Price	AE50049	Price	PT1640549	Price	AE80049	Price
25/32	.7812	3-1/4	5-1/8	MT1415234	Price	AE50050	Price	PT1640550	Price	AE80050	Price
51/64	.7969	3-3/8	5-1/4	MT1415235	Price	AE50051	Price	PT1640551	Price	AE80051	Price
13/16	.8125	3-3/8	5-1/4	MT1415236	Price	AE50052	Price	PT1640552	Price	AE80052	Price
53/64	.8281	3-1/2	5-3/8	MT1415237	Price	AE50053	Price	PT1640553	Price	AE80053	Price
27/32	.8438	3-1/2	5-3/8	MT1415238	Price	AE50054	Price	PT1640554	Price	AE80054	Price
55/64	.8594	3-1/2	5-1/2	MT1415239	Price	AE50055	Price	PT1640555	Price	AE80055	Price
7/8	.8750	3-1/2	5-1/2	MT1415240	Price	AE50056	Price	PT1640556	Price	AE80056	Price
57/64	.8906	3-5/8	5-5/8	MT1415241	Price	AE50057	Price	PT1640557	Price	AE80057	Price
29/32	.9062	3-5/8	5-5/8	MT1415242	Price	AE50058	Price	PT1640558	Price	AE80058	Price
59/64	.9219	3-3/4	5-3/4	MT1415243	Price	AE50059	Price	PT1640559	Price	AE80059	Price
15/16	.9375	3-3/4	5-3/4	MT1415244	Price	AE50060	Price	PT1640560	Price	AE80060	Price
61/64	.9531	3-7/8	5-7/8	MT1415245	Price	AE50061	Price	PT1640561	Price	AE80061	Price
31/32	.9688	3-7/8	5-7/8	MT1415246	Price	AE50062	Price	PT1640562	Price	AE80062	Price
63/64	.9844	4	6	MT1415247	Price	AE50063	Price	PT1640563	Price	AE80063	Price
1	1.0000	4	6	MT1415248	Price	AE50100	Price	PT1640600	Price	AE80100	Price
1-1/16	1.0625	4	6-1/4	MT1415249	Price	AE50104	Price	PT1640604	Price	AE80104	Price
1-1/8	1.1250	4	6-3/8	MT1415250	Price	AE50108	Price	PT1640608	Price	-	-
1-3/16	1.1875	4-1/4	6-5/8	MT1415251	Price	AE50112	Price	PT1640612	Price	AE80112	Price
1-1/4	1.2500	4-3/8	6-3/4	MT1415252	Price	AE50116	Price	PT1640616	Price	AE80116	Price
1-5/16	1.3125	4-3/8	7	MT1415253	Price	-	-	PT1640620	Price	AE80120	Price
1-3/8	1.3750	4-1/2	7-1/8	MT1415254	Price	-	-	PT1640624	Price	-	-
1-7/16	1.4375	4-3/4	7-3/8	MT1415255	Price	-	-	PT1640628	Price	-	-
1-1/2	1.5000	4-7/8	7-1/2	MT1415256	Price	-	-	PT1640632	Price	AE80132	Price
1-9/16	1.5625	4-7/8	7-3/4	MT1415257	Price	-	-	PT1640636	Price	AE80136	Price
1-5/8	1.6250	4-7/8	7-3/4	MT1415258	Price	-	-	PT1640640	Price	-	-
1-11/16	1.6875	5-1/8	8	MT1415259	Price	-	-	-	-	-	-
1-3/4	1.7500	5-1/8	8	MT1415260	Price	-	-	PT1640648	Price	-	-
1-13/16	1.8125	5-3/8	8-1/4	MT1415261	Price	-	-	PT1640652	Price	-	-
1-7/8	1.8750	5-3/8	8-1/4	MT1415262	Price	-	-	PT1640656	Price	AE80156	Price
1-15/16	1.9375	5-5/8	8-1/2	MT1415263	Price	-	-	PT1640660	Price	AE80160	Price
2	2.0000	5-5/8	8-1/2	MT1415264	Price	-	-	PT1640700	Price	AE80200	Price

29 Pc. Screw Machine Drill Set

High Speed Steel • 118° Standard Point

- Includes 1/16" thru 1/2" by 64ths
- Drills ground from solid
- Bright finish

Brand	Order No.	Price
Morse Cutting Tools	MT1218177	Price
Precision Twist Drill	PT2790170	Price
Rapidkut	AP50S70H	Price



Screw Machine Drills
High Speed Steel • 118° Standard Point • Bright Finish

- Developed primarily for use in screw machines
- The short length of these drills offers increased rigidity for strength-in machine and portable uses
- Morse List#1437 (wire gauge) - 1436 (letter sizes)
- Precision Twist List #R41 (wire gauge) - R42 (letter sizes)



60 Pc. Screw Machine Drill Sets
#1-60 Wire Gage
• 118° Standard Point
• High Speed Steel



Brand	Order No.	Price
Precision Twist Drill	**PT2790174**	Price
Rapidkut	**AP50S71H**	Price

26 Pc. Screw Machine Drill Sets
A-Z Letter Sizes
• 118° Standard Point
• High Speed Steel



Brand	Order No.	Price
Precision Twist Drill	**PT2790173**	Price
Rapidkut	**AP50S72H**	Price

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		Procut	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	.2280	1-5/16	2-7/16	**MT1415172**	Price	**AE51101**	Price	**PT1641001**	Price	**AE81101**	Price
2	.2210	1-5/16	2-7/16	**MT1415171**	Price	**AE51102**	Price	**PT1641002**	Price	**AE81102**	Price
3	.2130	1-1/4	2-3/8	**MT1415169**	Price	**AE51103**	Price	**PT1641003**	Price	**AE81103**	Price
4	.2090	1-1/4	2-3/8	**MT1415168**	Price	**AE51104**	Price	**PT1641004**	Price	**AE81104**	Price
5	.2055	1-1/4	2-3/8	**MT1415167**	Price	**AE51105**	Price	**PT1641005**	Price	**AE81105**	Price
6	.2040	1-1/4	2-3/8	**MT1415166**	Price	**AE51106**	Price	**PT1641006**	Price	**AE81106**	Price
7	.2010	1-3/16	2-1/4	**MT1415164**	Price	**AE51107**	Price	**PT1641007**	Price	**AE81107**	Price
8	.1990	1-3/16	2-1/4	**MT1415163**	Price	**AE51108**	Price	**PT1641008**	Price	**AE81108**	Price
9	.1960	1-3/16	2-1/4	**MT1415162**	Price	**AE51109**	Price	**PT1641009**	Price	**AE81109**	Price
10	.1935	1-3/16	2-1/4	**MT1415161**	Price	**AE51110**	Price	**PT1641010**	Price	**AE81110**	Price
11	.1910	1-3/16	2-1/4	**MT1415160**	Price	**AE51111**	Price	**PT1641011**	Price	**AE81111**	Price
12	.1890	1-3/16	2-1/4	**MT1415159**	Price	**AE51112**	Price	**PT1641012**	Price	**AE81112**	Price
13	.1850	1-1/8	2-3/16	**MT1415157**	Price	**AE51113**	Price	**PT1641013**	Price	**AE81113**	Price
14	.1820	1-1/8	2-3/16	**MT1415156**	Price	**AE51114**	Price	**PT1641014**	Price	**AE81114**	Price
15	.1800	1-1/8	2-3/16	**MT1415155**	Price	**AE51115**	Price	**PT1641015**	Price	**AE81115**	Price
16	.1770	1-1/8	2-3/16	**MT1415154**	Price	**AE51116**	Price	**PT1641016**	Price	**AE81116**	Price
17	.1730	1-1/8	2-3/16	**MT1415153**	Price	**AE51117**	Price	**PT1641017**	Price	**AE81117**	Price
18	.1695	1-1/16	2-1/8	**MT1415151**	Price	**AE51118**	Price	**PT1641018**	Price	**AE81118**	Price
19	.1660	1-1/16	2-1/8	**MT1415150**	Price	**AE51119**	Price	**PT1641019**	Price	**AE81119**	Price
20	.1610	1-1/16	2-1/8	**MT1415149**	Price	**AE51120**	Price	**PT1641020**	Price	**AE81120**	Price
21	.1590	1-1/16	2-1/8	**MT1415148**	Price	**AE51121**	Price	**PT1641021**	Price	**AE81121**	Price
22	.1570	1-1/16	2-1/8	**MT1415147**	Price	**AE51122**	Price	**PT1641022**	Price	**AE81122**	Price
23	.1540	1	2-1/16	**MT1415145**	Price	**AE51123**	Price	**PT1641023**	Price	**AE81123**	Price
24	.1520	1	2-1/16	**MT1415144**	Price	**AE51124**	Price	**PT1641024**	Price	**-**	-
25	.1495	1	2-1/16	**MT1415143**	Price	**AE51125**	Price	**PT1641025**	Price	**AE81125**	Price
26	.1470	1	2-1/16	**MT1415142**	Price	**AE51126**	Price	**PT1641026**	Price	**AE81126**	Price
27	.1440	1	2-1/16	**MT1415141**	Price	**AE51127**	Price	**PT1641027**	Price	**AE81127**	Price
28	.1405	15/16	1-15/16	**MT1415139**	Price	**AE51128**	Price	**PT1641028**	Price	**AE81128**	Price
29	.1360	15/16	1-15/16	**MT1415138**	Price	**AE51129**	Price	**PT1641029**	Price	**AE81129**	Price
30	.1285	15/16	1-15/16	**MT1415137**	Price	**AE51130**	Price	**PT1641030**	Price	**AE81130**	Price
31	.1200	7/8	1-7/8	**MT1415135**	Price	**AE51131**	Price	**PT1641031**	Price	**AE81131**	Price
32	.1160	7/8	1-7/8	**MT1415134**	Price	**AE51132**	Price	**PT1641032**	Price	**AE81132**	Price
33	.1130	7/8	1-7/8	**MT1415133**	Price	**AE51133**	Price	**PT1641033**	Price	**AE81133**	Price
34	.1110	7/8	1-7/8	**MT1415132**	Price	**AE51134**	Price	**PT1641034**	Price	**AE81134**	Price
35	.1100	7/8	1-7/8	**MT1415131**	Price	**AE51135**	Price	**PT1641035**	Price	**AE81135**	Price
36	.1065	13/16	1-13/16	**MT1415129**	Price	**AE51136**	Price	**PT1641036**	Price	**AE81136**	Price
37	.1040	13/16	1-13/16	**MT1415128**	Price	**AE51137**	Price	**PT1641037**	Price	**AE81137**	Price
38	.1015	13/16	1-13/16	**MT1415127**	Price	**AE51138**	Price	**PT1641038**	Price	**AE81138**	Price
39	.0995	13/16	1-13/16	**MT1415126**	Price	**AE51139**	Price	**PT1641039**	Price	**AE81139**	Price
40	.0980	13/16	1-13/16	**MT1415125**	Price	**AE51140**	Price	**PT1641040**	Price	**AE81140**	Price
41	.0960	13/16	1-13/16	**MT1415124**	Price	**AE51141**	Price	**PT1641041**	Price	**AE81141**	Price
42	.0935	3/4	1-3/4	**MT1415122**	Price	**AE51142**	Price	**PT1641042**	Price	**AE81142**	Price
43	.0890	3/4	1-3/4	**MT1415121**	Price	**AE51143**	Price	**PT1641043**	Price	**AE81143**	Price
44	.0860	3/4	1-3/4	**MT1415120**	Price	**AE51144**	Price	**PT1641044**	Price	**AE81144**	Price
45	.0820	3/4	1-3/4	**MT1415119**	Price	**AE51145**	Price	**PT1641045**	Price	**AE81145**	Price
46	.0810	3/4	1-3/4	**MT1415118**	Price	**AE51146**	Price	**PT1641046**	Price	**AE81146**	Price
47	.0785	11/16	1-11/16	**MT1415117**	Price	**AE51147**	Price	**PT1641047**	Price	**AE81147**	Price
48	.0760	11/16	1-11/16	**MT1415115**	Price	**AE51148**	Price	**PT1641048**	Price	**AE81148**	Price
49	.0730	11/16	1-11/16	**MT1415114**	Price	**AE51149**	Price	**PT1641049**	Price	**AE81149**	Price
50	.0700	11/16	1-11/16	**MT1415113**	Price	**AE51150**	Price	**PT1641050**	Price	**AE81150**	Price
51	.0670	11/16	1-11/16	**MT1415112**	Price	**AE51151**	Price	**PT1641051**	Price	**AE81151**	Price
52	.0635	11/16	1-11/16	**MT1415111**	Price	**AE51152**	Price	**PT1641052**	Price	**AE81152**	Price
53	.0595	5/8	1-5/8	**MT1415109**	Price	**AE51153**	Price	**PT1641053**	Price	**AE81153**	Price
54	.0550	5/8	1-5/8	**MT1415108**	Price	**AE51154**	Price	**PT1641054**	Price	**AE81154**	Price
55	.0520	5/8	1-5/8	**MT1415107**	Price	**AE51155**	Price	**PT1641055**	Price	**AE81155**	Price
56	.0465	1/2	1-3/8	**MT1415105**	Price	**AE51156**	Price	**PT1641056**	Price	**AE81156**	Price
57	.0430	1/2	1-3/8	**MT1415104**	Price	**AE51157**	Price	**PT1641057**	Price	**AE81157**	Price
58	.0420	1/2	1-3/8	**MT1415103**	Price	**AE51158**	Price	**PT1641058**	Price	**AE81158**	Price
59	.0410	1/2	1-3/8	**MT1415102**	Price	**AE51159**	Price	**PT1641059**	Price	**AE81159**	Price
60	.0400	1/2	1-3/8	**MT1415101**	Price	**AE51160**	Price	**PT1641060**	Price	**AE81160**	Price

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		ProCut	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
A	.2340	1-5/16	2-7/16	**MT1415173**	Price	**AE51201**	Price	**PT1642001**	Price	**AE81201**	Price
B	.2380	1-3/8	2-1/2	**MT1415175**	Price	**AE51202**	Price	**PT1642002**	Price	**-**	-
C	.2420	1-3/8	2-1/2	**MT1415176**	Price	**AE51203**	Price	**PT1642003**	Price	**AE81203**	Price
D	.2460	1-3/8	2-1/2	**MT1415177**	Price	**AE51204**	Price	**PT1642004**	Price	**AE81204**	Price
1/4, E	.2500	1-3/8	2-1/2	**MT1415178**	Price	**AE51205**	Price	**PT1640016**	Price	**-**	-
F	.2570	1-7/16	2-5/8	**MT1415180**	Price	**AE51206**	Price	**PT1642006**	Price	**AE81206**	Price
G	.2610	1-7/16	2-5/8	**MT1415181**	Price	**AE51207**	Price	**PT1642007**	Price	**AE81207**	Price
H	.2660	1-1/2	2-11/16	**MT1415183**	Price	**AE51208**	Price	**PT1642008**	Price	**AE81208**	Price
I	.2720	1-1/2	2-11/16	**MT1415184**	Price	**AE51209**	Price	**PT1642009**	Price	**AE81209**	Price
J	.2770	1-1/2	2-11/16	**MT1415185**	Price	**AE51210**	Price	**PT1642010**	Price	**AE81210**	Price
K	.2810	1-1/2	2-11/16	**MT1415186**	Price	**AE51211**	Price	**PT1642011**	Price	**AE81211**	Price
L	.2900	1-9/16	2-3/4	**MT1415188**	Price	**AE51212**	Price	**PT1642012**	Price	**AE81212**	Price
M	.2950	1-9/16	2-3/4	**MT1415189**	Price	**AE51213**	Price	**PT1642013**	Price	**AE81213**	Price
N	.3020	1-5/8	2-13/16	**MT1415191**	Price	**AE51214**	Price	**PT1642014**	Price	**AE81214**	Price
O	.3160	1-11/16	2-15/16	**MT1415193**	Price	**AE51215**	Price	**PT1642015**	Price	**AE81215**	Price
P	.3230	1-11/16	2-15/16	**MT1415194**	Price	**AE51216**	Price	**PT1642016**	Price	**AE81216**	Price
Q	.3320	1-11/16	3	**MT1415196**	Price	**AE51217**	Price	**PT1642017**	Price	**AE81217**	Price
R	.3390	1-11/16	3	**MT1415197**	Price	**AE51218**	Price	**PT1642018**	Price	**AE81218**	Price
S	.3480	1-3/4	3-1/16	**MT1415199**	Price	**AE51219**	Price	**PT1642019**	Price	**AE81219**	Price
T	.3580	1-3/4	3-1/16	**MT1415200**	Price	**AE51220**	Price	**PT1642020**	Price	**AE81220**	Price
U	.3680	1-13/16	3-1/8	**MT1415202**	Price	**AE51221**	Price	**PT1642021**	Price	**AE81221**	Price
V	.3770	1-7/8	3-1/4	**MT1415204**	Price	**AE51222**	Price	**PT1642022**	Price	**AE81222**	Price
W	.3860	1-7/8	3-1/4	**MT1415205**	Price	**AE51223**	Price	**PT1642023**	Price	**AE81223**	Price
X	.3970	1-15/16	3-5/16	**MT1415207**	Price	**AE51224**	Price	**PT1642024**	Price	**AE81224**	Price
Y	.4040	1-15/16	3-5/16	**MT1415208**	Price	**AE51225**	Price	**PT1642025**	Price	**AE81225**	Price
Z	.4130	2	3-3/8	**MT1415210**	Price	**AE51226**	Price	**PT1642026**	Price	**AE81226**	Price

Screw Machine Drills



High Speed Steel • 135° Split Point • Surface Treated

- Manufactured to NAS 907 Type C Aircraft specifications
- Ideal for medium duty portable or machine drilling in low alloys and stainless steels
- Morse List #1398
- Precision Twist List #R40C

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		Procut	
Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/64	.0469	1/2	1-3/8	**MT1414901**	Price	**AE70003**	Price	-	-	-	-
1/16	.0625	5/8	1-5/8	**MT1414902**	Price	**AE70004**	Price	**PT1740804**	Price	**AE85004**	Price
5/64	.0781	11/16	1-11/16	**MT1414903**	Price	**AE70005**	Price	**PT1740805**	Price	**AE85005**	Price
3/32	.0938	3/4	1-3/4	**MT1414904**	Price	**AE70006**	Price	**PT1740806**	Price	**AE85006**	Price
7/64	.1094	13/16	1-13/16	**MT1414910**	Price	**AE70007**	Price	**PT1740807**	Price	**AE85007**	Price
1/8	.1250	7/8	1-7/8	**MT1414916**	Price	**AE70008**	Price	**PT1740808**	Price	**AE85008**	Price
9/64	.1406	15/16	1-15/16	**MT1414920**	Price	**AE70009**	Price	**PT1740809**	Price	**AE85009**	Price
5/32	.1562	1	2-1/16	**MT1414926**	Price	**AE70010**	Price	**PT1740810**	Price	**AE85010**	Price
11/64	.1719	1-1/16	2-1/8	**MT1414932**	Price	**AE70011**	Price	**PT1740811**	Price	**AE85011**	Price
3/16	.1875	1-1/8	2-3/16	**MT1414938**	Price	**AE70012**	Price	**PT1740812**	Price	**AE85012**	Price
13/64	.2031	1-3/16	2-1/4	**MT1414945**	Price	**AE70013**	Price	**PT1740813**	Price	**AE85013**	Price
7/32	.2188	1-1/4	2-3/8	**MT1414950**	Price	**AE70014**	Price	**PT1740814**	Price	**AE85014**	Price
15/64	.2334	1-5/16	2-7/16	**MT1414954**	Price	**AE70015**	Price	**PT1740815**	Price	**AE85015**	Price
1/4, E	.2500	1-3/8	2-1/2	**MT1414958**	Price	**AE70016**	Price	**PT1740816**	Price	**AE85016**	Price
17/64	.2656	1-7/16	2-5/8	**MT1414963**	Price	**AE70017**	Price	**PT1740817**	Price	**AE85017**	Price
9/32	.2812	1-1/2	2-11/16	**MT1414968**	Price	**AE70018**	Price	**PT1740818**	Price	**AE85018**	Price
19/64	.2969	1-9/16	2-3/4	**MT1414971**	Price	**AE70019**	Price	**PT1740819**	Price	**AE85019**	Price
5/16	.3125	1-5/8	2-13/16	**MT1414973**	Price	**AE70020**	Price	**PT1740820**	Price	**AE85020**	Price
21/64	.3281	1-11/16	2-15/16	**MT1414976**	Price	**AE70021**	Price	**PT1740821**	Price	**AE85021**	Price
11/32	.3438	1-11/16	3	**MT1414979**	Price	**AE70022**	Price	**PT1740822**	Price	**AE85022**	Price
23/64	.3594	1-3/4	3-1/16	**MT1414982**	Price	**AE70023**	Price	**PT1740823**	Price	**AE85023**	Price
3/8	.3750	1-13/16	3-1/8	**MT1414984**	Price	**AE70024**	Price	**PT1740824**	Price	**AE85024**	Price
25/64	.3906	1-7/8	3-1/4	**MT1414987**	Price	**AE70025**	Price	**PT1740825**	Price	**AE85025**	Price
13/32	.4062	1-15/16	3-5/16	**MT1414990**	Price	**AE70026**	Price	**PT1740826**	Price	**AE85026**	Price
27/64	.4219	2	3-3/8	**MT1414992**	Price	**AE70027**	Price	**PT1740827**	Price	**AE85027**	Price
7/16	.4375	2-1/16	3-7/16	**MT1414993**	Price	**AE70028**	Price	**PT1740828**	Price	**AE85028**	Price
29/64	.4531	2-1/8	3-9/16	**MT1414994**	Price	**AE70029**	Price	**PT1740829**	Price	**AE85029**	Price
15/32	.4688	2-1/8	3-5/8	**MT1414995**	Price	**AE70030**	Price	**PT1740830**	Price	**AE85030**	Price
31/64	.4844	2-3/16	3-11/16	**MT1414996**	Price	**AE70031**	Price	**PT1740831**	Price	**AE85031**	Price
1/2	.5000	2-1/4	3-3/4	**MT1414997**	Price	**AE70032**	Price	**PT1740832**	Price	**AE85032**	Price

Screw Machine Drills



High Speed Steel • 135° Split Point • Surface Treated

- Manufactured to NAS 907 Type C Aircraft specifications
- Ideal for medium duty portable or machine drilling in low alloys and stainless steels
- Morse List #1398
- Precision Twist List #R42C

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		Procut	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
A	.2340	1-5/16	2-7/16	**MT1414953**	Price	**AE71201**	Price	**PT1742801**	Price	**AE86201**	Price
B	.2380	1-3/8	2-1/2	**MT1414955**	Price	**AE71202**	Price	**PT1742802**	Price	**AE86202**	Price
C	.2420	1-3/8	2-1/2	**MT1414956**	Price	**AE71203**	Price	**PT1742803**	Price	**AE86203**	Price
D	.2460	1-3/8	2-1/2	**MT1414957**	Price	**AE71204**	Price	**PT1742804**	Price	**AE86204**	Price
1/4, E	.2500	1-3/8	2-1/2	**MT1414958**	Price	**AE71205**	Price	**PT1740816**	Price	-	-
F	.2570	1-7/16	2-5/8	**MT1414959**	Price	**AE71206**	Price	**PT1742806**	Price	**AE86206**	Price
G	.2610	1-7/16	2-5/8	**MT1414960**	Price	**AE71207**	Price	**PT1742807**	Price	**AE86207**	Price
H	.2660	1-1/2	2-11/16	**MT1414964**	Price	**AE71208**	Price	**PT1742808**	Price	**AE86208**	Price
I	.2720	1-1/2	2-11/16	**MT1414965**	Price	**AE71209**	Price	**PT1742809**	Price	**AE86209**	Price
J	.2770	1-1/2	2-11/16	**MT1414966**	Price	**AE71210**	Price	**PT1742810**	Price	**AE86210**	Price
K	.2810	1-1/2	2-11/16	**MT1414967**	Price	**AE71211**	Price	**PT1742811**	Price	**AE86211**	Price
L	.2900	1-9/16	2-3/4	**MT1414969**	Price	**AE71212**	Price	**PT1742812**	Price	**AE86212**	Price
M	.2950	1-9/16	2-3/4	**MT1414970**	Price	**AE71213**	Price	**PT1742813**	Price	**AE86213**	Price
N	.3020	1-5/8	2-13/16	**MT1414972**	Price	**AE71214**	Price	**PT1742814**	Price	**AE86214**	Price
O	.3160	1-11/16	2-15/16	**MT1414974**	Price	**AE71215**	Price	**PT1742815**	Price	**AE86215**	Price
P	.3230	1-11/16	2-15/16	**MT1414975**	Price	**AE71216**	Price	**PT1742816**	Price	**AE86216**	Price
Q	.3320	1-11/16	3	**MT1414977**	Price	**AE71217**	Price	**PT1742817**	Price	**AE86217**	Price
R	.3390	1-11/16	3	**MT1414978**	Price	**AE71218**	Price	**PT1742818**	Price	**AE86218**	Price
S	.3480	1-3/4	3-1/16	**MT1414980**	Price	**AE71219**	Price	**PT1742819**	Price	**AE86219**	Price
T	.3580	1-3/4	3-1/16	**MT1414981**	Price	**AE71220**	Price	**PT1742820**	Price	**AE86220**	Price
U	.3680	1-13/16	3-1/8	**MT1414983**	Price	**AE71221**	Price	**PT1742821**	Price	**AE86221**	Price
V	.3770	1-7/8	3-1/4	**MT1414985**	Price	**AE71222**	Price	**PT1742822**	Price	**AE86222**	Price
W	.3860	1-7/8	3-1/4	**MT1414986**	Price	**AE71223**	Price	**PT1742823**	Price	**AE86223**	Price
X	.3970	1-15/16	3-5/16	**MT1414988**	Price	**AE71224**	Price	**PT1742824**	Price	**AE86224**	Price
Y	.4040	1-15/16	3-5/16	**MT1414989**	Price	**AE71225**	Price	**PT1742825**	Price	**AE86225**	Price
Z	.4130	2	3-3/8	**MT1414991**	Price	**AE71226**	Price	**PT1742826**	Price	**AE86226**	Price

29 Pc. Sets 1/16"-1/2" by 64ths

135° Split Point • High Speed Steel • Surface Treated

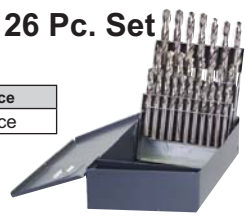
- Manufactured to NAS 907 Type C Aircraft specifications with surface treatme
- Ideal for medium duty portable or machine drilling in low alloys and stainless

Brand	Order No.	Price
RAPIDKUT	**AP50S70HDSP**	Price
PRECISION	**PT2799903**	Price



RAPIDKUT 26 Pc. Set A-Z Letter Size

Order No.	Price
AP50S72HDSP	Price



Screw Machine Drills



High Speed Steel • 135° Split Point • Surface Treated

- Manufactured to NAS 907 Type C Aircraft specifications
- Ideal for medium duty portable or machine drilling in low alloys and stainless steels
- Morse List #1398
- Precision Twist List #R41C

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		Procut	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	.2280	1-5/16	2-7/16	MT1414952	Price	AE71101	Price	PT1741801	Price	AE86101	Price
2	.2210	1-5/16	2-7/16	MT1414951	Price	AE71102	Price	PT1741802	Price	AE86102	Price
3	.2130	1-1/4	2-3/8	MT1414949	Price	AE71103	Price	PT1741803	Price	AE86103	Price
4	.2090	1-1/4	2-3/8	MT1414948	Price	AE71104	Price	PT1741804	Price	AE86104	Price
5	.2055	1-1/4	2-3/8	MT1414947	Price	AE71105	Price	PT1741805	Price	AE86105	Price
6	.2040	1-1/4	2-3/8	MT1414946	Price	AE71106	Price	PT1741806	Price	AE86106	Price
7	.2010	1-3/16	2-1/4	MT1414944	Price	AE71107	Price	PT1741807	Price	AE86107	Price
8	.1990	1-3/16	2-1/4	MT1414943	Price	AE71108	Price	PT1741808	Price	AE86108	Price
9	.1960	1-3/16	2-1/4	MT1414942	Price	AE71109	Price	PT1741809	Price	AE86109	Price
10	.1935	1-3/16	2-1/4	MT1414941	Price	AE71110	Price	PT1741810	Price	AE86110	Price
11	.1910	1-3/16	2-1/4	MT1414940	Price	AE71111	Price	PT1741811	Price	AE86111	Price
12	.1890	1-3/16	2-1/4	MT1414939	Price	AE71112	Price	PT1741812	Price	AE86112	Price
13	.1850	1-1/8	2-3/16	MT1414937	Price	AE71113	Price	PT1741813	Price	AE86113	Price
14	.1820	1-1/8	2-3/16	MT1414936	Price	AE71114	Price	PT1741814	Price	AE86114	Price
15	.1800	1-1/8	2-3/16	MT1414935	Price	AE71115	Price	PT1741815	Price	AE86115	Price
16	.1770	1-1/8	2-3/16	MT1414934	Price	AE71116	Price	PT1741816	Price	AE86116	Price
17	.1730	1-1/8	2-3/16	MT1414933	Price	AE71117	Price	PT1741817	Price	AE86117	Price
18	.1695	1-1/16	2-1/8	MT1414931	Price	AE71118	Price	PT1741818	Price	AE86118	Price
19	.1660	1-1/16	2-1/8	MT1414930	Price	AE71119	Price	PT1741819	Price	AE86119	Price
20	.1610	1-1/16	2-1/8	MT1414929	Price	AE71120	Price	PT1741820	Price	AE86120	Price
21	.1590	1-1/16	2-1/8	MT1414928	Price	AE71121	Price	PT1741821	Price	AE86121	Price
22	.1570	1-1/16	2-1/8	MT1414927	Price	AE71122	Price	PT1741822	Price	AE86122	Price
23	.1540	1	2-1/16	MT1414925	Price	AE71123	Price	PT1741823	Price	AE86123	Price
24	.1520	1	2-1/16	MT1414924	Price	AE71124	Price	PT1741824	Price	AE86124	Price
25	.1495	1	2-1/16	MT1414923	Price	AE71125	Price	PT1741825	Price	AE86125	Price
26	.1470	1	2-1/16	MT1414922	Price	AE71126	Price	PT1741826	Price	AE86126	Price
27	.1440	1	2-1/16	MT1414921	Price	AE71127	Price	PT1741827	Price	AE86127	Price
28	.1405	15/16	1-15/16	MT1414919	Price	AE71128	Price	PT1741828	Price	AE86128	Price
29	.1360	15/16	1-15/16	MT1414918	Price	AE71129	Price	PT1741829	Price	AE86129	Price
30	.1285	15/16	1-15/16	MT1414917	Price	AE71130	Price	PT1741830	Price	AE86130	Price
31	.1200	7/8	1-7/8	MT1414915	Price	AE71131	Price	PT1741831	Price	AE86131	Price
32	.1160	7/8	1-7/8	MT1414914	Price	AE71132	Price	PT1741832	Price	AE86132	Price
33	.1130	7/8	1-7/8	MT1414913	Price	AE71133	Price	PT1741833	Price	AE86133	Price
34	.1110	7/8	1-7/8	MT1414912	Price	AE71134	Price	PT1741834	Price	AE86134	Price
35	.1100	7/8	1-7/8	MT1414911	Price	AE71135	Price	PT1741835	Price	AE86135	Price
36	.1065	13/16	1-13/16	MT1414909	Price	AE71136	Price	PT1741836	Price	AE86136	Price
37	.1040	13/16	1-13/16	MT1414908	Price	AE71137	Price	PT1741837	Price	AE86137	Price
38	.1015	13/16	1-13/16	MT1414907	Price	AE71138	Price	PT1741838	Price	AE86138	Price
39	.0995	13/16	1-13/16	MT1414906	Price	AE71139	Price	PT1741839	Price	AE86139	Price
40	.0980	13/16	1-13/16	MT1414905	Price	AE71140	Price	PT1741840	Price	AE86140	Price
41	.0960	13/16	1-13/16	MT1414899	Price	AE71141	Price	PT1741841	Price	AE86141	Price
42	.0935	3/4	1-3/4	MT1414898	Price	AE71142	Price	PT1741842	Price	AE86142	Price
43	.0890	3/4	1-3/4	MT1414897	Price	AE71143	Price	PT1741843	Price	AE86143	Price
44	.0860	3/4	1-3/4	MT1414896	Price	AE71144	Price	PT1741844	Price	AE86144	Price
45	.0820	3/4	1-3/4	MT1414895	Price	AE71145	Price	PT1741845	Price	AE86145	Price
46	.0810	3/4	1-3/4	MT1414894	Price	AE71146	Price	PT1741846	Price	AE86146	Price
47	.0785	11/16	1-11/16	MT1414893	Price	AE71147	Price	PT1741847	Price	AE86147	Price
48	.0760	11/16	1-11/16	MT1414892	Price	AE71148	Price	PT1741848	Price	AE86148	Price
49	.0730	11/16	1-11/16	MT1414891	Price	AE71149	Price	PT1741849	Price	AE86149	Price
50	.0700	11/16	1-11/16	MT1414890	Price	AE71150	Price	PT1741850	Price	AE86150	Price
51	.0670	11/16	1-11/16	MT1414889	Price	AE71151	Price	PT1741851	Price	AE86151	Price
52	.0635	11/16	1-11/16	MT1414888	Price	AE71152	Price	PT1741852	Price	AE86152	Price
53	.0595	5/8	1-5/8	MT1414887†	Price	AE71153†	Price	PT1741853†	Price	AE86153†	Price
54	.0550	5/8	1-5/8	MT1414886†	Price	AE71154†	Price	PT1741854†	Price	AE86154†	Price
55	.0520	5/8	1-5/8	MT1414885†	Price	AE71155†	Price	PT1741855†	Price	AE86155†	Price
56	.0465	1/2	1-3/8	MT1414884†	Price	AE71156†	Price	PT1741856†	Price	AE86156†	Price
57	.0430	1/2	1-3/8	MT1414883†	Price	AE71157†	Price	PT1741857†	Price	AE86157†	Price
58	.0420	1/2	1-3/8	MT1414882†	Price	AE71158†	Price	PT1741858†	Price	AE86158†	Price
59	.0410	1/2	1-3/8	MT1414881†	Price	AE71159†	Price	PT1741859†	Price	AE86159†	Price
60	.0400	1/2	1-3/8	MT1414880†	Price	AE71160†	Price	PT1741860†	Price	AE86160†	Price

†Sizes 53 thru 60 are NOT Split Point

60 Pc. Screw Machine Drill Set

High Speed Steel • 135° Split Point • Surface Treated

- Includes #1-60 wire gage drills, index

Brand	Order No.	Price
	PT2799930	Price
RAPIDKUT	AP50S71HDSP	Price



Heavy Duty Cobalt Screw Machine Drills



Cobalt • 135° Split Point

- Effective in high alloys and work hardening materials
- Morse List #2435
- Precision Twist List #M40CO

				Morse Cutting Tools		Rapidkut		Precision Twist Drill		Price	
Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	.0625	5/8	1-5/8	MT1513157	Price	AE60004	Price	PT1840304	Price	AE65004	Price
5/64	.0781	11/16	1-11/16	MT1513163	Price	AE60005	Price	PT1840305	Price	AE65005	Price
3/32	.0938	3/4	1-3/4	MT1513170	Price	AE60006	Price	PT1840306	Price	AE65006	Price
7/64	.1094	13/16	1-13/16	MT1513177	Price	AE60007	Price	PT1840307	Price	AE65007	Price
1/8	.1250	7/8	1-7/8	MT1513183	Price	AE60008	Price	PT1840308	Price	AE65008	Price
9/64	.1406	15/16	1-15/16	MT1513187	Price	AE60009	Price	PT1840309	Price	AE65009	Price
5/32	.1562	1	2-1/16	MT1513193	Price	AE60010	Price	PT1840310	Price	AE65010	Price
11/64	.1719	1-1/16	2-1/8	MT1513199	Price	AE60011	Price	PT1840311	Price	AE65011	Price
3/16	.1875	1-1/8	2-3/16	MT1513205	Price	AE60012	Price	PT1840312	Price	AE65012	Price
13/64	.2031	1-3/16	2-1/4	MT1513212	Price	AE60013	Price	PT1840313	Price	AE65013	Price
7/32	.2188	1-1/4	2-3/8	MT1513217	Price	AE60014	Price	PT1840314	Price	AE65014	Price
15/64	.2344	1-5/16	2-7/16	MT1513221	Price	AE60015	Price	PT1840315	Price	AE65015	Price
1/4	.2500	1-3/8	2-1/2	MT1513225	Price	AE60016	Price	PT1840316	Price	AE65016	Price
17/64	.2656	1-7/16	2-5/8	MT1513228	Price	AE60017	Price	PT1840317	Price	AE65017	Price
9/32	.2812	1-1/2	2-11/16	MT1513233	Price	AE60018	Price	PT1840318	Price	AE65018	Price
19/64	.2969	1-9/16	2-3/4	MT1513236	Price	AE60019	Price	PT1840319	Price	AE65019	Price
5/16	.3125	1-5/8	2-13/16	MT1513238	Price	AE60020	Price	PT1840320	Price	AE65020	Price
21/64	.3281	1-11/16	2-15/16	MT1513241	Price	AE60021	Price	PT1840321	Price	AE65021	Price
11/32	.3438	1-11/16	3	MT1513244	Price	AE60022	Price	PT1840322	Price	AE65022	Price
23/64	.3594	1-3/4	3-1/16	MT1513247	Price	AE60023	Price	PT1840323	Price	AE65023	Price
3/8	.3750	1-13/16	3-1/8	MT1513249	Price	AE60024	Price	PT1840324	Price	AE65024	Price
25/64	.3906	1-7/8	3-1/4	MT1513252	Price	AE60025	Price	PT1840325	Price	AE65025	Price
13/32	.4062	1-15/16	3-5/16	MT1513255	Price	AE60026	Price	PT1840326	Price	AE65026	Price
27/64	.4219	2	3-3/8	MT1513257	Price	AE60027	Price	PT1840327	Price	AE65027	Price
7/16	.4375	2-1/16	3-7/16	MT1513258	Price	AE60028	Price	PT1840328	Price	AE65028	Price
29/64	.4531	2-1/8	3-9/16	MT1513259	Price	AE60029	Price	PT1840329	Price	AE65029	Price
15/32	.4688	2-1/8	3-5/8	MT1513260	Price	AE60030	Price	PT1840330	Price	AE65030	Price
31/64	.4844	2-3/16	3-11/16	MT1513261	Price	AE60031	Price	PT1840331	Price	AE65031	Price
1/2	.5000	2-1/4	3-3/4	MT1513262	Price	AE60032	Price	PT1840332	Price	AE65032	Price
33/64	.5156	2-3/8	3-7/8	-	-	-	-	PT1846033	Price	AE65033	Price
17/32	.5312	2-3/8	3-7/8	-	-	-	-	PT1846034	Price	AE65034	Price
35/64	.5469	2-1/2	4	-	-	-	-	PT1846035	Price	AE65035	Price
9/16	.5625	2-1/2	4	-	-	-	-	PT1846036	Price	AE65036	Price
37/64	.5781	2-5/8	4-1/8	-	-	-	-	PT1846037	Price	AE65037	Price
19/32	.5938	2-5/8	4-1/8	-	-	-	-	PT1846038	Price	-	-
39/64	.6094	2-3/4	4-1/4	-	-	-	-	PT1846039	Price	AE65039	Price
5/8	.6250	2-3/4	4-1/4	-	-	-	-	PT1846040	Price	AE65040	Price
41/64	.6406	2-7/8	4-1/2	-	-	-	-	PT1846041	Price	AE65041	Price
21/32	.6562	2-7/8	4-1/2	-	-	-	-	PT1846042	Price	AE65042	Price
43/64	.6719	2-7/8	4-5/8	-	-	-	-	PT1846043	Price	AE65043	Price
11/16	.6875	2-7/8	4-5/8	-	-	-	-	PT1846044	Price	AE65044	Price
45/64	.7031	3	4-3/4	-	-	-	-	-	-	AE65045	Price
45/64	.7310	3	4-3/4	-	-	-	-	PT1846045	Price	-	-
23/32	.7188	3	4-3/4	-	-	-	-	PT1846046	Price	AE65046	Price
47/64	.7344	3-1/8	5	-	-	-	-	PT1846047	Price	-	-
3/4	.7500	3-1/8	5	-	-	-	-	PT1846048	Price	AE65048	Price
25/32	.7812	3-1/4	5-1/8	-	-	-	-	-	-	AE65050	Price
51/64	.7969	3-3/8	5-1/4	-	-	-	-	-	-	AE65051	Price
13/16	.8125	3-3/8	5-1/4	-	-	-	-	-	-	AE65052	Price
53/64	.8281	3-1/2	5-3/8	-	-	-	-	-	-	AE65053	Price
27/32	.8438	3-1/2	5-3/8	-	-	-	-	-	-	AE65054	Price
7/8	.8750	3-1/2	5-1/2	-	-	-	-	-	-	AE65056	Price
29/32	.9062	3-5/8	5-5/8	-	-	-	-	-	-	AE65058	Price
59/64	.9212	3-3/4	5-3/4	-	-	-	-	-	-	AE65059	Price
15/16	.9375	3-3/4	5-3/4	-	-	-	-	-	-	AE65060	Price

****Series No. AE60 drill sizes over 1/2"** **Made in U.S.A. & England • M42 8% Cobalt**

29 Pc. Screw Machine Drill Sets

Cobalt • 135° Split Point

- Includes sizes 1/16" - 1/2" x 64ths, index

Brand	Order No.	Price
	PT2799962	Price
RAPIDKUT	AP50S70CO	Price



Screw Machine Drills

Cobalt • 135° Split Point

- Effective in high alloys and work hardening materials
- Morse List #2435
- Precision Twist List #M41CO



60 Pc. Screw Machine Drill Sets

Cobalt • 135° Split Point

Includes sizes #1 - 60, index



Brand	Order No.	Price
PRECISION	PT2799960	Price
RAPIDKUT	AP50S71CO	Price

26 Pc. Screw Machine Drill Sets

Cobalt • 135° Split Point

- Includes letter sizes A thru Z, index



Brand	Order No.	Price
PRECISION	PT2790292	Price
RAPIDKUT	AP50CAZCO	Price

				Morse Cutting Tools		Rapidkut		Precision Twist Drill	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1	.2280	1-5/16	2-7/16	MT1513219	Price	AE61101	Price	PT1841301	Price
2	.2210	1-5/16	2-7/16	MT1513218	Price	AE61102	Price	PT1841302	Price
3	.2130	1-1/4	2-3/8	MT1513216	Price	AE61103	Price	PT1841303	Price
4	.2090	1-1/4	2-3/8	MT1513215	Price	AE61104	Price	PT1841304	Price
5	.2055	1-1/4	2-3/8	MT1513214	Price	AE61105	Price	PT1841305	Price
6	.2040	1-1/4	2-3/8	MT1513213	Price	AE61106	Price	PT1841306	Price
7	.2010	1-3/16	2-1/4	MT1513211	Price	AE61107	Price	PT1841307	Price
8	.1990	1-3/16	2-1/4	MT1513210	Price	AE61108	Price	PT1841308	Price
9	.1960	1-3/16	2-1/4	MT1513209	Price	AE61109	Price	PT1841309	Price
10	.1935	1-3/16	2-1/4	MT1513208	Price	AE61110	Price	PT1841310	Price
11	.1910	1-3/16	2-1/4	MT1513207	Price	AE61111	Price	PT1841311	Price
12	.1890	1-3/16	2-1/4	MT1513206	Price	AE61112	Price	PT1841312	Price
13	.1850	1-1/8	2-3/16	MT1513204	Price	AE61113	Price	PT1841313	Price
14	.1820	1-1/8	2-3/16	MT1513203	Price	AE61114	Price	PT1841314	Price
15	.1800	1-1/8	2-3/16	MT1513202	Price	AE61115	Price	PT1841315	Price
16	.1770	1-1/8	2-3/16	MT1513201	Price	AE61116	Price	PT1841316	Price
17	.1730	1-1/8	2-3/16	MT1513200	Price	AE61117	Price	PT1841317	Price
18	.1695	1-1/16	2-1/8	MT1513198	Price	AE61118	Price	PT1841318	Price
19	.1660	1-1/16	2-1/8	MT1513197	Price	AE61119	Price	PT1841319	Price
20	.1610	1-1/16	2-1/8	MT1513196	Price	AE61120	Price	PT1841320	Price
21	.1590	1-1/16	2-1/8	MT1513195	Price	AE61121	Price	PT1841321	Price
22	.1570	1-1/16	2-1/8	MT1513194	Price	AE61122	Price	PT1841322	Price
23	.1540	1	2-1/16	MT1513192	Price	AE61123	Price	PT1841323	Price
24	.1520	1	2-1/16	MT1513191	Price	AE61124	Price	PT1841324	Price
25	.1495	1	2-1/16	MT1513190	Price	AE61125	Price	PT1841325	Price
26	.1470	1	2-1/16	MT1513189	Price	AE61126	Price	PT1841326	Price
27	.1440	1	2-1/16	MT1513188	Price	AE61127	Price	PT1841327	Price
28	.1405	15/16	1-15/16	MT1513186	Price	AE61128	Price	PT1841328	Price
29	.1360	15/16	1-15/16	MT1513185	Price	AE61129	Price	PT1841329	Price
30	.1285	15/16	1-15/16	MT1513184	Price	AE61130	Price	PT1841330	Price
31	.1200	7/8	1-7/8	MT1513182	Price	AE61131	Price	PT1841331	Price
32	.1160	7/8	1-7/8	MT1513181	Price	AE61132	Price	PT1841332	Price
33	.1130	7/8	1-7/8	MT1513180	Price	AE61133	Price	PT1841333	Price
34	.1110	7/8	1-7/8	MT1513179	Price	AE61134	Price	PT1841334	Price
35	.1100	7/8	1-7/8	MT1513178	Price	AE61135	Price	PT1841335	Price
36	.1065	13/16	1-13/16	MT1513176	Price	AE61136	Price	PT1841336	Price
37	.1040	13/16	1-13/16	MT1513175	Price	AE61137	Price	PT1841337	Price
38	.1015	13/16	1-13/16	MT1513174	Price	AE61138	Price	PT1841338	Price
39	.0995	13/16	1-13/16	MT1513173	Price	AE61139	Price	PT1841339	Price
40	.0980	13/16	1-13/16	MT1513172	Price	AE61140	Price	PT1841340	Price
41	.0960	13/16	1-13/16	MT1513171	Price	AE61141	Price	PT1841341	Price
42	.0935	3/4	1-3/4	MT1513169	Price	AE61142	Price	PT1841342	Price
43	.0890	3/4	1-3/4	MT1513168	Price	AE61143	Price	PT1841343	Price
44	.0860	3/4	1-3/4	MT1513167	Price	AE61144	Price	PT1841344	Price
45	.0820	3/4	1-3/4	MT1513166	Price	AE61145	Price	PT1841345	Price
46	.0810	3/4	1-3/4	MT1513165	Price	AE61146	Price	PT1841346	Price
47	.0785	11/16	1-11/16	MT1513164	Price	AE61147	Price	PT1841347	Price
48	.0760	11/16	1-11/16	MT1513162	Price	AE61148	Price	PT1841348	Price
49	.0730	11/16	1-11/16	MT1513161	Price	AE61149	Price	PT1841349	Price
50	.0700	11/16	1-11/16	MT1513160	Price	AE61150	Price	PT1841350	Price
51	.0670	11/16	1-11/16	MT1513159	Price	AE61151	Price	PT1841351	Price
52	.0635	11/16	1-11/16	MT1513158	Price	AE61152	Price	PT1841352	Price
53	.0595	5/8	1-5/8	MT1513156†	Price	AE61153†	Price	PT1841353†	Price
54	.0550	5/8	1-5/8	MT1513155†	Price	AE61154†	Price	PT1841354†	Price
55	.0520	5/8	1-5/8	MT1513154†	Price	AE61155†	Price	PT1841355†	Price
56	.0465	1/2	1-3/8	MT1513153†	Price	AE61156†	Price	PT1841356†	Price
57	.0430	1/2	1-3/8	MT1513152†	Price	AE61157†	Price	PT1841357†	Price
58	.0420	1/2	1-3/8	MT1513151†	Price	AE61158†	Price	PT1841358†	Price
59	.0410	1/2	1-3/8	MT1513150†	Price	AE61159†	Price	PT1841359†	Price
60	.0400	1/2	1-3/8	MT1513149†	Price	AE61160†	Price	PT1841360†	Price

				Morse Cutting Tools		Rapidkut		Precision Twist Drill	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
A	.2340	1-5/16	2-7/16	MT1513220	Price	AE61201	Price	PT1842301	Price
B	.2380	1-3/8	2-1/2	MT1513222	Price	AE61202	Price	PT1842302	Price
C	.2420	1-3/8	2-1/2	MT1513223	Price	AE61203	Price	PT1842303	Price
D	.2460	1-3/8	2-1/2	MT1513224	Price	AE61204	Price	PT1842304	Price
1/4, E	.2500	1-3/8	2-1/2	MT1513225	Price	AE61205	Price	PT1840316	Price
F	.2570	1-7/16	2-5/8	MT1513226	Price	AE61206	Price	PT1842306	Price
G	.2610	1-7/16	2-5/8	MT1513227	Price	AE61207	Price	PT1842307	Price
H	.2660	1-1/2	2-11/16	MT1513229	Price	AE61208	Price	PT1842308	Price
I	.2720	1-1/2	2-11/16	MT1513230	Price	AE61209	Price	PT1842309	Price
J	.2770	1-1/2	2-11/16	MT1513231	Price	AE61210	Price	PT1842310	Price
K	.2810	1-1/2	2-11/16	MT1513232	Price	AE61211	Price	PT1842311	Price
L	.2900	1-9/16	2-3/4	MT1513234	Price	AE61212	Price	PT1842312	Price
M	.2950	1-9/16	2-3/4	MT1513235	Price	AE61213	Price	PT1842313	Price
N	.3020	1-5/8	2-13/16	MT1513237	Price	AE61214	Price	PT1842314	Price
O	.3160	1-11/16	2-15/16	MT1513239	Price	AE61215	Price	PT1842315	Price
P	.3230	1-11/16	2-15/16	MT1513240	Price	AE61216	Price	PT1842316	Price
Q	.3320	1-11/16	3	MT1513242	Price	AE61217	Price	PT1842317	Price
R	.3390	1-11/16	3	MT1513243	Price	AE61218	Price	PT1842318	Price
S	.3480	1-3/4	3-1/16	MT1513245	Price	AE61219	Price	PT1842319	Price
T	.3580	1-3/4	3-1/16	MT1513246	Price	AE61220	Price	PT1842320	Price
U	.3680	1-13/16	3-1/8	MT1513248	Price	AE61221	Price	PT1842321	Price
V	.3770	1-7/8	3-1/4	MT1513250	Price	AE61222	Price	PT1842322	Price
W	.3860	1-7/8	3-1/4	MT1513251	Price	AE61223	Price	PT1842323	Price
X	.3970	1-15/16	3-5/16	MT1513253	Price	AE61224	Price	PT1842324	Price
Y	.4040	1-15/16	3-5/16	MT1513254	Price	AE61225	Price	PT1842325	Price
Z	.4130	2	3-3/8	MT1513256	Price	AE61226	Price	PT1842326	Price

† Sizes 53 thru 60 are NOT Split Point.

EX-SUS GOLD® Drill



Vanadium High Speed Steel • Stub Length • TiN Coated

- Recommended for aluminum, low carbon and medium carbon steels, 300 and 400 series stainless steels
- OSG List #1100

Type - Fractional Size

Dia.	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/32	.0311	3mm	5mm	38mm	TP318595079	Price
3/64	.0469	3mm	8mm	40mm	TP318595119	Price
1/16	.0626	3mm	10mm	42mm	TP318595159	Price
5/64	.0780	3mm	12mm	44mm	TP318595198	Price
3/32	.0937	3mm	14mm	46mm	TP318595238	Price
7/64	.1094	3mm	16mm	48mm	TP318595278	Price
1/8	.1252	4mm	18mm	50mm	TP318595318	Price
9/64	.1406	4mm	20mm	52mm	TP318595357	Price
5/32	.1563	4mm	22mm	54mm	TP318595397	Price
11/64	.1720	6mm	24mm	68mm	TP318595437	Price
3/16	.1874	6mm	26mm	70mm	TP318595476	Price
13/64	.2031	6mm	26mm	70mm	TP318595516	Price
7/32	.2189	6mm	28mm	72mm	TP318595556	Price
15/64	.2343	6mm	28mm	72mm	TP318595595	Price
1/4, E	.2500	8mm	31mm	75mm	TP318595635	Price
17/64	.2657	8mm	34mm	78mm	TP318595675	Price
31/64	.4843	12mm	51mm	108mm	TP3161623	Price
1/2	.5000	12mm	51mm	108mm	TP3161627	Price

Type - Wire Gage Size

Dia.	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
#76	.0201	3mm	3mm	38mm	TP318595051	Price
#75	.0209	3mm	3mm	38mm	TP318595053	Price
#73	.0240	3mm	4mm	38mm	TP318595061	Price
#70	.0280	3mm	4.5mm	38mm	TP318595071	Price
#69	.0291	3mm	4.5mm	38mm	TP318595074	Price
#67	.0319	3mm	5mm	38mm	TP318595081	Price
#65	.0350	3mm	5.5mm	38mm	TP318595089	Price
#64	.0358	3mm	5.5mm	38mm	TP318595091	Price
#63	.0370	3mm	5.5mm	38mm	TP318595094	Price
#62	.0382	3mm	6mm	38mm	TP318595097	Price
#60	.0402	3mm	6mm	38mm	TP318595102	Price
#59	.0409	3mm	6mm	38mm	TP318595104	Price
#58	.0421	3mm	7mm	39mm	TP318595107	Price
#55	.0520	3mm	8mm	40mm	TP318595132	Price
#54	.0551	3mm	9mm	41mm	TP3161514	Price
#53	.0594	3mm	10mm	42mm	TP318595151	Price
#52	.0634	3mm	10mm	42mm	TP318595161	Price
#51	.0669	3mm	10mm	42mm	TP3161517	Price
#50	.0701	3mm	11mm	43mm	TP318595178	Price
#49	.0728	3mm	11mm	43mm	TP318595185	Price
#47	.0783	3mm	12mm	44mm	TP318595199	Price
#46	.0811	3mm	12mm	44mm	TP318595206	Price
#45	.0819	3mm	12mm	44mm	TP318595208	Price
#44	.0858	3mm	13mm	45mm	TP318595218	Price
#43	.0890	3mm	13mm	45mm	TP318595226	Price
#42	.0933	3mm	14mm	46mm	TP318595237	Price
#41	.0961	3mm	14mm	46mm	TP318595244	Price
#40	.0980	3mm	14mm	46mm	TP318595249	Price
#38	.1016	3mm	14mm	46mm	TP318595258	Price
#34	.1110	3mm	16mm	48mm	TP318595282	Price
#31	.1201	4mm	18mm	50mm	TP318595305	Price
#30	.1283	4mm	18mm	50mm	TP318595326	Price
#29	.1358	4mm	20mm	52mm	TP318595345	Price
#29	.1358	4mm	20mm	52mm	TP318595345 11†	Price
#25	.1496	4mm	22mm	54mm	TP3161538	Price
#24	.1520	4mm	22mm	54mm	TP318595386	Price
#19	.1661	6mm	22mm	66mm	TP318595422	Price
#16	.1772	6mm	24mm	68mm	TP3161545	Price
#13	.1850	6mm	24mm	68mm	TP3161547	Price
#11	.1913	6mm	26mm	70mm	TP318595486	Price
#7	.2012	6mm	26mm	70mm	TP318595511	Price
#5	.2055	6mm	26mm	70mm	TP318595522	Price

Type - Metric Size

Dia.	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
0.5mm	.0197	3mm	3mm	38mm	TP3161505	Price
0.56mm	.0220	3mm	3.5mm	38mm	TP318595056	Price
0.58mm	.0228	3mm	3.5mm	38mm	TP318595058	Price
0.6mm	.0236	3mm	3.5mm	38mm	TP3161506	Price
0.65mm	.0256	3mm	4mm	38mm	TP318595065	Price
0.7mm	.0276	3mm	4.5mm	38mm	TP3161507	Price
0.73mm	.0287	3mm	4.5mm	38mm	TP318595073	Price
0.75mm	.0295	3mm	4.5mm	38mm	TP318595075	Price
0.78mm	.0307	3mm	5mm	38mm	TP318595078	Price
0.8mm	.0315	3mm	5mm	38mm	TP3161508	Price

† TiALN Coated

Type - Metric Size

Dia.	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
0.83mm	.0327	3mm	5mm	38mm	TP318595083	Price
0.76mm	.0299	3mm	5mm	38mm	TP318595076	Price
0.9mm	.0354	3mm	5.5mm	38mm	TP3161509	Price
0.95mm	.0374	3mm	5.5mm	38mm	TP318595095	Price
0.96mm	.0378	3mm	6mm	38mm	TP318595096	Price
1mm	.0394	3mm	6mm	38mm	TP3161510	Price
1.01mm	.0398	3mm	6mm	38mm	TP318595101	Price
1.05mm	.0413	3mm	6mm	38mm	TP318595105	Price
1.1mm	.0433	3mm	7mm	39mm	TP3161511	Price
1.17mm	.0461	3mm	7mm	39mm	TP318595117	Price
1.2mm	.0472	3mm	8mm	40mm	TP3161512	Price
1.21mm	.0476	3mm	8mm	40mm	TP318595121	Price
1.22mm	.0480	3mm	8mm	40mm	TP318595122	Price
1.3mm	.0512	3mm	8mm	40mm	TP3161513	Price
1.35mm	.0531	3mm	9mm	41mm	TP318595135	Price
1.41mm	.0555	3mm	9mm	41mm	TP318595141	Price
1.45mm	.0571	3mm	9mm	41mm	TP318595145	Price
1.5mm	.0591	3mm	9mm	41mm	TP3161515	Price
1.52mm	.0598	3mm	10mm	42mm	TP318595152	Price
1.53mm	.0602	3mm	10mm	42mm	TP318595153	Price
1.54mm	.0606	3mm	10mm	42mm	TP318595154	Price
1.6mm	.0630	3mm	10mm	42mm	TP3161516	Price
1.62mm	.0638	3mm	10mm	42mm	TP318595162	Price
1.63mm	.0642	3mm	10mm	42mm	TP318595163	Price
1.64mm	.0646	3mm	10mm	42mm	TP318595164	Price
1.65mm	.0650	3mm	10mm	42mm	TP318595165	Price
1.75mm	.0689	3mm	11mm	43mm	TP318595175	Price
1.8mm	.0709	3mm	11mm	43mm	TP3161518	Price
1.88mm	.0740	3mm	11mm	43mm	TP318595188	Price
1.9mm	.0748	3mm	11mm	43mm	TP3161519	Price
1.95mm	.0768	3mm	12mm	44mm	TP318595195	Price
2mm	.0787	3mm	12mm	44mm	TP3161520	Price
2.02mm	.0795	3mm	12mm	44mm	TP318595202	Price
2.04mm	.0803	3mm	12mm	44mm	TP318595204	Price
2.05mm	.0807	3mm	12mm	44mm	TP318595205	Price
2.09mm	.0823	3mm	12mm	44mm	TP318595209	Price
2.1mm	.0827	3mm	12mm	44mm	TP3161521	Price
2.12mm	.0835	3mm	12mm	44mm	TP318595212	Price
2.15mm	.0846	3mm	13mm	45mm	TP318595215	Price
2.21mm	.0870	3mm	13mm	45mm	TP318595221	Price
2.3mm	.0906	3mm	13mm	45mm	TP3161523	Price
2.31mm	.0909	3mm	13mm	45mm	TP318595231	Price
2.32mm	.0913	3mm	13mm	45mm	TP318595232	Price
2.35mm	.0925	3mm	13mm	45mm	TP318595235	Price
2.4mm	.0945	3mm	14mm	46mm	TP3161524	Price
2.45mm	.0965	3mm	14mm	46mm	TP318595245	Price
2.5mm	.0984	3mm	14mm	46mm	TP3161525	Price
2.51mm	.0988	3mm	14mm	46mm	TP318595251	Price
2.54mm	.1000	3mm	14mm	46mm	TP318595254	Price
2.6mm	.1024	3mm	14mm	46mm	TP3161526	Price
2.63mm	.1035	3mm	14mm	46mm	TP318595263	Price
2.65mm	.1043	3mm	14mm	46mm	TP318595265	Price
2.8mm	.1102	3mm	16mm	48mm	TP3161528	Price
3mm	.1181	3mm	16mm	48mm	TP3161530	Price
3.1mm	.1220	4mm	18mm	50mm	TP3161531	Price
3.15mm	.1240	4mm	18mm	50mm	TP318595315	Price
3.17mm	.1248	4mm	18mm	50mm	TP318595317	Price
3.2mm	.1260	4mm	18mm	50mm	TP3161532	Price
3.21mm	.1264	4mm	18mm	50mm	TP318595321	Price
3.23mm	.1272	4mm	18mm	50mm	TP318595323	Price
3.25mm	.1280	4mm	18mm	50mm	TP318595325	Price
3.27mm	.1287	4mm	18mm	50mm	TP318595327	Price
3.3mm	.1299	4mm	18mm	50mm	TP3161533	Price
3.33mm	.1311	4mm	18mm	50mm	TP318595333	Price
3.35mm	.1319	4mm	18mm	50mm	TP318595335	Price
3.4mm	.1339	4mm	20mm	52mm	TP3161534	Price
3.5mm	.1378	4mm	20mm	52mm	TP3161535	Price
3.58mm	.1409	4mm	20mm	52mm	TP318595358	Price
3.6mm	.1417	4mm	20mm	52mm	TP3161536	Price
3.9mm	.1535	4mm	22mm	54mm	TP3161539	Price
3.95mm	.1555	4mm	22mm	54mm	TP318595395	Price
3.98mm	.1567	4mm	22mm	54mm	TP318595398	Price
4mm	.1575	4mm	22mm	54mm	TP3161540	Price
4.1mm	.1614	6mm	22mm	66mm	TP3161541	Price
4.2mm	.1654	6mm	22mm	66mm	TP3161542	Price
4.4mm	.1732	6mm	24mm	68mm	TP3161544	Price
4.44mm	.1748	6mm	24mm	68mm	TP318595444	Price
4.45mm	.1752	6mm	24mm	68mm	TP318595445	Price
4.59mm	.1807	6mm	24mm	68mm	TP318595459	Price
4.6mm	.1811	6mm	24mm	68mm	TP3161546	Price
4.65mm	.1831	6mm	24mm	68mm	TP318595465	Price
4.78mm	.1882	6mm	26mm	70mm	TP318595478	Price
4.81mm	.1894	6mm	26mm	70mm	TP318595481	Price
4.9mm	.1929	6mm	26mm	70mm	TP3161549	Price
5mm	.1969	6mm	26mm	70mm	TP3161550	Price
5.1mm	.2008	6mm	26mm	70mm	TP3161551	Price
5.25mm	.2067	6mm	26mm	70mm	TP318595525	Price
5.5mm	.2165	6mm	28mm	72mm	TP3161555	Price
5.55mm	.2185	6mm	28mm	72mm	TP318595555	Price
5.7mm	.2244	6mm	28mm	72mm	TP3161557	Price

(Continued on next page)

EX-SUS GOLD® Drill Vanadium High Speed Steel • Stub Length • TiN Coated *(Continued from previous page)*

Type - Metric Size						
Dia.	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
6.01mm	.2362	6mm	28mm	72mm	**TP3161560**	Price
6.1mm	.2402	8mm	31mm	75mm	**TP3161561**	Price
6.2mm	.2441	8mm	31mm	75mm	**TP3161562**	Price
6.3mm	.2480	8mm	31mm	75mm	**TP3161563**	Price
6.4mm	.2520	8mm	31mm	75mm	**TP3161564**	Price
6.45mm	.2539	8mm	31mm	75mm	**TP318595645**	Price
6.5mm	.2559	8mm	31mm	75mm	**TP3161565**	Price
6.6mm	.2598	8mm	31mm	75mm	**TP3161566**	Price
6.65mm	.2618	8mm	31mm	75mm	**TP318595665**	Price
6.8mm	.2677	8mm	34mm	78mm	**TP3161568**	Price
6.9mm	.2717	8mm	34mm	78mm	**TP3161569**	Price
7mm	.2756	8mm	34mm	78mm	**TP3161570**	Price
7.15mm	.2815	8mm	34mm	78mm	**TP318595715**	Price
7.2mm	.2835	8mm	34mm	78mm	**TP3161572**	Price
7.4mm	.2913	8mm	34mm	78mm	**TP3161574**	Price
7.5mm	.2953	8mm	34mm	78mm	**TP3161575**	Price
7.95mm	.3130	8mm	37mm	81mm	**TP318595795**	Price
8mm	.3150	8mm	37mm	81mm	**TP3161580**	Price

Type - Metric Size						
Dia.	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
8.15mm	.3209	10mm	37mm	87mm	**TP318595815**	Price
8.5mm	.3346	10mm	37mm	87mm	**TP3161585**	Price
9mm	.3543	10mm	40mm	90mm	**TP3161590**	Price
9.1mm	.3583	10mm	40mm	90mm	**TP3161591**	Price
9.3mm	.3661	10mm	40mm	90mm	**TP3161593**	Price
9.4mm	.3701	10mm	40mm	90mm	**TP3161594**	Price
9.5mm	.3740	10mm	40mm	90mm	**TP3161595**	Price
9.55mm	.3760	10mm	43mm	93mm	**TP318595955**	Price
10mm	.3937	10mm	43mm	93mm	**TP3161600**	Price
10.5mm	.4134	12mm	43mm	100mm	**TP3161605**	Price
10.8mm	.4252	12mm	47mm	104mm	**TP3161608**	Price
11mm	.4331	12mm	47mm	104mm	**TP3161610**	Price
11.5mm	.4528	12mm	47mm	104mm	**TP3161615**	Price
12mm	.4724	12mm	51mm	108mm	**TP3161620**	Price
13mm	.5118	12mm	51mm	108mm	**TP3161630**	Price
14mm	.5512	16mm	54mm	114mm	**TP3161640**	Price
15mm	.5906	16mm	56mm	116mm	**TP316165011†**	Price
16mm	.6299	16mm	58mm	118mm	**TP3161660**	Price

† TiALN Coated

VPH® GDS Drill



Powdered High Speed Steel • 130° Point • V-Coated

- Stub length
- Recommended for cast iron, carbon steels, alloy steels, die steels, titanium, inconel and hardened steels up to 45 HrC
- OSG List #1900

Type - Fractional Size						
Size	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
3/64	.0469	3mm	8mm	40mm	**TP478608119**	Price
1/16	.0626	3mm	10mm	42mm	**TP478608159**	Price
1/8	.1252	4mm	18mm	50mm	**TP478608318**	Price
11/64	.1720	6mm	24mm	68mm	**TP478608437**	Price
3/16	.1874	6mm	26mm	70mm	**TP478608476**	Price
15/64	.2343	6mm	28mm	72mm	**TP478608595**	Price
1/4, E	.2500	8mm	31mm	75mm	**TP478608635**	Price
17/64	.2657	8mm	34mm	78mm	**TP478608675**	Price
9/32, K	.2811	8mm	34mm	78mm	**TP478608714**	Price
19/64	.2969	8mm	34mm	78mm	**TP478608754**	Price
5/16	.3126	8mm	37mm	81mm	**TP478608794**	Price
21/64	.3280	10mm	37mm	87mm	**TP478608833**	Price
11/32	.3437	10mm	40mm	90mm	**TP478608873**	Price
23/64	.3594	10mm	40mm	90mm	**TP478608913**	Price
3/8	.3748	10mm	40mm	90mm	**TP478608952**	Price
25/64	.3906	10mm	43mm	93mm	**TP478608992**	Price
13/32	.4063	12mm	73mm	100mm	**TP478609032**	Price
27/64	.4220	12mm	47mm	104mm	**TP478609072**	Price
29/64	.4531	12mm	47mm	104mm	**TP478609151**	Price
15/32	.4689	12mm	47mm	104mm	**TP478609191**	Price
1/2	.5000	12mm	51mm	108mm	**TP478599127**	Price
17/32	.5311	16mm	54mm	114mm	**TP478609349**	Price
9/16	.5626	16mm	56mm	116mm	**TP478609429**	Price
5/8	.6252	16mm	58mm	118mm	**TP478609588**	Price
21/32	.6563	20mm	60mm	126mm	**TP478609667**	Price
3/4	.7500	20mm	66mm	132mm	**TP478609905**	Price

Type - Metric Size						
Size	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
1.3mm	.0512	3mm	8mm	40mm	**TP478599013**	Price
1.5mm	.0591	3mm	9mm	41mm	**TP478599015**	Price
1.61mm	.0634	3mm	10mm	42mm	**TP478608161**	Price
1.7mm	.0669	3mm	10mm	42mm	**TP478599017**	Price
1.78mm	.0701	3mm	11mm	43mm	**TP478608178**	Price
1.85mm	.0728	3mm	11mm	43mm	**TP478608185**	Price
1.98mm	.0780	3mm	12mm	44mm	**TP478608198**	Price
2mm	.0787	3mm	12mm	44mm	**TP478599020**	Price
2.1mm	.0827	3mm	12mm	44mm	**TP479599021**	Price
2.18mm	.0858	3mm	13mm	45mm	**TP478608218**	Price
2.2mm	.0866	3mm	13mm	45mm	**TP479599022**	Price
2.26mm	.0890	3mm	13mm	45mm	**TP478608226**	Price
2.3mm	.0906	3mm	13mm	45mm	**TP479599023**	Price
2.38mm	.0937	3mm	14mm	46mm	**TP478608238**	Price
2.4mm	.0945	3mm	14mm	46mm	**TP479599024**	Price
2.44mm	.0961	3mm	14mm	46mm	**TP478608244**	Price
2.5mm	.0984	3mm	14mm	46mm	**TP479599025**	Price
2.58mm	.1016	3mm	14mm	46mm	**TP478608258**	Price
2.6mm	.1024	3mm	14mm	46mm	**TP479599026**	Price
2.78mm	.1094	3mm	16mm	46mm	**TP478608278**	Price
2.95mm	.1161	3mm	16mm	48mm	**TP478608295**	Price
3mm	.1181	3mm	16mm	48mm	**TP478599030**	Price
3.05mm	.1201	4mm	18mm	50mm	**TP478608305**	Price

Type - Metric Size						
Size	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
3.1mm	.1220	4mm	18mm	50mm	**TP479599031**	Price
3.26mm	.1283	4mm	18mm	50mm	**TP478608326**	Price
3.3mm	.1299	4mm	18mm	50mm	**TP479599033**	Price
3.4mm	.1339	4mm	20mm	52mm	**TP479599034**	Price
3.45mm	.1358	4mm	20mm	52mm	**TP478608345**	Price
3.5mm	.1378	4mm	20mm	52mm	**TP479599035**	Price
3.57mm	.1406	4mm	20mm	52mm	**TP478608357**	Price
3.6mm	.1417	4mm	20mm	52mm	**TP479599036**	Price
3.66mm	.1441	4mm	20mm	52mm	**TP478608366**	Price
3.7mm	.1457	4mm	20mm	52mm	**TP479599037**	Price
3.9mm	.1535	4mm	22mm	54mm	**TP479599039**	Price
3.97mm	.1563	4mm	22mm	54mm	**TP478608397**	Price
3.99mm	.1571	4mm	22mm	54mm	**TP478608399**	Price
4mm	.1575	4mm	22mm	54mm	**TP478599040**	Price
4.1mm	.1614	6mm	22mm	66mm	**TP479599041**	Price
4.2mm	.1654	6mm	22mm	66mm	**TP479599042**	Price
4.4mm	.1732	6mm	24mm	68mm	**TP479599044**	Price
4.5mm	.1772	6mm	24mm	68mm	**TP479599045**	Price
4.57mm	.1799	6mm	24mm	68mm	**TP478608457**	Price
4.6mm	.1811	6mm	24mm	68mm	**TP479599046**	Price
4.62mm	.1819	6mm	24mm	68mm	**TP478608462**	Price
4.7mm	.1850	6mm	24mm	68mm	**TP479599047**	Price
4.8mm	.1890	6mm	26mm	70mm	**TP479599048**	Price
5mm	.1969	6mm	26mm	70mm	**TP478599050**	Price
5.1mm	.2008	6mm	26mm	70mm	**TP479599051**	Price
5.16mm	.2031	6mm	26mm	70mm	**TP478608516**	Price
5.41mm	.2130	6mm	28mm	72mm	**TP478608541**	Price
5.5mm	.2165	6mm	28mm	72mm	**TP479599055**	Price
5.56mm	.2189	6mm	28mm	72mm	**TP478608556**	Price
5.7mm	.2244	6mm	28mm	72mm	**TP479599057**	Price
5.79mm	.2280	6mm	28mm	70mm	**TP478608579**	Price
5.8mm	.2283	6mm	28mm	72mm	**TP479599058**	Price
6mm	.2362	6mm	28mm	72mm	**TP478599060**	Price
6.1mm	.2402	8mm	31mm	75mm	**TP479599061**	Price
6.2mm	.2441	8mm	31mm	75mm	**TP479599062**	Price
6.3mm	.2480	8mm	31mm	75mm	**TP479599063**	Price
6.4mm	.2520	8mm	31mm	75mm	**TP479599064**	Price
6.5mm	.2559	8mm	31mm	75mm	**TP479599065**	Price
6.6mm	.2598	8mm	31mm	75mm	**TP479599066**	Price
6.7mm	.2638	8mm	31mm	75mm	**TP479599067**	Price
6.8mm	.2677	8mm	34mm	78mm	**TP479599068**	Price
7mm	.2756	8mm	34mm	78mm	**TP478599070**	Price
7.1mm	.2795	8mm	34mm	78mm	**TP479599071**	Price
7.2mm	.2835	8mm	34mm	78mm	**TP479599072**	Price
8mm	.3150	8mm	37mm	81mm	**TP478599080**	Price
9mm	.3543	10mm	40mm	90mm	**TP479599090**	Price
10mm	.3937	10mm	43mm	93mm	**TP478599100**	Price
11mm	.4331	12mm	47mm	104mm	**TP478599110**	Price
12mm	.4724	12mm	51mm	108mm	**TP478599120**	Price
16mm	.6299	16mm	58mm	118mm	**TP478599160**	Price

PROCUT Left Hand Screw Machine Drills

High Speed Steel • 118° Standard Point



- Left hand screw machine drills have a left hand helix for applications where shorter, more rigid length is required in a left hand rotation
- These drills may also be used in drilling out broken studs, bolts and screws

NOTE: Many wire gage and letter sizes in stock (while supplies last)-call for price and availability

Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	5/8	1-5/8	**AE55004**	Price
5/64	11/16	1-11/16	**AE55005**	Price
3/32	3/4	1-3/4	**AE55006**	Price
7/64	13/16	1-13/16	**AE55007**	Price
1/8	7/8	1-7/8	**AE55008**	Price
9/64	15/16	1-15/16	**AE55009**	Price
5/32	1	2-1/16	**AE55010**	Price
11/64	1-1/16	2-1/8	**AE55011**	Price
3/16	1-1/8	2-3/16	**AE55012**	Price
13/64	1-3/16	2-1/4	**AE55013**	Price
7/32	1-1/4	2-3/8	**AE55014**	Price
15/64	1-5/16	2-7/16	**AE55015**	Price
1/4	1-3/8	2-1/2	**AE55016**	Price
17/64	1-7/16	2-5/8	**AE55017**	Price
9/32	1-1/2	2-11/16	**AE55018**	Price
19/64	1-9/16	2-3/4	**AE55019**	Price
5/16	1-5/8	2-13/16	**AE55020**	Price
21/64	1-11/16	2-15/16	**AE55021**	Price
11/32	1-11/16	3	**AE55022**	Price
23/64	1-3/4	3-1/16	**AE55023**	Price
3/8	1-13/16	3-1/8	**AE55024**	Price
25/64	1-7/8	3-1/4	**AE55025**	Price
13/32	1-15/16	3-5/16	**AE55026**	Price
27/64	2	3-3/8	**AE55027**	Price
7/16	2-1/16	3-7/16	**AE55028**	Price
29/64	2-1/8	3-9/16	**AE55029**	Price
15/32	2-1/8	3-5/8	**AE55030**	Price
31/64	2-3/16	3-11/16	**AE55031**	Price
1/2	2-1/4	3-3/4	**AE55032**	Price
19/32	2-5/8	4-1/8	**AE55038**	Price
11/16	2-7/8	4-5/8	**AE55044**	Price
25/32	3-1/4	5-1/8	**AE55050**	Price
51/64	3-3/8	5-1/4	**AE55051**	Price
27/32	3-1/2	5-3/8	**AE55054**	Price
57/64	3-5/8	5-5/8	**AE55057**	Price

PROCUT Drill & Reamer Blanks

High Speed Steel



- Bright finish
- Hardened and ground
- Can be used as gages to check hole size and drill bushing sizes
- Can also be used as guide pins or die sets, or modified as punches

DRILL BLANKS TOLERANCE:
+.0000 –.0003”
Sizes over 1/2” +.0000 –.0005”

REAMER BLANKS TOLERANCE:
+.0002 –.0000”
Sizes over 1/2” +.0005 –.0000”

Description - Fractional Size						
			Drill Blank		Reamer Blank	
Size (in.)	Decimal Equiv.	OAL (in.)	Order No.	Price	Order No.	Price
1/64	.0156	3/4	**AY50001**	Price	-	-
1/32	.0312	1-3/8	**AY50002**	Price	**AY60002**	Price
3/64	.0469	1-3/4	**AY50003**	Price	**AY60003**	Price
1/16	.0625	1-7/8	**AY50004**	Price	**AY60004**	Price
5/64	.0781	2	**AY50005**	Price	**AY60005**	Price
3/32	.0938	2-1/4	**AY50006**	Price	**AY60006**	Price
7/64	.1094	2-5/8	**AY50007**	Price	**AY60007**	Price
1/8	.1250	2-3/4	**AY50008**	Price	**AY60008**	Price
9/64	.1406	2-7/8	**AY50009**	Price	**AY60009**	Price
5/32	.1562	3	**AY50010**	Price	**AY60010**	Price
11/64	.1719	3-1/4	**AY50011**	Price	**AY60011**	Price
3/16	.1875	3-1/2	**AY50012**	Price	**AY60012**	Price
13/64	.2031	3-5/8	**AY50013**	Price	**AY60013**	Price
7/32	.2188	3-3/4	**AY50014**	Price	**AY60014**	Price
15/64	.2344	3-7/8	**AY50015**	Price	**AY60015**	Price
1/4	.2500	4	**AY50016**	Price	**AY60016**	Price
17/64	.2656	4-1/8	**AY50017**	Price	**AY60017**	Price
9/32	.2812	4-1/4	**AY50018**	Price	**AY60018**	Price
19/64	.2969	4-3/8	**AY50019**	Price	**AY60019**	Price
5/16	.3125	4-1/2	**AY50020**	Price	**AY60020**	Price
21/64	.3281	4-5/8	**AY50021**	Price	**AY60021**	Price
11/32	.3438	4-3/4	**AY50022**	Price	**AY60022**	Price
23/64	.3594	4-7/8	**AY50023**	Price	**AY60023**	Price
3/8	.3750	5	**AY50024**	Price	**AY60024**	Price
25/64	.3906	5-1/8	**AY50025**	Price	**AY60025**	Price
13/32	.4062	5-1/4	**AY50026**	Price	**AY60026**	Price
27/64	.4219	5-3/8	**AY50027**	Price	**AY60027**	Price
7/16	.4375	5-1/2	**AY50028**	Price	**AY60028**	Price
29/64	.4531	5-5/8	**AY50029**	Price	**AY60029**	Price
15/32	.4688	5-3/4	**AY50030**	Price	**AY60030**	Price
31/64	.4844	5-7/8	**AY50031**	Price	**AY60031**	Price
1/2	.5000	6	**AY50032**	Price	**AY60032**	Price
33/64	.5156	6	**AY50033**	Price	-	-
17/32	.5312	6	**AY50034**	Price	**AY60034**	Price
35/64	.5469	6	**AY50035**	Price	**AY60035**	Price
9/16	.5625	6	**AY50036**	Price	**AY60036**	Price
19/32	.5938	6	**AY50038**	Price	**AY60038**	Price

Description - Fractional Size						
			Drill Blank		Reamer Blank	
Size (in.)	Decimal Equiv.	OAL (in.)	Order No.	Price	Order No.	Price
39/64	.6094	6	**AY50039**	Price	**AY60039**	Price
5/8	.6250	6	**AY50040**	Price	**AY60040**	Price
41/64	.6406	6	**AY50041**	Price	-	-
21/32	.6562	6	**AY50042**	Price	**AY60042**	Price
43/64	.6719	6	**AY50043**	Price	**AY60043**	Price
11/16	.6875	6	**AY50044**	Price	**AY60044**	Price
45/64	.7031	6	**AY50045**	Price	-	-
23/32	.7188	6	**AY50046**	Price	**AY60046**	Price
47/64	.7344	6	**AY50047**	Price	**AY60047**	Price
3/4	.7500	6	**AY50048**	Price	**AY60048**	Price
49/64	.7656	6	**AY50049**	Price	-	-
25/32	.7812	6	**AY50050**	Price	**AY60050**	Price
51/64	.7969	6	**AY50051**	Price	-	-
13/16	.8125	6	**AY50052**	Price	**AY60052**	Price
53/64	.8281	6	**AY50053**	Price	-	-
27/32	.8438	6	**AY50054**	Price	-	-
55/64	.8594	6	**AY50055**	Price	-	-
7/8	.8750	6	**AY50056**	Price	**AY60056**	Price
57/64	.8906	6	**AY50057**	Price	-	-
29/32	.9062	6	**AY50058**	Price	-	-
59/64	.9219	6	**AY50059**	Price	-	-
15/16	.9375	6	**AY50060**	Price	**AY60060**	Price
61/64	.9531	6	**AY50061**	Price	-	-
31/32	.9688	6	**AY50062**	Price	-	-
63/64	.9844	6	**AY50063**	Price	-	-
1	1.0000	6	**AY50100**	Price	**AY60100**	Price

Description - Letter Size						
			Drill Blank		Reamer Blank	
Size (in.)	Decimal Equiv.	OAL (in.)	Order No.	Price	Order No.	Price
A	.2340	3-7/8	**AY51201**	Price	**AY60201**	Price
B	.2380	4	**AY51202**	Price	**AY60202**	Price
C	.2420	4	**AY51203**	Price	**AY60203**	Price
D	.2460	4	**AY51204**	Price	**AY60204**	Price
E	.2500	4	-	-	**AY60205**	Price
F	.2570	4-1/8	**AY51206**	Price	**AY60206**	Price
G	.2610	4-1/8	**AY51207**	Price	**AY60207**	Price
H	.2660	4-1/8	**AY51208**	Price	**AY60208**	Price
I	.2720	4-1/8	**AY51209**	Price	**AY60209**	Price
J	.2770	4-1/8	**AY51210**	Price	**AY60210**	Price
K	.2810	4-1/4	**AY51211**	Price	**AY60211**	Price
L	.2900	4-1/4	**AY51212**	Price	**AY60212**	Price
M	.2950	4-3/8	**AY51213**	Price	**AY60213**	Price
N	.3020	4-3/8	**AY51214**	Price	**AY60214**	Price
O	.3160	4-1/2	**AY51215**	Price	**AY60215**	Price
P	.3230	4-5/8	**AY51216**	Price	**AY60216**	Price
Q	.3320	4-3/4	**AY51217**	Price	**AY60217**	Price
R	.3390	4-3/4	**AY51218**	Price	**AY60218**	Price
S	.3480	4-7/8	**AY51219**	Price	**AY60219**	Price
T	.3580	4-7/8	**AY51220**	Price	**AY60220**	Price
U	.3680	5	**AY51221**	Price	**AY60221**	Price
V	.3770	5	**AY51222**	Price	**AY60222**	Price
W	.3860	5-1/8	**AY51223**	Price	**AY60223**	Price
X	.3970	5-1/8	**AY51224**	Price	**AY60224**	Price
Y	.4040	5-1/4	**AY51225**	Price	**AY60225**	Price
Z	.4130	5-1/4	**AY51226**	Price	**AY60226**	Price

PROCUT Drill & Reamer Blanks

High Speed Steel



- Bright finish
- Hardened and ground
- Often used as gages to check hole size and drill bushing sizes
- Can be used as guide pins or die sets, or modified as punches

DRILL BLANK TOLERANCE: +.0000 –.0003”
REAMER BLANK TOLERANCE: +.0002 –.0000”

			Drill Blank		Reamer Blank	
Size	Decimal Equiv.	OAL (in.)	Order No.	Price	Order No.	Price
1	.2280	3-7/8	**AY52101**	Price	**AY60101**	Price
2	.2210	3-7/8	**AY52102**	Price	**AY60102**	Price
3	.2130	3-3/4	**AY52103**	Price	**AY60103**	Price
4	.2090	3-3/4	**AY52104**	Price	**AY60104**	Price
5	.2055	3-3/4	**AY52105**	Price	**AY60105**	Price
6	.2040	3-3/4	**AY52106**	Price	**AY60106**	Price
7	.2010	3-5/8	**AY52107**	Price	**AY60107**	Price
8	.1990	3-5/8	**AY52108**	Price	**AY60108**	Price
9	.1960	3-5/8	**AY52109**	Price	**AY60109**	Price
10	.1935	3-5/8	**AY52110**	Price	**AY60110**	Price
11	.1910	3-1/2	**AY52111**	Price	**AY60111**	Price
12	.1890	3-1/2	**AY52112**	Price	**AY60112**	Price
13	.1850	3-1/2	**AY52113**	Price	**AY60113**	Price
14	.1820	3-3/8	**AY52114**	Price	**AY60114**	Price
15	.1800	3-3/8	**AY52115**	Price	**AY60115**	Price
16	.1770	3-3/8	**AY52116**	Price	**AY60116**	Price
17	.1730	3-3/8	**AY52117**	Price	**AY60117**	Price
18	.1695	3-1/4	**AY52118**	Price	**AY60118**	Price
19	.1660	3-1/4	**AY52119**	Price	**AY60119**	Price
20	.1610	3-1/4	**AY52120**	Price	**AY60120**	Price
21	.1590	3-1/4	**AY52121**	Price	**AY60121**	Price
22	.1570	3-1/8	**AY52122**	Price	**AY60122**	Price
23	.1540	3-1/8	**AY52123**	Price	**AY60123**	Price
24	.1520	3-1/8	**AY52124**	Price	**AY60124**	Price
25	.1495	3	**AY52125**	Price	**AY60125**	Price
26	.1470	3	**AY52126**	Price	**AY60126**	Price
27	.1440	3	**AY52127**	Price	**AY60127**	Price
28	.1405	2-7/8	**AY52128**	Price	**AY60128**	Price
29	.1360	2-7/8	**AY52129**	Price	**AY60129**	Price
30	.1285	2-3/4	**AY52130**	Price	**AY60130**	Price
31	.1200	2-3/4	**AY52131**	Price	**AY60131**	Price
32	.1160	2-3/4	**AY52132**	Price	**AY60132**	Price
33	.1130	2-5/8	**AY52133**	Price	**AY60133**	Price
34	.1110	2-5/8	**AY52134**	Price	**AY60134**	Price
35	.1100	2-5/8	**AY52135**	Price	**AY60135**	Price
36	.1065	2-1/2	**AY52136**	Price	**AY60136**	Price
37	.1040	2-1/2	**AY52137**	Price	**AY60137**	Price
38	.1015	2-1/2	**AY52138**	Price	**AY60138**	Price
39	.0995	2-3/8	**AY52139**	Price	**AY60139**	Price
40	.0980	2-3/8	**AY52140**	Price	**AY60140**	Price
41	.0960	2-3/8	**AY52141**	Price	**AY60141**	Price
42	.0935	2-1/4	**AY52142**	Price	**AY60142**	Price
43	.0890	2-1/4	**AY52143**	Price	**AY60143**	Price
44	.0860	2-1/8	**AY52144**	Price	**AY60144**	Price
45	.0820	2-1/8	**AY52145**	Price	**AY60145**	Price
46	.0810	2-1/8	**AY52146**	Price	**AY60146**	Price
47	.0785	2	**AY52147**	Price	**AY60147**	Price
48	.0760	2	**AY52148**	Price	**AY60148**	Price
49	.0730	2	**AY52149**	Price	**AY60149**	Price
50	.0700	2	**AY52150**	Price	**AY60150**	Price
51	.0670	2	**AY52151**	Price	**AY60151**	Price
52	.0635	1-7/8	**AY52152**	Price	**AY60152**	Price
53	.0595	1-7/8	**AY52153**	Price	**AY60153**	Price
54	.0550	1-7/8	**AY52154**	Price	**AY60154**	Price
55	.0520	1-7/8	**AY52155**	Price	**AY60155**	Price
56	.0465	1-3/4	**AY52156**	Price	**AY60156**	Price
57	.0430	1-3/4	**AY52157**	Price	**AY60157**	Price
58	.0420	1-5/8	**AY52158**	Price	**AY60158**	Price
59	.0410	1-5/8	**AY52159**	Price	**AY60159**	Price
60	.0400	1-5/8	**AY52160**	Price	**AY60160**	Price
61	.0390	1-5/8	**AY52161**	Price	**AY60161**	Price
62	.0380	1-1/2	**AY52162**	Price	**AY60162**	Price
63	.0370	1-1/2	**AY52163**	Price	**AY60163**	Price
64	.0360	1-1/2	**AY52164**	Price	**AY60164**	Price
65	.0350	1-1/2	**AY52165**	Price	**AY60165**	Price
66	.0330	1-3/8	**AY52166**	Price	**AY60166**	Price
67	.0320	1-3/8	**AY52167**	Price	**AY60167**	Price
68	.0310	1-3/8	**AY52168**	Price	**AY60168**	Price
69	.0292	1-3/8	**AY52169**	Price	**AY60169**	Price
70	.0280	1-1/4	**AY52170**	Price	**AY60170**	Price
71	.0260	1-1/4	**AY52171**	Price	**AY60171**	Price
72	.0250	1-1/8	**AY52172**	Price	**AY60172**	Price
73	.0240	1-1/8	**AY52173**	Price	**AY60173**	Price
74	.0225	1	**AY52174**	Price	**AY60174**	Price
75	.0210	1	**AY52175**	Price	**AY60175**	Price
76	.0200	7/8	**AY52176**	Price	**AY60176**	Price
77	.0180	7/8	**AY52177**	Price	**AY60177**	Price
78	.0160	7/8	**AY52178**	Price	**AY60178**	Price
79	.0145	3/4	**AY52179**	Price	**AY60179**	Price
80	.0135	3/4	**AY52180**	Price	**AY60180**	Price

Metric Jobber Drill Blanks

High Speed Steel

- Bright finish
- Hardened and ground

TOLERANCES:
Up to .5000 +.0000 – .0002”
.5001 to .6250 +.0000 – .0003”
.6251 to 1.000 +.0000 – .0005”

Price	Decimal Equiv.	OAL (in.)	Order No.	Price
1.00	.0394	1-5/8	**AY650100**	Price
1.50	.0590	1-7/8	**AY650150**	Price
2.00	.0787	2-1/8	**AY650200**	Price
2.50	.0984	2-3/8	**AY650250**	Price
3.00	.1181	2-3/4	**AY650300**	Price
3.50	.1378	2-7/8	**AY650350**	Price
4.00	.1575	3-1/4	**AY650400**	Price
4.50	.1772	3-3/8	**AY650450**	Price
5.00	.1968	3-5/8	**AY650500**	Price
5.50	.2165	3-7/8	**AY650550**	Price
6.00	.2362	4	**AY650600**	Price
6.50	.2559	4-1/8	**AY650650**	Price
7.00	.2756	4-1/8	**AY650700**	Price
7.50	.2953	4-3/8	**AY650750**	Price
8.00	.3150	4-1/2	**AY650800**	Price
8.50	.3346	4-3/4	**AY650850**	Price
9.00	.3543	4-7/8	**AY650900**	Price
9.50	.3740	5	**AY650950**	Price
10.00	.3937	5-1/8	**AY651000**	Price
10.50	.4134	5-3/8	**AY651050**	Price
11.00	.4331	5-1/2	**AY651100**	Price
11.50	.4527	5-5/8	**AY651150**	Price
12.00	.4724	5-7/8	**AY651200**	Price
12.50	.4921	6	**AY651250**	Price
13.00	.5118	5	**AY651300**	Price
13.50	.5315	6	**AY651350**	Price
14.00	.5512	6	**AY651400**	Price
14.50	.5709	6	**AY651450**	Price
15.00	.5906	6	**AY651500**	Price
15.50	.6102	6	**AY651550**	Price
16.00	.6299	6	**AY651600**	Price
16.50	.6496	6	**AY651650**	Price
17.00	.6693	6	**AY651700**	Price
17.50	.6890	6	**AY651750**	Price
18.00	.7087	6	**AY651800**	Price
18.50	.7283	6	**AY651850**	Price
19.00	.7480	6	**AY651900**	Price
19.50	.7677	6	**AY651950**	Price
20.00	.7874	6	**AY652000**	Price
20.50	.8071	6	**AY652050**	Price
21.00	.8268	6	**AY652100**	Price
21.50	.8465	6	**AY652150**	Price
22.00	.8661	6	**AY652200**	Price
22.50	.8858	6	**AY652250**	Price
23.00	.9055	6	**AY652300**	Price
23.50	.9252	6	**AY652350**	Price
24.00	.9449	6	**AY652400**	Price
24.50	.9646	6	**AY652450**	Price
25.00	.9843	6	**AY652500**	Price

Note: Other metric sizes available POA

Taper Length Drills



High Speed Steel • 118° Standard Point

- Bright finish to 1/2" diameter, surface treated over 1/2"
- Taper length drills - longer than jobber length
- Designed to perform under a variety of normal conditions and in a broad range of materials
- **Fast spiral drills provide for improved chip evacuation**
- Morse List #1314
- Precision Twist List #R51

				Morse Cutting Tools		Precision Twist Drill		ProCut			
				Regular Spiral		Regular Spiral		Regular Spiral		Fast Spiral	
Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/64	.0156	5/16	1-1/2	-	-	PT2151001	Price	AB50001	Price	-	-
1/32	.0312	3/4	2	-	-	PT2151002	Price	AB50002	Price	-	-
3/64	.0469	1-1/8	2-1/4	MT1810553†	Price	PT2151003	Price	AB50003	Price	-	-
1/16	.0625	1-3/4	3	MT1810554†	Price	PT2151004	Price	AB50004	Price	AB55004	Price
5/64	.0781	2	3-3/4	MT1810555†	Price	PT2151005	Price	AB50005	Price	AB55005	Price
3/32	.0938	2-1/4	4-1/4	MT1810556†	Price	PT2151006	Price	AB50006	Price	AB55006	Price
7/64	.1094	2-1/2	4-5/8	MT1810557†	Price	PT2151007	Price	AB50007	Price	AB55007	Price
1/8	.1250	2-3/4	5-1/8	MT1810558†	Price	PT2151008	Price	AB50008	Price	AB55008	Price
9/64	.1406	3	5-3/8	MT1810559†	Price	PT2151009	Price	AB50009	Price	AB55009	Price
5/32	.1562	3	5-3/8	MT1810560†	Price	PT2151010	Price	AB50010	Price	AB55010	Price
11/64	.1719	3-3/8	5-3/4	MT1810561†	Price	PT2151011	Price	AB50011	Price	AB55011	Price
3/16	.1875	3-3/8	53/4	MT1810562†	Price	PT2151012	Price	AB50012	Price	AB55012	Price
13/64	.2031	3-5/8	6	MT1810563†	Price	PT2151013	Price	AB50013	Price	AB55013	Price
7/32	.2188	3-5/8	6	MT1810564†	Price	PT2151014	Price	AB50014	Price	AB55014	Price
15/64	.2344	3-3/4	6-1/8	MT1810565†	Price	PT2151015	Price	AB50015	Price	AB55015	Price
1/4	.2500	3-3/4	6-1/8	MT1810566†	Price	PT2151016	Price	AB50016	Price	AB55016	Price
17/64	.2656	3-7/8	6-1/4	MT1810567†	Price	PT2151017	Price	AB50017	Price	AB55017	Price
9/32	.2812	3-7/8	6-1/4	MT1810568†	Price	PT2151018	Price	AB50018	Price	AB55018	Price
19/64	.2969	4	6-3/8	MT1810569†	Price	PT2151019	Price	AB50019	Price	AB55019	Price
5/16	.3125	4	6-3/8	MT1810570†	Price	PT2151020	Price	AB50020	Price	AB55020	Price
21/64	.3281	4-1/8	6-1/2	MT1810571†	Price	PT2151021	Price	AB50021	Price	AB55021	Price
11/32	.3438	4-1/8	6-1/2	MT1810572†	Price	PT2151022	Price	AB50022	Price	AB55022	Price
23/64	.3594	4-1/4	6-3/4	MT1810573†	Price	PT2151023	Price	AB50023	Price	AB55023	Price
3/8	.3750	4-1/4	6-3/4	MT1810574†	Price	PT2151024	Price	AB50024	Price	AB55024	Price
25/64	.3906	4-3/8	7	MT1810575†	Price	PT2151025	Price	AB50025	Price	AB55025	Price
13/32	.4062	4-3/8	7	MT1810576†	Price	PT2151026	Price	AB50026	Price	AB55026	Price
27/64	.4219	4-5/8	7-1/4	MT1810577†	Price	PT2151027	Price	AB50027	Price	AB55027	Price
7/16	.4375	4-5/8	7-1/4	MT1810578†	Price	PT2151028	Price	AB50028	Price	AB55028	Price
29/64	.4531	4-3/4	7-1/2	MT1810579†	Price	PT2151029	Price	AB50029	Price	AB55029	Price
15/32	.4688	4-3/4	7-1/2	MT1810580†	Price	PT2151030	Price	AB50030	Price	AB55030	Price
31/64	.4844	4-3/4	7-3/4	MT1810581†	Price	PT2151031	Price	AB50031	Price	AB55031	Price
1/2	.5000	4-3/4	7-3/4	MT1810582†	Price	PT2151032	Price	AB50032	Price	AB55032	Price
33/64	.5156	4-3/4	8	MT1810583†	Price	PT2151033	Price	AB50033	Price	-	-
17/32	.5312	4-3/4	8	MT1810584†	Price	PT2151034	Price	AB50034	Price	-	-
35/64	.5469	4-7/8	8-1/4	MT1810585†	Price	PT2151035	Price	AB50035	Price	-	-
9/16	.5625	4-7/8	8-1/4	MT1810586†	Price	PT2151036	Price	AB50036	Price	-	-
37/64	.5781	4-7/8	8-3/4	MT1810587†	Price	PT2151037	Price	AB50037	Price	-	-
19/32	.5938	4-7/8	8-3/4	MT1810588†	Price	PT2151038	Price	AB50038	Price	-	-
39/64	.6094	4-7/8	8-3/4	MT1810589†	Price	PT2151039	Price	AB50039	Price	-	-
5/8	.6250	4-7/8	8-3/4	MT1810590†	Price	PT2151040	Price	AB50040	Price	-	-
41/64	.6406	5-1/8	9	MT1810591†	Price	PT2151041	Price	AB50041	Price	-	-
21/32	.6562	5-1/8	9	MT1810592†	Price	PT2151042	Price	AB50042	Price	-	-
43/64	.6719	5-3/8	9-1/4	MT1810593†	Price	PT2151043	Price	AB50043	Price	-	-
11/16	.6875	5-3/8	9-1/4	MT1810594†	Price	PT2151044	Price	AB50044	Price	-	-
45/64	.7031	5-5/8	9-1/2	MT1810595†	Price	PT2151045†	Price	AB50045	Price	-	-
23/32	.7188	5-5/8	9-1/2	MT1810596†	Price	PT2151046†	Price	AB50046	Price	-	-
47/64	.7344	5-7/8	9-3/4	MT1810597†	Price	PT2151047†	Price	AB50047	Price	-	-
3/4	.7500	5-7/8	9-3/4	MT1810598†	Price	PT2151048†	Price	AB50048	Price	-	-
49/64	.7656	6	9-7/8	MT1810599†	Price	PT2151049	Price	AB50049	Price	-	-
25/32	.7812	6	9-7/8	MT1810600†	Price	PT2151050	Price	AB50050	Price	-	-
51/64	.7969	6-1/8	10	MT1810601†	Price	PT2151051	Price	AB50051	Price	-	-
13/16	.8125	6-1/8	10	MT1810602†	Price	PT2151052	Price	AB50052	Price	-	-
53/64	.8281	6-1/8	10	MT1810603†	Price	PT2151053	Price	AB50053	Price	-	-
27/32	.8438	6-1/8	10	MT1810604†	Price	PT2151054	Price	AB50054	Price	-	-
55/64	.8594	6-1/8	10	MT1810605†	Price	PT2151055	Price	AB50055	Price	-	-
7/8	.8750	6-1/8	10	MT1810606†	Price	PT2151056	Price	AB50056	Price	-	-
57/64	.8906	6-1/8	10	MT1810607†	Price	PT2151057	Price	AB50057	Price	-	-

† Black oxide treated

(Continued on next page)

Taper Length Drills *(Continued from previous page)*



				Morse Cutting Tools		Precision Twist Drill		ProCut			
				Regular Spiral		Regular Spiral		Regular Spiral		Fast Spiral	
Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
29/32	.9062	6-1/8	10	**MT1810608†**	Price	**PT2151058**	Price	-	-	-	-
59/64	.9219	6-1/8	10-3/4	**MT1810609†**	Price	**PT2151059**	Price	**AB50059**	Price	-	-
15/16	.9375	6-1/8	10-3/4	**MT1810610†**	Price	**PT2151060**	Price	**AB50060**	Price	-	-
61/64	.9531	6-3/8	11	**MT1810611†**	Price	**PT2151061**	Price	**AB50061**	Price	-	-
31/32	.9688	6-3/8	11	**MT1810612†**	Price	**PT2151062**	Price	**AB50062**	Price	-	-
63/64	.9844	6-3/8	11	**MT1810613†**	Price	**PT2151063**	Price	**AB50063**	Price	-	-
1	1.0000	6-3/8	11	**MT1810614†**	Price	**PT2151100**	Price	**AB50100**	Price	-	-
1-1/64	1.0156	6-1/2	11-1/8	**MT1810615†**	Price	**PT2151101**	Price	**AB50101**	Price	-	-
1-1/32	1.0312	6-1/2	11-1/8	**MT1810616†**	Price	**PT2151102**	Price	**AB50102**	Price	-	-
1-3/64	1.0469	6-5/8	11-1/4	**MT1810617†**	Price	**PT2151103**	Price	**AB50103**	Price	-	-
1-1/16	1.0625	6-5/8	11-1/4	**MT1810618†**	Price	**PT2151104**	Price	**AB50104**	Price	-	-
1-5/64	1.0781	6-7/8	11-1/2	**MT1810619†**	Price	**PT2151105**	Price	-	-	-	-
1-3/32	1.0938	6-7/8	11-1/2	**MT1810620†**	Price	**PT2151106**	Price	**AB50106**	Price	-	-
1-7/64	1.1094	7-1/8	11-3/4	**MT1810621†**	Price	**PT2151107**	Price	-	-	-	-
1-1/8	1.1250	7-1/8	11-3/4	**MT1810622†**	Price	**PT2151108**	Price	**AB50108**	Price	-	-
1-9/64	1.1406	7-1/4	11-7/8	**MT1810623†**	Price	**PT2151109**	Price	-	-	-	-
1-5/32	1.1563	7-1/4	11-7/8	**MT1810624†**	Price	**PT2151110**	Price	-	-	-	-
1-11/64	1.1719	7-3/8	12	**MT1810625†**	Price	**PT2151111**	Price	-	-	-	-
1-3/16	1.1875	7-3/8	12	**MT1810626†**	Price	**PT2151112**	Price	**AB50112**	Price	-	-
1-13/64	1.2031	7-1/2	12-1/8	**MT1810627†**	Price	**PT2151113**	Price	-	-	-	-
1-7/32	1.2188	7-1/2	12-1/8	**MT1810628†**	Price	**PT2151114**	Price	-	-	-	-
1-15/64	1.2344	7-7/8	12-1/2	**MT1810629†**	Price	**PT2151115**	Price	-	-	-	-
1-1/4	1.2500	7-7/8	12-1/2	**MT1810630†**	Price	**PT2151116**	Price	**AB50116**	Price	-	-
1-5/16	1.3125	8-5/8	14-1/4	**MT1810632†**	Price	**PT2151120**	Price	**AB50120**	Price	-	-
1-3/8	1.3750	8-7/8	14-1/2	**MT1810634†**	Price	**PT2151124**	Price	**AB50124**	Price	-	-
1-13/32	1.4062	9	14-5/8	-	-	-	-	**AB50126**	Price	-	-
1-7/16	1.4375	9-1/8	14-3/4	**MT1810636†**	Price	**PT2151128**	Price	**AB50128**	Price	-	-
1-15/32	1.4688	9-1/4	14-7/8	**MT1810637†**	Price	-	-	**AB50130**	Price	-	-
1-1/2	1.5000	9-3/8	15	**MT1810638†**	Price	**PT2151132**	Price	-	-	-	-
1-9/16	1.5625	9-5/8	15-1/4	**MT1810639†**	Price	**PT2151136**	Price	**AB50136**	Price	-	-
1-5/8	1.6250	9-7/8	15-5/8	-	-	**PT2151140**	Price	**AB50140**	Price	-	-
1-11/16	1.6875	10	15-3/4	-	-	-	-	**AB50144**	Price	-	-
1-3/4	1.7500	10-1/2	16-1/4	-	-	**PT2151148**	Price	**AB50148**	Price	-	-
1-13/16	1.8125	10-1/2	16-1/4	-	-	-	-	**AB50152**	Price	-	-
1-7/8	1.8750	10-3/4	16-1/2	-	-	-	-	**AB50156**	Price	-	-
1-15/16	1.9375	10-3/4	16-5/8	-	-	-	-	**AB50160**	Price	-	-
2	2.0000	10-3/4	16-5/8	-	-	-	-	**AB50200**	Price	-	-

† Black oxide treated

Taper Length Drills



High Speed Steel • 118° Point • Bright Finish

- Taper length drills - longer than jobbers length
- Designed to perform under a variety of normal conditions and in a broad range of materials
- **Fast spiral drills provide for improved chip evacuation**
- Morse List #1322
- Precision Twist List #R52

				Morse Cutting Tools		Precision Twist Drill		ProCut			
				Regular Spiral		Regular Spiral		Regular Spiral		Price	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	.2280	3-3/4	6-1/8	**MT1811110†**	Price	**PT2152001**	Price	**AB51101**	Price	**AB55101**	Price
2	.2210	3-3/4	6-1/8	**MT1811109†**	Price	**PT2152002**	Price	**AB51102**	Price	-	-
3	.2130	3-5/8	6	**MT1811108†**	Price	**PT2152003**	Price	**AB51103**	Price	**AB55103**	Price
4	.2090	3-5/8	6	**MT1811107†**	Price	**PT2152004**	Price	**AB51104**	Price	**AB55104**	Price
5	.2055	3-5/8	6	**MT1811106†**	Price	**PT2152005**	Price	**AB51105**	Price	**AB55105**	Price
6	.2040	3-5/8	6	**MT1811105†**	Price	**PT2152006**	Price	**AB51106**	Price	**AB55106**	Price
7	.2010	3-5/8	6	**MT1811104†**	Price	**PT2152007**	Price	**AB51107**	Price	**AB55107**	Price
8	.1990	3-5/8	6	**MT1811103†**	Price	**PT2152008**	Price	**AB51108**	Price	**AB55108**	Price
9	.1960	3-5/8	6	**MT1811102†**	Price	**PT2152009**	Price	**AB51109**	Price	**AB55109**	Price
10	.1935	3-5/8	6	**MT1811101†**	Price	**PT2152010**	Price	**AB51110**	Price	**AB55110**	Price
11	.1910	3-5/8	6	**MT1811100†**	Price	**PT2152011**	Price	**AB51111**	Price	**AB55111**	Price
12	.1890	3-5/8	6	**MT1811099†**	Price	**PT2152012**	Price	**AB51112**	Price	-	-
13	.1850	3-3/8	5-3/4	**MT1811098†**	Price	**PT2152013**	Price	**AB51113**	Price	**AB55113**	Price
14	.1820	3-3/8	5-3/4	**MT1811097†**	Price	**PT2152014**	Price	**AB51114**	Price	**AB55114**	Price
15	.1800	3-3/8	5-3/4	**MT1811096†**	Price	**PT2152015**	Price	**AB51115**	Price	**AB55115**	Price
16	.1770	3-3/8	5-3/4	**MT1811095†**	Price	**PT2152016**	Price	**AB51116**	Price	**AB55116**	Price
17	.1730	3-3/8	5-3/4	**MT1811094†**	Price	**PT2152017**	Price	**AB51117**	Price	-	-
18	.1695	3-3/8	5-3/4	**MT1811093†**	Price	**PT2152018**	Price	**AB51118**	Price	**AB55118**	Price
19	.1660	3-3/8	5-3/4	**MT1811092†**	Price	**PT2152019**	Price	**AB51119**	Price	**AB55119**	Price

† Black oxide treated

(Continued on next page)

Taper Length Drills

(Continued from previous page)



				Morse Cutting Tools		Precision Twist Drill		ProCut			
				Regular Spiral		Regular Spiral		Regular Spiral		Price	
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
20	.1610	3-3/8	5-3/4	**MT1811091†**	Price	**PT2152020**	Price	**AB51120**	Price	**AB55120**	Price
21	.1590	3-3/8	5-3/4	**MT1811090†**	Price	**PT2152021**	Price	**AB51121**	Price	**AB55121**	Price
22	.1570	3-3/8	5-3/4	**MT1811089†**	Price	**PT2152022**	Price	**AB51122**	Price	-	-
23	.1540	3	5-3/8	**MT1811088†**	Price	**PT2152023**	Price	**AB51123**	Price	-	-
24	.1520	3	5-3/8	**MT1811087†**	Price	**PT2152024**	Price	**AB51124**	Price	**AB55124**	Price
25	.1495	3	5-3/8	**MT1811086†**	Price	**PT2152025**	Price	**AB51125**	Price	**AB55125**	Price
26	.1470	3	5-3/8	**MT1811085†**	Price	**PT2152026**	Price	**AB51126**	Price	**AB55126**	Price
27	.1440	3	5-3/8	**MT1811084†**	Price	**PT2152027**	Price	**AB51127**	Price	**AB55127**	Price
28	.1405	3	5-3/8	**MT1811083†**	Price	**PT2152028**	Price	**AB51128**	Price	-	-
29	.1360	3	5-3/8	**MT1811082†**	Price	**PT2152029**	Price	**AB51129**	Price	**AB55129**	Price
30	.1285	3	5-3/8	**MT1811081†**	Price	**PT2152030**	Price	**AB51130**	Price	**AB55130**	Price
31	.1200	2-3/4	5-1/8	**MT1811080†**	Price	**PT2152031**	Price	**AB51131**	Price	**AB55131**	Price
32	.1160	2-3/4	5-1/8	**MT1811079†**	Price	**PT2152032**	Price	**AB51132**	Price	**AB55132**	Price
33	.1130	2-3/4	5-1/8	**MT1811078†**	Price	**PT2152033**	Price	**AB51133**	Price	**AB55133**	Price
34	.1110	2-3/4	5-1/8	**MT1811077†**	Price	**PT2152034**	Price	**AB51134**	Price	-	-
35	.1100	2-3/4	5-1/8	**MT1811076†**	Price	**PT2152035**	Price	**AB51135**	Price	-	-
36	.1065	2-1/2	4-5/8	**MT1811075†**	Price	**PT2152036**	Price	**AB51136**	Price	-	-
37	.1040	2-1/2	4-5/8	**MT1811074†**	Price	**PT2152037**	Price	**AB51137**	Price	-	-
38	.1015	2-1/2	4-5/8	**MT1811073†**	Price	**PT2152038**	Price	**AB51138**	Price	**AB55138**	Price
39	.0995	2-1/2	4-5/8	**MT1811072†**	Price	**PT2152039**	Price	**AB51139**	Price	**AB55139**	Price
40	.0980	2-1/2	4-5/8	**MT1811071†**	Price	**PT2152040**	Price	**AB51140**	Price	**AB55140**	Price
41	.0960	2-1/2	4-5/8	**MT1811070†**	Price	**PT2152041**	Price	**AB51141**	Price	**AB55141**	Price
42	.0935	2-1/4	4-1/4	**MT1811069†**	Price	**PT2152042**	Price	**AB51142**	Price	**AB55142**	Price
43	.0890	2-1/4	4-1/4	**MT1811068†**	Price	**PT2152043**	Price	**AB51143**	Price	**AB55143**	Price
44	.0860	2-1/4	4-1/4	**MT1811067†**	Price	**PT2152044**	Price	**AB51144**	Price	**AB55144**	Price
45	.0820	2-1/4	4-1/4	**MT1811066†**	Price	**PT2152045**	Price	**AB51145**	Price	**AB55145**	Price
46	.0810	2-1/4	4-1/4	**MT1811065†**	Price	**PT2152046**	Price	**AB51146**	Price	-	-
47	.0785	2-1/4	4-1/4	**MT1811064†**	Price	**PT2152047**	Price	**AB51147**	Price	-	-
48	.0760	2	3-3/4	**MT1811063†**	Price	**PT2152048**	Price	**AB51148**	Price	**AB55148**	Price
49	.0730	2	3-3/4	**MT1811062†**	Price	**PT2152049**	Price	**AB51149**	Price	**AB55149**	Price
50	.0700	2	3-3/4	**MT1811061†**	Price	**PT2152050**	Price	**AB51150**	Price	**AB55150**	Price
51	.0670	2	3-3/4	**MT1811060†**	Price	**PT2152051**	Price	**AB51151**	Price	**AB55151**	Price
52	.0635	2	3-3/4	**MT1811059†**	Price	**PT2152052**	Price	**AB51152**	Price	-	-
53	.0595	1-3/4	3	**MT1811058†**	Price	**PT2152053**	Price	**AB51153**	Price	**AB55153**	Price
54	.0550	1-3/4	3	**MT1811057†**	Price	**PT2152054**	Price	**AB51154**	Price	-	-
55	.0520	1-3/4	3	**MT1811056†**	Price	**PT2152055**	Price	**AB51155**	Price	-	-
56	.0465	1-1/8	2-1/4	**MT1811055†**	Price	**PT2152056**	Price	**AB51156**	Price	**AB55156**	Price
57	.0430	1-1/8	2-1/4	**MT1811054†**	Price	**PT2152057**	Price	**AB51157**	Price	**AB55157**	Price
58	.0420	1-1/8	2-1/4	**MT1811053†**	Price	**PT2152058**	Price	**AB51158**	Price	-	-
59	.0410	1-1/8	2-1/4	**MT1811052†**	Price	**PT2152059**	Price	**AB51159**	Price	-	-
60	.0400	1-1/8	2-1/4	**MT1811051†**	Price	**PT2152060**	Price	**AB51160**	Price	**AB55160**	Price
61	.0390	1-1/8	2-1/4	-	-	**PT2152061**	Price	**AB51161**	Price	-	-
62	.0380	3/4	2	-	-	**PT2152062**	Price	**AB51162**	Price	-	-
63	.0370	3/4	2	-	-	**PT2152063**	Price	**AB51163**	Price	**AB55163**	Price
64	.0360	3/4	2	-	-	**PT2152064**	Price	**AB51164**	Price	-	-
65	.0350	3/4	2	-	-	**PT2152065**	Price	**AB51165**	Price	-	-
66	.0330	3/4	2	-	-	**PT2152066**	Price	**AB51166**	Price	-	-
67	.0320	3/4	2	-	-	**PT2152067**	Price	**AB51167**	Price	-	-
68	.0310	1/2	2	-	-	**PT2152068**	Price	**AB51168**	Price	-	-
69	.0292	3/4	2	-	-	**PT2152069**	Price	-	-	-	-
70	.0280	3/4	2	-	-	**PT2152070**	Price	**AB51170**	Price	-	-
71	.0260	3/4	2	-	-	**PT2152071**	Price	**AB51171**	Price	-	-
72	.0250	5/16	1-1/2	-	-	**PT2152072**	Price	**AB51172**	Price	-	-
73	.0240	5/16	1-1/2	-	-	**PT2152073**	Price	**AB51173**	Price	-	-
74	.0225	5/16	1-1/2	-	-	**PT2152074**	Price	**AB51174**	Price	-	-
75	.0210	5/16	1-1/2	-	-	**PT2152075**	Price	**AB51175**	Price	-	-
76	.0200	5/16	1-1/2	-	-	**PT2152076**	Price	**AB51176**	Price	-	-
77	.0180	5/16	1-1/2	-	-	**PT2152077**	Price	**AB51177**	Price	-	-
78	.0160	5/16	1-1/2	-	-	**PT2152078**	Price	**AB51178**	Price	-	-
79	.0145	5/16	1-1/2	-	-	**PT2152079**	Price	-	-	-	-
80	.0135	5/16	1-1/2	-	-	**PT2152080**	Price	**AB51180**	Price	-	-

† Black oxide treated

PROCUT Taper Length Drills

High Speed Steel • 118° Point • Bright Finish

- Taper length drills - longer than jobbers length
- Designed to perform under a variety of normal conditions and in a broad range of materials



Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
A	.2340	3-3/4	6-1/8	**AB51201**	Price
B	.2380	3-3/4	6-1/8	**AB51202**	Price
C	.2420	3-3/4	6-1/8	**AB51203**	Price
D	.2460	3-3/4	6-1/8	**AB51204**	Price
F	.2570	3-7/8	6-1/4	**AB51206**	Price
G	.2610	3-7/8	6-1/4	**AB51207**	Price
H	.2660	3-7/8	6-1/4	**AB51208**	Price
I	.2720	3-7/8	6-1/4	**AB51209**	Price
J	.2770	3-7/8	6-1/4	**AB51210**	Price
K	.2810	3-7/8	6-1/4	**AB51211**	Price
L	.2900	4	6-3/8	**AB51212**	Price
M	.2950	4	6-3/8	**AB51213**	Price
N	.3020	4	6-3/8	**AB51214**	Price
O	.3160	4-1/8	6-1/2	**AB51215**	Price
P	.3230	4-1/8	6-1/2	**AB51216**	Price
Q	.3320	4-1/8	6-1/2	**AB51217**	Price
R	.3390	4-1/8	6-1/2	**AB51218**	Price
S	.3480	4-1/4	6-3/4	**AB51219**	Price
T	.3580	4-1/4	6-3/4	**AB51220**	Price
U	.3680	4-1/4	6-3/4	**AB51221**	Price
V	.3770	4-3/8	7	**AB51222**	Price
W	.3860	4-3/8	7	**AB51223**	Price
X	.3970	4-3/8	7	**AB51224**	Price
Y	.4040	4-3/8	7	**AB51225**	Price

Parabolic Flute Taper Length Drills

High Speed Steel • 135° Split Point

- Effective in deep hole drilling of aluminum alloys and other low to medium tensile strength materials
- Wide land parabolic design provides superior performance in a greater range of materials and applications
- Effective in both deep and shallow hole drilling
- Self-centering positive rake point for faster penetration
- Improved chip and coolant flow
- Bright finish
- Precision Twist List #QC91P



Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1-3/4	3	**PT1557904**	Price
5/64	2	3-3/4	**PT1557905**	Price
3/32	2-1/4	4-1/4	**PT1557906**	Price
7/64	2-1/2	4-5/8	**PT1557907**	Price
1/8	2-3/4	5-1/8	**PT1557908**	Price
9/64	3	5-3/8	**PT1557909**	Price
5/32	3	5-3/8	**PT1557910**	Price
11/64	3-3/8	5-3/4	**PT1557911**	Price
3/16	3-3/8	5-3/4	**PT1557912**	Price
13/64	3-5/8	6	**PT1557913**	Price
7/32	3-5/8	6	**PT1557914**	Price
15/64	3-3/4	6-1/8	**PT1557915**	Price
1/4	3-3/4	6-1/8	**PT1557916**	Price
17/64	3-7/8	6-1/4	**PT1557917**	Price
9/32	3-7/8	6-1/4	**PT1557918**	Price
19/64	4	6-3/8	**PT1557919**	Price
5/16	4	6-3/8	**PT1557920**	Price
21/64	4-1/8	6-1/2	**PT1557921**	Price
11/32	4-1/8	6-1/2	**PT1557922**	Price
23/64	4-1/4	6-3/4	**PT1557923**	Price
3/8	4-1/4	6-3/4	**PT1557924**	Price
25/64	4-3/8	7	**PT1557925**	Price
13/32	4-3/8	7	**PT1557926**	Price
27/64	4-5/8	7-1/4	**PT1557927**	Price
7/16	4-5/8	7-1/4	**PT1557928**	Price
29/64	4-3/4	7-1/2	**PT1557929**	Price
15/32	4-3/4	7-1/2	**PT1557930**	Price
31/64	4-3/4	7-3/4	**PT1557931**	Price
1/2	4-3/4	7-3/4	**PT1557932**	Price

Parabolic Flute Taper Length Drills - Wire Gage Sizes

- High speed steel
- Surface treated
- 135° Split point
- Effective in deep hole drilling of aluminum alloys and other low to medium tensile strength materials
- Precision Twist List #QC91P



Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1	.2280	3-3/4	6-1/8	**PT1559401**	Price
2	.2210	3-3/4	6-1/8	**PT1559402**	Price
3	.2130	3-5/8	6	**PT1559403**	Price
4	.2090	3-5/8	6	**PT1559404**	Price
5	.2055	3-5/8	6	**PT1559405**	Price
6	.2040	3-5/8	6	**PT1559406**	Price
7	.2010	3-5/8	6	**PT1559407**	Price
8	.1990	3-5/8	6	**PT1559408**	Price
9	.1960	3-5/8	6	**PT1559409**	Price
10	.1935	3-5/8	6	**PT1559410**	Price
11	.1910	3-5/8	6	**PT1559411**	Price
12	.1890	3-5/8	6	**PT1559412**	Price
13	.1850	3-3/8	5-3/4	**PT1559413**	Price
14	.1820	3-3/8	5-3/4	**PT1559414**	Price
15	.1800	3-3/8	5-3/4	**PT1559415**	Price
16	.1770	3-3/8	5-3/4	**PT1559416**	Price
17	.1730	3-3/8	5-3/4	**PT1559417**	Price
18	.1695	3-3/8	5-3/4	**PT1559418**	Price
19	.1660	3-3/8	5-3/4	**PT1559419**	Price
20	.1610	3-3/8	5-3/4	**PT1559420**	Price
21	.1590	3-3/8	5-3/4	**PT1559421**	Price
22	.1570	3-3/8	5-3/4	**PT1559422**	Price
23	.1540	3	5-3/8	**PT1559423**	Price
24	.1520	3	5-3/8	**PT1559424**	Price
25	.1495	3	5-3/8	**PT1559425**	Price
26	.1470	3	5-3/8	**PT1559426**	Price
27	.1440	3	5-3/8	**PT1559427**	Price
28	.1405	3	5-3/8	**PT1559428**	Price
29	.1360	3	5-3/8	**PT1559429**	Price
30	.1285	3	5-3/8	**PT1559430**	Price
31	.1200	2-3/4	5-1/8	**PT1559431**	Price
32	.1160	2-3/4	5-1/8	**PT1559432**	Price
33	.1130	2-3/4	5-1/8	**PT1559433**	Price
34	.1110	2-3/4	5-1/8	**PT1559434**	Price
35	.1100	2-3/4	5-1/8	**PT1559435**	Price
36	.1065	2-1/2	4-5/8	**PT1559436**	Price
37	.1040	2-1/2	4-5/8	**PT1559437**	Price
38	.1015	2-1/2	4-5/8	**PT1559438**	Price
39	.0995	2-1/2	4-5/8	**PT1559439**	Price
40	.0980	2-1/2	4-5/8	**PT1559440**	Price
41	.0960	2-1/2	4-5/8	**PT1559441**	Price
42	.0935	2-1/4	4-1/4	**PT1559442**	Price
43	.0890	2-1/4	4-1/4	**PT1559443**	Price
44	.0860	2-1/4	4-1/4	**PT1559444**	Price
45	.0820	2-1/4	4-1/4	**PT1559445**	Price
46	.0810	2-1/4	4-1/4	**PT1559446**	Price
47	.0785	2-1/4	4-1/4	**PT1559447**	Price
48	.0760	2	3-3/4	**PT1559448**	Price
49	.0730	2	3-3/4	**PT1559449**	Price
50	.0700	2	3-3/4	**PT1559450**	Price
51	.0670	2	3-3/4	**PT1559451**	Price
52	.0635	2	3-3/4	**PT1559452**	Price

PROCUT Metric Taper Length Drills

High Speed Steel • 118° Point

- Longer than jobber length
- Designed to perform under a variety of normal conditions in a broad range of materials



Size (mm)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1.00	.0394	1-1/8	2-1/4	**AB65100**	Price
1.05	.0413	1-1/8	2-1/4	**AB65105**	Price
1.10	.0433	1-1/8	2-1/4	**AB65110**	Price
1.15	.0453	1-1/8	2-1/4	**AB65115**	Price
1.20	.0472	1-1/8	2-1/4	**AB65120**	Price
1.25	.0492	1-3/4	3	**AB65125**	Price
1.30	.0512	1-3/4	3	**AB65130**	Price
1.40	.0551	1-3/4	3	**AB65140**	Price
1.45	.0571	1-3/4	3	**AB65145**	Price
1.50	.0591	1-3/4	3	**AB65150**	Price
1.55	.0610	1-3/4	3	**AB65155**	Price
1.60	.0630	2	3-3/4	**AB65160**	Price
1.65	.0650	2	3-3/4	**AB65165**	Price
1.70	.0669	2	3-3/4	**AB65170**	Price
1.75	.0689	2	3-3/4	**AB65175**	Price
1.80	.0709	2	3-3/4	**AB65180**	Price
1.85	.0728	2	3-3/4	**AB65185**	Price
1.90	.0748	2	3-3/4	**AB65190**	Price
1.95	.0768	2	3-3/4	**AB65195**	Price
2.00	.0787	2-1/4	4-1/4	**AB65200**	Price
2.05	.0807	2-1/4	4-1/4	**AB65205**	Price
2.10	.0827	2-1/4	4-1/4	**AB65210**	Price
2.15	.0846	2-1/4	4-1/4	**AB65215**	Price
2.20	.0866	2-1/4	4-1/4	**AB65220**	Price
2.25	.0886	2-1/4	4-1/4	**AB65225**	Price
2.30	.0906	2-1/4	4-1/4	**AB65230**	Price
2.35	.0925	2-1/4	4-1/4	**AB65235**	Price
2.40	.0945	2-1/2	4-5/8	**AB65240**	Price
2.50	.0984	2-1/2	4-5/8	**AB65250**	Price
2.60	.1024	2-1/2	4-5/8	**AB65260**	Price
2.70	.1063	2-1/2	4-5/8	**AB65270**	Price
2.80	.1102	2-3/4	5-1/8	**AB65280**	Price
2.90	.1142	2-3/4	5-1/8	**AB65290**	Price
3.00	.1181	2-3/4	5-1/8	**AB65300**	Price
3.10	.1220	2-3/4	5-1/8	**AB65310**	Price
3.20	.1260	3	5-3/8	**AB65320**	Price
3.30	.1299	3	5-3/8	**AB65330**	Price
3.50	.1378	3	5-3/8	**AB65350**	Price
3.60	.1417	3	5-3/8	**AB65360**	Price
3.70	.1457	3	5-3/8	**AB65370**	Price
4.00	.1575	3-3/8	5-3/4	**AB65400**	Price
4.10	.1614	3-3/8	5-3/4	**AB65410**	Price
4.20	.1654	3-3/8	5-3/4	**AB65420**	Price
4.30	.1693	3-3/8	5-3/4	**AB65430**	Price
4.40	.1732	3-3/8	5-3/4	**AB65440**	Price
4.50	.1772	3-3/8	5-3/4	**AB65450**	Price
4.60	.1811	3-3/8	5-3/4	**AB65460**	Price
4.70	.1850	3-3/8	5-3/4	**AB65470**	Price
4.80	.1890	3-5/8	6	**AB65480**	Price
5.00	.1969	3-5/8	6	**AB65500**	Price
5.10	.2008	3-5/8	6	**AB65510**	Price
5.40	.2126	3-5/8	6	**AB65540**	Price
5.50	.2165	3-5/8	6	**AB65550**	Price
5.60	.2205	3-3/4	6-1/8	**AB65560**	Price
5.70	.2244	3-3/4	6-1/8	**AB65570**	Price
5.80	.2283	3-3/4	6-1/8	**AB65580**	Price
6.00	.2362	3-3/4	6-1/8	**AB65600**	Price
6.10	.2402	3-3/4	6-1/8	**AB65610**	Price
6.20	.2441	3-3/4	6-1/8	**AB65620**	Price
6.30	.2480	3-3/4	6-1/8	**AB65630**	Price
6.40	.2520	3-7/8	6-1/4	**AB65640**	Price
6.50	.2559	3-7/8	6-1/4	**AB65650**	Price
6.80	.2677	3-7/8	6-1/4	**AB65680**	Price
7.00	.2756	3-7/8	6-1/4	**AB65700**	Price
7.20	.2835	4	6-3/8	**AB65720**	Price
7.50	.2953	4	6-3/8	**AB65750**	Price
8.00	.3150	4-1/8	6-1/2	**AB65800**	Price
8.20	.3228	4-1/8	6-1/2	**AB65820**	Price
8.50	.3346	4-1/8	6-1/2	**AB65850**	Price
8.80	.3465	4-1/2	6-3/4	**AB65880**	Price
9.00	.3543	4-1/2	6-3/4	**AB65900**	Price
9.20	.3622	4-1/2	6-3/4	**AB65920**	Price
9.50	.3740	4-1/2	6-3/4	**AB65950**	Price
10.00	.3937	4-3/8	7	**AB651000**	Price
10.20	.4016	4-3/8	7	**AB651020**	Price
10.50	.4134	4-5/8	7-1/4	**AB651050**	Price
10.80	.4252	4-5/8	7-1/4	**AB651080**	Price
11.00	.4331	4-5/8	7-1/4	**AB651100**	Price
11.50	.4528	4-3/4	7-1/2	**AB651150**	Price
11.80	.4646	4-3/4	7-1/2	**AB651180**	Price
12.00	.4724	4-3/4	7-3/4	**AB651200**	Price
12.20	.4803	4-3/4	7-3/4	**AB651220**	Price
12.50	.4921	4-3/4	7-3/4	**AB651250**	Price
12.80	.5039	4-3/4	8	**AB651280**	Price
13.00	.5118	4-3/4	8	**AB651300**	Price
13.20	.5197	4-3/4	8	**AB651320**	Price
13.50	.5315	4-3/4	8	**AB651350**	Price
14.00	.5512	4-7/8	8-1/4	**AB651400**	Price
14.50	.5709	4-7/8	8-3/4	**AB651450**	Price
14.75	.5807	4-7/8	8-3/4	**AB651475**	Price
15.00	.5906	4-7/8	8-3/4	**AB651500**	Price
15.25	.6004	4-7/8	8-3/4	**AB651525**	Price
15.50	.6102	4-7/8	8-3/4	**AB651550**	Price
15.75	.6201	4-7/8	8-3/4	**AB651575**	Price
16.00	.6299	5-1/8	9	**AB651600**	Price
16.25	.6398	5-1/8	9	**AB651625**	Price
17.00	.6693	5-3/8	9-1/4	**AB651700**	Price
17.25	.6791	5-3/8	9-1/4	**AB651725**	Price
17.50	.6890	5-5/8	9-1/2	**AB651750**	Price
18.00	.7087	5-5/8	9-1/2	**AB651800**	Price
18.50	.7283	5-7/8	9-3/4	**AB651850**	Price
19.00	.7480	5-7/8	9-3/4	**AB651900**	Price
19.50	.7677	6	9-7/8	**AB651950**	Price
20.00	.7874	6-1/8	10	**AB652000**	Price
20.50	.8071	6-1/8	10	**AB652050**	Price
21.00	.8268	6-1/8	10	**AB652100**	Price
21.50	.8465	6-1/8	10	**AB652150**	Price
22.00	.8661	6-1/8	10	**AB652200**	Price
22.50	.8858	6-1/8	10	**AB652250**	Price
23.00	.9055	6-1/8	10	**AB652300**	Price
23.50	.9252	6-1/8	10-3/4	**AB652350**	Price
24.00	.9449	6-3/8	11	**AB652400**	Price
24.50	.9646	6-3/8	11	**AB652450**	Price
25.00	.9843	6-3/8	11	**AB652500**	Price
26.00	1.0236	6-1/2	11-1/8	**AB652600**	Price
26.50	1.0433	6-5/8	11-1/4	**AB652650**	Price
27.00	1.0630	6-5/8	11-1/4	**AB652700**	Price
27.50	1.0827	6-7/8	11-1/2	**AB652750**	Price
28.00	1.1024	7-1/8	11-3/4	**AB652800**	Price
28.50	1.1220	7-1/8	11-3/4	**AB652850**	Price
29.00	1.1417	7-1/4	11-7/8	**AB652900**	Price
29.50	1.1614	7-3/8	12	**AB652950**	Price
31.00	1.2205	7-7/8	12-1/2	**AB653100**	Price
31.50	1.2402	7-7/8	12-1/2	**AB653150**	Price
32.00	1.2598	8-1/2	14-1/8	**AB653200**	Price
33.50	1.3189	8-3/4	14-3/8	**AB653350**	Price
34.00	1.3386	8-3/4	14-3/8	**AB653400**	Price
35.50	1.3976	9	14-5/8	**AB653550**	Price
37.00	1.4567	9-1/4	14-7/8	**AB653700**	Price
37.50	1.4764	9-3/8	15	**AB653750**	Price
38.00	1.4961	9-3/8	15	**AB653800**	Price

Cobalt Taper Length Drills

Cobalt • 135° Split Point



- Designed for heavy duty deep hole drilling in tough alloy steels, forgings and castings
- Morse List #2314
- Precision Twist List #M51CO

				Morse Cutting Tools		Precision Twist Drill		ProCut	
Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/16	.0625	1-3/4	3	-	-	PT2251304	Price	AB60004	Price
5/64	.0781	2	3-3/4	-	-	PT2251305	Price	AB60005	Price
3/32	.0938	2-1/4	4-1/4	MT6810764	Price	PT2251306	Price	AB60006	Price
7/64	.1094	2-1/2	4-5/8	-	-	PT2251307	Price	AB60007	Price
1/8	.1250	2-3/4	5-1/8	MT6810766	Price	PT2251308	Price	AB60008	Price
9/64	.1406	3	5-3/8	MT6810767	Price	PT2251309	Price	AB60009	Price
5/32	.1562	3	5-3/8	MT6810707	Price	PT2251310	Price	AB60010	Price
11/64	.1719	3-3/8	5-3/4	MT6810708	Price	PT2251311	Price	AB60011	Price
3/16	.1875	3-3/8	5-3/4	MT6810709	Price	PT2251312	Price	AB60012	Price
13/64	.2031	3-5/8	6	MT6810710	Price	PT2251313	Price	AB60013	Price
7/32	.2188	3-5/8	6	MT6810711	Price	PT2251314	Price	AB60014	Price
15/64	.2344	3-3/4	6-1/8	MT6810712	Price	PT2251315	Price	AB60015	Price
1/4	.2500	3-3/4	6-1/8	MT6810713	Price	PT2251316	Price	AB60016	Price
17/64	.2656	3-7/8	6-1/4	MT6810714	Price	PT2251317	Price	AB60017	Price
9/32	.2812	3-7/8	6-1/4	MT6810715	Price	PT2251318	Price	AB60018	Price
19/64	.2969	4	6-3/8	MT6810716	Price	PT2251319	Price	AB60019	Price
5/16	.3125	4	6-3/8	MT6810717	Price	PT2251320	Price	AB60020	Price
21/64	.3281	4-1/8	6-1/2	MT6810718	Price	PT2251321	Price	AB60021	Price
11/32	.3438	4-1/8	6-1/2	MT6810719	Price	PT2251322	Price	AB60022	Price
23/64	.3594	4-1/4	6-3/4	MT6810720	Price	PT2251323	Price	AB60023	Price
3/8	.3750	4-1/4	6-3/4	MT6810721	Price	PT2251324	Price	AB60024	Price
25/64	.3906	4-3/8	7	MT6810722	Price	PT2251325	Price	AB60025	Price
13/32	.4062	4-3/8	7	MT6810723	Price	PT2251326	Price	AB60026	Price
27/64	.4219	4-5/8	7-1/4	MT6810724	Price	PT2251327	Price	-	-
7/16	.4375	4-5/8	7-1/4	MT6810725	Price	PT2251328	Price	AB60028	Price
29/64	.4531	4-3/4	7-1/2	MT6810726	Price	PT2251329	Price	AB60029	Price
15/32	.4688	4-3/4	7-1/2	MT6810727	Price	PT2251330	Price	AB60030	Price
31/64	.4844	4-3/4	7-3/4	MT6810728	Price	PT2251331	Price	AB60031	Price
1/2	.5000	4-3/4	7-3/4	MT6810729	Price	PT2251332	Price	AB60032	Price
33/64	.5156	4-3/4	8	-	-	PT2251333	Price	AB60033	Price
17/32	.5312	4-3/4	8	-	-	PT2251334	Price	AB60034	Price
35/64	.5469	4-7/8	8-1/4	-	-	PT2251335	Price	-	-
9/16	.5625	4-7/8	8-1/4	-	-	PT2251336	Price	AB60036	Price
37/64	.5781	4-7/8	8-3/4	-	-	PT2251337	Price	AB60037	Price
19/32	.5938	4-7/8	8-3/4	-	-	PT2251338	Price	AB60038	Price
39/64	.6094	4-7/8	8-3/4	-	-	PT2251339	Price	-	-
5/8	.6250	4-7/8	8-3/4	-	-	PT2251340	Price	AB60040	Price
41/64	.6406	5-1/8	9	-	-	PT2251341	Price	AB60041	Price
21/32	.6562	5-1/8	9	-	-	PT2251342	Price	AB60042	Price
43/64	.6719	5-3/8	9-1/4	-	-	PT2251343	Price	AB60043	Price
11/16	.6875	5-3/8	9-1/4	-	-	PT2251344	Price	AB60044	Price
45/64	.7031	5-5/8	9-1/2	-	-	PT2251345	Price	AB60045	Price
23/32	.7188	5-5/8	9-1/2	-	-	PT2251346	Price	AB60046	Price
47/64	.7344	5-7/8	9-3/4	-	-	PT2251347	Price	AB60047	Price
3/4	.7500	5-7/8	9-3/4	-	-	PT2251348	Price	AB60048	Price
49/64	.7656	6	9-7/8	-	-	PT2251349	Price	AB60049	Price
25/32	.7812	6	9-7/8	-	-	PT2251350	Price	AB60050	Price
51/64	.7969	6-1/8	10	-	-	PT2251351	Price	AB60051	Price
13/16	.8125	6-1/8	10	-	-	PT2251352	Price	AB60052	Price
53/64	.8281	6-1/8	10	-	-	PT2251353	Price	-	-
27/32	.8438	6-1/8	10	-	-	PT2251354	Price	-	-
55/64	.8594	6-1/8	10	-	-	PT2251355	Price	AB60055	Price
7/8	.8750	6-1/8	10	-	-	PT2251356	Price	AB60056	Price
57/64	.8906	6-1/8	10	-	-	PT2251357	Price	AB60057	Price
29/32	.9062	6-1/8	10	-	-	PT2251358	Price	AB60058	Price
59/64	.9219	6-1/8	10-3/4	-	-	PT2251359	Price	-	-
15/16	.9375	6-1/8	10-3/4	-	-	PT2251360	Price	AB60060	Price
61/64	.9531	6-3/8	11	-	-	PT2251361	Price	AB60061	Price
31/32	.9688	6-3/8	11	-	-	PT2251362	Price	AB60062	Price
63/64	.9844	6-3/8	11	-	-	PT2251363	Price	AB60063	Price
1	1.0000	6-3/8	11	-	-	PT2251364	Price	-	-

PROCUT Wire Gage Sizes

Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1	.2280	3-3/4	6-1/8	AB60101	Price
2	.2210	3-3/4	6-1/8	AB60102	Price
3	.2130	3-5/8	6	AB60103	Price
4	.2090	3-5/8	6	AB60104	Price
5	.2055	3-5/8	6	AB60105	Price
6	.2040	3-5/8	6	AB60106	Price
7	.2010	3-5/8	6	AB60107	Price
8	.1990	3-5/8	6	AB60108	Price
9	.1960	3-5/8	6	AB60109	Price
10	.1935	3-5/8	6	AB60110	Price
11	.1910	3-5/8	6	AB60111	Price
12	.1890	3-5/8	6	AB60112	Price
13	.1850	3-3/8	5-3/4	AB60113	Price
14	.1820	3-3/8	5-3/4	AB60114	Price
15	.1800	3-3/8	5-3/4	AB60115	Price
16	.1770	3-3/8	5-3/4	AB60116	Price
17	.1730	3-3/8	5-3/4	AB60117	Price
18	.1695	3-3/8	5-3/4	AB60118	Price
19	.1660	3-3/8	5-3/4	AB60119	Price
20	.1610	3-3/8	5-3/4	AB60120	Price
21	.1590	3-3/8	5-3/4	AB60121	Price
22	.1570	3-3/8	5-3/4	AB60122	Price
23	.1540	3	5-3/8	AB60123	Price
24	.1520	3	5-3/8	AB60124	Price
25	.1495	3	5-3/8	AB60125	Price
26	.1470	3	5-3/8	AB60126	Price
27	.1440	3	5-3/8	AB60127	Price
28	.1405	3	5-3/8	AB60128	Price
29	.1360	3	5-3/8	AB60129	Price
30	.1285	3	5-3/8	AB60130	Price
31	.1200	2-3/4	5-1/8	AB60131	Price
32	.1160	2-3/4	5-1/8	AB60132	Price
33	.1130	2-3/4	5-1/8	AB60133	Price
34	.1110	2-3/4	5-1/8	AB60134	Price
35	.1100	2-3/4	5-1/8	AB60135	Price
36	.1065	2-1/2	4-5/8	AB60136	Price
37	.1040	2-1/2	4-5/8	AB60137	Price
38	.1015	2-1/2	4-5/8	AB60138	Price
39	.0995	2-1/2	4-5/8	AB60139	Price
40	.0980	2-1/2	4-5/8	AB60140	Price

Aircraft Extension Drills — 6" & 12" Overall Length

High Speed Steel • 135° Split Point • Surface Treated



- Ideal for drilling mild steel where extra length is required
- Manufactured to NAS 907 Type B specifications
- Precision Twist List #500-6 (6" OAL)
- Precision Twist List #500-12 (12" OAL)

			Precision Twist Drill				ProCut			
			6" OAL		12" OAL		6" OAL		12" OAL	
Size (in.)	Decimal Equiv.	Flute Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/64	.0469	3/4	**PT2458003†**	10.28	**PT2459003†**	19.46	**AT50003†**	4.90	**AT51003†**	7.50
1/16	.0625	7/8	**PT2458004**	Price	**PT2459004**	Price	**AT50004**	Price	**AT51004**	Price
5/64	.0781	1	**PT2458005**	Price	**PT2459005**	Price	**AT50005**	Price	**AT51005**	Price
3/32	.0938	1-1/4	**PT2458006**	Price	**PT2459006**	Price	**AT50006**	Price	**AT51006**	Price
7/64	.1094	1-1/2	**PT2458007**	Price	**PT2459007**	Price	**AT50007**	Price	**AT51007**	Price
1/8	.1250	1-5/8	**PT2458008**	Price	**PT2459008**	Price	**AT50008**	Price	**AT51008**	Price
9/64	.1406	1-3/4	**PT2458009**	Price	**PT2459009**	Price	**AT50009**	Price	**AT51009**	Price
5/32	.1562	2	**PT2458010**	Price	**PT2459010**	Price	**AT50010**	Price	**AT51010**	Price
11/64	.1719	2-1/8	**PT2458011**	Price	**PT2459011**	Price	**AT50011**	Price	**AT51011**	Price
3/16	.1875	2-5/16	**PT2458012**	Price	**PT2459012**	Price	**AT50012**	Price	**AT51012**	Price
13/64	.2031	2-7/16	**PT2458013**	Price	**PT2459013**	Price	**AT50013**	Price	**AT51013**	Price
7/32	.2188	2-1/2	**PT2458014**	Price	**PT2459014**	Price	**AT50014**	Price	**AT51014**	Price
15/64	.2344	2-5/8	**PT2458015**	Price	**PT2459015**	Price	**AT50015**	Price	**AT51015**	Price
1/4	.2500	2-3/4	**PT2458016**	Price	**PT2459016**	Price	**AT50016**	Price	**AT51016**	Price
17/64	.2656	2-7/8	**PT2458017**	Price	**PT2459017**	Price	**AT50017**	Price	**AT51017**	Price
9/32	.2812	2-15/16	**PT2458018**	Price	**PT2459018**	Price	**AT50018**	Price	**AT51018**	Price
19/64	.2969	3-1/16	**PT2458019**	Price	**PT2459019**	Price	**AT50019**	Price	**AT51019**	Price
5/16	.3125	3-3/16	**PT2458020**	Price	**PT2459020**	Price	**AT50020**	Price	**AT51020**	Price
21/64	.3281	3-5/16	**PT2458021**	Price	**PT2459021**	Price	**AT50021**	Price	**AT51021**	Price
11/32	.3438	3-7/16	**PT2458022**	Price	**PT2459022**	Price	**AT50022**	Price	**AT51022**	Price
23/64	.3594	3-1/2	**PT2458023**	Price	**PT2459023**	Price	**AT50023**	Price	**AT51023**	Price
3/8	.3750	3-5/8	**PT2458024**	Price	**PT2459024**	Price	**AT50024**	Price	**AT51024**	Price
25/64	.3906	3-3/4	**PT2458025**	Price	**PT2459025**	Price	**AT50025**	Price	**AT51025**	Price
13/32	.4062	3-7/8	**PT2458026**	Price	**PT2459026**	Price	**AT50026**	Price	**AT51026**	Price
27/64	.4219	3-15/16	**PT2458027**	Price	**PT2459027**	Price	**AT50027**	Price	**AT51027**	Price
7/16	.4375	4-1/16	**PT2458028**	Price	**PT2459028**	Price	**AT50028**	Price	**AT51028**	Price
29/64	.4531	4-3/16	**PT2458029**	Price	**PT2459029**	Price	**AT50029**	Price	**AT51029**	Price
15/32	.4688	4-5/16	**PT2458030**	Price	**PT2459030**	Price	**AT50030**	Price	**AT51030**	Price
31/64	.4844	4-3/8	**PT2458031**	Price	**PT2459031**	Price	**AT50031**	Price	**AT51031**	Price
1/2	.5000	2-3/4	**PT2458032**	Price	**-**	-	**AT50032**	Price	**-**	-
1/2	.5000	4-1/2	**-**	-	**PT2459032**	Price	**-**	-	**AT51032**	Price

†Note: 3/64 NOT split point

Aircraft Extension Drills – 6" & 12" Overall Length
Letter Sizes

High Speed Steel • 135° Split Point • Surface Treated



- All drills manufactured to NAS 907 Type B specifications

			6" OAL		12" OAL	
Size	Decimal Equiv.	Flute Length (in.)	Order No.	Price	Order No.	Price
A	.2340	2-5/8	**AT50201**	Price	**AT51201**	Price
B	.2380	2-3/4	**AT50202**	Price	**AT51202**	Price
C	.2420	2-3/4	**AT50203**	Price	**AT51203**	Price
D	.2460	2-3/4	**AT50204**	Price	**AT51204**	Price
E	.2500	2-3/4	**AT50205**	Price	**AT51205**	Price
F	.2570	2-7/8	**AT50206**	Price	**AT51206**	Price
G	.2610	2-7/8	**AT50207**	Price	**AT51207**	Price
H	.2660	2-7/8	**AT50208**	Price	**AT51208**	Price
I	.2720	2-7/8	**AT50209**	Price	**AT51209**	Price
J	.2770	2-7/8	**AT50210**	Price	**AT51210**	Price
K	.2810	2-15/16	**AT50211**	Price	**AT51211**	Price
L	.2900	2-15/16	**AT50212**	Price	**AT51212**	Price
M	.2950	3-1/16	**AT50213**	Price	**AT51213**	Price
N	.3020	3-1/16	**AT50214**	Price	**AT51214**	Price
O	.3160	3-3/16	**AT50215**	Price	**AT51215**	Price
P	.3230	3-5/16	**AT50216**	Price	**AT51216**	Price
Q	.3320	3-7/16	**AT50217**	Price	**AT51217**	Price
R	.3390	3-7/16	**AT50218**	Price	**AT51218**	Price
S	.3480	3-1/2	**AT50219**	Price	**AT51219**	Price
T	.3580	3-1/2	**AT50220**	Price	**AT51220**	Price
U	.3680	3-5/8	**AT50221**	Price	**AT51221**	Price
V	.3770	3-5/8	**AT50222**	Price	**AT51222**	Price
W	.3860	3-3/4	**AT50223**	Price	**AT51223**	Price
X	.3970	3-3/4	**AT50224**	Price	**AT51224**	Price
Y	.4040	3-7/8	**AT50225**	Price	**AT51225**	Price
Z	.4130	3-7/8	**AT50226**	Price	**AT51226**	Price

Aircraft Extension Drills — 6" & 12" Overall Length

High Speed Steel • 135° Split Point • Surface Treated

- Ideal for drilling mild steel where extra length is required
- Manufactured to NAS 907 Type B specifications
- Precision Twist List #501-6 (6" OAL)
- Precision Twist List #501-12 (12" OAL)

			Precision Twist Drill				ProCut			
			6" OAL		12" OAL		6" OAL		12" OAL	
Size	Decimal Equiv.	Flute Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	.2280	2-5/8	**PT2458101**	Price	**PT2459101**	Price	**AT50101**	Price	**AT51101**	Price
2	.2210	2-5/8	**PT2458102**	Price	**-**	-	**AT50102**	Price	**AT51102**	Price
3	.2130	2-1/2	**PT2458103**	Price	**PT2459103**	Price	**AT50103**	Price	**AT51103**	Price
4	.2090	2-1/2	**PT2458104**	Price	**PT2459104**	Price	**AT50104**	Price	**AT51104**	Price
5	.2055	2-1/2	**PT2458105**	Price	**PT2459105**	Price	**AT50105**	Price	**AT51105**	Price
6	.2040	2-1/2	**PT2458106**	Price	**-**	-	**AT50106**	Price	**AT51106**	Price
7	.2010	2-7/16	**PT2458107**	Price	**PT2459107**	Price	**AT50107**	Price	**AT51107**	Price
8	.1990	2-7/16	**PT2458108**	Price	**-**	-	**AT50108**	Price	**AT51108**	Price
9	.1960	2-7/16	**PT2458109**	Price	**PT2459109**	Price	**AT50109**	Price	**AT51109**	Price
10	.1935	2-7/16	**PT2458110**	Price	**PT2459110**	Price	**AT50110**	Price	**AT51110**	Price
11	.1910	2-5/16	**PT2458111**	Price	**PT2459111**	Price	**AT50111**	Price	**AT51111**	Price
12	.1890	2-5/16	**PT2458112**	Price	**PT2459112**	Price	**AT50112**	Price	**AT51112**	Price
13	.1850	2-5/16	**PT2458113**	Price	**PT2459113**	Price	**AT50113**	Price	**AT51113**	Price
14	.1820	2-3/16	**PT2458114**	Price	**-**	-	**AT50114**	Price	**AT51114**	Price
15	.1800	2-3/16	**PT2458115**	Price	**-**	-	**AT50115**	Price	**AT51115**	Price
16	.1770	2-3/16	**PT2458116**	Price	**PT2459116**	Price	**AT50116**	Price	**AT51116**	Price
17	.1730	2-3/16	**PT2458117**	Price	**PT2459117**	Price	**AT50117**	Price	**AT51117**	Price
18	.1695	2-1/8	**PT2458118**	Price	**PT2459118**	Price	**AT50118**	Price	**AT51118**	Price
19	.1660	2-1/8	**PT2458119**	Price	**PT2459119**	Price	**AT50119**	Price	**AT51119**	Price
20	.1610	2-1/8	**PT2458120**	Price	**PT2459120**	Price	**AT50120**	Price	**AT51120**	Price
21	.1590	2-1/8	**PT2458121**	Price	**PT2459121**	Price	**AT50121**	Price	**AT51121**	Price
22	.1570	2	**PT2458122**	Price	**PT2459122**	Price	**AT50122**	Price	**AT51122**	Price
23	.1540	2	**PT2458123**	Price	**PT2459123**	Price	**AT50123**	Price	**AT51123**	Price
24	.1520	2	**PT2458124**	Price	**-**	-	**AT50124**	Price	**AT51124**	Price
25	.1495	1-7/8	**PT2458125**	Price	**PT2459125**	Price	**AT50125**	Price	**AT51125**	Price
26	.1470	1-7/8	**PT2458126**	Price	**PT2459126**	Price	**AT50126**	Price	**AT51126**	Price
27	.1440	1-7/8	**PT2458127**	Price	**PT2459127**	Price	**AT50127**	Price	**AT51127**	Price
28	.1405	1-3/4	**PT2458128**	Price	**-**	-	**AT50128**	Price	**AT51128**	Price
29	.1360	1-3/4	**PT2458129**	Price	**PT2459129**	Price	**AT50129**	Price	**AT51129**	Price
30	.1285	1-5/8	**PT2458130**	Price	**PT2459130**	Price	**AT50130**	Price	**AT51130**	Price
31	.1200	1-5/8	**PT2458131**	Price	**PT2459131**	Price	**AT50131**	Price	**AT51131**	Price
32	.1160	1-5/8	**PT2458132**	Price	**-**	-	**AT50132**	Price	**AT51132**	Price
33	.1130	1-1/2	**PT2458133**	Price	**-**	-	**AT50133**	Price	**AT51133**	Price
34	.1110	1-1/2	**PT2458134**	Price	**-**	-	**AT50134**	Price	**AT51134**	Price
35	.1100	1-1/2	**PT2458135**	Price	**-**	-	**AT50135**	Price	**AT51135**	Price
36	.1065	1-7/16	**PT2458136**	Price	**PT2459136**	Price	**AT50136**	Price	**AT51136**	Price
37	.1040	1-7/16	**PT2458137**	Price	**PT2459137**	Price	**AT50137**	Price	**AT51137**	Price
38	.1015	1-7/16	**PT2458138**	Price	**PT2459138**	Price	**AT50138**	Price	**AT51138**	Price
39	.0995	1-3/8	**PT2458139**	Price	**PT2459139**	Price	**AT50139**	Price	**AT51139**	Price
40	.0980	1-3/8	**PT2458140**	Price	**PT2459140**	Price	**AT50140**	Price	**AT51140**	Price
41	.0960	1-3/8	**PT2458141**	Price	**PT2459141**	Price	**AT50141**	Price	**AT51141**	Price
42	.0935	1-1/4	**PT2458142**	Price	**PT2459142**	Price	**AT50142**	Price	**AT51142**	Price
43	.0890	1-1/4	**PT2458143**	Price	**PT2459143**	Price	**AT50143**	Price	**AT51143**	Price
44	.0860	1-1/8	**PT2458144**	Price	**PT2459144**	Price	**AT50144**	Price	**AT51144**	Price
45	.0820	1-1/8	**PT2458145**	Price	**PT2459145**	Price	**AT50145**	Price	**AT51145**	Price
46	.0810	1-1/8	**PT2458146**	Price	**PT2459146**	Price	**AT50146**	Price	**AT51146**	Price
47	.0785	1	**PT2458147**	Price	**PT2459147**	Price	**AT50147**	Price	**AT51147**	Price
48	.0760	1	**PT2458148**	Price	**PT2459148**	Price	**AT50148**	Price	**AT51148**	Price
49	.0730	1	**PT2458149**	Price	**PT2459149**	Price	**AT50149**	Price	**AT51149**	Price
50	.0700	1	**PT2458150**	Price	**PT2459150**	Price	**AT50150**	Price	**AT51150**	Price
51	.0670	1	**PT2458151†**	Price	**-**	-	**AT50151†**	Price	**AT51151†**	Price
52	.0635	7/8	**PT2458152†**	Price	**-**	-	**AT50152†**	Price	**AT51152†**	Price
53	.0595	7/8	**PT2458153†**	Price	**-**	-	**AT50153†**	Price	**AT51153†**	Price
54	.0550	7/8	**PT2458154†**	Price	**-**	-	**AT50154†**	Price	**AT51154†**	Price
55	.0520	7/8	**PT2458155†**	Price	**-**	-	**AT50155†**	Price	**AT51155†**	Price
56	.0465	3/4	**PT2458156†**	Price	**-**	-	**AT50156†**	Price	**AT51156†**	Price
57	.0430	3/4	**PT2458157†**	Price	**-**	-	**AT50157†**	Price	**AT51157†**	Price
58	.0420	11/16	**PT2458158†**	Price	**-**	-	**AT50158†**	Price	**AT51158†**	Price
59	.0410	11/16	**PT2458159†**	Price	**-**	-	**AT50159†**	Price	**AT51159†**	Price
60	.0400	11/16	**PT2458160†**	Price	**-**	-	**AT50160†**	Price	**AT51160†**	Price

†Note: #53 thru #60 NOT Split Point

Aircraft Extension Drills — 6" & 12" Overall Length



Cobalt • 135° Split Point

- Ideal for tough, high tensile strength materials
- Manufactured To NAS 907 Type B specifications
- Precision Twist List #CO501-6

- Fractional Size										
			Precision Twist Drill				ProCut			
			6" OAL		12" OAL		Price		12" OAL	
Size	Dec. Equiv.	Flute Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	.0625	7/8	**PT2553604**	Price	**PT2552604**	Price	**AT55004**	Price	**AT56004**	Price
5/64	.0781	1	**PT2553605**	Price	**PT2552605**	Price	**AT55005**	Price	**AT56005**	Price
3/32	.0938	1-1/4	**PT2553606**	Price	**PT2552606**	Price	**AT55006**	Price	**AT56006**	Price
7/64	.1094	1-1/2	**PT2553607**	Price	**PT2552607**	Price	**AT55007**	Price	**AT56007**	Price
1/8	.1250	1-5/8	**PT2553608**	Price	**PT2552608**	Price	**AT55008**	Price	**AT56008**	Price
9/64	.1406	1-3/4	**PT2553609**	Price	**PT2552609**	Price	**AT55009**	Price	**AT56009**	Price
5/32	.1562	2	**PT2553610**	Price	**PT2552610**	Price	**AT55010**	Price	**AT56010**	Price
11/64	.1719	2-1/8	**PT2553611**	Price	**PT2552611**	Price	**AT55011**	Price	**AT56011**	Price
3/16	.1875	2-5/16	**PT2553612**	Price	**PT2552612**	Price	**AT55012**	Price	**AT56012**	Price
13/64	.2031	2-7/16	**PT2553613**	Price	**PT2552613**	Price	**AT55013**	Price	**AT56013**	Price
7/32	.2188	2-1/2	**PT2553614**	Price	**PT2552614**	Price	**AT55014**	Price	**AT56014**	Price
15/64	.2344	2-5/8	**PT2553615**	Price	**PT2552615**	Price	**AT55015**	Price	**AT56015**	Price
1/4	.2500	2-3/4	**PT2553616**	Price	**PT2552616**	Price	**AT55016**	Price	**AT56016**	Price

- Wire Gage Size								
			Precision Twist Drill		ProCut			
			6" OAL		6" OAL		12" OAL	
Size	Dec. Equiv.	Flute Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1	.2280	2-5/8	**PT2553701**	Price	**AT55101**	Price	**AT56101**	Price
2	.2210	2-5/8	**PT2553702**	Price	**AT55102**	Price	**AT56102**	Price
3	.2130	2-1/2	**PT2553703**	Price	**AT55103**	Price	**AT56103**	Price
4	.2090	2-1/2	**PT2553704**	Price	**AT55104**	Price	**AT56104**	Price
5	.2055	2-1/2	**PT2553705**	Price	**AT55105**	Price	**AT56105**	Price
6	.2040	2-1/2	**PT2553706**	Price	**AT55106**	Price	**AT56106**	Price
7	.2010	2-7/16	**PT2553707**	Price	**AT55107**	Price	**AT56107**	Price
8	.1990	2-7/16	**PT2553708**	Price	**AT55108**	Price	**AT56108**	Price
9	.1960	2-7/16	**PT2553709**	Price	**AT55109**	Price	**AT56109**	Price
10	.1935	2-7/16	**PT2553710**	Price	**AT55110**	Price	**AT56110**	Price
11	.1910	2-5/16	**PT2553711**	Price	**AT55111**	Price	**AT56111**	Price
12	.1890	2-5/16	**PT2553712**	Price	**AT55112**	Price	**AT56112**	Price
13	.1850	2-5/16	**PT2553713**	Price	**AT55113**	Price	**AT56113**	Price
14	.1820	2-3/16	**PT2553714**	Price	**AT55114**	Price	**AT56114**	Price
15	.1800	2-3/16	**PT2553715**	Price	**AT55115**	Price	-	-
16	.1770	2-3/16	**PT2553716**	Price	-	-	**AT56116**	Price
17	.1730	2-3/16	**PT2553717**	Price	**AT55117**	Price	**AT56117**	Price
18	.1695	2-1/8	**PT2553718**	Price	**AT55118**	Price	**AT56118**	Price
19	.1660	2-1/8	**PT2553719**	Price	**AT55119**	Price	**AT56119**	Price
20	.1610	2-1/8	**PT2553720**	Price	**AT55120**	Price	**AT56120**	Price
21	.1590	2-1/8	**PT2553721**	Price	**AT55121**	Price	**AT56121**	Price
22	.1570	2	**PT2553722**	Price	**AT55122**	Price	**AT56122**	Price
23	.1540	2	**PT2553723**	Price	**AT55123**	Price	**AT56123**	Price
24	.1520	2	**PT2553724**	Price	**AT55124**	Price	**AT56124**	Price
25	.1495	1-7/8	**PT2553725**	Price	**AT55125**	Price	**AT56125**	Price
26	.1470	1-7/8	**PT2553726**	Price	**AT55126**	Price	**AT56126**	Price
27	.1440	1-7/8	**PT2553727**	Price	**AT55127**	Price	**AT56127**	Price
28	.1405	1-3/4	**PT2553728**	Price	**AT55128**	Price	**AT56128**	Price
29	.1360	1-3/4	**PT2553729**	Price	**AT55129**	Price	**AT56129**	Price
30	.1285	1-5/8	**PT2553730**	Price	**AT55130**	Price	**AT56130**	Price
31	.1200	1-5/8	**PT2553731**	Price	**AT55131**	Price	**AT56131**	Price
32	.1160	1-5/8	**PT2553732**	Price	**AT55132**	Price	**AT56132**	Price
33	.1130	1-1/2	**PT2553733**	Price	**AT55133**	Price	**AT56133**	Price
34	.1110	1-1/2	**PT2553734**	Price	**AT55134**	Price	**AT56134**	Price
35	.1100	1-1/2	**PT2553735**	Price	**AT55135**	Price	**AT56135**	Price
36	.1065	1-7/16	**PT2553736**	Price	**AT55136**	Price	**AT56136**	Price
37	.1040	1-7/16	**PT2553737**	Price	**AT55137**	Price	**AT56137**	Price
38	.1015	1-7/16	**PT2553738**	Price	**AT55138**	Price	**AT56138**	Price
39	.0995	1-3/8	**PT2553739**	Price	**AT55139**	Price	**AT56139**	Price
40	.0980	1-3/8	**PT2553740**	Price	**AT55140**	Price	**AT56140**	Price
41	.0960	1-3/8	**PT2553741**	Price	**AT55141**	Price	**AT56141**	Price
42	.0935	1-1/4	**PT2553742**	Price	**AT55142**	Price	**AT56142**	Price
43	.0890	1-1/4	**PT2553743**	Price	**AT55143**	Price	**AT56143**	Price
44	.0860	1-1/8	**PT2553744**	Price	**AT55144**	Price	**AT56144**	Price
45	.0820	1-1/8	**PT2553745**	Price	**AT55145**	Price	**AT56145**	Price
46	.0810	1-1/8	**PT2553746**	Price	**AT55146**	Price	**AT56146**	Price
47	.0785	1	**PT2553747**	Price	-	-	-	-
48	.0760	1	**PT2553748**	Price	**AT55148**	Price	**AT56148**	Price
49	.0730	1	**PT2553749**	Price	**AT55149**	Price	**AT56149**	Price
50	.0700	1	**PT2553750**	Price	**AT55150**	Price	**AT56150**	Price

1/2" Shank Silver & Deming Drills

High Speed Steel • 118° Standard Point

- 3-1/8" Flute length
- 6" Overall length



	Morse Cutting Tools				Rapidkut		Precision Twist Drill				ProCut	
	Style 1424R - Round Shank		Style 1424S - Shanks w/3 Flats-Split Point		Made in USA - Round Shank		Style R57 - Shanks w/3 Flats		Style R56 - Round Shank		Industrial Quality - Round Shank	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
33/64	MT5717031	Price	MT5719031	Price	AK50033	Price	PT19091533	Price	PT1991433	Price	AK55033	Price
17/32	MT5717032	Price	MT5719032	Price	AK50034	Price	PT19091534	Price	PT1991434	Price	AK55034	Price
35/64	MT5717033	Price	MT5719033	Price	AK50035	Price	PT19091535	Price	PT1991435	Price	AK55035	Price
9/16	MT5717034	Price	MT5719034	Price	AK50036	Price	PT19091536	Price	PT1991436	Price	AK55036	Price
37/64	MT5717035	Price	MT5719035	Price	AK50037	Price	PT19091537	Price	PT1991437	Price	AK55037	Price
19/32	MT5717036	Price	MT5719036	Price	AK50038	Price	PT19091538	Price	PT1991438	Price	AK55038	Price
39/64	MT5717037	Price	MT5719037	Price	AK50039	Price	PT19091539	Price	PT1991439	Price	AK55039	Price
5/8	MT5717038	Price	MT5719038	Price	AK50040	Price	PT19091540	Price	PT1991440	Price	AK55040	Price
41/64	MT5717039	Price	MT5719039	Price	AK50041	Price	PT19091541	Price	PT1991441	Price	AK55041	Price
21/32	MT5717040	Price	MT5719040	Price	AK50042	Price	PT19091542	Price	PT1991442	Price	AK55042	Price
43/64	MT5717041	Price	MT5719041	Price	AK50043	Price	PT19091543	Price	PT1991443	Price	AK55043	Price
11/16	MT5717042	Price	MT5719042	Price	AK50044	Price	PT19091544	Price	PT1991444	Price	AK55044	Price
45/64	MT5717043	Price	MT5719043	Price	AK50045	Price	PT19091545	Price	PT1991445	Price	AK55045	Price
23/32	MT5717044	Price	MT5719044	Price	AK50046	Price	PT19091546	Price	PT1991446	Price	AK55046	Price
47/64	MT5717045	Price	MT5719045	Price	AK50047	Price	PT19091547	Price	PT1991447	Price	AK55047	Price
3/4	MT5717046	Price	MT5719046	Price	AK50048	Price	PT19091548	Price	PT1991448	Price	AK55048	Price
49/64	MT5717047	Price	MT5719047	Price	AK50049	Price	PT19091549	Price	PT1991449	Price	AK55049	Price
25/32	MT5717048	Price	MT5719048	Price	AK50050	Price	PT19091550	Price	PT1991450	Price	AK55050	Price
51/64	MT5717049	Price	MT5719049	Price	AK50051	Price	PT19091551	Price	PT1991451	Price	AK55051	Price
13/16	MT5717050	Price	MT5719050	Price	AK50052	Price	PT19091552	Price	PT1991452	Price	AK55052	Price
53/64	MT5717051	Price	MT5719051	Price	AK50053	Price	PT19091553	Price	PT1991453	Price	AK55053	Price
27/32	MT5717052	Price	MT5719052	Price	AK50054	Price	PT19091554	Price	PT1991454	Price	AK55054	Price
55/64	MT5717053	Price	MT5719053	Price	AK50055	Price	PT19091555	Price	PT1991455	Price	AK55055	Price
7/8	MT5717054	Price	MT5719054	Price	AK50056	Price	PT19091556	Price	PT1991456	Price	AK55056	Price
57/64	MT5717055	Price	MT5719055	Price	AK50057	Price	PT19091557	Price	PT1991457	Price	AK55057	Price
29/32	MT5717056	Price	MT5719056	Price	AK50058	Price	PT19091558	Price	PT1991458	Price	AK55058	Price
59/64	MT5717057	Price	MT5719057	Price	AK50059	Price	PT19091559	Price	PT1991459	Price	AK55059	Price
15/16	MT5717058	Price	MT5719058	Price	AK50060	Price	PT19091560	Price	PT1991460	Price	AK55060	Price
61/64	MT5717059	Price	MT5719059	Price	AK50061	Price	PT19091561	Price	PT1991461	Price	AK55061	Price
31/32	MT5717060	Price	MT5719060	Price	AK50062	Price	PT19091562	Price	PT1991462	Price	AK55062	Price
63/64	MT5717061	Price	MT5719061	Price	AK50063	Price	PT19091563	Price	PT1991463	Price	AK55063	Price
1	MT5717062	Price	MT5719062	Price	AK50100	Price	PT19091564	Price	PT1991464	Price	AK55100	Price
1-1/64	MT5717063	Price	MT5719063	Price	AK50101	Price	PT19091565	Price	PT1991465	Price	AK55101	Price
1-1/32	MT5717064	Price	MT5719064	Price	AK50102	Price	PT19091586	Price	PT1991486	Price	AK55102	Price
1-3/64	MT5717065	Price	-	-	AK50103	Price	PT19091567	Price	PT1991467	Price	AK55103	Price
1-1/16	MT5717066	Price	MT5719065	Price	AK50104	Price	PT19091568	Price	PT1991468	Price	AK55104	Price
1-5/64	MT5717067	Price	-	-	AK50105	Price	PT19091569	Price	PT1991469	Price	AK55105	Price
1-3/32	MT5717068	Price	MT5719066	Price	AK50106	Price	PT19091570	Price	PT1991470	Price	AK55106	Price
1-7/64	MT5717069	Price	-	-	AK50107	Price	PT19091571	Price	PT1991471	Price	AK55107	Price
1-1/8	MT5717070	Price	MT5719067	Price	AK50108	Price	PT19091572	Price	PT1991472	Price	AK55108	Price
1-9/64	MT5717071	Price	-	-	AK50109	Price	PT19091573	Price	PT1991473	Price	AK55109	Price
1-5/32	MT5717072	Price	MT5719068	Price	AK50110	Price	PT19091587	Price	PT1991487	Price	AK55110	Price
1-11/64	MT5717073	Price	-	-	AK50111	Price	PT19091575	Price	PT1991474	Price	AK55111	Price
1-3/16	MT5717074	Price	MT5719069	Price	AK50112	Price	PT19091576	Price	PT1991476	Price	AK55112	Price
1-13/64	MT5717075	Price	-	-	-	-	PT19091577	Price	PT1991475	Price	AK55113	Price
1-7/32	MT5717076	Price	MT5719070	Price	AK50114	Price	PT19091588	Price	PT1991488	Price	AK55114	Price
1-15/64	MT5717077	Price	-	-	AK50115	Price	PT19091579	Price	PT1991477	Price	AK55115	Price
1-1/4	MT5717078	Price	MT5719071	Price	AK50116	Price	PT19091580	Price	PT1991480	Price	AK55116	Price
1-17/64	MT5717079	Price	-	-	AK50117	Price	-	-	-	-	AK55117	Price
1-9/32	MT5717080	Price	-	-	AK50118	Price	PT19091589	Price	PT1991479	Price	AK55118	Price
1-19/64	MT5717081	Price	-	-	AK50119	Price	-	-	-	-	AK55119	Price
1-5/16	MT5717082	Price	MT5719072	Price	AK50120	Price	PT19091582	Price	PT1991482	Price	AK55120	Price
1-21/64	MT5717083	Price	-	-	AK50121	Price	-	-	-	-	AK55121	Price
1-11/32	MT5717084	Price	-	-	AK50122	Price	PT19091592	Price	PT1991497	Price	AK55122	Price
1-23/64	MT5717085	Price	-	-	AK50123	Price	-	-	-	-	AK55123	Price
1-3/8	MT5717086	Price	MT5719073	Price	AK50124	Price	PT19091583	Price	PT1991483	Price	AK55124	Price
1-25/64	MT5717087	Price	-	-	-	-	-	-	-	-	AK55125	Price
1-13/32	MT5717088	Price	-	-	AK50126	Price	PT19091595	Price	PT1991492	Price	AK55126	Price
1-27/64	MT5717089	Price	-	-	AK50127	Price	-	-	-	-	AK55127	Price
1-7/16	MT5717090	Price	MT5719074	Price	AK50128	Price	PT19091584	Price	PT1991484	Price	AK55128	Price
1-29/64	MT5717091	Price	-	-	-	-	-	-	-	-	AK55129	Price
1-15/32	MT5717092	Price	-	-	-	-	PT19091598	Price	PT1991495	Price	AK55130	Price
1-31/64	MT5717093	Price	-	-	AK50131	Price	-	-	-	-	AK55131	Price
1-1/2	MT5717094	Price	MT5719075	Price	AK50132	Price	PT19091585	Price	PT1991485	Price	AK55132	Price

1/2" Shank Silver & Deming Drills

Cobalt Heavy Duty • 118° Standard Point

- 3" Flute length
- 6" Overall length
- Precision Twist List #R56CO



RAPIDKUT | PRECISION | PROCUT

	Rapidkut Cobalt		Precision Twist Drill Cobalt		ProCut Cobalt	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/2	AK40032	Price	-	-	-	-
33/64	AK40033	Price	PT2092333†	Price	AK70033	Price
17/32	AK40034	Price	PT2092334†	Price	AK70034	Price
35/64	AK40035	Price	PT2092335†	Price	AK70035	Price
9/16	AK40036	Price	PT2092336†	Price	AK70036	Price
37/64	AK40037	Price	PT2092337†	Price	AK70037	Price
19/32	AK40038	Price	PT2092338†	Price	AK70038	Price
39/64	AK40039	Price	PT2092339†	Price	AK70039	Price
5/8	AK40040	Price	PT2092340†	Price	AK70040	Price
41/64	AK40041	Price	PT2092341†	Price	AK70041	Price
21/32	AK40042	Price	PT2092342†	Price	AK70042	Price
43/64	AK40043	Price	PT2092343†	Price	AK70043	Price
11/16	AK40044	Price	PT2092344†	Price	AK70044	Price
45/64	AK40045	Price	PT2092345†	Price	AK70045	Price
23/32	AK40046	Price	PT2092346†	Price	AK70046	Price
47/64	AK40047	Price	PT2092347†	Price	AK70047	Price
3/4	AK40048	Price	PT2092348†	Price	AK70048	Price
49/64	AK40049	Price	PT2092349†	Price	AK70049	Price
25/32	AK40050	Price	PT2092350†	Price	AK70050	Price
51/64	AK40051	Price	PT2092351†	Price	AK70051	Price
13/16	AK40052	Price	PT2092352†	Price	AK70052	Price
53/64	AK40053	Price	PT2092353†	Price	AK70053	Price
27/32	AK40054	Price	PT2092354†	Price	AK70054	Price
55/64	AK40055	Price	PT2092355†	Price	AK70055	Price
7/8	AK40056	Price	PT2092356†	Price	AK70056	Price
57/64	AK40057	Price	PT2092357†	Price	AK70057	Price
29/32	AK40058	Price	PT2092358†	Price	AK70058	Price
59/64	AK40059	Price	PT2092359†	Price	AK70059	Price
15/16	AK40060	Price	PT2092360†	Price	AK70060	Price
61/64	AK40061	Price	PT2092361†	Price	AK70061	Price
31/32	AK40062	Price	PT2092362†	Price	AK70062	Price
63/64	AK40063	Price	PT2092363†	Price	AK70063	Price
1	AK40064	Price	PT2092364†	Price	AK70100	Price
1-1/64	-	-	-	-	AK70101	Price
1-1/32	-	-	-	-	AK70102	Price
1-1/16	AK40104	Price	-	-	AK70104	Price
1-3/32	-	-	-	-	AK70106	Price
1-1/8	AK40108	Price	-	-	AK70108	Price
1-5/32	-	-	-	-	AK70110	Price
1-3/16	AK40112	Price	-	-	AK70112	Price
1-7/32	-	-	-	-	AK70114	Price
1-1/4	AK40116	Price	-	-	AK70116	Price
1-5/16	-	-	-	-	AK70120	Price
1-3/8	AK40124	Price	-	-	AK70124	Price
1-7/16	-	-	-	-	AK70128	Price
1-1/2	AK40132	Price	-	-	AK70132	Price

† 118° Self-Centering Split Point

1/2" Shank Metric Silver & Deming Drills

High Speed Steel • 118° Standard Point

- 3" Flute length
- 6" Overall length
- Available with a round shank or 3-flatted shank
- High speed steel
- Made in the USA





RAPIDKUT | PROCUT

		Round Shank		3 Flats Shank		Round Shank	
Size	Decimal Equiv.	Order No.	Price	Order No.	Price	Order No.	Price
13mm	.5120	AK661300	Price	AK673F1300	Price	AK651300	Price
13.5mm	.5320	AK661350	Price	AK673F1350	Price	-	-
14mm	.5510	AK661400	Price	AK673F1400	Price	AK651400	Price
14.5mm	.5710	AK661450	Price	AK673F1450	Price	-	-
15mm	.5910	AK661500	Price	AK673F1500	Price	AK651500	Price
15.5mm	.6100	AK661550	Price	AK673F1550	Price	AK651550	Price
16mm	.6300	AK661600	Price	AK673F1600	Price	AK651600	Price
16.5mm	.6500	AK661650	Price	AK673F1650	Price	AK651650	Price
17mm	.6990	AK661700	Price	AK673F1700	Price	AK651700	Price
17.5mm	.6890	AK661750	Price	AK673F1750	Price	AK651750	Price
18mm	.7810	AK661800	Price	AK673F1800	Price	AK651800	Price
18.5mm	.7280	AK661850	Price	AK673F1850	Price	AK651850	Price
19mm	.7480	AK661900	Price	AK673F1900	Price	-	-
19.5mm	.7680	AK661950	Price	AK673F1950	Price	-	-
20mm	.7870	AK662000	Price	AK673F2000	Price	-	-
21mm	.8270	AK662100	Price	AK673F2100	Price	AK652100	Price
22mm	.8660	AK662200	Price	AK673F2200	Price	AK652200	Price
23mm	.9060	AK662300	Price	AK673F2300	Price	AK652300	Price
23.5mm	.9252	AK662350	Price	-	-	-	-
24mm	.9450	AK662400	Price	AK673F2400	Price	AK652400	Price
24.5mm	.9646	AK662450	Price	-	-	-	-
25mm	.9740	AK662500	Price	AK673F2500	Price	-	-

PROCUT 3/4" Shank Drills

High Speed Steel & Cobalt Heavy Duty • 118° Standard Point

- 3" Flute length
- 6" Overall length
- High speed steel is good for drilling in low and medium strength materials
- Cobalt is good for drilling in tough, high tensile strength materials
- Designed for use on for Bridgeports, boring mill and screw machine operations



	Cobalt		High Speed Steel	
Size (in.)	Order No.	Price	Order No.	Price
25/32	AK75050	Price	AK54050	Price
13/16	AK75052	Price	AK54052	Price
27/32	AK75054	Price	AK54054	Price
7/8	AK75056	Price	AK54056	Price
29/32	AK75058	Price	AK54058	Price
15/16	AK75060	Price	AK54060	Price
31/32	AK75062	Price	AK54062	Price
1	AK75100	Price	AK54100	Price
1-1/32	AK75102	Price	AK54102	Price
1-1/16	AK75104	Price	AK54104	Price
1-3/32	AK75106	Price	AK54106	Price
1-1/8	AK75108	Price	AK54108	Price
1-5/32	AK75110	Price	AK54110	Price
1-3/16	AK75112	Price	AK54112	Price
1-1/4	AK75116	Price	AK54116	Price
1-9/32	AK75118	Price	AK54118	Price
1-5/16	AK75120	Price	AK54120	Price
1-11/32	AK75122	Price	AK54122	Price
1-3/8	AK75124	Price	AK54124	Price
1-13/32	AK75126	Price	-	-
1-7/16	AK75128	Price	AK54128	Price
1-15/32	-	-	AK54130	Price
1-1/2	AK75132	Price	AK54132	Price
1-17/32	AK75134	Price	AK54134	Price
1-9/16	AK75136	Price	AK54136	Price
1-19/32	-	-	AK54138	Price
1-5/8	AK75140	Price	AK54140	Price
1-21/32	-	-	AK54142	Price
1-11/16	AK75144	Price	AK54144	Price
1-23/32	-	-	AK54146	Price
1-3/4	AK75148	Price	AK54148	Price
1-25/32	-	-	AK54150	Price
1-13/16	-	-	AK54152	Price
1-27/32	-	-	AK54154	Price
1-7/8	AK75156	Price	AK54156	Price
1-15/16	AK75160	Price	AK54160	Price
1-31/32	-	-	AK54162	Price
2	AK75200	Price	AK54200	Price

HSS MORSE GP Ambore™ Mechanic Length Drills

High Speed Steel • 135° Split Point • 3/8" Reduced Shank

- Gold and black finish
- Shorter length — in-between a jobber and screw machine length
- 3/8" Reduced shank on sizes over 13/32"
- 135° Self-centering split point eliminates "walking" and reduces thrust
- 3/16" And above feature 3-flats on shank
- Morse List #1383



Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	.0625	7/8	1-7/8	MT0715303	Price
5/64	.0781	1	2	MT0715304	Price
3/32	.0938	1-1/4	2-1/4	MT0715305	Price
7/64	.1094	1-5/16	2-3/8	MT0715306	Price
1/8	.1250	1-7/16	2-1/2	MT0715307	Price
9/64	.1406	1-9/16	2-5/8	MT0715308	Price
5/32	.1562	1-11/16	2-3/4	MT0715309	Price
11/64	.1719	1-13/16	2-7/8	MT0715310	Price
3/16	.1875	1-7/8	3	MT0715311	Price
13/64	.2031	1-15/16	3-1/8	MT0715312	Price
7/32	.2188	2	3-1/4	MT0715313	Price
15/64	.2344	2-1/16	3-3/8	MT0715314	Price
1/4	.2500	2	3-1/2	MT0715315	Price
17/64	.2656	2-1/8	3-5/8	MT0715316	Price
9/32	.2812	2-1/4	3-3/4	MT0715317	Price
19/64	.2969	2-3/8	3-7/8	MT0715318	Price
5/16	.3125	2-1/2	4	MT0715319	Price
21/64	.3281	2-9/16	4-1/16	MT0715320	Price
11/32	.3438	2-5/8	4-1/8	MT0715321	Price
23/64	.3594	2-11/16	4-3/16	MT0715322	Price
3/8	.3750	2-11/16	4-1/4	MT0715323	Price
25/64	.3906	2-3/4	4-5/16	MT0715324	Price
13/32	.4062	2-13/16	4-3/8	MT0715325	Price
27/64	.4219	2-7/8	4-7/16	MT0715326	Price
7/16	.4375	2-15/16	4-1/2	MT0715327	Price
29/64	.4531	3	4-5/8	MT0715328	Price
15/32	.4688	3-1/8	4-3/4	MT0715329	Price
31/64	.4844	3-1/4	4-7/8	MT0715330	Price
1/2	.5000	3-3/8	5	MT0715331	Price

8 Pc. 1/2" Reduced Shank Drill Sets

Each set includes: 9/16”, 5/8”, 11/16”, 3/4”, 13/16”, 7/8”, 15/16” & 1”



Brand	Case Type	Material	Order No.	Price
RAPIDKUT	Folding Plastic Case	Cobalt	**AK40C08CO**	Price
	Folding Plastic Case	High Speed Steel	**AK50S07HS**	Price
HSS M GP	Metal Index	High Speed Steel	**MT1218109**	Price
	Metal Index	High Speed Steel	**MT1218110†**	Price
PRECISION	Folding Plastic Case	Cobalt	**PT2790328**	Price
	Plastic Case	High Speed Steel	**PT2790556**	Price
PROCUT	Wooden Case	High Speed Steel	**AK81008**	Price
	Wooden Case	Cobalt	**AK81SET8CO**	Price

† 3-Flat shanks - split point

13 Pc. 1/2" Reduced Shank Drill Sets

Each set includes: 17/32”, 9/16”, 19/32”, 5/8”, 21/32”, 11/16”, 23/32”, 3/4”, 13/16”, 7/8”, 15/16”, 31/32” & 1”



Brand	Case	Set Material	Order No.	Price
PROCUT	Wooden Stand	Cobalt	**AK50S13CO**	Price
	Wooden Stand	High Speed Steel	**AK81013**	Price
RAPIDKUT	Wooden Stand	High Speed Steel	**AK50S13HS**	Price

PROCUT 5 Pc. 3/4" Reduced Shank Drill Set

- High speed steel
- Silver & Deming
- Set includes: 1”, 1-1/8”, 1-1/4”, 1-3/8” & 1-1/2”, in wooden stand



Order No.	Price
AK81S05	Price

32 Pc. 1/2" Reduced Shank Drill Sets

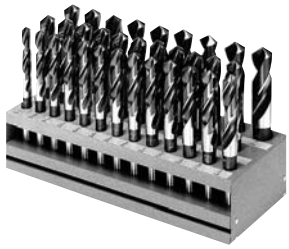
- Sets include sizes: 33/64” - 1” x 64ths
- Sets include wooden stand



Brand	Set Material	Order No.	Price
RAPIDKUT	Cobalt	**AK50C32C0**	Price
PROCUT	Cobalt	**AK50S32CO**	Price
RAPIDKUT	High Speed Steel	**AK50S32HS**	Price
PROCUT	High Speed Steel	**AK81032**	Price

33 Pc. 1/2" Reduced Shank Drill Sets

Sets includes sizes: 1/2” - 1” x 64ths



Brand	Case	Set Material	Order No.	Price
HSS M GP	Metal Index	High Speed Steel	**MT1218111†**	Price
	Metal Index	High Speed Steel	**MT1218112**	Price
PRECISION	Plastic Stand	High Speed Steel	**PT2790231**	Price

† 3-Flat shanks - split point

PROCUT 5 Pc. 1/2" Reduced Shank Drill Set

- Cobalt
- Silver & Deming
- Set includes: 9/16”, 5/8”, 3/4”, 7/8” & 1”, in wooden case



Order No.	Price
AK81SET5CO	Price

PROCUT 8 Pc. "Big Boy" 1/2" Reduced Shank Drill Set

- High speed steel
- Silver & Deming
- Set includes: 1-1/16”, 1-1/8”, 1-3/16”, 1-1/4”, 1-5/16”, 1-3/8”, 1-7/16” & 1-1/2”, in wooden stand



Order No.	Price
AK81S08	Price

3/8" Shank Jobber Drills

High Speed Steel

- Extend the range of 3/8" chuck tools
- Ground from solid M-2



Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
25/64	2-3/4	5-1/4	**AK60025**	Price
13/32	3-1/4	5-1/4	**AK60026**	Price
27/64	3-1/2	5-1/2	**AK60027**	Price
7/16	3-1/2	5-1/2	**AK60028**	Price
29/64	3-1/2	5-1/2	**AK60029**	Price
15/32	3-1/2	5-1/2	**AK60030**	Price
31/64	3-1/2	5-3/4	**AK60031**	Price
1/2	4	6	**AK60032**	Price

Straight Shank Drills — 8" and 10" Overall Length

High Speed Steel • 118° Point

- For general purpose drilling in applications where extra reach is required
- See index for extra long taper shank drills
- Precision Twist List #0860



	Precision Twist Drill		ProCut			
	8" OAL		8" OAL		10" OAL	
	6" Flute Length		6" Flute Length		8" Flute Length	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8	**PT2357408**	Price	**AM50008**	Price	**AM51008**	Price
9/64	**-**	-	**AM50009**	Price	**AM51009**	Price
5/32	**PT2357410**	Price	**AM50010**	Price	**AM51010**	Price
11/64	**-**	-	**AM50011**	Price	**AM51011**	Price
3/16	**PT2357412**	Price	**AM50012**	Price	**AM51012**	Price
13/64	**-**	-	**AM50013**	Price	**AM51013**	Price
7/32	**PT2357414**	Price	**AM50014**	Price	**AM51014**	Price
15/64	**-**	-	**AM50015**	Price	**AM51015**	Price
1/4	**PT2357416**	Price	**AM50016**	Price	**AM51016**	Price
17/64	**-**	-	**AM50017**	Price	**AM51017**	Price
9/32	**PT2357418**	Price	**AM50018**	Price	**AM51018**	Price
19/64	**-**	-	**AM50019**	Price	**AM51019**	Price
5/16	**PT2357420**	Price	**AM50020**	Price	**AM51020**	Price
21/64	**-**	-	**AM50021**	Price	**AM51021**	Price
11/32	**PT2357422**	Price	**AM50022**	Price	**AM51022**	Price
23/64	**-**	-	**AM50023**	Price	**AM51023**	Price
3/8	**PT2357424**	Price	**AM50024**	Price	**AM51024**	Price
25/64	**-**	-	**AM50025**	Price	**AM51025**	Price
13/32	**PT2357426**	Price	**AM50026**	Price	**AM51026**	Price
27/64	**-**	-	**AM50027**	Price	**AM51027**	Price
7/16	**PT2357428**	Price	**AM50028**	Price	**AM51028**	Price
29/64	**-**	-	**AM50029**	Price	**AM51029**	Price
15/32	**PT2357430**	Price	**AM50030**	Price	**AM51030**	Price
31/64	**-**	-	**AM50031**	Price	**AM51031**	Price
1/2	**PT2357432**	Price	**AM50032**	Price	**AM51032**	Price

Double End Body Drills

High Speed Steel

- For drilling auto bodies or any thin sheet metal
- 135° Split point
- Self centering

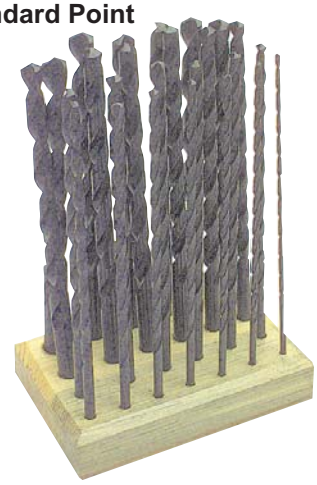


Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
7/64	1/2	1-7/8	**AC62D007**	Price
1/8	1/2	2	**AC62D008**	Price
3/16	1/2	2-3/16	**AC62D012**	Price
# 20	1/2	2-1/8	**AC62D120**	Price
# 30	1/2	2	**AC62D130**	Price

PROCUT Extra Long Straight Shank Drill Sets

High Speed Steel • 118° Standard Point

- 8", 12" & 18" Overall length
- Supplied in drill stand



Set Range	No. of Drills	Order No.	Price
1/8" - 1/2" by 64ths (OAL - 8")	25	**AP50XL20**	Price
1/8" - 1/2" by 64ths (OAL - 12")	25	**AP50XL25**	Price

Need a special length? We stock many additional lengths not shown – 6", 9", 14", 16" overall lengths. Call with your inquiry!

PROCUT Extra Long Straight Shank Drills

24" Overall Length, 18" Flute Length

Size (in.)	Order No.	Price
5/16	**AM54020**	Price
3/8	**AM54024**	Price
7/16	**AM54028**	Price
1/2	**AM54032**	Price
9/16	**AM54036**	Price
5/8	**AM54040**	Price
3/4	**AM54048**	Price
1	**AM54100**	Price

Extra Long Straight Shank Drills — 12", 15" & 18" Overall Lengths

High Speed Steel • 118° Standard Point

- For general purpose drilling in applications where extra reach is required
- See index for extra long taper shank drills
- Precision Twist List #1290 (12" OAL) - 1511 (15" OAL) - 1813 (18" OAL)



	Precision Twist Drill						ProCut					
	12" OAL		15" OAL		18" OAL		12" OAL		15" OAL		18" OAL	
	9" Flute Length		11" Flute Length		13" Flute Length		9" Flute Length		11" Flute Length		13" Flute Length	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	PT2359608	Price	-	-	-	-	AM52008	Price	AM58008	Price	AM53008	Price
9/64	PT2359609	Price	-	-	-	-	AM52009	Price	-	-	-	-
5/32	PT2359610	Price	-	-	-	-	AM52010	Price	-	-	AM53010	Price
11/64	PT2359611	Price	-	-	-	-	AM52011	Price	-	-	-	-
3/16	PT2359612	Price	PT2359512	Price	-	-	AM52012	Price	AM58012	Price	AM53012	Price
13/64	PT2359613	Price	-	-	-	-	AM52013	Price	-	-	AM53013	Price
7/32	PT2359614	Price	-	-	-	-	AM52014	Price	-	-	AM53014	Price
15/64	PT2359615	Price	-	-	-	-	AM52015	Price	-	-	AM53015	Price
1/4	PT2359616	Price	PT2359516	Price	PT2359716	Price	AM52016	Price	AM58016	Price	AM53016	Price
17/64	PT2359617	Price	-	-	PT2359717	Price	AM52017	Price	-	-	AM53017	Price
9/32	PT2359618	Price	-	-	PT2359718	Price	AM52018	Price	-	-	AM53018	Price
19/64	PT2359619	Price	-	-	PT2359719	Price	AM52019	Price	AM58019	Price	AM53019	Price
5/16	PT2359620	Price	PT2359520	Price	PT2359720	Price	AM52020	Price	-	-	AM53020	Price
21/64	PT2359621	Price	-	-	PT2359721	Price	AM52021	Price	-	-	AM53021	Price
11/32	PT2359622	Price	PT2359522	Price	PT2359722	Price	AM52022	Price	AM58022	Price	AM53022	Price
23/64	PT2359623	Price	-	-	PT2359723	Price	AM52023	Price	-	-	AM53023	Price
3/8	PT2359624	Price	PT2359524	Price	PT2359724	Price	AM52024	Price	-	-	AM53024	Price
25/64	PT2359625	Price	-	-	PT2359725	Price	AM52025	Price	-	-	AM53025	Price
13/32	PT2359626	Price	-	-	PT2359726	Price	AM52026	Price	AM58026	Price	AM53026	Price
27/64	PT2359627	Price	-	-	PT2359727	Price	AM52027	Price	AM58027	Price	AM53027	Price
7/16	PT2359628	Price	PT2359528	Price	PT2359728	Price	AM52028	Price	AM58028	Price	AM53028	Price
29/64	PT2359629	Price	-	-	PT2359729	Price	AM52029	Price	-	-	AM53029	Price
15/32	PT2359630	Price	-	-	PT2359730	Price	AM52030	Price	AM58030	Price	AM53030	Price
31/64	PT2359631	Price	-	-	PT2359731	Price	AM52031	Price	-	-	AM53031	Price
1/2	PT2359632	Price	PT2359532	Price	PT2359732	Price	AM52032	Price	AM58032	Price	AM53032	Price
33/64	PT2359633	Price	-	-	PT2359733	Price	AM52033	Price	AM58033	Price	AM53033	Price
17/32	PT2359634	Price	PT2359534	Price	PT2359734	Price	AM52034	Price	-	-	AM53034	Price
35/64	PT2359635	Price	-	-	PT2359735	Price	AM52035	Price	-	-	AM53035	Price
9/16	PT2359636	Price	PT2359536	Price	PT2359736	Price	AM52036	Price	AM58036	Price	AM53036	Price
37/64	PT2359637	Price	-	-	PT2359737	Price	AM52037	Price	-	-	AM53037	Price
19/32	PT2359638	Price	-	-	PT2359738	Price	AM52038	Price	-	-	AM53038	Price
39/64	PT2359639	Price	-	-	PT2359739	Price	AM52039	Price	-	-	AM53039	Price
5/8	PT2359640	Price	PT2359540	Price	PT2359740	Price	AM52040	Price	AM58040	Price	AM53040	Price
41/64	-	-	-	-	-	-	AM52041	Price	-	-	-	-
21/32	PT2359642	Price	PT2359542	Price	PT2359742	Price	AM52042	Price	AM58042	Price	AM53042	Price
43/64	-	-	-	-	-	-	AM52043	Price	-	-	AM53043	Price
11/16	PT2359644	Price	PT2359544	Price	PT2359744	Price	AM52044	Price	-	-	AM53044	Price
45/64	-	-	-	-	-	-	AM52045	Price	-	-	-	-
23/32	PT2359646	Price	PT2359546	Price	PT2359746	Price	AM52046	Price	-	-	-	-
47/64	-	-	-	-	-	-	AM52047	Price	-	-	-	-
3/4	PT2359648	Price	PT2359548	Price	PT2359748	Price	AM52048	Price	-	-	AM53048	Price
49/64	-	-	-	-	-	-	AM52049	Price	-	-	AM53049	Price
25/32	-	-	PT2359550	Price	PT2359750	Price	AM52050	Price	AM58050	Price	AM53050	Price
51/64	-	-	-	-	-	-	-	-	-	-	AM53051	Price
13/16	-	-	PT2359552	Price	PT2359752	Price	AM52052	Price	-	-	AM53052	Price
53/64	-	-	-	-	-	-	AM52053	Price	-	-	AM53053	Price
27/32	-	-	-	-	-	-	AM52054	Price	-	-	AM53054	Price
55/64	-	-	-	-	-	-	AM52055	Price	-	-	AM53055	Price
7/8	-	-	PT2359554	Price	PT2359756	Price	AM52056	Price	AM58056	Price	AM53056	Price
57/64	-	-	-	-	-	-	-	-	-	-	AM53057	Price
29/32	-	-	-	-	-	-	AM52058	Price	-	-	AM53058	Price
59/64	-	-	-	-	-	-	-	-	-	-	AM53059	Price
15/16	-	-	PT2359556	Price	PT2359760	Price	AM52060	Price	AM58060	Price	AM53060	Price
61/64	-	-	-	-	-	-	AM52061	Price	-	-	AM53061	Price
31/32	-	-	-	-	-	-	AM52062	Price	-	-	AM53062	Price
63/64	-	-	-	-	-	-	AM52063	Price	-	-	AM53063	Price
1	-	-	PT2359558	Price	-	-	AM52100	Price	-	-	AM53100	Price
1-7/16	-	-	-	-	-	-	-	-	-	-	AM53128	Price

V-Series Helios Drills

Cobalt-HSS • 10xD, 15xD, 20xD

- Capable of non-peck drilling up to 20xD without an internal coolant supply
- Compound flute lead construction
- 120° Point



- WXL® coating
- OSG List #1750

- 10xD Premium Cobalt HSS Drill

Size	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
5/64	.0780	5/64	26mm	75mm	**TP3117542411**	Price
2mm	.0787	2mm	26mm	75mm	**TP318622820**	Price
3/32	.0937	3/32	33mm	75mm	**TP3117543111**	Price
2.5mm	.0984	2.5mm	33mm	75mm	**TP318622825**	Price
7/64	.1094	7/64	40mm	90mm	**TP3117543811**	Price
3mm	.1181	3mm	40mm	90mm	**TP318622830**	Price
1/8	.1252	1/8	45mm	100mm	**TP3117544411**	Price
3.5mm	.1378	3.5mm	50mm	100mm	**TP318622835**	Price
9/64	.1406	9/64	50mm	100mm	**TP3117544711**	Price
5/32	.1563	5/32	50mm	100mm	**TP3117545311**	Price
4mm	.1575	4mm	50mm	100mm	**TP318622840**	Price
11/64	.1720	11/64	60mm	115mm	**TP3117545911**	Price
4.5mm	.1772	4.5mm	60mm	115mm	**TP318622845**	Price
3/16	.1874	3/16	65mm	115mm	**TP3117546511**	Price
5mm	.1969	5mm	65mm	115mm	**TP318622850**	Price
13/64	.2031	13/64	70mm	128mm	**TP3117547211**	Price
5.5mm	.2165	5.5mm	78mm	128mm	**TP318622855**	Price
7/32	.2189	7/32	78mm	128mm	**TP3117547711**	Price
15/64	.2343	15/64	78mm	128mm	**TP3117548111**	Price
6mm	.2362	6mm	78mm	128mm	**TP318622860**	Price
1/4, E	.2500	1/4	87mm	140mm	**TP3117548511**	Price
6.5mm	.2559	6.5mm	87mm	140mm	**TP318622865**	Price
17/64	.2657	17/64	90mm	140mm	**TP3117548811**	Price
7mm	.2756	7mm	90mm	140mm	**TP318622870**	Price
9/32	.2812	9/32	100mm	155mm	**TP3117549111**	Price
7.5mm	.2953	7.5mm	100mm	155mm	**TP318622875**	Price
19/64	.2969	19/64	105mm	155mm	**TP3117549411**	Price
5/16	.3125	5/16	105mm	155mm	**TP3117549611**	Price
8mm	.3150	8mm	105mm	155mm	**TP318622880**	Price
21/64	.3281	21/64	110mm	165mm	**TP3117549911**	Price
8.5mm	.3346	8.5mm	110mm	165mm	**TP318622885**	Price
11/32	.3438	11/32	115mm	165mm	**TP3117550211**	Price
9mm	.3543	9mm	115mm	165mm	**TP318622890**	Price
23/64	.3594	23/64	125mm	190mm	**TP3117550511**	Price
9.5mm	.3740	9.5mm	125mm	190mm	**TP318622895**	Price
3/8	.3750	3/8	130mm	190mm	**TP3117550711**	Price
25/64	.3906	25/64	130mm	190mm	**TP3117551011**	Price
10mm	.3937	10mm	130mm	190mm	**TP318622900**	Price
13/32	.4062	13/32	140mm	205mm	**TP3117551311**	Price
10.5mm	.4134	10.5mm	140mm	205mm	**TP318622905**	Price
27/64	.4219	27/64	145mm	205mm	**TP3117551511**	Price
11mm	.4331	11mm	145mm	205mm	**TP318622910**	Price
7/16	.4375	7/16	155mm	215mm	**TP3117551611**	Price
11.5mm	.4528	11.5mm	155mm	215mm	**TP318622915**	Price
29/64	.4531	29/64	155mm	215mm	**TP3117551711**	Price
15/32	.4688	15/32	155mm	215mm	**TP3117551811**	Price
12mm	.4724	12mm	155mm	215mm	**TP318622920**	Price
1/2	.5000	1/2	160mm	220mm	**TP3117552011**	Price
17/32	.5313	17/32	175mm	225mm	**TP3117525111**	Price
9/16	.5625	9/16	186mm	236mm	**TP3117525311**	Price
45/64	.7031	45/64	233mm	283mm	**TP3117525511**	Price

- 15xD Premium Cobalt HSS Drill

Size	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
2mm	.0787	2mm	36mm	80mm	**TP318623020**	Price
2.5mm	.0984	2.5mm	46mm	85mm	**TP318623025**	Price
7/64	.1094	7/64	50mm	100mm	**TP3117503811**	Price
3mm	.1181	3mm	54mm	105mm	**TP318623030**	Price
1/8	.1250	1/8	58mm	110mm	**TP3117504411**	Price
3.5mm	.1378	3.5mm	64mm	115mm	**TP318623035**	Price
9/64	.1406	9/64	64mm	115mm	**TP3117504711**	Price
5/32	.1562	5/32	72mm	120mm	**TP3117505311**	Price
4mm	.1575	4mm	72mm	120mm	**TP318623040**	Price
11/64	.1719	11/64	78mm	140mm	**TP3117505911**	Price
4.5mm	.1772	4.5mm	82mm	140mm	**TP318623045**	Price

- 15xD Premium Cobalt HSS Drill

Size	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
3/16	.1875	3/16	86mm	145mm	**TP3117506511**	Price
5mm	.1969	5mm	90mm	150mm	**TP318623050**	Price
13/64	.2031	13/64	92mm	150mm	**TP3117507211**	Price
5.5mm	.2165	5.5mm	100mm	155mm	**TP318623055**	Price
7/32	.2188	7/32	100mm	155mm	**TP3117507711**	Price
15/64	.2344	15/64	108mm	170mm	**TP3117508111**	Price
6mm	.2362	6mm	108mm	170mm	**TP318623060**	Price
1/4, E	.2500	1/4	114mm	175mm	**TP3117508511**	Price
6.5mm	.2559	6.5mm	118mm	200mm	**TP318623065**	Price
17/64	.2656	17/64	120mm	200mm	**TP3117508811**	Price
7mm	.2756	7mm	126mm	200mm	**TP318623070**	Price
9/32	.2812	9/32	130mm	205mm	**TP3117509111**	Price
7.5mm	.2953	7.5mm	136mm	205mm	**TP318623075**	Price
19/64	.2969	19/64	136mm	205mm	**TP3117509411**	Price
5/16	.3125	5/16	144mm	215mm	**TP3117509611**	Price
8mm	.3150	8mm	144mm	215mm	**TP318623080**	Price
21/64	.3281	21/64	150mm	220mm	**TP3117509911**	Price
8.5mm	.3346	8.5mm	154mm	225mm	**TP318623085**	Price
11/32	.3438	11/32	160mm	230mm	**TP3117510211**	Price
9mm	.3504	9mm	162mm	230mm	**TP318623090**	Price
23/64	.3594	23/64	165mm	235mm	**TP3117510511**	Price
3/8	.3750	3/8	172mm	240mm	**TP3117510711**	Price
25/64	.3906	25/64	180mm	250mm	**TP3117511011**	Price
10mm	.3937	10mm	180mm	250mm	**TP318623100**	Price
13/32	.4062	13/32	185mm	260mm	**TP3117511311**	Price
27/64	.4219	27/64	195mm	275mm	**TP3117511511**	Price
11mm	.4331	11mm	200mm	280mm	**TP318623110**	Price
7/16	.4375	7/16	200mm	280mm	**TP3117511611**	Price
11.5mm	.4528	11.5mm	208mm	290mm	**TP318623115**	Price
29/64	.4531	29/64	210mm	290mm	**TP3117511711**	Price
15/32	.4688	15/32	215mm	295mm	**TP3117511811**	Price
12mm	.4724	12mm	216mm	300mm	**TP318623120**	Price
1/2	.5000	1/2	230mm	310mm	**TP3117512011**	Price
17/32	.5313	17/32	243mm	293mm	**TP3117525711**	Price
9/16	.5625	9/16	257mm	307mm	**TP3117525911**	Price
45/64	.7031	45/64	322mm	372mm	**TP3117526111**	Price

- 20xD Premium Cobalt HSS Drill

Size	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
5/64	.0780	5/64	46mm	85mm	**TP3117515311**	Price
2mm	.0787	2mm	46mm	85mm	**TP318623220**	Price
3/32	.0937	3/32	56mm	95mm	**TP3117516011**	Price
2.5mm	.0984	2.5mm	58mm	100mm	**TP318623225**	Price
7/64	.1094	7/64	66mm	115mm	**TP3117516711**	Price
3mm	.1181	3mm	70mm	120mm	**TP318623230**	Price
1/8	.1250	1/8	74mm	125mm	**TP3117517311**	Price
3.5mm	.1378	3.5mm	82mm	130mm	**TP318623235**	Price
9/64	.1406	9/64	82mm	130mm	**TP3117517611**	Price
5/32	.1562	5/32	92mm	140mm	**TP3117518211**	Price
4mm	.1575	4mm	92mm	140mm	**TP318623240**	Price
11/64	.1719	11/64	100mm	160mm	**TP3117518811**	Price
3/16	.1875	3/16	110mm	170mm	**TP3117519411**	Price
5mm	.1969	5mm	116mm	175mm	**TP318623250**	Price
13/64	.2031	13/64	120mm	180mm	**TP3117520111**	Price
5.5mm	.2165	5.5mm	128mm	185mm	**TP318623255**	Price
7/32	.2188	7/32	128mm	185mm	**TP3117520611**	Price
15/64	.2344	15/64	138mm	200mm	**TP3117521011**	Price
6mm	.2362	6mm	138mm	200mm	**TP318623260**	Price
1/4, E	.2500	1/4	146mm	200mm	**TP3117521411**	Price
6.5mm	.2559	6.5mm	150mm	225mm	**TP318623265**	Price
17/64	.2656	17/64	156mm	225mm	**TP3117521711**	Price
7mm	.2756	7mm	162mm	230mm	**TP318623270**	Price
9/32	.2812	9/32	164mm	235mm	**TP3117522011**	Price
7.5mm	.2953	7.5mm	174mm	245mm	**TP318623275**	Price
19/64	.2969	19/64	174mm	245mm	**TP3117522311**	Price
5/16	.3125	5/16	184mm	255mm	**TP3117522511**	Price
8mm	.3150	8mm	184mm	255mm	**TP318623280**	Price
21/64	.3281	21/64	192mm	260mm	**TP3117522811**	Price
8.5mm	.3346	8.5mm	196mm	265mm	**TP318623285**	Price
11/32	.3438	11/32	200mm	270mm	**TP3117523111**	Price
9mm	.3543	9mm	208mm	275mm	**TP318623290**	Price
23/64	.3594	23/64	210mm	275mm	**TP3117523411**	Price
3/8	.3750	3/8	220mm	290mm	**TP3117523611**	Price
25/64	.3906	25/64	230mm	300mm	**TP3117523911**	Price
10mm	.3937	10mm	230mm	300mm	**TP318623300**	Price
13/32	.4062	13/32	238mm	300mm	**TP3117524211**	Price
27/64	.4219	27/64	246mm	340mm	**TP3117524411**	Price
11mm	.4331	11mm	254mm	350mm	**TP318623310**	Price
7/16	.4375	7/16	255mm	350mm	**TP3117524511**	Price
29/64	.4531	29/64	265mm	350mm	**TP3117524611**	Price
15/32	.4688	15/32	274mm	350mm	**TP3117524711**	Price
12mm	.4724	12mm	276mm	350mm	**TP318623320**	Price
1/2	.5000	1/2	292mm	360mm	**TP3117524911**	Price
17/32	.5313	17/32	310mm	360mm	**TP3117526311**	Price
9/16	.5625	9/16	328mm	378mm	**TP3117526511**	Price

Taper Shank Drills

High Speed Steel • 118° Standard Point • Surface Treated



- Standard and alternate shanks shown
- High production drilling in a wide variety of materials
- Morse List #1302
- Precision Twist List #209, S209, L209

				Morse Cutting Tools		Precision Twist Drill	
Size (in.)	Flute Length (in.)	Overall Length (in.)	Taper Shank	Order No.	Price	Order No.	Price
1/8	1-7/8	5-1/8	1 MT	**MT1610008**	Price	**PT2620008**	Price
9/64	2-1/8	5-3/8	1 MT	**MT1610009**	Price	**PT2620009**	Price
5/32	2-1/8	5-3/8	1 MT	**MT1610010**	Price	**PT2620010**	Price
11/64	2-1/2	5-3/4	1 MT	**MT1610011**	Price	**PT2620011**	Price
3/16	2-1/2	5-3/4	1 MT	**MT1610012**	Price	**PT2620012**	Price
13/64	2-3/4	6	1 MT	**MT1610013**	Price	**PT2620013**	Price
7/32	2-3/4	6	1 MT	**MT1610014**	Price	**PT2620014**	Price
15/64	2-7/8	6-1/8	1 MT	**MT1610015**	Price	**PT2620015**	Price
1/4	2-7/8	6-1/8	1 MT	**MT1610016**	Price	**PT2620016**	Price
17/64	3	6-1/4	1 MT	**MT1610017**	Price	**PT2620017**	Price
9/32	3	6-1/4	1 MT	**MT1610018**	Price	**PT2620018**	Price
19/64	3-1/8	6-3/8	1 MT	**MT1610019**	Price	**PT2620019**	Price
5/16	3-1/8	6-3/8	1 MT	**MT1610020**	Price	**PT2620020**	Price
21/64	3-1/4	6-1/2	1 MT	**MT1610021**	Price	**PT2620021**	Price
11/32	3-1/4	6-1/2	1 MT	**MT1610022**	Price	**PT2620022**	Price
23/64	3-1/2	6-3/4	1 MT	**MT1610023**	Price	**PT2620023**	Price
3/8	3-1/2	6-3/4	1 MT	**MT1610024**	Price	**PT2620024**	Price
3/8	3-1/2	7-3/8	2 MT	**-**	-	**PT2622524†**	Price
25/64	3-5/8	7	1 MT	**MT1610025**	Price	**PT2620025**	Price
13/32	3-5/8	7	1 MT	**MT1610026**	Price	**PT2620026**	Price
27/64	3-7/8	7-1/4	1 MT	**MT1610027**	Price	**PT2620027**	Price
7/16	3-7/8	7-1/4	1 MT	**MT1610028**	Price	**PT2620028**	Price
29/64	4-1/8	7-1/2	1 MT	**MT1610029**	Price	**PT2620029**	Price
15/32	4-1/8	7-1/2	1 MT	**MT1610030**	Price	**PT2620030**	Price
31/64	4-3/8	8-1/4	2 MT	**MT1610031**	Price	**PT2620031**	Price
1/2	4-3/8	7-3/4	1 MT	**-**	-	**PT2623032†**	Price
1/2	4-3/8	8-1/4	2 MT	**MT1610032**	Price	**PT2620032**	Price
33/64	4-5/8	8	1 MT	**-**	-	**PT2623033†**	Price
33/64	4-5/8	8-1/2	2 MT	**MT1610033**	Price	**PT2620033**	Price
17/32	4-5/8	8	1 MT	**-**	-	**PT2623034†**	Price
17/32	4-5/8	8-1/2	2 MT	**MT1610034**	Price	**PT2620034**	Price
35/64	4-7/8	8-1/4	1 MT	**-**	-	**PT2623035†**	Price
35/64	4-7/8	8-3/4	2 MT	**MT1610035**	Price	**PT2620035**	Price
9/16	4-7/8	8-1/4	1 MT	**MT1610213†**	Price	**PT2623036†**	Price
9/16	4-7/8	8-3/4	2 MT	**MT1610036**	Price	**PT2620036**	Price
37/64	4-7/8	8-3/4	2 MT	**MT1610037**	Price	**PT2620037**	Price
19/32	4-7/8	8-3/4	2 MT	**MT1610038**	Price	**PT2620038**	Price
39/64	4-7/8	8-3/4	2 MT	**MT1610039**	Price	**PT2620039**	Price
5/8	4-7/8	8-3/4	2 MT	**MT1610040**	Price	**PT2620040**	Price
41/64	5-1/8	9	2 MT	**MT1610041**	Price	**PT2620041**	Price
21/32	5-1/8	9	2 MT	**MT1610042**	Price	**PT2620042**	Price
43/64	5-3/8	9-1/4	2 MT	**MT1610043**	Price	**PT2620043**	Price
11/16	5-3/8	9-1/4	2 MT	**MT1610044**	Price	**PT2620044**	Price
45/64	5-5/8	9-1/2	2 MT	**MT1610045**	Price	**PT2620045**	Price
23/32	5-5/8	9-1/2	2 MT	**MT1610046**	Price	**PT2620046**	Price
47/64	5-7/8	9-3/4	2 MT	**MT1610047**	Price	**PT2620047**	Price
3/4	5-7/8	9-3/4	2 MT	**MT1610048**	Price	**PT2620048**	Price
49/64	6	9-7/8	2 MT	**MT1610049**	Price	**PT2620049**	Price
25/32	6	9-7/8	2 MT	**MT1610050**	Price	**PT2620050**	Price
51/64	6-1/8	10	2 MT	**-**	-	**PT2623051†**	Price
51/64	6-1/8	10-3/4	3 MT	**MT1610051**	Price	**PT2620051**	Price
13/16	6-1/8	10	2 MT	**-**	-	**PT2623052†**	Price
13/16	6-1/8	10-3/4	3 MT	**MT1610052**	Price	**PT2620052**	Price
53/64	6-1/8	10-3/4	3 MT	**MT1610053**	Price	**PT2620053**	Price
27/32	6-1/8	10	2 MT	**-**	-	**PT2623054†**	Price

				Morse Cutting Tools		Precision Twist Drill	
Size (in.)	Flute Length (in.)	Overall Length (in.)	Taper Shank	Order No.	Price	Order No.	Price
27/32	6-1/8	10-3/4	3 MT	**MT1610054**	Price	**PT2620054**	Price
55/64	6-1/8	10-3/4	3 MT	**MT1610055**	Price	**PT2620055**	Price
7/8	6-1/8	10	2 MT	**MT1610229†**	Price	**PT2623056†**	Price
7/8	6-1/8	10-3/4	3 MT	**MT1610056**	Price	**PT2620056**	Price
57/64	6-1/8	10-3/4	3 MT	**MT1610057**	Price	**PT2620057**	Price
29/32	6-1/8	10-3/4	3 MT	**MT1610058**	Price	**PT2620058**	Price
59/64	6-1/8	10-3/4	3 MT	**MT1610059**	Price	**PT2620059**	Price
15/16	6-1/8	10-3/4	3 MT	**MT1610060**	Price	**PT2620060**	Price
61/64	6-3/8	11	3 MT	**MT1610061**	Price	**PT2620061**	Price
31/32	6-3/8	11	3 MT	**MT1610062**	Price	**PT2620062**	Price
63/64	6-3/8	11	3 MT	**MT1610063**	Price	**PT2620063**	Price
1	6-3/8	11	3 MT	**MT1610064**	Price	**PT2620100**	Price
1-1/64	6-1/2	11-1/8	3 MT	**MT1610065**	Price	**PT2620101**	Price
1-1/32	6-1/2	11-1/8	3 MT	**MT1610066**	Price	**PT2620102**	Price
1-3/64	6-5/8	11-1/4	3 MT	**MT1610067**	Price	**PT2620103**	Price
1-1/16	6-5/8	11-1/4	3 MT	**MT1610068**	Price	**PT2620104**	Price
1-5/64	6-7/8	12-1/2	4 MT	**MT1610069**	Price	**PT2620105**	Price
1-3/32	6-7/8	11-1/2	3 MT	**-**	-	**PT2623106†**	Price
1-3/32	6-7/8	12-1/2	4 MT	**MT1610070**	Price	**PT2620106**	Price
1-7/64	7-1/8	11-3/4	3 MT	**-**	-	**PT2623107†**	Price
1-7/64	7-1/8	12-3/4	4 MT	**MT1610071**	Price	**PT2620107**	Price
1-1/8	7-1/8	11-3/4	3 MT	**-**	-	**PT2623108†**	Price
1-1/8	7-1/8	12-3/4	4 MT	**MT1610072**	Price	**PT2620108**	Price
1-9/64	7-1/4	11-7/8	3 MT	**-**	-	**PT2623109†**	Price
1-9/64	7-1/4	12-7/8	4 MT	**MT1610073**	Price	**PT2620109**	Price
1-5/32	7-1/4	11-7/8	3 MT	**-**	-	**PT2623110†**	Price
1-5/32	7-1/4	12-7/8	4 MT	**MT1610074**	Price	**PT2620110**	Price
1-11/64	7-3/8	12	3 MT	**-**	-	**PT2623111†**	Price
1-11/64	7-3/8	13	4 MT	**MT1610075**	Price	**PT2620111**	Price
1-3/16	7-3/8	12	3 MT	**-**	-	**PT2623112†**	Price
1-3/16	7-3/8	13	4 MT	**MT1610076**	Price	**PT2620112**	Price
1-13/64	7-1/2	12-1/8	3 MT	**MT1610243†**	Price	**PT2623113†**	Price
1-13/64	7-1/2	13-1/8	4 MT	**MT1610077**	Price	**-**	-
1-7/32	7-1/2	12-1/8	3 MT	**-**	-	**PT2623114†**	Price
1-7/32	7-1/2	13-1/8	4 MT	**MT1610078**	Price	**PT2620114**	Price
1-15/64	7-7/8	12-1/2	3 MT	**-**	-	**PT2623115†**	Price
1-15/64	7-7/8	13-1/2	4 MT	**MT1610079**	Price	**PT2620115**	Price
1-1/4	7-7/8	12-1/2	3 MT	**MT1610246†**	Price	**PT2623116†**	Price
1-1/4	7-7/8	13-1/2	4 MT	**MT1610080**	Price	**PT2620116**	Price
1-17/64	8-1/2	14-1/8	4 MT	**MT1610081**	Price	**PT2620117**	Price
1-9/32	8-1/2	14-1/8	4 MT	**MT1610082**	Price	**PT2620118**	Price
1-19/64	8-5/8	14-1/4	4 MT	**MT1610083**	Price	**PT2620119**	Price
1-5/16	8-5/8	14-1/4	4 MT	**MT1610084**	Price	**PT2620120**	Price
1-21/64	8-3/4	14-3/8	4 MT	**MT1610085**	Price	**PT2620121**	Price
1-11/32	8-3/4	14-3/8	4 MT	**MT1610086**	Price	**PT2620122**	Price
1-23/64	8-7/8	14-1/2	4 MT	**MT1610087**	Price	**-**	-
1-3/8	8-7/8	14-1/2	4 MT	**MT1610088**	Price	**PT2620124**	Price
1-25/64	9	14-5/8	4 MT	**MT1610089**	Price	**-**	-
1-13/32	9	14-5/8	4 MT	**MT1610090**	Price	**PT2620126**	Price
1-27/64	9-1/8	14-3/4	4 MT	**MT1610091**	Price	**PT2620127**	Price
1-7/16	9-1/8	14-3/4	4 MT	**MT1610092**	Price	**PT2620128**	Price
1-15/32	9-1/4	14-7/8	4 MT	**MT1610094**	Price	**PT2620130**	Price
1-31/64	9-3/8	15	4 MT	**MT1610095**	Price	**PT2620131**	Price
1-1/2	9-3/8	15	4 MT	**MT1610096**	Price	**PT2620132**	Price

(continued on next page)

Taper Shank Drills *(continued from previous page)*

High Speed Steel • 118° Standard Point • Surface Treated

- Standard and alternate shanks shown
- High production drilling in a wide variety of materials
- Morse List #1302
- Precision Twist List #209, S209, L209



				Morse Cutting Tools		Precision Twist Drill	
Size (in.)	Flute Length (in.)	Overall Length (in.)	Taper Shank	Order No.	Price	Order No.	Price
1-33/64	9-3/8	15	4 MT	-	-	**PT2623133**	Price
1-17/32	9-3/8	16-3/8	5 MT	**MT1610097**	Price	**PT2620134**	Price
1-35/64	9-5/8	15-1/4	4 MT	-	-	**PT2623135**	Price
1-9/16	9-5/8	15-1/4	4 MT	-	-	**PT2623136**	Price
1-9/16	9-5/8	16-5/8	5 MT	**MT1610098**	Price	**PT2620136**	Price
1-19/32	9-7/8	15-1/2	4 MT	-	-	**PT2623138**	Price
1-19/32	9-7/8	16-7/8	5 MT	**MT1610099**	Price	-	-
1-39/64	10	15-5/8	4 MT	-	-	**PT2623139**	Price
1-5/8	10	15-5/8	4 MT	-	-	**PT2623140**	Price
1-5/8	10	17	5 MT	**MT1610100**	Price	**PT2620140**	Price
1-21/32	10-1/8	15-3/4	4 MT	-	-	**PT2623142**	Price
1-21/32	10-1/8	17-1/8	5 MT	**MT1610101**	Price	-	-
1-11/16	10-1/8	15-3/4	4 MT	-	-	**PT2623144**	Price
1-11/16	10-1/8	17-1/8	5 MT	**MT1610102**	Price	**PT2620144**	Price
1-23/32	10-1/8	17-1/8	5 MT	**MT1610103**	Price	-	-
1-47/64	10-3/8	16-1/4	4 MT	-	-	**PT2623147**	Price
1-3/4	10-3/8	16-1/4	4 MT	-	-	**PT2623148**	Price
1-3/4	10-1/8	17-1/8	5 MT	**MT1610104**	Price	**PT2620148**	Price
1-25/32	10-3/8	16-1/4	4 MT	-	-	**PT2623150**	Price
1-25/32	10-1/8	17-1/8	5 MT	**MT1610105**	Price	-	-
1-13/16	10-1/8	17-1/8	5 MT	**MT1610106**	Price	**PT2620152**	Price
1-27/32	10-1/8	17-1/8	5 MT	**MT1610107**	Price	-	-

				Morse Cutting Tools		Precision Twist Drill	
Size (in.)	Flute Length (in.)	Overall Length (in.)	Taper Shank	Order No.	Price	Order No.	Price
1-7/8	10-1/2	16-1/2	4 MT	-	-	**PT2623156**	Price
1-7/8	10-3/8	17-3/8	5 MT	**MT1610108**	Price	**PT2620156**	Price
1-29/32	10-3/8	17-3/8	5 MT	**MT1610109**	Price	-	
Price	10-5/8	16-5/8	4 MT	-	-	**PT2623160**	Price
1-15/16	10-3/8	17-3/8	5 MT	**MT1610110**	Price	**PT2620160**	Price
1-31/32	10-5/8	16-5/8	4 MT	**MT1610269†**	Price	**PT2623162**	Price
1-31/32	10-3/8	17-3/8	5 MT	**MT1610111**	Price	-	-
2	10-5/8	16-5/8	4 MT	**MT1610270†**	Price	**PT2623200**	Price
2	10-3/8	17-3/8	5 MT	**MT1610112**	Price	**PT2620200**	Price
2-1/32	10-3/8	17-3/8	5 MT	**MT1610113**	Price	-	-
2-1/16	10-1/4	17-3/8	5 MT	**MT1610114**	Price	-	-
2-1/8	10-1/4	17-3/8	5 MT	**MT1610116**	Price	-	-
2-5/32	10-1/4	17-3/8	5 MT	**MT1610117**	Price	-	-
2-3/16	10-1/4	17-3/8	5 MT	**MT1610118**	Price	-	-
2-7/32	10-1/8	17-3/8	5 MT	**MT1610119**	Price	-	-
2-1/4	10-1/8	17-3/8	5 MT	**MT1610120**	Price	-	-
2-5/16	10-1/8	17-3/8	5 MT	**MT1610121**	Price	-	-
2-3/8	10-1/8	17-3/8	5 MT	**MT1610122**	Price	-	-
2-7/16	11-1/4	18-3/4	5 MT	**MT1610123**	Price	-	-
2-1/2	11-1/4	18-3/4	5 MT	**MT1610124**	Price	-	-

†Indicates smaller or larger shank than standard

Taper Shank Drills

High Speed Steel • 118° Standard Point • Surface Treated

- Standard and alternate shank available



				Generic USA		ProCut	
Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price	Order No.	Price
5/64	1-3/8	4-3/4	1 MT	-	-	**AA501005**	Price
1/8	1-7/8	5-1/8	1 MT	**AA401008**	Price	-	-
9/64	2-1/8	5-3/8	1 MT	-	-	**AA501009**	Price
5/32	2-1/8	5-3/8	1 MT	**AA401010**	Price	**AA501010**	Price
11/64	2-1/2	5-3/4	1 MT	**AA401011**	Price	**AA501011**	Price
3/16	2-1/2	5-3/4	1 MT	**AA401012**	Price	-	-
13/64	2-3/4	6	1 MT	**AA401013**	Price	-	-
7/32	2-3/4	6	1 MT	**AA401014**	Price	**AA501014**	Price
15/64	2-7/8	6-1/8	1 MT	**AA401015**	Price	**AA501015**	Price
1/4	2-7/8	6-1/8	1 MT	**AA401016**	Price	**AA501016**	Price
17/64	3	6-1/4	1 MT	**AA401017**	Price	**AA501017**	Price
9/32 (K)	3	6-1/4	1 MT	**AA401018**	Price	**AA501018**	Price
19/64	3-1/8	6-3/8	1 MT	**AA401019**	Price	**AA501019**	Price
5/16	3-1/8	6-3/8	1 MT	**AA401020**	Price	**AA501020**	Price
21/64	3-1/4	6-1/2	1 MT	**AA401021**	Price	**AA501021**	Price
11/32	3-1/4	6-1/2	1 MT	**AA401022**	Price	**AA501022**	Price
23/64	3-1/2	6-3/4	1 MT	**AA401023**	Price	**AA501023**	Price
3/8	3-1/2	6-3/4	1 MT	**AA401024**	Price	**AA501024**	Price

				Generic USA		ProCut	
Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price	Order No.	Price
3/8	3-1/2	7-3/8	2 MT	**AA402024†**	Price	**AA502024†**	Price
25/64	3-5/8	7	1 MT	**AA401025**	Price	**AA501025**	Price
25/64	3-5/8	7-1/2	2 MT	**AA402025†**	Price	**AA502025†**	Price
13/32	3-5/8	7	1 MT	**AA401026**	Price	**AA501026**	Price
13/32	3-5/8	7-1/2	2 MT	**AA402026†**	Price	**AA502026†**	Price
27/64	3-7/8	7-1/4	1 MT	**AA401027**	Price	**AA501027**	Price
27/64	3-7/8	7-3/4	2 MT	**AA402027†**	Price	**AA502027†**	Price
7/16	3-7/8	7-1/4	1 MT	**AA401028**	Price	**AA501028**	Price
7/16	3-7/8	7-3/4	2 MT	**AA402028†**	Price	**AA502028†**	Price
29/64	4-1/8	7-1/2	1 MT	**AA401029**	Price	**AA501029**	Price
29/64	4-1/8	8	2 MT	**AA402029†**	Price	**AA502029†**	Price
15/32	4-1/8	7-1/2	1 MT	**AA401030**	Price	**AA501030**	Price
15/32	4-1/8	8	2 MT	**AA402030†**	Price	**AA502030†**	Price
31/64	4-3/8	7-3/4	1 MT	**AA401031†**	Price	**AA501031†**	Price
31/64	4-3/8	8-1/4	2 MT	**AA402031**	Price	**AA502031**	Price
1/2	4-3/8	7-3/4	1 MT	**AA401032†**	Price	**AA501032†**	Price
1/2	4-3/8	8-1/4	2 MT	**AA402032**	Price	**AA502032**	Price
33/64	4-5/8	8	1 MT	**AA401033†**	Price	**AA501033†**	Price

Taper Shank Drills *(continued from previous page)*



High Speed Steel • 118° Standard Point • Surface Treated

- Standard and alternate shank available

				Generic USA		ProCut	
Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price	Order No.	Price
33/64	4-5/8	8-1/2	2 MT	**AA402033**	Price	**AA502033**	Price
17/32	4-5/8	8	1 MT	**AA401034†**	Price	**AA501034†**	Price
17/32	4-5/8	8-1/2	2 MT	**AA402034**	Price	**AA502034**	Price
35/64	4-7/8	8-1/4	1 MT	**AA401035†**	Price	**AA501035†**	Price
35/64	4-7/8	8-3/4	2 MT	**AA402035**	Price	**AA502035**	Price
9/16	4-7/8	8-1/4	1 MT	**AA401036†**	Price	**AA501036†**	Price
9/16	4-7/8	8-3/4	2 MT	**AA402036**	Price	**AA502036**	Price
37/64	4-7/8	8-1/4	1 MT	**-**	-	**AA501037†**	Price
37/64	4-7/8	8-3/4	2 MT	**AA402037**	Price	**AA502037**	Price
19/32	4-7/8	8-3/4	2 MT	**AA402038**	Price	**AA502038**	Price
39/64	4-7/8	8-3/4	2 MT	**AA402039**	Price	**AA502039**	Price
5/8	4-7/8	8-3/4	2 MT	**AA402040**	Price	**AA502040**	Price
41/64	5-1/8	9	2 MT	**AA402041**	Price	**AA502041**	Price
41/64	5-1/8	9-3/4	3 MT	**AA403041†**	Price	**AA503041†**	Price
21/32	5-1/8	9	2 MT	**AA402042**	Price	**AA502042**	Price
21/32	5-1/8	9-3/4	3 MT	**AA403042†**	Price	**AA503042†**	Price
43/64	5-3/8	9-1/4	2 MT	**AA402043**	Price	**AA502043**	Price
43/64	5-3/8	10	3 MT	**AA403043†**	Price	**AA503043†**	Price
11/16	5-3/8	9-1/4	2 MT	**AA402044**	Price	**AA502044**	Price
11/16	5-3/8	10	3 MT	**AA403044†**	Price	**AA503044†**	Price
45/64	5-5/8	9-1/2	2 MT	**AA402045**	Price	**AA502045**	Price
45/64	5-5/8	10-1/4	3 MT	**AA403045†**	Price	**AA503045†**	Price
23/32	5-5/8	9-1/2	2 MT	**AA402046**	Price	**AA502046**	Price
23/32	5-5/8	10-1/4	3 MT	**AA403046†**	Price	**AA503046†**	Price
47/64	5-7/8	9-3/4	2 MT	**AA402047**	Price	**AA502047**	Price
47/64	5-7/8	10-1/2	3 MT	**AA403047†**	Price	**AA503047†**	Price
3/4	5-7/8	9-3/4	2 MT	**AA402048**	Price	**AA502048**	Price
3/4	5-7/8	10-1/2	3 MT	**AA403048†**	Price	**AA503048†**	Price
49/64	6	9-7/8	2 MT	**AA402049**	Price	**AA502049**	Price
49/64	6	10-5/8	3 MT	**AA403049†**	Price	**AA503049†**	Price
25/32	6	9-7/8	2 MT	**AA402050**	Price	**AA502050**	Price
25/32	6	10-5/8	3 MT	**AA403050†**	Price	**AA503050†**	Price
51/64	6-1/8	10	2 MT	**AA402051†**	Price	**AA502051†**	Price
51/64	6-1/8	10-3/4	3 MT	**AA403051**	Price	**AA503051**	Price
13/16	6-1/8	10	2 MT	**AA402052†**	Price	**AA502052†**	Price
13/16	6-1/8	10-3/4	3 MT	**AA403052**	Price	**AA503052**	Price
53/64	6-1/8	10	2 MT	**AA402053†**	Price	**AA502053†**	Price
53/64	6-1/8	10-3/4	3 MT	**AA403053**	Price	**AA503053**	Price
27/32	6-1/8	10	2 MT	**AA402054†**	Price	**AA502054†**	Price
27/32	6-1/8	10-3/4	3 MT	**AA403054**	Price	**AA503054**	Price
55/64	6-1/8	10	2 MT	**AA402055†**	Price	**AA502055†**	Price
55/64	6-1/8	10-3/4	3 MT	**AA403055**	Price	**AA503055**	Price
7/8	6-1/8	10	2 MT	**AA402056†**	Price	**AA502056†**	Price
7/8	6-1/8	10-3/4	3 MT	**AA403056**	Price	**AA503056**	Price
57/64	6-1/8	10	2 MT	**AA402057†**	Price	**AA502057†**	Price
57/64	6-1/8	10-3/4	3 MT	**AA403057**	Price	**AA503057**	Price
29/32	6-1/8	10	2 MT	**AA402058†**	Price	**AA502058†**	Price
29/32	6-1/8	10-3/4	3 MT	**AA403058**	Price	**AA503058**	Price
59/64	6-1/8	10-3/4	3 MT	**AA403059**	Price	**AA503059**	Price
15/16	6-1/8	10-3/4	3 MT	**AA403060**	Price	**AA503060**	Price

				Generic USA		ProCut	
Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price	Order No.	Price
61/64	6-3/8	11	3 MT	**AA403061**	Price	**AA503061**	Price
31/32	6-3/8	11	3 MT	**AA403062**	Price	**AA503062**	Price
63/64	6-3/8	11	3 MT	**AA403063**	Price	**AA503063**	Price
1	6-3/8	11	3 MT	**AA403100**	Price	**AA503100**	Price
1	6-3/8	12	4 MT	**AA404100†**	Price	**AA504100†**	Price
1-1/64	6-1/2	11-1/8	3 MT	**AA403101**	Price	**AA503101**	Price
1-1/64	6-1/2	11-1/8	4 MT	**-**	-	**AA504101†**	Price
1-1/32	6-1/2	11-1/8	3 MT	**AA403102**	Price	**AA503102**	Price
1-1/32	6-1/2	12-1/8	4 MT	**AA404102†**	Price	**AA504102†**	Price
1-3/64	6-5/8	11-1/4	3 MT	**AA403103**	Price	**AA503103**	Price
1-3/64	6-5/8	11-1/4	4 MT	**-**	-	**AA504103†**	Price
1-1/16	6-5/8	11-1/4	3 MT	**AA403104**	Price	**AA503104**	Price
1-1/16	6-5/8	12-1/4	4 MT	**AA404104†**	Price	**AA504104†**	Price
1-5/64	6-7/8	11-1/2	3 MT	**AA403105†**	Price	**AA503105†**	Price
1-5/64	6-7/8	12-1/2	4 MT	**AA404105**	Price	**AA504105**	Price
1-3/32	6-7/8	11-1/2	3 MT	**AA403106†**	Price	**AA503106†**	Price
1-3/32	6-7/8	12-1/2	4 MT	**AA404106**	Price	**AA504106**	Price
1-7/64	7-1/8	11-3/4	3 MT	**AA403107†**	Price	**AA503107†**	Price
1-7/64	7-1/8	12-3/4	4 MT	**AA404107**	Price	**AA504107**	Price
1-1/8	7-1/8	11-3/4	3 MT	**AA403108†**	Price	**AA503108†**	Price
1-1/8	7-1/8	12-3/4	4 MT	**AA404108**	Price	**AA504108**	Price
1-9/64	7-1/4	11-7/8	3 MT	**AA403109†**	Price	**AA503109†**	Price
1-9/64	7-1/4	12-7/8	4 MT	**AA404109**	Price	**AA504109**	Price
1-5/32	7-1/4	11-7/8	3 MT	**AA403110†**	Price	**AA503110†**	Price
1-5/32	7-1/4	12-7/8	4 MT	**AA404110**	Price	**AA504110**	Price
1-11/64	7-3/8	12	3 MT	**AA403111†**	Price	**AA503111†**	Price
1-11/64	7-3/8	13	4 MT	**AA404111**	Price	**AA504111**	Price
1-3/16	7-3/8	12	3 MT	**AA403112†**	Price	**AA503112†**	Price
1-3/16	7-3/8	13	4 MT	**AA404112**	Price	**AA504112**	Price
1-13/64	7-1/2	12-1/8	3 MT	**-**	-	**AA503113†**	Price
1-13/64	7-1/2	13-1/8	4 MT	**AA404113**	Price	**AA504113**	Price
1-7/32	7-1/2	12-1/8	3 MT	**AA403114†**	Price	**AA503114†**	Price
1-7/32	7-1/2	13-1/8	4 MT	**AA404114**	Price	**AA504114**	Price
1-15/64	7-7/8	12-1/2	3 MT	**AA403115†**	Price	**AA503115†**	Price
1-15/64	7-7/8	13-1/2	4 MT	**AA404115**	Price	**AA504115**	Price
1-1/4	7-7/8	12-1/2	3 MT	**AA403116†**	Price	**AA503116†**	Price
1-1/4	7-7/8	13-1/2	4 MT	**AA404116**	Price	**AA504116**	Price
1-17/64	8-1/2	14-1/8	4 MT	**AA404117**	Price	**AA504117**	Price
1-9/32	8-1/2	14-1/8	4 MT	**AA404118**	Price	**AA504118**	Price
1-19/64	8-5/8	14-1/4	4 MT	**AA404119**	Price	**AA504119**	Price
1-5/16	8-5/8	13-1/4	3 MT	**-**	-	**AA503120†**	Price
1-5/16	8-5/8	14-1/4	4 MT	**AA404120**	Price	**AA504120**	Price
1-21/64	8-3/4	14-3/8	4 MT	**AA404121**	Price	**AA504121**	Price
1-11/32	8-3/4	14-3/8	4 MT	**AA404122**	Price	**AA504122**	Price
1-23/64	8-7/8	14-1/2	4 MT	**AA404123**	Price	**AA504123**	Price
1-3/8	8-7/8	13-1/2	3 MT	**-**	-	**AA503124†**	Price
1-3/8	8-7/8	14-1/2	4 MT	**AA404124**	Price	**AA504124**	Price
1-25/64	9	14-5/8	4 MT	**AA404125**	Price	**AA504125**	Price
1-13/32	9	14-5/8	4 MT	**AA404126†**	Price	**AA504126**	Price
1-27/64	9-1/8	14-3/4	4 MT	**AA404127**	Price	**AA504127**	Price

(continued on next page)

Taper Shank Drills *(continued from previous page)*



High Speed Steel • 118° Standard Point • Surface Treated

- Standard and alternate shank available

PROCUT

				Generic USA		ProCut	
Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price	Order No.	Price
1-7/16	9-1/8	13-7/8	3 MT	-	-	AA503128†	Price
1-7/16	9-1/8	14-3/4	4 MT	AA404128	Price	AA504128	Price
1-29/64	9-1/4	14-7/8	4 MT	AA404129	Price	AA504129	Price
1-15/32	9-1/4	14-7/8	4 MT	AA404130	Price	AA504130	Price
1-31/64	9-3/8	15	4 MT	AA404131	Price	AA504131	Price
1-1/2	9-3/8	14	3 MT	-	-	AA503132†	Price
1-1/2	9-3/8	15	4 MT	AA404132	Price	AA504132	Price
1-33/64	9-3/8	15	4 MT	AA404133†	Price	AA504133†	Price
1-33/64	9-3/8	16-3/8	5 MT	-	-	AA505133	Price
1-17/32	9-3/8	15	4 MT	AA404134†	Price	AA504134†	Price
1-17/32	9-3/8	16-3/8	5 MT	AA405134	Price	AA505134	Price
1-35/64	9-5/8	15-1/4	4 MT	AA404135†	Price	AA504135†	Price
1-35/64	9-5/8	16-5/8	5 MT	AA405135	Price	AA505135	Price
1-9/16	9-5/8	15-1/4	4 MT	AA404136†	Price	AA504136†	Price
1-9/16	9-5/8	16-5/8	5 MT	AA405136	Price	AA505136	Price
1-37/64	9-7/8	15-1/2	4 MT	AA404137†	Price	AA504137†	Price
1-37/64	9-7/8	16-7/8	5 MT	AA405137	Price	AA505137	Price
1-19/32	9-7/8	15-1/2	4 MT	AA404138†	Price	AA504138†	Price
1-19/32	9-7/8	16-7/8	5 MT	AA405138	Price	-	Price
1-39/64	10	15-5/8	4 MT	AA404139†	Price	AA504139†	Price
1-39/64	10	17	5 MT	-	-	AA505139	Price
1-5/8	10	15-5/8	4 MT	AA404140†	Price	AA504140†	Price
1-5/8	10	17	5 MT	AA405140	Price	AA505140	Price
1-41/64	10-1/8	15-3/4	4 MT	AA404141†	Price	AA504141†	Price
1-41/64	10-1/8	17-1/8	5 MT	-	-	AA505141	Price
1-21/32	10-1/8	15-3/4	4 MT	AA404142†	Price	AA504142†	Price
1-21/32	10-1/8	17-1/8	5 MT	AA405142	Price	AA505142	Price
1-43/64	10-1/8	15-3/4	4 MT	AA404143†	Price	-	Price
1-43/64	10-1/8	17-1/8	5 MT	-	-	AA505143	Price
1-11/16	10-1/8	15-3/4	4 MT	AA404144†	Price	AA504144†	Price
1-11/16	10-1/8	17-1/8	5 MT	AA405144	Price	AA505144	Price
1-45/64	10-1/8	15-3/4	4 MT	AA404145†	Price	-	Price
1-45/64	10-1/8	17-1/8	5 MT	-	-	AA505145	Price
1-23/32	10-1/8	15-3/4	4 MT	AA404146†	Price	AA504146†	Price
1-23/32	10-1/8	17-1/8	5 MT	AA405146	Price	AA505146	Price
1-47/64	10-3/8	16-1/4	4 MT	AA404147†	Price	AA504147†	Price
1-3/4	10-3/8	16-1/4	4 MT	AA404148†	Price	AA504148†	Price
1-3/4	10-1/8	17-1/8	5 MT	AA405148	Price	AA505148	Price
1-25/32	10-3/8	16-1/4	4 MT	AA404150†	Price	AA504150†	Price
1-25/32	10-1/8	17-1/8	5 MT	AA405150	Price	AA505150	Price
1-51/64	10-3/8	16-1/4	4 MT	-	-	AA504151†	Price
1-13/16	10-3/8	16-1/4	4 MT	AA404152†	Price	AA504152†	Price
1-13/16	10-1/8	17-1/8	5 MT	AA405152	Price	AA505152	Price
1-53/64	10-1/8	17-1/8	5 MT	-	-	AA505153	Price
1-27/32	10-3/8	16-1/4	4 MT	AA404154†	Price	AA504154†	Price
1-27/32	10-3/8	17-1/8	5 MT	-	-	AA505154	Price
1-55/64	10-1/8	17-3/8	5 MT	AA405155	Price	AA505155	Price
1-7/8	10-1/2	16-1/2	4 MT	AA404156†	Price	AA504156†	Price
1-7/8	10-3/8	17-3/8	5 MT	AA405156	Price	AA505156	Price
1-29/32	10-1/2	16-1/2	4 MT	AA404158†	Price	AA504158†	Price

PROCUT

				Generic USA		ProCut	
Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price	Order No.	Price
1-29/32	10-3/8	17-3/8	5 MT	AA405158	Price	AA505158	Price
1-15/16	10-5/8	16-5/8	4 MT	AA404160†	Price	AA504160†	Price
1-15/16	10-3/8	17-3/8	5 MT	AA405160	Price	AA505160	Price
1-61/64	10-5/8	16-5/8	4 MT	AA404161†	Price	AA504161†	Price
1-31/32	10-5/8	16-5/8	4 MT	AA404162†	Price	AA504162†	Price
1-31/32	10-3/8	17-3/8	5 MT	AA405162	Price	AA505162	Price
1-63/64	10-5/8	16-5/8	4 MT	-	-	AA504163†	Price
2	10-5/8	16-5/8	4 MT	AA404200†	Price	AA504200†	Price
2	10-3/8	17-3/8	5 MT	AA405200	Price	AA505200	Price
2-1/32	10-3/8	17-3/8	5 MT	AA405202	Price	AA505202	Price
2-1/16	10-1/4	16-5/8	4 MT	-	-	AA504204†	Price
2-1/16	10-1/4	17-3/8	5 MT	AA405204	Price	AA505204	Price
2-3/32	10-1/4	17-3/8	5 MT	-	-	AA505206	Price
2-1/8	10-1/4	16-5/8	4 MT	-	-	AA504208†	Price
2-1/8	10-1/4	17-3/8	5 MT	AA405208	Price	AA505208	Price
2-5/32	10-1/4	17-3/8	5 MT	-	-	AA505210	Price
2-3/16	10-1/4	16-5/8	4 MT	-	-	AA504212†	Price
2-3/16	10-1/4	17-3/8	5 MT	AA405212	Price	AA505212	Price
2-7/32	10-1/8	17-3/8	5 MT	AA405214	Price	AA505214	Price
2-1/4	10-1/8	16-5/8	4 MT	-	-	AA504216†	Price
2-1/4	10-1/8	17-3/8	5 MT	AA405216	Price	AA505216	Price
2-9/32	10-1/8	17-3/8	5 MT	-	-	AA505218	Price
2-5/16	10-1/8	16-5/8	4 MT	-	-	AA504220†	Price
2-5/16	10-1/8	17-3/8	5 MT	AA405220	Price	AA505220	Price
2-11/32	10-1/8	17-3/8	5 MT	-	-	AA505222	Price
2-3/8	10-1/8	16-5/8	4 MT	-	-	AA504224†	Price
2-3/8	10-1/8	17-3/8	5 MT	AA405224	Price	AA505224	Price
2-13/32	11-1/4	18-3/4	5 MT	-	-	AA505226	Price
2-7/16	10-1/4	18-1/4	4 MT	-	-	AA504228†	Price
2-7/16	11-1/4	18-3/4	5 MT	AA405228	Price	AA505228	Price
2-15/32	11-1/4	18-3/4	5 MT	-	-	AA505230	Price
2-1/2	11-1/4	17-3/8	4 MT	-	-	AA504232†	Price
2-1/2	11-1/4	18-3/4	5 MT	AA405232	Price	AA505232	Price
2-17/32	11-7/8	19-1/2	5 MT	-	-	AA505234	Price
2-9/16	11-7/8	19-1/2	5 MT	AA405236	Price	AA505236	Price
2-5/8	11-7/8	19-1/2	5 MT	AA405240	Price	AA505240	Price
2-21/32	12-3/4	20-3/8	5 MT	-	-	AA505242	Price
2-11/16	12-3/4	20-3/8	5 MT	AA405244	Price	AA505244	Price
2-3/4	12-3/4	20-3/8	5 MT	AA405248	Price	AA505248	Price
2-25/32	13-3/8	21-1/8	5 MT	-	-	AA505250	Price
2-13/16	13-3/8	21-1/8	5 MT	-	-	AA505252	Price
2-7/8	13-3/8	21-1/8	5 MT	AA405256	Price	AA505256	Price
2-15/16	14	21-3/4	5 MT	AA405260	Price	AA505260	Price
3	14	21-3/4	5 MT	AA405300	Price	-	-
3-1/8	14-1/4	22	5 MT	AA405308†	Price	-	-
3-1/8	14-5/8	24-1/2	6 MT	AA406308	Price	-	-
3-1/4	15-1/2	25-1/2	5 MT	AA405316†	Price	-	-
3-1/4	15-1/4	23	6 MT	AA406316	Price	-	-
3-7/16	15-1/2	25-1/2	6 MT	-	-	AA506328	Price
3-1/2	16-1/4	24	5 MT	AA405332†	Price	-	-

† Indicates smaller or larger shank than standard

PROCUT Extra Long Taper Shank Drills

High Speed Steel • 118° Standard Point

- See index for extra long straight shank drills



To Calculate Flute Length Deduct From Overall Length	
For 1 MT Shank	Deduct 3-3/16”
For 2 MT Shank	Deduct 3-7/8”
For 3 MT Shank	Deduct 4-3/4”
For 4 MT Shank	Deduct 5-7/8”
For 5 MT Shank	Deduct 7-3/8”
For 6 MT Shank	Deduct 10”

		12" OAL		15" OAL		18" OAL		24" OAL		30" OAL	
Size (in.)	Taper Shank	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1 MT	AL501008	Price	AL511008	Price	-	-	-	-	-	-
7/32	1 MT	AL501014	Price	-	-	-	-	-	-	-	-
1/4	1 MT	AL501016	Price	AL511016	Price	AL521016	Price	-	-	-	-
17/64	1 MT	AL501017	Price	AL511017	Price	AL521017	Price	-	-	-	-
9/32	1 MT	AL501018	Price	AL511018	Price	AL521018	Price	-	-	-	-
19/64	1 MT	AL501019	Price	AL511019	Price	-	-	-	-	-	-
5/16	1 MT	AL501020	Price	AL511020	Price	AL521020	Price	-	-	-	-
21/64	1 MT	AL501021	Price	AL511021	Price	AL521021	Price	-	-	-	-
11/32	1 MT	AL501022	Price	AL511022	Price	AL521022	Price	-	-	-	-
23/64	1 MT	AL501023	Price	AL511023	Price	-	-	-	-	-	-
3/8	1 MT	AL501024	Price	AL511024	Price	AL521024	Price	AL531024	Price	-	-
25/64	1 MT	AL501025	Price	AL511025	Price	AL521025	Price	-	-	-	-
13/32	1 MT	AL501026	Price	AL511026	Price	AL521026	Price	AL531026	Price	-	-
27/64	1 MT	AL501027	Price	AL511027	Price	AL521027	Price	AL531027	Price	-	-
7/16	1 MT	AL501028	Price	AL511028	Price	AL521028	Price	AL531028	Price	-	-
29/64	1 MT	AL501029	Price	AL511029	Price	AL521029	Price	-	-	-	-
15/32	1 MT	AL501030	Price	AL511030	Price	-	-	AL531030	Price	-	-
15/32	2 MT	-	-	-	-	AL522030	Price	-	-	-	-
31/64	1 MT	-	-	-	-	AL521031	Price	-	-	-	-
31/64	2 MT	AL502031	Price	AL512031	Price	AL522031	Price	AL532031	Price	-	-
1/2	2 MT	AL502032	Price	AL512032	Price	AL522032	Price	AL532032	Price	-	-
33/64	2 MT	AL502033	Price	AL512033	Price	AL522033	Price	-	-	-	-
17/32	2 MT	AL502034	Price	AL512034	Price	AL522034	Price	AL532034	Price	-	-
35/64	2 MT	AL502035	Price	AL512035	Price	AL522035	Price	-	-	-	-
9/16	2 MT	AL502036	Price	AL512036	Price	AL522036	Price	AL532036	Price	-	-
37/64	2 MT	AL502037	Price	AL512037	Price	AL522037	Price	AL532037	Price	-	-
19/32	2 MT	AL502038	Price	AL512038	Price	AL522038	Price	AL532038	Price	-	-
39/64	2 MT	AL502039	Price	AL512039	Price	AL522039	Price	AL532039	Price	-	-
5/8	2 MT	AL502040	Price	AL512040	Price	AL522040	Price	AL532040	Price	-	-
41/64	2 MT	AL502041	Price	AL512041	Price	AL522041	Price	AL532041	Price	-	-
21/32	2 MT	AL502042	Price	AL512042	Price	AL522042	Price	AL532042	Price	-	-
43/64	2 MT	AL502043	Price	AL512043	Price	AL522043	Price	-	-	-	-
11/16	2 MT	AL502044	Price	AL512044	Price	AL522044	Price	-	-	-	-
45/64	2 MT	AL502045	Price	AL512045	Price	AL522045	Price	AL532045	Price	-	-
23/32	2 MT	AL502046	Price	AL512046	Price	AL522046	Price	AL532046	Price	-	-
47/64	2 MT	AL502047	Price	AL512047	Price	-	-	-	-	-	-
3/4	2 MT	AL502048	Price	AL512048	Price	AL522048	Price	AL532048	Price	AL542048	Price
49/64	2 MT	AL502049	Price	AL512049	Price	AL522049	Price	-	-	-	-
25/32	2 MT	AL502050	Price	AL512050	Price	AL522050	Price	AL532050	Price	-	-
51/64	3 MT	AL503051	Price	-	-	-	-	-	-	-	-
13/16	3 MT	AL503052	Price	AL513052	Price	AL523052	Price	AL533052	Price	-	-
53/64	3 MT	AL503053	Price	AL513053	Price	AL523053	Price	AL533053	Price	-	-
27/32	2 MT	-	-	-	-	-	-	-	-	-	-
27/32	3 MT	AL503054	Price	AL513054	Price	-	-	AL533054	Price	-	-
55/64	3 MT	-	-	-	-	AL523055	Price	-	-	-	-
7/8	3 MT	AL503056	Price	AL513056	Price	AL523056	Price	AL533056	Price	AL543056	Price
57/64	3 MT	-	-	AL513057	Price	AL523057	Price	-	-	-	-
29/32	3 MT	-	-	AL513058	Price	AL523058	Price	AL533058	Price	-	-
59/64	3 MT	-	-	AL513059	Price	AL523059	Price	AL533059	Price	-	-
15/16	3 MT	-	-	AL513060	Price	AL523060	Price	AL533060	Price	AL543060	Price
61/64	3 MT	-	-	AL513061	Price	AL523061	Price	-	-	-	-

PROCUT Extra Long Taper Shank Drills (cont.)

High Speed Steel • 118° Standard Point

- See index for extra long straight shank drills



To Calculate Flute Length Deduct From Overall Length	
For 1 MT Shank	Deduct 3-3/16”
For 2 MT Shank	Deduct 3-7/8”
For 3 MT Shank	Deduct 4-3/4”
For 4 MT Shank	Deduct 5-7/8”
For 5 MT Shank	Deduct 7-3/8”
For 6 MT Shank	Deduct 10”

		12" OAL		15" OAL		18" OAL		24" OAL		30" OAL	
Size (in.)	Taper Shank	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
31/32	3 MT	-	-	AL513062	Price	AL523062	Price	AL533062	Price	-	-
63/64	3 MT	-	-	AL513063	Price	AL523063	Price	AL533063	Price	-	-
1	3 MT	-	-	AL513100	Price	AL523100	Price	AL533100	Price	AL543100	Price
1-1/64	3 MT	-	-	AL513101	Price	AL523101	Price	AL533101	Price	-	-
1-1/32	3 MT	-	-	AL513102	Price	AL523102	Price	AL533102	Price	-	-
1-3/64	3 MT	-	-	-	-	AL523103	Price	-	-	-	-
1-1/16	3 MT	-	-	AL513104	Price	AL523104	Price	AL533104	Price	AL543104	Price
1-3/32	4 MT	-	-	AL514106	Price	AL524106	Price	AL534106	Price	-	-
1-7/64	4 MT	-	-	AL514107	Price	AL524107	Price	-	-	-	-
1-1/8	4 MT	-	-	AL514108	Price	AL524108	Price	AL534108	Price	AL544108	Price
1-9/64	4 MT	-	-	-	-	AL524109	Price	-	-	-	-
1-5/32	4 MT	-	-	-	-	AL524110	Price	AL534110	Price	-	-
1-11/64	4 MT	-	-	AL514111	Price	AL524111	Price	AL534111	Price	-	-
1-3/16	4 MT	-	-	AL514112	Price	AL524112	Price	AL534112	Price	-	
Price	4 MT	-	-	AL514114	Price	AL524114	Price	AL534114	Price	-	-
1-15/64	4 MT	-	-	-	-	AL524115	Price	-	-	-	-
1-1/4	4 MT	-	-	AL514116	Price	AL524116	Price	AL534116	Price	AL544116	Price
1-17/64	4 MT	-	-	-	-	AL524117	Price	-	-	-	-
1-9/32	4 MT	-	-	-	-	AL524118	Price	AL534118	Price	-	-
1-19/64	4 MT	-	-	-	-	-	-	AL534119	Price	-	-
1-5/16	4 MT	-	-	AL514120	Price	AL524120	Price	AL534120	Price	AL544120	Price
1-21/64	4 MT	-	-	-	-	AL524121	Price	-	-	-	-
1-11/32	4 MT	-	-	-	-	AL524122	Price	AL534122	Price	-	-
1-23/64	4 MT	-	-	-	-	AL524123	Price	-	-	-	-
1-3/8	4 MT	-	-	-	-	AL524124	Price	AL534124	Price	-	-
1-25/64	4 MT	-	-	-	-	AL524125	Price	AL534125	Price	-	-
1-13/32	4 MT	-	-	-	-	AL524126	Price	AL534126	Price	-	-
1-27/64	4 MT	-	-	-	-	AL524127	Price	AL534127	Price	-	-
1-27/32	4 MT	-	-	-	-	-	-	-	-	-	-
1-27/32	5 MT	-	-	-	-	AL525154	Price	AL535154	Price	AL545154	Price
1-7/16	4 MT	-	-	-	-	AL524128	Price	AL534128	Price	-	-
1-15/32	4 MT	-	-	-	-	AL524130	Price	AL534130	Price	-	-
1-31/64	4 MT	-	-	-	-	AL524131	Price	AL534131	Price	-	-
1-1/2	4 MT	-	-	-	-	AL524132	Price	AL534132	Price	AL544132	Price
1-17/32	5 MT	-	-	-	-	AL525134	Price	AL535134	Price	AL545134	Price
1-9/16	5 MT	-	-	-	-	AL525136	Price	AL535136	Price	-	-
1-19/32	5 MT	-	-	-	-	-	-	AL535138	Price	-	-
1-5/8	5 MT	-	-	-	-	AL525140	Price	AL535140	Price	AL545140	Price
1-21/32	5 MT	-	-	-	-	-	-	AL535142	Price	-	-
1-11/16	5 MT	-	-	-	-	AL525144	Price	AL535144	Price	-	-
1-23/32	5 MT	-	-	-	-	AL525146	Price	AL535146	Price	-	-
1-3/4	5 MT	-	-	-	-	AL525148	Price	AL535148	Price	AL545148	Price
1-25/32	5 MT	-	-	-	-	AL525150	Price	AL535150	Price	-	-
1-13/16	5 MT	-	-	-	-	AL525152	Price	AL535152	Price	-	-
1-7/8	4 MT	-	-	-	-	-	-	-	-	-	-
1-7/8	5 MT	-	-	-	-	AL525156	Price	-	-	AL545156	Price
1-29/32	5 MT	-	-	-	-	AL525158	Price	-	-	-	-
1-15/16	4 MT	-	-	-	-	-	-	-	-	-	-
1-15/16	5 MT	-	-	-	-	AL525160	Price	-	-	-	-
1-31/32	5 MT	-	-	-	-	-	-	AL535162	Price	-	-
2	5 MT	-	-	-	-	AL525200	Price	AL535200	Price	-	-

PROCUT Heavy Duty Taper Shank Drills

Cobalt



- Heavy-duty construction
- For tough, hard-to-machine materials

Size (in.)	Taper Shank	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	1 MT	2-7/8	6-1/8	**AA60016**	Price
9/32	1 MT	3	6-1/4	**AA60018**	Price
5/16	1 MT	3-1/8	6-3/8	**AA60020**	Price
11/32	1 MT	3-1/4	6-1/2	**AA60022**	Price
3/8	2 MT	3-1/2	7-3/8	**AA60024**	Price
13/32	2 MT	3-5/8	7-1/2	**AA60026**	Price
27/64	2 MT	3-7/8	7-3/4	**AA60027**	Price
7/16	2 MT	3-7/8	7-3/4	**AA60028**	Price
15/32	2 MT	4-1/8	8	**AA60030**	Price
1/2	2 MT	4-3/8	8-1/4	**AA60032**	Price
17/32	2 MT	4-5/8	8-1/2	**AA60034**	Price
9/16	2 MT	4-7/8	8-3/4	**AA60036**	Price
19/32	2 MT	4-7/8	8-3/4	**AA60038**	Price
5/8	2 MT	4-7/8	8-3/4	**AA60040**	Price
21/32	3 MT	5-1/8	9-3/4	**AA60042**	Price
11/16	3 MT	5-3/8	10	**AA60044**	Price
23/32	3 MT	5-5/8	10-1/4	**AA60046**	Price
3/4	3 MT	5-7/8	10-1/2	**AA60048**	Price
25/32	3 MT	6	10-5/8	**AA60050**	Price
13/16	3 MT	6-1/8	10-3/4	**AA60052**	Price
27/32	3 MT	6-1/8	10-3/4	**AA60054**	Price
7/8	3 MT	6-1/8	10-3/4	**AA60056**	Price
29/32	3 MT	6-1/8	10-3/4	**AA60058**	Price
15/16	3 MT	6-1/8	10-3/4	**AA60060**	Price
31/32	3 MT	6-1/8	10-3/4	**AA60062**	Price
1	3 MT	6-3/8	11	**AA60100**	Price
1-1/16	4 MT	6-5/8	12-5/32	**AA60104**	Price
1-1/8	4 MT	7-1/8	12-3/4	**AA60108**	Price
1-3/16	4 MT	7-3/8	13	**AA60112**	Price
1-13/64	4 MT	7-1/2	13-1/8	**AA60113**	Price
1-1/4	4 MT	7-7/8	13-1/2	**AA60116**	Price
1-5/16	4 MT	8-5/8	15-5/8	**AA60120**	Price
1-3/8	4 MT	8-7/8	15-7/8	**AA60124**	Price
1-27/64	4 MT	9-1/8	14-3/4	**AA60127**	Price
1-7/16	4 MT	9-1/8	16-1/8	**AA60128**	Price
1-1/2	4 MT	9-3/8	16-3/8	**AA60132**	Price

PROCUT Taper Shank Drills — Stub Length

High Speed Steel



- 5” Flute length (approx.)
- 12” Overall length

Size (in.)	Taper Shank	Order No.	Price
2	4 MT	**AN504200**	Price
2	5 MT	**AN505200**	Price
2-1/16	4 MT	**AN504201**	Price
2-1/16	5 MT	**AN505201**	Price
2-1/8	4 MT	**AN504202**	Price
2-1/8	5 MT	**AN505202**	Price
2-3/16	4 MT	**AN504203**	Price
2-3/16	5 MT	**AN505203**	Price
2-1/4	4 MT	**AN504204**	Price
2-1/4	5 MT	**AN505204**	Price
2-5/16	4 MT	**AN504205**	Price
2-5/16	5 MT	**AN505205**	Price
2-3/8	4 MT	**AN504206**	Price
2-3/8	5 MT	**AN505206**	Price
2-7/16	4 MT	**AN504207**	Price
2-1/2	4 MT	**AN504208**	Price
2-1/2	5 MT	**AN505208**	Price
2-9/16	4 MT	**AN504209**	Price
2-9/16	5 MT	**AN505209**	Price
2-5/8	4 MT	**AN504210**	Price
2-5/8	5 MT	**AN505210**	Price
2-11/16	5 MT	**AN505211**	Price
2-3/4	4 MT	**AN504212**	Price
2-3/4	5 MT	**AN505212**	Price
2-13/16	5 MT	**AN505213**	Price
2-7/8	4 MT	**AN504214**	Price
2-7/8	5 MT	**AN505214**	Price
2-15/16	4 MT	**AN504215**	Price
2-15/16	5 MT	**AN505215**	Price
3	4 MT	**AN504300**	Price
3	5 MT	**AN505300**	Price
3-1/8	5 MT	**AN505302**	Price
3-1/4	5 MT	**AN505304**	Price
3-3/8	5 MT	**AN505306**	Price
3-1/2	5 MT	**AN505308**	Price

PROCUT Metric Taper Shank Drills

High Speed Steel • 118° Standard Point • Surface Treated



- Many in-between metric sizes in stock not shown below - call us.

Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price
3mm	.1181	1-7/8	5-1/8	1 MT	**AA65300**	Price
3.8mm	.1496	2-1/8	5-3/8	1 MT	**AA65380**	Price
4mm	.1575	2-1/2	5-3/4	1 MT	**AA65400**	Price
4.2mm	.1654	2-1/2	5-3/4	1 MT	**AA65420**	Price
4.5mm	.1772	2-1/2	5-3/4	1 MT	**AA65450**	Price
5.2mm	.2047	2-3/4	6	1 MT	**AA65520**	Price
5.5mm	.2165	2-3/4	6	1 MT	**AA65550**	Price
5.8mm	.2283	2-7/8	6-1/8	1 MT	**AA65580**	Price
6mm	.2362	2-7/8	6-1/8	1 MT	**AA65600**	Price
6.2mm	.2441	2-7/8	6-1/8	1 MT	**AA65620**	Price
6.5mm	.2559	3	6-1/4	1 MT	**AA65650**	Price
6.8mm	.2677	3	6-1/4	1 MT	**AA65680**	Price
7mm	.2756	3	6-1/4	1 MT	**AA65700**	Price
7.2mm	.2835	3-1/8	6-3/8	1 MT	**AA65720**	Price
8mm	.3150	3-1/4	6-1/2	1 MT	**AA65800**	Price
8.2mm	.3228	3-1/4	6-1/2	1 MT	**AA65820**	Price
8.5mm	.3346	3-1/4	6-1/2	1 MT	**AA65850**	Price
8.8mm	.3465	3-1/2	6-3/4	1 MT	**AA65880**	Price
9mm	.3543	3-1/2	6-3/4	1 MT	**AA65900**	Price
9.2mm	.3622	3-1/2	6-3/4	1 MT	**AA65920**	Price
9.5mm	.3740	3-1/2	6-3/4	1 MT	**AA65950**	Price
9.8mm	.3858	3-5/8	7	1 MT	**AA65980**	Price
10mm	.3937	3-5/8	7	1 MT	**AA651000**	Price
10.5mm	.4134	3-7/8	7-1/4	1 MT	**AA651050**	Price
10.8mm	.4252	3-7/8	7-1/4	1 MT	**AA651080**	Price
11mm	.4331	3-7/8	7-1/4	1 MT	**AA651100**	Price

Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price
11.2mm	.4409	4-1/8	7-1/2	1 MT	**AA651120**	Price
11.5mm	.4528	4-1/8	7-1/2	1 MT	**AA651150**	Price
11.8mm	.4646	4-1/8	7-1/2	1 MT	**AA651180**	Price
12mm	.4724	4-3/8	8-1/4	2 MT	**AA651200**	Price
12.2mm	.4803	4-3/8	8-1/4	2 MT	**AA651220**	Price
12.5mm	.4921	4-3/8	8-1/4	2 MT	**AA651250**	Price
13mm	.5118	4-5/8	8-1/2	2 MT	**AA651300**	Price
13.2mm	.5197	4-5/8	8-1/2	2 MT	**AA651320**	Price
13.5mm	.5315	4-5/8	8-1/2	2 MT	**AA651350**	Price
14mm	.5512	4-7/8	8-3/4	2 MT	**AA651400**	Price
14.5mm	.5709	4-7/8	8-3/4	2 MT	**AA651450**	Price
14.75mm	.5807	4-7/8	8-3/4	2 MT	**AA651475**	Price
15mm	.5906	4-7/8	8-3/4	2 MT	**AA651500**	Price
15.25mm	.6004	4-7/8	8-3/4	2 MT	**AA651525**	Price
15.5mm	.6102	4-7/8	8-3/4	2 MT	**AA651550**	Price
15.75mm	.6201	4-7/8	8-3/4	2 MT	**AA651575**	Price
16mm	.6299	5-1/8	9	2 MT	**AA651600**	Price
16.25mm	.6398	5-1/8	9	2 MT	**AA651625**	Price
16.5mm	.6496	5-1/8	9	2 MT	**AA651650**	Price
16.75mm	.6594	5-3/8	9-1/4	2 MT	**AA651675**	Price
17mm	.6693	5-3/8	9-1/4	2 MT	**AA651700**	Price
17.25mm	.6791	5-3/8	9-1/4	2 MT	**AA651725**	Price
17.5mm	.6890	5-5/8	9-1/2	2 MT	**AA651750**	Price
18mm	.7087	5-5/8	9-1/2	2 MT	**AA651800**	Price
18.5mm	.7283	5-7/8	9-3/4	2 MT	**AA651850**	Price
19mm	.7480	5-7/8	9-3/4	2 MT	**AA651900**	Price

(continued on next page)

PROCUT Metric Taper Shank Drills (cont.)



Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price
19.5mm	.7677	6	9-7/8	2 MT	**AA651950**	Price
20mm	.7874	6-1/8	10-3/4	3 MT	**AA652000**	Price
20.5mm	.8071	6-1/8	10-3/4	3 MT	**AA652050**	Price
21mm	.8268	6-1/8	10-3/4	3 MT	**AA652100**	Price
21.5mm	.8465	6-1/8	10-3/4	3 MT	**AA652150**	Price
22mm	.8661	6-1/8	10-3/4	3 MT	**AA652200**	Price
22.5mm	.8858	6-1/8	10-3/4	3 MT	**AA652250**	Price
23mm	.9055	6-1/8	10-3/4	3 MT	**AA652300**	Price
23.5mm	.9252	6-1/8	10-3/4	3 MT	**AA652350**	Price
24mm	.9449	6-3/8	11	3 MT	**AA652400**	Price
24.5mm	.9646	6-3/8	11	3 MT	**AA652450**	Price
25mm	.9843	6-3/8	11	3 MT	**AA652500**	Price
25.5mm	1.0039	6-1/2	11-1/8	3 MT	**AA652550**	Price
26mm	1.0236	6-1/2	11-1/8	3 MT	**AA652600**	Price
26.5mm	1.0433	6-5/8	11-1/4	3 MT	**AA652650**	Price
27mm	1.0630	6-5/8	11-1/4	3 MT	**AA652700**	Price
28mm	1.1024	7-1/8	12-3/4	4 MT	**AA652800**	Price
28.5mm	1.1220	7-1/8	12-3/4	4 MT	**AA652850**	Price
29mm	1.1417	7-1/4	12-7/8	4 MT	**AA652900**	Price
30mm	1.1811	7-3/8	13	4 MT	**AA653000**	Price
30.5mm	1.2008	7-1/2	13-1/8	4 MT	**AA653050**	Price
31mm	1.2205	7-7/8	13-1/2	4 MT	**AA653100**	Price

Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price
31.5mm	1.2402	7-7/8	13-1/2	4 MT	**AA653150**	Price
32mm	1.2598	8-1/2	14-1/8	4 MT	**AA653200**	Price
32.5mm	1.2795	8-1/2	14-1/8	4 MT	**AA653250**	Price
33mm	1.2992	8-5/8	14-1/4	4 MT	**AA653300**	Price
34mm	1.3386	8-3/4	14-3/8	4 MT	**AA653400**	Price
34.5mm	1.3583	8-7/8	14-1/2	4 MT	**AA653450**	Price
35mm	1.3780	9	14-5/8	4 MT	**AA653500**	Price
36mm	1.4173	9-1/8	14-3/4	4 MT	**AA653600**	Price
36.5mm	1.4370	9-1/8	14-3/4	4 MT	**AA653650**	Price
37mm	1.4567	9-1/4	14-7/8	4 MT	**AA653700**	Price
37.5mm	1.4764	9-3/8	15	4 MT	**AA653750**	Price
38mm	1.4961	9-3/8	15	4 MT	**AA653800**	Price
39mm	1.5354	9-5/8	16-5/8	5 MT	**AA653900**	Price
40mm	1.5748	9-7/8	16-7/8	5 MT	**AA654000**	Price
41mm	1.6142	10	17	5 MT	**AA654100**	Price
43mm	1.6929	10-1/8	17-1/8	5 MT	**AA654300**	Price
45mm	1.7717	10-1/8	17-1/8	5 MT	**AA654500**	Price
46mm	1.8110	10-1/8	17-3/8	5 MT	**AA654600**	Price
48mm	1.8898	10-3/8	17-3/8	5 MT	**AA654800**	Price
49mm	1.9291	10-3/8	17-3/8	5 MT	**AA654900**	Price
50mm	1.9685	10-3/8	17-3/8	5 MT	**AA655000**	Price

Taper Shank Core Drills

High Speed Steel • 3 Flute and 4 Flute



- Used for enlarging holes that have been previously drilled, cored or punched
- Many in-between sizes are available from stock at standard prices

				3 Flute		4 Flute	
Size	Flute Length	OAL	Taper Shank	Order No.	Price	Order No.	Price
11/32	3-1/4	6-1/2	1MT	**AG51022**	Price	**-**	-
3/8	3-1/2	6-3/4	1MT	**AG51024**	Price	**AG50024**	Price
13/32	3-5/8	7	1MT	**AG51026**	Price	**AG50026**	Price
7/16	3-7/8	7-1/4	1MT	**AG51028**	Price	**AG50028**	Price
15/32	4-1/8	7-1/2	1MT	**AG51030**	Price	**AG50030**	Price
1/2	4-3/8	8-1/4	2MT	**AG51032**	Price	**AG50032**	Price
17/32	4-5/8	8-1/2	2MT	**AG51034**	Price	**AG50034**	Price
9/16	4-7/8	8-3/4	2MT	**AG51036**	Price	**AG50036**	Price
19/32	4-7/8	8-3/4	2MT	**AG51038**	Price	**AG50038**	Price
5/8	4-7/8	8-3/4	2MT	**AG51040**	Price	**AG50040**	Price
21/32	5-1/8	9	2MT	**-**	-	**AG50042**	Price
11/16	5-3/8	9-1/4	2MT	**AG51044**	Price	**AG50044**	Price
23/32	5-5/8	9-1/2	2MT	**AG51046**	Price	**-**	-
3/4	5-7/8	9-3/4	2MT	**AG51048**	Price	**AG50048**	Price
25/32	6	9-7/8	2MT	**AG51050**	Price	**AG50050**	Price
13/16	6-1/8	10-3/4	3MT	**-**	-	**AG50052**	Price
7/8	6-1/8	10-3/4	3MT	**AG51056**	Price	**AG50056**	Price
29/32	6-1/8	10-3/4	3MT	**AG51058**	Price	**AG50058**	Price
15/16	6-1/8	10-3/4	3MT	**AG51060**	Price	**AG50060**	Price
31/32	6-3/8	11	3MT	**AG51062**	Price	**AG50062**	Price
1	6-3/8	11	3MT	**-**	-	**AG50100**	Price
1-1/32	6-1/2	11-1/8	3MT	**-**	-	**AG50102**	Price
1-1/16	6-5/8	11-1/4	3MT	**AG51104**	Price	**AG50104**	Price
1-3/32	6-7/8	12-1/2	4MT	**AG51106**	Price	**AG50106**	Price
1-1/8	7-1/8	12-3/4	4MT	**-**	-	**AG50108**	Price
1-5/32	7-1/4	12-7/8	4MT	**-**	-	**AG50110**	Price
1-3/16	7-3/8	13	4MT	**AG51112**	Price	**AG50112**	Price
1-7/32	7-1/2	13-1/8	4MT	**-**	-	**AG50114**	Price
1-1/4	7-5/8	13-1/2	4MT	**AG51116**	Price	**AG50116**	Price

				3 Flute		4 Flute	
Size	Flute Length	OAL	Taper Shank	Order No.	Price	Order No.	Price
1-9/32	8-1/2	14-1/8	4MT	**-**	-	**AG50118**	Price
1-5/16	8-5/8	14-1/4	4MT	**AG51120**	Price	**AG50120**	Price
1-11/32	8-3/4	14-3/8	4MT	**AG51122**	Price	**AG50122**	Price
1-3/8	8-7/8	14-1/2	4MT	**AG51124**	Price	**AG50124**	Price
1-7/16	9-1/8	14-3/4	4MT	**AG51128**	Price	**AG50128**	Price
1-1/2	9-3/8	15	4MT	**-**	-	**AG50132**	Price
1-19/32	9-7/8	16-7/8	5MT	**-**	-	**AG50138**	Price
1-5/8	10	17	5MT	**-**	-	**AG50140**	Price
1-21/32	10-1/8	17-1/8	5MT	**AG51142**	Price	**AG50142**	Price
1-11/16	10-1/8	17-1/8	5MT	**-**	-	**AG50144**	Price
1-3/4	10-1/8	17-1/8	5MT	**-**	-	**AG50148**	Price
1-25/32	10-1/8	17-1/8	5MT	**-**	-	**AG50150**	Price
1-13/16	10-1/8	17-1/8	5MT	**AG51152**	Price	**AG50152**	Price
1-27/32	10-1/8	17-1/8	5MT	**AG51154**	Price	**AG50154**	Price
1-7/8	10-3/8	17-3/8	5MT	**-**	-	**AG50156**	Price
1-29/32	10-3/8	17-3/8	5MT	**-**	-	**AG50158**	Price
1-15/16	10-3/8	17-3/8	5MT	**-**	-	**AG50160**	Price
2	10-3/8	17-3/8	5MT	**-**	-	**AG50200**	Price
2-1/16	10-1/4	17-3/8	5MT	**-**	-	**AG50204**	Price
2-1/8	10-1/4	17-3/8	5MT	**-**	-	**AG50208**	Price
2-3/16	10-1/4	17-3/8	5MT	**-**	-	**AG50212**	Price
2-1/4	10-3/8	17-3/8	5MT	**-**	-	**AG50216**	Price
2-5/16	10-3/8	17-3/8	5MT	**-**	-	**AG50220**	Price
2-7/16	11-1/4	18-3/4	5MT	**-**	-	**AG50228**	Price
2-1/2	11-1/4	18-3/4	5MT	**-**	-	**AG50232**	Price
2-5/8	11-7/8	19-1/2	5MT	**-**	-	**AG50240**	Price
2-3/4	12-3/4	20-3/8	5MT	**-**	-	**AG50248**	Price
3	14	21-3/4	5MT	**-**	-	**AG50300**	Price

Straight Shank Core Drills

High Speed Steel • 3 Flute and 4 Flute

- Many 64th sizes in stock-use next higher price



			3 Flute		4 Flute	
Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/4	3-3/4	6-1/8	**AH50016**	Price	**AH51016**	Price
9/32	3-7/8	6-1/4	**AH50018**	Price	**AH51018**	Price
5/16	4	6-3/8	**AH50020**	Price	**AH51020**	Price
11/32	4-1/8	6-1/2	**AH50022**	Price	**AH51022**	Price
3/8	4-1/4	6-3/4	**AH50024**	Price	**AH51024**	Price
13/32	4-3/8	7	**AH50026**	Price	**AH51026**	Price
7/16	4-5/8	7-1/4	**AH50028**	Price	**AH51028**	Price
15/32	4-3/4	7-1/2	**AH50030**	Price	**AH51030**	Price
1/2	4-3/4	7-1/2	**AH50032**	Price	**AH51032**	Price
17/32	4-3/4	8	**AH50034**	Price	**AH51034**	Price
9/16	4-7/8	8-1/4	**AH50036**	Price	**AH51036**	Price
19/32	4-7/8	8-3/4	**AH50038**	Price	**AH51038**	Price
5/8	4-7/8	8-3/4	**AH50040**	Price	**AH51040**	Price
21/32	5-1/8	9	**AH50042**	Price	**AH51042**	Price
11/16	5-3/8	9-1/4	**AH50044**	Price	**AH51044**	Price
23/32	5-5/8	9-1/2	**-**	-	**AH51046**	Price
3/4	5-7/8	9-3/4	**AH50048**	Price	**AH51048**	Price
25/32	6	9-7/8	**AH50050**	Price	**AH51050**	Price
13/16	6-1/8	10	**-**	-	**AH51052**	Price
27/32	6-1/8	10	**AH50054**	Price	**AH51054**	Price
7/8	6-1/8	10	**AH50056**	Price	**AH51056**	Price
29/32	6-1/8	10	**AH50058**	Price	**AH51058**	Price
15/16	6-1/8	10-3/4	**-**	-	**AH51060**	Price
31/32	6-3/8	11	**-**	-	**AH51062**	Price
1	6-3/8	11	**AH50100**	Price	**AH51100**	Price
1-1/32	6-1/2	11-1/8	**-**	-	**AH51102**	Price
1-1/16	6-5/8	11-1/4	**-**	-	**AH51104**	Price
1-3/32	6-7/8	11-1/2	**-**	-	**AH51106**	Price
1-1/8	7-1/8	11-3/4	**-**	-	**AH51108**	Price
1-5/32	7-1/4	11-7/8	**-**	-	**AH51110**	Price
1-3/16	7-3/8	12	**-**	-	**AH51112**	Price
1-1/4	7-7/8	12-1/2	**-**	-	**AH51116**	Price
1-5/16	8-5/8	14-1/4	**-**	-	**AH51120**	Price
1-3/8	8-7/8	14-1/2	**-**	-	**AH51124**	Price
1-7/16	9-1/8	14-3/4	**-**	-	**AH51128**	Price
1-1/2	9-3/8	15	**-**	-	**AH51132**	Price

Straight Shank Oil Hole Drills

High Speed Steel • 118° Point

- Designed with coolant holes to help flush chips out of the hole to reduce heat and chip packing problems common to deep hole drilling applications
- Surface speeds may be increased 30% or more over standard drill styles



- Available from stock in many special diameters & odd lengths at savings of up to 75%
- Slow spiral flute also available. Please inquire.

Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
5/16	4	6-3/8	**AJ51020**	Price
3/8	4-1/4	6-3/4	**AJ51024**	Price
13/32	4-3/8	7	**AJ51026**	Price
7/16	4-5/8	7-1/4	**AJ51028**	Price
15/32	4-7/8	7-1/2	**AJ51030**	Price
1/2	5	7-3/4	**AJ51032**	Price
17/32	5-1/4	8	**AJ51034**	Price
9/16	5-3/8	8-1/4	**AJ51036**	Price
19/32	5-5/8	8-1/2	**AJ51038**	Price
5/8	5-3/4	8-3/4	**AJ51040**	Price
21/32	5-7/8	9	**AJ51042**	Price
11/16	6	9-1/4	**AJ51044**	Price
23/32	6-3/16	9-1/2	**AJ51046**	Price
3/4	6-3/8	9-3/4	**AJ51048**	Price
25/32	6-1/2	9-7/8	**AJ51050**	Price
7/8	7	10-1/2	**AJ51056**	Price
61/64	7-1/8	10-7/8	**AJ51061**	Price
31/32	7-1/8	10-7/8	**AJ51062**	Price
63/64	7-3/16	11	**AJ51063**	Price
1	7-3/16	11	**AJ51100**	Price
1-1/32	7-5/16	11-1/8	**AJ51102**	Price
1-1/16	7-3/8	11-1/4	**AJ51104**	Price
1-1/8	7-7/8	11-3/4	**AJ51108**	Price
1-5/32	8	11-7/8	**AJ51110**	Price
1-3/16	8-1/8	12	**AJ51112**	Price
1-7/32	8-1/8	12-1/8	**AJ51114**	Price
1-5/16	9-1/4	14-1/4	**AJ51120**	Price
1-9/16	9-5/8	15-1/4	**AJ51136**	Price
1-13/16	10-1/2	16-1/4	**AJ51152**	Price

Coolant Inducer Sockets

For use with Taper Shank Oil Hole Drills



Morse Taper Hole & Shank Size	OAL (in.)	Order No.	Price
3	8-1/2	**AJ50CIS3**	Price

Taper Shank Oil Hole Drills

High Speed Steel • 118° Point

- These drills feature coolant passages throughout the length of the body
- Coolant holes allow coolant (air, oil or vapor mist) to reach the cutting edges to cool, lubricate and aid in the extraction of chips



Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price
3/8	3-1/2	7-5/8	2 MT	**AJ50024**	Price
25/64	3-5/8	8	2 MT	**AJ50025**	Price
31/64	4-3/8	9	3 MT	**AJ50031**	Price
1/2	4-3/8	9	3 MT	**AJ50032**	Price
17/32	4-5/8	9-1/4	3 MT	**AJ50034**	Price
9/16	4-7/8	9-1/2	3 MT	**AJ50036**	Price
39/64	4-7/8	9-1/2	3 MT	**AJ50039**	Price
5/8	4-7/8	9-1/2	3 MT	**AJ50040**	Price
43/64	5-3/8	10	3 MT	**AJ50043**	Price
11/16	5-3/8	10	3 MT	**AJ50044**	Price
3/4	5-7/8	10-1/2	3 MT	**AJ50048**	Price
49/64	6	10-5/8	3 MT	**AJ50049**	Price
13/16	6-1/8	10-3/4	3 MT	**AJ50052**	Price
7/8	6-1/8	10-3/4	3 MT	**AJ50056**	Price
29/32	6-1/8	10-3/4	3 MT	**AJ50058**	Price
15/16	6-1/8	10-3/4	3 MT	**AJ50060**	Price
31/32	6-3/8	11	3 MT	**AJ50062**	Price
1	6-3/8	11	3 MT	**AJ50100**	Price
1-9/32	8-1/2	14-1/8	4 MT	**AJ50118**	Price

Extra Length Taper Shank Oil Hole Drills

High Speed Steel • 118° Point



		12-1/2		14-1/2	
Size (in.)	Taper Shank	Order No.	Price	Order No.	Price
17/32	3 MT	**-**	-	**AJ5010034**	Price
5/8	3 MT	**-**	-	**AJ5010040**	Price
23/32	3 MT	**-**	-	**AJ5010046**	Price
7/8	3 MT	**AJ508056**	Price	**-**	-

RAPIDKUT® Carbide Tipped Drills For Hardened Steel

118° Point

- Recommended for drilling hardened steels 45 to 65 Rockwell
- Use light feed with steady pressure-frequently flood the point with coolant
- **NOTE:** Sizes below 3/16" are solid carbide spade type, not the fluted type shown



Size (in.)	Dec. Equiv.	OAL (in.)	Order No.	Price
1/16	.0625	1-1/2	**AW59004**	Price
3/32	.0938	1-1/2	**AW59006**	Price
1/8	.1250	1-1/2	**AW59008**	Price
5/32	.1562	2	**AW59010**	Price
3/16	.1875	3-1/2	**AW59012**	Price
13/64	.2031	3-3/4	**AW59013**	Price
7/32	.2188	2-3/4	**AW59014**	Price
15/64	.2344	4	**AW59015**	Price
1/4	.2500	4	**AW59016**	Price
17/64	.2656	4-1/4	**AW59017**	Price
9/32	.2812	4-1/4	**AW59018**	Price
19/64	.2969	4-1/2	**AW59019**	Price
5/16	.3125	4-1/2	**AW59020**	Price
21/64	.3281	4-3/4	**AW59021**	Price
11/32	.3438	4-3/4	**AW59022**	Price
23/64	.3594	5	**AW59023**	Price
3/8	.3750	5	**AW59024**	Price
25/64	.3906	5-1/4	**AW59025**	Price
13/32	.4062	5-1/4	**AW59026**	Price
27/64	.4219	5-1/2	**AW59027**	Price
7/16	.4375	5-1/2	**AW59028**	Price
29/64	.4531	5-3/4	**AW59029**	Price
15/32	.4688	5-3/4	**AW59030**	Price
31/64	.4844	6	**AW59031**	Price

Size (in.)	Dec. Equiv.	OAL (in.)	Order No.	Price
1/2	.5000	6	**AW59032**	Price
17/32	.5312	6	**AW59034**	Price
9/16	.5625	6	**AW59036**	Price
19/32	.5938	7	**AW59038**	Price
5/8	.6250	7	**AW59040**	Price
21/32	.6562	7-1/2	**AW59042**	Price
11/16	.6875	7-1/2	**AW59044**	Price
23/32	.7188	8	**AW59046**	Price
3/4	.7500	8	**AW59048**	Price

RAPIDKUT® Carbide Tipped Jobber Length Drill Sets

118° Standard Point

- Heavy duty construction
- Used in drilling of cast iron, metals and many composite materials
- Complete with metal index
- **NOT FOR STEEL**



No. of Pieces	Set Range	Order No.	Price
13	1/8" - 1/2" by 32nds	**AP50C162CT**	Price
26	A - Z Letter Size	**AP50CAZCT**	Price
32	#1 - #32	**AP50C1CT**	Price

RAPIDKUT® Carbide Tipped Jobber Length Drills

High Speed Steel Bodies • 118° Point

- For drilling cast iron, non-ferrous materials, composites, plastics and other non-metals
- Tips are brazed in hardened tool steel bodies
- **NOTE**: These drills are not guaranteed for use in steel nor are they recommended for this usage!



Description - Fractional Size					
Size	Dec. Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	.1250	1-5/8	2-3/4	**AW50008**	Price
9/64	.1406	1-3/4	2-7/8	**AW50009**	Price
5/32	.1562	2	3-1/8	**AW50010**	Price
11/64	.1719	2-1/8	3-1/4	**AW50011**	Price
3/16	.1875	2-5/16	3-1/2	**AW50012**	Price
13/64	.2031	2-7/16	3-5/8	**AW50013**	Price
7/32	.2188	2-1/2	3-3/4	**AW50014**	Price
15/64	.2344	2-5/8	3-7/8	**AW50015**	Price
1/4	.2500	2-3/4	4	**AW50016**	Price
17/64	.2656	2-7/8	4-1/8	**AW50017**	Price
9/32	.2812	2-15/16	4-1/4	**AW50018**	Price
19/64	.2969	3-1/16	4-3/8	**AW50019**	Price
5/16	.3125	3-3/16	4-1/2	**AW50020**	Price
21/64	.3281	3-5/16	4-5/8	**AW50021**	Price
11/32	.3438	3-7/16	4-3/4	**AW50022**	Price
23/64	.3594	3-1/2	4-7/8	**AW50023**	Price
3/8	.3750	3-5/8	5	**AW50024**	Price
25/64	.3906	3-3/4	5-1/8	**AW50025**	Price
13/32	.4062	3-7/8	5-1/4	**AW50026**	Price
27/64	.4219	3-15/16	5-3/8	**AW50027**	Price

Description - Fractional Size					
Size	Dec. Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
7/16	.4375	4-1/16	5-1/2	**AW50028**	Price
29/64	.4531	4-3/16	5-5/8	**AW50029**	Price
15/32	.4688	4-5/16	5-3/4	**AW50030**	Price
31/64	.4844	4-3/8	5-7/8	**AW50031**	Price
1/2	.5000	4-1/2	6	**AW50032**	Price

Description - Letter Size					
Size	Dec. Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
A	.2340	2-5/8	3-7/8	**AW50201**	Price
B	.2380	2-3/4	4	**AW50202**	Price
C	.2420	2-3/4	4	**AW50203**	Price
D	.2460	2-3/4	4	**AW50204**	Price
F	.2570	2-7/8	4-1/8	**AW50206**	Price
G	.2610	2-7/8	4-1/8	**AW50207**	Price
H	.2660	2-7/8	4-1/8	**AW50208**	Price
I	.2720	2-7/8	4-1/8	**AW50209**	Price
J	.2770	2-7/8	4-1/8	**AW50210**	Price
K	.2810	2-15/16	4-1/4	**AW50211**	Price
L	.2900	2-15/16	4-1/4	**AW50212**	Price
M	.2950	3-1/16	4-3/8	**AW50213**	Price
N	.3020	3-1/16	4-3/8	**AW50214**	Price
O	.3160	3-3/16	4-1/2	**AW50215**	Price
P	.3230	3-5/16	4-5/8	**AW50216**	Price
Q	.3320	3-7/16	4-3/4	**AW50217**	Price
R	.3390	3-7/16	4-3/4	**AW50218**	Price
S	.3480	3-1/2	4-7/8	**AW50219**	Price
T	.3580	3-1/2	4-7/8	**AW50220**	Price
U	.3680	3-5/8	5	**AW50221**	Price
V	.3770	3-5/8	5	**AW50222**	Price
W	.3860	3-3/4	5-1/8	**AW50223**	Price
X	.3970	3-3/4	5-1/8	**AW50224**	Price
Y	.4040	3-7/8	5-1/4	**AW50225**	Price
Z	.4130	3-7/8	5-1/4	**AW50226**	Price

Description - Wire Gage Size					
Size	Dec. Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1	.2280	2-5/8	3-7/8	**AW50101**	Price
2	.2210	2-5/8	3-7/8	**AW50102**	Price
3	.2130	2-1/2	3-3/4	**AW50103**	Price
4	.2090	2-1/2	3-3/4	**AW50104**	Price
5	.2055	2-1/2	3-3/4	**AW50105**	Price
6	.2040	2-1/2	3-3/4	**AW50106**	Price
7	.2010	2-7/16	3-5/8	**AW50107**	Price
8	.1990	2-7/16	3-5/8	**AW50108**	Price
9	.1960	2-7/16	3-5/8	**AW50109**	Price
10	.1935	2-7/16	3-5/8	**AW50110**	Price
11	.1910	2-5/16	3-1/2	**AW50111**	Price
12	.1890	2-5/16	3-1/2	**AW50112**	Price
13	.1850	2-5/16	3-1/2	**AW50113**	Price
14	.1820	2-3/16	3-3/8	**AW50114**	Price
15	.1800	2-3/16	3-3/8	**AW50115**	Price
16	.1770	2-3/16	3-3/8	**AW50116**	Price
17	.1730	2-3/16	3-3/8	**AW50117**	Price
18	.1695	2-1/8	3-1/4	**AW50118**	Price
19	.1660	2-1/8	3-1/4	**AW50119**	Price
20	.1610	2-1/8	3-1/4	**AW50120**	Price
21	.1590	2-1/8	3-1/4	**AW50121**	Price
22	.1570	2	3-1/8	**AW50122**	Price
23	.1540	2	3-1/8	**AW50123**	Price
24	.1520	2	3-1/8	**AW50124**	Price
25	.1495	1-7/8	3	**AW50125**	Price
26	.1470	1-7/8	3	**AW50126**	Price
27	.1440	1-7/8	3	**AW50127**	Price
28	.1405	1-3/4	2-7/8	**AW50128**	Price
29	.1360	1-3/4	2-7/8	**AW50129**	Price
30	.1285	1-5/8	2-3/4	**AW50130**	Price
31	.1200	1-5/8	2-3/4	**AW50131**	Price
32	.1160	1-5/8	2-3/4	**AW50132**	Price

Carbide Tipped Taper Shank Drills

118° Point

- Tips are brazed in hardened tool steel bodies
- For drilling cast iron, non-ferrous metals, composites, plastics and non-metal
- **NOTE**: Not recommended for drilling steel



Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price
1/4	2-7/8	6-1/8	1 MT	**AW55016**	Price
5/16	3-1/8	6-3/8	1 MT	**AW55020**	Price
13/32	3-5/8	7	1 MT	**AW55026**	Price
7/16	3-7/8	7-1/4	1 MT	**AW55028**	Price
31/64	4-3/8	8-1/4	2 MT	**AW55031**	Price
1/2	4-3/8	8-1/4	2 MT	**AW55032**	Price
33/64	4-5/8	8-1/2	2 MT	**AW55033**	Price
17/32	4-5/8	8-1/2	2 MT	**AW55034**	Price
35/64	4-7/8	8-3/4	2 MT	**AW55035**	Price
9/16	4-7/8	8-3/4	2 MT	**AW55036**	Price
37/64	4-7/8	8-3/4	2 MT	**AW55037**	Price
19/32	4-7/8	8-3/4	2 MT	**AW55038**	Price
5/8	4-7/8	8-3/4	2 MT	**AW55040**	Price
41/64	5-1/8	9	2 MT	**AW55041**	Price
21/32	5-1/8	9	2 MT	**AW55042**	Price
43/64	5-3/8	9-1/4	2 MT	**AW55043**	Price
11/16	5-3/8	9-1/4	2 MT	**AW55044**	Price
45/64	5-5/8	9-1/2	2 MT	**AW55045**	Price
23/32	5-5/8	9-1/2	2 MT	**AW55046**	Price
47/64	5-7/8	9-3/4	2 MT	**AW55047**	Price
3/4	5-7/8	9-3/4	2 MT	**AW55048**	Price
25/32	6	9-7/8	2 MT	**AW55050**	Price
13/16	6-1/8	10-3/4	3 MT	**AW55052**	Price
27/32	6-1/8	10-3/4	3 MT	**AW55054**	Price
7/8	6-1/8	10-3/4	3 MT	**AW55056**	Price
57/64	6-1/8	10-3/4	3 MT	**AW55057**	Price
29/32	6-1/8	10-3/4	3 MT	**AW55058**	Price
15/16	6-1/8	10-3/4	3 MT	**AW55060**	Price
31/32	6-3/8	11	3 MT	**AW55062**	Price
1	6-3/8	11	3 MT	**AW55100**	Price
1-1/16	6-5/8	11-1/4	3 MT	**AW55104**	Price
1-1/8	7-1/8	12-3/4	4 MT	**AW55108**	Price
1-3/16	7-3/8	13	4 MT	**AW55112**	Price
1-1/4	7-7/8	13-1/2	4 MT	**AW55116**	Price

RAPIDKUT Carbide Tipped Taper Length Drills

118° Point

- Tips are brazed in hardened tool steel bodies
- For drilling cast iron, non-ferrous metals, composites, plastics and other non-metals
- **NOTE**: Not recommended for drilling steel.



Size (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	.1250	2-3/4	5-1/8	**AW56008**	Price
9/64	.1406	3	5-3/8	**AW56009**	Price
5/32	.1562	3	5-3/8	**AW56010**	Price
11/64	.1719	3-3/8	5-3/4	**AW56011**	Price
3/16	.1875	3-3/8	5-3/4	**AW56012**	Price
13/64	.2031	3-5/8	6	**AW56013**	Price
7/32	.2188	3-5/8	6	**AW56014**	Price
15/64	.2344	3-3/4	6-1/8	**AW56015**	Price
1/4	.2500	3-3/4	6-1/8	**AW56016**	Price
17/64	.2656	3-7/8	6-1/4	**AW56017**	Price
9/32	.2812	3-7/8	6-1/4	**AW56018**	Price
19/64	.2969	4	6-3/8	**AW56019**	Price
5/16	.3125	4	6-3/8	**AW56020**	Price
21/64	.3281	4-1/8	6-1/2	**AW56021**	Price
11/32	.3438	4-1/8	6-1/2	**AW56022**	Price
23/64	.3594	4-1/4	6-3/4	**AW56023**	Price
3/8	.3750	4-1/4	6-3/4	**AW56024**	Price
25/64	.3906	4-3/8	7	**AW56025**	Price
13/32	.4062	4-3/8	7	**AW56026**	Price
27/64	.4219	4-5/8	7-1/4	**AW56027**	Price
7/16	.4375	4-5/8	7-1/4	**AW56028**	Price
29/64	.4531	4-3/4	7-1/2	**AW56029**	Price
15/32	.4688	4-3/4	7-1/2	**AW56030**	Price
31/64	.4844	4-3/4	7-3/4	**AW56031**	Price
1/2	.5000	4-3/4	7-3/4	**AW56032**	Price
33/64	.5156	4-3/4	8	**AW56033**	Price
17/32	.5312	4-3/4	8	**AW56034**	Price
35/64	.5469	4-7/8	8-1/4	**AW56035**	Price
9/16	.5625	4-7/8	8-1/4	**AW56036**	Price
37/64	.5781	4-7/8	8-3/4	**AW56037**	Price
19/32	.5938	4-7/8	8-3/4	**AW56038**	Price
39/64	.6094	4-7/8	8-3/4	**AW56039**	Price
5/8	.6250	4-7/8	8-3/4	**AW56040**	Price
41/64	.6406	5-1/8	9	**AW56041**	Price
21/32	.6562	5-1/8	9	**AW56042**	Price
43/64	.6719	5-3/8	9-1/4	**AW56043**	Price
11/16	.6875	5-3/8	9-1/4	**AW56044**	Price
45/64	.7031	5-5/8	9-1/2	**AW56045**	Price
23/32	.7187	5-5/8	9-1/2	**AW56046**	Price
47/64	.7344	5-7/8	9-3/4	**AW56047**	Price
3/4	.7500	5-7/8	9-3/4	**AW56048**	Price
25/32	.7812	6	9-7/8	**AW56050**	Price
13/16	.8125	6-1/8	10	**AW56052**	Price
27/32	.8438	6-1/8	10	**AW56054**	Price
7/8	.8750	6-1/8	10	**AW56056**	Price
29/32	.9062	6-1/8	10	**AW56058**	Price
15/16	.9375	6-1/8	10-3/4	**AW56060**	Price
61/64	.9531	6-3/8	11	**AW56061**	Price
31/32	.9688	6-3/8	11	**AW56062**	Price
1	1.0000	6-3/8	11	**AW56100**	Price

Extra Long Masonry Drills

Carbide Tipped

- For drilling deep or through holes in masonry



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	1/4	9	13	**AW64016**	Price
1/4	1/4	13	18	**AW64116**	Price
5/16	1/4	9	13	**AW64020**	Price
5/16	1/4	13	18	**AW64120**	Price
3/8	1/4	9	13	**AW64024**	Price
3/8	3/8	13	18	**AW64124**	Price
1/2	3/8	9	13	**AW64032**	Price
1/2	3/8	13	18	**AW64132**	Price
9/16	1/2	13	18	**AW64136**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
5/8	3/8	9	13	**AW64040A†**	Price
5/8	1/2	13	18	**AW64140**	Price
3/4	1/2	9	13	**AW64048**	Price
3/4	1/2	13	18	**AW64148**	Price
7/8	1/2	9	13	**AW64056**	Price
7/8	1/2	13	18	**AW64156**	Price
1-1/4	1/2	13	18	**AW64180**	Price
1-1/2	1/2	13	18	**AW64196**	Price

†Fast Spiral

Straight Shank Masonry Hammer Drill Bits

Carbide Tipped

- Round shank
- For use in rotary percussion tools and in drill motors with 3-jaw chucks



Size (in.)	Shank Dia. (in.)	Drill Depth (in.)	OAL (in.)	Order No.	Price
1/8	1/8	1-1/2	3	**AW67R0803**	Price
1/8	1/8	4-1/2	6	**AW67R0806**	Price
5/32	5/32	1-1/2	3	**AW67R1003**	Price
5/32	5/32	4-1/2	6	**AW67R1006**	Price
3/16	3/16	2-1/2	4	**AW67R1204**	Price
3/16	3/16	4	6	**AW67R1206**	Price
3/16	3/16	6	8	**AW67R1208**	Price
3/16	3/16	12	13-1/2	**AW67R1213**	Price
1/4	1/4	2-1/2	4	**AW67R1604**	Price
1/4	1/4	4-1/2	6	**AW67R1606**	Price
1/4	1/4	11-1/2	13	**AW67R1613**	Price
1/4	1/4	16-1/2	18	**AW67R1618**	Price
1/4	1/4	22-1/2	24	**AW67R1624**	Price
5/16	9/32	2-1/2	4	**AW67R2004**	Price
5/16	9/32	4-1/2	6	**AW67R2006**	Price
5/16	9/32	11-1/2	13	**AW67R2013**	Price
5/16	9/32	16-1/2	18	**AW67R2018**	Price
5/16	9/32	22-1/2	24	**AW67R2024**	Price
3/8	11/32	2-1/2	4	**AW67R2404**	Price
3/8	11/32	4-1/2	6	**AW67R2406**	Price
3/8	11/32	11-1/2	13	**AW67R2413**	Price
3/8	11/32	16-1/2	18	**AW67R2418**	Price
3/8	3/8	22-1/2	24	**AW67R2424**	Price
7/16	3/8	4-1/2	6	**AW67R2806**	Price
1/2	3/8	4-1/2	6	**AW67R3206**	Price
1/2	3/8	11-1/2	13	**AW67R3213**	Price
1/2	3/8	16-1/2	18	**AW67R3218**	Price
1/2	3/8	22-1/2	24	**AW67R3224**	Price
9/16	3/8	4-1/2	6	**AW67R3606**	Price
9/16	3/8	12	13-1/2	**AW67R3613**	Price
9/16	3/8	16-1/2	18	**AW67R3618**	Price
5/8	3/8	4-1/2	6	**AW67R4006**	Price
5/8	1/2	12	13-1/2	**AW67R4013**	Price
5/8	1/2	16-1/2	18	**AW67R4018**	Price
5/8	1/2	22-1/2	24	**AW67R4024**	Price
3/4	1/2	4-1/2	6	**AW67R4806**	Price
7/8	1/2	4-1/2	6	**AW67R5606**	Price
7/8	1/2	10	12	**AW67R5612**	Price
1	1/2	4-1/2	6	**AW67R6406**	Price
1-1/8	1/2	4-1/2	6	**AW67R7206**	Price
1-1/4	1/2	4-1/2	6	**AW67R8006**	Price

6" Extra Long 5 Pc. Masonry Drill Sets

Carbide Tipped

- 6" Overall length
- Sizes included: 1/4, 5/16, 3/8, 7/16, 1/2
- Case not included

Regular Spiral Set:

- Drill in brick, stone, concrete and sandstone
- Wide flutes provide fast dust removal in softer materials

Fast Spiral Set:

- Higher helix provides more support minimizing chipping of carbide tip
- For drilling in hard concrete aggregates and similar materials



Flute Type	Order No.	Price
Fast Spiral Set	**AW65006F**	Price
Regular Spiral Set	**AW65006**	Price

SDS+ Masonry Hammer Drill Bits

Carbide Tipped



- Versatile slot drive system
- Fit most rotary hammers

Size (in.)	Drill Depth (in.)	OAL (in.)	Order No.	Price
5/32	4	6-5/8	**AW671006**	Price
3/16	2	4-1/4	**AW671204**	Price
3/16	4	6-1/4	**AW671206**	Price
3/16	6	8-5/8	**AW671208**	Price
7/32	4	6-5/8	**AW671406**	Price
1/4	2	4-1/4	**AW671604**	Price
1/4	4	6-3/8	**AW671606**	Price
1/4	6	8-5/8	**AW671608**	Price
9/32	6	8-5/8	**AW671808**	Price
5/16	4	6-1/4	**AW672006**	Price
5/16	10	12-5/8	**AW672012**	Price
3/8	4	6-1/4	**AW672406**	Price
3/8	8	10-5/8	**AW672410**	Price
3/8	18	20-5/8	**AW672420**	Price
7/16	4	6-5/8	**AW672806**	Price
1/2	4	6-1/4	**AW673206**	Price
1/2	8	10-5/8	**AW673210**	Price
1/2	16	18-5/8	**AW673218**	Price
9/16	4	6-3/4	**AW673606**	Price
9/16	10	12-3/4	**AW673612**	Price
5/8	6	8-1/4	**AW674008**	Price
5/8	10	12-3/4	**AW674012**	Price
11/16	4	6-3/4	**AW674406**	Price
3/4	6	8-1/4	**AW674808**	Price
3/4	10	12-3/4	**AW674812**	Price
3/4	16	18-3/4	**AW674818**	Price
7/8	4	6-3/4	**AW675606**	Price
7/8	10	12-3/4	**AW675612**	Price
7/8	16	18-3/4	**AW675618**	Price
1	8	10-3/4	**AW676410**	Price
1	16	18-3/4	**AW676418**	Price
1	28	30	**AW676430**	Price
1-1/8	10	12-3/4	**AW677212**	Price
1-1/4	10	12-3/4	**AW678012**	Price

Masonry Drills

Carbide Tipped • Regular and Fast Spiral

Regular Spiral

- Drill in brick, stone, concrete and sandstone
- Wide flutes provide fast dust removal in softer materials

Fast Spiral

- Higher helix provides more support minimizing chipping of carbide tip
- For drilling in hard concrete aggregates and similar materials





			Fast Spiral		Regular Spiral	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	1/8	3	**AW63083**	Price	**AW62083**	Price
5/32	5/32	3-1/2	**-**	-	**AW62103**	Price
3/16	3/16	4	**AW63124**	Price	**AW62124**	Price
3/16	3/16	6	**AW63126**	Price	**AW62126**	Price
1/4	1/4	4	**AW63164**	Price	**AW62164**	Price
1/4	1/4	6	**AW63166**	Price	**AW62166**	Price
5/16	1/4	4	**AW63204**	Price	**AW62204**	Price
5/16	1/4	6	**AW63206**	Price	**AW62206**	Price
3/8	1/4	4	**AW63244**	Price	**AW62244**	Price
3/8	1/4	6	**AW63246**	Price	**AW62246**	Price
7/16	1/4	4	**AW63284**	Price	**AW62284**	Price
7/16	1/4	6	**AW63286**	Price	**AW62286**	Price
7/16	3/8	6	**-**	-	**AW62296**	Price
1/2	1/4	4	**AW63324**	Price	**AW62324**	Price
1/2	1/4	6	**-**	-	**AW62326**	Price
1/2	3/8	6	**AW63336**	Price	**AW62336**	Price
9/16	3/8	6	**AW63366**	Price	**-**	-
9/16	7/16	6	**-**	-	**AW62366**	Price
5/8	3/8	6	**-**	-	**AW62406A**	Price
11/16	1/2	6	**AW63426**	Price	**AW62426**	Price
3/4	3/8	6	**-**	-	**AW62486A**	Price
3/4	1/2	6	**AW63486**	Price	**AW62486**	Price
7/8	1/2	6	**-**	-	**AW62566**	Price
1	1/2	6	**-**	-	**AW62646**	Price
1-1/2	1/2	10	**-**	-	**AW6213210**	Price

RAPIDKUT® Solid Carbide Jobber Length Drills



118° Point • Uncoated and TiAlN Coated

- Ideal for drilling cast iron and other non-ferrous materials where greater torsional stresses are encountered
- Solid carbide offers extra rigidity and is particularly recommended for use under high drilling temperatures and where the drill body must withstand continuous abrasion
- **NOTE**: Not for use in steel

Type - Fractional Size						
			TiAlN		Bright	
Size	LOC (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/64	1/4	1	-	-	**AX50001**	Price
1/32	5/16	1-1/4	**AX50500**	Price	**AX50002**	Price
3/64	3/4	1-1/2	**AX50501**	Price	**AX50003**	Price
1/16	3/4	1-1/2	**AX50502**	Price	**AX50004**	Price
5/64	7/8	1-3/4	**AX50503**	Price	**AX50005**	Price
3/32	1	2	**AX50504**	Price	**AX50006**	Price
7/64	1-1/4	2-1/4	**AX50505**	Price	**AX50007**	Price
1/8	1-1/4	2-1/4	**AX50506**	Price	**AX50008**	Price
9/64	1-3/8	2-1/2	**AX50507**	Price	**AX50009**	Price
5/32	1-3/8	2-1/2	**AX50508**	Price	**AX50010**	Price
11/64	1-5/8	2-3/4	**AX50509**	Price	**AX50011**	Price
3/16	1-5/8	2-3/4	**AX50510**	Price	**AX50012**	Price
13/64	1-3/4	3	**AX50511**	Price	**AX50013**	Price
7/32	1-3/4	3	**AX50512**	Price	**AX50014**	Price
15/64	2	3-1/4	**AX50513**	Price	**AX50015**	Price
1/4	2	3-1/4	**AX50514**	Price	**AX50016**	Price

Type - Fractional Size						
			TiAlN		Bright	
Size	LOC (in.)	OAL (in.)	Order No.	Price	Order No.	Price
17/64	2-1/8	3-1/2	**AX50515**	Price	**AX50017**	Price
9/32	2-1/8	3-1/2	**AX50516**	Price	**AX50018**	Price
19/64	2-3/8	3-3/4	**AX50517**	Price	**AX50019**	Price
5/16	2-3/8	3-3/4	**AX50518**	Price	**AX50020**	Price
21/64	2-1/2	4	**AX50519**	Price	**AX50021**	Price
11/32	2-1/2	4	**AX50520**	Price	**AX50022**	Price
23/64	2-3/4	4-1/4	**AX50521**	Price	**AX50023**	Price
3/8	2-3/4	4-1/4	**AX50522**	Price	**AX50024**	Price
25/64	2-7/8	4-1/2	**AX50523**	Price	**AX50025**	Price
13/32	2-7/8	4-1/2	**AX50524**	Price	**AX50026**	Price
27/64	2-7/8	4-1/2	**AX50525**	Price	**AX50027**	Price
7/16	2-7/8	4-1/2	**AX50526**	Price	**AX50028**	Price
29/64	3	4-3/4	**AX50527**	Price	**AX50029**	Price
15/32	3	4-3/4	**AX50528**	Price	**AX50030**	Price
31/64	3	4-3/4	**AX50529**	Price	**AX50031**	Price
1/2	3	4-3/4	**AX50530**	Price	**AX50032**	Price

Type - Letter Size				
			Bright	
Size	LOC (in.)	OAL (in.)	Order No.	Price
A	2	3-1/4	**AX50201**	Price
B	2	3-1/4	**AX50202**	Price
C	2	3-1/4	**AX50203**	Price
D	2	3-1/4	**AX50204**	Price
E	2	3-1/4	**AX50205**	Price
F	2	3-1/4	**AX50206**	Price
G	2-1/8	3-1/2	**AX50207**	Price
H	2-1/8	3-1/2	**AX50208**	Price
I	2-1/8	3-1/2	**AX50209**	Price
J	2-1/8	3-1/2	**AX50210**	Price
K	2-1/8	3-1/2	**AX50211**	Price
L	2-1/8	3-1/2	**AX50212**	Price
M	2-3/8	3-3/4	**AX50213**	Price
N	2-3/8	3-3/4	**AX50214**	Price
O	2-3/8	3-3/4	**AX50215**	Price
P	2-3/8	3-3/4	**AX50216**	Price
Q	2-1/2	4	**AX50217**	Price
R	2-1/2	4	**AX50218**	Price
S	2-1/2	4	**AX50219**	Price
T	2-3/4	4-1/4	**AX50220**	Price
U	2-3/4	4-1/4	**AX50221**	Price
V	2-7/8	4-1/2	**AX50222**	Price
W	2-7/8	4-1/2	**AX50223**	Price
X	2-7/8	4-1/2	**AX50224**	Price
Y	2-7/8	4-1/2	**AX50225**	Price
Z	2-7/8	4-1/2	**AX50226**	Price

Type - Wire Gage Size				
			Bright	
Size	LOC (in.)	OAL (in.)	Order No.	Price
1	1-3/4	3	**AX50101**	Price
2	1-3/4	3	**AX50102**	Price
3	1-3/4	3	**AX50103**	Price
4	1-3/4	3	**AX50104**	Price
5	1-3/4	3	**AX50105**	Price
6	1-3/4	3	**AX50106**	Price
7	1-3/4	3	**AX50107**	Price
8	1-3/4	3	**AX50108**	Price
9	1-3/4	3	**AX50109**	Price
10	1-5/8	2-3/4	**AX50110**	Price
11	1-5/8	2-3/4	**AX50111**	Price
12	1-5/8	2-3/4	**AX50112**	Price
13	1-5/8	2-3/4	**AX50113**	Price
14	1-5/8	2-3/4	**AX50114**	Price
15	1-5/8	2-3/4	**AX50115**	Price
16	1-5/8	2-3/4	**AX50116**	Price
17	1-5/8	2-3/4	**AX50117**	Price
18	1-5/8	2-3/4	**AX50118**	Price
19	1-5/8	2-3/4	**AX50119**	Price
20	1-3/8	2-1/2	**AX50120**	Price
21	1-3/8	2-1/2	**AX50121**	Price
22	1-3/8	2-1/2	**AX50122**	Price
23	1-3/8	2-1/2	**AX50123**	Price
24	1-3/8	2-1/2	**AX50124**	Price
25	1-3/8	2-1/2	**AX50125**	Price
26	1-3/8	2-1/2	**AX50126**	Price
27	1-3/8	2-1/2	**AX50127**	Price
28	1-3/8	2-1/2	**AX50128**	Price
29	1-3/8	2-1/2	**AX50129**	Price
30	1-1/4	2-1/4	**AX50130**	Price

Type - Wire Gage Size				
			Bright	
Size	LOC (in.)	OAL (in.)	Order No.	Price
31	1-1/4	2-1/4	**AX50131**	Price
32	1-1/4	2-1/4	**AX50132**	Price
33	1-1/4	2-1/4	**AX50133**	Price
34	1-1/4	2-1/4	**AX50134**	Price
35	1-1/4	2-1/4	**AX50135**	Price
36	1-1/4	2-1/4	**AX50136**	Price
37	1-1/4	2-1/4	**AX50137**	Price
38	1-1/4	2-1/4	**AX50138**	Price
39	1-1/4	2-1/4	**AX50139**	Price
40	1	2	**AX50140**	Price
41	1	2	**AX50141**	Price
42	1	2	**AX50142**	Price
43	1	2	**AX50143**	Price
44	1	2	**AX50144**	Price
45	7/8	1-3/4	**AX50145**	Price
47	7/8	1-3/4	**AX50147**	Price
48	7/8	1-3/4	**AX50148**	Price
49	7/8	1-3/4	**AX50149**	Price
50	7/8	1-3/4	**AX50150**	Price
51	3/4	1-1/2	**AX50151**	Price
52	3/4	1-1/2	**AX50152**	Price
53	3/4	1-1/2	**AX50153**	Price
54	3/4	1-1/2	**AX50154**	Price
55	3/4	1-1/2	**AX50155**	Price
56	3/4	1-1/2	**AX50156**	Price
57	3/4	1-1/2	**AX50157**	Price
58	3/4	1-1/2	**AX50158**	Price
59	3/4	1-1/2	**AX50159**	Price
60	3/4	1-1/2	**AX50160**	Price

RAPIDKUT® Solid Carbide Jobber Length Drills



Metric Sizes • 118° Point • Uncoated

- Ideal for cast iron and other non-ferrous applications
- Extra rigidity and is particularly recommended for use under high drilling temperatures
- Not recommended for steel
- Solid C-2 grade premium sub-micron carbide with 10% cobalt

Size	Decimal Equiv.	Flute Length	OAL	Order No.	Price
1mm	.0394	16mm	38mm	**AX50250**	Price
1.5mm	.0591	19mm	38mm	**AX50251**	Price
2mm	.0787	22mm	45mm	**AX50252**	Price
3mm	.1181	32mm	57mm	**AX50254**	Price
2.5mm	.0984	25mm	51mm	**AX50253**	Price
3.5mm	.1378	35mm	64mm	**AX50255**	Price
4mm	.1575	35mm	64mm	**AX50256**	Price
4.5mm	.1772	41mm	70mm	**AX50257**	Price
5mm	.1968	45mm	76mm	**AX50258**	Price
5.5mm	.2165	45mm	76mm	**AX50259**	Price
6mm	.2362	51mm	83mm	**AX50260**	Price
6.5mm	.2559	51mm	83mm	**AX50261**	Price

Size	Decimal Equiv.	Flute Length	OAL	Order No.	Price
7mm	.2756	54mm	89mm	**AX50262**	Price
7.5mm	.2953	60mm	95mm	**AX50263**	Price
8mm	.3150	60mm	95mm	**AX50264**	Price
8.5mm	.3346	64mm	102mm	**AX50265**	Price
9mm	.3543	64mm	102mm	**AX50266**	Price
9.5mm	.3740	70mm	108mm	**AX50267**	Price
10mm	.3937	73mm	114mm	**AX50268**	Price
10.5mm	.4134	73mm	114mm	**AX50269**	Price
11mm	.4331	73mm	114mm	**AX50270**	Price
11.5mm	.4528	76mm	121mm	**AX50271**	Price
12mm	.4724	76mm	121mm	**AX50272**	Price
12.5mm	.4921	76mm	121mm	**AX50273**	Price

Twister® GP Solid Carbide Jobber Drills



118° Point

- Recommended for drilling cast iron, aluminum, bronze and magnesium alloys and other abrasive, but easily machined materials
- 21° Helix
- Designed to allow high feed rates with good chip flow
- Four facet drill point minimizes drill wander and assures accurately sized holes
- M.A. Ford List #204

Description - Fractional Size					
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1/64	.0156	1/4	1-1/2	**AX4024013**	Price
1/32	.0312	3/8	1-1/2	**AX4024073**	Price
3/64	.0469	3/4	1-1/2	**AX4024136**	Price
1/16	.0625	3/4	1-1/2	**AX4024169**	Price
5/64	.0781	7/8	1-3/4	**AX4024199**	Price
3/32	.0938	1	2	**AX4024232**	Price
7/64	.1094	1-1/4	2-1/4	**AX4024265**	Price
1/8	.1250	1-1/4	2-1/4	**AX4024295**	Price
9/64	.1406	1-3/8	2-1/2	**AX4024319**	Price
5/32	.1562	1-3/8	2-1/2	**AX4024349**	Price
11/64	.1719	1-5/8	2-3/4	**AX4024379**	Price
3/16	.1875	1-5/8	2-3/4	**AX4024406**	Price
13/64	.2031	1-3/4	3	**AX4024439**	Price
7/32	.2187	1-3/4	3	**AX4024466**	Price
15/64	.2344	2	3-1/4	**AX4024490**	Price
1/4	.2500	2	3-1/4	**AX4024514**	Price
17/64	.2656	2-1/8	3-1/2	**AX4024535**	Price
9/32	.2812	2-1/8	3-1/2	**AX4024562**	Price
19/64	.2969	2-3/8	3-3/4	**AX4024583**	Price
5/16	.3125	2-3/8	3-3/4	**AX4024601**	Price
21/64	.3281	2-1/2	4	**AX4024622**	Price
11/32	.3438	2-1/2	4	**AX4024643**	Price
23/64	.3594	2-3/4	4-1/4	**AX4024664**	Price
3/8	.3750	2-3/4	4-1/4	**AX4024682**	Price
25/64	.3906	2-7/8	4-1/2	**AX4024703**	Price
13/32	.4062	2-7/8	4-1/2	**AX4024724**	Price
27/64	.4219	2-7/8	4-1/2	**AX4024742**	Price
7/16	.4375	2-7/8	4-1/2	**AX4024757**	Price
29/64	.4531	3	4-3/4	**AX4024772**	Price
15/32	.4688	3	4-3/4	**AX4024787**	Price
31/64	.4844	3	4-3/4	**AX4024793**	Price
1/2	.5000	3	4-3/4	**AX4024799**	Price
33/64	.5156	3-1/4	5	**AX4024805**	Price
17/32	.5312	3-1/4	5	**AX4024808**	Price
35/64	.5469	3-1/4	5	**AX4024814**	Price
9/16	.5625	3-1/4	5	**AX4024820**	Price
37/64	.5781	3-1/2	5-1/4	**AX4024826**	Price
19/32	.5938	3-1/2	5-1/4	**AX4024832**	Price
39/64	.6094	3-1/2	5-1/4	**AX4024835**	Price
5/8	.6250	3-1/2	5-1/4	**AX4024841**	Price
41/64	.6406	3-5/8	5-1/2	**AX4024847**	Price
21/32	.6562	3-5/8	5-1/2	**AX4024853**	Price
43/64	.6719	3-5/8	5-1/2	**AX4024859**	Price
11/16	.6875	3-5/8	5-1/2	**AX4024862**	Price
45/64	.7031	3-7/8	5-3/4	**AX4024868**	Price
23/32	.7188	3-7/8	5-3/4	**AX4024874**	Price
47/64	.7343	3-7/8	5-3/4	**AX4024880**	Price
3/4	.7500	3-7/8	5-3/4	**AX4024886**	Price
49/64	.7656	4	6	**AX4024889**	Price
25/32	.7812	4	6	**AX4024892**	Price

Description - Letter Size					
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
A	.2340	2	3-1/4	**AX4024487**	Price
B	.2380	2	3-1/4	**AX4024496**	Price
C	.2420	2	3-1/4	**AX4024502**	Price
D	.2460	2	3-1/4	**AX4024508**	Price
F	.2570	2	3-1/4	**AX4024523**	Price
G	.2610	2-1/8	3-1/2	**AX4024529**	Price
H	.2660	2-1/8	3-1/2	**AX4024538**	Price
I	.2720	2-1/8	3-1/2	**AX4024547**	Price
J	.2770	2-1/8	3-1/2	**AX4024553**	Price
K	.2810	2-1/8	3-1/2	**AX4024559**	Price
L	.2900	2-1/8	3-1/2	**AX4024571**	Price
M	.2950	2-3/8	3-3/4	**AX4024577**	Price
N	.3020	2-3/8	3-3/4	**AX4024589**	Price
O	.3160	2-3/8	3-3/4	**AX4024607**	Price
P	.3230	2-3/8	3-3/4	**AX4024616**	Price
Q	.3320	2-1/2	4	**AX4024628**	Price
R	.3390	2-1/2	4	**AX4024637**	Price
S	.3480	2-1/2	4	**AX4024649**	Price

Description - Letter Size					
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
T	.3580	2-3/4	4-1/4	**AX4024658**	Price
U	.3680	2-3/4	4-1/4	**AX4024673**	Price
V	.3770	2-7/8	4-1/2	**AX4024685**	Price
W	.3860	2-7/8	4-1/2	**AX4024697**	Price
X	.3970	2-7/8	4-1/2	**AX4024709**	Price
Y	.4040	2-7/8	4-1/2	**AX4024718**	Price
Z	.4130	2-7/8	4-1/2	**AX4024730**	Price

Description - Wire Gage Size					
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
#1	.2280	1-3/4	3	**AX4024478**	Price
#2	.2210	1-3/4	3	**AX4024472**	Price
#3	.2130	1-3/4	3	**AX4024460**	Price
#4	.2090	1-3/4	3	**AX4024454**	Price
#5	.2055	1-3/4	3	**AX4024448**	Price
#6	.2040	1-3/4	3	**AX4024442**	Price
#7	.2010	1-3/4	3	**AX4024436**	Price
#8	.1990	1-3/4	3	**AX4024430**	Price
#9	.1960	1-3/4	3	**AX4024424**	Price
#10	.1935	1-5/8	2-3/4	**AX4024421**	Price
#11	.1910	1-5/8	2-3/4	**AX4024415**	Price
#12	.1890	1-5/8	2-3/4	**AX4024412**	Price
#13	.1850	1-5/8	2-3/4	**AX4024403**	Price
#14	.1820	1-5/8	2-3/4	**AX4024400**	Price
15	.1800	1-5/8	2-3/4	**AX4024394**	Price
#16	.1770	1-5/8	2-3/4	**AX4024388**	Price
#17	.1730	1-5/8	2-3/4	**AX4024382**	Price
#18	.1695	1-5/8	2-3/4	**AX4024376**	Price
#19	.1660	1-5/8	2-3/4	**AX4024370**	Price
#20	.1610	1-3/8	2-1/2	**AX4024361**	Price
#21	.1590	1-3/8	2-1/2	**AX4024358**	Price
#22	.1570	1-3/8	2-1/2	**AX4024352**	Price
#23	.1540	1-3/8	2-1/2	**AX4024346**	Price
#24	.1520	1-3/8	2-1/2	**AX4024340**	Price
#25	.1495	1-3/8	2-1/2	**AX4024334**	Price
#26	.1470	1-3/8	2-1/2	**AX4024331**	Price
#27	.1440	1-3/8	2-1/2	**AX4024325**	Price
#28	.1405	1-3/8	2-1/2	**AX4024316**	Price
#29	.1360	1-3/8	2-1/2	**AX4024310**	Price
#30	.1285	1-1/4	2-1/4	**AX4024301**	Price
#31	.1200	1-1/4	2-1/4	**AX4024289**	Price
#32	.1160	1-1/4	2-1/4	**AX4024283**	Price
#33	.1130	1-1/4	2-1/4	**AX4024277**	Price
#34	.1110	1-1/4	2-1/4	**AX4024274**	Price
#35	.1100	1-1/4	2-1/4	**AX4024268**	Price
#36	.1065	1-1/4	2-1/4	**AX4024262**	Price
#37	.1040	1-1/4	2-1/4	**AX4024256**	Price
#38	.1015	1-1/4	2-1/4	**AX4024250**	Price
#39	.0995	1-1/4	2-1/4	**AX4024247**	Price
#40	.0980	1	2	**AX4024241**	Price
#41	.0960	1	2	**AX4024238**	Price
#42	.0935	1	2	**AX4024229**	Price
#43	.0890	1	2	**AX4024223**	Price
#44	.0860	1	2	**AX4024217**	Price
#45	.0820	7/8	1-3/4	**AX4024211**	Price
#46	.0810	7/8	1-3/4	**AX4024208**	Price
#47	.0785	7/8	1-3/4	**AX4024202**	Price
#48	.0760	7/8	1-3/4	**AX4024196**	Price
#49	.0730	7/8	1-3/4	**AX4024190**	Price
#50	.0700	7/8	1-3/4	**AX4024184**	Price
#51	.0670	3/4	1-1/2	**AX4024181**	Price
#52	.0635	3/4	1-1/2	**AX4024175**	Price
#53	.0595	3/4	1-1/2	**AX4024166**	Price
#54	.0550	3/4	1-1/2	**AX4024154**	Price
#55	.0520	3/4	1-1/2	**AX4024148**	Price
#56	.0465	3/4	1-1/2	**AX4024133**	Price
#57	.0430	3/4	1-1/2	**AX4024124**	Price
#58	.0420	3/4	1-1/2	**AX4024121**	Price
#59	.0410	3/4	1-1/2	**AX4024115**	Price
#60	.0400	3/4	1-1/2	**AX4024112**	Price
#61	.0390	1/2	1-1/2	**AX4024106**	Price
#62	.0380	1/2	1-1/2	**AX4024103**	Price
#63	.0370	1/2	1-1/2	**AX4024097**	Price
#64	.0360	1/2	1-1/2	**AX4024094**	Price
#65	.0350	3/8	1-1/2	**AX4024088**	Price
#66	.0330	3/8	1-1/2	**AX4024082**	Price
#67	.0320	3/8	1-1/2	**AX4024079**	Price
#68	.0310	3/8	1-1/2	**AX4024070**	Price
#69	.0292	5/16	1-1/2	**AX4024064**	Price
#70	.0280	5/16	1-1/2	**AX4024061**	Price
#71	.0260	5/16	1-1/2	**AX4024055**	Price
#72	.0250	5/16	1-1/2	**AX4024049**	Price
#73	.0240	1/4	1-1/2	**AX4024046**	Price
#74	.0225	1/4	1-1/2	**AX4024040**	Price
#75	.0210	1/4	1-1/2	**AX4024034**	Price
#76	.0200	1/4	1-1/2	**AX4024031**	Price
#77	.0180	1/4	1-1/2	**AX4024025**	Price
#78	.0160	1/4	1-1/2	**AX4024019**	Price
#79	.0145	1/4	1-1/2	**AX4024010**	Price
#80	.0135	1/4	1-1/2	**AX4024004**	Price

† Letter E same as 1/4" AX4024514

Twister® GP Solid Carbide Metric Jobber Drills



- 118° Point
- 21° Helix
- Designed to allow high feet rates with good chip flow
- Four facet drill point minimizes drill wander and assures accurately sized holes
- M.A. Ford List #224

Size	Decimal Equiv.	Flute Length	OAL	Order No.	Price
.30mm	.0118	3mm	26mm	**AX4124002**	Price
.35mm	.0138	4mm	26mm	**AX4124008**	Price
.40mm	.0157	5mm	26mm	**AX4124017**	Price
.45mm	.0177	5mm	26mm	**AX4124023**	Price
.50mm	.0197	6mm	26mm	**AX4124029**	Price
.55mm	.0217	7mm	26mm	**AX4124038**	Price
.60mm	.0236	7mm	26mm	**AX4124044**	Price
.65mm	.0256	8mm	26mm	**AX4124053**	Price
.70mm	.0276	9mm	28mm	**AX4124059**	Price
.75mm	.0295	9mm	28mm	**AX4124068**	Price
.80mm	.0315	10mm	30mm	**AX4124077**	Price
.85mm	.0335	10mm	30mm	**AX4124086**	Price
.90mm	.0354	11mm	32mm	**AX4124092**	Price
.95mm	.0374	11mm	32mm	**AX4124101**	Price
1mm	.0394	12mm	34mm	**AX4124110**	Price
1.05mm	.0413	12mm	34mm	**AX4124119**	Price
1.1mm	.0433	14mm	36mm	**AX4124128**	Price
1.15mm	.0452	14mm	36mm	**AX4124131**	Price
1.2mm	.0472	16mm	38mm	**AX4124140**	Price
1.25mm	.0492	16mm	38mm	**AX4124143**	Price
1.3mm	.0511	16mm	38mm	**AX4124146**	Price
1.35mm	.0531	18mm	40mm	**AX4124152**	Price
1.4mm	.0551	18mm	40mm	**AX4124158**	Price
1.45mm	.0571	18mm	40mm	**AX4124161**	Price
1.5mm	.0590	18mm	40mm	**AX4124164**	Price
1.6mm	.0630	20mm	43mm	**AX4124173**	Price
1.7mm	.0669	20mm	43mm	**AX4124179**	Price
1.8mm	.0708	22mm	46mm	**AX4124188**	Price
1.9mm	.0748	22mm	46mm	**AX4124194**	Price
2mm	.0787	24mm	49mm	**AX4124206**	Price
2.1mm	.0827	24mm	49mm	**AX4124215**	Price
2.2mm	.0866	27mm	53mm	**AX4124221**	Price
2.3mm	.0906	27mm	53mm	**AX4124227**	Price
2.4mm	.0945	30mm	57mm	**AX4124236**	Price
2.5mm	.0984	30mm	57mm	**AX4124245**	Price
2.6mm	.1024	30mm	57mm	**AX4124254**	Price
2.7mm	.1063	33mm	61mm	**AX4124260**	Price
2.8mm	.1102	33mm	61mm	**AX4124272**	Price
2.9mm	.1142	33mm	61mm	**AX4124281**	Price
3mm	.1181	33mm	61mm	**AX4124287**	Price
3.1mm	.1220	36mm	65mm	**AX4124293**	Price
3.2mm	.1260	36mm	65mm	**AX4124299**	Price
3.3mm	.1299	36mm	65mm	**AX4124305**	Price
3.4mm	.1339	39mm	70mm	**AX4124308**	Price
3.5mm	.1378	39mm	70mm	**AX4124314**	Price
3.6mm	.1417	39mm	70mm	**AX4124323**	Price
3.7mm	.1457	39mm	70mm	**AX4124329**	Price
3.8mm	.1496	43mm	75mm	**AX4124338**	Price
3.9mm	.1535	43mm	75mm	**AX4124344**	Price
4mm	.1575	43mm	75mm	**AX4124356**	Price
4.1mm	.1614	43mm	75mm	**AX4124365**	Price
4.2mm	.1654	43mm	75mm	**AX4124368**	Price
4.3mm	.1693	47mm	80mm	**AX4124374**	Price
4.4mm	.1732	47mm	80mm	**AX4124386**	Price
4.5mm	.1772	47mm	80mm	**AX4124392**	Price
4.6mm	.1811	47mm	80mm	**AX4124398**	Price
4.7mm	.1850	47mm	80mm	**AX4124404**	Price
4.8mm	.1889	52mm	86mm	**AX4124410**	Price
4.9mm	.1929	52mm	86mm	**AX4124419**	Price
5mm	.1968	52mm	86mm	**AX4124428**	Price
5.1mm	.2008	52mm	86mm	**AX4124434**	Price
5.2mm	.2047	52mm	86mm	**AX4124446**	Price
5.3mm	.2086	52mm	86mm	**AX4124452**	Price
5.4mm	.2126	57mm	93mm	**AX4124458**	Price
5.5mm	.2165	57mm	93mm	**AX4124464**	Price
5.6mm	.2205	57mm	93mm	**AX4124470**	Price
5.7mm	.2244	57mm	93mm	**AX4124476**	Price
5.8mm	.2283	57mm	93mm	**AX4124482**	Price
5.9mm	.2323	57mm	93mm	**AX4124485**	Price
6mm	.2362	57mm	93mm	**AX4124494**	Price
6.1mm	.2402	63mm	101mm	**AX4124500**	Price
6.2mm	.2441	63mm	101mm	**AX4124506**	Price
6.3mm	.2480	63mm	101mm	**AX4124512**	Price
6.4mm	.2519	63mm	101mm	**AX4124518**	Price
6.5mm	.2559	63mm	101mm	**AX4124521**	Price
6.6mm	.2598	63mm	101mm	**AX4124527**	Price
6.7mm	.2637	63mm	101mm	**AX4124533**	Price
6.8mm	.2677	69mm	109mm	**AX4124542**	Price
6.9mm	.2716	69mm	109mm	**AX4124545**	Price
7mm	.2756	69mm	109mm	**AX4124551**	Price
7.1mm	.2795	69mm	109mm	**AX4124557**	Price
7.2mm	.2834	69mm	109mm	**AX4124566**	Price
7.3mm	.2874	69mm	109mm	**AX4124569**	Price
7.4mm	.2913	69mm	109mm	**AX4124575**	Price
7.5mm	.2953	69mm	109mm	**AX4124581**	Price
7.6mm	.2992	75mm	117mm	**AX4124587**	Price
7.7mm	.3031	75mm	117mm	**AX4124593**	Price
7.8mm	.3071	75mm	117mm	**AX4124596**	Price
7.9mm	.3110	75mm	117mm	**AX4124599**	Price
8mm	.3150	75mm	117mm	**AX4124605**	Price
8.1mm	.3189	75mm	117mm	**AX4124611**	Price
8.2mm	.3228	75mm	117mm	**AX4124614**	Price
8.3mm	.3267	75mm	117mm	**AX4124620**	Price
8.4mm	.3307	75mm	117mm	**AX4124626**	Price
8.5mm	.3346	75mm	117mm	**AX4124632**	Price
8.6mm	.3385	81mm	125mm	**AX4124635**	Price
8.7mm	.3425	81mm	125mm	**AX4124641**	Price
8.8mm	.3464	81mm	125mm	**AX4124647**	Price
8.9mm	.3504	81mm	125mm	**AX4124653**	Price
9mm	.3543	81mm	125mm	**AX4124656**	Price
9.1mm	.3582	81mm	125mm	**AX4124662**	Price
9.2mm	.3622	81mm	125mm	**AX4124668**	Price
9.3mm	.3661	81mm	125mm	**AX4124671**	Price
9.4mm	.3700	81mm	125mm	**AX4124677**	Price
9.5mm	.3740	81mm	125mm	**AX4124680**	Price
9.6mm	.3779	87mm	133mm	**AX4124689**	Price
9.7mm	.3819	87mm	133mm	**AX4124692**	Price
9.8mm	.3858	87mm	133mm	**AX4124695**	Price
9.9mm	.3897	87mm	133mm	**AX4124701**	Price
10mm	.3937	87mm	133mm	**AX4124707**	Price
10.1mm	.3976	87mm	133mm	**AX4124713**	Price
10.2mm	.4015	87mm	133mm	**AX4124716**	Price
10.3mm	.4055	87mm	133mm	**AX4124722**	Price
10.4mm	.4094	87mm	133mm	**AX4124728**	Price
10.5mm	.4134	87mm	133mm	**AX4124734**	Price
10.6mm	.4173	87mm	133mm	**AX4124737**	Price
10.7mm	.4212	94mm	142mm	**AX4124740**	Price
10.8mm	.4252	94mm	142mm	**AX4124746**	Price
10.9mm	.4291	94mm	142mm	**AX4124749**	Price
11mm	.4331	94mm	142mm	**AX4124752**	Price
11.1mm	.4370	94mm	142mm	**AX4124755**	Price
11.2mm	.4409	94mm	142mm	**AX4124761**	Price
11.3mm	.4449	94mm	142mm	**AX4124764**	Price
11.4mm	.4488	94mm	142mm	**AX4124767**	Price
11.5mm	.4527	94mm	142mm	**AX4124770**	Price
11.6mm	.4567	94mm	142mm	**AX4124776**	Price
11.7mm	.4606	94mm	142mm	**AX4124779**	Price
11.8mm	.4645	94mm	142mm	**AX4124782**	Price
11.9mm	.4685	101mm	151mm	**AX4124785**	Price
12mm	.4724	101mm	151mm	**AX4124791**	Price
12.5mm	.4921	101mm	151mm	**AX4124797**	Price
13mm	.5118	101mm	151mm	**AX4124803**	Price
13.5mm	.5315	108mm	160mm	**AX4124812**	Price
14mm	.5512	108mm	160mm	**AX4124818**	Price
14.5mm	.5708	114mm	169mm	**AX4124824**	Price
15mm	.5905	114mm	169mm	**AX4124830**	Price
15.5mm	.6102	120mm	178mm	**AX4124839**	Price
16mm	.6299	120mm	178mm	**AX4124845**	Price
16.5mm	.6496	125mm	184mm	**AX4124851**	Price
17mm	.6693	125mm	184mm	**AX4124857**	Price
17.5mm	.6890	130mm	191mm	**AX4124866**	Price
18mm	.7087	130mm	191mm	**AX4124872**	Price
18.5mm	.7283	135mm	198mm	**AX4124878**	Price
19mm	.7480	135mm	198mm	**AX4124884**	Price
20mm	.7874	140mm	205mm	**AX4124896**	Price

RAPIDKUT® Solid Carbide Screw Machine Length Drills

15° Helix • 135° Drill Point



- Cast iron
- Stainless steel
- Tool steel
- Titanium & nickel alloys
- C-2 grade premium sub-micron carbide with 10% cobalt
- Right hand spiral, right hand cut

				TiAlN		Uncoated	
Drill Dia. (in.)	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	.0310	1/2	1-1/2	**AX7022002**	Price	**AX7020002**	Price
3/64	.0470	1/2	1-1/2	**AX7022003**	Price	**AX7020003**	Price
1/16	.0620	5/8	1-5/8	**AX7022004**	Price	**AX7020004**	Price
5/64	.0780	11/16	1-11/16	**AX7022005**	Price	**AX7020005**	Price
3/32	.0940	3/4	1-3/4	**AX7022006**	Price	**AX7020006**	Price
7/64	.1090	13/16	1-13/16	**AX7022007**	Price	**AX7020007**	Price
1/8	.1250	7/8	1-7/8	**AX7022008**	Price	**AX7020008**	Price
9/64	.1410	15/16	1-15/16	**AX7022009**	Price	**AX7020009**	Price
5/32	.1560	1	2-1/16	**AX7022010**	Price	**AX7020010**	Price
11/64	.1720	1-1/16	2-1/8	**AX7022011**	Price	**AX7020011**	Price
3/16	.1880	1-1/8	2-3/16	**AX7022012**	Price	**AX7020012**	Price
13/64	.2030	1-3/16	2-1/4	**AX7022013**	Price	**AX7020013**	Price
7/32	.2190	1-1/4	2-3/8	**AX7022014**	Price	**AX7020014**	Price
15/64	.2340	1-5/16	2-7/16	**AX7022015**	Price	**AX7020015**	Price
1/4	.2500	1-3/8	2-1/2	**AX7022016**	Price	**AX7020016**	Price
17/64	.2660	1-7/16	2-5/8	**AX7022017**	Price	**AX7020017**	Price
9/32	.2810	1-1/2	2-11/16	**AX7022018**	Price	**AX7020018**	Price
19/64	.2970	1-9/16	2-3/4	**AX7022019**	Price	**AX7020019**	Price
5/16	.3120	1-5/8	2-13/16	**AX7022020**	Price	**AX7020020**	Price
21/64	.3280	1-11/16	2-15/16	**AX7022021**	Price	**AX7020021**	Price
11/32	.3440	1-11/16	3	**AX7022022**	Price	**AX7020022**	Price
23/64	.3590	1-3/4	3-1/16	**AX7022023**	Price	**AX7020023**	Price
3/8	.3750	1-13/16	3-1/8	**AX7022024**	Price	**AX7020024**	Price
25/64	.3910	1-7/8	3-1/4	**AX7022025**	Price	**AX7020025**	Price
13/32	.4060	1-15/16	3-5/16	**AX7022026**	Price	**AX7020026**	Price
27/64	.4220	2	3-3/8	**AX7022027**	Price	**AX7020027**	Price
7/16	.4380	2-1/16	3-7/16	**AX7022028**	Price	**AX7020028**	Price
29/64	.4530	2-1/8	3-9/16	**AX7022029**	Price	**AX7020029**	Price
15/32	.4690	2-1/8	3-5/8	**AX7022030**	Price	**AX7020030**	Price
31/64	.4840	2-3/16	3-11/16	**AX7022031**	Price	**AX7020031**	Price
1/2	.5000	2-1/4	3-3/4	**AX7022032**	Price	**AX7020032**	Price

Type - Letter Size							
				TiAlN		Uncoated	
Drill Dia.	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
A	.2340	1-5/16	2-7/16	**AX7022201**	Price	**AX7020201**	Price
B	.2380	1-3/8	2-1/2	**AX7022202**	Price	**AX7020202**	Price
C	.2420	1-3/8	2-1/2	**AX7022203**	Price	**AX7020203**	Price
D	.2460	1-3/8	2-1/2	**AX7022204**	Price	**AX7020204**	Price
E	.2500	1-3/8	2-1/2	**AX7022205**	Price	**AX7020205**	Price
F	.2570	1-7/16	2-5/8	**AX7022206**	Price	**AX7020206**	Price
G	.2610	1-7/16	2-5/8	**AX7022207**	Price	**AX7020207**	Price
H	.2660	1-1/2	2-11/16	**AX7022208**	Price	**AX7020208**	Price
I	.2720	1-1/2	2-11/16	**AX7022209**	Price	**AX7020209**	Price
J	.2770	1-1/2	2-11/16	**AX7022210**	Price	**AX7020210**	Price
K	.2810	1-1/2	2-11/16	**AX7022211**	Price	**AX7020211**	Price
L	.2900	1-9/16	2-3/4	**AX7022212**	Price	**AX7020212**	Price
M	.2950	1-9/16	2-3/4	**AX7022213**	Price	**AX7020213**	Price
N	.3020	1-5/8	2-13/16	**AX7022214**	Price	**AX7020214**	Price
O	.3160	1-11/16	2-15/16	**AX7022215**	Price	**AX7020215**	Price
P	.3230	1-11/16	2-15/16	**AX7022216**	Price	**AX7020216**	Price
Q	.3320	1-11/16	3	**AX7022217**	Price	**AX7020217**	Price
R	.3390	1-11/16	3	**AX7022218**	Price	**AX7020218**	Price
S	.3480	1-3/4	3-1/16	**AX7022219**	Price	**AX7020219**	Price
T	.3580	1-3/4	3-1/16	**AX7022220**	Price	**AX7020220**	Price
U	.3680	1-13/16	3-1/8	**AX7022221**	Price	**AX7020221**	Price
V	.3770	1-7/8	3-1/4	**AX7022222**	Price	**AX7020222**	Price
W	.3860	1-7/8	3-1/4	**AX7022223**	Price	**AX7020223**	Price
X	.3970	1-15/16	3-5/16	**AX7022224**	Price	**AX7020224**	Price
Y	.4040	1-15/16	3-5/16	**AX7022225**	Price	**AX7020225**	Price
Z	.4130	2	3-3/8	**AX7022226**	Price	**AX7020226**	Price

Type - Wire Gage							
				TiAlN		Uncoated	
Drill Dia.	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1	.2280	1-5/16	2-7/16	**AX7022101**	Price	**AX7020101**	Price
2	.2210	1-5/16	2-7/16	**AX7022102**	Price	**AX7020102**	Price
3	.2130	1-1/4	2-3/8	**AX7022103**	Price	**AX7020103**	Price
4	.2090	1-1/4	2-3/8	**AX7022104**	Price	**AX7020104**	Price
5	.2060	1-1/4	2-3/8	**AX7022105**	Price	**AX7020105**	Price
6	.2040	1-1/4	2-3/8	**AX7022106**	Price	**AX7020106**	Price
7	.2010	1-3/16	2-1/4	**AX7022107**	Price	**AX7020107**	Price
8	.1990	1-3/16	2-1/4	**AX7022108**	Price	**AX7020108**	Price
9	.1960	1-3/16	2-1/4	**AX7022109**	Price	**AX7020109**	Price
10	.1940	1-3/16	2-1/4	**AX7022110**	Price	**AX7020110**	Price
11	.1910	1-3/16	2-1/4	**AX7022111**	Price	**AX7020111**	Price
12	.1890	1-3/16	2-1/4	**AX7022112**	Price	**AX7020112**	Price
13	.1850	1-1/8	2-3/16	**AX7022113**	Price	**AX7020113**	Price
14	.1820	1-1/8	2-3/16	**AX7022114**	Price	**AX7020114**	Price
15	.1800	1-1/8	2-3/16	**AX7022115**	Price	**AX7020115**	Price
16	.1770	1-1/8	2-3/16	**AX7022116**	Price	**AX7020116**	Price
17	.1730	1-1/8	2-3/16	**AX7022117**	Price	**AX7020117**	Price
18	.1700	1-1/16	2-1/8	**AX7022118**	Price	**AX7020118**	Price
19	.1660	1-1/16	2-1/8	**AX7022119**	Price	**AX7020119**	Price
20	.1610	1-1/16	2-1/8	**AX7022120**	Price	**AX7020120**	Price
21	.1590	1-1/16	2-1/8	**AX7022121**	Price	**AX7020121**	Price
22	.1570	1-1/16	2-1/8	**AX7022122**	Price	**AX7020122**	Price
23	.1540	1	2-1/16	**AX7022123**	Price	**AX7020123**	Price
24	.1520	1	2-1/16	**AX7022124**	Price	**AX7020124**	Price
25	.1500	1	2-1/16	**AX7022125**	Price	**AX7020125**	Price
26	.1470	1	2-1/16	**AX7022126**	Price	**AX7020126**	Price
27	.1440	1	2-1/16	**AX7022127**	Price	**AX7020127**	Price
28	.1400	15/16	1-15/16	**AX7022128**	Price	**AX7020128**	Price
29	.1360	15/16	1-15/16	**AX7022129**	Price	**AX7020129**	Price
30	.1280	15/16	1-15/16	**AX7022130**	Price	**AX7020130**	Price
31	.1200	7/8	1-7/8	**AX7022131**	Price	**AX7020131**	Price
32	.1160	7/8	1-7/8	**AX7022132**	Price	**AX7020132**	Price
33	.1130	7/8	1-7/8	**AX7022133**	Price	**AX7020133**	Price
34	.1110	7/8	1-7/8	**AX7022134**	Price	**AX7020134**	Price
35	.1100	7/8	1-7/8	**AX7022135**	Price	**AX7020135**	Price
36	.1060	13/16	1-13/16	**AX7022136**	Price	**AX7020136**	Price
37	.1040	13/16	1-13/16	**AX7022137**	Price	**AX7020137**	Price
38	.1020	13/16	1-13/16	**AX7022138**	Price	**AX7020138**	Price
39	.1000	13/16	1-13/16	**AX7022139**	Price	**AX7020139**	Price
40	.0980	13/16	1-13/16	**AX7022140**	Price	**AX7020140**	Price
41	.0960	13/16	1-13/16	**AX7022141**	Price	**AX7020141**	Price
42	.0940	3/4	1-3/4	**AX7022142**	Price	**AX7020142**	Price
43	.0890	3/4	1-3/4	**AX7022143**	Price	**AX7020143**	Price
44	.0860	3/4	1-3/4	**AX7022144**	Price	**AX7020144**	Price
45	.0820	3/4	1-3/4	**AX7022145**	Price	**AX7020145**	Price
46	.0810	3/4	1-3/4	**AX7022146**	Price	**AX7020146**	Price
47	.0780	3/4	1-3/4	**AX7022147**	Price	**AX7020147**	Price
48	.0760	11/16	1-11/16	**AX7022148**	Price	**AX7020148**	Price
49	.0730	11/16	1-11/16	**AX7022149**	Price	**AX7020149**	Price
50	.0700	11/16	1-11/16	**AX7022150**	Price	**AX7020150**	Price
51	.0670	11/16	1-11/16	**AX7022151**	Price	**AX7020151**	Price
52	.0640	11/16	1-11/16	**AX7022152**	Price	**AX7020152**	Price
53	.0600	1/2	1-1/2	**AX7022153**	Price	**AX7020153**	Price
54	.0550	1/2	1-1/2	**AX7022154**	Price	**AX7020154**	Price
55	.0520	1/2	1-1/2	**AX7022155**	Price	**AX7020155**	Price
56	.0460	1/2	1-1/2	**AX7022156**	Price	**AX7020156**	Price

Twister® GP Solid Carbide Stub Length Drills



118° Point • 21° Helix

- Designed for drilling cast iron, aluminum, bronze and magnesium
- An extremely efficient and economical carbide drill
- Shorter overhang reduces deflection and vibration, increases drill accuracy and improves tool life
- M.A. Ford List #206

Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/64	3/8	1-1/2	**AX3926028**	Price
1/16	3/8	1-1/2	**AX3926061**	Price
5/64	1/2	1-1/2	**AX3926091**	Price
3/32	1/2	2	**AX3926124**	Price
7/64	5/8	2	**AX3926157**	Price
1/8	5/8	2	**AX3926187**	Price
9/64	5/8	2	**AX3926211**	Price
5/32	3/4	2	**AX3926241**	Price
11/64	3/4	2-1/8	**AX3926271**	Price
3/16	3/4	2-3/16	**AX3926298**	Price
13/64	3/4	2-1/4	**AX3926331**	Price
7/32	1	2-1/2	**AX3926358**	Price

Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
15/64	1	2-1/2	**AX3926382**	Price
1/4	1	2-1/2	**AX3926406**	Price
17/64	1	2-1/2	**AX3926427**	Price
9/32	1	2-1/2	**AX3926454**	Price
19/64	1-1/4	2-1/2	**AX3926475**	Price
5/16	1-1/4	2-1/2	**AX3926493**	Price
21/64	1-1/4	2-1/2	**AX3926514**	Price
11/32	1-1/4	2-1/2	**AX3926535**	Price
23/64	1-1/4	2-1/2	**AX3926556**	Price
3/8	1-1/4	2-1/2	**AX3926574**	Price
25/64	1-1/4	2-3/4	**AX3926595**	Price
13/32	1-1/4	2-3/4	**AX3926616**	Price

Twister® GP Solid Carbide Stub Length Drills



3xD Length • 118° Point • Uncoated

- 21° Helix
- Designed to allow high feed rates with good chip flow
- Four facet drill point minimizes drill wander and assures accurately sized holes
- M.A. Ford Series #206

Type - Letter Size					
Drill Dia.	Decimal Equiv.	Flute Length	OAL	Order No.	Price
A	.2340	1	2-1/2	**AX3926379**	Price
B	.2380	1	2-1/2	**AX3926388**	Price
C	.2420	1	2-1/2	**AX3926394**	Price
D	.2460	1	2-1/2	**AX3926400**	Price
F	.2570	1	2-1/2	**AX3926415**	Price
G	.2610	1	2-1/2	**AX3926421**	Price
H	.2660	1	2-1/2	**AX3926430**	Price
I	.2720	1	2-1/2	**AX3926439**	Price
J	.2770	1	2-1/2	**AX3926445**	Price
K	.2810	1	2-1/2	**AX3926451**	Price
L	.2900	1	2-1/2	**AX3926463**	Price
M	.2950	1-1/4	2-1/2	**AX3926469**	Price
T	.3580	1-1/4	2-1/2	**AX3926550**	Price
U	.3680	1-1/4	2-1/2	**AX3926565**	Price
V	.3770	1-1/4	2-1/2	**AX3926577**	Price
W	.3860	1-1/4	2-3/4	**AX3926589**	Price
X	.3970	1-1/4	2-3/4	**AX3926601**	Price
Y	.4040	1-1/4	2-3/4	**AX3926610**	Price
Z	.4130	1-1/4	2-3/4	**AX3926622**	Price
N	.3020	1-1/4	2-1/2	**AX3926481**	Price
P	.3230	1-1/4	2-1/2	**AX3926508**	Price
Q	.3320	1-1/4	2-1/2	**AX3926520**	Price
O	.3160	1-1/4	2-1/2	**AX3926499**	Price
R	.3390	1-1/4	2-1/2	**AX3926529**	Price
S	.3480	1-1/4	2-1/2	**AX3926541**	Price

Type - Wire Gage Size					
Drill Dia.	Decimal Equiv.	Flute Length	OAL	Order No.	Price
1	.2280	1	2-1/2	**AX3926370**	Price
2	.2210	1	2-1/2	**AX3926364**	Price
3	.2130	1	2-1/2	**AX3926352**	Price
4	.2090	3/4	2-1/4	**AX3926346**	Price
5	.2055	3/4	2-1/4	**AX3926340**	Price
6	.2040	3/4	2-1/4	**AX3926334**	Price
7	.2010	3/4	2-1/4	**AX3926328**	Price
8	.1990	3/4	2-1/4	**AX3926322**	Price
9	.1960	3/4	2-1/4	**AX3926316**	Price
10	.1935	3/4	2-3/16	**AX3926313**	Price
11	.1910	3/4	2-3/16	**AX3926307**	Price
12	.1890	3/4	2-3/16	**AX3926304**	Price
13	.1850	3/4	2-3/16	**AX3926295**	Price
14	.1820	3/4	2-3/16	**AX3926292**	Price
15	.1800	3/4	2-3/16	**AX3926286**	Price
16	.1770	3/4	2-1/8	**AX3926280**	Price

Type - Wire Gage Size					
Drill Dia.	Decimal Equiv.	Flute Length	OAL	Order No.	Price
17	.1730	3/4	2-1/8	**AX3926274**	Price
18	.1695	3/4	2-1/8	**AX3926268**	Price
20	.1610	3/4	2	**AX3926253**	Price
21	.1590	3/4	2	**AX3926250**	Price
22	.1570	3/4	2	**AX3926244**	Price
23	.1540	5/8	2	**AX3926238**	Price
24	.1520	5/8	2	**AX3926232**	Price
25	.1495	5/8	2	**AX3926226**	Price
26	.1470	5/8	2	**AX3926223**	Price
27	.1440	5/8	2	**AX3926217**	Price
28	.1405	5/8	2	**AX3926208**	Price
29	.1360	5/8	2	**AX3926202**	Price
30	.1285	5/8	2	**AX3926193**	Price
31	.1200	5/8	2	**AX3926181**	Price
32	.1160	5/8	2	**AX3926175**	Price
33	.1130	5/8	2	**AX3926169**	Price
34	.1110	5/8	2	**AX3926166**	Price
35	.1100	5/8	2	**AX3926160**	Price
36	.1065	5/8	2	**AX3926154**	Price
37	.1040	5/8	2	**AX3926148**	Price
38	.1015	5/8	2	**AX3926142**	Price
39	.0995	5/8	2	**AX3926139**	Price
40	.0980	5/8	2	**AX3926133**	Price
41	.0960	1/2	2	**AX3926130**	Price
42	.0935	1/2	2	**AX3926121**	Price
43	.0890	1/2	2	**AX3926115**	Price
44	.0860	1/2	2	**AX3926109**	Price
45	.0820	1/2	1-1/2	**AX3926103**	Price
46	.0810	1/2	1-1/2	**AX3926100**	Price
47	.0785	1/2	1-1/2	**AX3926094**	Price
48	.0760	1/2	1-1/2	**AX3926088**	Price
49	.0730	3/8	1-1/2	**AX3926082**	Price
50	.0700	3/8	1-1/2	**AX3926076**	Price
51	.0670	3/8	1-1/2	**AX3926073**	Price
52	.0635	3/8	1-1/2	**AX3926067**	Price
53	.0595	3/8	1-1/2	**AX3926058**	Price
54	.0550	3/8	1-1/2	**AX3926046**	Price
55	.0520	3/8	1-1/2	**AX3926040**	Price
56	.0465	3/8	1-1/2	**AX3926025**	Price
57	.0430	3/8	1-1/2	**AX3926016**	Price
58	.0420	3/8	1-1/2	**AX3926013**	Price
59	.0410	3/8	1-1/2	**AX3926007**	Price
60	.0400	3/8	1-1/2	**AX3926004**	Price

RAPIDKUT® Metric Solid Carbide Screw Machine Length Drills

15° Helix • 135° Drill Point

- C-2 grade premium sub-micron carbide with 10% cobalt

For use with:

- Cast iron
- Stainless steel
- Tool steel
- Titanium & nickel alloys



				TiAlN		Uncoated	
Drill Dia.	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1.0mm	.0390	1/2	1-1/2	**AX7023010**	Price	**AX7021010**	Price
1.5mm	.0590	1/2	1-1/2	**AX7023015**	Price	**AX7021015**	Price
2.0mm	.0790	3/4	1-3/4	**AX7023020**	Price	**AX7021020**	Price
2.5mm	.0980	13/16	1-13/16	**AX7023025**	Price	**AX7021025**	Price
3.5mm	.1380	15/16	1-15/16	**AX7023035**	Price	**AX7021035**	Price
4.0mm	.1580	1-1/16	2-1/8	**AX7023040**	Price	**AX7021040**	Price
4.5mm	.1770	1-1/8	2-3/16	**AX7023045**	Price	**AX7021045**	Price
3.0mm	.1180	7/8	1-7/8	**AX7023030**	Price	**AX7021030**	Price
5.0mm	.1970	1-3/16	2-1/4	**AX7023050**	Price	**AX7021050**	Price
5.5mm	.2160	1-1/4	2-3/8	**AX7023055**	Price	**AX7021055**	Price
6.0mm	.2360	1-5/16	2-7/16	**AX7023060**	Price	**AX7021060**	Price
6.5mm	.2560	1-3/8	2-1/2	**AX7023065**	Price	**AX7021065**	Price

				TiAlN		Uncoated	
Drill Dia.	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
7.0mm	.2760	1-1/2	2-11/16	**AX7023070**	Price	**AX7021070**	Price
7.5mm	.2950	1-9/16	2-3/4	**AX7023075**	Price	**AX7021075**	Price
8.0mm	.3150	1-5/8	2-13/16	**AX7023080**	Price	**AX7021080**	Price
8.5mm	.3350	1-11/16	3	**AX7023085**	Price	**AX7021085**	Price
9.0mm	.3540	1-3/4	3-1/16	**AX7023090**	Price	**AX7021090**	Price
9.5mm	.3740	1-13/16	3-1/8	**AX7023095**	Price	**AX7021095**	Price
10.0mm	.3940	1-7/8	3-1/4	**AX7023100**	Price	**AX7021100**	Price
10.5mm	.4130	2	3-3/8	**AX7023105**	Price	**AX7021105**	Price
11.0mm	.4330	2	3-3/8	**AX7023110**	Price	**AX7021110**	Price
11.5mm	.4530	2-1/16	3-7/16	**AX7023115**	Price	**AX7021115**	Price
12.0mm	.4720	2-1/8	3-5/8	**AX7023120**	Price	**AX7021120**	Price
12.5mm	.4920	2-3/16	3-11/16	**AX7023125**	Price	**AX7021125**	Price

M.A. FORD Hi-Tuff® Solid Carbide Drills

Screw Machine Length • 135° Point • Uncoated

- 12° Helix
- Designed for drilling stainless steel, tool steels, titanium, nickel base alloys and other high strength ferrous metals
- Screw machine lengths and a heavy web provide extra rigidity and strength
- Web-thinned drill point reduces power requirements, lowers drilling temperatures and extends tool life
- M.A. Ford List #205



Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/64	3/16	1-1/2	**AX3225013**	Price
1/32	3/8	1-1/2	**AX3225073**	Price
3/64	1/2	1-1/2	**AX3225136**	Price
1/16	5/8	1-5/8	**AX3225169**	Price
5/64	11/16	1-11/16	**AX3225199**	Price
3/32	3/4	1-3/4	**AX3225232**	Price
7/64	13/16	1-13/16	**AX3225265**	Price
1/8	7/8	1-7/8	**AX3225295**	Price
9/64	15/16	1-15/16	**AX3225319**	Price
5/32	1	2-1/16	**AX3225349**	Price
11/64	1-1/16	2-1/8	**AX3225379**	Price
3/16	1-1/8	2-3/16	**AX3225406**	Price
13/64	1-3/16	2-1/4	**AX3225439**	Price
7/32	1-1/4	2-3/8	**AX3225466**	Price
15/64	1-5/16	2-7/16	**AX3225490**	Price
1/4	1-3/8	2-1/2	**AX3225514**	Price
17/64	1-7/16	2-5/8	**AX3225535**	Price
9/32	1-1/2	2-11/16	**AX3225562**	Price
19/64	1-9/16	2-3/4	**AX3225583**	Price
5/16	1-5/8	2-13/16	**AX3225601**	Price
21/64	1-11/16	2-15/16	**AX3225622**	Price
11/32	1-11/16	2-15/16	**AX3225643**	Price
23/64	1-3/4	3-1/16	**AX3225664**	Price
3/8	1-13/16	3-1/8	**AX3225682**	Price
25/64	1-7/8	3-1/4	**AX3225703**	Price
13/32	1-15/16	3-5/16	**AX3225724**	Price
27/64	2	3-3/8	**AX3225742**	Price
7/16	2-1/16	3-7/16	**AX3225757**	Price
29/64	2-1/8	3-5/8	**AX3225772**	Price
15/32	2-1/8	3-5/8	**AX3225787**	Price
31/64	2-3/16	3-11/16	**AX3225793**	Price
1/2	2-1/4	3-3/4	**AX3225799**	Price
17/32	2-3/8	3-7/8	**AX3225808**	Price
9/16	2-1/2	4	**AX3225820**	Price
5/8	2-3/4	4-1/4	**AX3225841**	Price
11/16	2-7/8	4-5/8	**AX3225862**	Price
3/4	3-1/8	5	**AX3225886**	Price

Also available in wire gage, letter, and metric sizes

M.A. FORD Hi-Roc® Solid Carbide Drills

Screw Machine Length • 135° Point • Uncoated

- Straight flute
- Designed to drill hardened steel in the 42-65 Rockwell “C” range
- Produces chips without generating excessive heat
- Accurately sized holes are produced without annealing or softening the workpiece
- Reamer type finishes are easily produced
- Both a production drill and a salvage or reclaim tool
- M.A. Ford Series #200



Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/32	3/16	1-1/2	**AX3020004**	Price
3/64	1/4	1-1/2	**AX3020067**	Price
1/16	5/16	1-1/2	**AX3020100**	Price
5/64	3/8	1-1/2	**AX3020130**	Price
3/32	1/2	1-1/2	**AX3020163**	Price
7/64	5/8	1-1/2	**AX3020199**	Price
1/8	5/8	1-1/2	**AX3020229**	Price
9/64	5/8	2	**AX3020253**	Price
5/32	5/8	2	**AX3020283**	Price
11/64	5/8	2	**AX3020313**	Price
3/16	5/8	2	**AX3020340**	Price
13/64	3/4	2	**AX3020376**	Price
7/32	3/4	2	**AX3020403**	Price
15/64	3/4	2	**AX3020427**	Price
1/4	3/4	2	**AX3020451**	Price
17/64	3/4	2-1/2	**AX3020472**	Price
9/32	3/4	2-1/2	**AX3020499**	Price
19/64	3/4	2-1/2	**AX3020520**	Price
5/16	3/4	2-1/2	**AX3020541**	Price
21/64	1	2-1/2	**AX3020562**	Price
11/32	1	2-1/2	**AX3020583**	Price
23/64	1	2-1/2	**AX3020604**	Price
3/8	1	2-1/2	**AX3020622**	Price
25/64	1	2-3/4	**AX3020643**	Price
13/32	1	2-3/4	**AX3020664**	Price
27/64	1	2-3/4	**AX3020682**	Price
7/16	1	2-3/4	**AX3020697**	Price
29/64	1	3	**AX3020712**	Price
15/32	1	3	**AX3020727**	Price
31/64	1	3	**AX3020733**	Price
1/2	1	3	**AX3020739**	Price
33/64	1-1/8	3-1/2	**AX3020745**	Price
17/32	1-1/8	3-1/2	**AX3020748**	Price
9/16	1-1/8	3-1/2	**AX3020760**	Price
5/8	1-1/4	3-1/2	**AX3020781**	Price
11/16	1-1/2	4	**AX3020802**	Price
3/4	1-1/2	4	**AX3020826**	Price

Also available in wire gage, letter, and metric sizes

RAPIDKUT® Solid Carbide Straight Flute Drills

140° Notched Point • Uncoated or TiAlN Coated

- Specifically designed for increased edge strength & precision tight tolerance holes
- Capable of producing reamer type finishes in work hardened and abrasive materials such as: chrome alloys, heat treated alloys, nickel alloys, titanium alloys, steel & stainless steel weldments
- C-2 grade premium sub-micron carbide with 10% cobalt



Price							
				TiAlN		Uncoated	
Drill Dia.	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	.0312	1/2	1-1/2	**AX7111002**	Price	**AX7110002**	Price
3/64	.0469	1/2	1-1/2	**AX7111003**	Price	**AX7110003**	Price
1/16	.0625	5/8	1-5/8	**AX7111004**	Price	**AX7110004**	Price
5/64	.0781	11/16	1-11/16	**AX7111005**	Price	**AX7110005**	Price
3/32	.0938	3/4	1-3/4	**AX7111006**	Price	**AX7110006**	Price
7/64	.1094	13/16	1-13/16	**AX7111007**	Price	**AX7110007**	Price
1/8	.1250	7/8	1-7/8	**AX7111008**	Price	**AX7110008**	Price
9/64	.1406	15/16	1-15/16	**AX7111009**	Price	**AX7110009**	Price
5/32	.1562	1	2-1/16	**AX7111010**	Price	**AX7110010**	Price
11/64	.1719	1-1/16	2-1/8	**AX7111011**	Price	**AX7110011**	Price
3/16	.1875	1-1/8	2-3/16	**AX7111012**	Price	**AX7110012**	Price
13/64	.2031	1-3/16	2-1/4	**AX7111013**	Price	**AX7110013**	Price
7/32	.2188	1-1/4	2-3/8	**AX7111014**	Price	**AX7110014**	Price
15/64	.2344	1-5/16	2-7/16	**AX7111015**	Price	**AX7110015**	Price
1/4	.2500	1-3/8	2-1/2	**AX7111016**	Price	**AX7110016**	Price
17/64	.2656	1-7/16	2-5/8	**AX7111017**	Price	**AX7110017**	Price
9/32	.2812	1-1/2	2-11/16	**AX7111018**	Price	**AX7110018**	Price
19/64	.2969	1-9/16	2-3/4	**AX7111019**	Price	**AX7110019**	Price
5/16	.3125	1-5/8	2-13/16	**AX7111020**	Price	**AX7110020**	Price
21/64	.3281	1-11/16	2-15/16	**AX7111021**	Price	**AX7110021**	Price
11/32	.3438	1-11/16	3	**AX7111022**	Price	**AX7110022**	Price
23/64	.3594	1-3/4	3-1/16	**AX7111023**	Price	**AX7110023**	Price
3/8	.3750	1-13/16	3-1/8	**AX7111024**	Price	**AX7110024**	Price
25/64	.3906	1-7/8	3-1/4	**AX7111025**	Price	**AX7110025**	Price
13/32	.4062	1-15/16	3-5/16	**AX7111026**	Price	**AX7110026**	Price
27/64	.4219	2	3-3/8	**AX7111027**	Price	**AX7110027**	Price
7/16	.4375	2-1/16	3-7/16	**AX7111028**	Price	**AX7110028**	Price
29/64	.4531	2-1/8	3-9/16	**AX7111029**	Price	**AX7110029**	Price
15/32	.4688	2-1/8	3-5/8	**AX7111030**	Price	**AX7110030**	Price
31/64	.4844	2-3/16	3-11/16	**AX7111031**	Price	**AX7110031**	Price
1/2	.5000	2-1/4	3-3/4	**AX7111032**	Price	**AX7110032**	Price

- Metric					
				Uncoated	
Drill Dia.	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1mm	.0394	1/2	1-1/2	**AX7120010**	Price
1.5mm	.0591	1/2	1-1/2	**AX7120015**	Price
2mm	.0787	3/4	1-3/4	**AX7120020**	Price
2.5mm	.0984	13/16	1-13/16	**AX7120025**	Price
3mm	.1181	7/8	1-7/8	**AX7120030**	Price
3.5mm	.1378	15/16	1-15/16	**AX7120035**	Price
4mm	.1575	1-1/16	2-1/8	**AX7120040**	Price
4.5mm	.1772	1-1/8	2-3/16	**AX7120045**	Price
5mm	.1969	1-3/16	2-1/4	**AX7120050**	Price
5.5mm	.2165	1-1/4	2-3/8	**AX7120055**	Price
6mm	.2362	1-5/16	2-7/16	**AX7120060**	Price
6.5mm	.2559	1-3/8	2-1/2	**AX7120065**	Price
7mm	.2756	1-1/2	2-11/16	**AX7120070**	Price
7.5mm	.2953	1-9/16	2-3/4	**AX7120075**	Price
8mm	.3150	1-5/8	2-13/16	**AX7120080**	Price
8.5mm	.3346	1-11/16	3	**AX7120085**	Price
9mm	.3543	1-3/4	3-1/16	**AX7120090**	Price
9.5mm	.3740	1-13/16	3-1/8	**AX7120095**	Price
10mm	.3937	1-7/8	3-1/4	**AX7120100**	Price
10.5mm	.4134	2	3-3/8	**AX7120150**	Price
11mm	.4331	2	3-3/8	**AX7120110**	Price
11.5mm	.4528	2-1/16	3-7/16	**AX7120115**	Price
12mm	.4724	2-1/8	3-5/8	**AX7120120**	Price
12.5mm	.4921	2-3/16	3-11/16	**AX7120125**	Price

RAPIDKUT® Solid Carbide Straight Flute Drills



140° Notched Point • Uncoated

- Specifically designed for increased edge strength & precision tight tolerance holes
- Capable of producing reamer type finishes in work hardened and abrasive materials such as: chrome alloys, heat treated alloys, nickel alloys, titanium alloys, steel & stainless steel weldments
- Solid carbide C-2 grade premium sub-micron carbide with 10% cobalt

Price					
Drill Dia.	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
A	.2340	1-5/16	2-7/16	**AX7110201**	Price
B	.2380	1-3/8	2-1/2	**AX7110202**	Price
C	.2420	1-3/8	2-1/2	**AX7110203**	Price
D	.2460	1-3/8	2-1/2	**AX7110204**	Price
E	.2500	1-3/8	2-1/2	**AX7110205**	Price
F	.2570	1-7/16	2-5/8	**AX7110206**	Price
G	.2610	1-7/16	2-5/8	**AX7110207**	Price
H	.2660	1-1/2	2-11/16	**AX7110208**	Price
I	.2720	1-1/2	2-11/16	**AX7110209**	Price
J	.2770	1-1/2	2-11/16	**AX7110210**	Price
K	.2810	1-1/2	2-11/16	**AX7110211**	Price
L	.2900	1-9/16	2-3/4	**AX7110212**	Price
M	.2950	1-9/16	2-3/4	**AX7110213**	Price
N	.3020	1-5/8	2-13/16	**AX7110214**	Price
O	.3160	1-11/16	2-15/16	**AX7110215**	Price
P	.3230	1-11/16	2-15/16	**AX7110216**	Price
Q	.3320	1-11/16	3	**AX7110217**	Price
R	.3390	1-11/16	3	**AX7110218**	Price
S	.3480	1-3/4	3-1/16	**AX7110219**	Price
T	.3580	1-3/4	3-1/16	**AX7110220**	Price
U	.3680	1-13/16	3-1/8	**AX7110221**	Price
V	.3770	1-7/8	3-1/4	**AX7110222**	Price
W	.3860	1-7/8	3-1/4	**AX7110223**	Price
X	.3970	1-15/16	3-5/16	**AX7110224**	Price
Y	.4040	1-15/16	3-5/16	**AX7110225**	Price
Z	.4130	2	3-3/8	**AX7110226**	Price

Type - Wire Gage Size					
Drill Dia.	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1	.2280	1-5/16	2-7/16	**AX7110101**	Price
2	.2210	1-5/16	2-7/16	**AX7110102**	Price
3	.2130	1-1/4	2-3/8	**AX7110103**	Price
4	.2090	1-1/4	2-3/8	**AX7110104**	Price
5	.2055	1-1/4	2-3/8	**AX7110105**	Price
6	.2040	1-1/4	2-3/8	**AX7110106**	Price
7	.2010	1-3/16	2-1/4	**AX7110107**	Price
8	.1990	1-3/16	2-1/4	**AX7110108**	Price
9	.1960	1-3/16	2-1/4	**AX7110109**	Price
10	.1935	1-3/16	2-1/4	**AX7110110**	Price
11	.1910	1-3/16	2-1/4	**AX7110111**	Price
12	.1890	1-3/16	2-1/4	**AX7110112**	Price
13	.1850	1-1/8	2-3/16	**AX7110113**	Price
14	.1820	1-1/8	2-3/16	**AX7110114**	Price
15	.1800	1-1/8	2-3/16	**AX7110115**	Price
16	.1770	1-1/8	2-3/16	**AX7110116**	Price
17	.1730	1-1/8	2-3/16	**AX7110117**	Price
18	.1695	1-1/16	2-1/8	**AX7110118**	Price
19	.1660	1-1/16	2-1/8	**AX7110119**	Price
20	.1610	1-1/16	2-1/8	**AX7110120**	Price
21	.1590	1-1/16	2-1/8	**AX7110121**	Price
22	.1570	1-1/16	2-1/8	**AX7110122**	Price
23	.1540	1	2-1/16	**AX7110123**	Price
24	.1520	1	2-1/16	**AX7110124**	Price
25	.1495	1	2-1/16	**AX7110125**	Price
26	.1470	1	2-1/16	**AX7110126**	Price
27	.1440	1	2-1/16	**AX7110127**	Price
28	.1405	15/16	1-15/16	**AX7110128**	Price
29	.1360	15/16	1-15/16	**AX7110129**	Price
30	.1285	15/16	1-15/16	**AX7110130**	Price
31	.1200	7/8	1-7/8	**AX7110131**	Price
32	.1160	7/8	1-7/8	**AX7110132**	Price
33	.1130	7/8	1-7/8	**AX7110133**	Price
34	.1110	7/8	1-7/8	**AX7110134**	Price
35	.1100	7/8	1-7/8	**AX7110135**	Price
36	.1065	13/16	1-13/16	**AX7110136**	Price
37	.1040	13/16	1-13/16	**AX7110137**	Price
38	.1015	13/16	1-13/16	**AX7110138**	Price
39	.0995	13/16	1-13/16	**AX7110139**	Price
40	.0980	13/16	1-13/16	**AX7110140**	Price
41	.0960	13/16	1-13/16	**AX7110141**	Price
42	.0935	3/4	1-3/4	**AX7110142**	Price
43	.0890	3/4	1-3/4	**AX7110143**	Price
44	.0860	3/4	1-3/4	**AX7110144**	Price
45	.0820	3/4	1-3/4	**AX7110145**	Price
46	.0810	3/4	1-3/4	**AX7110146**	Price
47	.0785	3/4	1-3/4	**AX7110147**	Price
48	.0760	11/16	1-11/16	**AX7110148**	Price
49	.0730	11/16	1-11/16	**AX7110149**	Price
50	.0700	11/16	1-11/16	**AX7110150**	Price
51	.0670	11/16	1-11/16	**AX7110151**	Price
52	.0635	11/16	1-11/16	**AX7110152**	Price
53	.0595	1/2	1-1/2	**AX7110153**	Price
54	.0550	1/2	1-1/2	**AX7110154**	Price
55	.0520	1/2	1-1/2	**AX7110155**	Price
56	.0465	1/2	1-1/2	**AX7110156**	Price

Solid Carbide Circuit Board Drills

130° Point

- All listed drills have a 1/8" (3.175mm) shank
- 35° Helix
- M.A. Ford List #302



Price				
Size	Dec. Equiv.	Flute Length	Order No.	Price
.006	.0060	.1000	**AX4232025**	Price
.008	.0080	.1250	**AX4232057**	Price
.009	.0090	.1250	**AX4232069**	Price

Type - Fractional Size				
Size	Dec. Equiv.	Flute Length	Order No.	Price
1/64	.0156	.2500	**AX4232131**	Price
1/64	.0156	.1900	**AX4232129**	Price
1/32	.0312	.2500	**AX4232209**	Price
1/32	.0312	.4000	**AX4232211**	Price
3/64	.0469	.4000	**AX4232293**	Price
1/16	.0625	.4800	**AX4232345**	Price
5/64	.0781	.4800	**AX4232401**	Price
3/32	.0938	.4800	**AX4232461**	Price
7/64	.1094	.4800	**AX4232521**	Price
1/8	.1250	.4800	**AX4232569**	Price
9/64	.1406	.4800	**AX4236025**	Price
5/32	.1562	.4800	**AX4236051**	Price
11/64	.1719	.4800	**AX4236079**	Price
3/16	.1875	.4800	**AX4236105**	Price
13/64	.2031	.4800	**AX4236133**	Price
1/4	.2500	.4800	**AX4236201**	Price

Type - Letter Size				
Size	Dec. Equiv.	Flute Length	Order No.	Price
B	.2380	.4800	**AX4236187**	Price

Type - Metric Size				
Size	Dec. Equiv.	Flute Length	Order No.	Price
0.25mm	.0098	.1500	**AX4232081**	Price
0.3mm	.0118	.1900	**AX4232101**	Price
0.35mm	.0138	.1900	**AX4232121**	Price
0.35mm	.0138	.2500	**AX4232123**	Price
0.4mm	.0157	.1900	**AX4232133**	Price
0.45mm	.0177	.1900	**AX4232141**	Price
0.45mm	.0177	.2500	**AX4232143**	Price
0.5mm	.0197	.1900	**AX4232149**	Price
0.5mm	.0197	.2500	**AX4232151**	Price
0.55mm	.0217	.1900	**AX4232161**	Price
0.55mm	.0217	.2500	**AX4232163**	Price
0.6mm	.0236	.1900	**AX4232169**	Price
0.65mm	.0256	.2500	**AX4232183**	Price
0.65mm	.0256	.1900	**AX4232181**	Price
0.7mm	.0276	.4000	**AX4232192**	Price
0.75mm	.0295	.4000	**AX4232204**	Price
0.75mm	.0295	.2500	**AX4232201**	Price
0.8mm	.0315	.4000	**AX4232215**	Price
0.85mm	.0335	.4000	**AX4232227**	Price
0.9mm	.0354	.4000	**AX4232233**	Price
0.95mm	.0374	.4000	**AX4232245**	Price
1.1mm	.0433	.4000	**AX4232281**	Price
1.15mm	.0452	.4000	**AX4232285**	Price
1.2mm	.0472	.4000	**AX4232297**	Price
1.25mm	.0492	.4000	**AX4232301**	Price
1.3mm	.0511	.4000	**AX4232305**	Price
1.35mm	.0531	.4000	**AX4232313**	Price
1.4mm	.0551	.4000	**AX4232321**	Price
1.45mm	.0571	.4000	**AX4232325**	Price
1.5mm	.0590	.4000	**AX4232329**	Price
1.55mm	.0610	.4000	**AX4232341**	Price
1.6mm	.0630	.4800	**AX4232349**	Price
1.65mm	.0649	.4800	**AX4232357**	Price
1.8mm	.0708	.4800	**AX4232377**	Price
1.9mm	.0748	.4800	**AX4232389**	Price
2mm	.0787	.4800	**AX4232409**	Price
2.3mm	.0906	.4800	**AX4232449**	Price
2.4mm	.0945	.4800	**AX4232465**	Price
2.45mm	.0965	.4800	**AX4232473**	Price
2.5mm	.0984	.4800	**AX4232481**	Price
2.75mm	.1083	.4800	**AX4232517**	Price
3.1mm	.1220	.4800	**AX4232561**	Price
3.15mm	.1240	.4800	**AX4232565**	Price
3.2mm	.1260	.4800	**AX4236003**	Price
3.35mm	.1319	.4800	**AX4236011**	Price
3.5mm	.1378	.4800	**AX4236019**	Price
5mm	.1969	.4800	**AX4236121**	Price
6.3mm	.2480	.4800	**AX4236199**	Price

Price				
Size	Dec. Equiv.	Flute Length	Order No.	Price
#4	.2090	.4800	**AX4236145**	Price
#13	.1850	.4800	**AX4236101**	Price
#19	.1660	.4800	**AX4236069**	Price
#25	.1495	.4800	**AX4236039**	Price
#30	.1285	.4800	**AX4236007**	Price
#31	.1200	.4800	**AX4232557**	Price
#32	.1160	.4800	**AX4232549**	Price
#33	.1130	.4800	**AX4232541**	Price
#34	.1110	.4800	**AX4232533**	Price
#35	.1100	.4800	**AX4232525**	Price
#36	.1065	.4800	**AX4232513**	Price
#37	.1040	.4800	**AX4232501**	Price
#38	.1015	.4800	**AX4232493**	Price
#39	.0995	.4800	**AX4232485**	Price
#40	.0980	.4800	**AX4232477**	Price
#41	.0960	.4800	**AX4232469**	Price
#42	.0935	.4800	**AX4232457**	Price
#43	.0890	.4800	**AX4232445**	Price
#44	.0860	.4800	**AX4232433**	Price
#45	.0820	.4800	**AX4232421**	Price
#46	.0810	.4800	**AX4232417**	Price
#47	.0785	.4800	**AX4232405**	Price
#48	.0760	.4800	**AX4232393**	Price
#49	.0730	.4800	**AX4232385**	Price
#50	.0700	.4800	**AX4232373**	Price
#51	.0670	.4800	**AX4232365**	Price
#52	.0635	.4800	**AX4232353**	Price
#53	.0595	.4000	**AX4232333**	Price
#54	.0550	.4000	**AX4232317**	Price
#55	.0520	.4000	**AX4232309**	Price
#56	.0465	.4000	**AX4232289**	Price
#57	.0430	.4000	**AX4232277**	Price
#58	.0420	.4000	**AX4232273**	Price
#59	.0410	.4000	**AX4232265**	Price
#60	.0400	.4000	**AX4232261**	Price
#61	.0390	.4000	**AX4232253**	Price
#62	.0380	.4000	**AX4232249**	Price
#63	.0370	.4000	**AX4232241**	Price
#64	.0360	.4000	**AX4232237**	Price
#65	.0350	.4000	**AX4232229**	Price
#66	.0330	.4000	**AX4232223**	Price
#66	.0330	.2500	**AX4232221**	Price
#67	.0320	.4000	**AX4232219**	Price
#67	.0320	.2500	**AX4232217**	Price
#68	.0310	.2500	**AX4232205**	Price
#68	.0310	.4000	**AX4232207**	Price
#69	.0292	.2500	**AX4232197**	Price
#69	.0292	.4000	**AX4232200**	Price
#70	.0280	.3200	**AX4232195**	Price
#70	.0280	.4000	**AX4232196**	Price
#70	.0280	.2500	**AX4232193**	Price
#71	.0260	.2500	**AX4232187**	Price
#71	.0260	.3200	**AX4232188**	Price
#72	.0250	.1900	**AX4232177**	Price
#72	.0250	.3200	**AX4232180**	Price
#72	.0250	.2500	**AX4232179**	Price
#73	.0240	.3200	**AX4232176**	Price
#73	.0240	.1900	**AX4232173**	Price
#73	.0240	.2500	**AX4232175**	Price
#74	.0230	.3200	**AX4232168**	Price
#74	.0225	.1900	**AX4232165**	Price
#74	.0225	.2500	**AX4232167**	Price
#75	.0210	.1900	**AX4232157**	Price
#75	.0210	.2500	**AX4232159**	Price
#75	.0210	.3200	**AX4232160**	Price
#76	.0200	.3200	**AX4232156**	Price
#76	.0200	.1900	**AX4232153**	Price
#76	.0200	.2500	**AX4232155**	Price
#77	.0180	.1900	**AX4232145**	Price
#77	.0180	.3200	**AX4232148**	Price
#78	.0160	.2500	**AX4232139**	Price
#78	.0160	.1900	**AX4232137**	Price
#79	.0145	.2500	**AX4232127**	Price
#79	.0145	.1900	**AX4232125**	Price
#80	.0135	.2500	**AX4232119**	Price
#82	.0125	.1900	**AX4232109**	Price
#83	.0120	.1900	**AX4232105**	Price
#84	.0115	.1500	**AX4232097**	Price
#85	.0110	.1500	**AX4232093**	Price
#87	.0100	.1500	**AX4232085**	Price
#92	.0079	.1250	**AX4232053**	Price

Hi-Roc® Drill Sets

- Each set contains a selection of more frequently used, fractional size drills
- Packed in a plastic case



Price	Order No.	Price
1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	**AX3020367**	Price
1/8, 3/16, 1/4, 5/16, 3/8	**AX3020181**	Price
3/64, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 11/64, 3/16	**AX3020526**	Price

RAPIDKUT Solid Carbide Spade Drills

- Recommended for drilling shallow holes in hard, high strength materials such as steel with a Rockwell Rc50
- Highly shock resistant
- Prolongs tool life in machining hard stainless steels & exotic metals
- Cuts tool steels that are heat treated
- Vastly increased speed and feed rates



Head Dia. (in.)	OAL (in.)	Web Thick. at Point	Incl. Angle of Flutes	Order No.	Price
3/32	1-1/2	.015	10°	**DD561200**	Price
1/8	1-1/2	.015	10°	**DD561201**	Price
5/32	2	.020	14°	**DD561202**	Price
3/16	2	.020	14°	**DD561203**	Price
7/32	2	.025	16°	**DD561204**	Price
1/4	2	.025	16°	**DD561205**	Price
9/32	2	.030	16°	**DD561206**	Price
5/16	2	.030	18°	**DD561207**	Price
11/32	2-1/2	.035	18°	**DD561208**	Price
3/8	2-1/2	.035	18°	**DD561209**	Price
13/32	2-1/2	.045	20°	**DD561210**	Price
7/16	2-1/2	.050	20°	**DD561211**	Price
15/32	2-1/2	.055	20°	**DD561212**	Price
1/2	2-1/2	.060	20°	**DD561213**	Price

MICRO 100 Solid Carbide Spade Drills

- Highly shock resistant
- Prolongs tool life in machining hard stainless steels & exotic metals
- Cuts tool steels that are heat treated
- Vastly increased speed and feed rates



Head Dia. (in.)	OAL (in.)	Web Thick. at Point	Incl. Angle of Flutes	Order No.	Price
1/32	1-1/4	.010	6°	**GE45SD031**	Price
1/16	1-1/2	.012	10°	**GE45SD062**	Price
3/32	1-1/2	.016	10°	**GE45SD093**	Price
1/8	1-1/2	.020	14°	**GE45SD125**	Price
5/32	2	.025	16°	**GE45SD156**	Price
3/16	2	.028	16°	**GE45SD187**	Price
7/32	2	.030	18°	**GE45SD218**	Price
1/4	2	.035	18°	**GE45SD250**	Price
5/16	2-1/2	.040	18°	**GE45SD312**	Price
3/8	2-1/2	.046	18°	**GE45SD375**	Price
1/2	2-1/2	.060	22°	**GE45SD500**	Price

FULLERTON Solid Carbide Composite Poly Drill

Series 5566 - 3 Flute



- Produces a clean, burr-free hole without breakout in carbon composites, fiber glass, fiber reinforced composites, plastics and green ceramics
- Three-flute design allows for ultimate material removal rates and burr teeth provide a clean shearing of fibers
- 3 Flute
- 90° Point
- Parabolic flute
- Burr teeth
- Right hand spiral, right hand cut
- Available uncoated or with FC-1 CVD diamond coating
- Shank diameter tolerance: +.0000 -.0005" / +0.000-0.013mm
- Cutter diameter tolerance: +.0000 -.0005" / +0.000-0.013mm

Description - Fractional Size						
			FC1		Uncoated	
Drill Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price
1/4	1-1/2	4	**FT8225303**	Price	**FT8225322**	Price
17/64	1-1/2	4	**FT8225339**	Price	**FT8225338**	Price
9/32	1-1/2	4	**FT8225341**	Price	**FT8225340**	Price
5/16	1-1/2	4-1/2	**FT8225308**	Price	**FT8225327**	Price
3/8	1-1/2	5	**FT8225343**	Price	**FT8225342**	Price
25/64	1-1/2	5	**FT8225345**	Price	**FT8225344**	Price
7/16	1-1/2	6	**FT8225347**	Price	**FT8225346**	Price
1/2	1-1/2	6	**FT8225318**	Price	**FT8225337**	Price
33/64	1-1/2	6	**FT8225349**	Price	**FT8225348**	Price

Description - Metric Size						
			FC1		Uncoated	
Drill Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price
5mm	32mm	100mm	**FT8225301**	Price	**FT8225320**	Price
6mm	32mm	100mm	**FT8225302**	Price	**FT8225321**	Price
6.4mm	38mm	102mm	**FT8225304**	Price	**FT8225323**	Price
6.5mm	38mm	105mm	**FT8225305**	Price	**FT8225324**	Price
7mm	38mm	105mm	**FT8225306**	Price	**FT8225325**	Price
7.5mm	38mm	110mm	**FT8225307**	Price	**FT8225326**	Price
8mm	38mm	115mm	**FT8225309**	Price	**FT8225328**	Price
8.5mm	38mm	120mm	**FT8225310**	Price	**FT8225329**	Price
9mm	38mm	125mm	**FT8225311**	Price	**FT8225330**	Price
9.5mm	38mm	125mm	**FT8225312**	Price	**FT8225331**	Price
10mm	38mm	130mm	**FT8225313**	Price	**FT8225332**	Price
10.5mm	38mm	137mm	**FT8225314**	Price	**FT8225333**	Price
11mm	38mm	140mm	**FT8225315**	Price	**FT8225334**	Price
11.5mm	38mm	143mm	**FT8225316**	Price	**FT8225335**	Price
12mm	38mm	150mm	**FT8225317**	Price	**FT8225336**	Price

Description - Wire Gage Size						
			FC1		Uncoated	
Drill Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price
#11	1	4	**FT8225300**	Price	**FT8225319**	Price

RAPIDKUT 3xD High Performance Solid Carbide Drills

- For use in a wide variety of materials including carbon steel, alloy steel, stainless steel, hardened steel, cast iron, aluminum alloys, titanium and others
- 140° Point and 30° helix high performance geometry allows for high penetration rates
- These high penetration drills provide accurate hole sizing as well as near burnished holes
- TiAlN coated



- Fractional					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	1/4	15/32	2.36	**AX8020005**	Price
9/64	1/4	17/32	2.44	**AX8020010**	Price
5/32	1/4	19/32	2.44	**AX8020015**	Price
11/64	1/4	21/32	2.52	**AX8020020**	Price
3/16	1/4	23/32	2.52	**AX8020025**	Price
13/64	1/4	49/64	2.60	**AX8020030**	Price
7/32	1/4	53/64	2.60	**AX8020035**	Price
1/4	1/4	15/16	3	**AX8020040**	Price
9/32	5/16	1-1/16	3	**AX8020045**	Price
5/16	5/16	1-3/16	3	**AX8020050**	Price
11/32	3/8	1-19/64	3.5	**AX8020055**	Price
3/8	3/8	1-13/32	3.5	**AX8020060**	Price
7/16	7/16	1-21/32	4.02	**AX8020065**	Price
1/2	1/2	1-7/8	4.02	**AX8020070**	Price
9/16	9/16	2-1/8	4.33	**AX8020075**	Price
5/8	5/8	2-11/32	4.33	**AX8020080**	Price
3/4	3/4	2-13/16	5.04	**AX8020085**	Price

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
3mm	6mm	20mm	62mm	**AX8030005**	Price
3.1mm	6mm	20mm	62mm	**AX8030007**	Price
3.2mm	6mm	20mm	62mm	**AX8030009**	Price
3.3mm	6mm	20mm	62mm	**AX8030010**	Price
3.4mm	6mm	20mm	62mm	**AX8030012**	Price
3.5mm	6mm	20mm	62mm	**AX8030015**	Price
3.6mm	6mm	20mm	62mm	**AX8030017**	Price
3.7mm	6mm	20mm	62mm	**AX8030020**	Price
3.8mm	1/4	20mm	2-1/2	**AX8030022**	Price
3.9mm	6mm	20mm	62mm	**AX8030024**	Price
4mm	6mm	24mm	66mm	**AX8030025**	Price
4.1mm	6mm	24mm	66mm	**AX8030027**	Price
4.2mm	6mm	24mm	66mm	**AX8030030**	Price
4.3mm	1/4	24mm	2-1/2	**AX8030032**	Price
4.4mm	6mm	24mm	66mm	**AX8030034**	Price
4.5mm	6mm	24mm	66mm	**AX8030035**	Price
4.6mm	6mm	24mm	66mm	**AX8030036**	Price
4.7mm	1/4	24mm	2-1/2	**AX8030037**	Price
4.8mm	1/4	24mm	2-1/2	**AX8030038**	Price
4.9mm	6mm	24mm	66mm	**AX8030039**	Price
5mm	6mm	24mm	66mm	**AX8030040**	Price
5.1mm	6mm	24mm	66mm	**AX8030041**	Price
5.2mm	6mm	24mm	66mm	**AX8030045**	Price
5.3mm	6mm	24mm	66mm	**AX8030046**	Price
5.4mm	6mm	24mm	66mm	**AX8030049**	Price
5.5mm	6mm	24mm	66mm	**AX8030050**	Price
5.6mm	6mm	24mm	66mm	**AX8030052**	Price
5.7mm	6mm	24mm	66mm	**AX8030053**	Price
5.8mm	6mm	24mm	66mm	**AX8030054**	Price
6mm	6mm	24mm	66mm	**AX8030055**	Price
6.2mm	8mm	34mm	79mm	**AX8030060**	Price
6.4mm	8mm	34mm	79mm	**AX8030062**	Price
6.5mm	8mm	34mm	79mm	**AX8030065**	Price
6.6mm	8mm	34mm	79mm	**AX8030067**	Price
6.8mm	8mm	34mm	79mm	**AX8030068**	Price
6.83mm	8mm	34mm	79mm	**AX8030070**	Price
6.9mm	8mm	34mm	79mm	**AX8030072**	Price
7mm	8mm	34mm	79mm	**AX8030075**	Price
7.3mm	8mm	34mm	79mm	**AX8030077**	Price
7.5mm	8mm	41mm	79mm	**AX8030080**	Price
7.6mm	8mm	41mm	79mm	**AX8030082**	Price
7.8mm	8mm	41mm	79mm	**AX8030084**	Price
8mm	8mm	41mm	79mm	**AX8030085**	Price
8.1mm	10mm	47mm	89mm	**AX8030087**	Price
8.2mm	10mm	47mm	89mm	**AX8030088**	Price
8.5mm	10mm	47mm	89mm	**AX8030090**	Price
8.4mm	10mm	47mm	89mm	**AX8030089**	Price
8.8mm	10mm	47mm	89mm	**AX8030095**	Price
9mm	10mm	47mm	89mm	**AX8030100**	Price
9.2mm	10mm	47mm	89mm	**AX8030105**	Price
9.5mm	10mm	47mm	89mm	**AX8030110**	Price

(continued on next page)

RAPIDKUT 3xD High Performance Solid Carbide Drills



(continued from previous page)

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
9.8mm	10mm	47mm	89mm	**AX8030112**	Price
10mm	10mm	47mm	89mm	**AX8030115**	Price
10.2mm	12mm	55mm	102mm	**AX8030120**	Price
10.5mm	12mm	55mm	102mm	**AX8030125**	Price
10.8mm	12mm	55mm	102mm	**AX8030130**	Price
11mm	12mm	55mm	102mm	**AX8030135**	Price
11.5mm	12mm	55mm	102mm	**AX8030140**	Price
12mm	12mm	55mm	102mm	**AX8030145**	Price
12.5mm	14mm	60mm	107mm	**AX8030150**	Price
13mm	14mm	60mm	107mm	**AX8030155**	Price
13.5mm	14mm	60mm	107mm	**AX8030160**	Price
14mm	14mm	60mm	107mm	**AX8030165**	Price
14.5mm	16mm	65mm	115mm	**AX8030170**	Price
15mm	16mm	65mm	115mm	**AX8030175**	Price
15.5mm	16mm	65mm	115mm	**AX8030180**	Price
16mm	16mm	65mm	115mm	**AX8030185**	Price
17mm	18mm	73mm	123mm	**AX8030190**	Price
18mm	18mm	73mm	123mm	**AX8030195**	Price
19mm	20mm	79mm	131mm	**AX8030200**	Price
20mm	20mm	79mm	131mm	**AX8030205**	Price

M.A. FORD Twister XD® High Performance Solid Carbide Drills

3xD Length • 142° Point • ALtima® Coated

- Designed for drilling a broad cross section of materials at increased feed rates
- 30° Helix to promote rapid chip evacuation
- M.A. Ford List #2XDSS



- Fractional Size					
Size (in.)	Shank Dia.	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	3/4	2-1/4	**AX2702104**	Price
9/64	5/32	7/8	2-1/2	**AX2702118**	Price
5/32	5/32	7/8	2-1/2	**AX2702124**	Price
11/64	3/16	1	2-1/2	**AX2702130**	Price
3/16	3/16	1	2-1/2	**AX2702136**	Price
13/64	15/64	1-1/8	3	**AX2702146**	Price
7/32	15/64	1-1/8	3	**AX2702156**	Price
15/64	15/64	1-1/8	3	**AX2702166**	Price
1/4	1/4	1-1/4	3	**AX2702180**	Price
17/64	5/16	1-3/8	3-1/4	**AX2702190**	Price
9/32	5/16	1-1/2	3-1/4	**AX2702198**	Price
19/64	5/16	1-1/2	3-1/4	**AX2702206**	Price
5/16	5/16	1-1/2	3-1/4	**AX2702214**	Price
21/64	25/64	1-11/16	3-1/2	**AX2702224**	Price
11/32	25/64	1-11/16	3-1/2	**AX2702228**	Price
23/64	25/64	1-11/16	3-1/2	**AX2702236**	Price
3/8	25/64	1-11/16	3-1/2	**AX2702246**	Price
25/64	25/64	1-11/16	3-1/2	**AX2702252**	Price
13/32	15/32	2	4	**AX2702258**	Price
27/64	15/32	2	4	**AX2702262**	Price
7/16	15/32	2	4	**AX2702266**	Price
15/32	15/32	2	4	**AX2702274**	Price
31/64	1/2	2	4	**AX2702280**	Price
1/2	1/2	2	4	**AX2702284**	Price
33/64	35/64	2-1/8	4-1/4	**AX2702290**	Price
35/64	35/64	2-1/8	4-1/4	**AX2702296**	Price
9/16	5/8	2-3/8	4-5/8	**AX2702300**	Price
19/32	5/8	2-3/8	4-5/8	**AX2702308**	Price
5/8	5/8	2-3/8	4-5/8	**AX2702314**	Price
21/32	45/64	2-1/2	4-13/16	**AX2702322**	Price
11/16	45/64	2-1/2	4-13/16	**AX2702326**	Price
3/4	3/4	2-3/4	5-1/4	**AX2702334**	Price

- Metric Size					
Size (in.)	Shank Dia.	Flute Length (in.)	OAL (in.)	Order No.	Price
3mm	3mm	16mm	57mm	**AX2702100**	Price
4mm	4mm	22mm	63mm	**AX2702126**	Price
5mm	5mm	26mm	63mm	**AX2702142**	Price
6mm	6mm	30mm	76mm	**AX2702168**	Price
7mm	8mm	35mm	82mm	**AX2702196**	Price
8mm	8mm	38mm	82mm	**AX2702216**	Price
9mm	10mm	43mm	89mm	**AX2702234**	Price
10mm	10mm	43mm	89mm	**AX2702254**	Price
11mm	12mm	51mm	101mm	**AX2702264**	Price
12mm	12mm	51mm	101mm	**AX2702276**	Price

DORMER ForceX High Performance Carbide Drills

3xD Length • 140° Point • TiAlN Coated

- Multi-application solid carbide drills, excellent for drilling a wide range of materials, including steel, stainless steel, cast iron & more
- 140º Point provides excellent centering capabilities
- Common shanks to cut collet cost
- Manufactured to DIN 6537
- Dormer List #R458



Type - Fractional Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	20mm	62mm	**PT400624845**	Price
9/64	6mm	20mm	62mm	**PT400625224**	Price
5/32	6mm	24mm	66mm	**PT400625163**	Price
11/64	6mm	24mm	66mm	**PT400624876**	Price
3/16	6mm	28mm	66mm	**PT400625033**	Price
13/64	6mm	28mm	66mm	**PT400624890**	Price
7/32	6mm	28mm	66mm	**PT400625194**	Price
15/64	6mm	28mm	66mm	**PT400624913**	Price
1/4	8mm	34mm	79mm	**PT400624838**	Price
17/64	8mm	34mm	79mm	**PT400624937**	Price
9/32	8mm	41mm	79mm	**PT400625217**	Price
19/64	8mm	41mm	79mm	**PT400624951**	Price
5/16	8mm	41mm	79mm	**PT400625156**	Price
21/64	10mm	47mm	89mm	**PT400624975**	Price
11/32	10mm	47mm	89mm	**PT400624869**	Price
23/64	10mm	47mm	89mm	**PT400624999**	Price
3/8	10mm	47mm	89mm	**PT400625057**	Price
25/64	10mm	47mm	89mm	**PT400625002**	Price
13/32	12mm	55mm	102mm	**PT400624883**	Price
27/64	12mm	55mm	102mm	**PT400625019**	Price
7/16	12mm	55mm	102mm	**PT400625187**	Price
29/64	12mm	55mm	102mm	**PT400625026**	Price
15/32	12mm	55mm	102mm	**PT400624906**	Price
31/64	14mm	60mm	107mm	**PT400625064**	Price
1/2	14mm	60mm	107mm	**PT400624821**	Price
17/32	14mm	60mm	107mm	**PT400624920**	Price
9/16	16mm	65mm	115mm	**PT400625200**	Price
19/32	16mm	65mm	115mm	**PT400624944**	Price
5/8	16mm	65mm	115mm	**PT400625170**	Price
21/32	18mm	73mm	123mm	**PT400624968**	Price
11/16	18mm	73mm	123mm	**PT400624852**	Price
3/4	20mm	79mm	131mm	**PT400625040**	Price

Type - Metric Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
4mm	6mm	21mm	54mm	**PT400615362**	Price
4.5mm	6mm	23mm	57mm	**PT400615393**	Price
5mm	6mm	25mm	61mm	**PT400615409**	Price
6mm	6mm	27mm	65mm	**PT400615430**	Price
6.5mm	8mm	30mm	69mm	**PT400615447**	Price
7mm	8mm	33mm	73mm	**PT400615478**	Price
8mm	8mm	35mm	78mm	**PT400615508**	Price
8.5mm	10mm	35mm	78mm	**PT400615515**	Price
9mm	10mm	38mm	82mm	**PT400615546**	Price
10mm	10mm	41mm	87mm	**PT400615133**	Price
10.5mm	12mm	41mm	87mm	**PT400615171**	Price
11mm	12mm	45mm	93mm	**PT400615188**	Price
11.5mm	12mm	45mm	93mm	**PT400615201**	Price
12mm	12mm	49mm	100mm	**PT400615218**	Price
14mm	14mm	52mm	104mm	**PT400615263**	Price
14.5mm	16mm	53mm	108mm	**PT400615287**	Price
15mm	16mm	53mm	108mm	**PT400615294**	Price

Cyclone™ XD Solid Carbide HP Coolant Thru Drills

3xD • Double Margin • Altima® Plus Coated

- 30° Helix
- 140° / 142° Drill Point
- Designed for drilling in a broad range of materials
- M.A. Ford List #CXDCS



Drill Dia.	Decimal Equiv.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
#31	.1200	1/8	.7870	2.440	**AX2806780**	Price
1/8	.1250	1/8	.7870	2.440	**AX2806782**	Price
#30	.1285	5/32	.7870	2.440	**AX2806784**	Price
#29	.1360	5/32	.7870	2.440	**AX2806787**	Price
9/64	.1406	5/32	.7870	2.440	**AX2806789**	Price
#24	.1520	5/32	.9450	2.600	**AX2806793**	Price
5/32	.1562	5/32	.9450	2.600	**AX2806795**	Price
#21	.1590	3/16	.9450	2.600	**AX2806797**	Price
11/64	.1719	3/16	.9450	2.600	**AX2806801**	Price
3/16	.1875	3/16	1.102	2.600	**AX2806806**	Price
13/64	.2031	1/4	1.102	2.598	**AX2806811**	Price
7/32	.2187	1/4	1.102	2.598	**AX2806816**	Price
#2	.2210	1/4	1.102	2.598	**AX2806817**	Price
15/64	.2344	1/4	1.102	2.598	**AX2806821**	Price
C	.2420	1/4	1.339	3.110	**AX2806824**	Price
D	.2460	1/4	1.339	3.110	**AX2806826**	Price
1/4	.2500	1/4	1.339	3.110	**AX2806828**	Price
F	.2570	5/16	1.339	3.110	**AX2806831**	Price
G	.2610	5/16	1.339	3.110	**AX2806833**	Price
17/64	.2656	5/16	1.339	3.110	**AX2806835**	Price
9/32	.2812	5/16	1.614	3.110	**AX2806840**	Price
19/64	.2969	5/16	1.614	3.110	**AX2806845**	Price
5/16	.3125	5/16	1.614	3.110	**AX2806850**	Price
21/64	.3281	3/8	1.850	3.504	**AX2806855**	Price
Q	.3320	3/8	1.850	3.504	**AX2806857**	Price
11/32	.3438	3/8	1.850	3.504	**AX2806861**	Price
23/64	.3594	3/8	1.850	3.504	**AX2806866**	Price
3/8	.3750	3/8	1.850	3.504	**AX2806872**	Price
25/64	.3906	7/16	1.850	3.504	**AX2806877**	Price
13/32	.4062	7/16	2.165	4.016	**AX2806882**	Price
27/64	.4219	7/16	2.165	4.016	**AX2806887**	Price
7/16	.4375	7/16	2.165	4.016	**AX2806892**	Price
15/32	.4688	1/2	2.165	4.016	**AX2806901**	Price
31/64	.4844	1/2	2.362	4.213	**AX2806904**	Price
1/2	.5000	1/2	2.362	4.213	**AX2806906**	Price
33/64	.5156	9/16	2.362	4.213	**AX2806911**	Price
17/32	.5312	9/16	2.362	4.213	**AX2807089**	Price
35/64	.5469	9/16	2.362	4.213	**AX2806914**	Price
9/16	.5625	9/16	2.559	4.528	**AX2806916**	Price
19/32	.5938	5/8	2.559	4.528	**AX2806920**	Price
5/8	.6250	5/8	2.559	4.528	**AX2806924**	Price

Cyclone™ XD Solid Carbide High Performance Drills

3xD • Altima® Plus Coated

- 30° Helix
- 140° Drill Point
- Designed for drilling in a broad range of materials
- M.A. Ford List #CXDSS



Drill Dia.	Decimal Equiv.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
#31	.1200	1/8	0.787	2.440	**AX2806616**	Price
1/8	.1250	1/8	0.787	2.440	**AX2806618**	Price
#30	.1285	5/32	0.787	2.440	**AX2806620**	Price
#29	.1360	5/32	0.787	2.440	**AX2806623**	Price
9/64	.1406	5/32	0.787	2.440	**AX2806625**	Price
#24	.1520	5/32	0.945	2.598	**AX2806629**	Price
5/32	.1562	5/32	0.945	2.598	**AX2806631**	Price
#21	.1590	5/32	0.945	2.598	**AX2806633**	Price
11/64	.1719	3/16	0.945	2.598	**AX2806637**	Price
3/16	.1875	3/16	1.102	2.598	**AX2806642**	Price
13/64	.2031	1/4	1.102	2.598	**AX2806647**	Price
7/32	.2187	1/4	1.102	2.598	**AX2806652**	Price
#2	.2210	1/4	1.102	2.598	**AX2806653**	Price
15/64	.2344	1/4	1.102	2.598	**AX2806657**	Price
C	.2420	1/4	1.339	3.110	**AX2806660**	Price
D	.2460	1/4	1.339	3.110	**AX2806662**	Price
1/4	.2500	1/4	1.339	3.110	**AX2806664**	Price
F	.2570	5/16	1.339	3.110	**AX2806667**	Price
G	.2610	5/16	1.339	3.110	**AX2806669**	Price
17/64	.2656	5/16	1.339	3.110	**AX2806671**	Price
9/32	.2812	5/16	1.614	3.110	**AX2806676**	Price
19/64	.2969	5/16	1.614	3.110	**AX2806681**	Price
5/16	.3125	5/16	1.614	3.110	**AX2806686**	Price
21/64	.3281	3/8	1.850	3.504	**AX2806691**	Price
Q	.3320	3/8	1.850	3.504	**AX2806693**	Price
11/32	.3438	3/8	1.850	3.504	**AX2806697**	Price
23/64	.3594	3/8	1.850	3.504	**AX2806702**	Price
3/8	.3750	3/8	1.850	3.504	**AX2806708**	Price
25/64	.3906	7/16	1.850	3.504	**AX2806713**	Price
13/32	.4062	7/16	2.165	4.016	**AX2806718**	Price
27/64	.4219	7/16	2.165	4.016	**AX2806723**	Price
7/16	.4375	7/16	2.165	4.016	**AX2806728**	Price
15/32	.4688	1/2	2.165	4.016	**AX2806737**	Price
31/64	.4844	1/2	2.362	4.213	**AX2806740**	Price
1/2	.5000	1/2	2.362	4.213	**AX2806742**	Price
33/64	.5156	9/16	2.362	4.213	**AX2806747**	Price
17/32	.5312	9/16	2.362	4.213	**AX2806748**	Price
35/64	.5469	9/16	2.362	4.213	**AX2806752**	Price
9/16	.5625	9/16	2.559	4.528	**AX2806754**	Price
19/32	.5938	5/8	2.559	4.528	**AX2806758**	Price
5/8	.6250	5/8	2.559	4.528	**AX2806762**	Price
21/32	.6562	11/16	2.874	4.840	**AX2806767**	Price
11/16	.6875	11/16	2.874	4.840	**AX2806769**	Price
3/4	.7500	3/4	3.110	5.160	**AX2806773**	Price

HY-PRO® CARB Drill



Solid Carbide • 3xD Length • TiAlN Coated

- High performance carbide
- Recommended for cast iron, carbon steels, alloy steels, die steels and hardened steels up to 35 HrC
- OSG List #HP243

Size (in.)	Decimal Equiv.	Shank Dia. (mm)	Flute Length (mm)	OAL (mm)	Order No.	Price
1/8	.1248	6mm	20mm	62mm	**TP45HP2431248**	Price
3/16	.1874	6mm	28mm	66mm	**TP45HP2431874**	Price
7/32	.2189	6mm	28mm	66mm	**TP45HP2432189**	Price
1/4, E	.2500	8mm	34mm	79mm	**TP45HP2432500**	Price
9/32	.2811	8mm	41mm	79mm	**TP45HP2432811**	Price
5/16	.3126	8mm	41mm	79mm	**TP45HP2433126**	Price
11/32	.3437	10mm	47mm	89mm	**TP45HP2433437**	Price
3/8	.3748	10mm	47mm	89mm	**TP45HP2433748**	Price

Size (in.)	Decimal Equiv.	Shank Dia. (mm)	Flute Length (mm)	OAL (mm)	Order No.	Price
13/32	.4063	12mm	55mm	102mm	**TP45HP2434063**	Price
7/16	.4374	12mm	55mm	102mm	**TP45HP2434374**	Price
1/2	.5000	14mm	60mm	107mm	**TP45HP2435000**	Price
17/32	.5311	14mm	60mm	107mm	**TP45HP2435311**	Price
9/16	.5626	16mm	65mm	115mm	**TP45HP2435626**	Price
5/8	.6248	16mm	65mm	115mm	**TP45HP2436248**	Price
21/32	.6563	18mm	73mm	123mm	**TP45HP2436563**	Price
3/4	.7500	20mm	79mm	131mm	**TP45HP2437500**	Price

RAPIDKUT® 4xD Solid Carbide Drills

140° Point • AlTiN Coated

- Advanced 140° self-centering drill point provides the fastest penetration and ultimate longevity
- Premium C-2 grade sub-micron grain carbide with 10% cobalt extends tool life
- 25° Helix
- Right hand spiral / right hand cut
- Diameter tolerance: +.0000 / -.0005"



Type - Fractional Size					
Size	Decimal Equiv.	Shank	OAL	Order No.	Price
3/64	.0469	1/8	1-1/2	**AX7210000**	Price
1/16	.0625	1/8	1-1/2	**AX7210004**	Price
5/64	.0781	1/8	2	**AX7210009**	Price
3/32	.0938	1/8	2	**AX7210015**	Price
7/64	.1094	1/8	2	**AX7210022**	Price
1/8	.1250	1/8	2	**AX7210024**	Price
9/64	.1406	3/16	2	**AX7210028**	Price
5/32	.1562	3/16	2-1/2	**AX7210030**	Price
11/64	.1719	3/16	2-1/2	**AX7210033**	Price
3/16	.1875	3/16	2-1/2	**AX7210035**	Price
13/64	.2031	1/4	2-1/2	**AX7210039**	Price
7/32	.2188	1/4	2-1/2	**AX7210042**	Price
15/64	.2344	1/4	2-1/2	**AX7210043**	Price
1/4, E	.2500	1/4	2-1/2	**AX7210044**	Price
17/64	.2656	5/16	3	**AX7210046**	Price
9/32, K	.2812	5/16	3	**AX7210048**	Price
19/64	.2969	5/16	3	**AX7210049**	Price
5/16	.3125	5/16	3	**AX7210050**	Price
21/64	.3281	3/8	3	**AX7210051**	Price
11/32	.3438	3/8	3	**AX7210053**	Price
23/64	.3594	3/8	3	**AX7210054**	Price
3/8	.3750	3/8	3	**AX7210056**	Price
25/64	.3906	7/16	4	**AX7210057**	Price
13/32	.4063	7/16	4	**AX7210058**	Price
27/64	.4219	7/16	4	**AX7210059**	Price
7/16	.4375	7/16	4	**AX7210060**	Price
29/64	.4531	1/2	4	**AX7210061**	Price
31/64	.4844	1/2	4	**AX7210062**	Price
1/2	.5000	1/2	4	**AX7210063**	Price
33/64	.5156	9/16	4	**AX7210064**	Price
17/32	.5312	9/16	4	**AX7210065**	Price
35/64	.5469	9/16	4	**AX7210066**	Price
9/16	.5625	9/16	4	**AX7210067**	Price
37/64	.5781	5/8	5	**AX7210068**	Price
19/32	.5938	5/8	5	**AX7210069**	Price
5/8	.6250	5/8	5	**AX7210070**	Price
21/32	.6562	3/4	5	**AX7210071**	Price
11/16	.6875	3/4	5	**AX7210072**	Price
3/4	.7500	3/4	5	**AX7210073**	Price

Type - Letter Size					
Size	Decimal Equiv.	Shank	OAL	Order No.	Price
I	.2717	5/16	3	**AX7210047**	Price
U	.3680	3/8	3	**AX7210055**	Price
Q	.3320	3/8	3	**AX7210052**	Price
F	.2570	5/16	3	**AX7210045**	Price

Type - Metric Size					
Size	Decimal Equiv.	Shank	OAL	Order No.	Price
1.5mm	.0591	3mm	38mm	**AX7220000**	Price
2mm	.0787	3mm	38mm	**AX7220001**	Price
2.5mm	.0984	3mm	38mm	**AX7220002**	Price
3mm	.1181	3mm	38mm	**AX7220003**	Price
3.5mm	.1378	4mm	50mm	**AX7220004**	Price
4mm	.1575	4mm	50mm	**AX7220005**	Price
4.5mm	.1772	5mm	50mm	**AX7220006**	Price
5mm	.1969	5mm	50mm	**AX7220007**	Price
6mm	.2362	6mm	63mm	**AX7220008**	Price
6.5mm	.2559	8mm	75mm	**AX7220009**	Price
7mm	.2756	8mm	75mm	**AX7220010**	Price
7.5mm	.2953	8mm	75mm	**AX7220011**	Price
8mm	.3150	8mm	75mm	**AX7220012**	Price
8.5mm	.3346	10mm	100mm	**AX7220013**	Price
9mm	.3543	10mm	100mm	**AX7220014**	Price
9.5mm	.3740	10mm	100mm	**AX7220015**	Price
10mm	.3937	10mm	100mm	**AX7220016**	Price
10.5mm	.4134	12mm	100mm	**AX7220017**	Price
11mm	.4331	12mm	100mm	**AX7220018**	Price
11.5mm	.4528	12mm	100mm	**AX7220019**	Price
12mm	.4724	12mm	100mm	**AX7220020**	Price
12.5mm	.4921	14mm	100mm	**AX7220021**	Price
13mm	.5118	14mm	100mm	**AX7220022**	Price
13.5mm	.5315	14mm	100mm	**AX7220023**	Price

Type - Wire Gage Size					
Size	Decimal Equiv.	Shank	OAL	Order No.	Price
3	.2130	1/4	2-1/2	**AX7210041**	Price
5	.2055	1/4	2-1/2	**AX7210040**	Price
7	.2010	1/4	2-1/2	**AX7210038**	Price
10	.1935	1/4	2-1/2	**AX7210037**	Price
11	.1915	1/4	2-1/2	**AX7210036**	Price
16	.1772	3/16	2-1/2	**AX7210034**	Price
20	.1610	3/16	2-1/2	**AX7210032**	Price
21	.1590	3/16	2-1/2	**AX7210031**	Price
25	.1496	3/16	2-1/2	**AX7210029**	Price
28	.1406	3/16	2	**AX7210027**	Price
29	.1360	3/16	2	**AX7210026**	Price
30	.1285	3/16	2	**AX7210025**	Price
31	.1200	1/8	2	**AX7210023**	Price
36	.1065	1/8	2	**AX7210021**	Price
37	.1040	1/8	2	**AX7210020**	Price
38	.1015	1/8	2	**AX7210019**	Price
39	.0995	1/8	2	**AX7210018**	Price
40	.0980	1/8	2	**AX7210017**	Price
41	.0960	1/8	2	**AX7210016**	Price
42	.0935	1/8	2	**AX7210014**	Price
43	.0890	1/8	2	**AX7210013**	Price
44	.0860	1/8	2	**AX7210012**	Price
45	.0820	1/8	2	**AX7210011**	Price
46	.0810	1/8	2	**AX7210010**	Price
48	.0760	1/8	2	**AX7210008**	Price
49	.0728	1/8	2	**AX7210007**	Price
50	.0700	1/8	2	**AX7210006**	Price
52	.0635	1/8	1-1/2	**AX7210005**	Price
53	.0595	1/8	1-1/2	**AX7210003**	Price
54	.0551	1/8	1-1/2	**AX7210002**	Price
55	.0520	1/8	1-1/2	**AX7210001**	Price

Twister® Micro XD Drills

5xD • Solid Carbide

- Designed for high performance drilling in a broad range of materials
- Web thinned point helps reduce cutting forces during the drilling operation
- 0.8mm and above have honed cutting edges on the point which increases the strength of the cutting edges
- Post coat polishing to improve chip evacuation
- Altima® coated
- M A Ford List #MXDSR



Drill Dia.	Decimal Equiv.	Shank Size	Flute Length	OAL	Order No.	Price
0.55mm	.0217	3mm	4mm	57mm	**AX2804696**	Price
0.5mm	.0197	3mm	4mm	57mm	**AX2804694**	Price
0.65mm	.0256	3mm	5mm	57mm	**AX2804700**	Price
0.6mm	.0236	3mm	5mm	57mm	**AX2804698**	Price
0.75mm	.0295	3mm	6mm	57mm	**AX2804704**	Price
0.7mm	.0276	3mm	5mm	57mm	**AX2804702**	Price
0.85mm	.0335	3mm	7mm	57mm	**AX2804708**	Price
0.8mm	.0315	3mm	6mm	57mm	**AX2804706**	Price
0.95mm	.0374	3mm	7mm	57mm	**AX2804712**	Price
0.9mm	.0354	3mm	7mm	57mm	**AX2804710**	Price
1.0mm	.0394	3mm	8mm	57mm	**AX2804714**	Price
1.05mm	.0413	3mm	8mm	57mm	**AX2804716**	Price
1.15mm	.0453	3mm	9mm	57mm	**AX2804720**	Price
1.1mm	.0433	3mm	8mm	57mm	**AX2804718**	Price
1.25mm	.0492	3mm	9mm	57mm	**AX2804724**	Price
1.2mm	.0472	3mm	9mm	57mm	**AX2804722**	Price
1.35mm	.0531	3mm	10mm	57mm	**AX2804728**	Price
1.3mm	.0512	3mm	10mm	57mm	**AX2804726**	Price
1.45mm	.0571	3mm	11mm	57mm	**AX2804732**	Price
1.4mm	.0551	3mm	10mm	57mm	**AX2804730**	Price
1.55mm	.0610	3mm	12mm	57mm	**AX2804736**	Price
1.5mm	.0591	3mm	11mm	57mm	**AX2804734**	Price
1.65mm	.0650	3mm	12mm	57mm	**AX2804740**	Price
1.6mm	.0630	3mm	12mm	57mm	**AX2804738**	Price
1.75mm	.0689	3mm	13mm	57mm	**AX2804744**	Price
1.7mm	.0669	3mm	13mm	57mm	**AX2804742**	Price
1.85mm	.0725	3mm	14mm	57mm	**AX2804748**	Price
1.8mm	.0709	3mm	13mm	57mm	**AX2804746**	Price
1.95mm	.0768	3mm	14mm	57mm	**AX2804752**	Price
1.9mm	.0748	3mm	14mm	57mm	**AX2804750**	Price
2.0mm	.0787	3mm	15mm	57mm	**AX2804754**	Price
2.05mm	.0807	3mm	15mm	57mm	**AX2804756**	Price
2.15mm	.0846	3mm	16mm	57mm	**AX2804760**	Price
2.1mm	.0827	3mm	15mm	57mm	**AX2804758**	Price
2.25mm	.0886	3mm	17mm	57mm	**AX2804764**	Price
2.2mm	.0866	3mm	16mm	57mm	**AX2804762**	Price
2.35mm	.0925	3mm	17mm	57mm	**AX2804768**	Price
2.3mm	.0906	3mm	17mm	57mm	**AX2804766**	Price
2.45mm	.0965	3mm	18mm	57mm	**AX2804772**	Price
2.4mm	.0945	3mm	18mm	57mm	**AX2804770**	Price
2.55mm	.1004	3mm	19mm	57mm	**AX2804776**	Price
2.5mm	.0984	3mm	18mm	57mm	**AX2804774**	Price
2.65mm	.1043	3mm	19mm	57mm	**AX2804780**	Price
2.6mm	.1024	3mm	19mm	57mm	**AX2804778**	Price
2.75mm	.1083	3mm	20mm	57mm	**AX2804784**	Price
2.7mm	.1063	3mm	20mm	57mm	**AX2804782**	Price
2.85mm	.1122	3mm	21mm	57mm	**AX2804788**	Price
2.8mm	.1102	3mm	20mm	57mm	**AX2804786**	Price
2.95mm	.1161	3mm	21mm	57mm	**AX2804792**	Price
2.9mm	.1142	3mm	21mm	57mm	**AX2804790**	Price

RAPIDKUT 5xD High Performance Solid Carbide Drills

- For use in a wide variety of materials including carbon steel, alloy steel, stainless steel, hardened steel, cast iron, aluminum alloys, titanium and others
- 140° Point and 30° helix high performance geometry allows for high penetration rates
- These high penetration drills provide accurate hole sizing as well as near burnished holes
- TiAlN coated



- Fractional					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/4, E	1/4	2.08	3.58	**AX8021005**	Price
17/64	5/16	2.08	3.58	**AX8021010**	Price
9/32, K	5/16	2.08	3.58	**AX8021015**	Price
19/64	5/16	2.08	3.58	**AX8021020**	Price
5/16	5/16	2.08	3.58	**AX8021025**	Price
21/64	3/8	2.40	4.05	**AX8021030**	Price
11/32	3/8	2.40	4.05	**AX8021035**	Price
23/64	3/8	2.40	4.05	**AX8021040**	Price
3/8	3/8	2.40	4.05	**AX8021045**	Price
25/64	7/16	2.80	4.05	**AX8021050**	Price
13/32	7/16	2.80	4.64	**AX8021055**	Price
27/64	7/16	2.80	4.64	**AX8021060**	Price
7/16	7/16	2.80	4.64	**AX8021065**	Price
29/64	1/2	3.03	4-7/8	**AX8021070**	Price
15/32	1/2	3.03	4-7/8	**AX8021075**	Price
31/64	1/2	3.03	4-7/8	**AX8021080**	Price
1/2	1/2	3.03	4-7/8	**AX8021085**	Price
33/64	9/16	3.03	4-7/8	**AX8021090**	Price
17/32	9/16	3.03	4-7/8	**AX8021095**	Price
35/64	9/16	3.03	4-7/8	**AX8021100**	Price
9/16	9/16	3.03	4-7/8	**AX8021105**	Price
37/64	5/8	3-17/64	5.23	**AX8021110**	Price
19/32	5/8	3-17/64	5.23	**AX8021115**	Price
39/64	5/8	3-17/64	5.23	**AX8021120**	Price
5/8	5/8	3-17/64	5.23	**AX8021125**	Price
41/64	11/16	3-21/32	5-5/8	**AX8021130**	Price
21/32	11/16	3-21/32	5-5/8	**AX8021135**	Price
43/64	11/16	3-21/32	5-5/8	**AX8021140**	Price
11/16	11/16	3-21/32	5-5/8	**AX8021145**	Price
45/64	3/4	3-31/64	6	**AX8021150**	Price
23/32	3/4	3-31/64	6	**AX8021155**	Price
47/64	3/4	3-31/64	6	**AX8021160**	Price
3/4	3/4	3-31/64	6	**AX8021165**	Price

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
3mm	6mm	28mm	66mm	**AX8031005**	Price
3.1mm	6mm	28mm	66mm	**AX8031010**	Price
3.2mm	6mm	28mm	66mm	**AX8031012**	Price
3.3mm	6mm	28mm	66mm	**AX8031015**	Price
3.4mm	6mm	28mm	66mm	**AX8031017**	Price
3.5mm	6mm	28mm	66mm	**AX8031020**	Price
3.6mm	6mm	28mm	66mm	**AX8031022**	Price
3.7mm	6mm	28mm	66mm	**AX8031025**	Price
3.8mm	6mm	36mm	74mm	**AX8031030**	Price
3.9mm	6mm	28mm	66mm	**AX8031032**	Price
4mm	6mm	36mm	74mm	**AX8031035**	Price
4.1mm	6mm	36mm	74mm	**AX8031037**	Price
4.2mm	6mm	36mm	74mm	**AX8031040**	Price
4.3mm	6mm	36mm	74mm	**AX8031042**	Price
4.4mm	6mm	36mm	74mm	**AX8031044**	Price
4.5mm	6mm	36mm	74mm	**AX8031045**	Price
4.6mm	6mm	36mm	74mm	**AX8031047**	Price
4.7mm	6mm	44mm	76mm	**AX8031049**	Price
4.8mm	6mm	44mm	82mm	**AX8031050**	Price
5mm	6mm	44mm	82mm	**AX8031055**	Price
5.1mm	6mm	44mm	82mm	**AX8031060**	Price
5.2mm	6mm	44mm	82mm	**AX8031065**	Price
5.3mm	6mm	44mm	82mm	**AX8031067**	Price
5.5mm	6mm	44mm	82mm	**AX8031070**	Price
5.8mm	6mm	44mm	82mm	**AX8031075**	Price
6mm	6mm	44mm	82mm	**AX8031080**	Price
6.1mm	8mm	53mm	91mm	**AX8031082**	Price
6.3mm	8mm	53mm	91mm	**AX8031085**	Price

(continued on next page)

RAPIDKUT 5xD High Performance Solid Carbide Drills *(continued from previous page)*



- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
6.4mm	8mm	53mm	91mm	**AX8031087**	Price
6.5mm	8mm	53mm	91mm	**AX8031090**	Price
6.6mm	8mm	53mm	91mm	**AX8031092**	Price
6.8mm	8mm	53mm	91mm	**AX8031095**	Price
6.9mm	8mm	53mm	91mm	**AX8031097**	Price
7mm	8mm	53mm	91mm	**AX8031100**	Price
7.3mm	8mm	53mm	91mm	**AX8031102**	Price
7.5mm	8mm	53mm	91mm	**AX8031105**	Price
7.6mm	8mm	53mm	91mm	**AX8031107**	Price
7.8mm	8mm	53mm	91mm	**AX8031110**	Price
8mm	8mm	53mm	91mm	**AX8031115**	Price
8.1mm	10mm	61mm	103mm	**AX8031117**	Price
8.2mm	10mm	61mm	103mm	**AX8031118**	Price
8.4mm	10mm	61mm	103mm	**AX8031119**	Price
8.5mm	10mm	61mm	103mm	**AX8031120**	Price
8.8mm	10mm	61mm	103mm	**AX8031125**	Price
9mm	10mm	61mm	103mm	**AX8031130**	Price
9.2mm	10mm	61mm	103mm	**AX8031135**	Price
9.5mm	10mm	61mm	103mm	**AX8031140**	Price
9.8mm	10mm	61mm	103mm	**AX8031145**	Price
10mm	10mm	61mm	103mm	**AX8031150**	Price
10.2mm	12mm	71mm	118mm	**AX8031155**	Price
10.3mm	12mm	71mm	118mm	**AX8031157**	Price

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
10.5mm	12mm	71mm	118mm	**AX8031160**	Price
10.7mm	12mm	71mm	118mm	**AX8031162**	Price
10.8mm	12mm	71mm	118mm	**AX8031165**	Price
11mm	12mm	71mm	118mm	**AX8031170**	Price
11.5mm	12mm	71mm	118mm	**AX8031175**	Price
11.8mm	12mm	71mm	118mm	**AX8031180**	Price
12mm	12mm	71mm	118mm	**AX8031185**	Price
12.3mm	14mm	77mm	124mm	**AX8031190**	Price
12.5mm	14mm	77mm	124mm	**AX8031195**	Price
12.8mm	14mm	77mm	124mm	**AX8031200**	Price
13mm	14mm	77mm	124mm	**AX8031205**	Price
13.5mm	14mm	77mm	124mm	**AX8031210**	Price
14mm	14mm	77mm	124mm	**AX8031215**	Price
14.5mm	16mm	83mm	133mm	**AX8031220**	Price
15mm	16mm	83mm	133mm	**AX8031225**	Price
15.5mm	16mm	83mm	133mm	**AX8031230**	Price
16mm	16mm	83mm	133mm	**AX8031235**	Price
16.5mm	18mm	93mm	143mm	**AX8031240**	Price
17mm	18mm	93mm	143mm	**AX8031245**	Price
17.5mm	18mm	93mm	143mm	**AX8031250**	Price
18mm	18mm	93mm	143mm	**AX8031255**	Price
20mm	20mm	101mm	153mm	**AX8031260**	Price

Solid Carbide High Performance Drills

5xD



- 140° Self-centering drill point
- 30° Helix
- For use in steels, cast iron, austenitic stainless steel, and titanium
- AlTiN coated
- M A Ford Series #HPDSR

- Fractional Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	4mm	28mm	66mm	**AX2921973**	Price
5/32	4mm	36mm	74mm	**AX2921976**	Price
3/16	6mm	44mm	82mm	**AX2921978**	Price
13/64	6mm	44mm	82mm	**AX2921979**	Price
7/32	6mm	44mm	82mm	**AX2921980**	Price
1/4	8mm	53mm	91mm	**AX2921981**	Price
9/32	8mm	53mm	91mm	**AX2921983**	Price
5/16	8mm	53mm	91mm	**AX2921984**	Price
3/8	10mm	61mm	103mm	**AX2921985**	Price
7/16	12mm	71mm	118mm	**AX2921986**	Price
1/2	14mm	77mm	124mm	**AX2921987**	Price
5/8	16mm	83mm	133mm	**AX2921988**	Price

- Metric Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
3mm	3mm	28mm	66mm	**AX2921840**	Price
3.1mm	4mm	28mm	66mm	**AX2921841**	Price
3.2mm	4mm	28mm	66mm	**AX2921842**	Price
3.3mm	4mm	28mm	66mm	**AX2921843**	Price
3.4mm	4mm	28mm	66mm	**AX2921844**	Price
3.5mm	4mm	28mm	66mm	**AX2921845**	Price
3.6mm	4mm	28mm	66mm	**AX2921846**	Price
3.7mm	4mm	28mm	66mm	**AX2921847**	Price
3.8mm	4mm	36mm	74mm	**AX2921848**	Price
3.9mm	4mm	36mm	74mm	**AX2921849**	Price
4mm	4mm	36mm	74mm	**AX2921850**	Price
4.1mm	6mm	36mm	74mm	**AX2921851**	Price
4.2mm	6mm	36mm	74mm	**AX2921852**	Price
4.3mm	6mm	36mm	74mm	**AX2921853**	Price
4.4mm	6mm	36mm	74mm	**AX2921854**	Price
4.5mm	6mm	36mm	74mm	**AX2921855**	Price
4.6mm	6mm	36mm	74mm	**AX2921856**	Price
4.7mm	6mm	36mm	74mm	**AX2921857**	Price
4.8mm	6mm	44mm	82mm	**AX2921858**	Price
5mm	6mm	44mm	82mm	**AX2921860**	Price
5.1mm	6mm	44mm	82mm	**AX2921861**	Price
5.2mm	6mm	44mm	82mm	**AX2921862**	Price
5.3mm	6mm	44mm	82mm	**AX2921863**	Price
5.5mm	6mm	44mm	82mm	**AX2921865**	Price
6mm	6mm	44mm	82mm	**AX2921870**	Price
6.1mm	8mm	53mm	91mm	**AX2921871**	Price
6.3mm	8mm	53mm	91mm	**AX2921873**	Price

- Metric Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
6.4mm	8mm	53mm	91mm	**AX2921874**	Price
6.5mm	8mm	53mm	91mm	**AX2921875**	Price
6.6mm	8mm	53mm	91mm	**AX2921876**	Price
6.8mm	8mm	53mm	91mm	**AX2921878**	Price
6.9mm	8mm	53mm	91mm	**AX2921879**	Price
7mm	8mm	53mm	91mm	**AX2921880**	Price
7.1mm	8mm	53mm	91mm	**AX2921881**	Price
7.3mm	8mm	53mm	91mm	**AX2921883**	Price
7.5mm	8mm	53mm	91mm	**AX2921885**	Price
7.8mm	8mm	53mm	91mm	**AX2921888**	Price
8mm	8mm	53mm	91mm	**AX2921890**	Price
8.1mm	10mm	61mm	103mm	**AX2921891**	Price
8.2mm	10mm	61mm	103mm	**AX2921892**	Price
8.4mm	10mm	61mm	103mm	**AX2921894**	Price
8.5mm	10mm	61mm	103mm	**AX2921895**	Price
8.8mm	10mm	61mm	103mm	**AX2921898**	Price
9mm	10mm	61mm	103mm	**AX2921900**	Price
9.2mm	10mm	61mm	103mm	**AX2921902**	Price
9.5mm	10mm	61mm	103mm	**AX2921905**	Price
9.8mm	10mm	61mm	103mm	**AX2921908**	Price
10mm	10mm	61mm	103mm	**AX2921910**	Price
10.1mm	12mm	71mm	118mm	**AX2921911**	Price
10.2mm	12mm	71mm	118mm	**AX2921912**	Price
10.3mm	12mm	71mm	118mm	**AX2921913**	Price
10.5mm	12mm	71mm	118mm	**AX2921915**	Price
10.7mm	12mm	71mm	118mm	**AX2921917**	Price
10.8mm	12mm	71mm	118mm	**AX2921918**	Price
11mm	12mm	71mm	118mm	**AX2921920**	Price
11.5mm	12mm	71mm	118mm	**AX2921925**	Price
12mm	12mm	71mm	118mm	**AX2921930**	Price
12.3mm	14mm	77mm	124mm	**AX2921991**	Price
12.5mm	14mm	77mm	124mm	**AX2921933**	Price
13mm	14mm	77mm	124mm	**AX2921939**	Price
13.5mm	14mm	77mm	124mm	**AX2921940**	Price
13.7mm	14mm	77mm	124mm	**AX2922000**	Price
13.9mm	14mm	77mm	124mm	**AX2922001**	Price
14mm	14mm	77mm	124mm	**AX2921950**	Price
14.1mm	16mm	83mm	133mm	**AX2922002**	Price
14.2mm	16mm	83mm	133mm	**AX2922003**	Price
14.3mm	16mm	83mm	133mm	**AX2922004**	Price
14.4mm	16mm	83mm	133mm	**AX2922005**	Price
14.5mm	16mm	83mm	133mm	**AX2921955**	Price
14.6mm	16mm	83mm	133mm	**AX2922006**	Price
14.7mm	16mm	83mm	133mm	**AX2922007**	Price
14.9mm	16mm	83mm	133mm	**AX2922008**	Price
15mm	16mm	83mm	133mm	**AX2921963**	Price
15.1mm	16mm	83mm	133mm	**AX2922009**	Price
15.2mm	16mm	83mm	133mm	**AX2922010**	Price
15.3mm	16mm	83mm	133mm	**AX2922011**	Price
15.4mm	16mm	83mm	133mm	**AX2922012**	Price
15.6mm	16mm	83mm	133mm	**AX2922014**	Price
15.7mm	16mm	83mm	133mm	**AX2922015**	Price
15.9mm	16mm	83mm	133mm	**AX2922016**	Price
16mm	16mm	83mm	133mm	**AX2921970**	Price

Solid Carbide



High Performance Jobber Drills

5xD Length • 142° Point • ALtima® Coated

- ALtima® (AlTiN) coated for extended tool life
- Drills can be reconditioned and recoated
- 30° Helix angle
- Recommended for a broad cross section of materials at increased feed rates
- M.A. Ford List #2XDSR

Size (in./mm)	Flute Length (in./mm)	OAL (in./mm)	Order No.	Price
#31	1.125	2-1/2	**AX2702348**	Price
3/64	3/4	1-1/2	**AX2722241**	Price
1/16	3/4	1-1/2	**AX2722256**	Price
3/32	1	2	**AX2722291**	Price
1/8	1.125	2-1/2	**AX2702350**	Price
5/32	1.260	2-3/4	**AX2702370**	Price
11/64	1.500	3.150	**AX2702376**	Price
3/16	1.500	3.150	**AX2702382**	Price
13/64	1.580	3.230	**AX2702392**	Price
7/32	1.580	3.230	**AX2702402**	Price
1/4, E	1.740	3-1/4	**AX2702426**	Price
17/64	1.890	3.580	**AX2702436**	Price
9/32, K	1.890	3.580	**AX2702444**	Price
5/16	1.890	3.580	**AX2702460**	Price
11/32	2.170	4.060	**AX2702492**	Price
3/8	2.170	4.060	**AX2702510**	Price
13/32	2.360	4.720	**AX2702522**	Price
27/64	2.360	4.720	**AX2702526**	Price
7/16	2.600	4.720	**AX2702530**	Price
1/2	2.830	4.750	**AX2702548**	Price
1mm	12mm	34mm	**AX2728021**	Price
1.5mm	18mm	40mm	**AX2728036**	Price
2mm	24mm	49mm	**AX2728056**	Price
2.5mm	30mm	57mm	**AX2728071**	Price
3mm	24mm	63mm	**AX2702346**	Price
4mm	32mm	69mm	**AX2702372**	Price
5mm	38mm	80mm	**AX2702388**	Price
6mm	40mm	82mm	**AX2702414**	Price
7mm	48mm	91mm	**AX2702442**	Price
8mm	48mm	91mm	**AX2702480**	Price
9mm	55mm	103mm	**AX2702498**	Price
10mm	55mm	103mm	**AX2702518**	Price
11mm	60mm	120mm	**AX2702528**	Price
12mm	66mm	120mm	**AX2702540**	Price

3 Flute Solid Carbide High Performance Drills



5XD Length • 150° Point • Uncoated

- Recommended for increased speeds and feeds when drilling aluminum, cast iron and other easy to machine materials
- Greater hole dimensional accuracy at higher production rates
- Reduces drill deflection compared to HSS, cobalt and other carbide drills
- M.A. Ford Series #229

Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	3/4	1-1/2	**AX3522900**	Price
3/32	1	2	**AX3522902**	Price
1/8	1-1/4	2-1/4	**AX3522906**	Price
9/64, #28	1-3/8	2-1/2	**AX3522908**	Price
5/32	1-3/8	2-1/2	**AX3522909**	Price
3/16	1-5/8	2-3/4	**AX3522912**	Price
7/32	1-3/4	3	**AX3522913**	Price
1/4, E	2	3-1/4	**AX3522914**	Price
17/64	2-1/8	3-1/2	**AX3522916**	Price
9/32, K	2-1/8	3-1/2	**AX3522917**	Price
5/16	2-3/8	3-3/4	**AX3522918**	Price
21/64	2-1/2	4	**AX3522919**	Price
3/8	2-3/4	4-1/4	**AX3522920**	Price
25/64	2-7/8	4-1/2	**AX3522921**	Price
13/32	2-7/8	4-1/2	**AX3522922**	Price
27/64	2-7/8	4-1/2	**AX3522923**	Price
7/16	2-7/8	4-1/2	**AX3522924**	Price
31/64	3	4-3/4	**AX3522925**	Price
1/2	3	4-3/4	**AX3522926**	Price
33/64	3-1/4	5	**AX3522927**	Price
17/32	3-1/4	5	**AX3522928**	Price
35/64	3-1/4	5	**AX3522929**	Price
9/16	3-1/4	5	**AX3522930**	Price
5/8	3-1/2	5-1/4	**AX3522931**	Price
21/32	3-5/8	5-1/2	**AX3522932**	Price
11/16	3-5/8	5-1/2	**AX3522933**	Price
3/4	3-7/8	5-3/4	**AX3522934**	Price
#13	1-5/8	2-3/4	**AX3522911**	Price
#16	1-5/8	2-3/4	**AX3522910**	Price
#29	1-3/8	2-1/2	**AX3522907**	Price
#30	1-1/4	2-1/4	**AX3522935**	Price
#31	1-1/4	2-1/4	**AX3522905**	Price
#40	1	2	**AX3522904**	Price
#41	1	2	**AX3522903**	Price
#43	1	2	**AX3522901**	Price
F	2	3-1/4	**AX3522915**	Price
2.5mm	20.5mm	43mm	**AX3522951**	Price

Wire gage, letter and metric sizes also available.

DORMER ForceX High Performance Carbide Drills



5xD Length • 140° Point • TiAlN Coated

- Multi-application solid carbide drill, excellent for drilling a wide range of materials, including steel, stainless steel, cast iron & more
- 140º Point provides excellent centering capabilities
- Common shanks to cut collet cost
- Manufactured to DIN 6537
- Dormer List #R454

Type - Fractional Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	28mm	66mm	**PT410624029**	Price
9/64, #28	6mm	28mm	66mm	**PT410624401**	Price
5/32	6mm	36mm	74mm	**PT410624340**	Price
11/64	6mm	36mm	74mm	**PT410624050**	Price
3/16	6mm	44mm	82mm	**PT410624210**	Price
13/64	6mm	44mm	82mm	**PT410624074**	Price
7/32	6mm	44mm	82mm	**PT410624371**	Price
15/64	6mm	44mm	82mm	**PT410624098**	Price
1/4, E	8mm	53mm	91mm	**PT410624012**	Price
17/64	8mm	53mm	91mm	**PT410624111**	Price
9/32, K	8mm	53mm	91mm	**PT410624395**	Price
19/64	8mm	53mm	91mm	**PT410624135**	Price
5/16	8mm	53mm	91mm	**PT410624333**	Price
21/64	10mm	61mm	103mm	**PT410624159**	Price
11/32	10mm	61mm	103mm	**PT410624043**	Price
23/64	10mm	61mm	103mm	**PT410624173**	Price
3/8	10mm	61mm	103mm	**PT410624234**	Price
13/32	12mm	70mm	118mm	**PT410624067**	Price
27/64	12mm	70mm	118mm	**PT410624197**	Price
7/16	12mm	70mm	118mm	**PT410624364**	Price
29/64	12mm	70mm	118mm	**PT410624203**	Price

Type - Fractional Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
15/32	12mm	70mm	118mm	**PT410624081**	Price
31/64	14mm	76mm	124mm	**PT410624241**	Price
1/2	14mm	76mm	124mm	**PT410624005**	Price
17/32	14mm	76mm	124mm	**PT410624104**	Price
9/16	16mm	82mm	133mm	**PT410624388**	Price
5/8	16mm	82mm	133mm	**PT410624357**	Price
11/16	18mm	91mm	143mm	**PT410624036**	Price
3/4	20mm	99mm	153mm	**PT410624227**	Price

Type - Metric Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
6mm	6mm	44mm	82mm	**PT410614549**	Price
6.5mm	8mm	53mm	91mm	**PT410614556**	Price
7mm	8mm	53mm	91mm	**PT410614594**	Price
8mm	8mm	53mm	91mm	**PT410614624**	Price
8.5mm	10mm	61mm	103mm	**PT410614631**	Price
9mm	10mm	61mm	103mm	**PT410614662**	Price
9.5mm	10mm	61mm	103mm	**PT410614686**	Price
10mm	10mm	61mm	103mm	**PT410614242**	Price
11mm	12mm	70mm	118mm	**PT410614297**	Price
11.8mm	12mm	70mm	118mm	**PT410625675**	Price
12mm	12mm	70mm	118mm	**PT410614327**	Price
12.5mm	14mm	76mm	124mm	**PT410614341**	Price
14mm	16mm	76mm	124mm	**PT410614372**	Price

Cyclone™ XD Solid Carbide High Performance Drills



5xD • Altima® Plus Coated

- 30° Helix
- 140° Drill Point
- Designed for drilling in a broad range of materials
- M.A. Ford List #CXDSR

Drill Dia.	Decimal Equiv.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
#31	.1200	1/8	1.102	2.600	**AX2806468**	Price
1/8	.1250	1/8	1.102	2.600	**AX2806470**	Price
#30	.1285	5/32	1.102	2.600	**AX2806472**	Price
#29	.1360	5/32	1.102	2.600	**AX2806475**	Price
9/64, #28	.1406	5/32	1.102	2.600	**AX2806477**	Price
#24	.1520	5/32	1.417	2.910	**AX2806481**	Price
5/32	.1562	5/32	1.417	2.910	**AX2806483**	Price
#21	.1590	3/16	1.417	2.910	**AX2806485**	Price
11/64	.1719	3/16	1.417	2.910	**AX2806489**	Price
3/16	.1875	3/16	1.732	3.230	**AX2806494**	Price
13/64	.2031	1/4	1.732	3.230	**AX2806499**	Price
7/32	.2187	1/4	1.732	3.230	**AX2806504**	Price
#2	.2210	1/4	1.732	3.230	**AX2806505**	Price
15/64	.2344	1/4	1.732	3.230	**AX2806509**	Price
C	.2420	1/4	2.087	3.580	**AX2806512**	Price
D	.2460	1/4	2.087	3.580	**AX2806514**	Price
1/4, E	.2500	1/4	2.087	3.580	**AX2806516**	Price
F	.2570	5/16	2.087	3.580	**AX2806519**	Price
G	.2610	5/16	2.087	3.580	**AX2806521**	Price
17/64	.2656	5/16	2.087	3.580	**AX2806523**	Price
9/32, K	.2812	5/16	2.087	3.580	**AX2806528**	Price

Drill Dia.	Decimal Equiv.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
19/64	.2969	5/16	2.087	3.580	**AX2806533**	Price
5/16	.3125	5/16	2.087	3.580	**AX2806538**	Price
21/64	.3281	3/8	2.402	4.060	**AX2806543**	Price
Q	.3320	3/8	2.402	4.060	**AX2806545**	Price
11/32	.3438	3/8	2.402	4.060	**AX2806549**	Price
23/64	.3594	3/8	2.402	4.060	**AX2806554**	Price
3/8	.3750	3/8	2.402	4.060	**AX2806560**	Price
25/64	.3906	7/16	2.402	4.060	**AX2806565**	Price
13/32	.4063	7/16	2.795	4.650	**AX2806570**	Price
27/64	.4219	7/16	2.795	4.650	**AX2806575**	Price
7/16	.4375	7/16	2.795	4.650	**AX2806580**	Price
15/32	.4688	1/2	2.795	4.650	**AX2806589**	Price
31/64	.4844	1/2	3.031	4.880	**AX2806592**	Price
1/2	.5000	1/2	3.031	4.880	**AX2806594**	Price
33/64	.5156	9/16	3.031	4.880	**AX2806599**	Price
17/32	.5312	9/16	3.031	4.880	**AX2806600**	Price
35/64	.5469	9/16	3.031	4.880	**AX2806603**	Price
9/16	.5625	9/16	3.268	5.240	**AX2806605**	Price
19/32	.5938	5/8	3.268	5.240	**AX2806609**	Price
5/8	.6250	5/8	3.268	5.240	**AX2806613**	Price

HY-PRO® CARB Drill



Solid Carbide • 5xD Length • TiAlN Coated

- High performance carbide
- Recommended for cast iron, carbon steels, alloy steels, die steels and hardened steels up to 35 HrC
- OSG List #HP245

Size (in.)	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	.1248	6mm	28mm	66mm	**TP45HP2451248**	Price
3/16	.1874	6mm	44mm	82mm	**TP45HP2451874**	Price
7/32	.2189	6mm	44mm	82mm	**TP45HP2452189**	Price
1/4, E	.2500	8mm	53mm	91mm	**TP45HP2452500**	Price
9/32, K	.2811	8mm	53mm	91mm	**TP45HP2452811**	Price
5/16	.3126	8mm	53mm	91mm	**TP45HP2453126**	Price
11/32	.3437	10mm	61mm	103mm	**TP45HP2453437**	Price
3/8	.3748	10mm	61mm	103mm	**TP45HP2453748**	Price

Size (in.)	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
13/32	.4063	12mm	71mm	118mm	**TP45HP2454063**	Price
7/16	.4374	12mm	71mm	118mm	**TP45HP2454374**	Price
1/2	.5000	14mm	77mm	124mm	**TP45HP2455000**	Price
17/32	.5311	14mm	77mm	124mm	**TP45HP2455311**	Price
19/32	.5937	16mm	83mm	133mm	**TP45HP2455937**	Price
5/8	.6248	16mm	83mm	133mm	**TP45HP2456248**	Price
21/32	.6563	18mm	93mm	143mm	**TP45HP2456563**	Price
3/4	.7500	20mm	101mm	153mm	**TP45HP2457500**	Price

RAPIDKUT 8xD High Performance Solid Carbide Drills

- For use in a wide variety of materials including carbon steel, alloy steel, stainless steel, hardened steel, cast iron, aluminum alloys, titanium and others
- 140° Point and 30° helix high performance geometry allows for high penetration rates
- These high penetration drills provide accurate hole sizing as well as near burnished holes
- TiAlN coated



- Fractional					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/4	1/4	3	4-1/2	**AX8022005**	Price
17/64	5/16	3	4-1/2	**AX8022010**	Price
9/32	5/16	3	4-1/2	**AX8022015**	Price
19/64	5/16	3	4-1/2	**AX8022020**	Price
5/16	5/16	3	4-1/2	**AX8022025**	Price
21/64	3/8	3-3/4	5-3/4	**AX8022030**	Price
11/32	3/8	3-3/4	5-3/4	**AX8022035**	Price
23/64	3/8	3-3/4	5-3/4	**AX8022040**	Price
3/8	3/8	3-3/4	5-3/4	**AX8022045**	Price
25/64	7/16	4-1/2	6-1/2	**AX8022050**	Price
13/32	7/16	4-1/2	6-1/2	**AX8022055**	Price
27/64	7/16	4-1/2	6-1/2	**AX8022060**	Price
7/16	7/16	4-1/2	6-1/2	**AX8022065**	Price
29/64	1/2	5-1/4	7	**AX8022070**	Price
15/32	1/2	5-1/4	7	**AX8022075**	Price
31/64	1/2	5-1/4	7	**AX8022080**	Price
1/2	1/2	5-1/4	7	**AX8022085**	Price
33/64	9/16	5-1/4	7	**AX8022090**	Price
17/32	9/16	5-1/4	7	**AX8022095**	Price
35/64	9/16	5-1/4	7	**AX8022100**	Price
9/16	9/16	5-1/4	7	**AX8022105**	Price
37/64	5/8	6	8	**AX8022110**	Price
19/32	5/8	6	8	**AX8022115**	Price
39/64	5/8	6	8	**AX8022120**	Price
5/8	5/8	6	8	**AX8022125**	Price

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
3mm	6mm	34mm	72mm	**AX8032003**	Price
3.5mm	6mm	34mm	72mm	**AX8032005**	Price
3.7mm	6mm	34mm	72mm	**AX8032010**	Price
3.8mm	6mm	43mm	81mm	**AX8032015**	Price
4mm	6mm	43mm	81mm	**AX8032020**	Price
4.2mm	6mm	43mm	81mm	**AX8032025**	Price
4.5mm	6mm	43mm	81mm	**AX8032030**	Price
4.8mm	6mm	57mm	95mm	**AX8032035**	Price
5mm	6mm	57mm	95mm	**AX8032040**	Price

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
5.1mm	6mm	57mm	95mm	**AX8032045**	Price
5.2mm	6mm	57mm	95mm	**AX8032050**	Price
5.5mm	6mm	57mm	95mm	**AX8032055**	Price
5.8mm	6mm	57mm	95mm	**AX8032060**	Price
6mm	6mm	57mm	95mm	**AX8032065**	Price
6.3mm	8mm	76mm	114mm	**AX8032070**	Price
6.5mm	8mm	76mm	114mm	**AX8032075**	Price
6.8mm	8mm	76mm	114mm	**AX8032080**	Price
7mm	8mm	76mm	114mm	**AX8032085**	Price
7.5mm	8mm	76mm	114mm	**AX8032090**	Price
7.8mm	8mm	76mm	114mm	**AX8032095**	Price
8mm	8mm	76mm	114mm	**AX8032100**	Price
8.5mm	10mm	95mm	142mm	**AX8032105**	Price
8.8mm	10mm	95mm	142mm	**AX8032110**	Price
9mm	10mm	95mm	142mm	**AX8032115**	Price
9.2mm	10mm	95mm	142mm	**AX8032120**	Price
9.5mm	10mm	95mm	142mm	**AX8032125**	Price
9.8mm	10mm	95mm	142mm	**AX8032130**	Price
10mm	10mm	95mm	142mm	**AX8032135**	Price
10.2mm	12mm	114mm	162mm	**AX8032140**	Price
10.5mm	12mm	114mm	162mm	**AX8032145**	Price
10.8mm	12mm	114mm	162mm	**AX8032150**	Price
11mm	12mm	114mm	162mm	**AX8032155**	Price
11.5mm	12mm	114mm	162mm	**AX8032160**	Price
11.8mm	12mm	114mm	162mm	**AX8032165**	Price
12mm	12mm	114mm	162mm	**AX8032170**	Price
12.3mm	14mm	133mm	178mm	**AX8032175**	Price
12.5mm	14mm	133mm	178mm	**AX8032180**	Price
12.8mm	14mm	133mm	178mm	**AX8032185**	Price
13mm	14mm	133mm	178mm	**AX8032190**	Price
13.5mm	14mm	133mm	178mm	**AX8032195**	Price
14mm	14mm	133mm	178mm	**AX8032200**	Price
14.5mm	16mm	152mm	203mm	**AX8032205**	Price
15mm	16mm	152mm	203mm	**AX8032210**	Price
15.5mm	16mm	152mm	203mm	**AX8032215**	Price
16mm	16mm	152mm	203mm	**AX8032220**	Price

RAPIDKUT 3xD High Performance Solid Carbide Coolant Thru Drills

- For use in a wide variety of materials including carbon steel, alloy steel, stainless steel, hardened steel, cast iron, aluminum alloys, titanium and others
- 140° Point and 30° helix high performance geometry allows for high penetration rates
- These high penetration drills provide accurate hole sizing as well as near burnished holes
- TiAlN coated

MADE IN THE USA



- Fractional					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/4	1/4	1.279	3-15/32	**AX8170005**	Price
17/64	5/16	1.378	3-15/32	**AX8170010**	Price
9/32	5/16	1.476	3.701	**AX8170015**	Price
5/16	5/16	1.575	3.701	**AX8170020**	Price
11/32	3/8	1.772	3.937	**AX8170025**	Price
3/8	3/8	1.969	4.174	**AX8170030**	Price
13/32	7/16	2.067	4.567	**AX8170035**	Price
7/16	7/16	2.264	4.803	**AX8170040**	Price
15/32	1/2	2.362	4.803	**AX8170045**	Price
1/2	1/2	2.559	5.039	**AX8170050**	Price
17/32	9/16	2.756	5.276	**AX8170055**	Price
9/16	9/16	2.854	5.512	**AX8170060**	Price
5/8	5/8	3.16	5.709	**AX8170065**	Price
11/16	11/16	3.445	6.102	**AX8170070**	Price
3/4	3/4	3.839	6.496	**AX8170075**	Price

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1mm	3mm	7mm	45mm	**AX8179925**	Price
1.1mm	3mm	7mm	45mm	**AX8179930**	Price
1.2mm	3mm	7mm	45mm	**AX8179935**	Price
1.3mm	3mm	7mm	45mm	**AX8179940**	Price
1.4mm	3mm	7mm	45mm	**AX8179945**	Price
1.5mm	3mm	14mm	55mm	**AX8179950**	Price
1.6mm	3mm	14mm	55mm	**AX8179955**	Price
1.7mm	3mm	14mm	55mm	**AX8179960**	Price
1.8mm	3mm	14mm	55mm	**AX8179965**	Price
1.9mm	3mm	14mm	55mm	**AX8179970**	Price
2mm	4mm	20mm	55mm	**AX8179975**	Price
2.1mm	4mm	20mm	55mm	**AX8179980**	Price
2.2mm	4mm	20mm	55mm	**AX8179985**	Price
2.3mm	4mm	20mm	55mm	**AX8179990**	Price
2.4mm	4mm	20mm	55mm	**AX8179995**	Price
2.5mm	4mm	20mm	55mm	**AX8180000**	Price
2.6mm	4mm	20mm	55mm	**AX8180001**	Price
2.7mm	4mm	20mm	55mm	**AX8180002**	Price
2.8mm	4mm	20mm	55mm	**AX8180003**	Price
2.9mm	4mm	20mm	55mm	**AX8180004**	Price
3mm	6mm	20mm	62mm	**AX8180005**	Price
3.1mm	6mm	20mm	62mm	**AX8180006**	Price
3.2mm	6mm	20mm	62mm	**AX8180008**	Price
3.3mm	6mm	20mm	62mm	**AX8180007**	Price
3.4mm	6mm	20mm	62mm	**AX8180009**	Price
3.5mm	6mm	20mm	62mm	**AX8180010**	Price
3.6mm	6mm	24mm	66mm	**AX8180012**	Price
3.7mm	6mm	20mm	62mm	**AX8180013**	Price
3.8mm	6mm	24mm	66mm	**AX8180014**	Price
3.9mm	6mm	24mm	66mm	**AX8180016**	Price
4mm	6mm	24mm	66mm	**AX8180015**	Price
4.1mm	6mm	24mm	66mm	**AX8180017**	Price
4.2mm	6mm	24mm	66mm	**AX8180019**	Price
4.3mm	6mm	24mm	66mm	**AX8180018**	Price
4.4mm	6mm	24mm	66mm	**AX8180021**	Price
4.5mm	6mm	24mm	66mm	**AX8180020**	Price
4.6mm	6mm	24mm	66mm	**AX8180022**	Price
4.7mm	6mm	24mm	66mm	**AX8180036**	Price
4.8mm	6mm	24mm	66mm	**AX8180023**	Price
4.9mm	6mm	24mm	66mm	**AX8180024**	Price
5mm	6mm	24mm	66mm	**AX8180025**	Price
5.1mm	6mm	24mm	66mm	**AX8180026**	Price
5.2mm	6mm	24mm	66mm	**AX8180027**	Price
5.3mm	6mm	24mm	66mm	**AX8180028**	Price
5.4mm	6mm	28mm	66mm	**AX8180029**	Price
5.5mm	6mm	24mm	66mm	**AX8180030**	Price
5.6mm	6mm	24mm	66mm	**AX8180032**	Price
5.7mm	6mm	28mm	66mm	**AX8180031**	Price
5.8mm	6mm	28mm	66mm	**AX8180033**	Price
5.9mm	6mm	28mm	66mm	**AX8180034**	Price

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
6mm	6mm	24mm	66mm	**AX8180035**	Price
6.1mm	8mm	34mm	79mm	**AX8180037**	Price
6.2mm	8mm	34mm	79mm	**AX8180038**	Price
6.3mm	8mm	34mm	79mm	**AX8180041**	Price
6.4mm	8mm	34mm	79mm	**AX8180039**	Price
6.5mm	8mm	34mm	79mm	**AX8180040**	Price
6.6mm	8mm	34mm	79mm	**AX8180042**	Price
6.7mm	8mm	34mm	79mm	**AX8180043**	Price
6.8mm	8mm	34mm	79mm	**AX8180044**	Price
6.9mm	8mm	34mm	79mm	**AX8180046**	Price
7mm	8mm	34mm	79mm	**AX8180045**	Price
7.1mm	8mm	41mm	79mm	**AX8180047**	Price
7.2mm	8mm	41mm	79mm	**AX8180048**	Price
7.3mm	8mm	41mm	79mm	**AX8180049**	Price
7.4mm	8mm	41mm	79mm	**AX8180051**	Price
7.5mm	8mm	41mm	79mm	**AX8180050**	Price
7.6mm	8mm	41mm	79mm	**AX8180052**	Price
7.7mm	8mm	41mm	79mm	**AX8180053**	Price
7.8mm	8mm	41mm	79mm	**AX8180054**	Price
7.9mm	8mm	41mm	79mm	**AX8180056**	Price
8mm	8mm	41mm	79mm	**AX8180055**	Price
8.1mm	10mm	47mm	89mm	**AX8180058**	Price
8.2mm	10mm	47mm	89mm	**AX8180059**	Price
8.3mm	10mm	47mm	89mm	**AX8180061**	Price
8.4mm	10mm	47mm	89mm	**AX8180057**	Price
8.5mm	10mm	47mm	89mm	**AX8180060**	Price
8.6mm	10mm	47mm	89mm	**AX8180063**	Price
8.7mm	10mm	47mm	89mm	**AX8180064**	Price
8.8mm	10mm	47mm	89mm	**AX8180062**	Price
8.9mm	10mm	47mm	89mm	**AX8180066**	Price
9mm	10mm	47mm	89mm	**AX8180065**	Price
9.1mm	10mm	47mm	89mm	**AX8180067**	Price
9.2mm	10mm	47mm	89mm	**AX8180068**	Price
9.3mm	10mm	47mm	89mm	**AX8180069**	Price
9.4mm	10mm	47mm	89mm	**AX8180071**	Price
9.5mm	10mm	47mm	89mm	**AX8180070**	Price
9.6mm	10mm	47mm	89mm	**AX8180072**	Price
9.7mm	10mm	47mm	89mm	**AX8180073**	Price
9.8mm	10mm	47mm	89mm	**AX8180074**	Price
9.9mm	10mm	47mm	89mm	**AX8180076**	Price
10mm	10mm	47mm	89mm	**AX8180075**	Price
10.1mm	12mm	55mm	102mm	**AX8180077**	Price
10.2mm	12mm	55mm	102mm	**AX8180078**	Price
10.3mm	12mm	55mm	102mm	**AX8180079**	Price
10.4mm	12mm	55mm	102mm	**AX8180081**	Price
10.5mm	12mm	55mm	102mm	**AX8180080**	Price
10.6mm	12mm	55mm	102mm	**AX8180083**	Price
10.7mm	12mm	55mm	102mm	**AX8180084**	Price
10.8mm	12mm	55mm	102mm	**AX8180082**	Price
10.9mm	12mm	55mm	102mm	**AX8180086**	Price
11mm	12mm	55mm	102mm	**AX8180085**	Price
11.1mm	12mm	55mm	102mm	**AX8180087**	Price
11.2mm	12mm	55mm	102mm	**AX8180088**	Price
11.3mm	12mm	55mm	102mm	**AX8180089**	Price
11.4mm	12mm	55mm	102mm	**AX8180091**	Price
11.5mm	12mm	55mm	102mm	**AX8180090**	Price
11.6mm	12mm	55mm	102mm	**AX8180092**	Price
11.7mm	12mm	55mm	102mm	**AX8180093**	Price
11.8mm	12mm	55mm	102mm	**AX8180094**	Price
11.9mm	12mm	55mm	102mm	**AX8180096**	Price
12mm	12mm	55mm	102mm	**AX8180095**	Price
12.1mm	14mm	60mm	107mm	**AX8180097**	Price
12.2mm	14mm	60mm	107mm	**AX8180098**	Price
12.3mm	14mm	60mm	107mm	**AX8180099**	Price
12.4mm	14mm	60mm	107mm	**AX8180101**	Price
12.5mm	14mm	60mm	107mm	**AX8180100**	Price
12.6mm	14mm	60mm	107mm	**AX8180102**	Price
12.7mm	14mm	60mm	107mm	**AX8180103**	Price
12.8mm	14mm	60mm	107mm	**AX8180104**	Price
12.9mm	14mm	60mm	107mm	**AX8180106**	Price
13mm	14mm	60mm	107mm	**AX8180105**	Price
13.5mm	14mm	60mm	107mm	**AX8180110**	Price
14mm	14mm	60mm	107mm	**AX8180115**	Price
14.5mm	16mm	65mm	115mm	**AX8180120**	Price
15mm	16mm	65mm	115mm	**AX8180125**	Price
15.5mm	16mm	65mm	115mm	**AX8180130**	Price
16mm	16mm	65mm	115mm	**AX8180135**	Price
16.5mm	18mm	73mm	123mm	**AX8180137**	Price
17mm	18mm	73mm	123mm	**AX8180140**	Price
17.5mm	18mm	73mm	123mm	**AX8180142**	Price
18mm	18mm	73mm	123mm	**AX8180145**	Price
19mm	20mm	79mm	131mm	**AX8180150**	Price
20mm	20mm	79mm	131mm	**AX8180155**	Price

Twister GP® High Performance Solid Carbide Drills • Coolant Thru

3xD Length • 142° Point • ALtima® Coated

- ALtima® (AlTiN) coating provides for extended tool life
- Drills can be reconditioned and recoated
- 30° Helix angle
- Recommended for a broad cross section of materials at increased feed rates
- Full size range available: #31 (.1200)-5/8" and 3.0-16mm
- M.A. Ford List #204



Size (in./mm)	Flute Length (in./mm)	OAL (in./mm)	Order No.	Price
1/8	.7500	2.250	**AX2704406**	Price
5/32	.8750	2.500	**AX2704432**	Price
11/64	1.000	2.500	**AX2704444**	Price
3/16	1.000	2.500	**AX2704454**	Price
13/64	1.102	2.598	**AX2704464**	Price
7/32	1.102	2.598	**AX2704474**	Price
1/4	1.339	3.110	**AX2704498**	Price
17/64	1.339	3.110	**AX2704512**	Price
9/32	1.614	3.110	**AX2704522**	Price
5/16	1.614	3.110	**AX2704542**	Price
11/32	1.850	3.504	**AX2704564**	Price
3/8	1.850	3.504	**AX2704586**	Price
13/32	2.165	4.016	**AX2704606**	Price
7/16	2.165	4.016	**AX2704626**	Price
1/2	2.362	4.213	**AX2704654**	Price
3mm	16mm	57mm	**AX2704400**	Price
4mm	22mm	63mm	**AX2704434**	Price
5mm	26mm	63mm	**AX2704460**	Price
6mm	28mm	66mm	**AX2704486**	Price
7mm	34mm	79mm	**AX2704518**	Price
8mm	41mm	79mm	**AX2704544**	Price
9mm	47mm	89mm	**AX2704570**	Price
10mm	47mm	89mm	**AX2704598**	Price
12mm	55mm	102mm	**AX2704646**	Price
30	.8750	2.500	**AX2704410**	Price
31	.7500	2.250	**AX2704402**	Price

Above 5mm to DIN 6537K

HY-PRO® CARB Drill • Coolant Thru

Solid Carbide • 3xD Length • TiAlN Coated

- High performance carbide
- Recommended for cast iron, carbon steels, alloy steels, die steels and hardened steels up to 35 HrC
- OSG List #HP253



Size (in.)	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	.1248	6mm	20mm	62mm	**TP45HP2531248**	Price
3/16	.1874	6mm	28mm	66mm	**TP45HP2531874**	Price
7/32	.2189	6mm	28mm	66mm	**TP45HP2532189**	Price
1/4, E	.2500	8mm	34mm	79mm	**TP45HP2532500**	Price
9/32	.2811	8mm	41mm	79mm	**TP45HP2532811**	Price
5/16	.3126	8mm	41mm	79mm	**TP45HP2533126**	Price
11/32	.3437	10mm	47mm	89mm	**TP45HP2533437**	Price
3/8	.3748	10mm	47mm	89mm	**TP45HP2533748**	Price
13/32	.4063	12mm	55mm	102mm	**TP45HP2534063**	Price
7/16	.4374	12mm	55mm	102mm	**TP45HP2534374**	Price
1/2	.5000	14mm	60mm	107mm	**TP45HP2535000**	Price
5/8	.6248	16mm	65mm	115mm	**TP45HP2536248**	Price
3/4	.7500	20mm	79mm	131mm	**TP45HP2537500**	Price

EXOPRO® Mega Muscle® Carbide Drills

Coolant Thru • 3xD Length • WD-1 Coated

- High performance carbide
- Up to 200 IPM in steel and 670 IPM in cast iron
- 3 Flute
- Recommended for cast iron, carbon steels, alloy steels and 400 series stainless steels
- OSG List #5600



Size (in.)	Decimal Equiv.	Shank Dia. (in.)	Flute Length	OAL	Order No.	Price
13/64	.2031	15/64	26mm	82mm	**TP51560020311**	Price
7/32	.2189	15/64	28mm	82mm	**TP51560021911**	Price
15/64	.2343	15/64	30mm	82mm	**TP51560023411**	Price
1/4, E	.2500	1/4	32mm	88mm	**TP51560025011**	Price
17/64	.2657	17/64	34mm	88mm	**TP51560026611**	Price
9/32, K	.2811	9/32	36mm	94mm	**TP51560028111**	Price
19/64	.2969	5/16	38mm	94mm	**TP51560029711**	Price
5/16	.3126	5/16	40mm	94mm	**TP51560031311**	Price
21/64	.3280	11/32	42mm	101mm	**TP51560032811**	Price
11/32	.3437	11/32	44mm	101mm	**TP51560034411**	Price
23/64	.3594	25/64	46mm	106mm	**TP51560035911**	Price
3/8	.3752	3/8	48mm	106mm	**TP51560037511**	Price
25/64	.3906	25/64	50mm	106mm	**TP51560039111**	Price
13/32	.4063	27/64	52mm	113mm	**TP51560040611**	Price
27/64	.4220	27/64	54mm	113mm	**TP51560042211**	Price
7/16	.4374	7/16	56mm	120mm	**TP51560043711**	Price
29/64	.4531	15/32	58mm	120mm	**TP51560045311**	Price
15/32	.4689	15/32	60mm	120mm	**TP51560046911**	Price
31/64	.4843	1/2	62mm	128mm	**TP51560048411**	Price
1/2	.5000	1/2	64mm	128mm	**TP51560050011**	Price
17/32	.5311	35/64	68mm	134mm	**TP51560053111**	Price
9/16	.5626	9/16	72mm	140mm	**TP51560056311**	Price
5/8	.6252	5/8	80mm	145mm	**TP51560062511**	Price
21/32	.6563	21/32	85mm	150mm	**TP51560065611**	Price
3/4	.7500	3/4	95mm	160mm	**TP51560075011**	Price

DORMER ForceX High Performance Solid Carbide Drills • Coolant Thru

3xD Length • 140° Point • TiAlN Coated

- Multi-application solid carbide drills, excellent for drilling a wide range of materials, including steel, stainless steel, cast iron & more
- 140º Point provides excellent centering capabilities
- Common shanks to cut collet cost
- Manufactured to DIN 6537
- Complete range of sizes available, fractional & metric
- Dormer List #R457



Size (in.)	Shank Dia.	Flute Length	OAL	Order No.	Price
1/4	8mm	34mm	79mm	**PT380624425**	Price
9/32	8mm	41mm	79mm	**PT380624807**	Price
5/16	8mm	41mm	79mm	**PT380624746**	Price
11/32	10mm	47mm	89mm	**PT380624456**	Price
3/8	10mm	47mm	89mm	**PT380624647**	Price
13/32	12mm	55mm	102mm	**PT380624470**	Price
7/16	12mm	55mm	102mm	**PT380624777**	Price
15/32	12mm	55mm	102mm	**PT380624494**	Price
1/2	14mm	60mm	107mm	**PT380624418**	Price

RAPIDKUT 5xD High Performance Solid Carbide Coolant Thru Drills

MADE IN THE USA

- For use in a wide variety of materials including carbon steel, alloy steel, stainless steel, hardened steel, cast iron, aluminum alloys, titanium and others
- 140° Point and 30° helix high performance geometry allows for high penetration rates
- These high penetration drills provide accurate hole sizing as well as near burnished holes
- TiAlN coated



- Fractional					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/4	1/4	2.08	3.58	**AX8171005**	Price
17/64	5/16	2.08	3.58	**AX8171010**	Price
9/32	5/16	2.08	3.58	**AX8171015**	Price
19/64	5/16	2.08	3.58	**AX8171020**	Price
5/16	5/16	2.08	3.58	**AX8171025**	Price
21/64	3/8	2.40	4.05	**AX8171030**	Price
11/32	3/8	2.40	4.05	**AX8171035**	Price
23/64	3/8	2.40	4.05	**AX8171040**	Price
3/8	3/8	2.40	4.05	**AX8171045**	Price
25/64	7/16	2.80	4.05	**AX8171050**	Price
13/32	7/16	2.80	4.64	**AX8171055**	Price
7/16	7/16	2.80	4.64	**AX8171060**	Price
15/32	1/2	2.80	4-7/8	**AX8171065**	Price
1/2	1/2	3-1/32	4-7/8	**AX8171070**	Price
17/32	9/16	3-1/32	4-7/8	**AX8171075**	Price
9/16	9/16	3-1/32	4-7/8	**AX8171080**	Price
5/8	5/8	3-17/64	5.23	**AX8171085**	Price
11/16	11/16	3-21/32	5-5/8	**AX8171090**	Price
3/4	3/4	3-31/32	6	**AX8171095**	Price

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1mm	3mm	8mm	55mm	**AX8180500**	Price
1.1mm	3mm	12mm	55mm	**AX8180502**	Price
1.2mm	3mm	12mm	55mm	**AX8180505**	Price
1.3mm	3mm	12mm	55mm	**AX8180507**	Price
1.4mm	3mm	12mm	55mm	**AX8180509**	Price
1.5mm	3mm	16mm	55mm	**AX8180511**	Price
1.6mm	3mm	16mm	55mm	**AX8180513**	Price
1.7mm	3mm	16mm	55mm	**AX8180515**	Price
1.8mm	3mm	16mm	55mm	**AX8180517**	Price
1.9mm	3mm	16mm	55mm	**AX8180519**	Price
2mm	4mm	21mm	57mm	**AX8180521**	Price
2.1mm	4mm	21mm	57mm	**AX8180523**	Price
2.2mm	4mm	21mm	57mm	**AX8180525**	Price
2.3mm	4mm	21mm	57mm	**AX8180527**	Price
2.4mm	4mm	21mm	57mm	**AX8180529**	Price
2.5mm	4mm	21mm	57mm	**AX8180531**	Price
2.6mm	4mm	21mm	57mm	**AX8180533**	Price
2.7mm	4mm	21mm	57mm	**AX8180535**	Price
2.8mm	4mm	21mm	57mm	**AX8180537**	Price
2.9mm	4mm	21mm	57mm	**AX8180539**	Price
3mm	6mm	28mm	66mm	**AX8181005**	Price
3.1mm	6mm	28mm	66mm	**AX8181006**	Price
3.2mm	6mm	28mm	66mm	**AX8181007**	Price
3.3mm	6mm	28mm	66mm	**AX8181008**	Price
3.4mm	6mm	28mm	66mm	**AX8181009**	Price
3.5mm	6mm	28mm	66mm	**AX8181010**	Price
3.6mm	6mm	28mm	66mm	**AX8181011**	Price
3.7mm	6mm	28mm	66mm	**AX8181012**	Price
3.8mm	6mm	28mm	66mm	**AX8181013**	Price
3.9mm	6mm	36mm	74mm	**AX8181014**	Price
4mm	6mm	36mm	74mm	**AX8181015**	Price
4.1mm	6mm	36mm	74mm	**AX8181016**	Price
4.2mm	6mm	36mm	74mm	**AX8181017**	Price
4.3mm	6mm	36mm	74mm	**AX8181018**	Price
4.4mm	6mm	36mm	74mm	**AX8181019**	Price
4.5mm	6mm	36mm	74mm	**AX8181020**	Price
4.6mm	6mm	36mm	74mm	**AX8181021**	Price
4.7mm	6mm	24mm	66mm	**AX8181022**	Price
4.8mm	6mm	44mm	82mm	**AX8181023**	Price
4.9mm	6mm	44mm	82mm	**AX8181024**	Price
5mm	6mm	44mm	82mm	**AX8181025**	Price
5.1mm	6mm	44mm	82mm	**AX8181026**	Price
5.2mm	6mm	44mm	82mm	**AX8181027**	Price
5.3mm	6mm	44mm	82mm	**AX8181028**	Price
5.4mm	6mm	44mm	82mm	**AX8181029**	Price
5.5mm	6mm	44mm	82mm	**AX8181030**	Price
5.6mm	6mm	44mm	82mm	**AX8181032**	Price
5.7mm	6mm	44mm	82mm	**AX8181033**	Price
5.8mm	6mm	44mm	82mm	**AX8181034**	Price

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
5.9mm	6mm	44mm	82mm	**AX8181036**	Price
6mm	6mm	44mm	82mm	**AX8181035**	Price
6.1mm	8mm	53mm	91mm	**AX8181037**	Price
6.2mm	8mm	53mm	91mm	**AX8181039**	Price
6.3mm	8mm	53mm	91mm	**AX8181046**	Price
6.4mm	8mm	53mm	91mm	**AX8181038**	Price
6.5mm	8mm	53mm	91mm	**AX8181040**	Price
6.6mm	8mm	53mm	91mm	**AX8181041**	Price
6.7mm	8mm	53mm	91mm	**AX8181042**	Price
6.8mm	8mm	53mm	91mm	**AX8181043**	Price
6.9mm	8mm	53mm	91mm	**AX8181044**	Price
7mm	8mm	53mm	91mm	**AX8181045**	Price
7.1mm	8mm	53mm	91mm	**AX8181048**	Price
7.2mm	8mm	53mm	91mm	**AX8181049**	Price
7.3mm	8mm	53mm	91mm	**AX8181047**	Price
7.4mm	8mm	53mm	91mm	**AX8181051**	Price
7.5mm	8mm	53mm	91mm	**AX8181050**	Price
7.6mm	8mm	53mm	91mm	**AX8181052**	Price
7.7mm	8mm	53mm	91mm	**AX8181053**	Price
7.8mm	8mm	53mm	91mm	**AX8181054**	Price
7.9mm	8mm	53mm	91mm	**AX8181058**	Price
8mm	8mm	53mm	91mm	**AX8181055**	Price
8.1mm	10mm	61mm	103mm	**AX8181056**	Price
8.2mm	10mm	61mm	103mm	**AX8181057**	Price
8.3mm	10mm	61mm	103mm	**AX8181061**	Price
8.4mm	10mm	61mm	103mm	**AX8181059**	Price
8.5mm	10mm	61mm	103mm	**AX8181060**	Price
8.6mm	10mm	61mm	103mm	**AX8181062**	Price
8.7mm	10mm	61mm	103mm	**AX8181063**	Price
8.8mm	10mm	61mm	103mm	**AX8181064**	Price
8.9mm	10mm	61mm	103mm	**AX8181067**	Price
9mm	10mm	61mm	103mm	**AX8181065**	Price
9.1mm	10mm	61mm	103mm	**AX8181066**	Price
9.2mm	10mm	61mm	103mm	**AX8181068**	Price
9.3mm	10mm	61mm	103mm	**AX8181069**	Price
9.4mm	10mm	61mm	103mm	**AX8181071**	Price
9.5mm	10mm	61mm	103mm	**AX8181070**	Price
9.6mm	10mm	61mm	103mm	**AX8181072**	Price
9.7mm	10mm	61mm	103mm	**AX8180541**	Price
9.8mm	10mm	47mm	89mm	**AX8181073**	Price
9.9mm	10mm	61mm	103mm	**AX8181074**	Price
10mm	10mm	61mm	103mm	**AX8181075**	Price
10.1mm	12mm	71mm	118mm	**AX8181076**	Price
10.2mm	12mm	71mm	118mm	**AX8181077**	Price
10.3mm	12mm	71mm	118mm	**AX8181078**	Price
10.4mm	12mm	71mm	118mm	**AX8181079**	Price
10.5mm	12mm	71mm	118mm	**AX8181080**	Price
10.6mm	12mm	71mm	118mm	**AX8181081**	Price
10.7mm	12mm	71mm	118mm	**AX8181082**	Price
10.8mm	12mm	71mm	118mm	**AX8181083**	Price
10.9mm	12mm	71mm	118mm	**AX8181084**	Price
11mm	12mm	71mm	118mm	**AX8181085**	Price
11.1mm	12mm	71mm	118mm	**AX8181086**	Price
11.2mm	12mm	71mm	118mm	**AX8181087**	Price
11.3mm	12mm	71mm	118mm	**AX8181088**	Price
11.4mm	12mm	71mm	118mm	**AX8181089**	Price
11.5mm	12mm	71mm	118mm	**AX8181090**	Price
11.6mm	12mm	71mm	118mm	**AX8181091**	Price
11.7mm	12mm	71mm	118mm	**AX8181092**	Price
11.8mm	12mm	71mm	118mm	**AX8181093**	Price
11.9mm	12mm	71mm	118mm	**AX8181094**	Price
12mm	12mm	71mm	118mm	**AX8181095**	Price
12.1mm	14mm	77mm	124mm	**AX8181096**	Price
12.2mm	14mm	77mm	124mm	**AX8181097**	Price
12.3mm	14mm	77mm	124mm	**AX8181098**	Price
12.4mm	14mm	77mm	124mm	**AX8181099**	Price
12.5mm	14mm	77mm	124mm	**AX8181100**	Price
12.6mm	14mm	77mm	124mm	**AX8181101**	Price
12.7mm	14mm	77mm	124mm	**AX8181102**	Price
12.8mm	14mm	77mm	124mm	**AX8181103**	Price
12.9mm	14mm	77mm	124mm	**AX8181104**	Price
13mm	14mm	77mm	124mm	**AX8181105**	Price
13.5mm	14mm	77mm	124mm	**AX8181110**	Price
14mm	14mm	77mm	124mm	**AX8181115**	Price
14.5mm	16mm	83mm	133mm	**AX8181120**	Price
15mm	16mm	83mm	133mm	**AX8181125**	Price
15.5mm	16mm	83mm	133mm	**AX8181130**	Price
16mm	16mm	83mm	133mm	**AX8181135**	Price
16.5mm	18mm	93mm	143mm	**AX8181140**	Price
17mm	18mm	93mm	143mm	**AX8181145**	Price
17.5mm	18mm	93mm	143mm	**AX8181150**	Price
18mm	18mm	93mm	143mm	**AX8181155**	Price
19mm	20mm	101mm	153mm	**AX8181157**	Price
20mm	20mm	101mm	153mm	**AX8181160**	Price

RAPIDKUT Solid Carbide Coolant Thru Inox Drills

5xD • TiAlN Coated

- Good for use on stainless steels, nickel alloys and titanium up to HRc35
- Excellent chip evacuation
- 140° Point



Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1mm	3mm	8mm	55mm	**AX8250301**	Price
1.1mm	3mm	12mm	55mm	**AX8250303**	Price
1.2mm	3mm	12mm	55mm	**AX8250305**	Price
1.3mm	3mm	12mm	55mm	**AX8250307**	Price
1.4mm	3mm	12mm	55mm	**AX8250309**	Price
1.5mm	3mm	16mm	55mm	**AX8250311**	Price
1.6mm	3mm	16mm	55mm	**AX8250313**	Price
1.7mm	3mm	16mm	55mm	**AX8250315**	Price
1.8mm	3mm	16mm	55mm	**AX8250317**	Price
1.9mm	3mm	16mm	55mm	**AX8250319**	Price
2mm	4mm	21mm	57mm	**AX8250321**	Price
2.1mm	4mm	21mm	57mm	**AX8250323**	Price
2.2mm	4mm	21mm	57mm	**AX8250325**	Price
2.3mm	4mm	21mm	57mm	**AX8250327**	Price
2.4mm	4mm	21mm	57mm	**AX8250329**	Price
2.5mm	4mm	21mm	57mm	**AX8250331**	Price
2.6mm	4mm	21mm	57mm	**AX8250333**	Price
2.7mm	4mm	21mm	57mm	**AX8250335**	Price
2.8mm	4mm	21mm	57mm	**AX8250337**	Price
2.9mm	4mm	21mm	57mm	**AX8250339**	Price
3mm	6mm	28mm	66mm	**AX8250341**	Price
3.1mm	6mm	28mm	66mm	**AX8250343**	Price
3.2mm	6mm	28mm	66mm	**AX8250345**	Price
3.25mm	6mm	28mm	66mm	**AX8250347**	Price
3.3mm	6mm	28mm	66mm	**AX8250349**	Price
3.4mm	6mm	28mm	66mm	**AX8250351**	Price
3.5mm	6mm	28mm	66mm	**AX8250353**	Price
3.6mm	6mm	28mm	66mm	**AX8250355**	Price
3.7mm	6mm	28mm	66mm	**AX8250357**	Price
3.75mm	6mm	28mm	66mm	**AX8250359**	Price
3.8mm	6mm	36mm	74mm	**AX8250361**	Price
3.9mm	6mm	36mm	74mm	**AX8250363**	Price
4mm	6mm	36mm	74mm	**AX8250365**	Price
4.1mm	6mm	36mm	74mm	**AX8250367**	Price
4.2mm	6mm	36mm	74mm	**AX8250369**	Price
4.25mm	6mm	36mm	74mm	**AX8250371**	Price
4.3mm	6mm	36mm	74mm	**AX8250373**	Price
4.4mm	6mm	36mm	74mm	**AX8250375**	Price
4.5mm	6mm	36mm	74mm	**AX8250377**	Price
4.6mm	6mm	36mm	74mm	**AX8250379**	Price
4.65mm	6mm	36mm	74mm	**AX8250381**	Price
4.7mm	6mm	36mm	74mm	**AX8250383**	Price
4.75mm	6mm	36mm	74mm	**AX8250385**	Price
4.8mm	6mm	44mm	82mm	**AX8250387**	Price
4.9mm	6mm	44mm	82mm	**AX8250389**	Price
5mm	6mm	44mm	82mm	**AX8250391**	Price
5.1mm	6mm	44mm	82mm	**AX8250393**	Price
5.2mm	6mm	44mm	82mm	**AX8250395**	Price
5.25mm	6mm	44mm	82mm	**AX8250397**	Price
5.3mm	6mm	44mm	82mm	**AX8250399**	Price

Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
5.4mm	6mm	44mm	82mm	**AX8250401**	Price
5.5mm	6mm	44mm	82mm	**AX8250403**	Price
5.55mm	6mm	44mm	82mm	**AX8250405**	Price
5.6mm	6mm	44mm	82mm	**AX8250407**	Price
5.65mm	6mm	44mm	82mm	**AX8250409**	Price
5.7mm	6mm	44mm	82mm	**AX8250411**	Price
5.75mm	6mm	44mm	82mm	**AX8250413**	Price
5.8mm	6mm	44mm	82mm	**AX8250415**	Price
5.9mm	6mm	44mm	82mm	**AX8250417**	Price
6mm	6mm	44mm	82mm	**AX8250419**	Price
6.1mm	8mm	53mm	91mm	**AX8250421**	Price
6.2mm	8mm	53mm	91mm	**AX8250423**	Price
6.3mm	8mm	53mm	91mm	**AX8250425**	Price
6.4mm	8mm	53mm	91mm	**AX8250427**	Price
6.5mm	8mm	53mm	91mm	**AX8250429**	Price
6.55mm	8mm	53mm	91mm	**AX8250431**	Price
6.6mm	8mm	53mm	91mm	**AX8250433**	Price
6.65mm	8mm	53mm	91mm	**AX8250435**	Price
6.7mm	8mm	53mm	91mm	**AX8250437**	Price
6.8mm	8mm	53mm	91mm	**AX8250439**	Price
6.9mm	8mm	53mm	91mm	**AX8250441**	Price
7mm	8mm	53mm	91mm	**AX8250443**	Price
7.1mm	8mm	53mm	91mm	**AX8250445**	Price
7.2mm	8mm	53mm	91mm	**AX8250447**	Price
7.3mm	8mm	53mm	91mm	**AX8250449**	Price
7.35mm	8mm	53mm	91mm	**AX8250451**	Price
7.4mm	8mm	53mm	91mm	**AX8250453**	Price
7.5mm	8mm	53mm	91mm	**AX8250455**	Price
7.6mm	8mm	53mm	91mm	**AX8250457**	Price
7.65mm	8mm	53mm	91mm	**AX8250459**	Price
7.7mm	8mm	53mm	91mm	**AX8250461**	Price
7.8mm	8mm	53mm	91mm	**AX8250463**	Price
7.9mm	8mm	53mm	91mm	**AX8250465**	Price
8mm	8mm	53mm	91mm	**AX8250467**	Price
8.1mm	10mm	61mm	103mm	**AX8250469**	Price
8.2mm	10mm	61mm	103mm	**AX8250471**	Price
8.3mm	10mm	61mm	103mm	**AX8250473**	Price
8.4mm	10mm	61mm	103mm	**AX8250475**	Price
8.5mm	10mm	61mm	103mm	**AX8250477**	Price
8.6mm	10mm	61mm	103mm	**AX8250479**	Price
8.7mm	10mm	61mm	103mm	**AX8250481**	Price
8.8mm	10mm	61mm	103mm	**AX8250483**	Price
8.9mm	10mm	61mm	103mm	**AX8250485**	Price
9mm	10mm	61mm	103mm	**AX8250487**	Price
9.1mm	10mm	61mm	103mm	**AX8250489**	Price
9.2mm	10mm	61mm	103mm	**AX8250491**	Price
9.3mm	10mm	61mm	103mm	**AX8250493**	Price
9.4mm	10mm	61mm	103mm	**AX8250495**	Price
9.5mm	10mm	61mm	103mm	**AX8250497**	Price

Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
9.6mm	10mm	61mm	103mm	**AX8250499**	Price
9.65mm	10mm	61mm	103mm	**AX8250501**	Price
9.7mm	10mm	61mm	103mm	**AX8250503**	Price
9.75mm	10mm	61mm	103mm	**AX8250505**	Price
9.8mm	10mm	61mm	103mm	**AX8250507**	Price
9.9mm	10mm	61mm	103mm	**AX8250509**	Price
10mm	10mm	61mm	103mm	**AX8250511**	Price
10.1mm	12mm	71mm	118mm	**AX8250513**	Price
10.2mm	12mm	71mm	118mm	**AX8250515**	Price
10.3mm	12mm	71mm	118mm	**AX8250517**	Price
10.4mm	12mm	71mm	118mm	**AX8250519**	Price
10.5mm	12mm	71mm	118mm	**AX8250521**	Price
10.6mm	12mm	71mm	118mm	**AX8250523**	Price
10.7mm	12mm	71mm	118mm	**AX8250525**	Price
10.8mm	12mm	71mm	118mm	**AX8250527**	Price
10.9mm	12mm	71mm	118mm	**AX8250529**	Price
11mm	12mm	71mm	118mm	**AX8250531**	Price
11.1mm	12mm	71mm	118mm	**AX8250533**	Price
11.2mm	12mm	71mm	118mm	**AX8250535**	Price
11.3mm	12mm	71mm	118mm	**AX8250537**	Price
11.4mm	12mm	71mm	118mm	**AX8250539**	Price
11.5mm	12mm	71mm	118mm	**AX8250541**	Price
11.6mm	12mm	71mm	118mm	**AX8250543**	Price
11.7mm	12mm	71mm	118mm	**AX8250545**	Price
11.8mm	12mm	71mm	118mm	**AX8250547**	Price
11.9mm	12mm	71mm	118mm	**AX8250549**	Price
12mm	12mm	71mm	118mm	**AX8250551**	Price
12.1mm	14mm	77mm	124mm	**AX8250553**	Price
12.2mm	14mm	77mm	124mm	**AX8250555**	Price
12.3mm	14mm	77mm	124mm	**AX8250557**	Price
12.4mm	14mm	77mm	124mm	**AX8250559**	Price
12.5mm	14mm	77mm	124mm	**AX8250561**	Price
12.6mm	14mm	77mm	124mm	**AX8250563**	Price
12.7mm	14mm	77mm	124mm	**AX8250565**	Price
12.8mm	14mm	77mm	124mm	**AX8250567**	Price
12.9mm	14mm	77mm	124mm	**AX8250569**	Price
13mm	14mm	77mm	124mm	**AX8250571**	Price
13.5mm	14mm	77mm	124mm	**AX8250573**	Price
14mm	14mm	77mm	124mm	**AX8250575**	Price
14.5mm	16mm	83mm	133mm	**AX8250577**	Price
15mm	16mm	83mm	133mm	**AX8250579**	Price
15.5mm	16mm	83mm	133mm	**AX8250581**	Price
16mm	16mm	83mm	133mm	**AX8250583**	Price
16.5mm	18mm	93mm	143mm	**AX8250585**	Price
17mm	18mm	93mm	143mm	**AX8250587**	Price
17.5mm	18mm	93mm	143mm	**AX8250589**	Price
18mm	18mm	93mm	143mm	**AX8250591**	Price
19mm	20mm	101mm	153mm	**AX8250593**	Price
20mm	20mm	101mm	153mm	**AX8250595**	Price

PCT Coolant Thru Pilot Drills

Solid Carbide • 5D Length

- 140° Point
- 30° Helix
- AlTiN coated
- Ideal for aluminum, cast materials and non-ferrous materials
- PCT Cutters List #PXC

New!



Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	28mm	66mm	**CW8165050**	Price
9/64	6mm	28mm	66mm	**CW8165075**	Price
5/32	6mm	36mm	74mm	**CW8165100**	Price
11/64	6mm	36mm	74mm	**CW8165125**	Price
3/16	6mm	44mm	82mm	**CW8165155**	Price
13/64	6mm	44mm	82mm	**CW8165180**	Price
7/32	6mm	44mm	82mm	**CW8165210**	Price
15/64	6mm	44mm	82mm	**CW8165235**	Price
1/4	8mm	53mm	91mm	**CW8165260**	Price

Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
17/64	8mm	53mm	91mm	**CW8165285**	Price
9/32	8mm	53mm	91mm	**CW8165310**	Price
19/64	8mm	53mm	91mm	**CW8165335**	Price
5/16	8mm	53mm	91mm	**CW8165355**	Price
21/64	10mm	61mm	103mm	**CW8165380**	Price
11/32	10mm	61mm	103mm	**CW8165405**	Price
23/64	10mm	61mm	103mm	**CW8165420**	Price
3/8	10mm	61mm	103mm	**CW8165440**	Price

High Performance Carbide Drills • Coolant Thru

5xD Length • 142° Point • ALtima® Coated

- ALtima® (AlTiN) coated for extended tool life
- Drills can be reconditioned and recoated
- 30° Helix angle
- Recommended for a broad cross section of materials at increased feed rates
- M A Ford Series #2XDCR



Size (in./mm)	Shank Dia.	Flute Length (in./mm)	OAL (in./mm)	Order No.	Price
#30	5/32	1.2600	3.1500	**AX2702592**	Price
1/8	1/8	1.1250	3.0000	**AX2702586**	Price
5/32	5/32	1.2600	3.1500	**AX2702608**	Price
11/64	3/16	1.5000	3.2300	**AX2702614**	Price
3/16	3/16	1.5000	3.2300	**AX2702620**	Price
7/32	15/64	1.5800	3.2300	**AX2702640**	Price
1/4	1/4	1.7400	3.3000	**AX2702664**	Price
17/64	5/16	1.8900	3.5800	**AX2702674**	Price
9/32	5/16	1.8900	3.5800	**AX2702682**	Price
19/64	5/16	1.8900	3.5800	**AX2702690**	Price
5/16	5/16	1.8900	3.5800	**AX2702698**	Price
21/64	25/64	2.1700	4.0600	**AX2702708**	Price
11/32	25/64	2.1700	4.0600	**AX2702712**	Price
23/64	25/64	2.1700	4.0600	**AX2702720**	Price
3/8	25/64	2.1700	4.0600	**AX2702730**	Price
25/64	25/64	2.1700	4.0600	**AX2702736**	Price
13/32	15/32	2.3600	4.7200	**AX2702742**	Price
27/64	15/32	2.3600	4.7200	**AX2702746**	Price
7/16	15/32	2.6000	4.7200	**AX2702750**	Price
15/32	15/32	2.6000	4.7200	**AX2702758**	Price
31/64	1/2	2.8300	4.7500	**AX2702764**	Price
1/2	1/2	2.8300	4.7500	**AX2702768**	Price
33/64	35/64	3.0300	5.2800	**AX2702774**	Price
17/32	35/64	3.0300	5.2800	**AX2702775**	Price

Size (in./mm)	Shank Dia.	Flute Length (in./mm)	OAL (in./mm)	Order No.	Price
9/16	5/8	3.1500	5.5100	**AX2702784**	Price
5/8	5/8	3.2300	5.7500	**AX2702798**	Price
21/32	45/64	3.5400	6.2200	**AX2702806**	Price
11/16	45/64	3.7400	6.2200	**AX2702810**	Price
3/4	3/4	3.9400	6.3000	**AX2702818**	Price
3mm	3mm	24mm	75mm	**AX2702582**	Price
3.5mm	4mm	32mm	80mm	**AX2702600**	Price
4mm	4mm	32mm	80mm	**AX2702610**	Price
4.5mm	5mm	38mm	82mm	**AX2702616**	Price
5mm	5mm	38mm	82mm	**AX2702626**	Price
6mm	6mm	40mm	82mm	**AX2702652**	Price
7mm	8mm	48mm	91mm	**AX2702680**	Price
8mm	8mm	48mm	91mm	**AX2702700**	Price
9mm	10mm	55mm	103mm	**AX2702718**	Price
10mm	10mm	55mm	103mm	**AX2702738**	Price
11mm	12mm	60mm	120mm	**AX2702748**	Price
12mm	12mm	66mm	120mm	**AX2702760**	Price
14mm	14mm	77mm	134mm	**AX2702782**	Price
16mm	16mm	82mm	146mm	**AX2702800**	Price
18mm	18mm	95mm	158mm	**AX2702814**	Price
20mm	20mm	100mm	160mm	**AX2702828**	Price
F	5/16	1.8900	3.5800	**AX2702670**	Price
Q	25/64	2.1700	4.0600	**AX2702709**	Price

Solid Carbide High Performance Drills

5xD • Coolant Thru

- 140° Drill point
- 30° Helix
- AlTiN coated
- M A Ford Series #HPDCR



- Fractional Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	4mm	28mm	66mm	**AX2921629**	Price
5/32	4mm	36mm	74mm	**AX2921632**	Price
3/16	6mm	44mm	82mm	**AX2921634**	Price
13/64	6mm	44mm	82mm	**AX2921635**	Price
7/32	6mm	44mm	82mm	**AX2921636**	Price
1/4	8mm	53mm	91mm	**AX2921637**	Price
9/32	8mm	53mm	91mm	**AX2921639**	Price
5/16	8mm	53mm	91mm	**AX2921640**	Price
3/8	10mm	61mm	103mm	**AX2921641**	Price
7/16	12mm	71mm	118mm	**AX2921642**	Price
1/2	14mm	77mm	124mm	**AX2921643**	Price
5/8	16mm	83mm	133mm	**AX2921644**	Price

- Metric Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
3mm	3mm	28mm	66mm	**AX2921700**	Price
3.1mm	4mm	28mm	66mm	**AX2921701**	Price
3.2mm	4mm	28mm	66mm	**AX2921702**	Price
3.3mm	4mm	28mm	66mm	**AX2921703**	Price
3.4mm	4mm	28mm	66mm	**AX2921704**	Price
3.5mm	4mm	28mm	66mm	**AX2921705**	Price
3.6mm	4mm	28mm	66mm	**AX2921706**	Price
3.7mm	4mm	28mm	66mm	**AX2921707**	Price
3.8mm	4mm	36mm	74mm	**AX2921708**	Price
3.9mm	4mm	36mm	74mm	**AX2921709**	Price
4mm	4mm	36mm	74mm	**AX2921710**	Price
4.1mm	6mm	36mm	74mm	**AX2921711**	Price
4.2mm	6mm	36mm	74mm	**AX2921712**	Price
4.3mm	6mm	36mm	74mm	**AX2921713**	Price
4.4mm	6mm	36mm	74mm	**AX2921714**	Price
4.5mm	6mm	36mm	74mm	**AX2921715**	Price
4.6mm	6mm	36mm	74mm	**AX2921716**	Price
4.7mm	6mm	36mm	74mm	**AX2921717**	Price
4.8mm	6mm	44mm	82mm	**AX2921718**	Price
5mm	6mm	44mm	82mm	**AX2921720**	Price
5.1mm	6mm	44mm	82mm	**AX2921721**	Price

- Metric Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
5.2mm	6mm	44mm	82mm	**AX2921722**	Price
5.5mm	6mm	44mm	82mm	**AX2921725**	Price
5.6mm	6mm	44mm	82mm	**AX2921726**	Price
5.8mm	6mm	44mm	82mm	**AX2921728**	Price
6mm	6mm	44mm	82mm	**AX2921730**	Price
6.1mm	8mm	53mm	91mm	**AX2921731**	Price
6.5mm	8mm	53mm	91mm	**AX2921735**	Price
6.6mm	8mm	53mm	91mm	**AX2921736**	Price
6.7mm	8mm	53mm	91mm	**AX2921737**	Price
6.8mm	8mm	53mm	91mm	**AX2921738**	Price
6.9mm	8mm	53mm	91mm	**AX2921739**	Price
7mm	8mm	53mm	91mm	**AX2921740**	Price
7.3mm	8mm	53mm	91mm	**AX2921743**	Price
7.5mm	8mm	53mm	91mm	**AX2921745**	Price
7.6mm	8mm	53mm	91mm	**AX2921746**	Price
7.8mm	8mm	53mm	91mm	**AX2921748**	Price
8mm	8mm	53mm	91mm	**AX2921750**	Price
8.1mm	10mm	61mm	103mm	**AX2921751**	Price
8.2mm	10mm	61mm	103mm	**AX2921752**	Price
8.4mm	10mm	61mm	103mm	**AX2921754**	Price
8.5mm	10mm	61mm	103mm	**AX2921755**	Price
8.6mm	10mm	61mm	103mm	**AX2921756**	Price
8.8mm	10mm	61mm	103mm	**AX2921758**	Price
9mm	10mm	61mm	103mm	**AX2921760**	Price
9.1mm	10mm	61mm	103mm	**AX2921761**	Price
9.5mm	10mm	61mm	103mm	**AX2921765**	Price
9.8mm	10mm	61mm	103mm	**AX2921768**	Price
10mm	10mm	61mm	103mm	**AX2921770**	Price
10.1mm	12mm	71mm	118mm	**AX2921771**	Price
10.2mm	12mm	71mm	118mm	**AX2921772**	Price
10.3mm	12mm	71mm	118mm	**AX2921773**	Price
10.5mm	12mm	71mm	118mm	**AX2921775**	Price
10.7mm	12mm	71mm	118mm	**AX2921777**	Price
10.8mm	12mm	71mm	118mm	**AX2921778**	Price
11mm	12mm	71mm	118mm	**AX2921780**	Price
11.5mm	12mm	71mm	118mm	**AX2921785**	Price
12mm	12mm	71mm	118mm	**AX2921790**	Price
12.5mm	14mm	77mm	124mm	**AX2921793**	Price
13.5mm	14mm	77mm	124mm	**AX2921800**	Price
14mm	14mm	77mm	124mm	**AX2921810**	Price
15mm	16mm	83mm	133mm	**AX2921823**	Price
16mm	16mm	83mm	133mm	**AX2921830**	Price

HY-PRO® CARB Drill • Coolant Thru



Solid Carbide • 5xD Length • TiAlN Coated

- High performance carbide
- Recommended for cast iron, carbon steels, alloy steels, die steels and hardened steels up to 35 HrC
- OSG List #HP255

Size (in.)	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	.1248	6mm	28mm	66mm	**TP45HP2551248**	Price
3/16	.1874	6mm	44mm	82mm	**TP45HP2551874**	Price
7/32	.2189	6mm	44mm	82mm	**TP45HP2552189**	Price
1/4, E	.2500	8mm	53mm	91mm	**TP45HP2552500**	Price
9/32	.2811	8mm	53mm	91mm	**TP45HP2552811**	Price
5/16	.3126	8mm	53mm	91mm	**TP45HP2553126**	Price
11/32	.3437	10mm	61mm	103mm	**TP45HP2553437**	Price

Size (in.)	Decimal Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
3/8	.3748	10mm	61mm	103mm	**TP45HP2553748**	Price
13/32	.4063	12mm	71mm	118mm	**TP45HP2554063**	Price
7/16	.4374	12mm	71mm	118mm	**TP45HP2554374**	Price
1/2	.5000	14mm	77mm	124mm	**TP45HP2555000**	Price
5/8	.6248	16mm	83mm	133mm	**TP45HP2556248**	Price
3/4	.7500	20mm	101mm	153mm	**TP45HP2557500**	Price

Cyclone™ XD Solid Carbide HP Coolant Thru Drills



5xD • Double Margin • Uncoated

- 30° Helix
- 140° / 142° Drill Point
- Designed for drilling in a broad range of materials
- M.A. Ford List #CDACR

Drill Dia.	Decimal Equiv.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
#31	.1200	6mm	1.102	2.600	**AX2807301**	Price
1/8	.1250	6mm	1.102	2.600	**AX2807303**	Price
#30	.1285	6mm	1.102	2.600	**AX2807305**	Price
#29	.1360	6mm	1.102	2.600	**AX2807308**	Price
9/64	.1406	6mm	1.102	2.600	**AX2807310**	Price
#27	.1440	6mm	1.102	2.600	**AX2807312**	Price
#26	.1470	6mm	1.102	2.600	**AX2807314**	Price
#25	.1495	6mm	1.417	2.910	**AX2807315**	Price
#24	.1520	6mm	1.417	2.910	**AX2807317**	Price
5/32	.1562	6mm	1.417	2.910	**AX2807319**	Price
#21	.1590	6mm	1.417	2.910	**AX2807321**	Price
#20	.1610	6mm	1.417	2.910	**AX2807322**	Price
#19	.1660	6mm	1.417	2.910	**AX2807325**	Price
11/64	.1719	6mm	1.417	2.910	**AX2807327**	Price
#17	.1730	6mm	1.417	2.910	**AX2807328**	Price
#16	.1770	6mm	1.417	2.910	**AX2807330**	Price
3/16	.1875	6mm	1.732	3.230	**AX2807334**	Price
#11	.1910	6mm	1.732	3.230	**AX2807337**	Price
#10	.1935	6mm	1.732	3.230	**AX2807339**	Price
13/64	.2031	6mm	1.732	3.230	**AX2807342**	Price
7/32	.2187	6mm	1.732	3.230	**AX2807347**	Price
A	.2340	6mm	1.732	3.230	**AX2807352**	Price

Drill Dia.	Decimal Equiv.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	.2500	8mm	2.087	3.580	**AX2807357**	Price
F	.2570	8mm	2.087	3.580	**AX2807360**	Price
17/64	.2656	8mm	2.087	3.580	**AX2807362**	Price
I	.2720	8mm	2.087	3.580	**AX2807365**	Price
9/32	.2812	8mm	2.087	3.580	**AX2807367**	Price
19/64	.2969	8mm	2.087	3.580	**AX2807372**	Price
5/16	.3125	8mm	2.087	3.580	**AX2807374**	Price
21/64	.3281	10mm	2.402	4.060	**AX2807377**	Price
Q	.3320	10mm	2.402	4.060	**AX2807379**	Price
11/32	.3438	10mm	2.402	4.060	**AX2807381**	Price
23/64	.3594	10mm	2.402	4.060	**AX2807383**	Price
U	.3680	10mm	2.402	4.060	**AX2807384**	Price
3/8	.3750	10mm	2.402	4.060	**AX2807386**	Price
25/64	.3906	10mm	2.795	4.650	**AX2807388**	Price
13/32	.4062	12mm	2.795	4.650	**AX2807391**	Price
27/64	.4219	12mm	2.795	4.650	**AX2807395**	Price
7/16	.4375	12mm	2.795	4.650	**AX2807397**	Price
29/64	.4531	12mm	2.795	4.650	**AX2807399**	Price
15/32	.4688	12mm	2.795	4.650	**AX2807400**	Price
31/64	.4844	14mm	3.031	4.880	**AX2807402**	Price
1/2	.5000	14mm	3.031	4.880	**AX2807404**	Price

DORMER ForceX High Performance Solid Carbide Drills • Coolant Thru

Solid Carbide • 5xD Length • TiAlN Coated

- Multi-application solid carbide drills, excellent for drilling a wide range of materials, including steel, stainless steel, cast iron & more
- 140º Point provides excellent centering capabilities
- Common shanks to cut collet cost
- Manufactured to DIN 6537
- Dormer List #R453



Type - Fractional Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/4	8mm	53mm	91mm	**PT390623602**	Price
17/64	8mm	53mm	91mm	**PT390623701**	Price
9/32	8mm	53mm	91mm	**PT390623985**	Price
19/64	8mm	53mm	91mm	**PT390623725**	Price
5/16	8mm	53mm	91mm	**PT390623923**	Price
21/64	10mm	61mm	103mm	**PT390623749**	Price
11/32	10mm	61mm	103mm	**PT390623633**	Price
3/8	10mm	61mm	103mm	**PT390623824**	Price
13/32	12mm	70mm	118mm	**PT390623657**	Price
7/16	12mm	70mm	118mm	**PT390623954**	Price
15/32	12mm	70mm	118mm	**PT390623671**	Price
31/64	14mm	76mm	124mm	**PT390623831**	Price
1/2	14mm	76mm	124mm	**PT390623596**	Price
17/32	14mm	76mm	124mm	**PT390623695**	Price

Type - Metric Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
5mm	6mm	44mm	82mm	**PT390614112**	Price
5.5mm	6mm	44mm	82mm	**PT390614136**	Price
6mm	6mm	44mm	82mm	**PT390614143**	Price
6.5mm	8mm	53mm	91mm	**PT390614150**	Price

Type - Metric Size					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
7mm	8mm	53mm	91mm	**PT390614174**	Price
7.5mm	8mm	53mm	91mm	**PT390614181**	Price
8mm	8mm	53mm	91mm	**PT390614198**	Price
8.5mm	10mm	61mm	103mm	**PT390614204**	Price
9mm	10mm	61mm	103mm	**PT390614228**	Price
9.5mm	10mm	61mm	103mm	**PT390614235**	Price
10mm	10mm	61mm	103mm	**PT390613870**	Price
10.5mm	12mm	70mm	118mm	**PT390613900**	Price
11mm	12mm	70mm	118mm	**PT390613917**	Price
11.5mm	12mm	70mm	118mm	**PT390613931**	Price
12mm	12mm	70mm	118mm	**PT390613948**	Price
12.5mm	14mm	76mm	124mm	**PT390613962**	Price
13mm	14mm	76mm	124mm	**PT390613979**	Price
13.5mm	14mm	76mm	124mm	**PT390613986**	Price
14mm	14mm	76mm	124mm	**PT390613993**	Price
14.5mm	16mm	82mm	133mm	**PT390614013**	Price
15mm	16mm	82mm	133mm	**PT390614020**	Price
15.5mm	16mm	82mm	133mm	**PT390614037**	Price
16mm	16mm	82mm	133mm	**PT390614044**	Price

EXOPRO® Mega Muscle® Carbide Drills

Coolant Thru • 5xD Standard Length • WD-1 Coated

- High performance carbide
- Up to 200 IPM in steel and 670 IPM in cast iron
- 3 Flute
- Recommended for cast iron, carbon steels, alloy steels and 400 series stainless steels
- OSG List #5610



Size (in.)	Decimal Equiv.	Shank Dia. (in.)	Flute Length	OAL	Order No.	Price
13/64	.2031	15/64	42mm	100mm	**TP51561020311**	Price
7/32	.2189	15/64	45mm	100mm	**TP51561021911**	Price
15/64	.2343	15/64	48mm	100mm	**TP51561023411**	Price
1/4, E	.2500	1/4	52mm	109mm	**TP51561025011**	Price
17/64	.2657	17/64	55mm	109mm	**TP51561026611**	Price
9/32, K	.2811	9/32	58mm	118mm	**TP51561028111**	Price
19/64	.2969	5/16	60mm	118mm	**TP51561029711**	Price
5/16	.3126	5/16	64mm	118mm	**TP51561031311**	Price
21/64	.3280	11/32	67mm	128mm	**TP51561032811**	Price
11/32	.3437	11/32	70mm	128mm	**TP51561034411**	Price
23/64	.3594	25/64	73mm	136mm	**TP51561035911**	Price
3/8	.3752	3/8	76mm	136mm	**TP51561037511**	Price
25/64	.3906	25/64	80mm	136mm	**TP51561039111**	Price
13/32	.4063	27/64	83mm	146mm	**TP51561040611**	Price
27/64	.4220	27/64	86mm	146mm	**TP51561042211**	Price
7/16	.4374	7/16	89mm	156mm	**TP51561043711**	Price
29/64	.4531	15/32	92mm	156mm	**TP51561045311**	Price
15/32	.4689	15/32	96mm	156mm	**TP51561046911**	Price
31/64	.4843	1/2	99mm	167mm	**TP51561048411**	Price
1/2	.5000	1/2	102mm	167mm	**TP51561050011**	Price
17/32	.5311	35/64	108mm	176mm	**TP51561053111**	Price
9/16	.5626	9/16	115mm	185mm	**TP51561056311**	Price
5/8	.6252	5/8	128mm	193mm	**TP51561062511**	Price
21/32	.6563	21/32	134mm	201mm	**TP51561065611**	Price
3/4	.7500	3/4	154mm	217mm	**TP51561075011**	Price

High Performance Carbide Drills • Coolant Thru



7xD Length • 142° Point • ALtima® Coated

- ALtima® (AlTiN) coated for extended tool life
- Drills can be reconditioned and recoated
- 30° Helix angle
- Recommended for a broad cross section of materials at increased feed rates
- M A Ford Series #2XDCL

Size (in./ mm)	Shank Size (in./mm)	Flute Length (in./mm)	OAL (in./mm)	Order No.	Price
1/8	1/8	1-1/2	3-1/2	**AX2702834**	Price
5/32	5/32	1-3/4	3-5/8	**AX2702854**	Price
11/64	3/16	1-3/4	3-15/16	**AX2702860**	Price
3/16	3/16	1-3/4	3-15/16	**AX2702866**	Price
13/64	15/64	2	3-15/16	**AX2702876**	Price
7/32	15/64	2	3-15/16	**AX2702886**	Price
1/4	1/4	2-1/4	4-5/16	**AX2702910**	Price
17/64	5/16	2-3/8	4-5/16	**AX2702920**	Price
9/32	5/16	2-3/4	4-5/8	**AX2702928**	Price
5/16	5/16	2-3/4	4-5/8	**AX2702944**	Price
11/32	25/64	3-5/32	5	**AX2702958**	Price
23/64	25/64	3-21/64	5-5/16	**AX2702966**	Price
3/8	25/64	3-21/64	5-5/16	**AX2702976**	Price
13/32	15/32	3-5/8	5-7/8	**AX2702984**	Price
27/64	15/32	3-5/8	5-7/8	**AX2702987**	Price
7/16	15/32	4	6-7/64	**AX2702989**	Price
1/2	1/2	4-5/16	6-19/64	**AX2702996**	Price
3mm	3mm	33mm	81mm	**AX2702830**	Price
4mm	4mm	44mm	92mm	**AX2702856**	Price
5mm	5mm	45mm	100mm	**AX2702872**	Price
6mm	6mm	51mm	100mm	**AX2702898**	Price
7mm	8mm	60mm	109mm	**AX2702926**	Price
8mm	8mm	70mm	118mm	**AX2702946**	Price
9mm	10mm	80mm	127mm	**AX2702964**	Price
10mm	10mm	85mm	136mm	**AX2702982**	Price
12mm	12mm	102mm	155mm	**AX2702994**	Price

Cyclone™ XD Solid Carbide HP Coolant Thru Drills

5xD • Altima® Plus Coated

- 30° Helix
- 140° Drill Point
- Designed for drilling in a broad range of materials
- M.A. Ford List #CXDCR



Drill Dia.	Decimal Equiv.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
#31	.1200	1/8	1.1020	2.6000	**AX2806927**	Price
1/8	.1250	1/8	1.1020	2.6000	**AX2806929**	Price
#30	.1285	5/32	1.1020	2.6000	**AX2806931**	Price
#29	.1360	5/32	1.1020	2.6000	**AX2806934**	Price
9/64	.1406	5/32	1.1020	2.6000	**AX2806936**	Price
#24	.1520	5/32	1.4170	2.9100	**AX2806940**	Price
5/32	.1562	5/32	1.4170	2.9100	**AX2806942**	Price
#21	.1590	3/16	1.4170	2.9100	**AX2806944**	Price
11/64	.1719	3/16	1.4170	2.9100	**AX2806948**	Price
3/16	.1875	3/16	1.7320	3.2300	**AX2806953**	Price
13/64	.2031	1/4	1.7320	3.2300	**AX2806958**	Price
7/32	.2187	1/4	1.7320	3.2300	**AX2806963**	Price
#2	.2210	1/4	1.7320	3.2300	**AX2806964**	Price
15/64	.2343	1/4	1.7320	3.2300	**AX2806968**	Price
C	.2420	1/4	2.0870	3.5800	**AX2806971**	Price
D	.2460	1/4	2.0870	3.5800	**AX2806973**	Price
1/4	.2500	1/4	2.0870	3.5800	**AX2806975**	Price
F	.2570	5/16	2.0870	3.5800	**AX2806978**	Price
G	.2610	5/16	2.0870	3.5800	**AX2806980**	Price
17/64	.2656	5/16	2.0870	3.5800	**AX2806982**	Price
9/32	.2812	5/16	2.0870	3.5800	**AX2806987**	Price
19/64	.2969	5/16	2.0870	3.5800	**AX2806992**	Price
5/16	.3125	5/16	2.0870	3.5800	**AX2806997**	Price
21/64	.3281	3/8	2.4020	4.0600	**AX2807002**	Price
Q	.3320	3/8	2.4020	4.0600	**AX2807004**	Price
11/32	.3438	3/8	2.4020	4.0600	**AX2807008**	Price
23/64	.3594	3/8	2.4020	4.0600	**AX2807013**	Price
3/8	.3750	3/8	2.4020	4.0600	**AX2807019**	Price
25/64	.3906	7/16	2.4020	4.0600	**AX2807024**	Price
13/32	.4062	7/16	2.7950	4.6500	**AX2807029**	Price
27/64	.4219	7/16	2.7950	4.6500	**AX2807034**	Price
7/16	.4375	7/16	2.7950	4.6500	**AX2807039**	Price
15/32	.4688	1/2	2.7950	4.6500	**AX2807048**	Price
31/64	.4844	1/2	3.0310	4.8800	**AX2807051**	Price
1/2	.5000	1/2	3.0310	4.8800	**AX2807053**	Price
33/64	.5156	9/16	3.0310	4.8800	**AX2807058**	Price
17/32	.5312	9/16	3.0310	4.8800	**AX2807059**	Price
35/64	.5469	9/16	3.0310	4.8800	**AX2807062**	Price
9/16	.5625	9/16	3.2680	5.2400	**AX2807064**	Price
19/32	.5938	5/8	3.2680	5.2400	**AX2807068**	Price
5/8	.6250	5/8	3.2680	5.2400	**AX2807072**	Price
21/32	.6562	11/16	3.6610	5.6300	**AX2807077**	Price
11/16	.6875	11/16	3.6610	5.6300	**AX2807079**	Price
3/4	.7500	3/4	3.9760	6.0240	**AX2807083**	Price

RAPIDKUT® 8xD High Performance Solid Carbide Coolant Thru Drills

- For use in a wide variety of materials including carbon steel, alloy steel, stainless steel, hardened steel, cast iron, aluminum alloys, titanium and others
- 140° Point and 30° helix high performance geometry allows for high penetration rates
- These high penetration drills provide accurate hole sizing as well as near burnished holes
- TiAlN coated



- Fractional					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
1/4	1/4	3	4-1/2	**AX8172005**	Price
17/64	5/16	3	4-1/2	**AX8172010**	Price
9/32	5/16	3	4-1/2	**AX8172015**	Price
19/64	5/16	3	4-1/2	**AX8172020**	Price
5/16	5/16	3	4-1/2	**AX8172025**	Price
21/64	3/8	3-3/4	5-3/4	**AX8172030**	Price
11/32	3/8	3-3/4	5-3/4	**AX8172035**	Price
23/64	3/8	3-3/4	5-3/4	**AX8172040**	Price
3/8	3/8	3-3/4	5-3/4	**AX8172045**	Price
25/64	7/16	4-1/2	6-1/2	**AX8172050**	Price
13/32	7/16	4-1/2	6-1/2	**AX8172055**	Price
7/16	7/16	4-1/2	6-1/2	**AX8172060**	Price
15/32	1/2	5-1/4	7	**AX8172065**	Price
1/2	1/2	5-1/4	7	**AX8172070**	Price
17/32	9/16	5-1/4	7	**AX8172075**	Price
9/16	9/16	5-1/4	7	**AX8172080**	Price
19/32	5/8	6	8	**AX8172085**	Price
5/8	5/8	6	8	**AX8172090**	Price

- Metric					
Size	Shank Dia.	Flute Length	OAL	Order No.	Price
3mm	6mm	34mm	72mm	**AX8182003**	Price
3.3mm	6mm	34mm	72mm	**AX8182004**	Price
3.5mm	6mm	34mm	72mm	**AX8182005**	Price
3.8mm	6mm	43mm	81mm	**AX8182008**	Price
4mm	6mm	43mm	81mm	**AX8182010**	Price
4.2mm	6mm	43mm	81mm	**AX8182012**	Price
4.3mm	6mm	43mm	81mm	**AX8182013**	Price
4.5mm	6mm	43mm	81mm	**AX8182015**	Price
4.8mm	6mm	57mm	95mm	**AX8182018**	Price
5mm	6mm	57mm	95mm	**AX8182020**	Price
5.1mm	6mm	57mm	95mm	**AX8182021**	Price
5.3mm	6mm	57mm	95mm	**AX8182023**	Price
5.5mm	6mm	57mm	95mm	**AX8182025**	Price
6mm	6mm	57mm	95mm	**AX8182030**	Price
6.1mm	8mm	76mm	114mm	**AX8182031**	Price
6.5mm	8mm	76mm	114mm	**AX8182035**	Price
6.6mm	8mm	76mm	114mm	**AX8182036**	Price
6.8mm	8mm	76mm	114mm	**AX8182038**	Price
6.9mm	8mm	76mm	114mm	**AX8182039**	Price
7mm	8mm	76mm	114mm	**AX8182040**	Price
7.5mm	8mm	76mm	114mm	**AX8182045**	Price
8mm	8mm	76mm	114mm	**AX8182050**	Price
8.5mm	10mm	95mm	142mm	**AX8182055**	Price
9mm	10mm	95mm	142mm	**AX8182060**	Price
9.2mm	10mm	95mm	142mm	**AX8182062**	Price
9.5mm	10mm	95mm	142mm	**AX8182065**	Price
10mm	10mm	95mm	142mm	**AX8182070**	Price
10.5mm	12mm	114mm	162mm	**AX8182075**	Price
11mm	12mm	114mm	162mm	**AX8182080**	Price
11.5mm	12mm	114mm	162mm	**AX8182085**	Price
12mm	12mm	114mm	162mm	**AX8182090**	Price
12.5mm	14mm	133mm	178mm	**AX8182095**	Price
13mm	14mm	133mm	178mm	**AX8182100**	Price
13.5mm	14mm	133mm	178mm	**AX8182105**	Price
14mm	14mm	133mm	178mm	**AX8182110**	Price
14.5mm	16mm	152mm	203mm	**AX8182115**	Price
15mm	16mm	152mm	203mm	**AX8182120**	Price
15.5mm	16mm	152mm	203mm	**AX8182125**	Price

M.A. FORD Cyclone™ XD Solid Carbide HP Coolant Thru Drills

8xD • Altima® Plus Coated

- 30° Helix
- 140° Drill Point
- Designed for drilling in a broad range of materials
- M.A. Ford List #CXDCL



Drill Dia.	Decimal Equiv.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
#31	.1200	4mm	44mm	92mm	**AX2807227**	Price
1/8	.1250	4mm	44mm	92mm	**AX2807099**	Price
#30	.1285	4mm	44mm	92mm	**AX2807102**	Price
#29	.1360	4mm	44mm	92mm	**AX2807105**	Price
9/64	.1406	4mm	44mm	92mm	**AX2807107**	Price
#25	.1496	4mm	44mm	92mm	**AX2807110**	Price
#24	.1520	4mm	44mm	92mm	**AX2807111**	Price
5/32	.1562	4mm	44mm	92mm	**AX2807113**	Price
#21	.1590	5mm	45mm	100mm	**AX2807115**	Price
11/64	.1719	5mm	45mm	100mm	**AX2807119**	Price
3/16	.1875	5mm	45mm	100mm	**AX2807125**	Price
13/64	.2031	6mm	57mm	100mm	**AX2807130**	Price
7/32	.2187	6mm	57mm	100mm	**AX2807135**	Price
#2	.2210	6mm	57mm	100mm	**AX2807137**	Price
15/64	.2343	6mm	57mm	100mm	**AX2807141**	Price
C	.2420	8mm	76mm	118mm	**AX2807144**	Price
D	.2460	8mm	76mm	118mm	**AX2807146**	Price
1/4	.2500	8mm	76mm	118mm	**AX2807148**	Price
F	.2570	8mm	76mm	118mm	**AX2807151**	Price
G	.2610	8mm	76mm	118mm	**AX2807153**	Price
17/64	.2656	8mm	76mm	118mm	**AX2807155**	Price
9/32	.2812	8mm	76mm	118mm	**AX2807160**	Price
19/64	.2969	8mm	76mm	118mm	**AX2807165**	Price
5/16	.3125	8mm	76mm	118mm	**AX2807170**	Price
21/64	.3281	10mm	87mm	139mm	**AX2807175**	Price
Q	.3320	10mm	87mm	139mm	**AX2807177**	Price
11/32	.3438	10mm	87mm	139mm	**AX2807181**	Price
23/64	.3594	10mm	95mm	139mm	**AX2807186**	Price
U	.3680	10mm	95mm	139mm	**AX2807190**	Price
3/8	.3750	10mm	95mm	139mm	**AX2807193**	Price
W	.3858	10mm	95mm	139mm	**AX2807196**	Price
25/64	.3906	10mm	95mm	139mm	**AX2807198**	Price
13/32	.4062	12mm	106mm	155mm	**AX2807203**	Price
27/64	.4219	12mm	106mm	155mm	**AX2807208**	Price
7/16	.4375	12mm	114mm	163mm	**AX2807213**	Price
15/32	.4688	12mm	114mm	163mm	**AX2807222**	Price
31/64	.4844	14mm	133mm	182mm	**AX2807224**	Price
1/2	.5000	14mm	133mm	182mm	**AX2807225**	Price
33/64	.5156	14mm	133mm	182mm	**AX2807233**	Price
17/32	.5312	14mm	133mm	182mm	**AX2807234**	Price
35/64	.5469	14mm	133mm	182mm	**AX2807237**	Price
9/16	.5625	16mm	152mm	204mm	**AX2807239**	Price
19/32	.5938	16mm	152mm	204mm	**AX2807243**	Price
5/8	.6250	16mm	152mm	204mm	**AX2807247**	Price

Coolant Thru High Performance Drills

New!



Solid Carbide • 3xD to 12xD Lengths

- 140° Point
- Double margin
- 30° Helix
- Variantra ® Supral (TiAlCN) coated
- Ideal for carbon steels, alloy steels, gray cast iron, ductile iron and other alloys
- PCT Cutters List #DXC

Length - 3xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/2	14mm	60mm	107mm	**CW8170555**	Price
1/4	8mm	34mm	79mm	**CW8170225**	Price
1/8	6mm	20mm	62mm	**CW8170025**	Price
11/32	10mm	47mm	89mm	**CW8170370**	Price
11/64	6mm	24mm	66mm	**CW8170100**	Price
13/32	12mm	55mm	102mm	**CW8170450**	Price
13/64	6mm	28mm	66mm	**CW8170145**	Price
15/32	12mm	55mm	102mm	**CW8170515**	Price
15/64	6mm	28mm	66mm	**CW8170200**	Price
17/64	8mm	34mm	79mm	**CW8170250**	Price
19/64	8mm	41mm	79mm	**CW8170300**	Price
21/64	10mm	47mm	89mm	**CW8170345**	Price
23/64	10mm	47mm	89mm	**CW8170385**	Price
25/64	10mm	47mm	89mm	**CW8170425**	Price
27/64	12mm	55mm	102mm	**CW8170465**	Price
29/64	12mm	55mm	102mm	**CW8170500**	Price
3/16	6mm	28mm	66mm	**CW8170125**	Price
3/8	10mm	47mm	89mm	**CW8170405**	Price
31/64	14mm	60mm	107mm	**CW8170540**	Price
5/16	8mm	41mm	79mm	**CW8170320**	Price
5/32	6mm	24mm	66mm	**CW8170075**	Price
7/16	12mm	55mm	102mm	**CW8170485**	Price
7/32	6mm	28mm	66mm	**CW8170175**	Price
9/32	8mm	41mm	79mm	**CW8170275**	Price
9/64	6mm	20mm	62mm	**CW8170050**	Price

Length - 5xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/4	8mm	53mm	91mm	**CW8170880**	Price
1/8	6mm	28mm	66mm	**CW8170680**	Price
11/32	10mm	61mm	103mm	**CW8171025**	Price
11/64	6mm	36mm	74mm	**CW8170755**	Price
13/32	12mm	71mm	118mm	**CW8171105**	Price
13/64	6mm	44mm	82mm	**CW8170800**	Price
15/32	12mm	71mm	118mm	**CW8171170**	Price
15/64	6mm	44mm	82mm	**CW8170855**	Price
17/64	8mm	53mm	91mm	**CW8170905**	Price
19/64	8mm	53mm	91mm	**CW8170955**	Price
21/64	10mm	61mm	103mm	**CW8171000**	Price
23/64	10mm	61mm	103mm	**CW8171040**	Price
25/64	10mm	61mm	103mm	**CW8171080**	Price
27/64	12mm	71mm	118mm	**CW8171120**	Price
29/64	12mm	71mm	118mm	**CW8171155**	Price
3/16	6mm	44mm	82mm	**CW8170780**	Price
3/8	10mm	61mm	103mm	**CW8171060**	Price
5/16	8mm	53mm	91mm	**CW8170975**	Price
5/32	6mm	36mm	74mm	**CW8170730**	Price
7/16	12mm	71mm	118mm	**CW8171140**	Price
7/32	6mm	44mm	82mm	**CW8170830**	Price
9/32	8mm	53mm	91mm	**CW8170930**	Price
9/64	6mm	28mm	66mm	**CW8170705**	Price

Length - 8xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/4	8mm	76mm	114mm	**CW8171535**	Price
1/8	6mm	34mm	72mm	**CW8171335**	Price
11/32	10mm	95mm	142mm	**CW8171680**	Price
11/64	6mm	43mm	81mm	**CW8171410**	Price
13/32	12mm	114mm	162mm	**CW8171760**	Price
13/64	6mm	57mm	95mm	**CW8171455**	Price
15/32	12mm	114mm	162mm	**CW8171825**	Price
15/64	6mm	57mm	95mm	**CW8171510**	Price
17/64	8mm	76mm	114mm	**CW8171560**	Price
19/64	8mm	76mm	114mm	**CW8171610**	Price
21/64	10mm	95mm	142mm	**CW8171655**	Price
23/64	10mm	95mm	142mm	**CW8171695**	Price
25/64	10mm	95mm	142mm	**CW8171735**	Price
27/64	12mm	114mm	162mm	**CW8171775**	Price
29/64	12mm	114mm	162mm	**CW8171810**	Price
3/16	6mm	57mm	95mm	**CW8171435**	Price
3/8	10mm	95mm	142mm	**CW8171715**	Price
5/16	8mm	76mm	114mm	**CW8171630**	Price
5/32	6mm	43mm	81mm	**CW8171385**	Price
7/16	12mm	114mm	162mm	**CW8171795**	Price
7/32	6mm	57mm	95mm	**CW8171485**	Price
9/32	8mm	76mm	114mm	**CW8171585**	Price
9/64	6mm	34mm	72mm	**CW8171360**	Price

Length - 12xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/4	8mm	108mm	146mm	**CW8172190**	Price
1/8	6mm	54mm	92mm	**CW8171990**	Price
11/32	10mm	120mm	162mm	**CW8172325**	Price
11/64	6mm	64mm	102mm	**CW8172065**	Price
13/32	12mm	156mm	204mm	**CW8172405**	Price
13/64	6mm	78mm	116mm	**CW8172110**	Price
15/32	12mm	156mm	204mm	**CW8172470**	Price
15/64	6mm	78mm	116mm	**CW8172165**	Price
17/64	8mm	108mm	146mm	**CW8172215**	Price
19/64	8mm	108mm	146mm	**CW8172255**	Price
21/64	10mm	120mm	162mm	**CW8172300**	Price
23/64	10mm	120mm	162mm	**CW8172340**	Price
25/64	10mm	120mm	162mm	**CW8172380**	Price
27/64	12mm	156mm	204mm	**CW8172420**	Price
29/64	12mm	156mm	204mm	**CW8172455**	Price
3/16	6mm	78mm	116mm	**CW8172090**	Price
3/8	10mm	120mm	162mm	**CW8172360**	Price
5/16	8mm	108mm	146mm	**CW8172275**	Price
5/32	6mm	64mm	102mm	**CW8172040**	Price
7/16	12mm	156mm	204mm	**CW8172440**	Price
7/32	6mm	78mm	116mm	**CW8172140**	Price
9/32	8mm	108mm	146mm	**CW8172240**	Price
9/64	6mm	54mm	92mm	**CW8172015**	Price

Coolant Thru High Performance Drills

Solid Carbide • 3xD to 50xD Lengths

- 135° Point
- 15° Helix
- ZRCN coated
- Triple guided margin
- Ideal for aluminum, cast materials and non-ferrous materials
- PCT Cutters List #AXC



New!

Length - 3xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	20mm	62mm	**CW8144510**	Price
9/64	6mm	20mm	62mm	**CW8144535**	Price
5/32	6mm	24mm	66mm	**CW8144560**	Price
11/64	6mm	24mm	66mm	**CW8144585**	Price
3/16	6mm	28mm	66mm	**CW8144615**	Price
13/64	6mm	28mm	66mm	**CW8144630**	Price
7/32	6mm	28mm	66mm	**CW8144655**	Price
15/64	6mm	28mm	66mm	**CW8144680**	Price
1/4	8mm	34mm	79mm	**CW8144705**	Price
17/64	8mm	34mm	79mm	**CW8144730**	Price
9/32	8mm	41mm	79mm	**CW8144755**	Price
19/64	8mm	41mm	79mm	**CW8144775**	Price
5/16	8mm	41mm	79mm	**CW8142515**	Price
21/64	10mm	47mm	89mm	**CW8144815**	Price
11/32	10mm	47mm	89mm	**CW8144840**	Price
23/64	10mm	47mm	89mm	**CW8144855**	Price
3/8	10mm	47mm	89mm	**CW8144875**	Price
25/64	10mm	47mm	89mm	**CW8144895**	Price
13/32	12mm	55mm	102mm	**CW8144915**	Price
27/64	12mm	55mm	102mm	**CW8144930**	Price
7/16	12mm	55mm	102mm	**CW8144946**	Price
29/64	12mm	55mm	102mm	**CW8144960**	Price
15/32	12mm	55mm	102mm	**CW8144975**	Price

Length - 5xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	28mm	66mm	**CW8145130**	Price
9/64	6mm	28mm	66mm	**CW8145155**	Price
5/32	6mm	36mm	74mm	**CW8145180**	Price
11/64	6mm	36mm	74mm	**CW8145200**	Price
3/16	6mm	44mm	82mm	**CW8145230**	Price
13/64	6mm	44mm	82mm	**CW8145250**	Price
7/32	6mm	44mm	82mm	**CW8145280**	Price
15/64	6mm	44mm	82mm	**CW8145305**	Price
1/4	8mm	53mm	91mm	**CW8142530**	Price
17/64	8mm	53mm	91mm	**CW8142535**	Price
9/32	8mm	53mm	91mm	**CW8145370**	Price
19/64	8mm	53mm	91mm	**CW8145395**	Price
5/16	8mm	53mm	91mm	**CW8145415**	Price
21/64	10mm	61mm	103mm	**CW8145440**	Price
11/32	10mm	61mm	103mm	**CW8145460**	Price
23/64	10mm	61mm	103mm	**CW8145470**	Price
3/8	10mm	61mm	103mm	**CW8145490**	Price
25/64	10mm	61mm	103mm	**CW8145510**	Price
13/32	12mm	71mm	118mm	**CW8145535**	Price
27/64	12mm	71mm	118mm	**CW8145550**	Price
7/16	12mm	71mm	118mm	**CW8145561**	Price
29/64	12mm	71mm	118mm	**CW8145575**	Price
15/32	12mm	71mm	118mm	**CW8145590**	Price

Length - 8xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	34mm	72mm	**CW8145740**	Price
9/64	6mm	34mm	72mm	**CW8145765**	Price
5/32	6mm	43mm	81mm	**CW8145790**	Price
11/64	6mm	43mm	81mm	**CW8145815**	Price
3/16	6mm	57mm	95mm	**CW8145845**	Price
13/64	6mm	57mm	95mm	**CW8145860**	Price

Length - 8xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
7/32	6mm	57mm	95mm	**CW8142565**	Price
15/64	6mm	57mm	95mm	**CW8145905**	Price
1/4	8mm	76mm	114mm	**CW8145930**	Price
17/64	8mm	76mm	114mm	**CW8145950**	Price
9/32	8mm	76mm	114mm	**CW8145965**	Price
19/64	8mm	76mm	114mm	**CW8145985**	Price
5/16	8mm	76mm	114mm	**CW8146005**	Price
21/64	10mm	95mm	142mm	**CW8146025**	Price
11/32	10mm	95mm	142mm	**CW8146050**	Price
23/64	10mm	95mm	142mm	**CW8146060**	Price
3/8	10mm	95mm	142mm	**CW8146075**	Price
25/64	10mm	95mm	142mm	**CW8142715**	Price
13/32	12mm	114mm	162mm	**CW8146110**	Price
27/64	12mm	114mm	162mm	**CW8142485**	Price
7/16	12mm	114mm	162mm	**CW8146131**	Price
29/64	12mm	114mm	162mm	**CW8146145**	Price
15/32	12mm	114mm	162mm	**CW8146160**	Price

Length - 12xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
9/64	6mm	54mm	92mm	**CW8146340**	Price
5/32	6mm	64mm	102mm	**CW8146365**	Price
11/64	6mm	64mm	102mm	**CW8146390**	Price
3/16	6mm	78mm	116mm	**CW8142595**	Price
13/64	6mm	78mm	116mm	**CW8146440**	Price
7/32	6mm	78mm	116mm	**CW8146470**	Price
15/64	6mm	78mm	116mm	**CW8146495**	Price
1/4	8mm	108mm	146mm	**CW8146520**	Price
17/64	8mm	108mm	146mm	**CW8146545**	Price
9/32	8mm	108mm	146mm	**CW8146565**	Price
19/64	8mm	108mm	146mm	**CW8146590**	Price
5/16	8mm	108mm	146mm	**CW8146610**	Price
21/64	10mm	120mm	162mm	**CW8146635**	Price
11/32	10mm	120mm	162mm	**CW8146660**	Price
23/64	10mm	120mm	162mm	**CW8146670**	Price
3/8	10mm	120mm	162mm	**CW8142610**	Price
25/64	10mm	120mm	162mm	**CW8146705**	Price
13/32	12mm	156mm	204mm	**CW8146730**	Price
27/64	12mm	156mm	204mm	**CW8146745**	Price
7/16	12mm	156mm	204mm	**CW8146756**	Price
29/64	12mm	156mm	204mm	**CW8146770**	Price
15/32	12mm	156mm	204mm	**CW8146785**	Price

Length - 16xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	60mm	100mm	**CW8146930**	Price
9/64	6mm	75mm	115mm	**CW8146950**	Price
5/32	6mm	75mm	115mm	**CW8146960**	Price
11/64	6mm	90mm	130mm	**CW8146975**	Price
3/16	6mm	90mm	130mm	**CW8146990**	Price
13/64	6mm	108mm	150mm	**CW8147005**	Price
7/32	6mm	108mm	150mm	**CW8147015**	Price
15/64	6mm	108mm	150mm	**CW8147025**	Price
1/4	8mm	125mm	165mm	**CW8142630**	Price
17/64	8mm	125mm	165mm	**CW8147035**	Price
9/32	8mm	140mm	180mm	**CW8147050**	Price
19/64	8mm	140mm	180mm	**CW8147060**	Price
5/16	8mm	140mm	180mm	**CW8147070**	Price
21/64	10mm	160mm	205mm	**CW8147080**	Price
11/32	10mm	160mm	205mm	**CW8147090**	Price
23/64	10mm	180mm	225mm	**CW8147105**	Price
3/8	10mm	180mm	225mm	**CW8147110**	Price
25/64	10mm	180mm	225mm	**CW8147120**	Price
13/32	12mm	190mm	240mm	**CW8147135**	Price
27/64	12mm	190mm	240mm	**CW8147140**	Price
7/16	12mm	215mm	265mm	**CW8147151**	Price

(continued to next page)

Coolant Thru High Performance Drills (cont.)

Solid Carbide • 3xD to 50xD Lengths

- 135° Point
- 15° Helix
- ZRCN coated
- Triple guided margin
- Ideal for aluminum, cast materials and non-ferrous materials
- PCT Cutters List #AXC



Length - 16xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
29/64	12mm	215mm	265mm	**CW8147160**	Price
15/32	12mm	215mm	265mm	**CW8147165**	Price

Length - 20xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	80mm	120mm	**CW8147295**	Price
9/64	6mm	90mm	130mm	**CW8147315**	Price
5/32	6mm	90mm	130mm	**CW8147325**	Price
11/64	6mm	110mm	160mm	**CW8147340**	Price
3/16	6mm	120mm	160mm	**CW8147355**	Price
13/64	6mm	140mm	185mm	**CW8147365**	Price
7/32	6mm	140mm	185mm	**CW8147375**	Price
15/64	6mm	140mm	185mm	**CW8147385**	Price
1/4	8mm	160mm	210mm	**CW8147390**	Price
17/64	8mm	160mm	210mm	**CW8147400**	Price
9/32	8mm	180mm	230mm	**CW8147415**	Price
19/64	8mm	180mm	230mm	**CW8147425**	Price
5/16	8mm	180mm	230mm	**CW8147435**	Price
21/64	10mm	195mm	260mm	**CW8147440**	Price
11/32	10mm	230mm	290mm	**CW8147450**	Price
23/64	10mm	230mm	290mm	**CW8147460**	Price
3/8	10mm	230mm	290mm	**CW8147465**	Price

Length - 25xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	98mm	135mm	**CW8147615**	Price
9/64	6mm	120mm	160mm	**CW8147635**	Price
5/32	6mm	120mm	160mm	**CW8147645**	Price
11/64	6mm	135mm	180mm	**CW8147660**	Price
3/16	6mm	135mm	180mm	**CW8147675**	Price
13/64	6mm	168mm	205mm	**CW8147685**	Price
7/32	6mm	168mm	205mm	**CW8147695**	Price
15/64	6mm	168mm	205mm	**CW8147705**	Price
1/4	8mm	200mm	240mm	**CW8147715**	Price
17/64	8mm	200mm	240mm	**CW8147725**	Price
9/32	8mm	220mm	260mm	**CW8147735**	Price
19/64	8mm	220mm	260mm	**CW8147745**	Price
5/16	8mm	220mm	260mm	**CW8147755**	Price

Length - 25xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
21/64	10mm	240mm	285mm	**CW8147765**	Price
11/32	10mm	268mm	310mm	**CW8147775**	Price
23/64	10mm	268mm	310mm	**CW8147790**	Price
3/8	10mm	268mm	310mm	**CW8147795**	Price

Length - 30xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	105mm	150mm	**CW8147865**	Price
9/64	6mm	135mm	185mm	**CW8147885**	Price
5/32	6mm	135mm	185mm	**CW8147895**	Price
11/64	6mm	165mm	215mm	**CW8147910**	Price
3/16	6mm	165mm	215mm	**CW8147920**	Price
13/64	6mm	180mm	230mm	**CW8147930**	Price
7/32	6mm	180mm	230mm	**CW8147940**	Price
15/64	6mm	180mm	230mm	**CW8147950**	Price
1/4	8mm	215mm	280mm	**CW8147960**	Price
17/64	8mm	230mm	280mm	**CW8147970**	Price
9/32	8mm	230mm	280mm	**CW8147985**	Price
19/64	8mm	265mm	315mm	**CW8147995**	Price
5/16	8mm	265mm	315mm	**CW8148005**	Price
11/32	10mm	350mm	400mm	**CW8148025**	Price
3/8	10mm	350mm	400mm	**CW8148045**	Price

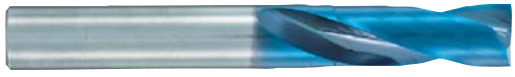
Length - 40xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	140mm	190mm	**CW8148085**	Price
3/16	6mm	220mm	270mm	**CW8148125**	Price
7/32	6mm	240mm	290mm	**CW8148145**	Price
1/4	8mm	290mm	340mm	**CW8148165**	Price
9/32	8mm	320mm	370mm	**CW8148190**	Price
5/16	8mm	350mm	400mm	**CW8148210**	Price

Length - 50xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
3/16	6mm	275mm	320mm	**CW8148255**	Price
7/32	6mm	310mm	360mm	**CW8148275**	Price
1/4	6mm	340mm	385mm	**CW8148291**	Price

NACHI AQUA Drill EX Flat

Stub Length & Non-Coolant Thru
List No. L9611 • Solid Carbide

- One step drilling with minimum burrs
- 20° Helix
- AQUA EX coated
- True 180° flat point



Drill Dia. (in.)	Dec. Equiv.	Shank Dia.	LOC	OAL	Order No.	Price
1/8	.1250	6mm	15mm	50mm	**AC861455595**	Price
5/32	.1562	6mm	18mm	50mm	**AC861455600**	Price
9/32	.2183	6mm	33mm	70mm	**AC861455646**	Price
7/32	.2188	6mm	25mm	60mm	**AC861455623**	Price
1/4	.2500	6mm	30mm	70mm	**AC861455630**	Price
5/16	.3125	6mm	36mm	70mm	**AC861455652**	Price
21/64	.3281	8mm	39mm	80mm	**AC861455669**	Price
23/64	.3594	8mm	42mm	80mm	**AC861455675**	Price
3/8	.3750	8mm	43mm	80mm	**AC861455681**	Price

Drill Dia. (in.)	Dec. Equiv.	Shank Dia.	LOC	OAL	Order No.	Price
13/32	.4062	10mm	48mm	90mm	**AC861455698**	Price
7/16	.4375	10mm	51mm	90mm	**AC861455703**	Price
29/64	.4531	10mm	52mm	90mm	**AC861455710**	Price
15/32	.4688	10mm	54mm	90mm	**AC861455726**	Price
1/2	.5000	12mm	58mm	100mm	**AC861455732**	Price
9/16	.5625	12mm	64mm	105mm	**AC861455749**	Price
5/8	.6250	12mm	72mm	115mm	**AC861455755**	Price
11/16	.6875	16mm	79mm	125mm	**AC861455761**	Price
3/4	.7500	16mm	87mm	135mm	**AC861455778**	Price

Coolant Thru High Performance Drills

Solid Carbide • 16xD to 50xD Lengths

- 135° Point
- 30° Helix
- AlTiN coated
- Ideal for aluminum, cast materials
- PCT Cutters List #SXC

New!



Length - 16xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	60mm	100mm	**CW8167820**	Price
9/64	6mm	75mm	115mm	**CW8167840**	Price
5/32	6mm	75mm	115mm	**CW8167850**	Price
11/64	6mm	90mm	130mm	**CW8167865**	Price
3/16	6mm	90mm	130mm	**CW8167880**	Price
13/64	6mm	108mm	150mm	**CW8167895**	Price
7/32	6mm	108mm	150mm	**CW8167905**	Price
15/64	6mm	108mm	150mm	**CW8167915**	Price
1/4	8mm	125mm	165mm	**CW8167925**	Price
17/64	8mm	125mm	165mm	**CW8167935**	Price
9/32	8mm	140mm	180mm	**CW8167950**	Price
19/64	8mm	140mm	180mm	**CW8167960**	Price
5/16	8mm	140mm	180mm	**CW8167970**	Price
21/64	10mm	160mm	205mm	**CW8167980**	Price
11/32	10mm	160mm	205mm	**CW8167990**	Price
23/64	10mm	180mm	225mm	**CW8168005**	Price
3/8	10mm	180mm	225mm	**CW8168010**	Price
25/64	10mm	180mm	225mm	**CW8168020**	Price
13/32	12mm	190mm	240mm	**CW8168035**	Price
27/64	12mm	190mm	240mm	**CW8168040**	Price
7/16	12mm	215mm	265mm	**CW8168051**	Price
29/64	12mm	215mm	265mm	**CW8168060**	Price
15/32	12mm	215mm	265mm	**CW8168065**	Price

Length - 20xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	80mm	120mm	**CW8168195**	Price
9/64	6mm	90mm	130mm	**CW8168215**	Price
5/32	6mm	90mm	130mm	**CW8168225**	Price
11/64	6mm	110mm	160mm	**CW8168240**	Price
3/16	6mm	120mm	160mm	**CW8168255**	Price
13/64	6mm	140mm	185mm	**CW8168270**	Price
7/32	6mm	140mm	185mm	**CW8168280**	Price
15/64	6mm	140mm	185mm	**CW8168290**	Price
1/4	8mm	160mm	210mm	**CW8168300**	Price
17/64	8mm	160mm	210mm	**CW8168310**	Price
9/32	8mm	180mm	230mm	**CW8168325**	Price
19/64	8mm	180mm	230mm	**CW8168335**	Price
5/16	8mm	180mm	230mm	**CW8168345**	Price
21/64	10mm	195mm	260mm	**CW8168355**	Price
11/32	10mm	230mm	290mm	**CW8168365**	Price
23/64	10mm	230mm	290mm	**CW8168380**	Price
3/8	10mm	230mm	290mm	**CW8168385**	Price
25/64	10mm	230mm	290mm	**CW8168395**	Price
13/32	12mm	268mm	315mm	**CW8168410**	Price
27/64	12mm	268mm	315mm	**CW8168415**	Price
7/16	12mm	268mm	315mm	**CW8168426**	Price
29/64	12mm	268mm	315mm	**CW8168435**	Price
15/32	12mm	268mm	315mm	**CW8168440**	Price

Length - 25xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	98mm	135mm	**CW8168535**	Price
9/64	6mm	120mm	160mm	**CW8168550**	Price
5/32	6mm	120mm	160mm	**CW8168560**	Price
11/64	6mm	135mm	180mm	**CW8168575**	Price
3/16	6mm	135mm	180mm	**CW8168590**	Price
13/64	6mm	168mm	205mm	**CW8168600**	Price
7/32	6mm	168mm	205mm	**CW8168610**	Price
15/64	6mm	168mm	205mm	**CW8168620**	Price
1/4	8mm	200mm	240mm	**CW8168630**	Price
17/64	8mm	200mm	240mm	**CW8168640**	Price
9/32	8mm	220mm	260mm	**CW8168655**	Price
19/64	8mm	220mm	260mm	**CW8168665**	Price
5/16	8mm	220mm	260mm	**CW8168675**	Price
21/64	10mm	240mm	285mm	**CW8168685**	Price
11/32	10mm	268mm	310mm	**CW8168695**	Price
23/64	10mm	268mm	310mm	**CW8168710**	Price
3/8	10mm	268mm	310mm	**CW8168715**	Price

Length - 30xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	105mm	150mm	**CW8168790**	Price
9/64	6mm	135mm	185mm	**CW8168810**	Price
5/32	6mm	135mm	185mm	**CW8168820**	Price
11/64	6mm	165mm	215mm	**CW8168835**	Price
3/16	6mm	165mm	215mm	**CW8168845**	Price
13/64	6mm	180mm	230mm	**CW8168855**	Price
7/32	6mm	180mm	230mm	**CW8168865**	Price
15/64	6mm	180mm	230mm	**CW8168875**	Price
1/4	8mm	215mm	280mm	**CW8168885**	Price
17/64	8mm	230mm	280mm	**CW8168895**	Price
9/32	8mm	230mm	280mm	**CW8168910**	Price
19/64	8mm	265mm	315mm	**CW8168920**	Price
5/16	8mm	265mm	315mm	**CW8168930**	Price
21/64	10mm	275mm	325mm	**CW8168940**	Price
11/32	10mm	300mm	350mm	**CW8168950**	Price
23/64	10mm	300mm	350mm	**CW8168965**	Price
3/8	10mm	315mm	365mm	**CW8168970**	Price

Length - 40xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/8	6mm	140mm	190mm	**CW8169010**	Price
5/32	6mm	180mm	230mm	**CW8169025**	Price
3/16	6mm	220mm	270mm	**CW8169050**	Price
7/32	6mm	240mm	290mm	**CW8169070**	Price
1/4	8mm	290mm	340mm	**CW8169090**	Price
9/32	8mm	320mm	370mm	**CW8169115**	Price
5/16	8mm	350mm	400mm	**CW8169135**	Price

Length - 50xD					
Drill Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
3/16	6mm	275mm	320mm	**CW8169180**	Price
7/32	6mm	310mm	360mm	**CW8169200**	Price
1/4	6mm	340mm	385mm	**CW8169216**	Price

NACHI AQUA Drill EX Flat

List No. L9610 • Solid Carbide

New!

- **One step drilling with minimum burrs**
- 20° Helix
- AQUA EX coated
- Stub length
- Non-Coolant thru
- True 180° flat point



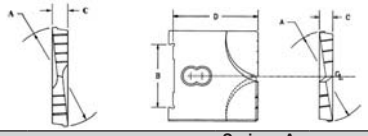
Drill Dia.	Dec. Equiv.	Shank Dia.	Flute Length	OAL	Order No.	Price
0.2mm	.0079	3mm	0.68mm	47mm	**AC860751974**	Price
0.3mm	.0118	3mm	0.99mm	47mm	**AC860751968**	Price
0.4mm	.0157	3mm	1.32mm	47mm	**AC860751951**	Price
0.5mm	.0197	3mm	1.65mm	47mm	**AC860737198**	Price
0.6mm	.0236	3mm	1.98mm	47mm	**AC860737181**	Price
0.7mm	.0276	3mm	2.31mm	47mm	**AC860737175**	Price
0.8mm	.0315	3mm	2.64mm	47mm	**AC860737169**	Price
0.9mm	.0354	3mm	2.97mm	47mm	**AC860737152**	Price
1.0mm	.0394	3mm	3.3mm	47mm	**AC86715148**	Price
1.1mm	.0433	3mm	3.5mm	47mm	**AC860715154**	Price
1.2mm	.0472	3mm	3.9mm	47mm	**AC860715160**	Price
1.3mm	.0512	3mm	4.2mm	47mm	**AC860715177**	Price
1.4mm	.0551	3mm	4.6mm	47mm	**AC860715183**	Price
1.5mm	.0591	3mm	4.9mm	50mm	**AC860715190**	Price
1.6mm	.0630	3mm	5.2mm	50mm	**AC86715205**	Price
1.7mm	.0669	3mm	5.5mm	50mm	**AC860715211**	Price
1.8mm	.0709	3mm	5.8mm	50mm	**AC860715228**	Price
1.9mm	.0748	3mm	6.2mm	50mm	**AC860715234**	Price
2.0mm	.0787	4mm	9mm	50mm	**AC860711354**	Price
2.1mm	.0827	4mm	11mm	50mm	**AC86713180**	Price
2.2mm	.0866	4mm	11mm	50mm	**AC860711360**	Price
2.3mm	.0906	4mm	11mm	50mm	**AC860713197**	Price
2.4mm	.0945	4mm	12mm	50mm	**AC86713202**	Price
2.5mm	.0984	4mm	12mm	50mm	**AC86711377**	Price
2.6mm	.1024	4mm	12mm	50mm	**AC86713219**	Price
2.7mm	.1063	4mm	14mm	50mm	**AC860713225**	Price
2.8mm	.1102	4mm	14mm	50mm	**AC86713231**	Price
2.9mm	.1142	4mm	14mm	50mm	**AC860713248**	Price
3.0mm	.1181	6mm	14mm	50mm	**AC860709920**	Price
3.1mm	.1220	6mm	15mm	50mm	**AC86713254**	Price
3.2mm	.1260	6mm	15mm	50mm	**AC86713260**	Price
3.3mm	.1299	6mm	15mm	50mm	**AC860710839**	Price
3.4mm	.1339	6mm	16mm	50mm	**AC860713277**	Price
3.5mm	.1378	6mm	16mm	50mm	**AC86709936**	Price
3.6mm	.1417	6mm	16mm	50mm	**AC86713283**	Price
3.7mm	.1457	6mm	18mm	50mm	**AC860713290**	Price
3.8mm	.1496	6mm	18mm	50mm	**AC860713305**	Price
3.9mm	.1535	6mm	18mm	50mm	**AC860713311**	Price
4.0mm	.1575	6mm	18mm	50mm	**AC860709942**	Price
4.1mm	.1614	6mm	19mm	60mm	**AC860713328**	Price
4.2mm	.1654	6mm	19mm	60mm	**AC860710845**	Price
4.3mm	.1693	6mm	19mm	60mm	**AC860713334**	Price
4.4mm	.1732	6mm	21mm	60mm	**AC86713340**	Price
4.5mm	.1772	6mm	21mm	60mm	**AC860709959**	Price
4.6mm	.1811	6mm	21mm	60mm	**AC860713357**	Price
4.7mm	.1850	6mm	22mm	60mm	**AC860713363**	Price
4.8mm	.1890	6mm	22mm	60mm	**AC860713370**	Price
4.9mm	.1929	6mm	22mm	60mm	**AC860713386**	Price
5.0mm	.1969	6mm	23mm	60mm	**AC86709965**	Price
5.1mm	.2008	6mm	24mm	60mm	**AC860713392**	Price
5.2mm	.2047	6mm	24mm	60mm	**AC860713408**	Price
5.3mm	.2087	6mm	24mm	60mm	**AC860711390**	Price
5.4mm	.2126	6mm	25mm	60mm	**AC860713414**	Price
5.5mm	.2165	6mm	25mm	60mm	**AC860709971**	Price
5.6mm	.2205	6mm	25mm	60mm	**AC860713420**	Price
5.7mm	.2244	6mm	27mm	60mm	**AC860713437**	Price
5.8mm	.2283	6mm	27mm	60mm	**AC860713443**	Price
5.9mm	.2323	6mm	27mm	60mm	**AC860713450**	Price
6.0mm	.2362	6mm	27mm	60mm	**AC86709988**	Price
6.1mm	.2402	6mm	28mm	70mm	**AC860713466**	Price
6.2mm	.2441	6mm	28mm	70mm	**AC860713472**	Price
6.3mm	.2480	6mm	28mm	70mm	**AC860713489**	Price
6.4mm	.2520	6mm	30mm	70mm	**AC860713495**	Price
6.5mm	.2559	6mm	30mm	70mm	**AC860709994**	Price
6.6mm	.2598	6mm	30mm	70mm	**AC860713500**	Price
6.7mm	.2638	6mm	31mm	70mm	**AC860713517**	Price
6.8mm	.2677	6mm	31mm	70mm	**AC860710851**	Price
6.9mm	.2717	6mm	31mm	70mm	**AC860713523**	Price
7.0mm	.2756	6mm	32mm	70mm	**AC860710008**	Price
7.1mm	.2795	6mm	33mm	70mm	**AC860713530**	Price
7.2mm	.2835	6mm	33mm	70mm	**AC860713546**	Price
7.3mm	.2874	6mm	33mm	70mm	**AC860713552**	Price
7.4mm	.2913	6mm	34mm	70mm	**AC860713569**	Price
7.5mm	.2953	6mm	34mm	70mm	**AC860710014**	Price
7.6mm	.2992	6mm	34mm	70mm	**AC860713575**	Price
7.7mm	.3031	6mm	36mm	70mm	**AC860713581**	Price
7.8mm	.3071	6mm	36mm	70mm	**AC860713598**	Price
7.9mm	.3110	6mm	36mm	70mm	**AC860713603**	Price
8.0mm	.3150	8mm	36mm	70mm	**AC860710020**	Price
8.1mm	.3189	8mm	37mm	80mm	**AC860713610**	Price
8.2mm	.3228	8mm	37mm	80mm	**AC860713626**	Price
8.3mm	.3268	8mm	37mm	80mm	**AC860713632**	Price
8.4mm	.3307	8mm	39mm	80mm	**AC86713649**	Price
8.5mm	.3346	8mm	39mm	80mm	**AC860710037**	Price
8.6mm	.3386	8mm	39mm	80mm	**AC860713655**	Price
8.7mm	.3425	8mm	40mm	80mm	**AC860713661**	Price
8.8mm	.3465	8mm	40mm	80mm	**AC860711405**	Price
8.9mm	.3504	8mm	40mm	80mm	**AC860713678**	Price
9.0mm	.3543	8mm	41mm	80mm	**AC860710043**	Price
9.1mm	.3583	8mm	42mm	80mm	**AC860713684**	Price
9.2mm	.3622	8mm	43mm	80mm	**AC860713690**	Price
9.3mm	.3661	8mm	43mm	80mm	**AC860713706**	Price
9.4mm	.3701	8mm	43mm	80mm	**AC860713712**	Price
9.5mm	.3740	8mm	43mm	80mm	**AC860710050**	Price
9.6mm	.3780	8mm	43mm	80mm	**AC860713729**	Price
9.7mm	.3819	8mm	45mm	80mm	**AC86713735**	Price
9.8mm	.3858	8mm	45mm	80mm	**AC860713741**	Price
9.9mm	.3898	8mm	45mm	80mm	**AC860713758**	Price
10.0mm	.3937	10mm	45mm	80mm	**AC860710066**	Price
10.1mm	.3976	10mm	46mm	90mm	**AC860713764**	Price
10.2mm	.4016	10mm	46mm	90mm	**AC860713770**	Price
10.3mm	.4055	10mm	46mm	90mm	**AC860710868**	Price
10.4mm	.4094	10mm	48mm	90mm	**AC860713787**	Price
10.5mm	.4134	10mm	48mm	90mm	**AC860710072**	Price
10.6mm	.4173	10mm	48mm	90mm	**AC860713793**	Price
10.7mm	.4213	10mm	49mm	90mm	**AC860713809**	Price
10.8mm	.4252	10mm	49mm	90mm	**AC860711411**	Price
10.9mm	.4291	10mm	49mm	90mm	**AC860713815**	Price
11.0mm	.4331	10mm	50mm	90mm	**AC860710089**	Price
11.1mm	.4370	10mm	51mm	90mm	**AC860713821**	Price
11.2mm	.4409	10mm	51mm	90mm	**AC860713838**	Price
11.3mm	.4449	10mm	51mm	90mm	**AC860713844**	Price
11.4mm	.4488	10mm	52mm	90mm	**AC860713850**	Price
11.5mm	.4528	10mm	52mm	90mm	**AC860710095**	Price
11.6mm	.4567	10mm	52mm	90mm	**AC860713867**	Price
11.7mm	.4606	10mm	54mm	90mm	**AC860713873**	Price
11.8mm	.4646	10mm	54mm	90mm	**AC860713880**	Price
11.9mm	.4685	10mm	54mm	90mm	**AC860713896**	Price
12.0mm	.4724	12mm	54mm	90mm	**AC860710100**	Price
12.1mm	.4764	12mm	54mm	100mm	**AC860724619**	Price
12.2mm	.4803	12mm	54mm	100mm	**AC860724625**	Price
12.3mm	.4843	12mm	54mm	100mm	**AC860724631**	Price
12.4mm	.4882	12mm	54mm	100mm	**AC860724648**	Price
12.5mm	.4921	12mm	57mm	100mm	**AC860710117**	Price
12.6mm	.4961	12mm	57mm	100mm	**AC860724654**	Price
12.7mm	.5000	12mm	57mm	100mm	**AC860724660**	Price
12.8mm	.5039	12mm	57mm	100mm	**AC860724677**	Price
12.9mm	.5079	12mm	57mm	100mm	**AC860724683**	Price
13.0mm	.5118	12mm	59mm	100mm	**AC860710123**	Price
13.1mm	.5157	12mm	59mm	100mm	**AC860724690**	Price
13.2mm	.5197	12mm	59mm	100mm	**AC860724705**	Price
13.3mm	.5236	12mm	59mm	100mm	**AC860724711**	Price
13.4mm	.5276	12mm	59mm	100mm	**AC860724728**	Price
13.5mm	.5315	12mm	61mm	100mm	**AC860710130**	Price
13.6mm	.5354	12mm	61mm	100mm	**AC860724734**	Price
13.7mm	.5394	12mm	61mm	100mm	**AC860724740**	Price
13.8mm	.5433	12mm	61mm	100mm	**AC860724757**	Price
13.9mm	.5472	12mm	61mm	100mm	**AC860724763**	Price
14.0mm	.5512	12mm	63mm	100mm	**AC860710146**	Price
14.1mm	.5551	12mm	63mm	100mm	**AC860724770**	Price
14.2mm	.5591	12mm	63mm	100mm	**AC860724786**	Price
14.3mm	.5630	12mm	63mm	100mm	**AC860724792**	Price
14.4mm	.5669	12mm	63mm	100mm	**AC860724808**	Price
14.5mm	.5709	12mm	66mm	105mm	**AC860710152**	Price
14.6mm	.5748	12mm	66mm	105mm	**AC860724814**	Price
14.7mm	.5787	12mm	66mm	105mm	**AC860724820**	Price
14.8mm	.5827	12mm	66mm	105mm	**AC860724837**	Price
14.9mm	.5866	12mm	66mm	105mm	**AC860724843**	Price
15.0mm	.5906	12mm	68mm	105mm	**AC860710169**	Price
15.1mm	.5945	12mm	68mm	105mm	**AC860724850**	Price
15.2mm	.5984	12mm	68mm	105mm	**AC860724866**	Price
15.3mm	.6024	12mm	68mm	105mm	**AC860724872**	Price
15.4mm	.6063	12mm	68mm	105mm	**AC860724889**	Price
15.5mm	.6102	12mm	70mm	115mm	**AC860710175**	Price
15.6mm	.6142	12mm	70mm	115mm	**AC860724895**	Price
15.7mm	.6181	12mm	70mm	115mm	**AC860724900**	Price
15.8mm	.6220	12mm	70mm	115mm	**AC860724917**	Price
15.9mm	.6260	12mm	70mm	115mm	**AC860724923**	Price
16.0mm	.6299	16mm	72mm	115mm	**AC860710181**	Price
16.5mm	.6496	16mm	75mm	115mm	**AC860710198**	Price
17.0mm	.6693	16mm	77mm	125mm	**AC860710203**	Price
17.5mm	.6890	16mm	79mm	125mm	**AC860710210**	Price
18.0mm	.7087	16mm	81mm	125mm	**AC860710226**	Price
18.5mm	.7283	16mm	84mm	135mm	**AC860710232**	Price
19.0mm	.7480	16mm	86mm	135mm	**AC860710249**	Price
19.5mm	.7677	16mm	88mm	145mm	**AC860710255**	Price
20.0mm	.7874	20mm	90mm	145mm	**AC860710261**	Price

ALLIED MACHINE & ENGINEERING CORP Universal Spade Drill Blades

130° Standard & Flat Bottom CPM-4 High Speed Steel

- Universal style and high performance spade drills use the same holders
- Universal style spade drills and holders are interchangeable with most other manufacturer's products
- Flat bottom drills are used as a secondary finishing tool for bottoming and finishing flat bottom holes





Series - A
Locating Area (B) (in.) - 3/4 Thickness (C) (in.) - 3/16 Ref. Length (D) (in.) - 1-5/32

	HSS CPM-4 Uncoated 130°		HSS CPM-4 Uncoated Flat Bottom	
Size (in.)	Order No.	Price	Order No.	Price
31/32	BA50102140031	Price	-	-
1	BA50102140100	Price	BA53104140100	Price
1-1/32	BA50102140101	Price	-	-
1-1/16	BA50102140102	Price	BA53104140102	Price
1-3/32	BA50102140103	Price	-	-
1-1/8	BA50102140104	Price	BA53104140104	Price
1-5/32	BA50102140105	Price	-	-
1-3/16	BA50102140106	Price	BA53104140106	Price
1-7/32	BA50102140107	Price	-	-
1-1/4	BA50102140108	Price	BA53104140108	Price
1-9/32	BA50102140109	Price	-	-
1-5/16	BA50102140110	Price	-	-
1-3/8	BA50102140112	Price	-	-

Series - AA
Locating Area (B) (in.) - 13/16 Thickness (C) (in.) - 1/4 Ref. Length (D) (in.) - 1-5/32

	HSS CPM-4 Uncoated Flat Bottom	
Size (in.)	Order No.	Price
1-1/8	BA53104040104	Price

Series - B
Locating Area (B) (in.) - 1-1/16 Thickness (C) (in.) - 9/32 Ref. Length (D) (in.) - 1-13/32

	HSS CPM-4 Uncoated 130°		HSS CPM-4 Uncoated Flat Bottom	
Size (in.)	Order No.	Price	Order No.	Price
1-1/4	BA50102240108	Price	BA53104240108	Price
1-9/32	BA50102240109	Price	-	-
1-5/16	BA50102240110	Price	BA53104240110	Price
1-11/32	BA50102240111	Price	-	-
1-3/8	BA50102240112	Price	BA53104240112	Price
1-7/16	BA50102240114	Price	BA53104240114	Price
1-15/32	BA50102240115	Price	-	-
1-1/2	BA50102240116	Price	BA53104240116	Price
1-9/16	BA50102240118	Price	-	-
1-5/8	BA50102240120	Price	-	-
1-11/16	BA50102240122	Price	-	-
1-3/4	BA50102240124	Price	-	-

Series - C
Locating Area (B) (in.) - 1-1/4 Thickness (C) (in.) - 5/16 Ref. Length (D) (in.) - 2

	HSS CPM-4 Uncoated 130°		HSS CPM-4 Uncoated Flat Bottom	
Size (in.)	Order No.	Price	Order No.	Price
1-1/2	BA50102340116	Price	BA53104340116	Price
1-9/16	BA50102340118	Price	BA53104340118	Price
1-19/32	BA50102340119	Price	-	-
1-5/8	BA50102340120	Price	BA53104340120	Price
1-11/16	BA50102340122	Price	BA53104340122	Price
1-23/32	BA50102340123	Price	-	-
1-3/4	BA50102340124	Price	BA53104340124	Price
1-25/32	BA50102340125	Price	-	-
1-13/16	BA50102340126	Price	BA53104340126	Price
1-7/8	BA50102340128	Price	BA53104340128	Price
1-29/32	BA50102340129	Price	-	-
1-15/16	BA50102340130	Price	BA53104340130	Price
1-31/32	BA50102340131	Price	-	-
2	BA50102340200	Price	BA53104340200	Price
2-1/32	BA50102340201	Price	-	-
2-1/16	BA50102340202	Price	-	-
2-1/8	BA50102340204	Price	-	-
2-5/32	BA50102340205	Price	-	-
2-3/16	BA50102340206	Price	-	-
2-1/4	BA50102340208	Price	-	-
2-5/16	BA50102340210	Price	-	-
2-3/8	BA50102340212	Price	-	-

Series - D
Locating Area (B) (in.) - 1-3/4 Thickness (C) (in.) - 3/8 Ref. Length (D) (in.) - 2-3/8

	HSS CPM-4 Uncoated 130°		HSS CPM-4 Uncoated Flat Bottom	
Size (in.)	Order No.	Price	Order No.	Price
2	BA50102440200	Price	BA53104440200	Price
2-1/32	BA50102440201	Price	-	-
2-1/16	BA50102440202	Price	BA53104440202	Price
2-1/8	BA50102440204	Price	BA53104440204	Price
2-3/16	BA50102440206	Price	BA53104440206	Price
2-7/32	BA50102440207	Price	-	-
2-1/4	BA50102440208	Price	BA53104440208	Price
2-9/32	BA50102440209	Price	-	-
2-5/16	BA50102440210	Price	BA53104440210	Price
2-11/32	BA50102440211	Price	-	-

Series - D
Locating Area (B) (in.) - 1-3/4 Thickness (C) (in.) - 3/8 Ref. Length (D) (in.) - 2-3/8

	HSS CPM-4 Uncoated 130°		HSS CPM-4 Uncoated Flat Bottom	
Size (in.)	Order No.	Price	Order No.	Price
2-3/8	BA50102440212	Price	BA53104440212	Price
2-7/16	BA50102440214	Price	BA53104440214	Price
2-15/32	BA50102440215	Price	-	-
2-1/2	BA50102440216	Price	BA53104440216	Price
2-17/32	BA50102440217	Price	-	-
2-9/16	BA50102440218	Price	-	-
2-5/8	BA50102440220	Price	-	-
2-11/16	BA50102440222	Price	-	-
2-3/4	BA50102440224	Price	-	-
2-13/16	BA50102440226	Price	-	-
2-7/8	BA50102440228	Price	-	-

Price

	Price		HSS CPM-4 Uncoated Flat Bottom	
Size (in.)	Order No.	Price	Order No.	Price
2-1/2	BA50102540216	Price	BA53104540216	Price
2-9/16	BA50102540218	Price	BA53104540218	Price
2-19/32	BA50102540219	Price	-	-
2-5/8	BA50102540220	Price	BA53104540220	Price
2-11/16	BA50102540222	Price	BA53104540222	Price
2-3/4	BA50102540224	Price	BA53104540224	Price
2-13/16	BA50102540226	Price	BA53104540226	Price
2-7/8	BA50102540228	Price	BA53104540228	Price
2-15/16	BA50102540230	Price	BA53104540230	Price
3	BA50102540300	Price	BA53104540300	Price
3-1/32	BA50102540301	Price	-	-
3-1/16	BA50102540302	Price	-	-
3-1/8	BA50102540304	Price	-	-
3-3/16	BA50102540306	Price	-	-
3-1/4	BA50102540308	Price	-	-
3-5/16	BA50102540310	Price	-	-
3-3/8	BA50102540312	Price	-	-

Series - F
Locating Area (B) (in.) - 2-5/8 Thickness (C) (in.) - 1/2 Ref. Length (D) (in.) - 3-1/8

	HSS CPM-4 Uncoated 130°		HSS CPM-4 Uncoated Flat Bottom	
Size (in.)	Order No.	Price	Order No.	Price
3	BA50102640300	Price	BA53104640300	Price
3-1/16	BA50102640302	Price	BA53104640302	Price
3-1/8	BA50102640304	Price	BA53104640304	Price
3-5/32	BA50102640305	Price	-	-
3-3/16	BA50102640306	Price	BA53104640306	Price
3-1/4	BA50102640308	Price	BA53104640308	Price
3-3/8	BA50102640312	Price	BA53104640312	Price
3-7/16	BA50102640314	Price	BA53104640314	Price
3-1/2	BA50102640316	Price	BA53104640316	Price
3-9/16	BA50102640318	Price	-	-
3-19/32	BA50102640319	Price	-	-
3-5/8	BA50102640320	Price	-	-
3-3/4	BA50102640324	Price	-	-
3-7/8	BA50102640328	Price	-	-

Series - G
Locating Area (B) (in.) - 3-1/16 Thickness (C) (in.) - 5/8 Ref. Length (D) (in.) - 3-3/8

	HSS CPM-4 Uncoated 130°		HSS CPM-4 Uncoated Flat Bottom	
Size (in.)	Order No.	Price	Order No.	Price
3-1/2	BA50102740316	Price	BA53104740316	Price
3-9/16	BA50102740318	Price	BA53104740318	Price
3-3/4	BA50102740324	Price	BA53104740324	Price
3-7/8	BA50102740328	Price	BA53104740328	Price
4	BA50102740400	Price	BA53104740400	Price
4-1/8	BA50102740404	Price	-	-
4-1/4	BA50102740408	Price	-	-
4-1/2	BA50102740416	Price	-	-

Series - H1
Locating Area (B) (in.) - 3-1/2 Thickness (C) (in.) - 11/16 Ref. Length (D) (in.) - 3-11/16

	HSS CPM-4 Uncoated 130°		HSS CPM-4 Uncoated Flat Bottom	
Size (in.)	Order No.	Price	Order No.	Price
4	BA50102840400	Price	BA53104840400	Price
4-1/16	BA50102840402	Price	-	-
4-1/8	BA50102840404	Price	BA53104840404	Price
4-1/4	BA50102840408	Price	BA53104840408	Price
4-3/8	BA50102840412	Price	BA53104840412	Price
4-1/2	BA50102840416	Price	BA53104840416	Price
4-3/4	-	-	BA53104840424	Price
5	-	-	BA53104840500	Price

Series - H2
Locating Area (B) (in.) - 3-1/2 Thickness (C) (in.) - 11/16 Ref. Length (D) (in.) - 3-11/16

	HSS CPM-4 Uncoated 130°	
Size (in.)	Order No.	Price
4-9/16	BA50102840418	Price
4-3/4	BA50102840424	Price
5	BA50102840500	Price

Series - H3
Locating Area (B) (in.) - 3-1/2 Thickness (C) (in.) - 11/16 Ref. Length (D) (in.) - 4-11/16

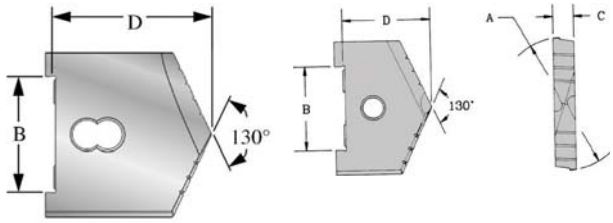
	HSS CPM-4 Uncoated 130°	
Size (in.)	Order No.	Price
5-3/8	BA50102940512	Price
5-1/2	BA50102940516	Price

Series - H4
Locating Area (B) (in.) - 3-1/2 Thickness (C) (in.) - 11/16 Ref. Length (D) (in.) - 4-11/16

	HSS CPM-4 Uncoated 130°	
Size (in.)	Order No.	Price
6	BA50102940600	Price

Series H blades available up to 8-1/2" size. Please inquire.

ALLIED MACHINE & ENGINEERING CORP High Performance Spade Drill Blades



TiN Coated 130°

Offers higher production levels than universal style spade drills. Reduced length and unique geometry improves rigidity while coating, increases tool life and performance. Increased performance levels of 100% to 500% are not uncommon.

- High performance spade drills use the same holders as the universal style blades.
- High performance spade drills and holders are interchangeable with most other manufacturer's products
- TiN coated blades increase tool life 3 to 10 times that of uncoated tools
- Largest inventory of spade drill products in the United States

Series - A Locating Area (B) (in.) - 3/4 Thickness (C) (in.) - 3/16 Reference Length (in.) - 7/8		
	HSS CPM-4 TiN Coated 130°	
Size (in.)	Order No.	Price
31/32	BA511021T0031	Price
1	BA511021T0100	Price
1-1/32	BA511021T0101	Price
1-1/16	BA511021T0102	Price
1-3/32	BA511021T0103	Price
1-1/8	BA511021T0104	Price
1-5/32	BA511021T0105	Price
1-3/16	BA511021T0106	Price
1-7/32	BA511021T0107	Price
1-1/4	BA511021T0108	Price
1-9/32	BA511021T0109	Price
1-5/16	BA511021T0110	Price
1-11/32	BA511021T0111	Price
1-3/8	BA511021T0112	Price

Series - B Locating Area (B) (in.) - 1-1/16 Thickness (C) (in.) - 9/32 Reference Length (in.) - 1-3/32		
	HSS CPM-4 TiN Coated 130°	
Size (in.)	Order No.	Price
1-1/4	BA511022T0108	Price
1-9/32	BA511022T0109	Price
1-5/16	BA511022T0110	Price
1-11/32	BA511022T0111	Price
1-3/8	BA511022T0112	Price
1-13/32	BA511022T0113	Price
1-7/16	BA511022T0114	Price
1-15/32	BA511022T0115	Price
1-1/2	BA511022T0116	Price
1-17/32	BA511022T0117	Price
1-9/16	BA511022T0118	Price
1-19/32	BA511022T0119	Price
1-5/8	BA511022T0120	Price
1-11/16	BA511022T0122	Price
1-23/32	BA511022T0123	Price
1-3/4	BA511022T0124	Price

Series - C Locating Area (B) (in.) - 1-1/4 Thickness (C) (in.) - 5/16 Reference Length (in.) - 1-19/64		
	HSS CPM-4 TiN Coated 130°	
Size (in.)	Order No.	Price
1-1/2	BA511023T0116	Price
1-17/32	BA511023T0117	Price
1-9/16	BA511023T0118	Price
1-5/8	BA511023T0120	Price
1-21/32	BA511023T0121	Price
1-11/16	BA511023T0122	Price
1-23/32	BA511023T0123	Price
1-3/4	BA511023T0124	Price
1-25/32	BA511023T0125	Price
1-13/16	BA511023T0126	Price
1-7/8	BA511023T0128	Price
1-29/32	BA511023T0129	Price
1-15/16	BA511023T0130	Price
1-31/32	BA511023T0131	Price
2	BA511023T0200	Price
2-1/32	BA511023T0201	Price

Series - C Locating Area (B) (in.) - 1-1/4 Thickness (C) (in.) - 5/16 Reference Length (in.) - 1-19/64		
	HSS CPM-4 TiN Coated 130°	
Size (in.)	Order No.	Price
2-1/16	BA511023T0202	Price
2-1/8	BA511023T0204	Price
2-3/16	BA511023T0206	Price
2-1/4	BA511023T0208	Price
2-5/16	BA511023T0210	Price
2-3/8	BA511023T0212	Price

Price		
	Price	
Size (in.)	Order No.	Price
2	BA511024T0200	Price
2-1/32	BA511024T0201	Price
2-1/16	BA511024T0202	Price
2-1/8	BA511024T0204	Price
2-5/32	BA511024T0205	Price
2-3/16	BA511024T0206	Price
2-1/4	BA511024T0208	Price
2-5/16	BA511024T0210	Price
2-11/32	BA511024T0211	Price
2-3/8	BA511024T0212	Price
2-7/16	BA511024T0214	Price
2-1/2	BA511024T0216	Price
2-9/16	BA511024T0218	Price
2-5/8	BA511024T0220	Price
2-11/16	BA511024T0222	Price
2-3/4	BA511024T0224	Price
2-13/16	BA511024T0226	Price
2-7/8	BA511024T0228	Price

Series - E Locating Area (B) (in.) - 2-1/16 Thickness (C) (in.) - 7/16 Reference Length (in.) - 1-7/16		
	HSS CPM-4 TiN Coated 130°	
Size (in.)	Order No.	Price
2-1/2	BA511025T0216	Price
2-9/16	BA511025T0218	Price
2-5/8	BA511025T0220	Price
2-11/16	BA511025T0222	Price
2-3/4	BA511025T0224	Price
2-13/16	BA511025T0226	Price
2-7/8	BA511025T0228	Price
2-15/16	BA511025T0230	Price
3	BA511025T0300	Price
3-1/16	BA511025T0302	Price
3-1/8	BA511025T0304	Price
3-3/16	BA511025T0306	Price
3-1/4	BA511025T0308	Price
3-5/16	BA511025T0310	Price
3-3/8	BA511025T0312	Price

Series - F Locating Area (B) (in.) - 2-5/8 Thickness (C) (in.) - 1/2 Reference Length (in.) - 1-13/16		
	HSS CPM-4 TiN Coated 130°	
Size (in.)	Order No.	Price
3	BA511026T0300	Price
3-1/8	BA511026T0304	Price
3-1/4	BA511026T0308	Price
3-3/8	BA511026T0312	Price

Series - F Locating Area (B) (in.) - 2-5/8 Thickness (C) (in.) - 1/2 Reference Length (in.) - 1-13/16		
	HSS CPM-4 TiN Coated 130°	
Size (in.)	Order No.	Price
3-7/16	BA511026T0314	Price
3-1/2	BA511026T0316	Price
3-9/16	BA511026T0318	Price
3-5/8	BA511026T0320	Price
3-3/4	BA511026T0324	Price
3-13/16	BA511026T0326	Price
3-7/8	BA511026T0328	Price

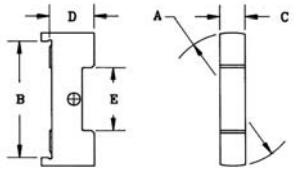
Price		
	Price	
Size (in.)	Order No.	Price
3-9/16	BA511027T0318	Price
3-5/8	BA511027T0320	Price
3-7/8	BA511027T0328	Price
3-15/16	BA511027T0330	Price
4	BA511027T0400	Price
4-1/4	BA511027T0408	Price
4-1/2	BA511027T0416	Price

Series - H Locating Area (B) (in.) - 3-1/2 Thickness (C) (in.) - 11/16 Reference Length (in.) - 2-3/16		
	HSS CPM-4 TiN Coated 130°	
Size (in.)	Order No.	Price
4-1/4	BA511028T0408	Price
4-5/8	BA511028T0420	Price
5	BA511028T0500	Price

Fax or call us for sizes or styles not listed. They can be promptly supplied.

Adapters for High Performance Blades

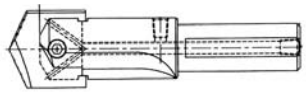
For use with style 2 (series D – H) high performance spade drill blades.



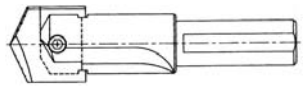
Series	Order No.	Price
D	BA511024U	Price
E	BA511025U	Price
F	BA511026U	Price
G	BA511027U	Price
H	BA511028U	Price

Allied Straight Shank Universal & High Performance Spade Drill Holders

- Straight shank holders are used in non-rotating applications, such as CNC lathes, automatic screw machines, or turret lathes
- For those holders with through-the-tool coolant, connections are made through a tapered pipe tap in the side of the holder body or at the end of the shank-a pipe plug is provided to close off the unused coolant inlet hole



Coolant Fed Straight Shank



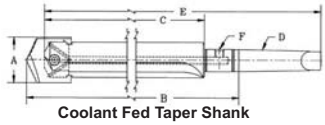
Straight Shank without Coolant

Series	Style	Blade Size Cutting Range (in.)	Reference Lgth. (in.)	Flute Lgth. (in.)	Shank (in.)	Shank Lgth. (in.)	OAL (in.)	Pipe Tap	Order No.	Price
A	Non-Coolant Fed	31/32 to 1-3/8	3-9/16	3	1	3-1/2	6-1/2	-	**BA55204111000**	Price
A	Coolant-Fed	31/32 to 1-3/8	3-9/16	3	1	3-1/2	6-1/2	1/8	**BA55206111000**	Price
A	Coolant-Fed	31/32 to 1-3/8	8-5/16	7-3/4	1	3-1/2	11-1/4	1/8	**BA55208111000**	Price
A	Coolant-Fed	31/32 to 1-3/8	15-9/16	15	1	3-1/2	18-1/2	1/8	**BA55210111000**	Price
B	Non-Coolant Fed	1-1/4 to 1-3/4	4-3/32	3-1/2	1	3-1/2	7	-	**BA55204211000**	Price
B	Coolant-Fed	1-1/4 to 1-3/4	4-3/32	3-1/2	1	3-1/2	7	1/4	**BA55206211000**	Price
B	Coolant-Fed	1-1/4 to 1-3/4	8-23/32	8-1/8	1	3-1/2	11-5/8	1/4	**BA55208211000**	Price
B	Coolant-Fed	1-1/4 to 1-3/4	4-3/32	3-1/2	1-1/4	3-1/2	7	1/4	**BA55206211250**	Price
B	Coolant-Fed	1-1/4 to 1-3/4	8-23/32	8-1/8	1-1/4	3-1/2	11-5/8	1/4	**BA55208211250**	Price
B	Coolant-Fed	1-1/4 to 1-3/4	15-19/32	15	1-1/4	3-1/2	18-1/2	1/4	**BA55210211250**	Price
C	Non-Coolant Fed	1-1/2 to 2-3/8	5	4	1-1/4	4	8	-	**BA55204311250**	Price
C	Coolant-Fed	1-1/2 to 2-3/8	5	4	1-1/4	4	8	1/4	**BA55206311250**	Price
C	Coolant-Fed	1-1/2 to 2-3/8	5	4	1-1/2	4	8	1/4	**BA55206311500**	Price
C	Coolant-Fed	1-1/2 to 2-3/8	9-1/2	8-1/2	1-1/4	4	12-1/2	1/4	**BA55208311250**	Price
C	Coolant-Fed	1-1/2 to 2-3/8	9-1/2	8-1/2	1-1/2	4	12-1/2	1/4	**BA55208311500**	Price
C	Coolant-Fed	1-1/2 to 2-3/8	19	18	1-1/2	4	22	1/4	**BA55210311500**	Price
D†	Non-Coolant Fed	2 to 2-7/8	5-1/2	4-1/2	1-1/2	4	8-1/2	-	**BA55204411500**	Price
D†	Coolant-Fed	2 to 2-7/8	5-1/2	4-1/2	1-1/2	4	8-1/2	1/4	**BA55206411500**	Price
D†	Coolant-Fed	2 to 2-7/8	10	9	1-1/2	4	13	1/4	**BA55208411500**	Price
D†	Coolant-Fed	2 to 2-7/8	19	18	1-1/2	4	22	1/4	**BA55210411500**	Price
E†	Non-Coolant Fed	2-1/2 to 3-3/8	6-1/16	5	1-3/4	4	9	-	**BA55204511750**	Price
E†	Coolant-Fed	2-1/2 to 3-3/8	11-1/16	10	2	4	14	1/2	**BA55208512000**	Price
F†	Non-Coolant Fed	3 to 3-7/8	6-3/4	5-1/2	2	4	9-1/2	1/8	**BA55204612000**	Price
F†	Coolant-Fed	3 to 3-7/8	6-3/4	5-1/2	2	4	9-1/2	1/2	**BA55206612000**	Price
F†	Coolant-Fed	3 to 3-7/8	12-3/4	11-1/2	2	4	15-1/2	1/2	**BA55208612000**	Price
E†	Coolant-Fed	2-1/2 to 3-3/8	21-1/16	20	2	4	24	1/2	**BA55210512000**	Price
F†	Coolant-Fed	3 to 3-7/8	21-1/4	20	2-1/2	4	24	1/2	**BA55210612500**	Price
G†	Coolant-Fed	3-1/2 to 4-1/2	7-7/16	6	2-1/2	5	11	1/2	**BA55206712500**	Price
G†	Coolant-Fed	3-1/2 to 4-1/2	14-7/16	13	2-1/2	5	18	1/2	**BA55208712500**	Price
H†	Coolant-Fed	4 to 8-1/2	8-9/16	7	2-1/2	6	13	1/2	**BA55206812500**	Price
H†	Coolant-Fed	4 to 8-1/2	16-9/16	15	2-1/2	6	21	1/2	**BA55208812500**	Price

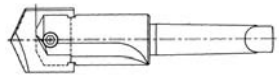
†Note: Series D through H high performance spade drill blades require the use of a spade drill adapter.

Allied Taper Shank Universal & High Performance Spade Drill Holders

- Taper shank holders are used in rotating applications, such as boring mills, drill presses, vertical & horizontal machining centers, etc
- For rotating applications with through-the-tool coolant, a rotary coolant area is provided
- Coolant is induced into the holder via an RCA (rotary coolant adapter)



Coolant Fed Taper Shank



Taper Shank without Coolant

Series	Style	Blade Size Cutting Range (in.)	Reference Lgth. (in.)	Flute Lgth. (in.)	Shank (in.)	Shank Lgth. (in.)	OAL (in.)	Pipe Tap	Coolant Adaptor	Order No.	Price
A	Non-Coolant Fed	31/32 to 1-3/8	3-3/4	3	3MT	3-7/8	6-7/8	-	-	**BA55214110003**	Price
A	Coolant-Fed	31/32 to 1-3/8	5-1/2	3	4MT	4-7/8	9-9/16	1/4	2T4SR	**BA55216110004**	Price
A	Coolant-Fed	31/32 to 1-3/8	10-1/4	7-3/4	4MT	4-7/8	14-5/16	1/4	2T4SR	**BA55218110004**	Price
A	Coolant-Fed	31/32 to 1-3/8	17-1/2	15	4MT	4-7/8	21-9/16	1/4	2T4SR	**BA55220110004**	Price
B	Non-Coolant Fed	1-1/4 to 1-3/4	4-9/32	3-1/2	3MT	3-7/8	7-3/8	-	-	**BA55214210003**	Price
B	Non-Coolant Fed	1-1/4 to 1-3/4	4-11/32	3-1/2	4MT	4-7/8	8-3/8	-	-	**BA55214210004**	Price
B	Coolant-Fed	1-1/4 to 1-3/4	6-1/32	3-1/2	4MT	4-7/8	10-1/16	1/4	2T4SR	**BA55216210004**	Price
B	Coolant-Fed	1-1/4 to 1-3/4	10-21/32	8-1/8	4MT	4-7/8	14-11/16	1/4	2T4SR	**BA55218210004**	Price
B	Coolant-Fed	1-1/4 to 1-3/4	17-17/32	15	4MT	4-7/8	21-9/16	1/4	2T4SR	**BA55220210004**	Price
C	Non-Coolant Fed	1-1/2 to 2-3/8	5-1/4	4	4MT	4-7/8	8-7/8	-	-	**BA55214310004**	Price
C	Coolant-Fed	1-1/2 to 2-3/8	6-15/16	4	4MT	4-7/8	10-9/16	1/4	2T4SR	**BA55216310004**	Price
C	Coolant-Fed	1-1/2 to 2-3/8	11-7/16	8-1/2	4MT	4-7/8	15-1/16	1/4	2T4SR	**BA55218310004**	Price
C	Coolant-Fed	1-1/2 to 2-3/8	20-15/16	18	4MT	4-7/8	24-9/16	1/4	2T4SR	**BA55220310004**	Price
D†	Non-Coolant Fed	2 to 2-7/8	5-3/4	4-1/2	4MT	4-7/8	9-3/8	-	-	**BA55214410004**	Price
D†	Coolant-Fed	2 to 2-7/8	7-7/16	4-1/2	4MT	4-7/8	11-1/16	1/4	2T4SR	**BA55216410004**	Price
D†	Coolant-Fed	2 to 2-7/8	11-15/16	9	4MT	4-7/8	15-9/16	1/4	2T4SR	**BA55218410004**	Price
D†	Coolant-Fed	2 to 2-7/8	20-15/16	18	4MT	4-7/8	24-9/16	1/4	2T4SR	**BA55220410004**	Price
E†	Non-Coolant Fed	2-1/2 to 3-3/8	6-5/16	5	4MT	4-7/8	9-7/8	-	-	**BA55214510004**	Price
E†	Coolant-Fed	2-1/2 to 3-3/8	8-5/8	5	5MT	6-1/8	13-7/16	1/2	2T6SR	**BA55216510005**	Price
E†	Coolant-Fed	2-1/2 to 3-3/8	13-5/8	10	5MT	6-1/8	18-7/16	1/2	2T6SR	**BA55218510005**	Price
E†	Coolant-Fed	2-1/2 to 3-3/8	23-5/8	20	5MT	6-1/8	28-7/16	1/2	2T6SR	**BA55220510005**	Price
F†	Non-Coolant Fed	3 to 3-7/8	7	5-1/2	5MT	6-1/8	11-5/8	-	-	**BA55214610005**	Price
F†	Coolant-Fed	3 to 3-7/8	9-5/16	5-1/2	5MT	6-1/8	13-15/16	1/2	2T6SR	**BA55216610005**	Price
F†	Coolant-Fed	3 to 3-7/8	15-5/16	11-1/2	5MT	6-1/8	19-15/16	1/2	2T6SR	**BA55218610005**	Price
F†	Coolant-Fed	3 to 3-7/8	23-9/16	20	5MT	6-1/8	28-7/16	1/2	2T6SR	**BA55220610005**	Price
G†	Non-Coolant Fed	3-1/2 to 4-1/2	7-11/16	6	5MT	6-1/8	12-1/8	-	-	**BA55214710005**	Price
G†	Coolant-Fed	3-1/2 to 4-1/2	10	6	5MT	6-1/8	14-7/16	1/2	2T6SR	**BA55216710005**	Price
G†	Coolant-Fed	3-1/2 to 4-1/2	17	13	5MT	6-1/8	21-7/16	1/2	2T6SR	**BA55218710005**	Price
H†	Non-Coolant Fed	4 to 8-1/2	8-13/16	7	5MT	6-1/8	13-1/8	-	-	**BA55214810005**	Price
H†	Coolant-Fed	4 to 8-1/2	11-1/8	7	5MT	6-1/8	15-7/16	1/2	2T6SR	**BA55216810005**	Price
H†	Coolant-Fed	4 to 8-1/2	19-1/8	15	5MT	6-1/8	23-9/16	1/2	2T6SR	**BA55218810005**	Price
G†	Coolant-Fed	3-1/2 to 4-1/2	28	24	5MT	6-1/8	32-7/16	1/2	2T6SR	**BA55220710005**	Price

†Note: Series D through H high performance spade drill blades require the use of a spade drill adapter.
Extra long series spade drill holders are available on request

Original T-A drill inserts are an excellent choice for gerneral purpose use. The design provides fast penetration rates that produce good hole size and finish. Standard geometry combines highly efficient and stable cutting action to minimize power consumption. Recommended for use in most steels, cast irons, high temperature alloys and aluminum alloys.
Gen2 T-A is the next generation in replaceable tip drilling systems. Gen2 T-A provides for lower drilling forces with increased drill stability. The geometry allows for smoother breakout on through holes and improved chip formation.
Flat Bottom T-A drills are used as a secondary finishing tool for bottoming and for flat bottom finishing.
MATERIALS:
HSS (CPM-M4) This tool steel grade possesses the highest material toughness to resist shock. It will drill the majority of steels and cast irons in the industry that are below 280 BHN.
Super Cobalt (CPM-T15) This tool steel grade exhibits mid-range wear resistance and toughness. This grade with provide increased wear resistance in any ferrous or non-ferrous application within the 280-359 BHN range.
Premium Cobalt the most wear-resistant tool steel. It is more susceptible to fracture from shock and vibration. It is recommended for hard materials (350-500 BHN) as well as abrasive materials.
COATINGS:
TiN coating provides increased lubricity and heat resistance and allows for increased machining speeds.
TiAlN coating has a higher heat threshold allowing for higher drilling speeds in stainless steels, titanium and nickel-based alloys. Has proven successful in cast iron applications. Not for aluminum.
AM200 proprietary coating has excellent wear characteristics and a high heat threshold. Ideal for most high penetration drilling applications.

Super Cobalt Flat Bottom T-A® Drill Inserts

- Flat bottom T-A drills are used as a secondary finishing tool for bottom finishing

Series - Super Cobalt (CPM-T15) / Series 0-Flat Bottom		
Cutting Diameter (Inch/Metric)	Order No.	Price
33/64	BA52150T515FB	Price
17/32	BA52150T0017FB	Price
9/16	BA52150T0018FB	Price
37/64	BA52150T578FB	Price
19/32	BA52150T0019FB	Price
5/8	BA52150T0020FB	Price
21/32	BA52150T0021FB	Price
11/16	BA52150T0022FB	Price
13mm	BA52150T13FB	Price
13.5mm	BA52150T135FB	Price
14mm	BA52150T14FB	Price
14.5mm	BA52150T145FB	Price
15mm	BA52150T15FB	Price
15.5mm	BA52150T155FB	Price
16mm	BA52150T16FB	Price

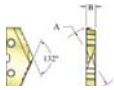
Series - Super Cobalt (CPM-T15) / Series 0-Flat Bottom		
Cutting Diameter (Inch/Metric)	Order No.	Price
16.5mm	BA52150T165FB	Price
17mm	BA52150T17FB	Price
17.5mm	BA52150T175FB	Price

Series - Super Cobalt (CPM-T15) / Series Y-Flat Bottom		
Cutting Diameter (Inch/Metric)	Order No.	Price
3/8	BA5215YT0012FB	Price
25/64	BA5215YT390FB	Price
13/32	BA5215YT0013FB	Price
27/64	BA5215YT421FB	Price
9.5mm	BA5215YT95FB	Price
9.8mm	BA5215YT386FB	Price
10mm	BA5215YT10FB	Price
10.2mm	BA5215YT102FB	Price

Series - Super Cobalt (CPM-T15) / Series Y-Flat Bottom		
Cutting Diameter (Inch/Metric)	Order No.	Price
10.5mm	BA5215YT105FB	Price
10.8mm	BA5215YT108FB	Price
11mm	BA5215YT11FB	Price

Series - Super Cobalt (CPM-T15) / Series Z-Flat Bottom		
Cutting Diameter (Inch/Metric)	Order No.	Price
7/16	BA5215ZT0014FB	Price
29/64	BA5215ZT453FB	Price
15/32	BA5215ZT0015FB	Price
31/64	BA5215ZT484FB	Price
1/2	BA5215ZT0016FB	Price
11.5mm	BA5215ZT115FB	Price
12mm	BA5215ZT12FB	Price
12.5mm	BA5215ZT125FB	Price

Standard T-A® Drill Inserts Series Y





Blade Thickness - 3/32”

GEN2 T-A

	Super Cobalt (CPM-T15)						Premium Cobalt			
	AM200		TiAlN		TiN		TiAlN		TiN	
	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/8	BA5245YH0012	Price	BA5215YA0012	Price	BA5215YT0012	Price	BA5218YA0012	Price	BA5218YT0012	Price
.386"(W)	BA5245YH386	Price	-	-	-	-	-	-	-	-
25/64	BA5245YH390	Price	BA5215YA390	Price	BA5215YT390	Price	BA5218YA390	Price	BA5218YT390	Price
13/32	BA5245YH0013	Price	BA5215YA0013	Price	BA5215YT0013	Price	BA5218YA0013	Price	BA5218YT0013	Price
27/64	BA5245YH421	Price	BA5215YA421	Price	BA5215YT421	Price	BA5218YA421	Price	BA5218YT421	Price
9.5mm	BA5245YH95	Price	BA5215YA95	Price	BA5215YT95	Price	BA5218YA95	Price	BA5218YT95	Price
9.8mm	-	-	BA5215YA386	Price	BA5215YT386	Price	-	-	BA5218YT386	Price
10mm	BA5245YH10	Price	BA5215YA10	Price	BA5215YT10	Price	BA5218YA10	Price	BA5218YT10	Price
10.2mm	BA5245YH102	Price	BA5215YA102	Price	BA5215YT102	Price	BA5218YA102	Price	BA5218YT102	Price
10.5mm	BA5245YH105	Price	BA5215YA105	Price	BA5215YT105	Price	BA5218YA105	Price	BA5218YT105	Price
10.8mm	BA5245YH108	Price	BA5215YA108	Price	BA5215YT108	Price	BA5218YA108	Price	BA5218YT108	Price
11mm	BA5245YH11	Price	BA5215YA11	Price	BA5215YT11	Price	BA5218YA11	Price	BA5218YT11	Price

Standard T-A® Drill Inserts Series Z

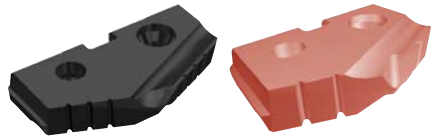
Blade Thickness - 3/32”

GEN2 T-A

	Super Cobalt (CPM-T15)						Premium Cobalt			
	AM200		TiAlN		TiN		TiAlN		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
7/16	BA5245ZH0014	Price	BA5215ZA0014	Price	BA5215ZT0014	Price	BA5218ZA0014	Price	BA5218ZT0014	Price
29/64	BA5245ZH453	Price	BA5215ZA453	Price	BA5215ZT453	Price	BA5218ZA453	Price	BA5218ZT453	Price
15/32	BA5245ZH0015	Price	BA5215ZA0015	Price	BA5215ZT0015	Price	BA5218ZA0015	Price	BA5218ZT0015	Price
31/64	BA5245ZH484	Price	BA5215ZA484	Price	BA5215ZT484	Price	BA5218ZA484	Price	BA5218ZT484	Price
1/2	BA5245ZH0016	Price	BA5215ZA0016	Price	BA5215ZT0016	Price	BA5218ZA0016	Price	BA5218ZT0016	Price
11.5mm	BA5245ZH115	Price	BA5215ZA115	Price	BA5215ZT115	Price	BA5218ZA115	Price	BA5218ZT115	Price
12mm	BA5245ZH12	Price	BA5215ZA12	Price	BA5215ZT12	Price	BA5218ZA12	Price	BA5218ZT12	Price
12.5mm	BA5245ZH125	Price	BA5215ZA125	Price	BA5215ZT125	Price	BA5218ZA125	Price	BA5218ZT125	Price

ALLIED MACHINE & ENGINEERING CORP Standard T-A® Drill Inserts Series 0

Blade Thickness - 1/8”

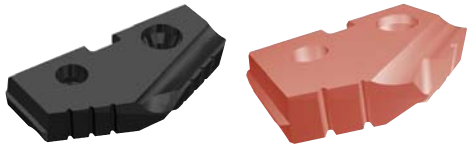


GEN2 T-A

	Super Cobalt (CPM-T15)						Premium Cobalt			
	AM200		TiAlN		TiN		TiAlN		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
33/64	BA52450H515	Price	BA52150A515	Price	BA52150T515	Price	BA52180A515	Price	BA52180T515	Price
17/32	BA52450H0017	Price	BA52150A0017	Price	BA52150T0017	Price	BA52180A0017	Price	BA52180T0017	Price
35/64	BA52450H546	Price	BA52150A546	Price	BA52150T546	Price	BA52180A546	Price	BA52180T546	Price
9/16	BA52450H0018	Price	BA52150A0018	Price	BA52150T0018	Price	BA52180A0018	Price	BA52180T0018	Price
37/64	BA52450H578	Price	BA52150A578	Price	BA52150T578	Price	BA52180A578	Price	BA52180T578	Price
19/32	BA52450H0019	Price	BA52150A0019	Price	BA52150T0019	Price	BA52180A0019	Price	BA52180T0019	Price
39/64	BA52450H609	Price	BA52150A609	Price	BA52150T609	Price	BA52180A609	Price	BA52180T609	Price
5/8	BA52450H0020	Price	BA52150A0020	Price	BA52150T0020	Price	BA52180A0020	Price	BA52180T0020	Price
41/64	BA52450H640	Price	BA52150A640	Price	BA52150T640	Price	BA52180A640	Price	BA52180T640	Price
21/32	BA52450H0021	Price	BA52150A0021	Price	BA52150T0021	Price	BA52180A0021	Price	BA52180T0021	Price
43/64	BA52450H671	Price	BA52150A671	Price	BA52150T671	Price	BA52180A671	Price	BA52180T671	Price
11/16	BA52450H0022	Price	BA52150A0022	Price	BA52150T0022	Price	BA52180A0022	Price	BA52180T0022	Price
13mm	BA52450H13	Price	BA52150A13	Price	BA52150T13	Price	BA52180A13	Price	BA52180T13	Price
13.5mm	BA52450H135	Price	BA52150A135	Price	BA52150T135	Price	BA52180A135	Price	BA52180T135	Price
14mm	BA52450H14	Price	BA52150A14	Price	BA52150T14	Price	BA52180A14	Price	BA52180T14	Price
14.5mm	BA52450H145	Price	BA52150A145	Price	BA52150T145	Price	BA52180A145	Price	BA52180T145	Price
15mm	BA52450H15	Price	BA52150A15	Price	BA52150T15	Price	BA52180A15	Price	BA52180T15	Price
15.5mm	BA52450H155	Price	BA52150A155	Price	BA52150T155	Price	BA52180A155	Price	BA52180T155	Price
16mm	BA52450H16	Price	BA52150A16	Price	BA52150T16	Price	BA52180A16	Price	BA52180T16	Price
16.5mm	BA52450H165	Price	BA52150A165	Price	BA52150T165	Price	BA52180A165	Price	BA52180T165	Price
17mm	-	-	-	-	-	-	BA52180A17	Price	BA52180T17	Price
17.5mm	BA52450H175	Price	BA52150A175	Price	BA52150T175	Price	BA52180A175	Price	BA52180T175	Price

ALLIED MACHINE & ENGINEERING CORP Standard T-A® Drill Inserts Series 1

Blade Thickness - 5/32”



	HSS (CPM-M4)				Premium Cobalt			
	TiAlN		TiN		TiAlN		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
45/64	BA52131A703	Price	BA52131T703	Price	BA52181A703	Price	BA52181T703	Price
23/32	BA52131A0023	Price	BA52131T0023	Price	BA52181A0023	Price	BA52181T0023	Price
47/64	BA52131A734	Price	BA52131T734	Price	BA52181A734	Price	BA52181T734	Price
3/4	BA52131A0024	Price	BA52131T0024	Price	BA52181A0024	Price	BA52181T0024	Price
49/64	BA52131A765	Price	BA52131T765	Price	BA52181A765	Price	BA52181T765	Price
25/32	BA52131A0025	Price	BA52131T0025	Price	BA52181A0025	Price	BA52181T0025	Price
51/64	BA52131A796	Price	BA52131T796	Price	BA52181A796	Price	BA52181T796	Price
13/16	BA52131A0026	Price	BA52131T0026	Price	BA52181A0026	Price	BA52181T0026	Price
27/32	BA52131A0027	Price	BA52131T0027	Price	BA52181A0027	Price	BA52181T0027	Price
55/64	BA52131A859	Price	BA52131T859	Price	BA52181A859	Price	BA52181T859	Price
7/8	BA52131A0028	Price	BA52131T0028	Price	BA52181A0028	Price	BA52181T0028	Price
57/64	BA52131A890	Price	BA52131T890	Price	BA52181A890	Price	BA52181T890	Price
29/32	BA52131A0029	Price	BA52131T0029	Price	BA52181A0029	Price	BA52181T0029	Price
59/64	BA52131A921	Price	BA52131T921	Price	BA52181A921	Price	BA52181T921	Price
15/16	BA52131A0030	Price	BA52131T0030	Price	BA52181A0030	Price	BA52181T0030	Price
18mm	BA52131A18	Price	BA52131T18	Price	BA52181A18	Price	BA52181T18	Price
18.5mm	BA52131A185	Price	BA52131T185	Price	BA52181A185	Price	BA52181T185	Price
19mm	BA52131A19	Price	BA52131T19	Price	BA52181A19	Price	BA52181T19	Price
19.5mm	BA52131A195	Price	BA52131T195	Price	BA52181A195	Price	BA52181T195	Price
20mm	BA52131A20	Price	BA52131T20	Price	BA52181A20	Price	BA52181T20	Price
20.5mm	BA52131A205	Price	BA52131T205	Price	BA52181A205	Price	BA52181T205	Price
21mm	BA52131A21	Price	BA52131T21	Price	BA52181A21	Price	BA52181T21	Price
22mm	BA52131A22	Price	BA52131T22	Price	BA52181A22	Price	BA52181T22	Price
23mm	BA52131A23	Price	BA52131T23	Price	BA52181A23	Price	BA52181T23	Price
24mm	BA52131A24	Price	BA52131T24	Price	BA52181A24	Price	BA52181T24	Price

ALLIED MACHINE & ENGINEERING CORP Standard T-A® Drill Inserts Series 1

Blade Thickness - 5/32”





GEN2 T-A

	Super Cobalt (CPM-T15)					
	AM200		TiAlN		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price	Order No.	Price
45/64	BA52451H703	Price	BA52151A703	Price	BA52151T703	Price
23/32	BA52451H0023	Price	BA52151A0023	Price	BA52151T0023	Price
47/64	BA52451H734	Price	BA52151A734	Price	BA52151T734	Price
3/4	BA52451H0024	Price	BA52151A0024	Price	-	-
49/64	BA52451H765	Price	BA52151A765	Price	BA52151T765	Price
25/32	BA52451H0025	Price	BA52151A0025	Price	BA52151T0025	Price
51/64	BA52451H796	Price	BA52151A796	Price	BA52151T796	Price
13/16	BA52451H0026	Price	BA52151A0026	Price	BA52151T0026	Price
27/32	BA52451H0027	Price	BA52151A0027	Price	BA52151T0027	Price
55/64	BA52451H859	Price	BA52151A859	Price	BA52151T859	Price
7/8	BA52451H0028	Price	BA52151A0028	Price	BA52151T0028	Price
57/64	BA52451H890	Price	BA52151A890	Price	BA52151T890	Price
29/32	BA52451H0029	Price	BA52151A0029	Price	BA52151T0029	Price
59/64	BA52451H921	Price	BA52151A921	Price	BA52151T921	Price
15/16	BA52451H0030	Price	BA52151A0030	Price	BA52151T0030	Price
18mm	BA52451H18	Price	BA52151A18	Price	BA52151T18	Price
18.5mm	BA52451H185	Price	BA52151A185	Price	BA52151T185	Price
19mm	BA52451H19	Price	BA52151A19	Price	BA52151T19	Price
19.5mm	BA52451H195	Price	BA52151A195	Price	BA52151T195	Price
20mm	BA52451H20	Price	BA52151A20	Price	BA52151T20	Price
20.5mm	BA52451H205	Price	BA52151A205	Price	BA52151T205	Price
21mm	BA52451H21	Price	BA52151A21	Price	BA52151T21	Price
22mm	BA52451H22	Price	BA52151A22	Price	BA52151T22	Price
23mm	BA52451H23	Price	BA52151A23	Price	BA52151T23	Price
24mm	BA52451H24	Price	BA52151A24	Price	BA52151T24	Price

ALLIED MACHINE & ENGINEERING CORP Standard T-A® Drill Inserts Series 2

Blade Thickness - 3/16”



	HSS (CPM-M4)				Premium Cobalt			
	TiAlN		TiN		TiAlN		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
31/32	BA52132A0031	Price	BA52132T0031	Price	BA52182A0031	Price	BA52182T0031	Price
1	BA52132A0100	Price	BA52132T0100	Price	BA52182A0100	Price	BA52182T0100	Price
1-1/64	BA52132A1015	Price	BA52132T1015	Price	BA52182A1015	Price	BA52182T1015	Price
1-1/32	BA52132A0101	Price	BA52132T0101	Price	BA52182A0101	Price	BA52182T0101	Price
1-3/64	BA52132A1046	Price	BA52132T1046	Price	BA52182A1046	Price	BA52182T1046	Price
1-1/16	BA52132A0102	Price	BA52132T0102	Price	BA52182A0102	Price	BA52182T0102	Price
1-3/32	BA52132A0103	Price	BA52132T0103	Price	BA52182A0103	Price	BA52182T0103	Price
1-7/64	BA52132A1109	Price	BA52132T1109	Price	BA52182A1109	Price	BA52182T1109	Price
1-1/8	BA52132A0104	Price	BA52132T0104	Price	BA52182A0104	Price	BA52182T0104	Price
1-5/32	BA52132A0105	Price	BA52132T0105	Price	BA52182A0105	Price	BA52182T0105	Price
1-3/16	BA52132A0106	Price	BA52132T0106	Price	BA52182A0106	Price	BA52182T0106	Price
1-7/32	BA52132A0107	Price	BA52132T0107	Price	BA52182A0107	Price	BA52182T0107	Price
1-1/4	BA52132A0108	Price	BA52132T0108	Price	BA52182A0108	Price	BA52182T0108	Price
1-9/32	BA52132A0109	Price	BA52132T0109	Price	BA52182A0109	Price	BA52182T0109	Price
1-5/16	BA52132A0110	Price	BA52132T0110	Price	BA52182A0110	Price	BA52182T0110	Price
1-11/32	BA52132A0111	Price	BA52132T0111	Price	BA52182A0111	Price	BA52182T0111	Price
1-3/8	BA52132A0112	Price	BA52132T0112	Price	BA52182A0112	Price	BA52182T0112	Price
25mm	-	-	-	-	-	-	BA52182T25	Price
26mm	-	-	-	-	-	-	BA52182T26	Price
27mm	-	-	-	-	-	-	BA52182T27	Price
28mm	-	-	-	-	-	-	BA52182T28	Price
29mm	-	-	-	-	-	-	BA52182T29	Price
30mm	-	-	-	-	-	-	BA52182T30	Price
31mm	-	-	-	-	-	-	BA52182T31	Price
32mm	-	-	-	-	-	-	BA52182T32	Price
33mm	-	-	-	-	-	-	BA52182T33	Price
34mm	-	-	-	-	-	-	BA52182T34	Price
35mm	-	-	-	-	-	-	BA52182T35	Price

ALLIED MACHINE & ENGINEERING CORP Standard T-A® Drill Inserts Series 2

Blade Thickness - 3/16”



GEN2 T-A

Super Cobalt (CPM-T15)						
	AM200		TiAlN		TiN	
Cutting Diameter (Inch/ Metric)	Order No.	Price	Order No.	Price	Order No.	Price
31/32	BA52452H0031	Price	BA52152A0031	Price	BA52152T0031	Price
63/64	-	-	-	-	BA52152T25	Price
1	BA52452H0100	Price	BA52152A0100	Price	BA52152T0100	Price
1-1/64	BA52452H1015	Price	BA52152A1015	Price	BA52152T1015	Price
1-1/32	BA52452H0101	Price	BA52152A0101	Price	BA52152T0101	Price
1-3/64	BA52452H1046	Price	BA52152A1046	Price	BA52152T1046	Price
1-1/16	BA52452H0102	Price	BA52152A0102	Price	BA52152T0102	Price
1-3/32	BA52452H0103	Price	BA52152A0103	Price	BA52152T0103	Price
1-7/64	BA52452H1109	Price	BA52152A1109	Price	BA52152T1109	Price
1-1/8	BA52452H0104	Price	BA52152A0104	Price	BA52152T0104	Price
1-5/32	BA52452H0105	Price	BA52152A0105	Price	BA52152T0105	Price
1-3/16	BA52452H0106	Price	BA52152A0106	Price	BA52152T0106	Price
1-7/32	BA52452H0107	Price	BA52152A0107	Price	BA52152T0107	Price
1-1/4	BA52452H0108	Price	BA52152A0108	Price	BA52152T0108	Price
1-9/32	BA52452H0109	Price	BA52152A0109	Price	BA52152T0109	Price
1-5/16	BA52452H0110	Price	BA52152A0110	Price	BA52152T0110	Price
1-11/32	BA52452H0111	Price	BA52152A0111	Price	BA52152T0111	Price
1-3/8	BA52452H0112	Price	BA52152A0112	Price	BA52152T0112	Price
25mm	BA52452H25	Price	BA52152A25	Price	-	-
26mm	BA52452H26	Price	BA52152A26	Price	-	-
27mm	BA52452H27	Price	BA52152A27	Price	-	-
28mm	BA52452H28	Price	BA52152A28	Price	-	-
29mm	BA52452H29	Price	BA52152A29	Price	-	-
30mm	BA52452H30	Price	BA52152A30	Price	-	-
31mm	BA52452H31	Price	BA52152A31	Price	-	-
32mm	BA52452H32	Price	-	-	-	-
33mm	BA52452H33	Price	BA52152A33	Price	-	-
34mm	BA52452H34	Price	BA52152A34	Price	-	-
35mm	BA52452H35	Price	BA52152A35	Price	-	-

ALLIED MACHINE & ENGINEERING CORP Standard T-A® Drill Inserts Series 3

Blade Thickness - 1/4”



GEN2 T-A GEN2 T-A GEN2 T-A

	HSS (CPM-M4)		Super Cobalt (CPM-T15)			
	TiN		AM200		TiN	
Cutting Diameter (Inch/ Metric)	Order No.	Price	Order No.	Price	Order No.	Price
1-13/32	BA52433T0113	Price	BA52453H0113	Price	BA52453T0113	Price
1-7/16	BA52433T0114	Price	BA52453H0114	Price	BA52453T0114	Price
1-15/32	BA52433T0115	Price	BA52453H0115	Price	BA52453T0115	Price
1-1/2	BA52433T0116	Price	BA52453H0116	Price	BA52453T0116	Price
1-17/32	BA52433T0117	Price	BA52453H0117	Price	BA52453T0117	Price
1-9/16	BA52433T0118	Price	BA52453H0118	Price	BA52453T0118	Price
1-19/32	BA52433T0119	Price	BA52453H0119	Price	BA52453T0119	Price
1-5/8	BA52433T0120	Price	BA52453H0120	Price	BA52453T0120	Price
1-21/32	BA52433T0121	Price	BA52453H0121	Price	BA52453T0121	Price
1-11/16	BA52433T0122	Price	BA52453H0122	Price	BA52453T0122	Price
1-23/32	BA52433T0123	Price	BA52453H0123	Price	BA52453T0123	Price
1-3/4	BA52433T0124	Price	BA52453H0124	Price	BA52453T0124	Price
1-25/32	BA52433T0125	Price	BA52453H0125	Price	BA52453T0125	Price
1-13/16	BA52433T0126	Price	BA52453H0126	Price	BA52453T0126	Price
1-27/32	BA52433T0127	Price	BA52453H0127	Price	BA52453T0127	Price
1-7/8	BA52433T0128	Price	BA52453H0128	Price	BA52453T0128	Price
36mm	BA52433T36	Price	BA52453H36	Price	BA52453T36	Price
37mm	BA52433T37	Price	BA52453H37	Price	BA52453T37	Price
38mm	BA52433T38	Price	BA52453H38	Price	BA52453T38	Price
39mm	BA52433T39	Price	BA52453H39	Price	BA52453T39	Price
40mm	BA52433T40	Price	BA52453H40	Price	BA52453T40	Price
41mm	BA52433T41	Price	BA52453H41	Price	BA52453T41	Price
42mm	BA52433T42	Price	BA52453H42	Price	BA52453T42	Price
43mm	BA52433T43	Price	BA52453H43	Price	BA52453T43	Price
44mm	BA52433T44	Price	BA52453H44	Price	BA52453T44	Price
45mm	BA52433T45	Price	BA52453H45	Price	BA52453T45	Price
46mm	BA52433T46	Price	BA52453H46	Price	BA52453T46	Price
47mm	BA52433T47	Price	BA52453H47	Price	BA52453T47	Price

ALLIED MACHINE & ENGINEERING CORP Standard T-A® Drill Inserts

Series 4

Blade Thickness - 5/16”



GEN2 T-A GEN2 T-A

	HSS (CPM-M4)		Super Cobalt (CPM-T15)			
	TiN		AM200		TiN	
Cutting Dia. (in./ mm)	Order No.	Price	Order No.	Price	Order No.	Price
1-29/32	BA52434T0129	Price	BA52454H0129	Price	BA52454T0129	Price
1-15/16	BA52434T0130	Price	BA52454H0130	Price	BA52454T0130	Price
1-31/32	BA52434T0131	Price	BA52454H0131	Price	BA52454T0131	Price
2	BA52434T0200	Price	BA52454H0200	Price	BA52454T0200	Price
2-1/32	BA52434T0201	Price	BA52454H0201	Price	BA52454T0201	Price
2-1/16	BA52434T0202	Price	BA52454H0202	Price	BA52454T0202	Price
2-3/32	BA52434T0203	Price	BA52454H0203	Price	BA52454T0203	Price
2-1/8	BA52434T0204	Price	BA52454H0204	Price	BA52454T0204	Price
2-5/32	BA52434T0205	Price	BA52454H0205	Price	BA52454T0205	Price
2-3/16	BA52434T0206	Price	BA52454H0206	Price	BA52454T0206	Price
2-7/32	BA52434T0207	Price	BA52454H0207	Price	BA52454T0207	Price
2-1/4	BA52434T0208	Price	BA52454H0208	Price	BA52454T0208	Price
2-9/32	BA52434T0209	Price	BA52454H0209	Price	BA52454T0209	Price
2-5/16	BA52434T0210	Price	BA52454H0210	Price	BA52454T0210	Price
2-11/32	BA52434T0211	Price	BA52454H0211	Price	BA52454T0211	Price
2-3/8	BA52434T0212	Price	BA52454H0212	Price	BA52454T0212	Price
2-13/32	BA52434T0213	Price	BA52454H0213	Price	BA52454T0213	Price
2-7/16	BA52434T0214	Price	BA52454H0214	Price	BA52454T0214	Price
2-15/32	BA52434T0215	Price	BA52454H0215	Price	BA52454T0215	Price
2-1/2	BA52434T0216	Price	BA52454H0216	Price	BA52454T0216	Price
2-17/32	BA52434T0217	Price	BA52454H0217	Price	BA52454T0217	Price
2-9/16	BA52434T0218	Price	BA52454H0218	Price	BA52454T0218	Price
48mm	-	-	BA52454H48	Price	BA52454T48	Price
49mm	-	-	BA52454H49	Price	BA52454T49	Price
50mm	-	-	BA52454H50	Price	BA52454T50	Price
51mm	-	-	BA52454H51	Price	BA52454T51	Price
52mm	-	-	BA52454H52	Price	BA52454T52	Price
53mm	-	-	BA52454H53	Price	BA52454T53	Price
54mm	-	-	BA52454H54	Price	BA52454T54	Price
55mm	-	-	BA52454H55	Price	BA52454T55	Price
56mm	-	-	BA52454H56	Price	BA52454T56	Price
57mm	-	-	BA52454H57	Price	BA52454T57	Price
58mm	-	-	BA52454H58	Price	BA52454T58	Price
59mm	-	-	BA52454H59	Price	BA52454T59	Price
60mm	-	-	BA52454H60	Price	BA52454T60	Price
61mm	-	-	BA52454H61	Price	BA52454T61	Price
62mm	-	-	BA52454H62	Price	BA52454T62	Price
63mm	-	-	BA52454H63	Price	BA52454T63	Price
64mm	-	-	BA52454H64	Price	BA52454T64	Price
65mm	-	-	BA52454H65	Price	BA52454T65	Price

ALLIED MACHINE & ENGINEERING CORP Standard T-A® Drill Inserts

Series 5, 6, 7 & 8

Series 5 thgough 8 have 144° point angle

Series 5 Blade Thickness - 5/16”

GEN2 T-A

Material - HSS (CPM-M4) TiN Coated / Series 5		
Cutting Diameter (Inch/Metric)	Order No.	Price
2-1/2	BA52435T0216	Price
2-17/32	BA52435T0217	Price
2-9/16	BA52435T0218	Price
2-19/32	BA52435T0219	Price
2-5/8	BA52435T0220	Price
2-21/32	BA52435T0221	Price
2-11/16	BA52435T0222	Price

Series 5 Blade Thickness - 5/16”

GEN2 T-A

Material - HSS (CPM-M4) TiN Coated / Series 5		
Cutting Diameter (Inch/Metric)	Order No.	Price
2-23/32	BA52435T0223	Price
2-3/4	BA52435T0224	Price
2-25/32	BA52435T0225	Price
2-13/16	BA52435T0226	Price
2-27/32	BA52435T0227	Price
2-7/8	BA52435T0228	Price
2-29/32	BA52435T0229	Price
2-15/16	BA52435T0230	Price
2-31/32	BA52435T0231	Price
3	BA52435T0300	Price

Series 6 Blade Thickness - 7/16”

GEN2 T-A

Material - HSS (CPM-M4) TiN Coated / Series 6		
Cutting Diameter (Inch/Metric)	Order No.	Price
3-1/32	BA52436T0301	Price
3-1/16	BA52436T0302	Price
3-3/32	BA52436T0303	Price
3-1/8	BA52436T0304	Price
3-5/32	BA52436T0305	Price
3-3/16	BA52436T0306	Price
3-7/32	BA52436T0307	Price
3-1/4	BA52436T0308	Price
3-9/32	BA52436T0309	Price
3-5/16	BA52436T0310	Price
3-11/32	BA52436T0311	Price
3-3/8	BA52436T0312	Price
3-13/32	BA52436T0313	Price
3-7/16	BA52436T0314	Price
3-15/32	BA52436T0315	Price
3-1/2	BA52436T0316	Price

Series 7 Blade Thickness - 7/16”

GEN2 T-A

Material - HSS (CPM-M4) TiN Coated / Series 7		
Cutting Diameter (Inch/Metric)	Order No.	Price
3-17/32	BA52437T0317	Price
3-9/16	BA52437T0318	Price
3-19/32	BA52437T0319	Price
3-5/8	BA52437T0320	Price
3-21/32	BA52437T0321	Price
3-11/16	BA52437T0322	Price
3-23/32	BA52437T0323	Price
3-3/4	BA52437T0324	Price
3-25/32	BA52437T0325	Price
3-13/16	BA52437T0326	Price
3-27/32	BA52437T0327	Price
3-7/8	BA52437T0328	Price
3-29/32	BA52437T0329	Price
3-15/16	BA52437T0330	Price
3-31/32	BA52437T0331	Price
4	BA52437T0400	Price

Series 8 Blade Thickness - 7/16”

GEN2 T-A

Material - HSS (CPM-M4) TiN Coated / Series 8		
Cutting Diameter (Inch/Metric)	Order No.	Price
4-1/16	BA52438T0402	Price
4-1/8	BA52438T0404	Price
4-3/16	BA52438T0406	Price
4-1/4	BA52438T0408	Price
4-5/16	BA52438T0410	Price
4-3/8	BA52438T0412	Price
4-7/16	BA52438T0414	Price
4-1/2	BA52438T0416	Price

ALLIED MACHINE & ENGINEERING CORP Solid Carbide T-A® Drill Inserts

- **C5** carbide is for general use in steel applications. It offers exceptionally high wear resistance. High machine tool rigidity is required.
- **C1** carbide is primarily for steel applications. This carbide offers wear characteristics similar to C5 carbide. In addition to its wear characteristics C1 carbide is considerably more durable when compared to other carbide grades.
- **C2** is for use in non-ferrous applications (high temperature alloys, stainless steels, aluminums, cast irons). It offers exceptionally high wear resistance. High machine tool rigidity is required.

Series Y - Blade Thickness - 3/32”

Series - C1 / Series Y		
	AM200	
Cutting Diameter (Inch/Metric)	Order No.	Price
3/8	BA524C1YH0012	Price
.386"(W)	BA524C1YH386	Price
25/64	BA524C1YH390	Price
13/32	BA524C1YH0013	Price
27/64	BA524C1YH421	Price
9.5mm	BA524C1YH95	Price
10mm	BA524C1YH10	Price
10.2mm	BA524C1YH102	Price
10.5mm	BA524C1YH105	Price
10.8mm	BA524C1YH108	Price
11mm	BA524C1YH11	Price

Series Z - Blade Thickness - 3/32”

GEN2 T-A

Series - C1 / Series Z		
	AM200	
Cutting Diameter (Inch/Metric)	Order No.	Price
7/16	BA524C1ZH0014	Price
29/64	BA524C1ZH453	Price
15/32	BA524C1ZH0015	Price
31/64	BA524C1ZH484	Price
1/2	BA524C1ZH0016	Price
11.5mm	BA524C1ZH115	Price
12mm	BA524C1ZH12	Price
12.5mm	BA524C1ZH125	Price

Series 0 - Blade Thickness - 1/8”

GEN2 T-A

Series - C1 / Series 0		
	AM200	
Cutting Diameter (Inch/Metric)	Order No.	Price
33/64	BA524C10H515	Price
17/32	BA524C10H0017	Price
35/64	BA524C10H546	Price
9/16	BA524C10H0018	Price
37/64	BA524C10H578	Price
19/32	BA524C10H0019	Price
39/64	BA524C10H609	Price
5/8	BA524C10H0020	Price
41/64	BA524C10H640	Price
21/32	BA524C10H0021	Price
43/64	BA524C10H671	Price
11/16	BA524C10H0022	Price
13mm	BA524C10H13	Price
13.5mm	BA524C10H135	Price
14mm	BA524C10H14	Price
14.5mm	BA524C10H145	Price
15mm	BA524C10H15	Price
15.5mm	BA524C10H155	Price
16mm	BA524C10H16	Price
16.5mm	BA524C10H165	Price
17mm	BA524C10H17	Price
17.5mm	BA524C10H175	Price

Solid Carbide T-A® Drill Inserts

Series 0 - Blade Thickness - 1/8”

GEN2 T-A

Series - C2 / Series 0							Series - C5 / Series 0			
	Price		TiAlN		TiN		TiAlN		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
33/64	BA524C20H515	Price	BA521C20A515	Price	BA521C20T515	Price	BA521C50A515	Price	BA521C50T515	Price
17/32	BA524C20H0017	Price	BA521C20A0017	Price	BA521C20T0017	Price	BA521C50A0017	Price	BA521C50T0017	Price
35/64	BA524C20H546	Price	BA521C20A546	Price	BA521C20T546	Price	BA521C50A546	Price	BA521C50T546	Price
9/16	BA524C20H0018	Price	BA521C20A0018	Price	BA521C20T0018	Price	BA521C50A0018	Price	BA521C50T0018	Price
37/64	BA524C20H578	Price	BA521C20A578	Price	BA521C20T578	Price	BA521C50A578	Price	BA521C50T578	Price
19/32	BA524C20H0019	Price	BA521C20A0019	Price	BA521C20T0019	Price	BA521C50A0019	Price	BA521C50T0019	Price
39/64	BA524C20H609	Price	BA521C20A609	Price	BA521C20T609	Price	BA521C50A609	Price	BA521C50T609	Price
5/8	BA524C20H0020	Price	BA521C20A0020	Price	BA521C20T0020	Price	BA521C50A0020	Price	BA521C50T0020	Price
41/64	BA524C20H640	Price	BA521C20A640	Price	BA521C20T640	Price	BA521C50A640	Price	BA521C50T640	Price
21/32	BA524C20H0021	Price	BA521C20A0021	Price	BA521C20T0021	Price	BA521C50A0021	Price	BA521C50T0021	Price
43/64	BA524C20H671	Price	BA521C20A671	Price	BA521C20T671	Price	BA521C50A671	Price	BA521C50T671	Price
11/16	BA524C20H0022	Price	BA521C20A0022	Price	BA521C20T0022	Price	BA521C50A0022	Price	BA521C50T0022	Price
13mm	BA524C20H13	Price	BA521C20A13	Price	BA521C20T13	Price	BA521C50A13	Price	BA521C50T13	Price
13.5mm	BA524C20H135	Price	BA521C20A135	Price	BA521C20T135	Price	BA521C50A135	Price	BA521C50T135	Price
14mm	BA524C20H14	Price	BA521C20A14	Price	BA521C20T14	Price	BA521C50A14	Price	BA521C50T14	Price
14.5mm	BA524C20H145	Price	BA521C20A145	Price	BA521C20T145	Price	BA521C50A145	Price	BA521C50T145	Price
15mm	BA524C20H15	Price	BA521C20A15	Price	BA521C20T15	Price	BA521C50A15	Price	BA521C50T15	Price
15.5mm	BA524C20H155	Price	BA521C20A155	Price	BA521C20T155	Price	BA521C50A155	Price	BA521C50T155	Price
15.7mm	BA524C20H618	Price	-	-	-	-	-	-	-	-
16mm	BA524C20H16	Price	BA521C20A16	Price	BA521C20T16	Price	BA521C50A16	Price	BA521C50T16	Price
16.5mm	BA524C20H165	Price	BA521C20A165	Price	BA521C20T165	Price	BA521C50A165	Price	BA521C50T165	Price
17mm	BA524C20H17	Price	BA521C20A17	Price	BA521C20T17	Price	BA521C50A17	Price	-	-
17.5mm	BA524C20H175	Price	BA521C20A175	Price	BA521C20T175	Price	BA521C50A175	Price	BA521C50T175	Price

Series 1 - Blade Thickness - 5/32”

	Series - C5 / Series 1			
	Price		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price
45/64	BA521C51A703	Price	BA521C51T703	Price
23/32	BA521C51A0023	Price	BA521C51T0023	Price
47/64	BA521C51A734	Price	BA521C51T734	Price
3/4	BA521C51A0024	Price	BA521C51T0024	Price
49/64	BA521C51A765	Price	BA521C51T765	Price
25/32	BA521C51A0025	Price	BA521C51T0025	Price
51/64	BA521C51A796	Price	BA521C51T796	Price
13/16	BA521C51A0026	Price	BA521C51T0026	Price
27/32	BA521C51A0027	Price	BA521C51T0027	Price
55/64	BA521C51A859	Price	BA521C51T859	Price
7/8	BA521C51A0028	Price	BA521C51T0028	Price
57/64	BA521C51A890	Price	BA521C51T890	Price
29/32	BA521C51A0029	Price	BA521C51T0029	Price

	Series - C5 / Series 1			
	Price		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price
59/64	BA521C51A921	Price	BA521C51T921	Price
15/16	BA521C51A0030	Price	BA521C51T0030	Price
18mm	BA521C51A18	Price	BA521C51T18	Price
18.5mm	BA521C51A185	Price	BA521C51T185	Price
19mm	BA521C51A19	Price	BA521C51T19	Price
19.5mm	BA521C51A195	Price	BA521C51T195	Price
20mm	BA521C51A20	Price	BA521C51T20	Price
20.5mm	BA521C51A205	Price	BA521C51T205	Price
21mm	BA521C51A21	Price	BA521C51T21	Price
22mm	BA521C51A22	Price	BA521C51T22	Price
23mm	BA521C51A23	Price	BA521C51T23	Price
24mm	BA521C51A24	Price	BA521C51T24	Price

ALLIED MACHINE & ENGINEERING CORP Solid Carbide T-A® Drill Inserts



Series 1 - Blade Thickness - 5/32”

C5 carbide is for general use in steel applications. It offers exceptionally high wear resistance. High machine tool rigidity is required.
C1 carbide is primarily for steel applications. This carbide offers wear characteristics similar to C5 carbide. In addition to its wear characteristics C1 carbide is considerably more durable when compared to other carbide grades.
C2 is for use in non-ferrous applications (high temperature alloys, stainless steels, aluminums, cast irons). It offers exceptionally high wear resistance. High machine tool rigidity is required.

GEN2 T-A

Series - C2 / Series 1						
	Price		TiAlN		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price	Order No.	Price
45/64	BA524C21H703	Price	BA521C21A703	Price	BA521C21T703	Price
23/32	BA524C21H0023	Price	BA521C21A0023	Price	BA521C21T0023	Price
47/64	BA524C21H734	Price	BA521C21A734	Price	BA521C21T734	Price
3/4	BA524C21H0024	Price	BA521C21A0024	Price	BA521C21T0024	Price
49/64	BA524C21H765	Price	BA521C21A765	Price	BA521C21T765	Price
25/32	BA524C21H0025	Price	BA521C21A0025	Price	BA521C21T0025	Price
51/64	BA524C21H796	Price	BA521C21A796	Price	BA521C21T796	Price
13/16	BA524C21H0026	Price	BA521C21A0026	Price	BA521C21T0026	Price
27/32	BA524C21H0027	Price	BA521C21A0027	Price	BA521C21T0027	Price
55/64	BA524C21H859	Price	BA521C21A859	Price	BA521C21T859	Price
7/8	BA524C21H0028	Price	BA521C21A0028	Price	BA521C21T0028	Price
57/64	BA524C21H890	Price	BA521C21A890	Price	BA521C21T890	Price
29/32	BA524C21H0029	Price	BA521C21A0029	Price	BA521C21T0029	Price
59/64	BA524C21H921	Price	BA521C21A921	Price	BA521C21T921	Price
15/16	BA524C21H0030	Price	BA521C21A0030	Price	BA521C21T0030	Price
18mm	BA524C21H18	Price	-	-	-	-
18.5mm	BA524C21H185	Price	-	-	-	-
19mm	BA524C21H19	Price	-	-	-	-
19.5mm	BA524C21H195	Price	-	-	-	-
20mm	BA524C21H20	Price	-	-	-	-
20.5mm	BA524C21H205	Price	-	-	-	-
21mm	BA524C21H21	Price	-	-	-	-
22mm	BA524C21H22	Price	-	-	-	-
24mm	-	-	BA521C21A24	54.85	-	-

Series 1 - Blade Thickness - 5/32”

GEN2 T-A

Series - C1 / Series 1		
	AM200	
Cutting Diameter (Inch/Metric)	Order No.	Price
45/64	BA524C11H703	Price
23/32	BA524C11H0023	Price
47/64	BA524C11H734	Price
3/4	BA524C11H0024	Price
49/64	BA524C11H765	Price
25/32	BA524C11H0025	Price
51/64	BA524C11H796	Price
13/16	BA524C11H0026	Price
27/32	BA524C11H0027	Price
55/64	BA524C11H859	Price
7/8	BA524C11H0028	Price
57/64	BA524C11H890	Price
29/32	BA524C11H0029	Price
59/64	BA524C11H921	Price
15/16	BA524C11H0030	Price
18mm	BA524C11H18	Price
18.5mm	BA524C11H185	Price
19mm	BA524C11H19	Price
19.5mm	BA524C11H195	Price
20mm	BA524C11H20	Price
20.5mm	BA524C11H205	Price
21mm	BA524C11H21	Price
22mm	BA524C11H22	Price
23mm	BA524C11H23	Price
24mm	BA524C11H24	Price

Series 2 - Blade Thickness - 3/16”

GEN2 T-A

Series - C1 / Series 2		
	AM200	
Cutting Diameter (Inch/Metric)	Order No.	Price
31/32	BA524C12H0031	Price
1	BA524C12H0100	Price
1-1/32	BA524C12H0101	Price
1-3/64	BA524C12H1046	Price
1-1/16	BA524C12H0102	Price
1-3/32	BA524C12H0103	Price
1-7/64	BA524C12H1109	Price
1-1/8	BA524C12H0104	Price
1-5/32	BA524C12H0105	Price
1-3/16	BA524C12H0106	Price
1-7/32	BA524C12H0107	Price
1-1/4	BA524C12H0108	Price
1-9/32	BA524C12H0109	Price
1-5/16	BA524C12H0110	Price
1-11/32	BA524C12H0111	Price
1-3/8	BA524C12H0112	Price
63/64 / 25mm	BA524C12H25	Price
26mm	BA524C12H26	Price
27mm	BA524C12H27	Price
28mm	BA524C12H28	Price
29mm	BA524C12H29	Price
30mm	BA524C12H30	Price
31mm	BA524C12H31	Price
32mm	BA524C12H32	Price
33mm	BA524C12H33	Price
34mm	BA524C12H34	Price
35mm	BA524C12H35	Price

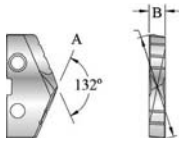
Series 2 - Blade Thickness - 3/16”

GEN2 T-A

Series - C2 / Series 2						
	AM200		TiAlN		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price	Order No.	Price
31/32	BA524C22H0031	Price	BA521C22A0031	Price	BA521C22T0031	Price
1	BA524C22H0100	Price	BA521C22A0100	Price	BA521C22T0100	Price
1-1/32	BA524C22H0101	Price	BA521C22A0101	Price	BA521C22T0101	Price
1-3/64	BA524C22H1046	Price	BA521C22A1046	Price	BA521C22T1046	Price
1-1/16	BA524C22H0102	Price	BA521C22A0102	Price	BA521C22T0102	Price
1-3/32	BA524C22H0103	Price	BA521C22A0103	Price	BA521C22T0103	Price
1-7/64	BA524C22H1109	Price	BA521C22A1109	Price	BA521C22T1109	Price
1-1/8	BA524C22H0104	Price	BA521C22A0104	Price	BA521C22T0104	Price
1-5/32	BA524C22H0105	Price	BA521C22A0105	Price	BA521C22T0105	Price
1-3/16	BA524C22H0106	Price	BA521C22A0106	Price	BA521C22T0106	Price
1-7/32	BA524C22H0107	Price	BA521C22A0107	Price	BA521C22T0107	Price
1-1/4	BA524C22H0108	Price	BA521C22A0108	Price	BA521C22T0108	Price
1-9/32	BA524C22H0109	Price	BA521C22A0109	Price	BA521C22T0109	Price
1-5/16	BA524C22H0110	Price	BA521C22A0110	Price	BA521C22T0110	Price
1-11/32	BA524C22H0111	Price	BA521C22A0111	Price	BA521C22T0111	Price
1-3/8	BA524C22H0112	Price	BA521C22A0112	Price	BA521C22T0112	Price

ALLIED MACHINE & ENGINEERING CORP Solid Carbide T-A® Drill Inserts

(continued from previous page)





Series 2 - Blade Thickness - 3/16”

Series - C5 / Series 2				
	TiAlN		TiN	
Cutting Diameter (Inch/ Metric)	Order No.	Price	Order No.	Price
31/32	**BA521C52A0031**	Price	**BA521C52T0031**	Price
1	**BA521C52A0100**	Price	**BA521C52T0100**	Price
1-1/32	**BA521C52A0101**	Price	**BA521C52T0101**	Price
1-3/64	**BA521C52A1046**	Price	**BA521C52T1046**	Price
1-1/16	**BA521C52A0102**	Price	**BA521C52T0102**	Price
1-3/32	**BA521C52A0103**	Price	**BA521C52T0103**	Price
1-7/64	**BA521C52A1109**	Price	**BA521C52T1109**	Price
1-1/8	**BA521C52A0104**	Price	**BA521C52T0104**	Price
1-5/32	**BA521C52A0105**	Price	**BA521C52T0105**	Price
1-3/16	**BA521C52A0106**	Price	**BA521C52T0106**	Price
1-7/32	**BA521C52A0107**	Price	**BA521C52T0107**	Price
1-1/4	**BA521C52A0108**	Price	**BA521C52T0108**	Price
1-9/32	**BA521C52A0109**	Price	**BA521C52T0109**	Price
1-5/16	**BA521C52A0110**	Price	**BA521C52T0110**	Price
1-11/32	**BA521C52A0111**	Price	**BA521C52T0111**	Price
1-3/8	**BA521C52A0112**	Price	**BA521C52T0112**	Price
63/64 / 25mm	**BA521C52A25**	Price	**BA521C52T25**	Price
26mm	**BA521C52A26**	Price	**BA521C52T26**	Price
27mm	**BA521C52A27**	Price	**BA521C52T27**	Price
28mm	**BA521C52A28**	Price	**BA521C52T28**	Price
29mm	**BA521C52A29**	Price	**BA521C52T29**	Price
30mm	**BA521C52A30**	Price	**BA521C52T30**	Price
31mm	**BA521C52A31**	Price	**BA521C52T31**	Price
32mm	**BA521C52A32**	Price	**BA521C52T32**	Price
33mm	**BA521C52A33**	Price	**BA521C52T33**	Price
34mm	**BA521C52A34**	Price	**BA521C52T34**	Price
35mm	**BA521C52A35**	Price	**BA521C52T35**	Price

C5 carbide is for general use in steel applications. It offers exceptionally high wear resistance. High machine tool rigidity is required.

C1 carbide is primarily for steel applications. This carbide offers wear characteristics similar to C5 carbide. In addition to its wear characteristics C1 carbide is considerably more durable when compared to other carbide grades.

C2 is for use in non-ferrous applications (high temperature alloys, stainless steels, aluminums, cast irons). It offers exceptionally high wear resistance. High machine tool rigidity is required.

Series 3 - Blade Thickness - 1/4”

Material - C2 / Series 3				
	TiAlN		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price
1-13/32	**BA521C23A0113**	Price	**BA521C23T0113**	Price
1-7/16	**BA521C23A0114**	Price	**BA521C23T0114**	Price
1-15/32	**BA521C23A0115**	Price	**BA521C23T0115**	Price
1-1/2	**BA521C23A0116**	Price	**BA521C23T0116**	Price
1-17/32	**BA521C23A0117**	Price	**BA521C23T0117**	Price
1-9/16	**BA521C23A0118**	Price	**BA521C23T0118**	Price
1-19/32	**BA521C23A0119**	Price	**BA521C23T0119**	Price
1-5/8	**BA521C23A0120**	Price	**BA521C23T0120**	Price
1-21/32	**BA521C23A0121**	Price	**BA521C23T0121**	Price
1-11/16	**BA521C23A0122**	Price	**BA521C23T0122**	Price
1-23/32	**BA521C23A0123**	Price	**BA521C23T0123**	Price
1-3/4	**BA521C23A0124**	Price	**BA521C23T0124**	Price
1-25/32	**BA521C23A0125**	Price	**BA521C23T0125**	Price
1-13/16	**BA521C23A0126**	Price	**BA521C23T0126**	Price
1-27/32	**BA521C23A0127**	Price	**BA521C23T0127**	Price
1-7/8	**BA521C23A0128**	Price	**BA521C23T0128**	Price
36mm	**-**	-	**BA521C23T36**	Price
37mm	**-**	-	**BA521C23T37**	Price
38mm	**-**	-	**BA521C23T38**	Price
39mm	**-**	-	**BA521C23T39**	Price
40mm	**-**	-	**BA521C23T40**	Price
41mm	**-**	-	**BA521C23T41**	Price
42mm	**-**	-	**BA521C23T42**	Price
43mm	**-**	-	**BA521C23T43**	Price
44mm	**-**	-	**BA521C23T44**	Price
45mm	**-**	-	**BA521C23T45**	Price
46mm	**-**	-	**BA521C23T46**	Price
47mm	**-**	-	**BA521C23T47**	Price

Material - C5 / Series 3				
	TiAlN		TiN	
Cutting Diameter (Inch/Metric)	Order No.	Price	Order No.	Price
1-13/32	**BA521C53A0113**	Price	**BA521C53T0113**	Price
1-7/16	**BA521C53A0114**	Price	**BA521C53T0114**	Price
1-15/32	**BA521C53A0115**	Price	**BA521C53T0115**	Price
1-1/2	**BA521C53A0116**	Price	**BA521C53T0116**	Price
1-17/32	**BA521C53A0117**	Price	**BA521C53T0117**	Price
1-9/16	**BA521C53A0118**	Price	**BA521C53T0118**	Price
1-19/32	**BA521C53A0119**	Price	**BA521C53T0119**	Price
1-5/8	**BA521C53A0120**	Price	**BA521C53T0120**	Price
1-21/32	**BA521C53A0121**	Price	**BA521C53T0121**	Price
1-11/16	**BA521C53A0122**	Price	**BA521C53T0122**	Price
1-23/32	**BA521C53A0123**	Price	**BA521C53T0123**	Price
1-3/4	**BA521C53A0124**	Price	**BA521C53T0124**	Price
1-25/32	**-**	-	**BA521C53T0125**	Price
1-13/16	**BA521C53A0126**	Price	**BA521C53T0126**	Price
1-27/32	**BA521C53A0127**	Price	**BA521C53T0127**	Price
1-7/8	**BA521C53A0128**	Price	**BA521C53T0128**	Price

Replacement Screws & Fastening Tools

for T-A® Style Holders

Price	Torx Driver		Torx Plus Screws-10/Pack	
T-A Series	Order No.	Price	Order No.	Price
0	**-**	-	**BA5272556IP810**	Price
0.5	**-**	-	**BA5272567IP810**	Price
1	**-**	-	**BA527375IP910**	Price
1.5	**-**	-	**BA52739IP910**	Price
0, 0.5	**BA528IP8**	Price	**-**	-
1, 1.5	**BA528IP9**	Price	**-**	-

Price	Torx Driver		Torx Plus Screws-10/Pack	
T-A Series	Order No.	Price	Order No.	Price
2, 2.5	**BA528IP15**	Price	**BA527495IP1510**	Price
3, 4	**BA528IP20**	Price	**BA527514IP2010**	Price
5 - 8	**BA528IP25**	Price	**BA527619IP2510**	Price
Y	**-**	-	**BA52724IP710**	Price
Y, Z	**BA528IP7**	Price	**-**	-
Z	**-**	-	**BA527247IP710**	Price

Allied T-A® Drill Insert Flanged Shank Holders

Coolant Fed

- Available with a larger body diameter than the standard series, which yields added support for drill inserts and higher inertial strength. This reduces holder failure in high torque applications. Call for pricing.
- T-A® Drill Insert holders are also available in XL and 3XL lengths including metric versions of most sizes. Call for pricing.
- When using the extended, long, XL and 3XL holders without a support bushing, AMEC recommends using a short T-A® holder to establish an initial hole two to three times diameters deep
- Never start or continue rotation of this tool holder without proper engagement with a work piece or fixture. Failure to do so could result in tool failure and/or personal injury.
- Rotary coolant adapters (for taper shank holders) are sold separately.





Series	Blade Size Cutting Range (in.)	Max. Drill Depth (in.)	Flute Length. (in.)	Reference Length. (in.)	OAL (in.)	Shank (in.)	Shank Length. (in.)	Flute Type	Pipe Tap (in.)	Order No.	Price
0	33/64 - 11/16	1-3/8	2-1/2	2-39-6/4	4-17/32	3/4	2-1/32	Straight	1/8	**BA5522000S075F**	Price
0	33/64 - 11/16	4-1/2	5-5/8	5-47/64	7-21/32	3/4	2-1/32	Helical	1/8	**BA5525000H075F**	Price
0	33/64 - 11/16	2-1/2	3-5/8	3-47/64	5-21/32	3/4	2-1/32	Helical	1/8	**BA5524000H075F**	Price
1	45/64 - 15/16	2-5/8	4-7/32	4-23/64	6-1/2	1	2-9/32	Straight	1/8	**BA5522010S100F**	Price
1	45/64 - 15/16	4-5/8	6-3/32	6-15/64	8-3/8	1	2-9/32	Helical	1/8	**BA5523010H100F**	Price
1	45/64 - 15/16	6-5/8	8-3/32	8-15/64	10-3/8	1	2-9/32	Helical	1/8	**BA5524010H100F**	Price
1	45/64 - 15/16	10-5/8	12-3/32	12-15/64	14-3/8	1	2-9/32	Helical	1/8	**BA5525010H100F**	Price
2	31/32 - 1-3/8	3-3/8	5-1/16	5-13/64	7-11/32	1-1/4	2-9/32	Straight	1/4	**BA5522020S125F**	Price
2	31/32 - 1-3/8	5-3/8	7-1/16	7-13/64	9-11/32	1-1/4	2-9/32	Helical	1/4	**BA5523020H125F**	Price
2	31/32 - 1-3/8	7-3/8	9-1/16	9-13/64	11-11/32	1-1/4	2-9/32	Helical	1/4	**BA5524020H125F**	Price
2	31/32 - 1-3/8	11-3/8	13-1/16	13-13/64	15-11/32	1-1/4	2-9/32	Helical	1/4	**BA5525020H125F**	Price
3	1-13/32 - 1-7/8	4-3/4	6-13/16	7	9-1/2	1-1/2	2-11/16	Straight	1/4	**BA5522030S150F**	Price
3	1-13/32 - 1-7/8	6-1/2	8-9/16	8-3/4	11-1/4	1-1/2	2-11/32	Helical	1/4	**BA5523030H150F**	Price
3	1-13/32 - 1-7/8	8-1/4	10-5/16	10-1/2	13	1-1/2	2-11/16	Helical	1/4	**BA5524030H150F**	Price
4	1-29/32 - 2-9/16	5-1/8	7-1/16	7-1/4	9-3/4	1-1/2	2-11/16	Straight	1/4	**BA5522040S150F**	Price
4	1-29/32 - 2-9/16	9-1/8	11-1/16	11-1/4	13-3/4	1-1/2	2-11/16	Helical	1/4	**BA5524040H150F**	Price
Y	3/8 - 27/64	1-1/4	2-13/32	2-1/2	4-7/16	3/4	2-1/32	Straight	1/8	**BA55220Y0S075F**	Price
Y	3/8 - 27/64	2-3/8	3-17/32	3-5/8	5-9/16	3/4	2-1/32	Helical	1/8	**BA55240Y0H075F**	Price
Y	3/8 - 27/64	4-3/8	5-17/32	5-5/8	7-9/16	3/4	2-1/32	Helical	1/8	**BA55250Y0H075F**	Price
Z	7/16 - 1/2	1-1/4	2-13/32	2-1/2	4-7/16	3/4	2-1/32	Straight	1/8	**BA55220Z0S075F**	Price
Z	7/16 - 1/2	2-3/8	3-17/32	3-5/8	5-9/16	3/4	2-1/32	Helical	1/8	**BA55240Z0H075F**	Price
Z	7/16 - 1/2	4-3/8	5-17/32	5-5/8	7-9/16	3/4	2-1/32	Helical	1/8	**BA55250Z0H075F**	Price

Allied Rotary Coolant Adapters

- These adapters are used with holders having snap ring grooves
- Easy to install and may be removed from holder in minutes



RCA Adapter No.	Inside Dia. (in.)	Outside Dia. (in.)	OAL (in.)	Pipe Tap	Order No.	Price
2T-2SR	3/4	1-3/4	7/8	1/8	**BA552T2SR**	Price
2T-3SR	1	2-1/8	1-1/8	1/8	**BA552T3SR**	Price
2T-4SR	1-1/4	2-1/2	1-3/8	1/4	**BA552T4SR**	Price
2T-5SR	1-3/4	3	1-3/8	1/4	**BA552T5SR**	Price
2T-6SR	2-1/4	3-3/4	1-3/4	1/2	**BA552T6SR**	Price

RCA repair kits are also available. Call for pricing.

Allied T-A® Drill Insert Straight Shank Holders Straight Flute Coolant Fed

Series	Blade Size Cutting Range (in.)	Max. Drill Depth (in.)	Flute Length (in.)	Reference Length (in.)	OAL (in.)	Shank (in.)	Shank Length (in.)	Pipe Tap (in.)	Order No.	Price
0	33/64 - 11/16	1-3/8	2-3/16	2-19/64	4-9/16	3/4	2-3/8	1/8	**BA5522000S075L**	Price
0	33/64 - 11/16	2-1/2	3-5/16	3-27/64	5-11/16	3/4	2-3/8	1/8	**BA5524000S075L**	Price
0	33/64 - 11/16	4-1/2	5-5/16	5-27/64	7-11/16	3/4	2-3/8	1/8	**BA5525000S075L**	Price
1	45/64 - 15/16	10-5/8	11-7/8	12-1/64	14-7/8	1	3	1/8	**BA5525010S100L**	Price
1	45/64 - 15/16	2-5/8	3-7/8	4-1/64	6-7/8	1	3	1/8	**BA5522010S100L**	Price
1	45/64 - 15/16	2-5/8	3-7/8	4-1/64	6-7/8	3/4	3	1/8	**BA5522010S075L**	Price
1	45/64 - 15/16	6-5/8	7-7/8	8-1/64	10-7/8	1	3	1/8	**BA5524010S100L**	Price
1	45/64 - 15/16	6-5/8	7-7/8	8-1/64	10-7/8	3/4	3	1/8	**BA5524010S075L**	Price
2	31/32 - 1-3/8	11-3/8	12-1/2	12-41/64	16	1-1/4	3-1/2	1/8	**BA5525020S125L**	Price
2	31/32 - 1-3/8	3-3/8	4-1/2	4-41/64	8	1	3-1/2	1/8	**BA5522020S100L**	Price
2	31/32 - 1-3/8	3-3/8	4-1/2	4-41/64	8	1-1/4	3-1/2	1/8	**BA5522020S125L**	Price
2	31/32 - 1-3/8	7-3/8	8-1/2	8-41/64	12	1	3-1/2	1/8	**BA5524020S100L**	Price
2	31/32 - 1-3/8	7-3/8	8-1/2	8-41/64	12	1-1/4	3-1/2	1/8	**BA5524020S125L**	Price
3	1-13/32 - 1-7/8	4-3/4	6	6-3/16	10	1-1/2	4	1/4	**BA5522030S150L**	Price
3	1-13/32 - 1-7/8	4-3/4	6	6-3/16	10	1-1/4	4	1/4	**BA5522030S125L**	Price
3	1-13/32 - 1-7/8	6-1/2	7-3/4	7-15/16	11-3/4	1-1/2	4	1/4	**BA5523030S150L**	Price
3	1-13/32 - 1-7/8	8-1/4	9-1/2	9-11/16	13-1/2	1-1/2	4	1/4	**BA5524030S150L**	Price
3	1-13/32 - 1-7/8	8-1/4	9-1/2	9-11/16	13-1/2	1-1/4	4	1/4	**BA5524030S125L**	Price
4	1-29/32 - 2-9/16	5-1/8	6-1/2	6-11/16	10-1/2	1-1/2	4	1/4	**BA5522040S150L**	Price
4	1-29/32 - 2-9/16	5-1/8	6-1/2	6-11/16	10-1/2	1-3/4	4	1/4	**BA5522040S175L**	Price
4	1-29/32 - 2-9/16	9-1/8	10-1/2	10-11/16	14-1/2	1-1/2	4	1/4	**BA5524040S150L**	Price
4	1-29/32 - 2-9/16	9-1/8	10-1/2	10-11/16	14-1/2	1-3/4	4	1/4	**BA5524040S175L**	Price
5 - 6	2-1/2 - 3-1/2	10-3/4	12-1/2	12-3/4	16-1/2	2	4	1/2	**BA5524050S200L**	Price
5 - 6	2-1/2 - 3-1/2	6-3/4	8-1/2	8-3/4	12-1/8	2	4	1/2	**BA5522050S200L**	Price
7 - 8	3-17/32 - 4-1/2	10-3/4	12-7/8	13-1/8	17-7/8	3	5	1/2	**BA5524070S300L**	Price
7 - 8	3-17/32 - 4-1/2	6-3/4	8-7/8	9-1/8	13-7/8	3	5	1/2	**BA5522070S300L**	Price
Y	3/8 - 27/64	1-1/4	2-1/32	2-1/8	4-13/32	3/4	2-3/8	1/8	**BA55220Y0S075L**	Price
Y	3/8 - 27/64	2-3/8	3-5/32	3-1/4	5-17/32	3/4	2-3/8	1/8	**BA55240Y0S075L**	Price
Y	3/8 - 27/64	4-3/8	5-5/32	5-1/4	7-17/32	3/4	2-3/8	1/8	**BA55250Y0S075L**	Price
Z	7/16 - 1/2	1-1/4	2-1/32	2-1/8	4-13/32	3/4	2-3/8	1/8	**BA55220Z0S075L**	Price
Z	7/16 - 1/2	2-3/8	3-5/32	3-1/4	5-17/32	3/4	2-3/8	1/8	**BA55240Z0S075L**	Price
Z	7/16 - 1/2	4-3/8	5-5/32	5-1/4	7-17/32	3/4	2-3/8	1/8	**BA55250Z0S075L**	Price

T-A® Drill Insert Holders Coolant Fed Taper Shank



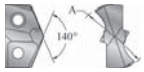


Series	Blade Size Cutting Range (in.)	Max. Drill Depth (in.)	Flute Length (in.)	Reference Length (in.)	OAL (in.)	Shank (in.)	Flute Type	Pipe Tap (in.)	Coolant Adaptor	Order No.	Price
0	33/64 - 11/16	1-3/8	2-3/16	3-41/64	6-15/32	2MT	Straight	1/16	2T2SR	**BA5522000S002I**	Price
0	33/64 - 11/16	2-1/2	3-5/16	4-49/64	7-19/32	2MT	Helical	1/16	2T2SR	**BA5524000H002I**	Price
0	33/64 - 11/16	4-1/2	5-5/16	6-49/64	9-19/32	2MT	Helical	1/16	2T2SR	**BA5525000H002I**	Price
1	45/64 - 15/16	2-3/4	3-7/8	5-39/64	9-5/32	3MT	Straight	1/8	2T3SR	**BA5522010S003I**	Price
1	45/64 - 15/16	4-3/4	5-7/8	7-39/64	11-5/32	3MT	Helical	1/8	2T3SR	**BA5523010H003I**	Price
1	45/64 - 15/16	6-3/4	7-7/8	9-39/64	13-5/32	3MT	Helical	1/8	2T3SR	**BA5524010H003I**	Price
1	45/64 - 15/16	10-3/4	11-7/8	13-39/64	17-5/32	3MT	Helical	1/8	2T3SR	**BA5525010H003I**	Price
1	45/64 - 15/16	2-3/4	3-7/8	5-43/64	10-5/32	4MT	Straight	1/8	2T3SR	**BA5522010S004I**	Price
1	45/64 - 15/16	6-3/4	7-7/8	9-43/64	14-5/32	4MT	Helical	1/8	2T3SR	**BA5524010H004I**	Price
2	31/32 - 1-3/8	3-3/8	4-1/2	6-15/64	9-25/32	3MT	Straight	1/8	2T3SR	**BA5522020S003I**	Price
2	31/32 - 1-3/8	7-3/8	8-1/2	10-15/64	13-25/32	3MT	Helical	1/8	2T3SR	**BA5524020H003I**	Price
2	31/32 - 1-3/8	3-3/8	4-1/2	6-19/64	10-25/32	4MT	Straight	1/8	2T3SR	**BA5522020S004I**	Price
2	31/32 - 1-3/8	5-3/8	6-1/2	8-19/64	12-25/32	4MT	Helical	1/8	2T3SR	**BA5523020H004I**	Price
2	31/32 - 1-3/8	7-3/8	8-1/2	10-19/64	14-25/32	4MT	Helical	1/8	2T3SR	**BA5524020H004I**	Price
2	31/32 - 1-3/8	11-3/8	12-1/2	14-15/64	18-25/32	4MT	Helical	1/8	2T3SR	**BA5525020H004I**	Price
3	1-13/32 - 1-7/8	4-3/4	6	8-1/8	12-9/16	4MT	Straight	1/4	2T4SR	**BA5522030S004I**	Price
3	1-13/32 - 1-7/8	6-1/2	7-3/4	9-7/8	14-5/16	4MT	Straight	1/4	2T4SR	**BA5523030S004I**	Price
3	1-13/32 - 1-7/8	8-1/4	9-1/2	11-5/8	16-1/16	4MT	Straight	1/4	2T4SR	**BA5524030S004I**	Price
3	1-13/32 - 1-7/8	4-3/4	6	8-1/8	13-13/16	5MT	Straight	1/4	2T5SR	**BA5522030S005I**	Price
3	1-13/32 - 1-7/8	8-1/4	9-1/2	11-5/8	17-5/16	5MT	Straight	1/4	2T5SR	**BA5524030S005I**	Price
4	1-29/32 - 2-9/16	5-1/8	6-1/2	8-5/8	13-1/16	4MT	Straight	1/4	2T4SR	**BA5522040S004I**	Price
4	1-29/32 - 2-9/16	9-1/8	10-1/2	12-5/8	17-1/16	4MT	Straight	1/4	2T4SR	**BA5524040S004I**	Price
4	1-29/32 - 2-9/16	5-1/8	6-1/2	8-5/8	14-5/16	5MT	Straight	1/4	2T5SR	**BA5522040S005I**	Price
4	1-29/32 - 2-9/16	9-1/8	10-1/2	12-5/8	18-5/16	5MT	Straight	1/4	2T5SR	**BA5524040S005I**	Price
5 - 6	2-1/2 - 3-1/2	6-3/4	8-1/2	11-5/16	16-15/16	5MT	Straight	1/2	2T6SR	**BA5522050S005I**	Price
5 - 6	2-1/2 - 3-1/2	10-3/4	12-1/2	15-5/16	20-15/16	5MT	Straight	1/2	2T6SR	**BA5524050S005I**	Price
7 - 8	3-17/32 - 4-1/2	6-3/4	8-7/8	11-11/16	17-5/16	5MT	Straight	1/2	2T6SR	**BA5522070S005I**	Price
7 - 8	3-17/32 - 4-1/2	10-3/4	12-7/8	15-11/16	21-5/16	5MT	Straight	1/2	2T6SR	**BA5524070S005I**	Price
Y	3/8 - 27/64	1-1/4	2-1/32	3-15/32	6-5/16	2MT	Straight	1/16	2T2SR	**BA55220Y0S002I**	Price
Y	3/8 - 27/64	2-3/8	3-5/32	4-19/32	7-7/16	2MT	Helical	1/16	2T2SR	**BA55240Y0H002I**	Price
Y	3/8 - 27/64	4-3/8	5-5/32	6-19/32	9-7/16	2MT	Helical	1/16	2T2SR	**BA55250Y0H002I**	Price
Z	7/16 - 1/2	1-1/4	2-1/32	3-15/32	6-5/16	2MT	Straight	1/16	2T2SR	**BA55220Z0S002I**	Price
Z	7/16 - 1/2	2-3/8	3-5/32	4-19/32	7-7/16	2MT	Helical	1/16	2T2SR	**BA55240Z0H002I**	Price
Z	7/16 - 1/2	4-3/8	5-5/32	6-19/32	9-7/16	2MT	Helical	1/16	2T2SR	**BA55250Z0H002I**	Price

ALLIED MACHINE & ENGINEERING CORP GEN3SYS™ Coolant Fed Drill Bodies

MADE IN THE USA







Fractional Size

- Holders have a highly precise locating pad which ensures absolute repeatability and reductions in TIR
- Precision ground locating slot
- 1/8 NPT coolant port

Note: all part numbers ending with “C” have round shanks, “F” means shank has flats.

GEN3SYS High Penetration Drilling System

Series - 12											
						Helical (Machining Center)		Helical (Machining Center)-Round Shk.		Straight (Lathe)	
Length	Shank Dia. (in.)	Shank Length (in.)	Max. Drill Depth (in.)	Body Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3xD	3/4	2-1/32	1-35/64	2-5/8	4-21/32	BA6060312H075F	Price	BA6060312H075C	Price	BA6060312S075F	Price
5xD	3/4	2-1/32	2-9/16	3-21/32	5-43/64	BA6060512H075F	Price	BA6060512H075C	Price	BA6060512S075F	Price
7xD	3/4	2-1/32	3-19/32	4-25/32	6-45/64	BA6060712H075F	Price	BA6060712H075C	Price	BA6060712S075F	Price

Series - 13											
						Helical (Machining Center)		Helical (Machining Center)-Round Shk.		Straight (Lathe)	
Length	Shank Dia. (in.)	Shank Length (in.)	Max. Drill Depth (in.)	Body Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3xD	3/4	2-1/32	1-21/32	2-47/64	4-49/64	BA6060313H075F	Price	BA6060313H075C	Price	BA6060313S075F	Price
5xD	3/4	2-1/32	2-49/64	3-53/64	5-55/64	BA6060513H075F	Price	BA6060513H075C	Price	BA6060513S075F	Price
7xD	3/4	2-1/32	3-55/64	4-15/16	6-31/32	BA6060713H075F	Price	BA6060713H075C	Price	BA6060713S075F	Price

Series - 14											
						Helical (Machining Center)		Helical (Machining Center)-Round Shk.		Straight (Lathe)	
Length	Shank Dia. (in.)	Shank Length (in.)	Max. Drill Depth (in.)	Body Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3xD	3/4	2-1/32	1-25/32	2-55/64	4-55/64	BA6060314H075F	Price	BA6060314H075C	Price	BA6060314S075F	Price
5xD	3/4	2-1/32	2-61/64	4-1/32	6-1/16	BA6060514H075F	Price	BA6060514H075C	Price	BA6060514S075F	Price
7xD	3/4	2-1/32	4-9/64	5-7/32	7-1/4	BA6060714H075F	Price	BA6060714H075C	Price	BA6060714S075F	Price

Series - 15											
						Helical (Machining Center)		Helical (Machining Center)-Round Shk.		Straight (Lathe)	
Length	Shank Dia. (in.)	Shank Length (in.)	Max. Drill Depth (in.)	Body Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3xD	3/4	2-1/32	1-57/64	2-61/64	4-63/64	BA6060315H075F	Price	BA6060315H075C	Price	BA6060315S075F	Price
5xD	3/4	2-1/32	3-5/32	4-7/32	6-1/4	BA6060515H075F	Price	BA6060515H075C	Price	BA6060515S075F	Price
7xD	3/4	2-1/32	4-27/64	5-31/64	7-1/2	BA6060715H075F	Price	BA6060715H075C	Price	BA6060715S075F	Price

Series - 16											
						Helical (Machining Center)		Helical (Machining Center)-Round Shk.		Straight (Lathe)	
Length	Shank Dia. (in.)	Shank Length (in.)	Max. Drill Depth (in.)	Body Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3xD	3/4	2-1/32	2-1/64	3-13/64	5-15/64	BA6060316H075F	Price	BA6060316H075C	Price	BA6060316S075F	Price
5xD	3/4	2-1/32	3-23/64	4-35/64	6-37/64	BA6060516H075F	Price	BA6060516H075C	Price	BA6060516S075F	Price
7xD	3/4	2-1/32	4-11/16	5-29/32	7-29/32	BA6060716H075F	Price	BA6060716H075C	Price	BA6060716S075F	Price

Series - 17											
						Helical (Machining Center)		Helical (Machining Center)-Round Shk.		Straight (Lathe)	
Length	Shank Dia. (in.)	Shank Length (in.)	Max. Drill Depth (in.)	Body Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3xD	3/4	2-1/32	2-1/8	3-5/16	5-15/64	BA6060317H075F	Price	BA6060317H075C	Price	BA6060317S075F	Price
5xD	3/4	2-1/32	3-35/64	4-47/64	6-49/64	BA6060517H075F	Price	BA6060517H075C	Price	BA6060517S075F	Price
7xD	3/4	2-1/32	4-31/32	6-9/64	8-11/64	BA6060717H075F	Price	BA6060717H075C	Price	BA6060717S075F	Price

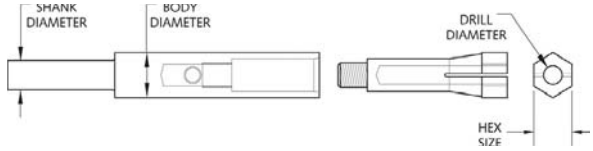
Series - 18											
						Helical (Machining Center)		Helical (Machining Center)-Round Shk.		Straight (Lathe)	
Length	Shank Dia. (in.)	Shank Length (in.)	Max. Drill Depth (in.)	Body Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3xD	1	2-9/32	2-3/8	3-45/64	5-63/64	BA6060318H100F	Price	BA6060318H100C	Price	BA6060318S100F	Price
5xD	1	2-9/32	3-15/16	5-9/32	7-9/16	BA6060518H100F	Price	BA6060518H100C	Price	BA6060518S100F	Price
7xD	1	2-9/32	5-33/64	6-55/64	9-9/64	BA6060718H100F	Price	BA6060718H100C	Price	BA6060718S100F	Price

Series - 20											
						Helical (Machining Center)		Helical (Machining Center)-Round Shk.		Straight (Lathe)	
Length	Shank Dia. (in.)	Shank Length (in.)	Max. Drill Depth (in.)	Body Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3xD	1	2-9/32	2-17/64	3-61/64	6-15/64	BA6060320H100F	Price	BA6060320H100C	Price	BA6060320S100F	Price
5xD	1	2-9/32	4-11/32	5-11/16	7-61/64	BA6060520H100F	Price	BA6060520H100C	Price	BA6060520S100F	Price
7xD	1	2-9/32	6-1/16	7-13/32	9-11/16	BA6060720H100F	Price	BA6060720H100C	Price	BA6060720S100F	Price

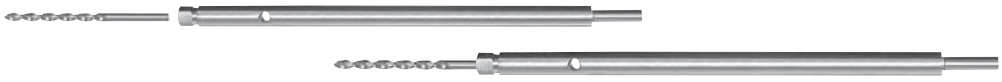
Collet Type Drill Extension System

Holders for Drill Extension System

- 4” & 9” Extension use collets
- Accommodates 1/16” thru 5/16” drills
- Slim profile gets into places that other collet type extensions cannot accommodate
- Threaded type collets eliminate the need for bulky collet nuts
- It’s easy to change collets, no special wrenches required
- A low cost system for difficult to reach spots



4" O.A.L.
Insert the drill into the end and screw down the compression cap to secure in place.
(Above statement for miniatures only)



Series	Length (in.)	Shank Dia. (in.)	Body Dia. (in.)	Order No.	Price
#1	4	1/4	5/16	**EX6596000**	Price
#1	9	1/4	5/16	**EX6596003**	Price
#2	4	1/4	7/16	**EX6596001**	Price

Series	Length (in.)	Shank Dia. (in.)	Body Dia. (in.)	Order No.	Price
#2	9	1/4	7/16	**EX6596004**	Price
#3	4	3/8	9/16	**EX6596002**	Price
#3	9	3/8	9/16	**EX6596005**	Price

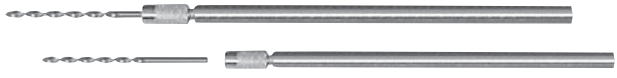
Collets for Drill Extension System



Series	Description of Collet	Hex Size (in.)	Order No.	Price
#1	1/16	1/4	**EX6596006**	Price
#1	5/64	1/4	**EX6596007**	Price
#1	3/32	1/4	**EX6596009**	Price
#1	7/64	1/4	**EX6596011**	Price
#1	1/8	1/4	**EX6596012**	Price
#1	9/64	1/4	**EX6596014**	Price
#1	5/32	1/4	**EX6596015**	Price
#1	# 21	1/4	**EX6596016**	Price
#1	# 26	1/4	**EX6596305**	Price
#1	# 29	1/4	**EX6596304**	Price
#1	# 30	1/4	**EX6596013**	Price
#1	# 36	1/4	**EX6596302**	Price
#1	# 40	1/4	**EX6596010**	Price
#1	# 43	1/4	**EX6596008**	Price
#1	2mm	1/4	**EX6596301**	Price
#1	3mm	1/4	**EX6596303**	Price
#2	11/64	3/8	**EX6596017**	Price
#2	3/16	3/8	**EX6596018**	Price
#2	13/64	3/8	**EX6596021**	Price
#2	7/32	3/8	**EX6596022**	Price
#2	15/64	3/8	**EX6596023**	Price
#2	1/4	3/8	**EX6596024**	Price
#2	# 10	3/8	**EX6596020**	Price
#2	# 11	3/8	**EX6596019**	Price
#1	4mm	1/4	**EX6596306**	Price
#2	5mm	3/8	**EX6596307**	Price
#3	1/4	7/16	**EX6596025**	Price
#3	17/64	7/16	**EX6596026**	Price
#3	9/32	7/16	**EX6596027**	Price
#3	19/64	7/16	**EX6596028**	Price
#3	5/16	7/16	**EX6596029**	Price
#1	1.5mm	1/4	**EX6596300**	Price
#2	6mm	3/8	**EX6596308**	Price
#3	7mm	7/16	**EX6596311**	Price
#3	8mm	7/16	**EX6596312**	Price
#3	F	7/16	**EX6596309**	Price

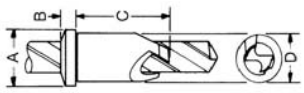
Miniature Drill Extensions

- 1/8” & 3/16” Diameter extensions
- #80 Drill size thru 1/16”
- Slim profile allows you to reach tight places
- The extension gives you added reach for small size drills
- Integral compression collet lets you change drills easily



	1/8		3/16	
Drill Size	Order No.	Price	Order No.	Price
1/64	**EX6596032**	Price	**EX6596059**	Price
1/32	**EX6596044**	Price	**EX6596071**	Price
3/64	**-**	-	**EX6596084**	Price
1/16	**-**	-	**EX6596088**	Price
# 53	**-**	-	**EX6596087**	Price
# 54	**-**	-	**EX6596086**	Price
# 55	**-**	-	**EX6596085**	Price
# 56	**EX6596056**	Price	**EX6596083**	Price
# 57	**EX6596055**	Price	**EX6596082**	Price
# 58	**EX6596054**	Price	**EX6596081**	Price
# 59	**EX6596053**	Price	**EX6596080**	Price
# 60	**EX6596052**	Price	**EX6596079**	Price
# 61	**EX6596051**	Price	**EX6596078**	Price
# 62	**EX6596050**	Price	**EX6596077**	Price
# 63	**EX6596049**	Price	**EX6596076**	Price
# 64	**EX6596048**	Price	**EX6596075**	Price
# 65	**EX6596047**	Price	**EX6596074**	Price
# 66	**EX6596046**	Price	**EX6596073**	Price
# 67	**EX6596045**	Price	**EX6596072**	Price
# 68	**EX6596043**	Price	**EX6596070**	Price
# 69	**EX6596042**	Price	**EX6596069**	Price
# 70	**EX6596041**	Price	**EX6596068**	Price
# 71	**EX6596040**	Price	**EX6596067**	Price
# 72	**EX6596039**	Price	**EX6596066**	Price
# 73	**EX6596038**	Price	**EX6596065**	Price
# 74	**EX6596037**	Price	**EX6596064**	Price
# 75	**EX6596036**	Price	**EX6596063**	Price
# 76	**EX6596035**	Price	**EX6596062**	Price
# 77	**EX6596034**	Price	**EX6596061**	Price
# 78	**EX6596033**	Price	**EX6596060**	Price
# 79	**EX6596031**	Price	**EX6596058**	Price
# 80	**EX6596030**	Price	**EX6596057**	Price
.5mm	**EX6596350**	Price	**EX6596356**	Price
.6mm	**EX6596351**	Price	**EX6596357**	Price
.7mm	**EX6596352**	Price	**EX6596358**	Price
.8mm	**EX6596353**	Price	**EX6596359**	Price
.9mm	**EX6596354**	Price	**EX6596360**	Price
1.5mm	**-**	-	**EX6596362**	Price
1mm	**EX6596355**	Price	**EX6596361**	Price

CHAM-BIT®



- Drill, chamfer and deburr in one operation
- Positioning for drill length can be varied instantly
- Patented locking device prevents any axial movement of Cham-Bit
- Single point cutter assures concentricity
- Drill acts as a pilot to reduce chatter
- Easily resharpened on any drill grinder without damage to the drill
- Can provide an additional chamfer diameter to a multi-diameter drill
- 90° Included angle
- Drill bit not included

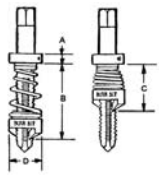


Drill Size	A Base OD (in.)	B Head Length (in.)	C OAL (in.)	D Head OD (in.)	Order No.	Price
1/8	7/16	1/4	5/8	5/16	**BB75CCH1250**	Price
9/64	7/16	1/4	5/8	5/16	**BB75CCH1406**	Price
5/32	7/16	1/4	5/8	5/16	**BB75CCH1560**	Price
11/64	7/16	1/4	5/8	5/16	**BB75CCH1710**	Price
3/16	1/2	1/4	3/4	3/8	**BB75CCH1870**	Price
13/64	1/2	1/4	3/4	3/8	**BB75CCH2030**	Price
7/32	1/2	1/4	3/4	3/8	**BB75CCH2180**	Price
15/64	5/8	1/4	1	1/2	**BB75CCH2350**	Price
1/4	5/8	1/4	1	1/2	**BB75CCH2490**	Price
17/64	5/8	1/4	1	1/2	**BB75CCH2650**	Price
9/32	5/8	1/4	1	1/2	**BB75CCH2812**	Price
19/64	5/8	1/4	1	1/2	**BB75CCH2960**	Price
5/16	3/4	5/16	1-1/4	5/8	**BB75CCH3120**	Price
21/64	3/4	5/16	1-1/4	5/8	**BB75CCH3280**	Price
11/32	3/4	5/16	1-1/4	5/8	**BB75CCH3430**	Price
23/64	3/4	5/16	1-1/4	5/8	**BB75CCH3590**	Price
3/8	3/4	5/16	1-1/4	5/8	**BB75CCH3750**	Price
25/64	3/4	5/16	1-1/4	5/8	**BB75CCH3900**	Price
13/32	3/4	5/16	1-1/4	5/8	**BB75CCH4060**	Price
27/64	3/4	5/16	1-1/4	5/8	**BB75CCH4210**	Price
7/16	3/4	5/16	1-1/4	5/8	**BB75CCH4370**	Price
29/64	15/16	5/16	1-1/2	13/16	**BB75CCH4530**	Price
15/32	15/16	5/16	1-1/2	13/16	**BB75CCH4680**	Price
31/64	15/16	5/16	1-1/2	13/16	**BB75CCH4840**	Price
1/2	15/16	5/16	1-1/2	13/16	**BB75CCH5000**	Price
33/64	15/16	5/16	1-1/2	13/16	**BB75CCH5150**	Price
17/32	15/16	5/16	1-1/2	13/16	**BB75CCH5310**	Price
35/64	15/16	5/16	1-1/2	13/16	**BB75CCH5460**	Price
9/16	15/16	5/16	1-1/2	13/16	**BB75CCH5620**	Price
37/64	15/16	5/16	1-1/2	13/16	**BB75CCH5780**	Price
19/32	15/16	5/16	1-1/2	13/16	**BB75CCH5930**	Price
39/64	15/16	5/16	1-1/2	13/16	**BB75CCH6090**	Price
5/8	1-1/8	5/8	1-5/8	1	**BB75CCH6250**	Price
41/64	1-1/8	5/8	1-5/8	1	**BB75CCH6401**	Price
21/32	1-1/8	5/8	1-5/8	1	**BB75CCH6560**	Price
43/64	1-1/8	5/8	1-5/8	1	**BB75CCH6710**	Price
11/16	1-1/8	5/8	1-5/8	1	**BB75CCH6870**	Price
45/64	1-1/8	5/8	1-5/8	1	**BB75CCH7030**	Price
23/32	1-1/8	5/8	1-5/8	1	**BB75CCH7180**	Price
47/64	1-1/8	5/8	1-5/8	1	**BB75CCH7340**	Price
3/4	1-5/16	7/16	1-3/4	1-3/16	**BB75CCH7500**	Price
49/64	1-5/16	7/16	1-3/4	1-3/16	**BB75CCH7650**	Price
25/32	1-5/16	7/16	1-3/4	1-3/16	**BB75CCH7810**	Price
51/64	1-5/16	7/16	1-3/4	1-3/16	**BB75CCH7960**	Price
13/16	1-5/16	7/16	1-3/4	1-3/16	**BB75CCH8120**	Price
53/64	1-5/16	7/16	1-3/4	1-3/16	**BB75CCH8280**	Price
27/32	1-5/16	7/16	1-3/4	1-3/16	**BB75CCH8430**	Price
55/64	1-5/16	7/16	1-3/4	1-3/16	**BB75CCH8590**	Price
7/8	1-7/16	1/2	2	1-5/16	**BB75CCH8750**	Price
57/64	1-7/16	1/2	2	1-5/16	**BB75CCH8900**	Price
29/32	1-7/16	1/2	2	1-5/16	**BB75CCH9060**	Price
59/64	1-7/16	1/2	2	1-5/16	**BB75CCH9210**	Price
15/16	1-7/16	1/2	2	1-5/16	**BB75CCH9370**	Price
61/64	1-7/16	1/2	2	1-5/16	**BB75CCH9530**	Price
31/32	1-7/16	1/2	2	1-5/16	**BB75CCH9680**	Price
63/64	1-7/16	1/2	2	1-5/16	**BB75CCH9840**	Price
1	1-7/16	1/2	2	1-5/16	**BB75CCH9990**	Price

Also available in wire gage, letter and metric sizes

BURR-BIT®





- Deburrs the top of the tapped hole while the tap is being withdrawn from the work piece at standard 120°
- No reversal cut in the chamfer due to tool cutting only in reverse
- Creates a chamfer for easy screw insertion; leaves no burr to clog the tapped hole
- Deburrs to consistent depth even though work pieces vary in thickness
- Easy to install; simply slips over your tap
- Resharpenable with simple radial relief grinding fixture
- Taps not included
- Available up to size 1-1/4" and in metric sizes - price on request
- Also available in 90° - price on request

				2 or 4 Flute Taps		3 Flute Taps	
Tap Size	B Extended Length (in.)	C Shortest Length (in.)	D Head OD (in.)	Order No.	Price	Order No.	Price
#2	7/8	45/64	3/8	**BB7520200**	Price	**BB7520250**	Price
#3	7/8	45/64	3/8	**BB7520300**	Price	**BB7520350**	Price
#4	7/8	45/64	3/8	**BB7520400**	Price	**BB7520450**	Price
#5	55/64	23/32	3/8	**BB7520500**	Price	**BB7520550**	Price
#6	55/64	23/32	3/8	**BB7520600**	Price	**BB7520650**	Price
#8	7/8	45/64	3/8	**BB7520700**	Price	**BB7520750**	Price
#10	1-1/16	25/32	3/8	**BB7520800**	Price	**BB7520850**	Price
#12	1-1/16	25/32	3/8	**BB7520900**	Price	**BB7520950**	Price
1/4	1-9/64	7/8	1/2	**BB7521100**	Price	**BB7521150**	Price
5/16	1-1/4	61/64	9/16	**BB7521200**	Price	**BB7521250**	Price
3/8	1-1/4	61/64	21/32	**BB7521300**	Price	**BB7521350**	Price
7/16	1-27/32	1-11/32	13/16	**BB7521400**	Price	**BB7521450**	Price
1/2	1-47/64	1-15/64	13/16	**BB7521500**	Price	**BB7521550**	Price
9/16	1-23/32	1-7/32	1	**BB7521600**	Price	**BB7521650**	Price
5/8	1-57/64	1-19/64	1	**BB7521700**	Price	**BB7521750**	Price
3/4	2-5/64	1-3/8	1-1/8	**BB7521900**	Price	**BB7521950**	Price

BURR-BIT®

Pipe Tap Burr-Bit for Standard NPT and NPS Taps

For Use With - 4 Flute Taps					
Pipe Tap Size	Extended Lgth. B (in.)	Shortest Lgth. C (in.)	Head OD D (in.)	Order No.	Price
1/8 Pipe	1-1/16	19/32	21/32	**BB7541100**	Price
1/4 Pipe	1-5/16	21/32	13/16	**BB7541200**	Price
3/8 Pipe	1-13/32	1	1-1/8	**BB7541300**	Price
1/2 Pipe	1-3/8	7/8	1-1/2	**BB7541400**	Price

For Use With - 5 Flute Taps					
Pipe Tap Size	Extended Lgth. B (in.)	Shortest Lgth. C (in.)	Head OD D (in.)	Order No.	Price
3/4 Pipe	1-1/2	1	1-1/2	**BB7541500**	Price
1 Pipe	1-7/8	1-3/16	1-7/8	**BB7541600**	Price

COUNTER-BIT®



- Conical pilot supports cutting edge to assure chatter-free cut
- Will not commence cutting until the pilot or work piece has found the center of the previously drilled hole
- Rubber spring provides "pre-load" for constant pressure, thus helping to eliminate chatter
- Concentric countersinks and chamfers assured
- Replaceable high speed steel blades ground with radial relief, assure smooth cut. (tungsten carbide blades special order)
- Available in 60°, 82°, and 90° (120° special order)
- Straight shank (Morse Taper shank special order)

			Counter-Bit Replacement Blade		Counter-Bit-Complete Tool	
Capacity	Degree	Shank Dia. (in.)	Order No.	Price	Order No.	Price
1/4 to 1-1/8	60	1/2	**BB75CB31060HS**	Price	**BB75CBS1060HS**	Price
1/4 to 1-1/8	82	1/2	**BB75CB31082HS**	Price	**BB75CBS1082HS**	Price
1/4 to 1-1/8	90	1/2	**BB75CB31090HS**	Price	**BB75CBS1090HS**	Price
1/2 to 1-1/2	60	1/2	**BB75CB31560HS**	Price	**BB75CBS1560HS**	Price
1/2 to 1-1/2	82	1/2	**BB75CB31582HS**	Price	**BB75CBS1582HS**	Price
1/2 to 1-1/2	90	1/2	**BB75CB31590HS**	Price	**BB75CBS1590HS**	Price
5/8 to 2-1/2	60	3/4	**BB75CB32060HS**	Price	**BB75CBS2060HS**	Price
5/8 to 2-1/2	82	3/4	**BB75CB32082HS**	Price	**BB75CBS2082HS**	Price
5/8 to 2-1/2	90	3/4	**BB75CB32090HS**	Price	**BB75CBS2090HS**	Price

Available up to 4-1/2" Capacity

Deburring Tools

Front/Rear Cutting or Rear Cuttng Only

- Simple to adjust or change blade in machine holder
- One piece durable, solid steel body
- Proven reliability, no springs or plungers
- Fully adjustable to control cutting pressure and chamfer

						Front/Rear Cutting			Rear Cutting Only		
Hole Dia. (in.)	OAL (in.)	Blade Depth (in.)	Pilot Length (in.)	Shank Length (in.)	Shank Dia. (in.)	Takes Blade Size	Order No.	Price	Takes Blade Size	Order No.	Price
.093	3-3/8	7/16	1-1/4	1	.236	L1A-02	**EB72EZL009302**	Price	L1A-08	**EB72EZL009308**	Price
.098	3-3/8	7/16	1-1/4	1	.236	L1A-02	**EB72EZL009802**	Price	L1A-08	**EB72EZL009808**	Price
.102	3-3/8	7/16	1-1/4	1	.236	L1A-02	**EB72EZL010202**	Price	L1A-08	**EB72EZL010208**	Price
.109	3-3/8	7/16	1-1/4	1	.236	L1A-02	**EB72EZL010902**	Price	L1A-08	**EB72EZL010908**	Price
.118	3-3/8	7/16	1-1/4	1	.236	L1A-02	**EB72EZL011802**	Price	L1A-08	**EB72EZL011808**	Price
.125	3-3/8	7/16	1-1/4	1	.236	L1B-02	**EB72EZL012502**	Price	L1B-08	**EB72EZL012508**	Price
.133	3-3/8	7/16	1-1/4	1	.236	L1B-02	**EB72EZL013302**	Price	L1B-08	**EB72EZL013308**	Price
.140	3-3/8	7/16	1-1/4	1	.236	L1B-02	**EB72EZL014002**	Price	L1B-08	**EB72EZL014008**	Price
.149	3-3/8	7/16	1-1/4	1	.236	L1B-02	**EB72EZL014902**	Price	L1B-08	**EB72EZL014908**	Price
.156	4-1/2	33/64	1-3/4	1-5/16	.250	L2A-02	**EB72EZL015602**	Price	L2A-08	**EB72EZL015608**	Price
.157	4-1/2	33/64	1-3/4	1-5/16	.236	L2A-02	**EB72EZL015702**	Price	L2A-08	**EB72EZL015708**	Price
.177	4-1/2	33/64	1-3/4	1-5/16	.236	L2A-02	**EB72EZL017702**	Price	L2A-08	**EB72EZL017708**	Price
.187	4-1/2	33/64	1-3/4	1-5/16	.250	L2B-02	**EB72EZL018702**	Price	L2B-08	**EB72EZL018708**	Price
.196	4-1/2	33/64	1-3/4	1-5/16	.236	L2B-02	**EB72EZL019602**	Price	L2B-08	**EB72EZL019608**	Price
.216	4-1/2	33/64	1-3/4	1-5/16	.236	L2B-02	**EB72EZL021602**	Price	L2B-08	**EB72EZL021608**	Price
.218	4-1/2	33/64	1-3/4	1-5/16	.250	L2B-02	**EB72EZL021802**	Price	L2B-08	**EB72EZL021808**	Price
.236	4-1/2	33/64	1-3/4	1-5/16	.236	L2B-02	**EB72EZL023602**	Price	L2B-08	**EB72EZL023608**	Price
.250	5	11/16	2	1-1/4	.359	L3A-02	**EB72EZL025002**	Price	L3A-08	**EB72EZL025008**	Price
.255	5	11/16	2	1-1/4	.354	L3A-02	**EB72EZL025502**	Price	L3A-08	**EB72EZL025508**	Price
.275	5	11/16	2	1-1/4	.354	L3A-02	**EB72EZL027502**	Price	L3A-08	**EB72EZL027508**	Price
.295	5	11/16	2	1-1/4	.354	L3A-02	**EB72EZL029502**	Price	L3A-08	**EB72EZL029508**	Price
.312	5	11/16	2	1-1/4	.359	L3A-02	**EB72EZL031202**	Price	L3A-08	**EB72EZL031208**	Price
.314	5	11/16	2	1-1/4	.354	L3A-02	**EB72EZL031402**	Price	L3A-08	**EB72EZL031408**	Price
.334	5	11/16	2	1-1/4	.354	L3A-02	**EB72EZL033402**	Price	L3A-08	**EB72EZL033408**	Price
.343	5	11/16	3-3/4	1-1/4	.348	L3B-02	**EB72EZL034302**	Price	L3B-08	**EB72EZL034308**	Price
.354	5	11/16	3-3/4	1-1/4	.348	L3B-02	**EB72EZL035402**	Price	L3B-08	**EB72EZL035408**	Price
.374	5	11/16	3-3/4	1-1/4	.368	L3B-02	**EB72EZL037402**	Price	L3B-08	**EB72EZL037408**	Price
.375	5	11/16	3-3/4	1-1/4	.370	L3B-02	**EB72EZL037502**	Price	L3B-08	**EB72EZL037508**	Price
.393	5	11/16	3-3/4	1-1/4	.387	L3B-02	**EB72EZL039302**	Price	L3B-08	**EB72EZL039308**	Price
.433	5	11/16	3-3/4	1-1/4	.427	L3B-02	**EB72EZL043302**	Price	L3B-08	**EB72EZL043308**	Price
.437	5	11/16	3-3/4	1-1/4	.432	L3B-02	**EB72EZL043702**	Price	L3B-08	**EB72EZL043708**	Price
.453	5	11/16	3-3/4	1-1/4	.447	L3B-02	**EB72EZL045302**	Price	L3B-08	**EB72EZL045308**	Price
.472	5	11/16	3-3/4	1-1/4	.466	L3B-02	**EB72EZL047202**	Price	L3B-08	**EB72EZL047208**	Price
.492	5	11/16	3-3/4	1-1/4	.486	L3B-02	**EB72EZL049202**	Price	L3B-08	**EB72EZL049208**	Price
.500	5	11/16	3-3/4	1-1/4	.495	L3B-02	**EB72EZL050002**	Price	L3B-08	**EB72EZL050008**	Price
.511	6-1/2	11/16	4-1/2	2	.477	L3B-02	**EB72EZL051102**	Price	L3B-08	**EB72EZL051108**	Price
.531	6-1/2	11/16	4-1/2	2	.477	L3B-02	**EB72EZL053102**	Price	L3B-08	**EB72EZL053108**	Price
.551	6-1/2	11/16	4-1/2	2	.477	L3B-02	**EB72EZL055102**	Price	L3B-08	**EB72EZL055108**	Price
.570	6-1/2	11/16	4-1/2	2	.477	L3B-02	**EB72EZL057002**	Price	L3B-08	**EB72EZL057008**	Price
.590	6-1/2	11/16	4-1/2	2	.477	L3B-02	**EB72EZL059002**	Price	L3B-08	**EB72EZL059008**	Price
.610	6-1/2	11/16	4-1/2	2	.477	L3B-02	**EB72EZL061002**	Price	L3B-08	**EB72EZL061008**	Price
.625	6-1/2	11/16	4-1/2	2	.500	L3B-02	**EB72EZL062502**	Price	L3B-08	**EB72EZL062508**	Price
.629	6-1/2	11/16	4-1/2	2	.477	L3B-02	**EB72EZL062902**	Price	L3B-08	**EB72EZL062908**	Price
.649	6-1/2	11/16	4-1/2	2	.477	L3B-02	**EB72EZL064902**	Price	L3B-08	**EB72EZL064908**	Price
.669	6-1/2	11/16	4-1/2	2	.477	L3B-02	**EB72EZL066902**	Price	L3B-08	**EB72EZL066908**	Price
.708	7	11/16	5	2	.477	L3B-02	**EB72EZL070802**	Price	L3B-08	**EB72EZL070808**	Price
.748	7	11/16	5	2	.477	L3B-02	**EB72EZL074802**	Price	L3B-08	**EB72EZL074808**	Price
.750	7	11/16	5	2	.500	L3B-02	**EB72EZL075002**	Price	L3B-08	**EB72EZL075008**	Price

Replacement Blades for Deburring Tools

Front/Rear Cutting or Rear Cutting Only

- Fit above tools
- Match blade number to above chart for correct sizing

	Front/Rear Cutting			Rear Cutting Only		
Hole Dia. Range (in.)	Model No.	Order No.	Price	Model No.	Order No.	Price
.093 - .118	L1A-02	**EB72L1A02**	Price	L1A-08	**EB72L1A08**	Price
.125 - .153	L1B-02	**EB72L1B02**	Price	L1B-08	**EB72L1B08**	Price
.156 - .177	L2A-02	**EB72L2A02**	Price	L2A-08	**EB72L2A08**	Price
.187 - .236	L2B-02	**EB72L2B02**	Price	L2B-08	**EB72L2B08**	Price
.250 - .334	L3A-02	**EB72L3A02**	Price	L3A-08	**EB72L3A08**	Price
.343 - .750	L3B-02	**EB72L3B02**	Price	L3B-08	**EB72L3B08**	Price

5 Pc. Set of High Speed Steel Deburring Cutters

Front/Rear Cutting

- Deburr the front & rear of a hole in one pass
- Simple to adjust or change blade in machine holder
- One piece durable, solid steel body
- Proven reliability, no springs or plungers
- Fully adjustable to control cutting pressure and chamfer
- Sizes included: 1/8, 5/32, 3/16, 7/32 & 1/4”



Order No.	Price
EB72EZHSSSET	Price

Combined Drills & Countersinks



60° • High Speed Steel • Cobalt

Plain Style

- Used for centering work ends, where the workpiece is to be revolved on machine centers
- 60° Countersink angle fits all standard centers
- Morse List #1495

RAPIDKUT | HSS M GP | PROCUT

			Rapidkut			Morse Cutting Tools			ProCut								
			High Speed Steel			High Speed Steel			High Speed Steel						M-42 Cobalt		
			Plain			Plain			Price			Plain			Plain		
Body Dia. (in.)	Drill Dia. (in.)	OAL (in.)	Size	Order No.	Price	Size	Order No.	Price	Size	Order No.	Price	Size	Order No.	Price	Size	Order No.	Price
1/8	3/64	1-1/4	1	**AV401**	Price	1	**MT1925041**	Price	-	**-**	-	1	**AV501**	Price	1	**AV801**	Price
3/16	5/64	1-7/8	2	**AV402**	Price	2	**MT1925042**	Price	-	**-**	-	2	**AV502**	Price	2	**AV802**	Price
1/4	7/64	2	3	**AV403**	Price	3	**MT1925043**	Price	-	**-**	-	3	**AV503**	Price	3	**AV803**	Price
5/16	1/8	2-1/8	4	**AV404**	Price	4	**MT1925044**	Price	4	**AV704**	Price	4	**AV504**	Price	4	**AV804**	Price
7/16	3/16	2-3/4	5	**AV405**	Price	5	**MT1925045**	Price	5	**AV705**	Price	5	**AV505**	Price	5	**AV805**	Price
1/2	7/32	3	6	**AV406**	Price	6	**MT1925046**	Price	6	**AV706**	Price	6	**AV506**	Price	6	**AV806**	Price
5/8	1/4	3-1/4	7	**AV407**	Price	7	**MT1925047**	Price	-	**-**	-	7	**AV507**	Price	7	**AV807**	Price
3/4	5/16	3-1/2	8	**AV408**	Price	8	**MT1925048**	Price	8	**AV708**	Price	8	**AV508**	Price	8	**AV808**	Price
1	3/8	3-3/4	-	**-**	-	-	**-**	-	-	**-**	-	10	**AV5010**	Price	-	**-**	-

KEO Combined Drills & Countersinks

MADE IN THE USA

60° Plain Type • High Speed Steel



- For producing center holes in components or work-pieces which require machining between centers

					Plain		Plain - TiN Coated		Left Hand	
Size	Body Dia. (in.)	Drill Dia.	Drill Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
5-0	1/8	.010	.010	1-1/4	**AV4210010†**	Price	**AV4210010TIN†**	Price	**-**	-
4-0	1/8	.015	.015	1-1/4	**AV4210015†**	Price	**AV4210015TIN†**	Price	**-**	-
3-0	1/8	.020	.020	1-1/4	**AV4210020†**	Price	**AV4210020TIN†**	Price	**-**	-
2-0	1/8	.025	.025	1-1/4	**AV4210025†**	Price	**AV4210025TIN†**	Price	**-**	-
0	1/8	1/32	1/32	1-1/4	**AV4210032†**	Price	**AV4210032TIN†**	Price	**-**	-
1	1/8	3/64	3/64	1-1/4	**AV4110100**	Price	**AV4110100TIN**	Price	**AV4210150**	Price
2	3/16	5/64	5/64	1-7/8	**AV4110200**	Price	**AV4110200TIN**	Price	**AV4210250**	Price
3	1/4	7/64	7/64	2	**AV4110300**	Price	**AV4110300TIN**	Price	**AV4210350**	Price
4	5/16	1/8	1/8	2-1/8	**AV4110400**	Price	**AV4110400TIN**	Price	**AV4210450**	Price
4-1/2	3/8	9/64	9/64	2-1/2	**AV4114500**	Price	**AV4114500TIN**	Price	**AV4214550**	Price
5	7/16	3/16	3/16	2-3/4	**AV4110500**	Price	**AV4110500TIN**	Price	**AV4210550**	Price
6	1/2	7/32	7/32	3	**AV4110600**	Price	**AV4110600TIN**	Price	**AV4210650**	Price
7	5/8	1/4	1/4	3-1/4	**AV4110700**	Price	**AV4110700TIN**	Price	**AV4210750**	Price
8	3/4	5/16	5/16	3-1/2	**AV4110800**	Price	**AV4110800TIN**	Price	**AV4210850**	Price
9	7/8	11/32	11/32	3-5/8	**AV4110900**	Price	**AV4110900TIN**	Price	**AV4210950**	Price
10	1	3/8	3/8	3-3/4	**AV4111000**	Price	**AV4111000TIN**	Price	**AV4211050**	Price

† Aircraft series

KEO Metric Combined Drills & Countersinks

High Speed Steel • Type A - 60° Plain Type

- Standard metric sizes according to DIN333 specifications



Size (mm)	Body Dia. (mm)	Drill Dia. (mm)	Drill Length (mm)	OAL (mm)	Order No.	Price
0.5	3.15	0.5	.80	25	**AV4216001†**	Price
0.8	3.15	0.8	1.1	25	**AV4216002†**	Price
1.0	3.15	1.0	1.3	31.5	**AV4216003**	Price
1.25	3.15	1.25	1.6	31.5	**AV4216004**	Price
1.6	4.0	1.6	2.0	35.5	**AV4216040**	Price
2.0	5.0	2.0	2.5	40	**AV4216050**	Price
2.5	6.3	2.5	3.1	45	**AV4216060**	Price
3.15	8.0	3.15	3.9	50	**AV4216080**	Price
4.0	10.0	4.0	5.0	56	**AV4216100**	Price
5.0	12.5	5.0	6.3	63	**AV4216120**	Price
6.3	16.0	6.3	8.0	71	**AV4216160**	Price
8.0	20.0	8.0	10.1	80	**AV4216200**	Price
10.0	25.0	10.0	12.8	100	**AV4216250**	Price
12.5	31.5	12.5	16.5	125	**AV4216310**	Price

†SE denotes single-end

KEO Combined Drills & Countersinks

82° & 90° Plain Type • High Speed Steel



					Uncoated				TiN			
					82°		90°		82°		90°	
Size	Body Dia. (in.)	Drill Dia. (in.)	Drill Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
5-0	1/8	.010	.010	1-1/4	**-**	-	**-**	-	**AV4210038TIN**	Price	**AV4210014TIN†**	Price
4-0	1/8	.015	.015	1-1/4	**-**	-	**-**	-	**AV4210039TIN**	Price	**AV4210019TIN†**	Price
3-0	1/8	.020	.020	1-1/4	**-**	-	**-**	-	**AV4210040TIN**	Price	**AV4210024TIN†**	Price
2-0	1/8	.025	.025	1-1/4	**-**	-	**-**	-	**AV4210029TIN†**	Price	**AV4210030TIN†**	Price
0	1/8	1/32	1/32	1-1/4	**-**	-	**-**	-	**AV4210036TIN†**	Price	**AV4210037TIN†**	Price
1	1/8	3/64	3/64	1-1/4	**AV4210182**	Price	**AV4210190**	Price	**AV4210182TIN**	Price	**AV4210190TIN**	Price
2	3/16	5/64	5/64	1-7/8	**AV4210282**	Price	**AV4210290**	Price	**AV4210282TIN**	Price	**AV4210290TIN**	Price
3	1/4	7/64	7/64	2	**AV4210382**	Price	**AV4210390**	Price	**AV4210382TIN**	Price	**AV4210390TIN**	Price
4	5/16	1/8	1/8	2-1/8	**AV4210482**	Price	**AV4210490**	Price	**AV4210482TIN**	Price	**AV4210490TIN**	Price
4-1/2	3/8	9/64	9/64	2-1/2	**AV4214582**	Price	**AV4214590**	Price	**AV4214582TIN**	Price	**AV4214590TIN**	Price
5	7/16	3/16	3/16	2-3/4	**AV4210582**	Price	**AV4210590**	Price	**AV4210582TIN**	Price	**AV4210590TIN**	Price
6	1/2	7/32	7/32	3	**AV4210682**	Price	**AV4210690**	Price	**AV4210682TIN**	Price	**AV4210690TIN**	Price
7	5/8	1/4	1/4	3-1/4	**AV4210782**	Price	**AV4210790**	Price	**AV4210782TIN**	Price	**AV4210790TIN**	Price
8	3/4	5/16	5/16	3-1/2	**AV4210882**	Price	**AV4210890**	Price	**AV4210882TIN**	Price	**AV4210890TIN**	Price
9	7/8	11/32	11/32	3-5/8	**AV4210982**	Price	**AV4210990**	Price	**AV4210982TIN**	Price	**AV4210990TIN**	Price
10	1	3/8	3/8	3-3/4	**AV4211082**	Price	**AV4211090**	Price	**AV4211082TIN**	Price	**AV4211090TIN**	Price

† Aircraft series

Bell Type Center Drills



High Speed Steel • 60°

- Designed for producing protected center holes in components or workpieces
- Additional 120° included chamfer eliminates the risk of deforming the countersink seat

KEO

Size	Bell Dia. (in.)	Body Dia. (in.)	Drill Dia. (in.)	Drill Length (in.)	OAL (in.)	Order No.	Price
11	.100	1/8	3/64	3/64	1-1/4	**AV4111100**	Price
12	.150	3/16	1/16	1/16	1-7/8	**AV4111200**	Price
13	.200	1/4	3/32	3/32	2	**AV4111300**	Price
14	.250	5/16	7/64	7/64	2-1/8	**AV4111400**	Price
15	.350	7/16	5/32	5/32	2-3/4	**AV4111500**	Price
16	.400	1/2	3/16	3/16	3	**AV4111600**	Price
17	.500	5/8	7/32	7/32	3-1/4	**AV4111700**	Price
18	.600	3/4	1/4	1/4	3-1/2	**AV4111800**	Price
19	.700	7/8	5/16	5/16	3-5/8	**AV4111900**	Price
20	.800	1	3/8	3/8	3-3/4	**AV4112000**	Price

PROCUT

Size	Bell Dia. (in.)	Body Dia. (in.)	Drill Dia. (in.)	Drill Length (in.)	OAL (in.)	Order No.	Price
11	.100	1/8	3/64	3/64	1-1/4	**AV5011**	Price
12	.150	3/16	1/16	5/64	1-7/8	**AV5012**	Price
13	.200	1/4	3/32	7/64	2	**AV5013**	Price
14	.250	5/16	7/64	1/8	2-1/8	**AV5014**	Price
15	.400	7/16	5/32	3/16	2-3/4	**AV5015**	Price
16	.500	1/2	3/16	-	3	**AV5016**	Price
17	.600	5/8	7/32	1/4	3-1/4	**AV5017**	Price
18	.700	3/4	1/4	-	3-1/2	**AV5018**	Price

KEO Radius Type



High Speed Steel

- Radius style designed to reduce the bearing surface of the center hole and provide a protected centering seat while reducing the risk of breakage

Size	Body Dia. (in.)	Drill Dia. (in.)	Drill Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1	1/8	3/64	.132	1-1/4	5/32	**AV4110110**	Price
2	3/16	5/64	.204	1-7/8	7/32	**AV4110210**	Price
3	1/4	7/64	.275	2	9/32	**AV4110310**	Price
4	5/16	1/8	11/32	2-1/8	3/8	**AV4110410**	Price
4-1/2	3/8	9/64	13/32	2-1/2	7/16	**AV4114510**	Price
5	7/16	3/16	31/64	2-3/4	1/2	**AV4110510**	Price
6	1/2	7/32	35/64	3	9/16	**AV4110610**	Price
7	5/8	1/4	43/64	3-1/4	45/64	**AV4110710**	Price
8	3/4	5/16	13/16	3-1/2	7/8	**AV4110810**	Price
9	7/8	11/32	15/16	3-5/8	1	**AV4110910**	Price
10	1	3/8	1-1/16	3-3/4	1-7/64	**AV4111010**	Price

Long Series Combined Drills & Countersinks



60° • High Speed Steel

Morse List #1499

PROCUT

				Morse Cutting Tools		ProCut	
Size	OAL (in.)	Body Dia. (in.)	Drill Dia. (in.)	Order No.	Price	Order No.	Price
1	3	1/8	3/64	**MT1925010**	Price	**AV5213X**	Price
1	4	1/8	3/64	**MT1925011**	Price	**AV5214X**	Price
1	5	1/8	3/64	**-**	-	**AV5215X**	Price
1	6	1/8	3/64	**-**	-	**AV5216X**	Price
2	4	3/16	5/64	**MT1925012**	Price	**AV5224X**	Price
2	5	3/16	5/64	**MT1925013**	Price	**AV5225X**	Price
2	6	3/16	5/64	**-**	-	**AV5226X**	Price
3	4	1/4	7/64	**MT1925014**	Price	**AV5234X**	Price
3	5	1/4	7/64	**MT1925015**	Price	**AV5235X**	Price
3	6	1/4	7/64	**-**	-	**AV5236X**	Price
4	4	5/16	1/8	**MT1925016**	Price	**AV5244X**	Price
4	5	5/16	1/8	**MT1925017**	Price	**AV5245X**	Price
4	6	5/16	1/8	**MT1925018**	Price	**AV5246X**	Price
5	4	7/16	3/16	**-**	-	**AV5254X**	Price
5	5	7/16	3/16	**MT1925019**	Price	**AV5255X**	Price
5	6	7/16	3/16	**MT1925020**	Price	**AV5256X**	Price
6	4	1/2	7/32	**-**	-	**AV5264X**	Price
6	5	1/2	7/32	**MT1925021**	Price	**AV5265X**	Price
6	6	1/2	7/32	**MT1925022**	Price	**AV5266X**	Price
7	6	5/8	1/4	**MT1925023**	Price	**AV5276X**	Price
8	6	3/4	5/16	**MT1925024**	Price	**AV5286X**	Price

Missile and Aircraft Series Combined Drills and Countersinks



60° • High Speed Steel

Morse List #1495

HSS MORSE M GP PROCUT

					Morse Cutting Tools		ProCut	
Size	Body Dia. (in.)	Drill Dia.	Drill Length	OAL	Order No.	Price	Order No.	Price
000	1/8	.020	.020	1-1/4	**MT1925049**	Price	**-**	-
00	1/8	.025	.025	1-1/4	**MT1925050**	Price	**AV5300**	Price
0	1/8	1/32	1/32	1-1/4	**MT1925051**	Price	**AV530**	Price

KEO Combined Drills & Countersinks 5 Pc. Set #1 - #5



- 60° Plain type
- High speed steel

Order No.	Price
AV4110000	Price

KEO Long Series Combined Drills & Countersinks



60° • High Speed Steel and Carbide

				High Speed Steel		Solid Carbide	
Size	OAL (in.)	Body Dia. (in.)	Drill Dia. (in.)	Order No.	Price	Order No.	Price
2-0	4	1/8	.025	**-**	-	**AV4229004**	Price
2-0	6	1/8	.025	**-**	-	**AV4229006**	Price
0	4	1/8	1/32	**-**	-	**AV4229014**	Price
0	6	1/8	1/32	**-**	-	**AV4229016**	Price
1	3	1/8	3/64	**AV4221030**	Price	**-**	-
1	4	1/8	3/64	**AV4221040**	Price	**AV4229104**	Price
1	5	1/8	3/64	**AV4221050**	Price	**-**	-
1	6	1/8	3/64	**AV4221060**	Price	**AV4229106**	Price
1	8	1/8	3/64	**AV4221080**	Price	**-**	-
2	3	3/16	5/64	**AV4222030**	Price	**-**	-
2	4	3/16	5/64	**AV4222040**	Price	**AV4229204**	Price
2	5	3/16	5/64	**AV4222050**	Price	**-**	-
2	6	3/16	5/64	**AV4222060**	Price	**AV4229206**	Price
2	8	3/16	5/64	**AV4222080**	Price	**-**	-
3	3	1/4	7/64	**AV4223030**	Price	**-**	-
3	4	1/4	7/64	**AV4223040**	Price	**AV4229304**	Price
3	5	1/4	7/64	**AV4223050**	Price	**-**	-
3	6	1/4	7/64	**AV4223060**	Price	**AV4229306**	Price
4	3	5/16	1/8	**AV4224030**	Price	**-**	-
3	8	1/4	7/64	**AV4223080**	Price	**-**	-
4	4	5/16	1/8	**AV4224040**	Price	**AV4229404**	Price
4	5	5/16	1/8	**AV4224050**	Price	**-**	-
4	6	5/16	1/8	**AV4224060**	Price	**AV4229406**	Price
4	8	5/16	1/8	**AV4224080**	Price	**-**	-
4-1/2	4	3/8	9/64	**AV4224540**	Price	**-**	-
4-1/2	5	3/8	9/64	**AV4224550**	Price	**-**	-
4-1/2	6	3/8	9/64	**AV4224560**	Price	**-**	-
4-1/2	8	3/8	9/64	**AV4224580**	Price	**-**	-
5	4	7/16	3/16	**AV4225040**	Price	**AV4229504**	Price
5	5	7/16	3/16	**AV4225050**	Price	**-**	-
5	6	7/16	3/16	**AV4225060**	Price	**AV4229506**	Price
5	8	7/16	3/16	**AV4225080**	Price	**-**	-
6	4	1/2	7/32	**AV4226040**	Price	**AV4229604**	Price
6	5	1/2	7/32	**AV4226050**	Price	**-**	-
6	6	1/2	7/32	**AV4226060**	Price	**AV4229606**	Price
6	8	1/2	7/32	**AV4226080**	Price	**-**	-
7	6	5/8	1/4	**AV4227060**	Price	**AV4229706**	Price
7	8	5/8	1/4	**AV4227080**	Price	**-**	-
8	6	3/4	5/16	**AV4228060**	Price	**AV4229806**	Price
8	8	3/4	5/16	**AV4228080**	Price	**-**	-

KEO Combined Drills & Countersinks

MADE IN THE USA

60° Plain Type • Cobalt

- For producing center holes in components or workpieces which require machining between centers
- Available in M42 cobalt or T15 cobalt
- Right hand



					M-42 Cobalt		T-15 Cobalt	
Size	Body Dia. (in.)	Drill Dia. (in.)	Drill Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
5-0	1/8	.010	.010	1-1/4	**AV4210012†**	Price	**-**	-
4-0	1/8	.015	.015	1-1/4	**AV4210017†**	Price	**-**	-
3-0	1/8	.020	.020	1-1/4	**AV4210022†**	Price	**-**	-
2-0	1/8	.025	.025	1-1/4	**AV4210027†**	Price	**-**	-
0	1/8	1/32	1/32	1-1/4	**AV4210034†**	Price	**-**	-
1	1/8	3/64	3/64	1-1/4	**AV4210142**	Price	**AV4210115**	Price
2	3/16	5/64	5/64	1-7/8	**AV4210242**	Price	**AV4210215**	Price
3	1/4	7/64	7/64	2	**AV4210342**	Price	**AV4210315**	Price
4	5/16	1/8	1/8	2-1/8	**AV4210442**	Price	**AV4210415**	Price
4-1/2	3/8	9/64	9/64	2-1/2	**AV4214542**	Price	**AV4214515**	Price
5	7/16	3/16	3/16	2-3/4	**AV4210542**	Price	**AV4210515**	Price
6	1/2	7/32	7/32	3	**AV4210642**	Price	**AV4210615**	Price
7	5/8	1/4	1/4	3-1/4	**AV4210742**	Price	**AV4210715**	Price
8	3/4	5/16	5/16	3-1/2	**AV4210842**	Price	**AV4210815**	Price
9	7/8	11/32	11/32	3-5/8	**AV4210942**	Price	**AV4210915**	Price
10	1	3/8	3/8	3-3/4	**AV4211042**	Price	**AV4211015**	Price

†Aircraft type

KEO Solid Carbide Combined Drills & Countersinks-Plain Type



60, 82 & 90°

- Used for producing center holes in components or workpieces which require machining between centers

				60°		82°		90°	
Size	Body Dia. (in.)	Drill Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
00	1/8	.025	1-1/2	**AV4219025**	Price	**-**	-	**-**	-
2-0	1/8	.025	1-1/2	**-**	-	**AV4219028**	Price	**AV4219029**	Price
3-0	1/8	.020	1-1/2	**AV4219020**	Price	**AV4219021**	Price	**AV4219022**	Price
4-0	1/8	.015	1-1/2	**AV4219015**	Price	**AV4219018**	Price	**AV4219019**	Price
5-0	1/8	.010	1-1/2	**AV4219010**	Price	**AV4219011**	Price	**AV4219012**	Price
0	1/8	1/32	1-1/2	**AV4219032**	Price	**AV4219038**	Price	**AV4219039**	Price
1	1/8	3/64	1-1/2	**AV4219105**	Price	**AV4219108**	Price	**AV4219109**	Price
2	3/16	5/64	2	**AV4219205**	Price	**AV4219208**	Price	**AV4219209**	Price
3	1/4	7/64	2	**AV4219305**	Price	**AV4219308**	Price	**AV4219309**	Price
4	5/16	1/8	2-1/8	**AV4219405**	Price	**AV4219408**	Price	**AV4219409**	Price
5	7/16	3/16	2-3/4	**AV4219505**	Price	**AV4219508**	Price	**AV4219509**	Price
6	1/2	7/32	3	**AV4219605**	Price	**AV4219608**	Price	**AV4219609**	Price
7	5/8	1/4	3-3/4	**AV4219705**	Price	**AV4219708**	Price	**AV4219709**	Price
8	3/4	5/16	4	**AV4219805**	Price	**AV4219808**	Price	**AV4219809**	Price

RAPIDKUT Solid Carbide Center Drills

- Carbide for longer tool life especially in abrasive and difficult-to-cut metals



				Price		82°		90°	
				Rapidkut		Rapidkut		Rapidkut	
Size	OAL	Body Dia.	Drill Dia.	Order No.	Price	Order No.	Price	Order No.	Price
00	1-1/2	1/8	.025	**AV54CD00**	Price	**AV541000**	Price	**AV541010**	Price
0	1-1/2	1/8	1/32	**AV54CD0**	Price	**AV541001**	Price	**AV541011**	Price
1	1-1/2	1/8	3/64	**AV54CD1**	Price	**AV541002**	Price	**AV541012**	Price
2	1-7/8	3/16	5/64	**AV54CD2**	Price	**AV541003**	Price	**AV541013**	Price
3	2	1/4	7/64	**AV54CD3**	Price	**AV541004**	Price	**AV541014**	Price
4	2-1/8	5/16	1/8	**AV54CD4**	Price	**AV541005**	Price	**AV541015**	Price
5	2-3/4	7/16	3/16	**AV54CD5**	Price	**AV541006**	Price	**AV541016**	Price
6	3	1/2	7/32	**AV54CD6**	Price	**AV541007**	Price	**AV541017**	Price
7	3-1/4	5/8	1/4	**-**	-	**AV541008**	Price	**AV541018**	Price
8	3-1/2	3/4	5/16	**-**	-	**AV541009**	Price	**AV541019**	Price

MICRO 100 Solid Carbide Combined Drills & Countersinks



- Provides for vastly increased speed and feed rates in cutting aluminum, copper, stainless steels, high temperature alloys, thermoplastics and composites used in the aircraft industry

Size	Body Dia. (in.)	Drill Dia. (in.)	OAL (in.)	Order No.	Price
0	1/8	1/32	1-1/4	**GE45DC01**	Price
00	1/8	.025	1-1/4	**GE45DC00**	Price
1	1/8	3/64	1-1/2	**GE45DC1**	Price
2	3/16	5/64	1-7/8	**GE45DC2**	Price
3	1/4	7/64	2	**GE45DC3**	Price
4	5/16	1/8	2-1/8	**GE45DC4**	Price
5	7/16	3/16	2-3/4	**GE45DC5**	Price
6	1/2	7/32	3	**GE45DC6**	Price
1 - 6 Set	-	-	3	**GE45DC0**	Price

RAPIDKUT Solid Carbide Long Series Combined Drill & Countersink - 60°



Size	OAL (in.)	Body Dia. (in.)	Drill Dia. (in.)	Order No.	Price
1	4	1/8	3/64	**AV541020**	Price
2	4	3/16	5/64	**AV541021**	Price
3	4	1/4	7/64	**AV541022**	Price
4	4	5/16	1/8	**AV541023**	Price
5	6	7/16	3/16	**AV541024**	Price
6	6	1/2	7/32	**AV541025**	Price
7	6	5/8	1/4	**AV541026**	Price
8	6	3/4	5/16	**AV541027**	Price

M.A. FORD Long Series Combination Drill & Countersink



Solid Carbide • 60°

- Long overall length
- Solid carbide construction helps reduce tool changes when centering abrasive or difficult to machine materials
- Designed to maintain accurate center holes on long production runs, or when precise centering is required
- M A Ford List #405

Size	OAL (in.)	Body Dia. (in.)	Drill Dia. (in.)	Order No.	Price
00	5	1/8	.025	**AX4340501**	Price
0	5	1/8	1/32	**AX4340505**	Price
1	5	1/8	3/64	**AX4340509**	Price
2	5	3/16	5/64	**AX4340513**	Price
3	5	1/4	7/64	**AX4340517**	Price
4	5	5/16	1/8	**AX4340521**	Price
5	5	7/16	3/16	**AX4340525**	Price
6	5	1/2	7/32	**AX4340529**	Price

KEO Solid Carbide Combined Drills & Countersinks



60° • Bell Type

- Used for producing protected center holes in components or work-pieces which require machining between centers
- The addtional 120° included chamfer eliminates the risk of deforming the countersink seat

Size	Bell Dia. (in.)	Body Dia. (in.)	Drill Dia. (in.)	OAL (in.)	Order No.	Price
11	.100	1/8	3/64	1-1/4	**AV4219110**	Price
12	.150	3/16	1/16	1-7/8	**AV4219120**	Price
13	.200	1/4	3/32	2	**AV4219130**	Price
14	.250	5/16	7/64	2-1/8	**AV4219140**	Price
15	.350	7/16	5/32	2-3/4	**AV4219150**	Price
16	.400	1/2	3/16	3	**AV4219160**	Price

NC Spotting Drills

High Speed Steel • 82°, 90° and 120° • Bright Finish



- Ideal for close tolerance NC spotting operations
- Provides a more accurate and faster spotting location for follow-up drilling
- Eliminates wandering
- Short, regular or long lengths

			Price				Keo						Morse Cutting Tools			
			90°		120°		Price		90°		120°		90°		120°	
Body Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/4	2-1/2	AF6590161	Price	AF65120161	Price	-	-	AV4132140	Price	AV4133140	Price	AF6011900	Price	AF6011906	Price
1/4	3/8	2-1/2	-	-	-	-	AV4238142	Price	-	-	-	-	-	-	-	-
1/4	3/4	4	AF6590162	Price	AF65120162	Price	AV4238144	Price	AV4132142	Price	AV4133142	Price	AF6011912	Price	AF6011918	Price
1/4	3/4	6	AF6590163	Price	AF65120163	Price	AV4238146	Price	AV4132144	Price	AV4133144	Price	-	-	-	-
3/8	1-1/8	3-1/8	AF6590241	Price	AF65120241	Price	AV4238382	Price	AV4132380	Price	AV4133380	Price	AF6011901	Price	AF6011907	Price
3/8	1-1/8	5	AF6590242	Price	AF65120242	Price	AV4238384	Price	AV4132382	Price	AV4133382	Price	AF6011913	Price	AF6011919	Price
3/8	1-1/8	7	AF6590243	Price	AF65120243	Price	AV4238386	Price	AV4132384	Price	AV4133384	Price	-	-	-	-
1/2	1-3/8	3-3/4	AF6590321	Price	AF65120321	Price	AV4238122	Price	AV4132120	Price	AV4133120	Price	AF6011902	Price	AF6011908	Price
1/2	1-3/8	6	AF6590322	Price	AF65120322	Price	AV4238124	Price	AV4132122	Price	AV4133122	Price	AF6011914	Price	AF6011920	Price
1/2	1-3/8	8	AF6590323	Price	AF65120323	Price	AV4238126	Price	AV4132124	Price	AV4133124	Price	-	-	-	-
5/8	1-5/8	4-3/8	AF6590401	Price	AF65120401	Price	AV4238582	Price	AV4132580	Price	AV4133580	Price	AF6011903	Price	AF6011909	Price
5/8	1-5/8	7	AF6590402	Price	AF65120402	Price	AV4238584	Price	AV4132582	Price	AV4133582	Price	AF6011915	Price	AF6011921	Price
5/8	1-5/8	9	AF6590403	Price	-	-	AV4238586	Price	AV4132584	Price	AV4133584	Price	-	-	-	-
3/4	1-7/8	5	AF6590481	Price	AF65120481	Price	AV4238342	Price	AV4132340	Price	AV4133340	Price	AF6011904	Price	AF6011910	Price
3/4	1-7/8	8	AF6590482	Price	AF65120482	Price	AV4238344	Price	AV4132342	Price	AV4133342	Price	AF6011916	Price	AF6011922	Price
3/4	1-7/8	10	AF6590483	Price	AF65120483	Price	AV4238346	Price	AV4132344	Price	AV4133344	Price	-	-	-	-
1	2-1/4	6	AF6591001	Price	AF65121001	Price	AV4238102	Price	AV4132100	Price	AV4133100	Price	AF6011905	Price	AF6011911	Price
1	2-1/4	8	AF6591002	Price	-	-	AV4238104	Price	AV4132102	Price	AV4133102	Price	AF6011917	Price	AF6011923	Price
1	2-1/4	10	AF6591003	Price	AF65121003	Price	AV4238106	Price	AV4132104	Price	AV4133104	Price	-	-	-	-

RAPIDKUT Spotting Drills

High Speed Steel

- 90 or 120° Angle
- Available in short and longer lengths for a variety of applications



			90°		120°	
Size	Flute Length	Overall Length	Order No.	Price	Order No.	Price
1/4	1	2-1/2	SD20160090	Price	SD20160120	Price
1/4	1	4	SD20L160090	Price	SD20L160120	Price
3/8	1-1/8	3-1/8	SD20240090	Price	SD20240120	Price
3/8	1-1/8	5	SD20L240090	Price	SD20L240120	Price
1/2	1-1/2	3-3/4	SD20320090	Price	SD20320120	Price
1/2	1-1/2	6	SD20L320090	Price	SD20L320120	Price
5/8	1-5/8	4-1/4	SD20400090	Price	SD20400120	Price
5/8	1-5/8	7-1/8	SD20L400090	Price	SD20L400120	Price
3/4	1-3/4	5	SD20480090	Price	SD20480120	Price
3/4	1-3/4	8	SD20L480090	Price	SD20L480120	Price
1	1-3/4	6	SD20640090	Price	SD20640120	Price
1	1-3/4	8	SD20L640090	Price	SD20L640120	Price

RAPIDKUT Spotting Drill Sets

High Speed Steel • 6 Piece Set

- 90 or 120° Angle
- Available in short and longer lengths for a variety of applications

Sizes Included	Length	Angle	Order No.	Price
1/4 - 1	Shorter Lengths	90°	SD20S1664090	Price
1/4 - 1	Longer Lengths	90°	SD20L1664090	Price
1/4 - 1	Shorter Lengths	120°	SD20S1664120	Price
1/4 - 1	Longer Lengths	120°	SD20L1664120	Price

KEO Spotting & Centering Drills



High Speed Steel • 90° and 118° • Right and Left Hand

- Prevent misalignment frequently caused by using regular drills for centering
- These short drills can be chucked close to the point ensuring accuracy and true starts

			90°				118°			
			Left Hand		Right Hand		Price		Right Hand	
Body Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	1-1/4	AV4230156	Price	AV4230151	Price	AV4230155	Price	AV4230150	Price
3/16	1/2	1-3/8	AV4230186	Price	AV4230181	Price	AV4230185	Price	AV4230180	Price
1/4	5/8	1-1/2	AV4230256	Price	AV4230251	Price	AV4230255	Price	AV4230250	Price
5/16	5/8	1-1/2	AV4230316	Price	AV4230311	Price	AV4230315	Price	AV4230310	Price
3/8	1	2	AV4230386	Price	AV4230381	Price	AV4230385	Price	AV4230380	Price
7/16	1	2	AV4230766	Price	AV4230761	Price	AV4230765	Price	AV4230760	Price
1/2	1	2	AV4230126	Price	AV4230121	Price	AV4230125	Price	AV4230120	Price
9/16	1	2	AV4230966	Price	AV4230961	Price	AV4230965	Price	AV4230960	Price
5/8	1-1/8	2-1/4	AV4230586	Price	AV4230581	Price	AV4230585	Price	AV4230580	Price
3/4	1-1/8	2-1/4	AV4230346	Price	AV4230341	Price	AV4230345	Price	AV4230340	Price
7/8	1-1/4	2-1/2	AV4230786	Price	AV4230781	Price	AV4230785	Price	AV4230780	Price
1	1-1/4	2-1/2	AV4231006	Price	AV4231001	Price	AV4231005	Price	AV4231000	Price
1-1/4	2	4	AV4231146	Price	AV4231141	Price	AV4231145	Price	AV4231140	Price
1-1/2	2-1/2	5	AV4231126	Price	AV4231121	Price	AV4231125	Price	AV4231120	Price
1-3/4	2-3/4	5-1/2	AV4231346	Price	AV4231341	Price	AV4231345	Price	AV4231340	Price

M A Ford Solid Carbide Spotting Drills



.3xD Length • 90° & 120°

- 21° Helix
- Designed for accurate spotting on NC machines
- Short lengths and no body clearance make this a very rigid tool
- Can be used at high speeds and feeds, compatible with other carbide tooling
- Easy to repoint because there is no web taper
- M A Ford List #403 & 404

			90°		120°	
Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
3/16	1	2	AX4340401	Price	AX4340301	Price
1/4	1	2	AX4340413	Price	AX4340313	Price
5/16	1	2-1/2	AX4340417	Price	AX4340317	Price
3/8	1	2-1/2	AX4340425	Price	AX4340325	Price
1/2	1-9/16	3	AX4340437	Price	AX4340337	Price

Solid Carbide NC Spotting Drills

82°, 90° and 120°



- Perfect for hard to reach areas
- Narrow chisel edge for quick starting
- Constant web which allows for resharpening without the need for web thinning

			82°		90°		120°	
Drill Dia. (in.)	Flute Length	Overall Length	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	1-1/2	**AV4234182**	Price	**AV4134180**	Price	**AV4134181**	Price
3/16	9/16	2	**AV4234185**	Price	**AV4134187**	Price	**AV4134188**	Price
1/4	3/4	2-1/2	**AV4234145**	Price	**AV4134140**	Price	**AV4134141**	Price
5/16	3/4	2-1/2	**AV4234315**	Price	**AV4134312**	Price	**AV4134313**	Price
3/8	3/4	2-1/2	**AV4234385**	Price	**AV4134380**	Price	**AV4134381**	Price
1/2	1	3	**AV4234125**	Price	**AV4134120**	Price	**AV4134121**	Price
5/8	1	3-1/2	**-**	-	**AV4134580**	Price	**AV4134581**	Price
3/4	1-1/8	4	**AV4234345**	Price	**AV4134340**	Price	**AV4134341**	Price

Solid Carbide 142° Point Angle Spotting Drill



- Great for steel & stainless steel applications
- Prepares a hole for a high performance drill with a 130°-140° point angle

Drill Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	5/8	1-1/2	**AV4134184**	Price
3/16	13/16	2	**AV4134189**	Price
1/4	13/16	2-1/2	**AV4134144**	Price
5/16	7/8	2-1/2	**AV4134314**	Price

Drill Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/8	7/8	2-1/2	**AV4134384**	Price
1/2	1-1/8	3	**AV4134124**	Price
5/8	1-1/8	3-1/2	**AV4134584**	Price
3/4	1-1/4	4	**AV4134344**	Price

MICRO 100 Solid Carbide Spotting & Centering Drills

82°, 90°, 100°, and 120°



			82°		90°		100°		120°	
Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/4	2	**GE45SPD250082**	Price	**GE45SPD250090**	Price	**GE45SPD250100**	Price	**GE45SPD250120**	Price
5/16	3/4	2	**GE45SPD312082**	Price	**GE45SPD312090**	Price	**GE45SPD312100**	Price	**GE45SPD312120**	Price
3/8	1	2	**GE45SPD375082**	Price	**GE45SPD375090**	Price	**GE45SPD375100**	Price	**GE45SPD375120**	Price
1/2	1	2-1/2	**GE45SPD500082**	Price	**GE45SPD500090**	Price	**GE45SPD500100**	Price	**GE45SPD500120**	Price
5/8	1-1/8	2-1/2	**GE45SPD625082**	Price	**GE45SPD625090**	Price	**GE45SPD625100**	Price	**GE45SPD625120**	Price
3/4	1-1/8	2-1/2	**GE45SPD750082**	Price	**GE45SPD750090**	Price	**GE45SPD750100**	Price	**-**	-

RAPIDKUT Solid Carbide Spotting & Centering Drills

60°, 90° and 120°



- Made from premium submicron grain carbide
- Tolerances +.0000/-.0005”

			60°		90°		120°	
Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8	5/8	2	**DD8319257**	Price	**DD8317711**	Price	**DD8317716**	Price
3/16	3/4	2	**-**	-	**DD8317712**	Price	**DD8317717**	Price
1/4	3/4	2-1/2	**DD8319259**	Price	**DD8317713**	Price	**DD8317718**	Price
3/8	1	3	**DD8319261**	Price	**DD8317714**	Price	**DD8317719**	Price
7/16	1-1/4	3	**DD8319264**	Price	**DD8319262**	Price	**DD8319263**	Price
1/2	1	3	**DD8319266**	Price	**DD8317715**	Price	**DD8317720**	Price
5/8	1-1/4	3	**DD8319269**	Price	**DD8319267**	Price	**DD8319268**	Price
3/4	1-3/4	3-1/2	**DD8319272**	Price	**DD8319270**	Price	**-**	-
7/8	1-3/4	3-1/2	**-**	-	**DD8319273**	Price	**DD8319274**	Price
1	1-3/4	3-1/2	**DD8319277**	Price	**DD8319275**	Price	**DD8319276**	Price

ZErO Flute Countersinks & Deburring Tools

Straight Shank, CNC Precision Cam Ground, M35 Cobalt, Chatterless Cutting Action

Features:

- Micro-smooth CNC precision ground for clean smooth cutting without smearing
- M35 cobalt: 6% tungsten, 5% moly, 5% cobalt – for long tool life in all types of materials
- Cam relieved for totally chatter-free cuts
- Through-hole design that is easy to resharpen using a small grinding wheel in the cross-hole



				60°		82°		90°	
Head Dia. (in.)	Dia. of Cut (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
5/16	3/32 to 9/32	1/4	1-5/8	-	-	AV4253510	Price	AV4253520	Price
5/16	7/64 to 9/32	1/4	1-7/8	AV4253500	Price	-	-	-	-
3/8	5/32 to 11/32	1/4	1-7/8	AV4253501	Price	-	-	-	-
3/8	9/64 to 11/32	1/4	1-3/4	-	-	AV4253511	Price	AV4253521	Price
1/2	11/64 to 29/64	5/16	2	AV4253502	Price	-	-	-	-
1/2	5/32 to 29/64	5/16	1-3/4	-	-	AV4253512	Price	AV4253522	Price
5/8	11/64 to 37/64	3/8	2-1/8	-	-	AV4253513	Price	AV4253523	Price
5/8	3/16 to 37/64	3/8	2-1/2	AV4253503	Price	-	-	-	-
3/4	1/4 to 45/64	3/8	2-3/4	AV4253504	Price	-	-	-	-
3/4	13/64 to 45/64	3/8	2-3/8	-	-	AV4253514	Price	AV4253524	Price
1	19/64 to 27/32	3/8	3	AV4253505	Price	-	-	-	-
1	19/64 to 59/64	3/8	2-5/8	-	-	AV4253515	Price	AV4253525	Price
1-1/4	23/64 to 1-3/32	1/2	3-1/8	-	-	AV4253516	Price	AV4253526	Price
1-1/4	27/64 to 1-1/32	1/2	3-1/2	AV4253506	Price	-	-	-	-

ZErO Flute Countersinks & Deburring Tool Sets

Straight Shank, CNC Precision Cam Ground, M35 Cobalt, Chatterless Cutting Action

- Micro-smooth CNC precision ground for clean smooth cutting without smearing
- M35 cobalt: 6% tungsten, 5% moly, 5% cobalt – for long tool life in all types of materials
- Cam relieved for totally chatter-free cuts
- Through-hole design that is easy to resharpen using a small grinding wheel in the cross-hole



		60°		82°		90°	
Head Dia. Included (in.)	No. of Pcs.	Order No.	Price	Order No.	Price	Order No.	Price
5/16, 3/8, 1/2, 5/8	4	AV4253508	Price	AV4253518	Price	AV4253528	Price
5/16, 3/8, 1/2, 3/4, 1	5	AV4253509	Price	AV4253519	Price	AV4253529	Price

PROCUT Countersink & Deburring Tools

60°, 82° and 90° • High Speed Steel

- Single Cutting edge provides faster stock removal and prevents chatter
- Designed for deburring steel and other ferrous materials-NOT recommended for deburring brass, aluminum and other non-ferrous materials



			60°		82°		90°	
Size	Dia. Range (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price
0 Double End	1/16 to 15/64	1/4	BB61544060	Price	BB61544082	Price	BB61544090	Price
1 Single End	5/32 to 13/32	1/4	BB61544160	Price	BB61544182	Price	BB61544190	Price
2 Single End	3/16 to 17/32	1/4	BB61544260	Price	BB61544282	Price	BB61544290	Price
3 Single End	5/16 to 25/32	1/2	BB61544360	Price	BB61544382	Price	BB61544390	Price
4 Single End	9/16 to 11/16	1/2	BB61544460	Price	BB61544482	Price	BB61544490	Price
5 Single End	5/8 to 1-15/32	1/2	BB61544560	Price	BB61544582	Price	BB61544590	Price
6 Single End	3/4 to 1-3/4	5/8	BB61544660	Price	BB61544682	Price	BB61544690	Price
7 Single End	1 to 2	5/8	BB61544760	Price	BB61544782	Price	BB61544790	Price
8 Single End	1-1/4 to 2-1/2	3/4	BB61544860	Price	BB61544882	Price	BB61544890	Price

Single Cutting Edge Countersinks

High Speed Steel

- Designed for general purpose countersinking, chamfering and deburring
- Efficient stock removal, chatter free finish
- Bright finish helps reduce chip build-up on cutting edge
- 3/16 & 1/4" Double-ended
- M. A. Ford List #67



		60°		82°		90°	
Body Size (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3/16	3/16	BC7267001	Price	BC7267006	Price	BC7267011	Price
1/4	1/4	BC7267016	Price	BC7267021	Price	BC7267026	Price
7/16	1/4	BC7267031	Price	BC7267036	Price	BC7267041	Price
9/16	1/4	BC7267046	Price	BC7267051	Price	BC7267056	Price
13/16	1/2	BC7267061	Price	BC7267066	Price	BC7267071	Price
1-1/8	1/2	BC7267076	Price	BC7267081	Price	BC7267086	Price
1-1/2	1/2	BC7267091	Price	BC7267096	Price	BC7267101	Price

PROCUT Countersink & Deburring Tool Sets

5 Pc. sets include 1 each: sizes #0 thru #4 complete with wood stand



Set Angle	Order No.	Price
60°	BB61544S60	Price
82°	BB61544S82	Price
90°	BB61544S90	Price

WELDON® Countersinks & Deburring Tools

High Speed Steel

- Use for countersinking and deburring operations in a wide range of materials in portable or machine applications
- Provides chatterless finish
- Single cutting edge for fast stock removal
- Free cutting and easy to sharpen
- Designed for 60°, 82°, 90°, and 100° cutting



Type - Pilotless Deburring Tools Angle - 60					
Model. No.	Dia. of Cut (Min.-Max.) (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
DC-14	3/16 to 13/32	1/4	1-3/4	**BB40DC14**	Price
DC-18	5/16 to 17/32	1/4	1-15/16	**BB40DC18**	Price
DC-26	7/16 to 25/32	1/2	2-11/16	**BB40DC26**	Price
DC-26A	7/16 to 25/32	1/4	2-1/8	**BB40DC26A**	Price
DC-36	11/16 to 1-3/32	1/2	2-7/8	**BB40DC36**	Price

Type - Pilotless Deburring Tools Angle - 82					
Model. No.	Dia. of Cut (Min.-Max.) (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
CS-5S	4,5 †	1/4	1-1/2	**BB40CS5S**	Price
CS-6S	6 †	1/4	1-1/2	**BB40CS6S**	Price
CS-8S	8 †	1/4	1-5/8	**BB40CS8S**	Price
CS-10S	10 †	1/4	1-5/8	**BB40CS10S**	Price
CS-18	3/16 to 17/32	1/4	1-7/8	**BB40CS18**	Price
CS-26	.307 to 25/32	1/2	2-5/8	**BB40CS26**	Price
CS-26A	.307 to 25/32	1/4	2-1/16	**BB40CS26A**	Price
CS-36	.431 to 7/8	1/2	2-13/16	**BB40CS36**	Price
CS-48	1/2 to 1-15/32	1/2	3-1/2	**BB40CS48**	Price

Type - Pilotless Deburring Tools Angle - 90					
Model. No.	Dia. of Cut (Min.-Max.) (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
DB-14	5/32 to 13/32	1/4	1-11/16	**BB40DB14**	Price
DB-18	3/16 to 17/32	1/4	1-7/8	**BB40DB18**	Price
DB-26	5/16 to 25/32	1/2	2-19/32	**BB40DB26**	Price
DB-26A	5/16 to 25/32	1/4	2-1/32	**BB40DB26A**	Price
DB-36	9/16 to 1-3/32	1/2	2-13/16	**BB40DB36**	Price
DB-48	1/2 to 1-15/32	1/2	3-1/2	**BB40DB48**	Price

Type - Pilotless Deburring Tools Angle - 100					
Model. No.	Dia. of Cut (Min.-Max.) (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
CSA-8	3/32 to 1/4	1/4	1-1/2	**BB40CSA8**	Price
CSA-14	1/8 to 27/64	1/4	1-11/16	**BB40CSA14**	Price
CSA-18	3/16 to 35/64	1/4	1-7/8	**BB40CSA18**	Price

† Note: these sizes are machine screw sizes.

WELDON® Double End - Style No. 3



Angle - 60					
Model. No.	Dia. of Cut (Min.-Max.) (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
DC-6	3/32 to 11/64	3/16	1-1/2	**BB40DC6**	Price
DC-8	1/8 to 15/64	1/4	1-3/4	**BB40DC8**	Price

Angle - 82					
Model. No.	Dia. of Cut (Min.-Max.) (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
CS-3S	.073 to 15/64	1/4	1-3/4	**BB40CS3S**	Price

Angle - 90					
Model. No.	Dia. of Cut (Min.-Max.) (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
DB-4	1/64 to 11/64	3/16	1-1/2	**BB40DB4**	Price
DB-6	1/16 to 11/64	3/16	1-1/2	**BB40DB6**	Price
DB-8	1/8 to 15/64	1/4	1-3/4	**BB40DB8**	Price

WELDON® Piloted - Style No. 2 82° Countersinks



Model. No.	Screw Size (in.)	Pilot Dia. (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
CS8-1	1/4	1/4	3/8	2	**BB40CS81**	Price
CS8-2	1/4	17/64	3/8	2	**BB40CS82**	Price
CS10-1	5/16	5/16	1/2	2-3/16	**BB40CS101**	Price
CS10-2	5/16	21/64	3/8	2-3/16	**BB40CS102**	Price
CS12-1	3/8	3/8	1/2	2-5/8	**BB40CS121**	Price
CS12-2	3/8	25/64	1/2	2-5/8	**BB40CS122**	Price
CS14-1	7/16	7/16	1/2	2-3/4	**BB40CS141**	Price
CS14-2	7/16	29/64	1/2	2-3/4	**BB40CS142**	Price
CS16-1	1/2	1/2	1/2	2-13/16	**BB40CS161**	Price
CS16-2	1/2	33/64	1/2	2-13/16	**BB40CS162**	Price

WELDON® Style No. 4 90° Deburring Tools

- Shank must be purchased separately



Model. No.	Dia. of Cut (Min.-Max.) (in.)	Order No.	Price
DB-64	1-1/16 to 2	**BB40DB64**	Price
DB-96	2 to 3	**BB40DB96**	Price

WELDON® Shanks for DB-64 and DB-96

Model No.	Description	For Use With	Order No.	Price
DS-2	1/2" Straight Shank	DB-64 Deburring Tools	**BB40DS2**	Price
DS-2T	2" Morse Taper	DB-64 Deburring Tools	**BB40DS2T**	Price
DS-3	1/2" Straight Shank	DB-96 Deburring Tools	**BB40DS3**	Price
DS-3T	2" Morse Taper	DB-96 Deburring Tools	**BB40DS3T**	Price

WELDON® 6 Pc. Pilotless Deburring Sets



Set Style	Included Angle	Set Contains One of Each Size	Order No.	Price
Pilotless Deburring (6 pcs.)	60°	DC-6, DC-8, DC-14, DC-18, DC-26, DC-36 (3/32" thru 11/16")	**BB4060DB**	Price
Pilotless Deburring (6 pcs.)	90°	DB-6, DB-8, DB-14, DB-18, DB-26, DB-36 (1/16" thru 9/16")	**BB4090DB**	Price

WELDON® Countersink Sets



Set Style	Included Angle	Set Contains One of Each Size	Order No.	Price
Pilotless Countersink (4 pcs.)	82°	CS-5S, CS-6S, CS-8S, CS-10S (#4 thru #10)	**BB40WCSET**	Price
Pilotless Countersink (4 pcs.)	82°	CS-6S, CS-8S, CS-10S, CS-18 (#6 thru 3/16")	**BB40GCSET**	Price
Zero Flute Pilotless (5 pcs.)	82°	CS-5S, CS-6S, CS-8S, CS-10S CS-18 (#4 thru 17/32")	**BB40WCGSET**	Price
Countersink (9 pcs.)	82°	CS-5S, CS-6S, CS-8S, CS-10S, CS8-1, CS10-1, CS12-1, CS14-1, CS16-1 (#4 thru 1/2")	**BB401CSET**	Price
Countersink & Deburring (9 pcs.)	82°	CS-5S, CS-6S, CS-8S, CS-10S, CS8-2, CS10-2, CS12-2, CS14-2, CS16-2 (#4 thru 1/2")	**BB402CSET**	Price

Single Flute Countersinks

High Speed Steel and Carbide • 60°, 82°, and 90°





RAPIDKUT®

				ProCut		Rapidkut			
				High Speed Steel		Carbide		High Speed Steel	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Angle	Order No.	Price	Order No.	Price	Order No.	Price
3/16	3/16	1-1/2	60°	**BC52RF360**	Price	**BC531900**	Price	**BC42RF360**	Price
3/16	3/16	1-1/2	82°	**BC52RF382**	Price	**BC531901**	Price	**BC42RF382**	Price
3/16	3/16	1-1/2	90°	**BC52RF390**	Price	**BC531902**	Price	**BC42RF390**	Price
1/4	1/4	2	60°	**BC52RF460**	Price	**BC531903**	Price	**BC42RF460**	Price
1/4	1/4	2	82°	**BC52RF482**	Price	**BC531904**	Price	**BC42RF482**	Price
1/4	1/4	2	90°	**BC52RF490**	Price	**BC531905**	Price	**BC42RF490**	Price
5/16	1/4	2	60°	**BC52RF560**	Price	-	-	-	-
5/16	1/4	2	82°	**BC52RF582**	Price	-	-	-	-
5/16	1/4	2	90°	**BC52RF590**	Price	-	-	-	-
3/8	1/4	2	60°	**BC52RF660**	Price	**BC531906**	Price	**BC42RF660**	Price
3/8	1/4	2	82°	**BC52RF682**	Price	**BC531907**	Price	**BC42RF682**	Price
3/8	1/4	2	90°	**BC52RF690**	Price	**BC531908**	Price	**BC42RF690**	Price
1/2	1/4	2	60°	**BC52RF860**	Price	-	-	**BC42RF860**	Price
1/2	1/4	2	82°	**BC52RF882**	Price	-	-	**BC42RF882**	Price
1/2	1/4	2	90°	**BC52RF890**	Price	-	-	**BC42RF890**	Price
1/2	3/8	2-1/2	60°	-	-	**BC531909**	Price	-	-
1/2	3/8	2-1/2	82°	-	-	**BC531910**	Price	-	-
1/2	3/8	2-1/2	90°	-	-	**BC531911**	Price	-	-
5/8	1/2	2-1/2	60°	**BC52RF1060**	Price	**BC531912**	Price	**BC42RF1060**	Price
5/8	1/2	2-1/2	82°	**BC52RF1082**	Price	**BC531913**	Price	**BC42RF1082**	Price
5/8	1/2	2-1/2	90°	**BC52RF1090**	Price	**BC531914**	Price	**BC42RF1090**	Price
3/4	1/2	2-3/4	60°	**BC52RF1260**	Price	**BC531915**	Price	**BC42RF1260**	Price
3/4	1/2	2-3/4	82°	**BC52RF1282**	Price	**BC531916**	Price	**BC42RF1282**	Price
3/4	1/2	2-3/4	90°	**BC52RF1290**	Price	**BC531917**	Price	**BC42RF1290**	Price
7/8	1/2	2-3/4	60°	**BC52RF1460**	Price	-	-	-	-
7/8	1/2	2-3/4	82°	**BC52RF1482**	Price	-	-	-	-
7/8	1/2	2-3/4	90°	**BC52RF1490**	Price	-	-	-	-
1	1/2	2-3/4	60°	**BC52RF1660**	Price	**BC531918**	Price	**BC42RF1660**	Price
1	1/2	2-3/4	82°	**BC52RF1682**	Price	**BC531919**	Price	**BC42RF1682**	Price
1	1/2	2-3/4	90°	**BC52RF1690**	Price	**BC531920**	Price	**BC42RF1690**	Price
1-1/4	1/2	3	60°	-	-	-	-	**BC42RF2060**	Price
1-1/4	1/2	3	82°	-	-	-	-	**BC42RF2082**	Price
1-1/4	1/2	3	90°	-	-	-	-	**BC42RF2090**	Price
1-1/4	3/4	3	60°	**BC52RF2060**	Price	-	-	-	-
1-1/4	3/4	3	82°	**BC52RF2082**	Price	-	-	-	-
1-1/4	3/4	3	90°	**BC52RF2090**	Price	-	-	-	-
1-1/2	3/4	3-3/8	60°	**BC52RF2460**	Price	-	-	**BC42RF2460**	Price
1-1/2	3/4	3-3/8	82°	**BC52RF2482**	Price	-	-	**BC42RF2482**	Price
1-1/2	3/4	3-3/8	90°	**BC52RF2490**	Price	-	-	**BC42RF2490**	Price
2	3/4	3-3/4	60°	**BC52RF3260**	Price	-	-	**BC42RF3260**	Price
2	3/4	3-3/4	82°	**BC52RF3282**	Price	-	-	**BC42RF3282**	Price
2	3/4	3-3/4	90°	**BC52RF3290**	Price	-	-	**BC42RF3290**	Price

PROCUT Single Flute Countersink Sets

High Speed Steel • 60°, 82°, and 90°

- All sets include wooden stand

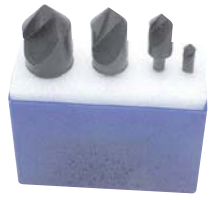


Set Range (in.)	No. of Pieces	Included Angle	Order No.	Price
1/4, 3/8, 1/2, 3/4, 1	5	60°	**BC55R23060**	Price
1/4, 3/8, 1/2, 3/4, 1	5	82°	**BC55R23082**	Price
1/4, 3/8, 1/2, 3/4, 1	5	90°	**BC55R23090**	Price
3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1	9	60°	**BC55R24060**	Price
3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1	9	82°	**BC55R24082**	Price
3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1	9	90°	**BC55R24090**	Price
3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2, 2	12	60°	**BC55R25060**	Price
3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2, 2	12	82°	**BC55R25082**	Price

Uniflute® Countersink Sets

High Speed Steel

- In plastic case
- 4 Pc. sets include: 1/4, 1/2, 3/4 and 1" diameter tools
- 7 Pc. sets include: 3/16, 1/4, 3/8, 1/2, 5/8, 3/4 and 1" diameter tools
- M.A.Ford List #64



No. of Pieces - 4		
Included Angle	Order No.	Price
60°	**BC7064001**	Price
82°	**BC7064006**	Price
90°	**BC7064011**	Price
100°	**BC7064016**	Price
120°	**BC7064021**	Price

No. of Pieces - 7		
Included Angle	Order No.	Price
60°	**BC7064003**	Price
82°	**BC7064008**	Price
90°	**BC7064013**	Price
100°	**BC7064018**	Price
120°	**BC7064023**	Price

RAPIDKUT® Single Flute Countersinks

M-42 8% Cobalt





- Excellent for countersinking abrasives, high strength, heat resistant, exotic, and other difficult to machine materials
- TiN coated for higher surface hardness and better lubricity

			Uncoated						TiN					
			60°		82°		Price		60°		82°		90°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	**BC6111141**	Price	**BC6111143**	Price	**BC6111145**	Price	**BC6018136**	Price	**BC6018137**	Price	**BC6018138**	Price
3/16	3/16	1-1/2	**BC6111147**	Price	**BC6111149**	Price	**BC6111151**	Price	**BC6018141**	Price	**BC6018142**	Price	**BC6018143**	Price
1/4	1/4	2	**BC6111153**	Price	**BC6111155**	Price	**BC6111156**	Price	**BC6018146**	Price	**BC6018147**	Price	**BC6018148**	Price
3/8	1/4	2	**BC6111157**	Price	**BC6111158**	Price	**BC6111159**	Price	**BC6018151**	Price	**BC6018152**	Price	**BC6018153**	Price
1/2	3/8	2	**BC6111160**	Price	**BC6111161**	Price	**BC6111162**	Price	**BC6018156**	Price	**BC6018157**	Price	**BC6018158**	Price
5/8	3/8	2-1/4	**BC6111163**	Price	**BC6111164**	Price	**BC6111165**	Price	**BC6018161**	Price	**BC6018162**	Price	**BC6018163**	Price
3/4	1/2	2-3/4	**BC6111166**	Price	**BC6111167**	Price	**BC6111168**	Price	**BC6018166**	Price	**BC6018167**	Price	**BC6018168**	Price
1	1/2	2-3/4	**BC6111169**	Price	**BC6111170**	Price	**BC6111171**	Price	**BC6018171**	Price	**BC6018172**	Price	**BC6018173**	Price
1-1/4	1/2	3	**BC6111172**	Price	**BC6111173**	Price	**BC6111175**	Price	**BC6018176**	Price	**BC6018177**	Price	**BC6018178**	Price

Single Flute Countersinks





High Speed Steel

- Ideal for chamferring, deburring and countersinking

				60°		82°		90°		100°		110°		120°	
Body Dia. (in.)	Shank Dia. (in.)	Shank Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	-	1-1/4	**AV4253186**	Price	**AV4253188**	Price	**AV4253189**	Price	**AV4253180**	Price	**AV4253181**	Price	**AV4253182**	Price
3/16	3/16	-	1-3/8	**AV4253176**	Price	**AV4253178**	Price	**AV4253179**	Price	**AV4253170**	Price	**AV4253171**	Price	**AV4253172**	Price
1/4	1/4	-	1-1/2	**AV4253146**	Price	**AV4253148**	Price	**AV4253149**	Price	**AV4253140**	Price	**AV4253141**	Price	**AV4253142**	Price
3/8	1/4	7/8	1-3/4	**AV4253386**	Price	**AV4253388**	Price	**AV4253389**	Price	**AV4253380**	Price	**AV4253381**	Price	**AV4253382**	Price
1/2	1/4	1	2	**AV4253126**	Price	**AV4253128**	Price	**AV4253129**	Price	**AV4253120**	Price	**AV4253121**	Price	**AV4253122**	Price
5/8	3/8	1	2-1/4	**AV4253586**	Price	**AV4253588**	Price	**AV4253589**	Price	**AV4253580**	Price	**AV4253581**	Price	**AV4253582**	Price
3/4	1/2	1-1/4	2-5/8	**AV4253346**	Price	**AV4253348**	Price	**AV4253349**	Price	**AV4253340**	Price	**AV4253341**	Price	**AV4253342**	Price
1	1/2	1-1/4	2-3/4	**AV4253106**	Price	**AV4253108**	Price	**AV4253109**	Price	**AV4253100**	Price	**AV4253101**	Price	**AV4253102**	Price
1-1/4	1/2	1-1/4	2-3/4	**AV4253246†**	81.55	**AV4253248**	Price	**AV4253249**	Price	**AV4253240**	Price	**AV4253241**	Price	**AV4253242**	Price
1-1/2	3/4	1-1/4	2-7/8	**AV4253226†**	110.40	**AV4253228**	Price	**AV4253229**	Price	**AV4253220**	Price	**AV4253221**	Price	**AV4253222**	Price
1-3/4	3/4	1-1/4	3	**AV4253446†**	140.95	**AV4253448**	Price	**AV4253449**	Price	**AV4253440**	Price	**AV4253441**	Price	**AV4253442**	Price
2	3/4	1-1/4	3-1/4	**AV4253206†**	197.25	**AV4253208**	Price	**AV4253209**	Price	**AV4253200**	Price	**AV4253201**	Price	**AV4253202**	Price

†60º OAL 3, 3-1/4, 3-1/2 and 3-3/4, respectively. Available in larger sizes and sets.

Uniflute® Countersinks



High Speed Steel

- Designed for general purpose countersinking, chamfering or deburring
- Self piloting and completely chatterless
- No secondary burrs formed
- Steam homogeneous surface treatment (blackening) to prolong tool life and prevent galling
- M A Ford Series #61

			60°		82°		90°		100°		120°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	**BC7061001**	Price	**BC7061006**	Price	**BC7061011**	Price	**BC7061016**	Price	**BC7061021**	Price
3/16	3/16	1-1/2	**BC7061026**	Price	**BC7061031**	Price	**BC7061036**	Price	**BC7061041**	Price	**BC7061046**	Price
1/4	1/4	2	**BC7061051**	Price	**BC7061056**	Price	**BC7061061**	Price	**BC7061066**	Price	**BC7061071**	Price
3/8	1/4	2	**BC7061076**	Price	**BC7061081**	Price	**BC7061086**	Price	**BC7061091**	Price	**BC7061096**	Price
1/2	1/4	2	**BC7061101**	Price	**BC7061106**	Price	**BC7061111**	Price	**BC7061116**	Price	**BC7061121**	Price
5/8	1/4	2-1/4	**BC7061126**	Price	**BC7061131**	Price	**BC7061136**	Price	**BC7061141**	Price	**BC7061146**	Price
3/4	1/2	2-3/4	**BC7061151**	Price	**BC7061156**	Price	**BC7061161**	Price	**BC7061166**	Price	**BC7061171**	Price
1	1/2	2-3/4	**BC7061176**	Price	**BC7061181**	Price	**BC7061186**	Price	**BC7061191**	Price	**BC7061196**	Price
1-1/4	1/2	3	**BC7061201†**	Price	**BC7061206†**	Price	**BC7061211†**	Price	**-**	-	**-**	-
1-1/2	3/4	3-1/2	**BC7061216†**	Price	**BC7061221†**	Price	**BC7061226†**	Price	**-**	-	**-**	-
2	3/4	3-3/4	**BC7061231†**	Price	**BC7061236†**	Price	**BC7061241†**	Price	**-**	-	**-**	-
2-1/2	3/4	5	**BC7061246†**	Price	**BC7061251†**	Price	**BC7061256†**	Price	**-**	-	**-**	-
3	3/4	5-1/4	**BC7061261†**	Price	**BC7061266†**	Price	**BC7061271†**	Price	**-**	-	**-**	-

†Straight shank with tang drive. Standard angles may be modified from 55° to 119°.

Solid Carbide Single Flute Countersinks



60, 82, 90 and 100°

- Ideal for chamfering, deburring and countersinking
- Positive rake construction provides a smooth surface finish on a wide variety of materials
- Allows for high cutting temperatures

			60°		82°		90°		100°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	**AV4255700**	Price	**AV4255710**	Price	**AV4255720**	Price	**AV4255730**	Price
3/16	3/16	2	**AV4255701**	Price	**AV4255711**	Price	**AV4255721**	Price	**AV4255731**	Price
1/4	1/4	2	**AV4255702**	Price	**AV4255712**	Price	**AV4255722**	Price	**AV4255732**	Price
3/8	1/4	2-5/8	**-**	-	**AV4255713**	Price	**AV4255723**	Price	**AV4255733**	Price
3/8	1/4	2-7/8	**AV4255703**	Price	**-**	-	**-**	-	**-**	-
1/2	1/4	2-5/8	**-**	-	**AV4255714**	Price	**AV4255724**	Price	**AV4255734**	Price
1/2	1/4	2-7/8	**AV4255704**	Price	**-**	-	**-**	-	**-**	-
5/8	3/8	2-3/4	**-**	-	**AV4255715**	Price	**AV4255725**	Price	**AV4255735**	Price
5/8	3/8	3	**AV4255705**	Price	**-**	-	**-**	-	**-**	-
3/4	3/8	2-3/4	**-**	-	**AV4255716**	Price	**AV4255726**	Price	**AV4255736**	Price
3/4	3/8	3	**AV4255706**	Price	**-**	-	**-**	-	**-**	-
1	1/2	3	**-**	-	**AV4255717**	Price	**AV4255727**	Price	**AV4255737**	Price
1	1/2	3-1/4	**AV4255707**	Price	**-**	-	**-**	-	**-**	-
1-1/4	3/4	3-1/4	**-**	-	**AV4255718**	Price	**AV4255728**	Price	**AV4255738**	Price
1-1/4	3/4	3-3/4	**AV4255708**	Price	**-**	-	**-**	-	**-**	-

Carbide Uniflute® Countersinks



- Recommended for use on abrasive, non-metallic and non-ferrous materials
- May be used on hardened steel and work hardening alloys
- M A Ford Series #60

			60°		82°		90°		100°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	**BC7260001**	Price	**BC7260006**	Price	**BC7260011**	Price	**BC7260016**	Price
3/16	3/16	1-1/2	**BC7260021**	Price	**BC7260026**	Price	**BC7260031**	Price	**BC7260036**	Price
1/4	1/4	2	**BC7260041**	Price	**BC7260046**	Price	**BC7260051**	Price	**BC7260056**	Price
3/8	1/4	2	**BC7260061**	Price	**BC7260066**	Price	**BC7260071**	Price	**BC7260076**	Price
1/2	1/4	2-3/8	**BC7260081**	Price	**BC7260086**	Price	**BC7260091**	Price	**BC7260096**	Price
3/4	1/2	3	**BC7260101**	Price	**BC7260106**	Price	**BC7260111**	Price	**BC7260116**	Price
1	1/2	3	**BC7260121**	Price	**BC7260126**	Price	**BC7260131**	Price	**BC7260136**	Price

Standard angles may be modified from 55° to 120°

RAPIDKUT® Center Reamers



High Speed Steel • 3 or 4 Flute

- Used for countersinking holes for centers or enlarging existing holes
- Radius on the angle contributes to smooth, chatter free operation

				60°		82°		90°	
Size (in.)	Shank (in.)	OAL (in.)	Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/4	1/4	2	3	**BC6219076**	Price	**BC6219078**	Price	**BC6219080**	Price
3/8	1/4	2	3	**BC6219084**	Price	**BC6219086**	Price	**BC6219075**	Price
1/2	3/8	2	3	**BC6219092**	Price	**BC6219094**	Price	**BC6219096**	Price
5/8	3/8	2-1/4	3	**BC6219091**	Price	**BC6219089**	Price	**BC6219087**	Price
3/4	1/2	2-3/4	3	**BC6219083**	Price	**BC6219081**	Price	**BC6219079**	Price
1	1/2	2-3/4	3	**BC6219227**	Price	**BC6219225**	Price	**BC6219226**	Price
1-1/4	1/2	3	4	**BC6219233**	Price	**BC6219232**	Price	**BC6219231**	Price
1-1/2	3/4	3-1/4	4	**BC6219236**	Price	**BC6219235**	Price	**BC6219234**	Price
1-3/4	3/4	3-1/2	4	**BC6219230**	Price	**BC6219229**	Price	**BC6219228**	Price
2	3/4	3-3/4	4	**BC6219237**	Price	**BC6219238**	Price	**BC6219239**	Price

KEO Center Reamers





High Speed Steel • 3 Flute

- For countersinking holes for centers or for enlarging existing holes

				60°		82°		90°		100°		110°		120°	
Body Dia. (in.)	Shank Dia. (in.)	Shank Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	1/4	-	1-1/2	**AV4250146**	Price	**AV4250148**	Price	**AV4250149**	Price	**AV4250140**	Price	**AV4250141**	Price	**AV4250142**	Price
3/8	1/4	7/8	1-3/4	**AV4250386**	Price	**AV4250388**	Price	**AV4250389**	Price	**AV4250380**	Price	**AV4250381**	Price	**AV4250382**	Price
1/2	1/4	1	2	**AV4250126**	Price	**AV4250128**	Price	**AV4250129**	Price	**AV4250120**	Price	**AV4250121**	Price	**AV4250122**	Price
5/8	3/8	1	2-1/4	**AV4250586**	Price	**AV4250588**	Price	**AV4250589**	Price	**AV4250580**	Price	**AV4250581**	Price	**AV4250582**	Price
3/4	1/2	1-1/4	2-5/8	**AV4250346**	Price	**AV4250348**	Price	**AV4250349**	Price	**AV4250340**	Price	**AV4250341**	Price	**AV4250342**	Price
1	1/2	1-1/4	2-3/4	**AV4251006**	Price	**AV4251008**	Price	**AV4251009**	Price	**AV4251000**	Price	**AV4251001**	Price	**AV4251002**	Price
1-1/4	1/2	1-1/4	2-3/4	**AV4251256**	Price	**AV4251258**	Price	**AV4251259**	Price	**AV4251250**	Price	**AV4251251**	Price	**AV4251252**	Price
1-1/2	3/4	1-1/4	2-7/8	**AV4251506**	Price	**AV4251508**	Price	**AV4251509**	Price	**AV4251500**	Price	**AV4251501**	Price	**AV4251502**	Price
1-3/4	3/4	1-1/4	3	**AV4251756**	Price	**AV4251758**	Price	**AV4251759**	Price	**AV4251750**	Price	**AV4251751**	Price	**AV4251752**	Price

Available in sets.

PROCUT Center Reamers



High Speed Steel • 3 Flute

			60°		82°		90°		110°		120°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/16	1-1/2	**BB50CR460**	Price	**BB50CR482**	Price	**BB50CR490**	Price	-	-	**BB50CR4120**	Price
3/8	1/4	1-3/4	**BB50CR660**	Price	**BB50CR682**	Price	**BB50CR690**	Price	-	-	**BB50CR6120**	Price
1/2	3/8	2	**BB50CR860**	Price	**BB50CR882**	Price	**BB50CR890**	Price	**BB50CR8110**	Price	**BB50CR8120**	Price
5/8	3/8	2-1/4	**BB50CR1060**	Price	**BB50CR1082**	Price	**BB50CR1090**	Price	**BB50CR10110**	Price	**BB50CR10120**	Price
3/4	1/2	2-5/8	**BB50CR1260**	Price	**BB50CR1282**	Price	**BB50CR1290**	Price	-	-	**BB50CR12120**	Price
1	1/2	2-3/4	**BB50CR1660**	Price	**BB50CR1682**	Price	**BB50CR1690**	Price	**BB50CR16110**	Price	**BB50CR16120**	Price
1-1/4	5/8	3	**BB50CR2060**	Price	**BB50CR2082**	Price	**BB50CR2090**	Price	-	-	**BB50CR20120**	Price
1-1/2	3/4	3	**BB50CR2460**	Price	**BB50CR2482**	Price	**BB50CR2490**	Price	-	-	**BB50CR24120**	Price
2	3/4	3-1/4	**BB50CR3260**	Price	**BB50CR3282**	Price	**BB50CR3290**	Price	-	-	**BB50CR32120**	Price

M.A. FORD Aircraft Countersink Sets



3 Flute • High Speed Steel

- Designed for countersinking, chamfering and deburring aircraft type metals
- Includes (1) of each 1/4, 3/8, 1/2, 5/8 and 3/4”
- Bright finish helps reduce chip build-up on the cutting edge
- Spiral flute geometry for clean, chatterless finish
- M. A. Ford List #92

Angle	Order No.	Price
82°	**BC7196381**	Price
90°	**BC7196382**	Price

PROCUT Center Reamer Sets

High Speed Steel • 3 Flute • With Stand



Price	60°		82°		90°	
Sizes Included	Order No.	Price	Order No.	Price	Order No.	Price
1/4, 3/8, 1/2, 3/4, 1	**BB50CRS10060**	Price	**BB50CRS10082**	Price	**BB50CRS10090**	Price
1/4, 3/8, 1/2, 5/8, 3/4, 1, 1-1/4, 1-1/2, 2	**BB50CRS20060**	Price	**BB50CRS20082**	Price	**BB50CRS20090**	Price

3 Flute Countersinks

Carbide • 60, 82, 90 and 100°

- Available uncoated or TiAlN coated



Price						
			TiAlN		Uncoated	
Body Dia. (in.)	Shank Dia. (in.)	OAL. (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	AV4255770TIALN	Price	AV4255770	Price
3/16	3/16	2	AV4255771TIALN	Price	AV4255771	Price
1/4	1/4	2	AV4255772TIALN	Price	AV4255772	Price
3/8	1/4	2-5/8	AV4255773TIALN	Price	AV4255773	Price
1/2	1/4	2-5/8	AV4255774TIALN	Price	AV4255774	Price
5/8	3/8	2-3/4	AV4255775TIALN	Price	AV4255775	Price
3/4	3/8	2-3/4	AV4255776TIALN	Price	AV4255776	Price
1	1/2	3	AV4255777TIALN	Price	AV4255777	Price
1-1/4	3/4	3-1/4	AV4255778TIALN	Price	AV4255778	Price

- 60°						
			TiAlN		Uncoated	
Body Dia. (in.)	Shank Dia. (in.)	OAL. (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	AV4255740TIALN	Price	AV4255740	Price
3/16	3/16	2	AV4255741TIALN	Price	AV4255741	Price
1/4	1/4	2	AV4255742TIALN	Price	AV4255742	Price
3/8	1/4	2-7/8	AV4255743TIALN	Price	AV4255743	Price
1/2	1/4	2-7/8	AV4255744TIALN	Price	AV4255744	Price
5/8	3/8	3	AV4255745TIALN	Price	AV4255745	Price
3/4	3/8	3	AV4255746TIALN	Price	AV4255746	Price
1	1/2	3-1/4	AV4255747TIALN	Price	AV4255747	Price
1-1/4	3/4	3-1/4	AV4255748TIALN	Price	AV4255748	Price

- 82°						
			TiAlN		Uncoated	
Body Dia. (in.)	Shank Dia. (in.)	OAL. (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	AV4255750TIALN	Price	AV4255750	Price
3/16	3/16	2	AV4255751TIALN	Price	AV4255751	Price
1/4	1/4	2	AV4255752TIALN	Price	AV4255752	Price
3/8	1/4	2-5/8	AV4255753TIALN	Price	AV4255753	Price
1/2	1/4	2-5/8	AV4255754TIALN	Price	AV4255754	Price
5/8	3/8	2-3/4	AV4255755TIALN	Price	AV4255755	Price
3/4	3/8	2-3/4	AV4255756TIALN	Price	AV4255756	Price
1	1/2	3	AV4255757TIALN	Price	AV4255757	Price
1-1/4	3/4	3-1/4	AV4255758TIALN	Price	AV4255758	Price

- 90°						
			TiAlN		Uncoated	
Body Dia. (in.)	Shank Dia. (in.)	OAL. (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	AV4255760TIALN	Price	AV4255760	Price
3/16	3/16	2	AV4255761TIALN	Price	AV4255761	Price
1/4	1/4	2	AV4255762TIALN	Price	AV4255762	Price
3/8	1/4	2-5/8	AV4255763TIALN	Price	AV4255763	Price
1/2	1/4	2-5/8	AV4255764TIALN	Price	AV4255764	Price
5/8	3/8	2-3/4	AV4255765TIALN	Price	AV4255765	Price
3/4	3/8	2-3/4	AV4255766TIALN	Price	AV4255766	Price
1	1/2	3	AV4255767TIALN	Price	AV4255767	Price
1-1/4	3/4	3-1/4	AV4255768TIALN	Price	AV4255768	Price

5 Pc. 3 Flute Countersink Sets

Carbide • 60, 82, 90 and 100°

- Each set includes one of each :1/4, 3/8, 1/2, 5/8, 3/4”
- Available in uncoated or TiAlN coated



	TiAlN		Uncoated	
Angle	Order No.	Price	Order No.	Price
60°	AV4255749TiALN	Price	AV4255749	Price
82°	AV4255759TiALN	Price	AV4255759	Price
90°	AV4255769TiALN	Price	AV4255769	Price
100°	AV4255779TiALN	Price	AV4255779	Price

Center Reamers





High Speed Steel • 4 Flute

- For countersinking holes for centers or for enlarging existing holes

				60°		82°		90°	
Body Dia. (in.)	Shank Dia. (in.)	Shank Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1-1/4	1/2	1-1/4	3	AV4251146	Price	AV4251148	Price	AV4251149	Price
1-1/2	3/4	1-1/4	3-1/4	AV4251126	Price	AV4251128	Price	AV4251129	Price
1-3/4	3/4	1-1/4	3-1/2	AV4251346	Price	AV4251348	Price	AV4251349	Price
2	3/4	1-1/4	3-3/4	AV4252006	Price	AV4252008	Price	AV4252009	Price

Machine Countersinks





High Speed Steel • 4 Flute

- For countersinking holes for centers or for enlarging existing holes
- Longer than standard lengths

				60°		82°		90°	
Body Dia. (in.)	Shank Dia. (in.)	Shank Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/2	2-1/4	3-7/8	AV4240126	Price	AV4240128	Price	AV4240129	Price
5/8	1/2	2-1/4	4	AV4240586	Price	AV4240588	Price	AV4240589	Price
3/4	1/2	2-1/4	4-1/8	AV4240346	Price	AV4240348	Price	AV4240349	Price
7/8	1/2	2-1/4	4-1/4	AV4240786	Price	AV4240788	Price	AV4240789	Price
1	1/2	2-1/4	4-3/8	AV4241006	Price	AV4241008	Price	AV4241009	Price

PROCUT Machine Countersinks



High Speed Steel • 4 Flute

- For countersinking holes for centers or for enlarging existing holes
- Longer than standard lengths

			60°		82°		90°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/2	3-7/8	BB51MC860	Price	BB51MC882	Price	BB51MC890	Price
5/8	1/2	4	BB51MC1060	Price	BB51MC1082	Price	BB51MC1090	Price
3/4	1/2	4-1/8	BB51MC1260	Price	BB51MC1282	Price	BB51MC1290	Price
7/8	1/2	4-1/4	BB51MC1460	Price	BB51MC1482	Price	BB51MC1490	Price
1	1/2	4-3/8	BB51MC1660	Price	BB51MC1682	Price	BB51MC1690	Price
1-1/4	1/2	5	BB51MC2060	Price	BB51MC2082	Price	BB51MC2090	Price
1-1/2	1/2	5-3/8	BB51MC2460	Price	BB51MC2482	Price	BB51MC2490	Price

PROCUT Machine Countersink Sets



High Speed Steel • 4 Flute • With Stand

	60°		82°		90°	
Sizes Included	Order No.	Price	Order No.	Price	Order No.	Price
1/2, 5/8, 3/4, 7/8, 1	BB51MCS10060	Price	BB51MCS10082	Price	BB51MCS10090	Price
1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2	-	-	BB51MCS15082	Price	BB51MCS15090	Price

RAPIDKUT 6 Flute Countersinks



High Speed Steel • CNC Precision

- Use on CNC and preset machines
- Tight dimensions on length and angle ensure setting accuracy and repeatability

			60°		82°		90°		120°	
Size (in.)	Shank (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/16	3/16	1-1/2	BC6318498	Price	BC6318499	Price	BC6318500	Price	BC6318503	Price
1/4	1/4	2	BC6318504	Price	BC6318505	Price	BC6318506	Price	BC6318509	Price
5/16	1/4	2	BC6318510	Price	BC6318511	Price	BC6318512	Price	BC6318516	Price
3/8	1/4	2	BC6318517	Price	BC6318518	Price	BC6318520	Price	BC6318523	Price
1/2	3/8	2	BC6318524	Price	BC6318525	Price	BC6318526	Price	BC6318529	Price
5/8	3/8	2-1/4	BC6318530	Price	BC6318531	Price	BC6318532	Price	BC6318536	Price
3/4	1/2	2-1/4	BC6318537	Price	BC6318538	Price	BC6318539	Price	BC6318542	Price
7/8	1/2	2-3/4	BC6318543	Price	BC6318544	Price	BC6318545	Price	BC6318549	Price
1	1/2	2-3/4	BC6318550	Price	BC6318551	Price	BC6318552	Price	BC6318555	Price

6 Flute Chatterless Countersinks



High Speed Steel

- Designed for economical, general purpose countersinking, chamfering or deburring
- Because of the multiple flute design, chip loads are generally smaller and even at maximum speeds, chatter-free machining is possible
- Steam homogeneous surface treatment (blackening) to prolong tool life and prevent galling
- M A Ford Series #79

			60°		82°		90°		100°		120°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	BC7579021	Price	BC7579026	Price	BC7579031	Price	BC7579036	Price	BC7579041	Price
3/16	3/16	1-1/2	BC7579046	Price	BC7579051	Price	BC7579056	Price	BC7579061	Price	BC7579066	Price
1/4	1/4	2	BC7579071	Price	BC7579076	Price	BC7579081	Price	BC7579086	Price	BC7579091	Price
5/16	1/4	2	BC7579096	Price	BC7579101	Price	BC7579106	Price	BC7579111	Price	BC7579116	Price
3/8	1/4	2	BC7579121	Price	BC7579126	Price	BC7579131	Price	BC7579136	Price	BC7579141	Price
1/2	3/8	2	BC7579146	Price	BC7579151	Price	BC7579156	Price	BC7579161	Price	BC7579166	Price
5/8	3/8	2-1/4	BC7579171	Price	BC7579176	Price	BC7579181	Price	BC7579186	Price	BC7579191	Price
3/4	1/2	2-3/4	BC7579196	Price	BC7579201	Price	BC7579206	Price	BC7579211	Price	BC7579216	Price
7/8	1/2	2-3/4	BC7579221	Price	BC7579226	Price	BC7579231	Price	BC7579236	Price	BC7579241	Price
1	1/2	2-3/4	BC7579246	Price	BC7579251	Price	BC7579256	Price	BC7579261	Price	BC7579266	Price
1-1/4	1/2	3	BC7579271†	Price	BC7579276†	Price	BC7579281†	Price	BC7579286†	Price	BC7579291†	Price
1-1/2	3/4	3-1/2	BC7579296†	Price	BC7579301†	Price	BC7579306†	Price	BC7579311†	Price	BC7579316†	Price
2	3/4	3-3/4	BC7579321†	Price	BC7579326†	Price	BC7579331†	Price	BC7579336†	Price	BC7579341†	Price
2-1/2	3/4	5	BC7579346†	Price	BC7579351†	Price	BC7579356†	Price	-	-	-	-
3	3/4	5-1/4	BC7579361†	Price	BC7579366†	Price	BC7579371†	Price	-	-	-	-

†Straight shank with tang drive.

PROCUT 6 Flute Chatterless Countersinks



High Speed Steel

			60°		82°		90°		100°		120°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/16	3/16	1-1/2	BC50HC105060	Price	BC50HC105082	Price	BC50HC105090	Price	BC50HC1050100	Price	BC50HC1050120	Price
1/4	1/4	2	BC50HC105160	Price	BC50HC105182	Price	BC50HC105190	Price	BC50HC1051100	Price	BC50HC1051120	Price
5/16	1/4	2	BC50HC105260	Price	BC50HC105282	Price	BC50HC105290	Price	BC50HC1052100	Price	BC50HC1052120	Price
3/8	1/4	2	BC50HC105360	Price	BC50HC105382	Price	BC50HC105390	Price	BC50HC1053100	Price	BC50HC1053120	Price
1/2	1/4	2	BC50HC105460	Price	BC50HC105482	Price	BC50HC105490	Price	BC50HC1054100	Price	BC50HC1054120	Price
5/8	1/2	2-1/2	BC50HC105560	Price	BC50HC105582	Price	BC50HC105590	Price	BC50HC1055100	Price	BC50HC1055120	Price
3/4	1/2	2-3/4	BC50HC105660	Price	BC50HC105682	Price	BC50HC105690	Price	BC50HC1056100	Price	BC50HC1056120	Price
7/8	1/2	2-3/4	BC50HC105760	Price	BC50HC105782	Price	BC50HC105790	Price	BC50HC1057100	Price	BC50HC1057120	Price
1	1/2	2-3/4	BC50HC105860	Price	BC50HC105882	Price	BC50HC105890	Price	BC50HC1058100	Price	BC50HC1058120	Price
1-1/4	3/4	3-3/8	BC50HC105960	Price	BC50HC105982	Price	BC50HC105990	Price	-	-	BC50HC1059120	Price
1-1/2	3/4	3-1/2	BC50HC106060	Price	BC50HC106082	Price	BC50HC106090	Price	BC50HC1060100	Price	BC50HC1060120	Price
1-3/4	1	4-1/4	BC50HC106160	Price	BC50HC106182	Price	BC50HC106190	Price	-	-	-	-
2	1	4-3/8	BC50HC106260	Price	BC50HC106282	Price	BC50HC106290	Price	-	-	-	-

KEC 6 Flute Chatterless Countersinks



High Speed Steel

- For greater material removal per revolution

				60°		82°		90°		100°		110°		120°	
Body Dia. (in.)	Shank Dia. (in.)	Shank Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	-	1-1/4	AV4255000	Price	AV4255020	Price	AV4255040	Price	AV4255060	Price	AV4255080	Price	AV4255100	Price
3/16	3/16	-	1-3/8	AV4255001	Price	AV4255021	Price	AV4255041	Price	AV4255061	Price	AV4255081	Price	AV4255101	Price
1/4	1/4	7/8	1-1/2	AV4255002	Price	AV4255022	Price	AV4255042	Price	AV4255062	Price	AV4255082	Price	AV4255102	Price
5/16	1/4	7/8	1-3/4	AV4255003	Price	AV4255023	Price	AV4255043	Price	AV4255063	Price	AV4255083	Price	AV4255103	Price
3/8	1/4	7/8	1-3/4	AV4255004	Price	AV4255024	Price	AV4255044	Price	AV4255064	Price	AV4255084	Price	AV4255104	Price
1/2	1/4	1	2	AV4255005	Price	AV4255025	Price	AV4255045	Price	AV4255065	Price	AV4255085	Price	AV4255105	Price
1/2	3/8	1	2	AV4255006	Price	AV4255026	Price	AV4255046	Price	AV4255066	Price	AV4255086	Price	AV4255106	Price
5/8	1/4	1	2-1/4	AV4255007	Price	AV4255027	Price	AV4255047	Price	AV4255067	Price	AV4255087	Price	AV4255107	Price
5/8	3/8	1	2-1/4	AV4255008	Price	AV4255028	Price	AV4255048	Price	AV4255068	Price	AV4255088	Price	AV4255108	Price
3/4	1/2	1-1/4	2-5/8	AV4255009	Price	AV4255029	Price	AV4255049	Price	AV4255069	Price	AV4255089	Price	AV4255109	Price
7/8	1/2	1-1/4	2-3/4	AV4255010	Price	AV4255030	Price	AV4255050	Price	AV4255070	Price	AV4255090	Price	AV4255110	Price
1	1/2	1-1/4	2-3/4	AV4255011	Price	AV4255031	Price	AV4255051	Price	AV4255071	Price	AV4255091	Price	AV4255111	Price
1-1/4	1/2	1-1/4	2-3/4	AV4255012†	62.10	AV4255032	Price	AV4255052	Price	AV4255072	Price	AV4255092	Price	AV4255112	Price
1-1/2	3/4	1-1/4	2-7/8	AV4255013†	89.00	AV4255033	Price	AV4255053	Price	AV4255073	Price	AV4255093	Price	AV4255113	Price
1-3/4	3/4	1-1/4	3	AV4255014†	118.35	AV4255034	Price	AV4255054	Price	AV4255074	Price	AV4255094	Price	AV4255114	Price
2	3/4	1-1/4	3-1/4	AV4255015†	150.50	AV4255035	Price	AV4255055	Price	AV4255075	Price	AV4255095	Price	AV4255115	Price

†60º OAL 3, 3-1/4, 3-1/2 and 3-3/4, respectively. Available in larger sizes and sets.

Severance CNC-K™ Precision 6 Flute Countersinks — High Speed Steel

- Designed specifically for use in NC, CNC and preset machine tools
- Feature Chatterless™ tooth geometry, using staggered cutting angles to eliminate the cause of harmonic vibration
- Close tolerances on cutting angles, diameters and lengths assure setting accuracy and excellent performance
- May be resharpened many times for ultimate economy

Technical and Programming Information

NOTE: For any depth the countersink diameter expands in a direct ratio. As you travel in the (A) direction along the axis of the countersink (X) expands in a direct relationship to angle (K) (forming an angle with the tangent of X/A)

Since the angle expands on both sides of the frilled hole: you must use 2 times the tangent of the angle for your ratio (R).

Price (K)	Ratio (R) = 2X/A
32°	1.15
41°	1.74
45°	2.00
50°	2.38
55°	2.86
60°	3.46

Angle (K) Tangent = X/A

Calculations
C = H + RA
A = (C - H)/R
S = (C - D)/R

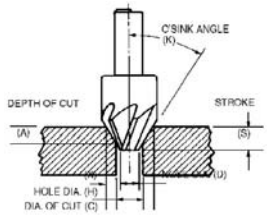


Example:

.500 hole diameter, countersink to .875 cut diameter with 41° angle (use NCK-1"-41°)

A = .875 - .500 / 1.74 = .216

S = .875 - .203 / 1.74 = .386



					60°				82°				Price			
					Carbide		High Speed Steel		Carbide		High Speed Steel		Carbide		High Speed Steel	
Size (in.)	Nose Dia. +.001-.000	Shank Dia. (in.)	OAL (in.)	Shank Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	.046	3/16	1-1/2	3/4	-	-	-	-	BC5403130	Price	BC5402980	Price	BC5403140	Price	BC5402990	Price
1/4	.078	3/16	1-1/2	3/4	BC5403120	Price	BC5402970	Price	-	-	-	-	-	-	-	-
3/8	.078	1/4	1-3/4	7/8	-	-	-	-	BC5403131	Price	BC5402981	Price	BC5403141	Price	BC5402991	Price
3/8	.125	1/4	1-3/4	7/8	BC5403121	Price	BC5402971	Price	-	-	-	-	-	-	-	-
1/2	.109	3/8	2-1/4	1-1/8	-	-	-	-	BC5403132	Price	-	-	BC5403142	Price	-	-
1/2	.109	3/8	2-1/8	1-1/8	-	-	-	-	-	-	BC5402982	Price	-	-	BC5402992	Price
1/2	.156	3/8	2-1/4	1-1/8	BC5403122	Price	-	-	-	-	-	-	-	-	-	-
1/2	.156	3/8	2-1/8	1-1/8	-	-	BC5402972	Price	-	-	-	-	-	-	-	-
5/8	.023	3/8	2-3/8	1-1/8	BC5403123	Price	BC5402973	Price	-	-	-	-	-	-	-	-
5/8	.125	3/8	2-3/8	1-1/8	-	-	-	-	BC5403133	Price	BC5402983	Price	BC5403143	Price	BC5402993	Price
3/4	.156	1/2	2-11/16	1-5/16	-	-	-	-	BC5403134	Price	BC5402984	Price	BC5403144	Price	BC5402994	Price
3/4	.250	1/2	2-11/16	1-5/16	BC5403124	Price	BC5402974	Price	-	-	-	-	-	-	-	-
7/8	.172	1/2	2-13/16	1-5/16	-	-	-	-	BC5403135	Price	BC5402985	Price	BC5403145	Price	BC5402995	Price
7/8	.281	1/2	2-13/16	1-5/16	BC5403125	Price	BC5402975	Price	-	-	-	-	-	-	-	-
1	.203	1/2	2-13/16	1-5/16	-	-	-	-	BC5403136	Price	BC5402986	Price	BC5403146	Price	BC5402996	Price
1	.328	1/2	2-13/16	1-5/16	BC5403126	Price	BC5402976	Price	-	-	-	-	-	-	-	-

RAPIDKUT 6 Flute Countersinks

M-42 Cobalt • TiN Coated



- Excellent for countersinking abrasive, high-strength, heat resistant, exotic, and other difficult to machine materials
- TiN coated for higher surface hardness and better lubricity
- Coating can also help to enhance productivity and extend tool life

			120°		60°		82°		90°	
Size (in.)	Shank (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	BC6418187	Price	BC6418182	Price	BC6418183	Price	BC6418184	Price
3/16	3/16	1-1/2	BC6418193	Price	BC6418188	Price	BC6418189	Price	BC6418190	Price
1/4	1/4	2	BC6418199	Price	BC6418194	Price	BC6418195	Price	BC6418196	Price
5/16	1/4	2	BC6418205	Price	BC6418200	Price	BC6418201	Price	BC6418202	Price
3/8	1/4	2	BC6418211	Price	BC6418206	Price	BC6418207	Price	BC6418208	Price
1/2	3/8	2	BC6418217	Price	BC6418212	Price	BC6418213	Price	BC6418214	Price
5/8	3/8	2-1/4	BC6418223	Price	BC6418218	Price	BC6418219	Price	BC6418220	Price
3/4	1/2	2-3/4	BC6418229	Price	BC6418224	Price	BC6418225	Price	BC6418226	Price
7/8	1/2	2-3/4	BC6418235	Price	BC6418230	Price	BC6418231	Price	BC6418232	Price
1	1/2	2-3/4	BC6418241	Price	BC6418236	Price	BC6418237	Price	BC6418238	Price
1-1/4	1/2	3	-	-	BC6418242	Price	BC6418243	Price	BC6418244	Price

PROCUT 6-Flute Chatterless Countersink Sets



High Speed Steel • 60°, 82° & 90°

Set Range (in.)	No. of Pieces	Included Angle	Order No.	Price
1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1	8	60°	BC55R20060	Price
1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1	8	82°	BC55R20082	Price
1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1	8	90°	BC55R20090	Price
3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2	11	60°	BC55R21060	Price
3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2	11	82°	BC55R21082	Price
3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2	11	90°	BC55R21090	Price

M.A. FORD 6 Flute Chatterless Countersink Sets

High Speed Steel • In Plastic Case



- 7 Piece sets include: 1/4, 5/16, 3/8, 1/2, 5/8, 3/4 and 1" diameter tools
- 4 Piece sets include: 1/4, 1/2, 3/4 and 1" diameter tools
- M A Ford Series #79

No. of Pieces - 4		
Incl. Angle	Order No.	Price
60°	BC7579003	Price
82°	BC7579008	Price
90°	BC7579013	Price
100°	BC7579019	Price

No. of Pieces - 4-TiN		
Incl. Angle	Order No.	Price
60°	BC7579380	Price
82°	BC7579382	Price

No. of Pieces - 4-TiN		
Incl. Angle	Order No.	Price
90°	BC7579384	Price

No. of Pieces - 7		
Incl.	Order No.	Price
60°	BC7579001	Price
82°	BC7579006	Price
90°	BC7579011	Price
100°	BC7579016	Price

KEO 5 Pc. 6 Flute Chatterless Countersink Sets

Carbide • 60, 82, 90 and 100°



- Each set includes one of each :1/4, 3/8, 1/2, 5/8, 3/4"
- Available in uncoated or TiAlN coated

	TiAlN		Uncoated	
Angle	Order No.	Price	Order No.	Price
60°	AV4255790TiALN	Price	AV4255790	Price
82°	AV4255801TiALN	Price	AV4255801	Price
90°	AV4255812TiALN	Price	AV4255812	Price
100°	AV4255823TiALN	Price	AV4255823	Price

RAPIDKUT Solid Carbide 6 Flute Countersink Sets



60°, 82°, and 90° • In Plastic Case

- Long life on most materials including hardened steels, high temperature alloys, cast iron, and other highly abrasive materials
- Made from premium submicron grade carbide

Set Range (in.)	No. of Pieces	Included Angle	Order No.	Price
1/4, 3/8, 1/2, 3/4, 1	5	60°	BC55R22060	Price
1/4, 3/8, 1/2, 3/4, 1	5	82°	BC55R22082	Price
1/4, 3/8, 1/2, 3/4, 1	5	90°	BC55R22090	Price

RAPIDKUT® Solid Carbide 6 Flute Countersinks Chatterless



- Long life on most materials including hardened steels, high temperature alloys, cast iron, and other highly abrasive materials
- Made from premium submicron grade carbide

			60°		82°		90°		100°		120°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/16	3/16	1-1/2	BC51CC106560	Price	BC51CC106582	Price	BC51CC106590	Price	BC51CC1065100	Price	BC51CC1065120	Price
1/4	1/4	2	BC51CC106660	Price	BC51CC106682	Price	BC51CC106690	Price	BC51CC1066100	Price	BC51CC1066120	Price
5/16	1/4	2	BC51CC106760	Price	BC51CC106782	Price	BC51CC106790	Price	BC51CC1067100	Price	BC51CC1067120	Price
3/8	1/4	2	BC51CC106860	Price	BC51CC106882	Price	BC51CC106890	Price	BC51CC1068100	Price	BC51CC1068120	Price
1/2	3/8	2	BC51CC106960	Price	BC51CC106982	Price	BC51CC106990	Price	BC51CC1069100	Price	BC51CC1069120	Price
5/8	3/8	2-1/2	BC51CC107060	Price	BC51CC107082	Price	BC51CC107090	Price	BC51CC1070100	Price	BC51CC1070120	Price
3/4	1/2	2-3/4	BC51CC107160	Price	BC51CC107182	Price	BC51CC107190	Price	BC51CC1071100	Price	BC51CC1071120	Price
7/8	1/2	2-3/4	BC51CC107260	Price	BC51CC107282	Price	BC51CC107290	Price	-	-	-	-
1	1/2	2-3/4	BC51CC107360	Price	BC51CC107382	Price	BC51CC107390	Price	BC51CC1073100	Price	BC51CC1073120	Price
1-1/4	3/4	3-3/8	BC51CC107460	Price	BC51CC107482	Price	BC51CC107490	Price	-	-	-	-

M.A. FORD Carbide Chatterless Countersinks Carbide • 6 Flute



- Solid carbide construction (steel shanks on tools 3/8" diameter and larger)
- Ideal for hardened steel, high temperature alloys and other tough jobs
- M A Ford Series #78

			60°		82°		90°		100°		120°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	BC7378001	Price	BC7378006	Price	BC7378011	Price	BC7378016	Price	BC7378021	Price
3/16	3/16	1-1/2	BC7378026	Price	BC7378031	Price	BC7378036	Price	BC7378041	Price	BC7378046	Price
1/4	1/4	2	BC7378051	Price	BC7378056	Price	BC7378061	Price	BC7378066	Price	BC7378071	Price
3/8	1/4	2	BC7378076	Price	BC7378081	Price	BC7378086	Price	BC7378091	Price	BC7378096	Price
1/2	3/8	2-1/4	BC7378101	Price	BC7378106	Price	BC7378111	Price	BC7378116	Price	BC7378121	Price
5/8	3/8	2-3/8	BC7378126	Price	BC7378131	Price	BC7378136	Price	BC7378141	Price	BC7378146	Price
3/4	1/2	2-3/4	BC7378151	Price	BC7378156	Price	BC7378161	Price	BC7378166	Price	BC7378171	Price
1	1/2	2-3/4	BC7378176	Price	BC7378181	Price	BC7378186	Price	BC7378191	Price	BC7378196	Price
1-1/4	1/2	3	BC7378201†	Price	BC7378206†	Price	BC7378211†	Price	-	-	-	-
1-1/2	3/4	3-1/2	BC7378216†	Price	BC7378221†	Price	BC7378226†	Price	-	-	-	-

†Straight shank with tang drive.

RAPIDKUT® Solid Carbide 6 Flute Countersinks Double End



- Two cutting ends give you twice the tool life of a single end tool
- Made from premium submicron grain carbide

			60°		82°		90°		120°	
Size (in.)	Shank (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	BC6518448	Price	BC6518449	Price	BC6518450	Price	BC6518452	Price
3/16	3/16	1-1/2	BC6518453	Price	BC6518454	Price	BC6518455	Price	BC6518457	Price
1/4	1/4	2	BC6518458	Price	BC6518459	Price	BC6518460	Price	BC6518462	Price
5/16	5/16	2-1/2	BC6518463	Price	BC6518464	Price	BC6518465	Price	BC6518467	Price
3/8	3/8	2-1/2	BC6518468	Price	BC6518469	Price	BC6518470	Price	BC6518472	Price
1/2	1/2	3	BC6518473	Price	BC6518474	Price	BC6518475	Price	BC6518477	Price
5/8	5/8	3-1/2	BC6518478	Price	BC6518820	Price	BC6518480	Price	BC6518482	Price
3/4	3/4	4	BC6518483	Price	BC6518484	Price	BC6518485	Price	BC6518487	Price

KEO 6 Flute Chatterless Countersinks Carbide • 60, 82, 90 and 100°



- Available uncoated or TiAlN coated

Price						
			TiAlN		Uncoated	
Body Dia. (in.)	Shank Dia. (in.)	OAL. (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	AV4255780TIALN	Price	AV4255780	Price
3/16	3/16	2	AV4255781TIALN	Price	AV4255781	Price
1/4	1/4	2	AV4255782TIALN	Price	AV4255782	Price
3/8	1/4	2-3/4	AV4255783TIALN	Price	AV4255783	Price
1/2	1/4	2-3/4	AV4255784TIALN	Price	AV4255784	Price
5/8	3/8	2-7/8	AV4255785TIALN	Price	AV4255785	Price
3/4	3/8	3	AV4255786TIALN	Price	AV4255786	Price
1	1/2	3-1/4	AV4255787TIALN	Price	AV4255787	Price
1-1/4	3/4	3-3/4	AV4255788TIALN	Price	AV4255788	Price
1-1/2	3/4	3-3/4	AV4255789TIALN	Price	AV4255789	Price

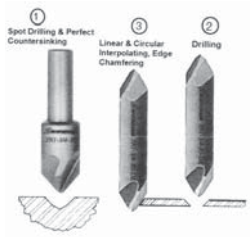
- 90°						
			TiAlN		Uncoated	
Body Dia. (in.)	Shank Dia. (in.)	OAL. (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	AV4255802TIALN	Price	AV4255802	Price
3/16	3/16	2	AV4255803TIALN	Price	AV4255803	Price
1/4	1/4	2	AV4255804TIALN	Price	AV4255804	Price
3/8	1/4	2-5/8	AV4255805TIALN	Price	AV4255805	Price
1/2	1/4	2-5/8	AV4255806TIALN	Price	AV4255806	Price
5/8	3/8	2-3/4	AV4255807TIALN	Price	AV4255807	Price
3/4	3/8	2-3/4	AV4255808TIALN	Price	AV4255808	Price
1	1/2	3	AV4255809TIALN	Price	AV4255809	Price
1-1/4	3/4	3-1/4	AV4255810TIALN	Price	AV4255810	Price
1-1/2	3/4	3-1/4	AV4255811TIALN	Price	AV4255811	Price

82°						
			TiAlN		Uncoated	
Body Dia. (in.)	Shank Dia. (in.)	OAL. (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	AV4255791TIALN	Price	AV4255791	Price
3/16	3/16	2	AV4255792TIALN	Price	AV4255792	Price
1/4	1/4	2	AV4255793TIALN	Price	AV4255793	Price
3/8	1/4	2-5/8	AV4255794TIALN	Price	AV4255794	Price
1/2	1/4	2-5/8	AV4255795TIALN	Price	AV4255795	Price
5/8	3/8	2-3/4	AV4255796TIALN	Price	AV4255796	Price
3/4	3/8	2-3/4	AV4255797TIALN	Price	AV4255797	Price
1	1/2	3	AV4255798TIALN	Price	AV4255798	Price
1-1/4	3/4	3-1/4	AV4255799TIALN	Price	AV4255799	Price
1-1/2	3/4	3-1/4	AV4255800TIALN	Price	AV4255800	Price

- 100°						
			TiAlN		Uncoated	
Body Dia. (in.)	Shank Dia. (in.)	OAL. (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1-1/2	AV4255813TIALN	Price	AV4255813	Price
3/16	3/16	2	AV4255814TIALN	Price	AV4255814	Price
1/4	1/4	2	AV4255815TIALN	Price	AV4255815	Price
3/8	1/4	2-5/8	AV4255816TIALN	Price	AV4255816	Price
1/2	1/4	2-5/8	AV4255817TIALN	Price	AV4255817	Price
5/8	3/8	2-3/4	AV4255818TIALN	Price	AV4255818	Price
3/4	3/8	2-3/4	AV4255819TIALN	Price	AV4255819	Price
1	1/2	3	AV4255820TIALN	Price	AV4255820	Price
1-1/4	3/4	3-1/4	AV4255821TIALN	Price	AV4255821	Price
1-1/2	3/4	3-1/4	AV4255822TIALN	Price	AV4255822	Price

Severance 3N1™ Spot, Drill, and Countersink Cutter





High Speed Steel and Carbide

- Conventional thin-web drill point that is blended into two flutes of a four-flute chatter-free countersink…to perform two or all three of the steps in a spot-drill-countersink and edge chamfer operations
- Spot drill, countersink, and edge chamfer
- Double end

Material - High Speed Steel								
			60°		82°		Price	
Size (in.)	Shank Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1-1/2	1-1/2	**BC5401585**	Price	**BC5401595**	Price	**BC5401605**	Price
3/16	1-7/8	1-7/8	**BC5401586**	Price	**BC5401596**	Price	**BC5401606**	Price
1/4	2	2	**BC5401587**	Price	**BC5401597**	Price	**BC5401607**	Price
5/16	2-1/8	2-1/8	**BC5401588**	Price	**BC5401598**	Price	**BC5401608**	Price
3/8	2-1/2	2-1/2	**BC5401589**	Price	**BC5401599**	Price	**BC5401609**	Price
1/2	3	3	**BC5401590**	Price	**BC5401600**	Price	**BC5401610**	Price
5/8	3-1/4	3-1/4	**BC5401591**	Price	**BC5401601**	Price	**BC5401611**	Price
3/4	3-1/2	3-1/2	**BC5401592**	Price	**BC5401602**	Price	**BC5401612**	Price

Material - Carbide								
			60°		82°		90°	
Size (in.)	Shank Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1-1/2	1-1/2	**BC5401650**	Price	**BC5401670**	Price	**BC5401680**	Price
3/16	1-7/8	1-7/8	**BC5401651**	Price	**BC5401671**	Price	**BC5401681**	Price
1/4	2	2	**BC5401652**	Price	**BC5401672**	Price	**BC5401682**	Price
5/16	2-1/8	2-1/8	**BC5401653**	Price	**BC5401673**	Price	**BC5401683**	Price
3/8	2-1/2	2-1/2	**BC5401654**	Price	**BC5401674**	Price	**BC5401684**	Price
1/2	3	3	**BC5401655**	Price	**BC5401675**	Price	**BC5401685**	Price
5/8	3-1/4	3-1/4	**BC5401656**	Price	**BC5401676**	Price	**BC5401686**	Price
3/4	3-1/2	3-1/2	**-**	-	**-**	-	**BC5401687**	Price

Severance 3N1™ Drill Point, Single Ended Countersink



High Speed Steel

				60°		82°		90°	
Size (in.)	Shank Dia. (in.)	Shank Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1-5/8	1-5/8	**BC5401473**	Price	**BC5401488**	Price	**BC5401503**	Price
3/16	3/16	1-1/2	1-5/8	**BC5401474**	Price	**BC5401489**	Price	**BC5401504**	Price
1/4	3/16	3/4	1-1/2	**BC5401470**	Price	**BC5401485**	Price	**BC5401500**	Price
5/16	1/4	7/8	1-3/4	**BC5401475**	Price	**BC5401490**	Price	**BC5401505**	Price
3/8	1/4	7/8	1-3/4	**BC5401471**	Price	**BC5401486**	Price	**BC5401501**	Price
1/2	3/8	1-1/8	2-1/8	**BC5401472**	Price	**BC5401487**	Price	**BC5401502**	Price
5/8	3/8	1-1/8	2-3/8	**BC5401476**	Price	**BC5401491**	Price	**BC5401506**	Price
3/4	1/2	1-5/16	2-11/16	**BC5401477**	Price	**BC5401492**	Price	**BC5401507**	Price
7/8	1/2	1-5/16	2-13/16	**BC5401478**	Price	**BC5401493**	Price	**BC5401508**	Price
1	1/2	1-5/16	2-13/16	**BC5401479**	Price	**BC5401494**	Price	**BC5401509**	Price

Severance Tube End Forming Cutters

High Speed Steel



- Used to produce a smooth, round lip on all types of tubing, including steel, copper, aluminum, plastic and other materials
- Not recommended for tubing with irregular wall thickness or for interrupted cutting

Tubing OD - 3/16						
Gauge	Wall Thickness	Shank Dia. (in.)	Head Size (in.)	OAL (in.)	Order No.	Price
22	.028	3/8	1/2	1-9/16	**BC54A3028**	Price
25	.020	3/8	1/2	1-9/16	**BC54A3020**	Price

Tubing OD - 1/4						
Gauge	Wall Thickness	Shank Dia. (in.)	Head Size (in.)	OAL (in.)	Order No.	Price
21	.032	3/8	1/2	1-9/16	**BC54A4032**	Price
22	.028	3/8	1/2	1-9/16	**BC54A4028**	Price
25	.020	3/8	1/2	1-9/16	**BC54A4020**	Price

Tubing OD - 5/16						
Gauge	Wall Thickness	Shank Dia. (in.)	Head Size (in.)	OAL (in.)	Order No.	Price
20	.035	3/8	9/16	1-9/16	**BC54A5035**	Price
21	.032	3/8	9/16	1-9/16	**BC54A5032**	Price
22	.028	3/8	9/16	1-9/16	**BC54A5028**	Price
25	.020	3/8	9/16	1-9/16	**BC54A5020**	Price

Tubing OD - 3/8						
Gauge	Wall Thickness	Shank Dia. (in.)	Head Size (in.)	OAL (in.)	Order No.	Price
20	.035	1/2	3/4	1-9/16	**BC54A6035**	Price
21	.032	1/2	3/4	1-9/16	**BC54A6032**	Price
22	.028	1/2	3/4	1-9/16	**BC54A6028**	Price
25	.020	1/2	3/4	1-9/16	**BC54A6020**	Price

Tubing OD - 1/2						
Gauge	Wall Thickness	Shank Dia. (in.)	Head Size (in.)	OAL (in.)	Order No.	Price
18	.049	1/2	3/4	1-9/16	**BC54A8049**	Price
20	.035	1/2	3/4	1-9/16	**BC54A8035**	Price
21	.032	1/2	3/4	1-9/16	**BC54A8032**	Price
22	.028	1/2	3/4	1-9/16	**BC54A8028**	Price
25	.020	1/2	3/4	1-9/16	**BC54A8020**	Price

Tubing OD - 9/16						
Gauge	Wall Thickness	Shank Dia. (in.)	Head Size (in.)	OAL (in.)	Order No.	Price
16	.065	1/2	7/8	1-5/8	**BC54A9065**	Price

Tubing OD - 5/8						
Gauge	Wall Thickness	Shank Dia. (in.)	Head Size (in.)	OAL (in.)	Order No.	Price
16	.065	1/2	7/8	1-5/8	**BC54A10065**	Price
17	.058	1/2	7/8	1-5/8	**BC54A10058**	Price
18	.049	1/2	7/8	1-5/8	**BC54A10049**	Price
20	.035	1/2	7/8	1-5/8	**BC54A10035**	Price
21	.032	1/2	7/8	1-5/8	**BC54A10032**	Price
22	.028	1/2	7/8	1-5/8	**BC54A10028**	Price

Severance® Carbide Inside Deburring Cutters

Shear Tooth Design

- For general purpose light deburring applications
- Multi-flute design is self piloting
- May be reground many times
- One tool can deburr many different hole diameters
- Large variety of shanks available
- Noses all come to a point
- Furnished in 60° and 90° angles
- The sectional shear-tooth pattern on these cutters is intended for deburring only
- For heavy chamfering, use chatterless countersinks
- 3/32 thru 1/4" are solid carbide and double end, 5/16 thru 1" are solid carbide heads brazed to hardened alloy precision ground shanks and single end





			60°		90°	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price
3/32	3/32	1-1/2	**BC5420620**	Price	**BC5420680**	Price
1/8	1/8	1-1/2	**BC5422250**	Price	**BC5422249**	Price
3/16	3/16	2	**BC5420622**	Price	**BC5420682**	Price
1/4	1/4	2	**BC5422411**	Price	**BC5422412**	Price
5/16	1/4	2-1/4	**BC5420628**	Price	**BC5420688**	Price
3/8	1/4	2-1/4	**BC5420629**	Price	**BC5420689**	Price
1/2	1/4	2-1/4	**BC5420633**	Price	**BC5420693**	Price
1/2	3/8	2-1/8	**BC5420634**	Price	**BC5420694**	Price
5/8	1/4	2-3/8	**BC5420639**	Price	**BC5420699**	Price
5/8	3/8	2-3/8	**BC5420640**	Price	**BC5420700**	Price
3/4	1/2	2-11/16	**BC5420644**	Price	**BC5420704**	Price
1	1/2	2-13/16	**BC5420650**	Price	**BC5420710**	Price

RAPIDKUT® Solid Carbide Chamfer Mills

2 & 4 Flute Single End

- Solid C-2 grade premium sub-micron grain carbide with 10% cobalt
- Center cutting
- Right hand cut
- Diameter tolerance: +.000 / -.002"
- Included angle tolerance: ±1°





Application:

- Eliminates hand deburring operations & provides consistent workpiece finishes

					Uncoated				TiAlN			
					2 Flute		4 Flute		2 Flute		4 Flute	
Dia. (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Point Angle	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	60°	**DD5810000**	Price	**DD5820000**	Price	**DD5830000**	Price	**DD5840000**	Price
1/8	1/8	1/2	1-1/2	82°	**DD5810001**	Price	**DD5820001**	Price	**DD5830001**	Price	**DD5840001**	Price
1/8	1/8	1/2	1-1/2	90°	**DD5810002**	Price	**DD5820002**	Price	**DD5830002**	Price	**DD5840002**	Price
3/16	3/16	5/8	2	60°	**DD5810003**	Price	**DD5820003**	Price	**DD5830003**	Price	**DD5840003**	Price
3/16	3/16	5/8	2	82°	**DD5810004**	Price	**DD5820004**	Price	**DD5830004**	Price	**DD5840004**	Price
3/16	3/16	5/8	2	90°	**DD5810005**	Price	**DD5820005**	Price	**DD5830005**	Price	**DD5840005**	Price
1/4	1/4	3/4	2-1/2	60°	**DD5810006**	Price	**DD5820006**	Price	**DD5830006**	Price	**DD5840006**	Price
1/4	1/4	3/4	2-1/2	82°	**DD5810007**	Price	**DD5820007**	Price	**DD5830007**	Price	**DD5840007**	Price
1/4	1/4	3/4	2-1/2	90°	**DD5810008**	Price	**DD5820008**	Price	**DD5830008**	Price	**DD5840008**	Price
3/8	3/8	1	2-1/2	60°	**DD5810009**	Price	**DD5820009**	Price	**DD5830009**	Price	**DD5840009**	Price
3/8	3/8	1	2-1/2	82°	**DD5810010**	Price	**DD5820010**	Price	**DD5830010**	Price	**DD5840010**	Price
3/8	3/8	1	2-1/2	90°	**DD5810011**	Price	**DD5820011**	Price	**DD5830011**	Price	**DD5840011**	Price
1/2	1/2	1	3	60°	**DD5810012**	Price	**DD5820012**	Price	**DD5830012**	Price	**DD5840012**	Price
1/2	1/2	1	3	82°	**DD5810013**	Price	**DD5820013**	Price	**DD5830013**	Price	**DD5840013**	Price
1/2	1/2	1	3	90°	**DD5810014**	Price	**DD5820014**	Price	**DD5830014**	Price	**DD5840014**	Price
3/4	3/4	1-1/2	3	60°	**DD5810015**	Price	**DD5820015**	Price	**DD5830015**	Price	**DD5840015**	Price
3/4	3/4	1-1/2	3	82°	**DD5810016**	Price	**DD5820016**	Price	**DD5830016**	Price	**DD5840016**	Price
3/4	3/4	1-1/2	3	90°	**DD5810017**	Price	**DD5820017**	Price	**DD5830017**	Price	**DD5840017**	Price

Severance® Tube End Chamfering Mills

High Speed Steel



- The cutting teeth are so developed as to preclude chatter and provide ample chip room for every operating condition
- Moderate speeds of about 100 RPM for 1" steel tubing to about 200 RPM for 1/2" tubing are recommended for these cutters - it is advisable to start at a slower speed on any given material or size and increase until best results are obtained
- Designed to chamfer both inside and outside of a tube or pipe simultaneously
- Chatterless
- Designed for heavy chamfering
- Liberal adjustment to accommodate different wall thicknesses

Std. Tubing O.D. Size (in.)	Std. Pipe Size (in.)	Wall Thickness (Min.-Max.)	Plug Size	Shank Dia. (in.)	Order No.	Price
3/16	-	.022 - .045	.152	1/4	**BC5434960**	Price
1/4	-	.022 - .065	.228	1/4	**BC5434961**	Price
5/16	-	.022 - .095	.290	1/4	**BC5434962**	Price
3/8	1/8	.022 - .095	.353	3/8	**BC5434963**	Price
7/16	-	.028 - .095	.409	3/8	**BC5434964**	Price
1/2	1/4	.028 - .095	.472	3/8	**BC5434965**	Price
9/16	-	.028 - .120	.534	1/2	**BC5434966**	Price
5/8	3/8	.028 - .120	.597	1/2	**BC5434967**	Price
3/4	1/2	.028 - .120	.722	1/2	**BC5434968**	Price
7/8	-	.022 - .156	.847	1/2	**BC5434969**	Price
1	3/4	.022 - .156	.965	1/2	**BC5434970**	Price

RAPIDKUT® M-42 Cobalt Chamfering End Mills

60°, 82°, and 90°



- Designed to mill chamfers or countersinks

Body Size (in.)	Shank Dia. (in.)	Angle	OAL (in.)	No. of Flutes	Material	Order No.	Price
1/2	1/2	90 x 60	3-3/8	2	M-42 Cobalt	**DR80CCT90605**	Price
1/2	1/2	90 x 82	3-3/16	2	M-42 Cobalt	**DR80CCT90825**	Price
1/2	1/2	90 x 90	3-3/16	2	M-42 Cobalt	**DR80CCT90905**	Price
3/4	3/4	90 x 60	3-3/8	2	M-42 Cobalt	**DR80CCT90607**	Price
3/4	3/4	90 x 82	3-3/16	2	M-42 Cobalt	**DR80CCT90827**	Price
3/4	3/4	90 x 90	3-3/16	2	M-42 Cobalt	**DR80CCT90907**	Price
1	1/2	90°	2-15/16	2	M-42 Cobalt	**DR80CCT9015**	Price
1-1/4	3/4	90°	3-3/8	2	M-42 Cobalt	**DR80CCT901147**	Price

RAPIDKUT® 4 Pc. M-42 Cobalt Chamfering Sets

60°, 82° & 90°



- 8% Cobalt M42 tool steel and solid body combine for rigid tool with an edge that lasts
- Unique geometry allows free cutting and superior finishes
- Includes 1 each 90 x 60°, 90 x 82°, 90 x 90° double end and 90° single end
- Sets supplied in wooden case

Shank Dia. (in.)	Order No.	Price
1/2	**DR80CCTSETS5**	Price
3/4	**DR80CCTSETS7**	Price

Severance® Outside Deburring Cutters

High Speed Steel



- Shear-type cutting tooth design eliminates burrs on diameters of tubes and rods
- Shearing action cuts clean and reduces chatter
- One tool can handle various size parts
- May be reground many times
- Carbide available-call for pricing
- **Shank required-sold separately-see ad below**

Angle - 60°								
Max. Cutting Size (in.)	Recess Hole Size (in.)	Mouth Size (in.)	Body Size (in.)	Body Length (in.)	Coolant Hole (in.)	I.D. Thread Size	Order No.	Price
1/8	1/16	5/32	1/2	7/8	-	1/4-28	**BC5425430**	Price
3/16	5/32	7/32	1/2	7/8	-	1/4-28	**BC5425431**	Price
1/4	13/64	19/64	1/2	7/8	-	1/4-28	**BC5425432**	Price
5/16	.242	23/64	1/2	7/8	-	1/4-28	**BC5425433**	Price
3/8	9/32	7/16	5/8	7/8	1/8	1/4-28	**BC5425434**	Price
1/2	.332	9/16	3/4	1	3/16	3/8-24	**BC5425435**	Price
5/8	7/16	11/16	7/8	1	3/16	3/8-24	**BC5425436**	Price
3/4	17/32	53/64	1	1	3/16	3/8-24	**BC5425437**	Price
1	45/64	1-5/64	1-1/4	1-3/8	1/4	1/2-20	**BC5425438**	Price
1-1/4	7/8	1-21/64	1-1/2	1-3/8	1/4	1/2-20	**BC5425439**	Price
1-1/2	1-3/64	1-19/32	1-3/4	1-5/8	1/4	5/8-18	**BC5425440**	Price

Angle - 90°								
Max. Cutting Size (in.)	Recess Hole Size (in.)	Mouth Size (in.)	Body Size (in.)	Body Length (in.)	Coolant Hole (in.)	I.D. Thread Size	Order No.	Price
1/8	5/64	3/16	1/2	7/8	-	1/4-28	**BC5425460**	Price
3/16	7/64	7/32	1/2	7/8	-	1/4-28	**BC5425461**	Price
1/4	9/64	23/64	1/2	7/8	-	1/4-28	**BC5425462**	Price
3/8	3/16	7/16	5/8	7/8	1/8	1/4-28	**BC5425463**	Price
1/2	1/4	9/16	3/4	1	3/16	3/8-24	**BC5425464**	Price
3/4	3/8	13/16	1	1	3/16	3/8-24	**BC5425465**	Price
1	1/2	1-5/64	1-1/4	1-3/8	1/4	1/2-20	**BC5425466**	Price
1-1/2	3/4	1-19/32	1-3/4	1-1/2	1/4	5/8-18	**BC5425467**	Price
2	15/16	2-7/64	2-3/8	1-3/4	5/16	3/4-16	**BC5425468**	Price

Tools furnished without shanks - order shanks separately

Severance® Straight Shank Threaded Arbors

- For use with outside deburring cutters and chamfering mills



Thread Size	Shank Size (in.)	Thread Length (in.)	Shank Length (in.)	Shoulder Size (in.)	Order No.	Price
1/4-28	1/4	1/4	1-3/4	3/8	**BC5434060**	Price
1/4-28	3/8	1/4	1-3/4	3/8	**BC5434061**	Price
1/4-28	1/2	1/4	1-3/4	1/2	**BC5434062**	Price
5/16-24	1/4	5/16	1-3/4	7/16	**BC5434063**	Price
5/16-24	3/8	5/16	1-3/4	7/16	**BC5434064**	Price
5/16-24	1/2	5/16	1-3/4	1/2	**BC5434065**	Price
3/8-24	1/4	3/8	1-3/4	1/2	**BC5434066**	Price
3/8-24	3/8	3/8	1-3/4	1/2	**BC5434067**	Price
3/8-24	1/2	3/8	1-3/4	1/2	**BC5434068**	Price
3/8-24	5/8	3/8	1-3/4	5/8	**BC5434069**	Price
1/2-20	3/8	1/2	1-3/4	5/8	**BC5434070**	Price
1/2-20	1/2	1/2	1-3/4	5/8	**BC5434071**	Price
1/2-20	5/8	1/2	1-3/4	5/8	**BC5434072**	Price
1/2-20	3/4	1/2	1-3/4	3/4	**BC5434073**	Price
1/2-20	1	1/2	2	1	**BC5434074**	Price
5/8-18	3/8	5/8	1-3/4	3/4	**BC5434075**	Price
5/8-18	1/2	5/8	1-3/4	3/4	**BC5434076**	Price
5/8-18	5/8	5/8	1-3/4	3/4	**BC5434077**	Price
5/8-18	3/4	5/8	1-3/4	7/8	**BC5434078**	Price
5/8-18	1	5/8	2	1	**BC5434079**	Price
3/4-16	1/2	5/8	1-3/4	7/8	**BC5434080**	Price
3/4-16	5/8	5/8	1-3/4	7/8	**BC5434081**	Price
3/4-16	3/4	5/8	1-3/4	7/8	**BC5434082**	Price
3/4-16	1	5/8	2	1	**BC5434083**	Price
1-14	1	3/4	2	1-3/16	**BC5434084**	Price
1-1/4-12	1	3/4	2	1-1/2	**BC5434085**	Price

Severance® Outside Chamfering Mills

High Speed Steel



- Designed to economically chamfer a large variety of diameters on tubing, pipe, and rod
- Chatterless teeth produce heavy chamfers
- One size will accommodate many size parts
- Available in 60° and 90° angles
- May be reground many times
- Shank required-sold separately-see ad below
- These outside chamfering mills are most efficient when used in screw machines, lathes, drill presses, or other chucking machines, or with work holding devices, although where requirements are not too exacting, may be used in a portable power tool on some materials

Angle - 60°							
Max. Cutting Size (in.)	Recess Hole Size (in.)	Mouth Size (in.)	Body Size (in.)	Body Length (in.)	ID Thread Size	Order No.	Price
1/8	1/32	3/16	1/2	1	5/16-24	**BC5425230**	Price
1/4	3/64	5/16	1/2	1	5/16-24	**BC5425231**	Price
1/2	1/8	5/8	7/8	1-5/16	3/8-24	**BC5425232**	Price
3/4	1/4	7/8	1-1/8	1-3/4	1/2-20	**BC5425233**	Price
1	1/4	1-1/8	1-1/2	2	3/4-16	**BC5425234**	Price
1-3/4	1/2	1-7/8	2-1/4	2-15/16	1-14	**BC5425235**	Price
2	7/8	2-1/8	2-1/2	3	1-14	**BC5425236**	Price
3	1	3-1/4	3-3/4	3-3/4	1-1/4-12	**BC5425237**	Price

Angle - 90°							
Max. Cutting Size (in.)	Recess Hole Size (in.)	Mouth Size (in.)	Body Size (in.)	Body Length (in.)	ID Thread Size	Order No.	Price
1/8	1/32	3/16	1/2	1	5/16-24	**BC5425250**	Price
1/4	3/64	5/16	1/2	1	5/16-24	**BC5425251**	Price
1/2	1/8	5/8	7/8	1-5/16	3/8-24	**BC5425252**	Price
3/4	3/16	7/8	1-1/8	1-5/16	1/2-20	**BC5425253**	Price
1	1/4	1-1/8	1-1/2	1-3/4	3/4-16	**BC5425254**	Price
1-1/2	3/8	1-5/8	2	1-7/8	3/4-16	**BC5425255**	Price
2	7/8	2-1/8	2-1/2	2-1/2	1-14	**BC5425256**	Price
3	1	3-1/4	3-3/4	2-7/8	1-1/4-12	**BC5425257**	Price

Tools furnished without shanks — order shanks separately.

Severance® Tube End Deburring Cutters

High Speed Steel



- Economical method of light deburring both inside and outside of tubing simultaneously
- Shear cutting teeth designed to avoid loading
- Adjustable
- Chamfer 30° inside and 45° outside
- Great for production deburring
- Operating speeds range from 50-200 RPM
- May be reground many times
- Two piece inside and outside cutting design consisting of plug and adjustable ring

Tubing OD Size (in.)	Tubing ID Size (in.)	Hole Size of Ring	Shank Size (in.)	Order No.	Price
1/8	1/16	.093	1/4	**BC5435060**	Price
3/16	1/8	.156	1/4	**BC5435061**	Price
1/4	3/16	.218	1/4	**BC5435062**	Price
5/16	1/4	.281	5/16	**BC5435063**	Price
3/8	5/16	.343	3/8	**BC5435064**	Price
7/16	3/8	.406	7/16	**BC5435065**	Price
1/2	7/16	.468	1/2	**BC5435066**	Price
9/16	1/2	.531	1/2	**BC5435067**	Price
5/8	9/16	.595	1/2	**BC5435068**	Price
3/4	5/8	.685	1/2	**BC5435069**	Price
7/8	3/4	.805	1/2	**BC5435070**	Price
1	7/8	.930	1/2	**BC5435071**	Price
1-1/8	1	1.063	1/2-20	**BC5435072†**	182.65
1-1/4	1-1/8	1.180	1/2-20	**BC5435073†**	209.20
1-3/8	1-1/4	1.313	1/2-20	**BC5435074†**	226.80
1-1/2	1-3/8	1.430	5/8-18	**BC5435075†**	254.85
1-3/4	1-5/8	1.680	5/8-18	**BC5435076†**	318.85
2	1-3/4	1.930	3/4-16	**BC5435077†**	405.45

†Tool numbers 35072 through 35077 require threaded arbors.

Straight Shank Capscrew Counterbores

High Speed Steel and M35 Cobalt • TiN Coated



- Designed for fast and easy cutting
- 4 Flute, 30˚ right-hand spiral
- The high lubricity of TiN improves chip flow, resists galling and edge build up
- Ideal for a wide range of applications where improved tool life and elevated feeds and speeds are required

					Alvord Polk						Keo		
					High Speed Steel			High Speed Steel (TiN Coated)			M-35 Cobalt		
Screw Size	Pilot Dia.	Cutter Dia.	Flute Length (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
#4	.112	.186	11/16	5/32	3-7/8	**BL5403000**	Price	3-7/8	**BL5433000**	Price	3	**AV4255200**	Price
#4	.127	.202	11/16	5/32	3-7/8	**BL5403001**	Price	3-7/8	**BL5433001**	Price	3	**AV4255201**	Price
#4	.143	.218	11/16	5/32	3-7/8	**BL5403002**	Price	3-7/8	**BL5433002**	Price	3	**AV4255202**	Price
#5	.125	.205	11/16	3/16	4-1/8	**BL5403003**	Price	4-1/8	**BL5433003**	Price	3	**AV4255203**	Price
#5	.140	.221	11/16	3/16	4-1/8	**BL5403004**	Price	4-1/8	**BL5433004**	Price	3	**AV4255204**	Price
#5	.156	.237	11/16	3/16	4-1/8	**BL5403005**	Price	4-1/8	**BL5433005**	Price	3	**AV4255205**	Price
#6	.138	.228	7/8	7/32	4-5/8	**BL5403006**	Price	4-5/8	**BL5433006**	Price	3	**AV4255206**	Price
#6	.153	.244	7/8	7/32	4-5/8	**BL5403007**	Price	4-5/8	**BL5433007**	Price	3	**AV4255207**	Price
#6	.169	.260	7/8	7/32	4-5/8	**BL5403008**	Price	4-5/8	**BL5433008**	Price	3	**AV4255208**	Price
#8	.164	.272	15/16	1/4	5	**BL5403009**	Price	5	**BL5433009**	Price	3	**AV4255209**	Price
#8	.179	.288	15/16	1/4	5	**BL5403010**	Price	5	**BL5433010**	Price	3	**AV4255210**	Price
#8	.195	.304	15/16	1/4	5	**BL5403011**	Price	5	**BL5433011**	Price	3	**AV4255211**	Price
#10	.190	.314	1-1/8	9/32	5-1/4	**BL5403012**	Price	5-1/4	**BL5433012**	Price	4-1/2	**AV4255212**	Price
#10	.205	.330	1-1/8	9/32	5-1/4	**BL5403013**	Price	5-1/4	**BL5433013**	Price	4-1/2	**AV4255213**	Price
#10	.221	.346	1-1/8	9/32	5-1/4	**BL5403014**	Price	5-1/4	**BL5433014**	Price	4-1/2	**AV4255214**	Price
1/4	.250	.382	1-5/16	5/16	5-5/8	**BL5403015**	Price	5-5/8	**BL5433015**	Price	4-1/2	**AV4255215**	Price
1/4	.265	.398	1-5/16	5/16	5-5/8	**BL5403016**	Price	5-5/8	**BL5433016**	Price	4-1/2	**AV4255216**	Price
1/4	.281	.414	1-5/16	5/16	5-5/8	**BL5403017**	Price	5-5/8	**BL5433017**	Price	4-1/2	**AV4255217**	Price
5/16	.312	.475	1-5/16	3/8	6-1/8	**BL5403018**	Price	6-1/8	**BL5433018**	Price	4-1/2	**AV4255218**	Price
5/16	.328	.491	1-5/16	3/8	6-1/8	**BL5403019**	Price	6-1/8	**BL5433019**	Price	4-1/2	**AV4255219**	Price
5/16	.343	.507	1-5/16	3/8	6-1/8	**BL5403020**	Price	6-1/8	**BL5433020**	Price	4-1/2	**AV4255220**	Price
3/8	.375	.572	1-5/8	1/2	6-1/2	**BL5403021**	Price	6-1/2	**BL5433021**	Price	5	**AV4255221**	Price
3/8	.390	.588	1-5/8	1/2	6-1/2	**BL5403022**	Price	6-1/2	**BL5433022**	Price	5	**AV4255222**	Price
3/8	.406	.604	1-5/8	1/2	6-1/2	**BL5403023**	Price	6-1/2	**BL5433023**	Price	5	**AV4255223**	Price
7/16	.437	.663	1-11/16	1/2	7	**BL5403024**	Price	7	**BL5433024**	Price	5	**AV4255224**	Price
7/16	.452	.679	1-11/16	1/2	7	**BL5403025**	Price	7	**BL5433025**	Price	5	**AV4255225**	Price
7/16	.468	.695	1-11/16	1/2	7	**BL5403026**	Price	7	**BL5433026**	Price	5	**AV4255226**	Price
1/2	.500	.757	2	1/2	7-1/2	**BL5403027**	Price	7-1/2	**BL5433027**	Price	6	**AV4255227**	Price
1/2	.515	.773	2	1/2	7-1/2	**BL5403028**	Price	7-1/2	**BL5433028**	Price	6	**AV4255228**	Price
1/2	.531	.789	2	1/2	7-1/2	**BL5403029**	Price	7-1/2	**BL5433029**	Price	6	**AV4255229**	Price
5/8	.625	.945	2	5/8	7-5/8	**BL5403030**	Price	7-5/8	**BL5433030**	Price	6	**AV4255230**	Price
5/8	.640	.961	2	5/8	7-5/8	**BL5403031**	Price	7-5/8	**BL5433031**	Price	6	**AV4255231**	Price
5/8	.656	.977	2	5/8	7-5/8	**BL5403032**	Price	7-5/8	**BL5433032**	Price	6	**AV4255232**	Price
3/4	.750	1.133	2-1/8	3/4	7-3/4	**BL5403033**	Price	7-3/4	**BL5433033**	Price	-	**-**	-
3/4	.765	1.149	2-1/8	3/4	7-3/4	**BL5403034**	Price	7-3/4	**BL5433034**	Price	7	**AV4255233**	Price
3/4	.781	1.165	2-1/8	3/4	7-3/4	**BL5403035**	Price	7-3/4	**BL5433035**	Price	7	**AV4255234**	Price
7/8	.875	1.322	2-1/8	7/8	8-1/8	**BL5403036**	Price	8-1/8	**BL5433036**	Price	-	**-**	-
7/8	.891	1.338	2-1/8	7/8	8-1/8	**BL5403037**	Price	8-1/8	**BL5433037**	Price	7	**AV4255235**	Price
7/8	.906	1.354	2-1/8	7/8	8-1/8	**BL5403038**	Price	8-1/8	**BL5433038**	Price	7	**AV4255236**	Price
1	1.000	1.510	2-1/4	1	8-1/2	**BL5403039**	Price	8-1/2	**BL5433039**	Price	-	**-**	-
1	1.015	1.526	2-1/4	1	8-1/2	**BL5403040**	Price	8-1/2	**BL5433040**	Price	7	**AV4255237**	Price
1	1.031	1.542	2-1/4	1	8-1/2	**BL5403041**	Price	8-1/2	**BL5433041**	Price	7	**AV4255238**	Price

Straight Shank Capscrew Counterbores

High Speed Steel • TiN Coated • Metric



						High Speed Steel		High Speed Steel (TiN Coated)	
Screw Size	Pilot Dia. (mm)	Cutter Dia. (mm)	Flute Length (in.)	OAL (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price
3mm	3.5	6.0	7/8	4-1/2	3/16	**BL5403080**	Price	**BL5433080**	Price
4mm	4.5	7.5	15/16	5	1/4	**BL5403081**	Price	**BL5433081**	Price
5mm	5.5	9.0	1-1/8	5-5/8	5/16	**BL5403082**	Price	**BL5433082**	Price
6mm	6.5	10.5	1-5/16	5-5/8	5/16	**BL5403083**	Price	**BL5433083**	Price
8mm	8.5	13.5	1-5/16	6-1/2	1/2	**BL5403084**	Price	**BL5433084**	Price
10mm	10.5	16.5	1-11/16	7	1/2	**BL5403085**	Price	**BL5433085**	Price
12mm	12.5	18.5	1-11/16	7-1/8	1/2	**BL5403086**	Price	**BL5433086**	Price
14mm	14.5	21.5	2	7-1/2	5/8	**BL5403087**	Price	**BL5433087**	Price

PROCUT Straight Shank Capscrew Counterbores



High Speed Steel and M-42 Cobalt • 3 Flute • Fractional

					High Speed Steel		M-42 Cobalt	
Capscrew Size (in.)	Pilot Dia. (in.)	Cutter Dia. (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price
#5	.141	.221	3/16	3	**CD50005**	Price	**CD60005**	Price
#6	.150	.242	7/32	3	**CD50006**	Price	**CD60006**	Price
#8	11/64	19/64	1/4	3	**CD50008**	Price	**CD60008**	Price
#10	13/64	21/64	5/16	3-1/2	**CD50010**	Price	**CD60010**	Price
1/4	9/32	13/32	3/8	5	**CD50016**	Price	**CD60016**	Price
5/16	11/32	1/2	7/16	5	**CD50020**	Price	**CD60020**	Price
3/8	13/32	19/32	1/2	6	**CD50024**	Price	**CD60024**	Price
7/16	15/32	11/16	1/2	7	**CD50028**	Price	**CD60028**	Price
1/2	17/32	25/32	1/2	7-1/2	**CD50032**	Price	**CD60032**	Price
1/2	9/16	13/16	1/2	7-1/2	**CD50033**	Price	**CD60033**	Price
5/8	11/16	1	3/4	7-1/2	**CD50041**	Price	**CD60041**	Price
5/8	21/32	31/32	3/4	7-1/2	**CD50040**	Price	**CD60040**	Price
3/4	13/16	1-3/16	1	8	**CD50048**	Price	**CD60048**	Price
7/8	15/16	1-3/8	1	8	**CD50056**	Price	**CD60056**	Price
1	1-1/16	1-9/16	1	10	**CD50100**	Price	**CD60100**	Price

PROCUT Straight Shank Capscrew Counterbores



High Speed Steel • 3 Flute • Metric

Capscrew Size	Pilot Dia. (mm)	Cutter Dia. (mm)	Shank Dia. (mm)	OAL (mm)	Order No.	Price
M3	3.4	6	5.55	76	**CD52M3**	Price
M4	4.5	8	7.938	89	**CD52M4**	Price
M5	5.5	10	9.525	127	**CD52M5**	Price
M6	6.6	11	11.112	127	**CD52M6**	Price
M8	9	15	12.700	152	**CD52M8**	Price
M10	11	18	12.700	178	**CD52M10**	Price
M12	14	20	12.7	190	**CD52M12**	Price

KEO Straight Shank Capscrew Kounterbores



Metric Sizes • M35 Cobalt

- 3 Flutes
- Before thread, fine, and medium applications

Screw Size	Application	Pilot Dia. (mm)	Cutter Dia. (mm)	Shank Dia. (mm)	OAL (mm)	Order No.	Price
M3	Before Thread	2.5	6	5	71	**AV4256200**	Price
M3	Fine	3.2	6	5	71	**AV4256201**	Price
M3	Medium	3.4	6	5	71	**AV4256202**	Price
M3.5	Before Thread	2.9	6.5	5	71	**AV4256203**	Price
M3.5	Fine	3.7	6.5	5	71	**AV4256204**	Price
M3.5	Medium	3.9	6.5	5	71	**AV4256205**	Price
M4	Before Thread	3.3	8	5	71	**AV4256206**	Price
M4	Fine	4.3	8	5	71	**AV4256207**	Price
M4	Medium	4.5	8	5	71	**AV4256208**	Price
M5	Before Thread	4.2	10	8	80	**AV4256209**	Price
M5	Fine	5.3	10	8	80	**AV4256210**	Price
M5	Medium	5.5	10	8	80	**AV4256211**	Price
M6	Before Thread	5	11	8	80	**AV4256212**	Price
M6	Fine	6.4	11	8	80	**AV4256213**	Price
M6	Medium	6.6	11	8	80	**AV4256214**	Price
M8	Before Thread	6.8	15	12.5	100	**AV4256215**	Price
M8	Fine	8.4	15	12.5	100	**AV4256216**	Price
M8	Medium	9	15	12.5	100	**AV4256217**	Price
M10	Before Thread	8.5	18	12.5	100	**AV4256218**	Price
M10	Fine	10.5	18	12.5	100	**AV4256219**	Price
M10	Medium	11	18	12.5	100	**AV4256220**	Price
M12	Before Thread	10.2	20	12.5	100	**AV4256221**	Price
M12	Fine	13	20	12.5	100	**AV4256222**	Price
M12	Medium	14	20	12.5	100	**AV4256223**	Price

PROCUT Taper Shank Capscrew Counterbores



High Speed Steel • 3 Flute • Metric

Capscrew Size	Pilot Dia. (mm)	Cutter Dia. (mm)	Shank Taper	OAL (mm)	Order No.	Price
M14	15	24	2MT	209	**CD52M14†**	Price
M16	17	26	2MT	228	**CD52M16†**	Price
M20	21	33	2MT	254	**CD52M20†**	Price
M24	25	44	3MT	254	**CD52M24†**	Price

PROCUT Taper Shank Capscrew Counterbores



High Speed Steel • 3 Flute • Fractional

Capscrew Size (in.)	Pilot Dia. (in.)	Cutter Dia. (in.)	Shank Taper	OAL (in.)	Order No.	Price
1/4	9/32	13/32	2MT	5-3/4	**CD51016**	Price
5/16	11/32	1/2	2MT	6	**CD51020**	Price
3/8	13/32	19/32	2MT	6-1/2	**CD51024**	Price
7/16	15/32	11/16	2MT	7	**CD51028**	Price
1/2	17/32	25/32	2MT	7-1/4	**CD51032**	Price
5/8	11/16	1	2MT	7-1/2	**CD51041**	Price
5/8	21/32	31/32	2MT	7-1/2	**CD51040**	Price
3/4	13/16	1-3/16	3MT	9	**CD51048**	Price
7/8	15/16	1-3/8	3MT	9	**CD51056**	Price
1	1-1/16	1-9/16	3MT	10	**CD51100**	Price

PROCUT Capscrew Counterbore Sets



Set Material - Cobalt Flute Type - Spiral		
Includes	Order No.	Price
6, 8, 10, 1/4, 5/16, 3/8, 1/2	**CD60SS1CO**	Price

Set Material - High Speed Steel Flute Type - Spiral		
Includes	Order No.	Price
6, 8, 10, 1/4, 5/16, 3/8, 1/2	**CD50SS1**	Price
1/4, 5/16, 3/8, 1/2, 5/8, 3/4	**CD50SS2**	Price
M3, M4, M5, M6, M8, M10, M12	**CD50MS1**	Price

KEO 6 Pc. Capscrew Kounterbore Sets

Metric • M35 Cobalt

- 3 Flutes
- Before thread, fine and medium applications
- Sizes included are M3, M4, M5, M6, M8 and M10



Application	Order No.	Price
Before Thread	**AV4256224**	Price
Fine	**AV4256225**	Price
Medium	**AV4256226**	Price

Straight Shank Capscrew Counterbore Sets

High Speed Steel • Fractional



ALVORD-POLK TOOL

Brand - Alvord Polk				
No. of Pieces	Set Range	Case Type	Order No.	Price
8	3mm thru 14mm	Wooden Case	**BL5409133**	Price
10	#4 thru 1/2" (1/32" oversize pilots)	Wooden Case	**BL5409130**	Price
10	#4 thru 1/2" (1/64" oversize pilots)	Wooden Case	**BL5409131**	Price
10	#4 thru 1/2" (on size pilots)	Wooden Case	**BL5409132**	Price

KEO

Brand - Keo				
No. of Pieces	Set Range	Case Type	Order No.	Price
7	#6 thru 1/2" (1/32" oversize pilots)	Plastic Case	**AV4255241**	Price
7	#6 thru 1/2" (1/64" oversize pilots)	Plastic Case	**AV4255240**	Price
7	#6 thru 1/2" (close fit)	Plastic Case	**AV4255239**	Price

Irwin Unibit® Step Drill Sets

- Easy-to-sharpen non-skid tip eliminates the need for center punching and gives sure starts even on curved surface
- Single-fluted cutting edge
- Helps assure true round holes and allows greater control
- As many as 13 different hole sizes in a single bit eliminates the need for a toolbox full of drill bits
- Industrial grade high speed steel heat treated to assure maximum durability
- 3 Flatted shank
- Prevents slipping in drill chucks



Set Range	Set Material	Order No.	Price
1, 2, 3 Unibit Cobalt	Cobalt	**KX5010502CB**	Price
1, 2, 3 Unibit HSS	High Speed Steel	**KX50502**	Price

Bully Hog™ Cobalt Step Drill Bits

- Super alloy
- Heat resistant for high production
- Excellent mechanical strength



Tool No.	No. of Hole Sizes	Hole Sizes	Order No.	Price
ST-376	13	1/8 - 1/2" in 32nds	**ST20ST376**	Price
ST-377	6	3/16 - 3/8 - 1/2	**ST20ST377**	Price
ST-378	9	1/4 - 3/16 in 1/16ths	**ST20ST378**	Price
ST-380	12	3/16 - 7/8	**ST20ST380**	Price
ST-381	3	1/4 - 7/8 - 1-1/8	**ST20ST381**	Price
ST-382	8	1/4 - 9/16 - 1	**ST20ST382**	Price
ST-383	10	1/2 - 1-1/8 - 1-3/8	**ST20ST383**	Price

Unibit® Step Drills

Easy-to-sharpen non-skid tip eliminates the need for center punching and gives sure starts even on curved surface

- Single-fluted cutting edge
- Helps assure true round holes and allows greater control
- As many as 13 different hole sizes in a single bit eliminates the need for a toolbox full of drill bits
- Industrial grade high speed steel heat treated to assure maximum durability
- 3 Flatted shank
- Prevents slipping in drill chucks



- Hole Enlarging						
					High Speed Steel	
No. of Holes	Hole Range	Step Increments	Step Thickness	Shank Size (in.)	Order No.	Price
6	14 - 24mm	2mm	5mm	1/2	**KX5020M**	Price
8	9/16 - 1	16ths	1/8	1/2	**KX5020**	Price
8	20 - 34mm	2mm	5mm	1/2	**KX5021M**	Price
10	13/16 - 1-3/8	16ths	1/8	1/2	**KX5021**	Price

- Self Starting Single Hole						
					High Speed Steel	
No. of Holes	Hole Range	Step Increments	Step Thickness	Shank Size (in.)	Order No.	Price
1	3/8	na	na	1/4	**KX5012**	Price
1	1/2	na	na	1/4	**KX5010**	Price
1	7/8	na	na	3/8	**KX5011**	Price
1	1-1/8	na	na	1/2	**KX5013**	Price
1	1-7/32	na	na	1/2	**KX5014**	Price

- Self Starting Multiple Holes											
					High Speed Steel		Cobalt		TiN		
No. of Holes	Hole Range	Step Increments	Step Thickness	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
5	4 - 12mm	2mm	11mm	1/4	**KX502M**	Price	**KX5011102CB**	Price	**-**	-
6	3/16 - 1/2	16ths	3/8	1/4	**KX502**	Price	**KX5010232CB**	Price	**KX502T**	Price
7	6 - 18mm	2mm	5mm	3/8	**KX503M**	Price	**KX5011103CB**	Price	**KX503MT**	Price
9	1/4 - 3/4	16ths	1/8	3/8	**KX503**	Price	**KX5010233CB**	Price	**KX503T**	Price
9	4 - 12mm	1mm	5mm	1/4	**KX501M**	Price	**KX5011101CB**	Price	**KX501MT**	Price
10	1/4 - 1-3/8	8ths	1/8	1/2	**KX505**	Price	**-**	-	**-**	-
10	4 - 22mm	2mm	5mm	3/8	**KX504M**	Price	**KX5011104CB**	Price	**KX504MT**	Price
12	3/16 - 7/8	16ths	1/8	3/8	**KX504**	Price	**KX5010234CB**	Price	**KX504T**	Price
13	1/8 - 1/2	32nds	1/8	1/4	**KX501**	Price	**KX5010231CB**	Price	**KX501T**	Price
13	5 - 35mm	2 - 3mm	3.5mm	1/2	**KX505M**	Price	**-**	-	**-**	-

Interchangeable Pilot Counterbores

Taper Shank



					Price		Rock River Tool	
					High Speed Steel		Carbide Tipped	
Size (in.)	Hole Size (in.)	Shank	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1/4	3/32	1MT	3-13/16	3	**CF50016**	Price	**DE61016**	Price
9/32	3/32	1MT	3-13/16	3	**CF50018**	Price	**-**	-
5/16	3/32	1MT	3-13/16	3	**CF50020**	Price	**DE61020**	Price
11/32	3/32	1MT	3-13/16	3	**CF50022**	Price	**-**	-
3/8	5/32	1MT	4-1/16	3	**CF50024**	Price	**DE61024**	Price
13/32	5/32	1MT	4-1/16	3	**CF50026**	Price	**-**	-
7/16	5/32	1MT	4-1/16	3	**CF50028**	Price	**DE61028**	Price
15/32	3/16	1MT	4-5/16	3	**CF50030**	Price	**-**	-
1/2	3/16	1MT	4-5/16	3	**CF50032**	Price	**DE61032**	Price
17/32	3/16	1MT	4-5/16	3	**CF50034**	Price	**-**	-
9/16	3/16	1MT	4-5/16	3	**CF50036**	Price	**DE61036**	Price
19/32	3/16	2MT	5-1/8	3	**CF50038**	Price	**-**	-
5/8	3/16	2MT	5-1/8	3	**CF50040**	Price	**DE61040**	Price
21/32	3/16	2MT	5-1/8	3	**CF50042**	Price	**-**	-
11/16	3/16	2MT	5-1/8	3	**CF50044**	Price	**DE61044**	Price
23/32	1/4	2MT	5-3/8	3	**CF50046**	Price	**-**	-
3/4	1/4	2MT	5-3/8	3	**CF50048**	Price	**DE61048**	Price
25/32	1/4	2MT	5-3/8	3	**CF50050**	Price	**-**	-
13/16	1/4	2MT	5-3/8	3	**CF50052**	Price	**DE61052**	Price
27/32	1/4	2MT	5-3/8	3	**CF50054**	Price	**-**	-
7/8	1/4	2MT	5-3/8	3	**CF50056**	Price	**DE61056**	Price
15/16	1/4	3MT	6-1/8	3	**CF50060**	Price	**DE61060**	Price
1	5/16	3MT	6-3/8	3	**CF50100**	Price	**DE61100**	Price
1-1/16	5/16	3MT	6-3/8	3	**CF50104**	Price	**DE61104**	Price
1-1/8	5/16	3MT	6-3/8	3	**CF50108**	Price	**DE61108**	Price
1-3/16	5/16	3MT	6-3/8	3	**CF50112**	Price	**DE61112**	Price
1-1/4	3/8	3MT	6-5/8	4	**-**	-	**DE61116**	Price
1-1/4	3/8	3MT	6-5/8	5	**CF50116**	Price	**-**	-
1-5/16	3/8	3MT	6-5/8	4	**-**	-	**DE61120**	Price
1-5/16	3/8	3MT	6-5/8	5	**CF50120**	Price	**-**	-
1-3/8	3/8	3MT	6-5/8	4	**-**	-	**DE61124**	Price
1-3/8	3/8	3MT	6-5/8	5	**CF50124**	Price	**-**	-
1-7/16	3/8	4MT	7-7/8	4	**-**	-	**DE61128**	Price
1-7/16	3/8	4MT	7-7/8	5	**CF50128**	Price	**-**	-
1-1/2	3/8	4MT	7-7/8	4	**-**	-	**DE61132**	Price
1-1/2	3/8	4MT	7-7/8	5	**CF50132**	Price	**-**	-
1-9/16	7/16	4MT	8-1/8	4	**-**	-	**DE61136**	Price
1-9/16	7/16	4MT	8-1/8	5	**CF50136**	Price	**-**	-
1-5/8	7/16	4MT	8-1/8	4	**-**	-	**DE61140**	Price
1-5/8	7/16	4MT	8-1/8	5	**CF50140**	Price	**-**	-
1-11/16	7/16	4MT	8-1/8	5	**CF50144**	Price	**-**	-
1-3/4	7/16	4MT	8-1/8	5	**CF50148**	Price	**-**	-
1-13/16	7/16	4MT	8-1/8	5	**CF50152**	Price	**-**	-
1-7/8	7/16	4MT	8-1/8	5	**CF50156**	Price	**-**	-
1-15/16	7/16	4MT	8-1/8	5	**CF50160**	Price	**-**	-
2	1/2	4MT	8-3/8	5	**CF50200**	Price	**-**	-
2-1/8	1/2	5MT	9-7/8	5	**CF50208**	Price	**-**	-
2-1/4	1/2	5MT	9-7/8	5	**CF50216**	Price	**-**	-
2-3/8	1/2	5MT	9-7/8	5	**CF50224**	Price	**-**	-
2-1/2	1/2	5MT	9-7/8	5	**CF50232**	Price	**-**	-
2-5/8	1/2	5MT	9-7/8	5	**CF50240**	Price	**-**	-
2-3/4	1/2	5MT	9-7/8	5	**CF50248**	Price	**-**	-
2-7/8	1/2	5MT	9-7/8	5	**CF50256**	Price	**-**	-
3	1/2	5MT	9-7/8	5	**CF50300**	Price	**-**	-

Interchangeable Pilot Counterbore Sets

With Pilots in Case — High Speed Steel

- 13 Counterbores: 1/4 to 1" by 16ths
- 26 Pilots:
  1/8, 5/32, 3/16, 1/4 with 3/32" shank
  3/16, 7/32, 1/4, 9/32, 5/16 with 5/32" shank
  1/4, 5/16, 3/8, 7/16, 1/2 with 3/16" shank
  5/16, 3/8, 7/16, 1/2, 9/16, 5/8 with 1/4" shank
  3/8, 7/16, 1/2, 9/16, 5/8, 3/4 with 5/16" shank



Shank Style	Order No.	Price
Straight Shank	**CG50K84**	Price
Taper Shank	**CG50K83**	Price

Interchangeable Pilot Counterbores

Straight Shank



					Price		Rock River Tool	
					High Speed Steel		Carbide Tipped	
Size (in.)	Hole Size (in.)	Straight Shank Dia. (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1/4	3/32	15/64	3-13/16	3	**CF51016**	Price	**DE60016**	Price
9/32	3/32	17/64	3-13/16	3	**CF51018**	Price	**-**	-
5/16	3/32	19/64	3-13/16	3	**CF51020**	Price	**DE60020**	Price
11/32	3/32	5/16	3-13/16	3	**CF51022**	Price	**-**	-
3/8	5/32	5/16	4-1/16	3	**CF51024**	Price	**DE60024**	Price
13/32	5/32	3/8	4-1/16	3	**CF51026**	Price	**-**	-
7/16	5/32	3/8	4-1/16	3	**CF51028**	Price	**DE60028**	Price
15/32	3/16	7/16	4-5/16	3	**CF51030**	Price	**-**	-
1/2	3/16	7/16	4-5/16	3	**CF51032**	Price	**DE60032**	Price
17/32	3/16	1/2	4-5/16	3	**CF51034**	Price	**-**	-
9/16	3/16	1/2	4-5/16	3	**CF51036**	Price	**DE60036**	Price
19/32	3/16	1/2	5-1/8	3	**CF51038**	Price	**-**	-
5/8	3/16	1/2	5-1/8	3	**CF51040**	Price	**DE60040**	Price
21/32	3/16	1/2	5-1/8	3	**CF51042**	Price	**-**	-
11/16	3/16	1/2	5-1/8	3	**CF51044**	Price	**DE60044**	Price
23/32	1/4	1/2	5-3/8	3	**CF51046**	Price	**-**	-
3/4	1/4	1/2	5-3/8	3	**CF51048**	Price	**DE60048**	Price
25/32	1/4	5/8	5-3/8	3	**CF51050**	Price	**-**	-
13/16	1/4	5/8	5-3/8	3	**CF51052**	Price	**DE60052**	Price
27/32	1/4	3/4	5-3/8	3	**CF51054**	Price	**-**	-
7/8	1/4	3/4	5-3/8	3	**CF51056**	Price	**DE60056**	Price
15/16	1/4	3/4	6-1/8	3	**CF51060**	Price	**DE60060**	Price
1	5/16	3/4	6-3/8	3	**CF51100**	Price	**DE60100**	Price
1-1/16	5/16	3/4	6-3/8	3	**CF51104**	Price	**DE60104**	Price
1-1/8	5/16	1	6-3/8	3	**CF51108**	Price	**DE60108**	Price
1-3/16	5/16	1	6-3/8	3	**CF51112**	Price	**DE60112**	Price
1-1/4	3/8	1	6-5/8	4	**-**	-	**DE60116**	Price
1-1/4	3/8	1	6-5/8	5	**CF51116**	Price	**-**	-
1-5/16	3/8	1	6-5/8	4	**-**	-	**DE60120**	Price
1-5/16	3/8	1	6-5/8	5	**CF51120**	Price	**-**	-
1-3/8	3/8	1	6-5/8	4	**-**	-	**DE60124**	Price
1-3/8	3/8	1	6-5/8	5	**CF51124**	Price	**-**	-
1-7/16	3/8	1-1/4	7-7/8	4	**-**	-	**DE60128**	Price
1-7/16	3/8	1-1/4	7-7/8	5	**CF51128**	Price	**-**	-
1-1/2	3/8	1-1/4	7-7/8	4	**-**	-	**DE60132**	Price
1-1/2	3/8	1-1/4	7-7/8	5	**CF51132**	Price	**-**	-
1-9/16	7/16	1-1/4	8-1/8	4	**-**	-	**DE60136**	Price
1-9/16	7/16	1-1/4	8-1/8	5	**CF51136**	Price	**-**	-
1-5/8	7/16	1-1/4	8-1/8	4	**-**	-	**DE60140**	Price
1-5/8	7/16	1-1/4	8-1/8	5	**CF51140**	Price	**-**	-
1-11/16	7/16	1-1/4	8-1/8	5	**CF51144**	Price	**-**	-
1-3/4	7/16	1-1/4	8-1/8	5	**CF51148**	Price	**-**	-
1-13/16	7/16	1-1/2	8-1/8	5	**CF51152**	Price	**-**	-
1-7/8	7/16	1-1/2	8-1/8	5	**CF51156**	Price	**-**	-
1-15/16	7/16	1-1/2	8-1/8	5	**CF51160**	Price	**-**	-
2	1/2	1-1/2	8-3/8	5	**CF51200**	Price	**-**	-

Long Type Interchangeable Pilot Aircraft Counterbores

- Straight shank
- High speed steel



Size (in.)	Pilot Hole (in.)	Flute Length (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
7/32	3/32	3/4	13/64	4	**CH55014**	Price
1/4	3/32	3/4	15/64	4	**CH55016**	Price
11/32	3/32	3/4	5/16	4	**CH55022**	Price
15/32	1/8	1-1/4	7/16	4-1/4	**CH55030**	Price
19/32	1/8	1-1/8	1/2	5-1/4	**CH55038**	Price
27/32	3/16	1-3/4	1/2	5-1/4	**CH55054**	Price
15/16	3/16	1-3/4	1/2	5-1/4	**CH55060**	Price
31/32	3/16	1-3/4	1/2	5-1/4	**CH55062**	Price

PROCUT Interchangeable Pilot Aircraft Counterbores

Square Corner
High Speed Steel

- With set screw to hold pilots



Size (in.)	Shank Length (in.)	Hole Size (in.)	OAL (in.)	Order No.	Price
1/4	1-1/8	3/32	2-3/8	**CH50016**	Price
9/32	7/8	3/32	2-3/8	**CH50018**	Price
5/16	7/8	3/32	2-3/8	**CH50020**	Price
11/32	7/8	3/32	2-3/8	**CH50022**	Price
3/8	7/8	3/32	2-3/8	**CH50024**	Price
13/32	7/8	1/8	2-13/16	**CH50026**	Price
7/16	7/8	1/8	2-13/16	**CH50028**	Price
15/32	7/8	1/8	2-13/16	**CH50030**	Price
1/2	7/8	1/8	2-13/16	**CH50032**	Price
17/32	7/8	1/8	2-13/16	**CH50034**	Price
9/16	7/8	1/8	2-13/16	**CH50036**	Price
19/32	7/8	1/8	2-13/16	**CH50038**	Price
5/8	7/8	1/8	2-13/16	**CH50040**	Price

Size (in.)	Shank Length (in.)	Hole Size (in.)	OAL (in.)	Order No.	Price
21/32	7/8	3/16	3-1/8	**CH50042**	Price
11/16	7/8	3/16	3-1/8	**CH50044**	Price
23/32	7/8	3/16	3-1/8	**CH50046**	Price
3/4	7/8	3/16	3-1/8	**CH50048**	Price
25/32	7/8	3/16	3-1/8	**CH50050**	Price
13/16	7/8	3/16	3-1/8	**CH50052**	Price
27/32	7/8	3/16	3-1/8	**CH50054**	Price
7/8	7/8	3/16	3-1/8	**CH50056**	Price
29/32	7/8	3/16	3-1/8	**CH50058**	Price
15/16	7/8	3/16	3-1/8	**CH50060**	Price
31/32	7/8	3/16	3-1/8	**CH50062**	Price
1	7/8	3/16	3-1/8	**CH50100**	Price

Pilots for Interchangeable Pilot Counterbores



Pilot Size (in.)	Shank Dia. (in.)	Order No.	Price
1/8	3/32	**CF55012503**	Price
5/32	3/32	**CF55015603**	Price
3/16	3/32	**CF55018703**	Price
7/32	3/32	**CF55021803**	Price
1/4	3/32	**CF55025003**	Price
1/8	1/8	**CF55012504**	Price
5/32	1/8	**CF55015604**	Price
3/16	1/8	**CF55018704**	Price
7/32	1/8	**CF55021804**	Price
1/4	1/8	**CF55025004**	Price
9/32	1/8	**CF55028104**	Price
5/16	1/8	**CF55031204**	Price
11/32	1/8	**CF55034304**	Price
3/8	1/8	**CF55037504**	Price
7/16	1/8	**CF55043704**	Price
1/2	1/8	**CF55050004**	Price
5/32	5/32	**CF55015605**	Price
3/16	5/32	**CF55018705**	Price
7/32	5/32	**CF55021805**	Price
1/4	5/32	**CF55025005**	Price
9/32	5/32	**CF55028105**	Price
5/16	5/32	**CF55031205**	Price
11/32	5/32	**CF55034305**	Price
3/16	3/16	**CF55018706**	Price
7/32	3/16	**CF55021806**	Price
1/4	3/16	**CF55025006**	Price
9/32	3/16	**CF55028106**	Price
5/16	3/16	**CF55031206**	Price
11/32	3/16	**CF55034306**	Price
3/8	3/16	**CF55037506**	Price
13/32	3/16	**CF55040606**	Price
7/16	3/16	**CF55043706**	Price
15/32	3/16	**CF55046806**	Price
1/2	3/16	**CF55050006**	Price
17/32	3/16	**CF55053106**	Price
9/16	3/16	**CF55056206**	Price
19/32	3/16	**CF55059306**	Price
5/8	3/16	**CF55062506**	Price
11/16	3/16	**CF55068706**	Price
1/4	1/4	**CF55025008**	Price
9/32	1/4	**CF55028108**	Price
5/16	1/4	**CF55031208**	Price

Pilot Size (in.)	Shank Dia. (in.)	Order No.	Price
11/32	1/4	**CF55034308**	Price
3/8	1/4	**CF55037508**	Price
13/32	1/4	**CF55040608**	Price
7/16	1/4	**CF55043708**	Price
15/32	1/4	**CF55046808**	Price
1/2	1/4	**CF55050008**	Price
17/32	1/4	**CF55053108**	Price
9/16	1/4	**CF55056208**	Price
19/32	1/4	**CF55059308**	Price
5/8	1/4	**CF55062508**	Price
11/16	1/4	**CF55068708**	Price
3/4	1/4	**CF55075008**	Price
25/32	1/4	**CF55078108**	Price
13/16	1/4	**CF55081208**	Price
27/32	1/4	**CF55084308**	Price
29/32	1/4	**CF55090608**	Price
15/16	1/4	**CF55093708**	Price
5/16	5/16	**CF55031210**	Price
11/32	5/16	**CF55034310**	Price
3/8	5/16	**CF55037510**	Price
13/32	5/16	**CF55040610**	Price
7/16	5/16	**CF55043710**	Price
15/32	5/16	**CF55046810**	Price
1/2	5/16	**CF55050010**	Price
17/32	5/16	**CF55053110**	Price
9/16	5/16	**CF55056210**	Price
19/32	5/16	**CF55059310**	Price
21/32	5/16	**CF55065610**	Price
11/16	5/16	**CF55068710**	Price
5/8	5/16	**CF55062510**	Price
23/32	5/16	**CF55071810**	Price
3/4	5/16	**CF55075010**	Price
25/32	5/16	**CF55078110**	Price
13/16	5/16	**CF55081210**	Price
27/32	5/16	**CF55084310**	Price
15/16	5/16	**CF55093710**	Price
1	5/16	**CF55100010**	Price
1-1/8	5/16	**CF55112510**	Price
1-5/32	5/16	**CF55115610**	Price
3/8	3/8	**CF55037512**	Price
7/16	3/8	**CF55043712**	Price
15/32	3/8	**CF55046812**	Price

Pilot Size (in.)	Shank Dia. (in.)	Order No.	Price
1/2	3/8	**CF55050012**	Price
17/32	3/8	**CF55053112**	Price
9/16	3/8	**CF55056212**	Price
5/8	3/8	**CF55062512**	Price
21/32	3/8	**CF55065612**	Price
11/16	3/8	**CF55068712**	Price
3/4	3/8	**CF55075012**	Price
25/32	3/8	**CF55078112**	Price
13/16	3/8	**CF55081212**	Price
27/32	3/8	**CF55084312**	Price
7/8	3/8	**CF55087512**	Price
29/32	3/8	**CF55090612**	Price
15/16	3/8	**CF55093712**	Price
1	3/8	**CF55100012**	Price
1-1/32	3/8	**CF55103112**	Price
1-1/16	3/8	**CF55106212**	Price
1-3/16	3/8	**CF55118712**	Price
1-7/16	3/8	**CF55143712**	Price
7/16	7/16	**CF55043714**	Price
1/2	7/16	**CF55050014**	Price
17/32	7/16	**CF55053114**	Price
9/16	7/16	**CF55056214**	Price
19/32	7/16	**CF55059314**	Price
5/8	7/16	**CF55062514**	Price
11/16	7/16	**CF55068714**	Price
25/32	7/16	**CF55078114**	Price
13/16	7/16	**CF55081214**	Price
27/32	7/16	**CF55084314**	Price
15/16	7/16	**CF55093714**	Price
1	7/16	**CF55100014**	Price
1-1/16	7/16	**CF55106214**	Price
1-1/4	7/16	**CF55125014**	Price
1-3/8	7/16	**CF55137514**	Price
1-1/2	7/16	**CF55150014**	Price
5/8	1/2	**CF55062516**	Price
3/4	1/2	**CF55075016**	Price
13/16	1/2	**CF55081216**	Price
1	1/2	**CF55100016**	Price
1-1/16	1/2	**CF55106216**	Price
1-3/16	1/2	**CF55118716**	Price

Straight Shank Straight Flute Chucking Reamers

High Speed Steel



- Diameter Tolerances:
  thru 1/2" diameter +.0002 -.0000
  above 1/2" to 5/8" +.0003 -.0000
  above 5/8" to 1-1/2" +.0001 +.0004
- Morse List #1655

HSS MORSE M GP RAPIDKUT PROCUT

Type - Fractional Size										
					Morse Cutting Tools		Rapidkut		ProCut	
Size	Dec. Equiv.	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
3/64	.0469	1/2	2-1/2	4	**MT5022106**	Price	**BL5400018**	Price	**BD50003**	Price
1/16	.0625	1/2	2-1/2	4	**MT5022110**	Price	**BL5400023**	Price	**BD50004**	Price
5/64	.0781	3/4	3	4	**MT5022116**	Price	**BL5400029**	Price	**BD50005**	Price
3/32	.0938	3/4	3	4	**MT5022123**	Price	**BL5400037**	Price	**BD50006**	Price
7/64	.1094	7/8	3-1/2	4	**MT5022130**	Price	**BL5400045**	Price	**BD50007**	Price
1/8	.1250	7/8	3-1/2	4	**MT5022137**	Price	**BL5400055**	Price	**BD50008**	Price
9/64	.1406	1	4	4	**MT5022142**	Price	**BL5400061**	Price	**BD50009**	Price
5/32	.1562	1	4	6	**MT5022148**	Price	**BL5400067**	Price	**BD50010**	Price
11/64	.1719	1-1/8	4-1/2	6	**MT5022154**	Price	**BL5400074**	Price	**BD50011**	Price
3/16	.1875	1-1/8	4-1/2	6	**MT5022161**	Price	**BL5400084**	Price	**BD50012**	Price
13/64	.2031	1-1/4	5	6	**MT5022169**	Price	**BL5400093**	Price	**BD50013**	Price
7/32	.2188	1-1/4	5	6	**MT5022174**	Price	**BL5400099**	Price	**BD50014**	Price
15/64	.2344	1-1/2	6	6	**MT5022178**	Price	**BL5400103**	Price	**BD50015**	Price
1/4	.2500	1-1/2	6	6	**MT5022183**	Price	**BL5400111**	Price	**BD50016**	Price
17/64	.2656	1-1/2	6	6	**MT5022188**	Price	**BL5400116**	Price	**BD50017**	Price
9/32	.2812	1-1/2	6	6	**MT5022193**	Price	**BL5400122**	Price	**BD50018**	Price
19/64	.2969	1-1/2	6	6	**MT5022196**	Price	**BL5400126**	Price	**BD50019**	Price
5/16	.3125	1-1/2	6	6	**MT5022199**	Price	**BL5400131**	Price	**BD50020**	Price
21/64	.3281	1-1/2	6	6	**MT5022203**	Price	**BL5400136**	Price	**BD50021**	Price
11/32	.3438	1-1/2	6	6	**MT5022206**	Price	**BL5400140**	Price	**BD50022**	Price
23/64	.3594	1-3/4	7	6	**MT5022209**	Price	**BL5400144**	Price	**BD50023**	Price
3/8	.3750	1-3/4	7	6	**MT5022212**	Price	**BL5400150**	Price	**BD50024**	Price
25/64	.3906	1-3/4	7	6	**MT5022216**	Price	**BL5400154**	Price	**BD50025**	Price
13/32	.4062	1-3/4	7	6	**MT5022219**	Price	**BL5400158**	Price	**BD50026**	Price
27/64	.4219	1-3/4	7	6	**MT5022221**	Price	**BL5400161**	Price	**BD50027**	Price
7/16	.4375	1-3/4	7	6	**MT5022223**	Price	**BL5400166**	Price	**BD50028**	Price
29/64	.4531	1-3/4	7	6	**MT5022225**	Price	**BL5400169**	Price	**BD50029**	Price
15/32	.4687	1-3/4	7	6	**MT5022226**	Price	**BL5400170**	Price	**BD50030**	Price
31/64	.4844	2	8	6	**MT5022227**	Price	**BL5400172**	Price	**BD50031**	Price
1/2	.5000	2	8	6	**MT5022229**	Price	**BL5400177**	Price	**BD50032**	Price
17/32	.5312	2	8	6-8	**MT5022231**	Price	**BL5400180**	Price	**BD50034**	Price
9/16	.5625	2	8	8	**MT5022232**	Price	**BL5400183**	Price	**BD50036**	Price
19/32	.5938	2	8	6-8	**MT5022233**	Price	**BL5400186**	Price	**BD50038**	Price
5/8	.6250	2-1/4	9	8	**MT5022234**	Price	**BL5400188**	Price	**BD50040**	Price
21/32	.6562	2-1/4	9	6-8	**MT5022235**	Price	**BL5400191**	Price	**BD50042**	Price
11/16	.6875	2-1/4	9	8	**MT5022236**	Price	**BL5400193**	Price	**BD50044**	Price
23/32	.7188	2-1/4	9	6-8	**MT5022237**	Price	**BL5400196**	Price	**BD50046**	Price
3/4	.7500	2-1/2	9-1/2	8	**MT5022238**	Price	**BL5400199**	Price	**BD50048**	Price
25/32	.7812	2-1/2	9-1/2	8	**MT5022239**	Price	**BL5400201**	Price	**BD50050**	Price
13/16	.8125	2-1/2	9-1/2	8	**MT5022240**	Price	**BL5400204**	Price	**BD50052**	Price
27/32	.8438	2-1/2	9-1/2	8	**MT5022241**	Price	**BL5400206**	Price	**BD50054**	Price
7/8	.8750	2-5/8	10	8	**MT5022242**	Price	**BL5400209**	Price	**BD50056**	Price
29/32	.9062	2-5/8	10	8	**MT5022243**	Price	**BL5400212**	Price	**BD50058**	Price
15/16	.9375	2-5/8	10	8	**MT5022244**	Price	**BL5400214**	Price	**BD50060**	Price
31/32	.9688	2-5/8	10	8-10	**MT5022245**	Price	**BL5400217**	Price	**BD50062**	Price
1	1.0000	2-3/4	10-1/2	8	**MT5022246**	Price	**BL5400219**	Price	**BD50064**	Price
1-1/16	1.0625	2-3/4	10-1/2	8-10	**MT5022247**	Price	**BL5400220**	Price	**BD50068**	Price
1-1/8	1.1250	2-7/8	11	8-10	**MT5022248**	Price	**BL5400221**	Price	**BD50072**	Price
1-3/16	1.1875	2-7/8	11	8-12	**MT5022249**	Price	**BL5400222**	Price	**BD50076**	Price
1-1/4	1.2500	3	11-1/2	8-12	**MT5022250**	Price	**BL5400223**	Price	**BD50080**	Price
1-5/16	1.3125	3	11-1/2	8-12	**-**	-	**BL5400224**	Price	**BD50084**	Price
1-3/8	1.3750	3-1/4	12	8-12	**MT5022251**	Price	**BL5400225**	Price	**BD50088**	Price
1-7/16	1.4375	3-1/4	12-1/2	8-12	**-**	-	**BL5400226**	Price	**BD50092**	Price
1-1/2	1.5000	3-1/2	12-1/2	8-12	**MT5022252**	Price	**BL5400227**	Price	**BD50096**	Price

Type - Letter Size										
					Morse Cutting Tools		Rapidkut		ProCut	
Size	Dec. Equiv.	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
A	.2340	1-1/2	6	6	**MT5022177**	Price	**BL5400102**	Price	**BD50201**	Price
B	.2380	1-1/2	6	6	**MT5022179**	Price	**BL5400105**	Price	**BD50202**	Price
C	.2420	1-1/2	6	6	**MT5022180**	Price	**BL5400106**	Price	**BD50203**	Price
D	.2460	1-1/2	6	6	**MT5022181**	Price	**BL5400107**	Price	**BD50204**	Price
1/4	.2500	1-1/2	6	6	**MT5022183**	Price	**BL5400111**	Price	**BD50016**	Price
F	.2570	1-1/2	6	6	**MT5022186**	Price	**BL5400114**	Price	**BD50206**	Price
G	.2610	1-1/2	6	6	**MT5022187**	Price	**BL5400115**	Price	**BD50207**	Price
H	.2660	1-1/2	6	6	**MT5022189**	Price	**BL5400117**	Price	**BD50208**	Price
I	.2720	1-1/2	6	6	**MT5022190**	Price	**BL5400118**	Price	**BD50209**	Price
J	.2770	1-1/2	6	6	**MT5022191**	Price	**BL5400120**	Price	**BD50210**	Price
K	.2810	1-1/2	6	6	**MT5022192**	Price	**BL5400121**	Price	**BD50211**	Price
L	.2900	1-1/2	6	6	**MT5022194**	Price	**BL5400123**	Price	**BD50212**	Price
M	.2950	1-1/2	6	6	**MT5022195**	Price	**BL5400124**	Price	**BD50213**	Price
N	.3020	1-1/2	6	6	**MT5022197**	Price	**BL5400127**	Price	**BD50214**	Price
O	.3160	1-1/2	6	6	**MT5022201**	Price	**BL5400134**	Price	**BD50215**	Price
P	.3230	1-1/2	6	6	**MT5022202**	Price	**BL5400135**	Price	**BD50216**	Price

(continued on next page)

Straight Shank Straight Flute Chucking Reamers *(continued from previous page)*

HSS MORSE M GP RAPIDKUT PROCUT

Type - Letter Size										
					Morse Cutting Tools		Rapidkut		ProCut	
Size	Dec. Equiv.	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
Q	.3320	1-1/2	6	6	**MT5022204**	Price	**BL5400137**	Price	**BD50217**	Price
R	.3390	1-1/2	6	6	**MT5022205**	Price	**BL5400139**	Price	**BD50218**	Price
S	.3480	1-3/4	7	6	**MT5022207**	Price	**BL5400141**	Price	**BD50219**	Price
T	.3580	1-3/4	7	6	**MT5022208**	Price	**BL5400143**	Price	**BD50220**	Price
U	.3680	1-3/4	7	6	**MT5022210**	Price	**BL5400145**	Price	**BD50221**	Price
V	.3770	1-3/4	7	6	**MT5022214**	Price	**BL5400152**	Price	**BD50222**	Price
W	.3860	1-3/4	7	6	**MT5022215**	Price	**BL5400153**	Price	**BD50223**	Price
X	.3970	1-3/4	7	6	**MT5022217**	Price	**BL5400156**	Price	**BD50224**	Price
Y	.4040	1-3/4	7	6	**MT5022218**	Price	**BL5400157**	Price	**BD50225**	Price
Z	.4130	1-3/4	7	6	**MT5022220**	Price	**BL5400159**	Price	**BD50226**	Price

Price										
					Morse Cutting Tools		Rapidkut		ProCut	
Size	Dec. Equiv.	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1	.2280	1-1/2	6	6	**MT5022176**	Price	**BL5400101**	Price	**BD50101**	Price
2	.2210	1-1/2	6	6	**MT5022175**	Price	**BL5400100**	Price	**BD50102**	Price
3	.2130	1-1/4	5	6	**MT5022173**	Price	**BL5400097**	Price	**BD50103**	Price
4	.2090	1-1/4	5	6	**MT5022172**	Price	**BL5400096**	Price	**BD50104**	Price
5	.2055	1-1/4	5	6	**MT5022171**	Price	**BL5400095**	Price	**BD50105**	Price
6	.2040	1-1/4	5	6	**MT5022170**	Price	**BL5400094**	Price	**BD50106**	Price
7	.2010	1-1/4	5	6	**MT5022168**	Price	**BL5400092**	Price	**BD50107**	Price
8	.1990	1-1/4	5	6	**MT5022167**	Price	**BL5400091**	Price	**BD50108**	Price
9	.1960	1-1/4	5	6	**MT5022166**	Price	**BL5400089**	Price	**BD50109**	Price
10	.1935	1-1/4	5	6	**MT5022165**	Price	**BL5400088**	Price	**BD50110**	Price
11	.1910	1-1/4	5	6	**MT5022164**	Price	**BL5400087**	Price	**BD50111**	Price
12	.1890	1-1/8	4-1/2	6	**MT5022163**	Price	**BL5400086**	Price	**BD50112**	Price
13	.1850	1-1/8	4-1/2	6	**MT5022159**	Price	**BL5400080**	Price	**BD50113**	Price
14	.1820	1-1/8	4-1/2	6	**MT5022158**	Price	**BL5400079**	Price	**BD50114**	Price
15	.1800	1-1/8	4-1/2	6	**MT5022157**	Price	**BL5400078**	Price	**BD50115**	Price
16	.1770	1-1/8	4-1/2	6	**MT5022156**	Price	**BL5400076**	Price	**BD50116**	Price
17	.1730	1-1/8	4-1/2	6	**MT5022155**	Price	**BL5400075**	Price	**BD50117**	Price
18	.1695	1-1/8	4-1/2	6	**MT5022153**	Price	**BL5400073**	Price	**BD50118**	Price
19	.1660	1-1/8	4-1/2	6	**MT5022152**	Price	**BL5400072**	Price	**BD50119**	Price
20	.1610	1-1/8	4-1/2	6	**MT5022151**	Price	**BL5400071**	Price	**BD50120**	Price
21	.1590	1-1/8	4-1/2	6	**MT5022150**	Price	**BL5400070**	Price	**BD50121**	Price
22	.1570	1	4	6	**MT5022149**	Price	**BL5400068**	Price	**BD50122**	Price
23	.1540	1	4	4	**MT5022147**	Price	**BL5400066**	Price	**BD50123**	Price
24	.1520	1	4	4	**MT5022146**	Price	**BL5400065**	Price	**BD50124**	Price
25	.1495	1	4	4	**MT5022145**	Price	**BL5400064**	Price	**BD50125**	Price
26	.1470	1	4	4	**MT5022144**	Price	**BL5400063**	Price	**BD50126**	Price
27	.1440	1	4	4	**MT5022143**	Price	**BL5400062**	Price	**BD50127**	Price
28	.1405	1	4	4	**MT5022141**	Price	**BL5400060**	Price	**BD50128**	Price
29	.1360	1	4	4	**MT5022140**	Price	**BL5400058**	Price	**BD50129**	Price
30	.1285	7/8	3-1/2	4	**MT5022139**	Price	**BL5400057**	Price	**BD50130**	Price
31	.1200	7/8	3-1/2	4	**MT5022135**	Price	**BL5400051**	Price	**BD50131**	Price
32	.1160	7/8	3-1/2	4	**MT5022134**	Price	**BL5400049**	Price	**BD50132**	Price
33	.1130	7/8	3-1/2	4	**MT5022133**	Price	**BL5400048**	Price	**BD50133**	Price
34	.1110	7/8	3-1/2	4	**MT5022132**	Price	**BL5400047**	Price	**BD50134**	Price
35	.1100	7/8	3-1/2	4	**MT5022131**	Price	**BL5400046**	Price	**BD50135**	Price
36	.1065	7/8	3-1/2	4	**MT5022129**	Price	**BL5400044**	Price	**BD50136**	Price
37	.1040	7/8	3-1/2	4	**MT5022128**	Price	**BL5400043**	Price	**BD50137**	Price
38	.1015	7/8	3-1/2	4	**MT5022127**	Price	**BL5400042**	Price	**BD50138**	Price
39	.0995	7/8	3-1/2	4	**MT5022126**	Price	**BL5400041**	Price	**BD50139**	Price
40	.0980	7/8	3-1/2	4	**MT5022125**	Price	**BL5400039**	Price	**BD50140**	Price
41	.0960	7/8	3-1/2	4	**MT5022124**	Price	**BL5400038**	Price	**BD50141**	Price
42	.0935	3/4	3	4	**MT5022122**	Price	**BL5400036**	Price	**BD50142**	Price
43	.0890	3/4	3	4	**MT5022121**	Price	**BL5400035**	Price	**BD50143**	Price
44	.0860	3/4	3	4	**MT5022120**	Price	**BL5400034**	Price	**BD50144**	Price
45	.0820	3/4	3	4	**MT5022119**	Price	**BL5400033**	Price	**BD50145**	Price
46	.0810	3/4	3	4	**MT5022118**	Price	**BL5400032**	Price	**BD50146**	Price
47	.0785	3/4	3	4	**MT5022117**	Price	**BL5400030**	Price	**BD50147**	Price
48	.0760	3/4	3	4	**MT5022115**	Price	**BL5400028**	Price	**BD50148**	Price
49	.0730	3/4	3	4	**MT5022114**	Price	**BL5400027**	Price	**BD50149**	Price
50	.0700	3/4	3	4	**MT5022113**	Price	**BL5400026**	Price	**BD50150**	Price
51	.0670	3/4	3	4	**MT5022112**	Price	**BL5400025**	Price	**BD50151**	Price
52	.0635	1/2	2-1/2	4	**MT5022111**	Price	**BL5400024**	Price	**BD50152**	Price
53	.0595	1/2	2-1/2	4	**MT5022109**	Price	**BL5400022**	Price	**BD50153**	Price
54	.0550	1/2	2-1/2	4	**MT5022108**	Price	**BL5400020**	Price	**BD50154**	Price
55	.0520	1/2	2-1/2	4	**MT5022107**	Price	**BL5400019**	Price	**BD50155**	Price
56	.0465	1/2	2-1/2	4	**MT5022105**	Price	**BL5400017**	Price	**BD50156**	Price
57	.0430	1/2	2-1/2	4	**MT5022104**	Price	**BL5400016**	Price	**BD50157**	Price
58	.0420	1/2	2-1/2	4	**MT5022103**	Price	**BL5400015**	Price	**BD50158**	Price
59	.0410	1/2	2-1/2	4	**MT5022102**	Price	**BL5400014**	Price	**BD50159**	Price
60	.0400	1/2	2-1/2	4	**MT5022101**	Price	**BL5400013**	Price	**BD50160**	Price

Metric Straight Shank Straight Flute Chucking Reamers

High Speed Steel

- Diameter tolerances:
  thru 12.50mm +.0002 -.0000
  13.00 to 15.50mm +.0003 -.0000
  16.00 to 25.00mm +.0001 +.0004
- Morse List #1655



				Morse Cutting Tools		Rapidkut		ProCut	
				High Speed Steel		High Speed Steel		High Speed Steel	
Size (mm)	Dec. Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1.00	.0394	—	2-1/2	MT5222350	Price	-	-	-	-
1.50	.0591	—	2-1/2	MT5222351	Price	-	-	-	-
2.00	.0787	3/4	3	MT5222352	Price	-	-	-	-
2.50	.0984	—	3-1/2	MT5222353	Price	-	-	-	-
3.00	.1181	7/8	3-1/2	MT5222354	Price	BL5400050	Price	BD650300	Price
3.50	.1378	1	4	MT5222355	Price	BL5400059	Price	BD650350	Price
4.00	.1575	1	4	MT5222356	Price	BL5400069	Price	BD650400	Price
4.50	.1772	1-1/8	4-1/2	MT5222357	Price	BL5400077	Price	BD650450	Price
5.00	.1968	1-1/4	5	MT5222358	Price	BL5400090	Price	BD650500	Price
5.50	.2165	1-1/4	5	MT5222359	Price	BL5400098	Price	BD650550	Price
6.00	.2362	1-1/2	6	MT5222360	Price	BL5400104	Price	BD650600	Price
6.50	.2559	1-1/2	6	MT5222361	Price	BL5400113	Price	BD650650	Price
7.00	.2756	1-1/2	6	MT5222362	Price	BL5400119	Price	BD650700	Price
7.50	.2953	1-1/2	6	MT5222363	Price	BL5400125	Price	BD650750	Price
8.00	.3150	1-1/2	6	MT5222364	Price	BL5400133	Price	BD650800	Price
8.50	.3346	1-1/2	6	MT5222365	Price	BL5400138	Price	BD650850	Price
9.00	.3543	1-3/4	7	MT5222366	Price	BL5400142	Price	BD650900	Price
9.50	.3740	1-3/4	7	MT5222367	Price	BL5400148	Price	BD650950	Price
10.00	.3937	1-3/4	7	MT5222368	Price	BL5400155	Price	BD651000	Price
10.50	.4134	1-3/4	7	MT5222369	Price	BL5400160	Price	BD651050	Price
11.00	.4331	1-3/4	7	MT5222370	Price	BL5400162	Price	BD651100	Price
11.50	.4528	1-3/4	7	MT5222371	Price	BL5400168	Price	BD651150	Price
12.00	.4724	1-3/4	7	MT5222372	Price	BL5400171	Price	BD651200	Price
12.50	.4921	1-3/4	7	MT5222373	Price	BL5400173	Price	BD651250	Price
13.00	.5118	1-3/4	7	MT5222374	Price	BL5400179	Price	BD651300	Price
13.50	.5315	2	8	MT5222375	Price	BL5400181	Price	BD651350	Price
14.00	.5512	2	8	MT5222376	Price	BL5400182	Price	BD651400	Price
14.50	.5709	2	8	MT5222377	Price	BL5400184	Price	BD651450	Price
15.00	.5906	2	8	MT5222378	Price	BL5400185	Price	BD651500	Price
15.50	.6102	2	8	MT5222379	Price	BL5400187	Price	BD651550	Price
16.00	.6299	2-1/4	9	MT5222380	Price	BL5400189	Price	BD651600	Price
16.50	.6496	2-1/4	9	MT5222381	Price	BL5400190	Price	BD651650	Price
17.00	.6693	2-1/4	9	MT5222382	Price	BL5400192	Price	BD651700	Price
17.50	.6890	2-1/4	9	MT5222383	Price	BL5400194	Price	BD651750	Price
18.00	.7087	2-1/4	9	MT5222384	Price	BL5400195	Price	BD651800	Price
18.50	.7283	2-1/2	9-1/2	MT5222385	Price	BL5400197	Price	BD651850	Price
19.00	.7480	2-1/2	9-1/2	MT5222386	Price	BL5400198	Price	BD651900	Price
19.50	.7677	2-1/2	9-1/2	MT5222387	Price	BL5400200	Price	BD651950	Price
20.00	.7874	2-1/2	9-1/2	MT5222388	Price	BL5400202	Price	BD652000	Price
20.50	.8071	2-1/2	9-1/2	MT5222389	Price	BL5400203	Price	BD652050	Price
21.00	.8268	2-1/2	9-1/2	MT5222390	Price	BL5400205	Price	BD652100	Price
21.50	.8465	2-5/8	10	MT5222391	Price	BL5400207	Price	BD652150	Price
22.00	.8661	2-5/8	10	MT5222392	Price	BL5400208	Price	BD652200	Price
22.50	.8858	2-5/8	10	MT5222393	Price	BL5400210	Price	BD652250	Price
23.00	.9055	2-5/8	10	MT5222394	Price	BL5400211	Price	BD652300	Price
23.50	.9252	2-5/8	10	MT5222395	Price	BL5400213	Price	BD652350	Price
24.00	.9449	2-5/8	10	MT5222396	Price	BL5400215	Price	BD652400	Price
24.50	.9646	2-5/8	10	MT5222397	Price	BL5400216	Price	BD652450	Price
25.00	.9843	2-3/4	10-1/2	MT5222398	Price	BL5400218	Price	BD652500	Price

Straight Shank Straight Flute Dowel Pin Chucking Reamers

High Speed Steel & Carbide Tipped

Diameter tolerances: +.0000 -.0002



					ProCut		Rock River Tool	
			High Speed Steel		High Speed Steel		Price	
Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
.1230	7/8	3-1/2	BD561230	Price	BD541230	Price	-	-
.1247	7/8	3-1/2	BD561247	Price	BD541247	Price	-	-
.1855	1-1/8	4-1/2	BD561855	Price	BD541855	Price	BF501855	Price
.1870	1-1/8	4-1/2	BD561870	Price	BD541870	Price	BF501870	Price
.2480	1-1/2	6	BD562480	Price	BD542480	Price	BF502480	Price
.2495	1-1/2	6	BD562495	Price	BD542495	Price	BF502495	Price
.3105	1-1/2	6	BD563105	Price	BD543105	Price	BF503105	Price
.3120	1-1/2	6	BD563120	Price	BD543120	Price	BF503120	Price
.3730	1-3/4	7	BD563730	Price	BD543730	Price	BF503730	Price
.3745	1-3/4	7	BD563745	Price	BD543745	Price	BF503745	Price
.4355	1-3/4	7	BD564355	Price	BD544355	Price	BF504355	Price
.4370	1-3/4	7	BD564370	Price	BD544370	Price	BF504370	Price
.4980	2	8	BD564980	Price	BD544980	Price	BF504980	Price
.4995	2	8	BD564995	Price	BD544995	Price	BF504995	Price

Metric Chucking Reamers

- **Carbide tipped**
- Straight shank
- Straight flute



Size (mm)	Order No.	Price
4.00	BF502400040	Price
5.00	BF502400050	Price
6.00	BF502400060	Price
8.00	BF502400080	Price
10.00	BF502400100	Price
12.00	BF502400120	Price
16.00	BF502400160	Price

Straight Shank Straight Flute Cobalt Chucking Reamers



- Diameter tolerances:
  thru 1/2" diameter +.0002 -.0000
  above 1/2" to 5/8" +.0003 -.0000
  above 5/8" to 1-1/2" +.0001 +.0004
- Morse List #2655

					Morse Cutting Tools		ProCut	
Size (in.)	Dec. Equiv.	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1/16	.0625	1/2	2-1/2	4	**MT5322400**	Price	**BD70004**	Price
5/64	.0781	3/4	3	4	**MT5322401**	Price	**BD70005**	Price
3/32	.0938	3/4	3	4	**MT5322402**	Price	**BD70006**	Price
7/64	.1094	7/8	3-1/2	4	**MT5322403**	Price	**BD70007**	Price
1/8	.1250	7/8	3-1/2	4	**MT5322404**	Price	**BD70008**	Price
9/64	.1406	1	4	4	**MT5322405**	Price	-	-
5/32	.1562	1	4	4	**MT5322406**	Price	**BD70010**	Price
11/64	.1719	1-1/8	4-1/2	6	**MT5322407**	Price	**BD70011**	Price
3/16	.1875	1-1/8	4-1/2	6	**MT5322408**	Price	**BD70012**	Price
13/64	.2031	1-1/4	5	6	**MT5322409**	Price	**BD70013**	Price
7/32	.2188	1-1/4	5	6	**MT5322410**	Price	**BD70014**	Price
15/64	.2344	1-1/2	6	6	**MT5322411**	Price	**BD70015**	Price
1/4	.2500	1-1/2	6	6	**MT5322413**	Price	**BD70016**	Price
17/64	.2656	1-1/2	6	6	**MT5322415**	Price	**BD70017**	Price
9/32	.2812	1-1/2	6	6	**MT5322416**	Price	**BD70018**	Price
19/64	.2969	1-1/2	6	6	**MT5322417**	Price	**BD70019**	Price
5/16	.3125	1-1/2	6	6	**MT5322419**	Price	**BD70020**	Price
21/64	.3281	1-1/2	6	6	**MT5322421**	Price	**BD70021**	Price
11/32	.3438	1-1/2	6	6	**MT5322422**	Price	**BD70022**	Price
23/64	.3594	1-3/4	7	6	**MT5322423**	Price	**BD70023**	Price
3/8	.3750	1-3/4	7	6	**MT5322425**	Price	**BD70024**	Price
25/64	.3906	1-3/4	7	6	**MT5322427**	Price	**BD70025**	Price
13/32	.4062	1-3/4	7	6	**MT5322428**	Price	**BD70026**	Price
27/64	.4219	1-3/4	7	6	**MT5322429**	Price	**BD70027**	Price
7/16	.4375	1-3/4	7	6	**MT5322431**	Price	**BD70028**	Price
29/64	.4531	1-3/4	7	6	**MT5322433**	Price	**BD70029**	Price
15/32	.4688	1-3/4	7	6	**MT5322434**	Price	**BD70030**	Price
31/64	.4844	2	8	6	**MT5322435**	Price	**BD70031**	Price
1/2	.5000	2	8	6	**MT5322437**	Price	**BD70032**	Price
17/32	.5312	2	8	6	**MT5322440**	Price	**BD70034**	Price
9/16	.5625	2	8	6	**MT5322443**	Price	**BD70036**	Price
19/32	.5938	2	8	6	**MT5322445**	Price	**BD70038**	Price
5/8	.6250	2-1/4	9	8	**MT5322448**	Price	**BD70040**	Price
21/32	.6562	2-1/4	9	8	**MT5322451**	Price	**BD70042**	Price
11/16	.6875	2-1/4	9	8	**MT5322454**	Price	**BD70044**	Price
23/32	.7188	2-1/4	9	8	**MT5322457**	Price	-	-
3/4	.7500	2-1/2	9-1/2	8	**MT5322460**	Price	**BD70048**	Price
25/32	.7812	2-1/2	9-1/2	8	**MT5322463**	Price	-	-
13/16	.8125	2-1/2	9-1/2	8	**MT5322466**	Price	-	-
27/32	.8438	2-1/2	9-1/2	8	**MT5322469**	Price	**BD70054**	Price
7/8	.8750	2-5/8	10	8	**MT5322472**	Price	**BD70056**	Price
29/32	.9062	2-5/8	10	8	**MT5322475**	Price	-	
Price	.9375	2-5/8	10	8	**MT5322478**	Price	**BD70060**	Price
31/32	.9688	2-5/8	10	8	**MT5322481**	Price	-	-
1	1.0000	2-3/4	10-1/2	8	**MT5322484**	Price	**BD70100**	Price

Straight Shank Straight Flute Chucking Reamers

High Speed Steel & Carbide Tipped
Popular Over/Under Size Reamers



- Diameter Tolerances:
  thru 1/2" diameter +.0002 -.0000
  above 1/2" to 5/8" +.0003 -.0000
  above 5/8" to 1-1/2" +.0001 +.0004
- Morse List #1655H

					Morse Cutting Tools		ProCut		Rapidkut		Rock River Tool	
					High Speed Steel		High Speed Steel		High Speed Steel		High Speed Steel (carbide tipped)	
Size (in.)	Dec. Equiv.	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
.1240	.1240	7/8	3-1/2	4	**MT5022136**	Price	**BD521240**	Price	**BD561240**	Price	-	-
.1260	.1260	7/8	3-1/2	4	**MT5022138**	Price	**BD521260**	Price	**BD561260**	Price	-	-
.1865	.1865	1-1/8	4-1/2	6	**MT5022160**	Price	**BD521865**	Price	**BD561865**	Price	**BF501865**	Price
.1885	.1885	1-1/8	4-1/2	6	**MT5022162**	Price	**BD521885**	Price	**BD561885**	Price	**BF501885**	Price
.2490	.2490	1-1/2	6	6	**MT5022182**	Price	**BD522490**	Price	**BD562490**	Price	**BF502490**	Price
.2510	.2510	1-1/2	6	6	**MT5022185**	Price	**BD522510**	Price	**BD562510**	Price	**BF502510**	Price
.3115	.3115	1-1/2	6	6	**MT5022198**	Price	**BD523115**	Price	**BD563115**	Price	**BF503115**	Price
.3135	.3135	1-1/2	6	6	**MT5022200**	Price	**BD523135**	Price	**BD563135**	Price	**BF503135**	Price
.3740	.3740	1-3/4	7	6	**MT5022211**	Price	**BD523740**	Price	**BD563740**	Price	**BF503740**	Price
.3760	.3760	1-3/4	7	6	**MT5022213**	Price	**BD523760**	Price	**BD563760**	Price	**BF503760**	Price
.4365	.4365	1-3/4	7	6	**MT5022222**	Price	**BD524365**	Price	**BD564365**	Price	**BF504365**	Price
.4385	.4385	1-3/4	7	6	**MT5022224**	Price	**BD524385**	Price	**BD564385**	Price	**BF504385**	Price
.4990	.4990	2	8	6	**MT5022228**	Price	**BD524990**	Price	**BD564990**	Price	**BF504990**	Price
.5010	.5010	2	8	6	**MT5022230**	Price	**BD525010**	Price	**BD565010**	Price	**BF505010**	Price
.5615	.5615	2	8	6	-	-	-	-	**BD565615**	Price	-	-
.5615	.5615	2	8	8	**MT5029932**	Price	-	-	-	-	-	-
.5635	.5635	2	8	6	-	-	-	-	**BD565635**	Price	-	-
.5635	.5635	2	8	8	**MT5029933**	Price	-	-	-	-	-	-
.6240	.6240	2-1/4	9	6	-	-	-	-	**BD566240**	Price	**BF506240**	Price
.6240	.6240	2-1/4	9	8	**MT5029850**	Price	-	-	-	-	-	-
.6260	.6260	2-1/4	9	8	**MT5029853**	Price	-	-	**BD566260**	Price	**BF506260**	Price
.7490	.7490	2-1/2	9-1/2	8	**MT5029873**	Price	-	-	**BD567490**	Price	**BF507490**	Price
.7510	.7510	2-1/2	9-1/2	8	**MT5029876**	Price	-	-	**BD567510**	Price	**BF507510**	Price
.8740	.8740	2-5/8	10	8	**MT5029899**	Price	-	-	**BD568740**	Price	-	-
.8760	.8760	2-5/8	10	8	**MT5029902**	Price	-	-	**BD568760**	Price	-	-
.9990	.9990	2-3/4	10-1/2	8-10	**MT5029924**	Price	-	-	-	-	-	-
.9990	.9990	2-5/8	10-1/2	8	-	-	-	-	**BD569990**	Price	-	-
1.0010	1.0010	2-3/4	10-1/2	8	-	-	-	-	**BD5610010**	Price	-	-
1.0010	1.0010	2-3/4	10-1/2	8-10	**MT5029927**	Price	-	-	-	-	-	-

Straight Shank Spiral Flute Chucking Reamers

High Speed Steel

Diameter tolerances:
thru 1/2" diameter: +.0002 - .0000
above 1/2" to 5/8": +.0003 - .0000
above 5/8" to 1-1/2": +.0001 - +.0004
Morse List #1653



					Price		Right Hand Spiral / RH Cut		Left Hand Spiral / RH Cut	
					Morse Cutting Tools		ProCut		ProCut	
Size (in.)	Dec. Equiv.	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/16	.0625	1/2	2-1/2	4	**MT5121701**	Price	-	-	-	-
5/64	.0781	3/4	3	4	**MT5121702**	Price	**BD51005**	Price	**BD51L005**	Price
3/32	.0938	3/4	3	4	**MT5121703**	Price	**BD51006**	Price	-	-
7/64	.1094	7/8	3-1/2	4	**MT5121704**	Price	**BD51007**	Price	**BD51L007**	Price
1/8	.1250	7/8	3-1/2	4	**MT5121705**	Price	**BD51008**	Price	**BD51L008**	Price
9/64	.1406	1	4	4	**MT5121706**	Price	**BD51009**	Price	**BD51L009**	Price
5/32	.1562	1	4	4	**MT5121707**	Price	**BD51010**	Price	**BD51L010**	Price
11/64	.1719	1-1/8	4-1/2	6	**MT5121708**	Price	**BD51011**	Price	**BD51L011**	Price
3/16	.1875	1-1/8	4-1/2	6	**MT5121709**	Price	**BD51012**	Price	-	-
13/64	.2031	1-1/4	5	6	**MT5121710**	Price	**BD51013**	Price	**BD51L013**	Price
7/32	.2188	1-1/4	5	6	**MT5121711**	Price	**BD51014**	Price	**BD51L014**	Price
15/64	.2344	1-1/2	6	6	**MT5121712**	Price	**BD51015**	Price	**BD51L015**	Price
1/4	.2500	1-1/2	6	6	**MT5121713**	Price	**BD51016**	Price	-	-
17/64	.2656	1-1/2	6	6	**MT5121714**	Price	**BD51017**	Price	**BD51L017**	Price
9/32	.2812	1-1/2	6	6	**MT5121715**	Price	**BD51018**	Price	**BD51L018**	Price
19/64	.2969	1-1/2	6	6	**MT5121716**	Price	**BD51019**	Price	**BD51L019**	Price
5/16	.3125	1-1/2	6	6	**MT5121717**	Price	**BD51020**	Price	-	-
21/64	.3281	1-1/2	6	6	**MT5121718**	Price	**BD51021**	Price	-	-
11/32	.3438	1-1/2	6	6	**MT5121719**	Price	**BD51022**	Price	**BD51L022**	Price
23/64	.3594	1-3/4	7	6	**MT5121720**	Price	**BD51023**	Price	**BD51L023**	Price
3/8	.3750	1-3/4	7	6	**MT5121721**	Price	**BD51024**	Price	-	-
25/64	.3906	1-3/4	7	6	**MT5121722**	Price	**BD51025**	Price	**BD51L025**	Price
13/32	.4062	1-3/4	7	6	**MT5121723**	Price	**BD51026**	Price	**BD51L026**	Price
27/64	.4219	1-3/4	7	6	**MT5121724**	Price	**BD51027**	Price	**BD51L027**	Price
7/16	.4375	1-3/4	7	6	**MT5121725**	Price	**BD51028**	Price	-	-
29/64	.4531	1-3/4	7	6	**MT5121726**	Price	**BD51029**	Price	-	-
15/32	.4688	1-3/4	7	6	**MT5121727**	Price	**BD51030**	Price	**BD51L030**	Price
31/64	.4844	2	8	6	**MT5121728**	Price	**BD51031**	Price	**BD51L031**	Price
1/2	.5000	2	8	6	**MT5121729**	Price	**BD51032**	Price	**BD51L032**	Price
17/32	.5312	2	8	6	**MT5121730**	Price	**BD51034**	Price	-	-
9/16	.5625	2	8	6-8	**MT5121731**	Price	**BD51036**	Price	-	-
19/32	.5938	2	8	6-8	**MT5121732**	Price	**BD51038**	Price	-	-
5/8	.6250	2-1/4	9	8	**MT5121733**	Price	**BD51040**	Price	-	-
21/32	.6562	2-1/4	9	8	**MT5121734**	Price	**BD51042**	Price	-	-
11/16	.6875	2-1/4	9	8	**MT5121735**	Price	**BD51044**	Price	-	-
23/32	.7188	2-1/4	9	8	**MT5121736**	Price	**BD51046**	Price	-	-
3/4	.7500	2-1/2	9-1/2	8	**MT5121737**	Price	**BD51048**	Price	-	-
25/32	.7812	2-1/2	9-1/2	8	**MT5121738**	Price	**BD51050**	Price	-	-
13/16	.8125	2-1/2	9-1/2	8	**MT5121739**	Price	**BD51052**	Price	-	-
27/32	.8438	2-1/2	9-1/2	8	**MT5121740**	Price	**BD51054**	Price	-	-
7/8	.8750	2-5/8	10	8	**MT5121741**	Price	**BD51056**	Price	-	-
29/32	.9062	2-5/8	10	8	**MT5121742**	Price	**BD51058**	Price	-	-
15/16	.9375	2-5/8	10	8	**MT5121743**	Price	**BD51060**	Price	-	-
31/32	.9688	2-5/8	10	8	**MT5121744**	Price	**BD51062**	Price	-	-
1	1.0000	2-3/4	10-1/2	8	**MT5121745**	Price	**BD51064**	Price	-	-
1-1/16	1.0625	2-3/4	10-1/2	8	**MT5121746**	Price	**BD51068**	Price	-	-
1-1/8	1.1250	2-7/8	11	8-10	**MT5121747**	Price	**BD51072**	Price	-	-
1-3/16	1.1875	2-7/8	11	8-10	**MT5121748**	Price	**BD51076**	Price	-	-
1-1/4	1.2500	3	11-1/2	8-10	**MT5121749**	Price	**BD51080**	Price	-	-
1-5/16	1.3125	3	11-1/2	8-10	**MT5121750**	Price	**BD51084**	Price	-	-
1-3/8	1.3750	3-1/4	12	10	**MT5121751**	Price	**BD51088**	Price	-	-
1-7/16	1.4375	3-1/4	12-1/2	10	**MT5121752**	Price	**BD51092**	Price	-	-
1-1/2	1.5000	3-1/2	12-1/2	10	**MT5121753**	Price	**BD51096**	Price	-	-

HSS M GP 14 Pc. Metric Straight Shank Chucking Reamer Set

High Speed Steel • Straight Flute • Right Hand Cut



- Over/under size set in plastic pouch
- Sizes included::.1565, .1585, .2352, .2372, .2746, .2766, .3140, .3160, .3533, .3553, .3927, .3947, .4714, & .4734
- Morse List #1655M

Order No.	Price
MT5023304	Price

HSS M GP 25 Pc. Metric Straight Shank Chucking Reamer Set

High Speed Steel • Straight Flute • Right Hand Cut



- Standard size set in metal case
- Morse List #1655M

Sizes Included	Order No.	Price
1.0 - 13.0mm by 0.5mm	**MT5023305**	Price

ProCut Chucking Reamer Sets

High Speed Steel • Straight Flute

Price		Price			
		Rapidkut		ProCut	
No. of Reamers	Set Range	Order No.	Price	Order No.	Price
14	.1230 - .4995 Dowel Pin Size	**BD61100**	Price	**BD60100**	Price
14	.1240 - .5010 Over/Under Size	**BD61110**	Price	**BD60110**	Price
25	1/8" - 1/2" by 64ths	-	-	**BD60150**	Price
25	1mm - 13mm by .5mm	**BD61170**	Price	**BD60170**	Price
26	A - Z Letter Size	**BD61130**	Price	**BD60130**	Price
29	1/16" - 1/2" by 64ths	**BD61150**	Price	-	-
30	#1 - #30 Wire Gage Size	-	-	**BD60120**	Price
60	#1 - #60 Wire Gage Size	**BD61160**	Price	-	-



ProCut In Vinyl Pouch



RAPIDKUT

Taper Shank Chucking Reamers




High Speed Steel

- Many other sizes also in stock — left hand spiral, special diameters, and 32nd and 64th sizes. Please inquire.
- Morse Cutting Tools List #1654 (spiral flute)
- Morse Cutting Tools List #1656 (straight flute)

					Price				ProCut			
					Spiral Flute		Straight Flute		Spiral Flute		Straight Flute	
Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	1-1/2	6	1 MT	6	**MT5121851**	Price	**MT5122311**	Price	**BE51016**	Price	**BE50016**	Price
9/32	1-1/2	6	1 MT	6	-	-	-	-	**BE51018**	Price	**BE50018**	Price
5/16	1-1/2	6	1 MT	6	**MT5121853**	Price	**MT5122313**	Price	**BE51020**	Price	**BE50020**	Price
11/32	1-1/2	6	1 MT	6	**MT5121854**	Price	**MT5122314**	Price	**BE51022**	Price	**BE50022**	Price
3/8	1-3/4	7	1 MT	6	**MT5121855**	Price	**MT5122315**	Price	**BE51024**	Price	**BE50024**	Price
13/32	1-3/4	7	1 MT	6	**MT5121856**	Price	**MT5122316**	Price	**BE51026**	Price	**BE50026**	Price
7/16	1-3/4	7	1 MT	6	**MT5121857**	Price	**MT5122317**	Price	**BE51028**	Price	**BE50028**	Price
15/32	1-3/4	7	1 MT	6	**MT5121858**	Price	**MT5122318**	Price	**BE51030**	Price	**BE50030**	Price
1/2	2	8	1 MT	6	**MT5121859**	Price	**MT5122319**	Price	**BE51032**	Price	**BE50032**	Price
17/32	2	8	1 MT	6	**MT5121860**	Price	**MT5122320**	Price	**BE51034**	Price	**BE50034**	Price
9/16	2	8	1 MT	6	**MT5121861**	Price	**MT5122321**	Price	**BE51036**	Price	**BE50036**	Price
19/32	2	8	1 MT	6	-	-	**MT5122322**	Price	**BE51038**	Price	**BE50038**	Price
5/8	2-1/4	9	2 MT	6	**MT5121863**	Price	**MT5122323**	Price	**BE51040**	Price	**BE50040**	Price
21/32	2-1/4	9	2 MT	6	**MT5121864**	Price	**MT5122324**	Price	**BE51042**	Price	**BE50042**	Price
11/16	2-1/4	9	2 MT	6	**MT5121865**	Price	**MT5122325**	Price	**BE51044**	Price	**BE50044**	Price
23/32	2-1/4	9	2 MT	6	**MT5121866**	Price	**MT5122326**	Price	**BE51046**	Price	**BE50046**	Price
3/4	2-1/2	9-1/2	2 MT	6	**MT5121867**	Price	**MT5122327**	Price	**BE51048**	Price	**BE50048**	Price
25/32	2-1/2	9-1/2	2 MT	6	**MT5121868**	Price	**MT5122328**	Price	**BE51050**	Price	**BE50050**	Price
13/16	2-1/2	9-1/2	2 MT	8	**MT5121869**	Price	**MT5122329**	Price	**BE51052**	Price	**BE50052**	Price
27/32	2-1/2	9-1/2	2 MT	8	**MT5121870**	Price	**MT5122330**	Price	**BE51054**	Price	**BE50054**	Price
7/8	2-5/8	10	2 MT	8	**MT5121871**	Price	**MT5122331**	Price	**BE51056**	Price	**BE50056**	Price
29/32	2-5/8	10	2 MT	8	**MT5121872**	Price	**MT5122332**	Price	**BE51058**	Price	**BE50058**	Price
15/16	2-5/8	10	3 MT	8	**MT5121873**	Price	**MT5122333**	Price	**BE51060**	Price	**BE50060**	Price
31/32	2-5/8	10	3 MT	8	**MT5121874**	Price	**MT5122334**	Price	**BE51062**	Price	**BE50062**	Price
1	2-3/4	10-1/2	3 MT	8	**MT5121875**	Price	**MT5122335**	Price	**BE51100**	Price	**BE50100**	Price
1-1/16	2-3/4	10-1/2	3 MT	8	**MT5121876**	Price	**MT5122336**	Price	**BE51104**	Price	**BE50104**	Price
1-1/8	2-7/8	11	3 MT	8	**MT5121877**	Price	**MT5122337**	Price	**BE51108**	Price	**BE50108**	Price
1-3/16	2-7/8	11	3 MT	8	**MT5121878**	Price	**MT5122338**	Price	**BE51112**	Price	**BE50112**	Price
1-1/4	3	11-1/2	4 MT	8	**MT5121879**	Price	**MT5122339**	Price	**BE51116**	Price	**BE50116**	Price
1-5/16	3	11-1/2	4 MT	10	**MT5121880**	Price	**MT5122340**	Price	**BE51120**	Price	**BE50120**	Price
1-3/8	3-1/4	12	4 MT	10	**MT5121881**	Price	**MT5122341**	Price	**BE51124**	Price	**BE50124**	Price
1-7/16	3-1/4	12	4 MT	10	**MT5121882**	Price	**MT5122342**	Price	**BE51128**	Price	**BE50128**	Price
1-1/2	3-1/2	12-1/2	4 MT	10	**MT5121883**	Price	**MT5122343**	Price	**BE51132**	Price	**BE50132**	Price

Expansion Chucking Reamers




HIgh Speed Steel • Screw Adjustment Type

- Not designed to allow for reaming over or under size holes — expansion feature to permit resharpening after becoming worn
- See catalog index for adjustable blade reamers which allow reaming under or over size holes.
- Straight shank diameter - same as regular reamers

			Straight Shank		Taper Shank		
Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Taper Shank	Order No.	Price
3/8	3/4	7	**BH51024**	Price	1 MT	**BH50024**	Price
13/32	3/4	7	**BH51026**	Price	1 MT	**BH50026**	Price
7/16	7/8	7	**BH51028**	Price	1 MT	**BH50028**	Price
15/32	7/8	7	**BH51030**	Price	1 MT	**BH50030**	Price
1/2	1	8	**BH51032**	Price	1 MT	**BH50032**	Price
17/32	1	8	**BH51034**	Price	1 MT	**BH50034**	Price
9/16	1-1/8	8	**BH51036**	Price	1 MT	**BH50036**	Price
19/32	1-1/8	8	**BH51038**	Price	1 MT	**BH50038**	Price
5/8	1-1/4	9	**BH51040**	Price	2 MT	**BH50040**	Price
21/32	1-1/4	9	-	-	2 MT	**BH50042**	Price
11/16	1-1/4	9	**BH51044**	Price	2 MT	**BH50044**	Price
23/32	1-1/4	9	**BH51046**	Price	2 MT	**BH50046**	Price
3/4	1-3/8	9-1/2	**BH51048**	Price	2 MT	**BH50048**	Price
25/32	1-3/8	9-1/2	**BH51050**	Price	2 MT	**BH50050**	Price
13/16	1-3/8	9-1/2	**BH51052**	Price	2 MT	**BH50052**	Price
27/32	1-3/8	9-1/2	**BH51054**	Price	2 MT	**BH50054**	Price
7/8	1-1/2	10	**BH51056**	Price	2 MT	**BH50056**	Price
29/32	1-1/2	10	**BH51058**	Price	2 MT	**BH50058**	Price
15/16	1-1/2	10	**BH51060**	Price	3 MT	**BH50060**	Price
31/32	1-1/2	10	**BH51062**	Price	3 MT	**BH50062**	Price
1	1-5/8	10-1/2	**BH51100**	Price	3 MT	**BH50100**	Price

			Straight Shank		Taper Shank		
Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Taper Shank	Order No.	Price
1-1/16	1-5/8	10-1/2	**BH51104**	Price	3 MT	**BH50104**	Price
1-1/8	1-3/4	11	**BH51108**	Price	3 MT	**BH50108**	Price
1-3/16	1-3/4	11	-	-	3 MT	**BH50112**	Price
1-1/4	1-7/8	11-1/2	**BH51116**	Price	4 MT	**BH50116**	Price
1-5/16	1-7/8	11-1/2	**BH51120**	Price	4 MT	**BH50120**	Price
1-3/8	2	12	**BH51124**	Price	4 MT	**BH50124**	Price
1-7/16	2	12	**BH51128**	Price	-	-	-
1-1/2	2-1/8	12-1/2	**BH51132**	Price	4 MT	**BH50132**	Price
1-9/16	2-1/8	12-1/2	**BH51136**	Price	4 MT	**BH50136**	Price
1-5/8	2-1/4	13	**BH51140**	Price	4 MT	**BH50140**	Price
1-11/16	2-1/4	13	**BH51144**	Price	-	-	-
1-3/4	2-3/8	13-1/2	**BH51148**	Price	5 MT	**BH50148**	Price
1-13/16	2-3/8	13-1/2	-	-	5 MT	**BH50152**	Price
1-7/8	2-1/2	14	-	-	5 MT	**BH50156**	Price
1-15/16	2-1/2	14	**BH51160**	Price	-	-	-
2	2-1/2	14	**BH51200**	Price	5 MT	**BH50200**	Price
2-1/8	2-3/4	14	-	-	5 MT	**BH50208**	Price
2-1/4	2-3/4	14-1/2	-	-	5 MT	**BH50216**	Price
2-3/8	2-3/4	15	-	-	5 MT	**BH50224**	Price
2-7/16	3	15	-	-	5 MT	**BH50228**	Price
2-1/2	3	15	-	-	5 MT	**BH50232**	Price

PROCUT Hand Reamers

High Speed Steel





- For sizing of drilled holes
- Slight taper ground on cutting end for easy entry
- Squared shank end fits a tap wrench
- Carbon hand reamers available in nearly all sizes at 80% off the high speed prices & will do most jobs if used by hand

			Straight Flute		Spiral Flute	
Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	1-1/2	3	**BM50008**	Price	**BM51008**	Price
5/32	1-5/8	3-1/4	**BM50010**	Price	**-**	-
11/64	1-3/4	3-1/2	**-**	-	**BM51011**	Price
3/16	1-3/4	3-1/2	**BM50012**	Price	**BM51012**	Price
7/32	1-7/8	3-3/4	**BM50014**	Price	**BM51014**	Price
15/64	2	4	**BM50015**	Price	**BM51015**	Price
1/4	2	4	**BM50016**	Price	**BM51016**	Price
9/32	2-1/8	4-1/4	**BM50018**	Price	**-**	-
19/64	2-1/4	4-1/2	**BM50019**	Price	**BM51019**	Price
5/16	2-1/4	4-1/2	**BM50020**	Price	**BM51020**	Price
11/32	2-3/8	4-3/4	**BM50022**	Price	**BM51022**	Price
23/64	2-1/2	5	**BM50023**	Price	**BM51023**	Price
3/8	2-1/2	5	**BM50024**	Price	**BM51024**	Price
13/32	2-5/8	5-1/4	**BM50026**	Price	**BM51026**	Price
27/64	2-3/4	5-1/2	**BM50027**	Price	**BM51027**	Price
7/16	2-3/4	5-1/2	**BM50028**	Price	**BM51028**	Price
15/32	2-7/8	5-3/4	**BM50030**	Price	**BM51030**	Price
1/2	3	6	**BM50032**	Price	**BM51032**	Price
17/32	3-1/8	6-1/4	**BM50034**	Price	**-**	-
9/16	3-1/4	6-1/2	**BM50036**	Price	**BM51036**	Price
19/32	3-3/8	6-3/4	**BM50038**	Price	**BM51038**	Price
5/8	3-1/2	7	**BM50040**	Price	**BM51040**	Price

			Straight Flute		Spiral Flute	
Size (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
21/32	3-11/16	7-3/8	**BM50042**	Price	**BM51042**	Price
11/16	3-7/8	7-3/4	**BM50044**	Price	**BM51044**	Price
23/32	4-1/16	8-1/8	**BM50046**	Price	**BM51046**	Price
3/4	4-3/16	8-3/8	**BM50048**	Price	**BM51048**	Price
25/32	4-3/8	8-3/4	**-**	-	**BM51050**	Price
13/16	4-9/16	9-1/8	**BM50052**	Price	**BM51052**	Price
27/32	4-11/16	9-3/8	**BM50054**	Price	**BM51054**	Price
7/8	4-7/8	9-3/4	**BM50056**	Price	**BM51056**	Price
29/32	5	10	**BM50058**	Price	**BM51058**	Price
15/16	5-1/8	10-1/4	**BM50060**	Price	**BM51060**	Price
31/32	5-5/16	10-5/8	**BM50062**	Price	**-**	-
1	5-7/16	10-7/8	**BM50100**	Price	**BM51100**	Price
1-1/16	5-5/8	11-1/4	**BM50104**	Price	**-**	-
1-1/8	5-13/16	11-5/8	**BM50108**	Price	**BM51108**	Price
1-3/16	6	12	**BM50112**	Price	**BM51112**	Price
1-1/4	6-1/8	12-1/4	**BM50116**	Price	**BM51116**	Price
1-5/16	6-1/4	12-1/2	**BM50120**	Price	**BM51120**	Price
1-3/8	6-5/16	12-5/8	**BM50124**	Price	**BM51124**	Price
1-7/16	6-7/16	12-7/8	**BM50128**	Price	**BM51128**	Price
1-1/2	6-1/2	13	**BM50132**	Price	**BM51132**	Price
1-3/4	6-3/4	13-1/2	**BM50148**	Price	**-**	-

PROCUT Taper Pin Reamers

High Speed Steel



- For reaming tapered holes that receive standard taper pins
- Reamers have a taper of 1/4" per foot
- The point of each reamer will enter hole reamed by next smaller size
- **Straight flute** is designed for hand use in easier to ream materials
- **Spiral flute** with left hand spiral for hand use in harder to ream materials
- **Helical flute** built for machine reaming of pin holes on a production basis, prevents chips from packing in flutes and reduces breakage; free cutting action at high speeds produces a fine finish

					Helical Flute		Spiral Flute		Straight Flute	
Size (in.)	Small End Dia. (in.)	Large End Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
7/0	.0497	.0666	13/16	1-13/16	**CA5470**	Price	**CA5370**	Price	**-**	-
6/0	.0611	.0806	15/16	1-15/16	**CA5460**	Price	**CA5360**	Price	**CA5160**	Price
5/0	.0719	.0966	1-3/16	2-3/16	**CA5450**	Price	**CA5350**	Price	**CA5150**	Price
4/0	.0869	.1142	1-5/16	2-5/16	**CA5440**	Price	**CA5340**	Price	**CA5140**	Price
3/0	.1029	.1302	1-5/16	2-5/16	**CA5430**	Price	**CA5330**	Price	**CA5130**	Price
2/0	.1137	.1462	1-9/16	2-9/16	**CA5420**	Price	**CA5320**	Price	**CA5120**	Price
0	.1287	.1638	1-11/16	2-15/16	**CA540**	Price	**CA530**	Price	**CA510**	Price
1	.1447	.1798	1-11/16	2-15/16	**CA541**	Price	**CA531**	Price	**CA511**	Price
2	.1605	.2008	1-15/16	3-3/16	**CA542**	Price	**CA532**	Price	**CA512**	Price
3	.1813	.2294	2-5/16	3-11/16	**CA543**	Price	**CA533**	Price	**CA513**	Price
4	.2071	.2604	2-9/16	4-1/16	**CA544**	Price	**CA534**	Price	**CA514**	Price
5	.2409	.2994	2-13/16	4-5/16	**CA545**	Price	**CA535**	Price	**CA515**	Price
6	.2773	.3540	3-11/16	5-7/16	**CA546**	Price	**CA536**	Price	**CA516**	Price
7	.3297	.4220	4-7/16	6-5/16	**CA547**	Price	**CA537**	Price	**CA517**	Price
8	.3971	.5050	5-3/16	7-3/16	**CA548**	Price	**CA538**	Price	**CA518**	Price
9	.4805	.6066	6-1/16	8-5/16	**CA549**	Price	**CA539**	Price	**CA519**	Price
10	.5799	.7216	6-13/16	9-5/16	**CA5410**	Price	**CA5310**	Price	**CA5110**	Price
11	.7060	.8780	8-1/4	11-1/4	**-**	-	**CA5311**	Price	**CA5111**	Price
12	.8420	1.0500	10	13-5/8	**-**	-	**CA5312**	Price	**CA5112**	Price
13	1.0090	1.2590	12	16	**-**	-	**CA5313**	Price	**CA5113**	Price
14	1.2500	1.5420	14	18-1/4	**-**	-	**CA5314**	Price	**CA5114**	Price

PROCUT Taper Pin Reamer Sets

High Speed Steel

	Spiral Flute		Straight Flute	
Sets In Vinyl Roll Pouch	Order No.	Price	Order No.	Price
#0 thru #5	**CA53TPR6SP**	Price	**CA51TPR6ST**	Price
#0 thru #10	**CA53TPR11SP**	Price	**CA51TPR11ST**	Price

Metric Hand Reamers

High Speed Steel • Straight Flute



Size (mm)	Flute Length (mm)	OAL (mm)	Order No.	Price
6	47	93	**BM50M6**	Price
8	58	115	**BM50M8**	Price
10	66	133	**BM50M10**	Price
12	76	152	**BM50M12**	Price
16	87	175	**BM50M16**	Price
20	100	201	**BM50M20**	Price

PROCUT Morse Taper Reamers

High Speed Steel • Straight Shank or Taper Shank • Finishing or Roughing

Finishing Reamers

- Are used to size & smooth holes
- For removal of nicks & burrs from machine spindles

Roughing Reamers

- Designed for heavy stock removal
- Used to start forming tapers in straight holes



Shank Type - Straight Shank								
					Finishing		Roughing	
MT Size	Small End Dia.	Large End Dia.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
0 MT	.2500	.3670	2-1/4	3-3/4	**CB540**	Price	**CB580**	Price
1 MT	.3674	.5170	3	5	**CB541**	Price	**CB581**	Price
2 MT	.5690	.7450	3-1/2	6	**CB542**	Price	**CB582**	Price
3 MT	.7748	.9884	4-1/4	7-1/4	**CB543**	Price	**CB583**	Price
4 MT	1.0167	1.2893	5-1/4	8-1/2	**CB544**	Price	**CB584**	Price
5 MT	1.4717	1.7990	6-1/4	9-3/4	**CB545**	Price	**CB585**	Price
6 MT	2.1120	2.5550	8-1/2	12-1/4	**CB546**	Price	-	-

Shank Type - Taper Shank								
					Finishing		Roughing	
MT Size	Small End Dia.	Large End Dia.	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
0 MT	.2500	.3670	2-1/4	5-11/32	**CB550**	Price	**CB590**	Price
1 MT	.3674	.5170	3	6-3/16	**CB551**	Price	-	-
2 MT	.5690	.7450	3-1/2	7-3/8	**CB552**	Price	**CB592**	Price
3 MT	.7748	.9884	4-1/4	8-7/8	**CB553**	Price	**CB593**	Price
4 MT	1.0167	1.2893	5-1/4	10-7/8	**CB554**	Price	**CB594**	Price
5 MT	1.4717	1.7990	6-1/4	13-1/8	**CB555**	Price	-	-

PROCUT Brown & Sharpe Taper Reamers

Finishing Reamers • High Speed Steel • Straight Shank Straight Flute



Size (in.)	Small End Dia.	Large End Dia.	Flute Length (in.)	OAL (in.)	Order No.	Price
1 B&S	.1974	.3176	2-7/8	4-3/4	**CB611**	Price
2 B&S	.2474	.3781	3-1/8	5-1/8	**CB612**	Price
3 B&S	.3099	.4510	3-3/8	5-1/2	**CB613**	Price
4 B&S	.3474	.5017	3-11/16	5-7/8	**CB614**	Price
5 B&S	.4474	.6145	4	6-3/8	**CB615**	Price
6 B&S	.4974	.6808	4-3/8	6-7/8	**CB616**	Price
7 B&S	.5974	.8011	4-7/8	7-1/2	**CB617**	Price
8 B&S	.7474	.9770	5-1/2	8-1/8	**CB618**	Price
9 B&S	.8974	1.1530	6-1/8	8-7/8	**CB619**	Price
10 B&S	1.0420	1.3370	6-7/8	9-3/4	**CB6110**	Price
12 B&S	1.5000	1.8440	8-1/4	11-3/8	**CB6112**	Price

Adjustable Blade Reamer Sets

High Speed Steel

- In fitted case



Set Range	No. of Pieces	Order No.	Price
1/4" thru 15/32"	7	**BP50ARS7**	Price
15/32" thru 1-1/16"	8	**BP50ARS8**	Price
15/32" thru 1-1/2"	11	**BP50ARS11**	Price

WORLD CLASS QUALITY Adjustable Blade Reamers

High Speed Steel

- Reamers expand by loosening one adjusting nut and tightening the other
- All adjustable blade hand reamers have 6 blades which may be reground or replaced



Price		Blades		Reamers	
Size Range (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/4 - 9/32	3-1/4	**BP518A**	Price	**BP508A**	Price
9/32 - 5/16	3-1/2	**BP517A**	Price	**BP507A**	Price
5/16 - 11/32	4-1/8	**BP516A**	Price	**BP506A**	Price
11/32 - 3/8	4-3/8	**BP515A**	Price	**BP505A**	Price
3/8 - 13/32	4-3/4	**BP514A**	Price	**BP504A**	Price
13/32 - 7/16	5	**BP513A**	Price	**BP503A**	Price
7/16 - 15/32	5-1/4	**BP512A**	Price	**BP502A**	Price
15/32 - 17/32	5-1/2	**BP51A**	Price	**BP50A**	Price
17/32 - 19/32	5-3/4	**BP51B**	Price	**BP50B**	Price
19/32 - 21/32	6-1/2	**BP51C**	Price	**BP50C**	Price
21/32 - 23/32	6-3/4	**BP51D**	Price	**BP50D**	Price
23/32 - 25/32	7	**BP51E**	Price	**BP50E**	Price
25/32 - 27/32	7-3/8	**BP51F**	Price	**BP50F**	Price
27/32 - 15/16	8	**BP51G**	Price	**BP50G**	Price
15/16 - 1-1/16	9	**BP51H**	Price	**BP50H**	Price
1-1/16 - 1-3/16	10	**BP51I**	Price	**BP50I**	Price
1-3/16 - 1-11/32	11	**BP51J**	Price	**BP50J**	Price
1-11/32 - 1-1/2	12	**BP51K**	Price	**BP50K**	Price
1-1/2 - 1-13/16	14	**BP51L**	Price	**BP50L**	Price
1-13/16 - 2-7/32	16	**BP51M**	Price	**BP50M**	Price
2-7/32 - 2-3/4	18	**BP51N**	Price	**BP50N**	Price
2-3/4 - 3-11/32	20	**BP51O**	Price	**BP50O**	Price

PROCUT Bridge Reamers

High Speed Steel • Taper Shank

Spiral Flute



Straight Flute



- For use in structural iron or steel, bridgework and ship construction where extreme accuracy is not required
- Pilot type points for easy entry in out-of-line holes often encountered in structural work

					Spiral Flute		Straight Flute	
Full Size (in.)	Approx. Point Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price	Order No.	Price
13/32	7/32	4-3/8	8-1/4	2 MT	**BL51013**	Price	**BL50013**	Price
7/16	17/64	4-3/8	8-1/4	2 MT	**BL51014**	Price	**BL50014**	Price
15/32	17/64	5-1/8	9	2 MT	**BL51015**	Price	**BL50015**	Price
1/2	5/16	5-1/8	9	2 MT	**BL51016**	Price	**BL50016**	Price
17/32	5/16	5-1/8	9	2 MT	**BL51017**	Price	**BL50017**	Price
9/16	3/8	5-1/8	9	2 MT	**BL51018**	Price	**BL50018**	Price
5/8	25/64	6-1/8	10	2 MT	**BL51020**	Price	**BL50020**	Price
21/32	25/64	6-1/8	10	2 MT	-	-	**BL50021**	Price
11/16	13/32	7-1/8	11-3/4	3 MT	**BL51022**	Price	**BL50022**	Price
3/4	15/32	7-3/8	12	3 MT	**BL51024**	Price	**BL50024**	Price
13/16	35/64	7-3/8	12	3 MT	**BL51026**	Price	**BL50026**	Price
27/32	9/16	7-3/8	12	3 MT	-	-	**BL50027**	Price
7/8	39/64	7-3/8	12	3 MT	**BL51028**	Price	**BL50028**	Price
29/32	41/64	7-3/8	12	3 MT	-	-	**BL50029**	Price
15/16	43/64	7-3/8	12	3 MT	**BL51030**	Price	**BL50030**	Price

Construction Taper Reamers

High Speed Steel • Left Hand Spiral
Fast Helix, 1-1/2" Shank Length



- Fast helix for better hole finish
- Generous taper for ease in hole entry
- One inch long full reamer diameter
- Backtaper from full reamer diameter eliminates hole binding
- Safety stop flange prevents tool run through

			Alvord Polk		Quality Import	
Size (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price
3/8	3/8	5	**BL5400750**	Price	**BL55024**	Price
7/16	7/16	5-1/4	**BL5400751**	Price	**BL55028**	Price
1/2	1/2	5-15/16	**BL5400752**	Price	**BL55032**	Price
9/16	1/2	6-1/4	**BL5400757**	Price	**BL55036**	Price
5/8	1/2	6-9/16	**BL5400753**	Price	**BL55040**	Price
11/16	1/2	7	**BL5400758**	Price	**BL55044**	Price
3/4	1/2	7	**BL5400754**	Price	**BL55048**	Price
13/16	1/2	7-1/4	**BL5400759**	Price	**BL55052**	Price
7/8	1/2	7-1/4	**BL5400755**	Price	**BL55056**	Price
15/16	1/2	7-1/4	**BL5400760**	Price	**BL55060**	Price
1	1/2	7-1/4	**BL5400756**	Price	**BL55100**	Price
1-1/16	1/2	7-1/4	**BL5400761**	Price	**BL55104**	Price
1-1/8	1/2	7-1/4	**BL5400762**	Price	-	-
1-3/16	1/2	7-1/4	**BL5400763**	Price	-	-
1-1/4	1/2	7-1/2	**BL5400764**	Price	-	-
1-5/16	1/2	7-1/2	**BL5400765**	Price	-	-
1-3/8	1/2	7-1/2	**BL5400766**	Price	-	-
1-7/16	1/2	7-1/2	**BL5400767**	Price	-	-
1-1/2	1/2	7-1/2	**BL5400768**	Price	-	-

MADE IN THE USA Repairmen's Taper Reamers



High Speed Steel • Straight Flute

Shank Type - Round Shank							
Point Dia. (in.)	Max. Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Dia. (in.)	Flute End Style	Order No.	Price
1/8	1/2	3-5/8	5-9/16	3/8	60° Point	**BL5404013**	Price
3/8	1	4-1/2	6-1/2	1/2	-	**BL5404014**	Price

Shank Type - Taper Bit Brace Shank						
Point Dia. (in.)	Max. Dia. (in.)	Flute Length (in.)	OAL (in.)	Flute End Style	Order No.	Price
1/8	1/2	3-5/8	5-9/16	60° Point	**BL5404010**	Price
3/8	1	4-1/2	6-1/2	-	**BL5404011**	Price

Shank Type - T-Handle Shank				
Point Dia. (in.)	Max. Dia. (in.)	Flute Length (in.)	Order No.	Price
1/8	1/2	3-5/8	**BL5404001**	Price
1/8	3/8	3-5/8	**BL5404000**	Price
3/8	3/4	3-5/8	**BL5404002**	Price

					Spiral Flute		Straight Flute	
Full Size (in.)	Approx. Point Size (in.)	Flute Length (in.)	OAL (in.)	Taper Shank	Order No.	Price	Order No.	Price
1	47/64	7-3/8	12	3 MT	**BL51100**	Price	**BL50100**	Price
1-1/16	13/16	7-3/8	12	3 MT	**BL51102**	Price	**BL50102**	Price
1-1/8	55/64	7-3/8	12	3 MT	**BL51104**	Price	**BL50104**	Price
1-3/16	59/64	7-3/8	12	3 MT	**BL51106**	Price	**BL50106**	Price
1-1/4	63/64	7-3/8	13	4 MT	**BL51108**	Price	**BL50108**	Price
1-5/16	1-1/16	7-3/8	13	4 MT	**BL51110**	Price	**BL50110**	Price
1-3/8	1-1/8	7-3/8	13	4 MT	**BL51112**	Price	**BL50112**	Price
1-7/16	1-1/8	7-3/8	13	4 MT	**BL51114**	Price	**BL50114**	Price
1-1/2	1-1/4	7-3/8	13	4 MT	**BL51116**	Price	**BL50116**	Price
1-9/16	1-1/4	7-3/8	13	4 MT	**BL51118**	Price	-	-
1-5/8	1-1/4	7-3/8	13	4 MT	**BL51120**	Price	-	-
1-3/4	1-7/16	7-3/8	13	4 MT	**BL51124**	Price	-	-
1-13/16	1-7/16	7-3/8	13	4 MT	**BL51126**	Price	-	-
1-15/16	1-1/2	7-3/8	13	4 MT	**BL51130**	Price	-	-
2	1-3/4	7-3/8	13	4 MT	**BL51200**	Price	-	-

Carbide Tipped Shell Reamers

Straight Flute



Size (in.)	Hole Size (in.)	OAL (in.)	Fits Arbor No.	Order No.	Price
3/4	3/8	2-1/4	4	**BT50048**	Price
13/16	1/2	2-1/2	5	**BT50052**	Price
7/8	1/2	2-1/2	5	**BT50056**	Price
15/16	1/2	2-1/2	5	**BT50060**	Price
1	1/2	2-1/2	5	**BT50100**	Price
1-1/16	5/8	2-3/4	6	**BT50104**	Price
1-1/8	5/8	2-3/4	6	**BT50108**	Price
1-3/16	5/8	2-3/4	6	**BT50112**	Price
1-1/4	5/8	2-3/4	6	**BT50116**	Price
1-5/16	3/4	3	7	**BT50120**	Price
1-3/8	3/4	3	7	**BT50124**	Price
1-7/16	3/4	3	7	**BT50128**	Price
1-1/2	3/4	3	7	**BT50132**	Price
1-9/16	3/4	3	7	**BT50136**	Price
1-5/8	3/4	3	7	**BT50140**	Price
1-11/16	1	3-1/2	8	**BT50144**	Price
1-3/4	1	3-1/2	8	**BT50148**	Price
1-13/16	1	3-1/2	8	**BT50152**	Price
1-7/8	1	3-1/2	8	**BT50156**	Price
1-15/16	1	3-1/2	8	**BT50160**	Price
2	1	3-1/2	8	**BT50200**	Price
2-1/16	1-1/4	3-3/4	9	**BT50204**	Price
2-1/8	1-1/4	3-3/4	9	**BT50208**	Price
2-3/16	1-1/4	3-3/4	9	**BT50212**	Price
2-1/4	1-1/4	3-3/4	9	**BT50216**	Price
2-5/16	1-1/4	3-3/4	9	**BT50220**	Price
2-3/8	1-1/4	3-3/4	9	**BT50224**	Price
2-7/16	1-1/4	3-3/4	9	**BT50228**	Price
2-1/2	1-1/4	3-3/4	9	**BT50232**	Price
2-5/8	1-1/2	4	10	**BT50240**	Price
2-11/16	1-1/2	4	10	**BT50244**	Price
2-3/4	1-1/2	4	10	**BT50248**	Price
2-13/16	1-1/2	4	10	**BT50252**	Price
2-7/8	1-1/2	4	10	**BT50256**	Price
2-15/16	1-1/2	4	10	**BT50260**	Price

PROCUT Shell Reamers

High Speed Steel • Straight and Spiral Flute


Spiral Flute


Straight Flute

- Designed as sizing or finishing reamers and are held on an arbor with driving lugs
- Holes in these reamers are tapered 1/8" per foot

				Spiral Flute		Straight Flute	
Size (in.)	Hole Size (in.)	Fits Arbor No.	OAL (in.)	Order No.	Price	Order No.	Price
13/16	1/2	5	2-1/2	-	-	**BS50052**	Price
7/8	1/2	5	2-1/2	**BS51056**	Price	**BS50056**	Price
15/16	1/2	5	2-1/2	**BS51060**	Price	**BS50060**	Price
1	1/2	5	2-1/2	**BS51100**	Price	**BS50100**	Price
1-1/16	5/8	6	2-3/4	**BS51104**	Price	**BS50104**	Price
1-1/8	5/8	6	2-3/4	**BS51108**	Price	**BS50108**	Price
1-3/16	5/8	6	2-3/4	**BS51112**	Price	**BS50112**	Price
1-1/4	5/8	6	2-3/4	**BS51116**	Price	**BS50116**	Price
1-5/16	3/4	7	3	**BS51120**	Price	**BS50120**	Price
1-3/8	3/4	7	3	**BS51124**	Price	**BS50124**	Price
1-7/16	3/4	7	3	**BS51128**	Price	**BS50128**	Price
1-1/2	3/4	7	3	**BS51132**	Price	**BS50132**	Price
1-9/16	3/4	7	3	**BS51136**	Price	**BS50136**	Price
1-5/8	3/4	7	3	**BS51140**	Price	**BS50140**	Price
1-11/16	1	8	3-1/2	**BS51144**	Price	**BS50144**	Price
1-3/4	1	8	3-1/2	**BS51148**	Price	**BS50148**	Price
1-13/16	1	8	3-1/2	**BS51152**	Price	**BS50152**	Price
1-15/16	1	8	3-1/2	**BS51160**	Price	**BS50160**	Price
1-7/8	1	8	3-1/2	**BS51156**	Price	**BS50156**	Price
2	1	8	3-1/2	**BS51200**	Price	**BS50200**	Price

				Spiral Flute		Straight Flute	
Size (in.)	Hole Size (in.)	Fits Arbor No.	OAL (in.)	Order No.	Price	Order No.	Price
2-1/16	1-1/4	9	3-3/4	**BS51204**	Price	**BS50204**	Price
2-1/8	1-1/4	9	3-3/4	**BS51208**	Price	**BS50208**	Price
2-3/16	1-1/4	9	3-3/4	**BS51212**	Price	**BS50212**	Price
2-1/4	1-1/4	9	3-3/4	**BS51216**	Price	**BS50216**	Price
2-5/16	1-1/4	9	3-3/4	**BS51220**	Price	**BS50220**	Price
2-3/8	1-1/4	9	3-3/4	**BS51224**	Price	**BS50224**	Price
2-7/16	1-1/4	9	3-3/4	**BS51228**	Price	**BS50228**	Price
2-1/2	1-1/4	9	3-3/4	**BS51232**	Price	**BS50232**	Price
2-9/16	1-1/2	10	4	**BS51236**	Price	**BS50236**	Price
2-5/8	1-1/2	10	4	**BS51240**	Price	**BS50240**	Price
2-11/16	1-1/2	10	4	**BS51244**	Price	**BS50244**	Price
2-3/4	1-1/2	10	4	**BS51248**	Price	**BS50248**	Price
2-13/16	1-1/2	10	4	**BS51252**	Price	**BS50252**	Price
2-15/16	1-1/2	10	4	**BS51260**	Price	**BS50260**	Price
2-7/8	1-1/2	10	4	**BS51256**	Price	**BS50256**	Price
3	1-1/2	10	4	**BS51300**	Price	**BS50300**	Price
3-1/16	1-3/4	11	4-1/2	**BS51304**	Price	**BS50304**	Price
3-1/8	1-3/4	11	4-1/2	**BS51308**	Price	**BS50308**	Price
3-3/16	1-3/4	11	4-1/2	**BS51312**	Price	**BS50312**	Price
3-1/4	1-3/4	11	4-1/2	**BS51316**	Price	**BS50316**	Price
3-5/16	1-3/4	11	4-1/2	**BS51320**	Price	**BS50320**	Price
3-3/8	1-3/4	11	4-1/2	**BS51324**	Price	**BS50324**	Price
3-7/16	1-3/4	11	4-1/2	**BS51328**	Price	**BS50328**	Price
3-1/2	1-3/4	11	4-1/2	**BS51332**	Price	**BS50332**	Price
3-9/16	2	12	5	**BS51336**	Price	**BS50336**	Price
3-5/8	2	12	5	**BS51340**	Price	**BS50340**	Price
3-11/16	2	12	5	-	-	**BS50344**	Price
3-3/4	2	12	5	-	-	**BS50348**	Price
3-7/8	2	12	5	**BS51356**	Price	-	-
4	2	12	5	**BS51400**	Price	**BS50400**	Price

Carbide Tipped Chucking Reamers

Straight Shanks STD & Flute Full Length for Steel



Taper Shank



- Carbide tips brazed to one-piece hardened tool steel bodies
- Cutting diameter tolerance +.0003" -.0000"
- For general reaming of steel, cast iron, non-ferrous metals, plastics and non-metals
- Reamers for steel have a special cutting geometry; positive radial rake (behind center) narrow circular lands; minimum back taper & longer flutes for straighter holes

				Full Length Straight Shank for Steel			STD Straight Shank			Taper Shank		
Size (in.)	No. of Flutes	Flute Length (in.)	OAL (in.)	Shank Size (in.)	Order No.	Price	Shank Size (in.)	Order No.	Price	Shank Size (in.)	Order No.	Price
3/16	4	1-1/8	4-1/2	.1795 - .1805	**BF50248006**	Price	11/64	**BF50012**	Price	-	**-**	-
7/32	4	1-1/4	5	.2065 - .2075	**BF50248007**	Price	13/64	**BF50014**	Price	1 MT	**BF51014**	Price
1/4	4	1-1/2	6	.2395 - .2405	**BF50248008**	Price	15/64	**BF50016**	Price	1 MT	**BF51016**	Price
9/32	4	1-1/2	6	.2475 - .2485	**BF50248009**	Price	15/64	**BF50018**	Price	1 MT	**BF51018**	Price
5/16	4	1-1/2	6	.2782 - .2792	**BF50248010**	Price	9/32	**BF50020**	Price	1 MT	**BF51020**	Price
11/32	4	1-1/2	6	.2782 - .2792	**BF50248011**	Price	9/32	**BF50022**	Price	1 MT	**BF51022**	Price
3/8	4	1-3/4	7	.3095 - .3105	**BF50248012**	Price	5/16	**BF50024**	Price	1 MT	**BF51024**	Price
13/32	4	1-3/4	7	.3095 - .3105	**BF50248013**	Price	5/16	**BF50026**	Price	1 MT	**BF51026**	Price
7/16	4-6	1-3/4	7	.3720 - .3730	**BF50248014**	Price	3/8	**BF50028**	Price	1 MT	**BF51028**	Price
15/32	4-6	1-3/4	7	.3720 - .3730	**BF50248015**	Price	3/8	**BF50030**	Price	1 MT	**BF51030**	Price
1/2	6	2	8	.4345 - .4355	**BF50248016**	Price	7/16	**BF50032**	Price	1 MT	**BF51032**	Price
17/32	6	2	8	.4345 - .4355	**BF50248017**	Price	7/16	**BF50034**	Price	1 MT	**BF51034**	Price
9/16	6	2	8	.4345 - .4355	**BF50248018**	Price	7/16	**BF50036**	Price	1 MT	**BF51036**	Price
19/32	6	2	8	.4345 - .4355	**BF50248019**	Price	7/16	**BF50038**	Price	1 MT	**BF51038**	Price
5/8	6	2-1/4	9	.5605 - .5615	**BF50248020**	Price	9/16	**BF50040**	Price	2 MT	**BF51040**	Price
21/32	6	2-1/4	9	.5605 - .5615	**BF50248021**	Price	9/16	**BF50042**	Price	2 MT	**BF51042**	Price
11/16	6	2-1/4	9	.5605 - .5615	**BF50248022**	Price	9/16	**BF50044**	Price	2 MT	**BF51044**	Price
23/32	6	2-1/4	9	.5605 - .5615	**BF50248023**	Price	9/16	**BF50046**	Price	2 MT	**BF51046**	Price
3/4	6	2-1/2	9-1/2	.6230 - .6245	**BF50248024**	Price	5/8	**BF50048**	Price	2 MT	**BF51048**	Price
25/32	6	2-1/2	9-1/2	.6230 - .6245	**BF50248025**	Price	5/8	**BF50050**	Price	2 MT	**BF51050**	Price
13/16	6	2-1/2	9-1/2	.6230 - .6245	**BF50248026**	Price	5/8	**BF50052**	Price	2 MT	**BF51052**	Price
27/32	6	2-1/2	9-1/2	.6230 - .6245	**BF50248027**	Price	5/8	**BF50054**	Price	2 MT	**BF51054**	Price
7/8	6	2-5/8	10	.7480 - .7495	**BF50248028**	Price	3/4	**BF50056**	Price	2 MT	**BF51056**	Price
29/32	6	2-5/8	10	.7480 - .7495	**BF50248029**	Price	3/4	**BF50058**	Price	2 MT	**BF51058**	Price
15/16	8	2-5/8	10	.7480 - .7495	**BF50248030**	Price	3/4	**BF50060**	Price	3 MT	**BF51060**	Price
31/32	8	2-5/8	10	.7480 - .7495	**BF50248031**	Price	3/4	**BF50062**	Price	3 MT	**BF51062**	Price
1	8	2-3/4	10-1/2	.8730 - .8745	**BF50248032**	Price	7/8	**BF50100**	Price	3 MT	**BF51100**	Price
1-1/16	8	2-3/4	10-1/2	.8730 - .8745	**BF50248034**	Price	7/8	**BF50104**	Price	3 MT	**BF51104**	Price
1-1/2	8	3-1/2	12-1/2	-	**-**	-	1-1/4	**BF50132**	Price	4 MT	**BF51132**	Price
1-1/4	8	3	11-1/2	.9980 - .9995	**BF50248040**	Price	1	**BF50116**	Price	4 MT	**BF51116**	Price
1-1/8	8	2-7/8	11	.8730 - .8745	**BF50248036**	Price	7/8	**BF50108**	Price	3 MT	**BF51108**	Price
1-3/16	8	2-7/8	11	.9980 - .9995	**BF50248038**	Price	1	**BF50112**	Price	3 MT	**BF51112**	Price
1-3/8	8	3-1/4	12	-	**-**	-	1	**BF50124**	Price	4 MT	**BF51124**	Price
1-5/16	8	3	11-1/2	-	**-**	-	1	**BF50120**	Price	4 MT	**BF51120**	Price
1-7/16	8	3-1/4	12	-	**-**	-	1-1/4	**BF50128**	Price	4 MT	**BF51128**	Price

PROCUT Shell Reamer Arbors

Straight Shank



Taper Shank



				Straight Shank			Taper Shank		
Arbor No.	Arbor Dia. (in.)	Fits Shell Reamer (in.)	OAL (in.)	Shank Dia. (in.)	Order No.	Price	Taper	Order No.	Price
4	3/8	21/32 - 25/32	9	1/2	**BZ504**	Price	2 MT	**BZ514**	Price
5	1/2	13/16 - 1-1/32	9-1/2	5/8	**BZ505**	Price	2 MT	**BZ515**	Price
6	5/8	1-1/16 - 1-9/32	10	3/4	**BZ506**	Price	3 MT	**BZ516**	Price
7	3/4	1-5/16 - 1-5/8	11	7/8	**BZ507**	Price	3 MT	**BZ517**	Price
8	1	1-11/16 - 2	12	1-1/8	**BZ508**	Price	4 MT	**BZ518**	Price
9	1-1/4	2-1/16 - 2-1/2	13	1-3/8	**BZ509**	Price	4 MT	**BZ519**	Price
10	1-1/2	2-9/16 - 3	14	1-5/8	**BZ5010**	Price	5 MT	**BZ5110**	Price
11	1-3/4	3-1/16 - 3-1/2	15	2	**BZ5011**	Price	5 MT	**BZ5111**	Price
12	2	3-9/16 - 4	16	2-1/8	**BZ5012**	Price	5 MT	**BZ5112**	Price

Carbide Tipped Decimal Size Chucking Reamers



Straight Shank • Straight Flute

Range .1560" to .7505"

Diameter tolerances:

+.0003" - .0000"

For use on general reaming of steel, cast iron, non-ferrous metals, plastics and non-metals.

Size	Order No.	Price
.1560	**BF531560**	Price
.1565	**BF531565**	Price
.1580	**BF531580**	Price
.1585	**BF531585**	Price
.1595	**BF531595**	Price
.1600	**BF531600**	Price
.1610	**BF531610**	Price
.1620	**BF531620**	Price
.1625	**BF531625**	Price
.1630	**BF531630**	Price
.1635	**BF531635**	Price
.1640	**BF531640**	Price
.1650	**BF531650**	Price
.1670	**BF531670**	Price
.1680	**BF531680**	Price
.1740	**BF531740**	Price
.1750	**BF531750**	Price
.1775	**BF531775**	Price
.1840	**BF531840**	Price
.1845	**BF531845**	Price
.1860	**BF531860**	Price
.1880	**BF531880**	Price
.1890	**BF531890**	Price
.1895	**BF531895**	Price
.1900	**BF531900**	Price
.1905	**BF531905**	Price
.1910	**BF531910**	Price
.1915	**BF531915**	Price
.1920	**BF531920**	Price
.1925	**BF531925**	Price
.1930	**BF531930**	Price
.1940	**BF531940**	Price
.1950	**BF531950**	Price
.1955	**BF531955**	Price
.1960	**BF531960**	Price
.1965	**BF531965**	Price
.1970	**BF531970**	Price
.1975	**BF531975**	Price
.1980	**BF531980**	Price
.1985	**BF531985**	Price
.1990	**BF531990**	Price
.2000	**BF532000**	Price
.2005	**BF532005**	Price
.2020	**BF532020**	Price
.2030	**BF532030**	Price
.2035	**BF532035**	Price
.2040	**BF532040**	Price
.2045	**BF532045**	Price
.2050	**BF532050**	Price
.2070	**BF532070**	Price
.2090	**BF532090**	Price
.2100	**BF532100**	Price
.2110	**BF532110**	Price
.2125	**BF532125**	Price
.2130	**BF532130**	Price
.2140	**BF532140**	Price
.2150	**BF532150**	Price
.2155	**BF532155**	Price
.2160	**BF532160**	Price
.2165	**BF532165**	Price
.2170	**BF532170**	Price
.2175	**BF532175**	Price
.2180	**BF532180**	Price
.2190	**BF532190**	Price
.2195	**BF532195**	Price
.2200	**BF532200**	Price
.2205	**BF532205**	Price
.2210	**BF532210**	Price
.2215	**BF532215**	Price
.2220	**BF532220**	Price

Size	Order No.	Price
.2240	**BF532240**	Price
.2250	**BF532250**	Price
.2255	**BF532255**	Price
.2270	**BF532270**	Price
.2290	**BF532290**	Price
.2300	**BF532300**	Price
.2310	**BF532310**	Price
.2320	**BF532320**	Price
.2325	**BF532325**	Price
.2330	**BF532330**	Price
.2345	**BF532345**	Price
.2350	**BF532350**	Price
.2355	**BF532355**	Price
.2360	**BF532360**	Price
.2365	**BF532365**	Price
.2370	**BF532370**	Price
.2375	**BF532375**	Price
.2385	**BF532385**	Price
.2390	**BF532390**	Price
.2400	**BF532400**	Price
.2410	**BF532410**	Price
.2415	**BF532415**	Price
.2420	**BF532420**	Price
.2425	**BF532425**	Price
.2430	**BF532430**	Price
.2440	**BF532440**	Price
.2445	**BF532445**	Price
.2450	**BF532450**	Price
.2455	**BF532455**	Price
.2460	**BF532460**	Price
.2465	**BF532465**	Price
.2470	**BF532470**	Price
.2475	**BF532475**	Price
.2485	**BF532485**	Price
.2505	**BF532505**	Price
.2515	**BF532515**	Price
.2520	**BF532520**	Price
.2525	**BF532525**	Price
.2530	**BF532530**	Price
.2535	**BF532535**	Price
.2540	**BF532540**	Price
.2545	**BF532545**	Price
.2550	**BF532550**	Price
.2555	**BF532555**	Price
.2560	**BF532560**	Price
.2565	**BF532565**	Price
.2570	**BF532570**	Price
.2575	**BF532575**	Price
.2580	**BF532580**	Price
.2590	**BF532590**	Price
.2600	**BF532600**	Price
.2615	**BF532615**	Price
.2620	**BF532620**	Price
.2630	**BF532630**	Price
.2640	**BF532640**	Price
.2650	**BF532650**	Price
.2670	**BF532670**	Price
.2680	**BF532680**	Price
.2690	**BF532690**	Price
.2700	**BF532700**	Price
.2740	**BF532740**	Price
.2745	**BF532745**	Price
.2750	**BF532750**	Price
.2760	**BF532760**	Price
.2765	**BF532765**	Price
.2775	**BF532775**	Price
.2780	**BF532780**	Price
.2785	**BF532785**	Price
.2790	**BF532790**	Price
.2795	**BF532795**	Price

Size	Order No.	Price
.2800	**BF532800**	Price
.2805	**BF532805**	Price
.2815	**BF532815**	Price
.2820	**BF532820**	Price
.2830	**BF532830**	Price
.2840	**BF532840**	Price
.2850	**BF532850**	Price
.2860	**BF532860**	Price
.2870	**BF532870**	Price
.2880	**BF532880**	Price
.2890	**BF532890**	Price
.2905	**BF532905**	Price
.2910	**BF532910**	Price
.2920	**BF532920**	Price
.2970	**BF532970**	Price
.2990	**BF532990**	Price
.3000	**BF533000**	Price
.3020	**BF533020**	Price
.3030	**BF533030**	Price
.3050	**BF533050**	Price
.3070	**BF533070**	Price
.3075	**BF533075**	Price
.3080	**BF533080**	Price
.3085	**BF533085**	Price
.3090	**BF533090**	Price
.3100	**BF533100**	Price
.3110	**BF533110**	Price
.3130	**BF533130**	Price
.3140	**BF533140**	Price
.3145	**BF533145**	Price
.3155	**BF533155**	Price
.3160	**BF533160**	Price
.3165	**BF533165**	Price
.3170	**BF533170**	Price
.3175	**BF533175**	Price
.3180	**BF533180**	Price
.3185	**BF533185**	Price
.3190	**BF533190**	Price
.3200	**BF533200**	Price
.3210	**BF533210**	Price
.3220	**BF533220**	Price
.3225	**BF533225**	Price
.3230	**BF533230**	Price
.3240	**BF533240**	Price
.3260	**BF533260**	Price
.3270	**BF533270**	Price
.3340	**BF533340**	Price
.3350	**BF533350**	Price
.3360	**BF533360**	Price
.3380	**BF533380**	Price
.3410	**BF533410**	Price
.3420	**BF533420**	Price
.3430	**BF533430**	Price
.3435	**BF533435**	Price
.3440	**BF533440**	Price
.3450	**BF533450**	Price
.3460	**BF533460**	Price
.3470	**BF533470**	Price
.3490	**BF533490**	Price
.3500	**BF533500**	Price
.3535	**BF533535**	Price
.3550	**BF533550**	Price
.3560	**BF533560**	Price
.3600	**BF533600**	Price
.3620	**BF533620**	Price
.3630	**BF533630**	Price
.3650	**BF533650**	Price
.3660	**BF533660**	Price
.3670	**BF533670**	Price
.3700	**BF533700**	Price

Size	Order No.	Price
.3710	**BF533710**	Price
.3715	**BF533715**	Price
.3720	**BF533720**	Price
.3725	**BF533725**	Price
.3735	**BF533735**	Price
.3755	**BF533755**	Price
.3765	**BF533765**	Price
.3770	**BF533770**	Price
.3775	**BF533775**	Price
.3780	**BF533780**	Price
.3785	**BF533785**	Price
.3790	**BF533790**	Price
.3795	**BF533795**	Price
.3800	**BF533800**	Price
.3805	**BF533805**	Price
.3810	**BF533810**	Price
.3820	**BF533820**	Price
.3825	**BF533825**	Price
.3830	**BF533830**	Price
.3840	**BF533840**	Price
.3850	**BF533850**	Price
.3860	**BF533860**	Price
.3870	**BF533870**	Price
.3880	**BF533880**	Price
.3890	**BF533890**	Price
.3900	**BF533900**	Price
.3910	**BF533910**	Price
.3920	**BF533920**	Price
.3925	**BF533925**	Price
.3930	**BF533930**	Price
.3935	**BF533935**	Price
.3940	**BF533940**	Price
.3945	**BF533945**	Price
.3950	**BF533950**	Price
.3955	**BF533955**	Price
.3960	**BF533960**	Price
.3970	**BF533970**	Price
.3975	**BF533975**	Price
.3980	**BF533980**	Price
.4000	**BF534000**	Price
.4010	**BF534010**	Price
.4015	**BF534015**	Price
.4020	**BF534020**	Price
.4030	**BF534030**	Price
.4050	**BF534050**	Price
.4055	**BF534055**	Price
.4060	**BF534060**	Price
.4065	**BF534065**	Price
.4070	**BF534070**	Price
.4080	**BF534080**	Price
.4090	**BF534090**	Price
.4100	**BF534100**	Price
.4130	**BF534130**	Price
.4150	**BF534150**	Price
.4160	**BF534160**	Price
.4190	**BF534190**	Price
.4210	**BF534210**	Price
.4220	**BF534220**	Price
.4230	**BF534230**	Price
.4240	**BF534240**	Price
.4250	**BF534250**	Price
.4270	**BF534270**	Price
.4300	**BF534300**	Price
.4310	**BF534310**	Price
.4320	**BF534320**	Price
.4325	**BF534325**	Price
.4330	**BF534330**	Price
.4340	**BF534340**	Price
.4350	**BF534350**	Price

Size	Order No.	Price
.4360	**BF534360**	Price
.4380	**BF534380**	Price
.4390	**BF534390**	Price
.4395	**BF534395**	Price
.4400	**BF534400**	Price
.4410	**BF534410**	Price
.4415	**BF534415**	Price
.4420	**BF534420**	Price
.4425	**BF534425**	Price
.4430	**BF534430**	Price
.4450	**BF534450**	Price
.4460	**BF534460**	Price
.4470	**BF534470**	Price
.4490	**BF534490**	Price
.4500	**BF534500**	Price
.4560	**BF534560**	Price
.4590	**BF534590**	Price
.4600	**BF534600**	Price
.4640	**BF534640**	Price
.4660	**BF534660**	Price
.4680	**BF534680**	Price
.4700	**BF534700**	Price
.4710	**BF534710**	Price
.4715	**BF534715**	Price
.4720	**BF534720**	Price
.4725	**BF534725**	Price
.4730	**BF534730**	Price
.4735	**BF534735**	Price
.4740	**BF534740**	Price
.4745	**BF534745**	Price
.4750	**BF534750**	Price
.4760	**BF534760**	Price
.4765	**BF534765**	Price
.4780	**BF534780**	Price
.4800	**BF534800**	Price
.4810	**BF534810**	Price
.4840	**BF534840**	Price
.4860	**BF534860**	Price
.4870	**BF534870**	Price
.4900	**BF534900**	Price
.4920	**BF534920**	Price
.4930	**BF534930**	Price
.4950	**BF534950**	Price
.4960	**BF534960**	Price
.4970	**BF534970**	Price
.4975	**BF534975**	Price
.4985	**BF534985**	Price
.5005	**BF535005**	Price
.5015	**BF535015**	Price
.5020	**BF535020**	Price
.5025	**BF535025**	Price
.5030	**BF535030**	Price
.5035	**BF535035**	Price
.5040	**BF535040**	Price
.5045	**BF535045**	Price
.5050	**BF535050**	Price
.5060	**BF535060**	Price
.5070	**BF535070**	Price
.5080	**BF535080**	Price
.5090	**BF535090**	Price
.5100	**BF535100**	Price
.5605	**BF535605**	Price
.5610	**BF535610**	Price
.5615	**BF535615**	Price
.5620	**BF535620**	Price
.6245	**BF536245**	Price
.6255	**BF536255**	Price
.6275	**BF536275**	Price
.7505	**BF537505**	Price

Carbide Tipped Expansion Chucking Reamers





Straight Shank or Taper Shank

- Recommended for reaming abrasive materials
- As the diameter wears down, the reamers can be expanded many times by tightening the end adjusting screw and regrinding to its original size

NOTE: Expansion reamers should not be expanded to use at diameters larger than listed diameters nor be considered as adjustable for use in producing holes of several sizes and the expansion screw should never be loosened

				Straight Shank			Taper Shank		
Size (in.)	No. of Flutes	Flute Length (in.)	OAL (in.)	Shank Size (in.)	Order No.	Price	Shank Size (in.)	Order No.	Price
3/8	4	1	7	5/16	**BJ50024**	Price	1 MT	**BJ51024**	Price
13/32	4	1	7	5/16	**BJ50026**	Price	1 MT	**BJ51026**	Price
7/16	4	1	7	3/8	**BJ50028**	Price	1 MT	**BJ51028**	Price
15/32	4	1	7	3/8	**BJ50030**	Price	1 MT	**BJ51030**	Price
1/2	6	1	8	7/16	**BJ50032**	Price	1 MT	**BJ51032**	Price
17/32	6	1	8	7/16	**BJ50034**	Price	1 MT	**BJ51034**	Price
9/16	6	1-1/8	8	7/16	**BJ50036**	Price	1 MT	**BJ51036**	Price
19/32	6	1-1/8	8	7/16	**BJ50038**	Price	1 MT	**BJ51038**	Price
5/8	6	1-1/4	9	9/16	**BJ50040**	Price	2 MT	**BJ51040**	Price
21/32	6	1-1/4	9	9/16	**BJ50042**	Price	2 MT	**BJ51042**	Price
11/16	6	1-1/4	9	9/16	**BJ50044**	Price	2 MT	**BJ51044**	Price
23/32	6	1-1/4	9	9/16	**BJ50046**	Price	2 MT	**BJ51046**	Price
3/4	6	1-3/8	9-1/2	5/8	**BJ50048**	Price	2 MT	**BJ51048**	Price
25/32	6	1-3/8	9-1/2	5/8	**BJ50050**	Price	2 MT	**BJ51050**	Price
13/16	6	1-3/8	9-1/2	5/8	**BJ50052**	Price	2 MT	**BJ51052**	Price
27/32	6	1-1/2	9-1/2	5/8	**BJ50054**	Price	2 MT	**BJ51054**	Price

				Straight Shank			Taper Shank		
Size (in.)	No. of Flutes	Flute Length (in.)	OAL (in.)	Shank Size (in.)	Order No.	Price	Shank Size (in.)	Order No.	Price
7/8	6	1-1/2	10	3/4	**BJ50056**	Price	2 MT	**BJ51056**	Price
29/32	8	1-1/2	10	3/4	**BJ50058**	Price	2 MT	**BJ51058**	Price
15/16	8	1-1/2	10	3/4	**BJ50060**	Price	3 MT	**BJ51060**	Price
31/32	8	1-1/2	10	3/4	**BJ50062**	Price	-	**-**	-
1	8	1-5/8	10-1/2	7/8	**BJ50100**	Price	3 MT	**BJ51100**	Price
1-1/32	8	1-5/8	10-1/2	7/8	**BJ50102**	Price	3 MT	**BJ51102**	Price
1-3/32	8	1-5/8	10-1/2	7/8	**BJ50106**	Price	3 MT	**BJ51106**	Price
1-1/16	8	1-5/8	10-1/2	7/8	**BJ50104**	Price	3 MT	**BJ51104**	Price
1-1/8	8	1-3/4	11	7/8	**BJ50108**	Price	3 MT	**BJ51108**	Price
1-3/16	8	1-3/4	11	1	**BJ50112**	Price	3 MT	**BJ51112**	Price
1-1/4	8	1-7/8	11-1/2	1	**BJ50116**	Price	4 MT	**BJ51116**	Price
1-5/16	8	1-7/8	11-1/2	1	**BJ50120**	Price	4 MT	**BJ51120**	Price
1-3/8	8	2	12	1	**BJ50124**	Price	4 MT	**BJ51124**	Price
1-7/16	8	2	12	1-1/4	**BJ50128**	Price	4 MT	**BJ51128**	Price
1-1/2	8	2-1/8	12-1/2	1-1/4	**BJ50132**	Price	4 MT	**BJ51132**	Price
1-3/4	10	2-3/8	13-1/2	1-1/4	**BJ50148**	Price	-	**-**	-

TrueSize® Solid Carbide Chucking Reamers

- Solid carbide reamers can be used successfully in a broad range of ferrous metals
- In hardened steel Rc 40 or greater, solid carbide reamers are the only realistic choice
- Recommended for general purpose reaming in most materials
- Tolerances:
  3/8" and smaller +.0001" / +.0003"
  over 3/8" +.0001" / +.0004"
- Right hand cutting with straight flutes and a 45° lead cutting angle
- Well suited for ferrous metals, and for many nonferrous and non-metallic materials
- Sizes up to .253" are 4 flute
  Sizes over .253" are 6 flute
- M.A. Ford List #272



Decimal Equiv.	Size (in.)	Flute Length (in.)	Shank Dia.	OAL (in.)	Order No.	Price
.0156	1/64	3/16	.015	1-1/2	**BG7001013**	Price
.0312	1/32	1/4	.031	1-1/2	**BG7001093**	Price
.0468	3/64	3/8	.043	1-1/2	**BG7001177**	Price
.0625	1/16	3/8	.058	1-1/2	**BG7001225**	Price
.0781	5/64	1/2	.073	1-3/4	**BG7001281**	Price
.0937	3/32	1/2	.088	2	**BG7001341**	Price
.1094	7/64	5/8	.104	2-1/4	**BG7001393**	Price
.1245	.1245	5/8	.120	2-1/4	**BG7003163**	Price
.1249	.1249	5/8	.120	2-1/4	**BG7003165**	Price
.1248	.1248	5/8	.120	2-1/4	**BG7003164**	Price
.1250	1/8	5/8	.120	2-1/4	**BG7001433**	Price
.1260	1/8 OS	5/8	.120	2-1/4	**BG7001437**	Price
.1406	9/64	3/4	.135	2-1/2	**BG7001481**	Price
.1562	5/32	3/4	.151	2-1/2	**BG7001533**	Price
.1719	11/64	7/8	.166	2-3/4	**BG7001589**	Price
.1870	3/16 DP2	7/8	.182	2-3/4	**BG7001637**	Price
.1873	3/16 DP1	7/8	.182	2-3/4	**BG7003270**	Price
.1874	3/16 US	7/8	.182	2-3/4	**BG7003271**	Price
.1875	3/16	7/8	.182	2-3/4	**BG7001641**	Price
.1885	3/16 OS	7/8	.182	2-3/4	**BG7003273**	Price
.2031	13/64	1	.198	3	**BG7001701**	Price
.2187	7/32	1	.213	3	**BG7001753**	Price
.2344	15/64	1	.229	3	**BG7001801**	Price
.2495	1/4 DP2	1	.244	3	**BG7003375**	Price
.2498	1/4 DP1	1	.244	3	**BG7003376**	Price
.2499	1/4 US	1	.244	3	**BG7003377**	Price
.2500	1/4 (E)	1	.244	3	**BG7001837**	Price
.2510	1/4 OS	1	.244	3	**BG7003380**	Price
.2656	17/64	1-1/8	.252	3-1/4	**BG7001857**	Price
.2812	9/32	1-1/8	.270	3-1/4	**BG7001881**	Price
.2968	19/64	1-1/8	.285	3-1/4	**BG7001897**	Price
.3120	5/16 DP2	1-1/8	.301	3-1/4	**BG7003434**	Price
.3123	5/16 DP1	1-1/8	.301	3-1/4	**BG7003435**	Price
.3125	5/16	1-1/8	.301	3-1/4	**BG7001905**	Price
.3124	5/16 US	1-1/8	.301	3-1/4	**BG7003436**	Price
.3135	5/16 OS	1-1/8	.301	3-1/4	**BG7003438**	Price
.3281	21/64	1-1/4	.317	3-1/2	**BG7001921**	Price
.3437	11/32	1-1/4	.332	3-1/2	**BG7001937**	Price
.3594	23/64	1-1/4	.348	3-1/2	**BG7001953**	Price
.3745	3/8 DP2	1-1/4	.363	3-1/2	**BG7003491**	Price
.3748	3/8 DP1	1-1/4	.363	3-1/2	**BG7003492**	Price
.3749	3/8 US	1-1/4	.363	3-1/2	**BG7003493**	Price
.3750	3/8	1-1/4	.363	3-1/2	**BG7001965**	Price
.3760	3/8 OS	1-1/4	.363	3-1/2	**BG7003494**	Price
.3906	25/64	1-1/4	.380	3-1/2	**BG7001977**	Price
.4062	13/32	1-1/4	.380	3-1/2	**BG7001985**	Price
.4219	27/64	1-3/8	.410	3-3/4	**BG7001991**	Price
.4370	7/16 DP2	1-3/8	.410	3-3/4	**BG7003550**	Price
.4373	7/16 DP1	1-3/8	.410	3-3/4	**BG7003551**	Price
.4375	7/16	1-3/8	.410	3-3/4	**BG7001995**	Price
.4374	7/16 US	1-3/8	.410	3-3/4	**BG7003552**	Price
.4385	7/16 OS	1-3/8	.410	3-3/4	**BG7003619**	Price
.4531	29/64	1-3/8	.440	3-3/4	**BG7001999**	Price
.4688	15/32	1-3/8	.440	3-3/4	**BG7002001**	Price
.4844	31/64	1-1/2	.470	4	**BG7002005**	Price
.4995	1/2 DP2	1-1/2	.470	4	**BG7003615**	Price
.4998	1/2 DP1	1-1/2	.470	4	**BG7003616**	Price
.4999	1/2 US	1-1/2	.470	4	**BG7003617**	Price
.5000	1/2	1-1/2	.470	4	**BG7002007**	Price
.5010	1/2 OS	1-1/2	.470	4	**BG7003618**	Price
.5156	33/64	1-1/2	.505	4	**BG7002011**	Price
.5312	17/32	1-1/2	.505	4	**BG7002013**	Price
.5469	35/64	1-1/2	.535	4	**BG7002015**	Price
.5625	9/16	1-1/2	.535	4	**BG7002019**	Price
.5781	37/64	1-3/4	.565	4	**BG7002021**	Price
.5938	19/32	1-3/4	.565	4	**BG7002025**	Price
.6094	39/64	1-3/4	.595	4	**BG7002027**	Price
.6250	5/8	1-3/4	.595	4	**BG7002029**	Price

Wire, mm sizes available

RAPIDKUT® Solid Carbide Chucking Reamers

Straight Shank • Straight Flute • Micrograin Carbide

Tolerances:
1/32" - 1/4" +.0002 -.0000"
Over 1/4" +.0003 -.0000"
4 Flutes for sizes 1/4" & smaller
6 Flutes for sizes over 1/4"



Type - Fractional Size					
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
3/64	.0469	3/8	1-1/2	**BG50003**	Price
1/16	.0625	3/8	1-1/2	**BG50004**	Price
5/64	.0781	1/2	1-3/4	**BG50005**	Price
3/32	.0938	1/2	2	**BG50006**	Price
7/64	.1094	5/8	2-1/4	**BG50007**	Price
1/8	.1250	5/8	2-1/4	**BG50008**	Price
9/64	.1406	3/4	2-1/2	**BG50009**	Price
5/32	.1562	3/4	2-1/2	**BG50010**	Price
11/64	.1719	7/8	2-3/4	**BG50011**	Price
3/16	.1875	7/8	2-3/4	**BG50012**	Price
13/64	.2031	1	3	**BG50013**	Price
7/32	.2188	1	3	**BG50014**	Price
15/64	.2344	1	3	**BG50015**	Price
1/4	.2500	1	3	**BG50016**	Price
17/64	.2656	1-1/8	3-1/4	**BG50017**	Price
9/32	.2812	1-1/8	3-1/4	**BG50018**	Price
19/64	.2969	1-1/8	3-1/4	**BG50019**	Price
5/16	.3125	1-1/8	3-1/4	**BG50020**	Price
21/64	.3281	1-1/4	3-1/2	**BG50021**	Price
11/32	.3438	1-1/4	3-1/2	**BG50022**	Price
23/64	.3594	1-1/4	3-1/2	**BG50023**	Price
3/8	.3750	1-1/4	3-1/2	**BG50024**	Price
13/32	.4062	1-1/2	4	**BG50026**	Price
7/16	.4375	1-1/2	4	**BG50028**	Price
15/32	.4688	1-1/2	4	**BG50030**	Price
1/2	.5000	1-1/2	4	**BG50032**	Price

Type - Letter Size					
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
A	.2340	1	3	**BG50201**	Price
B	.2380	1	3	**BG50202**	Price
C	.2420	1	3	**BG50203**	Price
D	.2460	1	3	**BG50204**	Price
E	.2500	1	3	**BG50205**	Price
F	.2570	1	3	**BG50206**	Price
G	.2610	1	3	**BG50207**	Price
H	.2660	1-1/8	3-1/4	**BG50208**	Price
I	.2720	1-1/8	3-1/4	**BG50209**	Price
J	.2770	1-1/8	3-1/4	**BG50210**	Price
K	.2810	1-1/8	3-1/4	**BG50211**	Price
L	.2900	1-1/8	3-1/4	**BG50212**	Price
M	.2950	1-1/8	3-1/4	**BG50213**	Price
N	.3020	1-1/8	3-1/4	**BG50214**	Price
O	.3160	1-1/8	3-1/4	**BG50215**	Price
P	.3230	1-1/8	3-1/4	**BG50216**	Price
Q	.3320	1-1/4	3-1/2	**BG50217**	Price
R	.3390	1-1/4	3-1/2	**BG50218**	Price
S	.3480	1-1/4	3-1/2	**BG50219**	Price
T	.3580	1-1/4	3-1/2	**BG50220**	Price
U	.3680	1-1/4	3-1/2	**BG50221**	Price
V	.3770	1-1/4	3-1/2	**BG50222**	Price
W	.3860	1-1/4	3-1/2	**BG50223**	Price
X	.3970	1-1/4	3-1/2	**BG50224**	Price
Y	.4040	1-1/4	3-1/2	**BG50225**	Price
Z	.4130	1-1/2	4	**BG50226**	Price

Type - Wire Gage Size					
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
1	.2280	1	3	**BG50101**	Price
2	.2210	1	3	**BG50102**	Price
3	.2130	1	3	**BG50103**	Price
4	.2090	1	3	**BG50104**	Price

Type - Wire Gage Size					
Size	Decimal Equiv.	Flute Length (in.)	OAL (in.)	Order No.	Price
5	.2055	1	3	**BG50105**	Price
6	.2040	1	3	**BG50106**	Price
7	.2010	1	3	**BG50107**	Price
8	.1990	7/8	2-3/4	**BG50108**	Price
9	.1960	7/8	2-3/4	**BG50109**	Price
10	.1935	7/8	2-3/4	**BG50110**	Price
11	.1910	7/8	2-3/4	**BG50111**	Price
12	.1890	7/8	2-3/4	**BG50112**	Price
13	.1850	7/8	2-3/4	**BG50113**	Price
14	.1820	7/8	2-3/4	**BG50114**	Price
15	.1800	7/8	2-3/4	**BG50115**	Price
16	.1770	7/8	2-3/4	**BG50116**	Price
17	.1730	7/8	2-3/4	**BG50117**	Price
18	.1695	7/8	2-3/4	**BG50118**	Price
19	.1660	7/8	2-3/4	**BG50119**	Price
20	.1610	7/8	2-3/4	**BG50120**	Price
21	.1590	3/4	2-1/2	**BG50121**	Price
22	.1570	3/4	2-1/2	**BG50122**	Price
23	.1540	3/4	2-1/2	**BG50123**	Price
24	.1520	3/4	2-1/2	**BG50124**	Price
25	.1495	3/4	2-1/2	**BG50125**	Price
26	.1470	3/4	2-1/2	**BG50126**	Price
27	.1440	3/4	2-1/2	**BG50127**	Price
28	.1405	3/4	2-1/2	**BG50128**	Price
29	.1360	3/4	2-1/2	**BG50129**	Price
30	.1285	5/8	2-1/4	**BG50130**	Price
31	.1200	5/8	2-1/4	**BG50131**	Price
32	.1160	5/8	2-1/4	**BG50132**	Price
33	.1130	5/8	2-1/4	**BG50133**	Price
34	.1110	5/8	2-1/4	**BG50134**	Price
35	.1100	5/8	2-1/4	**BG50135**	Price
36	.1065	5/8	2-1/4	**BG50136**	Price
37	.1040	5/8	2-1/4	**BG50137**	Price
38	.1015	5/8	2-1/4	**BG50138**	Price
39	.0995	5/8	2-1/4	**BG50139**	Price
40	.0980	1/2	2	**BG50140**	Price
41	.0960	1/2	2	**BG50141**	Price
42	.0935	1/2	2	**BG50142**	Price
43	.0890	1/2	2	**BG50143**	Price
44	.0860	1/2	2	**BG50144**	Price
45	.0820	1/2	2	**BG50145**	Price
46	.0810	1/2	1-3/4	**BG50146**	Price
47	.0785	1/2	1-3/4	**BG50147**	Price
48	.0760	1/2	1-3/4	**BG50148**	Price
49	.0730	1/2	1-3/4	**BG50149**	Price
50	.0700	1/2	1-3/4	**BG50150**	Price
51	.0670	3/8	1-1/2	**BG50151**	Price
52	.0635	3/8	1-1/2	**BG50152**	Price
53	.0595	3/8	1-1/2	**BG50153**	Price
54	.0550	3/8	1-1/2	**BG50154**	Price
55	.0520	3/8	1-1/2	**BG50155**	Price
56	.0465	3/8	1-1/2	**BG50156**	Price
57	.0430	3/8	1-1/2	**BG50157**	Price
58	.0420	3/8	1-1/2	**BG50158**	Price
59	.0410	1/4	1-1/8	**BG50159**	Price
60	.0400	1/4	1-1/8	**BG50160**	Price
61	.0390	1/4	1-1/8	**BG50161**	Price
62	.0380	1/4	1-1/8	**BG50162**	Price
63	.0370	1/4	1-1/8	**BG50163**	Price
64	.0360	1/4	1-1/8	**BG50164**	Price
65	.0350	1/4	1-1/8	**BG50165**	Price

RAPIDKUT® High Speed Steel & Solid Carbide Chucking Reamers - Decimal Size



Straight Shank • Straight Flute

Tolerances:
1/32" - 1/4" +.0003-.0000
Over 1/4" +.0004-.0000
4 Flutes for sizes 1/4" & smaller
6 Flutes for sizes over 1/4"

	Solid Carbide		High Speed Steel	
Size (in.)	Order No.	Price	Order No.	Price
.0300	BG5010300	Price	BD560300	Price
.0305	-	-	BD560305	Price
.0315	BG5010315	Price	BD560315	Price
.0325	BG5010325	Price	BD560325	Price
.0335	BG5010335	Price	-	-
.0340	BG5010340	Price	BD560340	Price
.0345	BG5010345	Price	BD560345	Price
.0355	BG5010355	Price	BD560355	Price
.0365	BG5010365	Price	BD560365	Price
.0375	BG5010375	Price	BD560375	Price
.0385	BG5010385	Price	-	-
.0395	BG5010395	Price	-	-
.0405	BG5010405	Price	BD560405	Price
.0415	BG5010415	Price	BD560415	Price
.0425	BG5010425	Price	BD560425	Price
.0435	BG5010435	Price	BD560435	Price
.0440	BG5010440	Price	-	-
.0445	BG5010445	Price	-	-
.0450	BG5010450	Price	BD560450	Price
.0455	BG5010455	Price	-	-
.0460	BG5010460	Price	BD560460	Price
.0470	BG5010470	Price	BD560470	Price
.0475	BG5010475	Price	BD560475	Price
.0480	BG5010480	Price	BD560480	Price
.0485	BG5010485	Price	BD560485	Price
.0490	BG5010490	Price	BD560490	Price
.0495	BG5010495	Price	BD560495	Price
.0500	BG5010500	Price	BD560500	Price
.0505	BG5010505	Price	BD560505	Price
.0510	BG5010510	Price	BD560510	Price
.0515	BG5010515	Price	-	-
.0525	BG5010525	Price	-	-
.0530	BG5010530	Price	BD560530	Price
.0535	BG5010535	Price	-	-
.0540	BG5010540	Price	BD560540	Price
.0545	BG5010545	Price	BD560545	Price
.0555	BG5010555	Price	BD560555	Price
.0560	BG5010560	Price	BD560560	Price
.0565	BG5010565	Price	-	-
.0570	BG5010570	Price	BD560570	Price
.0575	BG5010575	Price	BD560575	Price
.0580	BG5010580	Price	BD560580	Price
.0585	BG5010585	Price	-	-
.0590	BG5010590	Price	BD560590	Price
.0600	BG5010600	Price	BD560600	Price
.0605	BG5010605	Price	BD560605	Price
.0610	BG5010610	Price	BD560610	Price
.0615	BG5010615	Price	BD560615	Price
.0620	BG5010620	Price	BD560620	Price
.0622	BG501622	Price	-	-
.0630	BG5010630	Price	BD560630	Price
.0640	BG5010640	Price	BD560640	Price
.0645	BG5010645	Price	BD560645	Price
.0650	BG5010650	Price	BD560650	Price
.0655	BG5010655	Price	BD560655	Price
.0660	BG5010660	Price	BD560660	Price
.0665	BG5010665	Price	BD560665	Price
.0675	BG5010675	Price	BD560675	Price
.0680	BG5010680	Price	BD560680	Price
.0685	BG5010685	Price	BD560685	Price
.0690	BG5010690	Price	BD560690	Price
.0695	BG5010695	Price	-	-
.0705	BG5010705	Price	BD560705	Price
.0710	BG5010710	Price	BD560710	Price
.0715	BG5010715	Price	-	-
.0720	BG5010720	Price	BD560720	Price
.0725	BG5010725	Price	BD560725	Price
.0735	BG5010735	Price	-	-
.0740	BG5010740	Price	-	-
.0745	BG5010745	Price	-	-
.0750	BG5010750	Price	BD560750	Price
.0755	BG5010755	Price	-	-
.0760	-	-	BD560760	Price
.0765	BG5010765	Price	-	-
.0770	BG5010770	Price	BD560770	Price
.0775	BG5010775	Price	BD560775	Price
.0780	BG5010780	Price	BD560780	Price
.0790	BG5010790	Price	BD560790	Price
.0795	BG5010795	Price	BD560795	Price
.0800	BG5010800	Price	BD560800	Price
.0805	BG5010805	Price	BD560805	Price
.0815	BG5010815	Price	-	-
.0825	BG5010825	Price	-	-
.0830	BG5010830	Price	BD560830	Price
.0835	BG5010835	Price	-	-
.0840	BG5010840	Price	BD560840	Price
.0845	BG5010845	Price	BD560845	Price
.0850	BG5010850	Price	BD560850	Price
.0855	BG5010855	Price	BD560855	Price
.0865	BG5010865	Price	-	-
.0870	BG5010870	Price	BD560870	Price
.0875	BG5010875	Price	BD560875	Price
.0880	BG5010880	Price	BD560880	Price
.0885	BG5010885	Price	-	-
.0895	BG5010895	Price	BD560895	Price
.0900	BG5010900	Price	BD560900	Price
.0905	BG5010905	Price	-	-
.0910	BG5010910	Price	BD560910	Price
.0915	BG5010915	Price	BD560915	Price
.0920	BG5010920	Price	BD560920	Price
.0925	BG5010925	Price	BD560925	Price
.0930	BG5010930	Price	BD560930	Price
.0933	BG501933	Price	-	-
.0937	BG501937	Price	-	-
.0940	BG5010940	Price	BD560940	Price
.0945	BG5010945	Price	BD560945	Price
.0950	BG5010950	Price	BD560950	Price
.0955	BG5010955	Price	BD560955	Price
.0965	BG5010965	Price	BD560965	Price
.0970	BG5010970	Price	BD560970	Price
.0975	BG5010975	Price	BD560975	Price
.0985	BG5010985	Price	BD560985	Price
.0990	BG5010990	Price	BD560990	Price
.1000	BG5011000	Price	BD561000	Price
.1005	BG5011005	Price	-	-
.1010	BG5011010	Price	BD561010	Price
.1020	BG5011020	Price	BD561020	Price
.1025	BG5011025	Price	-	-
.1030	BG5011030	Price	-	-
.1035	BG5011035	Price	BD561035	Price
.1045	BG5011045	Price	BD561045	Price
.1050	BG5011050	Price	BD561050	Price
.1055	BG5011055	Price	BD561055	Price
.1060	BG5011060	Price	BD561060	Price
.1070	BG5011070	Price	BD561070	Price
.1075	BG5011075	Price	BD561075	Price
.1080	BG5011080	Price	BD561080	Price
.1085	BG5011085	Price	BD561085	Price
.1090	BG5011090	Price	BD561090	Price
.1095	BG5011095	Price	BD561095	Price
.1105	BG5011105	Price	BD561105	Price
.1115	BG5011115	Price	-	-
.1120	BG5011120	Price	-	-
.1125	BG5011125	Price	BD561125	Price
.1135	BG5011135	Price	-	-
.1140	BG5011140	Price	BD561140	Price
.1145	BG5011145	Price	-	-
.1150	BG5011150	Price	BD561150	Price
.1155	BG5011155	Price	BD561155	Price
.1160	-	-	BD561160	Price
.1165	BG5011165	Price	BD561165	Price
.1170	BG5011170	Price	BD561170	Price
.1175	BG5011175	Price	BD561175	Price
.1180	BG5011180	Price	BD561180	Price
.1185	BG5011185	Price	BD561185	Price
.1190	BG5011190	Price	BD561190	Price
.1195	BG5011195	Price	BD561195	Price
.1205	BG5011205	Price	BD561205	Price
.1210	BG5011210	Price	BD561210	Price
.1215	BG5011215	Price	BD561215	Price
.1220	BG5011220	Price	BD561220	Price
.1225	BG5011225	Price	BD561225	Price
.1230	BG5011230	Price	BD561230	Price
.1235	BG5011235	Price	BD561235	Price
.1240	BG5011240	Price	BD561240	Price
.1245	BG5011245	Price	BD561245	Price
.1247	BG5011247	Price	BD561247	Price
.1255	BG5011255	Price	BD561255	Price
.1260	BG5011260	Price	BD561260	Price
.1265	BG5011265	Price	BD561265	Price
.1270	BG5011270	Price	BD561270	Price
.1275	BG5011275	Price	BD561275	Price
.1280	BG5011280	Price	BD561280	Price
.1290	BG5011290	Price	BD561290	Price
.1295	BG5011295	Price	BD561295	Price
.1300	BG5011300	Price	BD561300	Price
.1305	BG5011305	Price	BD561305	Price
.1310	BG5011310	Price	BD561310	Price
.1315	BG5011315	Price	BD561315	Price
.1320	BG5011320	Price	BD561320	Price
.1325	BG5011325	Price	BD561325	Price
.1330	BG5011330	Price	BD561330	Price
.1335	BG5011335	Price	-	-
.1340	BG5011340	Price	BD561340	Price
.1345	BG5011345	Price	-	-
.1350	BG5011350	Price	BD561350	Price
.1355	BG5011355	Price	BD561355	Price
.1365	BG5011365	Price	BD561365	Price
.1370	BG5011370	Price	BD561370	Price
.1375	BG5011375	Price	-	-
.1380	BG5011380	Price	BD561380	Price
.1385	BG5011385	Price	BD561385	Price
.1390	BG5011390	Price	-	-
.1395	BG5011395	Price	BD561395	Price
.1400	BG5011400	Price	BD561400	Price
.1410	BG5011410	Price	BD561410	Price
.1415	BG5011415	Price	BD561415	Price
.1420	BG5011420	Price	BD561420	Price
.1425	BG5011425	Price	-	-
.1430	BG5011430	Price	BD561430	Price
.1435	BG5011435	Price	-	-
.1445	BG5011445	Price	-	-
.1450	BG5011450	Price	BD561450	Price
.1455	BG5011455	Price	-	-
.1460	BG5011460	Price	-	-
.1465	BG5011465	Price	-	-
.1475	BG5011475	Price	BD561475	Price
.1480	BG5011480	Price	-	-
.1485	BG5011485	Price	-	-
.1490	BG5011490	Price	BD561490	Price
.1500	BG5011500	Price	BD561500	Price
.1505	BG5011505	Price	BD561505	Price
.1507	BG5011507	Price	-	-
.1510	BG5011510	Price	BD561510	Price
.1515	BG5011515	Price	-	-
.1525	BG5011525	Price	-	-
.1530	BG5011530	Price	BD561530	Price
.1535	BG5011535	Price	BD561535	Price
.1541	BG5011541	Price	-	-
.1545	BG5011545	Price	BD561545	Price
.1550	BG5011550	Price	BD561550	Price
.1555	BG5011555	Price	BD561555	Price
.1560	BG5011560	Price	BD561560	Price
.1565	BG5011565	Price	BD561565	Price
.1580	BG5011580	Price	BD561580	Price
.1585	BG5011585	Price	BD561585	Price
.1595	BG5011595	Price	BD561595	Price
.1600	BG5011600	Price	BD561600	Price
.1605	BG5011605	Price	BD561605	Price
.1610	-	-	BD561610	Price
.1615	BG5011615	Price	-	-
.1620	BG5011620	Price	BD561620	Price
.1625	BG5011625	Price	BD561625	Price
.1630	BG5011630	Price	BD561630	Price
.1635	BG5011635	Price	BD561635	Price
.1640	BG5011640	Price	BD561640	Price
.1645	BG5011645	Price	-	-
.1650	BG5011650	Price	BD561650	Price
.1655	BG5011655	Price	BD561655	Price
.1665	BG5011665	Price	BD561665	Price
.1670	BG5011670	Price	BD561670	Price
.1675	BG5011675	Price	BD561675	Price
.1680	BG5011680	Price	BD561680	Price
.1685	BG5011685	Price	BD561685	Price
.1690	BG5011690	Price	BD561690	Price

(continued on next page)

RAPIDKUT® High Speed Steel & Solid Carbide Chucking Reamers - Decimal Size (cont.)



	Solid Carbide		High Speed Steel	
Size (in.)	Order No.	Price	Order No.	Price
.1700	BG5011700	Price	BD561700	Price
.1705	BG5011705	Price	-	-
.1710	BG5011710	Price	-	-
.1715	BG5011715	Price	BD561715	Price
.1720	BG5011720	Price	BD561720	Price
.1725	BG5011725	Price	-	-
.1735	BG5011735	Price	-	-
.1740	BG5011740	Price	BD561740	Price
.1745	BG5011745	Price	-	-
.1750	BG5011750	Price	BD561750	Price
.1755	BG5011755	Price	-	-
.1760	BG5011760	Price	BD561760	Price
.1765	BG5011765	Price	BD561765	Price
.1775	BG5011775	Price	BD561775	Price
.1780	BG5011780	Price	BD561780	Price
.1785	BG5011785	Price	-	-
.1790	BG5011790	Price	BD561790	Price
.1795	BG5011795	Price	BD561795	Price
.1805	BG5011805	Price	BD561805	Price
.1810	BG5011810	Price	BD561810	Price
.1814	BG5011814	Price	-	-
.1815	BG5011815	Price	-	-
.1825	BG5011825	Price	BD561825	Price
.1830	BG5011830	Price	BD561830	Price
.1835	BG5011835	Price	BD561835	Price
.1840	BG5011840	Price	BD561840	Price
.1845	BG5011845	Price	BD561845	Price
.1855	BG5011855	Price	BD561855	Price
.1860	BG5011860	Price	BD561860	Price
.1865	BG5011865	Price	BD561865	Price
.1870	BG5011870	Price	BD561870	Price
.1872	BG5011872	Price	-	-
.1877	BG5011877	Price	-	-
.1880	BG5011880	Price	BD561880	Price
.1885	BG5011885	Price	BD561885	Price
.1895	BG5011895	Price	BD561895	Price
.1900	BG5011900	Price	BD561900	Price
.1905	BG5011905	Price	BD561905	Price
.1915	BG5011915	Price	BD561915	Price
.1920	BG5011920	Price	BD561920	Price
.1925	BG5011925	Price	BD561925	Price
.1930	BG5011930	Price	BD561930	Price
.1940	BG5011940	Price	BD561940	Price
.1945	BG5011945	Price	-	-
.1950	BG5011950	Price	BD561950	Price
.1955	BG5011955	Price	BD561955	Price
.1965	BG5011965	Price	BD561965	Price
.1970	BG5011970	Price	BD561970	Price
.1975	BG5011975	Price	BD561975	Price
.1980	BG5011980	Price	BD561980	Price
.1985	BG5011985	Price	BD561985	Price
.1995	BG5011995	Price	BD561995	Price
.2000	BG5012000	Price	BD562000	Price
.2005	BG5012005	Price	BD562005	Price
.2015	BG5012015	Price	-	-
.2020	BG5012020	Price	BD562020	Price
.2025	BG5012025	Price	BD562025	Price
.2030	BG5012030	Price	BD562030	Price
.2035	BG5012035	Price	BD562035	Price
.2045	BG5012045	Price	BD562045	Price
.2050	BG5012050	Price	BD562050	Price
.2060	BG5012060	Price	-	-
.2065	BG5012065	Price	-	-
.2070	BG5012070	Price	BD562070	Price
.2075	BG5012075	Price	BD562075	Price
.2080	BG5012080	Price	BD562080	Price
.2085	BG5012085	Price	BD562085	Price
.2095	BG5012095	Price	-	-
.2100	BG5012100	Price	BD562100	Price
.2105	BG5012105	Price	BD562105	Price
.2110	BG5012110	Price	BD562110	Price
.2115	BG5012115	Price	-	-
.2120	BG5012120	Price	BD562120	Price
.2125	BG5012125	Price	BD562125	Price
.2135	BG5012135	Price	-	-
.2140	BG5012140	Price	BD562140	Price
.2145	BG5012145	Price	BD562145	Price
.2150	BG5012150	Price	BD562150	Price
.2155	BG5012155	Price	BD562155	Price
.2160	BG5012160	Price	BD562160	Price
.2170	BG5012170	Price	BD562170	Price
.2175	BG5012175	Price	BD562175	Price
.2177	BG5012177	Price	-	-
.2180	BG5012180	Price	BD562180	Price
.2185	BG5012185	Price	BD562185	Price
.2190	BG5012190	Price	BD562190	Price
.2195	BG5012195	Price	BD562195	Price
.2200	BG5012200	Price	BD562200	Price
.2205	BG5012205	Price	BD562205	Price
.2215	BG5012215	Price	BD562215	Price
.2220	BG5012220	Price	BD562220	Price
.2225	BG5012225	Price	BD562225	Price
.2230	BG5012230	Price	BD562230	Price
.2235	BG5012235	Price	BD562235	Price
.2240	BG5012240	Price	BD562240	Price
.2245	BG5012245	Price	-	-
.2250	BG5012250	Price	BD562250	Price
.2255	BG5012255	Price	BD562255	Price
.2260	BG5012260	Price	-	-
.2265	BG5012265	Price	-	-
.2270	BG5012270	Price	BD562270	Price
.2275	BG5012275	Price	-	-
.2285	BG5012285	Price	-	-
.2290	BG5012290	Price	BD562290	Price
.2295	BG5012295	Price	-	-
.2300	BG5012300	Price	BD562300	Price
.2305	BG5012305	Price	-	-
.2310	BG5012310	Price	BD562310	Price
.2315	BG5012315	Price	BD562315	Price
.2320	BG5012320	Price	BD562320	Price
.2325	BG5012325	Price	BD562325	Price
.2330	BG5012330	Price	BD562330	Price
.2335	BG5012335	Price	-	-
.2345	BG5012345	Price	BD562345	Price
.2350	BG5012350	Price	BD562350	Price
.2355	BG5012355	Price	BD562355	Price
.2360	BG5012360	Price	BD562360	Price
.2365	BG5012365	Price	BD562365	Price
.2370	BG5012370	Price	BD562370	Price
.2375	BG5012375	Price	BD562375	Price
.2385	BG5012385	Price	BD562385	Price
.2390	BG5012390	Price	BD562390	Price
.2395	BG5012395	Price	BD562395	Price
.2400	BG5012400	Price	BD562400	Price
.2405	BG5012405	Price	-	-
.2410	BG5012410	Price	BD562410	Price
.2415	BG5012415	Price	BD562415	Price
.2425	BG5012425	Price	BD562425	Price
.2430	BG5012430	Price	BD562430	Price
.2435	BG5012435	Price	-	-
.2440	BG5012440	Price	BD562440	Price
.2445	BG5012445	Price	BD562445	Price
.2450	BG5012450	Price	BD562450	Price
.2455	BG5012455	Price	BD562455	Price
.2465	BG5012465	Price	BD562465	Price
.2470	BG5012470	Price	BD562470	Price
.2475	BG5012475	Price	BD562475	Price
.2480	BG5012480	Price	BD562480	Price
.2485	BG5012485	Price	BD562485	Price
.2490	BG5012490	Price	BD562490	Price
.2495	BG5012495	Price	BD562495	Price
.2498	BG5012498	Price	-	-
.2502	BG5012502	Price	-	-
.2505	BG5012505	Price	BD562505	Price
.2510	BG5012510	Price	BD562510	Price
.2515	BG5012515	Price	BD562515	Price
.2520	BG5012520	Price	BD562520	Price
.2525	BG5012525	Price	BD562525	Price
.2530	BG5012530	Price	BD562530	Price
.2535	BG5012535	Price	BD562535	Price
.2540	BG5012540	Price	BD562540	Price
.2545	BG5012545	Price	BD562545	Price
.2550	BG5012550	Price	BD562550	Price
.2555	-	-	BD562555	Price
.2560	BG5012560	Price	BD562560	Price
.2565	BG5012565	Price	BD562565	Price
.2575	BG5012575	Price	BD562575	Price
.2580	BG5012580	Price	BD562580	Price
.2585	-	-	BD562585	Price
.2590	BG5012590	Price	BD562590	Price
.2595	-	-	BD562595	Price
.2600	BG5012600	Price	BD562600	Price
.2615	-	-	BD562615	Price
.2620	BG5012620	Price	BD562620	Price
.2630	BG5012630	Price	BD562630	Price
.2635	BG5012635	Price	-	-
.2640	BG5012640	Price	BD562640	Price
.2650	BG5012650	Price	BD562650	Price
.2655	-	-	BD562655	Price
.2670	BG5012670	Price	BD562670	Price
.2680	BG5012680	Price	BD562680	Price
.2690	BG5012690	Price	BD562690	Price
.2700	BG5012700	Price	BD562700	Price
.2710	BG5012710	Price	BD562710	Price
.2715	-	-	BD562715	Price
.2720	-	-	BD562720	Price
.2725	-	-	BD562725	Price
.2730	BG5012730	Price	BD562730	Price
.2740	BG5012740	Price	BD562740	Price
.2745	-	-	BD562745	Price
.2750	BG5012750	Price	BD562750	Price
.2755	-	-	BD562755	Price
.2760	BG5012760	Price	BD562760	Price
.2765	-	-	BD562765	Price
.2775	-	-	BD562775	Price
.2780	BG5012780	Price	BD562780	Price
.2785	-	-	BD562785	Price
.2790	BG5012790	Price	BD562790	Price
.2795	-	-	BD562795	Price
.2800	BG5012800	Price	BD562800	Price
.2805	-	-	BD562805	Price
.2815	-	-	BD562815	Price
.2818	BG5012818	Price	-	-
.2820	BG5012820	Price	BD562820	Price
.2825	-	-	BD562825	Price
.2830	BG5012830	Price	BD562830	Price
.2835	-	-	BD562835	Price
.2840	BG5012840	Price	BD562840	Price
.2850	BG5012850	Price	BD562850	Price
.2855	-	-	BD562855	Price
.2860	BG5012860	Price	BD562860	Price
.2870	BG5012870	Price	BD562870	Price
.2880	BG5012880	Price	BD562880	Price
.2885	-	-	BD562885	Price
.2890	BG5012890	Price	BD562890	Price
.2905	-	-	BD562905	Price
.2910	BG5012910	Price	BD562910	Price
.2920	BG5012920	Price	BD562920	Price
.2930	BG5012930	Price	BD562930	Price
.2940	BG5012940	Price	BD562940	Price
.2955	-	-	BD562955	Price
.2960	BG5012960	Price	BD562960	Price
.2965	-	-	BD562965	Price
.2970	BG5012970	Price	BD562970	Price
.2980	BG5012980	Price	BD562980	Price
.2990	BG5012990	Price	BD562990	Price
.3000	BG5013000	Price	BD563000	Price
.3005	-	-	BD563005	Price
.3010	BG5013010	Price	-	-
.3030	BG5013030	Price	BD563030	Price
.3040	BG5013040	Price	-	-
.3050	BG5013050	Price	BD563050	Price
.3060	BG5013060	Price	-	-
.3070	BG5013070	Price	BD563070	Price
.3075	-	-	BD563075	Price
.3080	BG5013080	Price	BD563080	Price
.3085	-	-	BD563085	Price
.3090	BG5013090	Price	BD563090	Price
.3095	-	-	BD563095	Price
.3100	BG5013100	Price	BD563100	Price
.3105	BG5013105	Price	BD563105	Price
.3110	BG5013110	Price	BD563110	Price
.3115	BG5013115	Price	BD563115	Price
.3120	BG5013120	Price	BD563120	Price
.3130	BG5013130	Price	BD563130	Price
.3135	BG5013135	Price	BD563135	Price
.3140	BG5013140	Price	BD563140	Price
.3145	BG5013145	Price	BD563145	Price
.3155	-	-	BD563155	Price
.3165	-	-	BD563165	Price
.3170	BG5013170	Price	BD563170	Price

(continued on next page)

RAPIDKUT® High Speed Steel & Solid Carbide Chucking Reamers - Decimal Size (cont.)



	Solid Carbide		High Speed Steel	
Size (in.)	Order No.	Price	Order No.	Price
.3175	-	-	BD563175	Price
.3180	BG5013180	Price	BD563180	Price
.3185	-	-	BD563185	Price
.3190	BG5013190	Price	BD563190	Price
.3200	BG5013200	Price	BD563200	Price
.3205	-	-	BD563205	Price
.3210	BG5013210	Price	BD563210	Price
.3220	BG5013220	Price	BD563220	Price
.3225	-	-	BD563225	Price
.3240	BG5013240	Price	BD563240	Price
.3245	-	-	BD563245	Price
.3250	BG5013250	Price	BD563250	Price
.3260	BG5013260	Price	BD563260	Price
.3270	BG5013270	Price	BD563270	Price
.3275	-	-	BD563275	Price
.3280	BG5013280	Price	-	-
.3285	-	-	BD563285	Price
.3290	BG5013290	Price	BD563290	Price
.3295	-	-	BD563295	Price
.3300	BG5013300	Price	BD563300	Price
.3310	BG5013310	Price	-	-
.3325	-	-	BD563325	Price
.3330	BG5013330	Price	BD563330	Price
.3340	BG5013340	Price	BD563340	Price
.3350	BG5013350	Price	BD563350	Price
.3360	BG5013360	Price	BD563360	Price
.3370	BG5013370	Price	-	-
.3380	BG5013380	Price	BD563380	Price
.3395	-	-	BD563395	Price
.3400	BG5013400	Price	BD563400	Price
.3410	BG5013410	Price	BD563410	Price
.3420	BG5013420	Price	BD563420	Price
.3425	-	-	BD563425	Price
.3430	BG5013430	Price	BD563430	Price
.3435	-	-	BD563435	Price
.3440	BG5013440	Price	BD563440	Price
.3450	BG5013450	Price	BD563450	Price
.3460	BG5013460	Price	BD563460	Price
.3470	BG5013470	Price	BD563470	Price
.3485	-	-	BD563485	Price
.3490	BG5013490	Price	BD563490	Price
.3500	BG5013500	Price	BD563500	Price
.3510	BG5013510	Price	BD563510	Price
.3520	BG5013520	Price	BD563520	Price
.3530	BG5013530	Price	BD563530	Price
.3535	-	-	BD563535	Price
.3540	BG5013540	Price	-	-
.3550	BG5013550	Price	BD563550	Price
.3555	-	-	BD563555	Price
.3560	BG5013560	Price	BD563560	Price
.3570	BG5013570	Price	BD563570	Price
.3575	-	-	BD563575	Price
.3590	BG5013590	Price	-	-
.3600	BG5013600	Price	BD563600	Price
.3610	BG5013610	Price	-	-
.3620	BG5013620	Price	BD563620	Price
.3630	BG5013630	Price	BD563630	Price
.3640	BG5013640	Price	-	-
.3650	BG5013650	Price	BD563650	Price
.3660	BG5013660	Price	BD563660	Price
.3665	-	-	BD563665	Price
.3670	BG5013670	Price	BD563670	Price
.3675	BG5013675	Price	-	-
.3690	BG5013690	Price	BD563690	Price
.3695	-	-	BD563695	Price
.3700	BG5013700	Price	BD563700	Price
.3705	-	-	BD563705	Price
.3710	BG5013710	Price	BD563710	Price
.3715	-	-	BD563715	Price
.3720	BG5013720	Price	BD563720	Price
.3725	-	-	BD563725	Price
.3730	BG5013730	Price	BD563730	Price
.3735	-	-	BD563735	Price
.3740	-	-	BD563740	Price
.3745	BG5013745	Price	BD563745	Price
.3755	BG5013755	Price	BD563755	Price
.3760	BG5013760	Price	BD563760	Price
.3765	BG5013765	Price	BD563765	Price
.3775	-	-	BD563775	Price
.3780	BG5013780	Price	-	-
9.60	-	-	BD563780	Price
.3785	-	-	BD563785	Price
.3790	BG5013790	Price	BD563790	Price
.3795	-	-	BD563795	Price
.3800	BG5013800	Price	BD563800	Price
.3805	-	-	BD563805	Price
.3810	BG5013810	Price	BD563810	Price
.3820	BG5013820	Price	BD563820	Price
.3825	-	-	BD563825	Price
.3830	BG5013830	Price	BD563830	Price
.3840	BG5013840	Price	BD563840	Price
.3850	BG5013850	Price	BD563850	Price
.3865	-	-	BD563865	Price
.3870	BG5013870	Price	BD563870	Price
.3880	BG5013880	Price	BD563880	Price
.3890	BG5013890	Price	BD563890	Price
.3895	-	-	BD563895	Price
.3900	BG5013900	Price	BD563900	Price
.3910	BG5013910	Price	BD563910	Price
.3920	BG5013920	Price	BD563920	Price
.3925	-	-	BD563925	Price
.3930	BG5013930	Price	BD563930	Price
.3935	-	-	BD563935	Price
.3940	BG5013940	Price	BD563940	Price
.3945	-	-	BD563945	Price
.3950	BG5013950	Price	BD563950	Price
.3955	-	-	BD563955	Price
.3960	BG5013960	Price	BD563960	Price
.3965	-	-	BD563965	Price
.3975	-	-	BD563975	Price
.3980	BG5013980	Price	BD563980	Price
.3990	BG5013990	Price	-	-
.4000	BG5014000	Price	BD564000	Price
.4010	BG5014010	Price	BD564010	Price
.4015	-	-	BD564015	Price
.4020	BG5014020	Price	BD564020	Price
.4030	BG5014030	Price	BD564030	Price
.4050	BG5014050	Price	BD564050	Price
.4055	-	-	BD564055	Price
.4060	BG5014060	Price	BD564060	Price
.4065	-	-	BD564065	Price
.4070	BG5014070	Price	BD564070	Price
.4080	BG5014080	Price	BD564080	Price
.4085	-	-	BD564085	Price
.4090	BG5014090	Price	BD564090	Price
.4095	-	-	BD564095	Price
.4100	BG5014100	Price	BD564100	Price
.4105	-	-	BD564105	Price
.4110	BG5014110	Price	-	-
.4120	BG5014120	Price	BD564120	Price
.4130	-	-	BD564130	Price
.4140	BG5014140	Price	BD564140	Price
.4145	-	-	BD564145	Price
.4150	BG5014150	Price	BD564150	Price
.4160	BG5014160	Price	BD564160	Price
.4170	BG5014170	Price	-	-
.4180	BG5014180	Price	BD564180	Price
.4185	-	-	BD564185	Price
.4190	BG5014190	Price	BD564190	Price
.4200	BG5014200	Price	-	-
.4210	BG5014210	Price	BD564210	Price
.4220	-	-	BD564220	Price
.4230	BG5014230	Price	BD564230	Price
.4240	BG5014240	Price	BD564240	Price
.4250	BG5014250	Price	BD564250	Price
.4260	BG5014260	Price	BD564260	Price
.4270	BG5014270	Price	BD564270	Price
.4275	-	-	BD564275	Price
.4280	BG5014280	Price	-	-
.4290	BG5014290	Price	-	-
.4300	BG5014300	Price	BD564300	Price
.4310	BG5014310	Price	BD564310	Price
.4320	BG5014320	Price	BD564320	Price
.4325	-	-	BD564325	Price
.4330	BG5014330	Price	BD564330	Price
.4335	-	-	BD564335	Price
.4340	BG5014340	Price	BD564340	Price
.4345	-	-	BD564345	Price
.4350	BG5014350	Price	BD564350	Price
.4355	BG5014355	Price	BD564355	Price
.4360	BG5014360	Price	BD564360	Price
.4365	BG5014365	Price	BD564365	Price
.4370	BG5014370	Price	BD564370	Price
.4380	BG5014380	Price	BD564380	Price
.4385	BG5014385	Price	BD564385	Price
.4390	BG5014390	Price	BD564390	Price
.4395	-	-	BD564395	Price
.4400	BG5014400	Price	BD564400	Price
.4405	-	-	BD564405	Price
.4410	BG5014410	Price	BD564410	Price
.4415	-	-	BD564415	Price
.4420	BG5014420	Price	BD564420	Price
.4425	-	-	BD564425	Price
.4430	BG5014430	Price	BD564430	Price
.4440	BG5014440	Price	BD564440	Price
.4450	BG5014450	Price	BD564450	Price
.4460	BG5014460	Price	BD564460	Price
.4470	BG5014470	Price	BD564470	Price
.4480	BG5014480	Price	BD564480	Price
.4490	BG5014490	Price	BD564490	Price
.4495	-	-	BD564495	Price
.4500	BG5014500	Price	BD564500	Price
.4510	BG5014510	Price	-	-
.4520	BG5014520	Price	-	-
.4530	BG5014530	Price	BD564530	Price
.4540	BG5014540	Price	BD564540	Price
.4545	-	-	BD564545	Price
.4550	BG5014550	Price	BD564550	Price
.4560	BG5014560	Price	BD564560	Price
.4570	BG5014570	Price	-	-
.4580	BG5014580	Price	BD564580	Price
.4590	BG5014590	Price	BD564590	Price
.4600	BG5014600	Price	BD564600	Price
.4610	BG5014610	Price	-	-
.4620	BG5014620	Price	-	-
.4630	BG5014630	Price	-	-
.4640	BG5014640	Price	BD564640	Price
.4650	BG5014650	Price	BD564650	Price
.4660	BG5014660	Price	BD564660	Price
.4670	BG5014670	Price	-	-
.4680	BG5014680	Price	BD564680	Price
.4690	BG5014690	Price	-	-
.4700	BG5014700	Price	BD564700	Price
.4705	-	-	BD564705	Price
.4710	BG5014710	Price	BD564710	Price
.4715	-	-	BD564715	Price
.4720	BG5014720	Price	BD564720	Price
.4725	-	-	BD564725	Price
.4730	BG5014730	Price	BD564730	Price
.4735	-	-	BD564735	Price
.4740	BG5014740	Price	BD564740	Price
.4745	-	-	BD564745	Price
.4750	BG5014750	Price	BD564750	Price
.4755	-	-	BD564755	Price
.4760	BG5014760	Price	BD564760	Price
.4765	-	-	BD564765	Price
.4770	BG5014770	Price	-	-
.4780	BG5014780	Price	BD564780	Price
.4790	BG5014790	Price	-	-
.4800	BG5014800	Price	BD564800	Price
.4805	BG5014805	Price	BD564805	Price
.4810	BG5014810	Price	BD564810	Price
.4820	BG5014820	Price	BD564820	Price
.4830	BG5014830	Price	-	-
.4840	BG5014840	Price	BD564840	Price
.4850	BG5014850	Price	-	-
.4860	BG5014860	Price	BD564860	Price
.4870	BG5014870	Price	BD564870	Price
.4880	BG5014880	Price	-	-
.4890	BG5014890	Price	BD564890	Price
.4900	BG5014900	Price	BD564900	Price
.4910	BG5014910	Price	BD564910	Price
.4920	-	-	BD564920	Price
.4930	BG5014930	Price	BD564930	Price
.4935	-	-	BD564935	Price
.4940	BG5014940	Price	BD564940	Price
.4950	BG5014950	Price	BD564950	Price
.4955	-	-	BD564955	Price
.4960	BG5014960	Price	BD564960	Price

(continued on next page)

RAPIDKUT High Speed Steel & Solid Carbide Chucking Reamers - Decimal Size (cont.)



	Solid Carbide		High Speed Steel	
Size (in.)	Order No.	Price	Order No.	Price
.4965	-	-	BD564965	Price
.4970	BG5014970	Price	BD564970	Price
.4975	-	-	BD564975	Price
.4980	BG5014980	Price	BD564980	Price
.4985	-	-	BD564985	Price
.4990	BG5014990	Price	BD564990	Price
.4995	BG5014995	Price	BD564995	Price
.5005	BG5015005	Price	BD565005	Price
.5010	BG5015010	Price	BD565010	Price
.5015	BG5015015	Price	BD565015	Price
.5020	BG5015020	Price	BD565020	Price
.5025	-	-	BD565025	Price
.5030	BG5015030	Price	BD565030	Price
.5035	-	-	BD565035	Price
.5040	BG5015040	Price	BD565040	Price
.5045	-	-	BD565045	Price
.5050	BG5015050	Price	BD565050	Price
.5060	-	-	BD565060	Price
.5070	-	-	BD565070	Price
.5080	-	-	BD565080	Price
.5090	-	-	BD565090	Price
.5100	-	-	BD565100	Price
.5605	-	-	BD565605	Price
.5610	-	-	BD565610	Price
.5615	-	-	BD565615	Price
.5620	-	-	BD565620	Price
.5630	-	-	BD565630	Price
.5635	-	-	BD565635	Price
.5640	-	-	BD565640	Price
.5645	-	-	BD565645	Price
.5650	-	-	BD565650	Price
.5655	-	-	BD565655	Price

	Solid Carbide		High Speed Steel	
Size (in.)	Order No.	Price	Order No.	Price
.6220	-	-	BD566220	Price
.6225	-	-	BD566225	Price
.6230	-	-	BD566230	Price
.6235	-	-	BD566235	Price
.6240	-	-	BD566240	Price
.6245	-	-	BD566245	Price
.6255	BG5016255	Price	BD566255	Price
.6260	-	-	BD566260	Price
.6265	-	-	BD566265	Price
.6270	-	-	BD566270	Price
.6275	-	-	BD566275	Price
.6280	-	-	BD566280	Price
.6310	BG5016310	Price	-	-
.6845	-	-	BD566845	Price
.6850	-	-	BD566850	Price
.6860	-	-	BD566860	Price
.6865	-	-	BD566865	Price
.6870	-	-	BD566870	Price
.6880	-	-	BD566880	Price
.6885	-	-	BD566885	Price
.6890	-	-	BD566890	Price
.6900	-	-	BD566900	Price
.6905	-	-	BD566905	Price
.7470	-	-	BD567470	Price
.7475	-	-	BD567475	Price
.7485	-	-	BD567485	Price
.7490	-	-	BD567490	Price
.7495	-	-	BD567495	Price
.7505	-	-	BD567505	Price
.7510	-	-	BD567510	Price
.7515	-	-	BD567515	Price
.7520	-	-	BD567520	Price
.7525	-	-	BD567525	Price
.7530	-	-	BD567530	Price
.7540	-	-	BD567540	Price
.7550	-	-	BD567550	Price
.8100	-	-	BD568100	Price
.8110	-	-	BD568110	Price
.8115	-	-	BD568115	Price
.8120	-	-	BD568120	Price
.8130	-	-	BD568130	Price
.8140	-	-	BD568140	Price
.8720	-	-	BD568720	Price
.8730	-	-	BD568730	Price
.8735	-	-	BD568735	Price
.8740	-	-	BD568740	Price

	Solid Carbide		High Speed Steel	
Size (in.)	Order No.	Price	Order No.	Price
.8745	-	-	BD568745	Price
.8755	-	-	BD568755	Price
.8760	-	-	BD568760	Price
.8765	-	-	BD568765	Price
.8770	-	-	BD568770	Price
.8780	-	-	BD568780	Price
.9340	-	-	BD569340	Price
.9970	-	-	BD569970	Price
.9980	-	-	BD569980	Price
.9985	-	-	BD569985	Price
.9990	-	-	BD569990	Price
.9995	-	-	BD569995	Price
1.0005	-	-	BD5610005	Price
1.0010	-	-	BD5610010	Price
1.0015	-	-	BD5610015	Price
1.0020	-	-	BD5610020	Price
1.0025	-	-	BD5610025	Price
1.0030	-	-	BD5610030	Price
1.00mm	BG5014001	Price	-	-
1.50mm	BG50140015	Price	-	-
2.00mm	BG5014002	Price	-	-
2.50mm	BG50140025	Price	-	-
3.00mm	BG5014003	Price	-	-
3.50mm	BG50140035	Price	-	-
4.00mm	BG5014004	Price	-	-
4.50mm	BG50140045	Price	-	-
5.00mm	BG5014005	Price	-	-
5.50mm	BG50140055	Price	-	-
6.00mm	BG5014006	Price	-	-
6.50mm	BG50140065	Price	-	-
7.00mm	BG5014007	Price	-	-
7.50mm	BG50140075	Price	-	-
8.00mm	BG5014008	Price	-	-
8.50mm	BG50140085	Price	-	-
9.00mm	BG5014009	Price	-	-
9.50mm	BG50140095	Price	-	-
10.50mm	BG50140105	Price	-	-
11.00mm	BG5014011	Price	-	-
11.50mm	BG50140115	Price	-	-
12.00mm	BG5014012	Price	-	-
12.50mm	BG50140125	Price	-	-
13.00mm	BG5014013	Price	-	-
14.00mm	BG5014014	Price	-	-
15.00mm	BG5014015	Price	-	-
16.00mm	BG5014016	Price	-	-

FULLERTON Straight Shank Straight Flute Chucking Reamers

Series 1400 • Solid Carbide

- Male centers on items up to .1124 (2.86mm)
- Female centers on items over .1124 (2.86mm)
- Cutter diameter tolerance: up to .2500 +.0002/-.0000; over .2501 +.0003/-.0000
- Shank diameter tolerance: +.0005/-.0005 (+0.013mm/-0.013mm)
- 45 Degree lead angle



Size	LOC (in.)	OAL (in.)	No. of Flutes	Order No.	Price
70	3/8	1-1/2	4	FT8014001	Price
69	3/8	1-1/2	4	FT8014002	Price
68	3/8	1-1/2	4	FT8014003	Price
1/32	3/8	1-1/2	4	FT8014004	Price
67	3/8	1-1/2	4	FT8014005	Price
66	3/8	1-1/2	4	FT8014006	Price
65	3/8	1-1/2	4	FT8014007	Price
64	3/8	1-1/2	4	FT8014008	Price
63	3/8	1-1/2	4	FT8014009	Price
62	3/8	1-1/2	4	FT8014010	Price
61	3/8	1-1/2	4	FT8014011	Price
1.00	1mm	1-1/2	4	FT8014012	Price
60	3/8	1-1/2	4	FT8014013	Price
59	3/8	1-1/2	4	FT8014014	Price
58	3/8	1-1/2	4	FT8014015	Price
57	3/8	1-1/2	4	FT8014016	Price
56	3/8	1-1/2	4	FT8014017	Price
3/64	3/8	1-1/2	4	FT8014018	Price
55	3/8	1-1/2	4	FT8014019	Price
54	3/8	1-1/2	4	FT8014020	Price
1.50	1mm	1-1/2	4	FT8014022	Price
53	3/8	1-1/2	4	FT8014023	Price
1/16	3/8	1-1/2	4	FT8014024	Price
52	3/8	1-1/2	4	FT8014025	Price
51	1/2	2	4	FT8014026	Price

Size	LOC (in.)	OAL (in.)	No. of Flutes	Order No.	Price
50	1/2	2	4	FT8014027	Price
49	1/2	2	4	FT8014028	Price
48	1/2	2	4	FT8014029	Price
5/64	1/2	2	4	FT8014030	Price
47	1/2	2	4	FT8014031	Price
2.00	12mm	1-31/32	4	FT8014032	Price
46	1/2	2	4	FT8014033	Price
45	1/2	2	4	FT8014034	Price
44	1/2	2	4	FT8014035	Price
43	1/2	2	4	FT8014036	Price
42	1/2	2	4	FT8014037	Price
3/32	1/2	2	4	FT8014038	Price
41	1/2	2	4	FT8014039	Price
40	5/8	2-1/4	4	FT8014040	Price
2.50	16mm	2-1/4	4	FT8014041	Price
39	5/8	2-1/4	4	FT8014042	Price
38	5/8	2-1/4	4	FT8014043	Price
37	5/8	2-1/4	4	FT8014044	Price
36	5/8	2-1/4	4	FT8014045	Price
7/64	5/8	2-1/4	4	FT8014046	Price
35	5/8	2-1/4	4	FT8014047	Price
34	5/8	2-1/4	4	FT8014048	Price
33	5/8	2-1/4	4	FT8014049	Price
32	5/8	2-1/4	4	FT8014050	Price
3.00	16mm	2-1/4	4	FT8014051	Price

Size	LOC (in.)	OAL (in.)	No. of Flutes	Order No.	Price
31	5/8	2-1/4	4	FT8014052	Price
.1240	5/8	2-1/4	4	FT8014150	Price
.1245	5/8	2-1/4	4	FT8014151	Price
1/8	7/8	3-1/2	4	FT8014511	Price
1/8	5/8	2-1/4	4	FT8014053	Price
.1255	5/8	2-1/4	4	FT8014153	Price
.1260	5/8	2-1/4	4	FT8014154	Price
30	3/4	2-1/2	4	FT8014054	Price
29	3/4	2-1/2	4	FT8014055	Price
3.50	20mm	2-1/2	4	FT8014056	Price
28	3/4	2-1/2	4	FT8014057	Price
9/64	7/8	3-1/2	4	FT8014512	Price
9/64	3/4	2-1/2	4	FT8014058	Price
27	3/4	2-1/2	4	FT8014059	Price
26	3/4	2-1/2	4	FT8014060	Price
25	3/4	2-1/2	4	FT8014061	Price
24	3/4	2-1/2	4	FT8014062	Price
23	3/4	2-1/2	4	FT8014063	Price
5/32	1	4	4	FT8014513	Price
5/32	3/4	2-1/2	4	FT8014064	Price
22	3/4	2-1/2	4	FT8014065	Price
.1890	7/8	2-3/4	4	FT8014079	Price
4.00	20mm	2-1/2	4	FT8014066	Price
21	3/4	2-1/2	4	FT8014067	Price
20	7/8	2-3/4	4	FT8014068	Price

(continued on next page)

FULLERTON Straight Shank Straight Flute Chucking Reamers (cont.)



Size	LOC (in.)	OAL (in.)	No. of Flutes	Order No.	Price
.1660	7/8	2-3/4	4	**FT8014069**	Price
.1695	7/8	2-3/4	4	**FT8014070**	Price
.1719	7/8	2-3/4	4	**FT8014071**	Price
.1719	1	4	4	**FT8014514**	Price
.1730	7/8	2-3/4	4	**FT8014072**	Price
.1770	7/8	2-3/4	4	**FT8014073**	Price
.1772	22mm	2-3/4	4	**FT8014074**	Price
.1800	7/8	2-3/4	4	**FT8014075**	Price
.1820	7/8	2-3/4	4	**FT8014076**	Price
.1850	7/8	2-3/4	4	**FT8014077**	Price
.1865	7/8	2-3/4	4	**FT8014155**	Price
.1870	7/8	2-3/4	4	**FT8014156**	Price
.1872	7/8	2-3/4	4	**FT8014157**	Price
3/16	7/8	2-3/4	4	**FT8014078**	Price
3/16	1-1/8	4-1/2	4	**FT8014515**	Price
.1880	7/8	2-3/4	4	**FT8014158**	Price
.1885	7/8	2-3/4	4	**FT8014159**	Price
.1910	7/8	2-3/4	4	**FT8014080**	Price
.1935	1	3	6	**FT8014081**	Price
.1960	1	3	6	**FT8014082**	Price
.1969	25mm	3	6	**FT8014083**	Price
.1990	1	3	6	**FT8014084**	Price
.2010	1	3	6	**FT8014085**	Price
.2031	1-1/4	5	6	**FT8014516**	Price
.2031	1	3	6	**FT8014086**	Price
.2040	1	3	6	**FT8014087**	Price
.2055	1	3	6	**FT8014088**	Price
.2090	1	3	6	**FT8014089**	Price
.2130	1	3	6	**FT8014090**	Price
.2165	25mm	3	6	**FT8014091**	Price
.2188	1-1/4	5	6	**FT8014517**	Price
.2188	1	3	6	**FT8014092**	Price
.2210	1	3	6	**FT8014093**	Price
.2280	1	3	6	**FT8014094**	Price
.2344	1	3	6	**FT8014096**	Price
.2344	1-1/4	6	6	**FT8014518**	Price
.2362	25mm	3	6	**FT8014097**	Price
.2490	1	3	6	**FT8014160**	Price
.2495	1	3	6	**FT8014161**	Price
.2497	1	3	6	**FT8014162**	Price
1/4	1	3	6	**FT8014098**	Price
1/4	1-1/2	6	6	**FT8014519**	Price
.2505	1	3	6	**FT8014163**	Price
.2510	1	3	6	**FT8014164**	Price
.2559	28mm	3-1/4	6	**FT8014099**	Price
.2969	1-5/8	6	6	**FT8014522**	Price
.2656	1-1/8	3-1/4	6	**FT8014100**	Price
.2656	1-1/2	6	6	**FT8014520**	Price
.2756	28mm	3-1/4	6	**FT8014101**	Price
9/32	1-1/2	6	6	**FT8014521**	Price
9/32	1-1/8	3-1/4	6	**FT8014102**	Price
7.50	28mm	3-1/4	6	**FT8014103**	Price
.2969	1-1/8	3-1/4	6	**FT8014104**	Price
.3115	1-1/8	3-1/4	6	**FT8014165**	Price
.3120	1-1/8	3-1/4	6	**FT8014166**	Price
5/16	1-5/8	6	6	**FT8014523**	Price
5/16	1-1/8	3-1/4	6	**FT8014105**	Price
.3130	1-1/8	3-1/4	6	**FT8014167**	Price
.3135	1-1/8	3-1/4	6	**FT8014168**	Price
8.00	28mm	3-1/4	6	**FT8014106**	Price
21/64	1-1/4	3-1/2	6	**FT8014107**	Price
21/64	1-5/8	6	6	**FT8014524**	Price
8.50	1.26	3-1/2	6	**FT8014108**	Price
11/32	1-5/8	6	6	**FT8014525**	Price
11/32	1-1/4	3-1/2	6	**FT8014109**	Price
9.00	1.26	3-1/2	6	**FT8014110**	Price
23/64	1-1/4	3-1/2	6	**FT8014111**	Price
23/64	1-3/4	7	6	**FT8014526**	Price
9.50	1.26	3-1/2	6	**FT8014112**	Price
9.50	1-1/4	3-1/2	6	**FT8014169**	Price
.3745	1-1/4	3-1/2	6	**FT8014170**	Price
3/8	1-1/4	3-1/2	6	**FT8014113**	Price
3/8	1-3/4	7	6	**FT8014527**	Price
.3755	1-1/4	3-1/2	6	**FT8014171**	Price
.3760	1-1/4	3-1/2	6	**FT8014172**	Price
25/64	1-1/2	4	6	**FT8014114**	Price
25/64	1-3/4	7	6	**FT8014528**	Price
10.00	1.496	4	6	**FT8014115**	Price
13/32	1-3/4	7	6	**FT8014529**	Price
13/32	1-1/2	4	6	**FT8014116**	Price
10.50	1.496	4	6	**FT8014117**	Price
27/64	1-1/2	4	6	**FT8014118**	Price
27/64	1-3/4	7	6	**FT8014530**	Price
11.00	1.496	4	6	**FT8014119**	Price
.4365	1-1/2	4	6	**FT8014173**	Price
.4370	1-1/2	4	6	**FT8014180**	Price
7/16	1-3/4	7	6	**FT8014531**	Price
7/16	1-1/2	4	6	**FT8014120**	Price
.4380	1-1/2	4	6	**FT8014181**	Price
.4385	1-1/2	4	6	**FT8014174**	Price
11.50	1.496	4	6	**FT8014121**	Price
29/64	1-3/4	8	6	**FT8014532**	Price
29/64	1-1/2	4	6	**FT8014122**	Price
15/32	1-1/2	4	6	**FT8014123**	Price
15/32	1-3/4	8	6	**FT8014533**	Price
12.00	1.496	4	6	**FT8014124**	Price
31/64	1-3/4	8	6	**FT8014534**	Price
31/64	1-1/2	4	6	**FT8014125**	Price
12.50	1.496	4	6	**FT8014126**	Price
.4990	1-1/2	4	6	**FT8014175**	Price
.4995	1-1/2	4	6	**FT8014182**	Price
1/2	1-1/2	4	6	**FT8014127**	Price
1/2	1-3/4	8	6	**FT8014535**	Price
.5005	1-1/2	4	6	**FT8014183**	Price
.5010	1-1/2	4	6	**FT8014176**	Price
9/16	1-7/8	9	6	**FT8014536†**	Price
5/8	1-7/8	9	6	**FT8014537†**	Price
11/16	2	9-1/2	6	**FT8014538†**	Price
3/4	2	9-1/2	6	**FT8014539†**	Price
7/8	2	10	8	**FT8014540†**	Price
1	2	10	8	**FT8014541†**	Price

† Solid carbide head on steel shank

General Purpose Hand Taps

Machine Screw Sizes • Straight Flute • Ground Thread • High Speed Steel



Bottoming



Plug



Taper

PROCUT RAPIDKUT PROCUT RAPIDKUT PROCUT RAPIDKUT

			Rapidkut		ProCut		Rapidkut		ProCut		Rapidkut	
			Bottoming		Plug				Taper			
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
0-80	H1	2	**EK50900801B**	Price	**EK65900801B**	Price	**EK50900801P**	Price	**EK65900801P**	Price	**EK50900801T**	Price	**EK65900801T**	Price
0-80	H2	2	**EK50900802B**	Price	**EK65900802B**	Price	**EK50900802P**	Price	**EK65900802P**	Price	**EK50900802T**	Price	**EK65900802T**	Price
1-64	H1	2	**EK50901641B**	Price	**EK65901641B**	Price	**EK50901641P**	Price	**EK65901641P**	Price	**EK50901641T**	Price	**EK65901641T**	Price
1-64	H2	2	**EK50901642B**	Price	**EK65901642B**	Price	**EK50901642P**	Price	**EK65901642P**	Price	**EK50901642T**	Price	**EK65901642T**	Price
1-72	H1	2	**EK50901722B**	Price	**EK65901721B**	Price	**EK50901722P**	Price	**EK65901721P**	Price	**EK50901721T**	Price	**EK65901721T**	Price
1-72	H2	2	**EK50901721B**	Price	**EK65901722B**	Price	**EK50901721P**	Price	**EK65901722P**	Price	**EK50901722T**	Price	**EK65901722T**	Price
2-56	H1	3	-	-	**EK65902561B**	Price	**EK50902561P**	Price	**EK65902561P**	Price	**EK50902561T**	Price	**EK65902561T**	Price
2-56	H2	3	**EK50902562B**	Price	**EK65902562B**	Price	**EK50902562P**	Price	**EK65902562P**	Price	**EK50902562T**	Price	**EK65902562T**	Price
2-64	H1	3	**EK50902641B**	Price	**EK65902641B**	Price	**EK50902641P**	Price	**EK65902641P**	Price	**EK50902641T**	Price	-	-
2-64	H2	3	**EK50902642B**	Price	**EK65902642B**	Price	**EK50902642P**	Price	**EK65902642P**	Price	**EK50902642T**	Price	-	-
3-48	H1	3	-	-	**EK65903481B**	Price	-	-	**EK65903481P**	Price	**EK50903481T**	Price	-	-
3-48	H2	3	**EK50903482B**	Price	**EK65903482B**	Price	**EK50903482P**	Price	**EK65903482P**	Price	**EK50903482T**	Price	**EK65903482T**	Price
3-56	H2	3	**EK50903562B**	Price	**EK65903562B**	Price	**EK50903562P**	Price	**EK65903562P**	Price	**EK50903562T**	Price	**EK65903562T**	Price
3-56	H1	3	**EK50903561B**	Price	-	-	**EK50903561P**	Price	-	-	-	-	-	-
4-36	H1	3	-	-	**EK65904361B**	Price	**EK50904361P**	Price	-	-	-	-	-	-
4-36	H2	3	**EK50904362B**	Price	**EK65904362B**	Price	**EK50904362P**	Price	**EK65904362P**	Price	**EK50904362T**	Price	-	-
4-40	H1	3	**EK50904401B**	Price	-	-	**EK50904401P**	Price	**EK65904401P**	Price	-	-	**EK65904401T**	Price
4-40	H2	3	**EK50904402B**	Price	**EK65904402B**	Price	**EK50904402P**	Price	**EK65904402P**	Price	**EK50904402T**	Price	**EK65904402T**	Price
4-48	H1	3	-	-	-	-	-	-	**EK65904481P**	Price	-	-	-	-
4-48	H2	3	**EK50904482B**	Price	**EK65904482B**	Price	**EK50904482P**	Price	**EK65904482P**	Price	**EK50904482T**	Price	**EK65904482T**	Price
5-40	H1	3	-	-	**EK65905401B**	Price	**EK50905401P**	Price	**EK65905401P**	Price	-	-	**EK65905401T**	Price
5-40	H2	3	**EK50905402B**	Price	**EK65905402B**	Price	**EK50905402P**	Price	**EK65905402P**	Price	**EK50905402T**	Price	**EK65905402T**	Price
5-44	H1	3	**EK50905442B**	Price	**EK65905441B**	Price	**EK50905442P**	Price	**EK65905441P**	Price	**EK50905442T**	Price	-	-
5-44	H2	3	**EK50905441B**	Price	**EK65905442B**	Price	-	-	**EK65905442P**	Price	**EK50905441T**	Price	**EK65905442T**	Price

(continued on next page)

General Purpose Hand Taps (cont.)

Machine Screw Sizes • Straight Flute • Ground Thread • High Speed Steel



Bottoming



Plug



Taper

PROCUT RAPIDKUT PROCUT RAPIDKUT PROCUT RAPIDKUT

			Bottoming		Rapidkut		Plug		Rapidkut		Taper		Rapidkut	
Size	Thread Limits	No. of Flutes	ProCut Order No.	Price	Rapidkut Order No.	Price	ProCut Order No.	Price	Rapidkut Order No.	Price	ProCut Order No.	Price	Rapidkut Order No.	Price
6-32	H1	3	-	-	EK65906321B	Price	EK50906321P	Price	-	-	EK50906321T	Price	-	-
6-32	H2	3	EK50906322B	Price	EK65906322B	Price	EK50906322P	Price	EK65906322P	Price	EK50906322T	Price	EK65906322T	Price
6-32	H3	3	EK50906323B	Price	EK65906323B	Price	EK50906323P	Price	EK65906323P	Price	EK50906323T	Price	EK65906323T	Price
6-40	H1	3	EK50906401B	Price	EK65906401B	Price	EK50906401P	Price	EK65906401P	Price	EK50906401T	Price	-	-
6-40	H2	3	EK50906402B	Price	EK65906402B	Price	EK50906402P	Price	EK65906402P	Price	EK50906402T	Price	EK65906402T	Price
6-40	H3	3	EK50906403B	Price	-	-	EK50906403P	Price	EK65906403P	Price	EK50906403T	Price	-	-
8-32	H1	4	EK50908321B	Price	-	-	EK50908321P	Price	EK65908321P	Price	-	-	EK65908321T	Price
8-32	H2	4	EK50908322B	Price	EK65908322B	Price	EK50908322P	Price	EK65908322P	Price	EK50908322T	Price	EK65908322T	Price
8-32	H3	4	EK50908323B	Price	EK65908323B	Price	EK50908323P	Price	EK65908323P	Price	EK50908323T	Price	EK65908323T	Price
8-36	H1	3	-	-	-	-	-	-	EK65908361P	Price	-	-	-	-
8-36	H1	4	-	-	EK65908361B	Price	-	-	-	-	-	-	EK65908361T	Price
8-36	H2	4	EK50908362B	Price	EK65908362B	Price	EK50908362P	Price	EK65908362P	Price	EK50908362T	Price	EK65908362T	Price
8-36	H3	4	EK50908363B	Price	-	-	EK50908363P	Price	EK65908363P	Price	EK50908363T	Price	-	-
10-24	H1	4	-	-	EK65910241B	Price	EK50910241P	Price	EK65910241P	Price	-	-	EK65910241T	Price
10-24	H2	4	EK50910242B	Price	EK65910242B	Price	EK50910242P	Price	EK65910242P	Price	EK50910242T	Price	EK65910242T	Price
10-24	H3	4	EK50910243B	Price	EK65910243B	Price	EK50910243P	Price	EK65910243P	Price	EK50910243T	Price	EK65910243T	Price
10-32	H1	4	EK50910321B	Price	EK65910321B	Price	EK50910321P	Price	EK65910321P	Price	EK50910321T	Price	EK65910321T	Price
10-32	H2	4	EK50910322B	Price	EK65910322B	Price	EK50910322P	Price	EK65910322P	Price	EK50910322T	Price	EK65910322T	Price
10-32	H3	4	EK50910323B	Price	EK65910323B	Price	EK50910323P	Price	EK65910323P	Price	EK50910323T	Price	EK65910323T	Price
12-24	H1	4	EK50912241B	Price	EK65912241B	Price	-	-	EK65912241P	Price	-	-	EK65912241T	Price
12-24	H2	4	-	-	EK65912242B	Price	-	-	-	-	-	-	EK65912242T	Price
12-24	H3	4	EK50912243B	Price	EK65912243B	Price	EK50912243P	Price	EK65912243P	Price	EK50912243T	Price	EK65912243T	Price
12-28	H1	4	-	-	EK65912281B	Price	-	-	-	-	-	-	EK65912281T	Price
12-28	H3	4	EK50912283B	Price	EK65912283B	Price	EK50912283P	Price	EK65912283P	Price	EK50912283T	Price	EK65912283T	Price
14-20	H3	4	-	-	-	-	EK50914203P†	Price	-	-	EK50914203T†	Price	-	-
14-24	H1	4	-	-	-	-	EK50914241P†	Price	-	-	-	-	-	-
14-24	H3	4	EK50914243B†	Price	-	-	EK50914243P†	Price	-	-	EK50914243T†	Price	-	-

†National Thread Special

Hand Taps

Fractional Sizes • Straight Flute • Ground Thread • High Speed Steel

PROCUT RAPIDKUT PROCUT RAPIDKUT PROCUT RAPIDKUT

			Bottoming		Bottoming		Plug		Plug		Taper		Taper	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
9/16-18	H2	4	-	-	-	-	EK509182P	Price	-	-	EK509182T	Price	-	-
9/16-18	H3	4	EK509183B	Price	EK659183B	Price	EK509183P	Price	EK659183P	Price	EK509183T	Price	EK659183T	Price
9/16-18	H5	4	-	-	-	-	EK509185P	Price	-	-	-	-	-	-
5/8-11	H2	4	EK5010112B	Price	-	-	-	-	-	-	-	-	-	-
5/8-11	H3	4	EK5010113B	Price	EK6510113B	Price	EK5010113P	Price	EK6510113P	Price	EK5010113T	Price	EK6510113T	Price
5/8-18	H1	4	EK5010181B	Price	-	-	EK5010181P	Price	-	-	-	-	-	-
5/8-18	H3	4	EK5010183B	Price	EK6510183B	Price	EK5010183P	Price	EK6510183P	Price	EK5010183T	Price	EK6510183T	Price
5/8-18	H5	4	EK5010185B	Price	-	-	EK5010185P	Price	-	-	-	-	-	-
11/16-11	H3	4	EK5011113B	Price	EK6511113B	Price	EK5011113P	Price	EK6511113P	Price	EK5011113T	Price	EK6511113T	Price
11/16-16	H3	4	-	-	EK6511163B	Price	EK5011163P	Price	EK6511163P	Price	EK5011163T	Price	EK6511163T	Price
3/4-10	H3	4	EK5012103B	Price	EK6512103B	Price	EK5012103P	Price	EK6512103P	Price	EK5012103T	Price	EK6512103T	Price
3/4-10	H5	4	EK5012105B	Price	EK6512105B	Price	EK5012105P	Price	-	-	EK5012105T	Price	-	-
3/4-16	H1	4	-	-	-	-	EK5012161P	Price	-	-	-	-	-	-
3/4-16	H3	4	EK5012163B	Price	EK6512163B	Price	EK5012163P	Price	EK6512163P	Price	EK5012163T	Price	EK6512163T	Price
3/4-16	H4	4	-	-	-	-	EK5012164P	Price	-	-	EK5012164T	Price	-	-
3/4-16	H5	4	EK5012165B	Price	-	-	EK5012165P	Price	-	-	-	-	-	-
7/8-9	H2	4	-	-	-	-	EK5014092P	Price	-	-	-	-	-	-
7/8-9	H3	4	EK5014093B	Price	-	-	EK5014093P	Price	-	-	-	-	-	-
7/8-9	H4	4	EK5014094B	Price	EK6514094B	Price	EK5014094P	Price	EK6514094P	Price	EK5014094T	Price	EK6514094T	Price
7/8-14	H2	4	-	-	-	-	EK5014142P	Price	-	-	-	-	-	-
7/8-14	H3	4	EK5014143B	Price	-	-	-	-	-	-	-	-	-	-
7/8-14	H4	4	EK5014144B	Price	EK6514144B	Price	EK5014144P	Price	EK6514144P	Price	EK5014144T	Price	EK6514144T	Price
1-8	H4	4	EK5016084B	Price	EK6516084B	Price	EK5016084P	Price	EK6516084P	Price	EK5016084T	Price	EK6516084T	Price
1-12	H3	4	-	-	-	-	EK5016123P	Price	-	-	-	-	-	-
1-12	H4	4	EK5016124B	Price	EK6516124B	Price	EK5016124P	Price	EK6516124P	Price	EK5016124T	Price	EK6516124T	Price
1-14	H4	4	EK5016144B	Price	EK6516144B	Price	EK5016144P	Price	EK6516144P	Price	EK5016144T	Price	EK6516144T	Price
1-1/8-7	H4	4	EK5018074B	Price	EK6518074B	Price	EK5018074P	Price	EK6518074P	Price	EK5018074T	Price	EK6518074T	Price
1-1/8-12	H4	4	EK5018124B	Price	EK6518124B	Price	EK5018124P	Price	EK6518124P	Price	EK5018124T	Price	EK6518124T	Price
1-1/4-7	H4	4	EK5020074B	Price	EK6520074B	Price	EK5020074P	Price	EK6520074P	Price	EK5020074T	Price	EK6520074T	Price
1-1/4-12	H4	6	EK5020124B	Price	EK6520124B	Price	EK5020124P	Price	EK6520124P	Price	EK5020124T	Price	EK6520124T	Price
1-3/8-6	H4	4	EK5022064B	Price	EK6522064B	Price	EK5022064P	Price	EK6522064P	Price	EK5022064T	Price	EK6522064T	Price
1-3/8-12	H4	6	EK5022124B	Price	EK6522124B	Price	EK5022124P	Price	EK6522124P	Price	EK5022124T	Price	EK6522124T	Price
1-1/2-6	H4	4	EK5024064B	Price	EK6524064B	Price	EK5024064P	Price	EK6524064P	Price	EK5024064T	Price	EK6524064T	Price
1-1/2-12	H4	6	EK5024124B	Price	EK6524124B	Price	EK5024124P	Price	EK6524124P	Price	EK5024124T	Price	EK6524124T	Price

General Purpose Hand Taps

Fractional Sizes • Straight Flute • Ground Thread • High Speed Steel

- Optional tolerances available while supplies last
- Standard tolerances in stock for immediate delivery
- TiN coating available on all taps

RAPIDKUT™
- Manufactured in USA
- Consistent high quality threads
- General & production applications
- Premium steel ~ maximum tap life

PRO CUT™
- Made to strict ASA specifications, quality and economy

			Bottoming				Plug				Taper			
			PROCUT		RAPIDKUT		PROCUT		RAPIDKUT		PROCUT		RAPIDKUT	
			Bottoming		Rapidkut		ProCut		Rapidkut		ProCut		Rapidkut	
			Bottoming				Plug				Price			
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4-20	H1	4	EK504201B	Price	EK654201B	Price	EK504201P	Price	EK654201P	Price	EK504201T	Price	EK654201T	Price
1/4-20	H2	4	EK504202B	Price	EK654202B	Price	EK504202P	Price	EK654202P	Price	EK504202T	Price	EK654202T	Price
1/4-20	H3	4	EK504203B	Price	EK654203B	Price	EK504203P	Price	EK654203P	Price	EK504203T	Price	EK654203T	Price
1/4-28	H1	4	EK504281B	Price	-	-	EK504281P	Price	-	-	-	-	-	-
1/4-28	H2	4	EK504282B	Price	EK654282B	Price	EK504282P	Price	EK654282P	Price	EK504282T	Price	EK654282T	Price
1/4-28	H3	4	EK504283B	Price	EK654283B	Price	EK504283P	Price	EK654283P	Price	EK504283T	Price	EK654283T	Price
1/4-28	H4	4	EK504284B	Price	-	-	-	-	EK654284P	Price	-	-	-	-
5/16-18	H1	4	EK505181B	Price	-	-	EK505181P	Price	-	-	-	-	-	-
5/16-18	H2	4	EK505182B	Price	EK655182B	Price	EK505182P	Price	EK655182P	Price	EK505182T	Price	EK655182T	Price
5/16-18	H3	4	EK505183B	Price	EK655183B	Price	EK505183P	Price	EK655183P	Price	EK505183T	Price	EK655183T	Price
5/16-18	H4	4	EK505184B	Price	-	-	-	-	-	-	-	-	-	-
5/16-18	H5	4	EK505185B	Price	EK655185B	Price	EK505185P	Price	EK655185P	Price	-	-	-	-
5/16-24	H1	4	EK505241B	Price	-	-	EK505241P	Price	-	-	EK505241T	Price	-	-
5/16-24	H2	4	EK505242B	Price	-	-	EK505242P	Price	EK655242P	Price	EK505242T	Price	EK655242T	Price
5/16-24	H3	4	EK505243B	Price	EK655243B	Price	EK505243P	Price	EK655243P	Price	EK505243T	Price	EK655243T	Price
5/16-24	H4	4	EK505244B	Price	-	-	EK505244P	Price	-	-	EK505244T	Price	-	-
5/16-24	H5	4	EK505245B	Price	-	-	EK505245P	Price	-	-	-	-	-	-
3/8-16	H1	4	EK506161B	Price	-	-	EK506161P	Price	-	-	-	-	-	-
3/8-16	H2	4	EK506162B	Price	EK656162B	Price	EK506162P	Price	EK656162P	Price	EK506162T	Price	EK656162T	Price
3/8-16	H3	4	EK506163B	Price	EK656163B	Price	EK506163P	Price	EK656163P	Price	EK506163T	Price	EK656163T	Price
3/8-16	H4	4	EK506164B	Price	-	-	-	-	-	-	-	-	-	-
3/8-16	H5	4	EK506165B	Price	-	-	EK506165P	Price	EK656165P	Price	-	-	-	-
3/8-24	H1	4	EK506241B	Price	-	-	EK506241P	Price	-	-	EK506241T	Price	-	-
3/8-24	H2	4	EK506242B	Price	EK656242B	Price	-	-	EK656242P	Price	-	-	-	-
3/8-24	H3	4	EK506243B	Price	EK656243B	Price	EK506243P	Price	EK656243P	Price	EK506243T	Price	EK656243T	Price
3/8-24	H4	4	EK506244B	Price	-	-	EK506244P	Price	-	-	EK506244T	Price	-	-
7/16-14	H1	4	EK507141B	Price	-	-	EK507141P	Price	-	-	-	-	-	-
7/16-14	H2	4	EK507142B	Price	-	-	EK507142P	Price	-	-	-	-	-	-
7/16-14	H3	4	EK507143B	Price	EK657143B	Price	EK507143P	Price	EK657143P	Price	EK507143T	Price	EK657143T	Price
7/16-14	H5	4	EK507145B	Price	-	-	EK507145P	Price	-	-	-	-	-	-
7/16-20	H1	4	-	-	-	-	EK507201P	Price	-	-	-	-	-	-
7/16-20	H2	4	EK507202B	Price	-	-	EK507202P	Price	-	-	-	-	-	-
7/16-20	H3	4	EK507203B	Price	EK657203B	Price	EK507203P	Price	EK657203P	Price	EK507203T	Price	EK657203T	Price
7/16-20	H5	4	-	-	EK657205B	Price	EK507205P	Price	-	-	-	-	-	-
1/2-13	H2	4	EK508132B	Price	EK658132B	Price	EK508132P	Price	EK658132P	Price	EK508132T	Price	EK658132T	Price
1/2-13	H3	4	EK508133B	Price	EK658133B	Price	EK508133P	Price	EK658133P	Price	EK508133T	Price	EK658133T	Price
1/2-13	H5	4		Price	EK658135B	Price	EK508135P	Price	-	-	-	-	-	-
1/2-20	H1	4	EK508201B	Price	EK658201B	Price	EK508201P	Price	-	-	-	-	-	-
1/2-20	H2	4	-	-	EK658202B	Price	-	-	EK658202P	Price	-	-	EK658202T	Price
1/2-20	H3	4	EK508203B	Price	EK658203B	Price	EK508203P	Price	EK658203P	Price	EK508203T	Price	EK658203T	Price
1/2-20	H5	4	EK508205B	Price	-	-	EK508205P	Price	-	-	EK508205T	Price	-	-
9/16-12	H3	4	EK509123B	Price	EK659123B	Price	EK509123P	Price	EK659123P	Price	EK509123T	Price	EK659123T	Price
9/16-12	H5	4	-	-	-	-	EK509125P	Price	-	-	-	-	-	-

RAPIDKUT 3 Pc. Tap Sets

High Speed Steel • Bright Finish

- Set includes one each: taper, plug and bottoming taps
- Ground threads, 4-flute
- For both ferrous and non-ferrous materials
- Used in all types of hand or machine tool operations
- **Buy a set & save**



Bottoming



Taper



Plug

Size	Thread Limits	Thread Length (in.)	OAL (in.)	Order No.	Price
6-32	H3	1/16	2	**EK65S906323**	Price
8-32	H3	3/4	2-1/8	**EK65S908323**	Price
10-24	H3	7/8	2-3/8	**EK65S910243**	Price
10-32	H3	7/8	2-3/8	**EK65S910323**	Price
12-24	H3	15/16	2-3/8	**EK65S912243**	Price
1/4-20	H3	1	2-1/2	**EK65S4203**	Price
5/16-18	H3	1-1/8	2-23/32	**EK65S5183**	Price
3/8-16	H3	1-1/4	2-15/16	**EK65S6163**	Price
7/16-14	H3	1-7/16	3-5/32	**EK65S7143**	Price
1/2-13	H3	1-21/32	3-3/8	**EK65S8133**	Price
5/8-11	H3	1-13/16	3-15/16	**EK65S10113**	Price
3/4-10	H3	2	4-1/4	**EK65S12103**	Price

DORMER 4 Flute Straight Shank Taps

- TiAlN top coating
- Excellent performance when threading both through and blind holes in short chipping materials



- Internal coolant with axial outlet - Reduces interruptions of the production process by providing optimum chip evacuation in both horizontal and vertical blind hole machining

					Bottoming		Semi-Bottoming	
Size (in.)	Thead Limits	Thread Length (in.)	OAL (in.)	Thread Tpe	Order No.	Price	Order No.	Price
10-32	H4	.551	2.756	UNF	-	-	**DS047350222**	Price
1/4-20	H5	.591	3.150	UNC	**DS047350231**	Price	**DS047350203**	Price
1/4-28	H4	.591	3.150	UNF	**DS047350240**	Price	-	-
1/4-28	H5	.591	3.150	UNF	-	-	**DS047350223**	Price
5/16-18	H5	.709	3.543	UNC	-	-	**DS047350204**	Price
5/16-18	H5	.787	3.543	UNC	**DS047350232**	Price	-	-
5/16-24	H5	.709	3.543	UNF	-	-	**DS047350224**	Price
5/16-24	H5	.787	3.543	UNF	**DS047350241**	Price	-	-
3/8-16	H5	.787	3.937	UNC	**DS047350233**	Price	**DS047350205**	Price
3/8-24	H5	.787	3.543	UNF	**DS047350242**	Price	**DS047350225**	Price
7/16-14	H5	.787	3.937	UNC	**DS047350234**	Price	**DS047350206**	Price
7/16-20	H5	.787	3.937	UNF	**DS047350243**	Price	**DS047350226**	Price
1/2-13	H5	.906	4.331	UNC	**DS047350235**	Price	**DS047350207**	Price
1/2-20	H5	.827	3.937	UNF	**DS047350244**	Price	**DS047350227**	Price
5/8-11	H5	.906	4.331	UNC	**DS047350236**	Price	**DS047350208**	Price
5/8-18	H5	.827	3.937	UNF	**DS047350245**	Price	**DS047350228**	Price
3/4-10	H5	1.181	4.921	UNC	**DS047350237**	Price	**DS047350209**	Price
3/4-16	H5	.906	4.331	UNF	**DS047350246**	Price	-	-
3/4-16	H6	.906	4.331	UNF	-	-	**DS047350229**	Price
7/8-9	H6	1.339	5.512	UNC	**DS047350238**	Price	**DS047350220**	Price
7/8-14	H6	.906	4.921	UNF	**DS047350247**	Price	**DS047350230**	Price
1-8	H6	1.417	6.299	UNC	**DS047350239**	Price	**DS047350221**	Price
1-12	H6	1.063	5.512	UNF	**DS047350248**	Price	-	-

General Purpose Hand Taps

Machine Screw Sizes • Straight Flute • Ground Thread • High Speed Steel



Bottoming



Plug



Taper

HSS M GP

			Morse Cutting Tools						OSG USA, Inc.					
			Bottoming		Plug		Price		Bottoming		Plug		Taper	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
0-80	H1	2	**MT3733801**	Price	**MT3733701**	Price	**MT3733601**	Price	**TP101000200**	Price	**TP101000100**	Price	**TP101000000**	Price
0-80	H2	2	**MT3733802**	Price	**MT3733702**	Price	-	-	**TP101010200**	Price	**TP101010100**	Price	-	-
1-64	H1	2	**MT3733803**	Price	**MT3733703**	Price	**MT3733602**	Price	**TP101000500**	Price	**TP101000400**	Price	**TP101000300**	Price
1-64	H2	2	-	-	**MT3733704**	Price	-	-	-	-	**TP101010400**	Price	-	-
1-72	H1	2	**MT3733804**	Price	**MT3733705**	Price	**MT3733603**	Price	**TP101000800**	Price	**TP101000700**	Price	**TP101000600**	Price
1-72	H2	2	**MT3733805**	Price	**MT3733706**	Price	-	-	**TP101010800**	Price	**TP101010700**	Price	-	-
2-56	H1	3	**MT3733806**	Price	**MT3733707**	Price	**MT3733604**	Price	**TP101001100**	Price	**TP101001000†**	Price	**TP101000900**	Price
2-56	H2	2	**MT3733808**	Price	**MT3733709**	Price	-	-	**TP101065200**	Price	**TP101065100††**	Price	-	-
2-56	H2	3	**MT3733807**	Price	**MT3733708**	Price	**MT3733605**	Price	**TP101011100**	Price	**TP101011000**	Price	**TP101010900**	Price
2-64	H2	3	**MT3733809**	Price	**MT3733710**	Price	**MT3733606**	Price	**TP101011400**	Price	**TP101011300**	Price	**TP101011200**	Price
3-48	H1	3	-	-	**MT3733711**	Price	-	-	-	-	**TP101001600**	Price	-	-
3-48	H2	3	**MT3733810**	Price	**MT3733712**	Price	**MT3733607**	Price	**TP101011700**	Price	**TP101011600†††**	Price	**TP101011500**	Price
3-56	H2	3	**MT3733812**	Price	**MT3733714**	Price	**MT3733608**	Price	**TP101012000**	Price	**TP101011900**	Price	**TP101011800**	Price
4-36	H2	3	**MT3733817**	Price	**MT3733720**	Price	**MT3733612**	Price	**TP101012900**	Price	**TP101012800**	Price	**TP101012700**	Price
4-40	H2	2	**MT3733815**	Price	**MT3733717**	Price	-	-	**TP101066400**	Price	**TP101066300†††**	Price	-	-
4-40	H2	3	**MT3733814**	Price	**MT3733716**	Price	**MT3733610**	Price	**TP101012300**	Price	**TP101012200**	Price	**TP101012100**	Price
4-48	H2	3	**MT3733816**	Price	**MT3733719**	Price	**MT3733611**	Price	**TP101012600**	Price	**TP101012500**	Price	**TP101012400**	Price
5-40	H1	3	-	-	**MT3733721**	Price	-	-	-	-	**TP101003100**	Price	-	-
5-40	H2	2	**MT3733819**	Price	**MT3733723**	Price	-	-	**TP101067300**	Price	**TP101067200**	Price	-	-
5-40	H2	3	**MT3733818**	Price	**MT3733722**	Price	**MT3733613**	Price	**TP101013200**	Price	**TP101013100**	Price	**TP101013000**	Price
5-44	H2	3	**MT3733820**	Price	**MT3733724**	Price	**MT3733614**	Price	**TP101013500**	Price	**TP101013400**	Price	**TP101013300**	Price

(continued on next page)

General Purpose Hand Taps (cont.)



Bottoming



Plug



Taper

HSS M GP

			Morse Cutting Tools						OSG USA, Inc.					
			Bottoming		Plug		Price		Bottoming		Plug		Taper	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
6-32	H1	3	MT3733821	Price	MT3733726	Price	MT3733615	Price	TP101003800	Price	TP101003700	Price	TP101003600	Price
6-32	H2	2	MT3733824	Price	MT3733729	Price	-	-	TP101067900	Price	TP101067800<>	Price	-	-
6-32	H2	3	MT3733822	Price	MT3733727	Price	MT3733616	Price	TP101013800	Price	TP101013700	Price	TP101013600	Price
6-32	H3	2	MT3733825	Price	MT3733730	Price	-	-	TP101072900	Price	TP101072800	Price	-	-
6-32	H3	3	MT3733823	Price	MT3733728	Price	MT3733617	Price	TP101023800	Price	TP101023700	Price	TP101023600	Price
6-40	H1	3	-	-	MT3733731	Price	-	-	-	-	-	-	-	-
6-40	H2	2	-	-	MT3733733	Price	-	-	-	-	TP101068100	Price	-	-
6-40	H2	3	MT3733826	Price	MT3733732	Price	MT3733618	Price	TP101014100	Price	TP101014000	Price	TP101013900	Price
8-32	H1	4	MT3733827	Price	MT3733734	Price	MT3733619	Price	TP101004400	Price	TP101004300	Price	TP101004200	Price
8-32	H2	2	MT3733833	Price	MT3733740	Price	-	-	TP101068500	Price	TP101068400	Price	-	-
8-32	H2	3	-	-	MT3733738	Price	-	-	TP101045200	Price	TP101045100	Price	-	-
8-32	H2	4	MT3733828	Price	MT3733735	Price	MT3733620	Price	TP101014400	Price	TP101014300	Price	TP101014200	Price
8-32	H3	2	MT3733834	Price	MT3733741	Price	-	-	TP101073500	Price	TP101073400<>	Price	-	-
8-32	H3	3	MT3733832	Price	MT3733739	Price	-	-	TP101050200	Price	TP101050100	Price	-	-
8-32	H3	4	MT3733829	Price	MT3733736	Price	MT3733621	Price	TP101024400	Price	TP101024300	Price	TP101024200	Price
8-36	H2	4	MT3733835	Price	MT3733742	Price	MT3733622	Price	TP101014700	Price	TP101014600	Price	TP101014500	Price
10-24	H1	4	MT3733836	Price	MT3733743	Price	MT3733623	Price	TP101005000	Price	TP101004900	Price	TP101004800	Price
10-24	H2	2	MT3733840	Price	MT3733749	Price	-	-	TP101069100	Price	TP101069000	Price	-	-
10-24	H2	3	-	-	MT3733747	Price	-	-	-	-	TP101045700	Price	-	-
10-24	H2	4	MT3733837	Price	MT3733744	Price	MT3733624	Price	TP101015000	Price	TP101014900	Price	TP101014800	Price
10-24	H3	2	MT3733841	Price	MT3733750	Price	-	-	TP101074100	Price	TP101074000<>	Price	-	-
10-24	H3	3	MT3733839	Price	MT3733748	Price	-	-	TP101050800	Price	TP101050700	Price	-	-
10-24	H3	4	MT3733838	Price	MT3733745	Price	MT3733625	Price	TP101025000	Price	TP101024900	Price	TP101024800	Price
10-32	H1	4	MT3733842	Price	MT3733751	Price	MT3733626	Price	TP101005300	Price	TP101005200	Price	TP101005100	Price
10-32	H2	2	MT3733847	Price	MT3733756	Price	-	-	TP101069400	Price	TP101069300	Price	-	-
10-32	H2	3	MT3733845	Price	MT3733754	Price	-	-	TP101046100	Price	TP101046000	Price	-	-
10-32	H2	4	MT3733843	Price	MT3733752	Price	MT3733627	Price	TP101015300	Price	TP101015200	Price	TP101015100	Price
10-32	H3	2	MT3733848	Price	MT3733757	Price	-	-	TP101074400	Price	TP101074300<>	Price	-	-
10-32	H3	3	MT3733846	Price	MT3733755	Price	-	-	TP101051100	Price	TP101051000	Price	-	-
10-32	H3	4	MT3733844	Price	MT3733753	Price	MT3733628	Price	TP101025300	Price	TP101025200	Price	TP101025100	Price
12-24	H3	4	MT3733849	Price	MT3733758	Price	MT3733629	Price	TP101025600	Price	TP101025500	Price	TP101025400	Price
12-28	H3	4	MT3733850	Price	MT3733759	Price	MT3733630	Price	TP101025900	Price	TP101025800	Price	TP101025700	Price

Note: OSG steam oxide available †Available in 2 flute from stock ††Available in H3 from stock ††† Available in H3 2 flute from stock <> Available in H4 from stock

General Purpose Hand Taps - Fractional Sizes

Ground Thread • High Speed Steel







			Morse Cutting Tools						OSG USA, Inc.					
			Bottoming		Plug		Price		Bottoming		Plug		Taper	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4-20	H3	3	MT3732604	Price	MT3732406	Price	-	-	-	-	-	-	-	-
1/4-20	H1	4	MT3732601	Price	MT3732402	Price	MT3732301	Price	TP101100200	Price	TP101100100	Price	TP101100000	Price
1/4-20	H2	4	MT3732602	Price	MT3732404	Price	MT3732302	Price	TP101110200	Price	TP101110100•	Price	TP101110000	Price
1/4-20	H3	4	MT3732605	Price	MT3732407	Price	MT3732303	Price	TP101120200•	Price	TP101120100•†	Price	TP101120000	Price
1/4-20	H5	4	-	-	MT3732409	Price	-	-	TP101140200•	Price	TP101140100•	Price	-	-
1/4-28	H1	4	MT3732607	Price	MT3732410	Price	-	-	TP101100500	Price	TP101100400	Price	-	-
1/4-28	H2	4	MT3732608	Price	MT3732411	Price	-	-	TP101110500	Price	TP101110400	Price	-	-
1/4-28	H3	4	MT3732611	Price	MT3732414	Price	MT3732304	Price	TP101120500•	Price	TP101120400•†	Price	TP101120300	Price
1/4-28	H4	4	MT3732612	Price	MT3732415	Price	-	-	TP101130500	Price	TP101130400	Price	-	-
5/16-18	H2	4	MT3732614	Price	MT3732418	Price	-	-	TP101110800	Price	TP101110700	Price	-	-
5/16-18	H3	4	MT3732617	Price	MT3732421	Price	MT3732305	Price	TP101120800	Price	TP101120700•†	Price	TP101120600	Price
5/16-18	H5	4	MT3732618	Price	MT3732422	Price	-	-	TP101140800	Price	TP101140700	Price	-	-
5/16-24	H2	4	-	-	MT3732424	Price	-	-	TP101111100	Price	-	-	-	-
5/16-24	H3	4	MT3732621	Price	MT3732426	Price	MT3732306	Price	TP101121100	Price	TP101121000	Price	TP101120900	Price
5/16-24	H4	4	-	-	MT3732427	Price	-	-	TP101131100	Price	TP101131000	Price	-	-
3/8-16	H1	4	-	-	MT3732429	Price	-	-	-	-	TP101101300	Price	-	-
3/8-16	H2	4	MT3732624	Price	MT3732430	Price	-	-	TP101111400	Price	TP101111300	Price	-	-
3/8-16	H3	3	MT3732625	Price	MT3732431	Price	-	-	-	-	-	-	-	-
3/8-16	H3	4	MT3732626	Price	MT3732432	Price	MT3732307	Price	TP101121400•	9.48	TP101121300•	Price	TP101121200	Price
3/8-16	H5	4	MT3732627	Price	MT3732434	Price	-	-	TP101141400	Price	TP101141300	Price	-	-
3/8-24	H1	4	-	-	MT3732435	Price	-	-	-	-	TP101101600	Price	-	-
3/8-24	H2	4	MT3732629	Price	MT3732436	Price	-	-	TP101111700	Price	TP101111600	Price	-	-

(continued on next page)

General Purpose Hand Taps - Fractional Sizes (cont.)



			Morse Cutting Tools						OSG USA, Inc.					
			Bottoming		Plug		Price		Bottoming		Plug		Taper	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/8-24	H3	4	MT3732631	Price	MT3732438	Price	MT3732308	Price	TP101121700	Price	TP101121600	Price	TP101121500	Price
3/8-24	H4	4	-	-	MT3732439	Price	-	-	TP101131700	Price	TP101131600	Price	-	-
7/16-14	H3	4	MT3732633	Price	MT3732441	Price	MT3732309	Price	TP101122000	Price	TP101121900•	Price	TP101121800	Price
7/16-14	H5	4	MT3732634	Price	MT3732442	Price	-	-	TP101142000	Price	TP101141900	Price	-	-
7/16-20	H3	4	MT3732635	Price	MT3732444	Price	MT3732310	Price	TP101122300	Price	TP101122200	Price	TP101122100	Price
7/16-20	H5	4	MT3732636	Price	MT3732445	Price	-	-	TP101142300	Price	TP101142200	Price	-	-
1/2-13	H1	4	-	-	MT3732446	Price	-	-	-	-	TP101102500	Price	-	-
1/2-13	H3	4	MT3732640	Price	MT3732449	Price	MT3732311	Price	TP101122600•	Price	TP101122500•	Price	TP101122400	Price
1/2-13	H5	4	MT3732641	Price	MT3732450	Price	-	-	TP101142600	Price	TP101142500	Price	-	-
1/2-20	H1	4	MT3732642	Price	MT3732451	Price	-	-	TP101102900	Price	TP101102800	Price	-	-
1/2-20	H3	4	MT3732643	Price	MT3732453	Price	MT3732312	Price	TP101122900	Price	TP101122800	Price	TP101122700	Price
1/2-20	H5	4	-	-	MT3732454	Price	-	-	TP101142900	Price	TP101142800	Price	-	-
9/16-12	H3	4	MT3732644	Price	MT3732455	Price	MT3732313	Price	TP101123200	Price	TP101123100	Price	TP101123000	Price
9/16-12	H5	4	-	-	MT3732456	Price	-	-	-	-	TP101143100	Price	-	-
9/16-18	H2	4	-	-	MT3732457	Price	-	-	-	-	TP101113400	Price	-	-
9/16-18	H3	4	MT3732645	Price	MT3732458	Price	MT3732314	Price	TP101123500	Price	TP101123400	Price	TP101123300	Price
9/16-18	H5	4	-	-	MT3732459	Price	-	-	TP101143500	Price	TP101143400	Price	-	-
5/8-11	H2	4	-	-	MT3732460	Price	-	-	-	-	TP101113700	Price	-	-
5/8-11	H3	4	MT3732647	Price	MT3732461	Price	MT3732315	Price	TP101123800	Price	TP101123700	Price	TP101123600	Price
5/8-11	H5	4	MT3732648	Price	MT3732462	Price	-	-	TP101143800	Price	TP101143700	Price	-	-
5/8-18	H2	4	-	-	MT3732463	Price	-	-	-	-	TP101114000	Price	-	-
5/8-18	H3	4	MT3732649	Price	MT3732464	Price	MT3732316	Price	TP101124100	Price	TP101124000	Price	TP101123900	Price
5/8-18	H5	4	MT3732650	Price	MT3732465	Price	-	-	TP101144100	Price	TP101144000	Price	-	-
11/16-11	H3	4	MT3732651	Price	MT3732466	Price	MT3732317	Price	TP101124400	Price	TP101124300	Price	TP101124200	Price
11/16-16	H3	4	MT3732652	Price	MT3732467	Price	MT3732318	Price	TP101124700	Price	TP101124600	Price	TP101124500	Price
3/4-10	H3	4	MT3732653	Price	MT3732469	Price	MT3732319	Price	TP101125000	Price	TP101124900	Price	TP101124800	Price
3/4-10	H5	4	MT3732654	Price	MT3732470	Price	-	-	TP101145000	Price	TP101144900	Price	-	-
3/4-16	H1	4	-	-	MT3732471	Price	-	-	-	-	TP101105200	Price	-	-
3/4-16	H2	4	-	-	MT3732472	Price	-	-	-	-	TP101115200	Price	-	-
3/4-16	H3	4	MT3732655	Price	MT3732473	Price	MT3732320	Price	TP101125300	Price	TP101125200	Price	TP101125100	Price
3/4-16	H5	4	MT3732656	Price	MT3732474	Price	-	-	TP101145300	Price	TP101145200	Price	-	-
7/8-9	H4	4	MT3732657	Price	MT3732475	Price	MT3732321	Price	TP101135600	Price	TP101135500	Price	TP101135400	Price
7/8-9	H6	4	-	-	MT3732476	Price	-	-	-	-	TP101145500	Price	-	-
7/8-14	H2	4	-	-	MT3732477	Price	-	-	-	-	TP101115800	Price	-	-
7/8-14	H4	4	MT3732658	Price	MT3732478	Price	MT3732322	Price	TP101135900	Price	TP101135800	Price	TP101135700	Price
1-12	H4	4	MT3732660	Price	MT3732482	Price	MT3732324	Price	TP101136500	Price	TP101136400	Price	TP101136300	Price
1-14	H4	4	MT3732661	Price	MT3732484	Price	MT3732325	Price	TP101136800	Price	TP101136700	Price	TP101136600	Price
1-1/8-7	H4	4	MT3732662	Price	MT3732485	Price	MT3732326	Price	TP101137100	Price	TP101137000	Price	TP101136900	Price
1-1/8-12	H4	4	MT3732663	Price	MT3732486	Price	MT3732327	Price	TP101137400	Price	TP101137300	Price	TP101137200	Price
1-1/4-7	H4	4	MT3732664	Price	MT3732487	Price	MT3732328	Price	TP101137700	Price	TP101137600	Price	TP101137500	Price
1-1/4-12	H4	6	MT3732665	Price	MT3732488	Price	MT3732329	Price	TP101138000	Price	TP101137900	Price	TP101137800	Price
1-3/8-6	H4	4	MT3732666	Price	MT3732489	Price	MT3732330	Price	TP101138300	Price	TP101138200	Price	TP101138100	Price
1-3/8-12	H4	6	MT3732667	Price	MT3732490	Price	MT3732331	Price	TP101138600	Price	TP101138500	Price	TP101138400	Price
1-1/2-6	H4	4	MT3732668	Price	MT3732491	Price	MT3732332	Price	TP101138900	Price	TP101138800	Price	TP101138700	Price
1-1/2-12	H4	6	MT3732669	Price	MT3732492	Price	MT3732333	Price	TP101139200	Price	TP101139100	Price	TP101139000	Price

†Available in 2 Flute in stock •Available in 3 flute from stock Note: OSG steam oxide available

HSS Morse M GP General Purpose Hand Tap Sets

Ground Thread • High Speed Steel • Bright Finish

- Set consists of 1 each taper, plug and bottoming
- Morse List #2046



Size	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
1/4-20	H3	4	1	2-1/2	MT3732701	Price
1/4-28	H3	4	1	2-1/2	MT3732702	Price
5/16-18	H3	4	1-1/8	2-23/32	MT3732703	Price
5/16-24	H3	4	1-1/8	2-23/32	MT3732704	Price
3/8-16	H3	4	1-1/4	2-15/16	MT3732705	Price
3/8-24	H3	4	1-1/4	2-15/16	MT3732706	Price
7/16-14	H3	4	1-7/16	3-5/32	MT3732707	Price
7/16-20	H3	4	1-7/16	3-5/32	MT3732708	Price
1/2-13	H3	4	1-21/32	3-19/32	MT3732709	Price
1/2-20	H3	4	1-21/32	3-19/32	MT3732710	Price
9/16-12	H3	4	1-21/32	3-19/32	MT3732711	Price
9/16-18	H3	4	1-21/32	3-19/32	MT3732712	Price
5/8-11	H3	4	1-13/16	3-13/16	MT3732713	Price
5/8-18	H3	4	1-13/16	3-13/16	MT3732714	Price
11/16-11	H3	4	1-13/16	4-1/32	MT3732715	Price
11/16-16	H3	4	1-13/16	4-1/32	MT3732716	Price
3/4-10	H3	4	2	4-1/4	MT3732717	Price
3/4-16	H3	4	2	4-1/4	MT3732718	Price
7/8-9	H4	4	2-7/32	4-11/16	MT3732719	Price

Size	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
7/8-14	H4	4	2-7/32	4-11/16	MT3732720	Price
1-8	H4	4	2-1/2	5-1/8	MT3732721	Price
1-12	H4	4	2-1/2	5-1/8	MT3732722	Price
1-14	H4	4	2-1/2	5-1/8	MT3732723	Price
1-1/8-7	H4	4	2-9/16	5-7/16	MT3732724	Price
1-1/8-12	H4	4	2-9/16	5-7/16	MT3732725	Price
1-1/4-7	H4	4	2-9/16	5-3/4	MT3732726	Price
1-1/4-12	H4	4	2-9/16	5-3/4	MT3732727	Price
1-3/8-6	H4	4	3	6-1/16	MT3732728	Price
1-3/8-12	H4	4	3	6-1/16	MT3732729	Price
1-1/2-6	H4	4	3	6-3/8	MT3732730	Price
1-1/2-12	H4	4	3	6-3/8	MT3732731	Price

HSS M GP 3 Pc. Metric Straight Flute Hand Taps Sets



Ground Thread • High Speed Steel • Bright Finish

- Set consists of taper (8-10 thread chamfer), plug (3-4 thread chamfer) and bottoming (1-2 thread chamfer)
- Morse List #7500

Size	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
M1.6 x 0.35	D3	2	5/16	1-5/8	**MT3838200**	Price
M1.8 x 0.35	D3	2	5/16	1-5/8	**MT3838201**	Price
M2 x 0.40	D3	3	7/16	1-3/4	**MT3838203**	Price
M2.2 x 0.45	D3	3	7/16	1-3/4	**MT3838204**	Price
M2.5 x 0.45	D3	3	1/2	1-13/16	**MT3838205**	Price
M3 x 0.50	D3	3	5/8	1-15/16	**MT3838206**	Price
M3.5 x 0.60	D3	3	11/16	2	**MT3838207**	Price
M4 x 0.70	D4	4	3/4	2-1/8	**MT3838208**	Price
M4.5 x 0.75	D4	4	7/8	2-3/8	**MT3838209**	Price
M5 x 0.80	D4	4	7/8	2-3/8	**MT3838210**	Price
M6 x 1.00	D5	4	1	2-1/2	**MT3838211**	Price
M7 x 1.00	D5	4	1-1/8	2-23/32	**MT3838212**	Price
M8 x 1.00	D5	4	1-1/8	2-23/32	**MT3838213**	Price
M8 x 1.25	D5	4	1-1/8	2-23/32	**MT3838214**	Price
M10 x 1.25	D5	4	1-1/4	2-15/16	**MT3838215**	Price
M10 x 1.50	D6	4	1-1/4	2-15/16	**MT3838216**	Price
M12 x 1.25	D5	4	1-21/32	3-3/8	**MT3838217**	Price
M12 x 1.75	D6	4	1-21/32	3-3/8	**MT3838218**	Price
M14 x 1.50	D6	4	1-21/32	3-19/32	**MT3838219**	Price
M14 x 2.00	D7	4	1-21/32	3-19/32	**MT3838220**	Price

Size	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
M16 x 1.50	D6	4	1-13/16	3-13/16	**MT3838221**	Price
M16 x 2.00	D7	4	1-13/16	3-13/16	**MT3838222**	Price
M18 x 1.50	D6	4	1-13/16	4-1/32	**MT3838223**	Price
M18 x 2.50	D7	4	1-13/16	4-1/32	**MT3838224**	Price
M20 x 1.50	D6	4	2	4-15/32	**MT3838225**	Price
M20 x 2.50	D7	4	2	4-15/32	**MT3838226**	Price
M22 x 1.50	D6	4	2-7/32	4-11/16	**MT3838227**	Price
M22 x 2.50	D7	4	2-7/32	4-11/16	**MT3838228**	Price
M24 x 2.00	D7	4	2-7/32	4-29/32	**MT3838229**	Price
M24 x 3.00	D8	4	2-7/32	4-29/32	**MT3838230**	Price
M27 x 2.00	D7	4	2-1/2	5-1/8	**MT3838231**	Price
M27 x 3.00	D8	4	2-1/2	5-1/8	**MT3838232**	Price
M30 x 2.00	D7	4	2-9/16	5-7/16	**MT3838233**	Price
M30 x 3.50	D9	4	2-9/16	5-7/16	**MT3838234**	Price
M33 x 2.00	D9	6	2-9/16	5-3/4	**MT3838238**	Price
M36 x 3.00	D9	4	3	6-1/16	**MT3838236**	Price
M36 x 4.00	D8	4	3	6-1/16	**MT3838237**	Price

WIDIA Hand Tap Sets



High Speed Steel • Straight Flute

- Includes one of each, taper, plug and bottoming chamfer

Size	Thread Limits	No. of Flutes	Order No.	Price
0-80	H1	2	**WK302748981**	Price
1-64	H1	2	**WK302748968**	Price
1-72	H1	2	**WK302748961**	Price
2-56	H2	3	**WK302748945**	Price
2-64	H2	3	**WK302748928**	Price
3-48	H2	3	**WK302748918**	Price
3-56	H2	3	**WK302748902**	Price
4-40	H2	3	**WK302748880**	Price
4-48	H2	3	**WK302748863**	Price
5-40	H2	3	**WK302865313**	Price
5-44	H2	3	**WK302748851**	Price
6-32	H1	3	**WK302865286**	Price
6-32	H3	3	**WK302748838**	Price
6-32	H2	3	**WK302865274**	Price
6-40	H2	3	**WK302748818**	Price
8-32	H2	4	**WK302748801**	Price
8-32	H3	4	**WK302865185**	Price
8-36	H2	4	**WK302748756**	Price
10-24	H2	4	**WK302748743**	Price

Size	Thread Limits	No. of Flutes	Order No.	Price
10-24	H3	4	**WK302748731**	Price
10-32	H2	4	**WK302748685**	Price
10-32	H3	4	**WK302748670**	Price
12-24	H3	4	**WK302748637**	Price
12-28	H3	4	**WK302748623**	Price
1/4-20	H1	4	**WK302749834**	Price
1/4-20	H2	4	**WK302749824**	Price
1/4-20	H3	4	**WK302749815**	Price
1/4-28	H3	4	**WK302749764**	Price
5/16-18	H3	4	**WK302749729**	Price
5/16-24	H3	4	**WK302749680**	Price
3/8-16	H3	4	**WK302749644**	Price
3/8-24	H3	4	**WK302749605**	Price
7/16-14	H3	4	**WK302749581**	Price
7/16-20	H3	4	**WK302749560**	Price
1/2-13	H3	4	**WK302749538**	Price
1/2-20	H3	4	**WK302749503**	Price
9/16-12	H3	4	**WK302749488**	Price
9/16-18	H3	4	**WK302749472**	Price

Size	Thread Limits	No. of Flutes	Order No.	Price
5/8-11	H3	4	**WK302749454**	Price
5/8-18	H3	4	**WK302749426**	Price
11/16-11	H3	4	**WK302749402**	Price
3/4-10	H3	4	**WK302749388**	Price
3/4-16	H3	4	**WK302749368**	Price
7/8-9	H4	4	**WK302749350**	Price
7/8-14	H4	4	**WK302749335**	Price
1-8	H4	4	**WK302749320**	Price
1-12	H4	4	**WK303303777**	Price
1-14	H4	4	**WK302749288**	Price
1-1/8-7	H4	4	**WK302749275**	Price
1-1/8-12	H4	4	**WK302749267**	Price
1-1/4-7	H4	4	**WK302749260**	Price
1-1/4-12	H4	6	**WK302749254**	Price
1-3/8-6	H4	4	**WK302749249**	Price
1-3/8-12	H4	6	**WK302749243**	Price
1-1/2-6	H4	4	**WK302749237**	Price
1-1/2-12	H4	6	**WK302749231**	Price

WIDIA Hand Taps



Taper • Plug • Bottoming

- For general purpose use

Price				Bottoming			Plug			Taper		
Size	Thread Limits	No. of Flutes	OAL	Thread Length	Order No.	Price	Thread Length	Order No.	Price	Thread Length	Order No.	Price
0-80	H1	2	1.625	.310	**WK302748985**	Price	.310	**WK302748988**	Price	.310	**WK302748991**	Price
0-80	H2	2	1.625	.312	**WK302748977**	Price	.312	**WK302748979**	Price	-	**-**	-
1-64	H1	2	1.688	.380	**WK302748970**	Price	.380	**WK302748972**	Price	.380	**WK302748975**	Price
1-64	H2	2	1.688	-	**-**	-	.375	**WK302748966**	Price	-	**-**	-
1-72	H1	2	1.688	.380	**WK302748962**	Price	.380	**WK302748963**	Price	.380	**WK302748964**	Price
1-72	H2	2	1.688	.375	**WK303049563**	Price	.375	**WK302748959**	Price	-	**-**	-
2-56	H1	3	1.750	.438	**WK302748955**	Price	.438	**WK302865450**	Price	.438	**WK302748956**	Price
2-56	H2	3	1.750	.440	**WK302748947**	Price	.440	**WK302748950**	Price	.440	**WK302748951**	Price
2-64	H2	3	1.750	.438	**WK302748930**	Price	.438	**WK302748933**	Price	.440	**WK302748935**	Price
3-48	H2	3	1.813	.500	**WK302748920**	Price	.500	**WK302748924**	Price	.500	**WK302748925**	Price
3-56	H2	3	1.813	.500	**WK302748906**	Price	.500	**WK302748911**	Price	.500	**WK302748913**	Price
4-40	H2	3	1.875	.560	**WK302748882**	Price	.560	**WK302748885**	Price	.560	**WK302748887**	Price
4-48	H2	3	1.875	.560	**WK302748864**	Price	.560	**WK302748867**	Price	.560	**WK302748869**	Price
5-40	H2	3	1.938	.620	**WK302865316**	Price	.620	**WK302865319**	Price	.620	**WK302865323**	Price
5-44	H2	3	1.938	.620	**WK302748852**	Price	.620	**WK302748855**	Price	.620	**WK302748858**	Price
6-32	H1	3	2.000	.690	**WK302865289**	Price	.688	**WK302865292**	Price	.688	**WK302865295**	Price
6-32	H2	3	2.000	.690	**WK302865277**	Price	.690	**WK302865279**	Price	.690	**WK302748845**	Price
6-32	H3	3	2.000	.690	**WK302748840**	Price	.690	**WK302748843**	Price	.690	**WK302865268**	Price
6-40	H2	3	2.000	.690	**WK302748820**	Price	.690	**WK302748825**	Price	.690	**WK302748827**	Price
8-32	H1	4	2.125	.750	**WK302748811**	Price	.750	**WK302748813**	Price	-	**-**	-
8-32	H2	4	2.125	.750	**WK302748803**	Price	.750	**WK302748804**	Price	.750	**WK302748806**	Price
8-32	H3	4	2.125	.750	**WK302748781**	Price	.750	**WK302748785**	Price	.750	**WK302748787**	Price

WIDIA Hand Taps (cont.)

Taper • Plug • Bottoming



- For general purpose use

Price				Bottoming			Plug			Taper		
Size	Thread Limits	No. of Flutes	OAL	Thread Length	Order No.	Price	Thread Length	Order No.	Price	Thread Length	Order No.	Price
8-36	H2	4	2.125	.750	**WK302748758**	Price	.750	**WK302748761**	Price	.750	**WK302748764**	Price
10-24	H1	4	2.375	-	**-**	-	.875	**WK302748749**	Price	-	**-**	-
10-24	H2	4	2.375	.880	**WK302748744**	Price	.880	**WK302748746**	Price	.880	**WK302748747**	Price
10-24	H3	4	2.375	.880	**WK302748733**	Price	.880	**WK302748736**	Price	.880	**WK302748738**	Price
10-32	H1	4	2.375	.875	**WK302748702**	Price	.880	**WK302748706**	Price	.880	**WK302748708**	Price
10-32	H2	4	2.375	.880	**WK302748689**	Price	.880	**WK302748692**	Price	.880	**WK302748694**	Price
10-32	H3	4	2.375	.880	**WK302748675**	Price	.880	**WK302748678**	Price	.880	**WK302748679**	Price
12-24	H3	4	2.375	.940	**WK302748641**	Price	.940	**WK302748643**	Price	.940	**WK302748645**	Price
12-28	H3	4	2.375	.940	**WK302748624**	Price	.940	**WK302748628**	Price	.940	**WK302748631**	Price
1/4-20	H1	4	2.500	1.000	**WK302749836**	Price	1.000	**WK302749837**	Price	1.000	**WK302749838**	Price
1/4-20	H2	4	2.500	1.000	**WK302749826**	Price	1.000	**WK302749830**	Price	1.000	**WK302749832**	Price
1/4-20	H3	4	2.500	1.000	**WK302749818**	Price	1.000	**WK302957247**	Price	1.000	**WK303139335**	Price
1/4-20	H5	4	2.500	1.000	**WK302749793**	Price	1.000	**WK302749795**	Price	-	**-**	-
1/4-28	H2	4	2.500	1.000	**WK302749777**	Price	1.000	**WK302749780**	Price	-	**-**	-
1/4-28	H3	4	2.500	1.000	**WK302749766**	Price	1.000	**WK302749772**	Price	1.000	**WK302749775**	Price
1/4-28	H4	4	2.500	1.000	**WK301854370**	Price	1.000	**WK302749751**	Price	-	**-**	-
5/16-18	H1	4	2.719	1.120	**WK302749742**	Price	1.120	**WK302749744**	Price	-	**-**	-
5/16-18	H2	4	2.719	1.120	**WK302749739**	Price	1.120	**WK302435312**	Price	-	**-**	-
5/16-18	H3	4	2.719	1.120	**WK302749732**	Price	1.120	**WK302749734**	Price	1.120	**WK302749737**	Price
5/16-18	H5	4	2.719	1.120	**WK302749706**	Price	1.120	**WK302749709**	Price	-	**-**	-
5/16-24	H1	4	2.719	-	**-**	-	1.120	**WK302749694**	Price	-	**-**	-
5/16-24	H2	4	2.719	-	**-**	-	1.125	**WK302749691**	Price	-	**-**	-
5/16-24	H3	4	2.719	1.120	**WK302038474**	Price	1.120	**WK302749686**	Price	1.120	**WK302749689**	Price
5/16-24	H4	4	2.719	1.125	**WK302749662**	Price	1.120	**WK302749666**	Price	-	**-**	-
3/8-16	H1	4	2.938	1.250	**WK302749656**	Price	1.250	**WK302749659**	Price	-	**-**	-
3/8-16	H2	4	2.938	1.250	**WK302749652**	Price	1.250	**WK302749655**	Price	-	**-**	-
3/8-16	H3	4	2.938	1.250	**WK302749647**	Price	1.250	**WK302749649**	Price	1.250	**WK302749651**	Price
3/8-16	H5	4	2.938	1.250	**WK302749625**	Price	1.250	**WK302749629**	Price	-	**-**	-
3/8-24	H2	4	2.938	-	**-**	-	1.250	**WK302749613**	Price	-	**-**	-
3/8-24	H3	4	2.938	1.250	**WK301951472**	Price	1.250	**WK302749609**	Price	1.250	**WK302749611**	Price
3/8-24	H4	4	2.938	1.250	**WK302749589**	Price	1.250	**WK302749591**	Price	-	**-**	-
7/16-14	H3	4	3.156	1.440	**WK302749582**	Price	1.440	**WK302749584**	Price	1.440	**WK302749586**	Price
7/16-14	H5	4	3.156	1.438	**WK302749570**	Price	1.438	**WK302749572**	Price	-	**-**	-
7/16-20	H3	4	3.156	1.440	**WK302038865**	Price	1.440	**WK301951473**	Price	1.440	**WK302749568**	Price
7/16-20	H5	4	3.156	1.440	**WK302749548**	Price	1.438	**WK302749550**	Price	-	**-**	-
1/2-13	H1	4	3.375	1.660	**WK302749545**	Price	1.660	**WK302866262**	Price	-	**-**	-
1/2-13	H3	4	3.375	1.660	**WK302749540**	Price	1.660	**WK302415661**	Price	1.660	**WK302749543**	Price
1/2-13	H5	4	3.375	1.660	**WK302749520**	Price	1.660	**WK302957246**	Price	-	**-**	-
1/2-20	H1	4	3.375	-	**-**	-	1.656	**WK302749517**	Price	-	**-**	-
1/2-20	H3	4	3.375	1.660	**WK301951476**	Price	1.660	**WK302749513**	Price	1.660	**WK302749514**	Price
1/2-20	H5	4	3.375	-	**-**	-	1.660	**WK302749491**	Price	-	**-**	-
9/16-12	H3	4	3.594	1.660	**WK302866184**	Price	1.660	**WK302866187**	Price	1.660	**WK303139336**	Price
9/16-12	H5	4	3.594	-	**-**	-	1.656	**WK302749481**	Price	-	**-**	-
9/16-18	H2	4	3.594	-	**-**	-	1.656	**WK302749478**	Price	-	**-**	-
9/16-18	H3	4	3.594	1.660	**WK302749474**	Price	1.660	**WK302749475**	Price	1.660	**WK302749476**	Price
9/16-18	H5	4	3.594	-	**-**	-	1.656	**WK302749463**	Price	-	**-**	-
5/8-11	H2	4	3.813	-	**-**	-	1.813	**WK302749461**	Price	-	**-**	-
5/8-11	H3	4	3.813	1.810	**WK302749456**	Price	1.810	**WK302749458**	Price	1.810	**WK302749460**	Price
5/8-11	H5	4	3.813	1.810	**WK302749441**	Price	1.810	**WK302749444**	Price	-	**-**	-
5/8-18	H2	4	3.813	-	**-**	-	1.813	**WK302749434**	Price	-	**-**	-
5/8-18	H3	4	3.813	1.810	**WK302749428**	Price	1.810	**WK302749431**	Price	1.810	**WK302749432**	Price
5/8-18	H5	4	3.813	1.810	**WK302749411**	Price	1.810	**WK302749414**	Price	-	**-**	-
11/16-11	H3	4	4.031	1.813	**WK302749403**	Price	1.060	**WK302749405**	Price	1.813	**WK302749406**	Price
11/16-16	H3	4	4.031	1.060	**WK302749396**	Price	1.813	**WK302749397**	Price	1.813	**WK302749400**	Price
3/4-10	H3	4	4.250	2.000	**WK303180808**	Price	2.000	**WK302749392**	Price	2.000	**WK302749394**	Price
3/4-10	H5	4	4.250	2.000	**WK302749376**	Price	2.000	**WK302749379**	Price	-	**-**	-
3/4-16	H3	4	4.250	2.000	**WK302749370**	Price	2.000	**WK301825322**	Price	2.000	**WK302749374**	Price
3/4-16	H4	4	4.250	-	**-**	-	2.000	**WK302710849**	Price	-	**-**	-
3/4-16	H5	4	4.250	2.000	**WK302749358**	Price	2.000	**WK302749359**	Price	-	**-**	-
7/8-9	H4	4	4.688	2.220	**WK302749352**	Price	2.220	**WK302749354**	Price	2.220	**WK302749356**	Price
7/8-9	H6	4	4.688	-	**-**	-	2.219	**WK302749342**	Price	-	**-**	-
7/8-14	H4	4	4.688	2.220	**WK302749336**	Price	2.220	**WK302749338**	Price	2.220	**WK302749340**	Price
7/8-14	H6	4	4.688	-	**-**	-	2.219	**WK302749329**	Price	-	**-**	-
1-8	H4	4	5.125	2.500	**WK302749324**	Price	2.500	**WK302749326**	Price	2.500	**WK302749327**	Price
1-8	H6	4	5.125	-	**-**	-	2.500	**WK302749311**	Price	-	**-**	-
1-12	H4	4	5.125	2.500	**WK303006761**	Price	2.500	**WK302749305**	Price	2.500	**WK302749308**	Price
1-14	H2	4	5.125	-	**-**	-	2.500	**WK302749297**	Price	-	**-**	-
1-14	H4	4	5.125	2.500	**WK303180807**	Price	2.500	**WK302749292**	Price	2.500	**WK302749294**	Price
1-1/8-7	H4	4	5.437	2.560	**WK302749278**	Price	2.560	**WK302749280**	Price	2.560	**WK302749281**	Price
1-1/8-12	H4	4	5.437	2.560	**WK302749269**	Price	2.560	**WK302749271**	Price	2.560	**WK302749274**	Price
1-1/4-7	H4	4	5.750	2.560	**WK302749261**	Price	2.560	**WK302749263**	Price	2.560	**WK302749265**	Price
1-1/4-12	H4	6	5.750	2.560	**WK302749256**	Price	2.560	**WK302749258**	Price	2.560	**WK303171056**	Price
1-3/8-6	H4	4	6.062	3.000	**WK302749251**	Price	3.000	**WK302749252**	Price	3.000	**WK303012774**	Price
1-3/8-12	H4	6	6.062	3.000	**WK302749246**	Price	3.000	**WK302749247**	Price	3.000	**WK303171057**	Price
1-1/2-6	H4	4	6.375	3.000	**WK302749240**	Price	3.000	**WK303012775**	Price	3.000	**WK302749241**	Price
1-1/2-12	H4	6	6.375	3.000	**WK302749233**	Price	3.000	**WK302749234**	Price	3.000	**WK303012776**	Price

HSS MORSE M GP Eight Pitch Straight Flute Hand Taps

Ground Thread • High Speed Steel • Bright Finish



- Morse List #2046

Price					Bottoming		Plug		Taper	
Size	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1-8	H4	4	2-1/2	5-1/8	**MT3732659**	Price	**MT3732480**	Price	**MT3732323**	Price
1-8	H6	4	2-1/2	5-1/8	-	-	**MT3732481**	Price	-	-
1-1/8-8	H5	4	2-9/16	5-7/16	**MT3732501**	Price	**MT3732508**	Price	**MT3732334**	Price
1-1/4-8	H5	4	2-9/16	5-3/4	**MT3732502**	Price	**MT3732509**	Price	**MT3732336**	Price
1-3/8-8	H5	4	3	6-1/16	**MT3732503**	Price	**MT3732510**	Price	**MT3732338**	Price
1-1/2-8	H5	6	3	6-3/8	**MT3732504**	Price	**MT3732511**	Price	**MT3732340**	Price
1-5/8-8	H6	6	3-3/16	6-11/16	**MT3732505**	Price	**MT3732512**	Price	-	-
1-3/4-8	H6	6	3-3/16	7	**MT3732506**	Price	**MT3732513**	Price	**MT3732344**	Price
1-7/8-8	H6	6	3-9/16	7-5/16	**MT3732507**	Price	**MT3732514**	Price	-	-
2-8	H6	6	3-9/16	7-5/8	**MT3732516**	Price	**MT3732515**	Price	**MT3732348**	Price
2-1/8-8	H6	6	3-9/16	8	**MT3734933**	Price	**MT3734925**	Price	**MT3734919**	Price
2-1/4-8	H6	6	3-9/16	8-1/4	**MT3734934**	Price	**MT3734926**	Price	**MT3734920**	Price
2-3/8-8	H6	6	4	8-1/2	**MT3734935**	Price	**MT3734927**	Price	**MT3734921**	Price
2-1/2-8	H6	6	4	8-3/4	**MT3734936**	Price	**MT3734928**	Price	**MT3734922**	Price
2-5/8-8	H8	6	4	8-3/4	**MT3734937**	Price	**MT3734929**	Price	-	-
2-3/4-8	H6	6	4	9-1/4	**MT3734938**	Price	**MT3734930**	Price	**MT3734923**	Price
2-7/8-8	H8	6	4	9-1/4	**MT3734939**	Price	**MT3734931**	Price	-	-
3-8	H8	6	4-9/16	9-3/4	**MT3734940**	Price	**MT3734932**	Price	**MT3734924**	Price

HSS MORSE M GP Cleanout Taps

Fractional, Machine Screw & Metric • High Speed Steel • Plug Chamfer



- Cleanout taps are used exclusively to restore existing internal threads by removing dirt, old finishes, burrs, and debris
- Cleanout taps are used by hand, hand held driver, drill press, or machine to restore threaded holes. When used by machine, a holder with axial float should be used, allowing the tap to time itself to existing threads.
- Pitch diameter tolerance is H0 for all machine screw and fractional threads and D0 for all metric threads
- Morse List # 2146

- Inch					
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
10-24	4	7/8	2-3/8	**MT9131850**	Price
10-32	4	7/8	2-3/8	**MT9131851**	Price
1/4-20	4	1	2-1/2	**MT9131852**	Price
1/4-28	4	1	2-1/2	**MT9131853**	Price
5/16-18	4	1-1/8	2-23/32	**MT9131854**	Price
5/16-24	4	1-1/8	2-23/32	**MT9131855**	Price
3/8-16	4	1-1/4	2-15/16	**MT9131856**	Price
3/8-24	4	1-1/4	2-15/16	**MT9131857**	Price
7/16-14	4	1-7/16	3-5/32	**MT9131858**	Price
7/16-20	4	1-7/16	3-5/32	**MT9131859**	Price
1/2-13	4	1-21/32	3-3/8	**MT9131860**	Price
1/2-20	4	1-21/32	3-3/8	**MT9131861**	Price
5/8-11	4	1-13/16	3-13/16	**MT9131862**	Price

- Inch					
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
5/8-18	4	1-13/16	3-13/16	**MT9131863**	Price
3/4-10	4	2	4-1/4	**MT9131864**	Price
3/4-16	4	2	4-1/4	**MT9131865**	Price

- Metric					
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
M6x1.0	4	1	2-1/2	**MT9131866**	Price
M8x1.25	4	1-1/8	2-23/32	**MT9131867**	Price
M10x1.5	4	1-1/4	2-15/16	**MT9131868**	Price
M12x1.75	4	1-21/32	3-3/8	**MT9131869**	Price
M14x2.0	4	1-21/32	3-19/32	**MT9131870**	Price
M16x2.0	4	1-13/16	3-19/32	**MT9131871**	Price

TiN Coated Plug Taps

TiN Coating

- Produces an extremely hard coating on tool surface
- Offers outstanding wear resistance, reduces friction and prevents galling
- Greatly increases tool life
- Increased lubricity and chip flow provide better surface finish and reduced torque
- Allows for increased speed & feeds to improve productivity

RAPIDKUT™



- Manufactured in the USA
- Consistent high quality threads
- General & high tech applications
- Premium steel
- Maximum tap life

RAPIDKUT PROCUT

			Rapidkut		ProCut	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price
4-40	H2	3	**EK75904402P**	Price	**EK70904402P**	Price
4-48	H2	3	**EK75904482P**	Price	**EK70904482P**	Price
5-40	H2	3	**EK75905402P**	Price	**EK70905402P**	Price
5-44	H2	3	**EK75905442P**	Price	**EK70905442P**	Price
6-32	H3	3	**EK75906323P**	Price	**EK70906323P**	Price
6-40	H2	3	**EK75906402P**	Price	**EK70906402P**	Price
8-32	H3	4	**EK75908323P**	Price	**EK70908323P**	Price
8-36	H2	4	**EK75908362P**	Price	**EK70908362P**	Price
10-24	H3	4	**EK75910243P**	Price	**EK70910243P**	Price
10-32	H3	4	**EK75910323P**	Price	**EK70910323P**	Price
12-24	H3	4	**EK75912243P**	Price	**EK70912243P**	Price
12-28	H3	4	**EK75912283P**	Price	**EK70912283P**	Price
1/4-20	H3	4	**EK754203P**	Price	**EK704203P**	Price
1/4-28	H3	4	**EK754283P**	Price	**EK704283P**	Price
5/16-18	H3	4	**EK755183P**	Price	**EK705183P**	Price
5/16-24	H3	4	**EK755243P**	Price	**EK705243P**	Price
3/8-16	H3	4	**EK756163P**	Price	**EK706163P**	Price
3/8-24	H3	4	**EK756243P**	Price	**EK706243P**	Price
7/16-14	H3	4	**EK757143P**	Price	**EK707143P**	Price

RAPIDKUT PROCUT

			Rapidkut		ProCut	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price
7/16-20	H3	4	**EK757203P**	Price	**EK707203P**	Price
1/2-13	H3	4	**EK758133P**	Price	**EK708133P**	Price
1/2-20	H3	4	**EK758203P**	Price	**EK708203P**	Price
5/8-11	H3	4	**EK7510113P**	Price	**EK7010113P**	Price
5/8-18	H3	4	**EK7510183P**	Price	**EK7010183P**	Price
3/4-10	H3	4	**EK7512103P**	Price	**EK7012103P**	Price
3/4-16	H3	4	**EK7512163P**	Price	**EK7012163P**	Price
7/8-9	H4	4	**EK7514094P**	Price	**EK7014094P**	Price
7/8-14	H4	4	**EK7514144P**	Price	**EK7014144P**	Price
1-8	H4	4	**EK7516084P**	Price	**EK7016084P**	Price
1-12	H4	4	**EK7516124P**	Price	**EK7016124P**	Price
1-1/8-7	H4	4	**EK7518074P**	Price	**EK7018074P**	Price
1-1/8-12	H4	4	**EK7518124P**	Price	**EK7018124P**	Price
1-1/4-7	H4	4	**EK7520074P**	Price	**EK7020074P**	Price
1-1/4-12	H4	6	**EK7520124P**	Price	**EK7020124P**	Price
1-3/8-6	H4	4	**EK7522064P**	Price	**EK7022064P**	Price
1-3/8-12	H4	6	**EK7522124P**	Price	**EK7022124P**	Price
1-1/2-6	H4	4	**EK7524064P**	Price	**EK7024064P**	Price
1-1/2-12	H4	6	**EK7524124P**	Price	**EK7024124P**	Price

Self Aligning Tapping Fixture



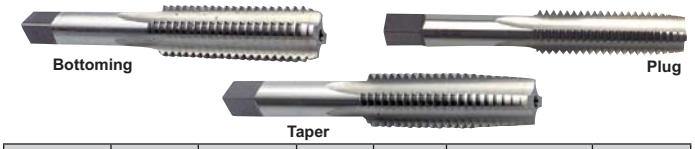
- Tap wrench is aligned in a slip fit steel guide which automatically squares the tap or reamer with the workpiece
- Round as well as flat parts are accurately accepted
- Tap wrench portion has jaw capacity up to 1/2”
- Delivered complete with 2 sets of jaws (one for up to 1/4” taps and another for 1/4” to 1/2” taps)

Order No.	Price
NE60390	Price

RAPIDKUT® 3 Pc. Metric Tap Sets

High Speed Steel • Ground Thread

- Set includes one of each: plug, taper, and bottoming
- Bright finish
- For both ferrous and non-ferrous materials



Set Range	Thread Length	OAL	No. of Flutes	Class of Fit	Order No.	Price
M2 x 0.40	7/16	1-3/4	3	D3	EP6029505	Price
M3 x 0.50	5/8	1-15/16	3	D3	EP6029506	Price
M4 x 0.70	3/4	2-1/8	4	D4	EP6029507	Price
M5 x 0.80	7/8	2-3/8	4	D4	EP6029508	Price
M6 x 1.00	1	2-1/2	4	D5	EP6029509	Price
M7 x 1.00	1-1/8	2-23/32	4	D5	EP6029510	Price
M8 x 1.25	1-1/8	2-23/32	4	D5	EP6029511	Price
M10 x 1.50	1-1/4	2-15/16	4	D6	EP6029512	Price
M12 x 1.75	1-21/32	3-3/8	4	D6	EP6029513	Price
M14 x 2.00	1-21/32	3-19/32	4	D7	EP6029514	Price
M16 x 2.00	1-13/16	3-13/16	4	D7	EP6029515	Price
M18 x 2.50	1-13/16	4-1/32	4	D7	EP6029516	Price
M20 x 2.50	2	4-15/32	4	D7	EP6029517	Price
M24 x 3.00	2-7/32	4-29/32	4	D8	EP6029518	Price

2 Pc. Tap Guide Set



Consists of (1) EV52221 and (1) EV52223

Order No.	Price
EV52225	Price

Tap Guide



- 1/2 Diameter hardened shank
- 3/16 Diameter hardened tension pin
- Adjustable tension spring
- Reversible tension pin for male and female hole centering
- With this tool you start every tap straight

Order No.	Price
EV52221	Price

Machine Tapping Guide



- Provides sensitive feel for hand tapping small holes on milling machines, drilling presses, and lathes
- Starts every hole straight and prevents tap breakage
- Shank diameter is 3/8; handle diameter is 1”
- #0 to #12 tap capacity

Order No.	Price
EV52223	Price

Micro Tap Guide



- Adjustable spring tensioned 1/2” body, knurled for easy handling
- Both male and female. just reverse the point and you have a center hole for small taps
- A handy accessory for any machinist’s box

Order No.	Price
NG4920MTG	Price

Metric Hand Taps

High Speed Steel • Ground Thread



RAPIDKUT® Price PROCUT

							Bottoming		Taper		Plug			
							Bright		Bright		Bright		TiN	
Size (mm)	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
M1.6x0.35	D3	2	5/16	1-5/8	EP6027701	Price	EP6027702	Price	EP6027700	Price	EP5040016†	Price	-	-
M1.8x0.35	D3	2	3/8	1-11/16	EP6027705	Price	EP6027706	Price	EP6027704	Price	EP5040018†	Price	-	-
M2x0.40	D3	3	7/16	1-3/4	EP6027709	Price	EP6027710	Price	EP6027708	Price	EP5027709†	Price	EP5127709TN	Price
M2x0.45	D3	3	7/16	1-3/4	-	-	-	-	-	-	EP5040020†	Price	EP5140020TN	Price
M2.2x0.45	D3	3	7/16	1-3/4	EP6027713	Price	EP6027714	Price	EP6027712	Price	EP5027713†	Price	EP5127713TN	Price
M2.5x0.45	D3	3	1/2	1-13/16	EP6027717	Price	EP6027718	Price	EP6027716	Price	EP5027717†	Price	EP5127717TN	Price
M2.6x0.45	D3	3	7/16	1-3/4	-	-	-	-	-	-	EP5040026	Price	-	-
M3x0.35	D3	3	5/8	1-15/16	-	-	-	-	-	-	EP5040030	Price	-	-
M3x0.50	D3	3	5/8	1-15/16	EP6027721	Price	EP6027722	Price	EP6027720	Price	EP5027721†	Price	EP5127721TN	Price
M3.5x0.35	D4	4	11/16	2	-	-	-	-	-	-	EP5040035	Price	-	-
M3.5x0.60	D3	3	11/16	2	-	-	-	-	-	-	EP5027725†	Price	EP5127725TN	Price
M3.5x0.60	D4	3	11/16	2	EP6027725	Price	EP6027726	Price	EP6027724	Price	-	-	-	-
M4x0.35	D4	4	3/4	2-1/8	-	-	-	-	-	-	EP5040041	Price	-	-
M4x0.50	D4	4	3/4	2-1/8	-	-	-	-	-	-	EP5040040	Price	EP5140040TN	Price
M4x0.70	D2	4	3/4	2-1/8	EP6020121	Price	-	-	-	-	-	-	-	-
M4x0.70	D4	4	3/4	2-1/8	EP6027729	Price	EP6027730	Price	EP6027728	Price	EP5027729†	Price	EP5127729TN	Price
M4.5x0.75	D4	4	7/8	2-3/8	EP6027733	Price	EP6027734	Price	EP6027732	Price	EP5027733†	Price	EP5127733TN	Price
M5x0.50	D4	4	7/8	2-3/8	-	-	-	-	-	-	EP5040050	Price	EP5140050TN	Price
M5x0.80	D4	4	7/8	2-3/8	EP6027737	Price	EP6027738	Price	EP6027736	Price	EP5027737†	Price	EP5127737TN	Price
M5x0.90	D4	4	7/8	2-3/8	-	-	-	-	-	-	EP5040051	Price	EP5140051TN	Price
M5.5x0.90	D4	4	7/8	2-3/8	-	-	-	-	-	-	EP5040055	Price	-	-
M6x0.50	D4	4	1	2-1/2	-	-	-	-	-	-	EP5040061	Price	EP5140061TN	Price
M6x0.75	D4	4	1	2-1/2	-	-	-	-	-	-	EP5040060	Price	EP5140060TN	Price
M6x1.0	D3	4	1	2-1/2	EP6020169	Price	EP6020170	Price	-	-	-	-	-	-

(continued next page)

Metric Hand Taps (cont.)

High Speed Steel • Ground Thread



RAPIDKUT® Price

PROCUT

							Bottoming		Taper		Plug			
							Bright		Bright		Bright		TiN	
Size (mm)	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
M6x1.0	D5	4	1	2-1/2	**EP6027741**	Price	**EP6027742**	Price	**EP6027740**	Price	**EP5027741†**	Price	**EP5127741TN**	Price
M7x1.0	D5	4	1-1/8	2-23/32	**EP6027745**	Price	**EP6027746**	Price	**EP6027744**	Price	**EP5027745†**	Price	**EP5127745TN**	Price
M8x0.75	D5	4	1-1/8	2-23/32	-	-	-	-	-	-	**EP5040080**	Price	**EP5140080TN**	Price
M8x1.0	D3	4	1-1/8	2-23/32	**EP6020233**	Price	**EP6020234**	Price	-	-	-	-	-	-
M8x1.0	D5	4	1-1/8	2-23/32	**EP6027753**	Price	**EP6027754**	Price	**EP6027752**	Price	**EP5027753†**	Price	**EP5127753TN**	Price
M8x1.25	D3	4	1-1/8	2-23/32	**EP6020217**	Price	**EP6020218**	Price	-	-	-	-	-	-
M8x1.25	D5	4	1-1/8	2-23/32	**EP6027749**	Price	**EP6027750**	Price	**EP6027748**	Price	**EP5027749†**	Price	**EP5127749TN**	Price
M9x0.75	D5	4	1-1/4	2-15/16	-	-	-	-	-	-	**EP5040092**	Price	**EP5140092TN**	Price
M9x1.0	D5	4	1-1/4	2-15/16	-	-	-	-	-	-	**EP5040091**	Price	**EP5140091TN**	Price
M9x1.25	D5	4	1-1/4	2-15/16	-	-	-	-	-	-	**EP5040090†**	Price	**EP5140090TN**	Price
M10x0.75	D5	4	1-1/4	2-15/16	-	-	-	-	-	-	**EP5040100**	Price	**EP5140100TN**	Price
M10x1.0	D5	4	1-1/4	2-15/16	-	-	-	-	-	-	**EP5027850†**	Price	**EP5127850TN**	Price
M10x1.25	D3	4	1-1/4	2-15/16	**EP6020265**	Price	**EP6020266**	Price	-	-	-	-	-	-
M10x1.25	D5	4	1-1/4	2-15/16	**EP6027761**	Price	**EP6027762**	Price	**EP6027760**	Price	**EP5027761†**	Price	**EP5127761TN**	Price
M10x1.5	D3	4	1-1/4	2-15/16	**EP6020249**	Price	**EP6020250**	Price	-	-	-	-	-	-
M10x1.5	D6	4	1-1/4	2-15/16	**EP6027757**	Price	**EP6027758**	Price	**EP6027756**	Price	**EP5027757†**	Price	**EP5127757TN**	Price
M11x1.0	D5	4	1-7/16	3-5/32	-	-	-	-	-	-	**EP5040111**	Price	-	-
M11x1.5	D6	4	1-7/16	3-5/32	-	-	-	-	-	-	**EP5040110†**	Price	**EP5140110TN**	Price
M12x1.0	D5	4	1-21/32	3-3/8	-	-	-	-	-	-	**EP5040121**	Price	**EP5140121TN**	Price
M12x1.25	D5	4	1-21/32	3-3/8	**EP6027769**	Price	**EP6027770**	Price	**EP6027768**	Price	**EP5027769†**	Price	**EP5127769TN**	Price
M12x1.5	D4	4	1-21/32	3-3/8	-	-	-	-	-	-	**EP5040120**	Price	**EP5140120TN**	Price
M12x1.75	D3	4	1-21/32	3-19/32	-	-	**EP6020282**	Price	-	-	-	-	-	-
M12x1.75	D3	4	1-21/32	3-3/8	**EP6020281**	Price	-	-	-	-	-	-	-	-
M12x1.75	D6	4	1-21/32	3-3/8	**EP6027765**	Price	**EP6027766**	Price	**EP6027764**	Price	**EP5027765†**	Price	**EP5127765TN**	Price
M14x1.0	D6	4	1-21/32	3-19/32	-	-	-	-	-	-	**EP5040140**	Price	**EP5140140TN**	Price
M14x1.25	D6	4	1-21/32	3-19/32	-	-	-	-	-	-	**EP5027860**	Price	**EP5127860TN**	Price
M14x1.5	D3	4	1-21/32	3-19/32	**EP6020329**	Price	-	-	-	-	-	-	-	-
M14x1.5	D6	4	1-21/32	3-19/32	**EP6027777**	Price	**EP6027778**	Price	**EP6027776**	Price	**EP5027777†**	Price	**EP5127777TN**	Price
M14x2.0	D7	4	1-21/32	3-19/32	**EP6027773**	Price	**EP6027774**	Price	**EP6027772**	Price	**EP5027773†**	Price	**EP5127773TN**	Price
M16x1.0	D6	4	1-13/16	3-13/16	-	-	-	-	-	-	**EP5040161**	Price	**EP5140161TN**	Price
M16x1.25	D5	4	1-13/16	3-13/16	-	-	-	-	-	-	**EP5040160**	Price	-	-
M16x1.5	D3	4	1-13/16	3-13/16	**EP6020361**	Price	-	-	-	-	-	-	-	-
M16x1.5	D6	4	1-13/16	3-13/16	**EP6027785**	Price	**EP6027786**	Price	**EP6027784**	Price	**EP5027785**	Price	**EP5127785TN**	Price
M16x2.0	D4	4	1-13/16	3-13/16	**EP6020345**	Price	-	-	-	-	-	-	-	-
M16x2.0	D7	4	1-13/16	3-13/16	**EP6027781**	Price	**EP6027782**	Price	**EP6027780**	Price	**EP5027781†**	Price	**EP5127781TN**	Price
M18x1.0	D6	4	1-13/16	4-1/32	-	-	-	-	-	-	**EP5040181**	Price	**EP5140181TN**	Price
M18x1.5	D3	4	1-13/16	4-1/32	**EP6020394**	Price	-	-	-	-	-	-	-	-
M18x1.5	D6	4	1-13/16	4-1/32	**EP6027793**	Price	**EP6027794**	Price	**EP6027792**	Price	**EP5027793†**	Price	**EP5127793TN**	Price
M18x2.0	D6	4	1-13/16	4-1/32	-	-	-	-	-	-	**EP5040180**	Price	-	-
M18x2.5	D7	4	1-13/16	4-1/32	**EP6027789**	Price	**EP6027790**	Price	**EP6027788**	Price	**EP5027789†**	Price	**EP5127789TN**	Price
M20x1.0	D7	4	2	4-15/32	-	-	-	-	-	-	**EP5040201**	Price	-	-
M20x1.5	D6	4	2	4-15/32	**EP6027800**	Price	**EP6027801**	Price	**EP6027799**	Price	**EP5027800**	Price	**EP5127800TN**	Price
M20x2.0	D6	4	2	4-15/32	-	-	-	-	-	-	**EP5040200**	Price	-	-
M20x2.5	D7	4	2	4-15/32	**EP6027796**	Price	**EP6027797**	Price	**EP6027795**	Price	**EP5027796**	Price	**EP5127796TN**	Price
M22x1.5	D6	4	2-7/32	4-11/16	**EP6027806**	Price	**EP6027807**	Price	**EP6027805**	Price	**EP5027806**	Price	**EP5127806TN**	Price
M22x2.0	D6	4	2-7/32	4-11/16	-	-	-	-	-	-	**EP5040220**	Price	-	-
M22x2.5	D7	4	2-7/32	4-11/16	**EP6027803**	Price	**EP6027804**	Price	**EP6027802**	Price	**EP5027803**	Price	**EP5127803TN**	Price
M24x1.0	D7	4	2-7/32	4-29/32	-	-	-	-	-	-	**EP5040240**	Price	-	-
M24x2.0	D7	4	2-7/32	4-29/32	**EP6027812**	Price	**EP6027813**	Price	**EP6027811**	Price	**EP5027812†**	Price	**EP5127812TN**	Price
M24x3.0	D8	4	2-7/32	4-29/32	**EP6027809**	Price	**EP6027810**	Price	**EP6027808**	Price	**EP5027809**	Price	**EP5127809TN**	Price
M27x1.5	D7	4	2-1/2	5-1/8	-	-	-	-	-	-	**EP5040270**	Price	-	-
M27x2.0	D7	4	2-1/2	5-1/8	**EP6027818**	Price	**EP6027819**	Price	**EP6027817**	Price	**EP5027818†**	Price	-	-
M27x3.0	D8	4	2-1/2	5-1/8	**EP6027815**	Price	**EP6027816**	Price	**EP6027814**	Price	**EP5027815†**	Price	-	-
M28x2.0	D7	4	2-9/16	5-7/16	-	-	-	-	-	-	**EP5040280**	Price	-	-
M30x2.0	D7	4	2-9/16	5-7/16	**EP6027824**	Price	**EP6027825**	Price	**EP6027823**	Price	**EP5027824†**	Price	**EP5127824TN**	Price
M30x3.5	D9	4	2-9/16	5-7/16	**EP6027821**	Price	**EP6027822**	Price	**EP6027820**	Price	**EP5027821†**	Price	**EP5127821TN**	Price
M33x2.0	D7	4	2-9/16	5-3/4	**EP6027830**	Price	**EP6027831**	Price	**EP6027829**	Price	-	-	-	-
M33x2.0	D7	4	2-9/16	5-3/4	-	-	-	-	-	-	**EP5027830**	Price	-	-
M33x3.5	D9	4	2-9/16	5-3/4	-	-	**EP6027827**	Price	**EP6027826**	Price	**EP5027827†**	Price	-	-
M36x3.0	D8	4	3	6-1/16	**EP6027836**	Price	**EP6027837**	Price	**EP6027835**	Price	**EP5027836†**	Price	-	-
M36x4.0	D9	4	3	6-1/16	**EP6027833**	Price	**EP6027834**	Price	**EP6027832**	Price	**EP5027833**	Price	-	-
M39x3.0	D8	6	3-3/16	6-11/16	**EP6027842**	Price	**EP6027843**	Price	**EP6027841**	Price	**EP5027842†**	Price	-	-
M39x4.0	D9	6	3-3/16	6-11/16	**EP6027839**	Price	**EP6027840**	Price	**EP6027838**	Price	**EP5027839†**	Price	-	-
M42x4.5	D10	6	3-3/16	6-11/16	-	-	-	-	-	-	**EP5040420**	Price	-	-
M45x4.5	D10	6	3-3/16	7	-	-	-	-	-	-	**EP5040450**	Price	-	-
M48x5.0	D10	6	3-9/16	7-5/16	-	-	-	-	-	-	**EP5040480**	Price	-	-
M52x5.0	D10	6	3-5/8	7-5/8	-	-	-	-	-	-	**EP5040520**	Price	-	-

†Available in Bottoming and Taper Styles - while supplies last

Metric Hand Taps

High Speed Steel • Ground Thread • Bright Finish

- Plug style shown
- Morse List #7500
- OSG List #141



					Morse Cutting Tools		OSG USA, Inc.		Morse Cutting Tools		OSG USA, Inc.		Morse Cutting Tools	
					Bottoming		Bottoming		Plug		Plug		Price	
Size	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
M1.6x0.35	D3	2	5/16	1-5/8	**MT3838116**	Price	-	-	**MT3838016**	Price	-	-	**MT3838141**	Price
M1.8x0.35	D3	2	3/8	1-11/16	**MT3838117**	Price	-	-	**MT3838017**	Price	-	-	**MT3838142**	Price
M2x0.40	D3	3	7/16	1-3/4	**MT3838118**	Price	**TP121977400**	Price	**MT3838018**	Price	**TP121977300**	Price	**MT3838143**	Price
M2.2x0.45	D3	3	7/16	1-3/4	**MT3838119**	Price	-	-	**MT3838019**	Price	-	-	**MT3838144**	Price
M2.5x0.45	D3	3	1/2	1-13/16	**MT3838101**	Price	**TP121972300**	Price	**MT3838001**	Price	**TP121972200**	Price	**MT3838145**	Price
M3x0.50	D3	3	5/8	1-15/16	**MT3838102**	Price	**TP121970200**	Price	**MT3838002**	Price	**TP121970100**	Price	**MT3838146**	Price
M3.5x0.60	D4	3	11/16	2	**MT3838103**	Price	**TP121972600**	Price	**MT3838003**	Price	**TP121972500**	Price	**MT3838147**	Price
M4x0.70	D4	4	3/4	2-1/8	**MT3838104**	Price	**TP121970500**	Price	**MT3838004**	Price	**TP121970400**	Price	**MT3838148**	Price
M4.5x0.75	D4	4	7/8	2-3/8	**MT3838105**	Price	**TP121972900**	Price	**MT3838005**	Price	**TP121972800**	Price	**MT3838149**	Price
M5x0.80	D4	4	7/8	2-3/8	**MT3838106**	Price	**TP121970800**	Price	**MT3838006**	Price	**TP121970700**	Price	**MT3838150**	Price
M6x1.0	D5	4	1	2-1/2	**MT3838107**	Price	**TP121971100**	Price	**MT3838007**	Price	**TP121971000**	Price	**MT3838151**	Price
M7x1.0	D5	4	1-1/8	2-23/32	**MT3838108**	Price	**TP121973200**	Price	**MT3838008**	Price	**TP121973100**	Price	**MT3838152**	Price
M8x1.0	D5	4	1-1/8	2-23/32	**MT3838120**	Price	**TP121973500**	Price	**MT3838020**	Price	**TP121973400**	Price	**MT3838153**	Price
M8x1.25	D5	4	1-1/8	2-23/32	**MT3838109**	Price	**TP121971400**	Price	**MT3838009**	Price	**TP121971300**	Price	**MT3838154**	Price
M10x1.0	D5	4	1-1/4	2-15/16	-	-	**TP121973800**	Price	-	-	**TP121973700**	Price	-	-
M10x1.25	D5	4	1-1/4	2-15/16	**MT3838121**	Price	**TP121974100**	Price	**MT3838021**	Price	**TP121974000**	Price	**MT3838155**	Price
M10x1.5	D6	4	1-1/4	2-15/16	**MT3838110**	Price	**TP121971700**	Price	**MT3838010**	Price	**TP121971600**	Price	**MT3838156**	Price
M12x1.25	D5	4	1-21/32	3-3/8	**MT3838122**	Price	**TP121974400**	Price	**MT3838022**	Price	**TP121974300**	Price	**MT3838157**	Price
M12x1.5	D6	4	1-21/32	3-3/8	-	-	**TP121974700**	Price	-	-	**TP121974600**	Price	-	-
M12x1.75	D6	4	1-21/32	3-3/8	**MT3838111**	Price	**TP121972000**	Price	**MT3838011**	Price	**TP121971900**	Price	**MT3838158**	Price
M14x1.25	D5	4	1-21/32	3-19/32	-	-	**TP121975000**	Price	-	-	**TP121974900**	Price	-	-
M14x1.5	D6	4	1-21/32	3-19/32	**MT3838123**	Price	**TP121977700**	Price	**MT3838023**	Price	**TP121977600**	Price	**MT3838159**	Price
M14x2.0	D7	4	1-21/32	3-19/32	**MT3838112**	Price	**TP121975300**	Price	**MT3838012**	Price	**TP121975200**	Price	**MT3838160**	Price
M16x1.5	D6	4	1-13/16	3-13/16	**MT3838124**	Price	**TP121975600**	Price	**MT3838024**	Price	**TP121975500**	Price	**MT3838161**	Price
M16x2.0	D7	4	1-13/16	3-13/16	**MT3838113**	Price	**TP121975900**	Price	**MT3838013**	Price	**TP121975800**	Price	**MT3838162**	Price
M18x1.5	D6	4	1-13/16	'4-1/32	-	-	**TP121976200**	Price	-	-	**TP121976100**	Price	-	-
M18x1.5	D6	4	1-13/16	4-1/32	**MT3838125**	Price	-	-	**MT3838025**	Price	-	-	**MT3838163**	Price
M18x2.5	D7	4	1-13/16	'4-1/32	-	-	**TP121976500**	Price	-	-	**TP121976400**	Price	-	-
M18x2.5	D7	4	1-13/16	4-1/32	**MT3838114**	Price	-	-	**MT3838014**	Price	-	-	**MT3838164**	Price
M20x1.5	D6	4	2	4-15/32	**MT3838126**	Price	**TP121976800**	Price	**MT3838026**	Price	**TP121976700**	Price	**MT3838165**	Price
M20x2.5	D7	4	2	4-15/32	**MT3838115**	Price	**TP121977100**	Price	**MT3838015**	Price	**TP121977000**	Price	**MT3838166**	Price
M22x1.5	D6	4	2-7/32	4-11/16	**MT3838127**	Price	-	-	**MT3838027**	Price	-	-	**MT3838167**	Price
M22x2.5	D7	4	2-7/32	4-11/16	**MT3838128**	Price	-	-	**MT3838028**	Price	-	-	**MT3838168**	Price
M24x2.0	D7	4	2-7/32	4-29/32	**MT3838129**	Price	-	-	**MT3838029**	Price	-	-	**MT3838169**	Price
M24x3.0	D8	4	2-7/32	4-29/32	**MT3838130**	Price	-	-	**MT3838030**	Price	-	-	**MT3838170**	Price
M27x2.0	D7	4	2-1/2	5-1/8	**MT3838131**	Price	-	-	**MT3838031**	Price	-	-	**MT3838171**	Price
M27x3.0	D8	4	2-1/2	5-1/8	**MT3838132**	Price	-	-	**MT3838032**	Price	-	-	**MT3838172**	Price
M30x2.0	D7	4	2-9/16	5-7/16	**MT3838133**	Price	-	-	**MT3838033**	Price	-	-	**MT3838173**	Price
M30x3.5	D9	4	2-9/16	5-7/16	**MT3838134**	Price	-	-	**MT3838034**	Price	-	-	**MT3838174**	Price
M33x2.0	D7	6	2-9/16	5-3/4	**MT3838138**	Price	-	-	**MT3838038**	Price	-	-	**MT3838178**	Price
M33x3.5	D9	4	2-9/16	5-3/4	-	-	-	-	**MT3838035**	Price	-	-	-	-
M36x3.0	D8	4	3	6-1/16	**MT3838136**	Price	-	-	**MT3838036**	Price	-	-	**MT3838176**	Price
M36x4.0	D9	4	3	6-1/16	**MT3838137**	Price	-	-	**MT3838037**	Price	-	-	**MT3838177**	Price

Note: OSG steam oxide available

Spiral Point Taps

Machine Screw Sizes

- Plug style
- Ground thread
- 2 Flute
- High speed steel



					Rapidkut		ProCut	
Size	Thread Limit	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
0-80	H1	2	5/16	1-5/8	**EL65900801P**	Price	**EL50900801P**	Price
0-80	H2	2	5/16	1-5/8	**EL65900802P**	Price	**EL50900802P**	Price
1-64	H1	2	3/8	1-11/16	-	-	**EL50901641P**	Price
1-64	H2	2	3/8	1-11/16	**EL65901642P**	Price	**EL50901642P**	Price
1-72	H1	2	3/8	1-11/16	-	-	**EL50901721P**	Price
1-72	H2	2	3/8	1-11/16	**EL65901722P**	Price	**EL50901722P**	Price
2-56	H1	2	7/16	1-3/4	**EL65902561P**	Price	**EL50902561P**	Price
2-56	H2	2	7/16	1-3/4	**EL65902562P**	Price	**EL50902562P**	Price
2-64	H1	2	7/16	1-3/4	**EL65902641P**	Price	**EL50902641P**	Price
2-64	H2	2	7/16	1-3/4	**EL65902642P**	Price	**EL50902642P**	Price
3-48	H2	2	1/2	1-13/16	**EL65903482P**	Price	**EL50903482P**	Price
3-56	H1	2	1/2	1-13/16	-	-	**EL50903561P**	Price
3-56	H2	2	1/2	1-13/16	**EL65903562P**	Price	**EL50903562P**	Price

					Rapidkut		ProCut	
Size	Thread Limit	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
4-36	H2	2	9/16	1-7/8	**EL65904362P**	Price	**EL50904362P**	Price
4-40	H1	2	9/16	1-7/8	**EL65904401P**	Price	**EL50904401P**	Price
4-40	H2	2	9/16	1-7/8	**EL65904402P**	Price	**EL50904402P**	Price
4-48	H1	2	9/16	1-7/8	**EL65904481P**	Price	**EL50904481P**	Price
4-48	H2	2	9/16	1-7/8	**EL65904482P**	Price	**EL50904482P**	Price
5-40	H2	2	5/8	1-15/16	**EL65905402P**	Price	**EL50905402P**	Price
5-44	H2	2	5/8	1-15/16	**EL65905442P**	Price	**EL50905442P**	Price
6-32	H1	2	11/16	2	**EL65906321P**	Price	**EL50906321P**	Price
5-40	H1	2	5/8	1-15/16	-	-	**EL50905401P**	Price
6-32	H2	2	11/16	2	**EL65906322P**	Price	**EL50906322P**	Price
6-32	H3	2	11/16	2	**EL65906323P**	Price	**EL50906323P**	Price
5-40	H3	2	5/8	1-15/16	-	-	**EL50905403P**	Price
6-40	H2	2	11/16	2	**EL65906402P**	Price	**EL50906402P**	Price

(continued next page)

Spiral Point Taps (cont.)

Machine Screw Sizes



RAPIDKUT PROCUT

Size	Thread Limit	No. of Flutes	Thread Length (in.)	OAL (in.)	Rapidkut Order No.	Rapidkut Price	ProCut Order No.	ProCut Price
5-44	H1	2	5/8	1-15/16	-	-	**EL50905441P**	Price
6-40	H3	2	11/16	2	**EL65906403P**	Price	**EL50906403P**	Price
8-32	H1	2	3/4	2-1/8	**EL65908321P**	Price	**EL50908321P**	Price
5-44	H3	2	5/8	1-15/16	-	-	**EL50905443P**	Price
8-32	H2	2	3/4	2-1/8	**EL65908322P**	Price	**EL50908322P**	Price
8-32	H3	2	3/4	2-1/8	**EL65908323P**	Price	**EL50908323P**	Price
8-36	H1	2	3/4	2-1/8	**EL65908361P**	Price	**EL50908361P**	Price
8-36	H2	2	3/4	2-1/8	**EL65908362P**	Price	**EL50908362P**	Price
6-40	H1	2	11/16	2	-	-	**EL50906401P**	Price
8-36	H3	2	3/4	2-1/8	**EL65908363P**	Price	**EL50908363P**	Price
10-24	H1	2	7/8	2-3/8	**EL65910241P**	Price	**EL50910241P**	Price
10-24	H2	2	7/8	2-3/8	**EL65910242P**	Price	**EL50910242P**	Price
10-24	H3	2	7/8	2-3/8	**EL65910243P**	Price	**EL50910243P**	Price

RAPIDKUT PROCUT

Size	Thread Limit	No. of Flutes	Thread Length (in.)	OAL (in.)	Rapidkut Order No.	Rapidkut Price	ProCut Order No.	ProCut Price
10-32	H1	2	7/8	2-3/8	**EL65910321P**	Price	**EL50910321P**	Price
10-32	H2	2	7/8	2-3/8	**EL65910322P**	Price	**EL50910322P**	Price
10-32	H3	2	7/8	2-3/8	**EL65910323P**	Price	**EL50910323P**	Price
12-24	H3	2	15/16	2-3/8	**EL65912243P**	Price	**EL50912243P**	Price
12-28	H3	2	15/16	2-3/8	**EL65912283P**	Price	**EL50912283P**	Price
12-24	H1	2	15/16	2-3/8	-	-	**EL50912241P**	Price
12-24	H2	2	15/16	2-3/8	-	-	**EL50912242P**	Price
12-28	H2	2	15/16	2-3/8	-	-	**EL50912282P**	Price
14-20	H2	2	1	2-1/8	-	-	**EL50914202P**	Price
14-20	H3	2	1	2-1/8	-	-	**EL50914203P**	Price
14-24	H2	2	1	2-1/8	-	-	**EL50914242P**	Price
14-24	H3	2	1	2-1/8	-	-	**EL50914243P**	Price

WIDIA GUN™ Spiral Pointed Taps

High Speed Steel

- For through holes in general machining applications



Size	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
0-80	H1	2	.310	1.625	**WK302750251**	Price
0-80	H2	2	.310	1.625	**WK302750249**	Price
1-64	H2	2	.375	1.688	**WK302750246**	Price
1-72	H1	2	.375	1.688	**WK302750243**	Price
1-72	H2	2	.380	1.688	**WK302750241**	Price
2-56	H1	2	.440	1.750	**WK302867066**	Price
2-56	H2	2	.440	1.750	**WK302867063**	Price
2-64	H2	2	.440	1.750	**WK302750238**	Price
3-48	H2	2	.500	1.813	**WK302750236**	Price
3-56	H2	2	.500	1.813	**WK302750231**	Price
4-36	H2	2	.563	1.875	**WK302750230**	Price
4-40	H2	2	.560	1.875	**WK302750228**	Price
4-48	H2	2	.560	1.875	**WK302750225**	Price
5-40	H2	2	.620	1.938	**WK302750220**	Price
5-44	H2	2	.620	1.938	**WK302750218**	Price
8-32	H1	2	.750	2.125	**WK302750204**	Price
6-32	H2	2	.690	2.000	**WK302750212**	Price
6-32	H3	2	.690	2.000	**WK302750210**	Price
6-40	H2	2	.690	2.000	**WK302750206**	Price
8-32	H2	2	.750	2.125	**WK302750202**	Price
8-32	H3	2	.750	2.125	**WK302750199**	Price
8-36	H2	2	.750	2.125	**WK302750193**	Price
10-24	H1	2	.880	2.375	**WK302750192**	Price
10-24	H2	2	.880	2.375	**WK302750190**	Price
10-24	H3	2	.880	2.375	**WK302409831**	Price
10-32	H1	2	.880	2.375	**WK302750179**	Price
10-32	H2	2	.880	2.375	**WK302750177**	Price
10-32	H3	2	.880	2.375	**WK302750175**	Price
12-24	H3	2	.940	2.375	**WK302750160**	Price
12-28	H3	2	.940	2.375	**WK302750159**	Price
1/4-20	H1	2	1.000	2.500	**WK302750156**	Price
1/4-20	H2	2	1.000	2.500	**WK302750154**	Price
1/4-20	H3	2	1.000	2.500	**WK302750152**	Price
1/4-20	H5	2	1.000	2.500	**WK302750143**	Price
1/4-20	H3	3	1.000	2.500	**WK302750148**	Price
1/4-20	H5	3	1.000	2.500	**WK302750141**	Price
1/4-28	H1	2	1.000	2.500	**WK302750135**	Price

Size	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
1/4-28	H2	2	1.000	2.500	**WK302750132**	Price
1/4-28	H3	2	1.000	2.500	**WK302750128**	Price
1/4-28	H4	2	1.000	2.500	**WK302750119**	Price
1/4-28	H2	3	1.000	2.500	**WK302750129**	Price
1/4-28	H4	3	1.000	2.500	**WK302750118**	Price
5/16-18	H1	2	1.120	2.719	**WK302750115**	Price
5/16-18	H2	2	1.120	2.719	**WK302750112**	Price
5/16-18	H3	2	1.120	2.719	**WK302750111**	Price
5/16-18	H5	2	1.120	2.719	**WK302750105**	Price
5/16-18	H3	3	1.120	2.719	**WK302750109**	Price
5/16-18	H5	3	1.120	2.719	**WK302750103**	Price
5/16-24	H2	2	1.120	2.719	**WK302750094**	Price
5/16-24	H3	2	1.120	2.719	**WK302750088**	Price
5/16-24	H4	2	1.125	2.719	**WK302750086**	Price
5/16-24	H4	3	1.120	2.719	**WK302750084**	Price
3/8-16	H1	3	1.250	2.938	**WK302750082**	Price
3/8-16	H2	3	1.250	2.938	**WK302750080**	Price
3/8-16	H3	3	1.250	2.938	**WK302750078**	Price
3/8-16	H5	3	1.250	2.938	**WK302750075**	Price
3/8-24	H2	3	1.250	2.938	**WK302866897**	Price
3/8-24	H3	3	1.250	2.938	**WK302750067**	Price
3/8-24	H4	3	1.250	2.938	**WK302750066**	Price
7/16-14	H2	3	1.440	3.156	**WK302750062**	Price
7/16-14	H3	3	1.440	3.156	**WK302750060**	Price
7/16-14	H5	3	1.440	3.156	**WK302750058**	Price
7/16-20	H3	3	1.440	3.156	**WK302750055**	Price
7/16-20	H5	3	1.440	3.156	**WK302750054**	Price
1/2-13	H2	3	1.660	3.375	**WK302750053**	Price
1/2-13	H3	3	1.660	3.375	**WK302750052**	Price
1/2-13	H5	3	1.660	3.375	**WK302750047**	Price
1/2-20	H2	3	1.656	3.375	**WK302750041**	Price
1/2-20	H3	3	1.660	3.375	**WK302750040**	Price
1/2-20	H5	3	1.660	3.375	**WK302750039**	Price
5/8-11	H3	3	1.810	3.813	**WK302750036**	Price
5/8-11	H5	3	1.810	3.813	**WK302750032**	Price
5/8-18	H3	3	1.810	3.813	**WK302750028**	Price
3/4-10	H3	3	2.000	4.250	**WK302750024**	Price
3/4-10	H5	3	2.000	4.250	**WK302750023**	Price

WIDIA GUN™ Spiral Pointed Taps

High Speed Steel • Plug Style

- For through holes in general machining applications



Size	Thread Limits	No. of Flutes	Thread Length	OAL	Order No.	Price
M1.6x0.35	D3	2	.310	1.625	**WK302750021**	Price
M2x0.40	6H	2	11.1mm	44.45mm	**WK302750018**	Price
M2.5x0.45	6H	2	12.7mm	46.04mm	**WK302750017**	Price
M3x0.50	6H	2	15.9mm	49.21mm	**WK302750015**	Price
M3.5x0.60	D4	2	17.5mm	50.8mm	**WK302750013**	Price
M4x0.70	6H	2	19mm	53.98mm	**WK302750012**	Price
M4.5x0.75	D4	2	22.2mm	60.32mm	**WK302750010**	Price
M5x0.80	6H	2	22.2mm	60.32mm	**WK302750009**	Price
M6.3x1.0	D5	2	25.4mm	63.5mm	**WK302750002**	Price
M6x1.0	6H	2	25.4mm	63.5mm	**WK302750005**	Price

Size	Thread Limits	No. of Flutes	Thread Length	OAL	Order No.	Price
M7x1.0	D5	2	28.6mm	69.06mm	**WK302750000**	Price
M8x1.25	6H	2	28.6mm	69.06mm	**WK302749995**	Price
M10x1.5	6H	3	31.8mm	74.61mm	**WK302749991**	Price
M12x1.75	D6	3	1.660	3.380	**WK302749985**	Price
M14x2.0	D7	3	1.660	3.590	**WK302749982**	Price
M16x2.0	D7	3	1.810	3.810	**WK302749979**	Price
M18x2.5	D7	3	46mm	102.39mm	**WK302749977**	Price
M20x2.5	D7	3	2.000	4.470	**WK302749975**	Price

Spiral Point Taps
Fractional Sizes

- Plug style
- Ground thread
- High speed steel



RAPIDKUT PROCUT

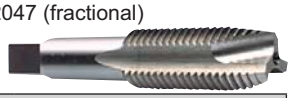
					Rapidkut		ProCut	
Size	Thread Limit	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/4-20	H1	2	1	2-1/2	EL654201P	Price	EL504201P	Price
1/4-20	H2	2	1	2-1/2	EL654202P	Price	EL504202P	Price
1/4-20	H3	2	1	2-1/2	EL654203P	Price	EL504203P	Price
1/4-20	H4	2	1	2-1/2	-	-	EL504204P	Price
1/4-28	H1	2	1	2-1/2	-	-	EL504281P	Price
1/4-28	H2	2	1	2-1/2	EL654282P	Price	EL504282P	Price
1/4-28	H3	2	1	2-1/2	EL654283P	Price	EL504283P	Price
1/4-28	H4	2	1	2-1/2	EL654284P	Price	-	-
5/16-18	H2	2	1-1/8	2-23/32	EL655182P	Price	EL505182P	Price
5/16-18	H3	2	1-1/8	2-23/32	EL655183P	Price	EL505183P	Price
5/16-18	H5	2	1-1/8	2-23/32	EL655185P	Price	EL505185P	Price
5/16-24	H1	2	1-1/8	2-23/32	EL655241P	Price	-	-
5/16-24	H2	2	1-1/8	2-23/32	EL655242P	Price	EL505242P	Price
5/16-24	H3	2	1-1/8	2-23/32	EL655243P	Price	EL505243P	Price
5/16-24	H4	2	1-1/8	2-23/32	-	-	EL505244P	Price
5/16-24	H5	4	1-1/8	2-23/32	EL655245P	Price	-	-
3/8-16	H2	3	1-1/4	2-15/16	EL656162P	Price	EL506162P	Price
3/8-16	H3	3	1-1/4	2-15/16	EL656163P	Price	EL506163P	Price
3/8-16	H5	3	1-1/4	2-15/16	EL656165P	Price	EL506165P	Price
3/8-24	H2	3	1-1/4	2-15/16	EL656242P	Price	EL506242P	Price
3/8-24	H3	3	1-1/4	2-15/16	EL656243P	Price	EL506243P	Price
3/8-24	H5	3	1-1/4	2-15/16	-	-	EL506245P	Price
7/16-14	H2	3	1-7/16	3-5/32	EL657142P	Price	EL507142P	Price
7/16-14	H3	3	1-7/16	3-5/32	EL657143P	Price	EL507143P	Price
7/16-14	H4	3	1-7/16	3-5/32	-	-	EL507144P	Price
7/16-14	H5	3	1-7/16	3-5/32	EL657145P	Price	EL507145P	Price
7/16-20	H2	3	1-7/16	3-5/32	EL657202P	Price	EL507202P	Price
7/16-20	H3	3	1-7/16	3-5/32	EL657203P	Price	EL507203P	Price
7/16-20	H4	3	1-7/16	3-5/32	EL657204P	Price	EL507204P	Price
7/16-20	H5	3	1-7/16	3-5/32	EL657205P	Price	EL507205P	Price
1/2-13	H1	3	1-21/32	3-3/8	-	-	EL508131P	Price
1/2-13	H2	3	1-21/32	3-3/8	EL658132P	Price	EL508132P	Price
1/2-13	H3	3	1-21/32	3-3/8	EL658133P	Price	EL508133P	Price
1/2-13	H5	3	1-21/32	3-3/8	EL658135P	Price	EL508135P	Price
1/2-20	H2	3	1-21/32	3-3/8	EL658202P	Price	EL508202P	Price
1/2-20	H3	3	1-21/32	3-3/8	EL658203P	Price	EL508203P	Price
1/2-20	H5	3	1-21/32	3-3/8	EL658205P	Price	-	-
9/16-12	H3	3	1-13/16	3-3/16	EL659123P	Price	EL5009123P	Price
9/16-12	H5	3	1-13/16	3-3/16	EL659125P	Price	-	-
9/16-18	H3	3	1-13/16	3-3/16	EL659183P	Price	EL5009183P	Price
5/8-11	H3	3	1-13/16	3-3/16	EL6510113P	Price	EL5010113P	Price
5/8-11	H5	3	1-13/16	3-3/16	-	-	EL5010115P	Price
5/8-18	H3	3	1-13/16	3-3/16	EL6510183P	Price	EL5010183P	Price
5/8-18	H5	3	1-13/16	3-3/16	-	-	EL5010185P	Price
11/16-11	H3	3	2	4-1/4	-	-	EL5011113P	Price
11/16-16	H3	3	2	4-1/4	-	-	EL5011163P	Price
3/4-10	H3	3	2	4-1/4	EL6512103P	Price	EL5012103P	Price
3/4-10	H5	3	2	4-1/4	-	-	EL5012105P	Price
3/4-16	H3	3	2	4-1/4	EL6512163P	Price	EL5012163P	Price
3/4-16	H5	3	2	4-1/4	-	-	EL5012165P	Price
7/8-9	H2	3	2-7/32	4-11/16	-	-	EL5014092P	Price
7/8-9	H4	3	2-7/32	4-11/16	EL6514094P	Price	EL5014094P	Price
7/8-14	H3	3	2-7/32	4-11/16	EL6514143P	Price	EL5014143P	Price
7/8-14	H4	3	2-7/32	4-11/16	EL6514144P	Price	EL5014144P	Price
1-8	H3	3	2-1/2	5-1/8	-	-	EL5016083P	Price
1-8	H4	3	2-1/2	5-1/8	-	-	EL5016084P	Price
1-12	H3	3	2-1/2	5-1/8	-	-	EL5016123P	Price
1-12	H4	3	2-1/2	5-1/8	-	-	EL5016124P	Price
1-12	H5	3	2-1/2	5-1/8	-	-	EL5016125P	Price
1-14	H3	3	2-1/2	5-1/8	EL6516143P	Price	EL5016143P	Price
1-14	H4	3	2-1/2	5-1/8	-	-	EL5016144P	Price

General Purpose Spiral Point Taps

- Plug & bottoming style
- Ground thread
- High speed steel

HSS M GP

- Morse List #2070 (machine screw sizes) 2047 (fractional)
- OSG List #105B (bottoming), 105 (plug)



			Plug		Bottoming		Plug				Bottoming			
			Bright		Bright		Price		Steam Oxide		Bright		Steam Oxide	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
0-80	H1	2	MT3634001	Price	-	-	TP111200000	Price	-	-	TP111200100	Price	-	-
0-80	H2	2	MT3634002	Price	MT3634101	Price	TP111205000	Price	TP111205001	Price	TP113000100	Price	-	-
0-80	H3	2	-	-	-	-	TP111210000	Price	TP111210001	Price	-	-	-	-
1-64	H1	2	MT3634003	Price	-	-	TP111200200	Price	-	-	-	-	-	-
1-64	H2	2	MT3634004	Price	-	-	TP111205200	Price	TP111205201	Price	-	-	-	-
1-72	H1	2	MT3634005	Price	-	-	TP111200400	Price	-	-	-	-	-	-
1-72	H2	2	MT3634006	Price	-	-	TP111205400	Price	TP111205401	Price	-	-	-	-
2-56	H2	2	MT3634008	Price	MT3634102	Price	TP111205600	Price	TP111205601	Price	TP111205700	Price	-	-
2-56	H3	2	-	-	-	-	TP111210600	Price	TP111210601	Price	-	-	-	-

General Purpose Spiral Point Taps (cont.)

HSS Morse M GP

			Plug		Bottoming		Plug				Bottoming			
			Bright		Bright		Price		Steam Oxide		Bright		Steam Oxide	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
2-56	H5	2	-	-	-	-	TP111215600	Price	-	-	-	-	-	-
2-64	H2	2	MT3634010	Price	-	-	TP111205800	Price	TP111205801	Price	-	-	-	-
3-48	H2	2	MT3634012	Price	MT3634103	Price	TP111206000	Price	TP111206001	Price	TP111206100	Price	-	-
3-56	H1	2	MT3634013	Price	-	-	TP111201200	Price	-	-	-	-	-	-
3-56	H2	2	MT3634014	Price	-	-	TP111206200	Price	TP111206201	Price	-	-	-	-
4-36	H2	2	MT3634019	Price	-	-	TP111206800	Price	-	-	-	-	-	-
4-40	H1	2	MT3634015	Price	-	-	TP111201400	Price	-	-	-	-	-	-
4-40	H2	2	MT3634016	Price	MT3634104	Price	TP111206400	Price	TP111206401	Price	TP111206500	Price	TP111206501	Price
4-40	H3	2	-	-	-	-	TP111211400	Price	TP111211401	Price	-	-	-	-
4-40	H5	2	-	-	-	-	TP111216400	Price	-	-	-	-	-	-
4-48	H1	2	MT3634017	Price	-	-	TP111201600	Price	-	-	-	-	-	-
4-48	H2	2	MT3634018	Price	MT3634105	Price	TP111206600	Price	TP111206601	Price	TP111206700	Price	-	-
5-40	H1	2	MT3634020	Price	-	-	TP111202000	Price	-	-	-	-	-	-
5-40	H2	2	MT3634021	Price	MT3634106	Price	TP111207000	Price	TP111207001	Price	TP111207100	Price	-	-
5-44	H2	2	MT3634022	Price	-	-	TP111207200	Price	TP111207201	Price	-	-	-	-
6-32	H1	2	MT3634023	Price	-	-	TP111202400	Price	-	-	-	-	-	-
6-32	H2	2	MT3634024	Price	MT3634107	Price	TP111207400	Price	TP111207401	Price	TP111207500	Price	-	-
6-32	H3	2	MT3634025	Price	MT3634108	Price	TP111212400	Price	TP111212401	Price	TP111212500	Price	TP111212501	Price
6-32	H4	2	-	-	-	-	TP112003900	Price	-	-	-	-	-	-
6-32	H5	2	-	-	-	-	TP111217400	Price	TP111217401	Price	-	-	-	-
6-40	H2	2	MT3634026	Price	MT3634109	Price	TP111207600	Price	TP111207601	Price	TP111207700	Price	-	-
8-32	H1	2	MT3634027	Price	-	-	TP111202800	Price	-	-	-	-	-	-
8-32	H2	2	MT3634028	Price	MT3634110	Price	TP111207800	Price	TP111207801	Price	TP111207900	Price	-	-
8-32	H3	2	MT3634029	Price	MT3634111	Price	TP111212800	Price	TP111212801	Price	TP111212900	Price	TP111212901	Price
8-32	H5	2	-	-	-	-	TP111217800	Price	TP111217801	Price	-	-	-	-
8-36	H2	2	MT3634030	Price	-	-	TP111208200	Price	-	-	-	-	-	-
10-24	H1	2	MT3634031	Price	-	-	TP111203400	Price	-	-	-	-	-	-
10-24	H2	2	MT3634032	Price	MT3634112	Price	TP111208400	Price	TP111208401	Price	TP11300450	Price	-	-
10-24	H3	2	MT3634033	Price	MT3634113	Price	TP111213400	Price	TP111213401	Price	TP111213500	Price	-	-
10-24	H5	2	-	-	-	-	TP112006600	Price	-	-	-	-	-	-
10-32	H1	2	MT3634034	Price	-	-	TP111203800	Price	-	-	-	-	-	-
10-32	H2	2	MT3634035	Price	MT3634114	Price	TP111208800	Price	TP111208801	Price	TP111208900	Price	-	-
10-32	H3	2	MT3634036	Price	MT3634115	Price	TP111213800	Price	TP111213801	Price	TP111213900	Price	TP111213901	Price
10-32	H5	2	-	-	-	-	TP111218800	Price	TP111218801	Price	-	-	-	-
12-24	H3	2	MT3634038	Price	MT3634116	Price	TP111214200	Price	-	-	TP111214300	Price	-	-
12-28	H3	2	MT3634039	Price	-	-	TP111214400	Price	-	-	-	-	-	-
1/4-20	H1	2	MT3633001	Price	-	-	TP111220000	Price	-	-	-	-	-	-
1/4-20	H2	2	MT3633002	Price	-	-	TP111225000	Price	-	-	-	-	-	-
1/4-20	H3	2	MT3633003	Price	MT3633101	Price	TP111230000	Price	TP111230001	Price	TP111230100	Price	TP111230101	Price
1/4-20	H3	3	MT3633005	Price	-	-	TP111230200	Price	TP111230201	Price	-	-	-	-
1/4-20	H5	2	MT3633004	Price	-	-	TP111240000	Price	-	-	-	-	-	-
1/4-20	H5	3	MT3633006	Price	-	-	TP111240200	Price	-	-	-	-	-	-
1/4-28	H1	2	MT3633007	Price	-	-	TP111220400	Price	-	-	-	-	-	-
1/4-28	H2	2	MT3633008	Price	-	-	TP111225400	Price	-	-	-	-	-	-
1/4-28	H2	3	MT3633011	Price	-	-	TP111225600	Price	-	-	-	-	-	-
1/4-28	H3	2	MT3633009	Price	MT3633102	Price	TP111230400	Price	TP111230401	Price	TP111230500	Price	TP111230501	Price
1/4-28	H4	2	MT3633010	Price	-	-	TP111235400	Price	-	-	-	-	-	-
1/4-28	H4	3	MT3633012	Price	-	-	TP111235600	Price	-	-	-	-	-	-
5/16-18	H1	2	MT3633013	Price	-	-	TP111220800	Price	-	-	-	-	-	-
5/16-18	H2	2	MT3633014	Price	-	-	TP111225800	Price	-	-	-	-	-	-
5/16-18	H3	2	MT3633015	Price	MT3633103	Price	TP111230800	Price	TP111230801	Price	TP111230900	Price	TP111230901	Price
5/16-18	H3	3	MT3633017	Price	-	-	TP111231000	Price	-	-	-	-	-	-
5/16-18	H5	2	MT3633016	Price	-	-	TP111240800	Price	-	-	-	-	-	-
5/16-18	H5	3	MT3633018	Price	-	-	TP111241000	Price	-	-	-	-	-	-
5/16-24	H1	2	MT3633019	Price	-	-	TP111221200	Price	-	-	-	-	-	-
5/16-24	H2	2	MT3633020	Price	-	-	TP111226200	Price	-	-	-	-	-	-
5/16-24	H2	3	MT3633023	Price	-	-	TP111226400	Price	-	-	-	-	-	-
5/16-24	H3	2	MT3633021	Price	MT3633104	Price	TP111231200	Price	TP111231201	Price	TP111231300	Price	-	-
5/16-24	H4	2	MT3633022	Price	-	-	TP111236200	Price	-	-	-	-	-	-
5/16-24	H4	3	MT3633024	Price	-	-	TP111236400	Price	-	-	-	-	-	-
3/8-16	H1	3	MT3633025	Price	-	-	TP111221600	Price	-	-	-	-	-	-
3/8-16	H2	3	MT3633026	Price	-	-	TP111226600	Price	-	-	-	-	-	-
3/8-16	H3	3	MT3633027	Price	-	-	TP111231600	Price	TP111231601	Price	TP111231700	Price	TP111231701	Price
3/8-16	H5	3	MT3633028	Price	-	-	TP111241600	Price	-	-	-	-	-	-
3/8-24	H1	3	MT3633029	Price	-	-	TP111221800	Price	-	-	-	-	-	-
3/8-24	H2	3	MT3633030	Price	-	-	TP111226800	Price	-	-	-	-	-	-
3/8-24	H3	3	MT3633031	Price	-	-	TP111231800	Price	TP111231801	Price	-	-	-	-
3/8-24	H4	3	MT3633032	Price	-	-	TP111236800	Price	-	-	-	-	-	-
7/16-14	H2	3	MT3633033	Price	-	-	TP111227000	Price	-	-	-	-	-	-
7/16-14	H3	3	MT3633034	Price	-	-	TP111232000	Price	-	-	-	-	-	-
7/16-14	H5	3	MT3633035	Price	-	-	TP111242000	Price	-	-	-	-	-	-
7/16-20	H3	3	MT3633036	Price	-	-	TP111232200	Price	TP111232201	Price	-	-	-	-
7/16-20	H5	3	MT3633037	Price	-	-	TP111242200	Price	-	-	-	-	-	-
1/2-13	H2	3	MT3633039	Price	-	-	TP111227400	Price	-	-	-	-	-	-
1/2-13	H3	3	MT3633040	Price	-	-	TP111232400	Price	TP111232401	Price	-	-	-	-
1/2-13	H5	3	MT3633041	Price	-	-	TP111242400	Price	-	-	-	-	-	-
1/2-20	H1	3	MT3633042	Price	-	-	TP111222600	Price	-	-	-	-	-	-
1/2-20	H2	3	MT3633043	Price	-	-	TP111227600	Price	-	-	-	-	-	-
1/2-20	H3	3	MT3633044	Price	-	-	TP111232600	Price	TP111232601	Price	-	-	-	-
1/2-20	H5	3	MT3633045	Price	-	-	TP111242600	Price	-	-	-	-	-	-
5/8-11	H3	3	MT3633046	Price	-	-	TP111233200	Price	TP111233201	Price	-	-	-	-
5/8-11	H5	3	MT3633047	Price	-	-	TP111243200	Price	-	-	-	-	-	-
5/8-18	H3	3	MT3633050	Price	-	-	TP111233400	Price	TP111233401	Price	-	-	-	-
3/4-10	H3	3	MT3633048	Price	-	-	TP111233600	Price	TP111233601	Price	-	-	-	-
3/4-10	H5	3	MT3633049	Price	-	-	TP111243600	Price	-	-	-	-	-	-
3/4-16	H3	3	MT3633052	Price	-	-	TP111233800	Price	TP111233801	Price	-	-	-	-

Note: OSG steam oxide available

TiN Coated Spiral Point Plug Taps

TiN Coating
- Produces an extremely hard coating on tool surface
- Offers outstanding wear resistance, reduces friction and prevents galling
- Greatly increases tool life
- Increased lubricity and chip flow provide better surface finish and reduced torque
- Allows for increased speed & feeds to improve productivity

RAPIDKUT™
- Manufactured in the USA
- Consistent high quality threads
- General & high tech applications
- Premium steel
- Maximum tap life



RAPIDKUT PROCUT

			Rapidkut		ProCut	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price
4-40	H2	2	**EL75904402P**	Price	**EL70904402P**	Price
4-48	H2	2	**EL75904482P**	Price	**EL70904482P**	Price
5-40	H2	2	**EL75905402P**	Price	**EL70905402P**	Price
5-44	H2	2	**EL75905442P**	Price	**EL70905442P**	Price
6-32	H3	2	**EL75906323P**	Price	**EL70906323P**	Price
6-40	H2	2	**EL75906402P**	Price	**EL70906402P**	Price
8-32	H3	2	**EL75908323P**	Price	**EL70908323P**	Price
8-36	H2	2	**EL75908362P**	Price	**EL70908362P**	Price
10-24	H3	2	**EL75910243P**	Price	**EL70910243P**	Price
10-32	H3	2	**EL75910323P**	Price	**EL70910323P**	Price
12-24	H3	2	**EL75912243P**	Price	**EL70912243P**	Price
12-28	H3	2	**EL75912283P**	Price	**EL70912283P**	Price
1/4-20	H3	2	**EL754203P**	Price	**EL704203P**	Price
1/4-28	H3	2	**EL754283P**	Price	**EL704283P**	Price
5/16-18	H3	2	**EL755183P**	Price	**EL705183P**	Price
5/16-24	H3	2	**EL755243P**	Price	**EL705243P**	Price
3/8-16	H3	3	**EL756163P**	Price	**EL706163P**	Price
3/8-24	H3	3	**EL756243P**	Price	**EL706243P**	Price
7/16-14	H3	3	**EL757143P**	Price	**EL707143P**	Price
7/16-20	H3	3	**EL757203P**	Price	**EL707203P**	Price
1/2-13	H3	3	**EL758133P**	Price	**EL708133P**	Price
1/2-20	H3	3	**EL758203P**	Price	**EL708203P**	Price
5/8-11	H3	3	**EL7510113P**	Price	**EL7010113P**	Price
5/8-18	H3	3	**EL7510183P**	Price	**EL7010183P**	Price
3/4-10	H3	3	**EL7512103P**	Price	**EL7012103P**	Price
3/4-16	H3	3	**EL7512163P**	Price	**EL7012163P**	Price
7/8-9	H4	3	-	-	**EL7014094P**	Price
7/8-14	H4	3	-	-	**EL7014144P**	Price
1-8	H4	3	-	-	**EL7016084P**	Price
1-12	H4	3	-	-	**EL7016124P**	Price

WIDIA Fast Spiral Fluted Taps

High Speed Steel • Bottoming

- For through holes in general machining applications



Size	Thread Limits	No. of Flutes	Thread Length	OAL	Order No.	Price
4-40	H2	2	.560	1.875	**WK302748375**	Price
5-40	H2	2	.560	1.938	**WK302748370**	Price
6-32	H3	2	.380	2.000	**WK302748367**	Price
8-32	H3	3	.380	2.125	**WK303083563**	Price
10-24	H3	3	.500	2.375	**WK302748361**	Price
10-32	H3	3	.500	2.375	**WK302748356**	Price
12-24	H3	3	.500	2.375	**WK302748353**	Price
1/4-20	H3	3	.620	2.500	**WK302748351**	Price
1/4-28	H3	3	.620	2.500	**WK301775500**	Price
5/16-18	H3	3	.680	2.719	**WK302748339**	Price
5/16-24	H3	3	.680	2.719	**WK303012779**	Price
3/8-16	H3	3	.740	2.938	**WK303083460**	Price
3/8-24	H3	3	.750	2.938	**WK302748329**	Price
7/16-14	H3	3	.880	3.156	**WK302748325**	Price
7/16-20	H3	3	.880	3.156	**WK302748321**	Price
1/2-13	H3	3	.940	3.375	**WK302748317**	Price
1/2-20	H3	3	.940	3.375	**WK302748314**	Price
5/8-11	H3	4	1.090	3.813	**WK302748309**	Price
3/4-10	H3	4	1.220	4.250	**WK303083458**	Price

WIDIA Fast Spiral Fluted Taps

High Speed Steel • Bottoming

- For through holes in general machining applications



Size	Thread Limit	No. of Flutes	Thread Limits	OAL	Order No.	Price
M3x0.50	D3	2	.310	1.940	**WK302748300**	Price
M4x0.70	D4	3	.380	2.130	**WK302748296**	Price
M5x0.80	D4	3	.500	2.380	**WK302748293**	Price
M6x1.0	D5	3	.380	2.500	**WK302748288**	Price
M8x1.25	D5	3	.680	2.720	**WK302748284**	Price
M10x1.5	D6	3	.740	2.940	**WK302748275**	Price
M12x1.75	D6	3	.940	3.380	**WK302748271**	Price

Metric Spiral Point Plug Taps High Speed Steel • Ground Thread

- Morse List #7501
- OSG List #142



HSS M GP RAPIDKUT PROCUT

			Morse Cutting Tools		Rapidkut		OSG USA, Inc.				ProCut			
			Bright		Bright		Price		Steam Oxide		Bright		TiN	
Size	Thread Limit	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
M1.6x0.35	D3	2	**MT3838516**	Price	**EP6527703**	Price	-	-	-	-	**EP5037703**	Price	-	-
M1.8x0.35	D3	2	**MT3838517**	Price	**EP6527707**	Price	-	-	-	-	**EP5037707**	Price	-	-
M2x0.40	D3	2	**MT3838518**	Price	**EP6527711**	Price	**TP121982000**	Price	**TP121982001**	Price	**EP5037711**	Price	**EP5137711TN**	Price
M2.2x0.45	D3	2	**MT3838519**	Price	**EP6527715**	Price	-	-	-	-	-	-	-	-
M2.5x0.45	D3	2	**MT3838501**	Price	**EP6527719**	Price	**TP121982100**	Price	**TP121982101**	Price	**EP5037719**	Price	**EP5137719TN**	Price
M3x0.50	D3	2	**MT3838502**	Price	**EP6527723**	Price	**TP121980100**	Price	-	-	**EP5037723**	Price	**EP5137723TN**	Price
M3.5x0.60	D3	2	-	-	-	-	-	-	-	-	**EP5037727**	Price	**EP5137727TN**	Price
M3.5x0.60	D4	2	**MT3838503**	Price	**EP6527727**	Price	**TP121982200**	Price	**TP121982201**	Price	-	-	-	-
M4x0.70	D2	2	-	-	**EP6520123**	Price	-	-	-	-	-	-	-	-
M4x0.70	D4	2	**MT3838504**	Price	**EP6527731**	Price	**TP121980400**	Price	**TP121980401**	Price	**EP5037731**	Price	**EP5137731TN**	Price
M4.5x0.75	D4	2	**MT3838505**	Price	**EP6527735**	Price	**TP121982300**	Price	**TP121982301**	Price	**EP5037735**	Price	**EP5137735TN**	Price
M5x0.80	D2	2	-	-	**EP6520155**	Price	-	-	-	-	-	-	-	-
M5x0.80	D4	2	**MT3838506**	Price	**EP6527739**	Price	**TP121980700**	Price	**TP121980701**	Price	**EP5037739**	Price	**EP5137739TN**	Price

Metric Spiral Point Plug Taps High Speed Steel • Ground Thread (cont.)



			Morse Cutting Tools		Rapidkut		OSG USA, Inc.				ProCut			
			Bright		Bright		Price		Steam Oxide		Bright		TiN	
Size	Thread Limit	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
M6x1.0	D3	2	-	-	EP6520171	Price	-	-	-	-	-	-	-	-
M6x1.0	D5	2	MT3838507	Price	EP6527743	Price	TP121981000	Price	TP121981001	Price	EP5037743	Price	EP5137743TN	Price
M7x1.0	D5	2	MT3838508	Price	EP6527747	Price	TP121982400	Price	TP121982401	Price	EP5037747	Price	-	-
M8x1.0	D3	2	-	-	EP6520235	Price	-	-	-	-	-	-	-	-
M8x1.0	D5	2	MT3838520	Price	EP6527755	Price	-	-	-	-	EP5037755	Price	EP5137755TN	Price
M8x1.0	D5	3	-	-	-	-	TP121982500	Price	TP121982501	Price	-	-	-	-
M8x1.25	D3	2	-	-	EP6520219	Price	-	-	-	-	-	-	-	-
M8x1.25	D5	2	MT3838509	Price	EP6527751	Price	TP121981300	Price	TP121981301	Price	EP5037751	Price	EP5137751TN	Price
M8x1.25	D5	3	-	-	-	-	TP121981400	Price	TP121981401	Price	-	-	-	-
M10x1.0	D5	3	-	-	-	-	TP121982600	Price	TP121982601	Price	-	-	-	-
M10x1.25	D5	3	MT3838521	Price	EP6527763	Price	TP121982700	Price	TP121982701	Price	EP5037763	Price	EP5137763TN	Price
M10x1.5	D3	3	-	-	EP6520251	Price	-	-	-	-	-	-	-	-
M10x1.5	D6	3	MT3838510	Price	EP6527759	Price	TP121981600	Price	TP121981601	Price	EP5037759	Price	EP5137759TN	Price
M12x1.25	D5	3	MT3838522	Price	EP6527771	Price	TP121982800	Price	TP121982801	Price	EP5037771	Price	EP5137771TN	Price
M12x1.5	D6	3	-	-	-	-	TP121982900	Price	-	-	-	-	-	-
M12x1.75	D3	3	-	-	EP6520283	Price	-	-	-	-	-	-	-	-
M12x1.75	D6	3	MT3838511	Price	EP6527767	Price	TP121981900	Price	TP121981901	Price	EP5037767	Price	EP5137767TN	Price
M14x1.25	D5	3	-	-	-	-	TP121983000	Price	TP121983001	Price	-	-	-	-
M14x1.5	D3	3	-	-	EP6520331	Price	-	-	-	-	-	-	-	-
M14x1.5	D6	3	MT3838523	Price	EP6527779	Price	-	-	-	-	EP5037779	Price	EP5137779TN	Price
M14x2.0	D7	3	MT3838512	Price	EP6527775	Price	TP121983100	Price	TP121983101	Price	EP5037775	Price	EP5137775TN	Price
M16x1.5	D6	3	MT3838524	Price	EP6527787	Price	TP121983200	Price	TP121983201	Price	EP5037787	Price	EP5137787TN	Price
M16x2.0	D7	3	MT3838513	Price	EP6527783	Price	TP121983300	Price	-	-	EP5037783	Price	EP5137783TN	Price
M18x1.5	D6	3	-	-	-	-	TP121983400	Price	TP121983401	Price	-	-	-	-
M18x2.5	D7	3	MT3838514	Price	EP6527791	Price	TP121983500	Price	-	-	EP5037791	Price	-	-
M20x1.5	D6	3	-	-	-	-	TP121983600	Price	-	-	-	-	-	-
M20x2.5	D7	3	MT3838515	Price	EP6527798	Price	TP121983700	Price	-	-	EP5037798	Price	EP5137798TN	Price

General Purpose Spiral Fluted Taps



High Speed Steel • Bright Finish

- Recommended for tapping relatively deep blind holes in materials which produce long curling chips
- The higher flute helix angle increases the lifting action in ejecting chips through the open end of the hole and affords increased ability to span slots or other interruptions
- OSG List #107 (inch) List #143 (metric)

			Price							
					Plug		Bottoming		Bottoming	
			Bright		Steam Oxide		Price		Steam Oxide	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
4-40	H2	2	TP151406400	Price	TP151406401	Price	TP151406500	Price	TP151406501	Price
5-40	H2	2	TP151407000	Price	-	-	TP151407100	Price	-	-
6-32	H2	2	TP155001400	Price	-	-	TP155001500	Price	-	-
6-32	H3	2	TP151412400	Price	TP151412401	Price	TP151412500	Price	TP151412501	Price
8-32	H2	3	TP155001800	Price	-	-	TP155001900	Price	-	-
8-32	H3	3	TP151412800	Price	-	-	TP151412900	Price	TP151412901	Price
10-24	H3	3	TP151413200	Price	-	-	TP151413300	Price	TP151413301	Price
10-32	H2	3	TP155002600	Price	-	-	TP155002700	Price	-	-
10-32	H3	3	TP151413400	Price	-	-	TP151413500	Price	TP151413501	Price
12-24	H3	3	-	-	-	-	-	-	TP151413701	Price
1/4-20	H3	3	TP151430000	Price	TP151430001	Price	TP151430100	Price	TP151430101	Price
1/4-20	H5	3	TP155003400	Price	-	-	TP155003500	Price	-	-
1/4-28	H3	3	TP151430200	Price	-	-	TP151430300	Price	-	-
5/16-18	H3	3	TP151430400	Price	TP151430401	Price	TP151430500	Price	TP151430501	Price
5/16-18	H5	3	TP155004600	Price	-	-	TP155004700	Price	-	-
5/16-24	H3	3	TP151430600	Price	-	-	TP151430700	Price	-	-
3/8-16	H3	3	TP151430800	Price	TP151430801	Price	TP151430900	Price	TP151430901	Price
3/8-16	H5	3	TP155005400	Price	-	-	TP155005500	Price	-	-
3/8-24	H3	3	TP151431000	Price	-	-	TP151431100	Price	-	-
7/16-14	H3	3	TP151431200	Price	-	-	TP151431300	Price	-	-
7/16-20	H3	3	TP151431600	Price	-	-	TP151431700	Price	-	-

General Purpose Spiral Fluted Taps (cont.)



Price										
					Plug		Bottoming		Bottoming	
			Bright		Steam Oxide		Price		Steam Oxide	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/2-13	H3	3	**TP151432000**	Price	**TP151432001**	Price	**TP151432100**	Price	**TP151432101**	Price
1/2-13	H5	3	**TP155007000**	Price	**-**	-	**TP155007100**	Price	**-**	-
1/2-20	H3	3	**TP151432400**	Price	**-**	-	**TP151432500**	Price	**-**	-
5/8-11	H3	4	**TP151432800**	Price	**-**	-	**TP151432900**	Price	**-**	-
5/8-18	H3	4	**TP151433200**	Price	**-**	-	**TP151433300**	Price	**-**	-
3/4-10	H3	4	**TP151433600**	Price	**-**	-	**TP151433700**	Price	**-**	-
3/4-16	H3	4	**TP151434000**	Price	**-**	-	**TP151434100**	Price	**-**	-

Price								
					Bottoming		Bottoming	
			Bright		Bright		Price	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
M3x0.5	D3	2	**TP151985100**	Price	**TP151985200**	Price	**TP151985201**	Price
M4x0.7	D4	3	**TP151985400**	Price	**TP151985500**	Price	**TP151985501**	Price
M5x0.8	D4	3	**TP151985700**	Price	**TP151985800**	Price	**TP151985801**	Price
M6x1.0	D5	3	**TP151986000**	Price	**TP151986100**	Price	**TP151986101**	Price
M8x1.25	D5	3	**TP151986300**	Price	**TP151986400**	Price	**TP151986401**	Price
M10x1.5	D6	3	**TP151986600**	Price	**TP151986700**	Price	**TP151986701**	Price
M12x1.75	D6	3	**TP151986900**	Price	**TP151987000**	Price	**-**	-

PRECISION BRAND Hot Melt Coating

- Strippable protective coating protects tools, gauges, and metal parts from nicks, corrosion, and abrasions during storage and shipping
- Packaged in convenient 5 lb. bags
- Easy to use — coating is presliced into manageable pieces
- Poly bag packaging means easy handling and storage
- Set time is less than 60 seconds
- To remove, coating peels right off
- Melting temperature: Type 1= 340-350°F



Color	Order No.	Price
Amber	**MA5243005**	Price
Blue	**MA5243025**	Price
Clear	**MA5243010**	Price

Color	Order No.	Price
Green	**MA5243020**	Price
Red	**MA5243015**	Price

PROCUT Spiral Fluted Taps

High Speed Steel • Ground Thread

- **Fast Spiral 45°**
- **Slow Spiral 30°**
- Recommended for use in ductile materials such as brass, copper, aluminum, magnesium and die cast materials
- Excellent for tapping blind holes where chips are a problem
- These taps propel chips upward, out and away thus producing finer thread quality
- Spiral flutes will also bridge a keyway or other gap in the hole
- **Sizes 4, 5, & 6 are 2 flute - all other sizes are 3 flute**



Slow Spiral 30 Degrees



Fast Spiral 45 Degrees

			30°		45°	
Size	Thread Length	OAL (in.)	Order No.	Price	Order No.	Price
4-40	9/16	1-7/8	**ER5590440**	Price	**ER5490440**	Price
4-48	9/16	1-7/8	**-**	-	**ER5490448**	Price
5-40	5/8	1-15/16	**ER5590540**	Price	**ER5490540**	Price
5-44	5/8	1-15/16	**-**	-	**ER5490544**	Price
6-32	11/16	2	**ER5590632**	Price	**ER5490632**	Price
6-40	11/16	2	**ER5590640**	Price	**ER5490640**	Price
8-32	3/4	2-1/8	**ER5590832**	Price	**ER5490832**	Price
8-36	3/4	2-1/8	**ER5590836**	Price	**ER5490836**	Price
10-24	7/8	2-3/8	**ER5591024**	Price	**ER5491024**	Price
10-32	7/8	2-3/8	**ER5591032**	Price	**ER5491032**	Price
12-24	15/16	2-1/2	**ER5591224**	Price	**ER5491224**	Price
12-28	15/16	2-1/2	**ER5591228**	Price	**ER5491228**	Price
1/4-20	1	2-1/2	**ER55420**	Price	**ER54420**	Price
1/4-28	1	2-1/2	**ER55428**	Price	**ER54428**	Price
5/16-18	1-1/8	2-23/32	**ER55518**	Price	**ER54518**	Price
5/16-24	1-1/8	2-23/32	**ER55524**	Price	**ER54524**	Price
3/8-16	1-1/4	2-15/16	**ER55616**	Price	**ER54616**	Price
3/8-24	1-1/4	2-15/16	**ER55624**	Price	**ER54624**	Price

			30°		45°	
Size	Thread Length	OAL (in.)	Order No.	Price	Order No.	Price
7/16-14	1-7/16	3-5/32	**ER55714**	Price	**ER54714**	Price
7/16-20	1-7/16	3-5/32	**ER55720**	Price	**ER54720**	Price
1/2-13	1-21/32	3-3/8	**ER55813**	Price	**ER54813**	Price
1/2-20	1-21/32	3-3/8	**ER55820**	Price	**ER54820**	Price
9/16-12	1-21/32	3-9/16	**-**	-	**ER54912**	Price
9/16-18	1-21/32	3-9/16	**-**	-	**ER54918**	Price
5/8-11	1-13/16	3-13/16	**ER551011**	Price	**ER541011**	Price
5/8-18	1-13/16	3-13/16	**ER551018**	Price	**ER541018**	Price
3/4-10	2-1/16	4-3/16	**ER551210**	Price	**ER541210**	Price
3/4-16	2-1/16	4-3/16	**ER551216**	Price	**-**	-

RAPIDKUT® Combined Drills & Taps

High Speed Steel

- Drills and taps in one operation
- Can be used on multi-spindle operations
- 118° Self centering helical point eliminates the need for center punch or center drilling



Size Type - Fractional (in.)						
Size	Thread Length (in.)	Drill Dimensions	Flute Length (in.)	OAL (in.)	Order No.	Price
4-40	3/8	.0890	1/4	1-7/8	**ER5990440**	Price
5-40	13/32	.1015	9/32	1-15/16	**ER5990540**	Price
5-44	13/32	.1040	9/32	1-15/16	**ER5990544**	Price
6-32	7/16	.1095	5/16	2	**ER5990632**	Price
6-40	7/16	.1150	5/16	2	**ER5990640**	Price
8-32	1/2	.1360	3/8	2-1/8	**ER5990832**	Price
10-24	5/8	.1520	13/32	2-3/8	**ER5991024**	Price
10-32	5/8	.1610	13/32	2-3/8	**ER5991032**	Price
12-24	21/32	.1770	15/32	2-3/8	**ER5991224**	Price
12-28	21/32	.1835	15/32	2-3/8	**ER5991228**	Price
1/4-20	25/32	.2010	17/32	2-1/2	**ER59420**	Price
1/4-28	25/32	.2175	17/32	2-1/2	**ER59428**	Price
5/16-18	15/16	.2570	11/16	2-27/32	**ER59518**	Price
5/16-24	15/16	.2720	11/16	2-27/32	**ER59524**	Price
3/8-16	1-1/16	.3125	13/16	3-3/8	**ER59616**	Price
3/8-24	1-1/16	.3345	13/16	3-3/8	**ER59624**	Price
7/16-14	1-1/4	.3680	1	3-3/4	**ER59714**	Price
7/16-20	1-1/4	.3890	1	3-3/4	**ER59720**	Price

Size Type - Fractional (in.)						
Size	Thread Length (in.)	Drill Dimensions	Flute Length (in.)	OAL (in.)	Order No.	Price
1/2-13	1-3/8	.4250	1-1/8	4-1/16	**ER59813**	Price
1/2-20	1-3/8	.4510	1-1/8	4-1/16	**ER59820**	Price

Size Type - Metric						
Size	Thread Length (in.)	Drill Dimensions	Flute Length (in.)	OAL (in.)	Order No.	Price
M3 x 0.5	5/8	.1015	9/32	1-15/16	**ER5961894**	Price
M3.5 x 0.6	11/16	.1180	5/16	2	**ER5961895**	Price
M4 x 0.7	3/4	.1340	3/8	2-1/8	**ER5961896**	Price
M4.5 x 0.75	13/32	.1520	13/32	2-3/8	**ER5961897**	Price
M5 x 0.8	7/8	.1700	13/32	2-3/8	**ER5961898**	Price
M6 x 1.0	1	.2030	17/32	2-1/2	**ER5961899**	Price
M7 x 1.0	15/16	.2420	11/16	2-27/32	**ER5961900**	Price
M8 x 1.25	1-1/8	.2735	11/16	2-27/32	**ER5961901**	Price
M10 x 1.5	1-1/4	.3440	13/16	2-15/16	**ER5961902**	Price
M12 x 1.75	1-21/32	.4140	1-1/8	3-3/8	**ER5961903**	Price

PROCUT Special Thread Taps

High Speed Steel
Plug Style Furnished

• Bottoming (B) and Taper (T) style taps available in most sizes - add suffix to end of order number. IE. ER6001624B = 1/4-24 Bottoming



Size	Order No.	Price
1-56	**ER6000156**	Price
1-80	**ER6000180**	Price
2-48	**ER6000248**	Price
4-32	**ER6000432‡**	Price
4-56	**ER6000456**	Price
4-60	**ER6000460**	Price
4-64	**ER6000464**	Price
5-32	**ER6000532**	Price
5-36	**ER6000536**	Price
5-48	**ER6000548‡**	Price
5-60	**ER6000560**	Price
6-36	**ER6000636‡**	Price
6-48	**ER6000648‡**	Price
6-56	**ER6000656‡**	Price
6-60	**ER6000660‡**	Price
8-24	**ER6000824**	Price
8-30	**ER6000830‡**	Price
8-40	**ER6000840‡**	Price
8-48	**ER6000848‡**	Price
8-60	**ER6000860**	Price
8-64	**ER6000864**	Price
10-28	**ER6001028‡**	Price
10-30	**ER6001030‡**	Price
10-36	**ER6001036**	Price
10-40	**ER6001040**	Price
10-44	**ER6001044**	Price
10-48	**ER6001048**	Price
10-56	**ER6001056**	Price
10-60	**ER6001060‡**	Price
12-30	**ER6001230‡**	Price
12-32	**ER6001232‡**	Price
12-36	**ER6001236**	Price
12-40	**ER6001240**	Price
12-48	**ER6001248‡**	Price
14-28	**ER6001428**	Price
3/16-32	**ER6000932‡**	Price
1/4-14	**ER6001614**	Price
1/4-16	**ER6001616‡**	Price
1/4-18	**ER6001618**	Price
1/4-24	**ER6001624‡**	Price
1/4-32	**ER6001632‡**	Price
1/4-36	**ER6001636‡**	Price
1/4-38	**ER6001638**	Price
1/4-40	**ER6001640‡**	Price

Size	Order No.	Price
1/4-48	**ER6001648‡**	Price
1/4-50	**ER6001650**	Price
1/4-60	**ER6001660**	Price
1/4-64	**ER6001664**	Price
1/4-72	**ER6001672‡**	Price
5/16-20	**ER6002020‡**	Price
5/16-22	**ER6002022‡**	Price
5/16-27	**ER6002027‡**	Price
5/16-28	**ER6002028**	Price
5/16-32	**ER6002032‡**	Price
5/16-36	**ER6002036‡**	Price
5/16-40	**ER6002040‡**	Price
5/16-48	**ER6002048‡**	Price
5/16-64	**ER6002064‡**	Price
3/8-14	**ER6002414‡**	Price
3/8-18	**ER6002418‡**	Price
3/8-20	**ER6002420‡**	Price
3/8-26	**ER6002426**	Price
3/8-27	**ER6002427‡**	Price
3/8-32	**ER6002432‡**	Price
3/8-40	**ER6002440**	Price
3/8-48	**ER6002448**	Price
3/8-56	**ER6002456**	Price
3/8-60	**ER6002460**	Price
3/8-64	**ER6002464**	Price
7/16-24	**ER6002824‡**	Price
7/16-28	**ER6002828‡**	Price
7/16-32	**ER6002832**	Price
7/16-40	**ER6002840**	Price
7/16-48	**ER6002848**	Price
1/2-12	**ER6003212‡**	Price
1/2-14	**ER6003214‡**	Price
1/2-16	**ER6003216‡**	Price
1/2-18	**ER6003218**	Price
1/2-24	**ER6003224‡**	Price
1/2-27	**ER6003227**	Price
1/2-28	**ER6003228‡**	Price
1/2-32	**ER6003232‡**	Price
1/2-40	**ER6003240**	Price
1/2-48	**ER6003248**	Price
1/2-60	**ER6003260**	Price
9/16-16	**ER6003616‡**	Price
9/16-20	**ER6003620‡**	Price
9/16-24	**ER6003624‡**	Price
9/16-27	**ER6003627**	Price
9/16-28	**ER6003628**	Price
9/16-30	**ER6003630**	Price
9/16-32	**ER6003632‡**	Price
9/16-40	**ER6003640‡**	Price
5/8-12	**ER6004012‡**	Price
5/8-14	**ER6004014‡**	Price
5/8-16	**ER6004016‡**	Price
5/8-20	**ER6004020**	Price
5/8-24	**ER6004024‡**	Price
5/8-27	**ER6004027**	Price
5/8-28	**ER6004028**	Price
5/8-32	**ER6004032‡**	Price
11/16-12	**ER6004412**	Price
11/16-18	**ER6004418**	Price
11/16-20	**ER6004420‡**	Price

Size	Order No.	Price
11/16-24	**ER6004424‡**	Price
11/16-32	**ER6004432**	Price
11/16-36	**ER6004436‡**	Price
3/4-12	**ER6004812**	Price
3/4-14	**ER6004814**	Price
3/4-18	**ER6004818‡**	Price
3/4-20	**ER6004820‡**	Price
3/4-24	**ER6004824**	Price
3/4-28	**ER6004828**	Price
3/4-32	**ER6004832**	Price
13/16-16	**ER6005216‡**	Price
13/16-20	**ER6005220‡**	Price
7/8-12	**ER6005612‡**	Price
7/8-16	**ER6005616**	Price
7/8-18	**ER6005618‡**	Price
7/8-20	**ER6005620‡**	Price
7/8-24	**ER6005624**	Price
7/8-28	**ER6005628**	Price
7/8-32	**ER6005632**	Price
7/8-36	**ER6005636‡**	Price
7/8-40	**ER6005640‡**	Price
15/16-12	**ER6006012**	Price
15/16-16	**ER6006016‡**	Price
15/16-20	**ER6006020‡**	Price
1-10	**ER6010010**	Price
1-16	**ER6010016‡**	Price
1-18	**ER6010018**	Price
1-20	**ER6010020‡**	Price
1-24	**ER6010024**	Price
1-32	**ER6010032‡**	Price
1-1/16-12	**ER6010412†‡**	Price
1-1/16-14	**ER6010414**	Price
1-1/16-16	**ER6010416**	Price
1-1/16-18	**ER6010418**	Price
1-1/16-20	**ER6010420**	Price
1-1/16-24	**ER6010424**	Price
1-1/8-8	**ER6010808†‡**	Price
1-1/8-10	**ER6010810†**	Price
1-1/8-16	**ER6010816**	Price
1-1/8-18	**ER6010818‡**	Price
1-1/8-20	**ER6010820‡**	Price
1-1/8-24	**ER6010824**	Price
1-1/8-27	**ER6010827‡**	Price
1-1/8-32	**ER6010832**	Price
1-3/16-12	**ER6011212†‡**	Price
1-3/16-14	**ER6011214**	Price
1-3/16-16	**ER6011216**	Price
1-3/16-18	**ER6011218‡**	Price
1-1/4-8	**ER6011608†‡**	Price
1-1/4-14	**ER6011614**	Price
1-1/4-16	**ER6011616‡**	Price
1-1/4-18	**ER6011618‡**	Price
1-1/4-20	**ER6011620**	Price
1-1/4-24	**ER6011624‡**	Price
1-1/4-28	**ER6011628**	Price
1-1/4-36	**ER6011636**	Price
1-5/16-12	**ER6012012†‡**	Price
1-5/16-16	**ER6012016‡**	Price
1-5/16-18	**ER6012018**	Price
1-5/16-20	**ER6012020**	Price

Size	Order No.	Price
1-3/8-8	**ER6012408†‡**	Price
1-3/8-16	**ER6012416**	Price
1-3/8-18	**ER6012418‡**	Price
1-3/8-20	**ER6012420**	Price
1-7/16-12	**ER6012812**	Price
1-7/16-16	**ER6012816**	Price
1-7/16-18	**ER6012818**	Price
1-1/2-8	**ER6013208†‡**	Price
1-1/2-10	**ER6013210†‡**	Price
1-1/2-14	**ER6013214**	Price
1-1/2-16	**ER6013216‡**	Price
1-1/2-18	**ER6013218‡**	Price
1-9/16-16	**ER6013616**	Price
1-9/16-18	**ER6013618**	Price
1-5/8-5-1/2	**ER6014005†‡**	Price
1-5/8-8	**ER6014008†‡**	Price
1-5/8-12	**ER6014012‡**	Price
1-5/8-16	**ER6014016**	Price
1-5/8-18	**ER6014018**	Price
1-5/8-20	**ER6014020**	Price
1-3/4-5	**ER6014805†‡**	Price
1-3/4-8	**ER6014808†‡**	Price
1-3/4-10	**ER6014810‡**	Price
1-3/4-12	**ER6014812‡**	Price
1-3/4-16	**ER6014816**	Price
1-3/4-18	**ER6014818**	Price
1-3/4-20	**ER6014820**	Price
1-7/8-5	**ER6015605†‡**	Price
1-7/8-8	**ER6015608†‡**	Price
1-7/8-10	**ER6015610‡**	Price
1-7/8-12	**ER6015612‡**	Price
1-7/8-16	**ER6015616**	Price
1-7/8-20	**ER6015620**	Price
2-8	**ER6020008†‡**	Price
2-10	**ER6020010**	Price
2-12	**ER6020012‡**	Price
2-16	**ER6020016**	Price
2-1/8-8	**ER6020808†**	Price
2-1/8-12	**ER6020812‡**	Price
2-1/8-16	**ER6020816**	Price
2-1/4-4-1/2	**ER6021604**	Price
2-1/4-8	**ER6021608†‡**	Price
2-1/4-12	**ER6021612‡**	Price
2-1/4-16	**ER6021616**	Price
2-3/8-8	**ER6022408†‡**	Price
2-3/8-12	**ER6022412**	Price
2-1/2-4	**ER6023204**	Price
2-1/2-12	**ER6023212‡**	Price
2-1/2-8	**ER6023208†**	Price
2-1/2-16	**ER6023216**	Price
2-1/2-20	**ER6023220**	Price
2-3/4-8	**ER6024808†‡**	Price
2-3/4-12	**ER6024812**	Price
3-4	**ER6030004†**	Price
3-8	**ER6030008†‡**	Price
3-12	**ER6030012**	Price
3-1/4-12	**ER6031612**	Price
3-1/2-12	**ER6033212**	Price

† Items are long series taps
‡ Bottoming and / or taper also available

PROCUT Left Hand Taps

High Speed Steel • Ground Thread

Plug style & spiral point plug style

Spiral Point Style



Plug Style



			Plug		Spiral Point Plug	
Size	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
3-48	1/2	1-7/8	**ER5290348**	Price	**ER5390348**	Price
3-56	1/2	1-7/8	**-**	-	**ER5390356**	Price
4-40	9/16	1-7/8	**ER5290440**	Price	**ER5390440**	Price
4-48	9/16	1-7/8	**ER5290448**	Price	**ER5390448**	Price
5-40	5/8	1-15/16	**ER5290540**	Price	**-**	-
5-44	5/8	1-15/16	**ER5290544**	Price	**ER5390544**	Price
6-32	11/16	2	**ER5290632**	Price	**ER5390632**	Price
6-40	11/16	2	**ER5290640**	Price	**ER5390640**	Price
8-32	3/4	2-1/8	**ER5290832**	Price	**ER5390832**	Price
8-36	3/4	2-1/8	**ER5290836**	Price	**ER5390836**	Price
10-24	7/8	2-3/8	**ER5291024**	Price	**ER5391024**	Price
10-32	7/8	2-3/8	**ER5291032**	Price	**ER5391032**	Price
1/4-20	1	2-1/2	**ER52420**	Price	**ER53420**	Price
1/4-28	1	2-1/2	**ER52428**	Price	**ER53428**	Price
5/16-18	1-1/8	2-23/32	**ER52518**	Price	**ER53518**	Price
5/16-24	1-1/8	2-23/32	**ER52524**	Price	**ER53524**	Price
3/8-16	1-1/4	2-15/16	**ER52616**	Price	**ER53616**	Price
3/8-24	1-1/4	2-15/16	**ER52624**	Price	**ER53624**	Price
7/16-14	1-7/16	3-5/32	**ER52714**	Price	**ER53714**	Price
7/16-20	1-7/16	3-5/32	**ER52720**	Price	**ER53720**	Price
1/2-13	1-21/32	3-3/8	**ER52813**	Price	**ER53813**	Price

			Plug		Spiral Point Plug	
Size	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/2-20	1-21/32	3-3/8	**ER52820**	Price	**ER53820**	Price
9/16-18	1-21/32	3-19/32	**ER52918**	Price	**-**	-
5/8-11	1-13/16	3-13/16	**ER521011**	Price	**ER531011**	Price
5/8-18	1-13/16	3-13/16	**ER521018**	Price	**ER531018**	Price
11/16-11	1-7/8	4-1/8	**ER521111**	Price	**ER531111**	Price
3/4-10	2	4-1/4	**ER521210**	Price	**ER531210**	Price
3/4-16	2	4-1/4	**ER521216**	Price	**ER531216**	Price
7/8-9	2-7/32	4-11/16	**ER521409**	Price	**-**	-
7/8-14	2-7/32	4-11/16	**ER521414**	Price	**-**	-
1-8	2-1/2	5-1/8	**ER521608**	Price	**-**	-
1-12	2-1/2	5-1/8	**ER521612**	Price	**-**	-
1-14	2-1/2	5-1/8	**ER521614**	Price	**-**	-
1-1/8-12	2-9/16	5-7/16	**ER521812**	Price	**-**	-
1-1/8-7	2-9/16	5-7/16	**ER521807**	Price	**-**	-
1-1/4-12	2-9/16	5-3/4	**ER522012**	Price	**-**	-
1-1/4-7	2-9/16	5-3/4	**ER522007**	Price	**-**	-
1-3/8-12	3	6-1/16	**ER522212**	Price	**-**	-
1-3/8-6	3	6-1/16	**ER522206**	Price	**-**	-
1-1/2-12	3	6-3/8	**ER522412**	Price	**-**	-
1-1/2-6	3	6-3/8	**ER522406**	Price	**-**	-

Note: Many sizes also available in Bottoming and Taper Styles

+.005 Oversize Taps - Plug Style

High Speed Steel Ground Thread

- These taps have a pitch diameter which is .005" larger than basic pitch diameter
- Morse List #2014



	Price		ProCut	
Size	Order No.	Price	Order No.	Price
5-40	**-**	-	**ER5090540**	Price
6-32	**MT3934222**	Price	**ER5090632**	Price
6-40	**-**	-	**ER5090640**	Price
8-32	**MT3934223**	Price	**ER5090832**	Price
8-36	**-**	-	**ER5090836**	Price
10-24	**MT3934225**	Price	**ER5091024**	Price
10-32	**MT3934226**	Price	**ER5091032**	Price
1/4-20	**MT3934301**	Price	**ER50420**	Price
1/4-28	**-**	-	**ER50428**	Price
5/16-18	**MT3934303**	Price	**ER50518**	Price
5/16-24	**-**	-	**ER50524**	Price
3/8-16	**MT3934305**	Price	**ER50616**	Price
3/8-24	**-**	-	**ER50624**	Price
7/16-14	**-**	-	**ER50714**	Price
7/16-20	**-**	-	**ER50720**	Price
1/2-13	**MT3934309**	Price	**ER50813**	Price
1/2-20	**-**	-	**ER50820**	Price
9/16-12	**-**	-	**ER50912**	Price
9/16-18	**-**	-	**ER50918**	Price
5/8-11	**MT3934313**	Price	**ER501011**	Price
5/8-18	**-**	-	**ER501018**	Price
3/4-10	**-**	-	**ER501210**	Price
3/4-16	**-**	-	**ER501216**	Price
7/8-9	**-**	-	**ER501409**	Price
7/8-14	**-**	-	**ER501414**	Price
1-8	**-**	-	**ER501608**	Price
1-14	**-**	-	**ER501614**	Price

+.005 Oversize Taps - Spiral Point Plug Style

High Speed Steel Ground Thread

- These taps have a pitch diameter which is .005" larger than basic pitch diameter
- Morse List #2015



	Price		ProCut	
Size	Order No.	Price	Order No.	Price
5-40	**-**	-	**ER5190540**	Price
6-32	**MT3934241**	Price	**ER5190632**	Price
6-40	**-**	-	**ER5190640**	Price
8-32	**MT3934243**	Price	**ER5190832**	Price
8-36	**-**	-	**ER5190836**	Price
10-24	**MT3934244**	Price	**ER5191024**	Price
10-32	**MT3934245**	Price	**ER5191032**	Price
1/4-20	**MT3934251**	Price	**ER51420**	Price
1/4-28	**-**	-	**ER51428**	Price
5/16-18	**MT3934253**	Price	**ER51518**	Price
5/16-24	**-**	-	**ER51524**	Price
3/8-16	**MT3934255**	Price	**ER51616**	Price
3/8-24	**-**	-	**ER51624**	Price
7/16-14	**-**	-	**ER51714**	Price
7/16-20	**-**	-	**ER51720**	Price
1/2-13	**MT3934259**	Price	**ER51813**	Price
1/2-20	**-**	-	**ER51820**	Price
9/16-12	**-**	-	**ER51912**	Price
5/8-11	**MT3934263**	Price	**ER511011**	Price
3/4-10	**-**	-	**ER511210**	Price
3/4-16	**-**	-	**ER511216**	Price
7/8-9	**-**	-	**ER511409**	Price
7/8-14	**-**	-	**ER511414**	Price
1-8	**-**	-	**ER511608**	Price
1-12	**-**	-	**ER511612**	Price
1-14	**-**	-	**ER511614**	Price

Left Hand Plug Taps

High Speed Steel • Bright Finish

- Ground thread
- OSG List #101L



Size	Thread Limits	No. of Flutes	Order No.	Price
8-32	H3	4	**TP161650500**	Price
10-24	H3	4	**TP161650900**	Price
10-32	H3	4	**TP161651100**	Price
1/4-20	H3	4	**TP161660100**	Price
1/4-28	H3	4	**TP161660300**	Price
5/16-18	H3	4	**TP161660500**	Price
5/16-24	H3	4	**TP161660700**	Price
3/8-16	H3	4	**TP161660900**	Price
3/8-24	H3	4	**TP161661100**	Price
7/16-14	H3	4	**TP161661300**	Price
7/16-20	H3	4	**TP161661500**	Price
1/2-13	H3	4	**TP161661700**	Price
1/2-20	H3	4	**TP161661900**	Price
5/8-11	H3	4	**TP161662500**	Price
5/8-18	H3	4	**TP161662700**	Price
3/4-10	H3	4	**TP161663300**	Price
3/4-16	H3	4	**TP161663500**	Price

Note: OSG steam oxide available

Taps for Cast Iron - Right Hand

High Speed Steel • Steam Oxide Coated

- Designed with proper hook angle
- Available only steam oxide over nitride finish
- OSG List #101C



			Bottoming		Plug	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price
1/4-20	H3	4	**TP181600207**	Price	**TP181600107**	Price
1/4-20	H5	4	**TP181600407**	Price	**TP181600307**	Price
1/4-28	H3	4	**-**	-	**TP181600507**	Price
5/16-18	H3	4	**TP181600807**	Price	**-**	-
5/16-18	H5	4	**TP181601007**	Price	**-**	-
3/8-16	H3	4	**TP181601407**	Price	**TP181601307**	Price
3/8-16	H5	4	**TP181601607**	Price	**-**	-
3/8-24	H3	4	**TP181601807**	Price	**-**	-
7/16-14	H5	4	**TP181602207**	Price	**TP181602107**	Price
1/2-13	H3	4	**TP181602807**	Price	**-**	-
1/2-13	H5	4	**TP181603007**	Price	**TP181602907**	Price
1/2-20	H3	4	**TP181603207**	Price	**-**	-
1/2-20	H5	4	**TP181603407**	Price	**-**	-
9/16-18	H3	4	**TP181603807**	Price	**-**	-
9/16-18	H5	4	**TP181600007**	Price	**-**	-
5/8-11	H3	4	**TP181604007**	Price	**-**	-
5/8-11	H5	4	**TP181604807**	Price	**-**	-
5/8-18	H5	4	**TP181605207**	Price	**-**	-
3/4-10	H3	4	**TP181604407**	Price	**TP181604307**	Price
3/4-16	H5	4	**TP181605007**	Price	**-**	-
M6x1.0	D5	3	**TP181608207**	Price	**TP181608107**	Price
M8x1.25	D5	4	**TP181608407**	Price	**TP181608307**	Price
M10x1.5	D6	4	**TP181608607**	Price	**-**	-
M12x1.75	D6	4	**TP181608807**	Price	**TP181608707**	Price

+.005 Taps - Spiral Point Plug Style

List #105H

High Speed Steel Ground Thread

- Bright & Steam Oxide Finish



		Bright		Steam Oxide	
Size	No. of Flutes	Order No.	Price	Order No.	Price
6-32	2	**TP141592000**	Price	**-**	-
8-32	2	**TP141592800**	Price	**TP141592801**	Price
10-24	2	**TP141593400**	Price	**TP141593401**	Price
10-32	2	**TP141593600**	Price	**TP141593601**	Price
1/4-20	2	**TP141590000**	Price	**TP141590001**	Price
1/4-28	2	**TP141590200**	Price	**TP141590201**	Price
5/16-18	2	**TP141590800**	Price	**TP141590801**	Price
5/16-24	2	**TP141591200**	Price	**-**	-
3/8-16	3	**TP141591600**	Price	**TP141591601**	Price
3/8-24	3	**TP141591800**	Price	**-**	-
1/2-13	3	**TP141592400**	Price	**TP141592401**	Price
1/2-20	3	**TP141592600**	Price	**-**	-
5/8-11	3	**TP141593200**	Price	**TP141593201**	Price
3/4-10	3	**TP141593800**	Price	**-**	-

+.005 Oversize Taps - Plug & Bottoming Style List #101H/102H

High Speed Steel Ground Thread



		Bottoming		Plug	
Size	No. of Flutes	Order No.	Price	Order No.	Price
6-32	3	**-**	-	**TP141593500**	Price
8-32	4	**-**	-	**TP141594300**	Price
10-24	4	**-**	-	**TP141594900**	Price
10-32	4	**-**	-	**TP141595100**	Price
1/4-20	4	**TP141009100**	Price	**TP141590100**	Price
1/4-28	4	**-**	-	**TP141590300**	Price
5/16-18	4	**TP141009200**	Price	**TP141590700**	Price
5/16-24	4	**-**	-	**TP141591100**	Price
3/8-16	4	**TP141009300**	Price	**TP141591300**	Price
3/8-24	4	**-**	-	**TP141591500**	Price
1/2-13	4	**TP141009400**	Price	**TP141592500**	Price
1/2-20	4	**-**	-	**TP141592700**	Price
5/8-11	4	**-**	-	**TP141593700**	Price

Oversized Plug Style Hand Taps

High Speed Steel

H6 Tolerance +.0025
H7 Tolerance +.0030



		H6		H7	
Size	No. of Flutes	Order No.	Price	Order No.	Price
4-40	3	**EP4021362**	Price	**EP4021372**	Price
5-40	3	**EP4021562**	Price	**EP4021572**	Price
6-32	3	**EP4021762**	Price	**EP4021772**	Price
8-32	3	**EP4021962**	Price	**EP4021972**	Price
10-24	3	**EP4022162**	Price	**EP4022172**	Price
10-32	3	**EP4022262**	Price	**EP4022272**	Price

+.005 Oversized Plug Style Hand Taps

High Speed Steel

H11 Tolerance +.005



Size	No. of Flutes	Order No.	Price
4-40	3	**EP4021382**	Price
5-40	3	**EP4021582**	Price
6-32	3	**EP4021782**	Price
8-32	3	**EP4021982**	Price
10-24	3	**EP4022182**	Price
10-32	3	**EP4022282**	Price
1/4-20	4	**EP4040573**	Price
1/4-28	4	**EP4040773**	Price
5/16-18	4	**EP4040973**	Price
5/16-24	4	**EP4041173**	Price
3/8-16	4	**EP4041373**	Price
3/8-24	4	**EP4041573**	Price
7/16-14	4	**EP4041773**	Price
7/16-20	4	**EP4041973**	Price
1/2-13	4	**EP4042173**	Price
1/2-20	4	**EP4042373**	Price
5/8-11	4	**EP4042401**	Price
5/8-18	4	**EP4042411**	Price
3/4-10	4	**EP4042421**	Price
3/4-16	4	**EP4042431**	Price
7/8-9	4	**EP4042441**	Price
7/8-14	4	**EP4042451**	Price
1-8	4	**EP4042461**	Price

Metric +.005 Oversized Plug Style Hand Taps

High Speed Steel

H11 Tolerance +.005



Size	No. of Flutes	Order No.	Price
M3x0.50	3	**EP4065002**	Price
M4x0.70	4	**EP4065022**	Price
M5x0.80	4	**EP4065032**	Price
M6x1.0	4	**EP4065042**	Price
M8x1.25	4	**EP4065052**	Price
M10x1.5	4	**EP4065062**	Price
M12x1.75	4	**EP4065072**	Price

Oversized Spiral Point Plug Taps

High Speed Steel

H6 Tolerance +.0025
H7 Tolerance +.0030



		H6		H7	
Size	No. of Flutes	Order No.	Price	Order No.	Price
4-40	2	**EP4022362**	Price	**EP4022372**	Price
5-40	2	**EP4022562**	Price	**EP4022572**	Price
6-32	2	**EP4022762**	Price	**EP4022772**	Price
8-32	2	**EP4022962**	Price	**EP4022972**	Price
10-24	2	**EP4023162**	Price	**EP4023172**	Price
10-32	2	**EP4023262**	Price	**EP4023272**	Price

+.005 Oversized Spiral Point Plug Taps

High Speed Steel

H11 Tolerance +.005



Size	No. of Flutes	Order No.	Price
4-40	2	**EP4022382**	Price
5-40	2	**EP4022582**	Price
6-32	2	**EP4022782**	Price
8-32	2	**EP4022982**	Price
10-24	2	**EP4023182**	Price
10-32	2	**EP4023282**	Price
1/4-20	2	**EP4040474**	Price
1/4-28	2	**EP4040674**	Price
5/16-18	3	**EP4040874**	Price
5/16-24	3	**EP4041074**	Price
3/8-16	3	**EP4041274**	Price
3/8-24	3	**EP4041474**	Price
7/16-14	3	**EP4041674**	Price
7/16-20	3	**EP4041874**	Price
1/2-13	3	**EP4042074**	Price
1/2-20	3	**EP4042274**	Price
5/8-11	3	**EP4042403**	Price
5/8-18	3	**EP4042413**	Price
3/4-10	3	**EP4042423**	Price
3/4-16	3	**EP4042433**	Price

Metric +.005 Oversized Spiral Point Plug Taps

High Speed Steel

H11 Tolerance +.005



Size	No. of Flutes	Order No.	Price
M3x0.50	2	**EP4065102**	Price
M4x0.70	2	**EP4065122**	Price
M5x0.80	2	**EP4065132**	Price
M6x1.0	2	**EP4065142**	Price
M8x1.25	2	**EP4065152**	Price
M10x1.5	3	**EP4065162**	Price
M12x1.75	3	**EP4065172**	Price

STI Screw Thread Insert Taps

High Speed Steel • Straight Flute



			Bottoming		Fast Spiral Bottoming		Plug	
Size	Thread Limit	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
2-56	H2	2	**-**	-	**EP4070023**	Price	**-**	-
2-56	H2	3	**EP4052023**	Price	**-**	-	**EP4052022**	Price
4-40	H2	3	**EP4054023**	Price	**EP4070123**	Price	**EP4054022**	Price
6-32	H2	3	**EP4054223**	Price	**-**	-	**EP4054222**	Price
6-32	H3	3	**EP4054233**	Price	**EP4070333**	Price	**EP4054232**	Price
8-32	H2	3	**EP4054423**	Price	**-**	-	**EP4054422**	Price
8-32	H3	2	**-**	-	**EP4070533**	Price	**-**	-
8-32	H3	3	**EP4054433**	Price	**-**	-	**EP4054432**	Price
10-24	H2	3	**EP4054523**	Price	**-**	-	**EP4054522**	Price
10-24	H3	3	**EP4054533**	Price	**EP4070633**	Price	**EP4054532**	Price

(continued next page)

R&N Reiff & Nestor STI Screw Thread Insert Taps (cont.)



			Bottoming		Fast Spiral Bottoming		Plug	
Size	Thread Limit	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
10-32	H2	3	**EP4054623**	Price	-	-	**EP4054622**	Price
10-32	H3	3	**EP4054633**	Price	**EP4070733**	Price	**EP4054632**	Price
1/4-20	H2	3	**EP4054823**	Price	-	-	**EP4054822**	Price
1/4-20	H3	3	**EP4054833**	Price	**EP4070833**	Price	**EP4054832**	Price
1/4-28	H2	3	**EP4054923**	Price	-	-	**EP4054922**	Price
1/4-28	H3	3	**EP4054933**	Price	**EP4070933**	Price	**EP4054932**	Price
5/16-18	H3	3	-	-	**EP4071033**	Price	-	-
5/16-18	H3	4	**EP4055033**	Price	-	-	**EP4055032**	Price
3/8-16	H3	4	**EP4055233**	Price	**EP4071233**	Price	**EP4055232**	Price
7/16-14	H3	4	**EP4055433**	Price	-	-	**EP4055432**	Price
1/2-13	H3	4	**EP4055633**	Price	**EP4071633**	Price	**EP4055632**	Price
5/8-11	H3	4	**EP4055753**	Price	-	-	**EP4055752**	Price
3/4-10	H3	4	**EP4055773**	Price	-	-	**EP4055772**	Price

R&N Reiff & Nestor Metric STI Screw Thread Insert Taps



			Bottoming		Fast Spiral Bottoming		Plug	
Size	Thread Limit	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
M2.5x0.45	D1	2	-	-	**EP4072119**	Price	-	-
M2.5x0.45	D1	3	**EP4072113**	Price	-	-	**EP4072112**	Price
M3x0.50	D1	3	**EP4072213**	Price	**EP4072219**	Price	**EP4072212**	Price
M4x0.70	D1	3	**EP4072413**	Price	**EP4072419**	Price	**EP4072412**	Price
M4x0.70	D2	3	-	-	-	-	**EP4072422**	Price
M5x0.80	D1	3	**EP4072513**	Price	**EP4072519**	Price	**EP4072512**	Price
M5x0.80	D2	3	-	-	-	-	**EP4072522**	Price
M6x1.0	D2	3	-	-	**EP4072629**	Price	**EP4072622**	Price
M6x1.0	D3	3	-	-	-	-	**EP4072632**	Price
M8x1.25	D2	3	-	-	**EP4072829**	Price	-	-
M8x1.25	D2	4	-	-	-	-	**EP4072822**	Price
M8x1.25	D3	4	-	-	-	-	**EP4072832**	Price
M10x1.5	D3	4	-	-	**EP4073139**	Price	**EP4073132**	Price
M10x1.5	D4	4	-	-	-	-	**EP4073142**	Price
M12x1.75	D3	4	-	-	**EP4073439**	Price	**EP4073432**	Price
M12x1.75	D5	4	-	-	-	-	**EP4073452**	Price

R&N Reiff & Nestor STI Screw Thread Insert Spiral Point Taps



			H2		H3	
Size	No. of Flutes	Thread Limit	Order No.	Price	Order No.	Price
2-56	2	H2	**EP4053022**	Price	-	-
4-40	2	H2	**EP4056022**	Price	-	-
6-32	2	H2	**EP4056222**	Price	-	-
6-32	2	H3	-	-	**EP4056232**	Price
8-32	2	H2	**EP4056422**	Price	-	-
8-32	2	H3	-	-	**EP4056432**	Price
10-24	2	H2	**EP4056522**	Price	-	-
10-24	2	H3	-	-	**EP4056532**	Price
10-32	2	H2	**EP4056622**	Price	-	-
10-32	2	H3	-	-	**EP4056632**	Price

			H2		H3	
Size	No. of Flutes	Thread Limit	Order No.	Price	Order No.	Price
1/4-20	2	H2	**EP4056822**	Price	-	-
1/4-20	2	H3	-	-	**EP4056832**	Price
1/4-28	2	H2	**EP4056922**	Price	-	-
1/4-28	2	H3	-	-	**EP4056932**	Price
5/16-18	3	H3	-	-	**EP4057032**	Price
3/8-16	3	H3	-	-	**EP4057232**	Price
7/16-14	3	H3	-	-	**EP4057432**	Price
1/2-13	3	H3	-	-	**EP4057632**	Price

PROCUT STI Screw Thread Insert Taps

High Speed Steel • Straight Flute Plug Style



Size	Thread Limit	No. of Flutes	Order No.	Price
4-40	H2	3	**ER560041**	Price
4-48	H2	3	**ER560042**	Price
5-40	H2	3	**ER560051**	Price
5-44	H2	3	**ER560052**	Price
6-32	H2	3	**ER560061**	Price
6-40	H2	3	**ER560062**	Price
8-32	H3	3	**ER560081**	Price
8-36	H3	3	**ER560082**	Price
10-24	H3	3	**ER560101**	Price
10-32	H3	3	**ER560102**	Price
12-24	H2	3	**ER560121**	Price
12-28	H3	3	**ER560122**	Price
1/4-20	H3	3	**ER560251**	Price
1/4-28	H3	3	**ER560252**	Price
5/16-18	H3	4	**ER560311**	Price
5/16-24	H3	4	**ER560312**	Price
3/8-16	H3	4	**ER560371**	Price

Size	Thread Limit	No. of Flutes	Order No.	Price
3/8-24	H3	4	**ER560372**	Price
7/16-14	H3	4	**ER560431**	Price
7/16-20	H3	4	**ER560432**	Price
1/2-13	H3	4	**ER560501**	Price
1/2-20	H3	4	**ER560502**	Price
9/16-12	H3	4	**ER560561**	Price
9/16-18	H3	4	**ER560562**	Price
5/8-11	H3	4	**ER560621**	Price
5/8-18	H3	4	**ER560622**	Price
3/4-10	H3	4	**ER560751**	Price
3/4-16	H3	4	**ER560752**	Price
7/8-9	H4	4	**ER560871**	Price
7/8-14	H4	4	**ER560872**	Price
1-8	H4	4	**ER561001**	Price
1-12	H4	4	**ER561002**	Price
1-14	H4	4	**ER561003**	Price

Spiral Pointed Plug STI Taps



Inch Sizes • Screw Thread Insert

OSG List #125
- High speed steel
- Premium general purpose taps for general machining

OSG List #301
- VA-3 high vanadium high speed steel
- Specially designed for tough-to-machine stainless steels

OSG List #314
- VC-10 powdered metal
- Specially designed for machining alloy steels, die steels, hardened steels, and other difficult to machine materials

						301		314	
				Bright		Steam Oxide		Steam Oxide	
Size	Thread Limit	No. of Flutes	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
2-56	H2	2	1-7/8	-	-	TP251712401	Price	TP251714601	Price
3-48	H2	2	1-15/16	TP207003200	Price	TP2330100101	Price	TP2331400101	Price
4-40	H2	2	2	TP201824000	Price	TP251712501	Price	-	-
4-40	H2	3	2	-	-	-	-	TP251714701	Price
4-48	H2	2	2	TP207004400	Price	TP2330100201	Price	-	-
4-48	H2	3	2	-	-	-	-	TP2331400201	Price
5-40	H2	2	2-1/8	TP207005000	Price	-	-	-	-
6-32	H2	2	2-3/8	TP201824800	Price	-	-	-	-
6-32	H3	2	2-3/8	TP201830400	Price	-	-	-	-
6-32	H2	3	2-3/8	-	-	TP251712601	Price	TP251714801	Price
6-32	H3	3	2-3/8	-	-	TP251712701	Price	TP251714901	Price
6-40	H2	2	2-3/8	TP207007100	Price	-	-	-	-
6-40	H2	3	2-3/8	-	-	TP2330100301	Price	TP2331400301	Price
8-32	H2	2	2-3/8	TP201825200	Price	-	-	-	-
8-32	H3	2	2-3/8	TP201830800	Price	-	-	-	-
8-32	H2	3	2-3/8	-	-	TP251712801	Price	TP251715001	Price
8-32	H3	3	2-3/8	-	-	TP251712901	Price	TP251715101	Price
8-36	H2	2	2-3/8	TP207008600	Price	-	-	-	-
8-36	H2	3	2-3/8	-	-	TP2330100401	Price	TP2331400401	Price
10-24	H2	2	2-1/2	TP201825600	Price	-	-	-	-
10-24	H3	2	2-1/2	TP207009800	Price	-	-	-	-
10-24	H2	3	2-1/2	-	-	TP2330100501	Price	TP2331400501	Price
10-24	H3	3	2-1/2	-	-	TP2330100601	Price	TP2331400601	Price
10-32	H2	2	2-1/2	TP201825800	Price	-	-	-	-
10-32	H3	2	2-1/2	TP207010700	Price	-	-	-	-
10-32	H2	3	2-1/2	-	-	TP251713001	Price	TP251715201	Price
10-32	H3	3	2-1/2	-	-	TP251713101	Price	TP251715301	Price
1/4-20	H2	3	2-23/32	TP201826400	Price	TP2330100701	Price	TP2331400701	Price
1/4-20	H3	3	2-23/32	TP201832000	Price	TP2330100801	Price	TP2331400801	Price
1/4-28	H2	3	2-23/32	TP201826600	Price	TP251713201	Price	TP251715401	Price
1/4-28	H3	3	2-23/32	TP201832200	Price	TP251713301	Price	TP251715501	Price
5/16-18	H3	3	2-15/16	TP207014700	Price	TP2330100901	Price	TP2331401001	Price
5/16-18	H4	3	2-15/16	TP207015300	Price	TP2330101101	Price	-	-
5/16-24	H3	3	2-15/16	TP207016200	Price	TP251713401	Price	TP251715601	Price
3/8-16	H3	3	3-3/8	TP207017100	Price	TP2330101301	Price	TP2331401201	Price
3/8-16	H4	3	3-3/8	TP207017400	Price	TP2330101401	Price	TP2331401301	Price
3/8-24	H3	3	3-3/8	TP207018300	Price	TP2330101601	Price	TP2331401501	Price
7/16-14	H3	3	3-19/32	TP2012500100	Price	TP2330101701	Price	TP2331401601	Price
7/16-20	H3	3	3-19/32	TP2012500300	Price	TP2330101901	Price	TP2331401801	Price
1/2-13	H3	3	3-13/16	TP2012500500	Price	TP2330102201	Price	TP2331402001	Price
1/2-20	H3	3	3-13/16	TP2012500700	Price	TP2330102401	Price	TP2331402201	Price
9/16-12	H3	3	4-1/32	TP2012500900	Price	TP2330102601	Price	TP2331402401	Price
9/16-18	H3	3	4-1/32	TP2012501100	Price	TP2330102801	Price	TP2331402601	Price
5/8-11	H3	3	4-1/4	TP2012501300	Price	TP2330103101	Price	TP2331402801	Price
5/8-18	H3	3	4-1/4	TP2012501500	Price	TP2330103301	Price	TP2331403001	Price
3/4-10	H3	3	4-11/16	TP2012501700	Price	TP2330103501	Price	-	-
3/4-10	H3	4	4-11/16	-	-	-	-	TP2331403201	Price
3/4-16	H3	3	4-11/16	TP2012501900	Price	TP2330103701	Price	-	-
3/4-16	H3	4	4-11/16	-	-	-	-	TP2331403401	Price
7/8-9	H3	3	5-1/8	TP2012502100	Price	TP2330103901	Price	-	-
7/8-9	H3	4	5-1/8	-	-	-	-	TP2331403601	Price
7/8-14	H3	3	5-1/8	TP2012502300	Price	TP2330104201	Price	-	-
7/8-14	H3	4	5-1/8	-	-	-	-	TP2331403801	Price
1-8	H4	3	5-3/4	-	-	TP2330104401	Price	-	-
1-8	H4	4	5-3/4	TP2012502500	Price	-	-	TP2331404001	Price
1-12	H4	3	5-3/4	-	-	TP2330104601	Price	-	-
1-12	H4	4	5-3/4	TP2012502700	Price	-	-	TP2331404201	Price

Metric STI Taps

Spiral Flute • Semi-Bottoming • Screw Thread Insert

OSG List S109
- Bright finish
- 45° Helix
- HSSE material

OSG List 343STI
- Steam oxide or V coating
- 45° Helix
- HSSE material

OSG List 345STI
- Steam oxide or V coating
- 15° Helix
- VC10 material





								345STI				S109	
				Steam Oxide		V		Steam Oxide		Price		Bright	
Size	Class of Fit	No. of Flutes	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
M2x0.40	D2	2	1-7/8	**TP2334300101**	Price	**TP2334300108**	Price	**TP2334500101**	Price	**TP2334500108**	Price	**TP2010900100**	Price
M2.5x0.45	D2	2	1-15/16	**TP2334300201**	Price	**TP2334300208**	Price	**TP2334500201**	Price	**TP2334500208**	Price	**TP2010900200**	Price
M3x0.50	D2	3	2-1/8	**TP2334300301**	Price	**TP2334300308**	Price	**TP2334500301**	Price	**TP2334500308**	Price	**TP2010900300**	Price
M4x0.70	D3	3	2-3/8	**TP2334300401**	Price	**TP2334300408**	Price	**TP2334500401**	Price	**TP2334500408**	Price	**TP2010900400**	Price
M5x0.80	D3	3	2-1/2	**TP2334300501**	Price	**TP2334300508**	Price	**TP2334500501**	Price	**TP2334500508**	Price	**TP2010900500**	Price
M6x1.0	D3	3	2-23/32	**TP2334300601**	Price	**TP2334300608**	Price	**TP2334500601**	Price	**TP2334500608**	Price	**TP2010900600**	Price
M8x1.25	D3	3	2-15/16	**TP2334300701**	Price	**TP2334300708**	Price	**TP2334500701**	Price	**TP2334500708**	Price	**TP2010900700**	Price
M10x1.5	D4	3	3-3/8	**TP2334300801**	Price	**TP2334300808**	Price	**TP2334500801**	Price	**TP2334500808**	Price	**TP2010900800**	Price
M12x1.75	D4	3	3-13/16	**TP2334300901**	Price	**TP2334300908**	Price	**TP2334500901**	Price	**TP2334500908**	Price	**TP2010900900**	Price
M14x2.0	D5	3	4-1/32	**TP2334301001**	Price	**TP2334301008**	Price	**TP2334501001**	Price	**TP2334501008**	Price	**TP2010901000**	Price
M16x2.0	D5	3	4-1/4	**TP2334301101**	Price	**TP2334301108**	Price	**TP2334501101**	Price	**TP2334501108**	Price	**TP2010901100**	Price
M18x2.5	D5	4	4-1/4	**TP2334301201**	Price	**TP2334301208**	Price	**TP2334501201**	Price	**TP2334501208**	Price	**TP2010901200**	Price
M20x2.5	D5	4	4-29/32	**TP2334301301**	Price	**TP2334301308**	Price	**TP2334501301**	Price	**TP2334501308**	Price	**TP2010901300**	Price
M22x2.5	D5	4	5-1/8	**TP2334301401**	Price	**TP2334301408**	Price	**TP2334501401**	Price	**TP2334501408**	Price	**TP2010901400**	Price
M24x3.0	D6	4	5-7/16	**TP2334301501**	Price	**TP2334301508**	Price	**TP2334501501**	Price	**TP2334501508**	Price	**TP2010901500**	Price

Metric STI Taps

Spiral Pointed • Plug Style • Screw Thread Insert

OSG List 127
- Bright finish
- HSS material

OSG List 342STI
- Steam oxide or V coating
- HSSE material

OSG List 344STI
- Steam oxide or V coating
- VC10 material



						342STI				344STI			
				Bright		Steam Oxide		V		Price		V	
Size	Class of Fit	No. of Flutes	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
M2x0.40	D2	2	1-7/8	**TP2012700100**	Price	**TP2334200101**	Price	**TP2334200108**	Price	**TP2334400101**	Price	**TP2334400108**	Price
M2.5x0.45	D2	2	1-15/16	**TP2012700200**	Price	**TP2334200201**	Price	**TP2334200208**	Price	**TP2334400201**	Price	**TP2334400208**	Price
M3x0.50	D2	2	2-1/8	**TP2012700300**	Price	**-**	-	**-**	-	**-**	-	**-**	-
M3x0.50	D2	3	2-1/8	**-**	-	**TP2334200301**	Price	**TP2334200308**	Price	**TP2334400301**	Price	**TP2334400308**	Price
M4x0.70	D3	2	2-3/8	**TP2012700400**	Price	**-**	-	**-**	-	**-**	-	**-**	-
M4x0.70	D3	3	2-3/8	**-**	-	**TP2334200401**	Price	**TP2334200408**	Price	**TP2334400401**	Price	**TP2334400408**	Price
M5x0.80	D3	2	2-1/2	**TP2012700500**	Price	**-**	-	**-**	-	**-**	-	**-**	-
M5x0.80	D3	3	2-1/2	**-**	-	**TP2334200501**	Price	**TP2334200508**	Price	**TP2334400501**	Price	**TP2334400508**	Price
M6x1.0	D3	3	2-23/32	**TP2012700600**	Price	**TP2334200601**	Price	**TP2334200608**	Price	**TP2334400601**	Price	**TP2334400608**	Price
M8x1.25	D3	3	2-15/16	**TP2012700700**	Price	**TP2334200701**	Price	**TP2334200708**	Price	**TP2334400701**	Price	**TP2334400708**	Price
M10x1.5	D4	3	3-3/8	**TP2012700800**	Price	**TP2334200801**	Price	**TP2334200808**	Price	**TP2334400801**	Price	**TP2334400808**	Price
M12x1.75	D4	3	3-13/16	**TP2012700900**	Price	**TP2334200901**	Price	**TP2334200908**	Price	**TP2334400901**	Price	**TP2334400908**	Price
M14x2.0	D5	3	4-1/32	**TP2012701000**	Price	**TP2334201001**	Price	**TP2334201008**	Price	**TP2334401001**	Price	**TP2334401008**	Price
M16x2.0	D5	3	4-1/4	**TP2012701100**	Price	**TP2334201101**	Price	**TP2334201108**	Price	**TP2334401101**	Price	**TP2334401108**	Price
M18x2.5	D5	3	4-1/4	**TP2012701200**	Price	**TP2334201201**	Price	**TP2334201208**	Price	**-**	-	**-**	-
M18x2.5	D5	4	4-1/4	**-**	-	**-**	-	**-**	-	**TP2334401201**	Price	**TP2334401208**	Price
M20x2.5	D5	3	4-29/32	**TP2012701300**	Price	**TP2334201301**	Price	**TP2334201308**	Price	**-**	-	**-**	-
M20x2.5	D5	4	4-29/32	**-**	-	**-**	-	**-**	-	**TP2334401301**	Price	**TP2334401308**	Price
M22x2.5	D5	3	5-1/8	**TP2012701400**	Price	**TP2334201401**	Price	**TP2334201408**	Price	**-**	-	**-**	-
M22x2.5	D5	4	5-1/8	**-**	-	**-**	-	**-**	-	**TP2334401401**	Price	**TP2334401408**	Price
M24x3.0	D6	4	5-7/16	**TP2012701500**	Price	**TP2334201501**	Price	**TP2334201508**	Price	**TP2334401501**	Price	**TP2334401508**	Price

PROCUT High Speed Steel Pulley Taps
Plug Style



			6" OAL		8 OAL		10 OAL		12 OAL	
Size	Thread Length (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
6-32	11/16	4	EM709632	Price	EM719632	Price	-	-	-	-
6-40	11/16	4	EM709640	Price	-	-	-	-	-	-
8-32	13/16	4	EM709832	Price	EM719832	Price	-	-	-	-
8-36	13/16	4	EM709836	Price	-	-	-	-	-	-
10-24	15/16	4	EM7091024	Price	-	-	-	-	-	-
10-32	15/16	4	EM7091032	Price	-	-	-	-	-	-
1/4-20	1	4	EM70420	Price	EM71420	Price	-	-	-	-
1/4-28	1	4	EM70428	Price	EM71428	Price	-	-	-	-
5/16-18	1-1/8	4	EM70518	Price	EM71518	Price	-	-	-	-
5/16-24	1-1/8	4	EM70524	Price	EM71524	Price	-	-	-	-
3/8-16	1-1/4	4	EM70616	Price	EM71616	Price	EM72616	Price	-	-
3/8-24	1-1/4	4	EM70624	Price	EM71624	Price	EM72624	Price	-	-
7/16-14	1-7/16	4	EM70714	Price	EM71714	Price	EM72714	Price	-	-
7/16-20	1-7/16	4	EM70720	Price	EM71720	Price	EM72720	Price	-	-
1/2-13	1-21/32	4	EM70813	Price	EM71813	Price	EM72813	Price	-	-
1/2-20	1-21/32	4	EM70820	Price	EM71820	Price	EM72820	Price	-	-
5/8-11	1-13/16	4	EM701011	Price	EM711011	Price	EM721011	Price	EM731011	Price
5/8-18	1-13/16	4	-	-	EM711018	Price	EM721018	Price	EM731018	Price
3/4-10	2	4	-	-	EM711210	Price	EM721210	Price	EM731210	Price
3/4-16	2	4	-	-	-	-	EM721216	Price	-	-
7/8-9	2-1/4	4	-	-	EM711409	Price	EM721409	Price	EM731409	Price
1-8	2-9/16	4	-	-	EM711608	Price	-	-	-	-

PROCUT 6" Spiral Point Pulley Taps
High Speed Steel • Plug Style



Size	No. of Flutes	Thread Length (in.)	Order No.	Price
6-32	2	11/16	EM759632	Price
6-40	2	11/16	EM759640	Price
8-32	2	13/16	EM759832	Price
8-36	2	13/16	EM759836	Price
10-24	2	15/16	EM7591024	Price
10-32	2	15/16	EM7591032	Price
1/4-20	2	1	EM75420	Price
1/4-28	2	1	EM75428	Price
5/16-18	2	1-1/8	EM75518	Price
5/16-24	2	1-1/8	EM75524	Price
3/8-16	3	1-1/4	EM75616	Price
3/8-24	3	1-1/4	EM75624	Price
7/16-14	3	1-7/16	EM75714	Price
7/16-20	3	1-7/16	EM75720	Price
1/2-13	3	1-21/32	EM75813	Price
1/2-20	3	1-21/32	EM75820	Price
5/8-11	3	1-13/16	EM751011	Price
5/8-18	3	1-13/16	EM751018	Price

Spiral Point Pulley Taps
High Speed Steel • Bright Finish

- OSG List #917



Size	Thread Limits	No. of Flutes	OAL (in.)	Order No.	Price
4-40	H2	2	4	TP171294000	Price
6-32	H3	2	4	TP171294100	Price
6-32	H3	2	6	TP171294200	Price
8-32	H3	2	4	TP171294300	Price
8-32	H3	2	6	TP171294400	Price
10-24	H3	2	4	TP171294500	Price
10-24	H3	2	6	TP171294600	Price
10-32	H3	2	4	TP171294700	Price
10-32	H3	2	6	TP171294800	Price
1/4-20	H3	2	4	TP171294900	Price
1/4-20	H3	2	6	TP171295000	Price
1/4-28	H3	2	6	TP171295100	Price
5/16-18	H3	2	4	TP172103000	Price
5/16-18	H3	2	6	TP171295200	Price
5/16-24	H3	2	6	TP172103600	Price
3/8-16	H3	3	4	TP172103800	Price
3/8-16	H3	3	6	TP171295300	Price
3/8-24	H3	3	6	TP172104400	Price
7/16-14	H3	3	6	TP171295400	Price
7/16-20	H3	3	6	TP172105200	Price
1/2-13	H3	3	6	TP171295500	Price
1/2-20	H3	3	6	TP172106000	Price
5/8-11	H3	3	6	TP171295600	Price

PROCUT 6" Spiral Point Extension Taps
High Speed Steel • Reduced Shank • Plug Style



Size	No. of Flutes	Order No.	Price
6-32	2	EM8090632	Price
8-32	2	EM8090832	Price
10-24	2	EM8091024	Price
10-32	2	EM8091032	Price
1/4-20	2	EM80420	Price
1/4-28	2	EM80428	Price
5/16-18	2	EM80518	Price

Size	No. of Flutes	Order No.	Price
5/16-24	2	EM80524	Price
3/8-16	3	EM80616	Price
3/8-24	3	EM80624	Price
7/16-14	3	EM80714	Price
1/2-13	3	EM80813	Price
1/2-20	3	EM80820	Price

Long Shank Spiral Flute Taps
High Speed Steel • Bright Finish

- Standard ANSI shanks
- OSG List #918



				Bottoming		Plug	
Size	Thread Limits	No. of Flutes	OAL (in.)	Order No.	Price	Order No.	Price
4-40	H2	2	4	TP171296100	Price	TP171296000	Price
6-32	H3	2	4	TP171296300	Price	TP171296200	Price
6-32	H3	2	6	TP171296500	Price	TP171296400	Price
8-32	H3	3	4	TP171296700	Price	TP171296600	Price
8-32	H3	3	6	TP171296900	Price	TP171296800	Price
10-24	H3	3	4	TP171297100	Price	TP171297000	Price
10-24	H3	3	6	TP171297300	Price	TP171297200	Price
10-32	H3	3	4	TP171297500	Price	TP171297400	Price
10-32	H3	3	6	TP171297700	Price	TP171297600	Price
1/4-20	H3	3	4	TP171297900	Price	TP171297800	Price
1/4-20	H3	3	6	TP171298100	Price	TP171298000	Price
1/4-28	H3	3	6	TP171298300	Price	TP171298200	Price
5/16-18	H3	3	6	TP171298500	Price	TP171298400	Price
3/8-16	H3	3	6	TP171298700	Price	TP171298600	Price
7/16-14	H3	3	6	TP171298900	Price	TP171298800	Price
1/2-13	H3	3	6	TP171299100	Price	TP171299000	Price
5/8-11	H3	4	6	TP171299300	Price	TP171299200	Price

Plug Style Pulley Taps
High Speed Steel • Steam Oxide Finish

- OSG List #916



Size	Thread Limits	No. of Flutes	OAL (in.)	Order No.	Price
1/4-20	H3	4	6	TP171290001	Price
5/16-18	H3	4	6	TP171290401	Price
3/8-16	H3	4	6	TP171290801	Price
1/2-13	H3	4	6	TP171292001	Price
5/8-11	H3	4	6	TP171292801	Price

Plug Style Small Shank Extension Taps

High Speed Steel - Ground Thread

Reduced shank for deeper threading & long reach applications



OAL (in.) - 4					
Size	Thread Limits	No. of Flutes	Shank Dia.	Order No.	Price
1/4-20	H3	4	.185	**EP4045612**	Price
5/16-18	H3	4	.240	**EP4045614**	Price
3/8-16	H3	4	.275	**EP4045779**	Price
1/2-13	H3	4	.367	**EP4045748**	Price

OAL (in.) - 6					
Size	Thread Limits	No. of Flutes	Shank Dia.	Order No.	Price
6-32	H3	3	.097	**EP4038332**	Price
8-32	H3	3	.123	**EP4038331**	Price
10-24	H3	3	.136	**EP4038342**	Price
10-32	H3	3	.136	**EP4039014**	Price
1/4-20	H3	4	.185	**EP4045681**	Price
1/4-28	H3	4	.185	**EP4045719**	Price
5/16-18	H3	4	.240	**EP4045683**	Price
5/16-24	H3	4	.240	**EP4045631**	Price
3/8-16	H3	4	.275	**EP4045685**	Price
3/8-24	H3	4	.275	**EP4045641**	Price
1/2-13	H3	4	.367	**EP4045687**	Price
1/2-20	H3	4	.367	**EP4045661**	Price
5/8-11	H3	4	.480	**EP4045689**	Price
5/8-18	H3	4	.480	**EP4044956**	Price
3/4-10	H3	4	.590	**EP4045831**	Price
3/4-16	H3	4	.590	**EP4045789**	Price
7/8-9	H4	4	.697	**EP4045741**	Price
1-8	H4	4	.800	**EP4045839**	Price

OAL (in.) - 8					
Size	Thread Limits	No. of Flutes	Shank Dia.	Order No.	Price
3/8-16	H3	4	.275	**EP4045686**	Price
1/2-13	H3	4	.367	**EP4045668**	Price
5/8-11	H3	4	.480	**EP4045952**	Price
3/4-10	H3	4	.590	**EP4045832**	Price
7/8-9	H4	4	.697	**EP4045761**	Price
1-8	H4	4	.800	**EP4045841**	Price

OAL (in.) - 10					
Size	Thread Limits	No. of Flutes	Shank Dia.	Order No.	Price
3/4-10	H3	4	.590	**EP4045834**	Price
7/8-9	H4	4	.697	**EP4045771**	Price
1-8	H4	4	.800	**EP4045851**	Price

OAL (in.) - 12					
Size	Thread Limits	No. of Flutes	Shank Dia.	Order No.	Price
7/8-9	H4	4	.697	**EP4045772**	Price
1-8	H4	4	.800	**EP4045859**	Price

Metric 6" Pulley Taps

- Plug style



Size (mm)	Thread Limits	No. of Flutes	Shank Diameter	Order No.	Price
M4x0.70	D4	4	.123	**EP4045804**	Price
M4x0.70	D4	4	.168	**EP4045800**	Price
M5x0.80	D4	4	.136	**EP4045813**	Price
M5x0.80	D4	4	.194	**EP4045808**	Price
M6x1.0	D5	4	.185	**EP4045821**	Price
M6x1.0	D5	4	.255	**EP4045816**	Price
M8x1.25	D5	4	.240	**EP4045829**	Price
M8x1.25	D5	4	.318	**EP4045825**	Price
M10x1.5	D6	4	.275	**EP4045837**	Price
M10x1.5	D6	4	.381	**EP4045833**	Price
M12x1.75	D6	4	.367	**EP4045845**	Price
M12x1.75	D6	4	.507	**EP4045843**	Price
M14x2.0	D7	4	.429	**EP4045853**	Price
M14x2.0	D7	4	.570	**EP4045849**	Price
M16x2.0	D7	4	.480	**EP4045861**	Price
M16x2.0	D7	4	.633	**EP4045857**	Price

Spiral Point Small Shank Extension Taps



High Speed Steel - Ground Thread

Reduced shank for deeper threading & long reach applications.

OAL (in.) - 4					
Size	Thread Limits	No. of Flutes	Shank Dia.	Order No.	Price
4-40	H2	2	.080	**EP4038302**	Price
4-48	H2	2	.080	**EP4038304**	Price
5-40	H2	2	.093	**EP4038312**	Price
6-32	H3	2	.097	**EP4038324**	Price
8-32	H3	2	.123	**EP4038328**	Price
10-24	H3	2	.136	**EP4038341**	Price
10-32	H3	2	.136	**EP4038992**	Price
1/4-20	H3	2	.185	**EP4045619**	Price
5/16-18	H3	2	.240	**EP4045753**	Price
3/8-16	H3	3	.275	**EP4045778**	Price
1/2-13	H3	3	.367	**EP4045744**	Price

OAL (in.) - 6					
Size	Thread Limits	No. of Flutes	Shank Dia.	Order No.	Price
6-32	H3	2	.097	**EP4038326**	Price
8-32	H3	2	.123	**EP4038330**	Price
10-24	H3	2	.136	**EP4038343**	Price
10-32	H3	2	.136	**EP4039012**	Price
1/4-20	H3	2	.185	**EP4045732**	Price
1/4-28	H3	2	.185	**EP4045722**	Price
5/16-18	H3	2	.240	**EP4045737**	Price
5/16-24	H3	2	.240	**EP4045723**	Price
3/8-16	H3	3	.275	**EP4045742**	Price
3/8-24	H3	3	.275	**EP4045743**	Price
7/16-14	H3	3	.323	**EP4045792**	Price
7/16-20	H3	3	.323	**EP4045745**	Price
1/2-13	H3	3	.367	**EP4045747**	Price
1/2-20	H3	3	.367	**EP4045749**	Price
5/8-11	H3	3	.480	**EP4045752**	Price
5/8-18	H3	3	.480	**EP4045922**	Price
3/4-10	H3	3	.590	**EP4045756**	Price
3/4-16	H3	3	.590	**EP4045784**	Price

OAL (in.) - 8					
Size	Thread Limits	No. of Flutes	Shank Dia.	Order No.	Price
3/8-16	H3	3	.275	**EP4045738**	Price
1/2-13	H3	3	.367	**EP4045665**	Price
5/8-11	H3	3	.480	**EP4045932**	Price
3/4-10	H3	3	.590	**EP4045835**	Price

OAL (in.) - 10					
Size	Thread Limits	No. of Flutes	Shank Dia.	Order No.	Price
3/4-10	H3	3	.590	**EP4045783**	Price

Metric 6" Small Shank Extension Taps Spiral Point

- Plug style
- Class 6H fit



Size (mm)	Thread Limits	No. of Flutes	Shank Dia.	Order No.	Price
M4 x 0.7	D4	2	.123	**EP4045904**	Price
M4 x 0.7	D4	2	.168	**EP4045900**	Price
M5 x 0.8	D4	2	.136	**EP4045912**	Price
M5 x 0.8	D4	2	.194	**EP4045908**	Price
M6 x 1.0	D5	2	.185	**EP4045921**	Price
M6 x 1.0	D5	2	.255	**EP4045916**	Price
M8 x 1.25	D5	2	.240	**EP4045928**	Price
M8 x 1.25	D5	2	.318	**EP4045925**	Price
M10 x 1.5	D6	3	.275	**EP4045937**	Price
M10 x 1.5	D6	3	.381	**EP4045933**	Price
M12 x 1.75	D6	3	.367	**EP4045945**	Price
M12 x 1.75	D6	3	.507	**EP4045941**	Price
M14 x 2.0	D7	3	.429	**EP4045953**	Price
M14 x 2.0	D7	3	.570	**EP4045949**	Price
M16 x 2.0	D7	3	.480	**EP4045961**	Price
M16 x 2.0	D7	3	.633	**EP4045957**	Price

RAPIDKUT® Small Shank Extension & Pulley Taps



High Speed Steel • Ground Thread • Bright Finish

- Reduced shank for deeper threading and long reach applications
- Plug style

- Hand Taps - Inch						
Size	Class of Fit	Flutes	Overall Length	Shank Dia.	Order No.	Price
6-32	H3	3	6	.097	**EP55110066**	Price
8-32	H3	3	6	.123	**EP55110086**	Price
10-24	H3	3	6	.136	**EP55110106**	Price
10-32	H3	3	6	.136	**EP55110116**	Price
1/4-20	H3	4	4	.185	**EP55110164**	Price
1/4-20	H3	4	6	.185	**EP55110166**	Price
1/4-28	H3	4	6	.185	**EP55110176**	Price
5/16-18	H3	4	4	.240	**EP55110204**	Price
5/16-18	H3	4	6	.240	**EP55110206**	Price
5/16-24	H3	4	6	.240	**EP55110216**	Price
3/8-16	H3	4	4	.275	**EP55110244**	Price
3/8-16	H3	4	6	.275	**EP55110246**	Price
3/8-16	H3	4	8	.275	**EP55110248**	Price
3/8-24	H3	4	6	.275	**EP55110256**	Price
1/2-13	H3	4	4	.367	**EP55110324**	Price
1/2-13	H3	4	6	.367	**EP55110326**	Price
1/2-13	H3	4	8	.367	**EP55110328**	Price
1/2-20	H3	4	6	.367	**EP55110336**	Price
5/8-11	H3	4	6	.480	**EP55110406**	Price
5/8-11	H3	4	8	.480	**EP55110408**	Price
5/8-18	H3	4	6	.480	**EP55110506**	Price
3/4-10	H3	4	6	.590	**EP55110486**	Price
3/4-10	H3	4	8	.590	**EP55110488**	Price
3/4-10	H3	4	10	.590	**EP55110489**	Price
3/4-16	H3	4	6	.590	**EP55110496**	Price
7/8-9	H4	4	6	.697	**EP55110566**	Price
7/8-9	H4	4	8	.697	**EP55110568**	Price
7/8-9	H4	4	10	.697	**EP55110569**	Price
7/8-9	H4	4	12	.697	**EP55110560**	Price
1-8	H4	4	6	.800	**EP55111006**	Price
1-8	H4	4	8	.800	**EP55111008**	Price
1-8	H4	4	10	.800	**EP55111010**	Price
1-8	H4	4	12	.800	**EP55111012**	Price

- Hand Taps - Metric						
Size	Class of Fit	Flutes	Overall Length	Shank Dia.	Order No.	Price
M4x0.70	D4	4	6	.168	**EP553104076†**	Price
M5x0.80	D4	4	6	.194	**EP553105086†**	Price
M6x1.0	D5	4	6	.255	**EP553106026†**	Price
M8x1.25	D5	4	6	.318	**EP553108126†**	Price
M10x1.5	D6	4	6	.381	**EP553110156†**	Price
M10x1.5	D6	4	6	.275	**EP553010156**	Price
M12x1.75	D6	4	6	.507	**EP553112176†**	Price
M12x1.75	D6	4	6	.367	**EP553012176**	Price
M14x2.0	D7	4	6	.570	**EP553114206†**	Price
M14x2.0	D7	4	6	.429	**EP553014206**	Price

- Hand Taps - Metric						
Size	Class of Fit	Flutes	Overall Length	Shank Dia.	Order No.	Price
M16x2.0	D7	4	6	.633	**EP553116206†**	Price
M16x2.0	D7	4	6	.480	**EP553016206**	Price

- Spiral Point Taps - Inch						
Size	Class of Fit	Flutes	Overall Length	Shank Dia.	Order No.	Price
4-40	H2	2	4	.080	**EP55200404**	Price
4-48	H2	2	4	.080	**EP55200484**	Price
5-40	H2	2	4	.093	**EP55200544**	Price
6-32	H3	2	4	.097	**EP55200634**	Price
6-32	H3	2	6	.097	**EP55200636**	Price
8-32	H3	2	4	.123	**EP55200834**	Price
8-32	H3	2	6	.123	**EP55200836**	Price
10-24	H3	2	4	.136	**EP55201244**	Price
10-24	H3	2	6	.136	**EP55201246**	Price
10-32	H3	2	4	.136	**EP55201324**	Price
10-32	H3	2	6	.136	**EP55201326**	Price
1/4-20	H3	2	4	.185	**EP55201624**	Price
1/4-20	H3	2	6	.185	**EP55201626**	Price
1/4-28	H3	2	6	.185	**EP55201686**	Price
5/16-18	H3	2	4	.240	**EP55202184**	Price
5/16-18	H3	2	6	.240	**EP55202186**	Price
5/16-24	H3	2	6	.240	**EP55202246**	Price
3/8-16	H3	3	4	.275	**EP55203164**	Price
3/8-16	H3	3	6	.275	**EP55203166**	Price
3/8-16	H3	3	8	.275	**EP55203168**	Price
3/8-24	H3	3	6	.275	**EP55203246**	Price
7/16-14	H3	3	6	.323	**EP55204166**	Price
7/16-20	H3	3	6	.323	**EP55204206**	Price
1/2-13	H3	3	4	.367	**EP55206134**	Price
1/2-13	H3	3	6	.367	**EP55206136**	Price
1/2-13	H3	3	8	.367	**EP55206138**	Price
1/2-20	H3	3	6	.367	**EP55206206**	Price
5/8-11	H3	3	6	.480	**EP55207116**	Price
5/8-11	H3	3	8	.480	**EP55207118**	Price
5/8-18	H3	3	6	.480	**EP55208186**	Price
3/4-10	H3	3	6	.590	**EP55209106**	Price
3/4-10	H3	3	8	.590	**EP55209108**	Price
3/4-10	H3	3	10	.590	**EP55209110**	Price
3/4-16	H3	3	6	.590	**EP55209166**	Price

- Spiral Point Taps - Metric						
Size	Class of Fit	Flutes	Overall Length	Shank Dia.	Order No.	Price
M4 x 0.7	D4	2	6	.168	**EP554104076†**	Price
M5 x 0.8	D4	2	6	.194	**EP554105086†**	Price
M6 x 1.0	D5	2	6	.255	**EP554106106†**	Price
M8 x 1.25	D5	2	6	.318	**EP554108126†**	Price
M10 x 1.5	D6	3	6	.381	**EP554110156†**	Price
M12 x 1.75	D6	3	6	.507	**EP554112176†**	Price
M12 x 1.75	D6	3	6	.367	**EP554012176**	Price
M14 x 2.0	D7	3	6	.570	**EP554114206†**	Price
M14 x 2.0	D7	3	6	.429	**EP554014206**	Price
M16 x 2.0	D7	3	6	.633	**EP554116206†**	Price
M16 x 2.0	D7	3	6	.480	**EP554016206**	Price

† Standard shank pulley taps

Acme Tandem Taps



High Speed Steel

- Ground thread
- Roughing and finishing tap
- 2G fit

					PROCUT		RAPIDKUT®			
					Right Hand		Rapidkut Left Hand		Rapidkut Right Hand	
Size	Thread Length (in.)	OAL (in.)	Brass & Cast Iron	Bronze & Steel	Order No.	Price	Order No.	Price	Order No.	Price
1/2-10	2-9/16	5	1-1/2	1	**ER701210**	Price	**ER721210**	Price	**ER711210**	Price
5/8-8	3-3/16	6-1/4	1-7/8	1-1/4	**ER70588**	Price	**ER72588**	Price	**ER71588**	Price
3/4-6	4-5/16	7-15/16	2-1/4	1-1/2	**ER70346**	Price	**ER72346**	Price	**ER71346**	Price
7/8-6	4-3/8	8-5/8	2-5/8	1-3/4	**ER70786**	Price	**ER72786**	Price	**ER71786**	Price
1-5	5-1/4	10-1/8	3	2	**ER7015**	Price	**ER7215**	Price	**ER7115**	Price
1-1/8-5	5-1/4	10-3/4	3-3/8	2-1/4	**ER701185**	Price	**-**	-	**-**	-
1-1/4-5	5-1/4	11-1/8	3-3/4	2-1/2	**ER701145**	Price	**ER721145**	Price	**ER711145**	Price
1-3/8-4	5-7/8	12-1/4	4-1/8	2-3/4	**ER701384**	Price	**-**	-	**-**	-
1-1/2-4	5-7/8	12-5/8	4-1/2	3	**ER701124**	Price	**ER721124**	Price	**ER711124**	Price

Taper Pipe Taps

- High speed steel
- Taper pipe taps - NPT
- Dryseal taper pipe taps - NPTF
- All HSS taps have ground threads



RAPIDKUT

				ProCut				Rapidkut			
				NPT		NPTF		NPT		Price	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16-27	4	11/16	2-1/8	EM50127	Price	EM51127	Price	EM40127	Price	EM41127	Price
1/8-27	4	3/4	2-1/8	EM50227	Price	EM51227	Price	EM40227	Price	EM41227	Price
1/8-27 (sm. sk.)	4	3/4	2-1/8	EM50227S†	Price	EM51227S†	Price	EM40227S†	Price	EM41227S†	Price
1/4-18	4	1-1/16	2-7/16	EM50418	Price	EM51418	Price	EM40418	Price	EM41418	Price
3/8-18	4	1-1/16	2-9/16	EM50618	Price	EM51618	Price	EM40618	Price	EM41618	Price
1/2-14	4	1-3/8	3-1/8	EM50814	Price	EM51814	Price	EM40814	Price	EM41814	Price
3/4-14	5	1-3/8	3-1/4	EM501214	Price	EM511214	Price	EM401214	Price	EM411214	Price
1-11-1/2	5	1-3/4	3-3/4	EM501611	Price	EM511611	Price	EM401611	Price	EM411611	Price
1-1/4-11-1/2	5	1-3/4	4	EM502011	Price	EM512011	Price	EM402011	Price	EM412011	Price
1-1/2-11-1/2	7	1-3/4	4-3/4	EM502411	Price	EM512411	Price	EM402411	Price	EM412411	Price
2-11-1/2	7	1-3/4	4-1/2	EM503211	Price	EM513211	Price	EM403211	Price	EM413211	Price
2-1/2-8	8	2-9/16	5-1/2	EM504008	Price	-	-	-	-	-	-
3-1/2-8	8	2-11/16	6-1/2	EM505608	Price	EM515608	Price	-	-	-	-
3-8	8	2-5/8	6	EM504808	Price	EM514808	Price	-	-	-	-
4-8	8	2-7/8	7	EM506408	Price	-	-	-	-	-	-

† Small shank .3125 diameter

Taper Pipe Taps High Speed Steel

- NPT/ANPT, NPTF
- Regular thread
- Morse List #2119
- OSG List #108 (NPT), List #118 (NPTF)



								OSG USA, Inc.							
				NPT		NPTF		NPT				NPTF			
				Bright		Bright		Bright		Price		Bright		Steam Oxide	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16-27	4	11/16	2-1/8	MT4036121	Price	MT4036141	Price	TP131310000	Price	TP131310001	Price	TP131312500	Price	TP131312501	Price
1/8-27 (sm. shk.)	4	3/4	2-1/8	MT4036122	Price	MT4036142	Price	TP131310200†	Price	TP131310201	Price	TP131312700†	Price	TP131312701	Price
1/8-27 (lg. shk.)	4	3/4	2-1/8	MT4036123	Price	MT4036143	Price	TP131310100	Price	TP131310101	Price	TP131312600	Price	TP131312601	Price
1/4-18	4	1-1/16	2-7/16	MT4036124	Price	MT4036144	Price	TP131310300	Price	TP131310301	Price	TP131312800	Price	TP131312801	Price
3/8-18	4	1-1/16	2-9/16	MT4036125	Price	MT4036145	Price	TP131310400	Price	TP131310401	Price	TP131312900	Price	TP131312901	Price
1/2-14	4	1-3/8	3-1/8	MT4036126	Price	MT4036146	Price	TP131310500	Price	TP131310501	Price	TP131313000	Price	TP131313001	Price
3/4-14	5	1-3/8	3-1/4	MT4036127	Price	MT4036147	Price	TP131310600	Price	TP131310601	Price	TP131313100	Price	TP131313101	Price
1-11-1/2	5	1-3/4	3-3/4	MT4036128	Price	MT4036148	Price	TP131310700	Price	TP131310701	Price	TP131313200	Price	TP131313201	Price
1-1/4-11-1/2	5	1-3/4	4	MT4036129	Price	MT4036149	Price	TP131310800	Price	TP131310801	Price	TP131313300	Price	TP131313301	Price
1-1/2-11-1/2	7	1-3/4	4-1/4	MT4036130	Price	MT4036150	Price	TP131310900	Price	TP131310901	Price	TP131313400	Price	TP131313401	Price
2-11-1/2	7	1-3/4	4-1/2	MT4036131	Price	MT4036151	Price	TP131311000	Price	TP131311001	Price	TP131313500	Price	TP131313501	Price

†Small shank .3125 diameter

PROCUT Long Taper Pipe Taps



High Speed Steel

- Ground thread

		4" OAL		6" OAL	
Size	Thread Length (in.)	Order No.	Price	Order No.	Price
1/8-27	3/4	EM68227	Price	EM69227	Price
1/4-18	1-1/16	EM68418	Price	EM69418	Price
3/8-18	1-1/16	-	-	EM69618	Price

		4" OAL		6" OAL	
Size	Thread Length (in.)	Order No.	Price	Order No.	Price
1/2-14	1-3/8	-	-	EM69814	Price
3/4-14	1-3/8	-	-	EM691214	Price
1-11-1/2	1-3/4	-	-	EM691611	Price

R&N Reiff & Nestor British Pipe Taps

Style BSPP British Parallel Pipe 55º Whitworth Thread - Full Form



Size	Drill Dia. Range	No. of Flutes	Order No.	Price
1/8-28	.3372 - .3488	4	EP4047050	Price
1/4-19	.4505 - .4680	4	EP4047052	Price
3/8-19	.5885 - .6060	4	EP4047054	Price
1/2-14	.7335 - .7548	4	EP4047056	Price
3/4-14	.9495 - .9707	5	EP4047058	Price
1-11	1.1926 - 1.2178	5	EP4047060	Price
1-1/4-11	1.5335 - 1.5887	5	EP4047062	Price
1-1/2-11	1.7655 - 1.7907	7	EP4047064	Price
2-11	2.2306 - 2.2558	7	EP4047066	Price

R&N Reiff & Nestor British Pipe Taps

Style BSPT (Rc) British Taper Pipe 55º Whitworth Thread - Full Form



Size	BSPT (Rc) Stnd. Projections	No. of Flutes	Drill Dia. With Reamer	Drill Dia. Without Reamer	Order No.	Price
1/8-28	.206 ± .035	4	8.00mm	8.40mm	EP4047070	Price
1/4-19	.304 ± .050	4	10.80mm	11.20mm	EP4047074	Price
3/8-19	.306 ± .050	4	14.25mm	14.75mm	EP4047078	Price
1/2-14	.416 ± .070	4	17.75mm	18.25mm	EP4047080	Price
3/4-14	.413 ± .070	5	23.00mm	23.75mm	EP4047082	Price
1-11	.525 ± .080	5	29.00mm	30.00mm	EP4047084	Price
1-1/4-11	.524 ± .080	5	37.50mm	38.50mm	EP4047086	Price
1-1/2-11	.524 ± .090	7	43.50mm	44.50mm	EP4047088	Price

PROCUT Taper Pipe Taps

Interrupted Thread

- First few threads on interrupted thread pipe taps are left full
- High speed steel
- Ground thread
- NPT, NPTF



				NPT		NPTF	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8-27	5	3/4	2-1/8	**EM60227**	Price	**EM61227**	Price
1/8-27 (Sm. Shk.)	5	3/4	2-1/8	**EM60227S†**	Price	**EM61227S†**	Price
1/4-18	5	1-1/16	2-7/16	**EM60418**	Price	**EM61418**	Price
3/8-18	5	1-1/16	2-9/16	**EM60618**	Price	**EM61618**	Price
1/2-14	5	1-3/8	3-1/8	**EM60814**	Price	**EM61814**	Price
3/4-14	5	1-3/8	3-1/4	**EM601214**	Price	**EM611214**	Price
1-11-1/2	5	1-3/4	3-3/4	**EM601611**	Price	**EM611611**	Price
1-1/4-11-1/2	5	1-3/4	4	**EM602011**	Price	**EM612011**	Price
1-1/2-11-1/2	7	1-3/4	4-1/4	**EM602411**	Price	-	-
2-11-1/2	7	1-3/4	4-1/2	**EM603211**	Price	-	-

† Small shank .3125 diameter

OSG Taper Pipe Taps Ground Thread

List 108G • Interrupted Thread

- High speed steel
- NPT/ANPT, NPTF
- OSG List #108G



				NPT		NPTF	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8 -27 (Lg.Shk.)	5	3/4	2-1/8	**TP131315100**	Price	**TP133310100**	Price
1/8-27 (Sm. Shk.)	5	3/4	2-1/8	**TP131315200†**	Price	**TP133310500†**	Price
1/4-18	5	1-1/16	2-7/16	**TP131315300**	Price	**TP133310900**	Price
3/8-18	5	1-1/16	2-9/16	**TP131315400**	Price	**TP131311300**	Price
1/2-14	5	1-3/8	3-1/8	**TP131315500**	Price	**TP131311700**	Price
3/4-14	5	1-3/8	3-1/4	**TP131315600**	Price	**TP131312100**	Price
1-11-1/2	5	3/4	3-3/4	**TP131315700**	Price	-	-

† Small shank .3125 diameter

HSS MORSE M GP Straight Pipe Taps

High Speed Steel • Bright Finish

- Ground thread
- NPS & NPSF
- Morse List #2123



				NPS		NPSF	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8-27 (lg. shk.)	4	3/4	2-1/8	**MT4036162**	Price	**MT4036182**	Price
1/8-27 (sm. shk.)	4	3/4	2-1/8	**MT4036161†**	Price	**MT4036181†**	Price
1/4-18	4	1-1/16	2-7/16	**MT4036163**	Price	**MT4036183**	Price
3/8-18	4	1-1/16	2-9/16	**MT4036164**	Price	**MT4036184**	Price
1/2-14	4	1-3/8	3-1/8	**MT4036165**	Price	**MT4036185**	Price
3/4-14	5	1-3/8	3-1/4	**MT4036166**	Price	**MT4036186**	Price
1-11-1/2	5	1-3/4	3-3/4	**MT4036167**	Price	-	-

† Small shank .3125 diameter

HSS MORSE M GP Taper Pipe Taps

Interrupted Thread

- Ground thread
- High speed steel
- NPT/ANPT, NPTF
- Morse List #2113



				NPT		NPTF	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8 -27 (Lg. Shk.)	5	3/4	2-1/8	**MT4036002**	Price	**MT4036022**	Price
1/8-27 (Sm. Shk.)	5	3/4	2-1/8	**MT4036001†**	Price	**MT4036021†**	Price
1/4-18	5	1-1/16	2-7/16	**MT4036003**	Price	**MT4036023**	Price
3/8-18	5	1-1/16	2-9/16	**MT4036004**	Price	**MT4036024**	Price
1/2-14	5	1-3/8	3-1/8	**MT4036005**	Price	**MT4036025**	Price
3/4-14	5	1-3/8	3-1/4	**MT4036006**	Price	**MT4036026**	Price
1-11-1/2	5	1-3/4	3-3/4	**MT4036007**	Price	**MT4036027**	Price
1-1/4-11-1/2	5	1-3/4	4	**MT4036008**	Price	-	-
1-1/2-11-1/2	7	1-3/4	4-1/4	**MT4036009**	Price	-	-
2-11-1/2	7	1-3/4	4-1/2	**MT4036010**	Price	-	-

† Small shank .3125 diameter

PROCUT Straight Pipe Taps

- Ground thread
- High speed steel
- NPS & NPSF



			NPS		NPSF	
Size	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8-27 (lg. shk.)	3/4	2-1/8	**EM55227**	Price	**EM56227**	Price
1/8-27 (sm. shk.)	3/4	2-1/8	**EM55227S†**	Price	**EM56227S†**	Price
1/4-18	1-1/16	2-7/16	**EM55418**	Price	**EM56418**	Price
3/8-18	1-1/16	2-9/16	**EM55618**	Price	**EM56618**	Price
1/2-14	1-3/8	3-1/8	**EM55814**	Price	**EM56814**	Price
3/4-14	1-3/8	3-1/4	**EM551214**	Price	**EM561214**	Price
1-11-1/2	1-3/4	3-3/4	**EM551611**	Price	**EM561611**	Price

† Small shank .3125 diameter

OSG Straight Pipe Taps

High Speed Steel • Bright Finish

- Ground thread
- NPS & NPSF
- OSG List #109



				NPS		NPSF	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8-27 (lg. shk.)	4	3/4	2-1/8	**TP131330100**	Price	**TP131332600**	Price
1/8-27 (sm. shk.)	4	3/4	2-1/8	**TP131330200**	Price	**TP131332700†**	Price
1/4-18	4	1-1/16	2-7/16	**TP131330300**	Price	**TP131332800**	Price
3/8-18	4	1-1/16	2-9/16	**TP131330400**	Price	**TP131332900**	Price
1/2-14	4	1-3/8	3-1/8	**TP131330500**	Price	**TP131333000**	Price
3/4-14	5	1-3/8	3-1/4	**TP131330600**	Price	**TP131333100**	Price
1-11-1/2	5	1-3/4	3-3/4	**TP131330700**	Price	-	-

† Small shank .3125 diameter

Regular NPT Pipe Taps

High Speed Steel



Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
1/16-27	4	11/16	2-1/8	**ER80P1000427**	Price
1/8-27	4	3/4	2-1/8	**ER80P1000827**	Price
1/4-18	4	1-1/16	2-7/16	**ER80P1001618**	Price
3/8-18	4	1-1/16	2-9/16	**ER80P1002418**	Price
1/2-14	4	1-3/8	3-1/8	**ER80P1003214**	Price
3/4-14	5	1-3/8	3-1/4	**ER80P1004814**	Price
1-11-1/2	5	1-3/4	3-3/4	**ER80P1010011**	Price
1-1/4-11-1/2	5	1-3/4	4	**ER80P1011611**	Price
1-1/2-11-1/2	7	1-3/4	4-1/4	**ER80P1013211**	Price
2-11-1/2	7	1-3/4	4-1/2	**ER80P1020011**	Price

Interrupted NPT Pipe Taps

High Speed Steel



Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
1/8-27	4	3/4	2-1/8	**ER80P3000827**	Price
1/4-18	4	1-1/16	2-7/16	**ER80P3001618**	Price
3/8-18	4	1-1/16	2-9/16	**ER80P3002418**	Price
1/2-14	4	1-3/8	3-1/8	**ER80P3003214**	Price
3/4-14	5	1-3/8	3-1/4	**ER80P3004814**	Price
1-11-1/2	5	1-3/4	3-3/4	**ER80P3010011**	Price

PROCUT Taper Pipe Reamers

Spiral Flute • High Speed Steel



Size (in.)	Diameter	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	.316 - .362	3/4	2-1/8	**EM90002**	Price
1/4	.406 - .472	1-1/16	2-7/16	**EM90004**	Price
3/8	.540 - .606	1-1/16	2-9/16	**EM90006**	Price
1/2	.665 - .751	1-3/8	3-1/8	**EM90008**	Price
3/4	.876 - .962	1-3/8	3-1/4	**EM90012**	Price
1	1.103 - 1.212	1-3/4	3-3/4	**EM90016**	Price
1-1/4	1.444 - 1.553	1-3/4	4	**EM90020**	Price
1-1/2	1.684 - 1.793	1-3/4	4-1/4	**EM90028**	Price
2	2.159 - 2.268	1-3/4	4-1/2	**EM90032**	Price

Spiral Flute HSSE-V3 NPT Pipe Taps

High Speed Steel

- Spiral flute design for steel, stainless steel and other materials



Size	No. of Flutes	Thread Length	OAL (in.)	Order No.	Price
1/16-27	4	11/16	2-1/8	**ER80P2000427**	Price
1/8-27	4	3/4	2-1/8	**ER80P2000827**	Price
1/4-18	4	1-1/16	2-7/16	**ER80P2001618**	Price
3/8-18	4	1-1/16	2-9/16	**ER80P2002418**	Price
1/2-14	4	1-3/8	3-1/8	**ER80P2003214**	Price
3/4-14	5	1-3/8	3-1/4	**ER80P2004814**	Price
1-11-1/2	5	1-3/4	3-3/4	**ER80P2010011**	Price
1-1/4-11-1/2	5	1-3/4	4	**ER80P2011611**	Price
1-1/2-11-1/2	5	1-3/4	4-1/4	**ER80P2013211**	Price
2-11-1/2	5	1-3/4	4-1/2	**ER80P2020022**	Price

Hy-Pro® Interrupted Pipe Taps

NPT • NPTF

- Interrupted modified bottoming
- Spiral flute
- Good for medium and high carbon steels, alloy steels, and die steels up to 20 HRc
- TiCN coated
- OSG List #12053 (NPT) and 12054 (NPTF)



				NPT		NPTF	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8-27 (Sm. Shk.)	3	3/4	2-1/8	**TP281205300108**	Price	**TP281205400108**	Price
1/8-27 (Lg. Shk.)	3	3/4	2-1/8	**TP281205300208**	Price	**TP281205400208**	Price
1/4-18	3	1-1/16	2-7/16	**TP281205300308**	Price	**TP281205400308**	Price
3/8-18	4	1-1/16	2-9/16	**TP281205300408**	Price	**TP281205400408**	Price
1/2-14	5	1-3/8	3-1/8	**TP281205300508**	Price	**TP281205400508**	Price
3/4-14	5	1-3/8	3-1/4	**TP281205300608**	Price	**TP281205400608**	Price
1-11-1/2	5	1-3/4	3-3/4	**TP281205300708**	Price	**TP281205400708**	Price

EXOPIPE® Pipe Taps

HSSE • Steam Oxide Finish

- For 300 stainless steel
- Developed especially for tapping stainless steel pipe fittings
- OSG List #308 (NPT) List #318 (NPTF)



				NPT		NPTF	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/16-27	4	11/16	2-1/8	**TP261735001**	Price	**TP261737501**	Price
1/8-27 (Lg. Shk.)	4	3/4	2-1/8	**TP261735101**	Price	**TP261737601**	Price
1/8-27 (Sm. Shk.)	4	3/4	2-1/8	**TP261735201†**	35.62	**TP261737701†**	35.62
1/4-18	4	1-1/16	2-7/16	**TP261735301**	Price	**TP261737801**	Price
3/8-18	4	1-1/16	2-9/16	**TP261735401**	Price	**TP261737901**	Price
1/2-14	4	1-3/8	3-1/8	**TP261735501**	Price	**TP261738001**	Price
3/4-14	5	1-3/8	3-1/4	**TP261735601**	Price	**TP261738101**	Price
1-11-1/2	5	1-3/4	3-3/4	**TP261735701**	Price	**TP261738201**	Price

† Small shank .3125 diameter

Taper Pipe Taps For Cast Iron

High Speed Steel • Ground Thread • NPT

- Manufactured with radial cutting face and surface treated to resist abrasion
- May also be used in brass and other materials having brittle chip characteristics
- Morse List #2133



Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
1/8-27	4	3/4	2-1/8	**MT4036202†**	Price
1/4-18	4	1-1/16	2-7/16	**MT4036203**	Price
3/8-18	4	1-1/16	2-9/16	**MT4036204**	Price
1/2-14	4	1-3/8	3-1/8	**MT4036205**	Price
3/4-14	5	1-3/8	3-1/4	**MT4036206**	Price
1-11-1/2	5	1-3/4	3-3/4	**MT4036207**	Price
1-1/4-11-1/2	5	1-3/4	4	**MT4036208**	Price
1-1/2-11-1/2	7	1-3/4	4-1/4	**MT4036209**	Price
2-11-1/2	7	1-3/4	4-1/2	**MT4036210**	Price

† Large shank

High Performance NPT Pipe Taps

HSS-E • Straight Flute

- 0° Tapping angle



Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
1/4-18 NPT	4	1.030	2.437	**WK315629647**	Price
3/8-18 NPT	4	1.030	2.563	**WK315629648**	Price
3/4-14 NPT	5	1.375	3.250	**WK315629904**	Price

Taper High Hook Pipe Taps

High Speed Steel • Ground Thread • NPT & NPTF

- Designed for those ductile “soft gummy” materials
- Smooth, chatterfree threads in soft stainless steel, aluminum and other similar materials are achieved due to high hook design
- Morse List #2120



					NPT		NPTF	
Size	Projection (in.)	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8-27	High Hook Design	4	3/4	2-1/8	**MT4036188†**	Price	**MT4036194†**	Price
1/4-18	High Hook Design	4	1-1/16	2-7/16	**MT4036189**	Price	**MT4036195**	Price
3/8-18	High Hook Design	4	1-1/16	2-9/16	**MT4036190**	Price	**MT4036196**	Price
1/2-14	High Hook Design	4	1-3/8	3-1/8	**MT4036191**	Price	**MT4036197**	Price
3/4-14	High Hook Design	5	1-3/8	3-1/4	**MT4036192**	Price	**MT4036198**	Price
1-11-1/2	High Hook Design	5	1-3/4	3-3/4	**MT4036193**	Price	**MT4036199**	Price

† Large shank

Spiral Flute Taper Pipe Taps

High Speed Steel • Ground Thread • NPT & NPTF

- Offer the most effectiveness in those applications where long stringy chips are produced
- The spiral flutes create a lifting action of the chips from the hole being tapped
- Morse List #2121



				NPT		NPTF	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8-27	4	3/4	2-1/8	**MT4036168†**	Price	**MT4036173†**	Price
1/4-18	4	1-1/16	2-7/16	**MT4036169**	Price	**MT4036174**	Price
3/8-18	4	1-1/16	2-9/16	**MT4036170**	Price	**MT4036175**	Price
1/2-14	4	1-3/8	3-1/8	**MT4036171**	Price	**MT4036176**	Price
3/4-14	5	1-3/8	3-1/4	**MT4036172**	Price	**MT4036177**	Price

† Large shank

Spiral Flute Taper Pipe Taps

High Speed Steel • Ground Thread • NPT & NPTF

- Offer the most effectiveness in those applications where long stringy chips are produced.
- The spiral flutes create a lifting action of the chips from the hole being tapped
- Bright finish
- OSG List #S125



				NPT		NPTF	
Size	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8-27	4	3/4	2-1/8	**TP131250500†**	Price	**TP131250600†**	Price
1/4-18	4	1-1/16	2-7/16	**TP131251300**	Price	**TP131251400**	Price
3/8-18	4	1-1/16	2-9/16	**TP131251700**	Price	**TP131251800**	Price
1/2-14	4	1-3/8	3-1/8	**TP131252100**	Price	**TP131252200**	Price
3/4-14	5	1-3/8	3-1/4	**TP131252500**	Price	**TP131252600**	Price

† Large shank

RAPIDKUT® High Performance Spiral Point Taps

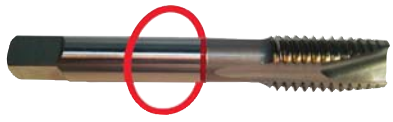
Bright Finish • Plug Style • Color Coded for Easy Identification



Blue Ring – High Vanadium Steel
For general purpose machining of:
- Low carbon steel (< HRc 16)<ParaStyle:Bullets>Medium to high carbon steel and low alloy steel (>HRc 23)
- Steel castings and forgings (> HRc 24)



Yellow Ring – High Vanadium Steel
For tough materials such as:
- Stainless steel (>HRc 23)
- Heat/corrosion resistant stainless steel (>HRc 24)
- Valve stainless steel (>HRc 38)
- Alloyed high carbon and tool steel



Red Ring – Powder Metallurgy HSS
For high tensile materials such as:
- Titanium (>HRc 38)
- Inconel, Waspaloy, Hastelloy and Monel (>HRc 38)
- Tool steels and nickel alloys
- High strength stainless steels
- Aluminum alloy castings

			General Purpose - Blue Band				Tough Material - Yellow Band				High Tensile - Red Band			
Size	OAL (in.)	Thread Length	Thread Limits	No. of Flutes	Order No.	Price	Thread Limits	No. of Flutes	Order No.	Price	Thread Limits	No. of Flutes	Order No.	Price
4-40	1-7/8	.3350	H2	2	**EK30BRB1000440**	Price	H2	2	**EK30YRB1000440**	Price	H2	2	**EK30RRB1000440**	Price
5-40	1-15/16	.3740	-	-	**-**	-	-	-	**-**	-	H2	3	**EK30RRB1000540**	Price
6-32	2	.4130	H3	2	**EK30BRB1000632**	Price	H3	3	**EK30YRB1000632**	Price	H3	3	**EK30RRB1000632**	Price
6-40	2	.4130	H2	2	**EK30BRB1000640**	Price	H2	3	**EK30YRB1000640**	Price	-	-	**-**	-
8-32	2-1/8	.4530	H3	2	**EK30BRB1000832**	Price	H3	3	**EK30YRB1000832**	Price	H3	3	**EK30RRB1000832**	Price
10-24	2-3/8	.5310	H3	2	**EK30BRB1001024**	Price	H3	3	**EK30YRB1001024**	Price	H3	3	**EK30RRB1001024**	Price
10-32	2-3/8	.5310	H3	2	**EK30BRB1001032**	Price	H3	3	**EK30YRB1001032**	Price	H3	3	**EK30RRB1001032**	Price
12-24	2-3/8	.5710	H3	2	**EK30BRB1001224**	Price	H3	3	**EK30YRB1001224**	Price	-	-	**-**	-
1/4-20	2-1/2	.5910	H3	2	**EK30BRB1001620**	Price	H3	3	**EK30YRB1001620**	Price	H3	3	**EK30RRB1001620**	Price
1/4-28	2-1/2	.5910	H3	3	**EK30BRB1001628**	Price	H2	3	**EK30YRB1001628**	Price	H3	3	**EK30RRB1001628**	Price
5/16-18	2-23/32	.6690	H3	2	**EK30BRB1002018**	Price	H3	3	**EK30YRB1002018**	Price	H3	3	**EK30RRB1002018**	Price
5/16-24	2-23/32	.6690	H3	3	**EK30BRB1002024**	Price	H3	3	**EK30YRB1002024**	Price	H3	3	**EK30RRB1002024**	Price
3/8-16	2-15/16	.7480	H3	3	**EK30BRB1002416**	Price	H3	3	**EK30YRB1002416**	Price	H3	3	**EK30RRB1002416**	Price
3/8-24	2-15/16	.7480	H3	3	**EK30BRB1002424**	Price	H3	3	**EK30YRB1002424**	Price	H3	3	**EK30RRB1002424**	Price
7/16-14	3-5/32	.8660	H3	3	**EK30BRB1002814**	Price	H3	3	**EK30YRB1002814**	Price	H3	3	**EK30RRB1002814**	Price
7/16-20	3-5/32	.8660	H3	3	**EK30BRB1002820**	Price	H3	3	**EK30YRB1002820**	Price	H3	3	**EK30RRB1002820**	Price
1/2-13	3-3/8	.9840	H3	3	**EK30BRB1003213**	Price	H3	3	**EK30YRB1003213**	Price	H3	3	**EK30RRB1003213**	Price
1/2-20	3-3/8	.9840	H3	3	**EK30BRB1003220**	Price	H3	3	**EK30YRB1003220**	Price	H3	3	**EK30RRB1003220**	Price
5/8-11	3-13/16	1.0830	H3	3	**EK30BRB1004011**	Price	H3	3	**EK30YRB1004011**	Price	H3	3	**EK30RRB1004011**	Price
5/8-18	3-13/16	1.0830	H3	3	**EK30BRB1004018**	Price	H3	3	**EK30YRB1004018**	Price	H3	3	**EK30RRB1004018**	Price
3/4-10	4-1/4	1.2010	H3	3	**EK30BRB1004810**	Price	H3	3	**EK30YRB1004810**	Price	H3	3	**EK30RRB1004810**	Price
3/4-16	4-1/4	1.2010	H3	3	**EK30BRB1004816**	Price	H3	3	**EK30YRB1004816**	Price	H3	3	**EK30RRB1004816**	Price
7/8-9	4-11/16	1.339	H4	3	**EK30BRB1005609**	Price	H4	3	**EK30YRB1005609**	Price	-	-	**-**	-
7/8-14	4-11/16	1.339	H4	3	**EK30BRB1005614**	Price	H4	3	**EK30YRB1005614**	Price	-	-	**-**	-
1-8	5-1/8	1.5000	H4	3	**EK30BRB1010008**	Price	H4	3	**EK30YRB1010008**	Price	-	-	**-**	-
1-12	5-1/8	1.5000	H4	3	**EK30BRB1010012**	Price	H4	3	**EK30YRB1010012**	Price	-	-	**-**	-
1-1/8-7	5-7/16	1.6100	H4	4	**EK30BRB1010807**	Price	H4	4	**EK30YRB1010807**	Price	-	-	**-**	-
1-1/8-12	5-7/16	1.6100	H4	4	**EK30BRB1010812**	Price	H4	4	**EK30YRB1010812**	Price	-	-	**-**	-
1-1/4-7	5-3/4	1.6100	H4	4	**EK30BRB1011607**	Price	H4	4	**EK30YRB1011607**	Price	-	-	**-**	-
1-1/4-12	5-3/4	1.6100	H4	4	**EK30BRB1011612**	Price	H4	4	**EK30YRB1011612**	Price	-	-	**-**	-
1-3/8-6	6-1/16	1.9000	H4	4	**EK30BRB1012406**	Price	H4	4	**EK30YRB1012406**	Price	-	-	**-**	-
1-3/8-12	6-1/16	1.9000	H4	4	**EK30BRB1012412**	Price	H4	4	**EK30YRB1012412**	Price	-	-	**-**	-
1-1/2-6	6-3/8	2.0000	H4	4	**EK30BRB1013206**	Price	H4	4	**EK30YRB1013206**	Price	-	-	**-**	-
1-1/2-12	6-3/8	2.0000	H4	4	**EK30BRB1013212**	Price	H4	4	**EK30YRB1013212**	Price	-	-	**-**	-

			Multi-Purpose - Black Band				Aluminum - Green Band			
Size	OAL (in.)	Thread Length	Thread Limits	No. of Flutes	Order No.	Price	Thread Limits	No. of Flutes	Order No.	Price
4-40	1-7/8	.3350	H2	2	**EK30BLRB4000440**	Price	H2	2	**EK30GRB6000440**	Price
4-48	1-7/8	.3350	H2	2	**EK30BLRB4000448**	Price	-	-	**-**	-
5-40	1-15/16	.3740	H2	2	**EK30BLRB4000540**	Price	-	-	**-**	-
5-44	1-15/16	.3740	H2	2	**EK30BLRB4000544**	Price	-	-	**-**	-
6-32	2	.4130	H3	3	**EK30BLRB4000632**	Price	H3	2	**EK30GRB6000632**	Price
6-40	2	.4130	H2	2	**EK30BLRB4000640**	Price	H2	2	**EK30GRB6000640**	Price
8-32	2-1/8	.4530	H3	3	**EK30BLRB4000832**	Price	H3	2	**EK30GRB6000832**	Price
8-36	2-1/8	.4530	H2	2	**EK30BLRB4000836**	Price	-	-	**-**	-
10-24	2-3/8	.5310	H3	3	**EK30BLRB4001024**	Price	H3	2	**EK30GRB6001024**	Price
10-32	2-3/8	.5310	H3	3	**EK30BLRB4001032**	Price	H3	2	**EK30GRB6001032**	Price
12-24	2-3/8	.5710	H3	3	**EK30BLRB4001224**	Price	H3	2	**EK30GRB6001224**	Price
12-28	2-3/8	.5710	H3	3	**EK30BLRB4001228**	Price	-	-	**-**	-
1/4-20	2-1/2	.5910	H5	3	**EK30BLRB4001620**	Price	H3	2	**EK30GRB6001620**	Price
1/4-28	2-1/2	.5910	H4	3	**EK30BLRB4001628**	Price	H2	2	**EK30GRB6001628**	Price
5/16-18	2-23/32	.6690	-	-	**-**	-	H3	2	**EK30GRB6002018**	Price
5/16-18	2-21/32	.6690	H5	3	**EK30BLRB4002018**	Price	-	-	**-**	-
5/16-24	2-23/32	.6690	-	-	**-**	-	H3	2	**EK30GRB6002024**	Price
5/16-24	2-21/32	.6690	H4	3	**EK30BLRB4002024**	Price	-	-	**-**	-
3/8-16	2-15/16	.7480	H5	3	**EK30BLRB4002416**	Price	H3	3	**EK30GRB6002416**	Price
3/8-24	2-15/16	.7480	H4	3	**EK30BLRB4002424**	Price	H3	3	**EK30GRB6002424**	Price
7/16-14	3-5/32	.8660	H5	3	**EK30BLRB4002814**	Price	H3	3	**EK30GRB6002814**	Price
7/16-20	3-5/32	.8660	H5	3	**EK30BLRB4002820**	Price	H3	3	**EK30GRB6002820**	Price
1/2-13	3-3/8	.9840	H5	3	**EK30BLRB4003213**	Price	H3	3	**EK30GRB6003213**	Price
1/2-20	3-3/8	.9840	H5	3	**EK30BLRB4003220**	Price	H3	3	**EK30GRB6003220**	Price
9/16-12	3-19/32	.9840	H5	3	**EK30BLRB4002816**	Price	-	-	**-**	-
9/16-18	3-19/32	.9840	H5	3	**EK30BLRB4002822**	Price	-	-	**-**	-
5/8-11	3-13/16	1.0830	H5	3	**EK30BLRB4004011**	Price	H3	3	**EK30GRB6004011**	Price
5/8-18	3-13/16	1.0830	H5	3	**EK30BLRB4004018**	Price	H3	3	**EK30GRB6004018**	Price
3/4-10	4-1/4	1.2010	H5	3	**EK30BLRB4004810**	Price	H3	3	**EK30GRB6004810**	Price
3/4-16	4-1/4	1.2010	H5	3	**EK30BLRB4004816**	Price	H3	3	**EK30GRB6004816**	Price
7/8-9	4-11/16	1.339	H6	3	**EK30BLRB4005609**	Price	H4	3	**EK30GRB6005609**	Price
7/8-14	4-11/16	1.339	H6	3	**EK30BLRB4005614**	Price	H4	3	**EK30GRB6005614**	Price
1-8	5-1/8	1.5000	H6	3	**EK30BLRB4010008**	Price	H4	3	**EK30GRB6010008**	Price
1-12	5-1/8	1.5000	H6	3	**EK30BLRB4010012**	Price	-	-	**-**	-



Black Ring - High Vanadium Steel
For multi-purpose use in a wide variety of materials such as:
- Low carbon steel (>HRc 16)
- Medium to high carbon steel (>HRc 23)
- Free machining stainless steel (< HRc 23) and heat/corrosion stainless steel (>HRc 24)
- Stainless steel castings (> 38HRc)
- Aluminum, aluminum alloys, cast iron, copper and brass



Green Ring – High Vanadium Steel
For all types of aluminum such as:
- Pure aluminum
- Aluminum alloys

RAPIDKUT® Metric High Performance Spiral Point Taps

Bright Finish • Plug Style
Color Coded for Easy Identification



Blue Ring – High Vanadium Steel
For general purpose machining of:
- Low carbon steel (< HRc 16)<ParaStyle:Bullets>Medium to high carbon steel and low alloy steel (>HRc 23)
- Steel castings and forgings (> HRc 24)



Yellow Ring – High Vanadium Steel
For tough materials such as:
- Stainless steel (>HRc 23)
- Heat/corrosion resistant stainless steel (>HRc 24)
- Valve stainless steel (>HRc 38)
- Alloyed high carbon and tool steel



Black Ring - High Vanadium Steel
For multi-purpose use in a wide variety of materials such as:
- Low carbon steel (>HRc 16)
- Medium to high carbon steel (>HRc 23)
- Free machining stainless steel (< HRc 23) and heat/corrosion stainless steel (>HRc 24)
- Stainless steel castings (> 38HRc)
- Aluminum, aluminum alloys, cast iron, copper and brass



Red Ring – Powder Metallurgy HSS
For high tensile materials such as:
- Titanium (>HRc 38)
- Inconel, Waspaloy, Hastelloy and Monel (>HRc 38)
- Tool steels and nickel alloys
- High strength stainless steels

				General Purpose - Blue Band			Tough Material - Yellow Band			Multi-Purpose - Black Band			High Tensile - Red Band		
Size	Thread Limits	OAL (in.)	Thread Length	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price
M2x0.40	D3	1-15/16	.3130	2	EK30BRB3002040	Price	2	EK30YRB3002040	Price	-	-	-	-	-	-
M2.5x0.45	D3	1-15/16	.3130	2	EK30BRB3002545	Price	2	EK30YRB3002545	Price	-	-	-	-	-	-
M3x0.50	D3	1-15/16	.3740	2	EK30BRB3003050	Price	3	EK30YRB3003050	Price	3	EK30BLRB3003050	Price	3	EK30RRB3003050	Price
M3.5x0.60	D4	2	.4130	2	EK30BRB3003560	Price	3	EK30YRB3003560	Price	3	EK30BLRB3003560	Price	-	-	-
M4x0.70	D4	2-1/8	.4530	2	EK30BRB3004070	Price	3	EK30YRB3004070	Price	3	EK30BLRB3004070	Price	3	EK30RRB3004070	Price
M4.5x0.75	D4	2-3/8	.5000	2	EK30BRB3004575	Price	3	EK30YRB3004575	Price	-	-	-	-	-	-
M5x0.80	D4	2-3/8	.5310	2	EK30BRB3005080	Price	3	EK30YRB3005080	Price	3	EK30BLRB3005080	Price	3	EK30RRB3005080	Price
M6x1.0	D5	2-1/2	.5910	3	EK30BRB3006100	Price	3	EK30YRB3006100	Price	3	EK30BLRB3006100	Price	3	EK30RRB3006100	Price
M7x1.0	D5	2-21/32	.6690	-	-	-	-	-	-	3	EK30BLRB3007100	Price	-	-	-
M7x1.0	D5	2-23/32	.6690	3	EK30BRB3007100	Price	3	EK30YRB3007100	Price	-	-	-	-	-	-
M8x1.0	D5	2-21/32	.6690	-	-	-	-	-	-	3	EK30BLRB3008100	Price	-	-	-
M8x1.0	D5	2-23/32	.6690	3	EK30BRB3008100	Price	3	EK30YRB3008100	Price	-	-	-	-	-	-
M8x1.25	D5	2-21/32	.6690	-	-	-	-	-	-	3	EK30BLRB3008125	Price	3	EK30RRB3008125	Price
M8x1.25	D5	2-23/32	.6690	3	EK30BRB3008125	Price	3	EK30YRB3008125	Price	-	-	-	-	-	-
M10x1.25	D5	2-15/16	.7480	-	-	-	3	EK30YRB3010125	Price	-	-	-	3	EK30RRB3010125	Price
M10x1.25	D6	2-15/16	.7480	3	EK30BRB3010125	Price	-	-	-	3	EK30BLRB3010125	Price	-	-	-
M10x1.5	D5	2-15/16	.7480	-	-	-	-	-	-	3	EK30BLRB3010150	Price	-	-	-
M10x1.5	D6	2-15/16	.7480	3	EK30BRB3010150	Price	3	EK30YRB3010150	Price	-	-	-	3	EK30RRB3010150	Price
M12x1.25	D5	3-3/8	.9840	3	EK30BRB3012125	Price	3	EK30YRB3012125	Price	-	-	-	-	-	-
M12x1.25	D6	3-3/8	.9840	-	-	-	-	-	-	3	EK30BLRB3012125	Price	-	-	-
M12x1.75	D5	3-3/8	.9840	-	-	-	-	-	-	3	EK30BLRB3012175	Price	-	-	-
M12x1.75	D6	3-3/8	.9840	3	EK30BRB3012175	Price	3	EK30YRB3012175	Price	-	-	-	3	EK30RRB3012175	Price
M14x1.5	D6	3-19/32	.9840	3	EK30BRB3014150	Price	3	EK30YRB3014150	Price	-	-	-	-	-	-
M14x1.5	D7	3-19/32	.9840	-	-	-	-	-	-	3	EK30BLRB3014150	Price	-	-	-
M14x2.0	D6	3-19/32	.9840	-	-	-	-	-	-	3	EK30BLRB3014200	Price	-	-	-
M14x2.0	D7	3-19/32	.9840	3	EK30BRB3014200	Price	3	EK30YRB3014200	Price	-	-	-	-	-	-
M16x1.5	D6	3-13/16	1.0830	3	EK30BRB3016150	Price	3	EK30YRB3016150	Price	-	-	-	-	-	-
M16x1.5	D7	3-13/16	1.0830	-	-	-	-	-	-	3	EK30BLRB3016150	Price	-	-	-
M16x2.0	D6	3-13/16	1.0830	-	-	-	-	-	-	3	EK30BLRB3016200	Price	-	-	-
M16x2.0	D7	3-13/16	1.0830	3	EK30BRB3016200	Price	3	EK30YRB3016200	Price	-	-	-	-	-	-
M18x1.5	D6	4-1/32	1.0830	3	EK30BRB3018150	Price	3	EK30YRB3018150	Price	-	-	-	-	-	-
M18x1.5	D7	4-1/32	1.0830	-	-	-	-	-	-	3	EK30BLRB3018150	Price	-	-	-
M18x2.5	D6	4-1/32	1.0830	-	-	-	-	-	-	3	EK30BLRB3018250	Price	-	-	-
M18x2.5	D7	4-1/32	1.0830	3	EK30BRB3018250	Price	3	EK30YRB3018250	Price	-	-	-	-	-	-
M20x1.5	D5	4-15/32	1.2010	3	EK30BRB3020150	Price	3	EK30YRB3020150	Price	-	-	-	-	-	-
M20x1.5	D7	4-15/32	1.2010	-	-	-	-	-	-	3	EK30BLRB3020150	Price	-	-	-
M20x2.5	D6	4-15/32	1.2010	3	EK30BRB3020250	Price	3	EK30YRB3020250	Price	3	EK30BLRB3020250	Price	-	-	-
M22x1.5	D6	4-11/16	1.339	3	EK30BRB3022150	Price	3	EK30YRB3022150	Price	-	-	-	-	-	-
M22x1.5	D7	4-11/16	1.339	-	-	-	-	-	-	3	EK30BLRB3022150	Price	-	-	-
M22x2.5	D6	4-11/16	1.339	3	EK30BRB3022250	Price	3	EK30YRB3022250	Price	3	EK30BLRB3022250	Price	-	-	-
M24x1.5	D5	4-29/32	1.4960	3	EK30BRB3024150	Price	3	EK30YRB3024150	Price	-	-	-	-	-	-
M24x3.0	D7	4-29/32	1.4960	3	EK30BRB3024300	Price	3	EK30YRB3024300	Price	-	-	-	-	-	-
M24x3.0	D8	4-29/32	1.4960	-	-	-	-	-	-	3	EK30BLRB3024300	Price	-	-	-
M27x1.5	D7	5	1.5630	4	EK30BRB3027150	Price	-	-	-	-	-	-	-	-	-
M27x3.0	D7	5	1.5630	4	EK30BRB3027300	Price	-	-	-	-	-	-	-	-	-
M30x1.5	D6	5-7/16	1.8130	4	EK30BRB3030150	Price	-	-	-	-	-	-	-	-	-
M30x3.5	D7	5-7/16	1.8130	4	EK30BRB3030350	Price	-	-	-	-	-	-	-	-	-

DORMER Spiral Point Shark Taps



Blue Ring - For Stainless Steel
- Super-B TiAlN + WC/C coating with an additional edge treament

Yellow Ring - For Structural, Plain Carbon & Low Alloy Steels
- TiAlN - Top coating with an additional edge treatment

Red Ring - For Alloy Steels
- TiAlN - Top coating with an additional edge treatment

					Blue Band			Red Band			Yellow Band		
Size (in.)	Thread Limits	OAL (in.)	Thread Length	Thread Type	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price
4-40	H2	2.205	.354	UNC	3	DS047350278	Price	3	DS047350391	Price	3	DS047350469	Price
6-32	H2	2.205	.433	UNC	-	-	-	3	DS047350392	Price	3	DS047350470	Price
6-32	H3	2.205	.433	UNC	3	DS047350279	Price	-	-	-	-	-	-
8-32	H3	2.480	.512	UNC	3	DS047350280	Price	3	DS047350393	Price	3	DS047350471	Price
10-24	H3	2.756	.551	UNC	3	DS047350281	Price	3	DS047350394	Price	3	DS047350472	Price
10-32	H3	2.756	.551	UNF	3	DS047350299	Price	3	DS047350404	Price	3	DS047350482	Price
1/4-20	H3	3.150	.591	UNC	3	DS047350283	Price	-	-	-	-	-	-
1/4-20	H5	3.150	.591	UNC	3	DS047350282	Price	3	DS047350395	Price	3	DS047350473	Price
1/4-28	H3	3.150	.591	UNF	3	DS047350301	Price	-	-	-	-	-	-
1/4-28	H4	3.150	.591	UNF	-	-	-	3	DS047350405	Price	3	DS047350483	Price
1/4-28	H5	3.150	.591	UNF	3	DS047350300	Price	-	-	-	-	-	-
5/16-18	H3	3.543	.709	UNC	3	DS047350285	Price	-	-	-	-	-	-
5/16-18	H5	3.543	.709	UNC	3	DS047350284	Price	3	DS047350396	Price	3	DS047350474	Price
5/16-24	H3	3.543	.709	UNF	3	DS047350303	Price	-	-	-	-	-	-
5/16-24	H4	3.543	.709	UNF	3	DS047350302	Price	3	DS047350406	Price	3	DS047350484	Price
3/8-16	H3	3.937	.787	UNC	3	DS047350287	Price	-	-	-	-	-	-
3/8-16	H4	3.543	.787	UNC	-	-	-	3	DS047350397	Price	-	-	-
3/8-16	H4	3.937	.787	UNC	-	-	-	-	-	-	3	DS047350475	Price
3/8-16	H5	3.937	.787	UNC	3	DS047350286	Price	-	-	-	-	-	-
3/8-24	H3	3.543	.787	UNF	3	DS047350305	Price	-	-	-	-	-	-
3/8-24	H4	3.543	.787	UNF	3	DS047350304	Price	3	DS047350407	Price	3	DS047350485	Price
7/16-14	H5	3.937	.787	UNC	4	DS047350288	Price	3	DS047350398	Price	3	DS047350476	Price
7/16-20	H5	3.937	.787	UNF	4	DS047350306	Price	3	DS047350408	Price	3	DS047350486	Price
1/2-13	H3	4.331	.906	UNC	4	DS047350290	Price	-	-	-	-	-	-
1/2-13	H5	4.331	.906	UNC	4	DS047350289	Price	3	DS047350399	Price	3	DS047350477	Price
1/2-20	H3	3.937	.827	UNF	4	DS047350308	Price	-	-	-	-	-	-
1/2-20	H5	3.937	.827	UNF	4	DS047350307	Price	3	DS047350409	Price	3	DS047350487	Price
5/8-11	H3	4.331	.906	UNC	4	DS047350292	Price	-	-	-	-	-	-
5/8-11	H5	4.331	.906	UNC	4	DS047350291	Price	3	DS047350400	Price	3	DS047350478	Price
5/8-18	H3	3.937	.827	UNF	4	DS047350310	Price	-	-	-	-	-	-
5/8-18	H5	3.937	.827	UNF	4	DS047350309	Price	3	DS047350410	Price	3	DS047350488	Price
3/4-10	H3	4.921	1.181	UNC	4	DS047350294	Price	-	-	-	-	-	-
3/4-10	H5	4.921	1.181	UNC	4	DS047350293	Price	4	DS047350401	Price	3	DS047350479	Price
3/4-16	H3	4.331	.906	UNF	4	DS047350312	Price	-	-	-	-	-	-
3/4-16	H5	4.331	.906	UNF	4	DS047350311	Price	4	DS047350411	Price	3	DS047350489	Price
7/8-9	H4	5.512	1.339	UNC	4	DS047350296	Price	-	-	-	-	-	-
7/8-9	H6	5.512	1.339	UNC	4	DS047350295	Price	4	DS047350402	Price	4	DS047350480	Price
7/8-14	H4	4.921	.906	UNF	4	DS047350314	Price	-	-	-	-	-	-
7/8-14	H6	4.921	.906	UNF	4	DS047350313	Price	4	DS047350412	Price	4	DS047350490	Price
1-8	H4	6.299	1.417	UNC	4	DS047350298	Price	-	-	-	-	-	-
1-8	H6	6.299	1.417	UNC	4	DS047350297	Price	4	DS047350403	Price	4	DS047350481	Price
1-12	H4	5.512	1.063	UNF	4	DS047350316	Price	-	-	-	-	-	-
1-12	H6	5.512	1.063	UNF	4	DS047350315	Price	4	DS047350413	Price	4	DS047350491	Price

RAPIDKUT® High Performance Spiral Flute Taps

Bright Finish • Semi-Bottoming Style
Color Coded for Easy Identification



Blue Ring – High Vanadium Steel
For general purpose machining of:
- Low carbon steel (< HRc 16)<ParaStyle:Bullets>Medium to high carbon steel and low alloy steel (>HRc 23)
- Steel castings and forgings (> HRc 24)



Yellow Ring – High Vanadium Steel
For tough materials such as:
- Stainless steel (>HRc 23)
- Heat/corrosion resistant stainless steel (>HRc 24)
- Valve stainless steel (>HRc 38)
- Alloyed high carbon and tool steel



Red Ring – Powder Metallurgy HSS
For high tensile materials such as:
- Titanium (>HRc 38)
- Inconel, Waspaloy, Hastelloy and Monel (>HRc 38)
- Tool steels and nickel alloys
- High strength stainless steels

			General Purpose - Blue Band				Tough Material - Yellow Band				High Tensile - Red Band			
Size	OAL (in.)	Thread Length	Thread Limits	No. of Flutes	Order No.	Price	Thread Limits	No. of Flutes	Order No.	Price	Thread Limits	No. of Flutes	Order No.	Price
4-40	1-7/8	.2360	H2	2	EK30BRB2000440	Price	H2	2	EK30YRB2000440	Price	H2	3	EK30RRB2000440	Price
6-32	2	.2760	H3	2	EK30BRB2000632	Price	H3	3	EK30YRB2000632	Price	H3	3	EK30RRB2000632	Price
8-32	2-1/8	.2760	H3	3	EK30BRB2000832	Price	H3	3	EK30YRB2000832	Price	H3	3	EK30RRB2000832	Price
10-24	2-3/8	.3540	H3	3	EK30BRB2001024	Price	H3	3	EK30YRB2001024	Price	H3	3	EK30RRB2001024	Price
10-32	2-3/8	.2760	H3	3	EK30BRB2001032	Price	H3	3	EK30YRB2001032	Price	H3	3	EK30RRB2001032	Price
1/4-20	2-1/2	.4330	H3	3	EK30BRB2001620	Price	H3	3	EK30YRB2001620	Price	H3	3	EK30RRB2001620	Price
1/4-28	2-1/2	.3540	H3	3	EK30BRB2001628	Price	H3	3	EK30YRB2001628	Price	H3	3	EK30RRB2001628	Price
5/16-18	2-23/32	.4720	H3	3	EK30BRB2002018	Price	H3	3	EK30YRB2002018	Price	H3	3	EK30RRB2002018	Price
5/16-24	2-23/32	.3940	H3	3	EK30BRB2002024	Price	H3	3	EK30YRB2002024	Price	H3	3	EK30RRB2002024	Price

(continued to next page)

RAPIDKUT® High Performance Spiral Flute Taps (cont.)





			General Purpose - Blue Band				Tough Material - Yellow Band				High Tensile - Red Band			
Size	OAL (in.)	Thread Length	Thread Limits	No. of Flutes	Order No.	Price	Thread Limits	No. of Flutes	Order No.	Price	Thread Limits	No. of Flutes	Order No.	Price
3/8-16	2-15/16	.5510	H3	3	**EK30BRB2002416**	Price	H3	3	**EK30YRB2002416**	Price	H3	3	**EK30RRB2002416**	Price
3/8-24	2-15/16	.3940	H3	3	**EK30BRB2002424**	Price	H3	3	**EK30YRB2002424**	Price	H3	3	**EK30RRB2002424**	Price
7/16-14	3-5/32	.5910	H3	3	**EK30BRB2002814**	Price	H3	3	**EK30YRB2002814**	Price	H3	3	**EK30RRB2002814**	Price
7/16-20	3-5/32	.4720	-	-	**-**	-	-	-	**-**	-	H3	3	**EK30RRB2002820**	Price
1/2-13	3-3/8	.6300	H3	3	**EK30BRB2003213**	Price	H3	3	**EK30YRB2003213**	Price	H3	3	**EK30RRB2003213**	Price
1/2-20	3-3/8	.6300	H3	3	**EK30BRB2003220**	Price	H3	3	**EK30YRB2003220**	Price	H3	3	**EK30RRB2003220**	Price
5/8-11	3-13/16	.7480	H3	4	**EK30BRB2004011**	Price	H3	4	**EK30YRB2004011**	Price	H3	4	**EK30RRB2004011**	Price
5/8-18	3-13/16	.5120	H3	4	**EK30BRB2004018**	Price	H3	4	**EK30YRB2004018**	Price	H3	4	**EK30RRB2004018**	Price
3/4-10	4-1/4	.8270	H3	4	**EK30BRB2004810**	Price	H3	4	**EK30YRB2004810**	Price	H3	4	**EK30RRB2004810**	Price
3/4-16	4-1/4	.5910	H3	4	**EK30BRB2004816**	Price	H3	4	**EK30YRB2004816**	Price	H3	4	**EK30RRB2004816**	Price
7/8-9	4-11/16	.8270	H4	4	**EK30BRB2005609**	Price	H4	4	**EK30YRB2005609**	Price	-	-	**-**	-
7/8-14	4-11/16	.7090	H4	4	**EK30BRB2005614**	Price	H4	4	**EK30YRB2005614**	Price	-	-	**-**	-
1-8	5-1/8	.9840	H4	4	**EK30BRB2010008**	Price	H4	4	**EK30YRB2010008**	Price	-	-	**-**	-
1-12	5-1/8	.7090	-	-	**-**	-	H4	4	**EK30YRB2010012**	Price	-	-	**-**	-
1-1/8-7	5-7/16	.9840	H4	4	**EK30BRB2010807**	Price	H4	4	**EK30YRB2010807**	Price	-	-	**-**	-
1-1/8-12	5-7/16	.9840	-	-	**-**	-	H4	4	**EK30YRB2010812**	Price	-	-	**-**	-
1-1/4-7	5-3/4	.9840	H4	4	**EK30BRB2011607**	Price	H4	4	**EK30YRB2011607**	Price	-	-	**-**	-
1-1/4-12	5-3/4	.9840	-	-	**-**	-	H4	4	**EK30YRB2011612**	Price	-	-	**-**	-
1-3/8-6	5-3/4	1.1150	H4	4	**EK30BRB2012406**	Price	H4	4	**EK30YRB2012406**	Price	-	-	**-**	-
1-3/8-12	5-3/4	1.1150	-	-	**-**	-	H4	4	**EK30YRB2012412**	Price	-	-	**-**	-
1-1/2-6	6-3/8	1.3500	H4	4	**EK30BRB2013206**	Price	H4	4	**EK30YRB2013206**	Price	-	-	**-**	-
1-1/2-12	6-3/8	1.3500	-	-	**-**	-	H4	4	**EK30YRB2013212**	Price	-	-	**-**	-

Black Ring - High Vanadium Steel
For multi-purpose use in a wide variety of materials such as:



- Low carbon steel (>HRc 16)
- Medium to high carbon steel (>HRc 23)
- Free machining stainless steel (< HRc 23) and heat/corrosion stainless steel (>HRc 24)
- Stainless steel castings (> 38HRc)
- Aluminum, aluminum alloys, cast iron, copper and brass

Green Ring – High Vanadium Steel
For all types of aluminum such as:

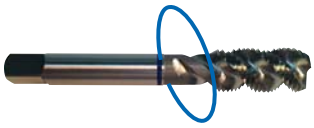
- Pure aluminum
- Aluminum alloys
- Aluminum alloy castings



			Multi-Purpose - Black Band				Aluminum - Green Band			
Size	OAL (in.)	Thread Length	Thread Limits	No. of Flutes	Order No.	Price	Thread Limits	No. of Flutes	Order No.	Price
4-40	1-7/8	.2360	H2	2	**EK30BLRB1000440**	Price	H2	2	**EK30GRB5000440**	Price
4-48	1-7/8	.2360	H2	2	**EK30BLRB1000448**	Price	-	-	**-**	-
5-40	1-15/16	.2360	H2	3	**EK30BLRB1000540**	Price	-	-	**-**	-
5-44	1-15/16	.2360	H2	3	**EK30BLRB1000544**	Price	-	-	**-**	-
6-32	2	.2760	H3	3	**EK30BLRB1000632**	Price	H3	2	**EK30GRB5000632**	Price
6-40	2	.2760	H2	3	**EK30BLRB1000640**	Price	-	-	**-**	-
8-32	2-1/8	.2760	H3	3	**EK30BLRB1000832**	Price	H3	2	**EK30GRB5000832**	Price
8-36	2-1/8	.2760	H2	3	**EK30BLRB1000836**	Price	-	-	**-**	-
10-24	2-3/8	.3540	H3	3	**EK30BLRB1001024**	Price	H3	2	**EK30GRB5001024**	Price
10-32	2-3/8	.2760	H3	3	**EK30BLRB1001032**	Price	H3	2	**EK30GRB5001032**	Price
12-24	2-3/8	.3540	H3	3	**EK30BLRB1001224**	Price	-	-	**-**	-
12-28	2-3/8	.2760	H3	3	**EK30BLRB1001228**	Price	-	-	**-**	-
1/4-20	2-1/2	.4330	H5	3	**EK30BLRB1001620**	Price	H3	2	**EK30GRB5001620**	Price
1/4-28	2-1/2	.3540	H4	3	**EK30BLRB1001628**	Price	H3	2	**EK30GRB5001628**	Price
5/16-18	2-23/32	.4720	H5	3	**EK30BLRB1002018**	Price	H3	2	**EK30GRB5002018**	Price
5/16-24	2-23/32	.3940	H4	3	**EK30BLRB1002024**	Price	H3	2	**EK30GRB5002024**	Price
3/8-16	2-15/16	.5510	H5	3	**EK30BLRB1002416**	Price	H3	2	**EK30GRB5002416**	Price
3/8-24	2-15/16	.3940	H4	3	**EK30BLRB1002424**	Price	H3	2	**EK30GRB5002424**	Price
7/16-14	3-5/32	.5910	H5	3	**EK30BLRB1002814**	Price	-	-	**-**	-
7/16-20	3-5/32	.4720	H5	3	**EK30BLRB1002820**	Price	-	-	**-**	-
1/2-13	3-3/8	.6300	H5	3	**EK30BLRB1003213**	Price	H3	2	**EK30GRB5003213**	Price
1/2-20	3-3/8	.6300	H5	3	**EK30BLRB1003220**	Price	H3	2	**EK30GRB5003220**	Price
9/16-12	3-19/32	.7090	H5	3	**EK30BLRB1002816**	Price	-	-	**-**	-
9/16-18	3-19/32	.5120	H5	3	**EK30BLRB1002822**	Price	-	-	**-**	-
5/8-11	3-13/16	.7480	H5	4	**EK30BLRB1004011**	Price	H3	3	**EK30GRB5004011**	Price
5/8-18	3-13/16	.5120	H5	4	**EK30BLRB1004018**	Price	H3	3	**EK30GRB5004018**	Price
3/4-10	4-1/4	.8270	H5	4	**EK30BLRB1004810**	Price	H3	3	**EK30GRB5004810**	Price
3/4-16	4-1/4	.5910	H5	4	**EK30BLRB1004816**	Price	H3	3	**EK30GRB5004816**	Price
7/8-9	4-11/16	.8270	H6	4	**EK30BLRB1005609**	Price	H4	3	**EK30GRB5005609**	Price
7/8-14	4-11/16	.7090	H6	4	**EK30BLRB1005614**	Price	H4	3	**EK30GRB5005614**	Price
1-8	5-1/8	.9840	H6	4	**EK30BLRB1010008**	Price	H4	3	**EK30GRB5010008**	Price
1-12	5-1/8	.7090	H6	4	**EK30BLRB1010012**	Price	-	-	**-**	-

RAPIDKUT® Metric High Performance Spiral Flute Taps

Bright Finish • Semi-Bottoming Style
Color Coded for Easy Identification



Blue Ring – High Vanadium Steel
For general purpose machining of:
- Low carbon steel (< HRc 16)<ParaStyle:Bullets>Medium to high carbon steel and low alloy steel (>HRc 23)
- Steel castings and forgings (> HRc 24)



Yellow Ring – High Vanadium Steel
For tough materials such as:
- Stainless steel (>HRc 23)
- Heat/corrosion resistant stainless steel (>HRc 24)
- Valve stainless steel (>HRc 38)
- Alloyed high carbon and tool steel



Red Ring – Powder Metallurgy HSS
For high tensile materials such as:
- Titanium (>HRc 38)
- Inconel, Waspaloy, Hastelloy and Monel (>HRc 38)
- Tool steels and nickel alloys
- High strength stainless steels



Black Ring - High Vanadium Steel
For multi-purpose use in a wide variety of materials such as:
- Low carbon steel (>HRc 16)
- Medium to high carbon steel (>HRc 23)
- Free machining stainless steel (< HRc 23) and heat/corrosion stainless steel (>HRc 24)
- Stainless steel castings (> 38HRc)
- Aluminum, aluminum alloys, cast iron, copper and brass

				General Purpose - Blue Band			Tough Material - Yellow Band			High Tensile - Red Band			Multi-Purpose - Black Band		
Size	Thread Limits	OAL (in.)	Thread Length	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price
M3x0.50	D3	1-15/16	.1970	2	EK30BRB4003050	Price	3	EK30YRB4003050	Price	3	EK30RRB4003050	Price	3	EK30BLRB2500305	Price
M3.5x0.60	D4	2	.2760	2	EK30BRB4003560	Price	3	EK30YRB4003560	Price	-	-	-	3	EK30BLRB2500356	Price
M4x0.70	D4	2-1/8	.2760	3	EK30BRB4004070	Price	3	EK30YRB4004070	Price	3	EK30RRB4004070	Price	3	EK30BLRB2500407	Price
M5x0.80	D4	2-3/8	.3540	3	EK30BRB4005080	Price	3	EK30YRB4005080	Price	3	EK30RRB4005080	Price	3	EK30BLRB2500508	Price
M6x1.0	D5	2-1/2	.4330	3	EK30BRB4006100	Price	3	EK30YRB4006100	Price	3	EK30RRB4006100	Price	3	EK30BLRB2500610	Price
M7x1.0	D5	2-23/32	.4330	3	EK30BRB4007100	Price	3	EK30YRB4007100	Price	-	-	-	3	EK30BLRB2500710	Price
M8x1.0	D5	2-23/32	.4720	3	EK30BRB4008100	Price	3	EK30YRB4008100	Price	-	-	-	3	EK30BLRB2500810	Price
M8x1.25	D5	2-23/32	.4720	3	EK30BRB4008125	Price	3	EK30YRB4008125	Price	3	EK30RRB4008125	Price	3	EK30BLRB2500812	Price
M10x1.25	D5	2-15/16	.5120	3	EK30BRB4010125	Price	3	EK30YRB4010125	Price	3	EK30RRB4010125	Price	-	-	-
M10x1.25	D6	2-15/16	.5120	-	-	-	-	-	-	-	-	-	3	EK30BLRB2501012	Price
M10x1.5	D5	2-15/16	.5120	-	-	-	-	-	-	-	-	-	3	EK30BLRB2501015	Price
M10x1.5	D6	2-15/16	.5120	3	EK30BRB4010150	Price	3	EK30YRB4010150	Price	3	EK30RRB4010150	Price	-	-	-
M12x1.25	D5	3-3/8	.5910	3	EK30BRB4012125	Price	3	EK30YRB4012125	Price	-	-	-	-	-	-
M12x1.25	D6	3-3/8	.5910	-	-	-	-	-	-	-	-	-	3	EK30BLRB2501212	Price
M12x1.75	D5	3-3/8	.5910	-	-	-	-	-	-	-	-	-	3	EK30BLRB2501217	Price
M12x1.75	D6	3-3/8	.5910	3	EK30BRB4012175	Price	3	EK30YRB4012175	Price	3	EK30RRB4012175	Price	-	-	-
M14x1.5	D6	3-19/32	.5510	3	EK30BRB4014150	Price	3	EK30YRB4014150	Price	-	-	-	-	-	-
M14x1.5	D7	3-19/32	.7090	-	-	-	-	-	-	-	-	-	3	EK30BLRB2501415	Price
M14x2.0	D6	3-19/32	.5510	-	-	-	-	-	-	-	-	-	3	EK30BLRB2501420	Price
M14x2.0	D7	3-19/32	.7090	3	EK30BRB4014200	Price	3	EK30YRB4014200	Price	-	-	-	-	-	-
M16x1.5	D6	3-13/16	.5510	3	EK30BRB4016150	Price	3	EK30YRB4016150	Price	-	-	-	-	-	-
M16x1.5	D7	3-13/16	.7090	-	-	-	-	-	-	-	-	-	3	EK30BLRB2501615	Price
M16x2.0	D6	3-13/16	.5510	-	-	-	-	-	-	-	-	-	3	EK30BLRB2501620	Price
M16x2.0	D7	3-13/16	.7090	3	EK30BRB4016200	Price	3	EK30YRB4016200	Price	-	-	-	-	-	-
M18x1.5	D6	4-1/32	.5510	4	EK30BRB4018150	Price	4	EK30YRB4018150	Price	-	-	-	-	-	-
M18x1.5	D7	4-1/32	.7880	-	-	-	-	-	-	-	-	-	4	EK30BLRB2501815	Price
M18x2.5	D6	4-1/32	.5510	-	-	-	-	-	-	-	-	-	4	EK30BLRB2501825	Price
M18x2.5	D7	4-1/32	.7870	4	EK30BRB4018250	Price	4	EK30YRB4018250	Price	-	-	-	-	-	-
M20x1.5	D5	4-15/32	.5510	4	EK30BRB4020150	Price	4	EK30YRB4020150	Price	-	-	-	-	-	-
M20x2.5	D6	4-15/32	.5520	-	-	-	-	-	-	-	-	-	4	EK30BLRB2502025	Price
M20x2.5	D6	4-15/32	.7880	4	EK30BRB4020250	Price	4	EK30YRB4020250	Price	-	-	-	-	-	-
M20x1.5	D7	4-15/32	.7880	-	-	-	-	-	-	-	-	-	4	EK30BLRB2502015	Price
M22x1.5	D6	4-11/16	.5510	3	EK30BRB4022150	Price	4	EK30YRB4022150	Price	-	-	-	-	-	-
M22x1.5	D7	4-11/16	.7870	-	-	-	-	-	-	-	-	-	4	EK30BLRB2502215	Price
M22x2.5	D6	4-11/16	.5510	-	-	-	-	-	-	-	-	-	4	EK30BLRB2502225	Price
M22x2.5	D6	4-11/16	.7870	4	EK30BRB4022250	Price	4	EK30YRB4022250	Price	-	-	-	-	-	-
M24x3.0	D8	4-29/32	1.5000	-	-	-	-	-	-	-	-	-	4	EK30BLRB2502430	Price
M24x1.5	D5	4-29/32	.7870	4	EK30BRB4024150	Price	-	-	-	-	-	-	-	-	-
M24x3.0	D7	4-29/32	1.5000	4	EK30BRB4024300	Price	4	EK30YRB4024300	Price	-	-	-	-	-	-
M27x3.0	D7	5-1/8	1.5000	4	EK30BRB4027300	Price	-	-	-	-	-	-	-	-	-
M30x3.5	D7	5-1/2	1.7500	4	EK30BRB4030350	Price	-	-	-	-	-	-	-	-	-
M30x1.5	D7	5-1/2	1.7500	4	EK30BRB4030150	Price	-	-	-	-	-	-	-	-	-

DORMER Spiral Flute Shark Taps

Blue Ring - For Stainless Steel
- Super-B TiAlN + WC/C coating with an additional edge treament
- 40° angle for blind holes

Yellow Ring - For Structural, Plain Carbon & Low Alloy Steels
- TiAlN - Top coating with an additional edge treatment
- 45° angle for blind holes
- Prevents nest formation of chips, reducing the risk of re-cutting chips on reversal

Red Ring - For Alloy Steels
- TiAlN - Top coating with an additional edge treatment
- 45° angle for blind holes
- Prevents nest formation of chips, reducing the risk of re-cutting chips on reversal
- Back tapered reducing chipping on the last threads of the taps and also reducing torque when the tap reverses







					Blue Band			Red Band			Yellow Band		
Size (in.)	Thread Limits	OAl (in.)	Thread Length	Thread Type	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price
4-40	H2	2.205	.256	UNC	3	**DS047350335**	Price	3	**DS047350430**	Price	3	**DS047350510**	Price
6-32	H2	2.205	.256	UNC	-	**-**	-	3	**DS047350431**	Price	3	**DS047350511**	Price
6-32	H3	2.205	.256	UNC	3	**DS047350336**	Price	-	**-**	-	-	**-**	-
8-32	H3	2.480	.276	UNC	3	**DS047350337**	Price	3	**DS047350432**	Price	3	**DS047350512**	Price
10-24	H3	2.756	.315	UNC	3	**DS047350338**	Price	3	**DS047350433**	Price	3	**DS047350513**	Price
10-32	H3	2.756	.315	UNF	3	**DS047350356**	Price	3	**DS047350443**	Price	3	**DS047350523**	Price
1/4-20	H3	3.150	.394	UNC	3	**DS047350340**	Price	-	**-**	-	-	**-**	-
1/4-20	H5	3.150	.394	UNC	3	**DS047350339**	Price	3	**DS047350434**	Price	3	**DS047350514**	Price
1/4-28	H3	3.150	.394	UNF	3	**DS047350358**	Price	-	**-**	-	-	**-**	-
1/4-28	H4	3.150	.394	UNF	-	**-**	-	3	**DS047350444**	Price	3	**DS047350524**	Price
1/4-28	H5	3.150	.394	UNF	3	**DS047350357**	Price	-	**-**	-	-	**-**	-
5/16-18	H3	3.543	.472	UNC	3	**DS047350342**	Price	-	**-**	-	-	**-**	-
5/16-18	H5	3.543	.472	UNC	3	**DS047350341**	Price	3	**DS047350435**	Price	3	**DS047350515**	Price
5/16-24	H3	3.543	.472	UNF	3	**DS047350360**	Price	-	**-**	-	-	**-**	-
5/16-24	H4	3.543	.472	UNF	3	**DS047350359**	Price	3	**DS047350445**	Price	3	**DS047350525**	Price
3/8-16	H3	3.937	.591	UNC	3	**DS047350344**	Price	-	**-**	-	-	**-**	-
3/8-16	H4	3.937	.591	UNC	-	**-**	-	3	**DS047350436**	Price	3	**DS047350516**	Price
3/8-16	H5	3.937	.591	UNC	3	**DS047350343**	Price	-	**-**	-	-	**-**	-
3/8-24	H3	3.543	.591	UNF	3	**DS047350362**	Price	-	**-**	-	-	**-**	-
3/8-24	H4	3.543	.591	UNF	3	**DS047350361**	Price	3	**DS047350446**	Price	3	**DS047350526**	Price
7/16-14	H5	3.937	.591	UNC	4	**DS047350345**	Price	3	**DS047350437**	Price	3	**DS047350517**	Price
7/16-20	H5	3.937	.591	UNF	4	**DS047350363**	Price	3	**DS047350447**	Price	3	**DS047350527**	Price
1/2-13	H3	4.331	.709	UNC	4	**DS047350347**	Price	-	**-**	-	-	**-**	-
1/2-13	H5	4.331	.709	UNC	4	**DS047350346**	Price	3	**DS047350438**	Price	3	**DS047350518**	Price
1/2-20	H3	3.937	.709	UNF	4	**DS047350365**	Price	-	**-**	-	-	**-**	-
1/2-20	H5	3.937	.709	UNF	4	**DS047350364**	Price	3	**DS047350448**	Price	3	**DS047350528**	Price
5/8-11	H3	4.331	.787	UNC	4	**DS047350349**	Price	-	**-**	-	-	**-**	-
5/8-11	H5	4.331	.787	UNC	4	**DS047350348**	Price	4	**DS047350439**	Price	4	**DS047350519**	Price
5/8-18	H3	3.937	.591	UNF	4	**DS047350367**	Price	-	**-**	-	-	**-**	-
5/8-18	H5	3.937	.591	UNF	4	**DS047350366**	Price	4	**DS047350449**	Price	4	**DS047350529**	Price
3/4-10	H3	4.921	.984	UNC	4	**DS047350351**	Price	-	**-**	-	-	**-**	-
3/4-10	H5	4.921	.984	UNC	4	**DS047350350**	Price	4	**DS047350440**	Price	4	**DS047350520**	Price
3/4-16	H3	4.331	.984	UNF	4	**DS047350369**	Price	-	**-**	-	-	**-**	-
3/4-16	H5	4.331	.984	UNF	4	**DS047350368**	Price	4	**DS047350450**	Price	4	**DS047350530**	Price
7/8-9	H4	5.512	.984	UNC	4	**DS047350353**	Price	-	**-**	-	-	**-**	-
7/8-9	H6	5.512	.984	UNC	4	**DS047350352**	Price	4	**DS047350441**	Price	4	**DS047350521**	Price
7/8-14	H4	4.921	.984	UNF	4	**DS047350371**	Price	-	**-**	-	-	**-**	-
7/8-14	H6	4.921	.984	UNF	4	**DS047350370**	Price	4	**DS047350451**	Price	4	**DS047350531**	Price
1-8	H4	6.299	1.181	UNC	4	**DS047350355**	Price	-	**-**	-	-	**-**	-
1-8	H6	6.299	1.181	UNC	4	**DS047350354**	Price	4	**DS047350442**	Price	4	**DS047350522**	Price
1-12	H4	5.512	1.063	UNF	4	**DS047350373**	Price	-	**-**	-	-	**-**	-
1-12	H6	5.512	1.063	UNF	4	**DS047350372**	Price	4	**DS047350452**	Price	4	**DS047350532**	Price

RAPIDKUT® High Performance Spiral Point Taps

Steam Oxide • Plug Style • Color Coded for Easy Indentification



Blue Band - for General Ductile Materials
Designed for high speed tapping applications. Developed to withstand the high stress and high heat associated with high speed CNC production tapping.
- Used in general machine tapping applications for mild carbon steels such as 1018, 1010, 1035, 1045, 1050 and 1065
- Up to 25 HRC



Red Band-for High Tensile Materials
Powdered metal taps offer superior toughness, lubricity and are made of super hard powder high speed steel.
- Used for heat resistant materials, high strength stainless stel and titanium alloys as well as other high tensile steels and alloys including tool steel and nickel alloys
- Up to 48 HRC



Yellow Band -for Tough Materials
Designed for high speed tapping applications. Developed to withstand the high stress and high heat associated with high speed CNC production tapping.
- Superior performance in hardened tool steels such as 4140, 4340, H13, D2, and a new variety of stainless steels
- Up to 35HRC

			General Purpose - Blue Band				High Tensile - Red Band				Tough Material - Yellow Band			
Size	Thread Limits	OAL (in.)	No. of Flutes	Thread Length	Order No.	Price	No. of Flutes	Thread Length	Order No.	Price	No. of Flutes	Thread Length	Order No.	Price
4-40	H2	1-7/8	2	.3130	**ER80B1000440**	Price	2	.3350	**ER80R1000440**	Price	2	.3350	**ER80Y1000440**	Price
5-40	H2	1-15/16	-	-	**-**	-	3	.3740	**ER80R1000540**	Price	-	-	**-**	-
6-32	H3	2	2	.3750	**ER80B1000632**	Price	3	.4130	**ER80R1000632**	Price	3	.4130	**ER80Y1000632**	Price
6-40	H2	2	2	.3750	**ER80B1000640**	Price	-	-	**-**	-	3	.4130	**ER80Y1000640**	Price
8-32	H3	2-1/8	3	.3750	**ER80B1000832**	Price	3	.4530	**ER80R1000832**	Price	3	.4530	**ER80Y1000832**	Price
10-24	H3	2-3/8	2	.5000	**ER80B1001024**	Price	3	.5310	**ER80R1001024**	Price	3	.5310	**ER80Y1001024**	Price
10-32	H3	2-3/8	2	.5000	**ER80B1001032**	Price	2	.5310	**ER80R1001032**	Price	3	.5310	**ER80Y1001032**	Price
12-24	H3	2-3/8	3	.5000	**ER80B1001224**	Price	-	-	**-**	-	3	.5310	**ER80Y1001224**	Price
1/4-20	H3	2-1/2	2	.6250	**ER80B1001620**	Price	3	.5910	**ER80R1001620**	Price	3	.5910	**ER80Y1001620**	Price
1/4-28	H3	2-1/2	3	.6250	**ER80B1001628**	Price	3	.5910	**ER80R1001628**	Price	3	.5910	**ER80Y1001628**	Price
5/16-18	H3	2-23/32	3	.6880	**ER80B1002018**	Price	3	.6690	**ER80R1002018**	Price	3	.6690	**ER80Y1002018**	Price
5/16-24	H3	2-23/32	3	.6880	**ER80B1002024**	Price	3	.6690	**ER80R1002024**	Price	3	.6690	**ER80Y1002024**	Price
3/8-16	H3	2-15/16	3	.7500	**ER80B1002416**	Price	3	.7480	**ER80R1002416**	Price	3	.7480	**ER80Y1002416**	Price
3/8-24	H3	2-15/16	3	.7500	**ER80B1002424**	Price	3	.7480	**ER80R1002424**	Price	3	.7480	**ER80Y1002424**	Price
7/16-14	H3	3-5/32	3	.8750	**ER80B1002814**	Price	3	.8660	**ER80R1002814**	Price	3	.8660	**ER80Y1002814**	Price
7/16-20	H3	3-5/32	3	.8750	**ER80B1002820**	Price	3	.8660	**ER80R1002820**	Price	3	.8660	**ER80Y1002820**	Price
1/2-13	H3	3-3/8	3	.9380	**ER80B1003213**	Price	3	.9840	**ER80R1003213**	Price	3	.9840	**ER80Y1003213**	Price
1/2-20	H3	3-3/8	3	.9380	**ER80B1003220**	Price	3	.9840	**ER80R1003220**	Price	3	.9840	**ER80Y1003220**	Price
5/8-11	H3	3-13/16	3	1.0940	**ER80B1004011**	Price	3	1.0830	**ER80R1004011**	Price	3	1.0830	**ER80Y1004011**	Price
5/8-18	H3	3-13/16	3	1.0940	**ER80B1004018**	Price	3	1.0830	**ER80R1004018**	Price	3	1.0830	**ER80Y1004018**	Price
3/4-10	H3	4-1/4	3	1.2190	**ER80B1004810**	Price	3	1.2010	**ER80R1004810**	Price	3	1.2010	**ER80Y1004810**	Price
3/4-16	H3	4-1/4	3	1.2190	**ER80B1004816**	Price	3	1.2010	**ER80R1004816**	Price	3	1.2010	**ER80Y1004816**	Price
7/8-9	H4	4-11/16	3	1.3440	**ER80B1005609**	Price	-	-	**-**	-	3	1.3390	**ER80Y1005609**	Price
7/8-14	H4	4-11/16	3	1.3440	**ER80B1005614**	Price	-	-	**-**	-	3	1.3390	**ER80Y1005614**	Price
1-8	H4	5-1/8	3	1.5000	**ER80B1010008**	Price	-	-	**-**	-	3	1.4960	**ER80Y1010008**	Price
1-12	H4	5-1/8	3	1.5000	**ER80B1010012**	Price	-	-	**-**	-	3	1.4960	**ER80Y1010012**	Price
1-1/8-7	H4	5-7/16	4	1.6100	**ER80B1010807**	Price	-	-	**-**	-	4	1.6100	**ER80Y1010807**	Price
1-1/8-12	H4	5-7/16	3	1.6100	**ER80B1010812**	Price	-	-	**-**	-	3	1.6100	**ER80Y1010812**	Price
1-1/4-12	H4	5-3/4	3	1.6100	**ER80B1011612**	Price	-	-	**-**	-	3	1.6100	**ER80Y1011612**	Price
1-1/4-7	H4	5-3/4	4	1.6100	**ER80B1011607**	Price	-	-	**-**	-	4	1.6100	**ER80Y1011607**	Price
1-3/8-6	H4	6-1/16	4	1.9000	**ER80B1012406**	Price	-	-	**-**	-	4	1.9000	**ER80Y1012406**	Price
1-3/8-12	H4	6-1/16	3	1.9000	**ER80B1012412**	Price	-	-	**-**	-	3	1.9000	**ER80Y1012412**	Price
1-1/2-6	H4	6-3/8	4	2.0000	**ER80B1013206**	Price	-	-	**-**	-	4	2.0000	**ER80Y1013206**	Price
1-1/2-12	H4	6-3/8	3	2.0000	**ER80B1013212**	Price	-	-	**-**	-	3	2.0000	**ER80Y1013212**	Price

RAPIDKUT® High Performance Spiral Flute Taps

Steam Oxide • Semi-Bottoming • Color Coded for Easy Indentification



Blue Band - for General Ductile Materials
Designed for high speed tapping applications. Developed to withstand the high stress and high heat associated with high speed CNC production tapping.

- Used in general machine tapping applications for mild carbon steels such as 1018, 1010, 1035, 1045, 1050 and 1065
- Up to 25 HRC



Red Band - for High Tensile Materials
Powdered Metal taps offer superior toughness, lubricity and are made of super hard powder high speed steel.

- Used for heat resistant materials, high strength stainless steel and titanium alloys as well as other high tensil steels and alloys including tool steel and nickel alloys
- Up to 48 HRC



Yellow Band - for Tough Materials
Designed for high speed tapping applications. Developed to withstand the high stress and high heat associated with high speed CNC production tapping.

- Superior performance in hardened tool steels such as 4140, 4340, H13, D2, and a new variety of stainless steels
- Up to 35 HRC

			General Purpose - Blue Band				High Tensile - Red Band				Tough Material - Yellow Band			
Size	Thread Limits	OAL (in.)	No. of Flutes	Thread Length	Order No.	Price	No. of Flutes	Thread Length	Order No.	Price	No. of Flutes	Thread Length	Order No.	Price
4-40	H2	1-7/8	2	.3130	**ER80B2000440**	Price	3	.2360	**ER80R2000440**	Price	2	.2360	**ER80Y2000440**	Price
6-32	H3	2	2	.3750	**ER80B2000632**	Price	3	.2760	**ER80R2000632**	Price	3	.2760	**ER80Y2000632**	Price
8-32	H3	2-1/8	3	.3750	**ER80B2000832**	Price	3	.2760	**ER80R2000832**	Price	3	.276	**ER80Y2000832**	Price
10-24	H3	2-3/8	3	.5000	**ER80B2001024**	Price	3	.3540	**ER80R2001024**	Price	3	.3540	**ER80Y2001024**	Price
10-32	H3	2-3/8	3	.5000	**ER80B2001032**	Price	3	.2760	**ER80R2001032**	Price	3	.2760	**ER80Y2001032**	Price
1/4-20	H3	2-1/2	3	.6250	**ER80B2001620**	Price	3	.4330	**ER80R2001620**	Price	3	.4330	**ER80Y2001620**	Price
1/4-28	H3	2-1/2	3	.6250	**ER80B2001628**	Price	3	.4330	**ER80R2001628**	Price	3	.4330	**ER80Y2001628**	Price
5/16-18	H3	2-23/32	3	.6880	**ER80B2002018**	Price	3	.4720	**ER80R2002018**	Price	3	.4720	**ER80Y2002018**	Price
5/16-24	H3	2-23/32	3	.6880	**ER80B2002024**	Price	3	.4720	**ER80R2002024**	Price	3	.4720	**ER80Y2002024**	Price
3/8-16	H3	2-15/16	3	.7500	**ER80B2002416**	Price	3	.5510	**ER80R2002416**	Price	3	.5510	**ER80Y2002416**	Price
3/8-24	H3	2-15/16	3	.7500	**ER80B2002424**	Price	3	.5510	**ER80R2002424**	Price	3	.5510	**ER80Y2002424**	Price
7/16-14	H3	3-5/32	3	.8750	**ER80B2002814**	Price	3	.5910	**ER80R2002814**	Price	3	.5910	**ER80Y2002814**	Price
7/16-20	H3	3-5/32	-	-	**-**	-	3	.4720	**ER80R2002820**	Price	-	-	**-**	-
1/2-13	H3	3-3/8	3	.9380	**ER80B2003213**	Price	3	.6300	**ER80R2003213**	Price	3	.6300	**ER80Y2003213**	Price
1/2-20	H3	3-3/8	3	.9380	**ER80B2003220**	Price	3	.6300	**ER80R2003220**	Price	3	.6300	**ER80Y2003220**	Price
5/8-11	H3	3-13/16	4	1.0940	**ER80B2004011**	Price	4	.7480	**ER80R2004011**	Price	4	.7480	**ER80Y2004011**	Price
5/8-18	H3	3-13/16	4	1.0940	**ER80B2004018**	Price	4	.5720	**ER80R2004018**	Price	4	.5720	**ER80Y2004018**	Price
3/4-10	H3	4-1/4	4	1.2190	**ER80B2004810**	Price	4	.8270	**ER80R2004810**	Price	4	.8270	**ER80Y2004810**	Price
3/4-16	H3	4-1/4	4	1.2190	**ER80B2004816**	Price	4	.5910	**ER80R2004816**	Price	4	.5910	**ER80Y2004816**	Price
7/8-9	H4	4-11/16	4	1.3440	**ER80B2005609**	Price	-	-	**-**	-	4	.8270	**ER80Y2005609**	Price
7/8-14	H4	4-11/16	4	1.3440	**ER80B2005614**	Price	-	-	**-**	-	4	.7090	**ER80Y2005614**	Price
1-8	H4	5-1/8	4	1.5000	**ER80B2010008**	Price	-	-	**-**	-	4	.7640	**ER80Y2010008**	Price
1-12	H4	5-1/8	-	-	**-**	-	-	-	**-**	-	4	.9840	**ER80Y2010012**	Price
1-1/8-7	H4	5-7/16	4	1.1150	**ER80B2010807**	Price	-	-	**-**	-	4	1.1150	**ER80Y2010807**	Price
1-1/8-12	H4	5-7/16	-	-	**-**	-	-	-	**-**	-	4	.9840	**ER80Y2010812**	Price
1-1/4-7	H4	5-3/4	4	1.1150	**ER80B2011607**	Price	-	-	**-**	-	4	1.1150	**ER80Y2011607**	Price
1-1/4-12	H4	5-3/4	-	-	**-**	-	-	-	**-**	-	4	.9840	**ER80Y2011612**	Price
1-3/8-6	H4	5-3/4	4	1.1150	**ER80B2012406**	Price	-	-	**-**	-	4	1.1150	**ER80Y2012406**	Price
1-3/8-12	H4	5-3/4	-	-	**-**	-	-	-	**-**	-	4	1.1150	**ER80Y2012412**	Price
1-1/2-6	H4	6-3/8	4	1.3500	**ER80B2013206**	Price	-	-	**-**	-	4	1.3500	**ER80Y2013206**	Price
1-1/2-12	H4	6-3/8	-	-	**-**	-	-	-	**-**	-	4	1.3500	**ER80Y2013212**	Price

RAPIDKUT® Metric High Performance Spiral Point Taps

Steam Oxide • Plug Style • Color Coded for Easy Indentification

ANSI Standard Shank





			General Purpose - Blue Band				High Tensile - Red Band				Tough Material - Yellow Band			
Size	Thread Limits	OAL (in.)	No. of Flutes	Thread Length	Order No.	Price	No. of Flutes	Thread Length	Order No.	Price	No. of Flutes	Thread Length	Order No.	Price
M2x0.40	D3	1-15/16	2	.3130	**ER80B3002040**	Price	-	-	-	-	2	.3750	**ER80Y3002040**	Price
M2.5x0.45	D3	1-15/16	2	.3130	**ER80B3002545**	Price	-	-	-	-	2	.3750	**ER80Y3002545**	Price
M3x0.50	D3	1-15/16	2	.3100	**ER80B3003050**	Price	3	.3750	**ER80R3003050**	Price	3	.3750	**ER80Y3003050**	Price
M3.5x0.60	D4	2	2	.3750	**ER80B3003560**	Price	-	-	-	-	3	.3750	**ER80Y3003560**	Price
M4x0.70	D4	2-1/8	2	.3750	**ER80B3004070**	Price	3	.3750	**ER80R3004070**	Price	3	.3750	**ER80Y3004070**	Price
M4.5x0.75	D4	2-3/8	2	.5000	**ER80B3004575**	Price	-	-	-	-	3	.5000	**ER80Y3004575**	Price
M5x0.80	D4	2-3/8	2	.5000	**ER80B3005080**	Price	3	.5000	**ER80R3005080**	Price	3	.5000	**ER80Y3005080**	Price
M6x1.0	D5	2-1/2	3	.6250	**ER80B3006100**	Price	3	.6250	**ER80R3006100**	Price	2	.6250	**ER80Y3006100**	Price
M7x1.0	D5	2-23/32	3	.6880	**ER80B3007100**	Price	-	-	-	-	3	.6870	**ER80Y3007100**	Price
M8x1.0	D5	2-23/32	3	.6880	**ER80B3008100**	Price	-	-	-	-	3	.6870	**ER80Y3008100**	Price
M8x1.25	D5	2-23/32	3	.6880	**ER80B3008125**	Price	3	.6870	**ER80R3008125**	Price	3	.6870	**ER80Y3008125**	Price
M10x1.25	D5	2-15/16	3	.7500	**ER80B3010125**	Price	3	.7500	**ER80R3010125**	Price	3	.7500	**ER80Y3010125**	Price
M10x1.5	D6	2-15/16	3	.7500	**ER80B3010150**	Price	3	.7500	**ER80R3010150**	Price	3	.7500	**ER80Y3010150**	Price
M12x1.25	D5	3-3/8	3	.9380	**ER80B3012125**	Price	-	-	-	-	3	.9370	**ER80Y3012125**	Price
M12x1.75	D6	3-3/8	3	.9380	**ER80B3012175**	Price	3	.9370	**ER80R3012175**	Price	3	.9370	**ER80Y3012175**	Price
M14x1.5	D6	3-19/32	3	1.0000	**ER80B3014150**	Price	-	-	-	-	3	1.0000	**ER80Y3014150**	Price
M14x2.0	D7	3-19/32	3	1.0000	**ER80B3014200**	Price	-	-	-	-	3	1.0000	**ER80Y3014200**	Price
M16x1.5	D6	3-13/16	3	1.0940	**ER80B3016150**	Price	-	-	-	-	3	1.0930	**ER80Y3016150**	Price
M16x2.0	D7	3-13/16	3	1.0940	**ER80B3016200**	Price	-	-	-	-	3	1.0930	**ER80Y3016200**	Price
M18x1.5	D6	4-1/32	3	1.0940	**ER80B3018150**	Price	-	-	-	-	3	1.0930	**ER80Y3018150**	Price
M18x2.5	D7	4-1/32	3	1.0940	**ER80B3018250**	Price	-	-	-	-	3	1.0930	**ER80Y3018250**	Price
M20x1.5	D5	4-15/32	3	1.2190	**ER80B3020150**	Price	-	-	-	-	3	1.2010	**ER80Y3020150**	Price
M20x2.5	D6	4-15/32	3	1.2190	**ER80B3020250**	Price	-	-	-	-	3	1.2010	**ER80Y3020250**	Price
M22x1.5	D6	4-11/16	3	1.3440	**ER80B3022150**	Price	-	-	-	-	3	1.3430	**ER80Y3022150**	Price
M22x2.5	D6	4-11/16	3	1.3440	**ER80B3022250**	Price	-	-	-	-	3	1.3430	**ER80Y3022250**	Price
M24x1.5	D5	4-29/32	3	1.3440	**ER80B3024150**	Price	-	-	-	-	3	1.4960	**ER80Y3024150**	Price
M24x3.0	D7	4-29/32	3	1.3440	**ER80B3024300**	Price	-	-	-	-	3	1.4960	**ER80Y3024300**	Price
M27x1.5	D7	5	4	1.5630	**ER80B3027150**	Price	-	-	-	-	-	-	-	-
M27x3.0	D7	5	4	1.5630	**ER80B3027300**	Price	-	-	-	-	-	-	-	-
M30x1.5	D7	5-7/16	4	1.8130	**ER80B3030150**	Price	-	-	-	-	-	-	-	-
M30x3.5	D7	5-7/16	4	1.8130	**ER80B3030350**	Price	-	-	-	-	-	-	-	-

RAPIDKUT® Metric High Performance Spiral Flute Taps

Steam Oxide • Semi-Bottoming • Color Coded for Easy Indentification





			General Purpose - Blue Band				High Tensile - Red Band				Tough Material - Yellow Band			
Size (mm)	Thread Limits	OAL (in.)	No. of Flutes	Thread Length	Order No.	Price	No. of Flutes	Thread Length	Order No.	Price	No. of Flutes	Thread Length	Order No.	Price
M3x0.50	D3	1-15/16	2	.3130	**ER80B4003050**	Price	3	.1970	**ER80R4003050**	Price	2	.1970	**ER80Y4003050**	Price
M3.5x0.60	D4	2	2	.3750	**ER80B4003560**	Price	-	-	-	-	3	.2760	**ER80Y4003560**	Price
M4x0.70	D4	2-1/8	3	.3750	**ER80B4004070**	Price	3	.2760	**ER80R4004070**	Price	2	.2760	**ER80Y4004070**	Price
M5x0.80	D4	2-3/8	3	.5000	**ER80B4005080**	Price	3	.3540	**ER80R4005080**	Price	2	.3540	**ER80Y4005080**	Price
M6x1.0	D5	2-1/2	3	.6250	**ER80B4006100**	Price	3	.4330	**ER80R4006100**	Price	2	.4330	**ER80Y4006100**	Price
M7x1.0	D5	2-23/32	3	.6880	**ER80B4007100**	Price	-	-	-	-	3	.4330	**ER80Y4007100**	Price
M8x1.0	D5	2-23/32	3	.6880	**ER80B4008100**	Price	-	-	-	-	3	.4720	**ER80Y4008100**	Price
M8x1.25	D5	2-23/32	3	.6880	**ER80B4008125**	Price	3	.4720	**ER80R4008125**	Price	3	.4720	**ER80Y4008125**	Price
M10x1.25	D5	2-15/16	3	.7500	**ER80B4010125**	Price	3	.4720	**ER80R4010125**	Price	3	.4720	**ER80Y4010125**	Price
M10x1.5	D6	2-15/16	3	.7500	**ER80B4010150**	Price	3	.5120	**ER80R4010150**	Price	3	.5120	**ER80Y4010150**	Price
M12x1.25	D5	3-3/8	3	.9380	**ER80B4012125**	Price	-	-	-	-	3	.5510	**ER80Y4012125**	Price
M12x1.75	D6	3-3/8	3	.9380	**ER80B4012175**	Price	3	.5910	**ER80R4012175**	Price	3	.5910	**ER80Y4012175**	Price
M14x1.5	D6	3-19/32	3	1.0000	**ER80B4014150**	Price	-	-	-	-	3	.7090	**ER80Y4014150**	Price
M14x2.0	D7	3-19/32	3	1.0000	**ER80B4014200**	Price	-	-	-	-	3	.7090	**ER80Y4014200**	Price
M16x1.5	D6	3-13/16	3	1.0940	**ER80B4016150**	Price	-	-	-	-	3	.5510	**ER80Y4016150**	Price
M16x2.0	D7	3-13/16	3	1.0940	**ER80B4016200**	Price	-	-	-	-	3	.7090	**ER80Y4016200**	Price
M18x1.5	D6	4-1/32	4	1.0940	**ER80B4018150**	Price	-	-	-	-	4	.5510	**ER80Y4018150**	Price
M18x2.5	D7	4-1/32	4	1.0940	**ER80B4018250**	Price	-	-	-	-	4	.7870	**ER80Y4018250**	Price
M20x1.5	D5	4-15/32	4	1.2190	**ER80B4020150**	Price	-	-	-	-	4	.5510	**ER80Y4020150**	Price
M20x2.5	D6	4-15/32	4	1.2190	**ER80B4020250**	Price	-	-	-	-	4	.7010	**ER80Y4020250**	Price
M22x1.5	D6	4-11/16	3	1.3440	**ER80B4022150**	Price	-	-	-	-	4	.5510	**ER80Y4022150**	Price
M22x2.5	D6	4-11/16	4	1.3440	**ER80B4022250**	Price	-	-	-	-	4	.7870	**ER80Y4022250**	Price
M24x1.5	D5	4-29/32	4	1.5000	**ER80B4024150**	Price	-	-	-	-	-	-	-	-
M24x3.0	D7	4-29/32	4	1.5000	**ER80B4024300**	Price	-	-	-	-	4	.7870	**ER80Y4024300**	Price
M27x3.0	D7	5-1/8	4	1.5000	**ER80B4027300**	Price	-	-	-	-	-	-	-	-
M30x3.5	D7	5-1/2	4	1.7500	**ER80B4030350**	Price	-	-	-	-	-	-	-	-
M30x1.5	D7	5-1/2	4	1.7500	**ER80B4030150**	Price	-	-	-	-	-	-	-	-

High Performance Taps

Spiral Point Plug Style Taps



ShearTap: used in steels and stainless steels up to 35Rc, 1010, 1018, 1046, 302, 303, 304, 310, 316



HPT for exotic alloys: used in exotic alloys, titanium, and nickel based alloys, monel, inconel



HPT for aluminum: recommended for all types of aluminum alloys

SHEAR M TAP — SINGLE M TAP

						ShearTap		High Performance			
						Surface Treated		TiCN		CrN	
						Stainless Steel		Exotic Alloys		Aluminum Alloys	
Size	Thread Limits	No. of Flutes	Thread Length	Neck Length	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4-40	H2	2	.3130	.2500	1-7/8	**MT3534400**	Price	**MT3360840**	Price	**MT3360700**	Price
4-40	H3	2	.3130	.2500	1-7/8	**MT3534401**	Price	-	-	-	-
6-32	H2	2	.3750	.3130	2	**MT3534404**	Price	**MT3360842**	Price	**MT3360704**	Price
6-32	H3	2	.3750	.3130	2	**MT3534405**	Price	**MT3360843**	Price	**MT3360705**	Price
8-32	H3	3	.3750	.3750	2-1/8	**MT3534408**	Price	**MT3360845**	Price	**MT3360708**	Price
10-24	H3	3	.5000	.3750	2-3/8	**MT3534410**	Price	**MT3360846**	Price	**MT3360710**	Price
10-32	H3	3	.5000	.3750	2-3/8	**MT3534412**	Price	**MT3360849**	Price	**MT3360712**	Price
1/4-20	H3	3	.6250	.3750	2-1/2	**MT3534417**	Price	**MT3360850**	Price	**MT3360713**	Price
1/4-28	H3	3	.6250	.3750	2-1/2	**MT3534420**	Price	**MT3360852**	Price	**MT3360715**	Price
5/16-18	H3	3	.6880	.4380	2-23/32	**MT3534422**	Price	**MT3360854**	Price	**MT3360717**	Price
5/16-24	H3	3	.6880	.4380	3-23/32	**MT3534424**	Price	**MT3360856**	Price	**MT3360719**	Price
3/8-16	H3	3	.7500	.5000	2	**MT3534426**	Price	**MT3360858**	Price	-	-
3/8-16	H3	3	.7500	.5000	2-15/16	-	-	-	-	**MT3360721**	Price
3/8-24	H3	3	.7500	.5000	2-15/16	**MT3534428**	Price	**MT3360860**	Price	**MT3360723**	Price
7/16-14	H3	3	.8750	.5630	2-15/16	**MT3534430**	Price	**MT3360862**	Price	-	-
7/16-14	H3	3	.8750	.5630	3-5/32	-	-	-	-	**MT3360725**	Price
7/16-20	H3	3	.8750	.5630	3-5/32	**MT3534432**	Price	**MT3360864**	Price	**MT3360727**	Price
1/2-13	H3	3	.9380	.7190	3-3/8	-	-	-	-	**MT3360729**	Price
1/2-13	H3	3	.9380	.7190	3-5/32	**MT3534434**	Price	**MT3360866**	Price	-	-
1/2-20	H3	3	.9380	.7190	3-3/8	**MT3534436**	Price	**MT3360868**	Price	**MT3360731**	Price
9/16-12	H3	4	1.0000	.6730	3-3/8	**MT3534438**	Price	**MT3360870**	Price	-	-
9/16-18	H3	4	1.0000	.6730	3-19/32	**MT3534439**	Price	**MT3360872**	Price	-	-
5/8-11	H3	4	1.1250	.6730	3-19/32	**MT3534440**	Price	**MT3360874**	Price	-	-
5/8-18	H3	4	1.1250	.6730	3-13/16	**MT3534441**	Price	**MT3360876**	Price	-	-
3/4-10	H3	4	1.2190	.7660	4-1/4	**MT3534444**	Price	**MT3360878**	Price	-	-
3/4-16	H3	4	1.2190	.7660	4-1/4	**MT3534445**	Price	**MT3360880**	Price	-	-
1-8	H4	4	1.5000	1.0000	5-1/8	**MT3534502**	Price	-	-	-	-
1-12	H4	4	1.5000	1.0000	5-1/8	**MT3534503**	Price	-	-	-	-

Note: sizes available through 2-4-1/2. TiN coated also available.

High Performance Taps

Metric Spiral Point Plug Style Taps



ShearTap: used in steels and stainless steels up to 35Rc, 1010, 1018, 1046, 302, 303, 304, 310, 316



Spiral point HPT for exotic alloys: used in exotic alloys, titanium, and nickel based alloys, monel, inconel

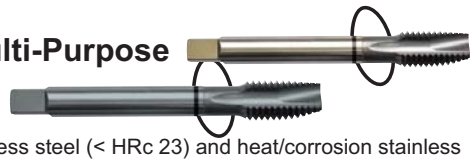


HPT for aluminum: recommended for all types of aluminum alloys

SHEAR M TAP — SINGLE M TAP

								High Performance			
						Surface Treated		TiCN		CrN	
						Stainless Steel		Exotic Alloys		Aluminum Alloys	
Size	Thread Limits	No. of Flutes	Thread Length	Neck Length	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
M3x0.50	D3	2	.3130	.3130	1-15/16	**MT3535240**	Price	**MT3360900**	Price	**MT3360750**	Price
M3.5x0.60	D4	2	.3750	.3130	2	**MT3535241**	Price	-	-	-	-
M4x0.70	D4	3	.3750	.3750	2-1/8	**MT3535242**	Price	**MT3360901**	Price	**MT3360751**	Price
M5x0.80	D4	3	.5000	.3750	2-3/8	**MT3535243**	Price	**MT3360902**	Price	**MT3360752**	Price
M6x1.0	D5	3	.6250	.3750	2-1/2	**MT3535244**	Price	**MT3360903**	Price	**MT3360753**	Price
M7x1.0	D5	3	.6880	.4380	2-23/32	**MT3535245**	Price	-	-	-	-
M8x1.0	D5	3	.6880	.4380	2-23/32	**MT3535246**	Price	**MT3360904**	Price	**MT3360754**	Price
M8x1.25	D5	3	.6880	.4380	2-23/32	**MT3535247**	Price	**MT3360905**	Price	**MT3360755**	Price
M10x1.25	D5	3	.7500	.5000	2-15/16	**MT3535248**	Price	-	-	-	-
M10x1.5	D6	3	.7500	.5000	2-15/16	**MT3535249**	Price	**MT3360906**	Price	**MT3360756**	Price
M12x1.25	D5	3	.9380	.7190	3-3/8	**MT3535250**	Price	-	-	-	-
M12x1.75	D6	3	.9380	.7190	3-3/8	**MT3535251**	Price	**MT3360908**	Price	**MT3360758**	Price
M14x1.5	D6	4	1.0000	.6730	3-19/32	**MT3535252**	Price	-	-	-	-
M14x2.0	D7	4	1.0000	.6730	3-19/32	**MT3535253**	Price	-	-	-	-
M16x1.5	D6	4	1.1250	.6730	3-13/16	**MT3535254**	Price	-	-	-	-
M16x2.0	D7	4	1.1250	.6730	3-13/16	**MT3535255**	Price	-	-	-	-
M18x1.5	D6	4	1.1250	.7190	4-1/32	**MT3535256**	Price	-	-	-	-
M18x2.5	D7	4	1.1250	.7190	4-1/32	**MT3535257**	Price	-	-	-	-
M20x1.5	D6	4	1.1880	.8120	4-15/32	**MT3535280**	Price	-	-	-	-
M20x2.5	D7	4	1.1880	.8120	4-15/32	**MT3535281**	Price	-	-	-	-
M22x1.5	D6	4	1.1880	1.0310	4-11/16	**MT3535282**	Price	-	-	-	-
M22x2.5	D7	4	1.1880	1.0310	4-11/16	**MT3535283**	Price	-	-	-	-
M24x2.0	D7	4	1.422	.7970	4-29/32	**MT3535284**	Price	-	-	-	-
M24x3.0	D8	4	1.4220	.7970	4-29/32	**MT3535285**	Price	-	-	-	-

RAPIDKUT High Performance Spiral Pointed Taps for Multi-Purpose



Steam Oxide or TiCN • Plug Style • Color Coded for Easy Identification

- DIN length ANSI shank

Black Ring - High Vanadium Steel

For multi-purpose use in a wide variety of materials such as:

- Low carbon steel (>HRc 16)
- Medium to high carbon steel (>HRc 23)
- Free machining stainless steel (< HRc 23) and heat/corrosion stainless steel (>HRc 24)
- Stainless steel castings (> 38HRc)
- Aluminum, aluminum alloys, cast iron, copper and brass

					Steam Oxide		TICN	
Size	Thread Limits	Shk. Dia. (in.)	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
4-40	H2	.141	.335	2.210	**ER80BLK1000440**	Price	**ER80BLK1000440T**	Price
5-40	H2	.141	.374	2.210	**ER80BLK1000540**	Price	**ER80BLK1000540T**	Price
6-32	H3	.141	.413	2.210	**ER80BLK1000632**	Price	**ER80BLK1000632T**	Price
8-32	H3	.168	.453	2.480	**ER80BLK1000832**	Price	**ER80BLK1000832T**	Price
10-24	H3	.194	.531	2.760	**ER80BLK1001024**	Price	**ER80BLK1001024T**	Price
10-32	H3	.194	.531	2.760	**ER80BLK1001032**	Price	**ER80BLK1001032T**	Price
12-24	H3	.220	.571	3.150	**ER80BLK1001224**	Price	**ER80BLK1001224T**	Price
12-28	H3	.220	.571	3.150	**ER80BLK1001228**	Price	**ER80BLK1001228T**	Price
1/4-20	H5	.255	.591	3.150	**ER80BLK1001620**	Price	**ER80BLK1001620T**	Price
1/4-28	H4	.255	.591	3.150	**ER80BLK1001628**	Price	**ER80BLK1001628T**	Price
5/16-18	H5	.318	.669	3.540	**ER80BLK1002018**	Price	**ER80BLK1002018T**	Price
5/16-24	H4	.318	.669	3.540	**ER80BLK1002024**	Price	**ER80BLK1002024T**	Price
3/8-16	H5	.381	.748	3.940	**ER80BLK1002416**	Price	**ER80BLK1002416T**	Price
3/8-24	H4	.381	.748	3.940	**ER80BLK1002424**	Price	**ER80BLK1002424T**	Price
7/16-14	H5	.323	.866	3.940	**ER80BLK1002814**	Price	**ER80BLK1002814T**	Price
7/16-20	H5	.323	.866	3.940	**ER80BLK1002820**	Price	**ER80BLK1002820T**	Price
1/2-13	H5	.367	.984	4.330	**ER80BLK1003213**	Price	**ER80BLK1003213T**	Price
1/2-20	H5	.367	.984	3.940	**ER80BLK1003220**	Price	**ER80BLK1003220T**	Price
9/16-12	H5	.429	.984	4.330	**ER80BLK1003612**	Price	**ER80BLK1003612T**	Price
9/16-18	H5	.429	.984	3.940	**ER80BLK1003618**	Price	**ER80BLK1003618T**	Price
5/8-11	H5	.480	1.083	4.330	**ER80BLK1004011**	Price	**ER80BLK1004011T**	Price
5/8-18	H5	.480	1.083	3.940	**ER80BLK1004018**	Price	**ER80BLK1004018T**	Price
3/4-10	H5	.590	1.201	4.920	**ER80BLK1004810**	Price	**ER80BLK1004810T**	Price
3/4-16	H5	.590	1.201	4.330	**ER80BLK1004816**	Price	**ER80BLK1004816T**	Price
7/8-9	H6	.697	1.339	5.510	**ER80BLK1005609**	Price	**ER80BLK1005609T**	Price
7/8-14	H6	.697	1.339	4.920	**ER80BLK1005614**	Price	**ER80BLK1005614T**	Price
1-8	H6	.800	1.496	6.300	**ER80BLK1010008**	Price	**ER80BLK1010008T**	Price
1-12	H6	.800	1.496	5.510	**ER80BLK1010012**	Price	**ER80BLK1010012T**	Price

RAPIDKUT High Performance Spiral Flute Taps for Multi-Purpose



Steam Oxide or TiCN • Semi-Bottoming • Color Coded for Easy Identification

- DIN length ANSI shank

Black Ring - High Vanadium Steel

For multi-purpose use in a wide variety of materials such as:

- Low carbon steel (>HRc 16)
- Medium to high carbon steel (>HRc 23)
- Free machining stainless steel (< HRc 23) and heat/corrosion stainless steel (>HRc 24)
- Stainless steel castings (> 38HRc)
- Aluminum, aluminum alloys, cast iron, copper and brass

						Steam Oxide		TICN	
Size	Thread Limits	No. of Flutes	Shk. Dia. (in.)	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
4-40	H2	2	.141	.236	2.210	**ER80BLK2000440**	Price	**ER80BLK2000440T**	Price
5-40	H2	3	.141	.236	2.210	**ER80BLK2000540**	Price	**ER80BLK2000540T**	Price
6-32	H3	3	.141	.276	2.210	**ER80BLK2000632**	Price	**ER80BLK2000632T**	Price
8-32	H3	3	.168	.276	2.480	**ER80BLK2000832**	Price	**ER80BLK2000832T**	Price
10-24	H3	3	.194	.354	2.760	**ER80BLK2001024**	Price	**ER80BLK2001024T**	Price
10-32	H3	3	.194	.276	2.760	**ER80BLK2001032**	Price	**ER80BLK2001032T**	Price
12-24	H3	3	.220	.354	3.150	**ER80BLK2001224**	Price	**ER80BLK2001224T**	Price
12-28	H3	3	.220	.276	3.150	**ER80BLK2001228**	Price	**ER80BLK2001228T**	Price
1/4-20	H5	3	.255	.433	3.150	**ER80BLK2001620**	Price	**ER80BLK2001620T**	Price
1/4-28	H4	3	.255	.354	3.150	**ER80BLK2001628**	Price	**ER80BLK2001628T**	Price
5/16-18	H5	3	.318	.472	3.540	**ER80BLK2002018**	Price	**ER80BLK2002018T**	Price
5/16-24	H4	3	.318	.394	3.540	**ER80BLK2002024**	Price	**ER80BLK2002024T**	Price
3/8-16	H5	3	.381	.551	3.940	**ER80BLK2002416**	Price	**ER80BLK2002416T**	Price
3/8-24	H4	3	.381	.394	3.940	**ER80BLK2002424**	Price	**ER80BLK2002424T**	Price
7/16-14	H5	3	.323	.591	3.940	**ER80BLK2002814**	Price	**ER80BLK2002814T**	Price
7/16-20	H5	3	.323	.472	3.940	**ER80BLK2002820**	Price	**ER80BLK2002820T**	Price
1/2-13	H5	3	.367	.630	4.330	**ER80BLK2003213**	Price	**ER80BLK2003213T**	Price
1/2-20	H5	3	.367	.472	3.940	**ER80BLK2003220**	Price	**ER80BLK2003220T**	Price
9/16-12	H5	3	.429	.709	4.330	**ER80BLK2003612**	Price	**ER80BLK2003612T**	Price
9/16-18	H5	3	.429	.512	3.940	**ER80BLK2003618**	Price	**ER80BLK2003618T**	Price
5/8-11	H5	4	.480	.748	4.330	**ER80BLK2004011**	Price	**ER80BLK2004011T**	Price
5/8-18	H5	4	.480	.512	3.940	**ER80BLK2004018**	Price	**ER80BLK2004018T**	Price
3/4-10	H5	4	.590	.827	4.920	**ER80BLK2004810**	Price	**ER80BLK2004810T**	Price
3/4-16	H5	4	.590	.591	4.330	**ER80BLK2004816**	Price	**ER80BLK2004816T**	Price
7/8-9	H6	4	.697	.827	5.510	**ER80BLK2005609**	Price	**ER80BLK2005609T**	Price
7/8-14	H6	4	.697	.709	4.920	**ER80BLK2005614**	Price	**ER80BLK2005614T**	Price
1-8	H6	4	.800	.984	6.300	**ER80BLK2010008**	Price	**ER80BLK2010008T**	Price
1-12	H6	4	.800	.709	5.510	**ER80BLK2010012**	Price	**ER80BLK2010012T**	Price

RAPIDKUT Metric High Performance Spiral Flute Taps for Multi-Purpose

Steam Oxide or TiCN • Semi-Bottoming • Color Coded for Easy Identification



- DIN length ANSI shank

Black Ring - High Vanadium Steel

For multi-purpose use in a wide variety of materials such as:

- Low carbon steel (>HRc 16)
- Medium to high carbon steel (>HRc 23)
- Free machining stainless steel (< HRc 23) and heat/corrosion stainless steel (>HRc 24)
- Stainless steel castings (> 38HRc)
- Aluminum, aluminum alloys, cast iron, copper and brass

						Steam Oxide		TICN	
Size	Thread Limits	No. of Flutes	Shk. Dia. (in.)	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
M3x0.5	D3	3	.141	.197	2.210	**ER80BLK4003050**	Price	**ER80BLK4003050T**	Price
M3.5x0.6	D4	3	.141	.276	2.210	**ER80BLK4003560**	Price	**ER80BLK4003560T**	Price
M4x0.7	D4	3	.168	.276	2.480	**ER80BLK4004070**	Price	**ER80BLK4004070T**	Price
M5x0.8	D4	3	.194	.354	2.760	**ER80BLK4005080**	Price	**ER80BLK4005080T**	Price
M6x1.0	D5	3	.255	.433	3.150	**ER80BLK4006010**	Price	**ER80BLK4006010T**	Price
M8x1.25	D5	3	.318	.472	3.540	**ER80BLK4008125**	Price	**ER80BLK4008125T**	Price
M10x1.25	D5	3	.381	.472	3.940	**ER80BLK4010125**	Price	**ER80BLK4010125T**	Price
M10x1.5	D6	3	.381	.512	3.940	**ER80BLK4010150**	Price	**ER80BLK4010150T**	Price
M12x1.25	D5	3	.367	.551	3.940	**ER80BLK4012125**	Price	**ER80BLK4012125T**	Price
M12x1.75	D6	3	.367	.591	4.330	**ER80BLK4012175**	Price	**ER80BLK4012175T**	Price
M14x1.5	D6	3	.429	.551	3.940	**ER80BLK4014150**	Price	**ER80BLK4014150T**	Price
M14x2.0	D7	3	.429	.709	4.330	**ER80BLK4014200**	Price	**ER80BLK4014200T**	Price
M16x1.5	D6	3	.480	.551	3.940	**ER80BLK4016150**	Price	**ER80BLK4016150T**	Price
M16x2.0	D7	3	.480	.709	4.330	**ER80BLK4016200**	Price	**ER80BLK4016200T**	Price
M18x1.5	D6	4	.542	.551	4.330	**ER80BLK4018150**	Price	**ER80BLK4018150T**	Price
M18x2.5	D7	4	.542	.787	4.920	**ER80BLK4018250**	Price	**ER80BLK4018250T**	Price

RAPIDKUT Metric High Performance Spiral Pointed Taps for Multi-Purpose

Steam Oxide or TiCN • Plug Style • Color Coded for Easy Identification



- DIN length ANSI shank

Black Ring - High Vanadium Steel

For multi-purpose use in a wide variety of materials such as:

- Low carbon steel (>HRc 16)
- Medium to high carbon steel (>HRc 23)
- Free machining stainless steel (< HRc 23) and heat/corrosion stainless steel (>HRc 24)
- Stainless steel castings (> 38HRc)
- Aluminum, aluminum alloys, cast iron, copper and brass

						Steam Oxide		TICN	
Size	Thread Limits	No. of Flutes	Shk. Dia. (in.)	Thread Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
M3x0.5	D3	3	.141	.374	2.210	**ER80BLK3003050**	Price	**ER80BLK3003050T**	Price
M3.5x0.6	D4	3	.141	.413	2.210	**ER80BLK3003560**	Price	**ER80BLK3003560T**	Price
M4x0.7	D4	3	.168	.453	2.480	**ER80BLK3004070**	Price	**ER80BLK3004070T**	Price
M5x0.8	D4	3	.194	.531	2.760	**ER80BLK3005080**	Price	**ER80BLK3005080T**	Price
M6x1.0	D5	3	.255	.591	3.150	**ER80BLK3006010**	Price	**ER80BLK3006010T**	Price
M8x1.25	D5	3	.318	.669	3.540	**ER80BLK3008125**	Price	**ER80BLK3008125T**	Price
M10x1.25	D5	3	.381	.748	3.940	**ER80BLK3010125**	Price	**ER80BLK3010125T**	Price
M10x1.5	D6	3	.381	.748	3.940	**ER80BLK3010150**	Price	**ER80BLK3010150T**	Price
M12x1.25	D5	3	.367	.984	3.940	**-**	-	**ER80BLK3012125T**	Price
M12x1.25	D5	3	.367	.984	4.330	**ER80BLK3012125**	Price	**-**	-
M12x1.75	D6	3	.367	.984	3.940	**ER80BLK3012175**	Price	**ER80BLK3012175T**	Price
M14x1.5	D6	3	.429	.984	3.940	**ER80BLK3014150**	Price	**ER80BLK3014150T**	Price
M14x2.0	D7	3	.429	.984	3.940	**ER80BLK3014200**	Price	**ER80BLK3014200T**	Price
M16x1.5	D6	3	.480	1.083	3.940	**ER80BLK3016150**	Price	**ER80BLK3016150T**	Price
M16x2.0	D7	3	.480	1.083	3.940	**ER80BLK3016200**	Price	**ER80BLK3016200T**	Price
M18x1.5	D6	3	.542	1.083	3.940	**ER80BLK3018150**	Price	**ER80BLK3018150T**	Price
M18x2.5	D7	3	.542	1.083	3.940	**ER80BLK3018250**	Price	**ER80BLK3018250T**	Price

ONYX CNC Style Spiral Flute Taps



High Speed Steel • Semi-Bottoming • Steam Oxide or Bright Finish

- **Steam Oxide over Nitride** - increases wear resistance, reduces friction, reduces galling and chip welding, improves chip flow and increases tap lubricant retention - not recommended for non-ferrous materials
- **Bright Finish** for tapping a wide range of materials including non-ferrous materials
- For tapping a wide range of materials up to 28Rc hardness
- **CNC Reduced Neck Design and Shorter Thread Length -** for increased coolant flow to the cutting edge, enhanced chip evacuation and reduced contact between tap and workpiece
- Morse List # 2102

						Bright Finish		Steam Oxide	
Size	Thread Limit	No. of Flutes	Thread Length (in.)	Neck Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
4-40	H2	3	.2360	.3270	1-7/8	**MT7930870**	Price	**MT7934750**	Price
6-32	H3	3	.2360	.4520	2	**MT7930872**	Price	**MT7934751**	Price
8-32	H3	3	.2360	.5140	2-1/8	**MT7930874**	Price	**MT7934752**	Price
10-24	H3	3	.3540	.5210	2-3/8	**MT7930875**	Price	**MT7934753**	Price
10-32	H3	3	.3540	.5210	2-3/8	**MT7930876**	Price	**MT7934754**	Price
12-24	H3	3	.3540	.5210	2-3/8	**MT7930877**	Price	**MT7934755**	Price
1/4-20	H3	3	.4330	.5670	2-1/2	**MT7930879**	Price	**MT7934757**	Price
1/4-28	H3	3	.4330	.5670	2-1/2	**MT7930880**	Price	**MT7934758**	Price
5/16-18	H3	3	.4720	.6530	2-23/32	**MT7930881**	Price	**MT7934759**	Price
5/16-24	H3	3	.4720	.6530	2-23/32	**MT7930882**	Price	**MT7934760**	Price
3/8-16	H3	3	.5510	.6990	2-15/16	**MT7930883**	Price	**MT7934761**	Price
3/8-24	H3	3	.5510	.6990	2-15/16	**MT7930884**	Price	**MT7934762**	Price
7/16-14	H3	3	.5910	.8470	3-5/32	**MT7930885**	Price	**MT7934763**	Price
7/16-20	H3	3	.5910	.8470	3-5/32	**MT7930886**	Price	**MT7934764**	Price
1/2-13	H3	3	.6300	1.0260	3-3/8	**MT7930887**	Price	**MT7934765**	Price
1/2-20	H3	3	.6300	1.0260	3-3/8	**MT7930888**	Price	**MT7934766**	Price
9/16-12	H3	3	.6900	.9830	3-19/32	**MT7930889**	Price	**MT7934767**	Price
5/8-11	H3	3	.7450	1.0520	3-13/16	**MT7930891**	Price	**MT7934769**	Price
5/8-18	H3	3	.7450	1.0520	3-13/16	**MT7930892**	Price	**MT7934770**	Price
3/4-10	H3	4	.8200	1.1650	4-1/4	**MT7930893**	Price	**MT7934771**	Price
3/4-16	H3	4	.8200	1.1650	4-1/4	**MT7930894**	Price	**MT7934772**	Price
7/8-9	H4	4	.9110	1.3080	4-11/16	**MT7930895**	Price	**MT7934773**	Price
7/8-14	H4	4	.9110	1.3080	4-11/16	**MT7930896**	Price	**MT7934774**	Price
1-8	H4	4	1.0250	1.4750	5-1/8	**MT7930897**	Price	**MT7934775**	Price
1-12	H4	4	1.0250	1.4750	5-1/8	**MT7930898**	Price	**MT7934776**	Price
1-14	H4	4	1.0250	1.4750	5-1/8	**MT7930899**	Price	**MT7934785**	Price
1-1/8-7	H4	4	1.1430	1.4190	5-7/16	**MT7930900**	Price	**MT7934777**	Price
1-1/8-12	H4	4	1.1430	1.4190	5-7/16	**MT7930901**	Price	**MT7934778**	Price
1-1/4-7	H4	4	1.1430	1.4190	5-3/4	**MT7930902**	Price	**MT7934779**	Price
1-1/4-12	H4	4	1.1430	1.4190	5-3/4	**MT7930903**	Price	**MT7934780**	Price
1-3/8-6	H4	4	1.3330	1.6670	6-1/16	**MT7930904**	Price	**MT7934781**	Price
1-3/8-12	H4	4	1.3330	1.6670	6-1/16	**MT7930905**	Price	**MT7934782**	Price
1-1/2-6	H4	4	1.3330	1.6670	6-3/8	**MT7930906**	Price	**MT7934783**	Price
1-1/2-12	H4	4	1.3330	1.6670	6-3/8	**MT7930907**	Price	**MT7934784**	Price

ONYX CNC Style Spiral Flute Taps



High Speed Steel • Semi-Bottoming • Steam Oxide or Bright Finish

- **Steam Oxide over Nitride** - increases wear resistance, reduces friction, reduces galling and chip welding, improves chip flow and increases tap lubricant retention - not recommended for non-ferrous materials
- **Bright Finish** for tapping a wide range of materials including non-ferrous materials
- For tapping a wide range of materials up to 28Rc hardness
- **CNC Reduced Neck Design and Shorter Thread Length -** for increased coolant flow to the cutting edge, enhanced chip evacuation and reduced contact between tap and workpiece
- Pitch diameter limits are those recommended for 6H class thread
- Morse List # 2102M

						Bright Finish		Steam Oxide	
Size	Thread Limits	No. of Flutes	Thread Length (in.)	Neck Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
M3x0.5	D3	3	.2360	.3890	1-15/16	**MT7930940**	Price	**MT7934840**	Price
M4x0.7	D4	3	.2360	.5140	2-1/8	**MT7930942**	Price	**MT7934842**	Price
M5x0.8	D4	3	.3540	.5210	2-3/8	**MT7930943**	Price	**MT7934843**	Price
M6x1.0	D5	3	.4330	.5670	2-1/2	**MT7930944**	Price	**MT7934844**	Price
M7x1.0	D5	3	.4720	.6530	2-23/32	**MT7930945**	Price	**MT7934845**	Price
M8x1.0	D5	3	.4720	.6530	2-23/32	**MT7930946**	Price	**MT7934846**	Price
M8x1.25	D5	3	.4720	.6530	2-23/32	**MT7930947**	Price	**MT7934847**	Price
M10x1.25	D5	3	.5510	.6990	2-15/16	**MT7930948**	Price	**MT7934848**	Price
M10x1.5	D6	3	.5510	.6990	2-15/16	**MT7930949**	Price	**MT7934849**	Price
M12x1.25	D5	3	.6300	1.0260	3-3/8	**MT7930950**	Price	**MT7934850**	Price
M12x1.75	D6	3	.6300	1.0260	3-3/8	**MT7930952**	Price	**MT7934851**	Price
M14x1.5	D6	3	.6900	.9830	3-19/32	**MT7930953**	Price	**MT7934852**	Price
M14x2.0	D7	3	.6900	.9830	3-19/32	**MT7930954**	Price	**MT7934853**	Price
M16x1.5	D6	3	.7450	1.0520	3-13/16	**MT7930955**	Price	**MT7934854**	Price
M16x2.0	D7	3	.7450	1.0520	3-13/16	**MT7930956**	Price	**MT7934855**	Price
M18x1.5	D6	4	.8130	.9830	4-1/32	**MT7930957**	Price	**MT7934856**	Price
M18x2.5	D7	4	.8130	.9830	4-1/32	**MT7930958**	Price	**MT7934857**	Price
M20x1.5	D6	4	.7900	1.2100	4-15/32	**MT7930959**	Price	**MT7934858**	Price
M20x2.5	D7	4	.7900	1.2100	4-15/32	**MT7930960**	Price	**MT7934859**	Price
M24x1.5	D7	4	.9400	1.2790	4-29/32	**MT7930963**	Price	**MT7934862**	Price
M24x2.0	D7	4	.9400	1.2790	4-29/32	**MT7930964**	Price	**MT7934865**	Price
M24x3.0	D8	4	.9400	1.2790	4-29/32	**MT7930965**	Price	**MT7934863**	Price

High Performance Taps

Spiral Flute Modified Bottoming Style 48° Helix Angle



ShearTap - Used in steels and stainless steels up to 35Rc, 1010, 1018, 1046, 302, 303, 304, 310, 316



HPT for exotic alloys - used in exotic alloys, titanium, and nickel based alloys, monel, inconel



HPT for aluminum - recommended for all types of aluminum alloys

SHEAR MORSE TAP

SINGLE MORSE TAP

					ShearTap			High Performance					
								TiCN			CrN		
					Stainless Steel			Exotic Alloys			Aluminum Alloys		
Size	Thread Limits	Thread Length	Neck Length	OAL (in.)	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price
4-40	H2	.2360	.3270	1-7/8	3	**MT3534450**	Price	3	**MT3360920**	Price	2	**MT3360770**	Price
6-32	H2	.2360	.4520	2	3	**MT3534453**	Price	3	**MT3360922**	Price	2	**MT3360774**	Price
8-32	H3	.2360	.5140	2-1/8	3	**MT3534457**	Price	3	**MT3360925**	Price	2	**MT3360778**	Price
10-24	H3	.3540	.5210	2-3/8	3	**MT3534460**	Price	3	**MT3360926**	Price	2	**MT3360780**	Price
10-32	H3	.3540	.5210	2-3/8	3	**MT3534462**	Price	3	**MT3360929**	Price	2	**MT3360782**	Price
1/4-20	H3	.4330	.5670	2-1/2	3	**MT3534466**	Price	3	**MT3360930**	Price	2	**MT3360783**	Price
1/4-28	H3	.4330	.5670	2-1/2	3	**MT3534468**	Price	3	**MT3360932**	Price	2	**MT3360785**	Price
5/16-18	H3	.4720	.6530	2-23/32	3	**MT3534470**	Price	3	**MT3360934**	Price	2	**MT3360787**	Price
5/16-24	H3	.4720	.6530	2-23/32	3	**MT3534472**	Price	3	**MT3360936**	Price	2	**MT3360789**	Price
3/8-16	H3	.5510	.6990	2-15/16	3	**MT3534474**	Price	3	**MT3360938**	Price	2	**MT3360791**	Price
3/8-24	H3	.5510	.6990	2-15/16	3	**MT3534476**	Price	3	**MT3360940**	Price	2	**MT3360793**	Price
7/16-14	H3	.5910	.8470	3-5/32	3	**MT3534478**	Price	3	**MT3360942**	Price	2	**MT3360795**	Price
7/16-20	H3	.5910	.8470	3-5/32	3	**MT3534480**	Price	3	**MT3360944**	Price	2	**MT3360797**	Price
1/2-13	H3	.6300	1.0260	3-3/38	3	**MT3534482**	Price	3	**MT3360946**	Price	2	**MT3360799**	Price
1/2-20	H3	.6300	1.0260	3-3/38	3	**MT3534484**	Price	3	**MT3360948**	Price	2	**MT3360801**	Price
9/16-12	H3	.6900	.9830	3-19/32	3	**MT3534486**	Price	3	**MT3360950**	Price	-	**-**	-
9/16-18	H3	.6900	.9830	3-19/32	3	**MT3534487**	Price	3	**MT3360952**	Price	-	**-**	-
5/8-11	H3	.7450	1.0520	3-13/16	3	**MT3534488**	Price	3	**MT3360954**	Price	-	**-**	-
5/8-18	H3	.7450	1.0520	3-13/16	3	**MT3534489**	Price	3	**MT3360956**	Price	-	**-**	-
3/4-10	H3	.8200	1.1650	4-1/4	4	**MT3534492**	Price	4	**MT3360958**	Price	-	**-**	-
3/4-16	H3	.8200	1.1650	4-1/4	4	**MT3534493**	Price	4	**MT3360960**	Price	-	**-**	-
1-8	H4	1.0250	1.4750	5-1/8	4	**MT3534522**	Price	-	**-**	-	-	**-**	-
1-12	H4	1.0250	1.4750	5-1/8	4	**MT3534523**	Price	-	**-**	-	-	**-**	-

Note: sizes available through 2-4-1/2. TiN coating also available.

High Performance Taps

Metric Spiral Flute Modified Bottoming Taps



Surface treated ShearTap - used in steels and stainless steels up to 35Rc, 1010, 1018, 1046, 302, 303, 304, 310, 316



TiCN-HPT Spiral point for exotic Alloys - used in exotic alloys titanium, and nickel based alloys monel, inconel



CrN-HPT for aluminum: - recommended for all types of aluminum alloys

SHEAR MORSE TAP

SINGLE MORSE TAP

								High Performance			
						Surface Treated		TiCN		CrN	
						Stainless Steel		Exotic Alloys		Aluminum Alloys	
Size	Thread Limits	No. of Flutes	Thread Length	Neck Length	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
M3x0.50	D3	3	.2360	.3890	1-15/16	**MT3535258**	Price	**MT3360980**	Price	**MT3360820**	Price
M3.5x0.60	D4	3	.2360	.4520	2	**MT3535259**	Price	**-**	-	**-**	-
M4x0.70	D4	3	.2360	.5140	2-1/8	**MT3535260**	Price	**MT3360981**	Price	**MT3360821**	Price
M5x0.80	D4	3	.3540	.5210	2-3/8	**MT3535261**	Price	**MT3360982**	Price	**MT3360822**	Price
M6x1.0	D5	3	.4330	.5670	2-1/2	**MT3535262**	Price	**MT3360983**	Price	**MT3360823**	Price
M7x1.0	D5	3	.4720	.6530	2-23/32	**MT3535263**	Price	**-**	-	**-**	-
M8x1.0	D5	3	.4720	.6530	2-23/32	**MT3535264**	Price	**MT3360984**	Price	**MT3360824**	Price
M8x1.25	D5	3	.4720	.6530	2-23/32	**MT3535265**	Price	**MT3360985**	Price	**MT3360825**	Price
M10x1.25	D5	3	.5510	.6990	2-15/16	**MT3535266**	Price	**-**	-	**-**	-
M10x1.5	D6	3	.5510	.6990	2-15/16	**MT3535267**	Price	**MT3360986**	Price	**MT3360826**	Price
M12x1.25	D5	3	.6300	1.0260	3-3/8	**MT3535268**	Price	**-**	-	**-**	-
M12x1.75	D6	3	.6300	1.0260	3-3/8	**MT3535269**	Price	**MT3360988**	Price	**MT3360828**	Price
M14x1.5	D6	3	.6900	.9830	3-19/32	**MT3535270**	Price	**-**	-	**-**	-
M14x2.0	D7	3	.6900	.9830	3-19/32	**MT3535271**	Price	**-**	-	**-**	-
M16x1.5	D6	3	.7450	1.0520	3-13/16	**MT3535272**	Price	**-**	-	**-**	-
M16x2.0	D7	3	.7450	1.0520	3-13/16	**MT3535273**	Price	**-**	-	**-**	-
M18x1.5	D6	4	.8130	.9830	4-1/32	**MT3535274**	Price	**-**	-	**-**	-
M18x2.5	D7	4	.8130	.9830	4-1/32	**MT3535275**	Price	**-**	-	**-**	-
M20x1.5	D6	4	.7900	1.2100	4-15/32	**MT3535290**	Price	**-**	-	**-**	-
M20x2.5	D7	4	.7900	1.2100	4-15/32	**MT3535291**	Price	**-**	-	**-**	-
M22x1.5	D6	4	.7900	1.4280	4-11/16	**MT3535292**	Price	**-**	-	**-**	-
M22x2.5	D7	4	.7900	1.4280	4-11/16	**MT3535293**	Price	**-**	-	**-**	-
M24x2.0	D7	4	.9400	1.2790	4-29/32	**MT3535294**	Price	**-**	-	**-**	-
M24x3.0	D8	4	.9400	1.2790	4-29/32	**MT3535295**	Price	**-**	-	**-**	-

SHEARMTAP Oversize Spiral Point & Spiral Flute SHEARTAP™

H7 Pitch Diameter Limit

- Oversize taps are mainly used for parts that will be plated or heat treated after tapping. Also used in materials that tend to shrink after tapping
- SHEARTAP™ used in steels and stainless steels up to 35Rc, 1010, 1018, 1046, 302, 303, 304, 310, 316

Inch					
		Spiral Flute		Price	
Size	Thread Limits	Order No.	Price	Order No.	Price
6-32	H7	**MT3534592**	Price	**MT3534542**	Price
8-32	H7	**MT3534594**	Price	**MT3534544**	Price
10-24	H7	**MT3534596**	Price	**MT3534546**	Price
10-32	H7	**MT3534598**	Price	**MT3534548**	Price
1/4-20	H7	**MT3534600**	Price	**MT3534550**	Price
1/4-28	H7	**MT3534602**	Price	**MT3534552**	Price
5/16-18	H7	**MT3534604**	Price	**MT3534554**	Price
5/16-24	H7	**MT3534606**	Price	**MT3534556**	Price
3/8-16	H7	**MT3534608**	Price	**MT3534558**	Price
3/8-24	H7	**MT3534610**	Price	**MT3534560**	Price

Size Type - Metric					
		Spiral Flute		Spiral Point	
Size	Thread Limits	Order No.	Price	Order No.	Price
M3x0.50	H7	**MT3534680**	Price	**MT3534670**	Price
M4x0.70	H7	**MT3534681**	Price	**MT3534671**	Price
M5x0.80	H7	**MT3534682**	Price	**MT3534672**	Price

SHEARTAP™ Cutting Speeds

MATERIAL	HARDNESS BHN	EXAMPLES	SFM*
Carbon Steel	200	1010, 1018	40–65
	200–300	1046, 1050	30–50
Stainless Steel	300	302, 303, 304, 310, 316	15–25
	300	405, 409	15–25
	300	440, 403	15–25

SPEEDS shown are suggested starting points only and may be increased or decreased depending on actual material and machining conditions. Start conservatively and increase until the machining cycle is optimized.

SPEEDS may be increased for coated taps, spiral point taps, fine pitch taps and when the percentage of thread is decreased.

SPEEDS may need to be reduced for spiral flute taps, coarse pitch taps, bottoming taps, difficult materials, longer thread lengths and when the percentage of thread is increased.



List No. 2090 - Steam Oxide Over Nitride
List No. 2090G - TiN Coated
List No. 2090M - Metric Steam Oxide Over Nitride



List No. 2091 - Steam Oxide Over Nitride
List No. 2091G - TiN Coated
List No. 2091M - Metric Steam Oxide Over Nitride

PRICE	AMOUNT LARGER THAN BASIC PITCH DIA.
H7	.0030″-.0035″
H11	.0050″-.0055″

Oversize taps are mainly used for parts that will be plated or heat treated after tapping. Also used in materials that tend to shrink after tapping.

SHEARMTAP Oversize Spiral Point & Spiral Flute SHEARTAP™

H11 Pitch Diameter Limit

- Oversize taps are mainly used for parts that will be plated or heat treated after tapping. Also used in materials that tend to shrink after tapping
- SHEARTAP™ used in steels and stainless steels up to 35Rc, 1010, 1018, 1046, 302, 303, 304, 310, 316

Inch					
		Spiral Flute		Price	
Size	Thread Limits	Order No.	Price	Order No.	Price
1/4-20	H11	**MT3534601**	Price	**MT3534551**	Price
1/4-28	H11	**MT3534603**	Price	**MT3534553**	Price
5/16-18	H11	**MT3534605**	Price	**MT3534555**	Price
5/16-24	H11	**MT3534607**	Price	**MT3534557**	Price
3/8-16	H11	**MT3534609**	Price	**MT3534559**	Price
3/8-24	H11	**MT3534611**	Price	**MT3534561**	Price
7/16-14	H11	**MT3534613**	Price	**MT3534563**	Price
7/16-20	H11	**MT3534615**	Price	**MT3534565**	Price
1/2-13	H11	**MT3534617**	Price	**MT3534567**	Price
1/2-20	H11	**MT3534619**	Price	**MT3534569**	Price
9/16-12	H11	**MT3534621**	Price	**MT3534571**	Price
9/16-18	H11	**MT3534623**	Price	**MT3534573**	Price
5/8-11	H11	**MT3534625**	Price	**MT3534575**	Price
5/8-18	H11	**MT3534627**	Price	**MT3534577**	Price
3/4-10	H11	**MT3534629**	Price	**MT3534579**	Price
3/4-16	H11	**MT3534631**	Price	**MT3534581**	Price
7/8-9	H11	**MT3534633**	Price	**MT3534583**	Price
7/8-14	H11	**MT3534635**	Price	**MT3534585**	Price
1-8	H11	**MT3534637**	Price	**MT3534587**	Price
1-12	H11	**MT3534639**	Price	**MT3534589**	Price

Size Type - Metric					
		Spiral Flute		Spiral Point	
Size	Thread Limits	Order No.	Price	Order No.	Price
M6x1.0	H11	**MT3534683**	Price	**MT3534673**	Price
M8x1.25	H11	**MT3534684**	Price	**MT3534674**	Price
M10x1.5	H11	**MT3534685**	Price	**MT3534675**	Price
M12x1.75	H11	**MT3534686**	Price	**MT3534676**	Price

SHEARMTAP Spiral Point Eight Pitch Plug Style SHEARTAP™

- SHEARTAP™ used in steels and stainless steels up to 35Rc, 1010, 1018, 1046, 302, 303, 304, 310, 316

					Surface Treated		TiN	
Size	Thread Limits	No. of Flutes	Thread Length	OAL (in.)	Order No.	Price	Order No.	Price
1-1/8-8	H5	4	1.7190	5-7/16	**MT3534650**	Price	**MT3594650**	Price
1-1/4-8	H5	4	1.7190	5-3/4	**MT3534651**	Price	**MT3594651**	Price
1-3/8-8	H5	4	2.0000	6-1/16	**MT3534652**	Price	**MT3594652**	Price
1-1/2-8	H5	6	2.0000	6-3/8	**MT3534653**	Price	**MT3594653**	Price
1-5/8-8	H6	6	2.0000	6-11/16	**MT3534654**	Price	**MT3594654**	Price
1-3/4-8	H6	6	2.4060	7	**MT3534655**	Price	**MT3594655**	Price
1-7/8-8	H6	6	2.4060	7-5/16	**MT3534656**	Price	**MT3594656**	Price
2-8	H6	6	2.6880	7-5/8	**MT3534657**	Price	**MT3594657**	Price

SHEARMTAP Spiral Flute Eight Pitch Bottoming Style SHEARTAP™

- SHEARTAP™ used in steels and stainless steels up to 35Rc, 1010, 1018, 1046, 302, 303, 304, 310, 316

					Surface Treated		TiN	
Size	Thread Limits	No. of Flutes	Thread Length	OAL (in.)	Order No.	Price	Order No.	Price
1-1/8-8	H5	4	1.1430	5-7/16	**MT3534660**	Price	**MT3594660**	Price
1-1/4-8	H5	4	1.1430	5-3/4	**MT3534661**	Price	**MT3594661**	Price
1-3/8-8	H5	4	1.3330	6-1/16	**MT3534662**	Price	**MT3594662**	Price
1-1/2-8	H5	4	1.3330	6-3/8	**MT3534663**	Price	**MT3594663**	Price
1-5/8-8	H6	6	1.3330	6-11/16	**MT3534664**	Price	**MT3594664**	Price
1-3/4-8	H6	6	1.6000	7	**MT3534665**	Price	**MT3594665**	Price
1-7/8-8	H6	6	1.6000	7-5/16	**MT3534666**	Price	**MT3594666**	Price
2-8	H6	6	1.7770	7-5/8	**MT3534667**	Price	**MT3594667**	Price

EXOTAP® A-TAP® Spiral Pointed Taps

VC10 • Plug Style



- Sharp cutting edge stabilizes chip shape
- Variable helix accelerates chip evacuation
- OSG's V coating for long tool life
- Good for carbon steels, alloy steels, 300 and 400 series stainless steels
- OSG List #16515

Size	Thread Limits	OAL	No. of Flutes	Order No.	Price
4-40	H2	56mm	2	**TP531651500108**	Price
4-48	H2	56mm	2	**TP531651500208**	Price
5-40	H2	56mm	3	**TP531651500308**	Price
5-44	H2	56mm	3	**TP531651500408**	Price
6-32	H3	56mm	3	**TP531651500508**	Price
6-32	H2	56mm	3	**TP531651500608**	Price
6-40	H2	56mm	3	**TP531651500708**	Price
8-32	H3	63mm	3	**TP531651500808**	Price
8-32	H2	63mm	3	**TP531651500908**	Price
8-36	H2	63mm	3	**TP531651501008**	Price
10-24	H3	70mm	3	**TP531651501108**	Price
10-32	H3	70mm	3	**TP531651501208**	Price
10-32	H2	70mm	3	**TP531651501308**	Price
12-24	H3	80mm	3	**TP531651501408**	Price
12-28	H3	80mm	3	**TP531651501508**	Price
1/4-20	H5	80mm	3	**TP531651501608**	Price
1/4-20	H3	80mm	3	**TP531651501708**	Price
1/4-28	H4	80mm	3	**TP531651501808**	Price
1/4-28	H3	80mm	3	**TP531651501908**	Price
5/16-18	H5	90mm	3	**TP531651502008**	Price
5/16-18	H3	90mm	3	**TP531651502108**	Price
5/16-24	H4	90mm	3	**TP531651502208**	Price
5/16-24	H3	90mm	3	**TP531651502308**	Price
3/8-16	H5	100mm	3	**TP531651502408**	Price
3/8-16	H3	100mm	3	**TP531651502508**	Price
3/8-24	H4	90mm	3	**TP531651502608**	Price
3/8-24	H3	90mm	3	**TP531651502708**	Price
7/16-14	H5	100mm	3	**TP531651502808**	Price
7/16-14	H3	100mm	3	**TP531651502908**	Price
7/16-20	H5	100mm	3	**TP531651503008**	Price
7/16-20	H3	100mm	3	**TP531651503108**	Price
1/2-13	H5	110mm	3	**TP531651503208**	Price
1/2-13	H3	110mm	3	**TP531651503308**	Price
1/2-20	H5	100mm	3	**TP531651503408**	Price
1/2-20	H3	100mm	3	**TP531651503508**	Price
9/16-12	H5	110mm	3	**TP531651503608**	Price
9/16-12	H3	110mm	3	**TP531651503708**	Price
9/16-18	H5	100mm	3	**TP531651503808**	Price
9/16-18	H3	100mm	3	**TP531651503908**	Price
5/8-11	H5	110mm	3	**TP531651504008**	Price
5/8-11	H3	110mm	3	**TP531651504108**	Price
5/8-18	H5	100mm	3	**TP531651504208**	Price
5/8-18	H3	100mm	3	**TP531651504308**	Price
3/4-10	H5	125mm	3	**TP531651504408**	Price
3/4-10	H3	125mm	3	**TP531651504508**	Price
3/4-16	H5	110mm	3	**TP531651504608**	Price
3/4-16	H3	110mm	3	**TP531651504708**	Price
7/8-9	H6	140mm	3	**TP531651504808**	Price
7/8-9	H4	140mm	3	**TP531651504908**	Price
7/8-14	H6	125mm	3	**TP531651505008**	Price
7/8-14	H4	125mm	3	**TP531651505108**	Price
1-8	H6	160mm	3	**TP531651505208**	Price
1-8	H4	160mm	3	**TP531651505308**	Price
1-12	H6	140mm	3	**TP531651505408**	Price
1-12	H4	140mm	3	**TP531651505508**	Price

EXOTAP® A-TAP® Spiral Pointed Taps

VC10 • Plug Style

- Sharp cutting edge stabilizes chip shape
- Variable helix accelerates chip evacuation
- OSG's V coating for long tool life
- Good for carbon steels, alloy steels, 300 and 400 series stainless steels
- OSG List #16510

Size	Thread Limits	OAL	No. of Flutes	Order No.	Price
M3x0.50	D3	56mm	3	**TP531651000108**	Price
M4x0.50	D3	63mm	3	**TP531651000208**	Price
M4x0.70	D4	63mm	3	**TP531651000308**	Price
M5x0.50	D3	70mm	3	**TP531651000408**	Price
M5x0.80	D4	70mm	3	**TP531651000508**	Price
M6x0.50	D3	80mm	3	**TP531651000608**	Price
M6x0.75	D4	80mm	3	**TP531651000708**	Price
M6x1.0	D5	80mm	3	**TP531651000808**	Price
M8x1.0	D5	90mm	3	**TP531651000908**	Price
M8x1.25	D5	90mm	3	**TP531651001008**	Price
M10x1.0	D5	100mm	3	**TP531651001108**	Price
M10x1.25	D5	100mm	3	**TP531651001208**	Price

EXOTAP® A-TAP® Spiral Flute Taps

VC10 • Modified Bottoming Style

- Sharp cutting edge stabilizes chip shape
- Variable helix accelerates chip evacuation
- OSG's V coating for long tool life
- Good for carbon steels, alloy steels, 300 and 400 series stainless steels
- OSG List #16505



Size	Thread Limits	OAL	No. of Flutes	Order No.	Price
4-40	H2	56mm	2	**TP531650500108**	Price
4-48	H2	56mm	2	**TP531650500208**	Price
5-40	H2	56mm	2	**TP531650500308**	Price
5-44	H2	56mm	2	**TP531650500408**	Price
6-32	H2	56mm	2	**TP531650500608**	Price
6-32	H3	56mm	2	**TP531650500508**	Price
6-40	H2	56mm	2	**TP531650500708**	Price
8-32	H2	63mm	2	**TP531650500908**	Price
8-32	H3	63mm	2	**TP531650500808**	Price
8-36	H2	63mm	2	**TP531650501008**	Price
10-24	H3	70mm	2	**TP531650501108**	Price
10-32	H2	70mm	2	**TP531650501308**	Price
10-32	H3	70mm	2	**TP531650501208**	Price
12-24	H3	80mm	2	**TP531650501408**	Price
12-28	H3	80mm	2	**TP531650501508**	Price
1/4-20	H3	80mm	2	**TP531650501708**	Price
1/4-20	H5	80mm	2	**TP531650501608**	Price
1/4-28	H3	80mm	2	**TP531650501908**	Price
1/4-28	H4	80mm	2	**TP531650501808**	Price
5/16-18	H3	90mm	3	**TP531650502108**	Price
5/16-18	H5	90mm	3	**TP531650502008**	Price
5/16-24	H3	90mm	3	**TP531650502308**	Price
5/16-24	H4	90mm	3	**TP531650502208**	Price
3/8-16	H3	100mm	3	**TP531650502508**	Price
3/8-16	H5	100mm	3	**TP531650502408**	Price
3/8-24	H3	90mm	3	**TP531650502708**	Price
3/8-24	H4	90mm	3	**TP531650502608**	Price
7/16-14	H3	100mm	3	**TP531650502908**	Price
7/16-14	H5	100mm	3	**TP531650502808**	Price
7/16-20	H3	100mm	3	**TP531650503108**	Price
7/16-20	H5	100mm	3	**TP531650503008**	Price
1/2-13	H3	110mm	3	**TP531650503308**	Price
1/2-13	H5	110mm	3	**TP531650503208**	Price
1/2-20	H3	100mm	3	**TP531650503508**	Price
1/2-20	H5	100mm	3	**TP531650503408**	Price
9/16-12	H3	110mm	3	**TP531650503708**	Price
9/16-12	H5	110mm	3	**TP531650503608**	Price
9/16-18	H3	100mm	3	**TP531650503908**	Price
9/16-18	H5	100mm	3	**TP531650503808**	Price
5/8-11	H3	110mm	3	**TP531650504108**	Price
5/8-11	H5	110mm	3	**TP531650504008**	Price
5/8-18	H3	100mm	3	**TP531650504308**	Price
5/8-18	H5	100mm	3	**TP531650504208**	Price
3/4-10	H3	125mm	4	**TP531650504508**	Price
3/4-10	H5	125mm	4	**TP531650504408**	Price
3/4-16	H3	110mm	4	**TP531650504708**	Price
3/4-16	H5	110mm	4	**TP531650504608**	Price
7/8-9	H4	140mm	4	**TP531650504908**	Price
7/8-9	H6	140mm	4	**TP531650504808**	Price
7/8-14	H4	125mm	4	**TP531650505108**	Price
7/8-14	H6	125mm	4	**TP531650505008**	Price
1-8	H4	160mm	4	**TP531650505308**	Price
1-8	H6	160mm	4	**TP531650505208**	Price
1-12	H4	140mm	4	**TP531650505508**	Price
1-12	H6	140mm	4	**TP531650505408**	Price



Size	Thread Limits	OAL	No. of Flutes	Order No.	Price
M10x1.5	D6	100mm	3	**TP531651001308**	Price
M12x1.0	D5	100mm	3	**TP531651001408**	Price
M12x1.25	D6	100mm	3	**TP531651001508**	Price
M12x1.5	D6	100mm	3	**TP531651001608**	Price
M12x1.75	D6	110mm	3	**TP531651001708**	Price
M14x1.5	D6	100mm	4	**TP531651001808**	Price
M14x2.0	D7	110mm	3	**TP531651001908**	Price
M16x1.5	D6	100mm	4	**TP531651002008**	Price
M16x2.0	D7	110mm	3	**TP531651002108**	Price
M18x1.5	D6	110mm	4	**TP531651002208**	Price
M18x2.5	D7	125mm	3	**TP531651002308**	Price
M20x1.5	D6	125mm	4	**TP531651002408**	Price
M20x2.5	D7	140mm	3	**TP531651002508**	Price
M22x1.5	D6	125mm	4	**TP531651002608**	Price
M22x2.5	D7	140mm	3	**TP531651002708**	Price
M24x1.5	D6	140mm	4	**TP531651002808**	Price
M24x3.0	D8	160mm	3	**TP531651002908**	Price

EXOTAP® A-TAP® Spiral Flute Taps

VC10 • Modified Bottoming Style

- Sharp cutting edge stabilizes chip shape
- Variable helix accelerates chip evacuation
- OSG's V coating for long tool life
- Good for carbon steels, alloy steels, 300 and 400 series stainless steels
- OSG List #16500



Size	Thread Limits	OAL	No. of Flutes	Order No.	Price
M3x0.50	D3	56mm	3	**TP531650000108**	Price
M4x0.50	D3	63mm	3	**TP531650000208**	Price
M4x0.70	D4	63mm	3	**TP531650000308**	Price
M5x0.50	D3	70mm	3	**TP531650000408**	Price
M5x0.80	D4	70mm	3	**TP531650000508**	Price
M6x0.50	D3	80mm	3	**TP531650000608**	Price
M6x0.75	D4	80mm	3	**TP531650000708**	Price
M6x1.0	D5	80mm	3	**TP531650000808**	Price
M8x1.0	D5	90mm	3	**TP531650000908**	Price
M8x1.25	D5	90mm	3	**TP531650001008**	Price
M10x1.0	D5	90mm	3	**TP531650001108**	Price
M10x1.25	D5	100mm	3	**TP531650001208**	Price
M10x1.5	D6	100mm	3	**TP531650001308**	Price
M12x1	D5	100mm	3	**TP531650001408**	Price
M12x1.25	D6	100mm	3	**TP531650001508**	Price
M12x1.5	D6	100mm	3	**TP531650001608**	Price
M12x1.75	D6	110mm	3	**TP531650001708**	Price
M14x1.5	D6	100mm	3	**TP531650001808**	Price
M14x2.0	D7	110mm	3	**TP531650001908**	Price
M16x1.5	D6	100mm	3	**TP531650002008**	Price
M16x2.0	D7	110mm	3	**TP531650002108**	Price
M18x1.5	D6	110mm	4	**TP531650002208**	Price
M18x2.5	D7	125mm	4	**TP531650002308**	Price
M20x1.5	D6	125mm	4	**TP531650002408**	Price
M20x2.5	D7	140mm	4	**TP531650002508**	Price
M22x1.5	D6	125mm	4	**TP531650002608**	Price
M22x2.5	D7	140mm	4	**TP531650002708**	Price
M24x1.5	D6	140mm	4	**TP531650002808**	Price
M24x3.0	D8	160mm	4	**TP531650002908**	Price

EXOTAP® VC-10 Spiral Fluted Taps

TiCN Coated

- Specially designed for difficult-to-machine materials
- Works best with alloy steels, stainless steel 17-4 PH, hardened steels up to 35HrC, die steels, titanium, inconel, stainless steel 400, hardened steel 35-45HrC
- Available in bottoming and modified bottoming
- OSG List #313



Size	Chamfer Length	Thread Limits	No. of Flutes	Order No.	Price
2-56	1.5P - 2P	H2	2	**TP25141708**	Price
4-40	2.5P - 3P	H3	2	**TP251754108**	Price
6-32	1.5P - 2P	H3	2	**TP25141908**	Price
6-32	2.5P - 3P	H3	2	**TP251752208**	Price
8-32	2.5P - 3P	H2	2	**TP251754608**	Price
8-32	2.5P - 3P	H3	2	**TP251752308**	Price
10-24	2.5P - 3P	H5	3	**TP251703008**	Price
10-32	1.5P - 2P	H3	3	**TP25142508**	Price
10-32	2.5P - 3P	H4	3	**TP251703208**	Price
10-32	2.5P - 3P	H5	3	**TP251703308**	Price
1/4-20	2.5P - 3P	H3	3	**TP241752608**	Price
1/4-20	2.5P - 3P	H5	3	**TP251703508**	Price
5/16-24	2.5P - 3P	H4	3	**TP251704008**	Price
5/16-24	2.5P - 3P	H6	3	**TP251704208**	Price
3/8-24	1.5P - 2P	H3	3	**TP25143108**	Price
3/8-24	2.5P - 3P	H4	3	**TP251704408**	Price
7/16-20	2.5P - 3P	H5	3	**TP251704808**	Price
1/2-13	2.5P - 3P	H5	3	**TP251704908**	Price
5/8-11	2.5P - 3P	H3	4	**TP251753608**	Price
3/4-10	2.5P - 3P	H3	4	**TP251753808**	Price
3/4-16	2.5P - 3P	H3	4	**TP251753908**	Price

SHEARMTAP Metric Spiral Flute SHEARTAP™

Premium High Speed Steel • 48° Helix Angle • Semi-Bottoming Style

- TiN coated
- Pitch diameter limits are those recommended for 6H class of thread
- Morse List # 2091G



Szie	Thread Limits	No. of Flutes	Thread Length (in.)	OAL (in.)	Order No.	Price
M3x0.50	D3	3	.2360	1-15/16	**MT3595258**	Price
M3.5x0.60	D4	3	.2360	2	**MT3595259**	Price
M4x0.70	D4	3	.2360	2-1/8	**MT3595260**	Price
M5x0.80	D4	3	.3540	2-3/8	**MT3595261**	Price
M6x1.0	D5	3	.4330	2-1/2	**MT3595262**	Price
M7x1.0	D5	3	.4720	2-23/32	**MT3595263**	Price
M8x1.0	D5	3	.4720	2-23/32	**MT3595264**	Price
M8x1.25	D5	3	.4720	2-23/32	**MT3595265**	Price
M10x1.25	D5	3	.5510	2-15/16	**MT3595266**	Price
M10x1.5	D6	3	.5510	2-15/16	**MT3595267**	Price
M12x1.25	D5	3	.6300	3-3/8	**MT3595268**	Price
M12x1.75	D6	3	.6300	3-3/8	**MT3595269**	Price
M14x1.5	D6	3	.6900	3-19/32	**MT3595270**	Price
M14x2.0	D7	3	.6900	3-19/32	**MT3595271**	Price
M16x1.5	D6	3	.7450	3-13/16	**MT3595272**	Price
M16x2.0	D7	3	.7450	3-13/16	**MT3595273**	Price

HY-PRO® Spiral Point Plug Style

Fractional • Steam Oxide Finish



- For tapping hardened steel
- Best application: 4140, 4340, H13, D2 and 1055 up to 35HRC
- OSG List #280

		H2		H3		H5	
Size	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
2-56	2	TP282805601	Price	-	-	-	-
4-40	2	TP282806401	Price	TP282811401	Price	TP282816401	Price
5-40	2	TP282807001	Price	-	-	-	-
6-32	2	TP282807401	Price	TP282812401	Price	TP282817401	Price
8-32	3	TP282807801	Price	TP282812801	Price	TP282817801	Price
10-24	3	-	-	TP282813401	Price	TP282818401	Price
10-32	3	TP282808801	Price	TP282813801	Price	TP282818801	Price
1/4-20	3	-	-	TP282830001	Price	TP282840001	Price
1/4-28	3	-	-	TP282830401	Price	TP282840401	Price
5/16-18	3	-	-	TP282830801	Price	TP282840801	Price
5/16-24	3	-	-	TP282831201	Price	TP282841201	Price
3/8-16	3	-	-	TP282831601	Price	TP282841601	Price
3/8-24	3	-	-	TP282831801	Price	TP282841801	Price
7/16-14	3	-	-	TP282832001	Price	-	-
7/16-20	3	-	-	TP282832201	Price	-	-
1/2-13	3	-	-	TP282832401	Price	-	-
1/2-20	3	-	-	TP282832601	Price	-	-
5/8-11	3	-	-	TP282833201	Price	TP282843201	Price
5/8-18	3	-	-	TP282833401	Price	-	-
3/4-10	3	-	-	TP282833601	Price	TP282843601	Price
7/8-9	3	-	-	-	-	TP282844001	Price
1-8	4	-	-	-	-	TP282844401	Price

Spiral Point Plug Style

Metric • Steam Oxide Finish



- For tapping hardened steel
- Best application: 4140, 4340, H13, D2 and 1055 up to 35HRC
- OSG List #289

Size	No. of Flutes	Thread Limit	Order No.	Price
M4x0.70	3	D4	TP282890601	Price
M5x0.80	3	D4	TP282890801	Price
M6x1.0	3	D5	TP282891001	Price
M8x1.25	3	D5	TP282891401	Price
M10x1.5	3	D6	TP282891801	Price
M12x1.75	3	D6	TP282892301	Price
M14x2.0	3	D7	TP282892601	Price
M16x2.0	3	D7	TP282892901	Price
M20x2.5	3	D8	TP282893601	Price

Other H limits and Bright Finish Taps available

HY-PRO® Spiral Fluted With Modified Bottom

Fractional • Steam Oxide Finish



- For tapping hardened steel
- Best application: 4140, 4340, H13, D2 and 1055 up to 35HRC
- OSG List #290

		H2		H3		H5	
Size	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
2-56	2	TP282905601	Price	-	-	-	-
4-40	3	TP282906401	Price	TP282911401	Price	-	-
5-40	3	TP282907001	Price	-	-	-	-
6-32	3	TP282907401	Price	TP282912401	Price	TP282917401	Price
8-32	3	TP282907801	Price	TP282912801	Price	TP282917801	Price
10-24	3	-	-	TP282913401	Price	TP282918401	Price
10-32	3	TP282908801	Price	TP282913801	Price	TP282918801	Price
1/4-20	3	-	-	TP282930001	Price	TP282940001	Price
1/4-28	3	-	-	TP282930401	Price	TP282940401	Price
5/16-18	3	-	-	TP282930801	Price	TP282940801	Price
5/16-24	3	-	-	TP282931201	Price	TP282941201	Price
3/8-16	3	-	-	TP282931601	Price	TP282941601	Price
3/8-24	3	-	-	TP282931801	Price	TP282941801	Price
7/16-14	3	-	-	TP282932001	Price	TP282942001	Price
7/16-20	3	-	-	TP282932201	Price	TP282942201	Price
1/2-13	3	-	-	TP282932401	Price	TP282942401	Price
1/2-20	3	-	-	TP282932601	Price	TP282942601	Price
5/8-11	4	-	-	TP282933201	Price	TP282943201	Price
5/8-18	4	-	-	TP282933401	Price	-	-
3/4-10	4	-	-	TP282933601	Price	TP282943601	Price
3/4-16	4	-	-	TP282933801	Price	TP282943801	Price
7/8-9	4	-	-	-	-	TP282944001	Price
1-8	4	-	-	-	-	TP282944401	Price

HY-PRO® DIN Spiral Flute Taps

Steam Oxide Finish



- DIN overall lengths, modified bottoming (2.5P-3P)
- OSG List #220 (inch) / #229 (metric)

Type - Inch					
Size	Class of Fit	No. of Flutes	OAL	Order No.	Price
4-40	2B	3	56mm	TP282211401	Price
6-32	2B	3	56mm	TP282212401	Price
8-32	2B	3	63mm	TP282217801	Price
10-24	2B	3	70mm	TP282213401	Price
10-32	2B	3	70mm	TP282218801	Price
1/4-20	2B	3	80mm	TP282230001	Price
1/4-28	2B	3	80mm	TP282230401	Price
5/16-18	2B	3	90mm	TP282230801	Price
5/16-24	2B	3	90mm	TP282231201	Price
3/8-16	2B	3	100mm	TP282231601	Price
3/8-24	2B	3	100mm	TP282231801	Price
7/16-14	2B	3	100mm	TP282232001	Price
7/16-20	2B	3	100mm	TP282232201	Price
1/2-13	2B	3	110mm	TP282232401	Price
1/2-20	2B	3	100mm	TP282232601	Price
5/8-11	2B	4	110mm	TP282233201	Price
5/8-18	2B	4	100mm	TP282233401	Price
3/4-10	2B	4	125mm	TP282233601	Price
3/4-16	2B	4	110mm	TP282233801	Price
7/8-9	2B	4	140mm	TP282244001	Price
7/8-14	2B	4	125mm	TP282239201	Price
1-8	2B	4	160mm	TP282244401	Price
1-12	2B	4	140mm	TP282239601	Price
1-1/8-7	2B	4	180mm	TP282247201	Price
1-1/8-12	2B	4	150mm	TP282245001	Price
1-1/4-7	2B	4	180mm	TP282247701	Price
1-1/4-12	2B	4	150mm	TP282245601	Price
1-3/8-6	2B	4	200mm	TP282248001	Price
1-3/8-12	2B	4	170mm	TP282246201	Price
1-1/2-6	2B	4	200mm	TP282248301	Price
1-1/2-12	2B	4	170mm	TP282246801	Price
1-3/4-5	2B	4	220mm	TP282248701	Price
2-4.5	2B	5	250mm	TP282249001	Price

Type - Metric					
Size	Class of Fit	No. of Flutes	OAL	Order No.	Price
M3x0.50	6H	3	56mm	TP282290401	Price
M4x0.70	6H	3	63mm	TP282290601	Price
M5x0.80	6H	3	70mm	TP282290801	Price
M6x1.0	6H	3	80mm	TP282291001	Price
M8x1.25	6H	3	90mm	TP282291401	Price
M10x1.25	6H	3	100mm	TP282291701	Price
M10x1.5	6H	3	100mm	TP282291801	Price
M12x1.25	6H	3	100mm	TP282292101	Price
M12x1.5	6H	3	100mm	TP282292201	Price
M12x1.75	6H	3	110mm	TP282292301	Price
M14x1.5	6H	3	100mm	TP282292501	Price
M14x2.0	6H	3	110mm	TP282292601	Price
M16x1.5	6H	3	100mm	TP282292801	Price
M16x2.0	6H	3	110mm	TP282292901	Price
M18x1.5	6H	4	110mm	TP282293001	Price
M18x2.5	6H	4	125mm	TP282293201	Price
M20x1.5	6H	4	125mm	TP282293401	Price
M20x2.5	6H	4	140mm	TP282293601	Price

Spiral Fluted Taps with Modified Bottom — Metric

Metric • Steam Oxide Finish



- For tapping hardened steel
- Best application: 4140, 4340, H13, D2 and 1055 up to 35HRC
- OSG List #299

Size	Thread Limit	No. of Flutes	Order No.	Price
M4x0.70	D4	3	TP282990601	Price
M5x0.80	D4	3	TP282990801	Price
M6x1.0	D5	3	TP282991001	Price
M8x1.25	D5	3	TP282991401	Price
M10x1.5	D6	3	TP282991801	Price
M12x1.75	D6	3	TP282992301	Price
M14x2.0	D7	3	TP282992601	Price
M16x2.0	D7	3	TP282992901	Price
M20x2.5	D8	4	TP282993601	Price

Other H limits and Bright Finish Taps available

WIDIA High Performance VariTap™ Spiral Flute Taps

HSS-E



- For blind holes
- 45° Helix

Bottoming						
					Oxide	
Size	Thread Limit	No. of Flutes	Thread Length	OAL	Order No.	Price
4-40	H2	2	.510	1.880	**WK316140539**	Price
4-40	H2	2	.560	6.000	**WK315602131**	Price
4-40	H3	2	.510	1.880	**WK316140540**	Price
5-40	H2	2	.580	1.940	**WK316140542**	Price
6-32	H2	2	.380	2.000	**WK316140543**	Price
6-32	H3	2	.380	2.000	**WK316140544**	Price
6-32	H3	2	.380	6.000	**WK315602132**	Price
6-32	H5	2	.380	2.000	**WK316140545**	Price
6-40	H2	2	.380	1.990	**WK316140546**	Price
6-40	H3	2	.380	1.990	**WK316140547**	Price
8-32	H2	3	.380	2.130	**WK316140548**	Price
8-32	H3	3	.380	2.130	**WK316140549**	Price
8-32	H3	3	.380	6.000	**WK315602133**	Price
8-32	H5	3	.380	2.130	**WK316140550**	Price
10-24	H3	3	.500	2.370	**WK316140561**	Price
10-24	H5	3	.500	2.370	**WK316140562**	Price
10-32	H3	3	.500	2.380	**WK316140563**	Price
10-32	H3	3	.500	6.000	**WK315602134**	Price
10-32	H5	3	.500	2.380	**WK316140564**	Price
1/4-20	H3	3	.630	2.500	**WK316140565**	Price
1/4-20	H3	3	.630	6.000	**WK315602135**	Price
1/4-20	H5	3	.630	2.500	**WK316140566**	Price
1/4-28	H3	3	.620	2.490	**WK316140567**	Price
1/4-28	H3	3	.630	6.000	**WK315602136**	Price
1/4-28	H5	3	.620	2.490	**WK316140568**	Price
5/16-18	H3	3	.690	2.720	**WK316140569**	Price
5/16-18	H5	3	.690	2.720	**WK316140570**	Price

Bottoming						
					Oxide	
Size	Thread Limit	No. of Flutes	Thread Length	OAL	Order No.	Price
5/16-18	H3	3	.690	6.000	**WK315602137**	Price
5/16-24	H3	3	.690	2.720	**WK316140571**	Price
5/16-24	H5	3	.690	2.720	**WK316140572**	Price
3/8-16	H3	3	.750	2.940	**WK316140574**	Price
3/8-16	H3	3	.750	6.000	**WK315602138**	Price
3/8-16	H5	3	.750	2.940	**WK316140573**	Price
3/8-24	H3	3	.750	2.940	**WK316140579**	Price
3/8-24	H3	3	.750	6.000	**WK315602139**	Price
3/8-24	H4	3	.750	2.940	**WK316140580**	Price
3/8-24	H5	3	.750	2.940	**WK316140581**	Price
7/16-14	H3	3	.880	3.160	**WK316140582**	Price
7/16-14	H3	3	.880	6.000	**WK315602140**	Price
7/16-14	H5	3	.880	3.160	**WK316140583**	Price
7/16-20	H3	3	.880	3.160	**WK316140584**	Price
7/16-20	H5	3	.880	3.160	**WK316140585**	Price
1/2-13	H3	3	.940	3.380	**WK316140586**	Price
1/2-13	H5	3	.940	3.380	**WK316140587**	Price
1/2-20	H3	3	.940	3.375	**WK316140588**	Price
9/16-12	H3	3	1.000	3.590	**WK316140589**	Price
9/16-18	H3	3	1.000	3.590	**WK316140590**	Price
5/8-11	H3	3	1.090	3.810	**WK316140591**	Price
5/8-11	H5	3	1.090	3.810	**WK316140592**	Price
5/8-18	H3	3	1.090	3.810	**WK316140593**	Price
5/8-18	H5	3	1.090	3.810	**WK316140595**	Price
3/4-10	H3	4	1.220	4.250	**WK316140597**	Price
3/4-16	H3	4	1.220	4.250	**WK316140599**	Price

Semi-Bottoming										
					Oxide		TiCN		TiN	
Size	Thread Limit	No. of Flutes	Thread Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
2-56	H2	2	.390	1.750	**WK316140249**	Price	**WK316140248**	Price	**-**	-
3-48	H2	2	.450	1.820	**WK316140271**	Price	**WK316140250**	Price	**-**	-
4-40	H2	2	.510	1.880	**WK316140273**	Price	**WK316140272**	Price	**-**	-
4-40	H2	2	.560	4.000	**WK315602125**	Price	**-**	-	**-**	-
4-40	H3	2	.510	1.880	**WK316140275**	Price	**WK316140274**	Price	**-**	-
4-48	H2	2	.510	1.880	**WK316140282**	Price	**WK316140281**	Price	**-**	-
5-40	H2	2	.580	1.940	**WK316140284**	Price	**WK316140283**	Price	**-**	-
6-32	H3	3	.380	2.000	**WK315886704**	Price	**WK315886705**	Price	**-**	-
6-32	H3	2	.380	4.000	**WK315602126**	Price	**-**	-	**-**	-
6-32	H5	3	.380	2.000	**WK315886706**	Price	**-**	-	**-**	-
6-40	H2	2	.380	1.990	**WK316140294**	Price	**WK316140293**	Price	**-**	-
6-40	H3	2	.380	1.990	**WK316140295**	Price	**-**	-	**-**	-
8-32	H2	3	.380	2.130	**WK316140297**	Price	**WK316140296**	Price	**-**	-
8-32	H3	3	.380	2.130	**WK315886707**	Price	**WK315886708**	Price	**-**	-
8-32	H3	3	.380	4.000	**WK315602127**	Price	**-**	-	**-**	-
8-32	H5	3	.380	2.130	**WK315886709**	Price	**WK316140299**	Price	**-**	-
8-36	H3	3	.380	2.130	**WK316140305**	Price	**-**	-	**-**	-
10-24	H3	3	.500	2.380	**WK315886710**	Price	**WK315887031**	Price	**-**	-
10-24	H3	3	.500	4.000	**WK315602128**	Price	**-**	-	**-**	-
10-24	H5	3	.500	2.380	**WK315887032**	Price	**WK316140308**	Price	**-**	-
10-32	H3	3	.500	2.380	**WK315887033**	Price	**WK315887034**	Price	**-**	-
10-32	H3	3	.500	4.000	**WK315602129**	Price	**-**	-	**-**	-
10-32	H4	3	.500	2.380	**WK316140314**	Price	**-**	-	**-**	-
10-32	H5	3	.500	2.380	**WK315887035**	Price	**WK316140315**	Price	**-**	-
10-32	H6	3	.500	2.380	**WK316140316**	Price	**-**	-	**-**	-
12-24	H3	3	.500	2.430	**WK315887036**	Price	**WK315887037**	Price	**-**	-
12-28	H3	3	.500	2.370	**WK316140322**	Price	**WK316140321**	Price	**-**	-
1/4-20	2B	3	.590	3.150	**-**	-	**-**	-	**WK316172794**	Price
1/4-20	H3	3	.630	2.500	**WK315887038**	Price	**WK315887039**	Price	**-**	-
1/4-20	H3	3	.630	4.000	**WK315602130**	Price	**-**	-	**-**	-
1/4-20	H3	3	.630	6.000	**WK315602114**	Price	**-**	-	**-**	-
1/4-20	H5	3	.630	2.500	**-**	-	**WK316140183**	Price	**-**	-
1/4-20	H7	3	.630	2.500	**WK316140185**	Price	**WK316140184**	Price	**-**	-
1/4-28	H3	3	.620	2.490	**WK315887041**	Price	**WK315887042**	Price	**-**	-
1/4-28	H4	3	.620	2.490	**WK316140190**	Price	**WK316140188**	Price	**-**	-
1/4-28	H5	3	.620	2.490	**WK315887043**	Price	**WK316140191**	Price	**-**	-
1/4-28	H6	3	.620	2.490	**WK316140192**	Price	**-**	-	**-**	-
1/4-28	H7	3	.620	2.490	**WK316140195**	Price	**WK316140193**	Price	**-**	-
5/16-18	2B	3	.690	2.720	**-**	-	**-**	-	**WK316172802**	Price
5/16-18	H3	3	.690	2.720	**WK315887044**	Price	**WK315887045**	Price	**-**	-
5/16-18	H3	3	.690	6.000	**WK315602116**	Price	**-**	-	**-**	-
5/16-18	H5	3	.690	2.720	**WK315887046**	Price	**WK316140198**	Price	**-**	-
5/16-18	H7	3	.690	2.720	**WK316140201**	Price	**WK316140200**	Price	**-**	-
5/16-24	H3	3	.680	2.710	**WK315887047**	Price	**WK315887048**	Price	**-**	-

(continued next page)

WIDIA High Performance VariTap™ Spiral Flute Taps (cont.)



Semi-Bottoming										
					Oxide		TiCN		TiN	
Size	Thread Limit	No. of Flutes	Thread Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
5/16-24	H5	3	.680	2.710	**WK315887049**	Price	**-**	-	**-**	-
5/16-24	H5	3	.690	2.710	**-**	-	**WK316140214**	Price	**-**	-
5/16-24	H6	3	.690	2.720	**WK316140216**	Price	**WK316140215**	Price	**-**	-
3/8-16	H3	3	.750	2.940	**WK315887050**	Price	**WK315887051**	Price	**-**	-
3/8-16	H3	3	.750	6.000	**WK315602118**	Price	**-**	-	**-**	-
3/8-16	H5	3	.750	2.940	**WK315887052**	Price	**WK316140222**	Price	**-**	-
3/8-24	H3	3	.740	2.920	**WK315887053**	Price	**WK315887054**	Price	**-**	-
3/8-24	H4	3	.750	2.940	**WK316140228**	Price	**WK316140227**	Price	**-**	-
3/8-24	H5	3	.740	2.920	**WK315887055**	Price	**-**	-	**-**	-
3/8-24	H5	3	.750	2.940	**-**	-	**WK316140229**	Price	**-**	-
7/16-14	H3	3	.880	3.160	**WK315887056**	Price	**WK315887057**	Price	**-**	-
7/16-14	H5	3	.880	3.160	**WK315887058**	Price	**WK316140235**	Price	**-**	-
7/16-20	H3	3	.880	3.160	**WK315887059**	Price	**WK315887061**	Price	**-**	-
7/16-20	H5	3	.880	3.160	**WK315887062**	Price	**WK316140240**	Price	**-**	-
1/2-13	2B	3	.940	3.380	**-**	-	**-**	-	**WK316172818**	Price
1/2-13	H3	3	.940	3.380	**WK315887063**	Price	**WK315887064**	Price	**-**	-
1/2-13	H3	3	.940	6.000	**WK315602122**	Price	**-**	-	**-**	-
1/2-13	H5	3	.940	3.380	**WK315887065**	Price	**WK316140422**	Price	**-**	-
1/2-20	H3	3	.940	3.380	**WK315887067**	Price	**WK315887068**	Price	**-**	-
1/2-20	H5	3	.940	3.375	**-**	-	**WK316140427**	Price	**-**	-
1/2-20	H5	3	.940	3.380	**WK315887069**	Price	**-**	-	**-**	-
1/2-20	H7	3	.940	3.375	**WK316140430**	Price	**WK316140429**	Price	**-**	-
9/16-12	H3	3	1.000	3.590	**WK316140436**	Price	**WK316140434**	Price	**-**	-
9/16-18	H3	3	1.000	3.590	**WK316140452**	Price	**WK316140440**	Price	**-**	-
5/8-11	H3	3	1.090	3.810	**WK315887070**	Price	**WK315887071**	Price	**-**	-
5/8-11	H5	3	1.090	3.810	**WK315887072**	Price	**WK316140456**	Price	**-**	-
5/8-18	H3	3	1.090	3.810	**WK315887073**	Price	**WK315887074**	Price	**-**	-
5/8-18	H5	3	1.090	3.810	**WK315887075**	Price	**-**	-	**-**	-
3/4-10	H3	4	1.220	4.250	**WK315887076**	Price	**WK315887077**	Price	**-**	-
3/4-10	H5	4	1.220	4.250	**WK315887078**	Price	**WK316140465**	Price	**-**	-
3/4-16	H3	4	1.220	4.250	**WK315887079**	Price	**WK315887080**	Price	**-**	-
3/4-16	H5	4	1.220	4.250	**WK315887081**	Price	**WK316140467**	Price	**-**	-
7/8-9	H5	4	1.340	4.690	**WK316140473**	Price	**WK316140471**	Price	**-**	-
7/8-14	H4	4	1.340	4.690	**WK316140477**	Price	**WK316140475**	Price	**-**	-
1-8	H5	4	1.500	5.130	**WK315887083**	Price	**-**	-	**-**	-
1-12	H4	4	1.500	5.130	**WK316140481**	Price	**WK316140479**	Price	**-**	-
1-1/8-7	H6	4	1.710	5.440	**WK316140483**	Price	**-**	-	**-**	-
1-1/8-8	H6	4	1.710	5.440	**WK316140484**	Price	**-**	-	**-**	-
1-1/4-7	H6	4	1.710	5.750	**WK316140488**	Price	**-**	-	**-**	-
1-1/4-8	H6	4	1.710	5.750	**WK316140492**	Price	**-**	-	**-**	-
1-3/8-6	H6	5	2.000	6.066	**WK316140498**	Price	**-**	-	**-**	-
1-1/2-6	H6	5	2.000	6.380	**WK316140500**	Price	**-**	-	**-**	-

WIDIA High Performance VariTap™ Spiral Flute Taps

HSS-E

- For blind holes
- 45° Helix



Bottoming						
					Oxide	
Size	Thread Limit	No. of Flutes	Thread Length	OAL	Order No.	Price
M3x0.50	D3	2	14.8mm	49.4mm	**WK316140343**	Price
M3.5x0.60	D4	2	9.7mm	50.5mm	**WK316140344**	Price
M4x0.70	D4	3	9.7mm	53.8mm	**WK316140345**	Price
M5x0.80	D4	3	12.7mm	60.3mm	**WK316140346**	Price
M6x1.0	D5	3	16mm	63.5mm	**WK316140347**	Price
M7x1.0	D5	3	17.5mm	69.2mm	**WK316140348**	Price
M8x1.0	D5	3	17.5mm	68.7mm	**WK316140350**	Price
M8x1.25	D5	3	17.5mm	68.7mm	**WK316140349**	Price
M10x1.25	D5	3	18.9mm	74.1mm	**WK316140392**	Price
M10x1.5	D6	3	19.1mm	74.3mm	**WK316140391**	Price
M12x1.25	D5	3	23.9mm	85.8mm	**WK316140395**	Price
M12x1.5	D6	3	23.9mm	85.9mm	**WK316140394**	Price
M12x1.75	D6	3	23.9mm	85.9mm	**WK316140393**	Price
M14x1.5	D6	3	25.4mm	91.2mm	**WK316140397**	Price
M14x2.0	D7	3	25.4mm	91.2mm	**WK316140396**	Price
M16x1.5	D6	3	27.7mm	96.8mm	**WK316140399**	Price
M16x2.0	D7	3	27.7mm	96.8mm	**WK316140398**	Price
M18x1.5	D6	4	27.7mm	102.4mm	**WK316140400**	Price

WIDIA High Performance VariTap™ Spiral Flute Taps (cont.)



Semi-Bottoming										
					Oxide		TiCN		TiN	
Size	Thread Limit	No. of Flutes	Thread Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
M3x0.50	D3	3	14.8mm	49.4mm	**WK315887084**	Price	**WK315887085**	Price	-	-
M3.5x0.60	D4	2	9.7mm	50.5mm	**WK316141781**	Price	**WK316141630**	Price	-	-
M4x0.70	D4	3	9.7mm	53.8mm	**WK315887086**	Price	**WK315887087**	Price	-	-
M5x0.80	D4	3	12.7mm	60.3mm	**WK315887088**	Price	**WK315887089**	Price	-	-
M6x1.0	D5	3	16mm	63.5mm	**WK315887090**	Price	**WK315887091**	Price	-	-
M7x1.0	D5	3	17.5mm	69.2mm	**WK316141792**	Price	**WK316141791**	Price	-	-
M8x1.0	D5	3	17.5mm	68.7mm	**WK316141797**	Price	**WK316141796**	Price	-	-
M8x1.25	6H	3	17.5mm	68.7mm	-	-	-	-	**WK316172486**	Price
M8x1.25	D5	3	17.5mm	68.7mm	**WK315887092**	Price	**WK315887093**	Price	-	-
M10x1.25	D5	3	18.9mm	74.1mm	**WK316141805**	Price	**WK316141804**	Price	-	-
M10x1.5	D6	3	19.1mm	74.3mm	**WK316141809**	Price	**WK316141808**	Price	-	-
M12x1.25	D5	3	23.9mm	85.8mm	**WK316140508**	Price	**WK316140507**	Price	-	-
M12x1.5	D6	3	23.9mm	85.9mm	**WK316140512**	Price	**WK316140511**	Price	-	-
M12x1.75	D6	3	23.9mm	85.9mm	**WK315887096**	Price	**WK315887097**	Price	-	-
M14x1.5	D6	3	25.4mm	91.2mm	**WK316140518**	Price	**WK316140517**	Price	-	-
M14x2.0	D7	3	25.4mm	91.2mm	**WK316140520**	Price	**WK316140519**	Price	-	-
M16x1.5	D6	3	27.7mm	96.8mm	**WK316140522**	Price	**WK316140521**	Price	-	-
M16x2.0	D7	3	27.7mm	96.8mm	**WK315887098**	Price	**WK315887099**	Price	-	-
M18x1.5	D6	4	27.7mm	102.4mm	**WK316140524**	Price	**WK316140523**	Price	-	-
M18x2.5	D7	4	31mm	102.4mm	**WK316140526**	Price	**WK316140525**	Price	-	-
M20x1.5	D6	4	31mm	113.5mm	**WK316140528**	Price	**WK316140527**	Price	-	-
M20x2.5	D7	4	31mm	113.5mm	**WK316140530**	Price	**WK316140529**	Price	-	-
M22x1.5	D6	4	31mm	119.1mm	**WK316140531**	Price	-	-	-	-
M22x2.5	D7	4	31mm	119.1mm	**WK316140532**	Price	-	-	-	-
M24x3.0	D8	4	31mm	124.7mm	**WK316140534**	Price	-	-	-	-
M27x3.0	D8	4	31mm	130.3mm	**WK316140536**	Price	-	-	-	-

ONYX MORSE TAP ONYX Metric Spiral Pointed Plug Taps



CNC Style • Steam Oxide or Bright Finish

- **Steam Oxide over Nitride** - increases wear resistance, reduces friction, reduces galling and chip welding, improves chip flow and increases tap lubricant retention - Not recommended for non-ferrous materials
- **Bright Finish** - for tapping a wide range of materials, including non-ferrouos materials
- For tapping a wide range of materials up to 28Rc hardness
- **CNC Reduced Neck Design and Shorter Thread Length -** for increased coolant flow to the cutting edge, enhanced chip evacuation and reduced contact between tap and workpiece
- Morse List # 2101M

						Bright Finish		Steam Oxide	
Size	Thread Limit	No. of Flutes	Thread Length (in.)	Neck Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
M2x0.40	D3	2	.3130	.3130	1-15/16	**MT7930910**	Price	**MT7934800**	Price
M2.5x0.45	D3	2	.3130	.3130	1-15/16	**MT7930911**	Price	**MT7934801**	Price
M3x0.50	D3	2	.3130	.3130	1-15/16	**MT7930912**	Price	**MT7934802**	Price
M4x0.70	D4	3	.3750	.3750	2-1/8	**MT7930914**	Price	**MT7934804**	Price
M5x0.80	D4	3	.5000	.3750	2-3/8	**MT7930915**	Price	**MT7934805**	Price
M6x1.0	D5	3	.6250	.3750	2-1/2	**MT7930916**	Price	**MT7934806**	Price
M7x1.0	D5	3	.6880	.4380	2-23/32	**MT7930917**	Price	**MT7934807**	Price
M8x1.0	D5	3	.6880	.4380	2-23/32	**MT7930918**	Price	**MT7934808**	Price
M8x1.25	D5	3	.6880	.4380	2-23/32	**MT7930919**	Price	**MT7934809**	Price
M10x1.25	D5	3	.7500	.5000	2-15/16	**MT7930920**	Price	**MT7934810**	Price
M10x1.5	D6	3	.7500	.5000	2-15/16	**MT7930921**	Price	**MT7934811**	Price
M12x1.25	D5	3	.9380	.7190	3-3/8	**MT7930922**	Price	**MT7934812**	Price
M12x1.75	D6	3	.9380	.7190	3-3/8	**MT7930924**	Price	**MT7934813**	Price
M14x1.5	D6	4	1.0000	.6730	3-19/32	**MT7930925**	Price	**MT7934814**	Price
M14x2.0	D7	4	1.0000	.6730	3-19/32	**MT7930926**	Price	**MT7934815**	Price
M16x1.5	D6	4	1.1250	.6730	3-13/16	**MT7930927**	Price	**MT7934816**	Price
M16x2.0	D7	4	1.1250	.6730	3-13/16	**MT7930928**	Price	**MT7934817**	Price
M18x1.5	D6	4	1.1250	.7190	4-1/32	**MT7930929**	Price	**MT7934818**	Price
M18x2.5	D7	4	1.1250	.7190	4-1/32	**MT7930930**	Price	**MT7934819**	Price
M20x1.5	D6	4	1.1880	.8120	4-15/32	**MT7930931**	Price	**MT7934820**	Price
M20x2.5	D7	4	1.1880	.8120	4-15/32	**MT7930932**	Price	**MT7934821**	Price
M24x1.5	D7	4	1.4220	.7970	4-29/32	**MT7930935**	Price	**MT7934824**	Price
M24x2.0	D7	4	1.4220	.7970	4-29/32	**MT7930936**	Price	**MT7934827**	Price
M24x3.0	D8	4	1.4220	.7970	4-29/32	**MT7930937**	Price	**MT7934825**	Price

EXOTAP® VA3® Spiral Point Plug Style

TiCN Coated

- Designed for low carbon steels, stainless steel 300 & 400, medium-high carbon steels & stainless steel 17-4PH
- OSG List #300



Size	No. of Flutes	Thread Limit	Order No.	Price
4-40	2	H3	**TP251734808**	Price
6-32	2	H3	**TP241730208**	Price
8-32	3	H3	**TP241730308**	Price
10-24	3	H3	**TP241730408**	Price
10-32	3	H3	**TP241730508**	Price
1/4-20	3	H3	**TP241730608**	Price
1/4-20	3	H5	**TP241737408**	Price
5/16-18	3	H3	**TP251730808**	Price
5/16-18	3	H5	**TP251738308**	Price
3/8-16	3	H3	**TP251731008**	Price
3/8-16	3	H5	**TP241738408**	Price
1/2-13	3	H3	**TP241731408**	Price
5/8-11	3	H5	**TP251738908**	Price
5/8-18	3	H3	**TP251731708**	Price

High Performance Spiral Fluted Bottom EXOTAPS®

EXOTAP® VA-3 Spiral Fluted Bottom Taps

- TiCN coated
- Designed for stainless steel 17-4PH, low carbon steels, stainless steel 300 & 400, medium-high carbon steels
- OSG List #303



Size	Chamfer Length	Thread Limits	No. of Flutes	Order No.	Price
2-56	1.5P - 2P	H2	2	**TP24135408**	Price
4-40	1.5P - 2P	H2	3	**TP24135608**	Price
6-32	1.5P - 2P	H3	3	**TP24136108**	Price
8-32	1.5P - 2P	H2	3	**TP24136308**	Price
8-32	1.5P - 2P	H3	3	**TP24136408**	Price
10-24	1.5P - 2P	H3	3	**TP24136708**	Price
1/4-20	1.5P - 2P	H3	3	**TP24137108**	Price
1/4-20	1.5P - 2P	H5	3	**TP24137208**	Price
5/16-24	1.5P - 2P	H4	3	**TP24137808**	Price

High Performance Spiral Fluted Modified Bottom EXOTAPS®

EXOTAP® VA-3 Spiral Fluted Modified Bottom Taps

- TiCN coated
- Designed for stainless steel 17-4PH, low carbon steels, stainless steel 300 & 400, medium-high carbon steels
- OSG List #303



Size	Chamfer Length	Thread Limits	No. of Flutes	Order No.	Price
6-32	2.5P - 3P	H3	3	**TP241732208**	Price
8-32	2.5P - 3P	H3	3	**TP241732308**	Price
10-24	2.5P - 3P	H2	3	**TP241724508**	Price
10-32	2.5P - 3P	H3	3	**TP241732508**	Price
10-32	2.5P - 3P	H5	3	**TP241722508**	Price
1/4-20	2.5P - 3P	H3	3	**TP241732608**	Price
1/4-20	2.5P - 3P	H5	3	**TP241722608**	Price
1/4-28	2.5P - 3P	H3	3	**TP241732708**	Price
5/16-18	2.5P - 3P	H3	3	**TP241732808**	Price
5/16-18	2.5P - 3P	H5	3	**TP241722808**	Price
5/16-24	2.5P - 3P	H3	3	**TP241732908**	Price
3/8-16	2.5P - 3P	H3	3	**TP241733008**	Price

EXOTAP® VA3® Spiral Point Plug Style

Steam Oxide Finish

- Specially designed for tough-to-machine stainless steels
- Best application: 300, 17-4ph stainless steels
- Good application: 400 stainless hardened steel up to 35 HRC
- OSG List #300



		H2		H3		H4	
Size	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
2-56	2	**TP241734601**	Price	**TP241734701**	Price	-	-
4-40	2	**TP241730001**	Price	**TP241734801**	Price	-	-
5-40	2	**TP241730101**	Price	-	-	-	-
6-32	2	**TP241735801**	Price	**TP241730201**	Price	-	-
8-32	3	**TP241735901**	Price	**TP241730301**	Price	-	-
10-24	3	-	-	**TP241730401**	Price	-	-
10-32	3	**TP241736501**	Price	**TP241730501**	Price	-	-
1/4-20	3	**TP241736601**	Price	**TP241730601**	Price	-	-
1/4-28	3	**TP241736701**	Price	**TP241730701**	Price	**TP241736801**	Price
5/16-18	3	-	-	**TP241730801**	Price	-	-
5/16-24	3	-	-	**TP241730901**	Price	**TP241736901**	Price
3/8-16	3	-	-	**TP241731001**	Price	-	-
3/8-24	3	-	-	**TP241731101**	Price	-	-
7/16-14	3	-	-	**TP241731201**	Price	-	-
7/16-20	3	-	-	**TP241731301**	Price	-	-
1/2-13	3	-	-	**TP241731401**	Price	-	-
1/2-20	3	-	-	**TP241731501**	Price	-	-
5/8-11	3	-	-	**TP241731601**	Price	-	-
5/8-18	3	-	-	**TP241731701**	Price	-	-
3/4-10	3	-	-	**TP241731801**	Price	-	-
3/4-16	3	-	-	**TP241731901**	Price	-	-
7/8-9	3	-	-	-	-	**TP241725201**	Price
7/8-14	3	-	-	-	-	**TP241725301**	Price
1-8	3	-	-	-	-	**TP241725401**	Price

VA3® Spiral Point Plug Style

Metric • Steam Oxide Finish

- Specially designed for tough-to-machine stainless steels
- Best application: 300, 17-4ph stainless steels
- Good application: 400 stainless hardened steel up to 35 HRC
- OSG List #342



Size	No. of Flutes	Thread Limit	Order No.	Price
M3x0.50	3	D3	**TP241750101**	Price
M4x0.70	3	D4	**TP241750401**	Price
M5x0.80	3	D4	**TP241750701**	Price
M6x1.0	3	D5	**TP241751001**	Price
M8x1.25	3	D5	**TP241751301**	Price
M10x1.5	3	D6	**TP241751601**	Price
M12x1.75	3	D6	**TP241751901**	Price

EXOTAP® VA3 Spiral Flute Taps

Metric Sizes

- Ideal for stainless steel
- Modified bottom
- OSG List #343



Size	Thread Limits	No. of Flutes	Order No.	Price
M3x0.50	D3	3	**TP241755101**	Price
M4x0.70	D4	3	**TP241755401**	Price
M5x0.80	D4	3	**TP241755701**	Price
M6x1.0	D5	3	**TP241756001**	Price
M8x1.25	D5	3	**TP241756301**	Price
M10x1.5	D6	3	**TP241756601**	Price
M12x1.75	D6	3	**TP241756901**	Price

High Performance Spiral Fluted EXOTAPS®

EXOTAP® VA-3 Spiral Fluted Taps

- Steam oxide finish
- Designed for stainless steels and other exotic alloy steels under 35 HrC
- Available in bottoming and modified bottoming
- OSG List #303



Size	Chamfer Length	Thread Limits	No. of Flutes	Order No.	Price
2-56	1.5P - 2P	H2	2	**TP240135401**	Price
4-40	1.5P - 2P	H3	3	**TP240135701**	Price
4-40	2.5P - 3P	H2	3	**TP241732001**	Price
4-40	2.5P - 3P	H3	3	**TP241722001**	Price
4-48	1.5P - 2P	H2	3	**TP240135801**	Price
5-40	1.5P - 2P	H2	3	**TP240135901**	Price
5-40	2.5P - 3P	H2	3	**TP241732101**	Price
6-32	1.5P - 2P	H3	3	**TP240136101**	Price
6-32	2.5P - 3P	H3	3	**TP241732201**	Price
6-40	1.5P - 2P	H2	3	**TP240136201**	Price
8-32	1.5P - 2P	H3	3	**TP240136401**	Price
8-32	2.5P - 3P	H3	3	**TP241732301**	Price
8-36	1.5P - 2P	H3	3	**TP240136501**	Price
10-24	1.5P - 2P	H3	3	**TP240136701**	Price
10-24	2.5P - 3P	H3	3	**TP241732401**	Price
10-32	1.5P - 2P	H3	3	**TP240136901**	Price
10-32	2.5P - 3P	H3	3	**TP241732501**	Price
1/4-20	1.5P - 2P	H3	3	**TP240137101**	Price
1/4-20	2.5P - 3P	H3	3	**TP241732601**	Price
1/4-28	1.5P - 2P	H3	3	**TP240137301**	Price
1/4-28	2.5P - 3P	H3	3	**TP241732701**	Price
5/16-18	1.5P - 2P	H3	3	**TP240137501**	Price
5/16-18	2.5P - 3P	H3	3	**TP241732801**	Price
5/16-24	1.5P - 2P	H3	3	**TP240137701**	Price
5/16-24	2.5P - 3P	H3	3	**TP241732901**	Price
3/8-16	1.5P - 2P	H3	3	**TP240137901**	Price
3/8-16	2.5P - 3P	H3	3	**TP241733001**	Price
3/8-16	2.5P - 3P	H5	3	**TP241723001**	Price
3/8-24	1.5P - 2P	H3	3	**TP240138101**	Price
3/8-24	2.5P - 3P	H3	3	**TP241733101**	Price
7/16-14	1.5P - 2P	H3	3	**TP240138301**	Price
7/16-14	2.5P - 3P	H3	3	**TP241733201**	Price
7/16-14	2.5P - 3P	H5	3	**TP241723201**	Price
7/16-20	1.5P - 2P	H3	3	**TP240138401**	Price
7/16-20	1.5P - 2P	H5	3	**TP240138501**	Price
7/16-20	2.5P - 3P	H3	3	**TP241733301**	Price
7/16-20	2.5P - 3P	H5	3	**TP241723301**	Price
1/2-13	1.5P - 2P	H3	3	**TP240138601**	Price
1/2-13	2.5P - 3P	H3	3	**TP241733401**	Price
1/2-13	2.5P - 3P	H5	3	**TP241723401**	Price
1/2-20	1.5P - 2P	H3	3	**TP240138801**	Price
1/2-20	2.5P - 3P	H3	3	**TP241733501**	Price
1/2-20	2.5P - 3P	H5	3	**TP241723501**	Price
5/8-11	1.5P - 2P	H3	4	**TP240139201**	Price
5/8-11	2.5P - 3P	H3	4	**TP241733601**	Price
5/8-18	1.5P - 2P	H3	4	**TP240139401**	Price
5/8-18	2.5P - 3P	H3	4	**TP241733701**	Price
3/4-10	1.5P - 2P	H3	4	**TP240139601**	Price
3/4-10	2.5P - 3P	H3	4	**TP241733801**	Price
3/4-16	1.5P - 2P	H3	4	**TP240139801**	Price
3/4-16	2.5P - 3P	H3	4	**TP241733901**	Price
7/8-9	2.5P - 3P	H4	4	**TP241726201**	Price
7/8-14	1.5P - 2P	H4	4	**TP240140001**	Price
7/8-14	2.5P - 3P	H4	4	**TP241726301**	Price
1-8	2.5P - 3P	H4	4	**TP241726401**	Price

ONYX Spiral Pointed Plug Taps



CNC Style • Steam Oxide or Bright Finish

- **Steam Oxide over Nitride** - increases wear resistance, reduces friction, reduces galling and chip welding, improves chip flow and increases tap lubricant retention - not recommended for non-ferrous materials
- **Bright Finish** for tapping a wide range of materials including non-ferrous materials
- For tapping a wide range of materials up to 28Rc hardness
- **CNC Reduced Neck Design and Shorter Thread Length -** for increased coolant flow to the cutting edge, enhanced chip evacuation and reduced contact between tap and workpiece
- Morse List # 2101M

						Bright Finish		Steam Oxide	
Size	Thread Limits	No. of Flutes	Thread Length (in.)	Neck Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
4-40	H2	2	.3130	.2500	1-7/8	**MT7930820**	Price	**MT7934700**	Price
6-32	H3	2	.3750	.3130	2	**MT7930822**	Price	**MT7934701**	Price
8-32	H3	2	.3750	.3750	2-1/8	**MT7930824**	Price	**MT7934702**	Price
8-32	H3	3	.3750	.3750	2-1/8	**MT7930826**	Price	**MT7934703**	Price
10-24	H3	2	.5000	.3750	2-3/8	**MT7930827**	Price	**MT7934704**	Price
10-24	H3	3	.5000	.3750	2-3/8	**MT7930828**	Price	**MT7934705**	Price
10-32	H3	2	.5000	.3750	2-3/8	**MT7930829**	Price	**MT7934706**	Price
10-32	H3	3	.5000	.3750	2-3/8	**MT7930830**	Price	**MT7934707**	Price
12-24	H3	3	.5000	.3750	2-3/8	**MT7930831**	Price	**MT7934708**	Price
1/4-20	H3	2	.6250	.3750	2-1/2	**MT7930833**	Price	**MT7934710**	Price
1/4-20	H3	3	.6250	.3750	2-1/2	**MT7930834**	Price	**MT7934711**	Price
1/4-28	H3	3	.6250	.3750	2-1/2	**MT7930836**	Price	**MT7934713**	Price
5/16-18	H3	3	.6880	.4380	2-23/32	**MT7930838**	Price	**MT7934714**	Price
5/16-24	H3	3	.6880	.4380	2-23/32	**MT7930840**	Price	**MT7934715**	Price
3/8-16	H3	3	.7500	.5000	2-15/16	**MT7930841**	Price	**MT7934716**	Price
3/8-24	H3	3	.7500	.5000	2-15/16	**MT7930842**	Price	**MT7934717**	Price
7/16-14	H3	3	.8750	.5630	3-5/32	**MT7930843**	Price	**MT7934718**	Price
7/16-20	H3	3	.8750	.5630	3-5/32	**MT7930844**	Price	**MT7934719**	Price
1/2-13	H3	3	.9380	.7190	3-3/8	**MT7930845**	Price	**MT7934720**	Price
1/2-20	H3	3	.9380	.7190	3-3/8	**MT7930846**	Price	**MT7934721**	Price
9/16-12	H3	4	1.0000	.6730	3-19/32	**MT7930847**	Price	**MT7934722**	Price
5/8-11	H3	4	1.1250	.6730	3-13/16	**MT7930849**	Price	**MT7934724**	Price
5/8-18	H3	4	1.1250	.6730	3-13/16	**MT7930850**	Price	**MT7934725**	Price
3/4-10	H3	4	1.2190	.7660	4-1/4	**MT7930851**	Price	**MT7934726**	Price
3/4-16	H3	4	1.2190	.7660	4-1/4	**MT7930852**	Price	**MT7934727**	Price
7/8-9	H4	4	1.3440	.8750	4-11/16	**MT7930853**	Price	**MT7934728**	Price
7/8-14	H4	4	1.3440	.8750	4-11/16	**MT7930854**	Price	**MT7934729**	Price
1-8	H4	4	1.5000	1.0000	5-1/8	**MT7930855**	Price	**MT7934730**	Price
1-12	H4	4	1.5000	1.0000	5-1/8	**MT7930856**	Price	**MT7934731**	Price
1-14	H4	4	1.5000	1.0000	5-1/8	**MT7930857**	Price	**MT7934742**	Price
1-1/8-7	H4	4	1.7190	.8430	5-7/16	**MT7930858**	Price	**MT7934732**	Price
1-1/8-12	H4	4	1.7190	.8430	5-7/16	**MT7930859**	Price	**MT7934733**	Price
1-1/4-7	H4	4	1.7190	.8430	5-3/4	**MT7930860**	Price	**MT7934734**	Price
1-1/4-12	H4	4	1.7190	.8430	5-3/4	**MT7930861**	Price	**MT7934735**	Price
1-3/8-6	H4	4	2.0000	1.0000	6-1/16	**MT7930862**	Price	**MT7934736**	Price
1-3/8-12	H4	4	2.0000	1.0000	6-1/16	**MT7930863**	Price	**MT7934737**	Price
1-1/2-6	H4	6	2.0000	1.0000	6-3/8	**MT7930864**	Price	**MT7934738**	Price
1-1/2-12	H4	6	2.0000	1.0000	6-3/8	**MT7930865**	Price	**MT7934739**	Price

EXOTAP® VA-3 Spiral Pointed Taps - Long Shank

Steam Oxide Finish

- Ideal for stainless steel
- OSG List #397



Size	Thread Limits	No. of Flutes	Neck Length	OAL (in.)	Order No.	Price
4-40	H2	2	.8430	4	**TP241764001**	Price
6-32	H3	2	1.031	4	**TP241764101**	Price
6-32	H3	2	1.031	6	**TP241764201**	Price
8-32	H3	3	1.125	4	**TP241764301**	Price
8-32	H3	3	1.125	6	**TP241764401**	Price
10-24	H3	3	1.312	4	**TP241764501**	Price
10-24	H3	3	1.312	6	**TP241764601**	Price
10-32	H3	3	1.312	4	**TP241764701**	Price
10-32	H3	3	1.312	6	**TP241764801**	Price
1/4-20	H3	3	1.500	4	**TP241764901**	Price
1/4-20	H3	3	1.500	6	**TP241765001**	Price

Size	Thread Limits	No. of Flutes	Neck Length	OAL (in.)	Order No.	Price
1/4-28	H3	3	1.500	6	**TP241765101**	Price
5/16-18	H3	3	1.687	6	**TP241765201**	Price
5/16-24	H3	3	1.687	6	**TP241765701**	Price
3/8-16	H3	3	1.875	6	**TP241765301**	Price
3/8-24	H3	3	1.875	6	**TP241765801**	Price
7/16-14	H3	3	-	6	**TP241765401**	Price
7/16-20	H3	3	-	6	**TP241765901**	Price
1/2-13	H3	3	-	6	**TP241765501**	Price
1/2-20	H3	3	-	6	**TP241766001**	Price
5/8-11	H3	3	-	6	**TP241765601**	Price

EXOTAP® VA-3 Spiral Fluted Taps - Long Shank

Steam Oxide Finish

- A special relief combined with the flute construction provides free cutting, rapid chip removal in stainless steel
- Modified bottoming
- OSG List #398



Size	Thread Limits	Neck Length	No. of Flutes	OAL (in.)	Order No.	Price
10-24	H3	1.312	3	4	**TP241767101**	Price
10-24	H3	1.312	3	6	**TP241767301**	Price
10-32	H3	1.312	3	4	**TP241767501**	Price
10-32	H3	1.312	3	6	**TP240144001†**	Price
10-32	H3	1.312	3	6	**TP241767701**	Price
1/4-20	H3	1.500	3	4	**TP241767901**	Price
1/4-20	H3	1.500	3	6	**TP240144101†**	Price
1/4-20	H3	1.500	3	6	**TP241768101**	Price
5/16-18	H3	1.687	3	6	**TP240144301†**	Price
5/16-18	H3	1.687	3	6	**TP241768501**	Price
5/16-24	H3	1.687	3	6	**TP241768601**	Price
3/8-16	H3	1.875	3	6	**TP240144401†**	Price
3/8-16	H3	1.875	3	6	**TP241768701**	Price
3/8-24	H3	1.875	3	6	**TP240144501†**	Price
3/8-24	H3	1.875	3	6	**TP241768801**	Price

†Bottoming style

HY-PRO® VXL-W Spiral Fluted Taps

Steam Oxide Finish

- Premium vanadium high speed steel
- For vertical applications
- DIN overall length
- Modified bottom chamfer
- Recommended for cast iron, carbon steels, alloy steels and hardened steels up to 35 HrC
- OSG List #13117



Size	Thread Limit	No. of Flutes	OAL	Order No.	Price
M16x2.0	D7	4	110mm	**TP221311702401**	Price
M16x2.0	D7	4	180mm	**TP221311702501**	Price
M16x2.0	D17	4	110mm	**TP221311702301**	Price
M20x2.5	D8	4	140mm	**TP221311700101**	Price
M20x2.5	D8	4	200mm	**TP221311700201**	Price
M24x3.0	D9	5	160mm	**TP221311700401**	Price
M24x3.0	D9	5	200mm	**TP221311700501**	Price
M27x3.0	D9	5	160mm	**TP221311700601**	Price
M30x3.5	D10	5	180mm	**TP221311700801**	Price
M33x3.5	D10	5	180mm	**TP221311701001**	Price
M36x4.0	D11	5	250mm	**TP221311701301**	Price

HY-PRO® -VXL Spiral Fluted Taps

Steam Oxide Finish

- Premium vanadium high speed steel
- For vertical applications
- DIN overall length
- Modified bottom chamfer
- Recommended for cast iron, carbon steels, alloy steels and hardened steels up to 35 HrC
- OSG List #13015



Size	Thread Limit	No. of Flutes	OAL	Order No.	Price
1/2-13	2B	4	110mm	**TP491301502601**	Price
9/16-18	2B	4	100mm	**TP491301500201**	Price
5/8-11	2B	4	110mm	**TP491301500301**	Price
3/4-10	2B	4	125mm	**TP491301500501**	Price
7/8-9	2B	4	140mm	**TP491301500601**	Price
1-8	2B	4	160mm	**TP491301500701**	Price
1-12	2B	5	140mm	**TP491301503001**	Price
1-1/8-7	2B	4	180mm	**TP491301500901**	Price
1-1/4-7	2B	5	180mm	**TP491301501201**	Price
1-3/8-8	2B	5	200mm	**TP491301501701**	Price
1-1/2-6	2B	5	200mm	**TP491301501801**	Price
1-1/2-8	2B	5	200mm	**TP491301502001**	Price
1-5/8-8	2B	6	200mm	**TP491301502101**	Price
1-7/8-8	2B	6	225mm	**TP491301502301**	Price

HY-PRO® SEVEN Spiral Point Plug Taps

Bright Finish

- 2B & 3B Class of fit
- Designed for tapping aluminum, mild steels and medium carbon steels
- Short thread geometry



- Results in highest fast speed tapping & max tool life
- OSG List #288

Inch					
		2B		Price	
Size	No. of Flutes	Order No.	Price	Order No.	Price
0-80	2	**TP202884100**	Price	-	-
2-56	2	**TP202884400**	Price	-	-
4-40	2	**TP202885000**	Price	**TP202880000**	Price
4-48	2	**TP202886400**	Price	-	-
6-32	2	**TP202885200**	Price	**TP202880200**	Price
8-32	2	**TP202885300**	Price	**TP202880300**	Price
10-24	2	**TP202885400**	Price	**TP202880400**	Price
10-32	2	**TP202885500**	Price	**TP202880500**	Price
12-24	2	**TP202886800**	Price	-	-
1/4-20	2	**TP202885600**	Price	**TP202880600**	Price
1/4-28	3	**TP202885700**	Price	**TP202880700**	Price
5/16-18	2	**TP202885800**	Price	**TP202880800**	Price
5/16-24	3	**TP202885900**	Price	**TP202880900**	Price
3/8-16	3	**TP202886000**	Price	**TP202881000**	Price
3/8-24	3	**TP202886100**	Price	**TP202881100**	Price

Inch					
		2B		Price	
Size	No. of Flutes	Order No.	Price	Order No.	Price
7/16-14	3	**TP202886900**	Price	-	-
7/16-20	3	**TP202887000**	Price	-	-
1/2-13	3	**TP202886200**	Price	**TP202881200**	Price
1/2-20	3	**TP202886300**	Price	**TP202881300**	Price

Metric			
		6H	
Size	No. of Flutes	Order No.	Price
M3x0.50	2	**TP202888000**	Price
M4x0.70	2	**TP202888100**	Price
M5x0.80	2	**TP202888200**	Price
M6x1.0	3	**TP202888300**	Price
M8x1.25	3	**TP202888400**	Price
M10x1.5	3	**TP202888500**	Price
M12x1.75	3	**TP202888600**	Price

HY-PRO® SEVEN Spiral Flute Bottoming Taps



Bright Finish

- 2B & 6H class of fit
- Designed for tapping aluminum, mild steels and medium carbon steels
- Highest speed tapping without chip packing
- OSG List #298

Size Type - Inch				
Size	No. of Flutes	Thread Limit	Order No.	Price
4-40	2	2B	**TP212985000**	Price
6-32	2	2B	**TP212985200**	Price
8-32	3	2B	**TP212985300**	Price
8-36	3	2B	**TP212986700**	Price
10-24	3	2B	**TP212985400**	Price
10-32	3	2B	**TP212985500**	Price
1/4-20	3	2B	**TP212985600**	Price
1/4-28	3	2B	**TP212985700**	Price
5/16-18	3	2B	**TP212985800**	Price
5/16-24	3	2B	**TP212985900**	Price
3/8-16	3	2B	**TP212986000**	Price
3/8-24	3	2B	**TP212986100**	Price
7/16-14	3	2B	**TP212986900**	Price

Size Type - Inch				
Size	No. of Flutes	Thread Limit	Order No.	Price
7/16-20	3	2B	**TP212987000**	Price
1/2-13	3	2B	**TP212986200**	Price
1/2-20	3	2B	**TP212986300**	Price

Size Type - Metric				
Size	No. of Flutes	Thread Limit	Order No.	Price
M3x0.50	2	6H	**TP212988000**	Price
M4x0.70	3	6H	**TP212988100**	Price
M5x0.80	3	6H	**TP212988200**	Price
M6x1.0	3	6H	**TP212988300**	Price
M8x1.25	3	6H	**TP212988400**	Price
M10x1.5	3	6H	**TP212988500**	Price
M12x1.75	3	6H	**TP212988600**	Price

EXOTIN® Spiral Point Plug Style



TiN Coated

- Designed for tough-to-machine steels
- Best for use with 1065 high carbon steel, 400 & 17-4ph stainless steel
- OSG List #320

Size	Thread Limits	No. of Flutes	Order No.	Price
4-40	H2	2	**TP231740005**	Price
5-40	H2	2	**TP231740105**	Price
6-32	H3	2	**TP231740205**	Price
8-32	H3	3	**TP231740305**	Price
10-24	H3	3	**TP231740405**	Price
10-32	H3	3	**TP231740505**	Price
1/4-20	H3	3	**TP231740605**	Price
1/4-28	H3	3	**TP231740705**	Price
5/16-18	H3	3	**TP231740805**	Price
5/16-24	H3	3	**TP231740905**	Price

Size	Thread Limits	No. of Flutes	Order No.	Price
3/8-16	H3	3	**TP231741005**	Price
3/8-24	H3	3	**TP231741105**	Price
7/16-14	H3	3	**TP231741205**	Price
7/16-20	H3	3	**TP231741305**	Price
1/2-13	H3	3	**TP231741405**	Price
1/2-20	H3	3	**TP231741505**	Price
5/8-11	H3	3	**TP231741605**	Price
5/8-18	H3	3	**TP231741705**	Price
3/4-10	H3	3	**TP231741805**	Price
3/4-16	H3	3	**TP231741905**	Price

WIDIA High Performance Plug Taps



HSS-E • Spiral Point

- Uncoated
- TiN coated
- TiCN coated
- Oxide

					Oxide		TiCN		TiN		Uncoated	
Size	Thread Limit	No. of Flutes	Thread Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
M2x0.40	6H	2	7mm	45mm	**WK315366648**	Price	-	-	-	-	-	-
M3x0.50	D3	2	14.8mm	49.3mm	**WK315362589**	Price	**WK315362670**	Price	-	-	-	-
M3x0.50	D3	3	14.8mm	49.3mm	**WK315631640**	Price	**WK315631641**	Price	-	-	-	-
M3.5x0.60	D4	3	9.7mm	50.5mm	**WK315631646**	Price	**WK315631647**	Price	-	-	-	-
M4x0.70	D4	2	9.7mm	53.8mm	**WK315362691**	Price	**WK315362692**	Price	**WK315362693**	Price	-	-
M4x0.70	D4	3	9.7mm	53.8mm	**WK315631651**	Price	**WK315631652**	Price	-	-	-	-
M5x0.50	6H	2	12mm	70mm	-	-	-	-	-	-	**WK315368607**	Price
M5x0.80	D4	2	12.7mm	60.3mm	**WK315362697**	Price	**WK315362698**	Price	**WK315362699**	Price	-	-
M5x0.80	D4	3	12.7mm	60.3mm	**WK315631658**	Price	**WK315631659**	Price	-	-	-	-
M6x1.0	6H	3	12mm	80mm	-	-	**WK315368178**	Price	-	-	-	-
M6x1.0	D5	3	16mm	63.5mm	**WK315362703**	Price	**WK315362704**	Price	**WK315362705**	Price	**WK315362706**	Price
M7x1.0	D5	3	17.5mm	69.2mm	**WK315362709**	Price	**WK315362710**	Price	-	-	-	-
M8x1.0	D5	3	17.5mm	68.7mm	**WK315362714**	Price	**WK315362715**	Price	-	-	-	-
M8x1.25	6H	3	15mm	89.8mm	**WK315368179**	Price	**WK315368180**	Price	-	-	-	-
M8x1.25	D5	3	17.5mm	68.9mm	**WK315362720**	Price	**WK315362722**	Price	**WK315362723**	Price	**WK315362724**	Price
M10x1.0	D5	3	19.1mm	74mm	**WK315362729**	Price	**WK315362730**	Price	-	-	-	-
M10x1.25	D5	3	18.9mm	74.1mm	**WK315367304**	Price	**WK315367305**	Price	-	-	-	-
M10x1.5	6H	3	18mm	100mm	**WK315368183**	Price	**WK315368480**	Price	-	-	-	-
M10x1.5	D6	3	19.1mm	74.3mm	**WK315367309**	Price	**WK315367340**	Price	-	-	-	-
M12x1.25	D6	3	23.9mm	85.8mm	**WK315367345**	Price	**WK315367346**	Price	-	-	-	-
M12x1.5	D6	3	23.9mm	85.9mm	**WK315367350**	Price	**WK315367351**	Price	-	-	-	-
M12x1.75	D6	3	23.9mm	85.9mm	**WK315367355**	Price	**WK315367356**	Price	-	-	-	-

(continued next page)

WIDIA High Performance Plug Taps (cont.)



					Oxide		TiCN		TiN		Uncoated	
Size	Thread Limit	No. of Flutes	Thread Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
M14x1.5	D6	3	25.4mm	91.2mm	**WK315367361**	Price	**WK315367362**	Price	-	-	-	-
M14x2.0	D7	3	25.4mm	91.2mm	**WK315367364**	Price	**WK315367365**	Price	-	-	-	-
M16x1.5	D6	3	27.7mm	96.8mm	**WK315366475**	Price	**WK315366476**	Price	-	-	-	-
M16x2.0	D7	3	27.7mm	96.8mm	**WK315366479**	Price	**WK315366480**	Price	-	-	-	-
M18x1.5	D6	3	27.7mm	102.4mm	**WK315366483**	Price	**WK315366485**	Price	-	-	-	-
M18x2.5	D7	3	31mm	102.4mm	**WK315366487**	Price	**WK315366488**	Price	-	-	-	-
M20x1.5	D6	3	31mm	113.5mm	**WK315366490**	Price	**WK315366491**	Price	-	-	-	-
M20x2.5	D7	3	31mm	113.5mm	**WK315366492**	Price	**WK315366493**	Price	-	-	-	-
M22x1.5	D6	3	31mm	119.1mm	**WK315366494**	Price	-	-	-	-	-	-
M22x2.5	D7	3	31mm	119.1mm	**WK315366495**	Price	-	-	-	-	-	-
M24x2.0	D7	3	31mm	124.7mm	**WK315366496**	Price	-	-	-	-	-	-
M24x3.0	D8	3	31mm	124.7mm	**WK315366497**	Price	-	-	-	-	-	-
M27x1.5	D7	4	31mm	130.3mm	**WK315366498**	Price	-	-	-	-	-	-
M27x3.0	D8	4	31mm	130.3mm	**WK315366499**	Price	-	-	-	-	-	-
M30x1.5	D6	4	31mm	138.2mm	**WK315366510**	Price	-	-	-	-	-	-
M30x3.5	D9	4	31mm	138.2mm	**WK315366511**	Price	-	-	-	-	-	-

EXOTAP® DC Bottom Taps

TiCN Coated

- Designed for tapping cast aluminum and cast iron
- Recommended use with synchronized spindle
- DIN overall length
- VC10 material to achieve high-speed tapping & long tool life
- OSG List #10052 (inch) / #11052 (metric)



Size Type - Inch					
Size	Thread Limits	No. of Flutes	OAL	Order No.	Price
1/4-20	H3	4	80mm	**TP291005200108**	Price
1/4-28	H3	4	80mm	**TP291005200308**	Price
5/16-18	H3	4	90mm	**TP291005200408**	Price
5/16-24	H3	4	90mm	**TP291005200608**	Price
3/8-16	H3	4	100mm	**TP291005200708**	Price
3/8-24	H3	4	100mm	**TP291005200908**	Price
7/16-14	H3	4	100mm	**TP291005201008**	Price
7/16-20	H3	4	100mm	**TP291005201208**	Price
1/2-13	H3	4	110mm	**TP291005201408**	Price
1/2-20	H3	4	100mm	**TP291005201608**	Price
9/16-12	H3	5	110mm	**TP291005201808**	Price
9/16-18	H3	5	100mm	**TP291005202008**	Price
5/8-11	H3	5	110mm	**TP291005202208**	Price
5/8-18	H3	5	100mm	**TP291005202408**	Price
3/4-10	H3	5	125mm	**TP291005202608**	Price

Size Type - Metric					
Size	Thread Limits	No. of Flutes	OAL	Order No.	Price
M6x1.0	D5	3	80mm	**TP291105200108**	Price
M8x1.25	D5	4	90mm	**TP291105200208**	Price
M10x1.0	D5	4	90mm	**TP291105200308**	Price
M10x1.25	D6	4	100mm	**TP291105200408**	Price
M10x1.5	D6	4	100mm	**TP291105200508**	Price
M12x1.25	D6	4	100mm	**TP291105200608**	Price
M12x1.5	D6	4	100mm	**TP291105200708**	Price
M12x1.75	D6	4	110mm	**TP291105200808**	Price
M14x1.5	D7	5	100mm	**TP291105200908**	Price
M14x2.0	D7	5	110mm	**TP291105201008**	Price

EXOTAP® DC Oil Bottom Taps

Coolant Thru • TiCN Coated

- Designed for tapping cast aluminum and cast iron
- Recommended use with synchronized spindle
- DIN overall length
- VC10 material to achieve high-speed tapping & long tool life
- OSG List #10053 (inch) / #11053 (metric)



Size Type - Inch					
Size	Thread Limits	No. of Flutes	OAL	Order No.	Price
1/4-20	H3	4	80mm	**TP291005300108**	Price
1/4-28	H3	4	80mm	**TP291005300308**	Price
5/16-18	H3	4	90mm	**TP291005300408**	Price
5/16-24	H3	4	90mm	**TP291005300608**	Price
3/8-16	H3	4	100mm	**TP291005300708**	Price
3/8-24	H3	4	100mm	**TP291005300908**	Price
7/16-14	H3	4	100mm	**TP291005301008**	Price
7/16-20	H3	4	100mm	**TP291005301208**	Price
1/2-13	H3	4	110mm	**TP291005301408**	Price
1/2-20	H3	4	100mm	**TP291005301608**	Price

Size Type - Metric					
Size	Thread Limits	No. of Flutes	OAL	Order No.	Price
M6x1.0	D5	3	80mm	**TP291105300108**	Price
M8x1.25	D5	4	90mm	**TP291105300208**	Price
M10x1.25	D6	4	100mm	**TP291105300308**	Price
M10x1.5	D6	4	100mm	**TP291105300408**	Price
M12x1.5	D6	4	100mm	**TP291105300508**	Price
M12x1.75	D6	4	110mm	**TP291105300608**	Price
M14x1.5	D7	5	100mm	**TP291105300708**	Price
M14x2.0	D7	5	110mm	**TP291105300808**	Price

EXOTAP® DC Oil Bottom Taps



Coolant Thru • TiCN Coated

- Designed for tapping cast aluminum and cast iron
- Recommended use with synchronized spindle
- DIN shank
- DIN overall length
- VC10 material to achieve high-speed tapping & long tool life
- OSG List #11055

Size	Thread Limits	No. of Flutes	OAL	Order No.	Price
M6x1.0	D5	3	80mm	**TP291105500108**	Price
M8x1.25	D5	4	90mm	**TP291105500208**	Price

Size	Thread Limits	No. of Flutes	OAL	Order No.	Price
M10x1.5	D6	4	100mm	**TP291105500308**	Price
M12x1.75	D6	4	110mm	**TP291105500408**	Price

EXOTAP® DC Oil Bottom Taps

Coolant Thru • TiCN Coated

- Designed for tapping cast aluminum and cast iron
- Provides excellent tool life
- Recommended use with synchronized spindle
- OSG List #10057 (inch) / #11057 (metric)



Size Type - Inch				
Size	Thread Limits	No. of Flutes	Order No.	Price
1/4-20	H3	4	**TP291005700108**	Price
1/4-28	H3	4	**TP291005700308**	Price
5/16-18	H3	4	**TP291005700408**	Price
5/16-24	H3	4	**TP291005700608**	Price
3/8-16	H3	4	**TP291005700708**	Price
3/8-24	H3	4	**TP291005700908**	Price
7/16-14	H3	4	**TP291005701008**	Price
7/16-20	H3	4	**TP291005701208**	Price
1/2-13	H3	4	**TP291005701408**	Price
1/2-20	H3	4	**TP291005701608**	Price

Size Type - Metric				
Size	Thread Limits	No. of Flutes	Order No.	Price
M6x1.0	D5	3	**TP291105700108**	Price
M8x1.25	D5	4	**TP291105700208**	Price
M10x1.25	D6	4	**TP291105700308**	Price
M10x1.5	D6	4	**TP291105700408**	Price
M12x1.5	D6	4	**TP291105700508**	Price
M12x1.75	D6	4	**TP291105700608**	Price
M14x1.5	D7	5	**TP291105700708**	Price
M14x2.0	D7	5	**TP291105700808**	Price

EXOTAP® VC-10TI Spiral Point and Spiral Flute Taps



TiCN Coated

- High performance taps for titanium alloys
- VC-10 premium powdered high speed steel
- Designed for use in titanium alloys and nickel based alloys such as inconel and hastelloy
- Hardened steels up to 42 HrC
- OSG List #313Ti (spiral fluted)
- OSG List #312Ti (spiral pointed)

			Spiral Flute		Spiral Flute Mod.Bottoming		Spiral Point Plug	
			313TI		313TI		Price	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
2-56	H2	3	-	-	**TP251305710108**	Price	**TP251105610108**	Price
4-40	H2	3	-	-	**TP251305710208**	Price	**TP251105610208**	Price
6-32	H2	3	-	-	**TP251305710408**	Price	**TP251105610408**	Price
6-32	H3	3	-	-	**TP251305710508**	Price	**TP251105610508**	Price
6-40	H2	3	-	-	**TP251305710608**	Price	**TP251105610608**	Price
8-32	H2	3	-	-	**TP251305710708**	Price	**TP251105610708**	Price
8-32	H3	3	-	-	**TP251305710808**	Price	**TP251105610808**	Price
8-36	H2	3	-	-	**TP251305710908**	Price	**TP251105610908**	Price
10-24	H3	3	-	-	**TP251305711008**	Price	**TP251105611008**	Price
10-32	H2	3	-	-	**TP251305711108**	Price	**TP251105611108**	Price
10-32	H3	3	-	-	**TP251305711208**	Price	**TP251105611208**	Price
1/4-20	H3	3	-	-	**TP251305711308**	Price	**TP251105611308**	Price
1/4-20	H5	3	**TP251305711408**	Price	-	-	-	-
1/4-28	H3	3	-	-	**TP251305711508**	Price	**TP251105611508**	Price
1/4-28	H4	3	**TP251305711608**	Price	-	-	-	-
5/16-18	H3	3	-	-	**TP251305711708**	Price	**TP251105611708**	Price
5/16-18	H5	3	-	-	-	-	**TP251105611808**	Price
5/16-24	H3	3	-	-	**TP251305711908**	Price	**TP251105611908**	Price
3/8-16	H3	3	-	-	**TP251305712108**	Price	**TP251105612108**	Price
3/8-16	H5	3	**TP251305712208**	Price	-	-	-	-
3/8-24	H3	3	-	-	**TP251305712308**	Price	**TP251105612308**	Price
7/16-14	H3	3	-	-	**TP251305712508**	Price	**TP251105612508**	Price
7/16-20	H3	3	-	-	**TP251305712708**	Price	**TP251105612708**	Price
1/2-13	H3	3	-	-	**TP251305712908**	Price	**TP251105612908**	Price
1/2-13	H5	3	**TP251305713008**	Price	-	-	-	-
1/2-20	H3	3	-	-	**TP251305713108**	Price	**TP251105613108**	Price

EXOTAP® VC-10TI Spiral Point and Spiral Flute Taps (cont.)



			Spiral Flute		Spiral Flute Mod.Bottoming		Spiral Point Plug	
			313TI		313TI		Price	
Size	Thread Limits	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
9/16-18	H3	3	-	-	TP251305713308	Price	TP251105613308	Price
5/8-11	H3	3	-	-	-	-	TP251105613508	Price
5/8-11	H3	4	-	-	TP251305713508	Price	-	-
5/8-18	H3	3	-	-	-	-	TP251105613608	Price
5/8-18	H3	4	-	-	TP251305713608	Price	-	-
3/4-10	H5	4	-	-	TP251305713808	Price	TP251105613808	Price
3/4-16	H5	4	-	-	TP251305714008	Price	TP251105614008	Price
7/8-9	H5	4	-	-	TP251305714308	Price	TP251105614308	Price
7/8-14	H5	4	-	-	TP251305714508	Price	TP251105614508	Price
1-8	H5	4	-	-	TP251305714108	Price	TP251105614108	Price

EXOTAP® VC-10Ni Spiral Flute Taps

VC-10 for Nickel Based Alloys • Steam Oxide Finish

- High performance spiral fluted taps
- VC-10 premium powered high speed steel
- OSG List #313Ni



Size	Thread Limits	No. of Flutes	Chamfer	Finish	Order No.	Price
2-56	H2	2	Semi-Bott	Steam Oxide	TP251770701	Price
4-40	H2	3	Mod-Bott	Steam Oxide	TP251719001	Price
4-40	H3	3	Mod-Bott	Steam Oxide	TP251719101	Price
6-32	H2	3	Bottoming	Steam Oxide	TP250140101	Price
6-32	H2	3	Semi-Bott	Steam Oxide	TP251720701	Price
6-32	H3	3	Mod-Bott	Steam Oxide	TP251709101	Price
8-32	H3	3	Mod-Bott	Steam Oxide	TP251709301	Price
8-32	H2	3	Bottoming	Steam Oxide	TP250140201	Price
10-24	H3	3	Mod-Bott	Steam Oxide	TP251719501	Price
10-32	H2	3	Semi-Bott	Steam Oxide	TP251770201	Price
10-32	H2	3	Bottoming	Steam Oxide	TP250140301	Price
10-32	H3	3	Mod-Bott	Steam Oxide	TP251709501	Price
1/4-20	H3	3	Bottoming	Steam Oxide	TP250140401	Price
1/4-20	H3	3	Mod-Bott	Steam Oxide	TP251719701	Price
1/4-28	H3	3	Mod-Bott	Steam Oxide	TP251709701	Price
1/4-28	H3	3	Bottoming	Steam Oxide	TP250140501	Price
5/16-18	H3	3	Mod-Bott	Steam Oxide	TP251719901	Price
5/16-24	H3	3	Mod-Bott	Steam Oxide	TP251709901	Price

Size	Thread Limits	No. of Flutes	Chamfer	Finish	Order No.	Price
5/16-24	H3	3	Bottoming	Steam Oxide	TP250140701	Price
3/8-16	H3	3	Mod-Bott	Steam Oxide	TP251720101	Price
3/8-24	H3	3	Mod-Bott	Steam Oxide	TP251710101	Price
3/8-24	H3	3	Bottoming	Steam Oxide	TP250140901	Price
7/16-14	H3	3	Mod-Bott	Steam Oxide	TP251720301	Price
7/16-20	H3	3	Mod-Bott	Steam Oxide	TP251710301	Price
1/2-13	H3	3	Mod-Bott	Steam Oxide	TP251720501	Price
7/16-20	H3	3	Bottoming	Steam Oxide	TP250141101	Price
1/2-20	H3	3	Mod-Bott	Steam Oxide	TP251710501	Price
1/2-20	H3	3	Bottoming	Steam Oxide	TP250141301	Price
5/8-11	H3	4	Semi-Bott	Steam Oxide	TP251710701	Price
5/8-18	H3	4	Semi-Bott	Steam Oxide	TP251710801	Price
3/4-10	H5	4	Semi-Bott	Steam Oxide	TP251711001	Price
3/4-16	H5	4	Semi-Bott	Steam Oxide	TP251711201	Price
7/8-9	H5	4	Semi-Bott	Steam Oxide	TP251711501	Price
7/8-14	H5	4	Semi-Bott	Steam Oxide	TP251711701	Price
1-8	H5	4	Semi-Bott	Steam Oxide	TP251711301	Price

HY-PRO® Spiral Fluted With Modified Bottom



Fractional • TiCN Coated

- For tapping medium to high carbon steels, alloy steels, cast iron, carbon steels, die steels, stainless steels hardened steel under 35 HrC
- OSG List # 290

Size	Thread Limit	No. of Flutes	Order No.	Price
3/8-16	H3	3	TP282931608	Price
3/8-16	H5	3	TP282941608	Price
3/8-16	H7	3	TP282942108	Price
3/8-24	H7	3	TP282941708	Price
7/16-20	H5	3	TP282942208	Price
1/2-13	H3	3	TP282932408	Price
1/2-13	H5	3	TP282942408	Price
1/2-13	H7	3	TP282942508	Price
5/8-11	H3	4	TP282933208	Price
3/4-10	H5	4	TP282943608	Price
3/4-16	H5	4	TP282943808	Price

HY-PRO® Spiral Fluted With Modified Bottom



Metric

- TiCN coated
- Designed for stainless steel 17-4PH, low carbon steels, stainless steel 300 & 400, medium-high carbon steels
- OSG List #299

Size	Thread Limits	No. of Flutes	Order No.	Price
M3x0.50	D3	3	TP282990408	Price
M4x0.70	D4	3	TP282990608	Price
M5x0.80	D4	3	TP282990808	Price
M6x1.0	D5	3	TP282991008	Price
M8x1.25	D5	3	TP282991408	Price
M10x1.25	D5	3	TP282991708	Price
M10x1.5	D6	3	TP282991808	Price
M12x1.75	D6	3	TP282992308	Price

WIDIA Victory™ Spiral Flute Taps



HSS-E-PM

- GM6515 TiN + CrC/C for stainless steel
- GP6520 TiCN for steel
- WS39MG oxide/nitride for nickel- and cobalt-based alloys
- WU32MG TiCN for nickel- and cobalt-based alloys

Size	Thread Limits	No. of Flutes	Style	Description	Order No.	Price
4-40	H2	3	Plug	WS39MG Oxide/Nitride	**WK345708148**	Price
6-32	H3	3	Plug	WU32MG TiCN	**WK345705279**	Price
8-32	3BX	3	Semi-Bottoming	GM6515 TiN + CrC/C	**WK343955136**	Price
8-32	H3	3	Plug	WS39MG Oxide/Nitride	**WK345708175**	Price
10-24	H3	3	Plug	WS39MG Oxide/Nitride	**WK345708014**	Price
10-32	H3	3	Plug	WS39MG Oxide/Nitride	**WK345708018**	Price
1/4-20	2BX	3	Semi-Bottoming	GM6515 TiN + CrC/C	**WK343955138**	Price
1/4-20	H3	3	Plug	WS39MG Oxide/Nitride	**WK345708201**	Price
1/4-20	H3	3	Plug	WU32MG TiCN	**WK345705275**	Price
1/4-20	3BX	3	Plug	GM6515 TiN + CrC/C	**WK343955285**	Price
1/4-20	3BX	3	Semi-Bottoming	GM6515 TiN + CrC/C	**WK343955139**	Price
1/4-20	2BX	3	Semi-Bottoming	GP6520 TiCN	**WK343955168**	Price
5/16-18	3BX	3	Semi-Bottoming	GM6515 TiN + CrC/C	**WK343955141**	Price
5/16-18	3BX	4	Semi-Bottoming	GP6520 TiCN	**WK344035542**	Price
5/16-18	H3	3	Plug	WS39MG Oxide/Nitride	**WK345708261**	Price
5/16-18	H3	3	Plug	WU32MG TiCN	**WK345705273**	Price
3/8-16	2BX	3	Semi-Bottoming	GP6520 TiCN	**WK343955172**	Price
3/8-16	H3	3	Plug	WS39MG Oxide/Nitride	**WK345708227**	Price
3/8-16	H3	3	Plug	WU32MG TiCN	**WK345705272**	Price
7/16-20	3BX	5	Semi-Bottoming	GP6520 TiCN	**WK343955199**	Price
1/2-13	2BX	4	Semi-Bottoming	GP6520 TiCN	**WK343955185**	Price
5/8-11	3BX	5	Semi-Bottoming	GM6515 TiN + CrC/C	**WK343955148**	Price
5/8-11	3BX	4	Semi-Bottoming	GP6520 TiCN	**WK344035571**	Price

WIDIA Victory™ Spiral Flute Taps



HSS-E-PM

- GP6520 TiCN for steel
- WP31MG TiN for steel 32–44 HRC
- WS30MG nitride for titanium and titanium alloys
- WS39MG oxide/nitride for nickel- and cobalt-based alloys

Size	Thread Limits	No. of Flutes	Style	Description	Order No.	Price
M2.5x0.45	D3	3	Semi-Bottoming	WS30MG Nitride	**WK345565219**	Price
M3x0.50	D3	3	Plug	WS39MG - Oxide/Nitride	**WK345708335**	Price
M4x0.70	D4	3	Plug	WS39MG - Oxide/Nitride	**WK345708337**	Price
M5x0.80	D4	3	Plug	WS39MG - Oxide/Nitride	**WK345708339**	Price
M6x1.0	6HX	3	Semi-Bottoming	GP6520 TiCN	**WK343955350**	Price
M6x1.0	D5	3	Semi-Bottoming	WS30MG Nitride	**WK345565227**	Price
M6x1.0	D5	3	Plug	WS39MG - Oxide/Nitride	**WK345708341**	Price
M10x1.5	D6	3	Plug	WS39MG - Oxide/Nitride	**WK345708323**	Price
M10x1.5	6HX	4	Semi-Bottoming	GP6520 TiCN	**WK344033753**	Price
M20x2.5	6HX	4	Plug	WP31MG TiN	**WK344153759**	Price

EXOTAP® VC-10Ni Spiral Pointed Taps

VC-10NI for Nickel Based Alloys

- Spiral point plug style steam oxide taps
- Designed for hard to machine materials
- OSG List #312Ni



Size	Thread Limits	No. of Flutes	Order No.	Price
4-40	H3	3	**TP251776301**	Price
6-32	H3	3	**TP251706301**	Price
8-32	H3	3	**TP251706501**	Price
10-24	H3	3	**TP251706701**	Price
10-32	H3	3	**TP251706901**	Price
10-32	H5	3	**TP251707001**	Price
1/4-20	H3	3	**TP251707101**	Price
1/4-28	H3	3	**TP251707301**	Price
5/16-18	H3	3	**TP251707501**	Price
5/16-18	H5	3	**TP251707601**	Price
5/16-24	H3	3	**TP251707701**	Price
3/8-16	H3	3	**TP251707901**	Price
3/8-24	H3	3	**TP251708101**	Price
7/16-14	H3	3	**TP251708301**	Price
7/16-20	H3	3	**TP251708501**	Price
1/2-13	H3	3	**TP251708701**	Price
1/2-20	H3	3	**TP251708901**	Price
9/16-18	H3	3	**TP251717201**	Price
5/8-11	H3	3	**TP251717401**	Price
5/8-18	H3	3	**TP251717501**	Price
3/4-10	H5	4	**TP251717701**	Price
3/4-16	H5	4	**TP251717901**	Price
1-8	H5	4	**TP251718001**	Price

HY-PRO® DIN Spiral Flute Taps

Coolant Thru • TiN Coated

- Designed for tapping hardened steel such as 4140, 4340, H-13, D-2 and 1055 up to 35 HRC as well as a variety of stainless steel
- TiN surface treatment and coolant through capability enables high speed tapping
- Recommended for use with a synchronized spindle
- DIN overall length
- Modified bottom
- OSG List #230 (inch) / #239 (metric)



Type - Inch					
Size	Class of Fit	No. of Flutes	OAL	Order No.	Price
1/4-20	2B	3	80mm	**TP282330005**	Price
5/16-18	2B	3	90mm	**TP282330805**	Price
3/8-16	2B	3	100mm	**TP282331605**	Price
1/2-13	2B	3	110mm	**TP282332405**	Price
5/8-11	2B	4	110mm	**TP282333205**	Price
3/4-10	2B	4	125mm	**TP282333605**	Price

Type - Metric					
Size	Class of Fit	No. of Flutes	OAL	Order No.	Price
M6x1.0	6H	3	80mm	**TP282391005**	Price
M8x1.25	6H	3	90mm	**TP282391405**	Price
M10x1.5	6H	3	100mm	**TP282391805**	Price
M12x1.5	6H	3	100mm	**TP282392205**	Price
M12x1.75	6H	3	110mm	**TP282392305**	Price
M14x1.5	6H	3	100mm	**TP282392505**	Price
M14x2.0	6H	3	110mm	**TP282392605**	Price
M16x2.0	6H	3	110mm	**TP282392905**	Price
M18x1.5	6H	4	110mm	**TP282393005**	Price
M18x2.5	6H	4	125mm	**TP282393205**	Price
M20x1.5	6H	4	125mm	**TP282393405**	Price
M20x2.5	6H	4	140mm	**TP282393605**	Price

HY-PRO® DIN Spiral Point Taps



Coolant Thru • TiN Coated

- Designed for tapping hardened steel such as 4140, 4340, H-13, D-2 and 1055 up to 35 HRC as well as a variety of stainless steel
- TiN surface treatment and coolant through capability enables high speed tapping
- Recommended for use with a synchronized spindle
- Plug style
- DIN overall length
- OSG List #260 (inch) / #269 (metric)

Type - Inch

Size	Class of Fit	No. of Flutes	OAL	Order No.	Price
1/4-20	2B	3	80mm	**TP282630005**	Price
5/16-18	2B	3	90mm	**TP282630805**	Price
3/8-16	2B	3	100mm	**TP282631605**	Price
1/2-13	2B	3	110mm	**TP282632405**	Price
5/8-11	2B	3	110mm	**TP282633205**	Price
3/4-10	2B	3	125mm	**TP282633605**	Price

Type - Metric

Size	Class of Fit	No. of Flutes	OAL	Order No.	Price
M6x1.0	6H	3	80mm	**TP282691005**	Price
M8x1.25	6H	3	90mm	**TP282691405**	Price
M10x1.5	6H	3	100mm	**TP282691805**	Price
M12x1.5	6H	3	100mm	**TP282692205**	Price
M12x1.75	6H	3	110mm	**TP282692305**	Price
M14x1.5	6H	3	100mm	**TP282692505**	Price

Type - Metric

Size	Class of Fit	No. of Flutes	OAL	Order No.	Price
M14x2.0	6H	3	110mm	**TP282692605**	Price
M16x2.0	6H	3	110mm	**TP282692905**	Price
M18x1.5	6H	3	110mm	**TP282693005**	Price
M18x2.5	6H	3	125mm	**TP282693205**	Price
M20x1.5	6H	3	125mm	**TP282693405**	Price
M20x2.5	6H	3	140mm	**TP282693605**	Price

EXOTAP® VC-10® Spiral Pointed Plug Style

TiCN Coated

- EXOTAP® VC-10® is the premium solution for unsurpassed performance in difficult to maching materials
- Designed for alloy steels, stainless steel 17-4PH, hardened steel up to 35 HrC, die steels, titanium, high nickel alloy, stainless steel 400, hardened steels up to 35-45HrC
- OSG List 312



Size	Thread Limits	No. of Flutes	Order No.	Price
4-40	H4	2	**TP251759208**	Price
6-32	H3	3	**TP251757208**	Price
6-32	H5	3	**TP251759608**	Price
8-32	H3	3	**TP251757308**	Price
10-24	H5	3	**TP251760208**	Price
10-32	H4	3	**TP251760408**	Price
1/4-20	H5	3	**TP251700208**	Price
1/4-28	H3	3	**TP251757708**	Price
3/8-16	H3	3	**TP251758008**	Price
3/8-16	H5	3	**TP251701008**	Price
3/8-24	H3	3	**TP251758108**	Price
3/4-10	H3	4	**TP241758808**	Price
3/4-16	H3	4	**TP251758908**	Price

EXOTAP® VC-10® Spiral Pointed Plug Style

Steam Oxide Finish

- Specially designed for difficult-to-machine materials
- Best for 400 & 17-4ph stainless steel and hardened steel up to 45 HRC
- OSG List 312 (inch sizes) / List 344 (metric)



Size Type - Inch

Size	Thread Limits	No. of Flutes	Order No.	Price
2-56	H2	2	**TP251759001**	Price
4-40	H3	2	**TP251759101**	Price
5-40	H2	3	**TP251757101**	Price
6-32	H3	3	**TP251757201**	Price
8-32	H3	3	**TP251757301**	Price
10-24	H3	3	**TP251757401**	Price
10-32	H3	3	**TP251757501**	Price
1/4-20	H3	3	**TP251757601**	Price
1/4-28	H3	3	**TP251757701**	Price
5/16-18	H3	3	**TP251757801**	Price
5/16-24	H3	3	**TP251757901**	Price
3/8-16	H3	3	**TP251758001**	Price
3/8-24	H3	3	**TP251758101**	Price
7/16-14	H3	3	**TP251758201**	Price
7/16-20	H3	3	**TP251758301**	Price
1/2-13	H3	3	**TP251758401**	Price

Size Type - Inch

Size	Thread Limits	No. of Flutes	Order No.	Price
1/2-20	H3	3	**TP251758501**	Price
5/8-11	H3	3	**TP251758601**	Price
5/8-18	H3	3	**TP251758701**	Price
3/4-10	H3	4	**TP251758801**	Price
3/4-16	H3	4	**TP251758901**	Price

Size Type - Metric

Size	Thread Limits	No. of Flutes	Order No.	Price
M3x0.50	D3	3	**TP251702201**	Price
M4x0.70	D4	3	**TP251702301**	Price
M5x0.80	D4	3	**TP251702401**	Price
M6x1.0	D5	3	**TP251702501**	Price
M8x1.25	D5	3	**TP251702601**	Price
M10x1.25	D5	3	**TP251702701**	Price
M10x1.5	D6	3	**TP251702801**	Price
M12x1.75	D6	3	**TP251702901**	Price

EXOTAP® VC-10 Spiral Fluted Taps

- Specially designed for difficult-to-machine materials
- Powdered metal with steam oxide finish
- Works best with 400, 17-4 PH stainless steels and hardened steels up to 45HrC
- Available in bottoming and modified bottoming
- OSG List #313



Size	Chamfer Length	Thread Limits	No. of Flutes	Order No.	Price
2-56	1.5P - 2P	H2	2	**TP250141701**	Price
2-56	2.5P - 3P	H2	2	**TP251754001**	Price
4-40	1.5P - 2P	H2	2	**TP250141801**	Price
4-40	2.5P - 3P	H3	2	**TP251754101**	Price
5-40	2.5P - 3P	H2	2	**TP251752101**	Price
6-32	1.5P - 2P	H3	2	**TP250141901**	Price
6-32	2.5P - 3P	H3	2	**TP251752201**	Price
8-32	1.5P - 2P	H3	2	**TP250142201**	Price
8-32	2.5P - 3P	H3	2	**TP251752301**	Price
10-24	2.5P - 3P	H3	3	**TP251752401**	Price
10-32	2.5P - 3P	H2	3	**TP251703101**	Price
10-32	1.5P - 2P	H3	3	**TP250142501**	Price
10-32	2.5P - 3P	H3	3	**TP251752501**	Price
1/4-20	2.5P - 3P	H3	3	**TP251752601**	Price
1/4-28	1.5P - 2P	H3	3	**TP250142701**	Price
1/4-28	1.5P - 2P	H4	3	**TP250142801**	Price
1/4-28	2.5P - 3P	H3	3	**TP251752701**	Price
1/4-28	2.5P - 3P	H5	3	**TP251703701**	Price
1/4-28	2.5P - 3P	H6	3	**TP251703801**	Price
5/16-18	2.5P - 3P	H3	3	**TP251752801**	Price

Size	Chamfer Length	Thread Limits	No. of Flutes	Order No.	Price
5/16-18	2.5P - 3P	H5	3	**TP251703901**	Price
5/16-24	1.5P - 2P	H3	3	**TP250142901**	Price
5/16-24	2.5P - 3P	H3	3	**TP251752901**	Price
3/8-16	2.5P - 3P	H3	3	**TP251753001**	Price
3/8-16	2.5P - 3P	H5	3	**TP251704301**	Price
3/8-24	1.5P - 2P	H3	3	**TP250143101**	Price
3/8-24	2.5P - 3P	H3	3	**TP251753101**	Price
7/16-14	2.5P - 3P	H3	3	**TP251753201**	Price
7/16-20	1.5P - 2P	H3	3	**TP250143301**	Price
7/16-20	2.5P - 3P	H3	3	**TP251753301**	Price
7/16-20	2.5P - 3P	H5	3	**TP251704801**	Price
1/2-13	2.5P - 3P	H3	3	**TP251753401**	Price
1/2-13	2.5P - 3P	H5	3	**TP241704901**	Price
1/2-20	1.5P - 2P	H3	3	**TP250143501**	Price
1/2-20	2.5P - 3P	H3	3	**TP251753501**	Price
1/2-20	2.5P - 3P	H5	3	**TP251705001**	Price
5/8-11	2.5P - 3P	H3	4	**TP251753601**	Price
5/8-18	2.5P - 3P	H3	4	**TP251753701**	Price
3/4-10	2.5P - 3P	H3	4	**TP251753801**	Price
3/4-16	2.5P - 3P	H3	4	**TP251753901**	Price

EXPRO®-XPF Forming Tap



Fractional Sizes

- Cobalt high speed steel
- Coolant thru
- OSG's V multi-layered coating
- DIN overall length
- Modified bottom chamfer
- Recommended for aluminum, carbon steels, alloy steels, die steels up to 20 HrC, stainless steels and hardened steels up to 35 HrC
- OSG List #16050

Size	Thread Limit	OAL	Order No.	Price
1/4-20	H4	80mm	**TP521605014204**	Price
1/4-20	H6	80mm	**TP521605014206**	Price
1/4-28	H4	80mm	**TP521605014284**	Price
1/4-28	H6	80mm	**TP521605014286**	Price
5/16-18	H5	90mm	**TP521605056185**	Price
5/16-18	H7	90mm	**TP521605056187**	Price
5/16-24	H5	90mm	**TP521605056245**	Price
5/16-24	H7	90mm	**TP521605056247**	Price
3/8-16	H5	100mm	**TP521605038165**	Price
3/8-16	H7	100mm	**TP521605038167**	Price
3/8-24	H5	100mm	**TP521605038245**	Price
3/8-24	H7	100mm	**TP521605038247**	Price
7/16-14	H5	100mm	**TP521605076145**	Price
7/16-14	H8	100mm	**TP521605076148**	Price
7/16-20	H5	100mm	**TP521605076205**	Price
7/16-20	H8	100mm	**TP521605076208**	Price
1/2-13	H5	110mm	**TP521605012135**	Price
1/2-13	H8	110mm	**TP521605012138**	Price
1/2-20	H5	100mm	**TP521605012205**	Price
1/2-20	H8	100mm	**TP521605012208**	Price

Size	Thread Limit	OAL	Order No.	Price
9/16-12	H7	110mm	**TP521605096127**	Price
9/16-12	H10	110mm	**TP521605096120**	Price
9/16-18	H7	100mm	**TP521605096187**	Price
9/16-18	H10	100mm	**TP521605096180**	Price
5/8-11	H7	110mm	**TP521605058117**	Price
5/8-11	H10	110mm	**TP521605058110**	Price
5/8-18	H7	100mm	**TP521605058187**	Price
5/8-18	H10	100mm	**TP521605058180**	Price
3/4-10	H7	125mm	**TP521605034107**	Price
3/4-10	H10	125mm	**TP521605034100**	Price
3/4-16	H7	110mm	**TP521605034167**	Price
3/4-16	H10	110mm	**TP521605034160**	Price
7/8-9	H8	140mm	**TP521605078908**	Price
7/8-9	H11	140mm	**TP521605078901**	Price
7/8-14	H8	125mm	**TP521605078148**	Price
7/8-14	H11	125mm	**TP521605078141**	Price
1-8	H8	160mm	**TP521605001088**	Price
1-8	H11	160mm	**TP521605001081**	Price
1-12	H8	140mm	**TP521605001128**	Price
1-12	H11	140mm	**TP521605001121**	Price

EXOPRO®-XPF Forming Tap



Metric Sizes

- Cobalt high speed steel
- OSG's V multi-layered coating
- Modified bottom chamfer
- DIN overall length
- Recommended for aluminum, carbon steels, alloy steels, die steels up to 20 HrC, stainless steels and hardened steels up to 35 HrC
- OSG List #16150

Size	Thread Limit	OAL	Order No.	Price
M6x0.75	D4	80mm	**TP521615006754**	Price
M6x0.75	D6	80mm	**TP521615006757**	Price
M6x1.0	D5	80mm	**TP521615006015**	Price
M6x1.0	D8	80mm	**TP521615006018**	Price
M7x1.0	D5	80mm	**TP521615007015**	Price
M7x1.0	D8	80mm	**TP521615007018**	Price
M8x0.75	D4	80mm	**TP521615008754**	Price
M8x0.75	D6	80mm	**TP521615008757**	Price
M8x1.0	D5	90mm	**TP521615008015**	Price
M8x1.0	D8	90mm	**TP521615008018**	Price
M8x1.25	D5	90mm	**TP521615008255**	Price
M8x1.25	D9	90mm	**TP521615008259**	Price
M10x1.0	D5	90mm	**TP521615010015**	Price
M10x1.0	D8	90mm	**TP521615010018**	Price
M10x1.25	D5	100mm	**TP521615010255**	Price
M10x1.25	D9	100mm	**TP521615010259**	Price
M10x1.5	D6	100mm	**TP521615010156**	Price
M10x1.5	D10	100mm	**TP521615010150**	Price
M12x1.0	D6	100mm	**TP521615012106**	Price
M12x1.0	D10	100mm	**TP521615012100**	Price
M12x1.25	D6	100mm	**TP521615012256**	Price
M12x1.25	D10	100mm	**TP521615012250**	Price
M12x1.5	D6	100mm	**TP521615012156**	Price
M12x1.5	D11	100mm	**TP521615012151**	Price
M12x1.75	D6	110mm	**TP521615012756**	Price
M12x1.75	D11	110mm	**TP521615010751**	Price
M14x1.5	D6	100mm	**TP521615014156**	Price

Size	Thread Limit	OAL	Order No.	Price
M14x1.5	D11	100mm	**TP521615014151**	Price
M14x2.0	D7	110mm	**TP521615014027**	Price
M14x2.0	D12	110mm	**TP521615014022**	Price
M16x1.5	D6	100mm	**TP521615016152**	Price
M16x1.5	D11	100mm	**TP521615016151**	Price
M16x2.0	D7	110mm	**TP521615016207**	Price
M16x2.0	D12	110mm	**TP521615016202**	Price
M18x1.5	D6	110mm	**TP521615018156**	Price
M18x1.5	D11	110mm	**TP521615018151**	Price
M18x2.5	D7	125mm	**TP521615018257**	Price
M18x2.5	D12	125mm	**TP521615018252**	Price
M20x1.5	D6	125mm	**TP521615020156**	Price
M20x1.5	D11	125mm	**TP521615020151**	Price
M20x2.5	D7	140mm	**TP521615020257**	Price
M20x2.5	D12	140mm	**TP521615020252**	Price
M22x1.5	D6	125mm	**TP521615022156**	Price
M22x1.5	D11	125mm	**TP521615022151**	Price
M22x2.0	D7	140mm	**TP521615022207**	Price
M22x2.0	D12	140mm	**TP521615022202**	Price
M22x2.5	D7	140mm	**TP521615022257**	Price
M22x2.5	D12	140mm	**TP521615022252**	Price
M24x1.5	D6	140mm	**TP521615024156**	Price
M24x1.5	D11	140mm	**TP521615024151**	Price
M24x2.0	D7	140mm	**TP521615024207**	Price
M24x2.0	D13	140mm	**TP521615024203**	Price
M24x3.0	D9	160mm	**TP521615024309**	Price
M24x3.0	D15	160mm	**TP521615024305**	Price

EXOPRO®-XPF Forming Taps

- Cobalt high speed steel
- OSG's V multi-layered coating
- DIN overall length
- Modified bottom chamfer
- Recommended for aluminum, carbon steels, alloy steels, die steels up to 20 HrC, stainless steels and hardened steels up to 35 HrC
- OSG List 16250 (inch) / List 16350 (metric)



List No. - 16250				
Size	Thread Limit	OAL	Order No.	Price
1/4-20	H4	80mm	**TP521625014204**	Price
1/4-20	H6	80mm	**TP521625014206**	Price
1/4-28	H4	80mm	**TP521625014284**	Price
1/4-28	H6	80mm	**TP521625014286**	Price
5/16-18	H5	90mm	**TP521625056185**	Price
5/16-18	H7	90mm	**TP521625056187**	Price
5/16-24	H5	90mm	**TP521625056245**	Price
5/16-24	H7	90mm	**TP521625056247**	Price
3/8-16	H5	100mm	**TP521625038165**	Price
3/8-16	H7	100mm	**TP521625038167**	Price
3/8-24	H5	100mm	**TP521625038245**	Price
3/8-24	H7	100mm	**TP521625038247**	Price
7/16-14	H5	100mm	**TP521625076145**	Price
7/16-14	H8	100mm	**TP521625076148**	Price
7/16-20	H5	100mm	**TP521625076205**	Price
7/16-20	H8	100mm	**TP521625076208**	Price
1/2-13	H5	110mm	**TP521625012135**	Price
1/2-13	H8	110mm	**TP521625012138**	Price
1/2-20	H5	100mm	**TP521625012205**	Price
1/2-20	H8	100mm	**TP521625012208**	Price
9/16-12	H7	110mm	**TP521625096127**	Price
9/16-12	H10	110mm	**TP521625096120**	Price
9/16-18	H7	100mm	**TP521625096187**	Price
9/16-18	H10	100mm	**TP521625096180**	Price
5/8-11	H7	110mm	**TP521625058117**	Price
5/8-11	H10	110mm	**TP521625058110**	Price
5/8-18	H7	100mm	**TP521625058187**	Price
5/8-18	H10	100mm	**TP521625058180**	Price
3/4-10	H7	125mm	**TP521625034107**	Price
3/4-10	H10	125mm	**TP521625034100**	Price
3/4-16	H7	110mm	**TP521625034167**	Price
3/4-16	H10	110mm	**TP521625034160**	Price
7/8-9	H8	140mm	**TP521625078908**	Price
7/8-9	H11	140mm	**TP521625078901**	Price
7/8-14	H8	125mm	**TP521625078148**	Price
7/8-14	H11	125mm	**TP521625078141**	Price
1-8	H8	160mm	**TP521625001088**	Price
1-8	H11	160mm	**TP521625001081**	Price
1-12	H8	140mm	**TP521625001128**	Price
1-12	H11	140mm	**TP521625001121**	Price

List No. - 16350				
Size	Thread Limit	OAL	Order No.	Price
M6x0.75	D4	80mm	**TP521635006754**	Price
M6x0.75	D6	80mm	**TP521635006757**	Price
M6x1.0	D5	80mm	**TP521635006015**	Price
M6x1.0	D8	80mm	**TP521635006018**	Price
M7x1.0	D5	80mm	**TP521635007015**	Price
M7x1.0	D8	80mm	**TP521635007018**	Price
M8x0.75	D4	80mm	**TP521635008754**	Price
M8x0.75	D6	80mm	**TP521635008757**	Price
M8x1.0	D5	90mm	**TP521635008015**	Price
M8x1.0	D8	90mm	**TP521635008018**	Price
M8x1.25	D5	90mm	**TP521635008255**	Price
M8x1.25	D9	90mm	**TP521635008259**	Price
M10x1.0	D5	90mm	**TP521635010015**	Price
M10x1.0	D8	90mm	**TP521635010018**	Price
M10x1.25	D5	100mm	**TP521635010255**	Price
M10x1.25	D9	100mm	**TP521635010259**	Price
M10x1.5	D6	100mm	**TP521635010156**	Price
M10x1.5	D10	100mm	**TP521635010150**	Price
M12x1.5	D6	100mm	**TP521635012156**	Price
M12x1.5	D11	100mm	**TP521635012151**	Price
M12x1.75	D6	110mm	**TP521635012756**	Price
M14x1.5	D6	100mm	**TP521635014156**	Price
M14x1.5	D11	100mm	**TP521635014151**	Price
M14x2.0	D7	110mm	**TP521635014027**	Price
M14x2.0	D12	110mm	**TP521635014022**	Price
M16x1.5	D11	100mm	**TP521635016151**	Price
M16x2.0	D7	110mm	**TP521635016207**	Price
M16x2.0	D12	110mm	**TP521635016202**	Price
M18x1.5	D6	110mm	**TP521635018156**	Price
M18x1.5	D11	110mm	**TP521635018151**	Price
M18x2.5	D7	125mm	**TP521635018257**	Price
M18x2.5	D12	125mm	**TP521635018252**	Price
M20x1.5	D6	125mm	**TP521635020156**	Price
M20x1.5	D11	125mm	**TP521635020151**	Price
M20x2.5	D7	140mm	**TP521635020257**	Price
M20x2.5	D12	140mm	**TP521635020252**	Price

HY-PRO® NRT® M42 Cobalt Forming Taps



Bright Finish

- Best applications: aluminum, aluminum castings, low, medium and high carbon steels
- OSG List #14001 (inch) / List #14101 (metric)

Thread Limits - H3			
Size	Chamfer Length	Order No.	Price
2-56	1.5P	**TP221400102300**	Price
3-56	2.5P	**TP221400104400**	Price
4-40	1.5P	**TP221400104900**	Price
5-40	2.5P	**TP221400107700**	Price
6-32	2.5P	**TP221400110400**	Price
8-32	2.5P	**TP221400114300**	Price

Thread Limits - H4			
Size	Chamfer Length	Order No.	Price
10-24	2.5P	**TP221400118300**	Price
10-32	2.5P	**TP221400120400**	Price
12-24	2.5P	**TP221400122200**	Price
1/4-20	2.5P	**TP221400126200**	Price

Thread Limits - H5			
Size	Chamfer Length	Order No.	Price
3-56	2.5P	**TP221400104600**	Price
4-40	1.5P	**TP221400105100**	Price
5-40	2.5P	**TP221400107900**	Price
6-32	2.5P	**TP221400110600**	Price
8-32	2.5P	**TP221400114500**	Price
5/16-18	2.5P	**TP221400130700**	Price
5/16-24	2.5P	**TP221400133000**	Price
3/8-16	2.5P	**TP221400135100**	Price
3/8-24	2.5P	**TP221400137400**	Price

Thread Limits - H6			
Size	Chamfer Length	Order No.	Price
10-24	2.5P	**TP221400118500**	Price
10-32	2.5P	**TP221400120600**	Price
12-24	2.5P	**TP221400122400**	Price
1/4-20	2.5P	**TP221400126400**	Price

Thread Limits - H7			
Size	Chamfer Length	Order No.	Price
5/16-18	2.5P	**TP221400130900**	Price
5/16-24	2.5P	**TP221400133200**	Price
7/16-20	2.5P	**TP221400141200**	Price
1/2-20	2.5P	**TP221400144800**	Price

Thread Limits - H8			
Size	Chamfer Length	Order No.	Price
3/8-16	2.5P	**TP221400135400**	Price
3/8-24	2.5P	**TP221400137700**	Price
7/16-14	2.5P	**TP221400139500**	Price
1/2-13	2.5P	**TP221400143100**	Price

Metric NRT® M42 Cobalt Forming Taps

For material up to 30 HRC
Best performance

- Aluminum materials
- Carbon steel types: 1010, 1018, 1035, 1045 & 1065



Size	Thread Limits	Chamfer Length	Order No.	Price
M2x0.40	D5	1.5P	**TP221410100500**	Price
M2.5x0.45	D5	1.5P	**TP221410100900**	Price
M3x0.50	D5	1.5P	**TP221410101500**	Price
M3.5x0.60	D6	1.5P	**TP221410101900**	Price
M4x0.70	D6	1.5P	**TP221410102500**	Price
M5x0.80	D7	1.5P	**TP221410103100**	Price
M6x1.0	D8	1.5P	**TP221410103700**	Price
M8x1.25	D9	1.5P	**TP221410104300**	Price
M10x1.5	D10	1.5P	**TP221410104900**	Price
M12x1.75	D11	1.5P	**TP221410105500**	Price

EXOTAP® NRT® Forming Taps

TiCN Coated

- VC10 material to achieve high-speed tapping and long tool life
- Good for a variety of materials, such as stainless, aluminum, and low, medium and high carbon steels
- OSG List #14050



Size	Thread Limits	Chamfer Length	Order No.	Price
4-40	H3	1.5P	**TP271405002008**	Price
5-40	H3	1.5P	**TP271405002608**	Price
6-32	H3	1.5P	**TP271405003208**	Price
8-32	H3	1.5P	**TP271405004008**	Price
10-24	H4	1.5P	**TP271405004908**	Price
10-32	H4	1.5P	**TP271405005708**	Price
1/4-20	H5	1.5P	**TP271405006808**	Price
1/4-28	H5	1.5P	**TP271405007708**	Price
5/16-18	H5	1.5P	**TP271405008408**	Price
5/16-24	H5	1.5P	**TP271405009508**	Price
3/8-16	H5	1.5P	**TP271405010408**	Price
3/8-24	H5	1.5P	**TP271405011508**	Price

HY-PRO® SEVEN Nu-Roll Forming Taps

Bottoming Style • Bright Finish

- Manufactured with lead correction allowing uniform material formation on both sides of the flank, resulting in extended tap life
- Best application: aluminum and aluminum castings
- OSG List #286



Size Type - Inch			
Size	**Class of Fit**	**Order No.**	**Price**
2-56	2B	**TP192864400**	Price
3-48	2B	**TP192864600**	Price
4-40	2B	**TP192864800**	Price
6-32	2B	**TP192865000**	Price
8-32	2B	**TP192865200**	Price
10-24	2B	**TP192865400**	Price
10-32	2B	**TP192865600**	Price
1/4-20	2B	**TP192865800**	Price
1/4-28	2B	**TP192866000**	Price
5/16-18	2B	**TP192866200**	Price
5/16-24	2B	**TP192866400**	Price

Size Type - Inch			
Size	**Class of Fit**	**Order No.**	**Price**
3/8-16	2B	**TP192866600**	Price
3/8-24	2B	**TP192866800**	Price

Size Type - Metric			
Size	**Class of Fit**	**Order No.**	**Price**
M3x0.50	6H	**TP192868100**	Price
M4x0.70	6H	**TP192868300**	Price
M5x0.80	6H	**TP192868500**	Price
M6x1.0	6H	**TP192868700**	Price
M8x1.25	6H	**TP192868900**	Price
M10x1.5	6H	**TP192869100**	Price
M12x1.75	6H	**TP192869300**	Price

WIDIA Victory™ Forming Taps

HSS-E-PM • Blind and Through Holes

- WU32MG TiCN for steel and stainless steel



Size	Thread Limits	Style	Description	Order No.	Price
1/4-20	H6	Bottoming	WU32MG TiCN Not Coolant Through	**WK345945108**	Price
4-40	H3	Bottoming	WU32MG TiCN Not Coolant Through	**WK345945094**	Price
10-32	H4	Bottoming	WU32MG TiCN Not Coolant Through	**WK345945105**	Price
1/4-20	H4	Bottoming	WU32MG TiCN Not Coolant Through	**WK345945107**	Price
1/4-20	H6	Semi-Bottoming	WU32MG TiCN Coolant Through	**WK345944975**	Price
1/4-20	H4	Semi-Bottoming	WU32MG TiCN Coolant Through-DIN	**WK345945029**	Price
1/4-20	H4	Semi-Bottoming	WU32MG TiCN Coolant Through	**WK345944974**	Price
1/2-13	H5	Semi-Bottoming	WU32MG TiCN Coolant Through	**WK345944990**	Price

SINGLE MORSE TAP Metric Thread Forming HPT High Performance Taps

Plug Style

- TiN coated
- Morse List #2106G



Size	Thread Limits	No. of Lube Grooves	Thread Length (in.)	Neck Length (in.)	OAL	Order No.	Price
M4x0.70	D6	3	.5118	.3150	63mm	**MT4294740**	Price
M5x0.80	D7	4	.5906	.3937	70mm	**MT4294741**	Price
M6x1.0	D8	4	.6693	.5118	80mm	**MT4294742**	Price
M8x1.25	D9	4	.7874	.5906	90mm	**MT4294743**	Price
M10x1.5	D10	4	.8661	.6693	100mm	**MT4294744**	Price
M12x1.75	D11	4	.9449	†	110mm	**MT4294745**	Price
M14x2.0	D11	6	1.0236	†	110mm	**MT4294746**	Price
M16x2.0	D12	6	1.0630	†	110mm	**MT4294747**	Price
M20x2.5	D12	6	1.2598	†	140mm	**MT4294748**	Price

† Reduced shank (shank diameter is smaller than minor diameter)

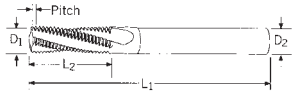
Helical Flute Thread Mills - NPT, NPTF, Pipe Threads



- AlTiN coated
- Helical flute design for reduced cutting forces, smoother cuts, longest tool life, and maximum thread milling performance
- 100% thread form; superior threads vs. tapping
- Cuts right hand and left hand high quality threads
- Internal and external threads
- Suitable for all types of materials, including heat treated and difficult to machine workpieces

Price		Price		Price		Price									
	Price		Price		Price		Price					Rapidkut			
							NPT		NPTF			NPT		NPTF	
Minimum Thread	Pitch	Cutter Dia. (in.)	Shank Dia. (in.)	OAL (in.)	Length of Cut (in.)	No. of Flutes	Order No.	Price	Order No.	Price		Order No.	Price	Order No.	Price
1/16 Pipe	27	.245	1/4	2-1/2	7/16	3	**MT3098641**	Price	**MT3098648**	Price		**EN9050041**	Price	**EN9050046**	Price
1/8 Pipe	27	5/16	5/16	2-1/2	7/16	4	**MT3098642**	Price	**MT3098649**	Price		**EN9050042**	Price	**EN9050047**	Price
1/4 Pipe	18	.370	3/8	3	5/8	4	**MT3098656**	Price	**MT3098658**	Price		**EN9050051**	Price	**EN9050053**	Price
3/8 Pipe	18	.370	3/8	3	5/8	4	**MT3098657**	Price	**MT3098659**	Price		**EN9050052**	Price	**EN9050054**	Price
1/2 Pipe	14	.495	1/2	3-1/2	7/8	4	**MT3098645**	Price	**MT3098652**	Price		**EN9050043**	Price	**EN9050048**	Price
3/4 Pipe	14	.495	1/2	3-1/2	7/8	4	**MT3098646**	Price	**MT3098653**	Price		**EN9050044**	Price	**EN9050049**	Price
1 Pipe	11-1/2	.620	3/4	4	1-1/8	5	**MT3098647**	Price	**MT3098654**	Price		**EN9050045**	Price	**EN9050050**	Price

MICRO 100 Helical Flute Thread Mills – NPT, NPTF, Pipe Threads

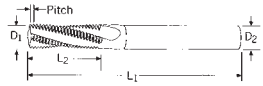




Price							NPT		NPTF	
Minimum Thread	Pitch	Cutter Dia. D1 (in.)	Shank Dia. D2 (in.)	OAL L1 (in.)	Length of Cut L2	Flutes	Order No.	Price	Order No.	Price
1/16 & 1/8 Pipe	27	.245	1/4	2-1/2	7/16	3	**GE45TM27NPTX**	Price	-	-
1/4 & 3/8 Pipe	18	.305	5/16	3	5/8	4	**GE45TM18NPTX**	Price	**GE45TM18NPTFX**	Price
1/2 & 3/4 Pipe	14	.495	1/2	4	7/8	4	**GE45TM14NPTX**	Price	-	-
1 & 2 Pipe	11.5	.620	5/8	4	1-1/8	4	**GE45TM11NPTX**	Price	-	-

Metric Thread Mills





Brand Name - Morse Cutting Tools								
Minimum Thread	Pitch	Cutter Dia. D1	Shank Dia. D2	OAL L1	Length of Cut L2	Flutes	Order No.	Price
M4	.7mm	.120	1/8	2	1/4	3	**MT3098625**	Price
M4.5	.75mm	.120	1/8	2	1/4	3	**MT3098626**	Price
M5	.8mm	.120	3/16	2	5/16	3	**MT3098627**	Price
M6	1mm	.170	3/16	2-1/2	1/2	3	**MT3098628**	Price
M8	.75mm	.235	1/4	2-1/2	5/8	3	**MT3098629**	Price
M8	1mm	.235	1/4	2-1/2	5/8	3	**MT3098630**	Price
M8	1.25mm	.235	1/4	2-1/2	5/8	3	**MT3098631**	Price
M10	1.25mm	.300	5/16	3	3/4	4	**MT3098632**	Price
M10	1.5mm	.300	5/16	3	3/4	4	**MT3098633**	Price
M12	1mm	.360	3/8	3-1/2	7/8	4	**MT3098634**	Price
M12	1.25mm	.360	3/8	3-1/2	7/8	4	**MT3098635**	Price
M12	1.75mm	.360	3/8	3-1/2	7/8	4	**MT3098636**	Price
M14	1.5mm	.360	3/8	3-1/2	7/8	4	**MT3098637**	Price
M16	2mm	.470	1/2	3-1/2	1-1/4	5	**MT3098638**	Price
M18	2.5mm	.470	1/2	3-1/2	1-1/4	5	**MT3098639**	Price
M20	3mm	.470	5/8	3-1/2	1-1/4	5	**MT3098640**	Price

Brand Name - Rapidkut								
Minimum Thread	Pitch	Cutter Dia. D1	Shank Dia. D2	OAL L1	Length of Cut L2	Flutes	Order No.	Price
M4	.7mm	.120	1/8	2	1/4	3	**EN9050025**	Price
M4.5	.75mm	.120	1/8	2	1/4	3	**EN9050026**	Price
M5	.8mm	.120	3/16	2	5/16	3	**EN9050027**	Price
M6	1mm	.170	3/16	2-1/2	1/2	3	**EN9050028**	Price
M8	.75mm	.235	1/4	2-1/2	5/8	3	**EN9050029**	Price
M8	1mm	.235	1/4	2-1/2	5/8	3	**EN9050030**	Price
M8	1.25mm	.235	1/4	2-1/2	5/8	3	**EN9050031**	Price
M10	1.25mm	.300	5/16	3	3/4	4	**EN9050032**	Price
M10	1.5mm	.300	5/16	3	3/4	4	**EN9050033**	Price
M12	1mm	.360	3/8	3-1/2	7/8	4	**EN9050034**	Price
M12	1.25mm	.360	3/8	3-1/2	7/8	4	**EN9050035**	Price
M12	1.75mm	.360	3/8	3-1/2	7/8	4	**EN9050036**	Price
M14	1.5mm	.360	3/8	3-1/2	7/8	4	**EN9050037**	Price
M16	2mm	.470	1/2	3-1/2	1-1/4	5	**EN9050038**	Price
M18	2.5mm	.470	1/2	3-1/2	1-1/4	5	**EN9050039**	Price
M20	3mm	.470	5/8	3-1/2	1-1/4	5	**EN9050040**	Price

MICRO 100 Metric Thread Mills



- AlTiN coated
- Helical flute design for reduced cutting forces, smoother cuts, longest tool life, and maximum thread milling performance
- 100% thread form; superior threads vs. tapping
- Cuts right hand and left hand high quality threads
- Suitable for all types of materials, including heat treated and difficult to machine workpieces

Minimum Thread	Pitch	Cutter Dia.	Shank Dia.	OAL	Length of Cut	Flutes	Order No.	Price
M4.5	.75mm	3mm	6mm	57mm	6mm	3	**GE45TMM045075X**	Price
M5	.8mm	3mm	6mm	57mm	8mm	3	**GE45TMM050080X**	Price
M6	1mm	4.3mm	6mm	57mm	12mm	3	**GE45TMM060100X**	Price
M8	.75mm	6mm	6mm	57mm	16mm	3	**GE45TMM080075X**	Price
M8	1.25mm	6mm	6mm	57mm	16mm	3	**GE45TMM080125X**	Price

Minimum Thread	Pitch	Cutter Dia.	Shank Dia.	OAL	Length of Cut	Flutes	Order No.	Price
M10	1.5mm	7.62mm	8mm	75mm	20mm	4	**GE45TMM100150X**	Price
M12	1mm	9.15mm	10mm	100mm	22mm	4	**GE45TMM120100X**	Price
M12	1.75mm	9.15mm	10mm	100mm	22mm	4	**GE45TMM120175X**	Price
M18	1.5mm	11.94mm	12mm	100mm	32mm	4	**GE45TMM180150X**	Price
M20	2.5mm	11.94mm	12mm	100mm	32mm	4	**GE45TMM200250X**	Price

MICRO 100 Helical Flute Thread Mills



- Completely CNC ground
- Helical flute design for reduced cutting forces, smoother cuts, longest tool life, and maximum thread milling performance
- 100% Thread form; superior threads vs. tapping
- Cuts right hand and left hand high quality threads
- Suitable for all types of materials, including heat treated and difficult to machine workpieces
- Supplied with AlTiN coating, uncoated thread mills are also available

Min. Thread Size	Pitch	Cutter Dia.	Shank Dia. (in.)	OAL (in.)	Length of Cut (in.)	No. of Flutes	Order No.	Price
4	40	.080	1/4	2	3/16	2	**GE45TM11240X**	Price
6	32	.100	1/4	2	1/4	2	**GE45TM13832X**	Price
10	32	.120	1/4	2	5/16	3	**GE45TM19032X**	Price
1/4	20	1/4	1/4	2-1/2	1/2	3	**GE45TM25020X**	Price
1/4	28	.180	1/4	2-1/2	1/2	3	**GE45TM25028X**	Price
5/16	18	.235	1/4	2-1/2	5/8	3	**GE45TM31218X**	Price
5/16	24	.235	1/4	2-1/2	5/8	3	**GE45TM31224X**	Price
3/8	16	.285	5/16	2-1/2	3/4	4	**GE45TM37516X**	Price
3/8	24	.285	5/16	2-1/2	3/4	4	**GE45TM37524X**	Price

Tolerances:
- Shank diameter: -.0001 to -.0003”
- Cutter diameter: ±.0005”
- Length of cut: +.050 to .000”
- Overall length: ±.015”
- TIR maximum: .0005”

Min. Thread Size	Pitch	Cutter Dia.	Shank Dia. (in.)	OAL (in.)	Length of Cut (in.)	No. of Flutes	Order No.	Price
7/16	14	.305	5/16	2-1/2	3/4	4	**GE45TM43714X**	Price
7/16	20	.305	5/16	2-1/2	3/4	4	**GE45TM43720X**	Price
1/2	13	.350	3/8	3	7/8	4	**GE45TM50013X**	Price
5/8	11	.470	1/2	4	1-1/4	4	**GE45TM62511X**	Price
3/4	10	.495	1/2	4	1-1/4	4	**GE45TM75010X**	Price
3/4	12	.495	1/2	4	1-1/4	4	**GE45TM75012X**	Price
3/4	16	.495	1/2	4	1-1/4	4	**GE45TM75016X**	Price
7/8	14	.490	1/2	4	1-1/4	4	**GE45TM87514X**	Price
1	8	.620	5/8	4	1-3/8	4	**GE45TM00108X**	Price

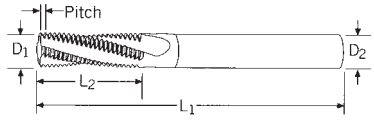
Helical Flute Thread Mills – UN Threads

- Completely CNC ground
- Helical flute design for reduced cutting forces, smoother cuts, longest tool life, and maximum thread milling performance
- 100% thread form; superior threads vs. tapping
- Cuts right hand and left hand high quality threads
- Internal and external threads
- Suitable for all types of materials, including heat treated and difficult to machine workpieces

- **Supplied with AlTiN coating only**

Tolerance:
- Shank diameter -.0001 to -.0003”
- Cutter diameter ±.0005”
- Length of cut ±.0050 to .000”
- Overall length ±.015”
- T.I.R. maximum .0005”





Price Price Price Price RAPIDKUT MILL M THREAD

							Rapidkut		Morse Cutting Tools	
Minimum Thread (in.)	Pitch	Cutter Dia. D1	Shank Dia. D2 (in.)	OAL L1 (in.)	Length of Cut L2 (in.)	Flutes	Order No.	Price	Order No.	Price
6	32	.100	1/8	2	7/32	3	**EN9050000**	Price	**MT3098600**	Price
8	32	.115	1/8	2	1/4	3	**EN9050002**	Price	**MT3098602**	Price
8	36	.115	1/8	2	1/4	3	**EN9050001**	Price	**MT3098601**	Price
10	24	.120	3/16	2	5/16	3	**EN9050003**	Price	**MT3098603**	Price
10	32	.120	3/16	2	5/16	3	**EN9050004**	Price	**MT3098604**	Price
1/4	20	.180	3/16	2-1/2	1/2	3	**EN9050005**	Price	**MT3098605**	Price
1/4	28	.180	3/16	2-1/2	1/2	3	**EN9050006**	Price	**MT3098606**	Price
5/16	18	.240	1/4	2-1/2	5/8	3	**EN9050007**	Price	**MT3098607**	Price
5/16	24	.240	1/4	2-1/2	5/8	3	**EN9050008**	Price	**MT3098608**	Price
3/8	16	.290	5/16	3	3/4	4	**EN9050009**	Price	**MT3098609**	Price
3/8	24	.290	5/16	3	3/4	4	**EN9050010**	Price	**MT3098610**	Price
7/16	14	.340	3/8	3	7/8	4	**EN9050011**	Price	**MT3098611**	Price
7/16	20	.340	3/8	3	7/8	4	**EN9050012**	Price	**MT3098612**	Price
1/2	13	.350	3/8	3	7/8	4	**EN9050013**	Price	**MT3098613**	Price
1/2	20	.350	3/8	3-1/2	7/8	4	**EN9050014**	Price	**MT3098614**	Price
9/16	12	.370	1/2	3-1/2	7/8	4	**EN9050015**	Price	**MT3098615**	Price
9/16	18	.370	1/2	3-1/2	7/8	4	**EN9050016**	Price	**MT3098616**	Price
5/8	11	.470	1/2	3-1/2	1-1/4	5	**EN9050017**	Price	**MT3098617**	Price
5/8	18	.470	1/2	3-1/2	1-1/4	5	**EN9050018**	Price	**MT3098618**	Price
3/4	10	.495	1/2	3-1/2	1-1/4	5	**EN9050019**	Price	**MT3098619**	Price
3/4	16	.495	1/2	3-1/2	1-1/4	5	**EN9050020**	Price	**MT3098620**	Price
7/8	9	.620	5/8	3-1/2	1-1/4	5	**EN9050021**	Price	**MT3098621**	Price
7/8	14	.620	5/8	3-1/2	1-1/4	5	**EN9050022**	Price	**MT3098622**	Price
1	8	.620	3/4	4	1-3/8	5	**EN9050023**	Price	**MT3098623**	Price
1	12	.620	3/4	4	1-3/8	5	**EN9050024**	Price	**MT3098624**	Price

MICRO 100 Precision ID & OD Thread Mills



Solid Carbide

- Engineered for milling precision ID and OD threads in all types of steels, non-ferrous metal and exotic materials
- Equally effective in laminated plastics, fiberglass, and composites
- Thread form generated in American Standard thread
- Minimum pitch listed is for an internal thread
- Solid carbide cutter head brazed to solid carbide shank for maximum rigidity

Price									AlTiN		Uncoated	
Cutter Dia. (in.)	TPI Range	Shank Dia. (in.)	No. of Flutes	Neck Dia. (in.)	Neck Length (in.)	Flat	Thickness (in.)	OAL (in.)	Order No.	Price	Order No.	Price
.120	32-56	3/16	3	.070	3/8	.001	.032	2	**GE45TM1206X**	Price	**GE45TM1206**	Price
.120	32-56	3/16	3	.070	5/8	.001	.032	2	**GE45TM12010X**	Price	**GE45TM12010**	Price
.180	18-56	1/4	4	.100	3/4	.002	.060	2-1/2	**GE45TM18012X**	Price	**GE45TM18012**	Price
.250	16-48	1/4	4	.100	1	.002	.065	2-1/2	**GE45TM25016X**	Price	**GE45TM25016**	Price
.250	16-48	5/16	4	.150	1-1/2	.002	.065	3-1/2	**GE45TM25024X**	Price	**GE45TM25024**	Price
.720	5-12	3/4	6	.370	1-1/4	.0045	.200	4	**GE45TM72020X**	Price	**GE45TM72020**	Price
.720	5-12	3/4	6	.370	2	.0045	.200	4	**GE45TM72032X**	Price	**GE45TM72032**	Price

Carmex Precision Tools Ltd. Solid Carbide 3-in-1 Drill

Thread, Chamfer

- TiAlN coating
- Cancels the need for drilling the hole
- Good for both blind and through holes
- Short cycle time and high performance reduces machining costs



Pitch	Min. Thread Size	Shank Dia.	Cutter Dia.	No. of Flutes	Length of Cut	OAL	Order No.	Price
20	1/4	8mm	.189	3	.550	2-1/2	**FF6110410**	Price
28	1/4	8mm	.197	3	.570	2-1/2	**FF6110400**	Price
18	5/16	8mm	.236	4	.670	2-1/2	**FF6110415**	Price
24	5/16	8mm	.256	4	.670	2-1/2	**FF6110405**	Price
16	3/8	8mm	.264	3	7/8	2-1/2	**FF6110420**	Price

Carmex Precision Tools Ltd. Solid Carbide Thread Mills with Coolant Bore



Full Profile – UN

- TiAlN coating
- Run at medium to high cutting speeds
- General purpose for all materials
- Coolant fluid washes the chips of hole
- Increased tool life

Pitch	Mini. Thread Size	Shank Dia.	Cutter Dia.	No. of Flutes	Length of Cut	OAL	Order No.	Price
32	8	1/4	.126	3	.270	2-1/2	**FF6110275**	Price
20	1/4	1/4	.185	3	.480	2-1/2	**FF6110310**	Price
28	1/4	1/4	.197	3	7/16	2-1/2	**FF6110290**	Price
18	5/16	1/4	.220	3	.580	2-1/2	**FF6110330**	Price
24	5/16	5/16	.260	3	.560	2-1/2	**FF6110300**	Price
32	5/16	5/16	5/16	3	.580	2-1/2	**FF6110280**	Price
16	3/8	5/16	.264	3	.660	2-1/2	**FF6110340**	Price
32	3/8	5/16	5/16	4	.740	2-1/2	**FF6110285**	Price
14	7/16	5/16	.303	3	.820	2-1/2	**FF6110350**	Price
20	7/16	5/16	5/16	3	.830	2-1/2	**FF6110315**	Price
28	7/16	1/4	5/16	3	.560	2-1/2	**FF6110295**	Price
13	1/2	3/8	.362	3	.890	3	**FF6110360**	Price
20	1/2	3/8	3/8	4	7/8	3	**FF6110320**	Price
12	9/16	1/2	.413	3	1.040	4	**FF6110365**	Price
18	9/16	1/2	.445	4	1.030	4	**FF6110335**	Price
11	5/8	1/2	.449	3	1.140	4	**FF6110375**	Price
10	3/4	5/8	.567	4	1.350	4	**FF6110380**	Price
16	3/4	1/2	1/2	4	1.220	4	**FF6110345**	Price
20	3/4	1/2	1/2	5	1.070	4	**FF6110325**	Price
9	7/8	5/8	5/8	3	1-1/2	4	**FF6110385**	Price
14	7/8	5/8	5/8	5	1.460	4	**FF6110355**	Price
8	1	3/4	3/4	4	1.690	4	**FF6110390**	Price
7	1-1/8	3/4	3/4	4	1.780	4	**FF6110395**	Price
12	1	5/8	5/8	5	1.630	4	**FF6110370**	Price

Carmex Precision Tools Ltd. Mini Mill - Thread UN - 2 x D

- TiAlN coating
- Run at medium to high cutting speeds
- General purpose for all materials
- 3-Flute



Pitch	Tap Size	Shank Dia.	Cutter Dia.	No. of Flutes	LOC	OAL	Order No.	Price
72	1	1/4	.057	3	.150	2-1/2	**FF6110000**	Price
64	1	1/4	.055	3	.150	2-1/2	**FF6110005**	Price
56	2	1/4	.065	3	.170	2-1/2	**FF6110010**	Price
48	3	1/4	.075	3	.200	2-1/2	**FF6110015**	Price
40	4	1/4	.083	3	1/4	2-1/2	**FF6110020**	Price
40	5	1/4	.096	3	.280	2-1/2	**FF6110025**	Price
32	6	1/4	.100	3	.280	2-1/2	**FF6110035**	Price
32	8	1/4	.126	3	.370	2-1/2	**FF6110040**	Price
36	8	1/4	.130	3	.350	2-1/2	**FF6110030**	Price
32	10	1/4	.146	3	.410	2-1/2	**FF6110045**	Price
24	10	1/4	.138	3	.420	2-1/2	**FF6110060**	Price
28	12	1/4	.165	3	.430	2-1/2	**FF6110050**	Price
20	1/4	1/4	3/16	3	.550	2-1/2	**FF6110070**	Price
28	1/4	1/4	.197	3	.570	2-1/2	**FF6110055**	Price
18	5/16	1/4	.236	3	.670	2-1/2	**FF6110080**	Price
24	5/16	5/16	.260	3	.670	2-1/2	**FF6110065**	Price
16	3/8	5/16	.264	3	7/8	2-1/2	**FF6110085**	Price
14	7/16	5/16	.303	3	.980	2-1/2	**FF6110090**	Price
20	7/16	5/16	5/16	3	.980	2-1/2	**FF6110075**	Price
13	1/2	3/8	.362	3	1.080	3	**FF6110095**	Price
12	9/16	1/2	.413	3	1.240	3-1/2	**FF6110100**	Price
11	5/8	1/2	.449	3	1.360	3-1/2	**FF6110105**	Price

Carmex Precision Tools Ltd. Solid Carbide Mini Mill Thread Mills ISO

- TiAlN coating
- Run at medium to high cutting speeds
- General purpose for all materials



Pitch (mm)	Min. Thread Size	Shank Dia.	Cutter Dia.	No. of Flutes	Length of Cut	OAL	Order No.	Price
.4mm	M2	3mm	.610	3	1/4	1-1/2	**FF6110240**	Price
.4mm	M2	1/4	.610	3	.180	2-1/2	**FF6110180**	Price
.45mm	M2.5	1/4	.770	3	7/32	2-1/2	**FF6110185**	Price
.45mm	M2.5	1/4	.770	3	.300	2-1/2	**FF6110245**	Price
.5mm	M3	1/4	.930	3	.260	2-1/2	**FF6110190**	Price
.5mm	M3	1/4	.930	3	.370	2-1/2	**FF6110250**	Price
.7mm	M4	1/4	.122	3	.350	2-1/2	**FF6110195**	Price
.7mm	M4	1/4	.122	3	.490	2-1/2	**FF6110255**	Price
.8mm	M5	1/4	.150	3	.490	2-1/2	**FF6110200**	Price
.8mm	M5	1/4	.150	3	.630	2-1/2	**FF6110260**	Price
1mm	M6	1/4	.183	3	.550	2-1/2	**FF6110205**	Price
1mm	M6	1/4	.183	3	.790	2-1/2	**FF6110265**	Price
1.25mm	M8	1/4	.234	3	.710	2-1/2	**FF6110210**	Price
1.25mm	M8	1/4	.234	3	.940	2-1/2	**FF6110270**	Price
1.5mm	M10	5/16	.370	3	.910	2-1/2	**FF6110215**	Price
1.75mm	M12	3/8	.354	3	1.200	3	**FF6110220**	Price
2mm	M16	1/2	.465	4	1-3/8	3-1/2	**FF6110225**	Price



PROCUT 15 Pc. Carbon Steel Tap & Die Set

#4 thru #12
13/16" Adjustable Round Dies

- In hinged cover box
- Includes one each plug tap and 13/16" OD adjustable round die for the following 6 thread sizes plus tools indicated:
- **Thread sizes:** 4-40, 6-32, 8-32, 10-24, 10-32, 12-24
- **Threading tools:** plain die stock, T-handle tap wrench, straight tap wrench



Set Material	Order No.	Price
Carbon Steel	**ET51C613**	Price

PROCUT 39 Pc. Tap & Die Sets

#4 thru 1/2"
1" Adjustable Round Dies

- Self-hinged durable plastic case with removable tray
- Includes one each plug tap and 1" OD die for the following 17 thread sizes plus tools indicated
- **Thread sizes:** 4-40, 6-32, 8-32, 10-24, 10-32, 12-24, 1/4-20, 1/4-28, 5/16-18, 5/16-24, 3/8-16, 3/8-24, 7/16-14, 7/16-20, 1/2-13, 1/2-20, 1/8-27 NPT (pipe die is solid round)
- **Threading tools:** T-handle tap wrench, straight tap wrenches, die stock



Set Material	Order No.	Price
Carbon Steel	**ET51C614**	Price
High Speed Steel	**ET51HS614**	Price

PROCUT 41 Pc. Tap & Die Sets

1/4" thru 3/4" NC & NF
1-1/2" Adjustable Round Dies

- Complete set in self-hinged durable plastic case 20" x 12" x 2-1/4"
- Includes one each plug tap and 1-1/2" OD adjustable round die for each of the following 18 thread sizes plus tools indicated:
- **Thread sizes:** 1/4-20, 1/4-28, 5/16-18, 5/16-24, 3/8-16, 3/8-24, 7/16-14, 7/16-20, 1/2-13, 1/2-20, 9/16-12, 9/16-18, 5/8-11, 5/8-18, 3/4-10, 3/4-16, 1/8-27 NPT, 1/4-18 NPT (pipe dies are solid round)
- **Threading tools:** Adjustable die stock, adjustable handle tap wrench, T-handle tap wrench, screw pitch gauge & screwdriver



Set Material	Order No.	Price
Carbon Steel	**ET51C3465**	Price
High Speed Steel	**ET51HS3465**	Price

IRWIN HANSON 41 Pc. Carbon Steel Tap & Hex Die Set

#4 thru 1/2"

- Packed in a hinged durable plastic case with removable tray
- Contains one each of the following taps and hex dies:
- **Thread sizes:** 4-40, 6-32, 8-32, 10-24, 10-32, 12-24, 1/4-20, 1/4-28, 5/16-18, 5/16-24, 3/8-16, 3/8-24, 7/16-14, 7/16-20, 1/2-13, 1/2-20, 1/8-27 NPT
- **Threading tools:** 2 die stocks, tap handles, tap wrench, 1 screwdriver, 1 thread gage



Set Material	Order No.	Price
Carbon Steel	**EW5124606**	Price

PROCUT 64 Pc. Tap & Die Sets

#4 thru 1", 1", 1-1/2", 2" Adjustable Round Dies

- In self-hinged durable plastic case with tray
- Complete set includes one each plug tap and die for the following 28 thread sizes plus tools indicated:
- **Thread sizes:** 1" Adjustable round dies: 4-40, 8-32, 10-32, 1/4-20, 5/16-18, 3/8-16, 7/16-14, 1/2-13, 1/8-27 NPT, 6-32, 10-24, 12-24, 1/4-28, 5/16-24, 3/8-24, 7/16-20, 1/2-20
- **Thread sizes:** 1-1/2" Adjustable round dies: 9/16-12, 5/8-11, 3/4-10, 9/16-18, 5/8-18, 3/4-16, 1/4-18 NPT pipe die is solid round
- **Thread sizes:** 2" Adjustable round dies: 7/8-9, 7/8-14, 1-8, 1-14
- **Threading tools:** 1" Adjustable die stock, 1-1/2" adjustable die stock, 2" adjustable die stock, 2" adjustable handle, tap wrenches, T-handle tap wrench, screw pitch gauge, screwdriver



Set Material	Order No.	Price
Carbon Steel	**ET51C99146**	Price
High Speed Steel	**ET51HS99146**	Price

IRWIN HANSON 39 Pc. #4-1/2" Super Set

Carbon Steel Taps and 1" Adjustable Round Dies



Thread sizes:
4-40
6-32
8-32
10-24
10-32
12-24
1/4-20
1/4-28
5/16-18
5/16-24
3/8-16
3/8-24
7/16-14
7/16-20
1/2-13
1/2-20
1/8-27 NPT

Threading tools:
- Adjustable die stock
- Adjustable handle tap wrench
- T-handle tap wrench
- Screw pitch gauge
- Screwdriver

Set Material	Order No.	Price
Carbon Steel	**EW5125914**	Price

IRWIN HANSON 41 Pc. 1/4"-3/4" Fractional Sizes

Carbon Steel Taps and 1-1/2" Screw Adjusting Dies



Thread sizes:
1/4-20
1/4-28
5/16-18
5/16-24
3/8-16
3/8-24
7/16-14
7/16-20
1/2-13
1/2-20
9/16-12
9/16-18
5/8-11
5/8-18
3/4-10
3/4-16
1/8-27 NPT
1/4-18 NPT

Threading tools:
- Adjustable die stock – 1-1/2" round
- Adjustable handle tap wrench
- T-handle tap wrench
- Screw pitch gauge
- Screwdriver

Set Material	Order No.	Price
Carbon Steel	**EW5125941**	Price

IRWIN HANSON 54 Pc. Metric Sizes 3mm-18mm

Carbon Steel Taps and Hexagon Dies with Drill Chart



Thread sizes:
1" Die
1/8-28 BSP
1/4-19 BSP
M3x0.50
M4x0.70
M4x0.75
M5x0.80
M5x0.90
M6x1.00
M7x1.00
M8x1.25
M9x1.00
M9x1.25
M10x1.25
M10x1.50
M11x1.50
M12x1.50
M12X1.75
1-7/16" Die
M14x1.25
M14x2.00
M16x1.50
M16x2.00
M18x1.50
M18x2.50

Threading tools:
- Adjustable die stock for 1" hex dies
- Adjustable die stock for 1-7/16" hex dies
- T-Handle tap wrench, hex nut
- Adjustable handle tap wrench
- Screw pitch gauge-metric
- Screwdriver

Set Material	Order No.	Price
Carbon Steel	**EW5126394**	Price

IRWIN HANSON 66 Pc. Combination Set Metric Sizes 3mm-24mm

Carbon Steel Taps and Hexagon Dies



Thread sizes:
5/8" Die
M3x0.50
M4x0.70
M4x0.75
M5x0.80
M5x0.90
M6x1.00
1" Die
M7x1.00
M8x1.00
M8x1.25
M9x1.00
M9x1.25
M10x1.25
M10x1.50
M11x1.50
M12x1.50
M12x1.75
1-7/16" Die
M14x1.25
M14x1.50
M14x2.00
M16x1.50
M16x2.00
M18x1.50
M18x2.50
1-13/16" Die
M20x2.50
M22x1.50
M24x2.00
M24x3.00
Pipe 1" Die
1/8-28 BSP

Threading tools:
- Adjustable die stock for 1" hexagon dies
- Adjustable die stock for 1-7/16" hexagon dies
- Adjustable die stock for 1-13/16" hexagon dies
- Plain die stock
- T-handle tap wrench, hex nut
- T-handle tap wrench, hex nut with 3/8" square drive
- Adjustable handle tap wrench
- Screw pitch gauge-metric
- Screwdriver

Set Material	Order No.	Price
Carbon Steel	**EW5197312**	Price

IRWIN HANSON 117 Pc. Super Tap and Die Set

Combination Machine Screw, Fractional and Metric Taps and Dies, Screw Extractors and High Speed Steel Drill Bits



Set includes carbon hex dies and plug style taps

Thread sizes
Machine screw:
4-40
6-32
8-32
10-24
10-32
12-24
Fractional:
1/4-20
1/4-28
5/16-18
5/16-24
3/8-16
3/8-24
7/16-14
7/16-20
1/2-13
1/2-20
Metric:
M3x0.50
M4x0.70
M4x0.75
M5x0.80
M5x0.90
M6x1.00
M7x1.00
M8x1.00
M8x1.25
M9x1.00
M9x1.25
M10x1.25
M10x1.50
M11x1.50
M12x1.50
M12x1.75
Spiral flute
Screw extractors: EX-1, EX-2, EX-3, EX-4, EX-5
Pipe:
1/8-27 NPT
1/8-28 BSP
Deluxe drill bits:
Includes 36 sizes
Threading tools:
- Adjustable die stock – 1" hexagon dies
- Plain die stock – 5/8" hexagon dies
- Adjustable handle tap wrench – taps no. 0 to 1/2"
- Two-in-one tap wrench – taps 1/4" to 1/2"
- T-Handle wrench – taps no. 0 to 1/4"
- 16 Leaf metric thread pitch gauge
- 18 Leaf standard thread pitch gauge
- Screwdriver

Set Material	Order No.	Price
Carbon Steel	**EW5126377**	Price

PROCUT Master Tap and Drill Sets

High Speed Steel
Compact Set for Toolmakers Box

Set Includes:

ET50103:
4-40, drill #44
5-40, drill #39
6-32, drill #36
8-32, drill #29
10-24, drill #25
1/4-20, drill #7
5/16-18, drill F
3/8-16, drill 5/16
7/16-14, drill U
1/2-13, drill 27/64

ET50104:
4-48, drill #43
5-44, drill #38
6-40, drill #34
8-36, drill #29
10-32, drill #21
1/4-28, drill #3
5/16-24, drill #1
3/8-24, drill O
7/16-20, drill W
1/2-20, drill 29/64



Set Range	Order No.	Price
#4 thru 1/2" NC Taps -- #44 thru 27/64" Drills	**ET50103**	Price
#4 thru 1/2" NF Taps -- #43 thru 29/64" Drills	**ET50104**	Price

PROCUT Tap and Drill Set

High Speed Steel with Metal Index

All the popular taps and necessary drills plus metal index.

Set Includes:
6-32, drill #36
8-32, drill #29
10-24, drill #25
10-32, drill #21
1/4-20, drill #7
5/16-18, drill F
3/8-16, drill 5/16
7/16-14, drill U
1/2-13, drill 27/64



Set Range	Order No.	Price
#6 thru 1/2" NF Taps -- #21 thru 29/64 Drills	**ET5018TDS**	Price
#6 thru 1/2" Taps -- #36 thru 27/64" Drills	**ET5099TDS**	Price

PROCUT Metric Tap and Drill Set

High Speed Steel with Metal Index

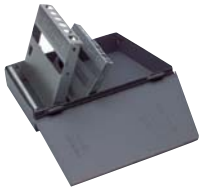
All the popular taps and necessary drills plus metal index.

Set Includes:
M2.5x0.45, drill 2.05mm
M3x0.50, drill 2.50mm
M3.5x0.60, drill 2.90mm
M4x0.70, drill 3.30mm
M5x0.80, drill 4.20mm
M6x1.00, drill 5.00mm
M8x1.25, drill 6.70mm
M10x1.5, drill 8.50mm
M12x1.75, drill 10.20mm



Set Range	Order No.	Price
M2 thru M12 Taps -- 2.05mm thru 10.2mm Drills	**ET504099TDS**	Price

Huot Metal Indexes



Sizes Held	Order No.	Price
M2 thru M12 Taps -- 2.05mm thru 10.2mm Drills	**AP534099**	Price
National Coarse: Holds sizes 6-32 Tap #36 Drill, 8-32 #29, 10-24 #25, 10-32 #21, 1/4-20 #7, 5/16-18 #F, 3/8-16 #5/16, 7/16-14 #U, 1/2-13 #27/64.	**AP5399**	Price

PROCUT 41 Pc. Metric Tap and Die Sets

3mm thru 12mm • 1" Hexagon Dies

- Features the advantage of hexagon dies allowing user to work in places where a die stock cannot be used.
- Plastic case with removable tray.
- Includes one each: plug tap and hexagon, die for the following 17 metric thread sizes plus tools indicated:



Thread sizes:
M3x0.50
M3x0.60
M4x0.70
M4x0.75
M5x0.80
M5x0.90
M6x0.75
M6x1.00
M7x0.75
M7x1.00
M8x1.00
M8x1.25
M10x1.25
M10x1.50
M12x1.50
M12x1.75
1/8 NPT

Threading tools:
- Adjustable die stock
- Screw pitch gauge (metric)
- Screwdriver
- T-handle tap wrenches (2)
- Straight tap wrench

Set Material	Order No.	Price
Carbon Steel	**ET516312**	Price
High Speed Steel	**ET51HS6312**	Price

PROCUT 24 Pc. Metric Tap & Die Sets

3mm thru 12mm • 1" Hexagon Dies

- In self-hinged plastic case
- Includes plug tap and 1" hexagon die for the following sizes plus tools indicated:



Thread sizes:
M3x0.50
M4x0.70
M5x0.80
M6x1.00
M7x1.00
M8x1.25
M9x1.25
M10x1.50
M12x1.50
M12x1.75
1/8 NPT

Threading tools:
- 1" Hex die stock
- Straight tap wrench

Set Material	Order No.	Price
Carbon Steel	**ET514M**	Price
High Speed Steel	**ET51HS4M**	Price

IRWIN HANSON 41 Pc. Carbon Steel Metric Tap & Die Set

3mm thru 12mm

- Provides for many metric threading requirements
- Packed in a hinged plastic case with removable tray
- Includes one each plug tap and hexagon die for the following metric thread sizes plus tools indicated

Thread sizes:
M3x0.50
M4x0.70
M4x0.75
M5x0.80
M5x0.90
M6x1.00
M7x1.00
M8x1.00
M8x1.25
M9x1.00
M9x1.25
M10x1.25
M10x1.50
M11x1.50
M12x1.50
M12x1.75
1/8-28 BSP



Threading tools:
- Dies stocks (2)
- Tap wrenches (2)
- Tap handle
- Thread gauge
- Screwdriver

Order No.	Price
EW5126317	Price

Lisle Tap Socket Set

- Ideal for use in areas where a T-handle won't fit
- Set of (8) sockets fits all number and fractional M.C.T.I. standard taps thru 1/2 inch
- Also fits 1/8 inch NPT taps and metric taps thru 12mm manufactured to M.C.T.I. standards
- Sockets contained on a vinyl holder



Order No.	Price
KN6570500	Price

PROCUT & RAPIDKUT Standard Thread Round Adjustable Dies

High Speed Steel

Machine screw & fractional sizes
National coarse or fine thread

Price				
	Price		ProCut	
Size	Order No.	Price	Order No.	Price
5-40	**EN2011140**	Price	**EN310005NC**	Price
5-44	**EN2011144**	Price	**EN310005NF**	Price
6-32	**EN2011232**	Price	**EN310006NC**	Price
6-40	**EN2011240**	Price	**EN310006NF**	Price
8-32	**EN2011332**	Price	**EN310008NC**	Price
8-36	**EN2011336**	Price	**EN310008NF**	Price
10-24	**EN2011424**	Price	**EN310010NC**	Price
10-32	**EN2011432**	Price	**EN310010NF**	Price
12-24	**EN2011524**	Price	**EN310012NC**	Price
12-28	**EN2011528**	Price	**EN310012NF**	Price
1/4-20	**EN2012332**	Price	**EN310025NC**	Price
1/4-28	**EN2012424**	Price	**EN310025NF**	Price
5/16-18	**EN2012432**	Price	**EN310031NC**	Price
5/16-24	**EN2012524**	Price	**EN310031NF**	Price

Type - Standard Thread Die OD (in.) - 1				
	Rapidkut		ProCut	
Size	Order No.	Price	Order No.	Price
6-32	**EN2011620**	Price	**EN320006NC**	Price
6-40	**-**	-	**EN320006NF**	Price
8-32	**EN2011628**	Price	**EN320008NC**	Price
8-36	**-**	-	**EN320008NF**	Price
10-24	**EN2011718**	Price	**EN320010NC**	Price
10-32	**EN2011724**	Price	**EN320010NF**	Price
12-24	**EN2012232**	Price	**EN320012NC**	Price
12-28	**-**	-	**EN320012NF**	Price
1/4-20	**EN2012620**	Price	**EN320025NC**	Price
1/4-28	**EN2012628**	Price	**EN320025NF**	Price
5/16-18	**EN2012718**	Price	**EN320031NC**	Price
5/16-24	**EN2012724**	Price	**EN320031NF**	Price
3/8-16	**EN2012816**	Price	**EN320037NC**	Price
3/8-24	**EN2012824**	Price	**EN320037NF**	Price
7/16-14	**EN2012914**	Price	**EN320043NC**	Price
7/16-20	**EN2012920**	Price	**EN320043NF**	Price

Type - Standard Thread Die OD (in.) - 1				
	Rapidkut		ProCut	
Size	Order No.	Price	Order No.	Price
1/2-13	**-**	-	**EN320050NC**	Price
1/2-20	**-**	-	**EN320050NF**	Price

Price				
	Price		ProCut	
Size	Order No.	Price	Order No.	Price
1/4-20	**EN2013120**	Price	**EN330025NC**	Price
1/4-28	**EN2013128**	Price	**EN330025NF**	Price
5/16-18	**EN2013218**	Price	**EN330031NC**	Price
5/16-24	**EN2013224**	Price	**EN330031NF**	Price
3/8-16	**EN2013316**	Price	**EN330037NC**	Price
3/8-24	**EN2013324**	Price	**EN330037NF**	Price
7/16-14	**EN2013414**	Price	**EN330043NC**	Price
7/16-20	**EN2013420**	Price	**EN330043NF**	Price
1/2-13	**EN2013513**	Price	**EN330050NC**	Price
1/2-20	**EN2013520**	Price	**EN330050NF**	Price
9/16-12	**EN2013612**	Price	**EN330056NC**	Price
9/16-18	**EN2013618**	Price	**EN330056NF**	Price
5/8-11	**EN2013711**	Price	**EN330062NC**	Price
5/8-18	**EN2013718**	Price	**EN330062NF**	Price
3/4-10	**-**	-	**EN330075NC**	Price
3/4-16	**-**	-	**EN330075NF**	Price

Type - Standard Thread Die OD (in.) - 2				
	Rapidkut		ProCut	
Size	Order No.	Price	Order No.	Price
5/8-11	**EN2014111**	Price	**EN340062NC**	Price
5/8-18	**EN2014118**	Price	**EN340062NF**	Price
3/4-10	**EN2014210**	Price	**EN340075NC**	Price
3/4-16	**EN2014216**	Price	**EN340075NF**	Price
7/8-9	**EN2014309**	Price	**EN340087NC**	Price
7/8-14	**EN2014314**	Price	**EN340087NF**	Price
1-8	**-**	-	**EN340100NC**	Price
1-12	**-**	-	**EN340100NF**	Price
1-14	**-**	-	**EN340101NF**	Price



Price		
	Price	
Size	Order No.	Price
1-1/8-7	**EN351125NC**	Price
1-1/8-12	**EN351125NF**	Price
1-1/4-7	**EN351250NC**	Price
1-1/4-12	**EN351250NF**	Price
1-3/8-6	**EN351375NC**	Price
1-3/8-12	**EN351375NF**	Price
1-1/2-6	**EN351500NC**	Price
1-1/2-12	**EN351500NF**	Price

Type - Metric Die OD (in.) - 13/16		
	Rapidkut	
Size	Order No.	Price
M2.5x0.45	**EN2021245**	Price
M3x0.50	**EN2021350**	Price
M3.5x0.60	**EN2021356**	Price
M4x0.70	**EN2021407**	Price
M4.5x0.75	**EN2021458**	Price
M5x0.80	**EN2021510**	Price
M6x1.0	**EN2021610**	Price

Type - Metric Die OD (in.) - 1		
	Rapidkut	
Size	Order No.	Price
M6x1.0	**EN2022610**	Price
M7x1.0	**EN2022710**	Price
M8x1.25	**EN2022812**	Price
M10x1.5	**EN2022815**	Price
M12x1.75	**EN2022917**	Price

Type - Metric Die OD (in.) - 1-1/2		
	Rapidkut	
Size	Order No.	Price
M14x2.0	**EN2023142**	Price
M16x2.0	**EN2023162**	Price
M18x2.5	**EN2023182**	Price
M20x2.5	**EN2023202**	Price

PROCUT Metric Round Adjustable Dies

High Speed Steel

- Coarse pitch
- Fine pitch



Size	O.D. (in.)	Pitch	Style	Order No.	Price
M2	1	0.40	Coarse	**EP52020**	Price
M2	1	0.45	Coarse	**EP52021**	Price
M2.2	1	0.45	Coarse	**EP52022**	Price
M2.5	1	0.45	Coarse	**EP52025**	Price
M3	1	0.35	Fine	**EP53030**	Price
M3	1	0.50	Coarse	**EP52030**	Price
M3.5	1	0.35	Fine	**EP53035**	Price
M3.5	1	0.60	Coarse	**EP52035**	Price
M4	1	0.50	Fine	**EP53041**	Price
M4	1	0.70	Coarse	**EP52040**	Price
M4.5	1	0.75	Coarse	**EP52045**	Price
M5	1	0.50	Fine	**EP53050**	Price
M5	1	0.80	Coarse	**EP52050**	Price
M5.5	1	0.90	Coarse	**EP52055**	Price
M6	1	0.50	Fine	**EP53060**	Price
M6	1	0.75	Fine	**EP53061**	Price
M6	1	1.0	Coarse	**EP52060**	Price
M7	1	0.75	Fine	**EP53070**	Price
M7	1	1.0	Coarse	**EP52070**	Price
M8	1	1.0	Fine	**EP53080**	Price
M8	1	1.25	Coarse	**EP52080**	Price
M9	1	1.0	Fine	**EP53090**	Price
M9	1	1.25	Coarse	**EP52090**	Price
M10	1	1.5	Coarse	**EP52100A**	Price
M10	1-1/2	1.25	Fine	**EP53100**	Price
M10	1-1/2	1.5	Coarse	**EP52100**	Price
M11	1-1/2	1.0	Fine	**EP53110**	Price
M11	1-1/2	1.5	Coarse	**EP52110**	Price
M12	1-1/2	1.25	Fine	**EP53121**	Price
M12	1-1/2	1.5	Fine	**EP53120**	Price
M12	1-1/2	1.75	Coarse	**EP52120**	Price
M14	1-1/2	1.25	Fine	**EP53141**	Price

Size	O.D. (in.)	Pitch	Style	Order No.	Price
M14	1-1/2	1.5	Fine	**EP53140**	Price
M14	1-1/2	2.0	Coarse	**EP52140**	Price
M16	1-1/2	1.5	Fine	**EP53160**	Price
M16	1-1/2	2.0	Coarse	**EP52160**	Price
M18	1-1/2	1.5	Fine	**EP53181**	Price
M18	1-1/2	2.0	Fine	**EP53180**	Price
M18	1-1/2	2.5	Coarse	**EP52180**	Price
M20	2	2.0	Fine	**EP53200**	Price
M20	2	2.5	Coarse	**EP52200**	Price
M22	2	2.0	Fine	**EP53220**	Price
M22	2	2.5	Coarse	**EP52220**	Price
M24	2	2.0	Fine	**EP53240**	Price
M24	2	3.0	Coarse	**EP52240**	Price
M28	2-1/2	2.0	Fine	**EP53280**	Price
M30	2-1/2	2.0	Fine	**EP53300**	Price
M30	2-1/2	3.5	Coarse	**EP52300**	Price

PROCUT NPT Round Adjustable Pipe Dies

High speed steel



Size	O.D. (in.)	Order No.	Price
1/16–27	1	**EN52001**	Price
1/8–27	1	**EN52002**	Price
1/8–27	1-1/2	**EN62002**	Price
1/4–18	1-1/2	**EN62004**	Price
3/8–18	1-1/2	**EN62006**	Price
1/2–14	2	**EN72008**	Price
3/4–14	2	**EN72012**	Price
1–11-1/2	2-1/2	**EN82016**	Price

PROCUT Metric Special Pitch Round Adjustable Dies

High Speed Steel



Size	O.D. (in.)	Order No.	Price
M1.6x0.35	1	**ER6101635A**	Price
M3.5x0.50	1	**ER6135050A**	Price
M3x0.60	1	**ER6130060A**	Price
M4.5x0.50	1	**ER6145050A**	Price
M5x0.90	1	**ER6150090A**	Price
M5x1.0	1	**ER6150100A**	Price
M6.3x1.0	1	**ER6163010A**	Price
M10x0.75	1	**ER6110075A**	Price
M10x1.0	1	**ER6110100A**	Price
M10x1.5	1	**ER6110150A**	Price
M10x1.0	1-1/2	**ER6110100B**	Price
M12x0.75	1-1/2	**ER6112075B**	Price
M12x1.0	1-1/2	**ER6112100B**	Price
M12x1.25	1-1/2	**ER6112125B**	Price
M13x1.0	1-1/2	**ER6113100B**	Price
M13x1.25	1-1/2	**ER6113125B**	Price
M13x1.5	1-1/2	**ER6113150B**	Price
M13x1.75	1-1/2	**ER6113175B**	Price
M14x1.0	1-1/2	**ER6114100B**	Price
M15x.75	1-1/2	**ER6115075B**	Price
M15x1.0	1-1/2	**ER6115100B**	Price
M15x1.50	1-1/2	**ER6115150B**	Price
M16x1.0	1-1/2	**ER6116100B**	Price
M17x1.5	1-1/2	**ER6117150B**	Price
M22x1.0	2	**ER6122100C**	Price
M25x2.0	2	**ER6125200C**	Price
M27x2.0	2-1/2	**ER6127200D**	Price
M27x3.0	2-1/2	**ER6127300D**	Price
M34x3.5	2-1/2	**ER6134350D**	Price
M36x2.0	2-1/2	**ER6136200D**	Price
M38x4.0	2-1/2	**ER6138400D**	Price

PROCUT Left Hand Round Adjustable Dies

High Speed Steel



Die OD (in.) - 13/16		
Size	Order No.	Price
2-56	ER620002NC	Price
2-64	ER620002NF	Price
3-48	ER620003NC	Price
3-56	ER620003NF	Price
4-40	ER620004NC	Price
4-48	ER620004NF	Price
5-40	ER620005NC	Price
5-44	ER620005NF	Price
6-32	ER620006NC	Price
6-40	ER620006NF	Price
8-32	ER620008NC	Price
8-36	ER620008NF	Price
10-24	ER620010NC	Price
10-32	ER620010NF	Price

Die OD (in.) - 1		
Size	Order No.	Price
6-32	ER621006NC	Price
6-40	ER621006NF	Price
8-32	ER621008NC	Price
8-36	ER621008NF	Price
10-24	ER621010NC	Price
10-32	ER621010NF	Price
12-24	ER621012NC	Price
12-28	ER621012NF	Price
1/4-20	ER621025NC	Price
1/4-28	ER621025NF	Price
5/16-18	ER621031NC	Price
5/16-24	ER621031NF	Price
3/8-16	ER621037NC	Price
3/8-24	ER621037NF	Price
7/16-14	ER621043NC	Price
7/16-20	ER621043NF	Price

Die OD (in.) - 1-1/2		
Size	Order No.	Price
1/4-20	ER622025NC	Price
1/4-28	ER622025NF	Price

Die OD (in.) - 1-1/2		
Size	Order No.	Price
5/16-18	ER622031NC	Price
5/16-24	ER622031NF	Price
3/8-16	ER622037NC	Price
3/8-24	ER622037NF	Price
7/16-14	ER622043NC	Price
7/16-20	ER622043NF	Price
1/2-13	ER622050NC	Price
1/2-20	ER622050NF	Price
5/8-11	ER622065NC	Price
5/8-18	ER622065NF	Price
3/4-10	ER622075NC	Price
3/4-16	ER622075NF	Price

Die OD (in.) - 2		
Size	Order No.	Price
5/8-11	ER623065NC	Price
5/8-18	ER623065NF	Price
3/4-10	ER623075NC	Price
3/4-16	ER623075NF	Price
7/8-9	ER623087NC	Price
7/8-14	ER623087NF	Price
1-8	ER623100NC	Price
1-12	ER623100NF	Price

Die OD (in.) - 2-1/2		
Size	Order No.	Price
1-1/2-6	ER624150NC	Price
1-1/2-12	ER624150NF	Price
1-1/4-7	ER624125NC	Price
1-1/4-12	ER624125NF	Price
1-1/8-7	ER624112NC	Price
1-1/8-12	ER624112NF	Price
1-3/8-6	ER624137NC	Price
1-3/8-12	ER624137NF	Price

PROCUT Hexagon Rethreading Die Sets

- High carbon tool steel hexagon dies with extra thickness for restoring damaged threads
- Case not included



No. of Pieces - 10		
Set Range	Order No.	Price
1/4" thru 1" - Coarse	ET51403	Price
1/4" thru 1" - Fine	ET51413	Price

No. of Pieces - 5		
Set Range	Order No.	Price
1/4" thru 1/2" -- Coarse	ET51401	Price
1/4" thru 1/2" -- Fine	ET51411	Price

IRWIN HANSON 75 Pc. Super Tap & Die Combination Set

Modular case system

- Individual modular sets of SAE taps, SAE dies, metric taps, metric dies, drive tools
- Slim design fits in smallest tool drawers

Set includes:

- Plain die stock for 5/8" hex dies
- Adjustable die stock for 1" hex dies
- Adjustable tap wrench for taps #0 to 1/2"
- Two-in-one tap wrench 1/4" to 1/2"
- T-handle tap wrench 1/4" to 1/2"
- 16 Leaf fractional thread pitch gage
- 16 Leaf metric thread pitch gage
- **Thread size -machine screw:** 4-40, 6-32, 8-32, 10-24, 10-32, 12-24
- **Fractional:** 1/4-20, 1/4-28, 5/16-18, 5/16-24, 3/8-16, 3/8-24, 7/16-14, 7/16-20, 1/2-13, 1/2-20
- **Metric:** M3x0.50, M4x0.70, M4x0.75, M5x0.80, M5x0.90, M6x1.00, M7x1.00, M8x1.00, M8x1.25, M9x1.00, M9x1.25, M10x1.25, M10x1.50, M11x1.50, M12x1.50, M12x1.75
- **Pipe sizes:** 1/8-27 NPT, 1/8-28 BSP



Set Includes	Order No.	Price
Carbon Aligning Hex Die and Plug Style Taps	EW5126376	Price

Nu-Thread Thread Restoring Files

- Overlap a few good threads & use just like a file to restore damaged areas
- 7/16" Square x 8-1/2" overall length



For Use With - Bolts		
Repairs (TPI)	Order No.	Price
.80, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, & 3.00mm	FB808M	Price
11, 12, 13, 14, 16, 18, 20, & 24	FB801	Price
9, 10, 12, 16, 20, 27, 28, & 32	FB802	Price

For Use With - External Pipe Threads		
Repairs (TPI)	Order No.	Price
8, 10, 11-1/2, 14, 16, 18, 24 & 27 TPI	FB807	Price
8, 10, 11-1/2 & 14	FB805†	Price

† 1" x 1/2" x 8-3/8"

LANG TOOLS Thread Restorer Files

- Restores damaged external threads, any diameter, right or left hand
- Select the proper number of threads per inch or millimeters per thread
- File is highly tempered for strength and durability



Repair Range	Order No.	Price
9, 10, 12, 16, 20, 27, 28, 32	KL402666	Price
11,12 ,13, 14, 16, 18, 20, 24	KL402665	Price
.75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00mm	KL402670	Price

LANG TOOLS 3 Pc. Thread Restorer File Set

- Restores damaged external threads, any diameter, right or left hand
- Files are highly tempered for strength and durability
- Pitches included on SAE rethread files (threads per inch): 9, 10, 11, 12, 13, 14, 16, 18, 20, 24, 27, 28, 30
- Pitches included on metric rethread files (millimeters per thread): .75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00

MADE IN THE USA



Order No.	Price
KL402573	Price

Hexagon Rethreading Dies



High Speed Steel or Carbon Steel

- Permits restoring of jammed threads to good condition
- Hexagon size is same as nut for thread being cut

Price	PROCUT	IRWIN HANSON	PROCUT
	Price		High Speed Steel
	Price	C.H. Hanson	ProCut
Die Thread Size	Order No. / Price	Order No. / Price	Order No. / Price
4-40	ER630004NC Price	- -	- -
4-48	ER630004NF Price	- -	- -
5-40	ER630005NC Price	- -	- -
5-44	ER630005NF Price	- -	- -
6-32	ER630006NC Price	- -	- -
8-32	ER630008NC Price	- -	- -
8-36	ER630008NF Price	- -	- -
10-24	ER630010NC Price	- -	- -
10-32	ER630010NF Price	- -	- -
12-24	ER630012NC Price	- -	- -
12-28	ER630012NF Price	- -	- -
3/16-24	ER630316NC Price	- -	- -
1/4-20	ER637220 Price	EW517220 Price	ER687220 Price
1/4-28	ER637223 Price	EW517223 Price	ER687223 Price
5/16-18	ER637227 Price	EW517227 Price	ER687227 Price
5/16-24	ER637229 Price	- -	ER687229 Price
3/8-16	ER637234 Price	EW517234 Price	ER687234 Price
3/8-24	ER637236 Price	EW517236 Price	ER687236 Price
7/16-14	ER637239 Price	EW517239 Price	ER687239 Price
7/16-20	ER637240 Price	EW517240 Price	ER687240 Price
1/2-13	ER637244 Price	EW517244 Price	ER687244 Price
1/2-20	ER637245 Price	EW517245 Price	ER687245 Price
9/16-12	ER637248 Price	EW517248 Price	ER687248 Price
9/16-18	ER637249 Price	EW517249 Price	ER687249 Price
5/8-11	ER637252 Price	EW517252 Price	ER687252 Price
5/8-18	ER637254 Price	EW517254 Price	ER687254 Price
11/16-11	ER637256 Price	EW517256 Price	- -
11/16-16	ER637257 Price	EW517257 Price	- -
3/4-10	ER637258 Price	EW517258 Price	ER687258 Price
3/4-16	ER637260 Price	EW517260 Price	ER687260 Price
7/8-9	ER637261 Price	EW517261 Price	ER687261 Price
7/8-14	ER637263 Price	EW517263 Price	ER687263 Price
1-8	ER637265 Price	EW517265 Price	ER687265 Price
1-12	ER637266 Price	EW517266 Price	ER687266 Price
1-14	ER637267 Price	EW517267 Price	ER687267 Price
1-1/8-7	ER637268 Price	EW517268 Price	ER687268 Price
1-1/8-12	ER637269 Price	EW517269 Price	ER687269 Price
1-1/4-7	ER637270 Price	EW517270 Price	ER687270 Price
1-1/4-12	ER637271 Price	EW517271 Price	ER687271 Price
1-3/8-6	ER637272 Price	EW517272 Price	ER687272 Price
1-3/8-12	ER637273 Price	EW517273 Price	ER687273 Price
1-1/2-6	ER637274 Price	EW517274 Price	ER687274 Price
1-1/2-12	ER637275 Price	EW517275 Price	ER687275 Price

PROCUT Left Hand Hexagon Rethreading Dies



Carbon Steel

Die Thread Size	Order No.	Price
1/4-20 NC	ER677220	Price
1/4-28 NF	ER677223	Price
5/16-18 NC	ER677227	Price
5/16-24 NF	ER677229	Price
3/8-16 NC	ER677234	Price
3/8-24 NF	ER677236	Price
7/16-14 NC	ER677239	Price
7/16-20 NF	ER677240	Price
1/2-13 NC	ER677244	Price
1/2-20 NF	ER677245	Price

Die Thread Size	Order No.	Price
5/8-11 NC	ER677252	Price
5/8-18 NF	ER677254	Price
3/4-10 NC	ER677258	Price
3/4-16 NF	ER677260	Price
7/8-14 NF	ER677263	Price
7/8-9 NC	ER677261	Price
1-8 NC	ER677265	Price
1-12 NF	ER677266	Price
1-14 NS	ER677267	Price

Special Thread Hexagon Rethreading Dies



Carbon Steel

Die Thread Size	Order No.	Price
1-1/8-8	ER6418008	Price
1-1/8-16	ER6418016	Price
1-1/8-18	ER6418018	Price
1-1/4-8	ER6420008	Price
1-1/4-16	ER6420016	Price
1-1/4-18	ER6420018	Price
1-3/8-8	ER6422008	Price
1-3/8-16	ER6422016	Price
1-3/8-18	ER6422018	Price
1-1/2-8	ER6424008	Price
1-1/2-16	ER6424016	Price
1-1/2-18	ER6424018	Price
1-1/2-20	ER6424020	Price
1-5/8-5-1/2	ER6426051	Price
1-5/8-8	ER6426008	Price
1-5/8-12	ER6426012	Price
1-5/8-16	ER6426016	Price
1-5/8-18	ER6426018	Price
1-3/4-5	ER6428005	Price
1-3/4-6	ER6428006	Price
1-3/4-8	ER6428008	Price
1-3/4-12	ER6428012	Price
1-3/4-18	ER6428018	Price
1-7/8-5	ER6430005	Price
1-7/8-8	ER6430008	Price
1-7/8-12	ER6430012	Price
1-7/8-16	ER6430016	Price

Die Thread Size	Order No.	Price
2-4-1/2	ER6432041	Price
2-8	ER6432008	Price
2-12	ER6432012	Price
2-18	ER6432018	Price
2-1/8-8	ER6434008	Price
2-1/8-12	ER6434012	Price
2-1/4-4-1/2	ER6436041	Price
2-1/4-8	ER6436008	Price
2-1/4-12	ER6436012	Price
2-1/4-16	ER6436016	Price
2-3/8-8	ER6438008	Price
2-3/8-12	ER6438012	Price
2-1/2-4	ER6440004	Price
2-1/2-6	ER6440006	Price
2-1/2-8	ER6440008	Price
2-1/2-12	ER6440012	Price
2-5/8-12	ER6442012	Price
2-3/4-8	ER6444008	Price
2-3/4-12	ER6444012	Price
2-7/8-12	ER6446012	Price
3-8	ER6448008	Price
3-12	ER6448012	Price
3-1/4-4	ER6450004	Price
3-1/4-8	ER6450008	Price
3-1/4-12	ER6450012	Price
3-1/2-8	ER6452008	Price
3-1/2-12	ER6452012	Price
4-8	ER6454008	Price
4-12	ER6454012	Price

PROCUT NPT Hexagon Rethreading Dies

Carbon Steel

Die Thread Size	Order No.	Price
1/8-27 NPT	ER667402	Price
1/4-18 NPT	ER667403	Price
3/8-18 NPT	ER667404	Price
1/2-14 NPT	ER667405	Price
3/4-14 NPT	ER667406	Price
1-11-1/2 NPT	ER667407	Price
1-1/4-11-1/2 NPT	ER667408	Price
1-1/2-11-1/2 NPT	ER667409	Price



PROCUT Metric Hexagon Rethreading Dies



Carbon Steel

Die Thread Size (mm)	Order No.	Price
M3 x .50	ER656612	Price
M3 x .60	ER656613	Price
M4 x .70	ER656617	Price
M4 x .75	ER656618	Price
M5 x .80	ER656622	Price
M5 x .90	ER656623	Price
M6 x 1.00	ER656627	Price
M6.3 x 1.00	ER656629	Price
M7 x 1.00	ER656631	Price
M8 x 1.00	ER656633	Price
M8 x 1.25	ER656634	Price
M9 x .75	ER656635	Price
M9 x 1.00	ER656636	Price
M9 x 1.25	ER656637	Price
M10 x 1.00	ER656638	Price
M10 x 1.25	ER656639	Price
M10 x 1.50	ER656640	Price
M11 x 1.50	ER656641	Price

Die Thread Size (mm)	Order No.	Price
M12 x 1.25	ER656642	Price
M12 x 1.50	ER656643	Price
M12 x 1.75	ER656644	Price
M14 x 1.25	ER656649	Price
M14 x 1.50	ER656650	Price
M14 x 2.00	ER656652	Price
M16 x 1.50	ER656655	Price
M16 x 2.00	ER656656	Price
M18 x 1.00	ER656658	Price
M18 x 1.50	ER656659	Price
M18 x 2.50	ER656661	Price
M20 x 2.50	ER656664	Price
M22 x 1.50	ER656665	Price
M24 x 1.50	ER656667	Price
M30 x 1.50	ER656673	Price

HeliCoil Inch Thread Repair Kits

- Quickly and permanently restore stripped, worn or damaged threads to their original size and condition
- Damaged threads can be restored to better than new condition
- Increase your repair capabilities and restore parts that otherwise would have to be scrapped



Inch Thread Repair Kits

Thread Type - Coarse				
Thread Size	Thread Length	Inserts per Kit	Order No.	Price
4-40	.168	24	**EX70540104**	Price
5-40	.189	24	**EX70540105**	Price
6-32	.207	24	**EX70540106**	Price
8-32	.246	24	**EX7054012**	Price
10-24	.285	24	**EX7054013**	Price
12-24	.324	24	**EX7054011**	Price
1/4-20	.375	24	**EX7054014**	Price
5/16-18	.469	24	**EX7054015**	Price
3/8-16	.562	12	**EX7054016**	Price
7/16-14	.656	12	**EX7054017**	Price
1/2-13	.750	12	**EX7054018**	Price
9/16-12	.844	6	**EX7054019**	Price
5/8-11	.938	6	**EX70540110**	Price
3/4-10	1.125	4	**EX70540112**	Price
7/8-9	1.312	6	**EX70552114**	Price
1-8	1.500	6	**EX70552116**	Price
1-1/8-7	1.688	5	**EX70552118**	Price
1-1/4-7	1.875	4	**EX70552120**	Price
1-3/8-6	2.062	4	**EX70552122**	Price
1-1/2-6	2.250	4	**EX70552124**	Price

Thread Type - Fine				
Thread Size	Thread Length	Inserts per Kit	Order No.	Price
6-40	.207	24	**EX70540206**	Price
8-36	.246	24	**EX7054022**	Price
10-32	.285	24	**EX7054023**	Price
1/4-28	.375	24	**EX7054024**	Price
5/16-24	.469	24	**EX7054025**	Price
3/8-24	.562	12	**EX7054026**	Price
7/16-20	.656	12	**EX7054027**	Price
1/2-20	.750	12	**EX7054028**	Price
9/16-18	.844	6	**EX7054029**	Price
5/8-18	.938	6	**EX70540210**	Price
3/4-16	1.125	4	**EX70540212**	Price
7/8-14	1.312	6	**EX70552814**	Price
1-12	1.500	6	**EX705528161**	Price
1-14	1.500	6	**EX70552816**	Price
1-1/8-12	1.688	5	**EX70552818**	Price
1-1/4-12	1.875	4	**EX70552820**	Price
1-3/8-12	2.062	4	**EX70552822**	Price
1-1/2-12	2.250	4	**EX70552824**	Price

HeliCoil Extracting Tools



Thread Size	Order No.	Price
#2	**EX70122702**	Price
#3 thru #8	**EX70122706**	Price
#10 thru 3/8	**EX7012276**	Price
7/16 thru 1	**EX70122716**	Price
1-1/8 thru 1-1/2	**EX70122724**	Price

Metric Thread Repair Kits

For Use With - Coarse				
Thread Size	Thread Length	Inserts per Kit	Order No.	Price
M3 x .50	4.5mm	12	**EX7054033**	Price
M4 x .70	6mm	12	**EX7054034**	Price
M5 x .80	7.5mm	12	**EX7054035**	Price
M6 x 1.00	9mm	12	**EX7054036**	Price
M7 x 1.00	10.5mm	12	**EX7054037**	Price
M8 x 1.25	12mm	12	**EX7054038**	Price
M10 x 1.50	15mm	12	**EX70540310**	Price
M12 x 1.75	18mm	12	**EX70540312**	Price
M14 x 2.00	21mm	12	**EX70540314**	Price
M16 x 2.00	24mm	6	**EX70540316**	Price
M18 x 2.50	27mm	6	**EX70540318**	Price
M20 x 2.50	30mm	4	**EX70540320**	Price

For Use With - Fine				
Thread Size	Thread Length	Inserts per Kit	Order No.	Price
M8 x 1.00	-	12	**EX7054048**	Price
M10 x 1.00	15mm	12	**EX70540410**	Price
M10 x 1.25	15mm	12	**EX70540510**	Price
M12 x 1.25	18mm	12	**EX70540512**	Price
M12 x 1.50	18mm	12	**EX70540612**	Price
M14 x 1.50	21mm	12	**EX70540614**	Price
M16 x 1.50	24mm	6	**EX70540616**	Price
M18 x 1.50	27mm	6	**EX70540618**	Price

HeliCoil Master Thread Repair Sets

- Each set contains the necessary taps, drills, installation tools and inserts to repair common thread problems
- Available in coarse or fine pitch, inch or metric
- These sets contain a complete product inventory that solves a wide range of the most commonly encountered inch coarse and fine thread repair problems
- Packed in durable, custom-molded case along with instruction sheet, drill and product reference chart



Thread Size	Order No.	Price
M5 x .8 thru M10 x 1.5	**EX704937150**	Price
10-32 thru 1/2-20	**EX704936**	Price
1/4-20 thru 5/8-11	**EX704934**	Price

HeliCoil Pneumatic Power Tool Installation Kit

- **8522 Kit** contains an air motor, adapter, tools, a filter-regulator-lubricator, oil, two (2) quick disconnect fittings and wrenches and handles sizes up to 1/4" (M6)
- **8521 Kit** includes all of the same contents and handles sizes up to1/2" (M12)
- Front end assemblies may be ordered separately to fit the sizes of Heli-Coil inserts to be installed



For Use With - Front End Assemblies		
Thread Size	Order No.	Price
up to 1/4", M6	**EX708521**	Price
up to 1/2", M12	**EX708522**	Price

For Use With - Power Tool Installer		
Thread Size	Order No.	Price
4-40	**EX70855104**	Price
5-40	**EX70855105**	Price
6-32	**EX70855106**	Price
6-40	**EX70855206**	Price
8-32	**EX7085512**	Price
10-24	**EX7085513**	Price
10-32	**EX7085523**	Price
1/4-20	**EX7085514**	Price
1/4-28	**EX7085524**	Price
5/16-18	**EX7082515**	Price
5/16-24	**EX7082525**	Price
3/8-16	**EX7082516**	Price
3/8-24	**EX7082526**	Price
7/16-14	**EX7082517**	Price
7/16-20	**EX7082527**	Price
1/2-13	**EX7082518**	Price
1/2-20	**EX7082528**	Price

HeliCoil Inserting Tools



For Use With - Coarse Thread		
Thread Size	Order No.	Price
4-40	**EX70228804**	Price
6-32	**EX70228806**	Price
8-32	**EX7022882**	Price
10-24	**EX7022883**	Price
12-24	**EX7022881**	Price
1/4-20	**EX7022884**	Price
5/16-18	**EX7022885**	Price
3/8-16	**EX7022886**	Price
7/16-14	**EX7022887**	Price
1/2-13	**EX7022888**	Price
9/16-12	**EX7022889**	Price
5/8-11	**EX70228810**	Price
3/4-10	**EX70228812**	Price

For Use With - Fine Thread		
Thread Size	Order No.	Price
10-32	**EX7022993**	Price
1/4-28	**EX7022994**	Price
5/16-24	**EX7022995**	Price
3/8-24	**EX7022996**	Price
7/16-20	**EX7022997**	Price
1/2-20	**EX7022998**	Price
9/16-18	**EX7022999**	Price
5/8-18	**EX70229910**	Price
3/4-16	**EX70229912**	Price

HeliCoil Package Inserts





For Use With - Coarse Thread				
Thread Size	Thread Length	Inserts per Pack	Order No.	Price
4-40	.168	12	EX70R118504	Price
5-40	.188	12	EX70R118505	Price
6-32	.207	12	EX70R118506	Price
8-32	.246	12	EX70R11852	Price
10-24	.285	12	EX70R11853	Price
12-24	.324	12	EX70R11851	Price
1/4-20	.375	12	EX70R11854	Price
5/16-18	.469	12	EX70R11855	Price
3/8-16	.562	12	EX70R11856	Price
7/16-14	-	6	EX70R11857	Price
1/2-13	.750	6	EX70R11858	Price
9/16-12	.844	6	EX70R11859	Price
5/8-11	.938	6	EX70R118510	Price
3/4-10	1.125	4	EX70R118512	Price
7/8-9	1.312	1	EX70K118514	Price
1-8	1.500	1	EX70K118516	Price
1-1/8-7	1.688	1	EX70K118518	Price
1-1/4-7	1.875	1	EX70K118520	Price
1-3/8-6	2.062	1	EX70K118522	Price
1-1/2-6	2.250	1	EX70K118524	Price
M3 x .50	4.5mm	12	EX70R10843	Price
M4 x .70	6mm	12	EX70R10844	Price
M5 x .80	7.5mm	12	EX70R10845	Price
M6 x 1.00	9mm	12	EX70R10846	Price
M7 x 1.00	10.5mm	12	EX70R10847	Price
M8 x 1.25	12mm	12	EX70R10848	Price
M10 x 1.50	15mm	12	EX70R108410	Price
M12 x 1.75	18mm	6	EX70R108412	Price
M14 x 2.00	21mm	6	EX70R108414	Price
M16 x 2.00	24mm	6	EX70R108416	Price
M18 x 2.50	27mm	6	EX70R108418	Price
M20 x 2.50	30mm	4	EX70R108420	Price

For Use With - Fine Thread				
Thread Size	Thread Length	Inserts per Pack	Order No.	Price
6-40	.207	12	EX70R119106	Price
8-36	.246	12	EX70R11912	Price
10-32	.285	12	EX70R11913	Price
1/4-28	.375	12	EX70R11914	Price
5/16-24	.469	12	EX70R11915	Price
3/8-24	.562	12	EX70R11916	Price
7/16-20	.656	6	EX70R11917	Price
1/2-20	.750	6	EX70R11918	Price
9/16-18	.844	6	EX70R11919	Price
5/8-18	.938	6	EX70R119110	Price
3/4-16	1.125	4	EX70R119112	Price
7/8-14	1.312	1	EX70K119114	Price
1-12	1.500	1	EX70K1191161	Price
1-14	1.500	1	EX70K119116	Price
1-1/8-12	1.688	1	EX70K119118	Price
1-1/4-12	1.875	1	EX70K119120	Price
1-3/8-12	2.062	1	EX70K119122	Price
1-1/2-12	2.250	1	EX70K119124	Price
M8 x 1.00	8mm	12	EX70R42558	Price
M10 x 1.00	15mm	12	EX70R425510	Price
M10 x 1.25	15mm	12	EX70R464910	Price
M12 x 1.25	18mm	6	EX70R464912	Price
M12 x 1.50	18mm	6	EX70R374512	Price
M14 x 1.50	21mm	6	EX70R374514	Price
M16 x 1.50	24mm	6	EX70R374516	Price

Larger Quantity Discounts are available for Bulk Inserts. Metric and Screw-Locking Styles are also available.

Specify Part Number + Length
When Ordering Bulk Inserts.
Example: EX70-1185-4CN 500 = 1/4-20 x .500

HeliCoil Standard Bulk Inserts




Thread Size	Thread Length	Order No.	Price
2-56	.086	EX70118502CN086	Price
2-56	.129	EX70118502CN129	Price
2-56	.172	EX70118502CN172	Price
4-40	.112	EX70118504CN112	Price
4-40	.168	EX70118504CN168	Price
4-40	.224	EX70118504CN224	Price
6-32	.138	EX70118506CN138	Price
6-32	.207	EX70118506CN207	Price
6-32	.276	EX70118506CN276	Price
8-32	.164	EX7011852CN164	Price
8-32	.246	EX7011852CN246	Price
10-24	.190	EX7011853CN190	Price
10-24	.285	EX7011853CN285	Price
10-32	.380	EX7011913CN380	Price
1/4-20	.250	EX7011854CN250	Price
1/4-20	.375	EX7011854CN375	Price
1/4-28	.500	EX7011914CN500	Price
5/16-18	.312	EX7011855CN312	Price
5/16-18	.469	EX7011855CN469	Price
5/16-24	.625	EX7011915CN625	Price
3/8-16	.375	EX7011856CN375	Price
3/8-16	.562	EX7011856CN562	Price
3/8-24	.750	EX7011916CN750	Price
7/16-14	.438	EX7011857CN438	Price
7/16-14	.656	EX7011857CN656	Price
7/16-20	.875	EX7011917CN875	Price
1/2-13	.500	EX7011858CN500	Price
1/2-13	.750	EX7011858CN750	Price
1/2-20	1.000	EX7011918CN1000	Price
9/16-12	.562	EX7011859CN562	Price
9/16-18	.844	EX7011919CN844	Price
5/8-11	.625	EX70118510C625	Price
5/8-11	.938	EX70118510C938	Price
5/8-18	1.250	EX70119110C1250	Price
3/4-10	.750	EX70118512C750	Price
3/4-16	1.125	EX70119112C1125	Price
7/8-9	.875	EX70118514C875	Price
7/8-14	1.312	EX70119114C1312	Price
1-8	1.000	EX70118516C1000	Price
1-8	1.500	EX70118516C1500	Price
1-8	2.000	EX70118516C2000	Price

Please contact us with your requirements.



Type I
Threaded Mandrel
Sizes 2-56 and 3-48



Type II
Prewinder
#4 thru 1/2" UNC, #3 thru 1/2" UNF



Type III
Threaded Mandrel
9/16" thru 1-1/2" UNC



Type IV
Non-Captive Prewinder
9/16" thru 1-1/2" UNF

Production Inserting Tools - Inch Series

Thread Size	Order No.	Price
2-56	EX7055102	Price
3-48	EX7055103	Price
4-40	EX70755104	Price
5-40	EX70755105	Price
6-32	EX70755106	Price
8-32	EX7075512	Price
10-24	EX7075513	Price
12-24	EX7075511	Price
1/4-20	EX7075514	Price
5/16-18	EX7075515	Price
3/8-16	EX7075516	Price
7/16-14	EX7075517	Price
1/2-13	EX7075518	Price
9/16-12	EX7037249	Price
5/8-11	EX70372410	Price
3/4-10	EX70372412	Price
7/8-9	EX70372414	Price
1-8	EX70372416	Price
3-56	EX70755203	Price
4-48	EX70755204	Price
6-40	EX70755206	Price
8-36	EX7075522	Price
10-32	EX7075523	Price
1/4-28	EX7075524	Price
5/16-24	EX7075525	Price
3/8-24	EX7075526	Price
7/16-20	EX7075527	Price
1/2-20	EX7075528	Price
9/16-18	EX705359	Price
5/8-18	EX7053510	Price
3/4-16	EX7053512	Price
7/8-14	EX7053514	Price
1-12	EX70535161	Price
1-14	EX7053516	Price

RECOIL Thread Repair Inserts

- Manufactured to the highest quality standards including ISO-9000 and QS-9000
- Also available in locking style, a variety of materials and sizes to numerous to list



System Of Measurement - Inch	Thread Type - Coarse			
Size	Length	Pkg. Qty.	Order No.	Price
4-40	.168	10	EX7123543	Price
5-40	.188	10	EX7123553	Price
6-32	.207	10	EX7123563	Price
8-32	.246	10	EX7123583	Price
10-24	.285	10	EX7123603	Price
12-24	.324	10	EX7123623	Price
1/4-20	.375	10	EX7123043	Price
5/16-18	.469	10	EX7123053	Price
3/8-16	.562	10	EX7123063	Price
7/16-14	.656	10	EX7123073	Price
1/2-13	.750	10	EX7123083	Price
9/16-12	.844	5	EX7123093	Price
5/8-11	.938	5	EX7123103	Price
3/4-10	1.125	5	EX7123123	Price
7/8-9	1.312	3	EX7123143	Price
1-8	1.500	1	EX7123163	Price
1-1/8-7	1.688	1	EX7123183	Price
1-1/4-7	1.875	1	EX7123203	Price
1-3/8-6	2.062	1	EX7123223	Price
1-1/2-6	2.250	1	EX7123243	Price

System Of Measurement - Inch	Thread Type - Fine			
Size	Length	Pkg. Qty.	Order No.	Price
6-40	.207	10	EX7124563	Price
8-36	.246	10	EX7124583	Price
10-32	.285	10	EX7124603	Price
1/4-28	.375	10	EX7124043	Price
5/16-24	.469	10	EX7124053	Price
3/8-24	.562	10	EX7124063	Price
7/16-20	.656	10	EX7124073	Price
1/2-20	.750	10	EX7124083	Price
9/16-18	.844	5	EX7124093	Price
5/8-18	.938	5	EX7124103	Price
3/4-16	1.125	5	EX7124123	Price
7/8-14	1.312	3	EX7124143	Price
1-12	1.500	1	EX7124163	Price
1-14	1.500	1	EX712416314	Price
1-1/8-12	1.688	1	EX7124183	Price
1-1/4-12	1.875	1	EX7124203	Price
1-3/8-12	2.062	1	EX7124223	Price
1-1/2-12	2.250	1	EX7124243	Price

System Of Measurement - Metric	Thread Type - Coarse			
Size	Length	Pkg. Qty.	Order No.	Price
M3 x .50	4.5mm	10	EX7125033	Price
M4 x .70	6mm	10	EX7125043	Price
M5 x .80	7.5mm	10	EX7125053	Price
M6 x 1.00	9mm	10	EX7125063	Price
M7 x 1.00	10.5mm	10	EX7125073	Price
M8 x 1.25	12mm	10	EX7125083	Price
M10 x 1.50	15mm	10	EX7125103	Price
M12 x 1.75	18mm	10	EX7125123	Price
M14 x 2.00	21mm	5	EX7125143	Price
M16 x 2.00	24mm	5	EX7125163	Price
M18 x 2.50	27mm	5	EX7125183	Price
M20 x 2.50	30mm	5	EX7125203	Price

System Of Measurement - Metric	Thread Type - Fine			
Size	Length	Pkg. Qty.	Order No.	Price
M8 x 1.00	12mm	10	EX7127083	Price
M10 x 1.00	15mm	10	EX7128103	Price
M10 x 1.25	15mm	10	EX7127103	Price
M12 x 1.25	18mm	10	EX7128123	Price
M12 x 1.50	18mm	10	EX7127123	Price
M14 x 1.50	21mm	5	EX7127143	Price
M16 x 1.50	24mm	5	EX7127163	Price

RECOIL Thread Repair Inserts Standard Bulk



Price					
Size	Length	Order No.	1 -100	101 -500	501+
2-56	.086	EX7103522†	Price	Price	Price
2-56	.129	EX7103523†	Price	Price	Price
2-56	.172	EX7103524†	Price	Price	Price
3-48	.099	EX7103532†	Price	Price	Price
3-48	.148	EX7103533†	Price	Price	Price
3-48	.198	EX7103534†	Price	Price	Price
4-40	.112	EX7103542†	Price	Price	Price
4-40	.168	EX7103543†	Price	Price	Price
4-40	.224	EX7103544†	Price	Price	Price
5-40	.125	EX7103552†	Price	Price	Price
5-40	.188	EX7103553†	Price	Price	Price
5-40	.250	EX7103554†	Price	Price	Price
6-32	.138	EX7103562†	Price	Price	Price
6-32	.207	EX7103563†	Price	Price	Price
6-32	.276	EX7103564†	Price	Price	Price
8-32	.164	EX7103582†	Price	Price	Price
8-32	.246	EX7103583†	Price	Price	Price
10-24	.190	EX7103602†	Price	Price	Price
10-24	.285	EX7103603†	Price	Price	Price
1/4-20	.250	EX7103042†	Price	Price	Price
1/4-20	.375	EX7103043†	Price	Price	Price
5/16-18	.312	EX7103052†	Price	Price	Price
5/16-18	.469	EX7103053†	Price	Price	Price
3/8-16	.375	EX7103062	Price	Price	Price
3/8-16	.562	EX7103063	Price	Price	Price
7/16-14	.438	EX7103072	Price	Price	Price
7/16-14	.656	EX7103073	Price	Price	Price
1/2-13	.500	EX7103082	Price	Price	Price
1/2-13	.750	EX7103083	Price	Price	Price

System of Measurement - Metric					
Size	Length	Order No.	1 -100	101 -500	501+
M3 x .50	3mm	EX7105032†	Price	Price	Price
M3 x .50	4.5mm	EX7105033†	Price	Price	Price
M3 x .50	6mm	EX7105034†	Price	Price	Price
M4 x .70	4mm	EX7105042†	Price	Price	Price
M4 x .70	6mm	EX7105043†	Price	Price	Price
M4 x .70	8mm	EX7105044†	Price	Price	Price
M5 x .80	5mm	EX7105052†	Price	Price	Price
M5 x .80	7.5mm	EX7105053†	Price	Price	Price
M5 x .80	10mm	EX7105054†	Price	Price	Price
M6 x 1.00	6mm	EX7105062†	Price	Price	Price
M6 x 1.00	9mm	EX7105063†	Price	Price	Price
M6 x 1.00	12mm	EX7105064†	Price	Price	Price
M7 x 1.00	7mm	EX7105072†	Price	Price	Price
M7 x 1.00	10.5mm	EX7105073†	Price	Price	Price
M7 x 1.00	14mm	EX7105074†	Price	Price	Price
M8 x 1.25	8mm	EX7105082†	Price	Price	Price
M8 x 1.25	12mm	EX7105083†	Price	Price	Price
M8 x 1.25	16mm	EX7105084†	Price	Price	Price
M10 x 1.50	10mm	EX7105102	Price	Price	Price
M10 x 1.50	15mm	EX7105103	Price	Price	Price
M10 x 1.50	20mm	EX7105104	Price	Price	Price
M12 x 1.75	12mm	EX7105122	Price	Price	Price
M12 x 1.75	18mm	EX7105123	Price	Price	Price
M12 x 1.75	24mm	EX7105124	Price	Price	Price
M14 x 2.00	14mm	EX7105142	Price	Price	Price
M14 x 2.00	21mm	EX7105143	Price	Price	Price
M14 x 2.00	28mm	EX7105144	Price	Price	Price
M16 x 2.00	16mm	EX7105162	Price	Price	Price
M16 x 2.00	24mm	EX7105163	Price	Price	Price
M16 x 2.00	32mm	EX7105164	Price	Price	Price

† These inserts are only sold in multiples of 100

RECOIL Production Inserting Tools



Thread Type - Coarse	System Of Measurement - Inch	
Thread Size	Order No.	Price
2-56	EX7153522U	Price
3-48	EX7153532U	Price
4-40	EX7153542U	Price
5-40	EX7153552U	Price
6-32	EX7153562U	Price
8-32	EX7153582U	Price
10-24	EX7153602U	Price
12-24	EX7153622U	Price
1/4-20	EX7153042U	Price
5/16-18	EX7153052U	Price
3/8-16	EX7153062U	Price
7/16-14	EX7153072U	Price
1/2-13	EX7153082U	Price
9/16-12	EX7153096	Price
5/8-11	EX7153106	Price
3/4-10	EX7153126	Price
7/8-9	EX7153146	Price
1-8	EX7153166	Price

Thread Type - Coarse	System Of Measurement - Metric	
Thread Size	Order No.	Price
M2.5 x .45	EX7155252U	Price
M3 x .50	EX7155032U	Price
M4 x .70	EX7155042U	Price
M5 x .80	EX7155052U	Price
M6 x 1.00	EX7155062U	Price
M7 x 1.00	EX7155071	Price
M8 x 1.25	EX7155082U	Price
M10 x 1.50	EX7155102U	Price
M12 x 1.75	EX7155122U	Price
M14 x 2.00	EX7155146	Price
M16 x 2.00	EX7155166	Price
M18 x 2.50	EX7155186	Price
M20 x 2.50	EX7155206	Price

Thread Type - Fine	System Of Measurement - Inch	
Thread Size	Order No.	Price
3-56	EX7154531	Price
4-48	EX7154542U	Price
6-40	EX7154562U	Price
8-36	EX7154582U	Price
10-32	EX7154602U	Price
1/4-28	EX7154042U	Price
5/16-24	EX7154052U	Price
3/8-24	EX7154062U	Price
7/16-20	EX7154072U	Price
1/2-20	EX7154082U	Price
9/16-18	EX7154091	Price
5/8-18	EX7154101	Price
3/4-16	EX7154121	Price
7/8-14	EX7154141	Price
1-12	EX7154161	Price
1-14	EX7154171	Price

Thread Type - Fine	System Of Measurement - Metric	
Thread Size	Order No.	Price
M8 x 1.00	EX7157082U	Price
M10 x 1.00	EX7158102U	Price
M10 x 1.25	EX7157102U	Price
M12 x 1.25	EX7158122U	Price
M12 x 1.50	EX7157122U	Price

Starrett® Plain Tap Wrenches



- For holding taps, drills, reamers and small tools to be turned by hand
- Body is centered for use on lathe centers or drilling machines to start tap straight
- Jaws heat treated to with stand hard use
- All wrenches have sliding handle
- Bodies are longer on 2nd one listed for each size which permits work at depths which cannot be reached with shorter wrenches

Tap Capacity	Length (in.)	Order No.	Price
1/16 - 3/16	2	**MV7050427**	Price
1/16 - 3/16	6	**MV7050430**	Price
7/32 - 7/16	2-1/2	**MV7050428**	Price
7/32 - 7/16	10	**MV7050431**	Price
1/4 - 1/2	3-1/2	**MV7050429**	Price
1/4 - 1/2	13	**MV7050432**	Price

T-Handle Tap Wrenches- Plain Style

- Hardened and tempered jaws



Tap Capacity	Order No.	Price
#0 - #8	**EV52182**	Price
#8 - 1/4	**EV52183**	Price
1/4 - 1/2	**EV52184**	Price
3-Pc. Set #0-1/2	**EV52003**	Price

Starrett® Tap Wrenches

- Highly finished tempered gripping surfaces
- Holds square or round shanks
- Plunger operated by knurled sleeve
- Spring inside sleeve causes plunger to back off when pressure removed



Tap Capacity	Length (in.)	Order No.	Price
1/16 - 1/4	6	**MV7050419**	Price
3/16 - 1/2	9	**MV7050420**	Price
1/4 - 5/8	12	**MV7050421**	Price
5/16 - 3/4	16	**MV7050422**	Price

NATIONAL Extra Long T-Handle Tap Wrenches

- Hardened and tempered jaw
- Reversible ratchet
- 13” Long



Tap Capacity	Length (in.)	Order No.	Price
1/16 - 1/4	13	**EV52188L**	Price
1/4 - 1/2	13	**EV52189L**	Price
2-Pc. Set 1/16 - 1/2	13	**EV52190L**	Price

GENERAL Plain Tap Wrenches



- NE50163 has a fixed T-handle
- NE50164 and NE50166 have sliding T-handle which is good for fitting into tight spaces with greater leverage

Tap Capacity	Length (in.)	Order No.	Price
#0 - #8	2-1/4	**NE50163**	Price
0 - 1/4	2-3/4	**NE50164**	Price
#12 - 1/2	3-3/4	**NE50166**	Price

GENERAL Reversible Ratchet Tap Wrenches



- Ratchet can be set for right or left hand operation or locked for non-ratchet use
- Self centering hardened tool steel jaws and knurled chuck sleeve provide positive grip on taps, reamers and small tools
- NE50161R conforms to government specifications GGG-W-680a

Tap Capacity	Length (in.)	Order No.	Price
#0 - #8	2-3/4	**NE50160R**	Price
0 - 1/4	3-1/2	**NE50161R**	Price
#12 - 1/2	4-1/4	**NE50162R**	Price

T-Handle Tap Wrenches- Knurled Nut



- Sliding handle with spring tension stop
- May be extended to full length for more leverage
- Positive grip knurled nut

Tap Capacity	Order No.	Price
#0 - #8	**EV52TR0E**	Price
0 - 1/4	**EV52TR1E**	Price
#12 - 5/16	**EV52TR112E**	Price
#12 - 1/2	**EV52TR2E**	Price
4-Pc. Set #0-1/2	**EV52TR4**	Price

T-Handle Tap Wrenches- Reversible Ratchet Style



- Hardened and tempered jaws

Tap Capacity	Order No.	Price
#0 - #8	**EV52185**	Price
#8 - 1/4	**EV52186**	Price
#12 - 1/2	**EV52187**	Price
3-Pc. Set #0-1/2	**EV52004**	Price

Straight Tap Wrenches

- Heavy duty
- Quickly adjusts by turning handle
- Two jaws
- Hardened steel for long wear
- Knurled handles
- Use for taps or reamers



Hand Taps (in.)	Machine Screw	Pipe	Hand Reamers (in.)	Order No.	Price
1/16 - 1/4	0 - 14	-	1/8 - 21/64	**EV510**	Price
5/32 - 3/4	7 - 14	1/8 - 1/4	11/64 - 41/64	**EV516**	Price
5/32 - 1/2	7 - 14	1/8	11/64 - 7/16	**EV515**	Price
1/4 - 1-1/8	-	1/8 - 3/4	9/32 - 29/32	**EV517**	Price
3/4 - 1-5/8	-	3/8 - 1-1/4	37/64 - 1-11/32	**EV518**	Price
1 - 2-1/2	-	3/4 - 2	7/8 - 2-1/2	**EV5122**	Price

NATIONAL Tap Extensions

- Use when extra reach is required



Tap Capacity	Length (in.)	Order No.	Price
0 - 1/4	7	**EV52TE1**	Price
#12 - 1/2	10-3/4	**EV52TE2**	Price
2-Pc set #0-1/2	7 - 10-3/4	**EV52TE3**	Price

Multi-Purpose Tap & Die Wrench Set



- Eliminates the need for individual tap wrenches and die stocks
- Drives dies with 1” or 1-1/2” outside diameter
- Drives taps 1/4” thru 1/2”

Order No.	Price
ET5020313	Price

Piloted Spindle Tap Wrenches



- Used for threading a drilled hole manually at one machine location, without moving the workpiece
- Reduce tap breakage
- Simple to use

Tap Capacity	Order No.	Price
0 - 1/4	**EV52E176**	Price
#12 - 1/2	**EV52E276**	Price
2-Pc. Set #0-1/2	**EV52E300**	Price

IRWIN HANSON 2 Pc. Adjustable Tap Socket



- Jaws adjust to tightly secure taps
- Square drive (3/8”) compatible with common ratchets
- Small profile for use in tight spaces
- Two sizes cover taps up to 1/2”

Order No.	Price
EW513095001	Price

IRWIN HANSON T-Handle Regular & Ratcheting Tap Wrenches

T-Handle Ratcheting Tap Wrenches

- Three-position gear box provides quick, efficient ratcheting action
- Knurled nut for tightening
- Ideal for hard-to-reach areas
- Chrome plated for long life and rust resistance



T-Handle Tap Wrenches

- Designed for use with taps and many other tools turned by hand
- Adjust and tighten to size by twisting knurled nut
- Additional holding jaws are recessed inside the hole for gripping onto smaller sized taps
- T-handle can be extended to either direction for more leverage



Type - T-Handle		
Description	**Order No.**	**Price**
For taps No. 0 to 1/4 (3mm to 6mm)	**EW5112001**	Price
For taps 1/4 to 1/2 (6mm to 12mm)	**EW5112002**	Price

Type - T-Handle / Ratchet		
Description	**Order No.**	**Price**
For taps No. 0 to 1/4 (3mm to 6mm)	**EW5121201**	Price
For taps 1/4 to 1/2 (6mm to 12mm)	**EW5121202**	Price
10" Extended length for taps No. 0 to 1/4 (3mm to 6mm)	**EW5121210**	Price
12" Extended length for taps 1/4 to 1/2 (6mm to 12mm)	**EW5121212**	Price

IRWIN HANSON Tap & Reamer Wrenches

- Solid construction
- Straight handle design provides greater leverage



Holding Capacity	Order No.	Price
#0-1/2 (3.0mm - 12.0mm)	**EW51311088**	Price
1/4 - 1 (6.0mm - 24.0mm)	**EW5112498**	Price

IRWIN HANSON Adjustable Guide Die Stock

- Accurate straight threading
- Dies lock in position with set screw



Description	Order No.	Price
For 1 Adjustable Round Dies	**EW5112428**	Price
For 1 Hexagon or Round Dies	**EW5111026**	Price
1-7/16 Hexagon Dies	**EW5112436**	Price
For 1-1/2 Adjustable Round Dies	**EW5112435**	Price
For 1-13/16 Hexagon Dies	**EW5112446**	Price
For 2 Adjustable Round Dies	**EW5112445**	Price

Interchangeable Reversible Ratchet Tap Holder Set

- Set consists of: 1/8" to 1/4" chuck, 1/4" to 1/2" chuck, 2 handles and tap wrench



Order No.	Price
EV52RRTH	Price

6 Pc. Tap Wrench Set

- 3 Straight tap wrenches: 1/16 - 1/4", 5/32" - 1/2", 5/32" - 3/4"
- 3 T-handle tap wrenches: #0- #8, #8- 1/4", 1/4" - 1/2"



Order No.	Price
EV52TR6	Price

6 Pc. Die & Tap Wrench Set

- 3 Die stocks: 13/16", 1" and 1-1/2"
- 3 Straight tap wrenches: 1/16" - 1/4", 5/32" - 1/2", 5/32" - 3/4"



Order No.	Price
EV50006	Price

Die Holders

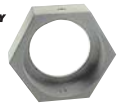
- Ideal for short or medium run threading of shafts, etc
- Can be used safely on lathes, milling machines, tapping heads, etc
- Shank length-2"
- Body length-1"



Round Die OD Size (in.)	Shank Dia. (in.)	Order No.	Price
13/16	1/2	**EV50218**	Price
1	1/2	**EV50219**	Price
1-1/2	3/4	**EV50220**	Price
13/16, 1, 1-1/2 (3 pc set)	1/2, 1/2, 3/4	**EV50003**	Price

Die Adapters

- Converts round dies to hex dies
- Use where conventional die stocks cannot swing due to lack of space



Round Die OD Size (in.)	Dia. Across Flats (in.)	Order No.	Price
13/16	1-1/16	**EV53052**	Price
1	1-1/4	**EV53100**	Price
1-1/2	1-31/32	**EV53132**	Price
2	2-9/16	**EV53200**	Price
2-1/2	3	**EV53232**	Price
3	3-1/2	**EV53300**	Price
13/16, 1, 1-1/2, 2 (4 pc set)	Set	**EV53SET**	Price

Die Stocks

- Holds round, solid or adjustable dies
- Rugged long lasting
- Heavy duty set screw holds die firmly in place



Round Die OD Size (in.)	Order No.	Price
5/8	**EV50625**	Price
13/16	**EV50812**	Price
1	**EV50100**	Price
1-1/2	**EV50150**	Price
2	**EV50200**	Price
2-1/2	**EV50250**	Price
3	**EV50300**	Price
4	**EV50400**	Price
5	**EV50500**	Price
13/16, 1, 1-1/2, 2 (4 Pc set)	**EV50004**	Price

WALTON Tap Extractor Units

- Removes broken taps quickly
- Extractor fingers fit into flutes of broken tap and a few turns of a tap wrench on the extractor removes the broken tap



No. of Flutes - 2 Flute			
Size	Metric Size	Order No.	Price
#4	M3	EX5010042	Price
#5 (1/8)	M3.2	EX5010052	Price
#6	M3.5	EX5010062	Price
#8	M4	EX5010082	Price
#10 (3/16)	M5	EX5010102	Price
#12	M5.5	EX5010122	Price
1/4	M6	EX5010252	Price
5/16	M7 & M8	EX5010312	Price
3/8	M9 & M10	EX5010372	Price
7/16	M11	EX5010432	Price
1/2	M12	EX5010502	Price

No. of Flutes - 3 Flute			
Size	Metric Size	Order No.	Price
#4	M3	EX5010043	Price
#5 (1/8)	M3.2	EX5010053	Price
#6	M3.5	EX5010063	Price
#8	M4	EX5010083	Price
#10 (3/16)	M5	EX5010103	Price
#12	M5.5	EX5010123	Price
1/4	M6	EX5010253	Price
5/16	M7 & M8	EX5010313	Price
3/8	M9 & M10	EX5010373	Price
7/16	M11	EX5010433	Price
1/2	M12	EX5010503	Price
9/16	M14	EX5010563	Price
5/8	M16	EX5010623	Price
3/4	M18 & M20	EX5010753	Price
7/8	M22	EX5010873	Price
1	M25	EX5011003	Price

No. of Flutes - 4 Flute			
Size	Metric Size	Order No.	Price
#6	M3.5	EX5010064	Price
#8	M4	EX5010084	Price
#10 (3/16)	M5	EX5010104	Price
#12	M5.5	EX5010124	Price
1/4	M6	EX5010254	Price
9/32	M7	EX5010284	Price
5/16	M7 & M8	EX5010314	Price
11/32	-	EX5010344	Price
3/8	M9 & M10	EX5010374	Price
13/32	M10	EX5010404	Price
7/16	M11	EX5010434	Price
1/2	M12	EX5010504	Price
9/16	M14	EX5010564	Price
5/8	M16	EX5010624	Price
11/16	M18	EX5010684	Price
3/4	M18 & M20	EX5010754	Price
7/8	M22	EX5010874	Price
1	M25	EX5011004	Price
1-1/8	M28	EX5011124	Price
1-1/4	M32	EX5011254	Price
1-3/8	M35	EX5011374	Price
1-1/2	M38	EX5011504	Price

No. of Flutes - 6 Flute			
Size	Metric Size	Order No.	Price
1-1/8	M28	EX5011126	Price
1-1/4	M32	EX5011256	Price
1-3/8	M35	EX5011376	Price
1-1/2	M38	EX5011506	Price

WALTON Tap Extractors for Pipe Taps



No. of Flutes - 4 Flute		
Size (in.)	Order No.	Price
1/8	EX5120124	Price
1/4	EX5120254	Price
3/8	EX5120374	Price
1/2	EX5120504	Price

No. of Flutes - 5 Flute		
Size (in.)	Order No.	Price
1/8	EX5120125	Price
1/4	EX5120255	Price
3/8	EX5120375	Price
1/2	EX5120505	Price
3/4	EX5120755	Price
1	EX5121005	Price

Tap Extractor Extra Fingers

No. of Flutes - 2 Flute			
Size	Metric Size	Order No.	Price
#4	3	EX6012042	Price
#5 (1/8)	3.2	EX6012052	Price
#6	3.5	EX6012062	Price
#8	4	EX6012082	Price
#10 (3/16)	5	EX6012102	Price
#12	5.5	EX6012122	Price
1/4	6	EX6012252	Price
5/16	7 & 8	EX6012312	Price
3/8	9 & 10	EX6012372	Price
7/16	11	EX6012432	Price
1/2	12	EX6012502	Price

No. of Flutes - 3 Flute			
Size	Metric Size	Order No.	Price
#4	3	EX6012043	Price
#5 (1/8)	3.2	EX6012053	Price
#6	3.5	EX6012063	Price
#8	4	EX6012083	Price
#10 (3/16)	5	EX6012103	Price
#12	5.5	EX6012123	Price
1/4	6	EX6012253	Price
5/16	7 & 8	EX6012313	Price
3/8	9 & 10	EX6012373	Price
7/16	11	EX6012433	Price
1/2	12	EX6012503	Price
9/16	14	EX6012563	Price
5/8	16	EX6012623	Price
3/4	18 & 20	EX6012753	Price
7/8	22	EX6012873	Price
1	25	EX6013003	Price

No. of Flutes - 4 Flute			
Size	Metric Size	Order No.	Price
#6	3.5	EX6012064	Price
#8	4	EX6012084	Price
#10 (3/16)	5	EX6012104	Price
#12	5.5	EX6012124	Price
1/4	6	EX6012254	Price
9/32	7	EX6012284	Price
5/16	7 & 8	EX6012314	Price
1132	-	EX6012344	Price
3/8	9 & 10	EX6012374	Price
13/32	10	EX6012404	Price
7/16	11	EX6012434	Price
1/2	12	EX6012504	Price
9/16	14	EX6012564	Price
5/8	16	EX6012624	Price
11/16	18	EX6012684	Price
3/4	18 & 20	EX6012754	Price
7/8	22	EX6012874	Price
1	25	EX6013004	Price
1-1/8	28	EX6013124	Price
1-1/4	32	EX6013254	Price
1-3/8	35	EX6013374	Price
1-1/2	38	EX6013504	Price

No. of Flutes - 6 Flute			
Size	Metric Size	Order No.	Price
1-1/8	28	EX6013126	Price
1-1/4	32	EX6013256	Price
1-3/8	35	EX6013376	Price
1-1/2	38	EX6013506	Price

Pipe Tap Extractor Extra Fingers

No .of Flutes - 4 Flute		
Size (in.)	Order No.	Price
1/8	EX6122124	Price
1/4	EX6122254	Price
3/8	EX6122374	Price
1/2	EX6122504	Price

No .of Flutes - 5 Flute		
Size (in.)	Order No.	Price
1/8	EX6122125	Price
1/4	EX6122255	Price
3/8	EX6122375	Price
1/2	EX6122505	Price
3/4	EX6122755	Price
1	EX6123005	Price

WALTON Tap Extractor for S.T.I. Taps

HeliCoil Type Extractors



No. of Flutes - 2 Flute		
Size	Order No.	Price
#4 STI	EX5030042	Price
#5 STI	EX5030052	Price
#6 STI	EX5030062	Price
#8 STI	EX5030082	Price
#10 STI	EX5030102	Price
#12 STI	EX5030122	Price
1/4 STI	EX5030252	Price

No. of Flutes - 3 Flute		
Size	Order No.	Price
#4 STI	EX5030043	Price
#5 STI	EX5030053	Price
#6 STI	EX5030063	Price
#8 STI	EX5030083	Price
#10 STI	EX5030103	Price
#12 STI	EX5030123	Price
1/4 STI	EX5030253	Price
5/16 STI	EX5030313	Price
3/8 STI	EX5030373	Price

No. of Flutes - 4 Flute		
Size	Order No.	Price
1/2 STI	EX5030504	Price
1/4 STI	EX5030254	Price
3/8 STI	EX5030374	Price
5/16 STI	EX5030314	Price
5/8 STI	EX5030624	Price
7/16 STI	EX5030434	Price
9/16 STI	EX5030564	Price

STI Tap Extractor Extra Fingers

No. of Flutes - 2 Flute		
Size	Order No.	Price
#4 STI	EX6032042	Price
#5 STI	EX6032052	Price
#6 STI	EX6032062	Price
#8 STI	EX6032082	Price
#10 STI	EX6032102	Price
#12 STI	EX6032122	Price
1/4 STI	EX6032252	Price

No. of Flutes - 3 Flute		
Size	Order No.	Price
#4 STI	EX6032043	Price
#5 STI	EX6032053	Price
#6 STI	EX6032063	Price
#8 STI	EX6032083	Price
#10 STI	EX6032103	Price
#12 STI	EX6032123	Price
1/4 STI	EX6032253	Price
3/8 STI	EX6032373	Price
5/16 STI	EX6032313	Price

No. of Flutes - 4 Flute		
Size	Order No.	Price
1/2 STI	EX6032504	Price
1/4 STI	EX6032254	Price
3/8 STI	EX6032374	Price
5/16 STI	EX6032314	Price
5/8 STI	EX6032624	Price
7/16 STI	EX6032434	Price
9/16 STI	EX6032564	Price

WALTON Tap Extractor Sets

Sets No's 1, 2, 3 packed in 6 compartment plastic case
Sets No's 11, 13, 15 packed in 15 compartment plastic case

Sizes Included (in.)	Order No.	Price
3/16, 1/4, 5/16, 3/8, 7/16, 1/2	**EX521**	Price
1/4, 5/16, 3/8, 7/16, 1/2, 5/8	**EX522**	Price
5/16, 3/8, 7/16, 1/2, 9/16, 5/8	**EX523**	Price
1/8†, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1	**EX5211**	Price
4†, 5†, 6†, 8, 10, 12, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4	**EX5213**	Price
4†, 5†, 6†, 8, 10, 12, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1	**EX5215**	Price



† Items supplied in 3-flute style. All others 4-flute style

WALTON Tap Extensions

Style "A" for Hand Tapping Only

- For tapping places where it is difficult or impossible, because of limited space, to turn a tap wrench
- Each set contains two 5" long extensions which can be used singly or in combination



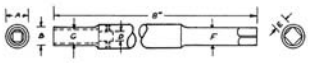
Tap Size (in.)	Square Shank Of Tap	Major OD of Extention	Square Socket Opening	Order No.	Price
#10	.152 sq.	.289	.154 sq	**EX5345010**	Price
1/4	.191 sq.	.354	.193 sq	**EX5345025**	Price
5/16	.238 sq.	.454	.242 sq	**EX5345031**	Price
3/8	.206 sq.	.404	.210 sq	**EX5345037**	Price
3/8	.286 sq.	.529	.290 sq	**EX5345038**	Price
7/16	.242 sq.	.454	.246 sq	**EX5345043**	Price
1/2	.275 sq.	.529	.279 sq	**EX5345050**	Price
5/8	.360 sq.	.704	.364 sq	**EX5345062**	Price

† The 3/8" (.286 sq) size is more frequently used than the 3/8" (.206 sq) size. Please specify which is required

WALTON Tap Extensions

Style "B" for Both Machine & Hand Tapping

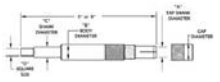
- Provides easy access to those hard-to-reach tapping locations
- Tap, supported by close-fitting long socket of extension, is held firmly in position by two socket set screws which bear on the square of tap
- All extensions are 8" overall length





Size	A Body Dia. (in.)	B Nose Dia. (in.)	D Tap Shank Dia. (in.)	J Tap Square Dia. (in.)	E Square Size (in.)	C Shank Dia. (in.)	Order No.	Price
#0-#6	5/16	.250	.142	.112	.191	.255	**EX5440006**	Price
#8	3/8	.250	.169	.133	.191	.255	**EX5440008**	Price
#10	3/8	.312	.195	.154	.191	.255	**EX5440010**	Price
#12	7/16	.312	.220	.166	.164	.219	**EX5440012**	Price
1/4	7/16	.375	.256	.193	.191	.255	**EX5440025**	Price
5/16	1/2	.437	.319	.240	.237	.318	**EX5440031**	Price
3/8	5/8	.500	.382	.288	.285	.381	**EX5440037**	Price
7/16	5/8	.500	.324	.244	.241	.323	**EX5440043**	Price
1/2	5/8	.500	.368	.277	.274	.367	**EX5440050**	Price
9/16	11/16	.562	.430	.322	.320	.428	**EX5440056**	Price
5/8	3/4	.625	.481	.361	.359	.479	**EX5440062**	Price
3/4	7/8	.750	.591	.443	.441	.589	**EX5440075**	Price
7/8	1-1/16	.906	.698	.524	.522	.696	**EX5440087**	Price
1	1-1/16	1.00	.801	.601	.599	.799	**EX5440100**	Price

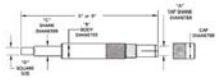
WHITNEY TOOL COMPANY Tool Tap Extension Sets





	Set Range	No. of Pieces	Order No.	Price
5	#0 thru 1/2"	9	**EX6596119**	Price
9	#0 thru 1/2"	9	**EX6596120**	Price

WHITNEY TOOL COMPANY Tap Extensions



- Internal square drive for positive tap drive
- Compression cap for easy tightening, no wrench required
- The slim profile lets you fit into places not accessible to conventional tap extensions



Extension Size - 5"							
Tap Size	A Tap Shank Dia. (in.)	B Body Dia. (in.)	C Shank Dia. (in.)	D Square Size (in.)	Depth of Tap (in.)	Order No.	Price
#0-#6	.141	1/4	.194	.152	7/8	**EX6596089**	Price
#8	.168	5/16	.194	.152	7/8	**EX6596090**	Price
#10	.194	3/8	.194	.152	1	**EX6596091**	Price
#12	.220	3/8	.194	.152	1	**EX6596092**	Price
1/4	.255	7/16	.255	.191	1	**EX6596093**	Price
5/16	.318	1/2	.318	.238	1-1/16	**EX6596094**	Price
3/8	.381	9/16	.381	.286	1-1/8	**EX6596095**	Price
7/16	.323	1/2	.323	.242	1-1/16	**EX6596096**	Price
1/2	.367	9/16	.367	.275	1-1/8	**EX6596097**	Price
1/16 & 1/8 RS NPT	.312	1/2	.312	.234	1	**EX6596098**	Price
M2 - M2.6	.110	1/4	.236	.193	7/8	**EX6596201**	Price
M3	.137	5/16	.236	.193	7/8	**EX6596202**	Price
M3.5	.157	3/8	.236	.193	7/8	**EX6596203**	Price
M4	.177	3/8	.236	.193	7/8	**EX6596204**	Price
M4.5 - M6	.236	7/16	.275	.216	1	**EX6596205**	Price
M7	.275	1/2	.275	.216	1	**EX6596206**	Price
M8	.315	1/2	.315	.244	1-1/8	**EX6596207**	Price
M9	.354	5/8	.354	.275	1-3/16	**EX6596208**	Price
M10	.393	5/8	.393	.315	1-1/4	**EX6596209**	Price
M12	.472	3/4	.472	.354	1-3/8	**EX6596211**	Price
M14	.433	3/4	.433	.354	1-3/8	**EX6596210**	Price

Extension Size - 6"							
Tap Size	A Tap Shank Dia. (in.)	B Body Dia. (in.)	C Shank Dia. (in.)	D Square Size (in.)	Depth of Tap (in.)	Order No.	Price
9/16	.429	3/4	.429	.320	1-1/4	**EX6596109**	Price
1/8 NPT	.437	3/4	.437	.328	1	**EX6596110**	Price
5/8	.480	3/4	.480	.360	1-1/4	**EX6596111**	Price
11/16	.542	7/8	.542	.406	1-1/4	**EX6596112**	Price
1/4 NPT	.562	7/8	.562	.420	1	**EX6596113**	Price
3/4	.590	7/8	.590	.440	1-3/8	**EX6596114**	Price
7/8	.697	1	.697	.520	1-3/8	**EX6596115**	Price
3/8 NPT	.700	1	.700	.530	1-3/16	**EX6596116**	Price
1/2 NPT	.687	1	.687	.515	1-1/4	**EX6596117**	Price
1	.800	1	.800	.600	1-1/2	**EX6596118**	Price

Extension Size - 9"							
Tap Size	A Tap Shank Dia. (in.)	B Body Dia. (in.)	C Shank Dia. (in.)	D Square Size (in.)	Depth of Tap (in.)	Order No.	Price
#0-#6	.141	1/4	.194	.152	7/8	**EX6596099**	Price
#8	.168	5/16	.194	.152	7/8	**EX6596100**	Price
#10	.194	3/8	.194	.152	1	**EX6596101**	Price
#12	.220	3/8	.194	.152	1	**EX6596102**	Price
1/4	.255	7/16	.255	.191	1	**EX6596103**	Price
5/16	.318	1/2	.318	.238	1-1/16	**EX6596104**	Price
3/8	.381	9/16	.381	.286	1-1/8	**EX6596105**	Price
7/16	.323	1/2	.323	.242	1-1/16	**EX6596106**	Price
1/2	.367	9/16	.367	.275	1-1/8	**EX6596107**	Price
1/16 & 1/8 RS NPT	.312	1/2	.312	.234	1	**EX6596108**	Price
M2 - M2.6	.110	1/4	.236	.193	7/8	**EX6596212**	Price
M3	.137	5/16	.236	.193	7/8	**EX6596213**	Price
M3.5	.157	3/8	.236	.193	7/8	**EX6596214**	Price
M4	.177	3/8	.236	.193	7/8	**EX6596215**	Price
M4.5 - M6	.236	7/16	.275	.216	1	**EX6596216**	Price
M7	.275	1/2	.275	.216	1	**EX6596217**	Price
M8	.315	1/2	.315	.244	1-1/8	**EX6596218**	Price
M9	.354	5/8	.354	.275	1-3/16	**EX6596219**	Price
M10	.393	5/8	.393	.315	1-1/4	**EX6596220**	Price
M12	.472	3/4	.472	.354	1-3/8	**EX6596222**	Price
M14	.433	3/4	.433	.354	1-3/8	**EX6596221**	Price

2- Flute Single-End End Mills



High Speed Steel • Center Cutting • Regular Length

- For slotting operations in all types of materials

Price	Price			Price		PRO CUT II PREMIUM CUTTING TOOLS		PROCUT	
				Rapidkut		ProCut II		ProCut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	3/8	2-5/16	CS40G4U	Price	CS30G4P	Price	CS50G4	Price
5/32	3/8	3/8	2-5/16	-	-	-	-	CS50G5	Price
3/16	3/8	7/16	2-3/8	CS40G6U	Price	-	-	-	-
3/16	3/8	7/16	2-5/16	-	-	CS30G6P	Price	CS50G6	Price
7/32	3/8	7/16	2-5/16	-	-	-	-	CS50G7	Price
1/4	3/8	1/2	2-5/16	-	-	CS30G8P	Price	CS50G8	Price
1/4	3/8	1/2	2-7/16	CS40G8U	Price	-	-	-	-
5/16	3/8	9/16	2-1/2	CS40G10U	Price	-	-	-	-
5/16	3/8	9/16	2-5/16	-	-	CS30G10P	Price	CS50G10	Price
3/8	3/8	9/16	2-1/2	CS40G12U	Price	-	-	-	-
3/8	3/8	9/16	2-5/16	-	-	CS30G12P	Price	CS50G12	Price
7/16	3/8	13/16	2-1/2	-	-	CS30G14P	Price	CS50G14	Price
7/16	3/8	13/16	2-11/16	CS40G14U	Price	-	-	-	-
15/32	3/8	1	3	-	-	-	-	CS50G15	Price
1/2	3/8	13/16	2-1/2	-	-	CS30G16XP	Price	CS50G16X	Price
1/2	3/8	13/16	2-11/16	CS40G16XU	Price	-	-	-	-
1/2	1/2	1	3	-	-	CS30G16P	Price	CS50G16	Price
1/2	1/2	1	3-1/4	CS40G16U	Price	-	-	-	-
9/16	1/2	1-1/8	3-1/8	-	-	CS30G18P	Price	CS50G18	Price
9/16	1/2	1-1/8	3-3/8	CS40G18U	Price	-	-	-	-
5/8	1/2	1-1/8	3-1/8	-	-	CS30G20XP	Price	CS50G20X	Price
5/8	1/2	1-1/8	3-3/8	CS40G20XU	Price	-	-	-	-
5/8	5/8	1-5/16	3-3/4	CS40G20U	Price	-	-	-	-
5/8	5/8	1-5/16	3-7/16	-	-	CS30G20P	Price	CS50G20	Price
11/16	1/2	1-5/16	3-3/8	CS40G22XU	Price	-	-	-	-
11/16	1/2	1-5/16	3-5/16	-	-	CS30G22XP	Price	CS50G22X	Price
11/16	5/8	1-5/16	3-3/4	CS40G22U	Price	-	-	-	-
11/16	5/8	1-5/16	3-7/16	-	-	CS30G22P	Price	CS50G22	Price
3/4	1/2	1-5/16	3-5/16	-	-	CS30G24XP	Price	CS50G24X	Price
3/4	1/2	1-5/16	3-5/8	CS40G24XU	Price	-	-	-	-
3/4	5/8	1-5/16	3-3/4	CS40G24U	Price	-	-	-	-
3/4	5/8	1-5/16	3-7/16	-	-	CS30G24P	Price	CS50G24	Price
3/4	3/4	1-5/16	3-7/16	-	-	CS30G24WP	Price	CS50G24W	Price
3/4	3/4	1-5/16	3-7/8	CS40G24WU	Price	-	-	-	-
13/16	1/2	1-1/2	3-1/2	-	-	-	-	CS50G26X	Price
13/16	5/8	1-1/2	3-5/8	-	-	CS30G26P	Price	CS50G26	Price
13/16	5/8	1-1/2	4	CS40G26U	Price	-	-	-	-
13/16	3/4	1-1/2	3-3/4	-	-	CS30G26WP	Price	CS50G26W	Price
7/8	5/8	1-1/2	3-5/8	-	-	CS30G28XP	Price	CS50G28X	Price
7/8	5/8	1-1/2	4	CS40G28XU	Price	-	-	-	-
7/8	3/4	1-1/2	3-3/4	-	-	CS30G28WP	Price	CS50G28W	Price
7/8	3/4	1-1/2	4-1/8	CS40G28WU	Price	-	-	-	-
7/8	7/8	1-1/2	3-3/4	-	-	CS30G28P	Price	CS50G28	Price
7/8	7/8	1-1/2	4-1/8	CS40G28U	Price	-	-	-	-
15/16	5/8	1-1/2	3-5/8	-	-	-	-	CS50G30X	Price
15/16	3/4	1-1/2	3-3/4	-	-	-	-	CS50G30W	Price
15/16	7/8	1-1/2	3-3/4	-	-	-	-	CS50G30	Price
1	1/2	1-1/2	3-1/2	-	-	CS30G32AP	Price	CS50G32A	Price
1	5/8	1-1/2	3-5/8	-	-	CS30G32XP	Price	-	-
1	5/8	1-1/2	4	CS40G32XU	Price	-	-	-	-
1	3/4	1-1/2	3-3/4	-	-	CS30G32WP	Price	CS50G32W	Price
1	3/4	1-1/2	4-1/8	CS40G32WU	Price	-	-	-	-
1	7/8	1-1/2	3-3/4	-	-	-	-	CS50G32Y	Price
1	7/8	1-1/2	4-1/8	CS40G32YU	Price	-	-	-	-
1	1	1-5/8	4-1/2	CS40G32U	Price	-	-	-	-
1	1	1-5/8	4-1/8	-	-	CS30G32P	Price	CS50G32	Price
1-1/8	3/4	1-5/8	3-7/8	-	-	CS30G36WP	Price	CS50G36W	Price
1-1/8	7/8	1-5/8	3-7/8	-	-	-	-	CS50G36Y	Price
1-1/8	1	1-5/8	4-1/2	CS40G36U	Price	-	-	-	-
1-1/8	1	1-5/8	4-1/8	-	-	-	-	CS50G36	Price
1-1/4	3/4	1-5/8	3-7/8	-	-	CS30G40WP	Price	CS50G40W	Price
1-1/4	3/4	1-5/8	4-1/2	CS40G40WU	Price	-	-	-	-
1-1/4	7/8	1-5/8	3-7/8	-	-	-	-	CS50G40X	Price
1-1/4	1	1-5/8	4-1/2	CS40G40ZU	Price	-	-	-	-
1-1/4	1	1-5/8	4-1/8	-	-	CS30G40ZP	Price	CS50G40Z	Price
1-1/4	1-1/4	1-5/8	4-1/2	CS40G40U	Price	-	-	-	-
1-1/4	1-1/4	1-5/8	4-1/8	-	-	CS30G40P	Price	CS50G40	Price
1-3/8	3/4	1-5/8	4	-	-	CS30G44WP	Price	CS50G44W	Price
1-3/8	3/4	1-5/8	4-1/4	CS40G44WU	Price	-	-	-	-
1-3/8	1	1-5/8	4-1/8	-	-	CS30G44P	Price	CS50G44	Price
1-1/2	3/4	1-5/8	4	-	-	CS30G48WP	Price	CS50G48W	Price
1-1/2	1	1-5/8	4-1/2	CS40G48U	Price	-	-	-	-
1-1/2	1	1-5/8	4-1/8	-	-	CS30G48P	Price	CS50G48	Price
1-1/2	1-1/4	1-5/8	4-1/2	CS40G48XU	Price	-	-	-	-
1-1/2	1-1/4	1-5/8	4-1/8	-	-	CS30G48XP	Price	CS50G48X	Price
1-5/8	1-1/4	1-5/8	4-1/8	-	-	-	-	CS50G52	Price
1-3/4	1-1/4	1-5/8	4-1/8	-	-	-	-	CS50G56	Price
1-7/8	1-1/4	1-5/8	4-1/8	-	-	-	-	CS50G60	Price
2	3/4	1-5/8	4-1/4	CS40G64WU	Price	-	-	-	-
2	1-1/4	1-5/8	4-1/2	CS40G64U	Price	-	-	-	-
2	1-1/4	1-5/8	4-1/8	-	-	CS30G64P	Price	CS50G64	Price
2	1-1/4	1-5/8	5	-	-	CS30G64AP	Price	CS50G64A	Price

PROCUT Miniature 3/16' Shank 2-Flute Single End Mills



High Speed Steel • Center Cutting

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/32	3/16	3/32	1-11/16	**CP51002**	Price
3/64	3/16	5/32	1-11/16	**CP51003**	Price
1/16	3/16	7/32	1-11/16	**CP51004**	Price
5/64	3/16	1/4	1-1/8	**CP51005**	Price
3/32	3/16	5/16	1-1/8	**CP51006**	Price
7/64	3/16	11/32	1-5/16	**CP51007**	Price
1/8	3/16	3/8	1-5/16	**CP51008**	Price
9/64	3/16	13/32	1-7/16	**CP51009**	Price
5/32	3/16	7/16	1-7/16	**CP51010**	Price
11/64	3/16	15/32	1-11/16	**CP51011**	Price
3/16	3/16	1/2	1-11/16	**CP51012**	Price

2 Flute Long Single End Mills



High Speed Steel • Center Cutting

Price Price Price

				Rapidkut		ProCut II		ProCut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/8	1	2-3/4	-	-	**CS32GE8P**	Price	**CS52GE8**	Price
1/4	3/8	1-1/4	3-1/8	**CS42GE8U**	Price	-	-	-	-
3/8	3/8	1-1/2	3-1/4	**CS42GE12U**	Price	**CS32GE12P**	Price	**CS52GE12**	Price
5/16	3/8	1-1/4	3	**CS42GE10U**	Price	**CS32GE10P**	Price	**CS52GE10**	Price
3/8	3/8	1	2-3/4	-	-	**CS32GE12AP**	Price	**CS52GE12A**	Price
1/2	1/2	1-1/2	3-1/2	**CS42GE16AU**	Price	**CS32GE16AP**	Price	**CS52GE16A**	Price
1/2	1/2	2	4	**CS42GE16U**	Price	**CS32GE16P**	Price	**CS52GE16**	Price
1/2	1/2	3	5	-	-	**CS32GE16XP**	Price	**CS52GE16X**	Price
5/8	5/8	2	4-1/8	**CS42GE20AU**	Price	**CS32GE20AP**	Price	**CS52GE20A**	Price
5/8	5/8	2-3/8	4-1/2	-	-	-	-	**CS52GE20X**	Price
5/8	5/8	3	5-1/8	-	-	-	-	**CS52GE20C**	Price
5/8	5/8	4	6-1/8	-	-	-	-	**CS52GE20**	Price
3/4	3/4	2-1/4	4-1/2	**CS42GE24CU**	Price	**CS32GE24CP**	Price	**CS52GE24C**	Price
3/4	1/2	3-1/8	5-1/8	-	-	-	-	**CS52GE24X**	Price
3/4	3/4	3	5-1/4	-	-	**CS32GE24P**	Price	**CS52GE24**	Price
3/4	3/4	4	6-1/4	-	-	-	-	**CS52GE24Y**	Price
7/8	3/4	2-1/2	4-3/4	-	-	-	-	**CS52GE28BW**	Price
7/8	7/8	2-1/2	4-3/4	-	-	-	-	**CS52GE28B**	Price
7/8	7/8	3-1/2	5-3/4	-	-	-	-	**CS52GE28**	Price
1	1	2-1/2	5	-	-	**CS32GE32BP**	Price	**CS52GE32B**	Price
1	1	3	5-1/2	**CS42GE32CU**	Price	-	-	**CS52GE32C**	Price
1	1	4-1/2	7	-	-	**CS32GE32P**	Price	**CS52GE32**	Price
1-1/8	1	3	5-1/2	**CS42GE36CU**	Price	-	-	**CS52GE36C**	Price
1-1/4	1	3	5-1/2	**CS42GE40AYU**	Price	-	-	**CS52GE40AY**	Price
1-1/4	1-1/4	3	5-1/2	**CS42GE40AU**	Price	**CS32GE40AP**	Price	**CS52GE40A**	Price
1-1/4	1-1/4	3-1/2	6	-	-	-	-	**CS52GE40B**	Price
1-1/4	1-1/4	4-3/4	7-1/4	-	-	-	-	**CS52GE40**	Price
1-3/8	1	3	5-1/2	-	-	-	-	**CS52GE44**	Price
1-1/2	1-1/4	3	5-1/2	**CS42GE48U**	Price	-	-	**CS52GE48**	Price
1-1/2	1-1/4	4	6-1/2	-	-	-	-	**CS52GE48X**	Price
1-1/2	1-1/4	6	8-1/2	-	-	**CS32GE48YP**	Price	**CS52GE48Y**	Price
1-5/8	1-1/4	3	5-1/2	-	-	-	-	**CS52GE52**	Price
1-3/4	1-1/4	3	5-1/2	**CS42GE56U**	Price	**CS32GE56P**	Price	**CS52GE56**	Price
1-7/8	1-1/4	3	5-1/2	-	-	-	-	**CS52GE60**	Price
2	1-1/4	3	5-1/2	-	-	**CS32GE64P**	Price	**CS52GE64**	Price
2	1-1/4	4	6-1/2	-	-	-	-	**CS52GE64X**	Price

2 Flute Long Extension Type Single End Mills



High Speed Steel • Center Cutting

- For slotting operations in a variety of materials

Price Price Price

					Rapidkut		ProCut II		ProCut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Length Below Shank (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3/16	3/8	1/2	1-1/4	2-11/16	**CS41GL6U**	Price	-	-	-	-
1/4	3/8	5/8	1-1/2	3-1/16	**CS41GL8U**	Price	**CS31GL8P**	Price	**CS51GL8**	Price
5/16	3/8	3/4	1-3/4	3-5/16	**CS41GL10U**	Price	**CS31GL10P**	Price	**CS51GL10**	Price
3/8	3/8	3/4	1-3/4	3-5/16	**CS41GL12U**	Price	**CS31GL12P**	Price	**CS51GL12**	Price
1/2	1/2	1	2-7/32	4	**CS41GL16U**	Price	**CS31GL16P**	Price	**CS51GL16**	Price
5/8	1/2	1-3/8	2-23/32	4-5/8	-	-	-	-	**CS51GL20X**	Price
5/8	5/8	1-3/8	2-23/32	4-5/8	**CS41GL20U**	Price	**CS31GL20P**	Price	**CS51GL20**	Price
3/4	1/2	1-5/8	3-11/32	5-3/8	-	-	-	-	**CS51GL24X**	Price
3/4	3/4	1-5/8	3-11/32	3-7/8	**CS41GL24U**	Price	-	-	-	-
3/4	3/4	1-5/8	3-11/32	5-3/8	-	-	**CS31GL24P**	Price	**CS51GL24**	Price
7/8	7/8	2	4	6	-	-	-	-	**CS51GL28**	Price
1	1	2-1/2	4-31/32	7-1/4	**CS41GL32U**	Price	**CS31GL32P**	Price	**CS51GL32**	Price
1-1/4	1-1/4	3	4-31/32	7-1/4	-	-	-	-	**CS51GL40**	Price

HSS M GP 2 Flute Single End Mills

High Speed Steel • Center Cutting

- Used for slotting operations in all types of materials



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	3/8	3/8	2-5/16	**MT2343651**	Price
5/32	3/8	3/8	2-5/16	**MT2343691**	Price
3/16	3/8	7/16	2-5/16	**MT2343652**	Price
13/64	3/8	7/16	2-5/16	**MT2343706**	Price
7/32	3/8	7/16	2-5/16	**MT2343692**	Price
15/64	3/8	1/2	2-5/16	**MT2343707**	Price
1/4	3/8	1/2	2-5/16	**MT2343653**	Price
17/64	3/8	9/16	2-5/16	**MT2343708**	Price
9/32	3/8	1/2	2-5/16	**MT2343693**	Price
5/16	3/8	9/16	2-5/16	**MT2343654**	Price
21/64	3/8	9/16	2-5/16	**MT2343710**	Price
11/32	3/8	9/16	2-5/16	**MT2343694**	Price
3/8	3/8	9/16	2-5/16	**MT2343655**	Price
25/64	3/8	13/16	2-1/2	**MT2343712**	Price
13/32	3/8	13/16	2-1/2	**MT2343695**	Price
27/64	3/8	13/16	2-1/2	**MT2343713**	Price
7/16	3/8	13/16	2-1/2	**MT2343656**	Price
15/32	1/2	1	3	**MT2343696**	Price
1/2	3/8	13/16	2-1/2	**MT2343657**	Price
1/2	1/2	1	3	**MT2343658**	Price
33/64	1/2	1	3	**MT2343716**	Price
17/32	1/2	1-1/8	3-1/8	**MT2343697**	Price
35/64	1/2	1-1/8	3-1/8	**MT2343717**	Price
9/16	1/2	1-1/8	3-1/8	**MT2343659**	Price
37/64	1/2	1-1/8	3-1/8	**MT2343718**	Price
19/32	1/2	1-1/8	3-1/8	**MT2343698**	Price
39/64	1/2	1-5/16	3-7/16	**MT2343719**	Price
5/8	1/2	1-1/8	3-1/8	**MT2343660**	Price
5/8	5/8	1-5/16	3-7/16	**MT2343661**	Price
11/16	1/2	1-5/16	3-5/16	**MT2343662**	Price
11/16	5/8	1-5/16	3-7/16	**MT2343663**	Price
3/4	1/2	1-5/16	3-5/16	**MT2343664**	Price
3/4	5/8	1-5/16	3-7/16	**MT2343665**	Price
3/4	3/4	1-5/16	3-9/16	**MT2343666**	Price
13/16	5/8	1-1/2	3-5/8	**MT2343667**	Price
13/16	3/4	1-1/2	3-3/4	**MT2343668**	Price
7/8	5/8	1-1/2	3-5/8	**MT2343669**	Price
7/8	3/4	1-1/2	3-3/4	**MT2343670**	Price
7/8	7/8	1-1/2	3-3/4	**MT2343671**	Price
15/16	3/4	1-1/2	3-3/4	**MT2343673**	Price
15/16	7/8	1-1/2	3-3/4	**MT2343674**	Price
1	5/8	1-1/2	3-5/8	**MT2343675**	Price
1	3/4	1-1/2	3-3/4	**MT2343676**	Price
1	7/8	1-1/2	3-3/4	**MT2343677**	Price
1	1	1-5/8	4-1/8	**MT2343678**	Price
1-1/8	3/4	1-1/2	3-7/8	**MT2343720**	Price
1-1/8	7/8	1-5/8	3-7/8	**MT2343679**	Price
1-1/4	3/4	1-1/2	3-7/8	**MT2343721**	Price
1-1/4	7/8	1-5/8	3-7/8	**MT2343681**	Price
1-3/8	3/4	1-1/2	3-7/8	**MT2343722**	Price
1-1/2	3/4	1-1/2	3-7/8	**MT2343723**	Price
1-5/8	1-1/4	1-5/8	4-1/8	**MT2343687**	Price
1-3/4	3/4	1-1/2	3-7/8	**MT2343724**	Price
2	1-1/4	1-5/8	4-1/8	**MT2343690**	Price

HSS M GP 2 Flute Long Single End Mills

High Speed Steel • Center Cutting



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/8	3/8	1-1/2	3-1/4	**MT2344601**	Price
1/2	1/2	2	4	**MT2344602**	Price
5/8	5/8	2	4-1/8	**MT2344603**	Price
3/4	3/4	2-1/4	4-1/2	**MT2344604**	Price
1	1	3	5-1/2	**MT2344606**	Price

HSS M GP 2 Flute Long Extended Length Single End Mills

High Speed Steel • Center Cutting



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	3/8	5/8	3-1/16	**MT2343751**	Price
5/16	3/8	3/4	3-5/16	**MT2343752**	Price
3/8	3/8	3/4	3-5/16	**MT2343753**	Price
1/2	1/2	1	4	**MT2343754**	Price

HSS M GP 2 Flute Metric Single End Mills

High Speed Steel • Center Cutting



Dia. (mm)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
5mm	3/8	1/2	2-5/16	**MT2343333**	Price
6mm	3/8	1/2	2-5/16	**MT2343335**	Price
7mm	3/8	9/16	2-5/16	**MT2343337**	Price
8mm	3/8	9/16	2-5/16	**MT2343307**	Price
10mm	3/8	13/16	2-1/2	**MT2343311**	Price
14mm	1/2	1-1/8	3-1/8	**MT2343319**	Price
15mm	1/2	1-1/8	3-1/8	**MT2343321**	Price
17mm	5/8	1-5/16	3-7/16	**MT2343323**	Price
25mm	1	2	4-1/2	**MT2343331**	Price

HSS M GP 2 Flute Double End Mills

High Speed Steel • Center Cutting



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	3/8	3/8	3-1/16	**MT2343412**	Price
5/32	3/8	7/16	3-1/8	**MT2343413**	Price
3/16	3/8	7/16	3-1/8	**MT2343414**	Price
7/32	3/8	1/2	3-1/8	**MT2343415**	Price
1/4	3/8	1/2	3-1/8	**MT2343416**	Price
9/32	3/8	9/16	3-1/8	**MT2343417**	Price
5/16	3/8	9/16	3-1/8	**MT2343418**	Price
11/32	3/8	9/16	3-1/8	**MT2343419**	Price
3/8	3/8	9/16	3-1/8	**MT2343420**	Price
13/32	1/2	13/16	3-3/4	**MT2343421**	Price
7/16	1/2	13/16	3-3/4	**MT2343422**	Price
1/2	1/2	13/16	3-3/4	**MT2343424**	Price
9/16	5/8	1-1/8	4-1/2	**MT2343425**	Price
5/8	5/8	1-1/8	4-1/2	**MT2343426**	Price
3/4	3/4	1-5/16	5	**MT2343428**	Price
7/8	7/8	1-9/16	5-1/2	**MT2343429**	Price

PROCUT 2 Flute Hi-Helix End Mills for Aluminum

High Speed Steel

- Designed to cut aluminum and other non-ferrous materials
- The 38° helix shears the material cleanly and allows for more of the cutting flutes to be engaged with the workpieces thus eliminating chatter



Regular Length



Long Length



Extra Long Length

Length - Standard					
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	3/8	5/8	2-1/2	**DA50A8**	Price
5/16	3/8	3/4	2-1/2	**DA50A10**	Price
3/8	3/8	3/4	2-1/2	**DA50A12**	Price
7/16	3/8	1	2-11/16	**DA50A14†**	Price
1/2	1/2	1-1/4	3-1/4	**DA50A16**	Price
5/8	1/2	1-3/8	3-3/8	**DA50A20X**	Price
5/8	5/8	1-5/8	3-3/4	**DA50A20**	Price
3/4	3/4	1-5/8	3-7/8	**DA50A24**	Price
7/8	7/8	1-7/8	4-1/8	**DA50A28**	Price
1	1	2	4-1/2	**DA50A32**	Price
1-1/4	1-1/4	2	4-1/2	**DA50A40**	Price
1-1/2	1-1/4	2	4-1/2	**DA50A48**	Price
1-3/4	1-1/4	2	4-1/2	**DA50A56**	Price
2	1-1/4	2	4-1/2	**DA50A64**	Price

Length - Long					
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	3/8	1-1/4	3-1/8	**DA51AL8P†**	Price
5/16	3/8	1-3/8	3-1/8	**DA51AL10P**	Price
3/8	3/8	1-1/2	3-1/4	**DA51AL12P†**	Price
7/16	1/2	1-3/4	3-3/4	**DA51AL14P†**	Price
1/2	1/2	2	4	**DA51AL16P**	Price
5/8	5/8	2-1/2	4-5/8	**DA51AL20P**	Price
3/4	3/4	3	5-1/4	**DA51AL24P**	Price
7/8	7/8	3-1/2	5-3/4	**DA51AL28P**	Price
1	1	4	6-1/2	**DA51AL32P**	Price
1-1/4	1-1/4	4	6-1/2	**DA51AL40P**	Price
1-1/2	1-1/4	4	6-1/2	**DA51AL48P**	Price
1-3/4	1-1/4	4	6-1/2	**DA51AL56P**	Price
2	1-1/4	4	6-1/2	**DA51AL64P**	Price

Length - Extra-Long					
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	3/8	1-3/4	3-9/16	**DA52AX8P†**	Price
5/16	3/8	2	3-3/4	**DA52AX10P†**	Price
3/8	3/8	2-1/2	4-1/4	**DA52AX12P†**	Price
7/16	1/2	2-3/4	4-3/4	**DA52AX14P†**	Price
1/2	1/2	3	5	**DA52AX16P**	Price
5/8	5/8	4	6-1/8	**DA52AX20P**	Price
3/4	3/4	4	6-1/4	**DA52AX24P**	Price
7/8	7/8	5	7-1/4	**DA52AX28P**	Price
1	1	6	8-1/2	**DA52AX32P**	Price
1-1/4	1-1/4	6	8-1/2	**DA52AX40P**	Price
1-1/2	1-1/4	6	8-1/2	**DA52AX48XP**	Price
1-1/2	1-1/4	8	10-1/2	**DA52AX48P**	Price

†Available in ball nose while supplies last. To order, add "B" to the end of order number. For pricing, add 10%.

PROCUT II PREMIUM CUTTING TOOLS 3 Flute Center Cutting Single End Mills

High Speed Steel

- Three flute design allows for better chip removal
- Center cut design allows for plunge milling



Regular Length



Long Length

Length - Standard					
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	3/8	3/8	2-5/16	**CL50E4**	Price
3/16	3/8	1/2	2-3/8	**CL50E6**	Price
1/4	3/8	5/8	2-1/2	**CL50E8**	Price
5/16	3/8	3/4	2-1/2	**CL50E10**	Price
3/8	3/8	3/4	2-1/2	**CL50E12**	Price
7/16	3/8	1	2-11/16	**CL50E14**	Price
1/2	1/2	1-1/4	3-1/4	**CL50E16**	Price
1/2	3/8	1	2-11/16	**CL50E16X**	Price
9/16	1/2	1-3/8	3-3/8	**CL50E18**	Price
5/8	1/2	1-3/8	3-3/8	**CL50E20X**	Price
5/8	5/8	1-5/8	3-3/4	**CL50E20**	Price
3/4	3/4	1-5/8	3-7/8	**CL50E24Y**	Price
3/4	5/8	1-5/8	3-3/4	**CL50E24**	Price
7/8	1/2	1-5/8	3-5/8	**CL50E28Y**	Price
7/8	3/4	1-7/8	4-1/8	**CL50E28W**	Price
7/8	5/8	1-7/8	4	**CL50E28X**	Price
7/8	7/8	1-7/8	4-1/8	**CL50E28**	Price
1	5/8	1-7/8	4	**CL50E32X**	Price
1	3/4	1-7/8	4-1/8	**CL50E32W**	Price
1	1	2	4-1/2	**CL50E32Y**	Price

Length - Long					
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/8	3/8	1-1/2	3-1/4	**CL52EL12**	Price
1/2	1/2	2	4	**CL52EL16**	Price
5/8	5/8	2-1/2	4-5/8	**CL52EL20**	Price
3/4	3/4	3	5-1/4	**CL52EL24**	Price
1	1	4	6-1/2	**CL52EL32**	Price
1-1/4	1-1/4	4	6-1/2	**CL52EL40**	Price

PROCUT II PREMIUM CUTTING TOOLS 3 Flute Center Cutting Double End Mills

High Speed Steel

- Three flute design allows for better chip removal
- Center cut design allows for plunge milling



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	3/8	3/8	3-1/8	**CL51EE4**	Price
5/32	3/8	7/16	3-1/8	**CL51EE5**	Price
3/16	3/8	1/2	3-1/4	**CL51EE6**	Price
1/4	3/8	5/8	3-3/8	**CL51EE8**	Price
5/16	3/8	3/4	3-1/2	**CL51EE10**	Price
3/8	3/8	3/4	3-3/8	**CL51EE12**	Price
7/16	1/2	1	4-1/4	**CL51EE14**	Price
1/2	1/2	1	4-1/4	**CL51EE16**	Price
9/16	5/8	1-3/8	5	**CL51EE18**	Price
5/8	5/8	1-3/8	5	**CL51EE20**	Price
11/16	3/4	1-5/8	5-5/8	**CL51EE22**	Price
3/4	3/4	1-5/8	5-5/8	**CL51EE24**	Price
15/16	1	1-3/4	6-1/2	**CL51EE30**	Price
1	1	1-3/4	6-1/2	**CL51EE32**	Price

RAPIDKUT®

Made by leading USA end mill manufacturers. Quality made to meet the close tolerances required in today's high production environment.

Rapidkut: 1/32″ - 3″ In all the styles and types required by the most precision CNC machines. Equal in quality to other premier American end mill manufacturers but at a substantial savings.

PRO CUT II PREMIUM CUTTING TOOLS

Premium quality end mills from selected Global Manufacturers. Designed to meet the need of higher production runs at affordable prices.

Pro Cut II: Manufactured to strict USA specifications. These mills are in use throughout the United States in many of the finest precision shops. Important price savings without sacrificing quality. Huge inventory and immediate delivery.

PROCUT

Produced by World Quality manufacturers. Designed to give you excellent quality at affordable prices.

ProCut: Imported to provide a full line of general purpose economy priced end mills that will produce excellent results at very reduced costs.

2 Flute Double End Mills

High Speed Steel • Center Cutting



Price	Price			Price		PRO CUT II PREMIUM CUTTING TOOLS		PROCUT	
				Rapidkut		ProCut II		ProCut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	3/8	3-1/16	CR40C4U	Price	CR30C4P	Price	CR50C4	Price
9/64	3/8	7/16	3-1/8	-	-	-	-	CR50C964	Price
5/32	3/8	7/16	3-1/8	CR40C5U	Price	CR30C5P	Price	CR50C5	Price
11/64	3/8	7/16	3-1/8	-	-	-	-	CR50C1164	Price
3/16	3/8	7/16	3-1/4	CR40C6U	Price	-	-	-	-
3/16	3/8	7/16	3-1/8	-	-	CR30C6P	Price	CR50C6	Price
13/64	3/8	1/2	3-1/8	-	-	-	-	CR50C1364	Price
7/32	3/8	1/2	3-1/4	CR40C7U	Price	-	-	-	-
7/32	3/8	1/2	3-1/8	-	-	CR30C7P	Price	CR50C7	Price
15/64	3/8	1/2	3-1/8	CR40C1564U	Price	-	-	CR50C1564	Price
1/4	3/8	1/2	3-1/8	-	-	CR30C8P	Price	CR50C8	Price
1/4	3/8	1/2	3-3/8	CR40C8U	Price	-	-	-	-
17/64	3/8	9/16	3-1/8	CR40C1764U	Price	-	-	CR50C1764	Price
9/32	3/8	9/16	3-1/8	-	-	CR30C9P	Price	CR50C9	Price
9/32	3/8	9/16	3-3/8	CR40C9U	Price	-	-	-	-
5/16	3/8	9/16	3-1/2	CR40C10U	Price	-	-	-	-
5/16	3/8	9/16	3-1/8	-	-	CR30C10P	Price	CR50C10	Price
21/64	3/8	9/16	3-1/8	-	-	-	-	CR50C2164	Price
11/32	3/8	9/16	3-1/2	CR40C11U	Price	-	-	-	-
11/32	3/8	9/16	3-1/8	-	-	CR30C11P	Price	CR50C11	Price
23/64	3/8	9/16	3-1/8	CR40C2364U	Price	-	-	CR50C2364	Price
3/8	3/8	9/16	3-1/2	CR40C12U	Price	-	-	-	-
3/8	3/8	9/16	3-1/8	-	-	CR30C12P	Price	CR50C12	Price
25/64	1/2	13/16	3-3/4	CR40C2564U	Price	-	-	CR50C2564	Price
13/32	1/2	13/16	3-3/4	-	-	CR30C13P	Price	CR50C13	Price
13/32	1/2	13/16	4-1/8	CR40C13U	Price	-	-	-	-
27/64	1/2	13/16	3-3/4	CR40C2764U	Price	-	-	CR50C2764	Price
7/16	1/2	13/16	3-3/4	-	-	CR30C14P	Price	CR50C14	Price
7/16	1/2	13/16	4-1/8	CR40C14U	Price	-	-	-	-
29/64	1/2	13/16	3-3/4	-	-	-	-	CR50C2964	Price
15/32	1/2	13/16	3-3/4	-	-	-	-	CR50C15	Price
15/32	1/2	13/16	4-1/8	CR40C15U	Price	-	-	-	-
31/64	1/2	13/16	3-3/4	CR40C3164U	Price	-	-	CR50C3164	Price
1/2	1/2	13/16	3-3/4	-	-	CR30C16P	Price	CR50C16	Price
1/2	1/2	13/16	4-1/8	CR40C16U	Price	-	-	-	-
17/32	5/8	1-1/8	4-1/2	-	-	-	-	CR50C17	Price
17/32	5/8	1-1/8	5	CR40C17U	Price	-	-	-	-
9/16	5/8	1-1/8	4-1/2	-	-	CR30C18P	Price	CR50C18	Price
9/16	5/8	1-1/8	5	CR40C18U	Price	-	-	-	-
19/32	5/8	1-1/8	4-1/2	-	-	-	-	CR50C19	Price
19/32	5/8	1-1/8	5	CR40C19U	Price	-	-	-	-
5/8	5/8	1-1/8	4-1/2	-	-	CR30C20P	Price	CR50C20	Price
5/8	5/8	1-1/8	5	CR40C20U	Price	-	-	-	-
21/32	3/4	1-5/16	5	-	-	-	-	CR50C21	Price
21/32	3/4	1-5/16	5-5/8	CR40C21U	Price	-	-	-	-
11/16	3/4	1-5/16	5	-	-	CR30C22P	Price	CR50C22	Price
11/16	3/4	1-5/16	5-5/8	CR40C22U	Price	-	-	-	-
23/32	3/4	1-5/16	5	-	-	-	-	CR50C23	Price
3/4	3/4	1-5/16	5	-	-	CR30C24P	Price	CR50C24	Price
3/4	3/4	1-5/16	5-5/8	CR40C24U	Price	-	-	-	-
13/16	7/8	1-9/16	5-1/2	-	-	CR30C26P	Price	CR50C26	Price
27/32	7/8	1-9/16	6-1/8	CR40C27U	Price	-	-	-	-
7/8	7/8	1-9/16	5-1/2	-	-	CR30C28P	Price	CR50C28	Price
7/8	7/8	1-9/16	6-1/8	CR40C28U	Price	-	-	-	-
29/32	1	1-5/8	6-3/8	CR40C29U	Price	-	-	-	-
15/16	1	1-5/8	5-7/8	-	-	CR30C30P	Price	CR50C30	Price
15/16	1	1-5/8	6-3/8	CR40C30U	Price	-	-	-	-
31/32	1	1-5/8	6-3/8	CR40C31U	Price	-	-	-	-
1	1	1-5/8	5-7/8	-	-	CR30C32P	Price	CR50C32	Price
1	1	1-5/8	6-3/8	CR40C32U	Price	-	-	-	-

Metric 2 Flute Single End Mills



High Speed Steel and M-42 8% Cobalt • Center Cutting

Price	Price		Price	Rapidkut				ProCut			
				High Speed Steel		M-42 Cobalt		High Speed Steel		Price	
Dia.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
2mm	3/8	5/16	2-5/16	CY812020U	Price	-	-	CY762020	Price	-	-
2.5mm	3/8	5/16	2-5/16	CY812025U	Price	-	-	CY762025	Price	-	-
3mm	3/8	3/8	2-5/16	CY812030U	Price	-	-	-	-	-	-
3mm	3/8	5/16	2-5/16	-	-	CY832030CU	Price	CY762030	Price	CY782030C	Price
3.5mm	3/8	7/16	2-3/8	CY812035U	Price	-	-	-	-	-	-
3.5mm	3/8	7/16	2-5/16	-	-	-	-	-	-	CY782035C	Price
4mm	3/8	7/16	2-3/8	CY812040U	Price	-	-	-	-	-	-
4mm	3/8	7/16	2-5/16	-	-	CY832040CU	Price	CY762040	Price	CY782040C	Price
4.5mm	3/8	1/2	2-5/16	-	-	-	-	CY762045	Price	CY782045C	Price
4.5mm	3/8	7/16	2-3/8	CY812045U	Price	-	-	-	-	-	-
5mm	3/8	1/2	2-5/16	-	-	CY832050CU	Price	CY762050	Price	CY782050C	Price
5mm	3/8	7/16	2-7/16	CY812050U	Price	-	-	-	-	-	-
5.5mm	3/8	1/2	2-5/16	-	-	-	-	CY762055	Price	CY782055C	Price
5.5mm	3/8	1/2	2-7/16	CY812055U	Price	-	-	-	-	-	-
6mm	3/8	1/2	2-5/16	-	-	CY832060CU	Price	CY762060	Price	CY782060C	Price
6mm	3/8	1/2	2-7/16	CY812060U	Price	-	-	-	-	-	-
6.5mm	3/8	1/2	2-7/16	CY812065U	Price	-	-	-	-	-	-
7mm	3/8	9/16	2-1/2	CY812070U	Price	-	-	-	-	-	-
7mm	3/8	9/16	2-5/16	-	-	CY832070CU	Price	CY762070	Price	CY782070C	Price
7.5mm	3/8	9/16	2-1/2	CY812075U	Price	-	-	-	-	-	-
8mm	3/8	9/16	2-1/2	CY812080U	Price	-	-	-	-	-	-
8mm	3/8	9/16	2-5/16	-	-	CY832080CU	Price	CY762080	Price	CY782080C	Price
8.5mm	3/8	9/16	2-1/2	CY812085U	Price	-	-	-	-	-	-
9mm	3/8	9/16	2-1/2	CY812090U	Price	-	-	-	-	-	-
9mm	3/8	9/16	2-5/16	-	-	-	-	CY762090	Price	-	-
-	-	-	-	-	-	-	-	-	-	-	-
10mm	3/8	13/16	2-1/2	-	-	CY832100CU	Price	CY762100	Price	CY782100C	Price
10mm	3/8	3/4	2-1/2	CY812100U	Price	-	-	-	-	-	-
10.5mm	3/8	1	2-11/16	CY812105U	Price	-	-	-	-	-	-
11mm	3/8	1	2-11/16	CY812110U	Price	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
12mm	3/8	13/16	2-1/2	CY812120U	Price	CY832120CU	Price	CY762120	Price	CY782120C	Price
12.5mm	1/2	1-1/4	3-1/4	CY812125U	Price	-	-	-	-	-	-
12.5mm	1/2	1-1/8	3-1/8	-	-	-	-	CY762125	Price	CY782125C	Price
13mm	1/2	1-1/8	3-1/8	CY812130U	Price	CY832130CU	Price	CY762130	Price	-	-
14mm	1/2	1-1/8	3-1/8	CY812140U	Price	CY832140CU	Price	CY762140	Price	CY782140C	Price
16mm	5/8	1-3/8	3-3/4	CY812160U	Price	-	-	-	-	-	-
16mm	5/8	1-5/16	3	-	-	CY832160CU	Price	-	-	-	-
16mm	5/8	1-5/16	3-7/16	-	-	-	-	CY762160	Price	CY782160C	Price
18mm	5/8	1-5/16	3-7/16	-	-	-	-	CY762180	Price	CY782180C	Price
18mm	5/8	1-5/8	3-3/4	CY812180U	Price	-	-	-	-	-	-
20mm	3/4	1-1/2	3-3/4	CY812200U	Price	CY832200CU	Price	-	-	CY782200C	Price
20mm	5/8	1-1/2	3-3/4	-	-	-	-	CY762200	Price	-	-
22mm	3/4	1-1/2	3-3/4	-	-	-	-	CY762220	Price	CY782220C	Price
24mm	3/4	2	4-1/2	-	-	-	-	CY762240	Price	-	-
25mm	1	2	4-1/2	CY812250U	Price	-	-	CY762250	Price	-	-

Metric 4 Flute Single End Mills



High Speed Steel and M-42 8% Cobalt

Price	Price		Price	High Speed Steel				M-42 Cobalt			
	Price		Price	Non-Center Cut				Center Cut			
				Rapidkut		ProCut		Rapidkut		Price	
Dia.	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
2mm	3/8	3/8	2-5/16	CY824020U	Price	CY774020	Price	-	-	-	-
2.5mm	3/8	3/8	2-5/16	CY824025U	Price	CY774025	Price	-	-	-	-
3mm	3/8	3/8	2-5/16	CY824030U	Price	CY774030	Price	CY844030CU	Price	CY794030C	Price
3.5mm	3/8	1/2	2-3/8	CY824035U	Price	CY774035	Price	-	-	CY794035C	Price
4mm	3/8	1/2	2-3/8	CY824040U	Price	CY774040	Price	CY844040CU	Price	CY794040C	Price
4.5mm	3/8	1/2	2-3/8	CY824045U	Price	-	-	-	-	-	-
4.5mm	3/8	9/16	2-1/2	-	-	CY774045	Price	-	-	CY794045C	Price
5mm	3/8	5/8	2-7/16	CY824050U	Price	-	-	-	-	-	-
5mm	3/8	9/16	2-1/2	-	-	CY774050	Price	CY844050CU	Price	CY794050C	Price
5.5mm	3/8	5/8	2-1/2	-	-	CY774055	Price	-	-	CY794055C	Price
5.5mm	3/8	5/8	2-7/16	CY824055U	Price	-	-	-	-	-	-
6mm	3/8	5/8	2-1/2	-	-	CY774060	Price	CY844060CU	Price	CY794060C	Price
6mm	3/8	5/8	2-7/16	CY824060U	Price	-	-	-	-	-	-
7mm	3/8	11/16	2-1/2	-	-	CY774070	Price	CY844070CU	Price	CY794070C	Price
7mm	3/8	3/4	2-1/2	CY824070U	Price	-	-	-	-	-	-
8mm	3/8	3/4	2-1/2	CY824080U	Price	CY774080	Price	CY844080CU	Price	CY794080C	Price
9mm	3/8	3/4	2-1/2	CY824090U	Price	CY774090	Price	CY844090CU	Price	-	-
9.5mm	3/8	3/4	2-1/2	CY824095U	Price	-	-	-	-	-	-
10mm	3/8	1	2-11/16	-	-	CY774100	Price	CY844100CU	Price	CY794100C	Price
10mm	3/8	3/4	2-1/2	CY824100U	Price	-	-	-	-	-	-
10.5mm	3/8	1	2-11/16	CY824105U	Price	-	-	-	-	-	-
11mm	3/8	1	2-11/16	CY824110U	Price	CY774110	Price	CY844110CU	Price	CY794110C	Price
11.5mm	3/8	1	2-11/16	CY824115U	Price	-	-	-	-	-	-
12mm	3/8	1	2-11/16	CY824120U	Price	CY774120	Price	CY844120CU	Price	CY794120C	Price
12.5mm	1/2	1-1/4	3-1/4	CY824125U	Price	CY774125	Price	-	-	CY794125C	Price
13mm	1/2	1-1/4	3-1/4	CY824130U	Price	CY774130	Price	CY844130CU	Price	CY794130C	Price
13.5mm	1/2	1-3/8	3-3/8	CY824135U	Price	-	-	-	-	-	-
14mm	1/2	1-3/8	3-3/8	CY824140U	Price	CY774140	Price	CY844140CU	Price	CY794140C	Price
14.5mm	1/2	1-3/8	3-3/8	CY824145U	Price	-	-	-	-	-	-
16mm	5/8	1-5/8	3-3/4	CY824160U	Price	CY774160	Price	CY844160CU	Price	CY794160C	Price
18mm	5/8	1-5/8	3-3/4	CY824180U	Price	CY774180	Price	CY844180CU	Price	CY794180C	Price
20mm	3/4	1-7/8	4-1/8	CY824200U	Price	-	-	CY844200CU	Price	-	-
20mm	5/8	1-7/8	4-1/8	-	-	CY774200	Price	-	-	CY794200C	Price
22mm	3/4	1-7/8	4-1/8	CY824220U	Price	CY774220	Price	-	-	-	-
24mm	3/4	2	4-1/2	-	-	CY774240	Price	-	-	-	-
25mm	1	2	4-1/2	CY824250U	Price	-	-	-	-	-	-

HSS MORSE M GP Multi-Flute Regular Length Single End Mills



High Speed Steel

Price					Center Cut		Non-Center Cut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1/8	3/8	3/8	2-5/16	4	**MT2244135**	Price	**MT2143501**	Price
5/32	3/8	1/2	2-3/8	4	**MT2243021**	Price	**-**	-
5/32	3/8	7/16	2-3/8	4	**-**	-	**MT2143541**	Price
11/64	3/8	1/2	2-3/8	4	**-**	-	**MT2143562**	Price
3/16	3/8	1/2	2-3/8	4	**MT2244136**	Price	**MT2143502**	Price
13/64	3/8	1/2	2-3/8	4	**-**	-	**MT2143563**	Price
7/32	3/8	9/16	2-7/16	4	**MT2244149**	Price	**MT2143542**	Price
15/64	3/8	5/8	2-7/16	4	**-**	-	**MT2143564**	Price
1/4	3/8	5/8	2-7/16	4	**MT2244137**	Price	**MT2143503**	Price
17/64	3/8	5/8	2-7/16	4	**-**	-	**MT2143565**	Price
9/32	3/8	11/16	2-1/2	4	**MT2244150**	Price	**MT2143543**	Price
19/64	3/8	3/4	2-1/2	4	**-**	-	**MT2143566**	Price
5/16	3/8	3/4	2-1/2	4	**MT2244138**	Price	**MT2143504**	Price
21/64	3/8	3/4	2-1/2	4	**-**	-	**MT2143567**	Price
11/32	3/8	3/4	2-1/2	4	**MT2244151**	Price	**MT2143544**	Price
23/64	3/8	3/4	2-1/2	4	**-**	-	**MT2143568**	Price
3/8	3/8	3/4	2-1/2	4	**MT2244139**	Price	**MT2143505**	Price
25/64	3/8	1	2-11/16	4	**-**	-	**MT2143569**	Price
13/32	3/8	1	2-11/16	4	**MT2244152**	Price	**MT2143545**	Price
27/64	3/8	1	2-11/16	4	**-**	-	**MT2143570**	Price
7/16	3/8	1	2-11/16	4	**MT2244153**	Price	**MT2143506**	Price
29/64	1/2	1	2-11/16	4	**-**	-	**MT2143571**	Price
15/32	1/2	1-1/4	3-1/4	4	**MT2244154**	Price	**MT2143546**	Price
31/64	1/2	1	2-11/16	4	**-**	-	**MT2143572**	Price
1/2	3/8	1	2-11/16	4	**MT2243033**	Price	**MT2143507**	Price
1/2	1/2	1-1/4	3-1/4	4	**MT2244140**	Price	**MT2143508**	Price
17/32	1/2	1-3/8	3-3/8	4	**MT2244155**	Price	**MT2143547**	Price
9/16	1/2	1-3/8	3-3/8	4	**MT2244156**	Price	**MT2143509**	Price
19/32	1/2	1-3/8	3-3/8	4	**-**	-	**MT2143548**	Price
5/8	1/2	1-3/8	3-3/8	4	**MT2243034**	Price	**MT2143510**	Price
5/8	5/8	1-5/8	3-3/4	4	**MT2244141**	Price	**MT2143511**	Price
21/32	5/8	1-5/8	3-3/4	4	**-**	-	**MT2143549**	Price
11/16	1/2	1-5/8	3-5/8	4	**-**	-	**MT2143512**	Price
11/16	5/8	1-5/8	3-3/4	4	**MT2244142**	Price	**MT2143513**	Price
23/32	1/2	1-5/8	3-7/8	4	**-**	-	**MT2143550**	Price
3/4	1/2	1-5/8	3-5/8	4	**-**	-	**MT2143514**	Price
3/4	5/8	1-5/8	3-3/4	4	**MT2243035**	Price	**MT2143515**	Price
3/4	3/4	1-5/8	3-7/8	4	**MT2244143**	Price	**MT2143516**	Price
25/32	1/2	1-7/8	3-5/8	4	**-**	-	**MT2143551**	Price
13/16	5/8	1-7/8	4	6	**-**	-	**MT2143517**	Price
13/16	3/4	1-7/8	4-1/8	4	**MT2244157**	Price	**MT2143518**	Price
27/32	7/8	1-7/8	4-1/8	4	**-**	-	**MT2143552**	Price
7/8	5/8	1-7/8	4	6	**-**	-	**MT2143519**	Price
7/8	3/4	1-7/8	4-1/8	4	**MT2243036**	Price	**MT2143520**	Price
7/8	7/8	1-7/8	4-1/8	4	**MT2244144**	Price	**MT2143521**	Price
29/32	7/8	1-7/8	4-1/8	4	**-**	-	**MT2143553**	Price
15/16	3/4	1-7/8	4-1/8	4	**-**	-	**MT2143523**	Price
15/16	7/8	1-7/8	4-1/8	4	**MT2244158**	Price	**MT2143524**	Price
31/32	1	2	4-1/2	4	**-**	-	**MT2143554**	Price
1	5/8	1-7/8	4	6	**-**	-	**MT2143525**	Price
1	3/4	2	4-1/8	4	**-**	-	**MT2143526**	Price
1	3/4	2	4-1/8	4	**MT2243038**	Price	**-**	-
1	7/8	1-7/8	4-1/8	4	**-**	-	**MT2143527**	Price
1	1	2	4-1/2	4	**MT2244145**	Price	**MT2143528**	Price
1-1/8	3/4	1-1/2	3-7/8	6	**-**	-	**MT2143555**	Price
1-1/8	1	2	4-1/2	6	**MT2244146†**	87.59	**MT2143530**	Price
1-1/4	3/4	1-1/2	3-7/8	6	**-**	-	**MT2143556**	Price
1-1/4	7/8	2	4-1/4	6	**-**	-	**MT2143531**	Price
1-1/4	1	2	4-1/2	6	**MT2243041**	Price	**MT2143532**	Price
1-1/4	1-1/4	2	4-1/2	6	**MT2244147†**	Price	**MT2143533**	Price
1-3/8	3/4	1-1/2	3-7/8	6	**-**	-	**MT2143557**	Price
1-3/8	1	2	4-1/2	6	**-**	-	**MT2143534**	Price
1-1/2	3/4	1-1/2	3-7/8	6	**-**	-	**MT2143558**	Price
1-1/2	1	2	4-1/2	6	**-**	-	**MT2143535**	Price
1-1/2	1-1/4	2	4-1/2	6	**MT2244148**	Price	**MT2143536**	Price
1-5/8	1-1/4	2	4-1/2	6	**-**	-	**MT2143537**	Price
1-3/4	3/4	1-1/2	3-7/8	6	**-**	-	**MT2143559**	Price
1-3/4	1-1/4	2	4-1/2	6	**MT2244159**	Price	**MT2143538**	Price
2	3/4	1-1/2	3-7/8	8	**-**	-	**MT2143560**	Price
2	1-1/4	2	4-1/2	6	**MT2244160**	Price	**-**	-
2	1-1/4	2	4-1/2	8	**-**	-	**MT2143540**	Price

†4-Flute

Multi-Flute Single End Mills

High Speed Steel • Regular Length



Price		Price		Price	RAPIDKUT	PROCUT II PREMIUM CUTTING TOOLS	PROCUT	RAPIDKUT	PROCUT

					Price						Non-Center Cutting			
					Rapidkut		ProCut II		ProCut		Rapidkut		Price	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	3/8	2-5/16	4	CT30F4U	Price	CT20F4P	Price	CT55F4	Price	CT40F4U	Price	-	-
3/16	3/8	1/2	2-3/8	4	CT30F6U	Price	CT20F6P	Price	CT55F6	Price	CT40F6U	Price	-	-
1/4	3/8	5/8	2-7/16	4	CT30F8U	Price	CT20F8P	Price	CT55F8	Price	CT40F8U	Price	-	-
9/32	3/8	3/4	2-1/2	4	-	-	-	-	CT55F9	Price	-	-	-	-
5/16	3/8	3/4	2-1/2	4	CT30F10U	Price	CT20F10P	Price	CT55F10	Price	CT40F10U	Price	-	-
11/32	3/8	3/4	2-1/2	4	-	-	-	-	CT55F11	Price	-	-	-	-
3/8	3/8	3/4	2-1/2	4	CT30F12U	Price	CT20F12P	Price	CT55F12	Price	CT40F12U	Price	-	-
7/16	3/8	1	2-11/16	4	CT30F14U	Price	CT20F14P	Price	CT55F14	Price	CT40F14U	Price	-	-
1/2	3/8	1	2-11/16	4	-	-	CT20F16XP	Price	CT55F16X	Price	CT40F16XU	Price	-	-
1/2	1/2	1-1/4	3-1/4	4	CT30F16U	Price	CT20F16P	Price	CT55F16	Price	CT40F16U	Price	-	-
9/16	1/2	1-3/8	3-3/8	4	CT30F18U	Price	CT20F18P	Price	CT55F18	Price	CT40F18U	Price	-	-
5/8	1/2	1-3/8	3-3/8	4	CT30F20XU	Price	CT20F20XP	Price	CT55F20X	Price	CT40F20XU	Price	-	-
5/8	5/8	1-5/8	3-3/4	4	CT30F20U	Price	CT20F20P	Price	CT55F20	Price	CT40F20U	Price	-	-
11/16	1/2	1-5/8	3-5/8	4	-	-	-	-	CT55F22X	Price	-	-	-	-
11/16	5/8	1-5/8	3-3/4	4	-	-	CT20F22P	Price	CT55F22	Price	-	-	CT50F22	Price
3/4	1/2	1-5/8	3-5/8	4	-	-	CT20F24XP	Price	CT55F24X	Price	CT40F24XU	Price	-	-
3/4	5/8	1-5/8	3-3/4	4	CT30F24U	Price	CT20F24P	Price	CT55F24	Price	CT40F24U	Price	-	-
3/4	3/4	1-5/8	3-7/8	4	CT30F24WU	Price	CT20F24WP	Price	CT55F24W	Price	CT40F24WU	Price	-	-
13/16	5/8	1-7/8	4	6	-	-	-	-	CT55F26	Price	-	-	-	-
13/16	3/4	1-7/8	4-1/8	4	-	-	CT20F26WP	Price	CT55F26W	Price	-	-	-	-
7/8	1/2	1-7/8	3-5/8	4	-	-	-	-	CT55F28Y	Price	-	-	-	-
7/8	5/8	1-7/8	4	6	-	-	-	-	CT55F28X	Price	-	-	-	-
7/8	5/8	1-7/8	4-1/8	6	CT30F28XU	Price	-	-	-	-	-	-	-	-
7/8	3/4	1-7/8	4-1/8	4	CT30F28WU	Price	CT20F28WP	Price	CT55F28W	Price	CT40F28WU	Price	-	-
7/8	7/8	1-7/8	4-1/8	4	-	-	CT20F28P	Price	CT55F28	Price	CT40F28U	Price	-	-
15/16	5/8	1-7/8	4-1/8	6	-	-	-	-	CT55F30X	Price	-	-	CT50F30X	Price
15/16	3/4	1-7/8	4-1/8	4	-	-	-	-	CT55F30W	Price	-	-	-	-
15/16	7/8	1-7/8	4-1/8	4	-	-	-	-	-	-	CT40F30U	Price	CT50F30	Price
1	1/2	1-7/8	3-7/8	4	-	-	-	-	CT55F32A	Price	-	-	-	-
1	5/8	1-7/8	4	6	-	-	CT20F32XP	Price	CT55F32X	Price	CT40F32XU	Price	-	-
1	5/8	1-7/8	4-1/8	6	CT30F32XU	Price	-	-	-	-	-	-	-	-
1	3/4	1-7/8	4-1/8	4	CT30F32WU	Price	CT20F32WP	Price	CT55F32W	Price	CT40F32WU	Price	-	-
1	7/8	1-7/8	4-1/8	4	-	-	CT20F32P	Price	CT55F32	Price	-	-	CT50F32	Price
1	1	2	4-1/2	4	CT30F32YU	Price	CT20F32YP	Price	CT55F32Y	Price	CT40F32YU	Price	CT50F32Y	Price
1	1	2	4-1/2	6	-	-	-	-	CT55F32YA	Price	-	-	-	-
1-1/8	3/4	2	3-7/8	6	CT30F36WU	Price	-	-	-	-	-	-	-	-
1-1/8	3/4	2	4-1/4	6	-	-	CT20F36WP	Price	CT55F36W	Price	CT40F36WU	Price	-	-
1-1/8	7/8	2	4-1/4	6	-	-	-	-	CT55F36X	Price	CT40F36XU	Price	-	-
1-1/8	1	2	4-1/2	4	-	-	-	-	CT55F36A	Price	-	-	-	-
1-1/8	1	2	4-1/2	6	-	-	CT20F36P	Price	CT55F36	Price	-	-	-	-
1-1/4	3/4	2	4-1/4	6	-	-	CT20F40WP	Price	CT55F40W	Price	CT40F40WU	Price	-	-
1-1/4	7/8	2	4-1/4	6	-	-	-	-	CT55F40X	Price	-		-	-
1-1/4	1	2	4-1/2	6	CT30F40U	Price	CT20F40P	Price	CT55F40	Price	-	-	-	-
1-1/4	1-1/4	2	4-1/2	4	CT30F40AU	Price	CT20F40AP	Price	CT55F40A	Price	-	-	-	-
1-1/4	1-1/4	2	4-1/2	6	-	-	-	-	CT55F40Y	Price	-	-	CT50F40Y	Price
1-3/8	3/4	2	4-1/4	6	-	-	CT20F44WP	Price	CT55F44W	Price	-	-	-	-
1-3/8	1	2	4-1/2	6	-	-	CT20F44P	Price	CT55F44	Price	-	-	-	-
1-1/2	3/4	2	4-1/4	6	-	-	CT20F48WP	Price	CT55F48W	Price	CT40F48WU	Price	-	-
1-1/2	1	2	4-1/2	6	CT30F48U	Price	CT20F48P	Price	CT55F48	Price	CT40F48U	Price	-	-
1-1/2	1-1/4	2	4-1/2	4	CT30F48AU	Price	CT20F48AP	Price	CT55F48A	Price	-	-	CT50F48A	Price
1-1/2	1-1/4	2	4-1/2	6	CT30F48XU	Price	CT20F48XP	Price	CT55F48X	Price	CT40F48XU	Price	CT50F48X	Price
1-5/8	1-1/4	2	4-1/2	6	-	-	-	-	CT55F52	Price	-	-	-	-
1-3/4	1-1/4	2	4-1/2	4	-	-	-	-	CT55F56A	Price	-	-	CT50F56A	Price
1-3/4	1-1/4	2	4-1/2	6	CT30F56U	Price	CT20F56P	Price	CT55F56	Price	-	-	-	-
1-7/8	3/4	2-1/2	4-1/2	6	-	-	-	-	CT55F60W	Price	-	-	-	-
1-7/8	1-1/4	2	4-1/2	6	-	-	-	-	CT55F60	Price	-	-	-	-
2	3/4	2	4-1/2	8	-	-	CT20F64WP	Price	CT55F64W	Price	-	-	-	-
2	3/4	2	4-1/4	8	-	-	-	-	-	-	CT40F64WU	Price	-	-
2	1-1/4	2	4-1/2	4	-	-	-	-	CT55F64A	Price	-	-	-	-
2	1-1/4	2	4-1/2	6	-	-	CT20F64BP	Price	CT55F64B	Price	CT40F64BU	Price	-	-
2	1-1/4	2	4-1/2	8	-	-	-	-	CT55F64	Price	CT40F64U	Price	-	-

Multi-Flute Long Single End Mills



Center Cutting • Non-Center Cutting • High Speed Steel

Pro-Cut — General purpose economy
Pro-Cut II — Premium quality import
RapidKut — Precision made by one of America's largest manufacturers

Price		Price		Price	RAPIDKUT				PRO CUT II PREMIUM CUTTING TOOLS				PROCUT	
	Price		Price		Price				ProCut II				ProCut	
					Center Cutting		Non-Center Cutting		Non-Center Cutting		Center Cutting		Price	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/8	1-1/4	3-1/16	4	CT31FL8U	Price	CT41FL8U	Price	CT51FL8	Price	CT21FL8P	Price	CT56FL8	Price
5/16	3/8	1-3/8	3-1/8	4	CT31FL10U	Price	CT41FL10U	Price	CT51FL10	Price	CT21FL10P	Price	CT56FL10	Price
3/8	3/8	1-1/2	3-1/4	4	CT31FL12U	Price	CT41FL12U	Price	-	-	CT21FL12P	Price	CT56FL12	Price
7/16	1/2	1-3/4	3-3/4	4	CT31FL14U	Price	CT41FL14U	Price	-	-	CT21FL14P	Price	CT56FL14	Price
1/2	1/2	2	4	4	CT31FL16U	Price	CT41FL16U	Price	-	-	CT21FL16P	Price	CT56FL16	Price
5/8	1/2	2-1/2	4-5/8	4	-	-	-	-	-	-	-	-	CT56FL20X	Price
5/8	5/8	2-1/2	4-5/8	4	CT31FL20U	Price	CT41FL20U	Price	-	-	CT21FL20P	Price	CT56FL20	Price
3/4	1/2	3	5-1/4	4	-	-	-	-	-	-	-	-	CT56FL24X	Price
3/4	3/4	3	5-1/4	4	CT31FL24U	Price	CT41FL24U	Price	-	-	CT21FL24P	Price	CT56FL24	Price
7/8	3/4	3-1/2	5-1/2	4	-	-	-	-	-	-	-	-	CT56FL28W	Price
7/8	7/8	3-1/2	5-3/4	4	CT31FL28U	Price	-	-	CT51FL28	Price	CT21FL28P	Price	CT56FL28	Price
1	1	4	6-1/2	4	CT31FL32U	Price	CT41FL32U	Price	-	-	CT21FL32P	Price	CT56FL32	Price
1-1/4	3/4	4	6-1/2	6	-	-	-	-	-	-	-	-	CT56FL40W	Price
1-1/4	1	4	6-1/2	6	-	-	CT41FL40U	Price	-	-	-	-	-	-
1-1/4	1-1/4	4	6-1/2	4	-	-	-	-	-	-	-	-	CT56FL40A	Price
1-1/4	1-1/4	4	6-1/2	6	-	-	CT41FL40XU	Price	-	-	-	-	-	-
1-1/2	1	4	6-1/2	6	-	-	CT41FL48XU	Price	-	-	-	-	-	-
1-1/2	1-1/4	4	6-1/2	4	-	-	-	-	-	-	-	-	CT56FL48A	Price
1-1/2	1-1/4	4	6-1/2	6	-	-	CT41FL48U	Price	-	-	-	-	CT56FL48	Price
2	1-1/4	4	6-1/2	4	-	-	-	-	CT51FL64A	Price	-	-	CT56FL64A	Price
2	1-1/4	4	6-1/2	6	-	-	-	-	-	-	-	-	CT56FL64B	Price
2	1-1/4	4	6-1/2	8	-	-	CT41FL64BU	Price	CT51FL64	Price	-	-	-	-

Multi-Flute Extra Long Single End Mills



Center Cutting • Non-Center Cutting • High Speed Steel

Pro-Cut — General purpose economy
Pro-Cut II — Premium quality import
RapidKut — Precision made by one of America's largest manufacturers

Price		Price		Price	RAPIDKUT				PRO CUT II PREMIUM CUTTING TOOLS		PROCUT	
	Price		Price		Price				ProCut II		ProCut	
					Center Cutting		Non-Center Cutting		Center Cutting		Center Cutting	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/8	1-3/4	3-9/16	4	CT32FX8U	Price	CT42FX8U	Price	CT22FX8P	Price	CT57FX8	Price
5/16	3/8	2	3-3/4	4	CT32FX10U	Price	CT42FX10U	Price	CT22FX10P	Price	CT57FX10	Price
3/8	3/8	2-1/2	4-1/4	4	CT32FX12U	Price	CT42FX12U	Price	CT22FX12P	Price	CT57FX12	Price
1/2	1/2	3	5	4	CT32FX16U	Price	CT42FX16U	Price	CT22FX16P	Price	CT57FX16	Price
5/8	5/8	4	6-1/8	4	CT32FX20U	Price	CT42FX20U	Price	CT22FX20P	Price	CT57FX20	Price
3/4	1/2	4	6-1/4	4	-	-	-	-	-	-	CT57FX24X	Price
3/4	3/4	4	6-1/4	4	CT32FX24U	Price	CT42FX24U	Price	CT22FX24P	Price	CT57FX24	Price
7/8	7/8	5	7-1/4	4	-	-	-	-	CT22FX28P	Price	-	-
1	1	6	8-1/2	4	CT32FX32U	Price	CT42FX32U	Price	CT22FX32P	Price	-	-
1-1/4	1-1/4	6	8-1/2	4	CT32FX40XU	Price	-	-	-	-	-	-
1-1/2	1-1/4	8	10-1/2	6	CT32FX48U†	197.90	CT42FX48U	Price	-	-	-	-

†Note: 6" flute length; 8" overall length

PROCUT Miniature 4 Flute Single End Mills



High Speed Steel • 3/16" Shank

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
5/64	3/16	1/4	1-11/16	CP53005	Price
3/32	3/16	5/16	1-11/16	CP53006	Price
7/64	3/16	11/32	1-11/16	CP53007	Price
1/8	3/16	3/8	1-11/16	CP53008	Price
9/64	3/16	13/32	1-11/16	CP53009	Price
5/32	3/16	7/16	1-11/16	CP53010	Price
11/64	3/16	15/32	1-11/16	CP53011	Price
3/16	3/16	1/2	1-11/16	CP53012	Price

HSS M GP 4 Flute Double End Mills

High Speed Steel



				Center Cut		Non-Center Cut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	3/8	3/8	3-1/16	**MT2244251**	Price	**MT2243266**	Price
9/64	3/8	7/16	3-1/8	**MT2243050**	Price	**MT2243286**	Price
5/32	3/8	7/16	3-1/8	**MT2243051**	Price	**MT2243267**	Price
11/64	3/8	1/2	3-1/4	**MT2243052**	Price	**MT2243287**	Price
3/16	3/8	1/2	3-1/4	**MT2244252**	Price	**MT2243268**	Price
13/64	3/8	9/16	3-1/4	**MT2243053**	Price	**MT2243288**	Price
7/32	3/8	9/16	3-1/4	**MT2243054**	Price	**MT2243269**	Price
15/64	3/8	5/8	3-3/8	**-**	-	**MT2243289**	Price
1/4	3/8	5/8	3-3/8	**MT2244253**	Price	**MT2243270**	Price
17/64	3/8	11/16	3-3/8	**MT2243056**	Price	**MT2243290**	Price
9/32	3/8	11/16	3-3/8	**MT2243057**	Price	**MT2243271**	Price
19/64	3/8	3/4	3-1/2	**MT2243058**	Price	**MT2243291**	Price
5/16	3/8	3/4	3-1/2	**MT2244254**	Price	**MT2243272**	Price
21/64	3/8	3/4	3-1/2	**MT2243059**	Price	**MT2243292**	Price
11/32	3/8	3/4	3-1/2	**MT2243060**	Price	**MT2243273**	Price
23/64	3/8	3/4	3-1/2	**MT2243061**	Price	**MT2243293**	Price
3/8	3/8	3/4	3-1/2	**MT2244255**	Price	**MT2243274**	Price
25/64	1/2	1	4-1/8	**MT2243062**	Price	**MT2243294**	Price
13/32	1/2	1	4-1/8	**MT2243063**	Price	**MT2243275**	Price
27/64	1/2	1	4-1/8	**MT2243064**	Price	**MT2243295**	Price
7/16	1/2	1	4-1/8	**MT2243065**	Price	**MT2243276**	Price
29/64	1/2	1	4-1/8	**MT2243066**	Price	**MT2243296**	Price
15/32	1/2	1	4-1/8	**MT2243067**	Price	**MT2243277**	Price
31/64	1/2	1	4-1/8	**MT2243068**	Price	**MT2243297**	Price
1/2	1/2	1	4-1/8	**MT2244256**	Price	**MT2243278**	Price
9/16	5/8	1-3/8	5	**MT2243069**	Price	**MT2243279**	Price
5/8	5/8	1-3/8	5	**MT2244257**	Price	**MT2243280**	Price
11/16	3/4	1-5/8	5-5/8	**MT2243070**	Price	**MT2243281**	Price
3/4	3/4	1-5/8	5-5/8	**MT2244258**	Price	**MT2243282**	Price
13/16	7/8	1-7/8	6-1/8	**-**	-	**MT2243283**	Price
7/8	7/8	1-7/8	6-1/8	**MT2244259**	Price	**MT2243284**	Price
15/16	1	1-7/8	6-3/8	**-**	-	**MT2243305**	Price
1	1	1-7/8	6-3/8	**MT2244260**	Price	**MT2243285**	Price

HSS M GP Multi-Flute Long Length Single End Mills

High Speed Steel



					Center Cut		Non-Center Cut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
3/16	3/8	1-1/4	3-1/16	4	**MT2244169**	Price	**-**	-
7/32	3/8	1-1/4	3-1/16	4	**MT2244170**	Price	**-**	-
1/4	3/8	1-1/4	3-1/16	4	**MT2244171**	Price	**MT2143776**	Price
9/32	3/8	1-3/8	3-1/8	4	**MT2244180**	Price	**-**	-
5/16	3/8	1-3/8	3-1/8	4	**MT2244172**	Price	**MT2143777**	Price
11/32	3/8	1-1/2	3-1/4	4	**MT2244181**	Price	**-**	-
3/8	3/8	1-1/2	3-1/4	4	**MT2244173**	Price	**-**	-
13/32	1/2	1-3/4	3-3/4	4	**MT2244182**	Price	**-**	-
7/16	1/2	1-3/4	3-3/4	4	**MT2244183**	Price	**MT2143779**	Price
15/32	1/2	2	4	4	**MT2244184**	Price	**-**	-
1/2	1/2	2	4	4	**MT2244174**	Price	**-**	-
5/8	5/8	2-1/2	4-5/8	4	**MT2244175**	Price	**MT2143781**	Price
3/4	3/4	3	5-1/4	4	**MT2244176**	Price	**MT2143782**	Price
7/8	7/8	3-1/2	5-3/4	4	**MT2244177**	Price	**MT2143783**	Price
1	1	4	6-1/2	4	**MT2244178**	Price	**MT2143784**	Price
1-1/8	1	4	6-1/2	4	**MT2244185**	Price	**-**	-
1-1/8	1	4	6-1/2	6	**-**	-	**MT2143785**	Price
1-1/4	1	4	6-1/2	4	**MT2244186**	Price	**-**	-
1-1/4	1	4	6-1/2	6	**-**	-	**MT2143786**	Price
1-1/4	1-1/4	4	6-1/2	6	**MT2244179**	Price	**MT2143787**	Price
1-1/2	1	4	6-1/2	4	**MT2244187**	Price	**-**	-
1-1/2	1	4	6-1/2	6	**-**	-	**MT2143789**	Price
1-1/2	1-1/4	4	6-1/2	4	**MT2244188**	Price	**-**	-
1-1/2	1-1/4	4	6-1/2	6	**-**	-	**MT2143790**	Price
1-3/4	1-1/4	4	6-1/2	6	**-**	-	**MT2143791**	Price
2	1-1/4	4	6-1/2	8	**MT2244190**	Price	**MT2143792**	Price

HSS M GP Multi-Flute Extra Long Single End Mills

High Speed Steel



					Center Cut		Non-Center Cut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
3/16	3/8	1-3/4	3-9/16	4	**MT2244199**	Price	**-**	-
1/4	3/8	1-3/4	3-9/16	4	**MT2244201**	Price	**MT2143826**	Price
9/32	3/8	2	3-3/4	4	**MT2244210**	Price	**-**	-
5/16	3/8	2	3-3/4	4	**MT2244202**	Price	**MT2143827**	Price
11/32	3/8	2-1/2	4-1/4	4	**MT2244211**	Price	**-**	-
3/8	3/8	2-1/2	4-1/4	4	**MT2244203**	Price	**MT2143828**	Price
15/32	1/2	3	4-11/16	4	**MT2244214**	Price	**-**	-
1/2	1/2	3	5	4	**MT2244204**	Price	**MT2143829**	Price
5/8	5/8	4	6-1/8	4	**MT2244205**	Price	**MT2143830**	Price
3/4	3/4	4	6-1/4	4	**MT2244206**	Price	**MT2143831**	Price
7/8	7/8	5	7-1/4	4	**MT2244207**	Price	**MT2143832**	Price
1	1	6	8-1/2	4	**MT2244208**	Price	**MT2143833**	Price
1-1/4	1-1/4	4	8-1/2	4	**MT2244209**	Price	**-**	-
1-1/2	1-1/4	8	10-1/2	6	**-**	-	**MT2143835**	Price

4-Flute Double-End Mills

High Speed Steel



				Rapidkut				ProCut II		ProCut			
				Center Cutting		Non-Center Cutting		Center Cutting		Price		Non-Center Cutting	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	3/8	3-1/16	**CR35B4U**	Price	**CR45B4U**	Price	**CR25B4P**	Price	**CR65B4**	Price	**-**	-
9/64	3/8	7/16	3-1/8	**-**	-	**-**	-	**-**	-	**CR65B964**	Price	**-**	-
5/32	3/8	7/16	3-1/8	**CR35B5U**	Price	**CR45B5U**	Price	**CR25B5P**	Price	**CR65B5**	Price	**CR55B5**	Price
11/64	3/8	1/2	3-1/4	**-**	-	**-**	-	**-**	-	**CR65B1164**	Price	**-**	-
3/16	3/8	1/2	3-1/4	**CR35B6U**	Price	**CR45B6U**	Price	**CR25B6P**	Price	**CR65B6**	Price	**CR55B6**	Price
13/64	3/8	9/16	3-1/4	**-**	-	**-**	-	**-**	-	**CR65B1364**	Price	**-**	-
7/32	3/8	9/16	3-1/4	**CR35B7U**	Price	**CR45B7U**	Price	**CR25B7P**	Price	**CR65B7**	Price	**CR55B7**	Price
15/64	3/8	5/8	3-3/8	**-**	-	**-**	-	**-**	-	**CR65B1564**	Price	**-**	-
1/4	3/8	5/8	3-3/8	**CR35B8U**	Price	**CR45B8U**	Price	**CR25B8P**	Price	**CR65B8**	Price	**-**	-
17/64	3/8	11/16	3-3/8	**-**	-	**-**	-	**-**	-	**CR65B1764**	Price	**-**	-
9/32	3/8	11/16	3-3/8	**CR35B9U**	Price	**CR45B9U**	Price	**CR25B9P**	Price	**CR65B9**	Price	**CR55B9**	Price
19/64	3/8	3/4	3-1/2	**-**	-	**-**	-	**-**	-	**CR65B1964**	Price	**-**	-
5/16	3/8	3/4	3-1/2	**CR35B10U**	Price	**CR45B10U**	Price	**CR25B10P**	Price	**CR65B10**	Price	**-**	-
21/64	3/8	3/4	3-1/2	**-**	-	**-**	-	**-**	-	**CR65B2164**	Price	**-**	-
11/32	3/8	3/4	3-1/2	**CR35B11U**	Price	**CR45B11U**	Price	**CR25B11P**	Price	**CR65B11**	Price	**CR55B11**	Price
23/64	3/8	3/4	3-1/2	**-**	-	**-**	-	**-**	-	**CR65B2364**	Price	**-**	-
3/8	3/8	3/4	3-1/2	**CR35B12U**	Price	**CR45B12U**	Price	**CR25B12P**	Price	**CR65B12**	Price	**-**	-
25/64	1/2	1	4-1/8	**-**	-	**-**	-	**-**	-	**CR65B2564**	Price	**-**	-
13/32	1/2	1	4-1/8	**CR35B13U**	Price	**CR45B13U**	Price	**CR25B13P**	Price	**CR65B13**	Price	**-**	-
27/64	1/2	1	4-1/8	**-**	-	**-**	-	**-**	-	**CR65B2764**	Price	**-**	-
7/16	1/2	1	4-1/8	**CR35B14U**	Price	**CR45B14U**	Price	**CR25B14P**	Price	**CR65B14**	Price	**-**	-
29/64	1/2	1	4-1/8	**-**	-	**-**	-	**-**	-	**CR65B2964**	Price	**-**	-
15/32	1/2	1	4-1/8	**CR35B15U**	Price	**CR45B15U**	Price	**CR25B15P**	Price	**CR65B15**	Price	**CR55B15**	Price
31/64	1/2	1	4-1/8	**-**	-	**-**	-	**-**	-	**CR65B3164**	Price	**-**	-
1/2	1/2	1	4-1/8	**CR35B16U**	Price	**CR45B16U**	Price	**CR25B16P**	Price	**CR65B16**	Price	**-**	-
17/32	5/8	1-3/8	5	**-**	-	**CR45B17U**	Price	**-**	-	**CR65B17**	Price	**-**	-
9/16	5/8	1-3/8	5	**CR35B18U**	Price	**CR45B18U**	Price	**CR25B18P**	Price	**CR65B18**	Price	**CR55B18**	Price
19/32	5/8	1-3/8	5	**-**	-	**-**	-	**-**	-	**CR65B19**	Price	**-**	-
5/8	5/8	1-3/8	5	**CR35B20U**	Price	**CR45B20U**	Price	**CR25B20P**	Price	**CR65B20**	Price	**-**	-
21/32	3/4	1-5/8	5-5/8	**-**	-	**CR45B21U**	Price	**-**	-	**CR65B21**	Price	**-**	-
11/16	3/4	1-5/8	5-5/8	**-**	-	**CR45B22U**	Price	**CR25B22P**	Price	**CR65B22**	Price	**CR55B22**	Price
23/32	3/4	1-5/8	5-5/8	**-**	-	**-**	-	**-**	-	**CR65B23**	Price	**-**	-
3/4	3/4	1-5/8	5-5/8	**CR35B24U**	Price	**CR45B24U**	Price	**CR25B24P**	Price	**CR65B24**	Price	**-**	-
13/16	7/8	1-7/8	6-1/8	**-**	-	**CR45B26U**	Price	**CR25B26P**	Price	**CR65B26**	Price	**CR55B26**	Price
7/8	7/8	1-7/8	6-1/8	**CR35B28U**	Price	**CR45B28U**	Price	**CR25B28P**	Price	**CR65B28**	Price	**CR55B28**	Price
29/32	1	1-7/8	6-3/8	**-**	-	**CR45B29U**	Price	**-**	-	**-**	-	**-**	-
15/16	1	1-7/8	6-3/8	**-**	-	**-**	-	**CR25B30P**	Price	**CR65B30**	Price	**CR55B30**	Price
31/32	1	1-7/8	6-3/8	**-**	-	**CR45B31U**	Price	**-**	-	**-**	-	**-**	-
1	1	1-7/8	6-3/8	**CR35B32U**	Price	**CR45B32U**	Price	**CR25B32P**	Price	**CR65B32**	Price	**CR55B32**	Price

High Speed Steel Center Cutting TiN Coated End Mills

- TiN coating increases surface hardness and protects the tool from abrasive wear to increase tool life
- Facilitates chip flow, resists galling and reduces heat generated in the metal removal process
- Allows for elevated feeds and speeds to increase your productivity

TiN Coated 2-Flute Single End

High Speed Steel • Center Cutting • Regular Length



				Rapidkut		ProCut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	3/8	3/8	2-5/16	**CS35G4UT**	Price	**CS60G4TN**	Price
3/16	3/8	7/16	2-5/16	**CS35G6UT**	Price	**CS60G6TN**	Price
1/4	3/8	1/2	2-5/16	**CS35G8UT**	Price	**CS60G8TN**	Price
5/16	3/8	9/16	2-5/16	**CS35G10UT**	Price	**CS60G10TN**	Price
3/8	3/8	9/16	2-5/16	**CS35G12UT**	Price	**CS60G12TN**	Price
7/16	3/8	13/16	2-1/2	**CS35G14UT**	Price	**CS60G14TN**	Price
1/2	1/2	1	3	**CS35G16UT**	Price	**CS60G16TN**	Price
5/8	5/8	1-5/16	3-7/16	**CS35G20UT**	Price	**CS60G20TN**	Price
3/4	5/8	1-5/16	3-7/16	**CS35G24UT**	Price	**CS60G24TN**	Price
3/4	3/4	1-5/16	3-9/16	**CS35G24WUT**	Price	**CS60G24WTN**	Price
1	3/4	1-1/2	3-3/4	**CS35G32WUT**	Price	**CS60G32WTN**	Price
1	1	1-5/8	4-1/8	**CS35G32UT**	Price	**CS60G32TN**	Price

TiN Coated 2-Flute Double End

High Speed Steel • Center Cutting



				Rapidkut		ProCut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	3/8	3/8	3-1/16	**CR42C4UT**	Price	**CR60C4TN**	Price
3/16	3/8	7/16	3-1/8	**CR42C6UT**	Price	**CR60C6TN**	Price
1/4	3/8	1/2	3-1/8	**CR42C8UT**	Price	**CR60C8TN**	Price
5/16	3/8	9/16	3-1/8	**CR42C10UT**	Price	**CR60C10TN**	Price
3/8	3/8	9/16	3-1/8	**CR42C12UT**	Price	**CR60C12TN**	Price
7/16	1/2	13/16	3-3/4	**CR42C14UT**	Price	**CR60C14TN**	Price
1/2	1/2	13/16	3-3/4	**CR42C16UT**	Price	**CR60C16TN**	Price
5/8	5/8	1-1/8	4-1/2	**CR42C20UT**	Price	**CR60C20TN**	Price
3/4	3/4	1-5/16	5	**CR42C24UT**	Price	**CR60C24TN**	Price
1	1	1-5/8	5-7/8	**CR42C32UT**	Price	**CR60C32TN**	Price

TiN Coated Single End Mill Sets

Center Cutting • High Speed Steel



No. of Pieces	No. of Flutes	Set Range (in.)	Order No.	Price
6	2	1/8, 3/16, 1/4, 5/16, 3/8, 1/2	**DB50G6TNS**	Price
6	4	1/8, 3/16, 1/4, 5/16, 3/8, 1/2	**DB50F6TNS**	Price
9	4	1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 11/16, 3/4	**DB50F9TNS**	Price
10	4	1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 11/16, 3/4, 1	**DB50F10TNS**	Price

TiN Coated 4-Flute Single End

High Speed Steel • Center Cutting • Regular Length



				Rapidkut		ProCut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	3/8	3/8	2-5/16	**CT25F4UT**	Price	**CT65F4TN**	Price
3/16	3/8	1/2	2-3/8	**CT25F6UT**	Price	**CT65F6TN**	Price
1/4	3/8	5/8	2-7/16	**CT25F8UT**	Price	**CT65F8TN**	Price
5/16	3/8	3/4	2-1/2	**CT25F10UT**	Price	**CT65F10TN**	Price
3/8	3/8	3/4	2-1/2	**CT25F12UT**	Price	**CT65F12TN**	Price
7/16	3/8	1	2-11/16	**CT25F14UT**	Price	**CT65F14TN**	Price
1/2	1/2	1-1/4	3-1/4	**CT25F16UT**	Price	**CT65F16TN**	Price
5/8	5/8	1-5/8	3-3/4	**CT25F20UT**	Price	**CT65F20TN**	Price
11/16	5/8	1-5/8	3-3/4	-	-	**CT65F22TN**	Price
3/4	3/4	1-5/8	3-7/8	**CT25F24WUT**	Price	**CT65F24WTN**	Price
7/8	3/4	1-7/8	4-1/8	**CT25F28WUT**	Price	**CT65F28WTN**	Price
1	3/4	1-7/8	4-1/8	**CT25F32WUT**	Price	**CT65F32WTN**	Price
1	1	2	4-1/2	**CT25F32YUT**	Price	**CT65F32YTN**	Price

TiN Coated 4-Flute Double End

High Speed Steel • Center Cutting



				Rapidkut		ProCut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	3/8	3/8	3-1/16	**CR36B4UT**	Price	**CR75B4TN**	Price
3/16	3/8	1/2	3-1/4	**CR36B6UT**	Price	**CR75B6TN**	Price
1/4	3/8	5/8	3-3/8	**CR36B8UT**	Price	**CR75B8TN**	Price
5/16	3/8	3/4	3-1/2	**CR36B10UT**	Price	**CR75B10TN**	Price
3/8	3/8	3/4	3-1/2	**CR36B12UT**	Price	**CR75B12TN**	Price
7/16	1/2	1	4-1/8	**CR36B14UT**	Price	**CR75B14TN**	Price
1/2	1/2	1	4-1/8	**CR36B16UT**	Price	**CR75B16TN**	Price
5/8	5/8	1-3/8	5	**CR36B20UT**	Price	**CR75B20TN**	Price
3/4	3/4	1-5/8	5-5/8	**CR36B24UT**	Price	**CR75B24TN**	Price
1	1	1-7/8	6-3/8	**CR36B32UT**	Price	**CR75B32TN**	Price

TiN Coated Double End Mill Sets

Center Cutting • High Speed Steel



No. of Flutes	No. of Pieces	Set Range (in.)	Order No.	Price
2	6	1/8, 3/16, 1/4, 5/16, 3/8, 1/2	**DB50C6TNS**	Price
4	6	1/8, 3/16, 1/4, 5/16, 3/8, 1/2	**DB50B6TNS**	Price

20 Pc.TiN Coated Single End Mill Set

Center Cutting • High Speed Steel

- Includes one each in 2 and 4 flute: 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4”
- Complete with fitted wooden case



Order No.	Price
DB50TC20E	Price

6 Pc. Single End Mill Sets

- 1 Each of: 1/8, 3/16, 1/4, 5/16, 3/8, 1/2”
- High speed steel & cobalt



Set Material - High Speed Steel No. of Flutes - 2		
Brand Name	**Order No.**	**Price**
Morse Cutting Tools	**MT2245025**	Price
Rapidkut	**DB40AG6S**	Price
ProCut II	**DB50PG6S**	Price
ProCut	**DB50G6S**	Price

Set Material - High Speed Steel No. of Flutes - 4		
Brand Name	**Order No.**	**Price**
Morse Cutting Tools	**MT2245020**	Price
Rapidkut	**DB40AF6S**	Price
ProCut II	**DB50PF6S**	Price
ProCut	**DB50F6S**	Price

Set Material - M-42 Cobalt No. of Flutes - 2		
Brand Name	**Order No.**	**Price**
ProCut	**DB50TG6S**	Price

Set Material - M-42 Cobalt No. of Flutes - 4		
Brand Name	**Order No.**	**Price**
ProCut II	**DB50TF6S**	Price

6 Pc. 2 Flute & Multi-Flute 3/4" Shank End Mill Sets for Bridgeports

- 1 Each of: 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-1/2”
- High speed steel



No. of Flutes - 2		
Brand Name	**Order No.**	**Price**
ProCut	**DB50GW6S**	Price
ProCut II	**DB50PGW6S**	Price

No. of Flutes - Multi-Flute		
Brand Name	**Order No.**	**Price**
ProCut II	**DB50PFW6S**	Price
Morse Cutting Tools	**MT2245021**	Price
ProCut	**DB50FW6S**	Price

6 Pc. Ball Nose End Mill Sets, Single End

- 1 Each of: 1/8, 3/16, 1/4, 5/16, 3/8, 1/2”
- High speed steel
- 2 Flute



Brand Name	Type	Order No.	Price
Morse Cutting Tools	Single-End End Mills	**MT2245001**	Price
ProCut	Double-End End Mills	**DB50BNS6S**	Price
ProCut	Single-End End Mills	**DB50BNR6S**	Price

6 Pc. Double End Mill Sets

- 1 Each of: 1/8, 3/16, 1/4, 5/16, 3/8, 1/2”
- High speed steel & cobalt



No. of Flutes - 2 Set Material - High Speed Steel		
Brand Name	**Order No.**	**Price**
Morse Cutting Tools	**MT2245015**	Price
Rapidkut	**DB40AC6S**	Price
ProCut II	**DB50PC6S**	Price
ProCut	**DB50C6S**	Price

No. of Flutes - 4 Set Material - High Speed Steel		
Brand Name	**Order No.**	**Price**
Morse Cutting Tools	**MT2245010**	Price
Rapidkut	**DB40AB6S**	Price
ProCut II	**DB50PB6S**	Price
ProCut	**DB50B6S**	Price

No. of Flutes - 4 Set Material - M-42 Cobalt		
Brand Name	**Order No.**	**Price**
ProCut II	**DB50TB6S**	Price

PROCUT 4 Pc. 2 Flute Single End Aluminum Cutting Set

- 1 Each of: 1/4, 5/16, 3/8, 1/2”
- High speed steel



Order No.	Price
DB50A4S	Price

PROCUT 4 Pc. 4 Flute Single End Ball Nose End Mill Set

- 1 Each of: 1/4, 5/16, 3/8, 1/2”
- High speed steel



Order No.	Price
DB50BM4S	Price

5 Pc. 2 & 4 Flute Miniature Double End 3/16" Shank End Mill Sets

- 1 Each of: 1/16, 3/32, 1/8, 5/32, 3/16”
- High speed steel & M-42 8% cobalt



No. of Flutes - 2 Set Material - High Speed Steel		
Brand Name	**Order No.**	**Price**
ProCut	**DB50CS5S**	Price

No. of Flutes - 2 Set Material - M-42 Cobalt		
Brand Name	**Order No.**	**Price**
ProCut II	**DB50TCS6S**	Price

No. of Flutes - 4 Set Material - M-42 Cobalt		
Brand Name	**Order No.**	**Price**
ProCut II	**DB50TBS5S**	Price

2-Flute Single End Mills

M42 Cobalt • Center Cutting • Regular Length



- For the tougher cutting assignments on hi-strength, hi-temp steels and exotic materials or extended production runs in conventional and N/C milling operations

RAPIDKUT OSG PROCUT

				Morse Cutting Tools		Rapidkut		OSG USA, Inc.		Price	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	3/8	2-5/16	MT2544376	Price	CY25TG4U	Price	TP365200100	Price	CY53TG4	Price
3/16	3/8	7/16	2-3/8	-	-	CY25TG6U	Price	-	-	-	-
3/16	3/8	7/16	2-5/16	MT2544377	Price	-	-	TP365200200	Price	CY53TG6	Price
7/32	3/8	1/2	2-5/16	-	-	-	-	-	-	CY53TG7	Price
7/32	3/8	1/2	2-7/16	-	-	CY25TG7U	Price	-	-	-	-
1/4	3/8	1/2	2-5/16	MT2544378	Price	-	-	TP365200300	Price	CY53TG8	Price
1/4	3/8	1/2	2-7/16	-	-	CY25TG8U	Price	-	-	-	-
9/32	3/8	9/16	2-5/16	-	-	-	-	-	-	CY53TG9	Price
5/16	3/8	9/16	2-1/2	-	-	CY25TG10U	Price	-	-	-	-
5/16	3/8	9/16	2-5/16	MT2544379	Price	-	-	TP365200400	Price	CY53TG10	Price
11/32	3/8	9/16	2-1/2	-	-	CY25TG11U	Price	-	-	-	-
11/32	3/8	9/16	2-5/16	-	-	-	-	-	-	CY53TG11	Price
3/8	3/8	9/16	2-1/2	-	-	CY25TG12U	Price	-	-	-	-
3/8	3/8	9/16	2-5/16	MT2544380	Price	-	-	TP365200500	Price	CY53TG12	Price
13/32	3/8	13/16	2-1/2	-	-	-	-	-	-	CY53TG13	Price
13/32	3/8	13/16	2-11/16	-	-	CY25TG13U	Price	-	-	-	
Price	3/8	13/16	2-1/2	-	-	-	-	-	-	CY53TG14	Price
7/16	3/8	13/16	2-11/16	-	-	CY25TG14U	Price	-	-	-	-
15/32	3/8	13/16	2-1/2	-	-	-	-	-	-	CY53TG15	Price
1/2	1/2	1	3	MT2544381	Price	-	-	TP365201100	Price	CY53TG16	Price
1/2	1/2	1	3-1/4	-	-	CY25TG16U	Price	-	-	-	-
1/2	3/8	13/16	2-1/2	-	-	-	-	-	-	CY53TG16X	Price
9/16	1/2	1-1/8	3-1/8	-	-	-	-	-	-	CY53TG18	Price
5/8	1/2	1-1/8	3-1/8	-	-	-	-	-	-	CY53TG20X	Price
5/8	5/8	1-5/16	3-7/16	MT2544382	Price	-	-	TP365202100	Price	CY53TG20	Price
5/8	5/8	1-5/16	3-3/4	-	-	CY25TG20U	Price	-	-	-	-
11/16	5/8	1-5/16	3-7/16	-	-	CY25TG22U	Price	-	-	CY53TG22	Price
3/4	1/2	1-5/16	3-5/16	-	-	-		Price	-	CY53TG24X	Price
3/4	3/4	1-5/16	3-9/16	MT2544383	Price	-	-	TP365203100	Price	CY53TG24W	Price
3/4	5/8	1-5/16	3-7/16	-	-	CY25TG24U	Price	-	-	CY53TG24	Price
3/4	3/4	1-5/16	3-7/8	-	-	CY25TG24WU	Price	-	-	-	-
7/8	5/8	1-1/2	3-5/8	-	-	CY25TG28XU	Price	-	-	CY53TG28X	Price
7/8	3/4	1-1/2	3-3/4	-	-	CY25TG28WU	Price	-	-	CY53TG28W	Price
7/8	7/8	1-1/2	3-3/4	-	-	-	-	-	-	CY53TG28	Price
1	1	1-5/8	4-1/8	MT2544384	Price	-	-	TP365205100	Price	CY53TG32	Price
1	5/8	1-1/2	3-5/8	-	-	-	-	-	-	CY53TG32X	Price
1	3/4	1-1/2	3-3/4	-	-	CY25TG32WU	Price	-	-	CY53TG32W	Price
1	7/8	1-1/2	3-3/4	-	-	-	-	-	-	CY53TG32Y	Price
1	1	1-5/8	4-1/2	-	-	CY25TG32U	Price	-	-	-	-
1-1/8	1	1-5/8	4-1/8	-	-	-	-	-	-	CY53TG36	Price
1-1/8	3/4	1-1/2	3-3/4	-	-	-	-	-	-	CY53TG36W	Price
1-1/4	1-1/4	1-5/8	4-1/8	MT2544385	Price	CY25TG40U	Price	TP365206100	Price	CY53TG40	Price
1-1/4	3/4	1-5/8	3-7/8	-	-	-	-	-	-	CY53TG40W	Price
1-1/4	1	1-5/8	4-1/8	-	-	-	-	-	-	CY53TG40Z	Price
1-3/8	1	1-5/8	4-1/8	-	-	-	-	-	-	CY53TG44	Price
1-3/8	1-1/4	1-5/8	4-1/8	-	-	-	-	-	-	CY53TG44X	Price
1-1/2	1-1/4	1-5/8	4-1/8	MT2544386	Price	CY25TG48XU	Price	TP365206200	Price	CY53TG48X	Price
1-1/2	3/4	1-5/8	4	-	-	-	-	-	-	CY53TG48W	Price
1-1/2	1	1-5/8	4-1/8	-	-	-	-	-	-	CY53TG48	Price
1-3/4	1-1/4	1-5/8	4-1/8	-	-	-	-	-	-	CY53TG56	Price
2	1-1/4	1-5/8	4-1/8	-	-	-	-	-	-	CY53TG64	Price

PROCUT M-42 Cobalt Extension Type 2-Flute Single End Mills

Center Cutting

Dia. (in.)	Shank Dia. (in.)	Length Below Shank (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	3/8	13/16	3/8	2-3/8	CY54TGL4	Price
1/4	3/8	1-1/2	5/8	3-1/16	CY54TGL8	Price
5/16	3/8	1-3/4	3/4	3-5/16	CY54TGL10	Price
3/8	3/8	1-3/4	3/4	3-5/16	CY54TGL12	Price
1/2	1/2	2-7/32	1	4	CY54TGL16	Price



Dia. (in.)	Shank Dia. (in.)	Length Below Shank (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
5/8	5/8	2-23/32	1-3/8	4-5/8	CY54TGL20	Price
3/4	3/4	3-11/32	1-5/8	5-3/8	CY54TGL24	Price
1	1	4-31/32	2-1/2	7-1/4	CY54TGL32	Price

M-42 8% Cobalt 4-Flute Double End Mills

Center Cutting



				Morse Cutting Tools		Rapidkut		OSG USA, Inc.		ProCut	
				Center Cut		Center Cut		Center Cut		Price	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	3/8	3-1/16	MT2544580	Price	CY10TB4U	Price	TP365430100	Price	CY65TB4	Price
5/32	3/8	7/16	3-1/4	-	-	CY10TB5U	Price	-	-	-	-
3/16	3/8	1/2	3-1/4	MT2544582	Price	CY10TB6U	Price	TP365430200	Price	CY65TB6	Price
7/32	3/8	9/16	3-1/4	-	-	CY10TB7U	Price	-	-	-	-
1/4	3/8	5/8	3-3/8	MT2544584	Price	CY10TB8U	Price	TP365430300	Price	CY65TB8	Price
9/32	3/8	11/16	3-3/8	-	-	CY10TB9U	Price	-	-	CY65TB9	Price
5/16	3/8	3/4	3-1/2	MT2544586	Price	CY10TB10U	Price	TP365430400	Price	CY65TB10	Price
11/32	3/8	3/4	3-1/2	-	-	CY10TB11U	Price	-	-	CY65TB11	Price
3/8	3/8	3/4	3-1/2	MT2544588	Price	CY10TB12U	Price	TP365430500	Price	CY65TB12	Price
13/32	1/2	1	4-1/8	-	-	CY10TB13U	Price	-	-	CY65TB13	Price
7/16	1/2	1	4-1/8	-	-	CY10TB14U	Price	-	-	CY65TB14	Price
1/2	1/2	1	4-1/8	MT2544591	Price	CY10TB16U	Price	TP365431100	Price	CY65TB16	Price
9/16	5/8	1-3/8	5	-	-	-	-	-	-	CY65TB18	Price
5/8	5/8	1-3/8	5	MT2544593	Price	CY10TB20U	Price	TP365432100	Price	CY65TB20	Price
11/16	3/4	1-5/8	5-5/8	-	-	-	-	-	-	CY65TB22	Price
3/4	3/4	1-5/8	5-5/8	MT2544594	Price	CY10TB24U	Price	TP365433100	Price	CY65TB24	Price
7/8	7/8	1-7/8	6-1/8	MT2544595	Price	-	-	TP365434100	Price	CY65TB28	Price
1	1	1-7/8	6-3/8	MT2544596	Price	CY10TB32U	Price	TP365435100	Price	CY65TB32	Price

M-42 8% Cobalt 2-Flute Double End Mills



				Morse Cutting Tools		Rapidkut		Price		ProCut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	3/8	3-1/16	MT2544560	Price	CY15TC4U	Price	TP365220100	Price	CY56TC4	Price
5/32	3/8	7/16	3-1/8	-	-	-	-	-	-	CY56TC5	Price
3/16	3/8	7/16	3-1/4	-	-	CY15TC6U	Price	-	-	-	-
3/16	3/8	7/16	3-1/8	MT2544562	Price	-	-	TP365220200	Price	CY56TC6	Price
7/32	3/8	1/2	3-1/8	-	-	-	-	-	-	CY56TC7	Price
1/4	3/8	1/2	3-1/8	MT2544564	Price	-	-	TP365220300	Price	CY56TC8	Price
1/4	3/8	1/2	3-3/8	-	-	CY15TC8U	Price	-	-	-	-
9/32	3/8	9/16	3-1/8	-	-	-	-	-	-	CY56TC9	Price
5/16	3/8	9/16	3-1/2	-	-	CY15TC10U	Price	-	-	-	-
5/16	3/8	9/16	3-1/8	MT2544566	Price	-	-	TP365220400	Price	CY56TC10	Price
11/32	3/8	9/16	3-1/8	-	-	-	-	-	-	CY56TC11	Price
3/8	3/8	9/16	3-1/2	-	-	CY15TC12U	Price	-	-	-	-
3/8	3/8	9/16	3-1/8	MT2544568	Price	-	-	TP365220500	Price	CY56TC12	Price
13/32	1/2	13/16	3-3/4	-	-	CY15TC13U	Price	-	-	CY56TC13	Price
7/16	1/2	13/16	3-3/4	MT2544570	Price	CY15TC14U	Price	TP365229600	Price	CY56TC14	Price
15/32	1/2	13/16	3-3/4	-	-	CY15TC15U	Price	-	-	-	-
1/2	1/2	13/16	3-3/4	MT2544571	Price	-	-	TP365221100	Price	CY56TC16	Price
1/2	1/2	13/16	4-1/8	-	-	CY15TC16U	Price	-	-	-	-
17/32	5/8	1-1/8	4-1/2	-	-	CY15TC17U	Price	-	-	-	-
9/16	5/8	1-1/8	4-1/2	-	-	CY15TC18U	Price	-	-	CY56TC18	Price
5/8	5/8	1-1/8	4-1/2	MT2544573	Price	-	-	TP365222100	Price	CY56TC20	Price
5/8	5/8	1-1/8	5	-	-	CY15TC20U	Price	-	-	-	-
11/16	3/4	1-5/16	5	-	-	CY15TC22U	Price	-	-	CY56TC22	Price
3/4	3/4	1-5/16	5	MT2544574	Price	-	-	TP365223100	Price	CY56TC24	Price
3/4	3/4	1-5/16	5-5/8	-	-	CY15TC24U	Price	-	-	-	-
7/8	7/8	1-9/16	5-1/2	-	-	CY15TC28U	Price	TP365224100	Price	CY56TC28	Price
1	1	1-5/8	5-7/8	-	-	CY15TC32U	Price	TP365225100	Price	CY56TC32	Price

M-42 8% Cobalt Multi-Flute Single End Mills

Center Cutting



- For tougher cutting assignments on hi-strength, hi-temp steels and exotic materials or extended production runs in conventional and N/C milling operations

					Morse Cutting Tools		Rapidkut		OSG USA, Inc.		ProCut	
					Center Cut		Center Cut		Center Cutting		Center Cut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	3/8	2-5/16	4	MT2544426	Price	CY20TF4U	Price	TP365410100	Price	CY60TF4	Price
5/32	3/8	1/2	2-3/8	4	-	-	CY20TF5U	Price	-	-	CY60TF5	Price
3/16	3/8	1/2	2-3/8	4	MT2544427	Price	CY20TF6U	Price	TP365410200	Price	CY60TF6	Price
7/32	3/8	9/16	2-7/16	4	-	-	CY20TF7U	Price	-	-	CY60TF7	Price
1/4	3/8	5/8	2-7/16	4	MT2544428	Price	CY20TF8U	Price	TP365410300	Price	CY60TF8	Price
1/4	3/8	1-1/4	3-1/16	4	-	-	CY21TFL8U	Price	-	-	CY61TFL8	Price
1/4	3/8	1-3/4	3-9/16	4	-	-	CY22TFX8U	Price	-	-	CY62TFX8	Price
9/32	3/8	3/4	2-1/2	4	-	-	CY20TF9U	Price	-	-	CY60TF9	Price
5/16	3/8	3/4	2-1/2	4	MT2544429	Price	CY20TF10U	Price	TP365410400	Price	CY60TF10	Price
5/16	3/8	1-3/8	3-1/8	4	-	-	CY21TFL10U	Price	-	-	CY61TFL10	Price
5/16	3/8	2	3-3/4	4	-	-	CY22TFX10U	Price	-	-	CY62TFX10	Price
3/8	3/8	3/4	2-1/2	4	MT2544430	Price	CY20TF12U	Price	TP365410500	Price	CY60TF12	Price
3/8	3/8	1-1/2	3-1/4	4	MT2544541	Price	CY21TFL12U	Price	TP365460500	Price	CY61TFL12	Price
3/8	3/8	2-1/2	4-1/4	4	MT2544520	Price	CY22TFX12U	Price	-	-	CY62TFX12	Price
7/16	3/8	1	2-11/16	4	-	-	CY20TF14U	Price	-	-	CY60TF14	Price
7/16	1/2	1-1/4	3-1/4	4	-	-	CY20TF14XU	Price	-	-	-	-
7/16	1/2	1-3/4	3-3/4	4	-	-	-	-	-	-	CY61TFL14	Price
15/32	3/8	1	2-11/16	4	-	-	-	-	-	-	CY60TF15X	Price
1/2	1/2	1-1/4	3-1/4	4	MT2544431	Price	CY20TF16U	Price	TP365411100	Price	CY60TF16	Price
1/2	3/8	1	2-11/16	4	-	-	CY20TF16XU	Price	-	-	CY60TF16X	Price
1/2	1/2	2	4	4	MT2544542	Price	CY21TFL16U	Price	TP365461100	Price	CY61TFL16	Price
1/2	1/2	3	5	4	MT2544521	Price	CY22TFX16U	Price	TP365581100	Price	CY62TFX16	Price
9/16	1/2	1-3/8	3-3/8	4	-	-	CY20TF18U	Price	-	-	CY60TF18	Price
5/8	1/2	1-3/8	3-3/8	4	-	-	-	-	-	-	CY60TF20X	Price
5/8	5/8	1-5/8	3-3/4	4	MT2544432	Price	CY20TF20U	Price	TP365412100	Price	CY60TF20	Price
5/8	5/8	1-5/8	3-3/4	6	MT2544433	Price	-	-	TP365412500	Price	-	-
5/8	5/8	2-1/2	4-5/8	4	MT2544543	Price	CY21TFL20U	Price	TP365462100	Price	CY61TFL20	Price
5/8	5/8	4	6-1/8	4	MT2544522	Price	CY22TFX20U	Price	TP365582100	Price	CY62TFX20	Price
11/16	5/8	1-5/8	3-3/4	4	-	-	CY20TF22XU	Price	-	-	CY60TF22	Price
3/4	1/2	1-5/8	3-5/8	4	-	-	-	-	-	-	CY60TF24X	Price
3/4	1/2	3	5-1/4	4	-	-	-	-	-	-	CY61TFL24X	Price
3/4	5/8	1-5/8	3-3/4	4	-	-	CY20TF24U	Price	-	-	CY60TF24	Price
3/4	3/4	1-5/8	3-7/8	4	MT2544434	Price	CY20TF24WU	Price	TP365413100	Price	CY60TF24W	Price
3/4	3/4	1-5/8	3-7/8	6	MT2544435	Price	-	-	TP365413500	Price	-	-
3/4	3/4	3	5-1/4	4	MT2544544	Price	CY21TFL24U	Price	TP365463100	Price	CY61TFL24	Price
3/4	3/4	3	5-1/4	6	MT2544545	Price	-	-	TP365463500	Price	-	-
3/4	3/4	4	6-1/4	4	MT2544523	Price	CY22TFX24U	Price	TP365583100	Price	CY62TFX24	Price
3/4	3/4	4	6-1/4	6	MT2544524	Price	-	-	TP365583500	Price	-	-
7/8	5/8	1-7/8	4	4	-	-	-	-	-	-	CY60TF28X	Price
7/8	3/4	1-7/8	4-1/8	4	-	-	CY20TF28WU	Price	-	-	CY60TF28W	Price
7/8	7/8	1-7/8	4-1/8	4	-	-	CY20TF28U	Price	-	-	CY60TF28	Price
7/8	7/8	3-1/2	5-3/4	4	-	-	CY21TFL28U	Price	-	-	CY61TFL28	Price
7/8	7/8	5	7-1/4	4	-	-	-	-	-	-	CY62TFX28	Price
1	5/8	1-7/8	3-7/8	4	-	-	-	-	-	-	CY60TF32X	Price
1	3/4	1-7/8	4-1/8	4	-	-	CY20TF32WU	Price	-	-	CY60TF32W	Price
1	1	2	4-1/2	4	MT2544436	Price	CY20TF32YU	Price	TP365415100	Price	CY60TF32Y	Price
1	1	2	4-1/2	6	MT2544437	Price	-	-	TP365415500	Price	-	-
1	1	4	6-1/2	4	MT2544546	Price	CY21TFL32U	Price	TP365465100	Price	CY61TFL32Y	Price
1	1	4	6-1/2	6	MT2544547	Price	-	-	TP365465500	Price	-	-
1	1	6	8-1/2	4	MT2544525	Price	CY22TFX32U	Price	TP365585100	Price	CY62TFX32	Price
1	1	6	8-1/2	6	-	-	-	-	TP365585500	Price	-	-
1-1/8	3/4	2	4-1/8	6	-	-	-	-	-	-	CY60TF36W	Price
1-1/8	1	2	4-1/2	6	-	-	-	-	-	-	CY60TF36	Price
1-1/4	3/4	2	4-1/2	6	-	-	-	-	-	-	CY60TF40W	Price
1-1/4	1	2	4-1/2	6	-	-	-	-	-	-	CY60TF40	Price
1-1/4	1-1/4	2	4-1/2	4	MT2544438	Price	CY20TF40U	Price	TP365416100	Price	-	-
1-1/4	1-1/4	2	4-1/2	6	MT2544439	Price	CY20TF40YU	Price	TP365416500	Price	CY60TF40Y	Price
1-1/4	1-1/4	4	6-1/2	4	MT2544548	Price	-	-	TP365466100	Price	-	-
1-1/4	1-1/4	4	6-1/2	6	MT2544549	Price	CY21TFL40U	Price	TP365466500	Price	CY61TFL40X	Price
1-1/4	1-1/4	6	8-1/2	4	MT2544527	Price	-	-	TP365586100	Price	-	-
1-1/4	1-1/4	6	8-1/2	6	-	-	-	-	TP365586500	Price	CY62TFX40	Price
1-1/2	3/4	2	4-1/2	6	-	-	-	-	-	-	CY60TF48W	Price
1-1/2	1	2	4-1/2	6	-	-	-	-	-	-	CY60TF48	Price
1-1/2	1-1/4	2	4-1/2	4	MT2544440	Price	CY20TF48U	Price	-	-	-	-
1-1/2	1-1/4	2	4-1/2	6	MT2544441	Price	-	-	TP365416600	Price	CY60TF48X	Price
1-1/2	1-1/4	4	6-1/2	6	-	-	-	-	-	-	CY61TFL48	Price
1-1/2	1-1/4	8	10-1/2	6	-	-	-	-	-	-	CY62TFX48	Price
1-3/4	3/4	2	4-1/2	6	-	-	-	-	-	-	CY60TF56W	Price
1-3/4	1-1/4	2	4-1/2	6	-	-	-	-	-	-	CY60TF56	Price
2	1-1/4	2	4-1/2	6	-	-	-	-	-	-	CY60TF64B	Price
-	-	-	-	-	-	-	-	-	-	-	-	-
2	1-1/4	4	6-1/2	8	-	-	-	-	-	-	CY61TFL64	Price

6 Pc. M-42 8% Cobalt End Mill Sets

Center Cutting

1 Each of: 1/8, 3/16, 1/4, 5/16, 3/8, 1/2"

No. of Flutes	Order No.	Price
2	DB50TG6S	Price
4	DB50TF6S	Price



2-Flute, Single End Ball Nose Mills

High Speed Steel • Center Cutting



RAPIDKUT® PROCUT

				Morse Cutting Tools		Rapidkut		ProCut	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	3/8	2-5/16	**MT2043111**	Price	**CX60R4U**	Price	**CX50R4**	Price
3/16	3/8	1/2	2-3/8	**MT2043112**	Price	**CX60R6U**	Price	**CX50R6**	Price
1/4	3/8	5/8	2-7/16	**MT2043113**	Price	**CX60R8U**	Price	**CX50R8**	Price
5/16	3/8	3/4	2-1/2	**MT2043114**	Price	**CX60R10U**	Price	**CX50R10**	Price
3/8	3/8	3/4	2-1/2	**MT2043115**	Price	**CX60R12U**	Price	**CX50R12**	Price
7/16	1/2	1	3	**MT2043116**	Price	**-**	-	**CX50R14**	Price
7/16	1/2	1	3-1/4	**-**	-	**CX60R14U**	Price	**-**	-
1/2	1/2	1	3	**MT2043117**	Price	**-**	-	**CX50R16**	Price
1/2	1/2	1	3-1/4	**-**	-	**CX60R16U**	Price	**-**	-
9/16	1/2	1	3	**MT2043118**	Price	**-**	-	**CX50R18**	Price
9/16	1/2	1-1/8	3-3/8	**-**	-	**CX60R18U**	Price	**-**	-
5/8	1/2	1-3/8	3-3/8	**-**	-	**-**	-	**CX50R20X**	Price
5/8	5/8	1-3/8	3-1/2	**MT2043120**	Price	**CX60R20U**	Price	**CX50R20**	Price
3/4	1/2	1-5/8	3-5/8	**-**	-	**-**	-	**CX50R24X**	Price
3/4	3/4	1-5/8	3-7/8	**MT2043122**	Price	**CX60R24U**	Price	**CX50R24**	Price
13/16	3/4	2	4-1/4	**-**	-	**-**	-	**CX50R26**	Price
7/8	3/4	2	4-1/4	**-**	-	**-**	-	**CX50R28Y**	Price
7/8	7/8	2	4-1/4	**MT2043123**	Price	**CX60R28U**	Price	**CX50R28**	Price
15/16	3/4	2-1/4	4-1/2	**-**	-	**-**	-	**CX50R30**	Price
1	3/4	2-1/4	4-1/2	**-**	-	**-**	-	**CX50R32Y**	Price
1	1	2-1/4	4-3/4	**MT2043124**	Price	**CX60R32U**	Price	**CX50R32**	Price
1-1/8	1	2-1/4	4-3/4	**MT2043125**	Price	**CX60R36U**	Price	**CX50R36**	Price
1-1/4	1-1/4	2-1/2	5	**MT2043126**	Price	**CX60R40U**	Price	**CX50R40**	Price
1-3/8	1-1/4	2-1/2	5	**-**	-	**-**	-	**CX50R44**	Price
1-1/2	1-1/4	2-1/2	5	**MT2043127**	Price	**CX60R48U**	Price	**CX50R48**	Price
2	1-1/4	2-1/2	5	**-**	-	**-**	-	**CX50R64**	Price

PROCUT 4-Flute, Single End Ball Nose Mills

High Speed Steel • Center Cutting • Regular & Long Length



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	3/8	1-1/4	3-1/16	**CX54MBL8**	Price
1/4	3/8	5/8	2-7/16	**CX53MB8**	Price
5/16	3/8	1-1/2	3-1/4	**CX54MBL10**	Price
5/16	3/8	3/4	2-1/2	**CX53MB10**	Price
3/8	3/8	1-1/2	3-1/4	**CX54MBL12**	Price
3/8	3/8	3/4	2-1/2	**CX53MB12**	Price
1/2	1/2	1-1/4	3-1/4	**CX53MB16**	Price
1/2	1/2	2	4	**CX54MBL16**	Price
5/8	5/8	1-5/8	3-3/4	**CX53MB20**	Price
5/8	5/8	2-1/2	4-5/8	**CX54MBL20**	Price
3/4	3/4	1-5/8	3-7/8	**CX53MB24**	Price
3/4	3/4	3	5-1/4	**CX54MBL24**	Price
7/8	7/8	1-7/8	4-1/8	**CX53MB28**	Price

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1	1	2	4-1/2	**CX53MB32Y**	Price
1	1	4	6-1/2	**CX54MBL32**	Price
1	1	6	7-1/2	**CX54MBL32X**	Price
1-1/4	1-1/4	2	4-1/2	**CX53MB40Y**	Price
1-1/4	1-1/4	3	5-1/2	**CX54MBL40W**	Price
1-1/4	1-1/4	4	6-1/2	**CX54MBL40**	Price
1-1/4	1-1/4	6	8-1/2	**CX54MBL40Y†**	Price
1-1/2	1-1/4	2	4-1/2	**CX53MB48**	Price
1-1/2	1-1/4	4	6-1/2	**CX54MBL48†**	Price
1-1/2	1-1/4	6	8-1/2	**CX54MBL48X**	Price

†6 Flute

M-42 8% Cobalt

2 Flute, Ball End • Single End Mills • Center Cutting

- M-42 8% cobalt steel for the tougher cutting assignments on high-strength, high-temperature steels and exotic materials or extended production runs



				Morse Cutting Tools		OSG USA, Inc.	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	3/8	3/8	2-5/16	**MT2544401**	Price	**TP365210100**	Price
3/16	3/8	1/2	2-3/8	**MT2544402**	Price	**TP365210200**	Price
1/4	3/8	5/8	2-7/16	**MT2544403**	Price	**TP365210300**	Price
5/16	3/8	3/4	2-1/2	**MT2544404**	Price	**TP365210400**	Price
3/8	3/8	3/4	2-1/2	**MT2544405**	Price	**TP365210500**	Price
1/2	1/2	1	3	**MT2544406**	Price	**TP365211100**	Price
5/8	5/8	1-3/8	3-1/2	**MT2544407**	Price	**TP365212100**	Price
3/4	3/4	1-5/8	3-7/8	**MT2544408**	Price	**TP365213100**	Price
1	1	2-1/4	4-3/4	**MT2544409**	Price	**TP365215100**	Price
1-1/4	1-1/4	2-1/2	5	**MT2544410**	Price	**TP365216100**	Price
1-1/2	1-1/4	2-1/2	5	**MT2544411**	Price	**TP365216200**	Price

RAPIDKUT® 2 Flute M-42 8% Cobalt Ball End Double End Mills

Center Cutting • Regular Length

- For tougher cutting assignments on hi-strength, hi temp alloys and exotic materials or extended production runs in conventional and NC milling operations



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	3/8	3/8	3-1/16	**CY35TSR4U**	Price
3/16	3/8	7/16	3-1/8	**CY35TSR6U**	Price
1/4	3/8	1/2	3-1/8	**CY35TSR8U**	Price
5/16	3/8	9/16	3-1/8	**CY35TSR10U**	Price
3/8	3/8	9/16	3-1/8	**CY35TSR12U**	Price
7/16	1/2	13/16	3-3/4	**CY35TSR14U**	Price
1/2	1/2	13/16	3-3/4	**CY35TSR16U**	Price
5/8	5/8	1-1/8	4-1/2	**CY35TSR20U**	Price
1	1	1-5/8	5-7/8	**CY35TSR32U**	Price

4 Flute Stub Length Double End Mills

3/16" Shank • Center Cutting • Cobalt



HSS M GP PROCUT

			Morse Cutting Tools		ProCut	
Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/16	3/32	2	**MT2544126**	Price	**-**	-
3/32	9/64	2	**MT2544128**	Price	**CP77006**	Price
7/64	9/64	2	**-**	-	**CP77007**	Price
1/8	3/16	2	**MT2544130**	Price	**-**	-
9/64	7/32	2	**-**	-	**CP77009**	Price
5/32	15/64	2	**MT2544132**	Price	**CP77010**	Price
3/16	9/32	2	**MT2544134**	Price	**CP77012**	Price

4-Flute Regular Length Double End Mills

3/16" Shank • Center Cutting • High Speed Steel



HSS M GP PROCUT

			Morse Cutting Tools		ProCut	
Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/16	3/16	2-1/4	**MT2643261**	Price	**CR56BS2**	Price
5/64	15/64	2-1/4	**-**	-	**CR56BS564**	Price
3/32	9/32	2-1/4	**MT2643262**	Price	**CR56BS3**	Price
7/64	5/16	2-1/4	**-**	-	**CR56BS764**	Price
1/8	3/8	2-1/4	**MT2643263**	Price	**CR56BS4**	Price
9/64	3/8	2-1/4	**-**	-	**CR56BS964**	Price
5/32	7/16	2-1/4	**MT2643264**	Price	**CR56BS5**	Price
11/64	7/16	2-1/4	**-**	-	**CR56BS1164**	Price
3/16	1/2	2-1/4	**MT2643265**	Price	**CR56BS6**	Price

4-Flute Long Length Double End Mills

3/16" Shank • Center Cutting • High Speed Steel



HSS M GP PROCUT

			Morse Cutting Tools		ProCut	
Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/16	7/32	2-1/2	**MT2643241**	Price	**CR57BX2**	Price
5/64	1/4	2-1/2	**-**	-	**CR57BX564**	Price
3/32	9/32	2-5/8	**MT2643242**	Price	**CR57BX3**	Price
7/64	9/32	2-5/8	**-**	-	**CR57BX764**	Price
1/8	3/4	3-1/8	**MT2643243**	Price	**CR57BX4**	Price
9/64	3/4	3-1/8	**-**	-	**CR57BX964**	Price
5/32	7/8	3-1/4	**MT2643244**	Price	**CR57BX5**	Price
11/64	7/8	3-1/4	**-**	-	**CR57BX1164**	Price
3/16	1	3-3/8	**MT2643245**	Price	**CR57BX6**	Price

PREMIER HP HIGH PERFORMANCE S-Kut

2-Flute Single End Mills



Cobalt • Alcrona Coated

- Excellent at dry milling with high speed cutting
- Improved edge performance & wear resistance
- Fine surface finish
- Excellent results up to HRC 50-53
- Alcrona coated has oxidation resistance up to 1100°C

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1/8	3/8	3/8	2-5/16	2	**CR80GB030008**	Price
5/32	3/8	7/16	2-5/16	2	**CR80GB030010**	Price
3/16	3/8	7/16	2-5/16	2	**CR80GB030012**	Price
7/32	3/8	1/2	2-5/16	2	**CR80GB030014**	Price
1/4	3/8	1/2	2-5/16	2	**CR80GB030016**	Price
9/32	3/8	9/16	2-5/16	2	**CR80GB030018**	Price
5/16	3/8	9/16	2-5/16	2	**CR80GB030020**	Price
3/8	3/8	9/16	2-5/16	2	**CR80GB030024**	Price
7/16	3/8	13/16	2-1/2	2	**CR80GB030028**	Price
1/2	1/2	1	3	2	**CR80GB030032**	Price

PREMIER HP HIGH PERFORMANCE S-Kut

4-Flute Single End Mills



Cobalt • Alcrona Coated

- Excellent at dry milling with high speed cutting
- Improved edge performance and wear resistance
- Fine surface finish
- Excellent results up to HRC 50-53
- Alcrona coating has oxidation resistance up to 1100°C

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1/8	3/8	3/8	2-5/16	4	**CR80GB039008**	Price
5/32	3/8	7/16	2-3/8	4	**CR80GB039010**	Price
3/16	3/8	1/2	2-3/8	4	**CR80GB039012**	Price
7/32	3/8	9/16	2-7/16	4	**CR80GB039014**	Price
1/4	3/8	5/8	2-7/16	4	**CR80GB039016**	Price
9/32	3/8	11/16	2-1/2	4	**CR80GB039018**	Price
5/16	3/8	3/4	2-1/2	4	**CR80GB039020**	Price
3/8	3/8	3/4	2-1/2	4	**CR80GB039024**	Price
7/16	1/2	1-1/4	3-1/4	4	**CR80GB039028**	Price
1/2	1/2	1-1/4	3-1/4	4	**CR80GB039032**	Price

PREMIER HP HIGH PERFORMANCE S-Kut

2 Flute Ball Nose Single End Mills

Cobalt • Alcrona Coated

- Excellent at dry milling with high speed cutting
- Fine surface finish
- Excellent results up to HRC 50-53
- Alcrona coating has oxidation resistance up to 1100°C



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1/8	3/8	3/8	2-5/16	2	**CR80GB110008**	Price
3/16	3/8	1/2	2-3/8	2	**CR80GB110012**	Price
1/4	3/8	5/8	2-7/16	2	**CR80GB110016**	Price
5/16	3/8	3/4	2-1/2	2	**CR80GB110020**	Price
3/8	3/8	3/4	2-1/2	2	**CR80GB110024**	Price
7/16	1/2	1	3	2	**CR80GB110028**	Price
1/2	1/2	1	3	2	**CR80GB110032**	Price

PREMIER HP HIGH PERFORMANCE S-Kut

Coarse Tooth Roughing End Mills

Cobalt • Alcrona Coated

- Excellent at dry milling with high speed cutting
- Fine surface finish
- Excellent results up to HRC 50-53
- Alcrona coating has oxidation resistance up to 1100°C



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1/4	3/8	5/8	2-7/16	3	**CR80GB170016**	Price
5/16	3/8	3/4	2-1/2	3	**CR80GB170020**	Price
3/8	3/8	3/4	2-1/2	4	**CR80GB170024**	Price
7/16	3/8	1	2-11/16	4	**CR80GB170028**	Price
1/2	1/2	1-1/4	3-1/4	4	**CR80GB170032**	Price

PREMIER HP HIGH PERFORMANCE S-Kut

Fine Tooth Roughing End Mills

Cobalt • Alcrona Coated

- Excellent at dry milling with high speed cutting
- Fine surface finish
- Excellent results up to HRC 50-53
- Alcrona coating has oxidation resistance up to 1100°C



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1/4	3/8	5/8	2-7/16	3	**CR80GB189016**	Price
5/16	3/8	3/4	2-1/2	3	**CR80GB189020**	Price
3/8	3/8	3/4	2-1/2	4	**CR80GB189024**	Price
7/16	3/8	1	2-11/16	4	**CR80GB189028**	Price
1/2	1/2	1-1/4	3-1/4	4	**CR80GB189032**	Price

RAPIDKUT® 3-Flute M-42 8% Cobalt Shearkut Spiral Single End Mills

60° High Spiral Design Cuts Cleanly & Efficiently

- Excellent resistance to heat and abrasion
- Improved machining in exotic materials — titanium, inconels, stainless steel, mold and die steels
- Excellent finishes due to less vibration
- Precision ground to CNC tolerances
- 200% to 500% more cutting power



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	3/8	5/8	2-7/16	**CV20SM8U**	Price
5/16	3/8	3/4	2-1/2	**CV20SM10U**	Price
3/8	3/8	3/4	2-1/2	**CV20SM12U**	Price
3/8	3/8	1-1/2	3-1/4	**CV20SML12U**	Price
1/2	1/2	1-1/4	3	**CV20SM16U**	Price
1/2	1/2	2	4	**CV20SML16U**	Price
5/8	5/8	1-5/8	3-3/4	**CV20SM20U**	Price
5/8	5/8	2-1/2	4-5/8	**CV20SML20U**	Price
3/4	3/4	1-5/8	3-7/8	**CV20SM24WU**	Price

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/4	3/4	3	5-1/4	**CV20SML24U**	Price
7/8	3/4	1-7/8	4-1/8	**CV20SM28WU**	Price
7/8	7/8	3-1/2	5-3/4	**CV20SML28U**	Price
1	1	2	4-1/2	**CV20SM32YU**	Price
1	1	4	6-1/2	**CV20SML32U**	Price
1-1/4	1	2	4-1/2	**CV20SM40U**	Price
1-1/4	1-1/4	4	6-1/2	**CV20SML40AU**	Price
1-1/2	1-1/4	2	4-1/2	**CV20SM48AU**	Price
2	1-1/4	2	4-1/2	**CV20SM64AU**	Price

PROCUT II PREMIUM CUTTING TOOLS M-42 Cobalt — Coarse Tooth Roughing End Mills

- For general purpose milling of soft to medium hard materials
- Suitable for heavier feed rates
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials



Length - Standard

					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/8	5/8	2-7/16	3	**CV50CR83**	Price	**CV70CR83**	Price	**CV72CR83**	Price
5/16	3/8	3/4	2-1/2	3	**CV50CR103**	Price	**CV70CR103**	Price	**CV72CR103**	Price
3/8	3/8	3/4	2-1/2	4	**CV50CR123**	Price	**CV70CR123**	Price	**CV72CR123**	Price
7/16	3/8	1	2-11/16	4	**CV50CR143**	Price	**CV70CR143**	Price	**CV72CR143**	Price
1/2	1/2	1-1/4	3-1/4	4	**CV50CR164**	Price	**CV70CR164**	Price	**CV72CR164**	Price
9/16	1/2	1-3/8	3-3/8	4	**CV50CR184**	Price	**CV70CR184**	Price	**CV72CR184**	Price
5/8	5/8	1-5/8	3-3/4	4	**CV50CR205**	Price	**CV70CR205**	Price	**CV72CR205**	Price
11/16	5/8	1-5/8	3-3/4	4	**CV50CR225**	Price	**CV70CR225**	Price	**CV72CR225**	Price
3/4	5/8	1-5/8	3-3/4	4	**CV50CR245**	Price	**CV70CR245**	Price	**CV72CR245**	Price
3/4	3/4	1-5/8	3-3/4	4	**CV50CR246**	Price	**CV70CR246**	Price	**CV72CR246**	Price
13/16	3/4	1-7/8	4-1/8	4	**CV50CR266**	Price	**CV70CR266**	Price	**CV72CR266**	Price
7/8	3/4	1-7/8	4-1/8	5	**CV50CR286**	Price	**CV70CR286**	Price	**CV72CR286**	Price
7/8	7/8	1-7/8	4-1/8	5	**CV50CR287**	Price	**CV70CR287**	Price	**CV72CR287**	Price
15/16	3/4	1-7/8	4-1/8	4	**CV50CR306**	Price	**CV70CR306**	Price	**CV72CR306**	Price
15/16	7/8	2-1/8	4-1/8	4	**CV50CR307**	Price	-	-	-	-
1	3/4	2	4-1/2	5	**CV50CR326**	Price	**CV70CR326**	Price	**CV72CR326**	Price
1	1	2	4-1/2	5	**CV50CR328**	Price	**CV70CR328**	Price	**CV72CR328**	Price
1-1/8	3/4	2	4-1/4	6	**CV50CR366**	Price	**CV70CR366**	Price	**CV72CR366**	Price
1-1/8	1	2	4-1/2	6	**CV50CR368**	Price	**CV70CR368**	Price	**CV72CR368**	Price
1-1/4	1	2	4-1/2	5	**CV50CR408**	Price	**CV70CR408**	Price	**CV72CR408**	Price
1-1/4	3/4	2	4-1/4	6	**CV50CR406**	Price	**CV70CR406**	Price	**CV72CR406**	Price
1-1/4	1-1/4	2	4-1/2	6	**CV50CR4010**	Price	**CV70CR4010**	Price	**CV72CR4010**	Price
1-3/8	3/4	2	4-1/4	6	**CV50CR446**	Price	**CV70CR446**	Price	**CV72CR446**	Price
1-1/2	3/4	2	4-1/4	6	**CV50CR486**	Price	**CV70CR486**	Price	**CV72CR486**	Price
1-1/2	1-1/4	2	4-1/2	6	**CV50CR4810**	Price	**CV70CR4810**	Price	**CV72CR4810**	Price
1-3/4	3/4	2	4-1/4	6	**CV50CR566**	Price	**CV70CR566**	Price	**CV72CR566**	Price
1-3/4	1-1/4	2	4-1/2	6	**CV50CR5610**	Price	**CV70CR5610**	Price	**CV72CR5610**	Price
2	3/4	2	4-1/4	6	**CV50CR646**	Price	**CV70CR646**	Price	**CV72CR646**	Price
2	1-1/4	2	4-1/2	8	**CV50CR6410**	Price	**CV70CR6410**	Price	**CV72CR6410**	Price
2	2	2	5-3/4	8	**CV50CR64162**	Price	**CV70CR64162**	Price	**CV72CR64162**	Price
2	2	3	6-3/4	8	**CV50CR64163**	Price	**CV70CR64163**	Price	**CV72CR64163**	Price
2	2	4	7-3/4	8	**CV50CR64164**	Price	**CV70CR64164**	Price	**CV72CR64164**	Price

Length - Medium

					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1	1	3	5-1/2	5	**CV50CM328**	Price	**CV70CM328**	Price	**CV72CM328**	Price
1-1/4	1-1/4	3	5-1/2	6	**CV50CM4010**	Price	**CV70CM4010**	Price	**CV72CM4010**	Price
1-1/2	1-1/4	3	5-1/2	6	**CV50CM4810**	Price	**CV70CM4810**	Price	**CV72CM4810**	Price
2	2	6	9-3/4	8	**CV50CM64166**	Price	**CV70CM64166**	Price	**CV72CM64166**	Price

(continued on next page)

PRO CUT II PREMIUM CUTTING TOOLS M-42 Cobalt — Coarse Tooth Roughing End Mills (cont.)



Length - Long										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/2	2	4	4	**CV50CL164**	Price	**CV70CL164**	Price	**CV72CL164**	Price
5/8	5/8	2-1/2	4-5/8	4	**CV50CL205**	Price	**CV70CL205**	Price	**CV72CL205**	Price
3/4	3/4	3	5-1/4	4	**CV50CL246**	Price	**CV70CL246**	Price	**CV72CL246**	Price
3/4	5/8	3	5-1/8	4	**CV50CL245**	Price	**CV70CL245**	Price	**CV72CL245**	Price
7/8	3/4	3-1/2	5-3/4	5	**CV50CL286**	Price	**CV70CL286**	Price	**CV72CL286**	Price
7/8	7/8	3-1/2	5-3/4	4	**CV50CL287**	Price	**CV70CL287**	Price	**CV72CL287**	Price
1	3/4	4	6-1/4	5	**CV50CL326**	Price	**CV70CL326**	Price	**CV72CL326**	Price
1	1	4	6-1/2	5	**CV50CL328**	Price	**CV70CL328**	Price	**CV72CL328**	Price
1-1/4	3/4	4	6-1/4	6	**CV50CL406**	Price	**CV70CL406**	Price	**CV72CL406**	Price
1-1/4	1-1/4	4	6-1/2	6	**CV50CL4010**	Price	**CV70CL4010**	Price	**CV72CL4010**	Price
1-1/2	3/4	4	6-1/4	6	**CV50CL486**	Price	**CV70CL486**	Price	**CV72CL486**	Price
1-1/2	1-1/4	4	6-1/2	6	**CV50CL4810**	Price	**CV70CL4810**	Price	**CV72CL4810**	Price
1-3/4	1-1/4	4	6-1/2	8	**CV50CL5610**	Price	**CV70CL5610**	Price	**CV72CL5610**	Price
2	1-1/4	4	6-1/2	6	**CV50CL6410**	Price	**CV70CL6410**	Price	**CV72CL6410**	Price
2	2	8	11-3/4	8	**CV50CL64168**	Price	**CV70CL64168**	Price	**-**	-
2	2	10	13-3/4	8	**CV50CL64160**	Price	**CV70CL64160**	Price	**-**	-
2	2	12	15-3/4	8	**CV50CL64162**	Price	**CV70CL64162**	Price	**-**	-

PRO CUT II PREMIUM CUTTING TOOLS M-42 Cobalt — Coarse Tooth Center Cutting Roughing End Mills

- For general purpose milling of soft to medium hard materials
- Suitable for heavier feed rates
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials



Length - Standard										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/2	1-1/4	3-1/4	4	**CV50CRC164**	Price	**CV70CRC164**	Price	**CV72CRC164**	Price
5/8	5/8	1-5/8	3-3/4	4	**CV50CRC205**	Price	**CV70CRC205**	Price	**CV72CRC205**	Price
3/4	3/4	1-5/8	3-7/8	4	**CV50CRC246**	Price	**CV70CRC246**	Price	**CV72CRC246**	Price
1	1	2	4-1/2	5	**CV50CRC328**	Price	**CV70CRC328**	Price	**CV72CRC328**	Price
1-1/4	1-1/4	2	4-1/2	6	**CV50CRC4010**	Price	**CV70CRC4010**	Price	**CV72CRC4010**	Price
1-1/2	1-1/4	2	4-1/2	6	**CV50CRC4810**	Price	**CV70CRC4810**	Price	**CV72CRC4810**	Price

Length - Long										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/2	2	4	4	**CV50CLC164**	Price	**CV70CLC164**	Price	**CV72CLC164**	Price
5/8	5/8	2-1/2	4-5/8	4	**CV50CLC205**	Price	**CV70CLC205**	Price	**CV72CLC205**	Price
3/4	3/4	3	5-1/4	4	**CV50CLC246**	Price	**CV70CLC246**	Price	**CV72CLC246**	Price
1	1	4	6-1/2	5	**CV50CLC328**	Price	**CV70CLC328**	Price	**CV72CLC328**	Price
1-1/4	1-1/4	4	6-1/2	6	**CV50CLC4010**	Price	**CV70CLC4010**	Price	**CV72CLC4010**	Price
1-1/2	1-1/4	4	6-1/2	6	**CV50CLC4810**	Price	**CV70CLC4810**	Price	**CV72CLC4810**	Price

PRO CUT II PREMIUM CUTTING TOOLS M-42 Cobalt Roughing and Finishing End Mills

Rough and Finish in a Single Pass!

- Reduce chatter dramatically
- For maximum performance, reduce feeds by 10%
- Easy regrinding, longer tool life, less tool deflection
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials



Length - Stub										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1	3/4	1-1/8	3-3/8	5	**CV90RFS32**	Price	**CV95RFS32**	Price	**CV97RFS32**	Price
1-1/4	3/4	1-1/8	3-3/8	6	**CV90RFS40**	Price	**CV95RFS40**	Price	**CV97RFS40**	Price
1-3/4	3/4	1-1/8	3-3/8	6	**CV90RFS56**	Price	**-**	-	**-**	-

Length - Standard										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/8	5/8	2-7/16	4	**CV90RF83**	Price	**CV95RF83**	Price	**CV97RF83**	Price
3/8	3/8	3/4	2-1/2	4	**CV90RF123**	Price	**CV95RF123**	Price	**CV97RF123**	Price

(continued on next page)

PRO CUT II PREMIUM CUTTING TOOLS M-42 Cobalt Roughing and Finishing End Mills (cont.)



Length - Standard										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
7/16	3/8	1	2-11/16	4	**CV90RF143**	Price	**CV95RF143**	Price	**CV97RF143**	Price
1/2	1/2	1-1/4	3-1/4	4	**CV90RF164**	Price	**CV95RF164**	Price	**CV97RF164**	Price
5/8	5/8	1-5/8	3-3/4	4	**CV90RF205**	Price	**CV95RF205**	Price	**CV97RF205**	Price
3/4	5/8	1-5/8	3-3/4	4	**CV90RF245**	Price	**CV95RF245**	Price	**CV97RF245**	Price
3/4	3/4	1-5/8	3-7/8	4	**CV90RF246**	Price	**CV95RF246**	Price	**CV97RF246**	Price
7/8	3/4	1-7/8	4-1/8	4	**CV90RF286**	Price	**CV95RF286**	Price	**CV97RF286**	Price
1	3/4	2	4-1/4	4	**CV90RF326**	Price	**CV95RF326**	Price	**CV97RF326**	Price
1	1	2	4-1/2	6	**CV90RF328**	Price	**CV95RF328**	Price	**CV97RF328**	Price
1-1/8	3/4	2	4-1/4	6	**CV90RF366**	Price	**CV95RF366**	Price	**CV97RF366**	Price
1-1/8	1	2	4-1/2	6	**CV90RF368**	Price	**CV95RF368**	Price	**CV97RF368**	Price
1-1/4	3/4	2	4-1/4	6	**CV90RF406**	Price	**CV95RF406**	Price	**CV97RF406**	Price
1-1/4	1-1/4	2	4-1/2	6	**CV90RF4010**	Price	**CV95RF4010**	Price	**CV97RF4010**	Price
1-1/2	3/4	2	4-1/4	6	**CV90RF486**	Price	**CV95RF486**	Price	**CV97RF486**	Price
1-1/2	1-1/4	2	4-1/2	6	**CV90RF4810**	Price	**CV95RF4810**	Price	**CV97RF4810**	Price
-	-	-	-	-	**CV90RF64162**	Price	**-**	-	**-**	-
2	2	3	6-3/4	8	**CV90RF64163**	Price	**-**	-	**CV97RF64163**	Price

Length - Long										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
5/8	5/8	2-1/2	4-5/8	4	**CV90RFL205**	Price	**CV95RFL205**	Price	**CV97RFL205**	Price
3/4	3/4	2-1/2	4-3/4	4	**CV90RFL246**	Price	**CV95RFL246**	Price	**CV97RFL246**	Price
1	1	3	5-1/2	5	**CV90RFL328**	Price	**CV95RFL328**	Price	**CV97RFL328**	Price
1-1/4	1-1/4	4	6-1/2	6	**CV90RFL4010**	Price	**CV95RFL4010**	Price	**CV97RFL4010**	Price
1-1/2	1-1/4	4	6-1/2	6	**CV90RFL4810**	Price	**CV95RFL4810**	Price	**CV97RFL4810**	Price

RAPIDKUT® Multiple Flute Roughing End Mills

8% M-42 Cobalt

- Precision ground knuckle type
- Designed for machining low alloy, high strength steels and die steels



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1/4	3/8	5/8	2-7/16	3	**CV45CR83U**	Price
5/16	3/8	3/4	2-1/2	3	**CV45CR103U**	Price
3/8	3/8	3/4	2-1/2	4	**CV45CR123U**	Price
1/2	1/2	1-1/4	3-1/4	4	**CV45CR164U**	Price
1/2	1/2	2	4	4	**CV45CL164U**	Price
5/8	5/8	1-5/8	3-3/4	4	**CV45CR205U**	Price
3/4	3/4	1-5/8	3-7/8	4	**CV45CR246U**	Price
3/4	3/4	3	5-1/4	4	**CV45CL246U**	Price
1	3/4	2	4-1/4	5	**CV45CR326U**	Price
1	1	2	4-1/2	5	**CV45CR328U**	Price
1	1	4	6-1/2	5	**CV45CL328U**	Price
1-1/4	1-1/4	2	4-1/2	6	**CV45CR4010U**	Price
1-1/4	1-1/4	4	6-1/2	6	**CV45CL4010U**	Price
1-1/2	1-1/4	2	4-1/2	6	**CV45CR4810U**	Price
1-1/2	1-1/4	4	6-1/2	6	**CV45CL4810U**	Price
2	1-1/4	2	4-1/2	8	**CV45CR6410U**	Price
2	2	6	9-3/4	8	**CV45CM64166U**	Price
2	2	8	11-3/4	8	**CV45CL64168U**	Price

RAPIDKUT® Multiple Flute Roughing End Mills

High Speed Steel

- Precision ground knuckle type
- Provides a more economical tool
- For rough milling low tensile, non-ferrous material and soft steel



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1/4	3/8	5/8	2-7/16	3	**CV30HR83U**	Price
5/16	3/8	3/4	2-1/2	3	**CV30HR103U**	Price
3/8	3/8	3/4	2-1/2	4	**CV30HR123U**	Price
1/2	1/2	1-1/4	3-1/4	4	**CV30HR164U**	Price
1/2	1/2	2	4	4	**CV30HL164U**	Price
5/8	5/8	1-5/8	3-3/4	4	**CV30HR205U**	Price
3/4	3/4	1-5/8	3-7/8	4	**CV30HR246U**	Price
3/4	3/4	3	5-1/4	4	**CV30HL246U**	Price
1	3/4	2	4-1/4	5	**CV30HR326U**	Price
1	1	2	4-1/2	5	**CV30HR328U**	Price
1	1	3	5-1/2	5	**CV30HM328U**	Price
1	1	4	6-1/2	5	**CV30HL328U**	Price
1-1/4	3/4	2	4-1/4	6	**CV30HR406U**	Price
1-1/4	1-1/4	2	4-1/2	6	**CV30HR4010U**	Price
1-1/4	1-1/4	4	6-1/2	6	**CV30HL4010U**	Price
1-1/2	3/4	2	4-1/4	6	**CV30HR486U**	Price
1-1/2	1-1/4	2	4-1/2	6	**CV30HR4810U**	Price
1-1/2	1-1/4	4	6-1/2	6	**CV30HL4810U**	Price
2	1-1/4	2	4-1/2	8	**CV30HR6410U**	Price
2	2	6	9-3/4	8	**CV30HM64166U**	Price
2	2	8	11-3/4	8	**CV30HL64168U**	Price

Multiple Flute Roughing End Mills

8% Cobalt

- Coarse tooth–best for steel up to 30 HRC
- Fine tooth–best for material 20-45 HRC
- Coarse Tooth - OSG List #490
- Fine Tooth - OSG List #450



				Coarse			Fine		
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	No. of Flutes	Order No.	Price
1/4	3/8	3/4	2-1/2	4	**TP364909100**	Price	3	**TP364509100**	Price
5/16	3/8	3/4	2-1/2	4	**TP364909400**	Price	3	**TP364509400**	Price
3/8	3/8	1-1/2	3-1/4	4	**TP364909800**	Price	-	**-**	-
3/8	3/8	7/8	2-5/8	4	**TP364909700**	Price	4	**TP364509700**	Price
7/16	3/8	1	2-11/16	4	**TP364909900**	Price	4	**TP364509900**	Price
1/2	1/2	1-1/4	3-1/4	4	**TP364900100**	Price	4	**TP364500100**	Price
1/2	1/2	2	4	4	**TP364900300**	Price	4	**TP364500300**	Price
5/8	5/8	1-5/8	3-3/4	4	**TP364900500**	Price	4	**TP364500500**	Price
5/8	5/8	2-1/2	4-5/8	4	**TP364900700**	Price	-	**-**	-
3/4	3/4	1-5/8	3-7/8	4	**TP364901300**	Price	4	**TP364501300**	Price
3/4	3/4	3	5-1/4	4	**TP364901500**	Price	4	**TP364501500**	Price
7/8	3/4	1-7/8	4-1/8	5	**TP364901700**	Price	-	**-**	-
7/8	7/8	1-7/8	4-1/8	5	**TP364902100**	Price	5	**TP364502100**	Price
1	3/4	2	4-1/4	5	**TP364910100**	Price	5	**TP364510100**	Price
1	1	2	4-1/2	5	**TP364910500**	Price	5	**TP364510500**	Price
1	1	3	5-1/2	5	**TP364910700**	Price	5	**TP364510700**	Price
1-1/4	3/4	4	6-1/4	6	**TP364911900**	Price	-	**-**	-
1-1/4	1-1/4	2	4-1/2	6	**TP364912100**	Price	6	**TP364512100**	Price
1-1/4	1-1/4	4	6-1/2	6	**TP364912500**	Price	-	**-**	-
2	1-1/4	2	4-1/2	8	**TP364920100**	Price	8	**TP364520100**	Price

4 Pc. Roughing End Mill Sets

- 1 Each: 1/2, 5/8, 3/4 x 3/4” shank, 1 x 3/4” shank
- High speed steel
- 8% Cobalt or TiN coated



Price

RAPIDKUT® PROCUT PROCUT II PREMIUM CUTTING TOOLS

			ProCut		ProCut II	
Type	Order No.	Price	Order No.	Price	Order No.	Price
M-2 High Speed Steel	**CV65HRS4U**	Price	**-**	-	**-**	-
Cobalt	**CV65CRS4U**	Price	**-**	-	**CV50CRS4**	Price
TiN	**-**	-	**CV70CRS4**	Price	**-**	-

4 Pc. Roughing End Mill Sets

- 1 Each: 1/4, 5/16, 3/8, 1/2”
- High speed steel
- 8% Cobalt or TiN coated



RAPIDKUT® PROCUT PROCUT II PREMIUM CUTTING TOOLS

			ProCut		ProCut II	
Type	Order No.	Price	Order No.	Price	Order No.	Price
M-2 High Speed Steel	**CV65HRS3U**	Price	**-**	-	**-**	-
Cobalt	**CV65CRS3U**	Price	**-**	-	**CV50CRS3**	Price
TiN	**-**	-	**CV70CRS3**	Price	**-**	-

HSS MORSE M PM M-42 8% Cobalt Coarse & Fine Tooth Roughing End Mills

Roughing end mills feature a chip breaker type cutting edge for heavier cuts, high speeds and feeds and greatly increased productivity

Coarse Tooth Center Cutting 30° Helix:

- Recommended for a wide variety of materials of soft and medium hardness including titantion and aluminum alloys

TiN Coating:

- TiN coating allows increased feeds over uncoated end mills
- Improves chip flow, resists galling and edge build up and reduces heat generated in the metal removal process
- Ideal for a wide range of applications where improved tool life and elevated feeds and speeds are required

Fine Tooth Center Cutting 30° Helix:

- Recommended for difficult to machine, high tensile strength, abrasive and harder materials up to 40 Rc

TiCN Coating:

- TiCN coating has the same lubricity as TiN but is more than 30% harder. This makes it the optimum choice for maximizing tool life in production runs
- Ideal for operating at aggressive feeds and speeds and for cutting extremely abrasive and difficult-to-cut materials

Coarse Tooth





Fine Tooth

Tooth Type - Coarse										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/2	1-1/4	3-1/4	4	**CV3244910**	Price	**CV3244921**	Price	**CV3244932**	Price
1/2	1/2	2	4	4	**CV3244943**	Price	**CV3244952**	Price	**CV3244961**	Price
5/8	5/8	1-5/8	3-3/4	4	**CV3244911**	Price	**CV3244922**	Price	**CV3244933**	Price
5/8	5/8	2-1/2	4-5/8	4	**CV3244944**	Price	**CV3244953**	Price	**CV3244962**	Price
3/4	3/4	1-5/8	3-7/8	4	**CV3244912**	Price	**CV3244923**	Price	**CV3244934**	Price
3/4	3/4	3	5-1/4	4	**CV3244945**	Price	**CV3244954**	Price	**CV3244963**	Price
7/8	3/4	1-7/8	4-1/8	5	**CV3244913**	Price	**CV3244924**	Price	**CV3244935**	Price
1	1	2	4-1/2	5	**CV3244914**	Price	**CV3244925**	Price	**CV3244936**	Price
1	1	2	5-1/2	5	**CV3244946**	Price	**CV3244955**	Price	**CV3244964**	Price
1	1	3	6-1/2	5	**CV3244947**	Price	**CV3244956**	Price	**CV3244965**	Price
1-1/4	1-1/4	2	4-1/2	6	**CV3244915**	Price	**CV3244926**	Price	**CV3244937**	Price
1-1/4	1-1/4	3	5-1/2	6	**CV3244948**	Price	**CV3244957**	Price	**CV3244966**	Price
1-1/4	1-1/4	4	6-1/2	6	**CV3244949**	Price	**CV3244958**	Price	**CV3244967**	Price
1-1/2	1-1/4	2	4-1/2	6	**CV3244916**	Price	**CV3244927**	Price	**CV3244938**	Price
1-1/2	1-1/4	3	5-1/2	6	**CV3244950**	Price	**CV3244959**	Price	**CV3244968**	Price
1-1/2	1-1/4	4	6-1/2	6	**CV3244951**	Price	**CV3244960**	Price	**CV3244969**	Price

Tooth Type - Fine										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/2	1-1/4	3-1/4	4	**CV3244970**	Price	**CV3244981**	Price	**CV3245050**	Price
1/2	1/2	2	4	4	**CV3245061**	Price	**CV3245070**	Price	**CV3245079**	Price
5/8	5/8	1-5/8	3-3/4	4	**CV3244971**	Price	**CV3244982**	Price	**CV3245051**	Price
5/8	5/8	2-1/2	4-5/8	4	**CV3245062**	Price	**CV3245071**	Price	**CV3245080**	Price
3/4	3/4	1-5/8	3-7/8	4	**CV3244972**	Price	**CV3244983**	Price	**CV3245052**	Price
3/4	3/4	3	5-1/4	4	**CV3245063**	Price	**CV3245072**	Price	**CV3245081**	Price
7/8	3/4	1-7/8	4-1/8	5	**CV3244973**	Price	**CV3244984**	Price	**CV3245053**	Price
1	1	2	4-1/2	5	**CV3244974**	Price	**CV3244985**	Price	**CV3245054**	Price
1	1	3	5-1/2	5	**CV3245064**	Price	**CV3245073**	Price	**CV3245082**	Price
1	1	4	6-1/2	5	**CV3245065**	Price	**CV3245074**	Price	**CV3245083**	Price
1-1/4	1-1/4	2	4-1/2	6	**CV3244975**	Price	**CV3244986**	Price	**CV3245055**	Price
1-1/4	1-1/4	3	5-1/2	6	**CV3245066**	Price	**CV3245075**	Price	**CV3245084**	Price
1-1/4	1-1/4	4	6-1/2	6	**CV3245067**	Price	**CV3245076**	Price	**CV3245085**	Price
1-1/2	1-1/4	2	4-1/2	6	**CV3244976**	Price	**CV3244987**	Price	**CV3245056**	Price
1-1/2	1-1/4	3	5-1/2	6	**CV3245068**	Price	**CV3245077**	Price	**CV3245086**	Price
1-1/2	1-1/4	4	6-1/2	6	**CV3245069**	Price	**CV3245078**	Price	**CV3245087**	Price

PRO CUT II PREMIUM CUTTING TOOLS M-42 Cobalt — Fine Tooth Roughing End Mills

- For high production milling in difficult to machine materials such as iconel, hastalloy, titanium alloys and other materials up to 40 Rc.
- The pressure of the cut is distributed over many teeth
- Less friction
- Breakage and cracks are eliminated
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials



Style - Stub

					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/8	1/4	2-1/16	3	**CV80SFR83**	Price	**CV82SFR83**	Price	**CV83SFR83**	Price
3/8	3/8	3/8	2-5/32	3	**CV80SFR123**	Price	**CV82SFR123**	Price	**CV83SFR123**	Price
1/2	1/2	1/2	2-1/2	3	**CV80SFR164**	Price	**CV82SFR164**	Price	**CV83SFR164**	Price
5/8	5/8	5/8	2-3/4	3	**CV80SFR205**	Price	**CV82SFR205**	Price	**CV83SFR205**	Price
3/4	3/4	3/4	2-7/8	3	**CV80SFR246**	Price	**CV82SFR246**	Price	**CV83SFR246**	Price
7/8	3/4	7/8	3-1/8	3	**CV80SFR286**	Price	**CV82SFR286**	Price	**CV83SFR286**	Price
1	3/4	1	3-1/4	3	**CV80SFR326**	Price	**CV82SFR326**	Price	**CV83SFR326**	Price
1	1	1	3-1/2	3	**CV80SFR328**	Price	**CV82SFR328**	Price	**CV83SFR328**	Price

Style - Standard

					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/8	5/8	2-7/16	3	**CV80FCR83**	Price	**CV82FCR83**	Price	**CV83FCR83**	Price
5/16	3/8	3/4	2-1/2	3	**CV80FCR103**	Price	**CV82FCR103**	Price	**CV83FCR103**	Price
3/8	3/8	3/4	2-1/2	4	**CV80FCR123**	Price	**CV82FCR123**	Price	**CV83FCR123**	Price
7/16	3/8	1	2-11/16	4	**CV80FCR143**	Price	**CV82FCR143**	Price	**CV83FCR143**	Price
1/2	1/2	1-1/4	3-1/4	4	**CV80FCR164**	Price	**CV82FCR164**	Price	**CV83FCR164**	Price
9/16	1/2	1-3/8	3-3/8	4	**CV80FCR184**	Price	**CV82FCR184**	Price	**CV83FCR184**	Price
5/8	5/8	1-5/8	3-3/4	4	**CV80FCR205**	Price	**CV82FCR205**	Price	**CV83FCR205**	Price
3/4	5/8	1-5/8	3-3/4	4	**CV80FCR245**	Price	**CV82FCR245**	Price	**CV83FCR245**	Price
3/4	3/4	1-5/8	3-7/8	4	**CV80FCR246**	Price	**CV82FCR246**	Price	**CV83FCR246**	Price
7/8	3/4	1-7/8	4-1/8	5	**CV80FCR286**	Price	**CV82FCR286**	Price	**CV83FCR286**	Price
7/8	7/8	1-7/8	4-1/8	5	**CV80FCR287**	Price	**CV82FCR287**	Price	**CV83FCR287**	Price
1	3/4	2	4-1/4	5	**CV80FCR326**	Price	**CV82FCR326**	Price	**CV83FCR326**	Price
1	1	2	4-1/2	5	**CV80FCR328**	Price	**CV82FCR328**	Price	**CV83FCR328**	Price
1-1/8	3/4	2	4-1/4	6	**CV80FCR366**	Price	**CV82FCR366**	Price	**CV83FCR366**	Price
1-1/8	1	2	4-1/2	6	**CV80FCR368**	Price	**CV82FCR368**	Price	**CV83FCR368**	Price
1-1/4	3/4	2	4-1/4	6	**CV80FCR406**	Price	**CV82FCR406**	Price	**CV83FCR406**	Price
1-1/4	1-1/4	2	4-1/2	6	**CV80FCR4010**	Price	**CV82FCR4010**	Price	**CV83FCR4010**	Price
1-3/8	3/4	2	4-1/4	6	**CV80FCR446**	Price	**CV82FCR446**	Price	**CV83FCR446**	Price
1-1/2	3/4	2	4-1/4	6	**CV80FCR486**	Price	**CV82FCR486**	Price	**CV83FCR486**	Price
1-1/2	1-1/4	2	4-1/2	6	**CV80FCR4810**	Price	**CV82FCR4810**	Price	**CV83FCR4810**	Price
2	3/4	2	4-1/4	6	**CV80FCR646**	Price	**CV82FCR646**	Price	**CV83FCR646**	Price
2	1-1/4	2	4-1/2	6	**CV80FCR6410**	Price	**CV82FCR6410**	Price	**CV83FCR6410**	Price

Style - Medium

					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1	1	3	5-1/2	5	**CV80FCM328**	Price	**CV82FCM328**	Price	**CV83FCM328**	Price
1-1/4	1-1/4	3	5-1/2	6	**CV80FCM4010**	Price	**CV82FCM4010**	Price	**CV83FCM4010**	Price
1-1/2	1-1/4	3	5-1/2	6	**CV80FCM4810**	Price	**CV82FCM4810**	Price	**CV83FCM4810**	Price

Style - Long

					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/2	2	4	4	**CV80FCL164**	Price	**CV82FCL164**	Price	**CV83FCL164**	Price
5/8	5/8	2-1/2	4-5/8	4	**CV80FCL205**	Price	**CV82FCL205**	Price	**CV83FCL205**	Price
3/4	5/8	3	5-1/8	4	**CV80FCL245**	Price	**CV82FCL245**	Price	**CV83FCL245**	Price
3/4	3/4	3	5-1/4	4	**CV80FCL246**	Price	**CV82FCL246**	Price	**CV83FCL246**	Price
7/8	7/8	3-1/2	5-3/4	5	**CV80FCL287**	Price	**CV82FCL287**	Price	**CV83FCL287**	Price
1	1	4	6-1/2	5	**CV80FCL328**	Price	**CV82FCL328**	Price	**CV83FCL328**	Price
1-1/4	1-1/4	4	6-1/2	6	**CV80FCL4010**	Price	**CV82FCL4010**	Price	**CV83FCL4010**	Price
1-1/2	3/4	4	6-1/4	6	**CV80FCL486**	Price	**CV82FCL486**	Price	**CV83FCL486**	Price
1-1/2	1-1/4	4	6-1/2	6	**CV80FCL4810**	Price	**CV82FCL4810**	Price	**CV83FCL4810**	Price
1-3/4	1-1/4	4	6-1/2	6	**CV80FCL5610**	Price	**CV82FCL5610**	Price	**CV83FCL5610**	Price
2	1-1/4	4	6-1/2	6	**CV80FCL6410**	Price	**CV82FCL6410**	Price	**CV83FCL6410**	Price

PRO CUT II PREMIUM CUTTING TOOLS Coarse Tooth Roughing End Mills for Bridgeports

M-42 Cobalt • 3/4" Shank



- For general purpose milling of soft to medium hard materials
- Suitable for heavier feed rates
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials

				Uncoated		TiN		TiCN	
Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1	1-1/8	3-3/8	6	**CV50CRS32**	Price	**CV70CRS32**	Price	**CV72CRS32**	Price
1-1/8	1-1/8	3-3/8	6	**CV50CRS36**	Price	**CV70CRS36**	Price	**CV72CRS36**	Price
1-1/4	1-1/8	3-3/8	6	**CV50CRS40**	Price	**CV70CRS40**	Price	**CV72CRS40**	Price
1-3/8	1-1/8	3-3/8	6	**CV50CRS44**	Price	**CV70CRS44**	Price	**CV72CRS44**	Price
1-1/2	1-1/8	3-3/8	6	**CV50CRS48**	Price	**CV70CRS48**	Price	**CV72CRS48**	Price
1-3/4	1-1/8	3-3/8	6	**CV50CRS56**	Price	**CV70CRS56**	Price	**CV72CRS56**	Price
2	1-1/8	3-3/8	8	**CV50CRS64**	Price	**CV70CRS64**	Price	**CV72CRS64**	Price

PRO CUT II PREMIUM CUTTING TOOLS 3 Flute Coarse Tooth Roughing End Mills

M-42 Cobalt • Stub Length



- For general purpose milling of soft to medium hard materials
- Suitable for heavier feed rates
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials

				Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/8	1/4	2-1/16	**CV50CS83**	Price	**CV70CS83**	Price	**CV72CS83**	Price
3/8	3/8	3/8	2-5/32	**CV50CS123**	Price	**CV70CS123**	Price	**CV72CS123**	Price
1/2	1/2	1/2	2-1/2	**CV50CS164**	Price	**CV70CS164**	Price	**CV72CS164**	Price
5/8	5/8	5/8	2-3/4	**CV50CS205**	Price	**CV70CS205**	Price	**CV72CS205**	Price
3/4	3/4	3/4	2-7/8	**CV50CS246**	Price	**CV70CS246**	Price	**CV72CS246**	Price
7/8	3/4	7/8	3-1/4	**CV50CS286**	Price	**CV70CS286**	Price	**CV72CS286**	Price
1	1	1	3-1/2	**CV50CS328**	Price	**CV70CS328**	Price	**CV72CS328**	Price

PRO CUT II PREMIUM CUTTING TOOLS 3 Flute Fine Tooth Roughing End Mills

M-42 Cobalt • Center Cutting • 45° Helix



- Use for milling operations in hard materials
- 3-flute design and high shear angle aids in chip removal and produces better finishes than coarse tooth design
- TiN coating improves tool life and allows elevated speeds and feeds

				Uncoated		TiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/4	3/8	5/8	2-7/16	**CV80FCH83**	Price	**CV82FCH83**	Price
5/16	3/8	3/4	2-1/2	**CV80FCH103**	Price	**CV82FCH103**	Price
3/8	3/8	3/4	2-1/2	**CV80FCH123**	Price	**CV82FCH123**	Price
1/2	1/2	1-1/4	3-1/4	**CV80FCH164**	Price	**CV82FCH164**	Price
1/2	1/2	2	4	**CV80FCH164L**	Price	**CV82FCH164L**	Price
5/8	5/8	1-5/8	3-3/4	**CV80FCH205**	Price	**CV82FCH205**	Price
5/8	5/8	2-1/2	4-5/8	**CV80FCH205L**	Price	**CV82FCH205L**	Price
3/4	3/4	1-5/8	3-3/4	**CV80FCH246**	Price	**CV82FCH246**	Price
3/4	3/4	3	5-1/4	**CV80FCH246L**	Price	**CV82FCH246L**	Price
7/8	3/4	1-7/8	4-1/8	**CV80FCH286**	Price	**CV82FCH286**	Price
7/8	3/4	3-1/2	5-3/4	**CV80FCH286L**	Price	**CV82FCH286L**	Price
1	3/4	2	4-1/2	**CV80FCH326**	Price	**CV82FCH326**	Price
1	1	2	4-1/2	**CV80FCH328**	Price	**CV82FCH328**	Price
1	1	4	6-1/2	**CV80FCH328L**	Price	**CV82FCH328L**	Price
1-1/8	3/4	2	4-1/2	**CV80FCH366**	Price	**CV82FCH366**	Price
1-1/4	1-1/4	2	4-1/2	**CV80FCH4010**	Price	**CV82FCH4010**	Price
1-1/4	1-1/4	4	6-1/2	**CV80FCH4010L**	Price	**CV82FCH4010L**	Price
1-1/2	1-1/4	2	4-1/2	**CV80FCH4810**	Price	**CV82FCH4810**	Price
1-1/2	1-1/4	4	6-1/2	**CV80FCH4810L**	Price	**CV82FCH4810L**	Price
1-3/4	1-1/4	2	4-1/2	**CV80FCH5610**	Price	**CV82FCH5610**	Price
2	1-1/4	2	4-1/2	**CV80FCH6410**	Price	**CV82FCH6410**	Price
2	1-1/4	4	6-1/2	**CV80FCH6410L**	Price	**CV82FCH6410L**	Price

PRO CUT II PREMIUM CUTTING TOOLS 3-Flute Roughing End Mills for Aluminum

M-42 Cobalt



- For rapid stock removal in aluminum and other alloys
- The three flute design improves chip flow and prevents flutes from loading up
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials

Length - Standard											
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/8	5/8	2-7/16	3	**CV51ACR83**	Price	**CV71ACR83**	Price	**CV73ACR83**	Price
5/16	3/8	3/4	2-1/2	3	**CV51ACR103**	Price	**CV71ACR103**	Price	**CV73ACR103**	Price
3/8	3/8	3/4	2-1/2	3	**CV51ACR123**	Price	**CV71ACR123**	Price	**CV73ACR123**	Price
1/2	1/2	1-1/4	3-1/4	3	**CV51ACR164**	Price	**CV71ACR164**	Price	**CV73ACR164**	Price
5/8	5/8	1-5/8	3-3/4	3	**CV51ACR205**	Price	**CV71ACR205**	Price	**CV73ACR205**	Price

(continued on next page)

PRO CUT II PREMIUM CUTTING TOOLS 3-Flute Roughing End Mills for Aluminum (cont.)



Length - Standard											
					Uncoated		TiN		TiCN		
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price	
3/4	3/4	1-5/8	3-7/8	3	**CV51ACR246**	Price	**CV71ACR246**	Price	**CV73ACR246**	Price	
7/8	3/4	1-7/8	4-1/8	3	**CV51ACR286**	Price	**CV71ACR286**	Price	**CV73ACR286**	Price	
1	3/4	2	4-1/4	3	**CV51ACR326**	Price	**CV71ACR326**	Price	**CV73ACR326**	Price	
1	1	2	4-1/2	3	**CV51ACR328**	Price	**CV71ACR328**	Price	**CV73ACR328**	Price	
1-1/4	1-1/4	2	4-1/2	3	**CV51ACR4010**	Price	**CV71ACR4010**	Price	**CV73ACR4010**	Price	
1-1/2	1-1/4	2	4-1/2	3	**CV51ACR4810**	Price	**CV71ACR4810**	Price	**CV73ACR4810**	Price	

Length - Long										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/2	2	4	3	**CV51ACL164**	Price	**CV71ACL164**	Price	**CV73ACL164**	Price
5/8	5/8	2-1/2	4-5/8	3	**CV51ACL205**	Price	**CV71ACL205**	Price	**CV73ACL205**	Price
3/4	3/4	3	5-1/4	3	**CV51ACL245**	Price	**CV71ACL245**	Price	**CV73ACL245**	Price
1	1	4	6-1/2	3	**CV51ACL328**	Price	**CV71ACL328**	Price	**CV73ACL328**	Price
1-1/4	1-1/4	4	6-1/2	3	**CV51ACL4010**	Price	**CV71ACL4010**	Price	**CV73ACL4010**	Price
1-1/2	1-1/4	4	6-1/2	3	**CV51ACL4810**	Price	**CV71ACL4810**	Price	**CV73ACL4810**	Price

PRO CUT II PREMIUM CUTTING TOOLS Coarse Tooth Ball Nose Roughing End Mills



M-42 Cobalt

- For general purpose milling of soft to medium hard materials
- Suitable for heavier feed rates
- TiN coating improves tool life and allows elevated feeds and speeds
- TiCN coating is ideal for cutting extremely abrasive or difficult to cut materials

Length - Standard										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/4	3/8	5/8	2-7/16	3	**CV50CRB83**	Price	**CV70CRB83**	Price	**CV72CRB83**	Price
5/16	3/8	3/4	2-1/2	3	**CV50CRB103**	Price	**CV70CRB103**	Price	**CV72CRB103**	Price
3/8	3/8	3/4	2-1/2	4	**CV50CRB123**	Price	**CV70CRB123**	Price	**CV72CRB123**	Price
1/2	1/2	1-1/4	3-1/4	4	**CV50CRB164**	Price	**CV70CRB164**	Price	**CV72CRB164**	Price
5/8	5/8	1-5/8	3-3/4	4	**CV50CRB205**	Price	**CV70CRB205**	Price	**CV72CRB205**	Price
3/4	3/4	1-3/4	4	4	**CV50CRB246**	Price	**CV70CRB246**	Price	**CV72CRB246**	Price
1	3/4	2	4-1/2	5	**CV50CRB326**	Price	**CV70CRB326**	Price	**CV72CRB326**	Price
1	1	2	4-1/2	5	**CV50CRB328**	Price	**CV70CRB328**	Price	**CV72CRB328**	Price
1-1/4	3/4	2	4-1/2	6	**CV50CRB406**	Price	**CV70CRB406**	Price	**CV72CRB406**	Price
1-1/4	1-1/4	2	4-1/2	6	**CV50CRB4010**	Price	**CV70CRB4010**	Price	**CV72CRB4010**	Price
1-1/2	3/4	2	4-1/2	6	**CV50CRB486**	Price	**CV70CRB486**	Price	**CV72CRB486**	Price
1-1/2	1-1/4	2	4-1/2	6	**CV50CRB4810**	Price	**CV70CRB4810**	Price	**CV72CRB4810**	Price

Length - Long										
					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/2	2-1/2	4-1/2	4	**CV50CLB164**	Price	**CV70CLB164**	Price	**CV72CLB164**	Price
5/8	5/8	2-1/2	4-5/8	4	**CV50CLB205**	Price	**CV70CLB205**	Price	**CV72CLB205**	Price
3/4	3/4	3	5-1/4	4	**CV50CLB246**	Price	**CV70CLB246**	Price	**CV72CLB246**	Price
1	1	4	6-1/2	5	**CV50CLB328**	Price	**CV70CLB328**	Price	**CV72CLB328**	Price
1-1/4	1-1/4	4	6-1/2	6	**CV50CLB4010**	Price	**-**	-	**CV72CLB4010**	Price
1-1/2	1-1/4	4	6-1/2	6	**CV50CLB4810**	Price	**-**	-	**CV72CLB4810**	Price

PRO CUT M-2 and M2-AL Roughing End Mills



M-2 High Speed Steel • M-2-AL Premium High Speed Steel with Aluminum Content

- For extremely rapid stock removal
- These mills can remove material up to three times the rate of regular steel or premium steel conventional mills

Length - Standard								
					M-2 High Speed Steel		Premium M-2-AL HSS	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1/4	3/8	5/8	2-7/16	4	**CV40HR83**	Price	**CV75MAR83**	Price
5/16	3/8	3/4	2-1/2	4	**CV40HR103**	Price	**CV75MAR103**	Price
3/8	3/8	3/4	2-1/2	4	**CV40HR123**	Price	**CV75MAR123**	Price
7/16	3/8	1	2-11/16	4	**CV40HR143**	Price	**CV75MAR143**	Price
1/2	1/2	1-1/4	3-1/4	4	**CV40HR164**	Price	**CV75MAR164**	Price
5/8	5/8	1-5/8	3-3/4	4	**CV40HR205**	Price	**CV75MAR205**	Price
11/16	5/8	1-5/8	3-3/4	4	**CV40HR225**	Price	**CV75MAR225**	Price
3/4	5/8	1-5/8	3-3/4	4	**CV40HR245**	Price	**CV75MAR245**	Price
3/4	3/4	1-5/8	3-3/4	4	**CV40HR246**	Price	**CV75MAR246**	Price
7/8	3/4	1-5/8	4-1/8	4	**CV40HR286**	Price	**CV75MAR286**	Price
7/8	7/8	1-7/8	4-1/8	4	**CV40HR287**	Price	**CV75MAR287**	Price
15/16	3/4	1-7/8	4-1/8	4	**-**	-	**CV75MAR306**	Price
1	3/4	2	4-1/2	6	**CV40HR326**	Price	**CV75MAR326**	Price
1	1	2	4-1/2	6	**CV40HR328**	Price	**CV75MAR328**	Price
1-1/8	3/4	2	4-1/2	6	**CV40HR366**	Price	**-**	-
1-1/8	1	2	4-1/2	6	**CV40HR368**	Price	**CV75MAR368**	Price
1-1/4	3/4	2	4-1/2	6	**CV40HR406**	Price	**-**	-
1-1/4	1-1/4	2	4-1/2	6	**CV40HR4010**	Price	**CV75MAR4010**	Price
1-1/2	3/4	2	4-1/2	6	**CV40HR486**	Price	**-**	-
1-1/2	1-1/4	2	4-1/2	6	**CV40HR4810**	Price	**CV75MAR4810**	Price

(continued on next page)

PROCUT M-2 and M2-AL Roughing End Mills (cont.)



Length - Standard								
					M-2 High Speed Steel		Premium M-2-AL HSS	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1-3/4	1-1/4	2	4-1/2	6	-	-	CV75MAR5610	Price
2	1-1/4	2	4-1/2	8	CV40HR6410	Price	CV75MAR6410	Price
2	2	2	5-3/4	8	-	-	CV75MAR64162	Price
2	2	3	6-3/4	6	-	-	CV75MAR64163	Price

Length - Medium								
					High Speed Steel		Premium M-2-AL HSS	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1-1/4	1-1/4	3	5-1/2	6	CV40HM4010	Price	-	-
2	2	5	8-3/4	8	-	-	CV75MAM64165	Price
2	2	6	9-3/4	8	CV40HM64166	Price	-	-
2-1/2	2-1/2	6	9-3/4	8	-	-	CV75MAM80206	Price

Length - Long								
					High Speed Steel		Premium M-2-AL HSS	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1/2	1/2	2	4	4	CV40HL164	Price	CV75MAL164	Price
5/8	5/8	2-1/2	4-5/8	4	CV40HL205	Price	CV75MAL205	Price
3/4	5/8	3	5-1/8	4	-	-	CV75MAL245	Price
3/4	3/4	3	5-1/4	4	CV40HL246	Price	CV75MAL246	Price
7/8	3/4	3-1/2	5-5/8	4	-	-	CV75MAL286	Price
7/8	7/8	3-1/2	5-3/4	4	CV40HL287	Price	CV75MAL287	Price
1	1	4	6-1/2	6	CV40HL328	Price	CV75MAL328	Price
1	1	6	8-1/2	6	-	-	CV75MAL328X	Price
1-1/4	3/4	4	6-1/4	6	CV40HL406	Price	CV75MAL406	Price
1-1/4	1-1/4	4	6-1/2	6	CV40HL4010	Price	CV75MAL4010	Price
1-1/4	1-1/4	6	8-1/2	6	-	-	CV75MAL40106	Price
1-1/2	3/4	4	6-1/4	6	CV40HL486	Price	CV75MAL486	Price
1-1/2	1-1/4	4	6-1/2	6	CV40HL4810	Price	CV75MAL4810	Price
1-1/2	1-1/4	6	8-1/2	6	-	-	CV75MAL48106	Price
1-3/4	1-1/4	4	6-1/2	6	-	-	CV75MAL5610	Price
2	1-1/4	4	6-1/2	8	CV40HL6410	Price	CV75MAL6410	Price
2	2	8	11-3/4	8	-	-	CV75MAL64168	Price
2	2	12	15-3/4	8	-	-	CV75MAL64162	Price
2-1/2	2-1/2	8	11-3/4	8	-	-	CV75MAL80208	Price

PROCUT M-2 and M2-AL Roughing End Mills - Stub Length

M-2 High Speed Steel • M-2-AL Premium High Speed Steel with Aluminum Content

- Stub length
- 3/4" Shank
- 1-1/8" Flute length
- 3-5/8" Overall length
- All sizes 6 flutes
- Aluminum alloy helps increase tool life by reducing friction
- For high speed & feed rates



	M-2 High Speed Steel		Premium M-2-AL HSS	
Dia. (in.)	Order No.	Price	Order No.	Price
1-1/8	CV40HRS36	Price	-	-
1-5/16	CV40HRS42	Price	CV75MARS42	Price
1-3/8	CV40HRS44	Price	CV75MARS44	Price
2	CV40HRS64†	Price	-	-

†2" Diameter supplied with 8 flutes.

PROCUT Heavy Duty Shell End Mills

High Speed Steel • Right Hand & Left Hand



				Left Hand		Right Hand	
Size (in.)	Hole Dia. (in.)	Length of Cut (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1-1/4	1/2	1	8	-	-	EE50116	Price
1-1/2	1/2	1-1/8	8	EE51132	Price	EE50132	Price
1-3/4	3/4	1-1/4	8	-	-	EE50148	Price
2	3/4	1-3/8	10	-	-	EE50200	Price
2-1/4	1	1-1/2	10	-	-	EE50216	Price
2-1/2	1	1-5/8	10	EE51232	Price	EE50232	Price
2-3/4	1	1-5/8	10	EE51248	Price	EE50248	Price
3	1-1/4	1-3/4	12	-	-	EE50300	Price
3-1/2	1-1/4	1-7/8	12	EE51332	Price	EE50332	Price
4	1-1/2	2-1/4	14	-		EE50400	Price
4-1/2	1-1/2	2-1/4	14	EE51432	Price	EE50432	Price
5	1-1/2	2-1/4	16	EE51500	Price	EE50500	Price
5-1/2	2	2-1/4	16	EE51532	Price	EE50532	Price
6	2	2-1/4	16	EE51600	Price	-	-

PROCUT Roughing End Mill Sets

- Standard length
- Includes wooden stand



No. of Pieces	Set Contents	Set Material	Order No.	Price
4	1/4, 5/16, 3/8, 1/2	M-2 High Speed Steel	CV65HRS3	Price
4	1/4, 5/16, 3/8, 1/2	Premium M-2-AL HSS	CV65MRS3	Price
4	1/2, 5/8, 3/4 x 3/4, 1 x 3/4	M-2 High Speed Steel	CV65HRS4	Price
4	1/2, 5/8, 3/4 x 3/4, 1 x 3/4	Premium M-2-AL HSS	CV65MRS4	Price

PROCUT II PREMIUM CUTTING TOOLS M-42 Cobalt Roughing Shell End Mills

Right Hand • Radius Teeth • Up To 300% Faster • Stock Removal



Size (in.)	Hole Dia. (in.)	Length of Cut (in.)	No. of Flutes	Order No.	Price
2	3/4	2	10	CV60CS6416	Price
2-1/4	1	2	10	CV60CS7216	Price
2-1/2	1	1-5/8	10	CV60CS8016	Price
2-3/4	1	2	10	CV60CS8816	Price
3	1-1/4	1-3/4	10	CV60CS9616	Price
3-1/2	1-1/4	2	10	CV60CS11216	Price
4	1-1/2	2-1/4	10	CV60CS12818	Price
4-1/2	1-1/2	2-1/4	12	CV60CS14418	Price
5	1-1/2	2-1/4	12	CV60CS16018	Price
5-1/2	2	2-1/4	14	CV60CS17618	Price
6	2	2-1/4	14	CV60CS19218	Price

PROCUT Shell End Mills for Aluminum

High Speed Steel
Right Hand • 25° Helix



Size (in.)	Hole Dia. (in.)	Length of Cut (in.)	No. of Flutes	Order No.	Price
1-1/4	1/2	1	4	EE52116A	Price
1-1/2	1/2	1-1/8	4	EE52132A	Price
1-3/4	3/4	1-1/4	4	EE52148A	Price
2	3/4	1-3/8	4	EE52200A	Price
2-1/4	1	1-1/2	4	EE52216A	Price
2-1/2	1	1-5/8	4	EE52232A	Price
2-3/4	1	1-5/8	6	EE52248A	Price
3	1-1/4	1-3/4	6	EE52300A	Price
3-1/2	1-1/4	1-7/8	6	EE52332A	Price
4	1-1/2	2-1/4	6	EE52400A	Price
5	1-1/2	2-1/4	8	EE52500A	Price

Tapered End Mills



High Speed Steel

- Premium grade M-7 high speed steel
- For milling or sinking dies and mold cavities
- Polished flutes for free chip passage
- Designed with a constant spiral for all degrees of taper to ensure faster and more accurate cutting

Taper per Side - 3°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	3/8	1/2	2-5/8	**CN543AA2**	Price
1/16	3/8	3/4	2-7/8	**CN543AA3**	Price
1/16	3/8	1	2-7/8	**CN543AA4**	Price
3/32	3/8	1-1/4	3-1/8	**CN543A5**	Price
3/32	3/8	1-1/2	3-1/4	**CN543A6**	Price
3/32	3/8	2	3-5/8	**CN543A8**	Price
3/32	3/8	2-1/2	4-1/2	**CN543A10**	Price
7/64	3/8	1	2-7/8	**CN543AX4**	Price
7/64	3/8	1-1/2	3-1/4	**CN543AX6**	Price
7/64	3/8	2	3-5/8	**CN543AX8**	Price
1/8	3/8	3/4	2-1/2	**CN543B3**	Price
1/8	3/8	1-1/2	3-1/4	**CN543B6**	Price
1/8	3/8	2	3-5/8	**CN543B8**	Price
1/8	3/8	3	5	**CN543B12**	Price
5/32	3/8	1	2-7/8	**CN543BX4**	Price
5/32	3/8	1-1/4	3-1/8	**CN543BX5**	Price
5/32	3/8	1-1/2	3-1/4	**CN543BX6**	Price
5/32	3/8	2	3-5/8	**CN543BX8**	Price
3/16	3/8	3/4	2-1/2	**CN543C3**	Price
3/16	3/8	1	2-7/8	**CN543C4A**	Price
3/16	3/8	1-1/4	3-1/8	**CN543C5**	Price
3/16	3/8	1-1/2	3-1/8	**CN543C6**	Price
3/16	5/8	4	6-1/2	**CN543C16**	Price
1/4	3/8	3/4	2-1/2	**CN543D3**	Price
1/4	3/8	1-1/4	3-1/8	**CN543D5**	Price
1/4	1/2	2-1/4	4-1/4	**CN543D9**	Price
3/8	1/2	1-1/4	3-1/8	**CN543F5**	Price
3/8	5/8	2-1/4	4-1/4	**CN543F9**	Price
1/2	1/2	1-1/4	3-1/8	**CN543H5**	Price
1/2	5/8	2-1/4	4-1/4	**CN543H9**	Price
3/4	1	2-1/4	4-3/4	**CN543J9**	Price

Taper per Side - 4°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	3/8	1	2-7/8	**CN544AX4A**	Price
3/32	3/8	1	2-7/8	**CN544A4**	Price
1/8	1/2	2	3-7/8	**CN544B8**	Price
3/16	3/8	3/4	2-1/2	**CN544C3**	Price
1/4	1/2	1-1/4	3-1/8	**CN544D5**	Price
3/8	1/2	1-1/4	3-1/8	**CN544F5**	Price
3/8	5/8	2-1/4	4-1/4	**CN544F9**	Price
1/2	1/2	1-1/4	3-1/8	**CN544H5**	Price

Taper per Side - 5°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	3/8	1/2	2-5/8	**CN555AA2**	Price
1/16	3/8	3/4	2-7/8	**CN555AA3**	Price
1/16	3/8	1	3-1/4	**CN555AA4**	Price
1/16	3/8	1-1/2	3-1/4	**CN555AA6**	Price
3/32	3/8	1/2	2-5/8	**CN555A2**	Price
3/32	3/8	3/4	2-1/2	**CN555A3**	Price
3/32	3/8	1	2-7/8	**CN555A4**	Price
3/32	3/8	1-1/4	3-1/8	**CN555A5**	Price
3/32	1/2	2	3-7/8	**CN555A8**	Price
3/32	1/2	2-1/2	4-1/2	**CN555A10**	Price
7/64	3/8	1	2-7/8	**CN555AX4**	Price
7/64	3/8	1-1/2	3-1/4	**CN555AX6**	Price

Taper per Side - 5°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
7/64	1/2	2	3-7/8	**CN555AX8**	Price
1/8	3/8	3/4	2-1/2	**CN555B3**	Price
1/8	3/8	1	2-7/8	**CN555B4**	Price
1/8	3/8	1-1/4	3-1/8	**CN555B5**	Price
1/8	1/2	2	3-7/8	**CN555B8**	Price
5/32	3/8	1	2-7/8	**CN555BX4**	Price
5/32	1/2	1-1/2	3-3/4	**CN555BX6**	Price
3/16	3/8	3/4	2-1/2	**CN555C3**	Price
3/16	1/2	1-1/4	3-1/8	**CN555C5**	Price
3/16	1/2	1-1/2	3-1/8	**CN555C6**	Price
3/16	1/2	2	4-1/8	**CN555C8**	Price
3/16	1/2	2-1/2	4-1/2	**CN555C10**	Price
3/16	1/2	3	5	**CN555C12S**	Price
3/16	3/4	3-1/4	5-1/2	**CN555C13**	Price
3/16	3/4	4	6-1/2	**CN555C16**	Price
1/4	3/8	3/4	2-7/8	**CN555D3**	Price
1/4	1/2	1	3	**CN555D4**	Price
1/4	1/2	1-1/4	3-1/8	**CN555D5**	Price
1/4	1/2	1-1/2	3-1/2	**CN555D6A**	Price
1/4	1/2	2-1/4	4-1/4	**CN555D9**	Price
5/16	5/8	2-1/4	4-1/4	**CN555E9A**	Price
3/8	1/2	1-1/4	3-1/8	**CN555F5**	Price
3/8	3/4	2-1/4	4-1/4	**CN555F9**	Price
1/2	1/2	1-1/4	3-1/8	**CN555H5**	Price
1/2	3/4	2-1/4	4-1/4	**CN555H9**	Price

Taper per Side - 7°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	3/8	1	2-7/8	**CN567AA4**	Price
1/16	1/2	1-1/2	3-1/4	**CN567AA6**	Price
3/32	3/8	3/4	2-1/2	**CN567A3A**	Price
3/32	3/8	1	2-7/8	**CN567A4**	Price
3/32	1/2	1-1/4	3-1/8	**CN567A5**	Price
3/32	1/2	1-1/2	3-1/4	**CN567A6**	Price
1/8	3/8	3/4	2-1/2	**CN567B3**	Price
1/8	3/8	1	2-7/8	**CN567B4**	Price
1/8	1/2	1-1/2	3-1/4	**CN567B6**	Price
1/8	5/8	2	4-1/8	**CN567B8**	Price
3/16	1/2	1-1/4	3-1/8	**CN567C5**	Price
3/16	3/4	3	5-1/4	**CN567C12**	Price
1/4	1/2	3/4	2-1/2	**CN567D3**	Price
1/4	1/2	1-1/4	3-1/8	**CN567D5**	Price
1/4	3/4	2-1/4	4-1/2	**CN567D9**	Price
3/8	3/4	2-1/4	4-1/4	**CN567F9**	Price
1/2	5/8	1-1/4	3-1/4	**CN567H5**	Price
1/2	3/4	1-1/4	3-1/4	**CN567H5A**	Price
1/2	1	2-1/4	4-3/4	**CN567H9**	Price
1/2	1-1/4	3-1/4	5-3/4	**CN567H13**	Price

Taper per Side - 10°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	3/8	1/2	2-3/8	**CN5710AA2A**	Price
1/16	3/8	3/4	2-5/8	**CN5710AA3A**	Price
1/16	1/2	1	2-7/8	**CN5710AA4A**	Price
3/32	3/8	1/2	2-1/2	**CN5710A2**	Price
3/32	3/8	3/4	2-7/8	**CN5710A3**	Price
3/32	1/2	1-1/2	3-3/8	**CN5710A6**	Price
1/8	1/2	3/4	2-1/2	**CN5710B3**	Price
1/8	1/2	1-1/4	3-1/8	**CN5710B5**	Price
1/8	1/2	1-1/2	3-1/2	**CN5710B6A**	Price
3/16	1/2	1-1/4	3-1/4	**CN5710C5**	Price
1/4	1/2	3/4	2-1/2	**CN5710D3**	Price
1/4	1/2	1-1/4	3-1/8	**CN5710D5**	Price
1/4	3/4	2-1/4	4-1/4	**CN5710D9**	Price
3/8	5/8	1-1/4	3-1/4	**CN5710F5**	Price
1/2	3/4	1-1/4	3-3/8	**CN5710H5**	Price
1/2	1	2-1/4	4-5/8	**CN5710H9**	Price
1/2	1-1/4	4	6-3/8	**CN5710H16**	Price

Taper per Side - 15°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/2	3/4	2-3/4	**CN5815AA3**	Price
3/32	3/8	1/2	2-3/8	**CN5815A2A**	Price
3/32	1/2	3/4	2-3/4	**CN5815A3**	Price
3/32	1/2	1	2-7/8	**CN5815A4**	Price
1/8	1/2	3/4	2-1/2	**CN5815B3**	Price
1/8	1/2	1/2	2-5/8	**CN5815B2A**	Price
1/8	1/2	1	3	**CN5815B4**	Price
1/8	1/2	1-1/4	3-1/4	**CN5815B5**	Price
1/8	1/2	1-1/2	3-1/4	**CN5815B6A**	Price
1/4	1/2	1	3-1/8	**CN5815D4**	Price
1/4	3/4	1-1/4	3-1/4	**CN5815D5**	Price
1/4	1/2	1-1/4	3-1/4	**CN5815D5S**	Price
1/4	3/4	1-1/2	3-3/4	**CN5815D6**	Price
1/4	3/4	2	4-1/2	**CN5815D8A**	Price
1/4	1	2-1/4	4-3/4	**CN5815D9**	Price
5/16	3/4	1	3-1/4	**CN5815E4**	Price
5/16	3/4	1-1/2	3-7/8	**CN5815E6A**	Price
3/8	3/4	1-1/4	3-1/2	**CN5815F5**	Price
1/2	3/4	1	3-1/4	**CN5815H4**	Price
1/2	3/4	1-1/4	3-1/2	**CN5815H5**	Price
1/2	1	1-3/4	4-1/4	**CN5815H7**	Price
1/2	1-1/4	2-1/4	4-3/4	**CN5815H9**	Price

Taper per Side - 20°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	3/8	1/2	2-1/2	**CN5820AX2A**	Price
3/32	1/2	3/4	2-3/4	**CN5820A3**	Price
1/8	3/8	1/2	2-1/2	**CN5820B2**	Price
1/8	1/2	1	3	**CN5820B4**	Price
3/16	1/2	1	3	**CN5820C4**	Price
3/16	3/4	1-1/2	3-3/4	**CN5820C6**	Price
1/4	1/2	1	3	**CN5820D4**	Price
1/4	3/4	1-1/2	3-3/4	**CN5820D6**	Price
5/16	3/4	1	3-1/4	**CN5820E4**	Price
5/16	3/4	1-1/2	3-3/4	**CN5820E6**	Price
3/8	3/4	1-1/2	3-3/4	**CN5820F6**	Price
1/2	1-1/4	2-1/4	4-3/4	**CN5820H9**	Price

Taper per Side - 25°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/32	1/2	3/4	3	**CN5825A3**	Price
1/8	1/2	1/2	2-1/2	**CN5825B2**	Price
1/8	1/2	1	3	**CN5825B4**	Price
1/4	5/8	1	3-1/4	**CN5825D4**	Price
1/4	3/4	1-1/2	3-3/4	**CN5825D6**	Price
3/8	1	1-1/2	4	**CN5825F6**	Price

Taper per Side - 30°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/2	1/2	2-1/2	**CN5830AX2A**	Price
3/32	1/2	3/4	2-3/4	**CN5830A3**	Price
1/8	1/2	1/2	2-1/2	**CN5830B2**	Price
1/8	1/2	1	3	**CN5830B4**	Price
1/4	3/4	1	3-1/4	**CN5830D4**	Price
1/4	1	1-1/2	4	**CN5830D6**	Price
3/8	1	1-1/4	3-3/4	**CN5830F5**	Price
1/2	1	1-1/2	4	**CN5830H6**	Price

Taper per Side - 45°

Tip Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/2	1/2	2-5/8	**CN5845B2A**	Price
1/8	5/8	3/4	3	**CN5845B3**	Price
1/8	1	1	3-3/4	**CN5845B4**	Price
1/4	1	1	4	**CN5845D4A**	Price

See website for additional sizes.

RAPIDKUT® 2 Flute Solid Carbide Single End Mills

Center Cutting • Stub, Regular and Long Lengths



- Used for general purpose milling in most materials of medium hardness such as steel, brass, iron and non-ferrous materials
- Made from premium submicron grain carbide
- 30° Helix

AlTiN TiCN TiN MCG

				AlTiN		TiCN		TiN		Uncoated	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	1/16	1-1/2	DD8252631	Price	DD8042631	Price	DD5522631	Price	DD5012631	Price
1/32	1/8	3/32	1-1/2	DD8256889	Price	DD802002TCN	Price	DD5526889	Price	DD502002S	Price
3/64	1/8	1/8	1-1/2	DD8256890	Price	DD802003TCN	Price	DD5526890	Price	DD5016890	Price
1/16	1/8	1/8	1-1/2	DD8252635	Price	DD8042635	Price	DD5522635	Price	DD5012635	Price
1/16	1/8	1/4	1-1/2	DD8256891	Price	DD802004STCN	Price	DD552004ST	Price	DD502004S	Price
1/16	1/8	3/8	1-1/2	DD8250765	Price	DD8040765	Price	DD5520765	Price	DD5010765	Price
5/64	1/8	1/8	1-1/2	DD8252637	Price	DD8042637	Price	DD5522637	Price	DD5012637	Price
5/64	1/8	1/4	1-1/2	DD8256892	Price	-	-	DD552005ST	Price	DD502005S	Price
3/32	1/8	3/16	1-1/2	DD8252639	Price	DD8042639	Price	DD5522639	Price	DD5012639	Price
3/32	1/8	3/8	1-1/2	DD8256893	Price	DD802006STCN	Price	DD552006ST	Price	DD502006S	Price
7/64	1/8	3/8	1-1/2	DD8256894	Price	-	-	DD552007ST	Price	DD502007S	Price
7/64	1/8	3/4	2	DD8250769	Price	DD8040769	Price	DD5520769	Price	DD5010769	Price
1/8	1/8	1/4	1-1/2	DD8257889	Price	DD8047889	Price	DD5527889	Price	DD5017889	Price
1/8	1/8	1/2	1-1/2	DD8256606	Price	DD802008STCN	Price	DD552008ST	Price	DD502008S	Price
1/8	1/8	5/8	2	DD8250173	Price	DD8040173	Price	DD5520173	Price	DD5010173	Price
1/8	1/8	3/4	3	DD8250175	Price	DD8040175	Price	DD5520175	Price	DD5010175	Price
1/8	1/8	1	3	DD8250177	Price	DD8040177	Price	DD552008SLT	Price	DD502008SL	Price
9/64	3/16	9/16	2	DD8257863	Price	-	-	DD552009ST	Price	DD502009S	Price
5/32	3/16	5/16	1-1/2	DD8252641	Price	DD8042641	Price	DD5522641	Price	DD5012641	Price
5/32	3/16	9/16	2	DD8257864	Price	DD802010STCN	Price	DD552010ST	Price	DD502010S	Price
11/64	3/16	9/16	2	DD8257865	Price	-	-	DD552011ST	Price	DD502011S	Price
3/16	3/16	3/8	1-1/2	DD8257890	Price	DD8047890	Price	DD5527890	Price	DD5017890	Price
3/16	3/16	9/16	2	DD8256607	Price	DD802012STCN	Price	DD552012ST	Price	DD502012S	Price
3/16	3/16	1	3	DD8250179	Price	DD8040179	Price	DD5520179	Price	DD5010179	Price
3/16	3/16	1-1/8	3	DD8250181	Price	-	-	DD552012SLT	Price	DD502012SL	Price
13/64	1/4	5/8	2	DD8257866	Price	-	-	DD552013ST	Price	DD502013S	Price
7/32	1/4	1/2	2	DD8252643	Price	DD8042643	Price	DD5522643	Price	DD5012643	Price
7/32	1/4	5/8	2-1/2	DD8257867	Price	DD802014STCN	Price	DD552014ST	Price	DD502014S	Price
15/64	1/4	3/4	2-1/2	DD8257868	Price	-	-	DD552015ST	Price	DD502015S	Price
1/4	1/4	1/2	2	DD8257891	Price	DD8047891	Price	DD5527891	Price	DD5017891	Price
1/4	1/4	3/4	2-1/2	DD8256608	Price	DD802016STCN	Price	DD552016ST	Price	DD502016S	Price
1/4	1/4	1	3	DD8250187	Price	DD8040187	Price	DD5520187	Price	DD5010187	Price
1/4	1/4	1-1/2	4	DD8250191	Price	-	-	DD552016SLT	Price	DD502016SL	Price
17/64	5/16	3/4	2-1/2	DD8257869	Price	-	-	DD552017ST	Price	DD502017S	Price
9/32	5/16	3/4	2-1/2	DD8257870	Price	DD802018STCN	Price	DD552018ST	Price	DD502018S	Price
19/64	5/16	13/16	2-1/2	DD8257871	Price	-	-	DD552019ST	Price	DD502019S	Price
5/16	5/16	1/2	2	DD8257892	Price	DD8047892	Price	DD5527892	Price	DD5017892	Price
5/16	5/16	13/16	2-1/2	DD8256609	Price	DD802020STCN	Price	DD552020ST	Price	DD502020S	Price
5/16	5/16	1-1/8	3	DD8256066	Price	DD8046066	Price	DD5526066	Price	DD5016066	Price
5/16	5/16	1-5/8	4	DD8250193	Price	-	-	DD552020SLT	Price	DD502020SL	Price
11/32	3/8	7/8	2-1/2	-	-	DD8047873	Price	-	-	DD5017873	Price
3/8	3/8	5/8	2	DD8257893	Price	DD8047893	Price	DD5527893	Price	DD5017893	Price
3/8	3/8	1	2-1/2	DD8256610	Price	DD802024STCN	Price	DD552024ST	Price	DD502024S	Price
3/8	3/8	2	4	DD8250203	Price	-	-	DD552024SLT	Price	DD502024SL	Price
3/8	3/8	3	6	DD8250199	Price	-	-	DD552024SXLT	Price	DD502024SXL	Price
25/64	7/16	1	2-3/4	DD8250741	Price	DD8040741	Price	DD5520741	Price	DD5010741	Price
13/32	7/16	1	2-3/4	DD8257875	Price	DD802026TCN	Price	DD5527875	Price	DD5017875	Price
7/16	7/16	1	2-3/4	DD8256903	Price	DD802028STCN	Price	DD552028ST	Price	DD502028S	Price
7/16	7/16	2	4	DD8250205	Price	DD8040205	Price	DD5520205	Price	DD5010205	Price
1/2	1/2	5/8	2-1/2	DD8257895	Price	DD8047895	Price	DD5527895	Price	DD5017895	Price
1/2	1/2	1	3	DD8256611	Price	DD802032STCN	Price	DD552032ST	Price	DD502032S	Price
1/2	1/2	1-1/2	4	DD8250773	Price	DD8040773	Price	DD5520773	Price	DD5010773	Price
1/2	1/2	2	4	DD8250209	Price	DD8040209	Price	DD5520209	Price	DD5010209	Price
1/2	1/2	3	6	DD8250211	Price	-	-	DD552032SLT	Price	DD502032SL	Price
9/16	9/16	1-1/4	3-1/2	DD8250751	Price	DD802036STCN	Price	DD552036ST	Price	DD502036S	Price
5/8	5/8	3/4	3	DD8250793	Price	DD8040793	Price	DD5520793	Price	DD5010793	Price
5/8	5/8	1-1/4	3-1/2	DD8256613	Price	DD802040STCN	Price	DD552040ST	Price	DD502040S	Price
5/8	5/8	3	6	DD8256068	Price	-	-	DD552040SLT	Price	DD502040SL	Price
11/16	3/4	1-1/2	4	DD8252723	Price	DD802044STCN	Price	DD552044ST	Price	DD502044S	Price
3/4	3/4	1	3	DD8256160	Price	DD8046160	Price	DD5526160	Price	DD5016160	Price
3/4	3/4	1-1/2	4	DD8256614	Price	DD802048STCN	Price	DD552048ST	Price	DD502048S	Price
3/4	3/4	2	6	DD8250215	Price	DD8040215	Price	DD5520215	Price	DD5010215	Price
3/4	3/4	3	6	DD8250217	Price	-	-	DD552048SLT	Price	DD502048SL	Price
7/8	7/8	1-1/2	4	DD8251901	Price	DD802056STCN	Price	DD552056ST	Price	DD502056S	Price
1	1	1-1/2	4	DD8256615	Price	DD802100STCN	Price	DD552100ST	Price	DD502100S	Price
1	1	3	6	DD8253463	Price	-	-	DD552100SLT	Price	DD502100SL	Price

SOLID MORSE MASTER Solid Carbide 2 Flute Single End Mills

- Recommended for easily machined materials including low alloy steels, non-ferrous materials, and cast iron
- Ideal for plunge cutting or slotting
- Morse list #5944 (regular) 5954 (long) and 5950 (extra long)



Standard



Long Length



Extra Long

TiALN TiCN TiN MCG

Style - Standard											
				TiAlN		TiCN		TiN		Price	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	1/8	3/16	1-1/2	MT3290076	Price	MT3290039	Price	MT3290002	Price	MT3258004	Price
3/32	1/8	3/8	1-1/2	MT3290078	Price	MT3290041	Price	MT3290004	Price	MT3258006	Price
1/8	1/8	1/2	1-1/2	MT3290080	Price	MT3290043	Price	MT3290006	Price	MT3258008	Price
5/32	3/16	9/16	2	MT3290082	Price	MT3290045	Price	MT3290008	Price	MT3258010	Price
3/16	3/16	5/8	2	MT3290084	Price	MT3290047	Price	MT3290010	Price	MT3258012	Price
7/32	1/4	5/8	2-1/2	MT3290086	Price	MT3290049	Price	MT3290012	Price	MT3258014	Price
1/4	1/4	3/4	2-1/2	MT3290088	Price	MT3290051	Price	MT3290014	Price	MT3258016	Price
9/32	5/16	3/4	2-1/2	MT3290090	Price	MT3290053	Price	MT3290016	Price	MT3258018	Price
5/16	5/16	13/16	2-1/2	MT3290092	Price	MT3290055	Price	MT3290018	Price	MT3258020	Price
3/8	3/8	7/8	2-1/2	MT3290096	Price	MT3290059	Price	MT3290022	Price	MT3258024	Price
7/16	7/16	7/8	2-3/4	MT3290100	Price	MT3290063	Price	MT3290026	Price	MT3258028	Price
1/2	1/2	1	3	MT3290104	Price	MT3290067	Price	MT3290030	Price	MT3258032	Price
9/16	9/16	1-1/4	3-1/2	MT3290105	Price	MT3290068	Price	MT3290031	Price	MT3258036	Price
5/8	5/8	1-1/4	3-1/2	MT3290106	Price	MT3290069	Price	MT3290032	Price	MT3258040	Price
11/16	3/4	1-1/2	4	MT3290107	Price	MT3290070	Price	MT3290033	Price	MT3258044	Price
3/4	3/4	1-1/2	4	MT3290108	Price	MT3290071	Price	MT3290034	Price	MT3258048	Price
7/8	7/8	1-1/2	4	MT3290109	Price	MT3290072	Price	MT3290035	Price	MT3258056	Price
1	1	1-1/2	4	MT3290110	Price	MT3290073	Price	MT3290036	Price	MT3258064	Price

Style - Long											
				TiAlN		TiCN		TiN		Uncoated	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	3/4	2-1/4	MT3290140	Price	MT3290130	Price	MT3290120	Price	MT3258238	Price
3/16	3/16	3/4	2-1/2	MT3290141	Price	MT3290131	Price	MT3290121	Price	MT3258239	Price
1/4	1/4	1-1/8	3	MT3290142	Price	MT3290132	Price	MT3290122	Price	MT3258241	Price
5/16	5/16	1-1/8	3	MT3290143	Price	MT3290133	Price	MT3290123	Price	MT3258250	Price
3/8	3/8	1-1/8	3	MT3290144	Price	MT3290134	Price	MT3290124	Price	MT3258254	Price
7/16	7/16	2	4	MT3290145	Price	MT3290135	Price	MT3290125	Price	MT3258258	Price
1/2	1/2	2	4	MT3290146	Price	MT3290136	Price	MT3290126	Price	MT3258262	Price
5/8	5/8	2-1/4	5	MT3290147	Price	MT3290137	Price	MT3290127	Price	MT3258270	Price
3/4	3/4	2-1/4	5	MT3290148	Price	MT3290138	Price	MT3290128	Price	MT3258278	Price
1	1	2-1/4	5	MT3290149	Price	MT3290139	Price	MT3290129	Price	MT3258294	Price

Style - Extra Long											
				TiAlN		TiCN		TiN		Uncoated	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1	3	MT3290180	Price	MT3290170	Price	MT3290160	Price	MT3258408	Price
3/16	3/16	1-1/8	3	MT3290181	Price	MT3290171	Price	MT3290161	Price	MT3258412	Price
1/4	1/4	1-1/2	4	MT3290182	Price	MT3290172	Price	MT3290162	Price	MT3258416	Price
5/16	5/16	1-5/8	4	MT3290183	Price	MT3290173	Price	MT3290163	Price	MT3258420	Price
3/8	3/8	1-3/4	4	MT3290184	Price	MT3290174	Price	MT3290164	Price	MT3258424	Price
7/16	7/16	3	6	MT3290185	Price	MT3290175	Price	MT3290165	Price	MT3258428	Price
1/2	1/2	3	6	MT3290186	Price	MT3290176	Price	MT3290166	Price	MT3258432	Price
5/8	5/8	3	6	MT3290187	Price	MT3290177	Price	MT3290167	Price	MT3258440	Price
3/4	3/4	3	6	MT3290188	Price	MT3290178	Price	MT3290168	Price	MT3258448	Price
1	1	3	6	MT3290189	Price	MT3290179	Price	MT3290169	Price	MT3258464	Price

truCORE® E12 Solid Carbide 2 Flute Square End Mills



Square End or Ball End

- A versatile general purpose tool for slotting and peripheral milling
- Fine grain carbide for greater toughness, wear resistance, and higher transverse rupture strength
- Precision ground for reliability and outstanding performance
- Coatings for a wide range of applications
- 30° Helix, round shank

MADE IN THE USA

K Good in **Cast Iron** | M Good in **Stainless Steels** | P Good in **Carbon and Tool Steels** | N Good in **Non-ferrous**

				AlTiN		Uncoated	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	1/8	3/32	1-1/2	DD4030509	Price	DD4030601	Price
3/64	1/8	9/64	1-1/2	DD4035603	Price	DD4030603	Price
1/16	1/8	1/8	1-1/2	DD4039104	Price	-	-
1/16	1/8	3/16	1-1/2	DD4030336	Price	DD4030605	Price
5/64	1/8	1/4	1-1/2	DD4030337	Price	DD4030607	Price
3/32	1/8	3/16	1-1/2	DD4039105	Price	-	-
3/32	1/8	3/8	1-1/2	DD4030338	Price	DD4030609	Price
7/64	1/8	3/8	1-1/2	DD4030339	Price	DD4030611	Price
1/8	1/8	1/4	1-1/2	DD4090088	Price	DD4031407	Price
1/8	1/8	1/2	1-1/2	DD4096342	Price	DD4030613	Price
1/8	1/8	3/4	2-1/4	DD4036610	Price	DD4037608	Price
1/8	1/8	1	3	DD4034015	Price	DD4034008	Price
9/64	3/16	9/16	2	DD4030344	Price	-	-
5/32	3/16	9/16	2	DD4030503	Price	DD4030617	Price
3/16	3/16	3/8	2	DD4039131	Price	DD4031411	Price
3/16	3/16	5/8	2	DD4030554	Price	DD4030621	Price
3/16	3/16	3/4	2-1/2	DD4036619	Price	DD4037612	Price
3/16	3/16	1-1/8	3	DD4034023	Price	DD4034012	Price
7/32	1/4	5/8	2-1/2	DD4030348	Price	-	-
1/4	1/4	1/2	2	DD4039154	Price	DD4031415	Price
1/4	1/4	3/4	2-1/2	DD4030553	Price	DD4030629	Price
1/4	1/4	1-1/8	3	DD4036645	Price	DD4037616	Price
1/4	1/4	1-1/2	4	DD4034035	Price	DD4034016	Price
1/4	1/4	1-1/2	6	-	-	DD4031063	Price
5/16	5/16	13/16	2-1/2	DD4030557	Price	DD4030637	Price
5/16	5/16	1-1/8	3	DD4036640	Price	DD4037620	Price
5/16	5/16	1-5/8	4	DD4034036	Price	DD4034020	Price
3/8	3/8	1	2-1/2	DD4030556	Price	DD4030645	Price
3/8	3/8	1-1/8	3	DD4036646	Price	DD4037624	Price
3/8	3/8	1-1/2	6	-	-	DD4031035	Price
3/8	3/8	1-3/4	4	DD4034037	Price	DD4034024	Price
1/2	1/2	1	3	DD4030552	Price	DD4030661	Price
1/2	1/2	1-1/2	6	-	-	DD4031047	Price
1/2	1/2	2	4	DD4036647	Price	DD4037632	Price
1/2	1/2	3	6	DD4034039	Price	DD4034032	Price
5/8	5/8	1-1/4	3-1/2	DD4030532	Price	DD4030665	Price
5/8	5/8	2-1/4	5	DD4036648	Price	DD4037640	Price
3/4	3/4	1-1/2	4	DD4030700	Price	DD4030669	Price
3/4	3/4	2-1/4	5	DD4036649	Price	DD4037648	Price

2 Flute Solid Carbide End Mills



- Standard micro grain carbide
- Uncoated and TiAlN coated

				Bright		TiAlN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	1/8	1/8	1-1/2	TP37402031200	Price	TP37402031211	Price
1/16	1/8	1/8	1-1/2	TP37412062500	Price	TP37412062511	Price
1/16	1/8	3/16	1-1/2	TP37402062500	Price	TP37402062511	Price
3/32	1/8	3/16	1-1/2	TP37412093800	Price	-	-
3/32	1/8	5/16	1-1/2	TP37402093800	Price	TP37402093811	Price
1/8	1/8	1/4	1-1/2	TP37412125000	Price	-	-
1/8	1/8	1/2	1-1/2	TP37402125000	Price	TP37402125011	Price
1/8	1/8	3/4	2-1/4	TP37462125000	Price	-	-
1/8	1/8	1	3	TP37482125000	Price	TP37482125011	Price
5/32	3/16	5/16	2	TP37412156200	Price	-	-
5/32	3/16	9/16	2	TP37402156200	Price	TP37402156211	Price
3/16	3/16	3/8	2	TP37412187500	Price	TP37412187511	Price
3/16	3/16	5/8	2	TP37402187500	Price	TP37402187511	Price
3/16	3/16	3/4	2-1/4	TP37462187500	Price	-	-
3/16	3/16	1-1/8	3	TP37482187500	Price	-	-
7/32	1/4	7/16	2	TP37412218800	Price	TP37412218811	Price

2 Flute Solid Carbide End Mills (cont.)



				Bright		TiAlN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
7/32	1/4	5/8	2-1/2	**TP37402218800**	Price	**TP37402218811**	Price
1/4	1/4	1/2	2	**TP37412250000**	Price	**TP37412250011**	Price
1/4	1/4	3/4	2-1/2	**TP37402250000**	Price	**TP37402250011**	Price
1/4	1/4	1-1/8	3	**TP37462250000**	Price	-	-
1/4	1/4	1-1/2	4	**TP37482250000**	Price	-	-
9/32	5/16	3/4	2-1/2	**TP37402281200**	Price	**TP37402281211**	Price
5/16	5/16	1/2	2	**TP37412312500**	Price	-	-
5/16	5/16	13/16	2-1/2	**TP37402312500**	Price	**TP37402312511**	Price
5/16	5/16	1-1/8	3	**TP37462312500**	Price	-	-
5/16	5/16	1-5/8	4	**TP37482312500**	Price	-	-
3/8	3/8	5/8	2	**TP37412375000**	Price	-	-
3/8	3/8	1	2-1/2	**TP37402375000**	Price	**TP37402375011**	Price
3/8	3/8	1-1/8	3	**TP37462375000**	Price	**TP37462375011**	Price
3/8	3/8	1-3/4	4	**TP37482375000**	Price	-	-
7/16	7/16	5/8	2-1/2	**TP37412437500**	Price	**TP37412437511**	Price
7/16	7/16	1	2-3/4	**TP37402437500**	Price	**TP37402437511**	Price
7/16	7/16	2	4	**TP37462437500**	Price	**TP37462437511**	Price
7/16	7/16	3	6	**TP37482437500**	Price	-	-
1/2	1/2	5/8	2-1/2	**TP37412500000**	Price	**TP37412500011**	Price
1/2	1/2	1	3	**TP37402500000**	Price	**TP37402500011**	Price
1/2	1/2	2	4	**TP37462500000**	Price	**TP37462500011**	Price
1/2	1/2	3	6	**TP37482500000**	Price	-	-
5/8	5/8	1-1/4	3-1/2	**TP37402625000**	Price	**TP37402625011**	Price
5/8	5/8	2-1/4	5	**TP37462625000**	Price	**TP37462625011**	Price
5/8	5/8	3	6	**TP37482625000**	Price	-	-
3/4	3/4	1	3	**TP37412750000**	Price	**TP37412750011**	Price
3/4	3/4	1-1/2	4	**TP37402750000**	Price	**TP37402750011**	Price
3/4	3/4	2-1/4	5	**TP37462750000**	Price	**TP37462750011**	Price
3/4	3/4	3	6	**TP37482750000**	Price	-	-
7/8	7/8	1-1/2	4	**TP37402875000**	Price	**TP37402875011**	Price
1	1	1-1/2	4	**TP37402100000**	Price	**TP37402100011**	Price
1	1	2-1/4	5	**TP37462100000**	Price	**TP37462100011**	Price
1	1	3	6	**TP37482100000**	Price	**TP37482100011**	Price

Tuff Cut® GP 2 Flute Carbide End Mills

Stub Length • 30° Helix

- Designed for aggressive milling of most materials M.A. Ford List #164



				Uncoated		ALtima	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/64	1/8	.023	1-1/2	**DD1516400**	Price	-	-
1/32	1/8	1/16	1-1/2	**DD1516401**	Price	-	-
3/64	1/8	3/32	1-1/2	**DD1516405**	Price	-	-
1/16	1/8	1/8	1-1/2	**DD1516409**	Price	-	-
5/64	1/8	5/32	1-1/2	**DD1516410**	Price	-	-
3/32	1/8	3/16	1-1/2	**DD1516413**	Price	-	-
7/64	1/8	7/32	1-1/2	**DD1516416**	Price	-	-
1/8	1/8	1/4	1-1/2	**DD1516419**	Price	**DD1556434**	Price
9/64	3/16	5/16	2	**DD1516422**	Price	-	-
5/32	3/16	5/16	2	**DD1516423**	Price	-	-
11/64	3/16	3/8	2	**DD1516426**	Price	-	-
1/4	1/4	1/2	2	**DD1516439**	Price	**DD1556448**	Price
3/16	3/16	3/8	2	**DD1516429**	Price	**DD1556441**	Price
13/64	1/4	1/2	2	**DD1516432**	Price	-	-
7/32	1/4	1/2	2	**DD1516435**	Price	-	-
15/64	1/4	1/2	2	**DD1516436**	Price	-	-
9/32	5/16	1/2	2	**DD1516442**	Price	-	-
5/16	5/16	1/2	2	**DD1516443**	Price	**DD1556451**	Price
3/8	3/8	5/8	2	**DD1516449**	Price	**DD1556454**	Price
7/16	7/16	5/8	2-1/2	**DD1516455**	Price	**DD1556457**	Price
1/2	1/2	5/8	2-1/2	**DD1516459**	Price	**DD1556459**	Price
5/8	5/8	3/4	3	**DD1516463**	Price	**DD1556461**	Price
3/4	3/4	1	3	**DD1516467**	Price	**DD1556464**	Price

Tuff Cut® GP 2 Flute Carbide End Mills

Standard Length · Straight Shank · 30° Helix

- Designed for aggressive milling of most materials
- M.A. Ford List #121



				Uncoated		ALtima	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/64	1/8	1/32	1-1/2	**DD1512106**	Price	-	-
1/32	1/8	5/64	1-1/2	**DD1512114**	Price	-	-
3/64	1/8	7/64	1-1/2	**DD1512123**	Price	-	-
1/16	1/8	3/16	1-1/2	**DD1512132**	Price	-	-
5/64	1/8	3/16	1-1/2	**DD1512140**	Price	-	-
3/32	1/8	9/32	1-1/2	**DD1512146**	Price	-	-
7/64	1/8	3/8	1-1/2	**DD1512151**	Price	-	-
1/8	1/8	1/2	1-1/2	**DD1512150**	Price	-	-
1/8	1/8	3/8	1-1/2	**DD1512153**	Price	**DD1552155**	Price
9/64	3/16	1/2	2	**DD1512187**	Price	-	-
5/32	3/16	1/2	2	**DD1512157**	Price	-	-
11/64	3/16	5/8	2	**DD1512188**	Price	-	-
3/16	3/16	5/8	2	**DD1512160**	Price	**DD1552159**	Price
13/64	1/4	5/8	2-1/2	**DD1512189**	Price	-	-
7/32	1/4	5/8	2-1/2	**DD1512163**	Price	-	-
15/64	1/4	3/4	2-1/2	**DD1512190**	Price	-	-
1/4	1/4	3/4	2-1/2	**DD1512165**	Price	**DD1552165**	Price
9/32	5/16	3/4	2-1/2	**DD1512167**	Price	-	-
5/16	5/16	13/16	2-1/2	**DD1512168**	Price	**DD1552167**	Price
3/8	3/8	1	2-1/2	**DD1512171**	Price	**DD1552171**	Price
7/16	7/16	1	2-3/4	-	-	**DD1552175**	Price
1/2	1/2	1	3	**DD1512176**	Price	**DD1552179**	Price
9/16	9/16	1-1/8	3-1/2	**DD1512178**	Price	-	-
5/8	5/8	1-1/4	3-1/2	**DD1512179**	Price	**DD1552181**	Price
3/4	3/4	1-1/2	4	**DD1512182**	Price	**DD1552185**	Price
7/8	7/8	1-1/2	4	**DD1512185**	Price	-	-
1	1	1-1/2	4	**DD1512149**	Price	**DD1552151**	Price
1-1/4	1-1/4	1-9/16	4-3/8	**DD1512154**	Price	-	-

RAPIDKUT® 2 Flute Solid Carbide Corner Radius End Mills



Center Cutting

- Used when radius is permissable
- Radius gives added strength to corner
- Made from premium grain carbide
- 30° Helix

					Uncoated		TiN		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	.015	DD8315300	Price	DD8325300	Price	DD8345300	Price	DD8355300	Price
3/16	3/16	5/8	2	.015	DD8311551	Price	DD8321551	Price	DD8341551	Price	DD8351551	Price
3/16	3/16	5/8	2	.020	DD8315302	Price	DD8325302	Price	DD8345302	Price	DD8355302	Price
3/16	3/16	5/8	2	.030	DD8315304	Price	DD8325304	Price	DD8345304	Price	DD8355304	Price
1/4	1/4	3/4	2-1/2	.015	DD8316322	Price	DD8326322	Price	DD8346322	Price	DD8356322	Price
1/4	1/4	3/4	2-1/2	.020	DD8315306	Price	DD8325306	Price	DD8345306	Price	DD8355306	Price
1/4	1/4	3/4	2-1/2	.030	DD8315308	Price	DD8325308	Price	DD8345308	Price	DD8355308	Price
1/4	1/4	3/4	2-1/2	.045	DD8315310	Price	DD8325310	Price	DD8345310	Price	DD8355310	Price
5/16	5/16	13/16	2-1/2	.020	DD8315312	Price	DD8325312	Price	DD8345312	Price	DD8355312	Price
5/16	5/16	13/16	2-1/2	.030	DD8315314	Price	DD8325314	Price	DD8345314	Price	DD8355314	Price
5/16	5/16	13/16	2-1/2	.045	DD8315316	Price	DD8325316	Price	DD8345316	Price	DD8355316	Price
3/8	3/8	1	2-1/2	.020	DD8315318	Price	DD8325318	Price	DD8345318	Price	DD8355318	Price
3/8	3/8	1	2-1/2	.030	DD8315320	Price	DD8325320	Price	DD8345320	Price	DD8355320	Price
3/8	3/8	1	2-1/2	.045	DD8315322	Price	DD8325322	Price	DD8345322	Price	DD8355322	Price
1/2	1/2	1	3	.020	DD8315324	Price	DD8325324	Price	DD8345324	Price	DD8355324	Price
1/2	1/2	1	3	.030	DD8315326	Price	DD8325326	Price	DD8345326	Price	DD8355326	Price
1/2	1/2	1	3	.045	DD8315328	Price	DD8325328	Price	DD8345328	Price	DD8355328	Price
1/2	1/2	1	3	.060	DD8315330	Price	DD8325330	Price	DD8345330	Price	DD8355330	Price
5/8	5/8	1-1/4	3-1/2	.020	DD8315332	Price	DD8325332	Price	DD8345332	Price	DD8355332	Price
5/8	5/8	1-1/4	3-1/2	.030	DD8315334	Price	DD8325334	Price	DD8345334	Price	DD8355334	Price
5/8	5/8	1-1/4	3-1/2	.045	DD8315336	Price	DD8325336	Price	DD8345336	Price	DD8355336	Price
5/8	5/8	1-1/4	3-1/2	.060	DD8315338	Price	DD8325338	Price	DD8345338	Price	DD8355338	Price
5/8	5/8	1-1/4	3-1/2	.090	DD8315340	Price	DD8325340	Price	DD8345340	Price	DD8355340	Price
3/4	3/4	1-1/2	4	.020	DD8315342	Price	DD8325342	Price	DD8345342	Price	DD8355342	Price
3/4	3/4	1-1/2	4	.030	DD8315344	Price	DD8325344	Price	DD8345344	Price	DD8355344	Price
3/4	3/4	1-1/2	4	.045	DD8315346	Price	DD8325346	Price	DD8345346	Price	DD8355346	Price
3/4	3/4	1-1/2	4	.060	DD8315348	Price	DD8325348	Price	DD8345348	Price	DD8355348	Price
3/4	3/4	1-1/2	4	.090	DD8315350	Price	DD8325350	Price	DD8345350	Price	DD8355350	Price
3/4	3/4	1-1/2	4	.125	DD8315352	Price	DD8325352	Price	DD8345352	Price	DD8355352	Price
1	1	1-1/2	4	.020	DD8315354	Price	DD8325354	Price	DD8345354	Price	DD8355354	Price
1	1	1-1/2	4	.030	DD8315356	Price	DD8325356	Price	DD8345356	Price	DD8355356	Price
1	1	1-1/2	4	.045	DD8315358	Price	DD8325358	Price	DD8345358	Price	DD8355358	Price
1	1	1-1/2	4	.060	DD8314428	Price	DD8325428	Price	DD8345428	Price	DD8355428	Price
1	1	1-1/2	4	.090	DD8315430	Price	DD8325430	Price	DD8345430	Price	DD8355430	Price
1	1	1-1/2	4	.125	DD8315432	Price	DD8325432	Price	DD8345432	Price	DD8355432	Price

RAPIDKUT® 2 Flute Solid Carbide Long Reach End Mills



Reduced Neck • Square End

- Neck diameter reduced for clearance
- Neck reduction .020" - all sizes
- The solid neck area provides reach with maximum rigidity
- Used to mill deep pockets or slots where long flute lengths are not needed
- Made from premium submicron grain carbide
- Tolerances +.000/-.002"
- 30° Helix

					Uncoated		TiN		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Neck Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	5/8	3/8	2	DD5016713	Price	DD5526713	Price	DD8046713	Price	DD8256713	Price
3/16	3/16	1	1-5/8	4	DD5016715	Price	DD5526715	Price	DD8046715	Price	DD8256715	Price
1/4	1/4	1-1/2	2-3/4	6	DD5016717	Price	DD5526717	Price	DD8046717	Price	DD8256717	Price
5/16	5/16	1-1/2	2-13/16	6	DD5016719	Price	DD5526719	Price	DD8046719	Price	DD8256719	Price
3/8	3/8	1-1/2	2-7/8	6	DD5016721	Price	DD5526721	Price	DD8046721	Price	DD8256721	Price
7/16	7/16	1-1/2	2-3/4	6	DD5016723	Price	DD5526723	Price	DD8046723	Price	DD8256723	Price
1/2	1/2	1-1/2	2-1/2	6	DD5016725	Price	DD5526725	Price	DD8046725	Price	DD8256725	Price
9/16	9/16	2	1-3/4	6	DD5016726	Price	DD5526726	Price	DD8046726	Price	DD8256726	Price
5/8	5/8	2	1-3/4	6	DD5016728	Price	DD5526728	Price	DD8046728	Price	DD8256728	Price
3/4	3/4	2	1-1/2	6	DD5016729	Price	DD5526729	Price	DD8046729	Price	DD8256729	Price
1	1	2	1-1/2	6	DD5016730	Price	DD5526730	Price	DD8046730	Price	DD8256730	Price

RAPIDKUT® 2 Flute Metric Solid Carbide Single End Mills



Regular Length

- Premium micrograin carbide
- Designed to cut materials ranging from nickel-based alloy, stainless, tough alloys, abrasives and non-ferrous metals
- 30° Helix

				Uncoated		TiN		AlTiN	
Dia. (mm)	Shank Dia. (mm)	Flute Length (mm)	OAL (mm)	Order No.	Price	Order No.	Price	Order No.	Price
2mm	3mm	9mm	38mm	DD502200MS	Price	DD552200MST	Price	DD8255987	Price
2.5mm	3mm	12mm	38mm	DD502250MS	Price	DD552250MST	Price	DD8255988	Price
3mm	3mm	12mm	38mm	DD502300MS	Price	DD552300MST	Price	DD8255989	Price
3.5mm	4mm	12mm	51mm	DD502350MS	Price	DD552350MST	Price	DD8255990	Price
4mm	4mm	14mm	51mm	DD502400MS	Price	DD552400MST	Price	DD8255991	Price
4.5mm	5mm	14mm	51mm	DD502450MS	Price	DD552450MST	Price	DD8255992	Price
5mm	5mm	20mm	51mm	-	-	-	-	DD8255993	Price
5mm	5mm	20mm	51mm	DD502500MS	Price	DD552500MST	Price	-	-
6mm	6mm	20mm	63mm	DD502600MS	Price	DD552600MST	Price	DD8255994	Price
7mm	8mm	20mm	63mm	DD502700MS	Price	DD552700MST	Price	DD8255995	Price
8mm	8mm	20mm	63mm	DD502800MS	Price	DD552800MST	Price	DD8255996	Price
9mm	10mm	22mm	70mm	DD502900MS	Price	DD552900MST	Price	DD8255997	Price
10mm	10mm	25mm	70mm	DD502010MS	Price	DD552010MST	Price	DD8255998	Price
11mm	12mm	25mm	76mm	-	-	DD552110MST	Price	DD8250218	Price
12mm	12mm	25mm	76mm	-	-	-	-	DD8255999	Price
12mm	12mm	25mm	76mm	DD502120MS	Price	DD552120MST	Price	-	-
13mm	13mm	22mm	70mm	-	-	DD552130MST	Price	-	-
14mm	14mm	32mm	89mm	DD502140MS	Price	DD552140MST	Price	DD8256926	Price
16mm	16mm	32mm	89mm	DD502160MS	Price	DD552160MST	Price	DD8256927	Price
18mm	18mm	38mm	100mm	DD502180MS	Price	DD552180MST	Price	DD8256928	Price
20mm	20mm	38mm	100mm	DD502002MS	Price	DD552002MST	Price	DD8256929	Price
25mm	25mm	38mm	100mm	DD502025MS	Price	DD552025MST	Price	DD8256931	Price

RAPIDKUT® 2 Flute Solid Carbide Ball End Single End Mills

Center Cutting • Stub, Regular and Long Lengths

- Used for radius and contouring part surfaces
- Designed to cut materials ranging from nickel base alloy, stainless, tough alloys, abrasives and non-ferrous
- Made from premium submicron grain carbide
- 30° Helix
- Cutting diameter tolerance:
  1/32 to 1/4" +.000/-.002"
  9/32 to 1" +.000/-.003"



				Uncoated		TiN		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	1/16	1-1/2	DD6016161	Price	DD6526161	Price	DD8046161	Price	DD8256161	Price
1/32	1/8	3/32	1-1/2	DD6012597	Price	DD6522597	Price	DD802002BTCN	Price	DD8252597	Price
3/64	1/8	1/8	1-1/2	DD6012599	Price	DD6522599	Price	DD802003BTCN	Price	DD8252599	Price
1/16	1/8	1/8	1-1/2	DD6016163	Price	DD6526163	Price	DD8046163	Price	DD8256163	Price
1/16	1/8	3/16	1-1/2	DD602004B	Price	DD652004BT	Price	DD802004BTCN	Price	DD8251823	Price
5/64	1/8	1/4	1-1/2	DD602005B	Price	DD652005BT	Price	-	-	DD8252601	Price
3/32	1/8	3/16	1-1/2	DD6016164	Price	DD6526164	Price	DD8046164	Price	DD8256164	Price
3/32	1/8	3/8	1-1/2	DD602006B	Price	DD652006BT	Price	DD802006BTCN	Price	DD8252603	Price
7/64	1/8	3/8	1-1/2	DD602007B	Price	DD652007BT	Price	-	-	DD8252605	Price
1/8	1/8	1/4	1-1/2	DD6017917	Price	DD6527917	Price	DD8047917	Price	DD8257917	Price
1/8	1/8	1/2	1-1/2	DD602008B	Price	DD652008BT	Price	DD802008BTCN	Price	DD8257903	Price
1/8	1/8	3/4	3	DD6016110	Price	DD6526110	Price	DD8046110	Price	DD8256110	Price
1/8	1/8	1	3	DD602008BL	Price	DD652008BLT	Price	-	-	DD8256176	Price
9/64	3/16	9/16	2	DD602009B	Price	DD652009BT	Price	-	-	DD8252607	Price
5/32	3/16	5/16	1-1/2	DD6016166	Price	DD6526166	Price	DD8046166	Price	DD8256166	Price
5/32	3/16	9/16	2	DD602010B	Price	DD652010BT	Price	DD802010BTCN	Price	DD8252609	Price
11/64	3/16	9/16	2	DD602011B	Price	DD652011BT	Price	-	-	DD8252611	Price
3/16	3/16	3/8	1-1/2	DD6016167	Price	DD6526167	Price	DD8046167	Price	DD8256167	Price
3/16	3/16	5/8	2	DD602012B	Price	DD652012BT	Price	DD802012BTCN	Price	DD8257904	Price
3/16	3/16	3/4	3	DD6016111	Price	DD6526111	Price	DD8046111	Price	DD8256111	Price
3/16	3/16	1-1/8	3	DD602012BL	Price	DD652012BLT	Price	-	-	DD8252577	Price
13/64	1/4	5/8	2	DD602013B	Price	DD652013BT	Price	-	-	DD8252613	Price
7/32	1/4	1/2	2	DD6016168	Price	DD6526168	Price	DD8046168	Price	DD8256168	Price
7/32	1/4	5/8	2-1/2	DD602014B	Price	DD652014BT	Price	DD802014BTCN	Price	DD8252615	Price
15/64	1/4	3/4	2-1/2	DD602015B	Price	DD652015BT	Price	-	-	DD8252617	Price
1/4	1/4	1/2	2	DD6017919	Price	DD6527919	Price	DD8047919	Price	DD8257919	Price
1/4	1/4	3/4	2-1/2	DD602016B	Price	DD652016BT	Price	DD802016BTCN	Price	DD8257905	Price
1/4	1/4	1-1/8	3	DD6011001	Price	DD6521001	Price	DD8041001	Price	DD8251001	Price
1/4	1/4	1-1/2	4	DD602016BL	Price	DD652016BLT	Price	-	-	DD8251003	Price
17/64	5/16	3/4	2-1/2	DD602017B	Price	DD652017BT	Price	-	-	DD8252619	Price
9/32	5/16	3/4	2-1/2	DD602018B	Price	DD652018BT	Price	DD802018BTCN	Price	DD8252621	Price
19/64	5/16	13/16	2-1/2	DD602019B	Price	DD652019BT	Price	-	-	DD8252623	Price
5/16	5/16	1/2	2	DD6016170	Price	DD6526170	Price	DD8046170	Price	DD8256170	Price
5/16	5/16	13/16	2-1/2	DD602020B	Price	DD652020BT	Price	DD802020BTCN	Price	DD8257906	Price
5/16	5/16	1-1/8	3	DD6016113	Price	DD6526113	Price	DD8046113	Price	DD8256113	Price
5/16	5/16	1-5/8	4	DD602020BL	Price	DD652020BLT	Price	-	-	DD8252573	Price
11/32	3/8	7/8	2-1/2	DD6012625	Price	DD6522625	Price	DD8042625	Price	DD8252625	Price
3/8	3/8	5/8	2	DD6017921	Price	DD6527921	Price	DD8047921	Price	DD8257921	Price
3/8	3/8	1	2-1/2	DD602024B	Price	DD652024BT	Price	DD802024BTCN	Price	DD8257907	Price
3/8	3/8	1-3/4	4	DD602024BL	Price	DD652024BLT	Price	-	-	DD8251007	Price
13/32	7/16	1	2-3/4	DD6012629	Price	DD6522629	Price	DD8042629	Price	DD8252629	Price
7/16	7/16	1	2-3/4	DD602028B	Price	DD652028BT	Price	DD802028BTCN	Price	DD8257908	Price
7/16	7/16	2	4	DD6016115	Price	DD6526115	Price	DD8046115	Price	DD8256115	Price
7/16	7/16	3	6	DD602028BL	Price	DD652028BLT	Price	-	-	-	-
1/2	1/2	5/8	2-1/2	DD6017923	Price	DD6527923	Price	DD8047923	Price	DD8257923	Price
1/2	1/2	1	3	DD602032B	Price	DD652032BT	Price	DD802032BTCN	Price	DD8257909	Price
1/2	1/2	2	4	DD6011009	Price	DD6521009	Price	DD8041009	Price	DD8251009	Price
1/2	1/2	3	6	DD602032BL	Price	DD652032BLT	Price	-	-	DD8251011	Price
9/16	9/16	1-1/4	3-1/2	DD602036B	Price	DD652036BT	Price	DD802036BTCN	Price	DD8252727	Price
5/8	5/8	3/4	3	DD6016174	Price	DD6526174	Price	DD8046174	Price	DD8256174	Price
5/8	5/8	1-1/4	3-1/2	DD602040B	Price	DD652040BT	Price	DD802040BTCN	Price	DD8251013	Price
5/8	5/8	3	6	DD602040BL	Price	DD652040BLT	Price	-	-	DD8251017	Price
11/16	3/4	1-3/8	4	DD602044B	Price	DD652044BT	Price	DD802044BTCN	Price	DD8250318	Price
3/4	3/4	1	3	DD6016175	Price	DD6526175	Price	DD8046175	Price	DD8256175	Price
3/4	3/4	1-3/8	4	-	-	-	-	-	-	DD8251019	Price
3/4	3/4	1-1/2	4	DD602048B	Price	DD652048BT	Price	DD802048BTCN	Price	-	-
3/4	3/4	2-1/4	5	DD6011021	Price	DD6521021	Price	-	-	DD8251021	Price
3/4	3/4	3	6	DD602048BL	Price	DD652048BLT	Price	-	-	DD8251023	Price
7/8	7/8	1-1/2	4	DD602056B	Price	DD652056BT	Price	DD802056BTCN	Price	DD8254012	Price
1	1	3	6	DD602100BL	Price	DD652100BLT	Price	-	-	DD8251029	Price
1	1	1-1/2	4	DD602100B	Price	DD652100BT	Price	DD802100BTCN	Price	DD8251025	Price

TuffCut® GP 2 Flute Ball Nose Carbide End Mills

- Stub length
- 30° Helix
- Straight shank
- Designed for aggressive milling of most materials with reduced deflection and improved tool life and overall economy
- M.A. Ford List #166



				Uncoated		ALtima	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/64	1/8	.023	1-1/2	**DD1516600**	Price	-	-
1/32	1/8	1/16	1-1/2	**DD1516601**	Price	-	-
3/64	1/8	3/32	1-1/2	**DD1516605**	Price	-	-
1/16	1/8	1/8	1-1/2	**DD1516609**	Price	-	-
5/64	1/8	5/32	1-1/2	**DD1516610**	Price	-	-
3/32	1/8	3/16	1-1/2	**DD1516613**	Price	-	-
7/64	1/8	7/32	1-1/2	**DD1516616**	Price	-	-
1/8	1/8	1/4	1-1/2	**DD1516619**	Price	**DD1556634**	Price
9/64	3/16	5/16	2	**DD1516622**	Price	-	-
5/32	3/16	5/16	2	**DD1516623**	Price	-	-
11/64	3/16	3/8	2	**DD1516626**	Price	-	-
3/16	3/16	3/8	2	**DD1516629**	Price	**DD1556641**	Price

				Uncoated		ALtima	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
13/64	1/4	1/2	2	**DD1516632**	Price	-	-
7/32	1/4	1/2	2	**DD1516635**	Price	-	-
15/64	1/4	1/2	2	**DD1516636**	Price	-	-
1/4	1/4	1/2	2	**DD1516639**	Price	**DD1556648**	Price
9/32	5/16	1/2	2	**DD1516642**	Price	-	-
5/16	5/16	1/2	2	**DD1516643**	Price	**DD1556651**	Price
3/8	3/8	5/8	2	**DD1516649**	Price	**DD1556654**	Price
7/16	7/16	5/8	2-1/2	**DD1516655**	Price	**DD1556657**	Price
1/2	1/2	5/8	2-1/2	**DD1516659**	Price	**DD1556659**	Price
5/8	5/8	3/4	3	**DD1516663**	Price	**DD1556661**	Price
3/4	3/4	1	3	**DD1516669**	Price	**DD1556664**	Price

TuffCut® GP 2 Flute Ball Nose Carbide End Mills

Standard Length • 30° Helix

- Manufactured with a full ball radius end
- Designed for milling fillets or similar rounded corners in the bottom of a cut
- Ideal for most ferrous metal applications
- M.A. Ford List #150



				Uncoated		ALtima	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	1/8	5/64	1-1/2	**DD1515001**	Price	-	-
3/64	1/8	7/64	1-1/2	**DD1515005**	Price	-	-
1/16	1/8	3/16	1-1/2	**DD1515009**	Price	-	-
5/64	1/8	3/16	1-1/2	**DD1515011**	Price	-	-
3/32	1/8	9/32	1-1/2	**DD1515015**	Price	-	-
7/64	1/8	3/8	1-1/2	**DD1515021**	Price	-	-
1/8	1/8	3/8	1-1/2	**DD1515025**	Price	**DD1555041**	Price
5/32	3/16	1/2	2	**DD1515029**	Price	-	-
3/16	3/16	5/8	2	**DD1515035**	Price	**DD1555043**	Price
7/32	1/4	5/8	2-1/2	**DD1515041**	Price	-	-
1/4	1/4	3/4	2-1/2	**DD1515045**	Price	**DD1555046**	Price

				Uncoated		ALtima	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
9/32	5/16	3/4	2-1/2	**DD1515049**	Price	-	-
5/16	5/16	13/16	2-1/2	**DD1515051**	Price	**DD1555047**	Price
3/8	3/8	1	2-1/2	**DD1515057**	Price	**DD1555049**	Price
7/16	7/16	1	2-3/4	**DD1515063**	Price	**DD1555051**	Price
1/2	1/2	1	3	**DD1515067**	Price	**DD1555053**	Price
9/16	9/16	1-1/8	3-1/2	**DD1515071**	Price	-	-
5/8	5/8	1-1/4	3-1/2	**DD1515073**	Price	**DD1555054**	Price
11/16	3/4	1-3/8	4	**DD1515077**	Price	-	-
3/4	3/4	1-1/2	4	**DD1515081**	Price	**DD1555056**	Price
7/8	7/8	1-1/2	4	**DD1515087**	Price	-	-
1	1	1-1/2	4	**DD1515019**	Price	**DD1555095**	Price

truCORE® E12B Solid Carbide 2 Flute Ball Nose End Mills

MADE IN THE USA

- Precision ground for reliability and outstanding performance
- Fine grain carbide for greater toughness, wear resistance, and higher transverse rupture strength
- Round shank, 30° Helix

K Good in **Cast Iron**
M Good in **Stainless Steels**
P Good in **Carbon and Tool Steels**
N Good in **Non-ferrous**



				AlTiN		Uncoated	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	1/8	3/32	1-1/2	**DD4030303**	Price	**DD4030801**	Price
3/64	1/8	9/64	1-1/2	**DD4030302**	Price	**DD4030803**	Price
1/16	1/8	1/8	1-1/2	**DD4030374**	Price	-	-
1/16	1/8	3/16	1-1/2	**DD4030433**	Price	**DD4030805**	Price
5/64	1/8	1/4	1-1/2	**DD4030349**	Price	**DD4030807**	Price
3/32	1/8	3/16	1-1/2	**DD4030375**	Price	-	-
3/32	1/8	3/8	1-1/2	**DD4030350**	Price	**DD4030809**	Price
7/64	1/8	3/8	1-1/2	-	-	**DD4030811**	Price
1/8	1/8	1/4	1-1/2	**DD4031956**	Price	**DD4031607**	Price
1/8	1/8	1/2	1-1/2	**DD4030993**	Price	**DD4030813**	Price
1/8	1/8	3/4	2-1/4	**DD4030385**	Price	**DD4037808**	Price
1/8	1/8	1	3	**DD4031291**	Price	**DD4034208**	Price
5/32	3/16	9/16	2	**DD4030354**	Price	**DD4030817**	Price
3/16	3/16	3/8	2	**DD4030378**	Price	-	-
3/16	3/16	5/8	2	**DD4090087**	Price	**DD4030821**	Price
3/16	3/16	3/4	2-1/2	**DD4030386**	Price	**DD4037812**	Price
3/16	3/16	1-1/8	3	**DD4090081**	Price	**DD4034212**	Price
1/4	1/4	1/2	2	**DD4030563**	Price	-	-
1/4	1/4	3/4	2-1/2	**DD4030994**	Price	**DD4030829**	Price

				AlTiN		Uncoated	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/4	1/4	1-1/8	3	**DD4030387**	Price	**DD4037816**	Price
1/4	1/4	1-1/2	4	**DD4090082**	Price	**DD4034216**	Price
1/4	1/4	1-1/2	6	-	-	**DD4031263**	Price
5/16	5/16	13/16	2-1/2	**DD4030562**	Price	**DD4030837**	Price
5/16	5/16	1-1/8	3	**DD4020561**	Price	**DD4037820**	Price
3/8	3/8	1	2-1/2	**DD4030995**	Price	**DD4030845**	Price
3/8	3/8	1-1/8	3	**DD4030390**	Price	**DD4037824**	Price
3/8	3/8	1-1/2	6	-	-	**DD4031235**	Price
3/8	3/8	1-3/4	4	**DD4031293**	Price	**DD4034224**	Price
1/2	1/2	1	3	**DD4097921**	Price	**DD4030861**	Price
1/2	1/2	1-1/2	6	-	-	**DD4031247**	Price
1/2	1/2	2	4	**DD4030392**	Price	**DD4037832**	Price

2 Flute Carbide Ball Nose End Mills



- Micrograin carbide end mill
- Regular length
- Ball end
- OSG List #402BN

Type - Fractional Ball End					
Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/32	1/8	1/8	1-1/2	**TP374020312BN**	Price
3/64	1/8	9/64	1-1/2	**TP374020469BN**	Price
1/16	1/8	3/16	1-1/2	**TP374020625BN**	Price
5/64	1/8	1/4	1-1/2	**TP374020781BN**	Price
3/32	1/8	5/16	1-1/2	**TP374020938BN**	Price
1/8	1/8	1/2	1-1/2	**TP374021250BN**	Price
9/64	3/16	1/2	2	**TP374021406BN**	Price
5/32	3/16	9/16	2	**TP374021562BN**	Price
3/16	3/16	5/8	2	**TP374021875BN**	Price
13/64	1/4	5/8	2-1/2	**TP374022031BN**	Price
7/32	1/4	5/8	2-1/2	**TP374022188BN**	Price
1/4	1/4	3/4	2-1/2	**TP374022500BN**	Price
17/64	5/16	3/4	2-1/2	**TP374022656BN**	Price
9/32	5/16	3/4	2-1/2	**TP374022812BN**	Price
5/16	5/16	13/16	2-1/2	**TP374023125BN**	Price
3/8	3/8	1	2-1/2	**TP374023750BN**	Price
7/16	7/16	1	2-3/4	**TP374024375BN**	Price
1/2	1/2	1	3	**TP374025000BN**	Price
5/8	5/8	1-1/4	3-1/2	**TP374026250BN**	Price
3/4	3/4	1-1/2	4	**TP374027500BN**	Price
7/8	7/8	1-1/2	4	**TP374028750BN**	Price
1	1	1-1/2	4	**TP374021000BN**	Price

Type - Metric Ball End					
Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1mm	3mm	3mm	39mm	**TP374020394BN**	Price
1.5mm	3mm	5mm	39mm	**TP374020591BN**	Price
2mm	3mm	7mm	39mm	**TP374020787BN**	Price
2.5mm	3mm	8mm	39mm	**TP374020984BN**	Price
3mm	3mm	10mm	39mm	**TP374021181BN**	Price
4mm	4mm	14mm	51mm	**TP374021575BN**	Price
5mm	5mm	16mm	51mm	**TP374021968BN**	Price
6mm	6mm	19mm	64mm	**TP374022362BN**	Price
7mm	8mm	19mm	64mm	**TP374022756BN**	Price
8mm	8mm	21mm	64mm	**TP374023150BN**	Price
10mm	10mm	25mm	70mm	**TP374023937BN**	Price
12mm	12mm	25mm	76mm	**TP374024724BN**	Price
14mm	14mm	30mm	89mm	**TP374025512BN**	Price
16mm	16mm	32mm	89mm	**TP374026299BN**	Price
18mm	18mm	35mm	102mm	**TP374027087BN**	Price
20mm	20mm	38mm	102mm	**TP374027874BN**	Price

RAPIDKUT 2 Flute Metric Solid Carbide Ball End Single End Mills



- Premium micrograin carbide
- 30° Helix

				Uncoated		TiN		AlTiN	
Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
2mm	3mm	9mm	38mm	**DD602200MB**	Price	**DD652200MBT**	Price	**DD6056555**	Price
2.5mm	3mm	12mm	38mm	**DD602250MB**	Price	**DD652250MBT**	Price	**DD6056556**	Price
3mm	3mm	12mm	38mm	**DD602300MB**	Price	**DD652300MBT**	Price	**DD6056557**	Price
3.5mm	4mm	12mm	51mm	**DD602350MB**	Price	**DD652350MBT**	Price	**DD6056558**	Price
4mm	4mm	14mm	51mm	**DD602400MB**	Price	**DD652400MBT**	Price	**DD6056559**	Price
4.5mm	5mm	14mm	51mm	**DD602450MB**	Price	**-**	-	**DD6056560**	Price
5mm	5mm	20mm	51mm	**DD602500MB**	Price	**DD652500MBT**	Price	**DD6056561**	Price
6mm	6mm	20mm	63mm	**DD602600MB**	Price	**DD652600MBT**	Price	**DD6056562**	Price
7mm	8mm	20mm	63mm	**DD602700MB**	Price	**DD652700MBT**	Price	**DD6056563**	Price
8mm	8mm	20mm	63mm	**DD602800MB**	Price	**DD652800MBT**	Price	**DD6056564**	Price
9mm	10mm	22mm	70mm	**DD602900MB**	Price	**-**	-	**DD6056565**	Price
10mm	10mm	25mm	70mm	**DD602010MB**	Price	**-**	-	**DD6056566**	Price
11mm	12mm	22mm	70mm	**DD602110MB**	Price	**-**	-	**DD6050286**	Price
12mm	12mm	25mm	76mm	**DD602120MB**	Price	**-**	-	**DD6056567**	Price
14mm	14mm	32mm	89mm	**DD602140MB**	Price	**DD652140MBT**	Price	**DD6056568**	Price
16mm	16mm	32mm	89mm	**DD602160MB**	Price	**-**	-	**DD6056569**	Price
18mm	18mm	38mm	100mm	**-**	-	**DD652180MBT**	Price	**DD6056570**	Price
20mm	20mm	38mm	100mm	**DD602002MB**	Price	**DD652002MBT**	Price	**DD6056571**	Price
25mm	25mm	38mm	100mm	**DD602025MB**	Price	**DD652025MBT**	Price	**DD6056808**	Price

RAPIDKUT 2 Flute Solid Carbide Double End Mills



Center Cutting • Stub Length

- 30º Helix
- Used for general purpose milling in most materials of medium hardness such as steel, brass, iron and non-ferrous materials
- Made from premium submicron grain carbide
- Cutting diameter tolerance +.000/.002”

				Uncoated		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	1/16	1-1/2	**DD502002D**	Price	**DD802002DTCN**	Price	**DD8257931**	Price
3/64	1/8	3/32	1-1/2	**DD502003D**	Price	**DD802003DTCN**	Price	**DD8257932**	Price
1/16	1/8	1/8	1-1/2	**DD502004D**	Price	**DD802004DTCN**	Price	**DD8256618**	Price
3/32	1/8	3/16	1-1/2	**DD502006D**	Price	**DD802006DTCN**	Price	**DD8256620**	Price
1/8	1/8	1/4	1-1/2	**DD502008D**	Price	**DD802008DTCN**	Price	**DD8256621**	Price
5/32	3/16	5/16	2	**DD502010D**	Price	**DD802010DTCN**	Price	**DD8257934**	Price
3/16	3/16	3/8	2	**DD502012D**	Price	**DD802012DTCN**	Price	**DD8257936**	Price
7/32	1/4	1/2	2-1/2	**DD502014D**	Price	**DD802014DTCN**	Price	**DD8257938**	Price
1/4	1/4	1/2	2-1/2	**DD502016D**	Price	**DD802016DTCN**	Price	**DD8257940**	Price
5/16	5/16	1/2	2-1/2	**DD502020D**	Price	**DD802020DTCN**	Price	**DD8257941**	Price
3/8	3/8	9/16	2-1/2	**DD502024D**	Price	**DD802024DTCN**	Price	**DD8257942**	Price
7/16	7/16	5/8	3	**DD502028D**	Price	**DD802028DTCN**	Price	**DD8257943**	Price
1/2	1/2	5/8	3	**DD502032D**	Price	**DD802032DTCN**	Price	**DD8257944**	Price

SOLID MORSE MASTER Solid Carbide 2 Flute Double End Mills



Style - Standard											
				Uncoated		TiN		TiCN		Price	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	3/8	3/8	3-1/8	MT3257158	Price	MT3290350	Price	MT3290360	Price	MT3290370	Price
5/32	3/8	7/16	3-1/8	MT3257160	Price	MT3290351	Price	MT3290361	Price	MT3290371	Price
3/16	3/8	1/2	3-1/4	MT3257162	Price	MT3290352	Price	MT3290362	Price	MT3290372	Price
7/32	3/8	9/16	3-3/8	MT3257164	Price	MT3290353	Price	MT3290363	Price	MT3290373	Price
1/4	3/8	5/8	3-3/8	MT3257166	Price	MT3290354	Price	MT3290364	Price	MT3290374	Price
9/32	3/8	11/16	3-3/8	MT3257168	Price	MT3290355	Price	MT3290365	Price	MT3290375	Price
5/16	3/8	3/4	3-1/2	MT3257170	Price	MT3290356	Price	MT3290366	Price	MT3290376	Price
3/8	3/8	3/4	3-1/2	MT3257174	Price	MT3290357	Price	MT3290367	Price	MT3290377	Price
7/16	1/2	7/8	4	MT3257178	Price	-	-	-	-	MT3290378	Price
7/16	7/16	7/8	4	-	-	MT3290358	Price	MT3290368	Price	-	-
1/2	1/2	1	4	MT3257182	Price	MT3290359	Price	MT3290369	Price	MT3290379	Price

Style - Stub											
				Uncoated		TiN		TiCN		TiAlN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	1/8	1/8	1-1/2	MT3257250	Price	MT3290300	Price	MT3290311	Price	MT3290322	Price
3/32	1/8	3/16	1-1/2	MT3257251	Price	MT3290301	Price	MT3290312	Price	MT3290323	Price
1/8	1/8	1/4	2	MT3257252	Price	MT3290302	Price	MT3290313	Price	MT3290324	Price
5/32	3/16	5/16	2	MT3257253	Price	MT3290303	Price	MT3290314	Price	MT3290325	Price
3/16	3/16	3/8	2	MT3257254	Price	MT3290304	Price	MT3290315	Price	MT3290326	Price
7/32	1/4	1/2	2-1/2	MT3257255	Price	MT3290305	Price	MT3290316	Price	MT3290327	Price
1/4	1/4	1/2	2-1/2	MT3257256	Price	MT3290306	Price	MT3290317	Price	MT3290328	Price
5/16	5/16	1/2	2-1/2	MT3257257	Price	MT3290307	Price	MT3290318	Price	MT3290329	Price
3/8	3/8	9/16	3	MT3257258	Price	MT3290308	Price	MT3290319	Price	MT3290330	Price
7/16	7/16	9/16	3	MT3257259	Price	MT3290309	Price	MT3290320	Price	MT3290331	Price
1/2	1/2	5/8	3	MT3257260	Price	MT3290310	Price	MT3290321	Price	MT3290332	Price

RAPIDKUT® 2 Flute Solid Carbide Ball End Double End Mills



Center Cutting • Stub Length

- 30º Helix
- Use for radius and contouring part surfaces
- Designed to cut materials ranging from nickel base alloy, stainless, tough alloys, abrasives and non-ferrous
- Made from premium submicron grain carbide
- Cutting diameter tolerance +.000/.002”

				Uncoated		TiN		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	1/16	1-1/2	DD602002DB	Price	DD652002DBT	Price	DD802002DBTCN	Price	DD8252715	Price
3/64	1/8	3/32	1-1/2	DD602003DB	Price	DD652003DBT	Price	DD802003DBTCN	Price	DD8252717	Price
1/16	1/8	1/8	1-1/2	DD602004DB	Price	DD652004DBT	Price	DD802004DBTCN	Price	DD8252719	Price
3/32	1/8	3/16	1-1/2	DD602006DB	Price	DD652006DBT	Price	DD802006DBTCN	Price	DD8252721	Price
1/8	1/8	1/4	1-1/2	DD602008DB	Price	DD652008DBT	Price	DD802008DBTCN	Price	DD8252651	Price
5/32	3/16	5/16	2	DD602010DB	Price	DD652010DBT	Price	DD802010DBTCN	Price	DD8252652	Price
3/16	3/16	3/8	2	DD602012DB	Price	DD652012DBT	Price	DD802012DBTCN	Price	DD8252655	Price
7/32	1/4	1/2	2-1/2	DD602014DB	Price	DD652014DBT	Price	DD802014DBTCN	Price	DD8252653	Price
1/4	1/4	1/2	2-1/2	DD602016DB	Price	DD652016DBT	Price	DD802016DBTCN	Price	DD8252565	Price
5/16	5/16	1/2	2-1/2	DD602020DB	Price	DD652020DBT	Price	DD802020DBTCN	Price	DD8252654	Price
3/8	3/8	9/16	2-1/2	DD602024DB	Price	DD652024DBT	Price	DD802024DBTCN	Price	DD8252656	Price
7/16	7/16	5/8	3	DD602028DB	Price	DD652028DBT	Price	DD802028DBTCN	Price	DD8252657	Price
1/2	1/2	5/8	3	DD602032DB	Price	DD652032DBT	Price	DD802032DBTCN	Price	DD8252743	Price

MICRO 100® 3 Flute Solid Carbide End Mills



Corner Radius • Center Cutting

- Ideally suited for heavier cuts in medium and hard materials
- 30° Helix

					AlTiN		Uncoated	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Corner Radius (in.)	Order No.	Price	Order No.	Price
1/32	1/8	5/64	1-1/2	.005	GE45GEC0313005X	Price	GE45GEC0313005	Price
1/16	1/8	3/16	1-1/2	.005	GE45GEC0623005X	Price	GE45GEC0623005	Price
1/16	1/8	3/16	1-1/2	.010	GE45GEC0623010X	Price	GE45GEC0623010	Price
3/32	1/8	3/8	1-1/2	.010	GE45GEC0933010X	Price	GE45GEC0933010	Price
1/8	1/8	1/2	1-1/2	.010	GE45GEC1253010X	Price	GE45GEC1253010	Price
1/8	1/8	1/2	1-1/2	.020	GE45GEC1253020X	Price	GE45GEC1253020	Price
3/16	3/16	5/8	2	.020	GE45GEC1873020X	Price	GE45GEC1873020	Price
3/16	3/16	5/8	2	.030	GE45GEC1873030X	Price	GE45GEC1873030	Price
1/4	1/4	3/4	2-1/2	.020	GE45GEC2503020X	Price	GE45GEC2503020	Price
1/4	1/4	3/4	2-1/2	.030	GE45GEC2503030X	Price	GE45GEC2503030	Price
3/8	3/8	7/8	2-1/2	.030	GE45GEC3753030X	Price	GE45GEC3753030	Price

MICRO 100 Universal End Mills



Center Cutting - Single End - 30° Helix

- Standard Length
- Material: soft, medium, hard
- Rake: +
- Finishing, semi-finishing, roughing

Tolerances:
Shank diameter: -.0001 to .0005”
Cutter diameter: 1/32-1/4 +.000-.002”; 9/32-1 +.000-.003”
T.I.R. maximum: .0005”

				2 Flute		3 Flute		4 Flute	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	5/64	1-1/2	**GE45GEM0312**	Price	**GE45GEM0313**	Price	**GE45GEM0314**	Price
1/16	1/8	3/16	1-1/2	**GE45GEM0622**	Price	**GE45GEM0623**	Price	**GE45GEM0624**	Price
3/32	1/8	3/8	1-1/2	**GE45GEM0932**	Price	**GE45GEM0933**	Price	**GE45GEM0934**	Price
1/8	1/8	1/2	1-1/2	**GE45GEM1252**	Price	**GE45GEM1253**	Price	**GE45GEM1254**	Price
5/32	3/16	9/16	2	**GE45GEM1562**	Price	**GE45GEM1563**	Price	**GE45GEM1564**	Price
3/16	3/16	5/8	2	**GE45GEM1872**	Price	**GE45GEM1873**	Price	**GE45GEM1874**	Price
7/32	1/4	5/8	2-1/2	**-**	-	**-**	-	**GE45GEM2184**	Price
1/4	1/4	3/4	2-1/2	**GE45GEM2502**	Price	**GE45GEM2503**	Price	**GE45GEM2504**	Price
9/32	5/16	3/4	2-1/2	**-**	-	**GE45GEM2813**	Price	**GE45GEM2814**	Price
5/16	5/16	13/16	2-1/2	**-**	-	**-**	-	**GE45GEM3124**	Price
3/8	3/8	7/8	2-1/2	**GE45GEM3752**	Price	**GE45GEM3753**	Price	**GE45GEM3754**	Price
7/16	7/16	1	2-1/2	**-**	-	**-**	-	**GE45GEM4374**	Price
1/2	1/2	1	3	**-**	-	**GE45GEM5003**	Price	**GE45GEM5004**	Price
9/16	9/16	1-1/4	3-1/2	**-**	-	**-**	-	**GE45GEM5624**	Price
5/8	5/8	1-1/4	3-1/2	**-**	-	**-**	-	**GE45GEM6254**	Price
3/4	3/4	1-1/2	4	**-**	-	**-**	-	**GE45GEM7504**	Price
7/8	7/8	1-1/2	4	**-**	-	**-**	-	**GE45GEM8754**	Price

MICRO 100 Metric Universal End Mills



- Features slightly increased flute and overall lengths for greater versatility
- Good for a variety of different materials ranging from soft to hard
- Shank diameter: -.0025mm to .0076mm
- Cutter diameter tolerances: **1mm - 3mm** +.000 / -.04mm; **4mm - 6mm** +.000mm / -.018mm; **8mm - 10mm** +.000mm / -.036mm;**12mm - 14mm** +.000mm / -.043mm

				2 Flute		3 Flute		4 Flute	
Dia. (D1)	Shank Dia. (D2)	2-3 Flute Length (L2)	OAL (L1)	Order No.	Price	Order No.	Price	Order No.	Price
1mm	3mm	3mm	38mm	**GE45GEMM0102**	Price	**GE45GEMM0103**	Price	**GE45GEMM0104**	Price
3mm	3mm	7mm	38mm	**GE45GEMM0302**	Price	**GE45GEMM0303**	Price	**-**	-
3mm	3mm	8mm	38mm	**-**	-	**-**	-	**GE45GEMM0304**	Price
5mm	5mm	13mm	50mm	**-**	-	**-**	-	**GE45GEMM0504**	Price
6mm	6mm	10mm	57mm	**GE45GEMM0602**	Price	**-**	-	**-**	-
6mm	6mm	13mm	57mm	**-**	-	**-**	-	**GE45GEMM0604**	Price
8mm	8mm	19mm	63mm	**-**	-	**-**	-	**GE45GEMM0804**	Price
10mm	10mm	19mm	72mm	**GE45GEMM1002**	Price	**GE45GEMM1003**	Price	**-**	-
10mm	10mm	22mm	72mm	**-**	-	**-**	-	**GE45GEMM1004**	Price
12mm	12mm	26mm	83mm	**-**	-	**-**	-	**GE45GEMM1204**	Price
14mm	14mm	26mm	83mm	**-**	-	**-**	-	**GE45GEMM1404**	Price

MICRO 100 Stub End Mills



Center Cutting - Single End - 30° Helix

- Shank diameter tolerance: -.0001 to -.0005”
- Cutter diameter tolerances: 1/32 - 1/4” +.000-.002”; 9/32 - 1/2” +.000-.003”; T.I.R.: .0005”

				2 Flute		3 Flute		4 Flute	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	1/16	1-1/2	**GE45SEM03102**	Price	**-**	-	**GE45SEM03104**	Price
3/64	1/8	3/32	1-1/2	**-**	-	**GE45SEM04603**	Price	**GE45SEM04604**	Price
1/16	1/8	1/8	1-1/2	**GE45SEM06202**	Price	**GE45SEM06203**	Price	**GE45SEM06204**	Price
5/64	1/8	5/32	1-1/2	**GE45SEM07802**	Price	**GE45SEM07803**	Price	**GE45SEM07804**	Price
3/32	1/8	3/16	1-1/2	**GE45SEM09302**	Price	**GE45SEM09303**	Price	**GE45SEM09304**	Price
7/64	1/8	3/16	1-1/2	**GE45SEM10902**	Price	**GE45SEM10903**	Price	**GE45SEM10904**	Price
1/8	1/8	1/4	1-1/2	**GE45SEM12502**	Price	**-**		**GE45SEM12504**	Price
9/64	3/16	1/4	1-1/2	**GE45SEM14002**	Price	**GE45SEM14003**	Price	**GE45SEM14004**	Price
5/32	3/16	5/16	1-1/2	**-**	-	**GE45SEM15603**	Price	**GE45SEM15604**	Price
3/16	3/16	3/8	1-1/2	**-**	-	**GE45SEM18703**	Price	**GE45SEM18704**	Price
13/64	1/4	3/8	2	**-**		**Price**	-	**GE45SEM20304**	Price
7/32	1/4	7/16	2	**-**	-	**-**	-	**GE45SEM21804**	Price
15/64	1/4	7/16	2	**-**	-	**-**	-	**GE45SEM23404**	Price
1/4	1/4	1/2	2	**GE45SEM25002**	Price	**GE45SEM25003**	Price	**GE45SEM25004**	Price
9/32	5/16	1/2	2	**-**	-	**-**	-	**GE45SEM28104**	Price
21⁄64	3/8	1/2	2	**GE45SEM32802**	Price	**-**	-	**GE45SEM32804**	Price
3/8	3/8	5/8	2	**GE45SEM37502**	Price	**GE45SEM37503**	Price	**GE45SEM37504**	Price
25/64	7/16	5/8	2-1/2	**-**	-	**-**	-	**GE45SEM39004**	Price
1/2	1/2	5/8	2-1/2	**-**	-	**-**	-	**GE45SEM50004**	Price

MICRO 100 N/C Generation End Mills

Center Cutting - Single End - 30° Helix

- Special flute diameter for maintaining radii with close tolerances
- Shank diameter tolerance: -.0001 to -.0003
- Cutter diameter tolerances : +.001 - .0000
- T.I.R. maximum .0005
- Sizes 3/8 and larger feature Weldon flat



				2		3		4	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/16	1/8	3/16	1-1/2	**GE45EMS0622**	Price	**GE45EMS0623**	Price	**GE45EMS0624**	Price
3/32	1/8	3/8	1-1/2	**GE45EMS0932**	Price	**GE45EMS0933**	Price	**GE45EMS0934**	Price
1/8	1/8	1/2	1-1/2	**-**	-	**-**	-	**GE45EMS1254**	Price
3/16	3/16	5/8	2	**GE45EMS1872**	Price	**-**	-	**GE45EMS1874**	Price
1/4	1/4	3/4	2-1/2	**-**	-	**GE45EMS2503**	Price	**GE45EMS2504**	Price
5/16	5/16	13/16	2-1/2	**-**	-	**-**	-	**GE45EMS3124**	Price
3/8	3/8	7/8	2-1/2	**-**	-	**-**	-	**GE45EMS3754**	Price
1/2	1/2	1	3	**-**	-	**GE45EMS5003**	Price	**GE45EMS5004**	Price
5/8	5/8	1-1/4	3-1/2	**-**	-	**GE45EMS6253**	Price	**GE45EMS6254**	Price
3/4	3/4	1-1/2	4	**-**	-	**-**	-	**GE45EMS7504**	Price

MICRO 100 Metric N/C Generation End Mills

- Shank diameter tolerance: .0025mm to .0076mm
- Cutter diameter tolerance: +.025mm / -.000mm
- Sizes 10mm and over have Weldon Flats



				2 Flute		3 Flute		4 Flute	
Size	Shank Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
2mm	2mm	10mm	38mm	**GE45EMSM0202**	Price	**GE45EMSM0203**	Price	**GE45EMSM0204**	Price
3mm	3mm	15mm	38mm	**GE45EMSM0302**	Price	**-**	-	**GE45EMSM0304**	Price
4mm	4mm	18mm	50mm	**-**	-	**-**	-	**GE45EMSM0404**	Price

MICRO 100 Micrograin Carbide Metric Square End Mills – Standard Length

- Features a slightly increased flute length and overall length for greater versatility
- Shank tolerance: -.0025mm to -.0076mm
- Cutting diameter tolerances: **1mm - 3mm** +.000mm / -.014mm; **3.5mm - 6mm** +.000mm / -.018mm; **7mm - 10mm** +.000 -.022mm



				2 Flute		4 Flute	
Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price
1mm	4mm	4mm	50mm	**GE45AEMM0102**	Price	**GE45AEMM0104**	Price
1.5mm	4mm	4mm	50mm	**GE45AEMM0152**	Price	**GE45AEMM0154**	Price
2mm	4mm	5mm	50mm	**GE45AEMM0202**	Price	**GE45AEMM0204**	Price
2.5mm	4mm	6mm	50mm	**-**	-	**GE45AEMM0254**	Price
3mm	6mm	8mm	57mm	**GE45AEMM0302**	Price	**GE45AEMM0304**	Price
3.5mm	6mm	10mm	57mm	**GE45AEMM0352**	Price	**GE45AEMM0354**	Price
4mm	6mm	11mm	57mm	**GE45AEMM0402**	Price	**GE45AEMM0404**	Price
4.5mm	6mm	11mm	57mm	**-**	-	**GE45AEMM0454**	Price
5mm	6mm	16mm	57mm	**GE45AEMM0502**	Price	**GE45AEMM0504**	Price
5.5mm	6mm	16mm	57mm	**GE45AEMM0552**	Price	**GE45AEMM0554**	Price
6mm	6mm	16mm	57mm	**GE45AEMM0602**	Price	**GE45AEMM0604**	Price
7mm	8mm	22mm	63mm	**-**	-	**GE45AEMM0704**	Price
8mm	8mm	22mm	63mm	**GE45AEMM0802**	Price	**GE45AEMM0804**	Price
10mm	10mm	25mm	72mm	**GE45AEMM1002**	Price	**GE45AEMM1004**	Price
12mm	12mm	30mm	83mm	**GE45AEMM1202**	Price	**GE45AEMM1204**	Price
14mm	14mm	35mm	83mm	**-**	-	**GE45AEMM1404**	Price
16mm	16mm	35mm	92mm	**-**	-	**GE45AEMM1604**	Price
20mm	20mm	45mm	104mm	**-**	-	**GE45AEMM2004**	Price
25mm	25mm	50mm	127mm	**-**	-	**GE45AEMM2504**	Price

RAPIDKUT® 4 Flute Solid Carbide Single End Mills



Center Cutting

- Used for general purpose milling in most materials of medium hardness such as steel, brass, iron and non-ferrous materials
- Made from premium submicron grain carbide
- 30° Helix

				MCG Uncoated		TiN		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	1/16	1-1/2	DD5012697	Price	DD5522697	Price	DD8042697	Price	DD8252697	Price
1/32	1/8	3/32	1-1/2	DD504002S	Price	DD5526896	Price	DD804002STCN	Price	DD8256896	Price
1/32	1/8	9/64	1-1/2	DD5017961	Price	DD5527961	Price	DD8047961	Price	DD8257961	Price
3/64	1/8	1/8	1-1/2	DD5016897	Price	DD5526897	Price	DD8046897	Price	DD8256897	Price
3/64	1/8	3/16	1-1/2	DD5017962	Price	DD5527962	Price	DD8047962	Price	DD8257962	Price
1/16	1/8	1/8	1-1/2	DD5012701	Price	DD5522701	Price	DD8042701	Price	DD8252701	Price
1/16	1/8	1/4	1-1/2	DD504004S	Price	DD554004ST	Price	DD804004STCN	Price	DD8256898	Price
1/16	1/8	3/8	1-1/2	DD5017861	Price	DD5527861	Price	DD8047861	Price	DD8257861	Price
5/64	1/8	1/8	1-1/2	DD5012703	Price	DD5522703	Price	DD8042703	Price	DD8252703	Price
5/64	1/8	1/4	1-1/2	DD504005S	Price	DD554005ST	Price	-	-	DD8256899	Price
5/64	1/8	1/2	1-1/2	DD5010775	Price	DD5520775	Price	DD8040775	Price	DD8250775	Price
3/32	1/8	3/16	1-1/2	DD5012705	Price	DD5522705	Price	DD8042705	Price	DD8252705	Price
3/32	1/8	3/8	1-1/2	DD504006S	Price	DD554006ST	Price	DD804006STCN	Price	DD8256900	Price
7/64	1/8	3/8	1-1/2	DD504007S	Price	DD554007ST	Price	-	-	DD8256901	Price
7/64	1/8	3/4	2	DD5010779	Price	DD5520779	Price	DD8040779	Price	DD8250779	Price
1/8	1/8	1/4	1-1/2	DD5017896	Price	DD5527896	Price	DD8047896	Price	DD8257896	Price
1/8	1/8	1/2	1-1/2	DD504008S	Price	DD554008ST	Price	DD804008STCN	Price	DD8256631	Price
1/8	1/8	5/8	2	DD5010125	Price	DD5520125	Price	DD8040125	Price	DD8250125	Price
1/8	1/8	3/4	3	DD5010127	Price	DD5520127	Price	DD8040127	Price	DD8250127	Price
1/8	1/8	1	3	DD504008SL	Price	DD554008SLT	Price	-	-	DD8250129	Price
9/64	3/16	9/16	2	DD504009S	Price	DD554009ST	Price	-	-	DD8257876	Price
5/32	3/16	5/16	1-1/2	DD5012707	Price	DD5522707	Price	DD8042707	Price	DD8252707	Price
5/32	3/16	9/16	2	DD504010S	Price	DD554010ST	Price	DD804010STCN	Price	DD8257877	Price
5/32	3/16	3/4	3	DD5011005	Price	DD5521005	Price	DD8041005	Price	DD8251005	Price
11/64	3/16	9/16	2	DD504011S	Price	DD554011ST	Price	-	-	DD8257878	Price
3/16	3/16	3/8	1-1/2	DD5017897	Price	DD5527897	Price	DD8047897	Price	DD8257897	Price
3/16	3/16	9/16	2	DD504012S	Price	DD554012ST	Price	DD804012STCN	Price	DD8256632	Price
3/16	3/16	1	3	DD5010131	Price	DD5520131	Price	DD8040131	Price	DD8250131	Price
3/16	3/16	1-1/8	3	DD504012SL	Price	DD554012SLT	Price	-	-	DD8250133	Price
13/64	1/4	5/8	2	DD504013S	Price	DD554013ST	Price	-	-	DD8257879	Price
7/32	1/4	1/2	2	DD5012709	Price	DD5522709	Price	DD8042709	Price	DD8252709	Price
7/32	1/4	5/8	2-1/2	DD504014S	Price	DD554014ST	Price	DD804014STCN	Price	DD8257880	Price
15/64	1/4	3/4	2-1/2	DD504015S	Price	DD554015ST	Price	-	-	DD8257881	Price
1/4	1/4	1/2	2	DD5017898	Price	DD5527898	Price	DD8047898	Price	DD8257898	Price
1/4	1/4	3/4	2-1/2	DD504016S	Price	DD554016ST	Price	DD804016STCN	Price	DD8256633	Price
1/4	1/4	1	3	DD5010139	Price	DD5520139	Price	DD8040139	Price	DD8250139	Price
1/4	1/4	1-1/2	4	DD504016SL	Price	DD554016SLT	Price	-	-	DD8250143	Price
17/64	5/16	3/4	2-1/2	DD504017S	Price	DD554017ST	Price	-	-	DD8257882	Price
9/32	5/16	3/4	2-1/2	DD504018S	Price	DD554018ST	Price	DD804018STCN	Price	DD8257883	Price
19/64	5/16	13/16	2-1/2	DD504019S	Price	DD554019ST	Price	-	-	DD8257884	Price
5/16	5/16	1/2	2	DD5017899	Price	DD5527899	Price	DD8047899	Price	DD8257899	Price
5/16	5/16	13/16	2-1/2	DD504020S	Price	DD554020ST	Price	DD804020STCN	Price	DD8256634	Price
5/16	5/16	1-1/8	3	DD5016075	Price	DD5526075	Price	-	-	-	-
5/16	5/16	1-5/8	4	DD504020SL	Price	DD554020SLT	Price	-	-	DD8250145	Price
11/32	3/8	7/8	2-1/2	DD5017886	Price	DD554022ST	Price	DD8047886	Price	DD8257886	Price
3/8	3/8	5/8	2	DD5017900	Price	DD5527900	Price	DD8047900	Price	DD8257900	Price
3/8	3/8	1	2-1/2	DD504024S	Price	DD554024ST	Price	DD804024STCN	Price	DD8256635	Price
3/8	3/8	2	4	DD504024SL	Price	DD554024SLT	Price	-	-	DD8250155	Price
3/8	3/8	3	6	DD504024SXL	Price	DD554024SXLT	Price	-	-	-	-
25/64	7/16	1	2-3/4	DD5010753	Price	DD5520753	Price	DD8040753	Price	DD8250753	Price
13/32	7/16	1	2-3/4	DD5017888	Price	DD5527888	Price	-	-	DD8257888	Price
7/16	7/16	1	2-3/4	DD504028S	Price	DD554028ST	Price	DD804028STCN	Price	DD8256637	Price
7/16	7/16	2	4	DD5010157	Price	DD5520157	Price	DD8040157	Price	DD8250157	Price
1/2	1/2	1	3	DD504032S	Price	DD554032ST	Price	DD804032STCN	Price	DD8256639	Price
1/2	1/2	5/8	2-1/2	DD5017902	Price	DD5527902	Price	DD8047902	Price	DD8257902	Price
1/2	1/2	1-1/2	4	DD5010785	Price	DD5520785	Price	DD8040785	Price	DD8250785	Price
1/2	1/2	2	4	DD5010161	Price	DD5520161	Price	DD8040161	Price	DD8250161	Price
1/2	1/2	3	6	DD504032SL	Price	DD554032SLT	Price	-	-	DD8250163	Price
9/16	9/16	1-1/4	3-1/2	DD504036S	Price	DD554036ST	Price	DD804036STCN	Price	-	-
5/8	5/8	3/4	3	DD5010795	Price	DD5520795	Price	DD8040795	Price	DD8250795	Price
5/8	5/8	1-1/4	3-1/2	DD504040S	Price	DD554040ST	Price	DD804040STCN	Price	DD8256641	Price
5/8	5/8	3	6	DD504040SL	Price	DD554040SLT	Price	-	-	-	-
11/16	3/4	1-1/2	4	DD504044S	Price	DD554044ST	Price	DD804044STCN	Price	DD8252713	Price
3/4	3/4	1	3	DD5016238	Price	DD5526238	Price	DD8046238	Price	DD8256238	Price
3/4	3/4	1-1/2	4	DD504048S	Price	DD554048ST	Price	DD804048STCN	Price	DD8256642	Price
3/4	3/4	2	6	DD5010167	Price	DD5520167	Price	DD8040167	Price	DD8250167	Price
3/4	3/4	3	6	DD504048SL	Price	DD554048SLT	Price	-	-	DD8250169	Price
3/4	3/4	4	7	DD5017736	Price	DD5527736	Price	DD8047736	Price	DD8257736	Price
7/8	7/8	1-1/2	4	DD504056S	Price	DD554056ST	Price	DD804056STCN	Price	DD8251903	Price
1	1	1-1/2	4	DD504100S	Price	DD554100ST	Price	DD804100STCN	Price	DD8256644	Price
1	1	3	6	DD504100SL	Price	DD554100SLT	Price	-	-	DD8251275	Price
1	1	4	7	DD5016315	Price	DD5526315	Price	DD8046315	Price	DD8256315	Price

SOLID MORSE MASTER Solid Carbide 4 Flute Single End Mills

30° Helix • Center Cutting

- These 4-flute end mills with a greater core thickness offer increased tool strength and reduced tool deflection
- 4-Flute mills also reduce chip load per tooth for the milling of tougher materials, greater wear resistance and improved surface finish
- Center cutting end allows for plunge cutting into solid material
- **Tolerances:**
  Sizes to 1/4" +.000 - .002"
  9/32 to 1" +.000 - .003"



				Uncoated		TiN		TiCN		TiAlN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	1/16	1-1/2	**MT3257087**	Price	**-**	-	**-**	-	**MT3292862**	Price
3/64	1/8	3/32	1-1/2	**MT3257088**	Price	**-**	-	**-**	-	**MT3292863**	Price
1/16	1/8	1/8	1-1/2	**MT3257040**	Price	**-**	-	**-**	-	**MT3292815**	Price
1/16	1/8	3/16	1-1/2	**MT3257904**	Price	**MT3290702**	Price	**MT3290739**	Price	**MT3290776**	Price
3/32	1/8	3/16	1-1/2	**MT3257041**	Price	**-**	-	**-**	-	**MT3292816**	Price
3/32	1/8	5/16	1-1/2	**MT3257906**	Price	**MT3290704**	Price	**MT3290741**	Price	**MT3290778**	Price
1/8	1/8	1/4	1-1/2	**MT3257042**	Price	**-**	-	**-**	-	**MT3292817**	Price
1/8	1/8	1/2	1-1/2	**MT3257908**	Price	**MT3290706**	Price	**MT3290743**	Price	**MT3290780**	Price
1/8	1/8	3/4	2-1/4	**MT3258138**	Price	**MT3290820**	Price	**MT3290830**	Price	**MT3290840**	Price
1/8	1/8	1	3	**MT3258508**	Price	**MT3290860**	Price	**MT3290870**	Price	**MT3290880**	Price
5/32	3/16	5/16	2	**MT3257043**	Price	**-**	-	**-**	-	**MT3292818**	Price
5/32	3/16	9/16	2	**MT3257910**	Price	**MT3290708**	Price	**MT3290745**	Price	**MT3290782**	Price
3/16	3/16	3/8	2	**MT3257044**	Price	**-**	-	**-**	-	**MT3292819**	Price
3/16	3/16	5/8	2	**MT3257912**	Price	**MT3290710**	Price	**MT3290747**	Price	**MT3290784**	Price
3/16	3/16	3/4	2-1/2	**MT3258139**	Price	**MT3290821**	Price	**MT3290831**	Price	**MT3290841**	Price
3/16	3/16	1-1/8	3	**MT3258512**	Price	**MT3290861**	Price	**MT3290871**	Price	**MT3290881**	Price
7/32	1/4	7/16	2	**MT3257045**	Price	**-**	-	**-**	-	**MT3292820**	Price
7/32	1/4	5/8	2-1/2	**MT3257914**	Price	**MT3290712**	Price	**MT3290749**	Price	**MT3290786**	Price
1/4	1/4	1/2	2	**MT3257046**	Price	**-**	-	**-**	-	**MT3292821**	Price
1/4	1/4	3/4	2-1/2	**MT3257916**	Price	**MT3290714**	Price	**MT3290751**	Price	**MT3290788**	Price
1/4	1/4	1-1/8	3	**MT3258141**	Price	**MT3290822**	Price	**MT3290832**	Price	**MT3290842**	Price
1/4	1/4	1-1/2	4	**MT3258516**	Price	**MT3290862**	Price	**MT3290872**	Price	**MT3290882**	Price
3/8	3/8	1-3/4	4	**MT3258524**	Price	**MT3290864**	Price	**MT3290874**	Price	**MT3290884**	Price
9/32	5/16	3/4	2-1/2	**MT3257918**	Price	**MT3290716**	Price	**MT3290753**	Price	**MT3290790**	Price
5/16	5/16	1/2	2	**MT3257047**	Price	**-**	-	**-**	-	**MT3292822**	Price
5/16	5/16	13/16	2-1/2	**MT3257920**	Price	**MT3290718**	Price	**MT3290755**	Price	**MT3290792**	Price
5/16	5/16	1-1/8	3	**MT3258150**	Price	**MT3290823**	Price	**MT3290833**	Price	**MT3290843**	Price
5/16	5/16	1-5/8	4	**MT3258520**	Price	**MT3290863**	Price	**MT3290873**	Price	**MT3290883**	Price
3/8	3/8	5/8	2	**MT3257048**	Price	**-**	-	**-**	-	**MT3292823**	Price
3/8	3/8	7/8	2-1/2	**MT3257924**	Price	**MT3290722**	Price	**MT3290759**	Price	**MT3290796**	Price
3/8	3/8	1-1/8	3	**MT3258154**	Price	**MT3290824**	Price	**MT3290834**	Price	**MT3290844**	Price
7/16	7/16	5/8	2-1/2	**MT3257049**	Price	**-**	-	**-**	-	**MT3292824**	Price
7/16	7/16	1	2-3/4	**MT3257928**	Price	**MT3290726**	Price	**MT3290763**	Price	**MT3290800**	Price
7/16	7/16	2	4	**MT3258158**	Price	**MT3290825**	Price	**MT3290835**	Price	**MT3290845**	Price
7/16	7/16	3	6	**MT3258528**	Price	**MT3290865**	Price	**MT3290875**	Price	**MT3290885**	Price
1/2	1/2	5/8	2-1/2	**MT3257050**	Price	**-**	-	**-**	-	**MT3292825**	Price
1/2	1/2	1	3	**MT3257932**	Price	**MT3290730**	Price	**MT3290767**	Price	**MT3290804**	Price
1/2	1/2	2	4	**MT3258162**	Price	**MT3290826**	Price	**MT3290836**	Price	**MT3290846**	Price
1/2	1/2	3	6	**MT3258532**	Price	**MT3290866**	Price	**MT3290876**	Price	**MT3290886**	Price
9/16	9/16	1-1/2	3-1/2	**MT3257936**	Price	**MT3290731**	Price	**MT3290768**	Price	**MT3290805**	Price
5/8	5/8	3/4	3	**MT3257051**	Price	**-**	-	**-**	-	**MT3292826**	Price
5/8	5/8	1-1/4	3-1/2	**MT3257940**	Price	**MT3290732**	Price	**MT3290769**	Price	**MT3290806**	Price
5/8	5/8	2-1/4	5	**MT3258170**	Price	**MT3290827**	Price	**MT3290837**	Price	**MT3290847**	Price
5/8	5/8	3	6	**MT3258540**	Price	**MT3290867**	Price	**MT3290877**	Price	**MT3290887**	Price
11/16	3/4	1-1/2	4	**MT3257944**	Price	**MT3290733**	Price	**MT3290770**	Price	**MT3290807**	Price
3/4	3/4	1	3	**MT3257052**	Price	**-**	-	**-**	-	**MT3292827**	Price
3/4	3/4	1-1/2	4	**MT3257948**	Price	**MT3290734**	Price	**MT3290771**	Price	**MT3290808**	Price
3/4	3/4	2-1/4	5	**MT3258178**	Price	**MT3290828**	Price	**MT3290838**	Price	**MT3290848**	Price
3/4	3/4	3	6	**MT3258548**	Price	**MT3290868**	Price	**MT3290878**	Price	**MT3290888**	Price
7/8	7/8	1-1/2	4	**MT3257956**	Price	**MT3290735**	Price	**MT3290772**	Price	**MT3290809**	Price
1	1	1-1/2	4	**MT3257964**	Price	**MT3290736**	Price	**MT3290773**	Price	**MT3290810**	Price
1	1	2-1/4	5	**MT3258194**	Price	**MT3290829**	Price	**MT3290839**	Price	**MT3290849**	Price
1	1	3	6	**MT3258564**	Price	**MT3290869**	Price	**MT3290879**	Price	**MT3290889**	Price

truCORE® E14 Solid Carbide 4 Flute Square End Mills



- Square end for general machining and finishing
- Fine grain carbide for greater toughness, wear resistance, and higher transverse rupture strength
- Multiple coatings available for all of your application needs
- Round or Weldon style shank
- 30° Helix

MADE IN THE USA

P *Good in* **Carbon and Tool Steels**
K *Good in* **Cast Iron**
M *Good in* **Stainless Steels**

					AlTiN		Uncoated		TiCN	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	3/32	1-1/2	Round Shank	DD4099345	Price	DD4030701	Price	DD4034402	Price
3/64	1/8	9/64	1-1/2	Round Shank	DD4030537	Price	DD4030703	Price	DD4034403	Price
1/16	1/8	1/8	1-1/2	Round Shank	DD4030529	Price	-	-	-	-
1/16	1/8	3/16	1-1/2	Round Shank	DD4030800	Price	DD4030705	Price	DD4034404	Price
1/16	1/8	1/4	1-1/2	Round Shank	DD4090695	Price	-	-	-	-
5/64	1/8	1/4	1-1/2	Round Shank	DD4030506	Price	DD4030707	Price	-	-
3/32	1/8	3/16	1-1/2	Round Shank	DD4031545	Price	-	-	-	-
3/32	1/8	3/8	1-1/2	Round Shank	DD4030531	Price	DD4030709	Price	DD4034406	Price
7/64	1/8	3/8	1-1/2	Round Shank	DD4030458	Price	DD4030711	Price	-	-
1/8	1/8	1/4	1-1/2	Round Shank	DD4097871	Price	DD4031507	Price	DD4031532	Price
1/8	1/8	1/2	1-1/2	Round Shank	DD4030521	Price	DD4030713	Price	DD4034408	Price
1/8	1/8	3/4	2-1/4	Round Shank	DD4030417	Price	DD4037708	Price	DD4037710	Price
1/8	1/8	1	3	Round Shank	DD4097847	Price	DD4034108	Price	DD4034110	Price
9/64	3/16	9/16	2	Round Shank	DD4030500	Price	-	-	-	-
5/32	3/16	9/16	2	Round Shank	DD4030501	Price	DD4030717	Price	DD4034410	Price
3/16	3/16	3/8	2	Round Shank	DD4031548	Price	DD4031511	Price	DD4031534	Price
3/16	3/16	5/8	2	Round Shank	DD4030520	Price	DD4030721	Price	DD4034412	Price
3/16	3/16	3/4	2-1/2	Round Shank	DD4037793	Price	DD4037712	Price	-	-
3/16	3/16	1-1/8	3	Round Shank	DD4034115	Price	DD4034112	Price	DD4034114	Price
7/32	1/4	5/8	2-1/2	Round Shank	DD4030546	Price	DD4030725	Price	-	-
1/4	1/4	1/2	2	Round Shank	DD4031595	Price	DD4031515	Price	DD4031536	Price
1/4	1/4	3/4	2-1/2	Round Shank	DD4098955	Price	DD4030729	Price	DD4034416	Price
1/4	1/4	1-1/8	3	Round Shank	DD4099336	Price	DD4037716	Price	DD4037718	Price
1/4	1/4	1-1/2	4	Round Shank	DD4098978	Price	DD4034116	Price	DD4034118	Price
1/4	1/4	1-1/2	6	Round Shank	DD4039772	Price	-	-	-	-
9/32	5/16	3/4	2-1/2	Round Shank	DD4096156	Price	-	-	-	-
5/16	5/16	1/2	2	Round Shank	DD4030534	Price	-	-	-	-
5/16	5/16	13/16	2-1/2	Round Shank	DD4030898	Price	DD4030737	Price	DD4034420	Price
5/16	5/16	1-1/8	3	Round Shank	DD4030461	Price	DD4037720	Price	-	-
5/16	5/16	1-5/8	4	Round Shank	DD4034123	Price	DD4034120	Price	-	-
3/8	3/8	5/8	2	Round Shank	DD4031549	Price	DD4031519	Price	-	-
3/8	3/8	1	2-1/2	Round Shank	DD4098244	Price	DD4030745	Price	DD4034424	Price
3/8	3/8	1	2-1/2	Weldon Shank	DD4039790	Price	DD4039745	Price	-	-
3/8	3/8	1-1/8	3	Round Shank	DD4037727	Price	DD4037724	Price	DD4037726	Price
3/8	3/8	1-1/8	3	Weldon Shank	DD4039168	Price	-	-	-	-
3/8	3/8	1-1/2	6	Round Shank	DD4097850	Price	-	-	-	-
3/8	3/8	1-3/4	4	Round Shank	DD4034136	Price	DD4034124	Price	DD4034126	Price
7/16	7/16	1	2-3/4	Round Shank	DD4031040	Price	-	-	DD4034430	Price
7/16	7/16	2	4	Round Shank	DD4037731	Price	-	-	-	-
1/2	1/2	5/8	2-1/2	Round Shank	DD4031546	Price	DD4031523	Price	-	-
1/2	1/2	1	3	Round Shank	DD4098245	Price	DD4030761	Price	DD4034432	Price
1/2	1/2	1-1/2	6	Round Shank	DD4031150	Price	-	-	-	-
1/2	1/2	2	4	Round Shank	DD4037735	Price	DD4037732	Price	DD4037734	Price
1/2	1/2	2	4	Weldon Shank	DD4039169	Price	-	-	-	-
1/2	1/2	3	6	Round Shank	DD4034135	Price	DD4034132	Price	DD4034134	Price
9/16	9/16	1-1/4	3-1/2	Round Shank	DD4030996	Price	-	-	-	-
5/8	5/8	1-1/4	3-1/2	Round Shank	DD4030555	Price	DD4030765	Price	DD4034440	Price
5/8	5/8	2-1/4	5	Round Shank	DD4030561	Price	DD4037740	Price	DD4037742	Price
5/8	5/8	2-1/4	5	Weldon Shank	DD4039170	Price	-	-	-	-
5/8	5/8	3	6	Round Shank	DD4034143	Price	DD4034140	Price	DD4034142	Price
5/8	5/8	3	6	Weldon Shank	DD4039177	Price	-	-	-	-
11/16	3/4	1-1/2	4	Round Shank	DD4031032	Price	-	-	-	-
3/4	3/4	1-1/2	4	Round Shank	DD4098956	Price	DD4030769	Price	DD4034448	Price
3/4	3/4	2-1/4	5	Round Shank	DD4037751	Price	DD4037748	Price	DD4037750	Price
3/4	3/4	2-1/4	5	Weldon Shank	DD4039171	Price	-	-	-	-
3/4	3/4	3	6	Round Shank	DD4034151	Price	DD4034148	Price	DD4034150	Price
3/4	3/4	3	6	Weldon Shank	DD4039178	Price	-	-	-	-
7/8	7/8	1-1/2	4	Round Shank	DD4030523	Price	-	-	-	-
1	1	1-1/2	4	Round Shank	DD4098957	Price	-	-	DD4034464	Price
1	1	2-1/4	5	Round Shank	DD4037767	Price	-	-	DD4037766	Price
1	1	2-1/4	5	Weldon Shank	DD4039172	Price	-	-	-	-
1	1	3	6	Round Shank	DD4034167	Price	-	-	-	-
1	1	3	6	Weldon Shank	DD4039365	Price	-	-	-	-

4 Flute Solid Carbide General Purpose End Mills

- Standard micro grain carbide
- TiAlN coated



				Bright		TiAlN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	1/8	1/8	1-1/2	**TP37404031200**	Price	**TP37404031211**	Price
1/16	1/8	1/8	1-1/2	**TP37414062500**	Price	**TP37414062511**	Price
1/16	1/8	3/16	1-1/2	**TP37404062500**	Price	**TP37404062511**	Price
3/32	1/8	3/16	1-1/2	**TP37414093800**	Price	-	-
3/32	1/8	5/16	1-1/2	**TP37404093800**	Price	**TP37404093811**	Price
1/8	1/8	1/4	1-1/2	**TP37414125000**	Price	**TP37414125011**	Price
1/8	1/8	1/2	1-1/2	**TP37404125000**	Price	**TP37404125011**	Price
1/8	1/8	3/4	2-1/4	**TP37464125000**	Price	**TP37464125011**	Price
1/8	1/8	1	3	**TP37484125000**	Price	**TP37484125011**	Price
5/32	3/16	5/16	2	**TP37414156200**	Price	-	-
5/32	3/16	9/16	2	**TP37404156200**	Price	**TP37404156211**	Price
3/16	3/16	5/8	2	**TP37404187500**	Price	**TP37404187511**	Price
3/16	3/16	3/4	2-1/4	**TP37464187500**	Price	-	-
3/16	3/16	1-1/8	3	**TP37484187500**	Price	-	-
7/32	1/4	5/8	2-1/2	**TP37404218800**	Price	**TP37404218811**	Price
1/4	1/4	1/2	2	**TP37414250000**	Price	-	-
1/4	1/4	3/4	2-1/2	**TP37404250000**	Price	**TP37404250011**	Price
1/4	1/4	1-1/8	3	**TP37464250000**	Price	-	-
1/4	1/4	1-1/2	4	**TP37484250000**	Price	**TP37484250011**	Price
9/32	5/16	3/4	2-1/2	**TP37404281200**	Price	**TP37404281211**	Price
5/16	5/16	1/2	2	**TP37414312500**	Price	**TP37414312511**	Price
5/16	5/16	13/16	2-1/2	**TP37404312500**	Price	**TP37404312511**	Price
5/16	5/16	1-1/8	3	**TP37464312500**	Price	-	-
5/16	5/16	1-5/8	4	**TP37484312500**	Price	-	-
3/8	3/8	5/8	2	**TP37414375000**	Price	**TP37414375011**	Price
3/8	3/8	1	2-1/2	**TP37404375000**	Price	**TP37404375011**	Price
3/8	3/8	1-1/8	3	**TP37464375000**	Price	-	-
3/8	3/8	1-3/4	4	**TP37484375000**	Price	-	-
7/16	7/16	5/8	2-1/2	**TP37414437500**	Price	-	-
7/16	7/16	1	2-3/4	**TP37404437500**	Price	**TP37404437511**	Price
7/16	7/16	2	4	**TP37464437500**	Price	-	-
7/16	7/16	3	6	**TP37484437500**	Price	-	-
1/2	1/2	5/8	2-1/2	**TP37414500000**	Price	**TP37414500011**	Price
1/2	1/2	1	3	**TP37404500000**	Price	**TP37404500011**	Price
1/2	1/2	2	4	**TP37464500000**	Price	-	-
1/2	1/2	3	6	**TP37484500000**	Price	-	-
5/8	5/8	3/4	3	**TP37414625000**	Price	**TP37414625011**	Price
5/8	5/8	1-1/4	3-1/2	**TP37404625000**	Price	**TP37404625011**	Price
5/8	5/8	2-1/4	5	**TP37464625000**	Price	**TP37464625011**	Price
5/8	5/8	3	6	**TP37484625000**	Price	**TP37484625011**	Price
3/4	3/4	1	3	**TP37414750000**	Price	**TP37414750011**	Price
3/4	3/4	3	6	**TP37484750000**	Price	**TP37484750011**	Price
3/4	3/4	1-1/2	4	**TP37404750000**	Price	**TP37404750011**	Price
3/4	3/4	2-1/4	5	**TP37464750000**	Price	-	-
7/8	7/8	1-1/2	4	**TP37404875000**	Price	**TP37404875011**	Price
1	1	1-1/2	4	**TP37404100000**	Price	**TP37404100011**	Price
1	1	2-1/4	5	**TP37464100000**	Price	**TP37464100011**	Price
1	1	3	6	**TP37484100000**	Price	-	-

RAPIDKUT® 4 Flute Solid Carbide Long Reach End Mills



Reduced Neck • Square End

- Neck diameter reduced for clearance
- Neck reduction .020" - all sizes
- The solid neck area provides reach with maximum rigidity
- Used to mill deep pockets or slots where long flute lengths are not needed
- Made from premium submicron grain carbide
- Tolerances +.000/-.002"

					Uncoated		TiN		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Neck Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	5/8	3/8	2	**DD5016731**	Price	**DD5526731**	Price	**DD8046731**	Price	**DD8256731**	Price
3/16	3/16	1	1-5/8	4	**DD5016733**	Price	**DD5526733**	Price	**DD8046733**	Price	**DD8256733**	Price
1/4	1/4	1-1/2	2-3/4	6	**DD5016735**	Price	**DD5526735**	Price	**DD8046735**	Price	**DD8256735**	Price
5/16	5/16	1-1/2	2-13/16	6	**DD5016737**	Price	**DD5526737**	Price	**DD8046737**	Price	**DD8256737**	Price
3/8	3/8	1-1/2	2-7/8	6	**DD5016739**	Price	**DD5526739**	Price	**DD8046739**	Price	**DD8256739**	Price
7/16	7/16	1-1/2	2-3/4	6	**DD5016741**	Price	**DD5526741**	Price	**DD8046741**	Price	**DD8256741**	Price
1/2	1/2	1-1/2	2-1/2	6	**DD5016743**	Price	**DD5526743**	Price	**DD8046743**	Price	**DD8256743**	Price
9/16	9/16	2	1-3/4	6	**DD5016744**	Price	**DD5526744**	Price	**DD8046744**	Price	**DD8256744**	Price
5/8	5/8	2	1-3/4	6	**DD5016746**	Price	**DD5526746**	Price	**DD8046746**	Price	**DD8256746**	Price
3/4	3/4	2	1-1/2	6	**DD5016747**	Price	**DD5526747**	Price	**DD8046747**	Price	**DD8256747**	Price
1	1	2	1-1/2	6	**DD5016748**	Price	**DD5526748**	Price	**DD8046748**	Price	**DD8256748**	Price

Tuff Cut® GP 4 Flute Center Cutting Carbide End Mills

Standard Length · 30° Helix

- Designed for aggressive milling of most materials
- Corner radius styles available
- M.A. Ford List 111



				Uncoated		ALtima	
Size (in.)	Shank Dia. (in.)	Flute Length	OAL (in.)	Order No.	Price	Order No.	Price
1/64	1/8	1/32	1-1/2	**DD1511011**	Price	-	-
1/32	1/8	5/64	1-1/2	**DD1511027**	Price	-	-
3/64	1/8	7/64	1-1/2	**DD1511045**	Price	**DD1511104680A**	Price
1/16	1/8	3/16	1-1/2	**DD1511063**	Price	-	-
5/64	1/8	3/16	1-1/2	**DD1511079**	Price	**DD1511107810A**	Price
7/64	1/8	3/8	1-1/2	**DD1511101**	Price	-	-
1/8	1/8	1/2	1-1/2	**DD1511108**	Price	-	-
1/8	1/8	3/8	1-1/2	**DD1511105**	Price	**DD1511005**	Price
9/64	3/16	1/2	2	**DD1511112**	Price	-	-
5/32	3/16	1/2	2	**DD1511113**	Price	**DD1511115620A**	Price
11/64	3/16	5/8	2	**DD1511116**	Price	-	-
3/16	3/16	5/8	2	**DD1511119**	Price	**DD1511009**	Price
13/64	1/4	5/8	2-1/2	**DD1511122**	Price	-	-
7/32	1/4	5/8	2-1/2	**DD1511125**	Price	-	-

				Uncoated		ALtima	
Size (in.)	Shank Dia. (in.)	Flute Length	OAL (in.)	Order No.	Price	Order No.	Price
15/64	1/4	3/4	2-1/2	**DD1511126**	Price	-	-
1/4	1/4	3/4	2-1/2	**DD1511129**	Price	**DD1511017**	Price
9/32	5/16	3/4	2-1/2	**DD1511133**	Price	-	-
5/16	5/16	13/16	2-1/2	**DD1511135**	Price	**DD1511019**	Price
3/8	3/8	1	2-1/2	**DD1511141**	Price	**DD1511023**	Price
7/16	7/16	1	2-3/4	**DD1511147**	Price	**DD1511029**	Price
1/2	1/2	1	3	**DD1511151**	Price	**DD1511033**	Price
9/16	9/16	1-1/8	3-1/2	**DD1511155**	Price	-	-
5/8	5/8	1-1/4	3-1/2	-	-	**DD1511037**	Price
3/4	3/4	1-1/2	4	**DD1511163**	Price	**DD1511041**	Price
7/8	7/8	1-1/2	4	**DD1511169**	Price	-	-
1	1	1-1/2	4	**DD1511097**	Price	**DD1011001**	Price
1-1/4	1-1/4	1-9/16	4-3/8	**DD1511107**	Price	-	-

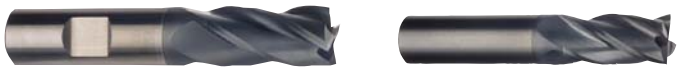
truCORE® E14 Solid Carbide 4 Flute Corner Radius End Mills

- Wide range of corner radii available for machining in a wide variety of materials
- Fine grain carbide for greater toughness, wear resistance, and higher transverse rupture strength
- Precision ground flat (Weldon style) available for improved rigidity
- 30° Helix, AlTiN coated

P Good in **Carbon and Tool Steels**

M Good in **Stainless Steels**

K Good in **Cast Iron**



					.015		.020		.030		.045		.060	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	Round Shank	**DD4097662**	Price	**DD4090523**	Price	-	-	-	-	-	-
3/16	3/16	5/8	2	Round Shank	**DD4039694**	Price	**DD4039695**	Price	**DD4039601**	Price	-	-	-	-
1/4	1/4	3/4	2-1/2	Round Shank	**DD4030519**	Price	**DD4039513**	Price	**DD4039604**	Price	**DD4039696**	Price	-	-
5/16	5/16	13/16	2-1/2	Round Shank	**DD4039697**	Price	**DD4039698**	Price	**DD4039700**	Price	**DD4039701**	Price	-	-
3/8	3/8	1	2-1/2	Round Shank	**DD4037443**	Price	**DD4037444**	Price	**DD4037445**	Price	**DD4037446**	Price	**DD4037447**	Price
1/2	1/2	1	3	Round Shank	**DD4037449**	Price	**DD4037450**	Price	**DD4037451**	Price	**DD4037452**	Price	**DD4037453**	Price

MICRO 100® 4 Flute Solid Carbide End Mills

Corner Radius • Center Cutting

- Ideally suited for heavier cuts in medium and hard materials
- 30° Helix



					AlTiN		Uncoated	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Corner Radius (in.)	Order No.	Price	Order No.	Price
1/32	1/8	5/64	1-1/2	.005	**GE45GEC0314005X**	Price	**GE45GEC0314005**	Price
1/16	1/8	3/16	1-1/2	.005	**GE45GEC0624005X**	Price	**GE45GEC0624005**	Price
1/16	1/8	3/16	1-1/2	.010	**GE45GEC0624010X**	Price	**GE45GEC0624010**	Price
3/32	1/8	3/8	1-1/2	.005	**GE45GEC0934005X**	Price	**GE45GEC0934005**	Price
3/32	1/8	3/8	1-1/2	.010	**GE45GEC0934010X**	Price	**GE45GEC0934010**	Price
1/8	1/8	1/2	1-1/2	.010	**GE45GEC1254010X**	Price	**GE45GEC1254010**	Price
1/8	1/8	1/2	1-1/2	.020	**GE45GEC1254020X**	Price	**GE45GEC1254020**	Price
3/16	3/16	5/8	2	.010	**GE45GEC1874010X**	Price	**GE45GEC1874010**	Price
3/16	3/16	5/8	2	.030	**GE45GEC1874030X**	Price	**GE45GEC1874030**	Price
1/4	1/4	3/4	2-1/2	.010	**GE45GEC2504010X**	Price	**GE45GEC2504010**	Price
1/4	1/4	3/4	2-1/2	.020	**GE45GEC2504020X**	Price	**GE45GEC2504020**	Price
1/4	1/4	3/4	2-1/2	.030	**GE45GEC2504030X**	Price	**GE45GEC2504030**	Price
5/16	5/16	13/16	2-1/2	.010	**GE45GEC3124010X**	Price	**GE45GEC3124010**	Price
3/8	3/8	7/8	2-1/2	.010	**GE45GEC3754010X**	Price	**GE45GEC3754010**	Price
3/8	3/8	7/8	2-1/2	.020	**GE45GEC3754020X**	Price	**GE45GEC3754020**	Price
3/8	3/8	7/8	2-1/2	.030	**GE45GEC3754030X**	Price	**GE45GEC3754030**	Price

RAPIDKUT® 4 Flute Corner Radius Carbide End Mills



Center Cutting

- 30° Helix
- Used when radius is permissible
- Radius gives added strength to corner
- Made from premium submicron grain carbide
- Cutting tool diameter tolerance: +.000/-.002”

MCG TiN TiCN AlTiN

					Uncoated		TiN		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/32	1/8	3/8	1-1/2	.010	DD8311061	Price	DD8321061	Price	DD8341061	Price	DD8351061	Price
3/32	1/8	3/8	1-1/2	.015	DD8311063	Price	DD8321063	Price	DD8341063	Price	DD8351063	Price
3/32	1/8	3/8	1-1/2	.020	DD8311065	Price	DD8321065	Price	DD8341065	Price	DD8351065	Price
1/8	1/8	1/4	1-1/2	.010	DD8316904	Price	DD8326904	Price	DD8346904	Price	DD8356904	Price
1/8	1/8	1/2	1-1/2	.010	-	-	DD8321067	Price	DD8341067	Price	DD8351067	Price
1/8	1/8	1/2	1-1/2	.015	DD8315422	Price	DD8325422	Price	DD8345422	Price	DD8355422	Price
1/8	1/8	1/2	1-1/2	.020	DD8311069	Price	DD8321069	Price	DD8341069	Price	-	-
1/8	1/8	1/2	1-1/2	.030	-	-	DD8321071	Price	DD8341071	Price	-	-
3/16	3/16	5/8	2	.010	-	-	DD8321073	Price	DD8341073	Price	DD8351073	Price
3/16	3/16	5/8	2	.015	-	-	DD8321075	Price	DD8341075	Price	-	-
3/16	3/16	5/8	2	.020	-	-	DD8325424	Price	DD8345424	Price	-	-
3/16	3/16	5/8	2	.030	-	-	DD8325426	Price	DD8345426	Price	-	-
1/4	1/4	3/4	2-1/2	.015	DD8315360	Price	DD8325360	Price	DD8345360	Price	DD8355360	Price
1/4	1/4	3/4	2-1/2	.020	-	-	DD8325362	Price	DD8345362	Price	-	-
1/4	1/4	3/4	2-1/2	.030	DD8315364	Price	DD8325364	Price	DD8345364	Price	-	-
1/4	1/4	3/4	2-1/2	.045	DD8315366	Price	DD8325366	Price	DD8345366	Price	DD8355366	Price
5/16	5/16	13/16	2-1/2	.015	DD8311077	Price	DD8321077	Price	DD8341077	Price	DD8351077	Price
5/16	5/16	13/16	2-1/2	.020	DD8315368	Price	DD8325368	Price	DD8345368	Price	DD8355368	Price
5/16	5/16	13/16	2-1/2	.030	DD8315370	Price	DD8325370	Price	DD8345370	Price	DD8355370	Price
5/16	5/16	13/16	2-1/2	.045	DD8315372	Price	DD8325372	Price	DD8345372	Price	DD8355372	Price
5/16	5/16	13/16	2-1/2	.060	DD8311079	Price	DD8321079	Price	DD8341079	Price	DD8351079	Price
3/8	3/8	1	2-1/2	.015	DD8311081	Price	DD8321081	Price	DD8341081	Price	DD8351081	Price
3/8	3/8	1	2-1/2	.020	DD8315374	Price	DD8325374	Price	DD8345374	Price	DD8355374	Price
3/8	3/8	1	2-1/2	.030	-	-	DD8325376	Price	DD8345376	Price	DD8355376	Price
3/8	3/8	1	2-1/2	.045	DD8315378	Price	DD8325378	Price	DD8345378	Price	DD8355378	Price
3/8	3/8	1	2-1/2	.060	DD8311083	Price	DD8321083	Price	DD8341083	Price	DD8351083	Price
1/2	1/2	1	3	.015	DD8311085	Price	DD8321085	Price	DD8341085	Price	DD8351085	Price
1/2	1/2	1	3	.020	DD8315380	Price	DD8325380	Price	DD8345380	Price	DD8355380	Price
1/2	1/2	1	3	.030	DD8315382	Price	DD8325382	Price	DD8345382	Price	DD8355382	Price
1/2	1/2	1	3	.045	DD8315384	Price	DD8325384	Price	DD8345384	Price	DD8355384	Price
1/2	1/2	1	3	.060	DD8315386	Price	DD8325386	Price	DD8345386	Price	DD8355386	Price
1/2	1/2	1	3	.090	DD8311087	Price	DD8321087	Price	DD8341087	Price	DD8351087	Price
1/2	1/2	1	3	.125	DD8311089	Price	DD8321089	Price	DD8341089	Price	DD8351089	Price
5/8	5/8	1-1/4	3-1/2	.015	DD8311091	Price	DD8321091	Price	DD8341091	Price	DD8351091	Price
5/8	5/8	1-1/4	3-1/2	.020	DD8315388	Price	DD8325388	Price	DD8345388	Price	DD8355388	Price
5/8	5/8	1-1/4	3-1/2	.030	DD8315390	Price	DD8325390	Price	DD8345390	Price	DD8355390	Price
5/8	5/8	1-1/4	3-1/2	.045	DD8315392	Price	DD8325392	Price	DD8345392	Price	DD8355392	Price
5/8	5/8	1-1/4	3-1/2	.060	DD8315394	Price	DD8325394	Price	DD8345394	Price	DD8355394	Price
5/8	5/8	1-1/4	3-1/2	.090	DD8315396	Price	DD8325396	Price	DD8345396	Price	DD8355396	Price
3/4	3/4	1-1/2	4	.015	DD8311093	Price	DD8321093	Price	DD8341093	Price	DD8351093	Price
3/4	3/4	1-1/2	4	.020	DD8315398	Price	DD8325398	Price	DD8345398	Price	DD8355398	Price
3/4	3/4	1-1/2	4	.030	DD8315400	Price	DD8325400	Price	DD8345400	Price	DD8355400	Price
3/4	3/4	1-1/2	4	.045	DD8315402	Price	DD8325402	Price	DD8345402	Price	DD8355402	Price
3/4	3/4	1-1/2	4	.060	DD8315404	Price	DD8325404	Price	DD8345404	Price	DD8355404	Price
3/4	3/4	1-1/2	4	.090	DD8315406	Price	DD8325406	Price	DD8345406	Price	DD8355406	Price
3/4	3/4	1-1/2	4	.125	DD8315408	Price	DD8325408	Price	DD8345408	Price	DD8355408	Price
1	1	1-1/2	4	.015	DD8311095	Price	DD8321095	Price	DD8341095	Price	DD8351095	Price
1	1	1-1/2	4	.020	DD8315410	Price	DD8325410	Price	DD8345410	Price	DD8355410	Price
1	1	1-1/2	4	.030	DD8315412	Price	DD8325412	Price	DD8345412	Price	DD8355412	Price
1	1	1-1/2	4	.045	DD8315414	Price	DD8325414	Price	DD8345414	Price	DD8355414	Price
1	1	1-1/2	4	.060	DD8315416	Price	DD8325416	Price	DD8345416	Price	DD8355416	Price
1	1	1-1/2	4	.090	DD8315418	Price	DD8325418	Price	DD8345418	Price	DD8355418	Price
1	1	1-1/2	4	.125	DD8315420	Price	DD8325420	Price	DD8345420	Price	DD8355420	Price

PREMIER HP HIGH PERFORMANCE 4 Flute 30° Corner Radius AlTiN Coated End Mills

- O.D. tolerance: -.0005"~-.0015"
- Widely used for milling raw material to hardened steel
- Best for work in material 60HRC or above



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/8	1/8	5/8	2	.020	**DD25EM15300803**	Price
3/16	3/16	3/4	2-1/8	.010	**DD25EM15301202**	Price
1/4	1/4	1	2-3/4	.020	**DD25EM15301603**	Price
5/16	5/16	1	2-3/4	.020	**DD25EM15302002**	Price
3/8	3/8	1	2-3/4	.020	**DD25EM15302402**	Price
1/2	1/2	1-1/2	3-1/2	.030	**DD25EM15303203**	Price
5/8	5/8	1-3/4	4	.030	**DD25EM15304003**	Price

IMCO truCORE® E14 4 Flute Solid Carbide End Mills-Metric

MADE IN THE USA

Center Cutting • Square End

- Precision ground for reliability and outstanding performance
- Fine grain carbide for greater toughness, wear resistance, and higher transverse rupture strength
- AlTiN coated for most applications, micrograin for non-ferrous materials
- Round shank, 30° helix

K Good in **Cast Iron**
M Good in **Stainless Steels**
P Good in **Carbon and Tool Steels**
N Good in **Non-ferrous**



				AlTiN		Uncoated	
Size	Shank Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price
2mm	3mm	9mm	38mm	**DD4030253**	Price	**DD4038608**	Price
2.5mm	3mm	9.5mm	38mm	**DD4032212**	Price	**DD4031474**	Price
3mm	3mm	12mm	38mm	**DD4032214**	Price	**DD4031475**	Price
3.5mm	4mm	14mm	50mm	**DD4032216**	Price	**-**	-
4mm	4mm	14mm	50mm	**DD4032218**	Price	**DD4031477**	Price
5mm	5mm	16mm	50mm	**DD4032224**	Price	**DD4031479**	Price
6mm	6mm	19mm	63mm	**DD4032226**	Price	**DD4031480**	Price
8mm	8mm	20mm	63mm	**DD4032228**	Price	**DD4031482**	Price
10mm	10mm	25mm	72mm	**DD4032230**	Price	**DD4031484**	Price
12mm	12mm	25mm	76mm	**DD4032231**	Price	**DD4031485**	Price
20mm	20mm	38mm	104mm	**DD4036597**	Price	**DD4036581**	Price

RAPIDKUT 4 Flute Metric Solid Carbide Single End Mills



Center Cutting • Regular Length

- Premium micrograin carbide
- Designed to cut materials ranging from nickel-based alloy, stainless, tough alloys, abrasives and non-ferrous metals
- 30° Helix

				AlTiN		TiN		Uncoated	
Size	Shank Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
2mm	3mm	9mm	38mm	**DD8256000**	Price	**DD554200MST**	Price	**DD504200MS**	Price
2.5mm	3mm	12mm	38mm	**DD8256001**	Price	**DD554250MST**	Price	**DD504250MS**	Price
3mm	3mm	12mm	38mm	**DD8256002**	Price	**DD554300MST**	Price	**DD504300MS**	Price
3.5mm	4mm	12mm	51mm	**DD8256003**	Price	**DD554350MST**	Price	**DD504350MS**	Price
4mm	4mm	14mm	51mm	**DD8256004**	Price	**DD554400MST**	Price	**DD504400MS**	Price
4.5mm	5mm	14mm	51mm	**DD8256005**	Price	**DD554450MST**	Price	**DD504450MS**	Price
5mm	5mm	20mm	51mm	**DD8256006**	Price	**DD554500MST**	Price	**DD504500MS**	Price
6mm	6mm	20mm	63mm	**DD8256007**	Price	**DD554600MST**	Price	**DD504600MS**	Price
7mm	8mm	20mm	63mm	**DD8256008**	Price	**DD554700MST**	Price	**DD504700MS**	Price
8mm	8mm	20mm	63mm	**DD8256009**	Price	**DD554800MST**	Price	**DD504800MS**	Price
9mm	10mm	22mm	70mm	**DD8256010**	Price	**DD554900MST**	Price	**DD504900MS**	Price
10mm	10mm	25mm	70mm	**DD8256011**	Price	**DD554010MST**	Price	**DD504010MS**	Price
11mm	12mm	25mm	76mm	**DD8253988**	Price	**-**	-	**DD504110MS**	Price
12mm	12mm	25mm	76mm	**DD8256012**	Price	**DD554120MST**	Price	**DD504120MS**	Price
13mm	13mm	22mm	70mm	**-**	-	**DD554130MST**	Price	**-**	-
14mm	14mm	32mm	89mm	**DD8256795**	Price	**DD554140MST**	Price	**DD504140MS**	Price
16mm	16mm	32mm	89mm	**DD8256796**	Price	**DD554160MST**	Price	**DD504160MS**	Price
18mm	18mm	38mm	100mm	**DD8256797**	Price	**DD554180MST**	Price	**DD504180MS**	Price
20mm	20mm	38mm	100mm	**DD8256798**	Price	**DD554002MST**	Price	**DD504002MS**	Price
25mm	25mm	38mm	100mm	**DD8256800**	Price	**DD554025MST**	Price	**DD504025MS**	Price

RAPIDKUT® 4 Flute Solid Carbide Ball End Single End Mills



Center Cutting

- 30° Helix
- Used for radius and contouring part surfaces
- Designed to cut materials ranging from nickel base alloy, stainless, tough alloys, abrasives and non-ferrous
- Made from premium submicron grain carbide
- Cutting diameter tolerance:

  1/32 to 1/4 +.000/-.002”
  9/32 to 1” +.000/-.003”

				Uncoated		TiN		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	1/16	1-1/2	DD6016239	Price	DD6526239	Price	DD8046239	Price	DD8256239	Price
1/32	1/8	3/32	1-1/2	DD6012645	Price	DD6522645	Price	DD8042645	Price	DD8252645	Price
3/64	1/8	1/8	1-1/2	DD6011825	Price	DD6521825	Price	DD8041825	Price	DD8251825	Price
1/16	1/8	1/8	1-1/2	DD6016241	Price	DD6526241	Price	DD8046241	Price	DD8256241	Price
1/16	1/8	3/16	1-1/2	DD604004B	Price	DD654004BT	Price	DD804004BTCN	Price	DD8252567	Price
5/64	1/8	3/16	1-1/2	DD604005B	Price	DD654005BT	Price	-	-	DD8252647	Price
3/32	1/8	3/16	1-1/2	DD6016242	Price	DD6526242	Price	DD8046242	Price	DD8256242	Price
3/32	1/8	3/8	1-1/2	DD604006B	Price	DD654006BT	Price	DD804006BTCN	Price	DD8252649	Price
7/64	1/8	3/8	1-1/2	DD604007B	Price	DD654007BT	Price	-	-	DD8252659	Price
1/8	1/8	1/4	1-1/2	DD6017924	Price	DD6527924	Price	DD8047924	Price	DD8257924	Price
1/8	1/8	1/2	1-1/2	DD604008B	Price	DD654008BT	Price	DD804008BTCN	Price	DD8257910	Price
1/8	1/8	3/4	3	DD6016188	Price	DD6526188	Price	DD8046188	Price	DD8256188	Price
1/8	1/8	1	3	DD604008BL	Price	DD654008BLT	Price	-	-	DD8256254	Price
9/64	3/16	9/16	2	DD604009B	Price	DD654009BT	Price	-	-	DD8256204	Price
5/32	3/16	5/16	1-1/2	DD6016244	Price	DD6526244	Price	DD8046244	Price	DD8256244	Price
5/32	3/16	9/16	2	DD604010B	Price	DD654010BT	Price	DD804010BTCN	Price	DD8251827	Price
11/64	3/16	9/16	2	DD604011B	Price	DD654011BT	Price	-	-	DD8256205	Price
3/16	3/16	3/8	1-1/2	DD6017925	Price	DD6526245	Price	DD8046245	Price	DD8256245	Price
3/16	3/16	5/8	2	DD604012B	Price	DD654012BT	Price	DD804012BTCN	Price	DD8257911	Price
3/16	3/16	3/4	3	DD6016189	Price	DD6526189	Price	DD8046189	Price	DD8256189	Price
3/16	3/16	1-1/8	3	DD604012BL	Price	DD654012BLT	Price	-	-	DD8256255	Price
13/64	1/4	5/8	2	DD604013B	Price	DD654013BT	Price	-	-	DD8256206	Price
7/32	1/4	1/2	2	DD6016246	Price	DD6526246	Price	DD8046246	Price	DD8256246	Price
7/32	1/4	5/8	2-1/2	DD604014B	Price	DD654014BT	Price	DD804014BTCN	Price	DD8252663	Price
15/64	1/4	3/4	2-1/2	DD604015B	Price	DD654015BT	Price	-	-	DD8252665	Price
1/4	1/4	1/2	2	DD6017926	Price	DD6527926	Price	DD8047926	Price	DD8257926	Price
1/4	1/4	3/4	2-1/2	DD604016B	Price	DD654016BT	Price	DD804016BTCN	Price	DD8257912	Price
1/4	1/4	1-1/8	3	DD6011031	Price	DD6521031	Price	DD8041031	Price	DD8251031	Price
1/4	1/4	1-1/2	4	DD604016BL	Price	DD654016BLT	Price	-	-	DD8251033	Price
17/64	5/16	3/4	2-1/2	DD604017B	Price	DD654017BT	Price	-	-	DD8252667	Price
9/32	5/16	3/4	2-1/2	DD604018B	Price	DD654018BT	Price	DD804018BTCN	Price	DD8252669	Price
19/64	5/16	13/16	2-1/2	DD604019B	Price	DD654019BT	Price	-	-	DD8252671	Price
5/16	5/16	1/2	2	DD6016248	Price	DD6526248	Price	DD8046248	Price	DD8256248	Price
5/16	5/16	13/16	2-1/2	DD604020B	Price	DD654020BT	Price	DD804020BTCN	Price	DD8257913	Price
5/16	5/16	1-1/8	3	DD6016191	Price	DD6526191	Price	DD8046191	Price	DD8256191	Price
5/16	5/16	1-5/8	4	DD604020BL	Price	DD654020BLT	Price	-	-	DD8256257	Price
11/32	3/8	7/8	2-1/2	DD6012673	Price	DD6522673	Price	DD8042673	Price	DD8252673	Price
3/8	3/8	5/8	2	DD6017928	Price	DD6527928	Price	DD8047928	Price	DD8257928	Price
3/8	3/8	1	2-1/2	DD604024B	Price	DD654024BT	Price	DD804024BTCN	Price	DD8257914	Price
3/8	3/8	1-3/4	4	DD604024BL	Price	DD654024BLT	Price	-	-	DD8251037	Price
13/32	7/16	1	2-3/4	DD6012675	Price	DD6522675	Price	DD8042675	Price	DD8252675	Price
7/16	7/16	1	2-3/4	DD604028B	Price	DD654028BT	Price	DD804028BTCN	Price	DD8257915	Price
7/16	7/16	2	4	DD6016193	Price	DD6526193	Price	DD8046193	Price	DD8256193	Price
7/16	7/16	3	6	DD604028BL	Price	DD654028BLT	Price	-	-	-	-
1/2	1/2	3	6	DD604032BL	Price	DD654032BLT	Price	DD804032BLTCN	Price	DD8251041	Price
1/2	1/2	5/8	2-1/2	DD6017930	Price	DD6527930	Price	DD8047930	Price	DD8257930	Price
1/2	1/2	1	3	DD604032B	Price	DD654032BT	Price	DD804032BTCN	Price	DD8257916	Price
1/2	1/2	2	4	DD6011039	Price	DD6521039	Price	-	-	DD8251039	Price
5/8	5/8	1-1/4	3-1/2	DD604040B	Price	DD654040BT	Price	DD804040BTCN	Price	DD8251043	Price
9/16	9/16	1-1/4	3-1/2	DD604036B	Price	DD654036BT	Price	DD804036BTCN	Price	DD8252679	Price
5/8	5/8	3/4	3	DD6016252	Price	DD6526252	Price	DD8046252	Price	DD8256252	Price
5/8	5/8	3	6	DD604040BL	Price	DD654040BLT	Price	-	-	DD8251047	Price
11/16	3/4	1-3/8	4	DD604044B	Price	DD654044BT	Price	DD804044BTCN	Price	-	-
3/4	3/4	1	3	DD6016253	Price	DD6526253	Price	DD8046253	Price	DD8256253	Price
3/4	3/4	1-1/2	4	DD604048B	Price	DD654048BT	Price	DD804048BTCN	Price	DD8251049	Price
3/4	3/4	2-1/4	5	DD6011051	Price	DD6521051	Price	DD8041051	Price	DD8251051	Price
3/4	3/4	3	6	DD604048BL	Price	DD654048BLT	Price	-	-	DD8251053	Price
7/8	7/8	1-1/2	4	DD604056B	Price	DD654056BT	Price	DD804056BTCN	Price	DD8252059	Price
1	1	1-1/2	4	DD604100B	Price	DD654100BT	Price	DD804100BTCN	Price	DD8251055	Price
1	1	3	6	DD604100BL	Price	DD654100BLT	Price	-	-	DD8251059	Price

truCORE® E14 Solid Carbide 4 Flute Ball Nose End Mills

- For contour milling where chip packing is not a problem
- Fine grain carbide for greater toughness, wear resistance, and higher transverse rupture strength
- Multiple coatings available for all of your application needs
- Round shank
- 30° Helix

P *Good in* **Carbon and Tool Steels**
K *Good in* **Cast Iron**
M *Good in* **Stainless Steels**



Spector AlTiN

Accelerator TiCN

MADE IN THE USA

				AlTiN		TiCN		Uncoated	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	3/32	1-1/2	**DD4030559**	Price	-	-	**DD4030901**	Price
3/64	1/8	9/64	1-1/2	**DD4030539**	Price	-	-	-	-
1/16	1/8	1/8	1-1/2	**DD4030530**	Price	-	-	-	-
1/16	1/8	3/16	1-1/2	**DD4097852**	Price	**DD4034504**	Price	**DD4030905**	Price
5/64	1/8	1/4	1-1/2	**DD4030482**	Price	-	-	-	-
3/32	1/8	3/16	1-1/2	**DD4031700**	Price	-	-	-	-
3/32	1/8	3/8	1-1/2	**DD4030992**	Price	**DD4034506**	Price	**DD4030909**	Price
1/8	1/8	1/4	1-1/2	**DD4031747**	Price	-	-	-	-
1/8	1/8	1/2	1-1/2	**DD4030997**	Price	**DD4034508**	Price	**DD4030913**	Price
1/8	1/8	5/8	2	**DD4037897**	Price	-	-	-	-
1/8	1/8	3/4	2-1/4	**DD4037911**	Price	-	-	-	-
1/8	1/8	1	3	**DD4097842**	Price	-	-	-	-
5/32	3/16	5/16	2	**DD4030465**	Price	-	-	-	-
5/32	3/16	9/16	2	**DD4030468**	Price	-	-	-	-
3/16	3/16	3/8	2	**DD4031746**	Price	-	-	-	-
3/16	3/16	5/8	2	**DD4030524**	Price	**DD4034512**	Price	**DD4030921**	Price
3/16	3/16	3/4	2-1/2	**DD4037915**	Price	-	-	-	-
3/16	3/16	1	4	**DD4037898**	Price	-	-	-	-
3/16	3/16	1-1/8	3	**DD4037938**	Price	-	-	-	-
7/32	1/4	5/8	2-1/2	**DD4031046**	Price	-	-	-	-
1/4	1/4	1/2	2	**DD4031745**	Price	-	-	-	-
1/4	1/4	3/4	2-1/2	**DD4030998**	Price	**DD4034516**	Price	**DD4030929**	Price
1/4	1/4	1	4	**DD4037899**	Price	-	-	-	-
1/4	1/4	1-1/8	3	**DD4037919**	Price	-	-	-	-
1/4	1/4	1-1/2	4	**DD4096411**	Price	-	-	-	-
1/4	1/4	1-1/2	6	**DD4097844**	Price	-	-	-	-
5/16	5/16	1/2	2	**DD4031744**	Price	-	-	-	-
5/16	5/16	13/16	2-1/2	**DD4030525**	Price	-	-	-	-
5/16	5/16	1-1/8	3	**DD4034323**	Price	-	-	-	-
5/16	5/16	1-5/8	4	**DD4034361**	Price	-	-	-	-
3/8	3/8	5/8	2	**DD4031749**	Price	-	-	-	-
3/8	3/8	1	2-1/2	**DD4098262**	Price	**DD4034524**	Price	**DD4030945**	Price
3/8	3/8	1-1/8	3	**DD4037927**	Price	-	-	-	-
3/8	3/8	1-3/4	4	**DD4034335**	Price	-	-	-	-
7/16	7/16	1	2-3/4	**DD4031052**	Price	-	-	-	-
1/2	1/2	5/8	2-1/2	**DD4031743**	Price	-	-	-	-
1/2	1/2	1	3	**DD4097922**	Price	**DD4034532**	Price	**DD4030961**	Price
1/2	1/2	2	4	**DD4037935**	Price	-	-	-	-
1/2	1/2	3	6	**DD4030473**	Price	-	-	-	-
9/16	9/16	1-1/4	3-1/2	**DD4030409**	Price	-	-	-	-
5/8	5/8	1-1/4	3-1/2	**DD4030991**	Price	**DD4034540**	Price	-	-
3/4	3/4	1-1/2	4	**DD4095757**	Price	**DD4034548**	Price	-	-

TuffCut® GP 4 Flute Ball Nose Carbide End Mills

- Stub length
- 30° Helix



- Designed for aggressive milling of most materials with reduced deflection and improved tool life and overall economy
- M.A. Ford List #165

				Uncoated		ALtima	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/64	1/8	.023	1-1/2	**DD1516500**	Price	-	-
1/32	1/8	1/16	1-1/2	**DD1516501**	Price	-	-
3/64	1/8	3/32	1-1/2	**DD1516505**	Price	-	-
1/16	1/8	1/8	1-1/2	**DD1516509**	Price	-	-
5/64	1/8	5/32	1-1/2	**DD1516510**	Price	-	-
3/32	1/8	3/16	1-1/2	**DD1516513**	Price	-	-
7/64	1/8	7/32	1-1/2	**DD1516516**	Price	-	-
1/8	1/8	1/4	1-1/2	**DD1516519**	Price	**DD1556534**	Price
9/64	3/16	5/16	2	**DD1516522**	Price	-	-
5/32	3/16	5/16	2	**DD1516523**	Price	-	-
11/64	3/16	3/8	2	**DD1516526**	Price	-	-
3/16	3/16	3/8	2	**DD1516529**	Price	**DD1556541**	Price
13/64	1/4	1/2	2	**DD1516532**	Price	-	-
7/32	1/4	1/2	2	**DD1516535**	Price	-	-
15/64	1/4	1/2	2	**DD1516536**	Price	-	-
1/4	1/4	1/2	2	**DD1516539**	Price	**DD1556548**	Price
9/32	5/16	1/2	2	**DD1516542**	Price	-	-
5/16	5/16	1/2	2	**DD1516543**	Price	**DD1556551**	Price
3/8	3/8	5/8	2	**DD1516549**	Price	**DD1556554**	Price
7/16	7/16	5/8	2-1/2	**DD1516555**	Price	**DD1556557**	Price
1/2	1/2	5/8	2-1/2	**DD1516559**	Price	**DD1556559**	Price
5/8	5/8	3/4	3	**DD1516563**	Price	**DD1556561**	Price
3/4	3/4	1	3	**DD1516569**	Price	**DD1556564**	Price

TuffCut® GP 4 Flute Ball Nose Carbide End Mills



Center Cutting • Standard Length • 30° Helix

- Manufactured with a full ball radius end
- Designed for milling fillets or similar rounded corners in the bottom of a cut
- Ideal for most ferrous metal applications
- M.A. Ford Series #140

				Uncoated		ALtima	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
3/64	1/8	7/64	1-1/2	**DD1514005**	Price	-	-
1/16	1/8	3/16	1-1/2	**DD1514009**	Price	-	-
5/64	1/8	3/16	1-1/2	**DD1514011**	Price	-	-
3/32	1/8	9/32	1-1/2	**DD1514015**	Price	-	-
7/64	1/8	3/8	1-1/2	**DD1514021**	Price	-	-
1/8	1/8	3/8	1-1/2	**DD1514025**	Price	**DD1514002**	Price
5/32	3/16	1/2	2	**DD1514029**	Price	-	-
3/16	3/16	5/8	2	**DD1514035**	Price	**DD1514006**	Price
7/32	1/4	5/8	2-1/2	**DD1514041**	Price	-	-
1/4	1/4	3/4	2-1/2	**DD1514045**	Price	**DD1514012**	Price
9/32	5/16	3/4	2-1/2	**DD1514049**	Price	-	-
5/16	5/16	13/16	2-1/2	**DD1514051**	Price	**DD1514014**	Price
3/8	3/8	7/8	2-1/2	**DD1514057**	Price	**DD1514018**	Price
7/16	7/16	1	2-3/4	**DD1514063**	Price	**DD1514022**	Price
1/2	1/2	1	3	**DD1514067**	Price	**DD1514026**	Price
9/16	9/16	1-1/8	3-1/2	**DD1514071**	Price	-	-
5/8	5/8	1-1/4	3-1/2	-	-	**DD1514028**	Price
11/16	3/4	1-3/8	4	**DD1514077**	Price	-	-
3/4	3/4	1-1/2	4	**DD1514081**	Price	**DD1514032**	Price
7/8	7/8	1-1/2	4	**DD1514087**	Price	-	-
1	1	1-1/2	4	**DD1514019**	Price	**DD1554001**	Price

4 Flute Carbide Ball Nose End Mills

- Micrograin carbide end mill
- Regular length
- Ball end
- OSG List #404BN



Type - Fractional Ball End					
Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1/32	1/8	1/8	1-1/2	**TP374040312BN**	Price
3/64	1/8	9/64	1-1/2	**TP374040469BN**	Price
1/16	1/8	3/16	1-1/2	**TP374040625BN**	Price
5/64	1/8	1/4	1-1/2	**TP374040781BN**	Price
3/32	1/8	5/16	1-1/2	**TP374040938BN**	Price
1/8	1/8	1/2	1-1/2	**TP374041250BN**	Price
9/64	3/16	1/2	2	**TP374041406BN**	Price
5/32	3/16	9/16	2	**TP374041562BN**	Price
3/16	3/16	5/8	2	**TP374041875BN**	Price
13/64	1/4	5/8	2-1/2	**TP374042031BN**	Price
7/32	1/4	5/8	2-1/2	**TP374042188BN**	Price
1/4	1/4	3/4	2-1/2	**TP374042500BN**	Price
17/64	5/16	3/4	2-1/2	**TP374042656BN**	Price
9/32	5/16	3/4	2-1/2	**TP374042812BN**	Price
5/16	5/16	13/16	2-1/2	**TP374043125BN**	Price
3/8	3/8	1	2-1/2	**TP374043750BN**	Price
7/16	7/16	1	2-3/4	**TP374044375BN**	Price
1/2	1/2	1	3	**TP374045000BN**	Price
5/8	5/8	1-1/4	3-1/2	**TP374046250BN**	Price
3/4	3/4	1-1/2	4	**TP374047500BN**	Price

Type - Fractional Ball End					
Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
7/8	7/8	1-1/2	4	**TP374048750BN**	Price
1	1	1-1/2	4	**TP374041000BN**	Price

Type - Metric Ball End					
Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
1mm	3mm	3mm	39mm	**TP374040394BN**	Price
1.5mm	3mm	5mm	39mm	**TP374040591BN**	Price
2mm	3mm	7mm	39mm	**TP374040787BN**	Price
2.5mm	3mm	8mm	39mm	**TP374040984BN**	Price
3mm	3mm	10mm	39mm	**TP374041181BN**	Price
4mm	4mm	14mm	51mm	**TP374041575BN**	Price
5mm	5mm	16mm	51mm	**TP374041968BN**	Price
6mm	6mm	19mm	64mm	**TP374042362BN**	Price
7mm	8mm	19mm	64mm	**TP374042756BN**	Price
8mm	8mm	21mm	64mm	**TP374043150BN**	Price
10mm	10mm	25mm	70mm	**TP374043937BN**	Price
12mm	12mm	25mm	76mm	**TP374044724BN**	Price
14mm	14mm	30mm	89mm	**TP374045512BN**	Price
16mm	16mm	32mm	89mm	**TP374046299BN**	Price
18mm	18mm	35mm	102mm	**TP374047087BN**	Price
20mm	20mm	38mm	102mm	**TP374047874BN**	Price

RAPIDKUT® 4 Flute Metric Solid Carbide Ball End Single End Mills



Center Cutting

- Premium micrograin carbide
- 30° Helix

				Uncoated		TiN		AlTiN	
Dia	Shank Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
2mm	3mm	9mm	38mm	**DD604200MB**	Price	**DD654200MBT**	Price	**DD6056572**	Price
2.5mm	3mm	12mm	38mm	**DD604250MB**	Price	**DD654250MBT**	Price	**DD6056573**	Price
3mm	3mm	12mm	38mm	**DD604300MB**	Price	**DD654300MBT**	Price	**DD6056574**	Price
3.5mm	4mm	12mm	51mm	**DD604350MB**	Price	**DD654350MBT**	Price	**DD6056575**	Price
4mm	4mm	14mm	51mm	**DD604400MB**	Price	**DD654400MBT**	Price	**DD6056576**	Price
4.5mm	5mm	14mm	51mm	**DD604450MB**	Price	-	-	**DD6056577**	Price
5mm	5mm	20mm	51mm	**DD604500MB**	Price	**DD654500MBT**	Price	**DD6056578**	Price
6mm	6mm	20mm	63mm	**DD604600MB**	Price	**DD654600MBT**	Price	**DD6056579**	Price
7mm	8mm	20mm	63mm	**DD604700MB**	Price	**DD654700MBT**	Price	**DD6056580**	Price
8mm	8mm	20mm	63mm	**DD604800MB**	Price	**DD654800MBT**	Price	**DD6056581**	Price
9mm	10mm	22mm	70mm	**DD604900MB**	Price	**DD654900MBT**	Price	**DD6056582**	Price
10mm	10mm	25mm	70mm	**DD604010MB**	Price	**DD654010MBT**	Price	**DD6056583**	Price
11mm	12mm	22mm	70mm	-	-	-	-	**DD6054067**	Price
12mm	12mm	25mm	76mm	**DD604120MB**	Price	**DD654120MBT**	Price	**DD6056584**	Price
14mm	14mm	32mm	89mm	**DD604140MB**	Price	**DD654140MBT**	Price	**DD6056585**	Price
16mm	16mm	32mm	89mm	**DD604160MB**	Price	-	-	**DD6056586**	Price
18mm	18mm	38mm	100mm	**DD604180MB**	Price	-	-	**DD6056587**	Price
20mm	20mm	38mm	100mm	**DD604002MB**	Price	-	-	**DD6056588**	Price
25mm	25mm	38mm	100mm	**DD604025MB**	Price	-	-	**DD6056804**	Price

SOLID MORSE MASTER Solid Carbide 4 Flute Double End Mills



30° Helix • Center Cutting

- 4-Flute mills reduce chip load per tooth for the milling of tougher materials, greater wear resistance and improved surface finish
- Center cutting end allows for plunge cutting into solid material

MCG TiN TiCN TiAlN

				Uncoated		TiN		TiCN		TiAlN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	1/8	1/8	1-1/2	MT3257270	Price	MT3291000	Price	MT3291011	Price	MT3291022	Price
3/32	1/8	3/16	1-1/2	MT3257271	Price	MT3291001	Price	MT3291012	Price	MT3291023	Price
1/8	1/8	1/4	1-1/2	-	-	-	-	-	-	MT3291024	Price
1/8	3/16	1/4	1-1/2	MT3257272	Price	MT3291002	Price	MT3291013	Price	-	-
1/8	3/8	3/8	3-1/8	MT3257108	Price	MT3291050	Price	MT3291060	Price	MT3291070	Price
5/32	3/16	5/16	2	MT3257273	Price	MT3291003	Price	MT3291014	Price	MT3291025	Price
5/32	3/8	7/16	3-1/8	MT3257110	Price	MT3291051	Price	MT3291061	Price	MT3291071	Price
3/16	3/16	3/8	2	MT3257274	Price	MT3291004	Price	MT3291015	Price	MT3291026	Price
3/16	3/8	1/2	3-1/4	MT3257112	Price	MT3291052	Price	MT3291062	Price	MT3291072	Price
7/32	1/4	1/2	2-1/2	MT3257275	Price	MT3291005	Price	MT3291016	Price	MT3291027	Price
7/32	3/8	9/16	3-3/8	MT3257114	Price	MT3291053	Price	MT3291063	Price	MT3291073	Price
1/4	1/4	1/2	2-1/2	MT3257276	Price	MT3291006	Price	MT3291017	Price	MT3291028	Price
1/4	3/8	5/8	3-3/8	MT3257116	Price	MT3291054	Price	MT3291064	Price	MT3291074	Price
9/32	3/8	11/16	3-3/8	MT3257118	Price	MT3291055	Price	MT3291065	Price	MT3291075	Price
5/16	5/16	1/2	2-1/2	MT3257277	Price	MT3291007	Price	MT3291018	Price	MT3291029	Price
5/16	3/8	3/4	3-1/2	MT3257120	Price	MT3291056	Price	MT3291066	Price	MT3291076	Price
3/8	3/8	9/16	2-1/2	MT3257278	Price	MT3291008	Price	MT3291019	Price	MT3291030	Price
3/8	3/8	3/4	3-1/2	MT3257124	Price	MT3291057	Price	MT3291067	Price	MT3291077	Price
7/16	7/16	9/16	3	MT3257279	Price	MT3291009	Price	MT3291020	Price	MT3291031	Price
7/16	1/2	7/8	4	MT3257128	Price	MT3291058	Price	MT3291068	Price	MT3291078	Price
1/2	1/2	5/8	3	MT3257280	Price	MT3291010	Price	MT3291021	Price	MT3291032	Price
1/2	1/2	1	4	MT3257132	Price	MT3291059	Price	MT3291069	Price	MT3291079	Price

IMCO truCORE® E24 Solid Carbide Double End 4 Flute Square End Mills

MADE IN THE USA

- Stub length double end geometry offers added strength and excellent rigidity
- Typical uses are machining shallow slots and keyways.
- Precision ground for reliability and repeatability
- Fine grain carbide for greater toughness, wear resistance, and higher transverse rupture strength
- Round shank, 30° helix



P Good in Carbon and Tool Steels
M Good in Stainless Steels
K Good in Cast Iron

				AlTiN	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/32	1/8	1/16	1-1/2	DD4030410	Price
3/64	1/8	3/32	1-1/2	DD4031900	Price
1/16	1/8	1/8	1-1/2	DD4031985	Price
3/32	1/8	3/16	1-1/2	DD4031927	Price
1/8	1/8	1/4	1-1/2	DD4099125	Price
5/32	3/16	5/16	2	DD4031995	Price

				AlTiN	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/16	3/16	3/8	2	DD4099331	Price
7/32	1/4	1/2	2-1/2	DD4031959	Price
1/4	1/4	1/2	2-1/2	DD4031990	Price
5/16	5/16	1/2	2-1/2	DD4031991	Price
3/8	3/8	9/16	2-1/2	DD4031929	Price
1/2	1/2	5/8	3	DD4031998	Price

RAPIDKUT 4 Flute Solid Carbide Double End Mills



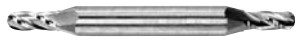
Stub Length • Center Cutting

- 30º Helix
- Used for general purpose milling in most materials of medium hardness such as steel, brass, iron and non-ferrous material
- Made from premium submicron grain carbide
- Cutting diameter tolerance +.000/.002”

MCG TiN TiCN AlTiN

				Uncoated		TiN		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	1/16	1-1/2	DD504002D	Price	DD554002DT	Price	DD804002DTCN	Price	DD8256645	Price
3/64	1/8	3/32	1-1/2	DD504003D	Price	DD554003DT	Price	DD804003DTCN	Price	DD8256646	Price
1/16	1/8	1/8	1-1/2	DD504004D	Price	DD554004DT	Price	DD804004DTCN	Price	DD8256647	Price
3/32	1/8	3/16	1-1/2	DD504006D	Price	DD554006DT	Price	DD804006DTCN	Price	DD8256649	Price
1/8	1/8	1/4	1-1/2	DD504008D	Price	DD554008DT	Price	DD804008DTCN	Price	DD8256650	Price
5/32	3/16	5/16	2	DD504010D	Price	DD554010DT	Price	DD804010DTCN	Price	DD8257948	Price
3/16	3/16	3/8	2	DD504012D	Price	DD554012DT	Price	DD804012DTCN	Price	DD8257950	Price
7/32	1/4	1/2	2-1/2	DD504014D	Price	DD554014DT	Price	DD804014DTCN	Price	DD8257952	Price
1/4	1/4	1/2	2-1/2	DD504016D	Price	DD554016DT	Price	DD804016DTCN	Price	DD8257954	Price
5/16	5/16	1/2	2-1/2	DD504020D	Price	DD554020DT	Price	DD804020DTCN	Price	DD8257955	Price
3/8	3/8	9/16	2-1/2	DD504024D	Price	DD554024DT	Price	DD804024DTCN	Price	DD8257956	Price
7/16	7/16	5/8	3	DD504028D	Price	DD554028DT	Price	DD804028DTCN	Price	DD8257957	Price
1/2	1/2	5/8	3	DD504032D	Price	DD554032DT	Price	DD804032DTCN	Price	DD8257958	Price

RAPIDKUT® 4 Flute Solid Carbide Ball End Double End Mills



Center Cutting • Stub Length

- 30º Helix
- Use for radius and contouring part surfaces
- Designed to cut materials ranging from nickel base alloy, stainless, tough alloys, abrasives and non-ferrous
- Made from premium submicron grain carbide
- Cutting diameter tolerance +.000/.002”

MCG TiN TiCN AlTiN

				Uncoated		TiN		TiCN		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	1/16	1-1/2	**DD604002DB**	Price	**DD654002DBT**	Price	**DD804002DBTCN**	Price	**DD8252685**	Price
3/64	1/8	3/32	1-1/2	**DD604003DB**	Price	**DD654003DBT**	Price	**DD804003DBTCN**	Price	**DD8252687**	Price
1/16	1/8	1/8	1-1/2	**DD604004DB**	Price	**DD654004DBT**	Price	**DD804004DBTCN**	Price	**DD8252581**	Price
3/32	1/8	3/16	1-1/2	**DD604006DB**	Price	**DD654006DBT**	Price	**DD804006DBTCN**	Price	**DD8250941**	Price
1/8	1/8	1/4	1-1/2	**DD604008DB**	Price	**DD654008DBT**	Price	**DD804008DBTCN**	Price	**DD8250945**	Price
5/32	3/16	5/16	2	**DD604010DB**	Price	**DD654010DBT**	Price	**DD804010DBTCN**	Price	**DD8252683**	Price
3/16	3/16	3/8	2	**DD604012DB**	Price	**DD654012DBT**	Price	**DD804012DBTCN**	Price	**DD8250953**	Price
7/32	1/4	1/2	2-1/2	**DD604014DB**	Price	**DD654014DBT**	Price	**DD804014DBTCN**	Price	**DD8252689**	Price
1/4	1/4	1/2	2-1/2	**DD604016DB**	Price	**DD654016DBT**	Price	**DD804016DBTCN**	Price	**DD8252690**	Price
5/16	5/16	1/2	2-1/2	**DD604020DB**	Price	**DD654020DBT**	Price	**DD804020DBTCN**	Price	**DD8252691**	Price
3/8	3/8	9/16	2-1/2	**DD604024DB**	Price	**DD654024DBT**	Price	**DD804024DBTCN**	Price	**DD8252692**	Price
7/16	7/16	5/8	3	**DD604028DB**	Price	**DD654028DBT**	Price	**DD804028DBTCN**	Price	**DD8252693**	Price
1/2	1/2	5/8	3	**DD604032DB**	Price	**DD654032DBT**	Price	**DD804032DBTCN**	Price	**DD8252695**	Price

IMCO truCORE® E24 Solid Carbide Double End 4 Flute Ball Nose End Mills

MADE IN THE USA

- Stub length double end geometry offers added strength and excellent rigidity
- Typical uses are machining shallow slots and keyways
- Double end offers added economy, but care must be taken to prevent edge chipping when loading tools into holders
- Precision ground for reliability and outstanding performance
- Fine grain carbide for greater toughness, wear resistance, and higher transverse rupture strength
- Round shank, 30° helix, AlTiN coated



P Good in **Carbon and Tool Steels**

M Good in **Stainless Steels**

K Good in **Cast Iron**

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/32	1/8	1/16	1-1/2	**DD4032083**	Price
3/64	1/8	3/32	1-1/2	**DD4032182**	Price
1/16	1/8	1/8	1-1/2	**DD4032181**	Price
3/32	1/8	3/16	1-1/2	**DD4032086**	Price
1/8	1/8	1/4	1-1/2	**DD4032139**	Price
5/32	3/16	5/16	2	**DD4032090**	Price
3/16	3/16	3/8	2	**DD4032138**	Price
1/4	1/4	1/2	2-1/2	**DD4032137**	Price
3/8	3/8	9/16	2-1/2	**DD4032200**	Price
1/2	1/2	5/8	3	**DD4032201**	Price

RAPIDKUT® Solid Carbide End Mill Sets In Stand

Uncoated or TiN Coated

- The high lubricity of TiN coating improves chip flow, resists galling and edge build up
- TiN coating is ideal for a wide range of applications where improved tool life and elevated feeds and speeds are required

End Mills Consist of 1 ea. size - 1/4, 5/16, 3/8, 1/2, 5/8, 3/4 Type - Single-End End Mills						
			TiN		Uncoated	
No. of Flutes	Style	Length	Order No.	Price	Order No.	Price
4	Square	Extra Long	**DD75CEM3**	Price	**DD70CEM3**	Price

End Mills Consist of 1 ea. size - 1/8, 3/16, 1/4, 5/16, 3/8, 1/2 Type - Double-End End Mills						
			TiN		Uncoated	
No. of Flutes	Style	Length	Order No.	Price	Order No.	Price
4	Square	Stub	**DD75CEM5**	Price	**DD70CEM5**	Price

End Mills Consist of 1 ea. size - 1/8, 3/16, 1/4, 5/16, 3/8, 1/2 Type - Single-End End Mills						
			TiN		Uncoated	
No. of Flutes	Style	Length	Order No.	Price	Order No.	Price
2	Square	Standard	**DD75CEM2**	Price	**DD70CEM2**	Price
4	Ball	Standard	**DD75CEM1BN**	Price	**DD70CEM1BN**	Price
4	Square	Standard	**DD75CEM1**	Price	**DD70CEM1**	Price



STREAKERS® M202 Solid Carbide Square & Corner Radius End Mills for Aluminum

- 2 Flute design unequalled in preventing clogging and loading even when slotting at 1xD axial depth
- Maximized productivity when machining all types of aluminum and non-ferrous materials
- Unique cutting edge and flute design are engineered for aggressive chip evacuation
- Operates effectively in speed ranges from 3,000 to 20,000 rpm
- 45° Helix, round or Weldon shanks

MADE IN THE USA

Best in Aluminum and Non-ferrous





					.015		.030		None	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	3/8	1-1/2	Round Shank	**DD4033526**	Price	-	-	**DD4032949**	Price
3/16	3/16	9/16	2	Round Shank	**DD4033542**	Price	-	-	**DD4032950**	Price
1/4	1/4	3/8	2-1/2	Round Shank	-	-	-	-	**DD4032943**	Price
1/4	1/4	3/4	2-1/2	Round Shank	**DD4033544**	Price	**DD4033548**	Price	**DD4032951**	Price
1/4	1/4	3/4	2-1/2	Weldon Shank	**DD4033546**	Price	**DD4033550**	Price	**DD4032430**	Price
1/4	1/4	1-1/4	3	Round Shank	**DD4033552**	Price	**DD4034382**	Price	**DD4032957**	Price
1/4	1/4	1-1/4	3	Weldon Shank	-	-	-	-	**DD4032444**	Price
5/16	5/16	13/16	2-1/2	Round Shank	-	-	-	-	**DD4032952**	Price
5/16	5/16	13/16	2-1/2	Weldon Shank	-	-	-	-	**DD4032431**	Price
3/8	3/8	1/2	2-1/2	Round Shank	-	-	-	-	**DD4032945**	Price
3/8	3/8	1	2-1/2	Weldon Shank	-	-	-	-	**DD4032432**	Price
3/8	3/8	7/8	2-1/2	Weldon Shank	**DD4033649**	Price	**DD4033691**	Price	-	-
3/8	3/8	1	2-1/2	Round Shank	**DD4033648**	Price	**DD4033689**	Price	**DD4032953**	Price
3/8	3/8	1-1/2	3-1/4	Round Shank	**DD4033693**	Price	**DD4033886**	Price	**DD4032959**	Price
3/8	3/8	1-1/2	3-1/4	Weldon Shank	-	-	-	-	**DD4032446**	Price
3/8	3/8	2	4	Round Shank	**DD4034100**	Price	**DD4034144**	Price	**DD4032964**	Price
3/8	3/8	2	4	Weldon Shank	-	-	-	-	**DD4032510**	Price
1/2	1/2	5/8	3	Round Shank	-	-	-	-	**DD4032946**	Price
1/2	1/2	1	3	Weldon Shank	-	-	-	-	**DD4032434**	Price
1/2	1/2	1-1/4	3	Round Shank	**DD4034146**	Price	**DD4034161**	Price	**DD4090358**	Price
1/2	1/2	1-1/4	3-1/4	Weldon Shank	-	-	**DD4034162**	Price	**DD4032606**	Price
1/2	1/2	2	4	Round Shank	-	-	**DD4034204**	Price	**DD4032960**	Price
1/2	1/2	2	4	Weldon Shank	-	-	**DD4034205**	Price	**DD4032447**	Price
1/2	1/2	2-1/2	5	Round Shank	-	-	**DD4034235**	Price	**DD4032965**	Price
1/2	1/2	2-1/2	5	Weldon Shank	-	-	-	-	**DD4032512**	Price
5/8	5/8	1-1/4	3-1/2	Weldon Shank	-	-	-	-	**DD4032436**	Price
5/8	5/8	1-5/8	3-1/2	Round Shank	-	-	**DD4034237**	Price	**DD4032954**	Price
5/8	5/8	2-1/2	5	Round Shank	-	-	**DD4034243**	Price	**DD4032966**	Price
5/8	5/8	2-1/2	5	Weldon Shank	-	-	-	-	**DD4032514**	Price
3/4	3/4	1-5/8	4	Round Shank	-	-	**DD4034245**	Price	**DD4032955**	Price
3/4	3/4	1-5/8	4	Weldon Shank	-	-	**DD4034246**	Price	**DD4032504**	Price
3/4	3/4	2-1/2	5	Round Shank	-	-	**DD4034343**	Price	**DD4032962**	Price
3/4	3/4	2-1/2	5	Weldon Shank	-	-	**DD4034344**	Price	**DD4032506**	Price
3/4	3/4	3-1/4	6	Round Shank	-	-	**DD4034345**	Price	**DD4032968**	Price
3/4	3/4	3-1/4	6	Weldon Shank	-	-	-	-	**DD4032516**	Price

RAPIDKUT® 2 Flute Solid Carbide End Mills

For Aluminum

- Square end
- 45° Helix
- Cutting diameter tolerance: +.0000 / -.0005”



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price
1/8	1/8	3/8	1-1/2	Round	**PE1120125**	Price
3/16	3/16	5/8	2	Round	**PE1120187**	Price
1/4	1/4	1/2	2	Round	**PE1120250**	Price
1/4	1/4	1	2-1/2	Round	**PE1120255**	Price
1/4	1/4	2	4	Round	**PE1120260**	Price
5/16	5/16	1-1/8	3	Round	**PE1120312**	Price
3/8	3/8	5/8	2-1/2	Round	**PE1120375**	Price
3/8	3/8	1	2-1/2	Round	**PE1120380**	Price
3/8	3/8	1-1/2	3-1/4	Round	**PE1120385**	Price
3/8	3/8	2	4	Round	**PE1120390**	Price
1/2	1/2	3/4	3	Round	**PE1120500**	Price
1/2	1/2	1-1/4	3	Weldon	**PE1120510**	Price
1/2	1/2	1-1/4	3	Round	**PE1120505**	Price
1/2	1/2	1-1/4	3-1/4	Weldon	**PE1120515**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price
1/2	1/2	2	4	Round	**PE1120520**	Price
1/2	1/2	2	4	Weldon	**PE1120525**	Price
1/2	1/2	2-1/2	5	Round	**PE1120530**	Price
5/8	5/8	1	3-1/2	Round	**PE1120625**	Price
5/8	5/8	1-5/8	3-1/2	Round	**PE1120630**	Price
5/8	5/8	2-1/2	5	Round	**PE1120635**	Price
3/4	3/4	1-3/4	4	Round	**PE1120750**	Price
3/4	3/4	2-1/2	5	Round	**PE1120755**	Price
3/4	3/4	3-1/4	6	Round	**PE1120760**	Price
3/4	3/4	3-1/4	6	Weldon	**PE1120765**	Price
1	1	1-1/4	4	Round	**PE1121000**	Price
1	1	2	4	Round	**PE1121005**	Price
1	1	2-5/8	5	Round	**PE1121010**	Price
1	1	3-1/4	6	Round	**PE1121015**	Price

PREMIER HP HIGH PERFORMANCE Carbide 2 Flute 30° Helix Stub Length Corner Radius End Mills for Aluminum with TiCN Coating



(For Production)

- Good for high velocity milling of aluminum, copper and other non-ferrous materials
- Increased tool life & superior workpiece finishes
- Maximum stock removal, chip ejection, stability
- Corner radius to avoid chipping
- Increased tool life and higher cutting accuracy
- OD tolerance: -.0005" ~ -.0015"
- Shank tolerance: 0 ~ -.0003"

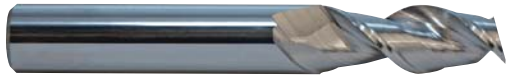
TiCN

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Length Below Shank (in.)	Neck Dia.	OAL (in.)	Radius	Order No.	Price
5/32	1/4	5/32	5/16	.1400	1-7/8	.012	**DD25SA302010R**	Price
1/4	1/4	9/32	11/16	.2260	2-1/4	.020	**DD25SA302016R**	Price
5/16	5/16	5/16	1-1/16	.2820	2-5/8	.024	**DD25SA302020R**	Price
3/8	3/8	7/16	1-1/4	.3360	3	.031	**DD25SA302024R**	Price
1/2	1/2	1/2	1-1/4	.4600	3-3/8	.040	**DD25SA302032R**	Price
5/8	5/8	5/8	1-1/2	.5660	3-7/8	.051	**DD25SA302040R**	Price
3/4	3/4	7/8	1-1/2	.6700	37/8	.063	**DD25SA302048R**	Price

M.A. FORD TuffCut® AL 2 Flute High Performance End Mills for Aluminum

Metric Sizes

- High performance aluminum finisher out performs competitors
- 45° Helix
- M.A. Ford Series #136



Size	Shank Dia.	Flute Length	OAL	Order No.	Price
3mm	6mm	8mm	52mm	**DD2013600**	Price
4mm	6mm	11mm	55mm	**DD2013602**	Price
5mm	6mm	13mm	58mm	**DD2013605**	Price
6mm	6mm	13mm	58mm	**DD2013610**	Price
8mm	8mm	19mm	64mm	**DD2013615**	Price
10mm	10mm	22mm	70mm	**DD2013620**	Price
12mm	12mm	26mm	84mm	**DD2013625**	Price
14mm	14mm	26mm	84mm	**DD2013626**	Price
16mm	16mm	32mm	89mm	**DD2013630**	Price
18mm	18mm	32mm	92mm	**DD2013631**	Price
20mm	20mm	38mm	102mm	**DD2013635**	Price

MONSTER TOOL COMPANY 2 Flute Carbide End Mills for Aluminum



Corner Radius • 45° Helix

- Specifically designed for maximum productivity in non-ferrous materials
- Excellent work piece finish
- Extremely high feed rates
- ZrN coating offers excellent wear resistance and increased lubricity
- Solid C-2 grade premium sub-micron carbide with 10% cobalt
- Right hand spiral, right hand cut
- Diameter tolerance: +.0000 / -.002"
- Shank tolerance +.0000 / -.0003"

					Uncoated		ZrN	
Dia. (in.)	Shank	LOC	OAL	Radius	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	.005-.010	**DC1010001**	Price	**DC1020001**	Price
1/8	1/8	1/4	1-1/2	.005-.010	**DC1010000**	Price	**DC1020000**	Price
5/32	3/16	5/8	2	.005-.010	**DC1010003**	Price	**DC1020003**	Price
3/16	3/16	5/16	2	.005-.010	**DC1010004**	Price	**DC1020004**	Price
3/16	3/16	5/8	2	.005-.010	**DC1010005**	Price	**DC1020005**	Price
7/32	1/4	3/4	2-1/2	.005-.010	**DC1010007**	Price	**DC1020007**	Price
1/4	1/4	1/2	2	.005-.010	**DC1010008**	Price	**DC1020008**	Price
1/4	1/4	1-1/4	3	.005-.010	**DC1010010**	Price	**DC1020010**	Price
1/4	1/4	3/4	2-1/2	.005-.010	**DC1010009**	Price	**DC1020009**	Price
9/32	5/16	13/16	2-1/2	.005-.010	**DC1010012**	Price	**DC1020012**	Price
5/16	5/16	1/2	2-1/2	.005-.010	**DC1010013**	Price	**DC1020013**	Price
5/16	5/16	13/16	2-1/2	.005-.010	**DC1010014**	Price	**DC1020014**	Price
5/16	5/16	1-3/8	3	.005-.010	**DC1010015**	Price	**DC1020015**	Price
3/8	3/8	1-1/8	2-1/2	.005-.010	**DC1010018**	Price	**DC1020018**	Price
3/8	3/8	1-3/8	3	.005-.010	**DC1010019**	Price	**DC1020019**	Price
3/8	3/8	2	4	.005-.010	**DC1010020**	Price	**DC1020020**	Price
3/8	3/8	5/8	2-1/2	.005-.010	**DC1010017**	Price	**DC1020017**	Price
7/16	7/16	1-1/4	2-3/4	.005-.010	**DC1010022**	Price	**DC1020022**	Price
1/2	1/2	1-1/4	3	.005-.010	**DC1010024**	Price	**DC1020024**	Price
1/2	1/2	2	4	.005-.010	**DC1010025**	Price	**DC1020025**	Price
1/2	1/2	3/4	2-1/2	.005-.010	**DC1010023**	Price	**DC1020023**	Price
5/8	5/8	1-1/4	3	.005-.010	**DC1010027**	Price	**DC1020027**	Price
5/8	5/8	1-5/8	3-1/2	.005-.010	**DC1010028**	Price	**DC1020028**	Price
5/8	5/8	2-1/2	5	.005-.010	**DC1010029**	Price	**DC1020029**	Price
3/4	3/4	1	3	.005-.010	**DC1010031**	Price	**DC1020031**	Price
3/4	3/4	1-3/4	4	.005-.010	**DC1010032**	Price	**DC1020032**	Price
3/4	3/4	2-1/2	5	.005-.010	**DC1010033**	Price	**DC1020033**	Price
1	1	1-3/4	4	.005-.010	**DC1010035**	Price	**DC1020035**	Price
1	1	2-5/8	5	.005-.010	**DC1010036**	Price	**DC1020036**	Price
1	1	3-1/4	6	.005-.010	**DC1010037**	Price	**DC1020037**	Price

Additional sizes available

RAPIDKUT® 2 Flute Solid Carbide Aluminum Cutting End Mills

Center Cutting • Standard and Long Lengths



- 35° Helix
- Special geometry allows for high chip loads and feed rates
- Small corner radius for added strength and smoother cutting action
- Excellent for slotting and profiling at high speeds
- Made from premium submicron grain carbide
- Tolerances: +.000/-.002”

MCG TiN TiCN

					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	3/8	1-1/2	.010	**DD8117737**	Price	**DD8127737**	Price	**DD8147737**	Price
3/16	3/16	5/8	2	.010	**DD8117739**	Price	**DD8127739**	Price	**DD8147739**	Price
1/4	1/4	3/4	2-1/2	.010	**DD8117741**	Price	**DD8127741**	Price	**DD8147741**	Price
1/4	1/4	1-1/8	3	.010	**DD8117755**	Price	**DD8127755**	Price	**DD8147755**	Price
5/16	5/16	13/16	2	.010	**DD8117743**	Price	**DD8127743**	Price	**DD8147743**	Price
5/16	5/16	1-1/8	3	.010	**DD8117756**	Price	**DD8127756**	Price	**DD8147756**	Price
3/8	3/8	1	2-1/2	.015	**DD8117745**	Price	**DD8127745**	Price	**DD8147745**	Price
3/8	3/8	1-1/8	3	.015	**DD8117757**	Price	**DD8127757**	Price	**DD8147757**	Price
7/16	7/16	1	2-3/4	.015	**DD8117747**	Price	**DD8127747**	Price	**DD8147747**	Price
1/2	1/2	1	3	.020	**DD8117749**	Price	**DD8127749**	Price	**DD8147749**	Price
1/2	1/2	2	4	.020	**DD8117759**	Price	**DD8127759**	Price	**DD8147759**	Price
5/8	5/8	1-1/4	3-1/2	.020	**DD8117751**	Price	**DD8127751**	Price	**DD8147751**	Price
5/8	5/8	2-1/4	5	.020	**DD8117760**	Price	**DD8127760**	Price	**DD8147760**	Price
3/4	3/4	1-1/2	4	.030	**DD8117752**	Price	**DD8127752**	Price	**DD8147752**	Price
3/4	3/4	2-1/4	5	.030	**DD8117761**	Price	**DD8127761**	Price	**DD8147761**	Price
1	1	1-1/2	4	.030	**DD8117754**	Price	**DD8127754**	Price	**DD8147754**	Price
1	1	2-1/4	5	.030	**DD8117762**	Price	**DD8127762**	Price	**DD8147762**	Price

EXOCARB® AERO Blizzard® Carbide End Mills

2 Flute



- Carbide end mills for aluminum, aluminum alloys and copper alloys
- Bright finish
- OSG List #2021/2022

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/8	1/8	1/4	1-1/2	None	**TP4620210100**	Price
1/8	1/8	1/4	1-1/2	.010	**TP4820210200**	Price
1/8	1/8	3/8	1-1/2	None	**TP4820220100**	Price
1/8	1/8	3/8	1-1/2	.010	**TP4820220200**	Price
5/32	3/16	5/16	2	None	**TP4820210500**	Price
5/32	3/16	5/16	2	.020	**TP4820210600**	Price
5/32	3/16	9/16	2	None	**TP4820220500**	Price
5/32	3/16	9/16	2	.020	**TP4820220600**	Price
3/16	3/16	5/16	2	None	**TP4620210900**	Price
3/16	3/16	5/16	2	.020	**TP4820211000**	Price
3/16	3/16	9/16	2	None	**TP4820220900**	Price
3/16	3/16	9/16	2	.020	**TP4820221000**	Price
7/32	1/4	3/8	2-1/2	None	**TP4820211300**	Price
7/32	1/4	3/4	2-1/2	None	**TP4820221300**	Price
7/32	1/4	3/8	2-1/2	.020	**TP4820211400**	Price
1/4	1/4	3/8	2-1/2	None	**TP4620211700**	Price
1/4	1/4	3/8	2-1/2	.020	**TP4820211800**	Price
1/4	1/4	3/8	2-1/2	.030	**TP4820211900**	Price
1/4	1/4	3/8	2-1/2	.060	**TP4820212000**	Price
1/4	1/4	3/4	2-1/2	None	**TP4820221700**	Price
1/4	1/4	3/4	2-1/2	.020	**TP4820221800**	Price
1/4	1/4	3/4	2-1/2	.030	**TP4820221900**	Price
1/4	1/4	3/4	2-1/2	.060	**TP4820222000**	Price
9/32	5/16	7/16	2-1/2	None	**TP4820212100**	Price
9/32	5/16	13/16	2-1/2	.020	**TP4820222200**	Price
5/16	5/16	7/16	2-1/2	None	**TP4820212500**	Price
5/16	5/16	7/16	2-1/2	.020	**TP4820212600**	Price
5/16	5/16	13/16	2-1/2	None	**TP4820222500**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
5/16	5/16	13/16	2-1/2	.020	**TP4820222600**	Price
3/8	3/8	1/2	2-1/2	None	**TP4820213300**	Price
3/8	3/8	1/2	2-1/2	.020	**TP4820213400**	Price
3/8	3/8	1/2	2-1/2	.060	**TP4820213600**	Price
3/8	3/8	1	2-1/2	None	**TP4820223300**	Price
3/8	3/8	1	2-1/2	.020	**TP4820223400**	Price
3/8	3/8	1	2-1/2	.030	**TP4820223500**	Price
3/8	3/8	1	2-1/2	.060	**TP4820223600**	Price
7/16	7/16	1	2-3/4	None	**TP4820224100**	Price
1/2	1/2	5/8	3	None	**TP4820214900**	Price
1/2	1/2	5/8	3	.020	**TP4820215000**	Price
1/2	1/2	5/8	3	.060	**TP4820215200**	Price
1/2	1/2	1-1/4	3	None	**TP4820224900**	Price
1/2	1/2	1-1/4	3	.020	**TP4820225000**	Price
1/2	1/2	1-1/4	3	.030	**TP4820225100**	Price
1/2	1/2	1-1/4	3	.060	**TP4820225200**	Price
5/8	5/8	3/4	3-1/2	None	**TP4820215300**	Price
5/8	5/8	3/4	3-1/2	.030	**TP4820215400**	Price
5/8	5/8	3/4	3-1/2	.060	**TP4820215500**	Price
5/8	5/8	1-5/8	3-1/2	None	**TP4820225300**	Price
5/8	5/8	1-5/8	3-1/2	.030	**TP4820225400**	Price
5/8	5/8	1-5/8	3-1/2	.060	**TP4820225500**	Price
3/4	3/4	1	4	None	**TP4820215700**	Price
3/4	3/4	1	4	.060	**TP4820215800**	Price
3/4	3/4	1-5/8	4	None	**TP4820225700**	Price
3/4	3/4	1-5/8	4	.060	**TP4820225800**	Price
3/4	3/4	1-5/8	4	.120	**TP4820226000**	Price
1	1	1-1/4	4	None	**TP4820216100**	Price
1	1	2	5	None	**TP4820226100**	Price

TuffCut® AL 2 Flute High Performance End Mills for Aluminum

Fractional Sizes

- High performance aluminum finisher out performs competitors
- 45° Helix
- M.A. Ford Series #136



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	1/4	1-1/2	**DD2013641**	Price
1/8	1/8	3/8	1-1/2	**DD2013671**	Price
1/8	1/8	1/2	1-1/2	**DD2013642**	Price
1/8	1/8	3/4	2	**DD2013672**	Price
1/8	1/8	1	2-1/2	**DD2013643**	Price
5/32	5/32	5/16	2	**DD2013673**	Price
5/32	5/32	9/16	2	**DD2013674**	Price
3/16	3/16	5/16	2	**DD2013644**	Price
3/16	3/16	3/8	2	**DD2013675**	Price
3/16	3/16	5/8	2-1/2	**DD2013646**	Price
3/16	3/16	3/4	2-1/2	**DD2013676**	Price
3/16	3/16	1	2-1/2	**DD2013647**	Price
1/4	1/4	3/8	2	**DD2013678**	Price
1/4	1/4	1/2	2	**DD2013679**	Price
1/4	1/4	5/8	2-1/2	**DD2013680**	Price
1/4	1/4	3/4	2-1/2	**DD2013640**	Price
1/4	1/4	1	2-1/2	**DD2013681**	Price
1/4	1/4	1-1/4	3-1/16	**DD2013648**	Price
1/4	1/4	1-1/2	3	**DD2013682**	Price
1/4	1/4	1-3/4	3-9/16	**DD2013649**	Price
1/4	1/4	2	4	**DD2013683**	Price
5/16	5/16	7/16	2	**DD2013684**	Price
5/16	5/16	1/2	2	**DD2013651**	Price
5/16	5/16	13/16	2-1/2	**DD2013685**	Price
5/16	5/16	1-3/8	3-1/8	**DD2013652**	Price
5/16	5/16	1-3/4	3-1/4	**DD2013653**	Price
3/8	3/8	1/2	2	**DD2013686**	Price
3/8	3/8	5/8	2	**DD2013687**	Price
3/8	3/8	3/4	2-1/2	**DD2013645**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/8	3/8	1	2-1/2	**DD2013688**	Price
3/8	3/8	1-1/4	3	**DD2013689**	Price
3/8	3/8	1-1/2	3-1/4	**DD2013654**	Price
3/8	3/8	2	4	**DD2013690**	Price
3/8	3/8	2-1/2	4-1/4	**DD2013660**	Price
1/2	1/2	5/8	3	**DD2013691**	Price
1/2	1/2	3/4	3	**DD2013692**	Price
1/2	1/2	1	3	**DD2013693**	Price
1/2	1/2	1-1/4	3-1/2	**DD2013650**	Price
1/2	1/2	1-1/2	4	**DD2013694**	Price
1/2	1/2	2	4	**DD2013661**	Price
1/2	1/2	2-1/2	5	**DD2013695**	Price
1/2	1/2	3	5	**DD2013662**	Price
5/8	5/8	3/4	3-1/2	**DD2013663**	Price
5/8	5/8	1-1/4	3-1/2	**DD2013696**	Price
5/8	5/8	1-5/8	3-3/4	**DD2013664**	Price
5/8	5/8	2	5	**DD2013697**	Price
5/8	5/8	2-1/2	4-5/8	**DD2013665**	Price
3/4	3/4	1	4	**DD2013698**	Price
3/4	3/4	2	5	**DD2013699**	Price
3/4	3/4	1-5/8	4	**DD2013655**	Price
3/4	3/4	2-1/2	5	**DD2013601**	Price
3/4	3/4	3	5-1/4	**DD2013666**	Price
3/4	3/4	4	6-1/4	**DD2013667**	Price
1	1	1-1/4	4	**DD2013668**	Price
1	1	2	4-1/2	**DD2013669**	Price
1	1	3	6	**DD2013603**	Price
1	1	4	6-1/2	**DD2013670**	Price
1	1	5-1/2	8	**DD2013604**	Price

STREAKERS® M202N Solid Carbide 2 Flute End Mills for Aluminum

MADE IN THE USA

Square End and Corner Radius with Neck Relief

- Neck relief for additional clearance in cavities and when machining against tight walls
- Unequalled at preventing clogging and loading even when slotting at 1xD axial depth
- Maximizes productivity when machining all types of aluminum and non-ferrous materials
- Unique cutting edge and flute design are engineered for aggressive chip evacuation
- Operates effectively in speed ranges from 3,000 to 20,000 rpm
- 40° Helix, round shank

N Best in **Aluminum and Non-ferrous**





					None	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Reach (in.)	OAL (in.)	Order No.	Price
1/4	1/4	3/8	1-1/8	2-1/2	**DD4032935**	Price
1/4	1/4	3/8	1-5/8	3	**DD4033016**	Price
1/4	1/4	3/8	2-1/4	4	**DD4033023**	Price
3/8	3/8	1/2	1-1/8	2-1/2	**DD4032936**	Price
3/8	3/8	1/2	1-3/4	3	**DD4033018**	Price
3/8	3/8	1/2	2-1/4	4	**DD4033024**	Price
1/2	1/2	5/8	1-3/8	3	**DD4032937**	Price
1/2	1/2	5/8	2-1/4	4	**DD4033019**	Price
1/2	1/2	5/8	2-3/8	5	**DD4033025**	Price
1/2	1/2	5/8	3-3/8	6	**DD4033032**	Price
5/8	5/8	3/4	2-1/4	5	**DD4033020**	Price
5/8	5/8	3/4	3-3/8	6	**DD4033026**	Price
3/4	3/4	1	1-3/4	4	**DD4032939**	Price
3/4	3/4	1	2-1/4	5	**DD4033021**	Price
3/4	3/4	1	3-3/8	6	**DD4033027**	Price

MICRO 100 High Tech Stub & Regular Length End Mills for Aluminum

2 & 3 Flute — Center Cutting — 45° Helix

- Feature 45° helix for high speed milling of aluminum and soft, non-ferrous materials
- Exceptional surface finishes with conventional machining methods as well as with today's high speed machining technology
- 45° helix diminishes chatter when machining in corners of parts
- Sizes 3/8" and larger feature a Weldon flat
- ZrN coating provides high hardness and abrasion resistance



No. of Flutes - 2							
				Uncoated		ZrN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/16	1/8	1/8	1-1/2	**GE45ASM0622**	Price	**GE45ASM0622S**	Price
1/16	1/8	3/16	1-1/2	**GE45ARM0622**	Price	**GE45ARM0622S**	Price
3/32	1/8	3/16	1-1/2	**GE45ASM0932**	Price	**GE45ASM0932S**	Price
3/32	1/8	3/8	1-1/2	**GE45ARM0932**	Price	**GE45ARM0932S**	Price
1/8	1/8	1/4	1-1/2	**GE45ASM1252**	Price	**GE45ASM1252S**	Price
1/8	1/8	1/2	1-1/2	**GE45ARM1252**	Price	**GE45ARM1252S**	Price
5/32	3/16	5/16	1-1/2	**GE45ASM1562**	Price	**GE45ASM1562S**	Price
3/16	3/16	3/8	1-1/2	**GE45ASM1872**	Price	**GE45ASM1872S**	Price
3/16	3/16	5/8	2	**GE45ARM1872**	Price	**GE45ARM1872S**	Price
1/4	1/4	1/2	2	**GE45ASM2502**	Price	**GE45ASM2502S**	Price
1/4	1/4	3/4	2-1/2	**GE45ARM2502**	Price	**GE45ARM2502S**	Price
5/16	5/16	1/2	2	**GE45ASM3122**	Price	**GE45ASM3122S**	Price
3/8	3/8	5/8	2	**GE45ASM3752**	Price	**GE45ASM3752S**	Price
3/8	3/8	7/8	2-1/2	**GE45ARM3752**	Price	**GE45ARM3752S**	Price
1/2	1/2	5/8	2-1/2	**GE45ASM5002**	Price	**GE45ASM5002S**	Price
1/2	1/2	1	3	**GE45ARM5002**	Price	**GE45ARM5002S**	Price

No. of Flutes - 3							
				Uncoated		ZrN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/4	1/4	3/4	2-1/2	**GE45ARM2503**	Price	**GE45ARM2503S**	Price
5/16	5/16	13/16	2-1/2	**GE45ARM3123**	Price	**GE45ARM3123S**	Price
3/8	3/8	7/8	2-1/2	**GE45ARM3753**	Price	**GE45ARM3753S**	Price
1/2	1/2	1	3	**GE45ARM5003**	Price	**GE45ARM5003S**	Price

WIDIA Solid Carbide AluSurf™ End Mills

2 and 3 Flute



- Center cutting
- Cylindrical shanks
- Unequal flute spacing
- Wiper facet design for improved floor finishes

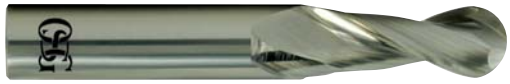
Flutes - 2						
Size (in.)	Shank Dia. (in.)	Flute Lengtj (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/4	1/4	1/2	2-1/2	None	**WK403336098**	Price
3/8	3/8	3/4	2-1/2	None	**WK403336102**	Price
1/2	1/2	1-1/4	3	None	**WK403336104**	Price

Flutes - 3						
Size (in.)	Shank Dia. (in.)	Flute Lengtj (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/4	1/4	1/2	2-1/2	None	**WK403336112**	Price
1/4	1/4	1/2	2-1/2	.060	**WK403738929**	Price
3/8	3/8	3/4	2-1/2	None	**WK403336116**	Price
1/2	1/2	1-1/4	3	None	**WK403336118**	Price
1/2	1/2	1-1/4	3	.030	**WK403336119**	Price
1/2	1/2	1-1/4	3	.090	**WK403739147**	Price
3/4	3/4	1-1/2	4	None	**WK403336122**	Price

OSG EXOCARB® AERO Blizzard® Carbide End Mills

2 Flute • Ball Nose

- Carbide end mills for aluminum, aluminum alloys and copper alloys
- Bright finish
- OSG List #2010



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	3/8	1-1/2	**TP4820100100**	Price
3/16	3/16	9/16	2	**TP4820100200**	Price
1/4	1/4	3/4	2-1/2	**TP4820100300**	Price
5/16	5/16	13/16	2-1/2	**TP4820100400**	Price
3/8	3/8	1	2-1/2	**TP4820100500**	Price
7/16	7/16	1	2-3/4	**TP4820100600**	Price
1/2	1/2	1-1/4	3	**TP4820100700**	Price
5/8	5/8	1-5/8	3-1/2	**TP4820100800**	Price
3/4	3/4	1-5/8	4	**TP4820100900**	Price
1	1	2	5	**TP4820101000**	Price

IMCO STREAKERS® M202B Solid Carbide 2 Flute Ball End Mills for Aluminum

- For contouring applications in aluminum and non-ferrous materials
- Unequalled in preventing clogging and loading even when slotting at 1xD axial depth
- Unique cutting edge and flute design for aggressive chip evacuation
- Operates effectively in speed ranges from 3,000 to 20,000 rpm
- 40° Helix, round or Weldon shanks



				Round Shank		Weldon	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/4	1/4	3/4	2-1/2	**DD4032980**	Price	**DD4032595**	Price
5/16	5/16	13/16	2-1/2	**DD4032981**	Price	**DD4032596**	Price
3/8	3/8	1	2-1/2	**DD4032982**	Price	**-**	-
3/8	3/8	7/8	2-1/2	**-**	-	**DD4032597**	Price
1/2	1/2	1-1/4	3	**DD4032983**	Price	**-**	-
1/2	1/2	1-1/4	3-1/4	**-**	-	**DD4032598**	Price
5/8	5/8	1-1/4	3-1/2	**-**	-	**DD4032599**	Price
5/8	5/8	1-5/8	3-1/2	**DD4032984**	Price	**-**	-
3/4	3/4	1-5/8	4	**DD4032985**	Price	**DD4032608**	Price

MONSTER TOOL COMPANY 2 Flute Ball Nose 45° Carbide End Mills for Aluminum

- For use in aluminum and other non-ferrous materials



				Uncoated		ZrN	
Dia. (in.)	Shank	LOC	OAL	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	**DC1030001**	Price	**DC1040001**	Price
3/16	3/16	5/8	2	**DC1030003**	Price	**DC1040003**	Price
7/32	1/4	3/4	2-1/2	**DC1030004**	Price	**DC1040004**	Price
1/4	1/4	3/4	2-1/2	**DC1030005**	Price	**DC1040005**	Price
5/16	5/16	13/16	2-1/2	**DC1030006**	Price	**DC1040006**	Price
3/8	3/8	1-1/8	2-1/2	**DC1030007**	Price	**DC1040007**	Price
7/16	7/16	1-1/4	2-3/4	**DC1030008**	Price	**DC1040008**	Price
1/2	1/2	1-1/4	3	**DC1030009**	Price	**DC1040009**	Price
5/8	5/8	1-5/8	3-1/2	**DC1030010**	Price	**DC1040010**	Price
3/4	3/4	1-3/4	4	**DC1030011**	Price	**DC1040011**	Price
1	1	1-3/4	4	**DC1030012**	Price	**DC1040012**	Price

Additional sizes available

RAPIDKUT® 3 Flute Solid Carbide Aluminum Cutting End Mills

Center Cutting • Standard and Long Lengths

- 3 Flute design for lighter finishing cuts
- Small corner radius for added strength and smoother cutting action
- Made from premium submicron grain carbide
- 35° Helix
- Tolerances: +.000/-.002”



MCG TiN TiCN

					Uncoated		TiN		TiCN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	3/8	1-1/2	.005	**DD8117764**	Price	**DD8127764**	Price	**DD8147764**	Price
3/16	3/16	5/8	2	.005	**DD8117766**	Price	**DD8127766**	Price	**DD8147766**	Price
1/4	1/4	3/4	2-1/2	.005	**DD8117768**	Price	**DD8127768**	Price	**DD8147768**	Price
1/4	1/4	1-1/8	3	.005	**DD8117782**	Price	**DD8127782**	Price	**DD8147782**	Price
5/16	5/16	13/16	2-1/2	.005	**DD8117770**	Price	**DD8127770**	Price	**DD8147770**	Price
5/16	5/16	1-1/8	3	.005	**DD8117783**	Price	**DD8127783**	Price	**DD8147783**	Price
3/8	3/8	1	2-1/2	.005	**DD8117772**	Price	**DD8127772**	Price	**DD8147772**	Price
3/8	3/8	1-1/8	3	.005	**DD8117784**	Price	**DD8127784**	Price	**DD8147784**	Price
7/16	7/16	1	2-3/4	.005	**DD8117774**	Price	**DD8127774**	Price	**DD8147774**	Price
1/2	1/2	1-1/4	3	.005	**DD8117776**	Price	**DD8127776**	Price	**DD8147776**	Price
1/2	1/2	1-1/2	4	.005	**DD8110811**	Price	**DD8120811**	Price	**DD8140811**	Price
1/2	1/2	2	4	.005	**DD8117786**	Price	**DD8127786**	Price	**DD8147786**	Price
5/8	5/8	1-5/8	3-1/2	.005	**DD8117778**	Price	**DD8127778**	Price	**DD8147778**	Price
5/8	5/8	2-1/4	5	.005	**DD8117787**	Price	**DD8127787**	Price	**DD8147787**	Price
3/4	3/4	1-5/8	4	.005	**DD8117779**	Price	**DD8127779**	Price	**DD8147779**	Price
3/4	3/4	2-1/4	5	.005	**DD8117788**	Price	**DD8127788**	Price	**DD8147788**	Price
1	1	1-1/2	4	.005	**DD8117781**	Price	**DD8127781**	Price	**DD8147781**	Price
1	1	2-1/4	5	.005	**DD8117789**	Price	**DD8127789**	Price	**DD8147789**	Price

MONSTER TOOL COMPANY 3 Flute High Performance Carbide End Mills for Aluminum

- 42° Helix
- Square end
- Specifically designed for maximum productivity in aluminum and non-ferrous materials
- Premium sub-micron carbide with 10% cobalt
- Right hand spiral, right hand cut
- Diameter tolerance +.000 / -.002”





				Uncoated		ZrN	
Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	**DC30273125500**	Price	**DC30273125500D**	Price
1/8	1/8	1-1/8	3	**DC30273126112**	Price	**DC30273126112D**	Price
3/16	3/16	5/8	2	**DC30273187625**	Price	**DC30273187625D**	Price
3/16	3/16	1-1/8	3	**DC30273188112**	Price	**DC30273188112D**	Price
1/4	1/4	3/4	2-1/2	**DC30273250750**	Price	**DC30273250750D**	Price
1/4	1/4	1-1/4	3	**DC30273251500**	Price	**DC30273251500D**	Price
1/4	1/4	2	4	**DC30273252000**	Price	**DC30273252000D**	Price
5/16	5/16	13/16	2-1/2	**DC30273312812**	Price	**DC30273312812D**	Price
5/16	5/16	1-3/8	3	**DC30273313375**	Price	**DC30273313375D**	Price
5/16	5/16	2	4	**DC30273314000**	Price	**DC30273314000D**	Price
3/8	3/8	1-1/8	2-1/2	**DC30273371125**	Price	**DC30273371125D**	Price
3/8	3/8	1-3/8	3	**DC30273371375**	Price	**DC30273371375D**	Price
3/8	3/8	2	4	**DC30273372000**	Price	**DC30273372000D**	Price
3/8	3/8	3	6	**DC30273373000**	Price	**DC30273373000D**	Price
7/16	7/16	1-1/4	2-3/4	**DC30273431250**	Price	**DC30273431250D**	Price
1/2	1/2	1-1/4	3	**DC30273501250**	Price	**DC30273501250D**	Price
1/2	1/2	2	4	**DC30273502000**	Price	**DC30273502000D**	Price
1/2	1/2	3-1/8	6	**DC30273503125**	Price	**DC30273503125D**	Price
5/8	5/8	1-5/8	3-1/2	**DC30273621625**	Price	**DC30273621625D**	Price
5/8	5/8	2-1/2	5	**DC30273622500**	Price	**DC30273622500D**	Price
5/8	5/8	3-1/8	6	**DC30273623125**	Price	**DC30273623125D**	Price
3/4	3/4	1-3/4	4	**DC30273751750**	Price	**DC30273751750D**	Price
3/4	3/4	2-1/2	5	**DC30273752500**	Price	**DC30273752500D**	Price
3/4	3/4	3-1/4	6	**DC30273753250**	Price	**DC30273753250D**	Price
1	1	1-3/4	4	**DC30273911750**	Price	**DC30273911750D**	Price
1	1	2-5/8	5	**DC30273912625**	Price	**DC30273912625D**	Price
1	1	3-1/4	6	**DC30273913250**	Price	**DC30273913250D**	Price

STREAKERS® M203 Solid Carbide Square and Corner Radius End Mills for Aluminum

- 3 Flute design for excellent surface finish
- Unique cutting edge and flute design are engineered for aggressive chip evacuation
- Operates effectively in speed ranges off 3,000 to 20,000 rpm
- Round & Weldon shanks
- 45° Helix, uncoated



MADE IN THE USA

					.030		None		.015	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	3/8	1-1/2	Round Shank	-	-	**DD4033246**	Price	**DD4034384**	Price
3/16	3/16	9/16	2	Round Shank	-	-	**DD4033248**	Price	**DD4034385**	Price
1/4	1/4	3/4	2-1/2	Round Shank	**DD4034388**	Price	**DD4032992**	Price	**DD4034386**	Price
1/4	1/4	3/8	2-1/2	Round Shank	-	-	**DD4032986**	Price	-	-
1/4	1/4	3/4	2-1/2	Weldon Shank	-	-	**DD4032634**	Price	-	-
1/4	1/4	1-1/4	3	Round Shank	**DD4034438**	Price	**DD4033009**	Price	**DD4034435**	Price
1/4	1/4	1-1/4	3	Weldon Shank	-	-	**DD4033011**	Price	-	-
5/16	5/16	13/16	2-1/2	Round Shank	-	-	**DD4033250**	Price	-	-
3/8	3/8	1/2	2-1/2	Round Shank	-	-	**DD4032988**	Price	-	-
3/8	3/8	1	2-1/2	Weldon Shank	-	-	**DD4032635**	Price	-	-
3/8	3/8	1	2-1/2	Round Shank	**DD4034460**	Price	**DD4032993**	Price	**DD4034458**	Price
3/8	3/8	1-1/2	3-1/4	Round Shank	**DD4034480**	Price	**DD4032998**	Price	**DD4034462**	Price
3/8	3/8	1-1/2	3-1/4	Weldon Shank	-	-	**DD4032702**	Price	-	-
3/8	3/8	2	4	Round Shank	-	-	**DD4033003**	Price	-	-
1/2	1/2	5/8	3	Round Shank	-	-	**DD4032989**	Price	-	-
1/2	1/2	1-1/4	3	Round Shank	**DD4034522**	Price	**DD4032994**	Price	**DD4034492**	Price
1/2	1/2	1-1/4	3-1/4	Weldon Shank	-	-	**DD4032637**	Price	-	-
1/2	1/2	2	4	Round Shank	**DD4034534**	Price	**DD4032999**	Price	-	-
1/2	1/2	2	4	Weldon Shank	-	-	**DD4032703**	Price	-	-
1/2	1/2	2-1/2	5	Round Shank	-	-	**DD4033004**	Price	-	-
1/2	1/2	3-1/8	6	Round Shank	-	-	**DD4033013**	Price	-	-
5/8	5/8	1-5/8	3-1/2	Weldon Shank	-	-	**DD4032638**	Price	-	-
5/8	5/8	1-5/8	3-1/2	Round Shank	**DD4034545**	Price	**DD4032995**	Price	-	-
5/8	5/8	2-1/2	5	Round Shank	**DD4034549**	Price	-	-	-	-
5/8	5/8	2-1/2	5	Weldon Shank	-	-	**DD4032720**	Price	-	-
3/4	3/4	1	4	Round Shank	**DD4033611**	Price	**DD4032991**	Price	-	-
3/4	3/4	1-5/8	4	Round Shank	**DD4034553**	Price	**DD4032996**	Price	-	-
3/4	3/4	1-5/8	4	Weldon Shank	-	-	**DD4032639**	Price	-	-
3/4	3/4	2-1/2	5	Round Shank	**DD4034558**	Price	**DD4033001**	Price	-	-
3/4	3/4	2-1/2	5	Weldon Shank	-	-	**DD4032704**	Price	-	-
3/4	3/4	3-1/4	6	Round Shank	**DD4034560**	Price	**DD4033007**	Price	-	-
1	1	1-1/4	4	Round Shank	-	-	**DD4033137**	Price	-	-
1	1	2	4	Round Shank	-	-	**DD4032997**	Price	-	-
1	1	2	4	Weldon Shank	-	-	**DD4032701**	Price	-	-
1	1	2-5/8	5	Round Shank	-	-	**DD4033002**	Price	-	-
1	1	2-5/8	5	Weldon Shank	-	-	**DD4032714**	Price	-	-
1	1	3-1/4	6	Round Shank	-	-	**DD4033008**	Price	-	-
1	1	3-1/4	6	Weldon Shank	-	-	**DD4032726**	Price	-	-

STREAKERS® M223 Solid Carbide
3 Flute Square and Corner Radius End Mills for Aluminum



- For high performance machining in aluminum alloys
- Improved floor and wall finishes, better ramping abililty and longer tool life
- Unique grinds curl and evacuate gummy aluminum chips, allowing high feed rates without chip packing
- Excellent for roughing and finishing

N Best in Aluminum and Non-ferrous

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Shank Style	Order No.	Price
1/8	1/8	1/4	1-1/2	None	Round	**DD4061000**	Price
1/8	1/8	3/8	1-1/2	None	Round	**DD4061001**	Price
1/8	1/8	3/8	1-1/2	.015	Round	**DD4061002**	Price
1/8	1/8	1/2	2	None	Round	**DD4061004**	Price
3/16	3/16	5/16	2	None	Round	**DD4061005**	Price
3/16	3/16	9/16	2	None	Round	**DD4061006**	Price
3/16	3/16	9/16	2	.015	Round	**DD4061007**	Price
3/16	3/16	3/4	2-1/2	None	Round	**DD4061009**	Price
1/4	1/4	1/2	2	None	Round	**DD4061010**	Price
1/4	1/4	1/2	2	.015	Round	**DD4061011**	Price
1/4	1/4	3/4	2-1/2	None	Round	**DD4061012**	Price
1/4	1/4	3/4	2-1/2	.015	Round	**DD4061013**	Price
1/4	1/4	3/4	2-1/2	.030	Round	**DD4061014**	Price
1/4	1/4	1	3	None	Round	**DD4061016**	Price
1/4	1/4	1	3	.015	Round	**DD4061017**	Price
1/4	1/4	1	3	.030	Round	**DD4061018**	Price
5/16	5/16	15/16	2-1/2	None	Round	**DD4061019**	Price
5/16	5/16	15/16	2-1/2	.015	Round	**DD4061020**	Price
5/16	5/16	15/16	2-1/2	.030	Round	**DD4061021**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Shank Style	Order No.	Price
5/16	5/16	1-3/8	3	None	Round	**DD4061022**	Price
3/8	3/8	1/2	2	None	Round	**DD4061023**	Price
3/8	3/8	1/2	2	.015	Round	**DD4061024**	Price
3/8	3/8	15/16	2-1/2	None	Round	**DD4061025**	Price
3/8	3/8	15/16	2-1/2	None	Weldon	**DD4061095**	Price
3/8	3/8	15/16	2-1/2	.015	Round	**DD4061026**	Price
3/8	3/8	15/16	2-1/2	.030	Round	**DD4061027**	Price
3/8	3/8	15/16	2-1/2	.060	Round	**DD4061028**	Price
3/8	3/8	1-1/8	3	None	Round	**DD4061030**	Price
3/8	3/8	1-1/8	3	.015	Round	**DD4061031**	Price
3/8	3/8	1-1/8	3	.030	Round	**DD4061032**	Price
3/8	3/8	1-1/8	3	.060	Round	**DD4061033**	Price
3/8	3/8	1-1/2	3-1/2	None	Round	**DD4061034**	Price
3/8	3/8	1-1/2	3-1/2	None	Weldon	**DD4061096**	Price
3/8	3/8	1-1/2	3-1/2	.015	Round	**DD4061035**	Price
3/8	3/8	1-1/2	3-1/2	.030	Round	**DD4061036**	Price
3/8	3/8	1-1/2	3-1/2	.060	Round	**DD4061037**	Price
3/8	3/8	2	4	None	Round	**DD4061038**	Price
1/2	1/2	5/8	2-1/2	None	Round	**DD4061039**	Price

(continued on next page)

STREAKERS® M223 Solid Carbide (cont.)





Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Shank Style	Order No.	Price
1/2	1/2	5/8	2-1/2	.030	Round	**DD4061040**	Price
1/2	1/2	5/8	3	None	Round	**DD4061041**	Price
1/2	1/2	5/8	3	.030	Round	**DD4061042**	Price
1/2	1/2	5/8	3	.125	Round	**DD4061043**	Price
1/2	1/2	1	3	None	Round	**DD4061044**	Price
1/2	1/2	1	3	None	Weldon	**DD4061097**	Price
1/2	1/2	1	3	.015	Round	**DD4061045**	Price
1/2	1/2	1	3	.030	Round	**DD4061046**	Price
1/2	1/2	1	3	.060	Round	**DD4061047**	Price
1/2	1/2	1	3	.125	Round	**DD4061048**	Price
1/2	1/2	1-1/4	3	None	Round	**DD4061050**	Price
1/2	1/2	1-1/4	3	.015	Round	**DD4061051**	Price
1/2	1/2	1-1/4	3	.030	Round	**DD4061052**	Price
1/2	1/2	1-1/4	3	.060	Round	**DD4061053**	Price
1/2	1/2	1-1/4	3	.125	Round	**DD4061054**	Price
1/2	1/2	1-1/2	3-1/2	None	Round	**DD4061055**	Price
1/2	1/2	1-1/2	3-1/2	None	Weldon	**DD4061098**	Price
1/2	1/2	1-1/2	3-1/2	.030	Round	**DD4061056**	Price
1/2	1/2	1-1/2	3-1/2	.060	Round	**DD4061057**	Price
1/2	1/2	1-1/2	3-1/2	.125	Round	**DD4061058**	Price
1/2	1/2	2	4	None	Round	**DD4061059**	Price
1/2	1/2	2	4	None	Weldon	**DD4061099**	Price
1/2	1/2	2	4	.015	Round	**DD4061060**	Price
1/2	1/2	2	4	.030	Round	**DD4061061**	Price
1/2	1/2	2	4	.060	Round	**DD4061062**	Price
1/2	1/2	2	4	.125	Round	**DD4061063**	Price
1/2	1/2	2-1/2	5	None	Round	**DD4061064**	Price
1/2	1/2	2-1/2	5	.030	Round	**DD4061065**	Price
5/8	5/8	1-1/4	3-1/2	None	Round	**DD4061066**	Price
5/8	5/8	1-1/4	3-1/2	.030	Round	**DD4061067**	Price
5/8	5/8	1-1/4	3-1/2	.125	Round	**DD4061068**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Shank Style	Order No.	Price
5/8	5/8	1-7/8	4	None	Round	**DD4061069**	Price
5/8	5/8	1-7/8	4	None	Weldon	**DD4061100**	Price
5/8	5/8	1-7/8	4	.030	Round	**DD4061070**	Price
5/8	5/8	1-7/8	4	.125	Round	**DD4061071**	Price
5/8	5/8	2-1/2	5	None	Round	**DD4061073**	Price
5/8	5/8	2-1/2	5	.030	Round	**DD4061074**	Price
3/4	3/4	1-5/8	4	None	Round	**DD4061075**	Price
3/4	3/4	1-5/8	4	None	Weldon	**DD4061101**	Price
3/4	3/4	1-5/8	4	.030	Round	**DD4061076**	Price
3/4	3/4	1-5/8	4	.060	Round	**DD4061077**	Price
3/4	3/4	1-5/8	4	.125	Round	**DD4061078**	Price
3/4	3/4	2-1/4	5	None	Round	**DD4061080**	Price
3/4	3/4	2-1/4	5	None	Weldon	**DD4061102**	Price
3/4	3/4	2-1/4	5	.030	Round	**DD4061081**	Price
3/4	3/4	2-1/4	5	.060	Round	**DD4061082**	Price
3/4	3/4	2-1/4	5	.125	Round	**DD4061083**	Price
3/4	3/4	3-1/4	6	None	Round	**DD4061084**	Price
3/4	3/4	3-1/4	6	None	Weldon	**DD4061103**	Price
3/4	3/4	3-1/4	6	.030	Round	**DD4061085**	Price
3/4	3/4	3-1/4	6	.125	Round	**DD4061086**	Price
1	1	1-1/4	4	None	Round	**DD4061087**	Price
1	1	1-1/4	4	.030	Round	**DD4061088**	Price
1	1	2	5	None	Round	**DD4061089**	Price
1	1	2	5	None	Weldon	**DD4061104**	Price
1	1	2	5	.030	Round	**DD4061090**	Price
1	1	3-1/4	6	None	Round	**DD4061091**	Price
1	1	3-1/4	6	None	Weldon	**DD4061105**	Price
1	1	3-1/4	6	.030	Round	**DD4061092**	Price
1	1	4-1/4	7	None	Round	**DD4061093**	Price
1	1	4-1/4	7	.030	Round	**DD4061094**	Price

STREAKERS® M223 Solid Carbide 3 Flute Square and Corner Radius End Mills for Aluminum

- For high performance machining in aluminum alloys
- Improved floor and wall finishes, better ramping abililty and longer tool life
- Unique grinds curl and evacuate gummy aluminum chips, allowing high feed rates without chip packing
- Excellent for roughing and finishing



N Best in **Aluminum and Non-ferrous**

Size	Shank Dia.	Flute Length	OAL	Radius	Order No.	Price
3mm	3mm	9mm	38mm	None	**DD4061220**	Price
3mm	3mm	9mm	38mm	0.3mm	**DD4061221**	Price
4mm	4mm	12mm	50mm	None	**DD4061223**	Price
4mm	4mm	12mm	50mm	0.3mm	**DD4061224**	Price
5mm	5mm	15mm	50mm	None	**DD4061226**	Price
5mm	5mm	15mm	50mm	0.3mm	**DD4061227**	Price
6mm	6mm	13mm	57mm	None	**DD4061229**	Price
6mm	6mm	13mm	57mm	0.3mm	**DD4061230**	Price
6mm	6mm	13mm	57mm	0.5mm	**DD4061231**	Price
6mm	6mm	13mm	57mm	1.0mm	**DD4061232**	Price
6mm	6mm	18mm	63mm	None	**DD4061234**	Price
6mm	6mm	18mm	63mm	0.5mm	**DD4061235**	Price
6mm	6mm	18mm	63mm	1.0mm	**DD4061236**	Price
6mm	6mm	24mm	75mm	None	**DD4061237**	Price
6mm	6mm	24mm	75mm	0.5mm	**DD4061238**	Price
6mm	6mm	24mm	75mm	1.0mm	**DD4061239**	Price
8mm	8mm	20mm	63mm	None	**DD4061240**	Price
8mm	8mm	20mm	63mm	0.5mm	**DD4061241**	Price
8mm	8mm	20mm	63mm	1.0mm	**DD4061242**	Price
8mm	8mm	32mm	75mm	None	**DD4061244**	Price
8mm	8mm	32mm	75mm	0.5mm	**DD4061245**	Price
8mm	8mm	32mm	75mm	1.0mm	**DD4061246**	Price
10mm	10mm	20mm	66mm	None	**DD4061247**	Price
10mm	10mm	20mm	66mm	0.3mm	**DD4061248**	Price
10mm	10mm	22mm	72mm	None	**DD4061249**	Price
10mm	10mm	22mm	72mm	0.3mm	**DD4061250**	Price
10mm	10mm	25mm	72mm	None	**DD4061251**	Price
10mm	10mm	25mm	72mm	0.3mm	**DD4061252**	Price
10mm	10mm	25mm	72mm	0.5mm	**DD4061253**	Price
10mm	10mm	25mm	72mm	1.0mm	**DD4061254**	Price

Size	Shank Dia.	Flute Length	OAL	Radius	Order No.	Price
10mm	10mm	25mm	72mm	1.5mm	**DD4061255**	Price
10mm	10mm	30mm	75mm	None	**DD4061257**	Price
10mm	10mm	30mm	75mm	0.5mm	**DD4061258**	Price
10mm	10mm	30mm	75mm	1.0mm	**DD4061259**	Price
10mm	10mm	30mm	75mm	1.5mm	**DD4061260**	Price
10mm	10mm	40mm	88mm	None	**DD4061261**	Price
10mm	10mm	40mm	88mm	0.5mm	**DD4061262**	Price
10mm	10mm	40mm	88mm	1.0mm	**DD4061263**	Price
10mm	10mm	40mm	88mm	1.5mm	**DD4061264**	Price
12mm	12mm	24mm	73mm	None	**DD4061265**	Price
12mm	12mm	24mm	73mm	0.3mm	**DD4061266**	Price
12mm	12mm	26mm	83mm	None	**DD4061267**	Price
12mm	12mm	26mm	83mm	0.3mm	**DD4061268**	Price
12mm	12mm	26mm	83mm	0.5mm	**DD4061269**	Price
12mm	12mm	26mm	83mm	1.0mm	**DD4061270**	Price
12mm	12mm	26mm	83mm	1.5mm	**DD4061271**	Price
12mm	12mm	26mm	83mm	2.0mm	**DD4061272**	Price
12mm	12mm	26mm	83mm	3.0mm	**DD4061273**	Price
12mm	12mm	30mm	83mm	None	**DD4061274**	Price
12mm	12mm	30mm	83mm	0.5mm	**DD4061275**	Price
12mm	12mm	30mm	83mm	1.0mm	**DD4061276**	Price
12mm	12mm	30mm	83mm	1.5mm	**DD4061277**	Price
12mm	12mm	30mm	83mm	2.0mm	**DD4061278**	Price
12mm	12mm	30mm	83mm	3.0mm	**DD4061279**	Price
12mm	12mm	36mm	88mm	None	**DD4061281**	Price
12mm	12mm	36mm	88mm	0.5mm	**DD4061282**	Price
12mm	12mm	36mm	88mm	1.0mm	**DD4061283**	Price
12mm	12mm	36mm	88mm	1.5mm	**DD4061284**	Price
12mm	12mm	36mm	88mm	3.0mm	**DD4061285**	Price
12mm	12mm	48mm	100mm	None	**DD4061286**	Price

(continued on next page)

STREAKERS® M223 Solid Carbide 3 Flute Square and Corner Radius End Mills for Aluminum (cont.)



Size	Shank Dia.	Flute Length	OAL	Radius	Order No.	Price
12mm	12mm	48mm	100mm	0.5mm	**DD4061287**	Price
12mm	12mm	48mm	100mm	1.0mm	**DD4061288**	Price
12mm	12mm	48mm	100mm	1.5mm	**DD4061289**	Price
12mm	12mm	48mm	100mm	2.0mm	**DD4061290**	Price
12mm	12mm	48mm	100mm	3.0mm	**DD4061291**	Price
16mm	16mm	32mm	92mm	None	**DD4061292**	Price
16mm	16mm	32mm	92mm	0.5mm	**DD4061293**	Price
16mm	16mm	32mm	92mm	1.0mm	**DD4061294**	Price
16mm	16mm	32mm	92mm	1.5mm	**DD4061295**	Price
16mm	16mm	32mm	92mm	2.0mm	**DD4061296**	Price
16mm	16mm	32mm	92mm	3.0mm	**DD4061297**	Price
16mm	16mm	48mm	110mm	None	**DD4061299**	Price
16mm	16mm	48mm	110mm	1.0mm	**DD4061300**	Price
16mm	16mm	48mm	110mm	1.5mm	**DD4061301**	Price
16mm	16mm	48mm	110mm	2.0mm	**DD4061302**	Price
16mm	16mm	48mm	110mm	3.0mm	**DD4061303**	Price
16mm	16mm	64mm	125mm	None	**DD4061304**	Price
16mm	16mm	64mm	125mm	1.0mm	**DD4061305**	Price
16mm	16mm	64mm	125mm	1.5mm	**DD4061306**	Price

Size	Shank Dia.	Flute Length	OAL	Radius	Order No.	Price
16mm	16mm	64mm	125mm	2.0mm	**DD4061307**	Price
16mm	16mm	64mm	125mm	3.0mm	**DD4061308**	Price
20mm	20mm	40mm	104mm	None	**DD4061309**	Price
20mm	20mm	40mm	104mm	1.0mm	**DD4061310**	Price
20mm	20mm	40mm	104mm	1.5mm	**DD4061311**	Price
20mm	20mm	40mm	104mm	2.0mm	**DD4061312**	Price
20mm	20mm	40mm	104mm	3.0mm	**DD4061313**	Price
20mm	20mm	60mm	125mm	None	**DD4061315**	Price
20mm	20mm	60mm	125mm	1.0mm	**DD4061316**	Price
20mm	20mm	60mm	125mm	1.5mm	**DD4061317**	Price
20mm	20mm	60mm	125mm	2.0mm	**DD4061318**	Price
20mm	20mm	60mm	125mm	3.0mm	**DD4061319**	Price
20mm	20mm	80mm	150mm	None	**DD4061320**	Price
20mm	20mm	80mm	150mm	1.0mm	**DD4061321**	Price
20mm	20mm	80mm	150mm	1.5mm	**DD4061322**	Price
20mm	20mm	80mm	150mm	2.0mm	**DD4061323**	Price
20mm	20mm	80mm	150mm	3.0mm	**DD4061324**	Price
25mm	25mm	50mm	125mm	None	**DD4061325**	Price

RAPIDKUT® 3 Flute Solid Carbide End Mills



For Aluminum

- Square end
- 36° Helix
- Center cutting
- Cutter diameter tolerance: +.0000 / -.0005”

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price
1/8	1/8	1/2	1-1/2	Round	**PE1230125**	Price
3/16	3/16	5/8	2	Round	**PE1230187**	Price
1/4	1/4	1/2	2-1/2	Round	**PE1230250**	Price
1/4	1/4	1	2-1/2	Round	**PE1230255**	Price
1/4	1/4	1	2-1/2	Weldon	**PE1230260**	Price
1/4	1/4	1-1/4	3	Round	**PE1230265**	Price
5/16	5/16	1	2-1/2	Round	**PE1230312**	Price
3/8	3/8	5/8	2-1/2	Round	**PE1230375**	Price
3/8	3/8	1	2-1/2	Round	**PE1230380**	Price
3/8	3/8	1	2-1/2	Weldon	**PE1230385**	Price
3/8	3/8	1-1/2	3-1/4	Round	**PE1230390**	Price
3/8	3/8	2	4	Round	**PE1230400**	Price
1/2	1/2	3/4	3	Round	**PE1230500**	Price
1/2	1/2	1-1/4	3	Round	**PE1230505**	Price
1/2	1/2	1-1/4	3-1/4	Weldon	**PE1230510**	Price
1/2	1/2	2	4	Round	**PE1230515**	Price
1/2	1/2	2-1/2	5	Round	**PE1230520**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price
1/2	1/2	3-1/4	6	Round	**PE1230525**	Price
5/8	5/8	1	3-1/2	Round	**PE1230625**	Price
5/8	5/8	1-5/8	3-1/2	Round	**PE1230630**	Price
5/8	5/8	1-5/8	3-1/2	Weldon	**PE1230635**	Price
5/8	5/8	2-1/2	5	Weldon	**PE1230640**	Price
5/8	5/8	3-1/4	6	Round	**PE1230645**	Price
5/8	5/8	3-1/4	6	Weldon	**PE1230650**	Price
3/4	3/4	1	4	Round	**PE1230750**	Price
3/4	3/4	1-3/4	4	Round	**PE1230755**	Price
3/4	3/4	2-1/2	5	Round	**PE1230760**	Price
3/4	3/4	3-1/4	6	Round	**PE1230765**	Price
3/4	3/4	4	6-1/2	Round	**PE1230770**	Price
1	1	1-1/4	4	Round	**PE1231000**	Price
1	1	1-3/4	4	Round	**PE1231005**	Price
1	1	2-1/2	5	Round	**PE1231010**	Price
1	1	3-1/4	6	Round	**PE1231015**	Price
1	1	3-1/4	6	Weldon	**PE1231020**	Price

STREAKERS® M223N Solid Carbide 3 Flute End Mills with Neck Relief

Square or Corner Radius



- For high performance machining in aluminum alloys
- Adding a necked shank to the M223 design offers a high performance tool that can reach deep cavities while minimizing tool deflection
- ZrN coating helps reduce chip packing even in heavy tool engagement cuts

N Best in **Aluminum and Non-ferrous**

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Reach LBS	Radius (in.)	OAL (in.)	Order No.	Price
1/8	1/8	1/4	3/4	None	2-1/2	**DD4061122**	Price
1/8	1/8	1/4	3/4	.015	2-1/2	**DD4061123**	Price
1/8	1/8	1/4	1	None	3	**DD4061125**	Price
1/8	1/8	1/4	1	.015	3	**DD4061126**	Price
3/16	3/16	1/4	3/4	None	2-1/2	**DD4061128**	Price
3/16	3/16	1/4	3/4	.015	2-1/2	**DD4061129**	Price
3/16	3/16	1/4	1	None	3	**DD4061131**	Price
3/16	3/16	1/4	1	.015	3	**DD4061132**	Price
1/4	1/4	3/8	7/8	None	2-1/2	**DD4061134**	Price
1/4	1/4	3/8	7/8	.015	2-1/2	**DD4061135**	Price
1/4	1/4	3/8	7/8	.030	2-1/2	**DD4061136**	Price
1/4	1/4	3/8	1-3/8	None	3	**DD4061138**	Price
1/4	1/4	3/8	1-3/8	.015	3	**DD4061139**	Price
1/4	1/4	3/8	1-3/8	.030	3	**DD4061140**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Reach LBS	Radius (in.)	OAL (in.)	Order No.	Price
1/4	1/4	3/8	2-1/4	None	4	**DD4061142**	Price
1/4	1/4	3/8	2-1/4	.015	4	**DD4061143**	Price
1/4	1/4	3/8	2-1/4	.030	4	**DD4061144**	Price
3/8	3/8	1/2	1-1/8	None	2-1/2	**DD4061146**	Price
3/8	3/8	1/2	1-1/8	.015	2-1/2	**DD4061147**	Price
3/8	3/8	1/2	1-1/8	.030	2-1/2	**DD4061148**	Price
3/8	3/8	1/2	1-1/8	.060	2-1/2	**DD4061149**	Price
3/8	3/8	1/2	1-1/4	None	3	**DD4061151**	Price
3/8	3/8	1/2	1-1/4	.015	3	**DD4061152**	Price
3/8	3/8	1/2	1-1/4	.030	3	**DD4061153**	Price
3/8	3/8	1/2	1-1/4	.060	3	**DD4061154**	Price
3/8	3/8	1/2	2-1/4	None	4	**DD4061156**	Price
3/8	3/8	1/2	2-1/4	.015	4	**DD4061157**	Price
3/8	3/8	1/2	2-1/4	.030	4	**DD4061158**	Price

(continued on next page)

STREAKERS® M223N Solid Carbide 3 Flute End Mills with Neck Relief (cont.)

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Reach LBS	Radius (in.)	OAL (in.)	Order No.	Price
1/2	1/2	5/8	1-3/8	None	3	**DD4061160**	Price
1/2	1/2	5/8	1-3/8	.015	3	**DD4061161**	Price
1/2	1/2	5/8	1-3/8	.030	3	**DD4061162**	Price
1/2	1/2	5/8	1-3/8	.060	3	**DD4061163**	Price
1/2	1/2	5/8	1-3/8	.125	3	**DD4061164**	Price
1/2	1/2	5/8	2-1/4	None	4	**DD4061166**	Price
1/2	1/2	5/8	2-1/4	.015	4	**DD4061167**	Price
1/2	1/2	5/8	2-1/4	.030	4	**DD4061168**	Price
1/2	1/2	5/8	2-1/4	.060	4	**DD4061169**	Price
1/2	1/2	5/8	2-1/4	.125	4	**DD4061170**	Price
1/2	1/2	5/8	3-1/4	None	5	**DD4061172**	Price
1/2	1/2	5/8	3-1/4	.015	5	**DD4061173**	Price
1/2	1/2	5/8	3-1/4	.030	5	**DD4061174**	Price
1/2	1/2	5/8	3-1/4	.060	5	**DD4061175**	Price
1/2	1/2	5/8	3-1/4	.125	5	**DD4061176**	Price
1/2	1/2	5/8	4-1/4	None	6	**DD4061178**	Price
1/2	1/2	5/8	4-1/4	.015	6	**DD4061179**	Price
1/2	1/2	5/8	4-1/4	.030	6	**DD4061180**	Price
1/2	1/2	5/8	4-1/4	.060	6	**DD4061181**	Price
1/2	1/2	5/8	4-1/4	.125	6	**DD4061182**	Price
5/8	5/8	3/4	1-3/4	None	4	**DD4061184**	Price
5/8	5/8	3/4	1-3/4	.030	4	**DD4061185**	Price
5/8	5/8	3/4	1-3/4	.125	4	**DD4061186**	Price
5/8	5/8	3/4	2-3/8	None	5	**DD4061188**	Price
5/8	5/8	3/4	2-3/8	.030	5	**DD4061189**	Price
5/8	5/8	3/4	2-3/8	.125	5	**DD4061190**	Price



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Reach LBS	Radius (in.)	OAL (in.)	Order No.	Price
5/8	5/8	3/4	3-3/8	None	6	**DD4061192**	Price
5/8	5/8	3/4	3-3/8	.030	6	**DD4061193**	Price
5/8	5/8	3/4	3-3/8	.125	6	**DD4061194**	Price
3/4	3/4	1	1-3/4	None	4	**DD4061196**	Price
3/4	3/4	1	1-3/4	.030	4	**DD4061197**	Price
3/4	3/4	1	1-3/4	.060	4	**DD4061198**	Price
3/4	3/4	1	1-3/4	.125	4	**DD4061199**	Price
3/4	3/4	1	2-3/8	None	5	**DD4061201**	Price
3/4	3/4	1	2-3/8	.030	5	**DD4061202**	Price
3/4	3/4	1	2-3/8	.060	5	**DD4061203**	Price
3/4	3/4	1	2-3/8	.125	5	**DD4061204**	Price
3/4	3/4	1	3-3/8	None	6	**DD4061206**	Price
3/4	3/4	1	3-3/8	.030	6	**DD4061207**	Price
3/4	3/4	1	3-3/8	.060	6	**DD4061208**	Price
3/4	3/4	1	3-3/8	.125	6	**DD4061209**	Price
1	1	1-1/4	2-5/8	None	5	**DD4061211**	Price
1	1	1-1/4	2-5/8	.030	5	**DD4061212**	Price
1	1	1-1/4	3-3/8	None	6	**DD4061214**	Price
1	1	1-1/4	3-3/8	.030	6	**DD4061215**	Price
1	1	1-1/4	4-3/8	None	7	**DD4061217**	Price
1	1	1-1/4	4-3/8	.030	7	**DD4061218**	Price

STREAKERS® M223N Solid Carbide 3 Flute End Mills with Neck Relief

Square or Corner Radius

- For high performance machining in aluminum alloys
- Adding a necked shank to the M223 design offers a high performance tool that can reach deep cavities while minimizing tool deflection
- ZrN coating helps reduce chip packing even in heavy tool engagement cuts



N Best in **Aluminum and Non-ferrous**

Size	Shank Dia.	Flute Length	Reach LBS	Radius	OAL	Order No.	Price
6mm	6mm	9mm	18mm	None	63mm	**DD4061342**	Price
6mm	6mm	9mm	18mm	0.3mm	63mm	**DD4061343**	Price
6mm	6mm	9mm	18mm	0.5mm	63mm	**DD4061344**	Price
6mm	6mm	9mm	18mm	1.0mm	63mm	**DD4061345**	Price
6mm	6mm	9mm	24mm	None	75mm	**DD4061347**	Price
6mm	6mm	9mm	24mm	0.3mm	75mm	**DD4061348**	Price
6mm	6mm	9mm	24mm	0.5mm	75mm	**DD4061349**	Price
6mm	6mm	9mm	24mm	1.0mm	75mm	**DD4061350**	Price
8mm	8mm	12mm	24mm	None	75mm	**DD4061352**	Price
8mm	8mm	12mm	24mm	0.3mm	75mm	**DD4061353**	Price
8mm	8mm	12mm	24mm	0.5mm	75mm	**DD4061354**	Price
8mm	8mm	12mm	24mm	1.0mm	75mm	**DD4061355**	Price
10mm	10mm	15mm	30mm	None	88mm	**DD4061357**	Price
10mm	10mm	15mm	30mm	0.3mm	88mm	**DD4061358**	Price
10mm	10mm	15mm	30mm	0.5mm	88mm	**DD4061359**	Price
10mm	10mm	15mm	30mm	1.0mm	88mm	**DD4061360**	Price
10mm	10mm	15mm	30mm	1.5mm	88mm	**DD4061361**	Price
10mm	10mm	15mm	40mm	None	100mm	**DD4061363**	Price
10mm	10mm	15mm	40mm	0.3mm	100mm	**DD4061364**	Price
10mm	10mm	15mm	40mm	0.5mm	100mm	**DD4061365**	Price
10mm	10mm	15mm	40mm	1.0mm	100mm	**DD4061366**	Price
10mm	10mm	15mm	40mm	1.5mm	100mm	**DD4061367**	Price
12mm	12mm	18mm	36mm	None	88mm	**DD4061369**	Price
12mm	12mm	18mm	36mm	0.3mm	88mm	**DD4061370**	Price
12mm	12mm	18mm	36mm	0.5mm	88mm	**DD4061371**	Price
12mm	12mm	18mm	36mm	1.0mm	88mm	**DD4061372**	Price
12mm	12mm	18mm	36mm	1.5mm	88mm	**DD4061373**	Price
12mm	12mm	18mm	36mm	3.0mm	88mm	**DD4061374**	Price

Size	Shank Dia.	Flute Length	Reach LBS	Radius	OAL	Order No.	Price
12mm	12mm	18mm	48mm	None	100mm	**DD4061376**	Price
12mm	12mm	18mm	48mm	0.3mm	100mm	**DD4061377**	Price
12mm	12mm	18mm	48mm	0.5mm	100mm	**DD4061378**	Price
12mm	12mm	18mm	48mm	1.0mm	100mm	**DD4061379**	Price
12mm	12mm	18mm	48mm	1.5mm	100mm	**DD4061380**	Price
12mm	12mm	18mm	48mm	2.0mm	100mm	**DD4061381**	Price
12mm	12mm	18mm	48mm	3.0mm	100mm	**DD4061382**	Price
16mm	16mm	24mm	48mm	None	110mm	**DD4061384**	Price
16mm	16mm	24mm	48mm	0.5mm	110mm	**DD4061385**	Price
16mm	16mm	24mm	48mm	1.0mm	110mm	**DD4061386**	Price
16mm	16mm	24mm	48mm	1.5mm	110mm	**DD4061387**	Price
16mm	16mm	24mm	48mm	2.0mm	110mm	**DD4061388**	Price
16mm	16mm	24mm	48mm	3.0mm	110mm	**DD4061389**	Price
16mm	16mm	24mm	64mm	None	125mm	**DD4061391**	Price
16mm	16mm	24mm	64mm	0.5mm	125mm	**DD4061392**	Price
16mm	16mm	24mm	64mm	1.5mm	125mm	**DD4061393**	Price
16mm	16mm	24mm	64mm	2.0mm	125mm	**DD4061394**	Price
16mm	16mm	24mm	64mm	3.0mm	125mm	**DD4061395**	Price
20mm	20mm	30mm	60mm	None	125mm	**DD4061397**	Price
20mm	20mm	30mm	60mm	0.5mm	125mm	**DD4061398**	Price
20mm	20mm	30mm	60mm	1.5mm	125mm	**DD4061399**	Price
20mm	20mm	30mm	60mm	3.0mm	125mm	**DD4061400**	Price
20mm	20mm	30mm	80mm	None	150mm	**DD4061402**	Price
20mm	20mm	30mm	80mm	0.5mm	150mm	**DD4061403**	Price
20mm	20mm	30mm	80mm	1.5mm	150mm	**DD4061404**	Price
20mm	20mm	30mm	80mm	2.0mm	150mm	**DD4061405**	Price
20mm	20mm	30mm	80mm	3.0mm	150mm	**DD4061406**	Price

3 Flute, Aluminum Extended Length Finisher, Center Cutting End Mills

- Very high feed rates & excellent surface finish
- 3 Flute geometry promotes smooth cutting action
- Fordlube coating provides hi-lubricity and minimal edge build-up
- M.A. Ford List #138



TuffCut® X-AL

					Uncoated		Fordlube	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1/4	1-1/2	None	**DD2013801**	Price	-	-
1/8	1/8	3/8	1-1/2	None	**DD1513803**	Price	**DD1514206**	Price
1/8	1/8	1/2	1-1/2	None	**DD2013804**	Price	-	-
1/8	1/8	3/4	2	None	**DD2013806**	Price	-	-
3/16	3/16	3/8	2	None	**DD2013809**	Price	-	-
3/16	3/16	1/2	2	None	**DD1513810**	Price	**DD1514213**	Price
3/16	3/16	5/8	2-1/2	None	**DD2013811**	Price	-	-
3/16	3/16	3/4	2-1/2	None	**DD1513812**	Price	**DD1514215**	Price
3/16	3/16	1	2-1/2	None	**DD1513813**	Price	-	-
1/4	1/4	3/8	2	None	**DD2013814**	Price	-	-
1/4	1/4	1/2	2	None	**DD2013815**	Price	-	-
1/4	1/4	5/8	2	None	**DD2013817**	Price	-	-
1/4	1/4	3/4	2-1/2	None	**DD1513818**	Price	**DD1514221**	Price
1/4	1/4	3/4	2-1/2	.015	**DD1513002**	Price	-	-
1/4	1/4	3/4	2-1/2	.030	**DD1513003**	Price	-	-
1/4	1/4	1	3	None	**DD1513819**	Price	-	-
1/4	1/4	1-1/8	3	None	**DD1513820**	Price	**DD1514223**	Price
1/4	1/4	1-1/4	3	None	**DD2013821**	Price	-	-
5/16	5/16	13/16	2-1/2	None	**DD1513829**	Price	**DD1514232**	Price
5/16	5/16	1-1/2	4	None	**DD1513833**	Price	**DD1514236**	Price
3/8	3/8	3/4	2-1/2	None	**DD2013838**	Price	-	-
3/8	3/8	1	2-1/2	None	**DD1513839**	Price	**DD1514242**	Price
3/8	3/8	1	2-1/2	.015	**DD1513008**	Price	-	-
3/8	3/8	1	2-1/2	.030	**DD1513009**	Price	-	-
3/8	3/8	1-1/4	3	None	**DD1513840**	Price	-	-
3/8	3/8	1-1/2	3-1/2	None	**DD2013841**	Price	-	-
3/8	3/8	1-1/2	3-1/2	.015	**DD1513010**	Price	-	-
3/8	3/8	1-1/2	3-1/2	.030	**DD1513011**	Price	-	-
3/8	3/8	2	4	None	**DD1513842**	Price	**DD1514245**	Price
1/2	1/2	5/8	3	None	**DD2013848**	Price	-	-
1/2	1/2	1	3	None	**DD1513850**	Price	**DD1514253**	Price
1/2	1/2	1-1/4	3	None	**DD1513851**	Price	-	-
1/2	1/2	1-1/4	3	.030	**DD1513018**	Price	-	-
1/2	1/2	1-1/4	3	.060	**DD1513019**	Price	-	-
1/2	1/2	1-1/2	4	None	**DD2013852**	Price	-	-
1/2	1/2	1-1/2	4	.030	**DD1575101**	Price	-	-
1/2	1/2	1-1/2	4	.060	**DD1575102**	Price	-	-
1/2	1/2	2	4	None	**DD2013853**	Price	-	-
1/2	1/2	2-1/4	4	None	**DD1513854**	Price	**DD1514257**	Price
5/8	5/8	1-1/4	3-1/2	None	**DD1513861**	Price	**DD1514264**	Price
5/8	5/8	1-5/8	4	None	**DD2013862**	Price	-	-
5/8	5/8	2-1/2	5	None	**DD1513864**	Price	**DD1514267**	Price
3/4	3/4	1-5/8	4	None	**DD1513870**	Price	**DD1514273**	Price
3/4	3/4	1-5/8	4	.030	**DD1513045**	Price	-	-
3/4	3/4	1-5/8	4	.045	**DD1515122**	Price	-	-
3/4	3/4	2-1/2	5	None	**DD2013873**	Price	-	-
3/4	3/4	2-1/2	5	.030	**DD1513051**	Price	-	-
3/4	3/4	2-1/2	5	.060	**DD1513052**	Price	-	-
3/4	3/4	3	6	None	**DD1513874**	Price	**DD1514277**	Price

STREAKERS® M203N Solid Carbide 3 Flute End Mills with Neck Relief

Square or Corner Radius



- 3 Flute design for excellent surface finish
- Unique cutting edge and flute design are engineered for aggressive chip evacuation
- Neck relief for additional clearance in cavities and when machining against tight walls
- 45° Helix, uncoated

N *Best in* ***Aluminum and Non-ferrous***

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/4	1/4	3/8	2-1/2	1-1/8	**DD4033034**	Price
1/4	1/4	3/8	3	1-5/8	**DD4033121**	Price
1/4	1/4	3/8	4	2-1/4	**DD4033110**	Price
3/8	3/8	1/2	2-1/2	1-1/8	**DD4033035**	Price
3/8	3/8	1/2	3	1-3/4	**DD4033122**	Price
3/8	3/8	1/2	4	2-1/4	**DD4033112**	Price
1/2	1/2	5/8	3	1-3/8	**DD4033036**	Price
1/2	1/2	5/8	4	2-1/4	**DD4033123**	Price
1/2	1/2	5/8	5	2-3/8	**DD4033114**	Price
1/2	1/2	5/8	6	3-3/8	**DD4033048**	Price
5/8	5/8	3/4	5	2-1/4	**DD4033124**	Price
5/8	5/8	3/4	6	3-3/8	**DD4033116**	Price
3/4	3/4	1	4	1-3/4	**DD4033039**	Price
3/4	3/4	1	5	2-1/4	**DD4033125**	Price
3/4	3/4	1	6	3-3/8	**DD4033118**	Price

RAPIDKUT Solid Carbide, 3 Flute AlCrN Center Cut Aluminum End Mills

Metric Sizes



- 3 Flute 45° helix for high performance
- Designed for slotting and profiling in various materials
- Produces excellent surface finish
- AlCrN coated for added tool life

Size	Shank Dia.	Flute Length	OAL	Protective Chamfer	Order No.	Price
3mm	6mm	9mm	57mm	.050 - .150	**DC6210076**	Price
3.5mm	6mm	9mm	57mm	.050 - .150	**DC6210077**	Price
4mm	6mm	10mm	57mm	.050 - .150	**DC6210078**	Price
4.5mm	6mm	10mm	57mm	.050 - .150	**DC6210079**	Price
5mm	6mm	13mm	57mm	.050 - .150	**DC6210080**	Price
5.5mm	6mm	13mm	57mm	.050 - .150	**DC6210081**	Price
6mm	6mm	15mm	57mm	.050 - .150	**DC6210082**	Price
6.5mm	8mm	15mm	63mm	.100 - .200	**DC6210083**	Price
7mm	8mm	20mm	63mm	.100 - .200	**DC6210084**	Price
7.5mm	8mm	20mm	63mm	.100 - .200	**DC6210085**	Price
8mm	8mm	20mm	63mm	.100 - .200	**DC6210086**	Price
9mm	10mm	23mm	72mm	.100 - .200	**DC6210087**	Price
10mm	10mm	25mm	72mm	.100 - .200	**DC6210088**	Price
12mm	12mm	30mm	83mm	.200 - .300	**DC6210089**	Price
14mm	14mm	34mm	83mm	.200 - .300	**DC6210090**	Price
16mm	16mm	36mm	92mm	.250 - .350	**DC6210091**	Price
18mm	18mm	40mm	92mm	.250 - .350	**DC6210092**	Price

MONSTER TOOL COMPANY 3 Flute Ball Nose 45° Carbide End Mills for Aluminum



- Designed for maximum productivity in non-ferrous materials
- ZrN coating offers excellent wear resistance and increased lubricity

				Uncoated		ZrN	
Dia. (in.)	Shank	LOC	OAL	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	**DC1030013**	Price	**DC1040013**	Price
5/32	3/16	5/8	2	**DC1030014**	Price	**DC1040014**	Price
3/16	3/16	5/8	2	**DC1030015**	Price	**DC1040015**	Price
7/32	1/4	3/4	2-1/2	**DC1030016**	Price	**DC1040016**	Price
1/4	1/4	3/4	2-1/2	**DC1030017**	Price	**DC1040017**	Price
3/8	3/8	1-1/8	2-1/2	**DC1030031**	Price	**DC1040031**	Price
7/16	7/16	1-1/4	2-3/4	**DC1030032**	Price	**DC1040032**	Price
1/2	1/2	1-1/4	3	**DC1030019**	Price	**DC1040019**	Price
5/8	5/8	1-5/8	3-1/2	**DC1030020**	Price	**DC1040020**	Price
3/4	3/4	1-3/4	4	**DC1030021**	Price	**DC1040021**	Price
5/16	5/16	13/16	2-1/2	**DC1030018**	Price	**DC1040018**	Price
1	1	1-3/4	4	**DC1030022**	Price	**DC1040022**	Price

Additional sizes available

IMCO STREAKERS® M223N Solid Carbide 3 Flute End Mills with Neck Relief

Ball Nose



- For high performance machining in aluminum alloys
- Adding a necked shank to the M223 design offers a high performance tool that can reach deep cavities while minimizing tool deflection
- ZrN coating helps reduce chip packing even in heavy tool engagement cuts

N Best in Aluminum and Non-ferrous

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Reach LBS	OAl (in.)	Order No.	Price
1/8	1/8	1/4	3/4	2-1/2	**DD4061124**	Price
1/8	1/8	1/4	1	3	**DD4061127**	Price
3/16	3/16	1/4	3/4	2-1/2	**DD4061130**	Price
3/16	3/16	1/4	1	3	**DD4061133**	Price
1/4	1/4	3/8	7/8	2-1/2	**DD4061137**	Price
1/4	1/4	3/8	1-3/8	3	**DD4061141**	Price
1/4	1/4	3/8	2-1/4	4	**DD4061145**	Price
3/8	3/8	1/2	1-1/8	2-1/2	**DD4061150**	Price
3/8	3/8	1/2	1-1/4	3	**DD4061155**	Price
3/8	3/8	1/2	2-1/4	4	**DD4061159**	Price
1/2	1/2	5/8	1-3/8	3	**DD4061165**	Price
1/2	1/2	5/8	2-1/4	4	**DD4061171**	Price
1/2	1/2	5/8	3-1/4	5	**DD4061177**	Price
1/2	1/2	5/8	4-1/4	6	**DD4061183**	Price
5/8	5/8	3/4	1-3/4	4	**DD4061187**	Price
5/8	5/8	3/4	2-3/8	5	**DD4061191**	Price
5/8	5/8	3/4	3-3/8	6	**DD4061195**	Price
3/4	3/4	1	1-3/4	4	**DD4061200**	Price
3/4	3/4	1	2-3/8	5	**DD4061205**	Price
3/4	3/4	1	3-3/8	6	**DD4061210**	Price
1	1	1-1/4	2-5/8	5	**DD4061213**	Price
1	1	1-1/4	3-3/8	6	**DD4061216**	Price
1	1	1-1/4	4-3/8	7	**DD4061219**	Price

IMCO STREAKERS® M223N Solid Carbide 3 Flute End Mills with Neck Relief

Ball Nose



- For high performance machining in aluminum alloys
- Adding a necked shank to the M223 design offers a high performance tool that can reach deep cavities while minimizing tool deflection
- ZrN coating helps reduce chip packing even in heavy tool engagement cuts

N Best in Aluminum and Non-ferrous

Size	Shank Dia.	Flute Length	Reach LBS	OAL	Order No.	Price
6mm	6mm	9mm	18mm	63mm	**DD4061346**	Price
6mm	6mm	9mm	24mm	75mm	**DD4061351**	Price
8mm	8mm	12mm	24mm	75mm	**DD4061356**	Price
10mm	10mm	15mm	30mm	88mm	**DD4061362**	Price
10mm	10mm	15mm	40mm	100mm	**DD4061368**	Price
12mm	12mm	18mm	36mm	88mm	**DD4061375**	Price
12mm	12mm	18mm	48mm	100mm	**DD4061383**	Price
16mm	16mm	24mm	48mm	110mm	**DD4061390**	Price
16mm	16mm	24mm	64mm	125mm	**DD4061396**	Price
20mm	20mm	30mm	60mm	125mm	**DD4061401**	Price
20mm	20mm	30mm	80mm	150mm	**DD4061407**	Price

PREMIER HP HIGH PERFORMANCE 3 Flute 45° Helix TiCN Coated End Mill Ball Nose for Aluminum

TiCN

- High velocity milling of aluminum, copper and other non-ferrous materials
- Maximum stock removal, chip ejection, stability
- Increased tool life and higher cutting accuracy
- O.D. tolerance: -.0005" ~ .0015"
- Shank tolerance: 0 ~ -.0003

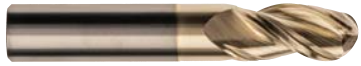


Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	1/2	1-1/2	**DD25EG97500801**	Price
3/16	3/16	5/8	2	**DD25EG97501201**	Price
1/4	1/4	3/4	2-1/2	**DD25EG97501601**	Price
5/16	5/16	13/16	2-1/2	**DD25EG97502001**	Price
3/8	3/8	1	2-1/2	**DD25EG97502401**	Price
1/2	1/2	1	3	**DD25EG97503201**	Price
5/8	5/8	1-1/4	3-1/2	**DD25EG97504001**	Price
3/4	3/4	1-1/2	4	**DD25EG97504801**	Price
1	1	1-1/2	4	**DD25EG97506401**	Price

IMCO STREAKERS® M223 Solid Carbide 3 Flute Ball Nose End Mills for Aluminum

- For high performance machining in aluminum alloys
- Improved floor and wall finishes, better ramping abililty and longer tool life
- Unique grinds curl and evacuate gummy aluminum chips, allowing high feed rates without chip packing
- Excellent for roughing and finishing

N Best in Aluminum and Non-ferrous



Size	Shank Dia.	Flute Length	OAL	Order No.	Price
3mm	3mm	9mm	38mm	**DD4061222**	Price
4mm	4mm	12mm	50mm	**DD4061225**	Price
5mm	5mm	15mm	50mm	**DD4061228**	Price
6mm	6mm	13mm	57mm	**DD4061233**	Price
8mm	8mm	20mm	63mm	**DD4061243**	Price
10mm	10mm	25mm	72mm	**DD4061256**	Price
12mm	12mm	30mm	83mm	**DD4061280**	Price
16mm	16mm	32mm	92mm	**DD4061298**	Price
20mm	20mm	40mm	104mm	**DD4061314**	Price

IMCO STREAKERS® M223 Solid Carbide 3 Flute Ball Nose End Mills for Aluminum

- For high performance machining in aluminum alloys
- Improved floor and wall finishes, better ramping abililty and longer tool life
- Unique grinds curl and evacuate gummy aluminum chips, allowing high feed rates without chip packing
- Excellent for roughing and finishing



N Best in Aluminum and Non-ferrous

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	3/8	1-1/2	**DD4061003**	Price
3/16	3/16	9/16	2	**DD4061008**	Price
1/4	1/4	3/4	2-1/2	**DD4061015**	Price
3/8	3/8	15/16	2-1/2	**DD4061029**	Price
1/2	1/2	1	3	**DD4061049**	Price
5/8	5/8	1-7/8	4	**DD4061072**	Price
3/4	3/4	1-5/8	4	**DD4061079**	Price

M.A. FORD TuffCut® XR-AL 3 Flute Gem+ Coated End Mills for Aluminum



45° Helix • Solid Carbide

- Enhanced flute design for improved chip control and reduced cutting forces
- Chipbreaker design provides better part finish than traditional knuckle roughers and aids in chip management
- Variable helix strengthens the tool corner reducing the chance of a chipped corner
- Gem+ coating recommended for aluminum, aluminum alloys, non-ferrous metals and composites
- M A Ford List #334

Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Neck Length (in.)	Corner Radius (in.)	Order No.	Price
1/4	1/4	1/2	2	-	.020	**DD1633400**	Price
1/4	1/4	3/4	2-1/2	-	.020	**DD1633404**	Price
3/8	3/8	5/8	2	-	.020	**DD1633408**	Price
3/8	3/8	1	2-1/2	-	.020	**DD1633412**	Price
1/2	1/2	5/8	3	-	.030	**DD1633416**	Price
1/2	1/2	1	3	-	.030	**DD1633419**	Price
1/2	1/2	1-1/4	3	-	.030	**DD1633423**	Price
1/2	1/2	5/8	4	2-1/8	.030	**DD1633428**	Price
3/4	3/4	1	4	-	.030	**DD1633432**	Price
3/4	3/4	1	5	3	.030	**DD1633436**	Price
1	1	1-1/2	4	-	-	**DD1633439**	Price

RAPIDKUT® 2 Flute Solid Carbide Miniature End Mills

Square End



- 30° Helix
- Tolerance +/- .0005”
- Good for materials less than HRc 48

AlTiN coating is ideal for high temperature cutting operations in many materials such as titanium and nickel alloys, Co-Cr-Mo, stainless steel, alloy steels and cast iron

PCD (Amorphous DLC) Diamond coating for increased lubricity in non-ferrous materials

				Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
.005	1/8	.008	1-1/2	HC4514470	Price	-	-	-	-
.005	1/8	.015	1-1/2	HC4515010	Price	HC4710005	Price	-	-
.006	1/8	.009	1-1/2	HC4514480	Price	-	-	-	-
.006	1/8	.018	1-1/2	HC4515020	Price	-	-	-	-
.007	1/8	.011	1-1/2	HC4514490	Price	-	-	-	-
.007	1/8	.021	1-1/2	HC4515030	Price	-	-	-	-
.008	1/8	.012	1-1/2	HC4514500	Price	-	-	-	-
.008	1/8	.024	1-1/2	HC4515040	Price	-	-	-	-
.009	1/8	.014	1-1/2	HC4514510	Price	-	-	-	-
.009	1/8	.027	1-1/2	HC4515050	Price	-	-	-	-
.010	1/8	.015	1-1/2	HC4514520	Price	HC4710000	Price	-	-
.010	1/8	.030	1-1/2	HC4515060	Price	HC4710020	Price	HC4613120	Price
.011	1/8	.017	1-1/2	HC4514530	Price	-	-	-	-
.011	1/8	.033	1-1/2	HC4515070	Price	-	-	-	-
.012	1/8	.018	1-1/2	HC4514540	Price	-	-	-	-
.012	1/8	.036	1-1/2	HC4515080	Price	HC4710040	Price	-	-
.013	1/8	.020	1-1/2	HC4514550	Price	-	-	-	-
.013	1/8	.039	1-1/2	HC4515090	Price	-	-	-	-
.014	1/8	.021	1-1/2	HC4514560	Price	-	-	-	-
.014	1/8	.042	1-1/2	HC4515100	Price	-	-	-	-
.015	1/8	.023	1-1/2	HC4514570	Price	HC4710050	Price	-	-
.015	1/8	.045	1-1/2	HC4515110	Price	HC4710070	Price	HC4613130	Price
.016	1/8	.024	1-1/2	HC4514580	Price	-	-	-	-
.016	1/8	.048	1-1/2	HC4515120	Price	-	-	-	-
.017	1/8	.026	1-1/2	HC4514590	Price	-	-	-	-
.017	1/8	.051	1-1/2	HC4515130	Price	-	-	-	-
.018	1/8	.027	1-1/2	HC4514600	Price	-	-	-	-
.018	1/8	.054	1-1/2	HC4515140	Price	HC4710090	Price	-	-
.019	1/8	.029	1-1/2	HC4514610	Price	-	-	-	-
.019	1/8	.057	1-1/2	HC4515150	Price	-	-	-	-
.020	1/8	.030	1-1/2	HC4514620	Price	HC4710100	Price	-	-
.020	1/8	.060	1-1/2	HC4515160	Price	HC4710120	Price	HC4613150	Price
.021	1/8	.032	1-1/2	HC4514630	Price	-	-	-	-
.021	1/8	.063	1-1/2	HC4515170	Price	-	-	-	-
.022	1/8	.033	1-1/2	HC4514640	Price	-	-	-	-
.022	1/8	.066	1-1/2	HC4515180	Price	-	-	-	-
.023	1/8	.035	1-1/2	HC4514650	Price	-	-	-	-
.023	1/8	.069	1-1/2	HC4515190	Price	-	-	-	-
.024	1/8	.036	1-1/2	HC4514660	Price	-	-	-	-
.024	1/8	.072	1-1/2	HC4515200	Price	-	-	-	-
.025	1/8	.038	1-1/2	HC4514670	Price	HC4710140	Price	-	-
.025	1/8	.075	1-1/2	HC4515210	Price	HC4710160	Price	HC4613170	Price
.026	1/8	.039	1-1/2	HC4514680	Price	-	-	-	-
.026	1/8	.078	1-1/2	HC4515220	Price	-	-	-	-
.027	1/8	.041	1-1/2	HC4514690	Price	-	-	-	-
.027	1/8	.081	1-1/2	HC4515230	Price	-	-	-	-
.028	1/8	.042	1-1/2	HC4514700	Price	-	-	-	-
.028	1/8	.084	1-1/2	HC4515240	Price	-	-	-	-
.029	1/8	.044	1-1/2	HC4514710	Price	-	-	-	-
.029	1/8	.087	1-1/2	HC4515250	Price	-	-	-	-
.030	1/8	.045	1-1/2	HC4514720	Price	HC4710180	Price	-	-
.030	1/8	.090	1-1/2	HC4515260	Price	HC4710200	Price	HC4613190	Price
.031	1/8	.047	1-1/2	HC4514730	Price	HC4710220	Price	-	-
.031	1/8	.093	1-1/2	HC4515270	Price	HC4710240	Price	HC4613210	Price
.032	1/8	.048	1-1/2	HC4514740	Price	-	-	-	-
.032	1/8	.096	1-1/2	HC4515280	Price	-	-	-	-
.033	1/8	.050	1-1/2	HC4514750	Price	-	-	-	-
.033	1/8	.099	1-1/2	HC4515290	Price	-	-	-	-
.034	1/8	.051	1-1/2	HC4514760	Price	-	-	-	-
.034	1/8	.102	1-1/2	HC4515300	Price	-	-	-	-
.035	1/8	.053	1-1/2	HC4514770	Price	HC4710260	Price	-	-
.035	1/8	.105	1-1/2	HC4515310	Price	HC4710280	Price	HC4613230	Price
.036	1/8	.054	1-1/2	HC4514780	Price	-	-	-	-
.036	1/8	.108	1-1/2	HC4515320	Price	-	-	-	-
.037	1/8	.056	1-1/2	HC4514790	Price	-	-	-	-
.037	1/8	.111	1-1/2	HC4515330	Price	-	-	-	-
.038	1/8	.057	1-1/2	HC4514800	Price	-	-	-	-
.038	1/8	.114	1-1/2	HC4515340	Price	-	-	-	-
.039	1/8	.059	1-1/2	HC4514810	Price	-	-	-	-
.039	1/8	.117	1-1/2	HC4515350	Price	HC4710300	Price	-	-
.040	1/8	.060	1-1/2	HC4514820	Price	HC4710310	Price	-	-
.040	1/8	.120	1-1/2	HC4515360	Price	HC4710330	Price	HC4613250	Price
.041	1/8	.123	1-1/2	HC4515370	Price	-	-	-	-
.042	1/8	.126	1-1/2	HC4515380	Price	-	-	-	-
.043	1/8	.129	1-1/2	HC4515390	Price	-	-	-	-
.044	1/8	.132	1-1/2	HC4515400	Price	-	-	-	-
.045	1/8	.068	1-1/2	HC4514830	Price	HC4710350	Price	-	-
.045	1/8	.135	1-1/2	HC4515410	Price	HC4710360	Price	HC4613270	Price
.046	1/8	.138	1-1/2	HC4515420	Price	-	-	-	-
.047	1/8	.071	1-1/2	HC4514840	Price	HC4710380	Price	-	-
.047	1/8	.141	1-1/2	HC4515430	Price	HC4710400	Price	HC4613290	Price
.048	1/8	.144	1-1/2	HC4515440	Price	-	-	-	-
.049	1/8	.147	1-1/2	HC4515450	Price	-	-	-	-
.050	1/8	.074	1-1/2	HC4514850	Price	-	-	-	-
.050	1/8	.075	1-1/2	-	-	HC4710420	Price	-	-
.050	1/8	.150	1-1/2	HC4515460	Price	HC4710430	Price	HC4613310	Price
.051	1/8	.153	1-1/2	HC4515470	Price	-	-	-	-
.052	1/8	.156	1-1/2	HC4515480	Price	-	-	-	-
.053	1/8	.159	1-1/2	HC4515490	Price	-	-	-	-
.054	1/8	.162	1-1/2	HC4515500	Price	-	-	-	-
.055	1/8	.083	1-1/2	HC4514860	Price	HC4710450	Price	-	-
.055	1/8	.165	1-1/2	HC4515510	Price	HC4710460	Price	HC4613330	Price
.056	1/8	.168	1-1/2	HC4515520	Price	-	-	-	-
.057	1/8	.171	1-1/2	HC4515530	Price	-	-	-	-
.058	1/8	.174	1-1/2	HC4515540	Price	-	-	-	-
.059	1/8	.177	1-1/2	HC4515550	Price	-	-	-	-
.060	1/8	.090	1-1/2	HC4514870	Price	HC4710480	Price	-	-
.060	1/8	.180	1-1/2	HC4515560	Price	HC4710490	Price	HC4613350	Price
.062	1/8	.093	1-1/2	HC4514880	Price	HC4710510	Price	-	-
.062	1/8	.186	1-1/2	HC4515570	Price	HC4710530	Price	HC4613370	Price
.065	1/8	.098	1-1/2	HC4514890	Price	HC4710540	Price	-	-
.065	1/8	.195	1-1/2	HC4515580	Price	HC4710550	Price	HC4613380	Price
.070	1/8	.105	1-1/2	HC4514900	Price	HC4710560	Price	-	-
.070	1/8	.210	1-1/2	HC4515590	Price	HC4710570	Price	HC4613400	Price
.075	1/8	.113	1-1/2	HC4514910	Price	HC4710580	Price	-	-
.075	1/8	.225	1-1/2	HC4515600	Price	HC4710590	Price	-	-
.078	1/8	.117	1-1/2	HC4514920	Price	HC4710610	Price	-	-
.078	1/8	.234	1-1/2	HC4515610	Price	HC4710630	Price	HC4613430	Price
.080	1/8	.120	1-1/2	HC4514930	Price	HC4710640	Price	-	-
.080	1/8	.240	1-1/2	HC4515620	Price	HC4710650	Price	HC4613440	Price
.085	1/8	.128	1-1/2	HC4514940	Price	HC4710660	Price	-	-
.085	1/8	.255	1-1/2	HC4515630	Price	HC4710670	Price	-	-
.090	1/8	.135	1-1/2	HC4514950	Price	HC4710680	Price	-	-
.090	1/8	.270	1-1/2	HC4515640	Price	HC4710690	Price	HC4613460	Price
.093	1/8	.140	1-1/2	HC4516930	Price	HC4710830	Price	-	-
.093	1/8	.279	1-1/2	HC4515650	Price	HC4710720	Price	HC4613490	Price
.095	1/8	.143	1-1/2	HC4514960	Price	HC4710730	Price	-	-
.095	1/8	.285	1-1/2	HC4515660	Price	HC4710740	Price	-	-
.100	1/8	.150	1-1/2	HC4514970	Price	HC4710750	Price	-	-
.100	1/8	.300	1-1/2	HC4515670	Price	HC4710760	Price	HC4613500	Price
.105	1/8	.158	1-1/2	HC4514980	Price	HC4710770	Price	-	-
.105	1/8	.315	1-1/2	HC4515680	Price	HC4710780	Price	-	-
.110	1/8	.165	1-1/2	HC4514990	Price	HC4710790	Price	-	-
.110	1/8	.330	1-1/2	HC4515690	Price	HC4710800	Price	-	-
.115	1/8	.173	1-1/2	HC4515000	Price	HC4710810	Price	-	-
.115	1/8	.345	1-1/2	HC4515700	Price	HC4710820	Price	-	-

RAPIDKUT® 2 Flute Solid Carbide Miniature End Mills

Ball Nose



- 30° Helix
- Tolerance +/- .0005”
- Good for materials less than HRc 48

AlTiN coating is ideal for high temperature cutting operations in many materials such as titanium and nickel alloys, Co-Cr-Mo, stainless steel, alloy steels and cast iron

PCD (Amorphous DLC) Diamond coating for increased lubricity in non-ferrous materials

				Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	Overall Length	Order No.	Price	Order No.	Price	Order No.	Price
.005	1/8	.008	1-1/2	**HC4515710**	Price	-	-	-	-
.005	1/8	.015	1-1/2	**HC4515720**	Price	-	-	-	-
.006	1/8	.009	1-1/2	**HC4515730**	Price	-	-	-	-
.006	1/8	.018	1-1/2	**HC4515740**	Price	-	-	-	-
.007	1/8	.011	1-1/2	**HC4515750**	Price	-	-	-	-
.007	1/8	.021	1-1/2	**HC4515760**	Price	-	-	-	-
.008	1/8	.012	1-1/2	**HC4515770**	Price	-	-	-	-
.008	1/8	.024	1-1/2	**HC4515780**	Price	-	-	-	-
.009	1/8	.014	1-1/2	**HC4515790**	Price	-	-	-	-
.009	1/8	.027	1-1/2	**HC4515800**	Price	-	-	-	-
.010	1/8	.015	1-1/2	**HC4515810**	Price	**HC4710010**	Price	-	-
.010	1/8	.030	1-1/2	**HC4515820**	Price	**HC4710030**	Price	**HC4613110**	Price
.011	1/8	.017	1-1/2	**HC4515830**	Price	-	-	-	-
.011	1/8	.033	1-1/2	**HC4515840**	Price	-	-	-	-
.012	1/8	.018	1-1/2	**HC4515850**	Price	-	-	-	-
.012	1/8	.036	1-1/2	**HC4515860**	Price	-	-	-	-
.013	1/8	.020	1-1/2	**HC4515880**	Price	-	-	-	-
.013	1/8	.039	1-1/2	**HC4515870**	Price	-	-	-	-
.014	1/8	.021	1-1/2	**HC4515890**	Price	-	-	-	-
.014	1/8	.042	1-1/2	**HC4515900**	Price	-	-	-	-
.015	1/8	.023	1-1/2	**HC4515910**	Price	**HC4710060**	Price	-	-
.015	1/8	.045	1-1/2	**HC4515920**	Price	**HC4710080**	Price	**HC4613140**	Price
.016	1/8	.024	1-1/2	**HC4515930**	Price	-	-	-	-
.016	1/8	.048	1-1/2	**HC4515940**	Price	-	-	-	-
.017	1/8	.026	1-1/2	**HC4515950**	Price	-	-	-	-
.017	1/8	.051	1-1/2	**HC4515960**	Price	-	-	-	-
.018	1/8	.027	1-1/2	**HC4515970**	Price	-	-	-	-
.018	1/8	.054	1-1/2	**HC4515980**	Price	-	-	-	-
.019	1/8	.029	1-1/2	**HC4515990**	Price	-	-	-	-
.019	1/8	.057	1-1/2	**HC4516000**	Price	-	-	-	-
.020	1/8	.030	1-1/2	**HC4516010**	Price	**HC4710110**	Price	-	-
.020	1/8	.060	1-1/2	**HC4516020**	Price	**HC4710130**	Price	**HC4613160**	Price
.021	1/8	.032	1-1/2	**HC4516030**	Price	-	-	-	-
.021	1/8	.063	1-1/2	**HC4516040**	Price	-	-	-	-
.022	1/8	.033	1-1/2	**HC4516050**	Price	-	-	-	-
.022	1/8	.066	1-1/2	**HC4516060**	Price	-	-	-	-
.023	1/8	.035	1-1/2	**HC4516070**	Price	-	-	-	-
.023	1/8	.069	1-1/2	**HC4516080**	Price	-	-	-	-
.024	1/8	.036	1-1/2	**HC4516090**	Price	-	-	-	-
.024	1/8	.072	1-1/2	**HC4516100**	Price	-	-	-	-
.025	1/8	.038	1-1/2	**HC4516110**	Price	**HC4710150**	Price	-	-
.025	1/8	.075	1-1/2	**HC4516120**	Price	**HC4710170**	Price	**HC4613180**	Price
.026	1/8	.039	1-1/2	**HC4516130**	Price	-	-	-	-
.026	1/8	.078	1-1/2	**HC4516140**	Price	-	-	-	-
.027	1/8	.041	1-1/2	**HC4516150**	Price	-	-	-	-
.027	1/8	.081	1-1/2	**HC4516160**	Price	-	-	-	-
.028	1/8	.042	1-1/2	**HC4516170**	Price	-	-	-	-
.028	1/8	.084	1-1/2	**HC4516180**	Price	-	-	-	-
.029	1/8	.044	1-1/2	**HC4516190**	Price	-	-	-	-
.029	1/8	.087	1-1/2	**HC4516200**	Price	-	-	-	-
.030	1/8	.045	1-1/2	**HC4516210**	Price	**HC4710190**	Price	-	-
.030	1/8	.090	1-1/2	**HC4516220**	Price	**HC4710210**	Price	**HC4613200**	Price
.031	1/8	.047	1-1/2	**HC4516230**	Price	**HC4710230**	Price	-	-
.031	1/8	.093	1-1/2	**HC4516240**	Price	**HC4710250**	Price	**HC4613220**	Price
.032	1/8	.048	1-1/2	**HC4516250**	Price	-	-	-	-

				Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	Overall Length	Order No.	Price	Order No.	Price	Order No.	Price
.032	1/8	.096	1-1/2	**HC4516260**	Price	-	-	-	-
.033	1/8	.050	1-1/2	**HC4516270**	Price	-	-	-	-
.033	1/8	.099	1-1/2	**HC4516280**	Price	-	-	-	-
.034	1/8	.051	1-1/2	**HC4516290**	Price	-	-	-	-
.034	1/8	.102	1-1/2	**HC4516300**	Price	-	-	-	-
.035	1/8	.053	1-1/2	**HC4516310**	Price	**HC4710270**	Price	-	-
.035	1/8	.105	1-1/2	**HC4516320**	Price	**HC4710290**	Price	**HC4613240**	Price
.036	1/8	.054	1-1/2	**HC4516330**	Price	-	-	-	-
.036	1/8	.108	1-1/2	**HC4516340**	Price	-	-	-	-
.037	1/8	.056	1-1/2	**HC4516350**	Price	-	-	-	-
.037	1/8	.111	1-1/2	**HC4516360**	Price	-	-	-	-
.038	1/8	.057	1-1/2	**HC4516370**	Price	-	-	-	-
.038	1/8	.114	1-1/2	**HC4516380**	Price	-	-	-	-
.039	1/8	.059	1-1/2	**HC4516390**	Price	-	-	-	-
.039	1/8	.117	1-1/2	**HC4516400**	Price	-	-	-	-
.040	1/8	.060	1-1/2	**HC4516410**	Price	**HC4710320**	Price	-	-
.040	1/8	.120	1-1/2	**HC4516420**	Price	**HC4710340**	Price	**HC4613260**	Price
.041	1/8	.123	1-1/2	**HC4516430**	Price	-	-	-	-
.042	1/8	.126	1-1/2	**HC4516440**	Price	-	-	-	-
.043	1/8	.129	1-1/2	**HC4516450**	Price	-	-	-	-
.044	1/8	.132	1-1/2	**HC4516460**	Price	-	-	-	-
.045	1/8	.068	1-1/2	**HC4516470**	Price	-	-	-	-
.045	1/8	.135	1-1/2	**HC4516480**	Price	**HC4710370**	Price	**HC4613280**	Price
.046	1/8	.138	1-1/2	**HC4516490**	Price	-	-	-	-
.047	1/8	.071	1-1/2	**HC4516500**	Price	**HC4710390**	Price	-	-
.047	1/8	.141	1-1/2	**HC4516510**	Price	**HC4710410**	Price	**HC4613300**	Price
.048	1/8	.144	1-1/2	**HC4516520**	Price	-	-	-	-
.049	1/8	.147	1-1/2	**HC4516530**	Price	-	-	-	-
.050	1/8	.075	1-1/2	**HC4516540**	Price	-	-	-	-
.050	1/8	.150	1-1/2	**HC4516550**	Price	**HC4710440**	Price	**HC4613320**	Price
.051	1/8	.153	1-1/2	**HC4516560**	Price	-	-	-	-
.052	1/8	.156	1-1/2	**HC4516570**	Price	-	-	-	-
.053	1/8	.159	1-1/2	**HC4516580**	Price	-	-	-	-
.054	1/8	.162	1-1/2	**HC4516590**	Price	-	-	-	-
.055	1/8	.083	1-1/2	**HC4516600**	Price	-	-	-	-
.055	1/8	.165	1-1/2	**HC4516610**	Price	**HC4710470**	Price	**HC4613340**	Price
.056	1/8	.168	1-1/2	**HC4516620**	Price	-	-	-	-
.057	1/8	.171	1-1/2	**HC4516630**	Price	-	-	-	-
.058	1/8	.174	1-1/2	**HC4516640**	Price	-	-	-	-
.059	1/8	.177	1-1/2	**HC4516650**	Price	-	-	-	-
.060	1/8	.090	1-1/2	**HC4516660**	Price	-	-	-	-
.060	1/8	.180	1-1/2	**HC4516670**	Price	**HC4710500**	Price	**HC4613360**	Price
.062	1/8	.093	1-1/2	**HC4516680**	Price	**HC4710520**	Price	-	-
.065	1/8	.098	1-1/2	**HC4516690**	Price	-	-	-	-
.065	1/8	.195	1-1/2	**HC4516700**	Price	-	-	**HC4613390**	Price
.070	1/8	.105	1-1/2	**HC4516710**	Price	-	-	-	-
.070	1/8	.210	1-1/2	**HC4516720**	Price	-	-	**HC4613410**	Price
.075	1/8	.113	1-1/2	**HC4516730**	Price	-	-	-	-
.075	1/8	.225	1-1/2	**HC4516740**	Price	-	-	-	-
.078	1/8	.117	1-1/2	**HC4516750**	Price	**HC4710600**	Price	-	-
.078	1/8	.234	1-1/2	**HC4516760**	Price	**HC4710620**	Price	**HC4613420**	Price
.080	1/8	.120	1-1/2	**HC4516770**	Price	-	-	-	-
.080	1/8	.240	1-1/2	**HC4516780**	Price	-	-	**HC4613450**	Price
.085	1/8	.128	1-1/2	**HC4516790**	Price	-	-	-	-
.085	1/8	.255	1-1/2	**HC4516800**	Price	-	-	-	-
.090	1/8	.135	1-1/2	**HC4516810**	Price	-	-	-	-
.090	1/8	.270	1-1/2	**HC4516820**	Price	-	-	**HC4613470**	Price
.093	1/8	.140	1-1/2	**HC4516830**	Price	**HC4710700**	Price	-	-
.093	1/8	.279	1-1/2	**HC4516840**	Price	**HC4710710**	Price	**HC4613480**	Price
.095	1/8	.143	1-1/2	**HC4516850**	Price	-	-	-	-
.095	1/8	.285	1-1/2	**HC4516860**	Price	-	-	-	-
.100	1/8	.150	1-1/2	**HC4516870**	Price	-	-	-	-
.100	1/8	.300	1-1/2	**HC4516880**	Price	-	-	**HC4613510**	Price
.105	1/8	.315	1-1/2	**HC4516890**	Price	-	-	-	-
.110	1/8	.330	1-1/2	**HC4516900**	Price	-	-	-	-
.115	1/8	.345	1-1/2	**HC4516910**	Price	-	-	-	-
.120	1/8	.360	1-1/2	**HC4516920**	Price	-	-	-	-

RAPIDKUT® 2 Flute Spherical Ball Nose End Mills

Solid Carbide

- nACo coated for hard materials
- Made from premium submicron grain carbide



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Style	Order No.	Price
1/32	1/8	.027	1-1/2	.0890	Ball 270°	**HC5521535**	Price
1/32	1/8	.027	1-1/2	.1200	Ball 270°	**HC5521540**	Price
1/32	1/8	.027	1-1/2	.1520	Ball 270°	**HC5521545**	Price
1/32	1/8	.027	1-1/2	.2140	Ball 270°	**HC5521550**	Price
3/64	1/8	.040	1-1/2	.1330	Ball 270°	**HC5521555**	Price
1/16	1/8	.040	1-1/2	.1460	Ball 270°	**HC5521565**	Price
1/16	1/8	.040	1-1/2	.2590	Ball 220°	**HC5521560**	Price
1/16	1/8	.053	1-1/2	.1780	Ball 270°	**HC5521575**	Price
1/16	1/8	.053	1-1/2	.2400	Ball 270°	**HC5521580**	Price
1/16	1/8	.053	1-1/2	.3030	Ball 270°	**HC5521570**	Price
1/16	1/8	.053	1-1/2	.3650	Ball 270°	**HC5521585**	Price
1/16	1/8	.057	1-1/2	.1350	Ball 300°	**HC5521590**	Price
5/64	1/8	.067	1-1/2	.1920	Ball 270°	**HC5521595**	Price
5/64	1/8	.072	1-1/2	.1650	Ball 300°	**HC5521600**	Price
3/32	1/8	.060	1-1/2	.2600	Ball 220°	**HC5521605**	Price
3/32	1/8	.079	1-1/2	.2040	Ball 270°	**HC5521610**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Style	Order No.	Price
3/32	1/8	.079	1-1/2	.3290	Ball 270°	**HC5521615**	Price
3/32	1/8	.079	1-1/2	.4540	Ball 270°	**HC5521620**	Price
3/32	1/8	.079	1-1/2	.3910	Ball 270°	**HC5521625**	Price
3/32	1/8	.079	1-1/2	.5790	Ball 270°	**HC5521630**	Price
3/32	1/8	.079	1-1/2	.7040	Ball 270°	**HC5521635**	Price
3/32	1/8	.086	1-1/2	.2110	Ball 300°	**HC5521640**	Price
1/8	1/8	3/32	1-1/2	.2738	Ball 220°	**HC5521645**	Price
1/8	1/8	3/32	3	.2738	Ball 220°	**HC5521650**	Price
3/16	3/16	9/64	2	.3356	Ball 220°	**HC5521655**	Price
3/16	3/16	9/64	3	.3356	Ball 220°	**HC5521660**	Price
1/4	1/4	3/16	2-1/2	.3975	Ball 220°	**HC5521665**	Price
1/4	1/4	3/16	4	.3975	Ball 220°	**HC5521670**	Price
3/8	3/8	9/32	2-1/2	.5223	Ball 220°	**HC5521675**	Price
3/8	3/8	9/32	4	.5223	Ball 220°	**HC5521680**	Price
1/2	1/2	3/8	3	.6460	Ball 220°	**HC5521685**	Price
1/2	1/2	3/8	6	.6460	Ball 220°	**HC5521690**	Price

RAPIDKUT® 3 Flute Solid Carbide Miniature End Mills

Square End

- Center cutting
- 30° Helix
- Good for materials less than HRc 48
- Tolerance +/- .0005”



AlTiN coating is ideal for high temperature cutting operations in many materials such as titanium and nickel alloys, Co-Cr-Mo, stainless steel, alloy steels and cast iron

PCD (Amorphous DLC) Diamond coating for increased lubricity in non-ferrous materials

							Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	Flute Length x Diameter Ratio	Length Below Shank (in.)	Reach	OAL	Order No.	Price	Order No.	Price	Order No.	Price
.010	1/8	.015	1.5x	.030	3x	2-1/2	**HC4830000**	Price	**HC5037080**	Price	**-**	-
.010	1/8	.015	1.5x	.050	5x	2-1/2	**HC4830010**	Price	**HC5037090**	Price	**HC4934500**	Price
.010	1/8	.015	1.5x	.080	8x	2-1/2	**HC4830020**	Price	**HC5037100**	Price	**HC4934510**	Price
.010	1/8	.015	1.5x	.125	12x	2-1/2	**HC4830030**	Price	**HC5037110**	Price	**HC4934520**	Price
.010	1/8	.015	1.5x	.150	15x	2-1/2	**HC4830040**	Price	**HC5037120**	Price	**-**	-
.010	1/8	.050	5x	-	-	2-1/2	**HC4830050**	Price	**HC5037130**	Price	**HC4934530**	Price
.010	1/8	.050	5x	.100	10x	2-1/2	**HC4830060**	Price	**HC5037140**	Price	**HC4934540**	Price
.015	1/8	.022	1.5x	.045	3x	2-1/2	**HC4830070**	Price	**HC5037150**	Price	**-**	-
.015	1/8	.022	1.5x	.078	5x	2-1/2	**HC4830080**	Price	**HC5037160**	Price	**HC4934550**	Price
.015	1/8	.022	1.5x	.125	8x	2-1/2	**HC4830090**	Price	**HC5037170**	Price	**HC4934560**	Price
.015	1/8	.022	1.5x	.156	10x	2-1/2	**HC4830100**	Price	**HC5037180**	Price	**-**	-
.015	1/8	.022	1.5x	.225	15x	2-1/2	**HC4830110**	Price	**HC5037190**	Price	**HC4934570**	Price
.015	1/8	.022	1.5x	.270	18x	2-1/2	**HC4830120**	Price	**HC5037200**	Price	**-**	-
.015	1/8	.022	1.5x	.300	20x	2-1/2	**HC4830130**	Price	**HC5037210**	Price	**-**	-
.015	1/8	.022	1.5x	.375	25x	2-1/2	**HC4830140**	Price	**HC5037220**	Price	**-**	-
.015	1/8	.078	5x	-	-	2-1/2	**HC4830150**	Price	**HC5037230**	Price	**HC4934580**	Price
.015	1/8	.078	5x	.150	10x	2-1/2	**HC4830160**	Price	**HC5037240**	Price	**HC4934590**	Price
.015	1/8	.125	8x	-	-	2-1/2	**HC4830170**	Price	**HC5037250**	Price	**HC4934600**	Price
.015	1/8	.187	12x	-	-	2-1/2	**HC4830180**	Price	**HC5037260**	Price	**-**	-
.020	1/8	.030	1.5x	.100	5x	2-1/2	**HC4830190**	Price	**HC5037270**	Price	**HC4934610**	Price
.020	1/8	.030	1.5x	.160	8x	2-1/2	**HC4830200**	Price	**HC5037280**	Price	**HC4934620**	Price
.020	1/8	.030	1.5x	.200	10x	2-1/2	**HC4830210**	Price	**HC5037290**	Price	**-**	-
.020	1/8	.030	1.5x	.250	12x	2-1/2	**HC4830220**	Price	**HC5037300**	Price	**HC4934630**	Price
.020	1/8	.030	1.5x	.300	15x	2-1/2	**HC4830230**	Price	**HC5037310**	Price	**HC4934640**	Price
.020	1/8	.030	1.5x	.500	25x	2-1/2	**HC4830240**	Price	**HC5037320**	Price	**-**	-
.020	1/8	.100	5x	-	-	2-1/2	**HC4830250**	Price	**HC5037330**	Price	**HC4934650**	Price
.020	1/8	.100	5x	.200	10x	2-1/2	**HC4830260**	Price	**HC5037340**	Price	**HC4934660**	Price
.020	1/8	.160	8x	-	-	2-1/2	**HC4830270**	Price	**HC5037350**	Price	**-**	-
.020	1/8	.250	12x	-	-	2-1/2	**HC4830280**	Price	**HC5037360**	Price	**-**	-
.025	1/8	.037	1.5x	.075	3x	2-1/2	**HC4830290**	Price	**HC5037370**	Price	**-**	-
.025	1/8	.037	1.5x	.125	5x	2-1/2	**HC4830300**	Price	**HC5037380**	Price	**HC4934670**	Price
.025	1/8	.037	1.5x	.203	8x	2-1/2	**HC4830310**	Price	**HC5037390**	Price	**HC4934680**	Price
.025	1/8	.037	1.5x	.250	10x	2-1/2	**HC4830320**	Price	**HC5037400**	Price	**-**	-
.025	1/8	.037	1.5x	.375	15x	2-1/2	**HC4830330**	Price	**HC5037410**	Price	**HC4934690**	Price
.025	1/8	.037	1.5x	.500	20x	2-1/2	**HC4830340**	Price	**HC5037420**	Price	**-**	-
.025	1/8	.125	5x	-	-	2-1/2	**HC4830350**	Price	**HC5037430**	Price	**HC4934700**	Price
.025	1/8	.125	5x	.250	10x	2-1/2	**HC4830360**	Price	**HC5037440**	Price	**HC4934710**	Price
.025	1/8	.203	8x	-	-	2-1/2	**HC4830370**	Price	**HC5037450**	Price	**-**	-
.030	1/8	.045	1.5x	.090	3x	2-1/2	**HC4830380**	Price	**HC5037460**	Price	**-**	-

(continued on next page)

RAPIDKUT® 3 Flute Solid Carbide Miniature End Mills *(continued from previous page)*

Square End



							Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	Flute Length x Diameter Ratio	Length Below Shank (in.)	Reach	OAL	Order No.	Price	Order No.	Price	Order No.	Price
.030	1/8	.045	1.5x	.156	5x	2-1/2	**HC4830390**	Price	**HC5037470**	Price	**HC4934720**	Price
.030	1/8	.045	1.5x	.250	8x	2-1/2	**HC4830400**	Price	**HC5037480**	Price	**HC4934730**	Price
.030	1/8	.045	1.5x	.312	10x	2-1/2	**HC4830410**	Price	**HC5037490**	Price	-	-
.030	1/8	.045	1.5x	.375	12x	2-1/2	**HC4830420**	Price	**HC5037500**	Price	**HC4934740**	Price
.030	1/8	.150	5x	-	-	2-1/2	**HC4830430**	Price	**HC5037510**	Price	**HC4934750**	Price
.030	1/8	.150	5x	.300	10x	2-1/2	**HC4830440**	Price	**HC5037520**	Price	**HC4934760**	Price
.030	1/8	.250	8x	-	-	2-1/2	**HC4830450**	Price	**HC5037530**	Price	-	-
.031	1/8	.046	1.5x	.093	3x	2-1/2	**HC4830460**	Price	**HC5037540**	Price	-	-
.031	1/8	.046	1.5x	.156	5x	2-1/2	**HC4830470**	Price	**HC5037550**	Price	**HC4934770**	Price
.031	1/8	.046	1.5x	.250	8x	2-1/2	**HC4830480**	Price	**HC5037560**	Price	**HC4934780**	Price
.031	1/8	.046	1.5x	.312	10x	2-1/2	**HC4830490**	Price	**HC5037570**	Price	-	-
.031	1/8	.046	1.5x	.375	12x	2-1/2	**HC4830500**	Price	**HC5037580**	Price	**HC4934790**	Price
.031	1/8	.046	1.5x	.470	15x	2-1/2	**HC4830510**	Price	**HC5037590**	Price	**HC4934800**	Price
.031	1/8	.046	1.5x	.565	18x	2-1/2	**HC4830520**	Price	**HC5037600**	Price	-	-
.031	1/8	.046	1.5x	.625	20x	2-1/2	**HC4830530**	Price	**HC5037610**	Price	-	-
.031	1/8	.046	1.5x	.775	25x	2-1/2	**HC4830540**	Price	**HC5037620**	Price	-	-
.031	1/8	.046	1.5x	.937	30x	2-1/2	**HC4830550**	Price	-	-	-	-
.031	1/8	.156	5x	-	-	2-1/2	**HC4830560**	Price	**HC5037630**	Price	**HC4934810**	Price
.031	1/8	.156	5x	.310	10x	2-1/2	**HC4830570**	Price	**HC5037640**	Price	**HC4934820**	Price
.031	1/8	.250	8x	-	-	2-1/2	**HC4830580**	Price	**HC5037650**	Price	**HC4934830**	Price
.031	1/8	.312	10x	-	-	2-1/2	**HC4830590**	Price	**HC5037660**	Price	-	-
.031	1/8	.375	12x	-	-	2-1/2	**HC4830600**	Price	**HC5037670**	Price	**HC4934840**	Price
.031	1/8	.470	15x	-	-	2-1/2	**HC4830610**	Price	**HC5037680**	Price	-	-
.035	1/8	.052	1.5x	.105	3x	2-1/2	**HC4830620**	Price	**HC5037690**	Price	-	-
.035	1/8	.052	1.5x	.187	5x	2-1/2	**HC4830630**	Price	**HC5037700**	Price	**HC4934850**	Price
.035	1/8	.052	1.5x	.281	8x	2-1/2	**HC4830640**	Price	**HC5037710**	Price	**HC4934860**	Price
.035	1/8	.052	1.5x	.425	12x	2-1/2	**HC4830650**	Price	**HC5037720**	Price	**HC4934870**	Price
.035	1/8	.052	1.5x	.525	15x	2-1/2	**HC4830660**	Price	**HC5037730**	Price	-	-
.035	1/8	.175	5x	-	-	2-1/2	**HC4830670**	Price	**HC5037740**	Price	**HC4934880**	Price
.035	1/8	.175	5x	.350	10x	2-1/2	**HC4830680**	Price	**HC5037750**	Price	**HC4934890**	Price
.035	1/8	.280	8x	-	-	2-1/2	**HC4830690**	Price	**HC5037760**	Price	-	-
.039	1/8	.059	1.5x	.117	3x	2-1/2	**HC4830700**	Price	**HC5037770**	Price	-	-
.039	1/8	.059	1.5x	.203	5x	2-1/2	**HC4830710**	Price	**HC5037780**	Price	-	-
.039	1/8	.059	1.5x	.325	8x	2-1/2	**HC4830720**	Price	**HC5037790**	Price	-	-
.039	1/8	.059	1.5x	.480	12x	2-1/2	**HC4830730**	Price	**HC5037800**	Price	-	-
.039	1/8	.203	5x	-	-	2-1/2	**HC4830740**	Price	**HC5037810**	Price	-	-
.040	1/8	.060	1.5x	.120	3x	2-1/2	**HC4830750**	Price	**HC5037820**	Price	-	-
.040	1/8	.060	1.5x	.203	5x	2-1/2	**HC4830760**	Price	**HC5037830**	Price	**HC4934900**	Price
.040	1/8	.060	1.5x	.325	8x	2-1/2	**HC4830770**	Price	**HC5037840**	Price	**HC4934910**	Price
.040	1/8	.060	1.5x	.400	10x	2-1/2	**HC4830780**	Price	**HC5037850**	Price	-	-
.040	1/8	.060	1.5x	.480	12x	2-1/2	**HC4830790**	Price	**HC5037860**	Price	**HC4934920**	Price
.040	1/8	.060	1.5x	.600	15x	2-1/2	**HC4830800**	Price	**HC5037870**	Price	-	-
.040	1/8	.060	1.5x	.800	20x	2-1/2	**HC4830810**	Price	**HC5037880**	Price	-	-
.040	1/8	.200	5x	-	-	2-1/2	**HC4830820**	Price	**HC5037890**	Price	**HC4934930**	Price
.040	1/8	.200	5x	.400	10x	2-1/2	**HC4830830**	Price	**HC5037900**	Price	**HC4934940**	Price
.040	1/8	.325	8x	-	-	2-1/2	**HC4830840**	Price	**HC5037910**	Price	-	-
.040	1/8	.480	12x	-	-	2-1/2	**HC4830850**	Price	**HC5037920**	Price	-	-
.045	1/8	.067	1.5x	.450	10x	2-1/2	**HC4830860**	Price	**HC5037930**	Price	-	-
.045	1/8	.067	1.5x	.550	12x	2-1/2	**HC4830870**	Price	**HC5037940**	Price	**HC4934950**	Price
.045	1/8	.067	1.5x	.680	15x	2-1/2	**HC4830880**	Price	**HC5037950**	Price	-	-
.045	1/8	.067	1.5x	.900	20x	2-1/2	**HC4830890**	Price	**HC5037960**	Price	-	-
.045	1/8	.225	5x	-	-	2-1/2	**HC4830900**	Price	**HC5037970**	Price	**HC4934960**	Price
.045	1/8	.375	8x	-	-	2-1/2	**HC4830910**	Price	**HC5037980**	Price	-	-
.045	1/8	.550	12x	-	-	2-1/2	**HC4830920**	Price	**HC5037990**	Price	-	-
.047	1/8	.070	1.5x	.141	3x	2-1/2	**HC4830930**	Price	**HC5038000**	Price	-	-
.047	1/8	.070	1.5x	.250	5x	2-1/2	**HC4830940**	Price	**HC5038010**	Price	**HC4934970**	Price
.047	1/8	.070	1.5x	.375	8x	2-1/2	**HC4830950**	Price	**HC5038020**	Price	**HC4934980**	Price
.047	1/8	.070	1.5x	.480	10x	2-1/2	**HC4830960**	Price	**HC5038030**	Price	-	-
.047	1/8	.070	1.5x	.570	12x	2-1/2	**HC4830970**	Price	**HC5038040**	Price	**HC4934990**	Price
.047	1/8	.070	1.5x	.710	15x	2-1/2	**HC4830980**	Price	**HC5038050**	Price	-	-
.047	1/8	.070	1.5x	.850	18x	2-1/2	**HC4830990**	Price	**HC5038060**	Price	-	-
.047	1/8	.070	1.5x	.950	20x	2-1/2	**HC4831000**	Price	**HC5038070**	Price	-	-
.047	1/8	.250	5x	-	-	2-1/2	**HC4831010**	Price	**HC5038080**	Price	**HC4935000**	Price
.047	1/8	.250	5x	.500	10x	2-1/2	**HC4831020**	Price	**HC5038090**	Price	**HC4935010**	Price
.047	1/8	.375	8x	-	-	2-1/2	**HC4831030**	Price	**HC5038100**	Price	**HC4935020**	Price
.047	1/8	.480	10x	-	-	2-1/2	**HC4831040**	Price	**HC5038110**	Price	-	-
.047	1/8	.570	12x	-	-	2-1/2	**HC4831050**	Price	**HC5038120**	Price	**HC4935030**	Price
.047	1/8	.710	15x	-	-	2-1/2	**HC4831060**	Price	**HC5038130**	Price	-	-
.050	1/8	.075	1.5x	.150	3x	2-1/2	**HC4831070**	Price	**HC5038140**	Price	-	-
.050	1/8	.075	1.5x	.250	5x	2-1/2	**HC4831080**	Price	**HC5038150**	Price	**HC4935040**	Price
.050	1/8	.075	1.5x	.400	8x	2-1/2	**HC4831090**	Price	**HC5038160**	Price	**HC4935050**	Price
.050	1/8	.075	1.5x	.500	10x	2-1/2	**HC4831100**	Price	**HC5038170**	Price	-	-
.050	1/8	.075	1.5x	.600	12x	2-1/2	**HC4831110**	Price	**HC5038180**	Price	**HC4935060**	Price
.050	1/8	.075	1.5x	.750	15x	2-1/2	**HC4831120**	Price	**HC5038190**	Price	-	-
.050	1/8	.300	6x	-	-	2-1/2	**HC4831130**	Price	**HC5038200**	Price	**HC4935070**	Price
.050	1/8	.400	8x	-	-	2-1/2	**HC4831140**	Price	**HC5038210**	Price	-	-
.050	1/8	.600	12x	-	-	2-1/2	**HC4831150**	Price	**HC5038220**	Price	-	-

(Continued on next page)

RAPIDKUT® 3 Flute Solid Carbide Miniature End Mills *(continued from previous page)*

Square End



							Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	Flute Length x Diameter Ratio	Length Below Shank (in.)	Reach	OAL	Order No.	Price	Order No.	Price	Order No.	Price
.055	1/8	.082	1.5x	.165	3x	2-1/2	**HC4831160**	Price	**HC5038230**	Price	**-**	-
.055	1/8	.082	1.5x	.275	5x	2-1/2	**HC4831170**	Price	**HC5038240**	Price	**HC4935080**	Price
.055	1/8	.082	1.5x	.450	8x	2-1/2	**HC4831180**	Price	**HC5038250**	Price	**HC4935090**	Price
.055	1/8	.082	1.5x	.560	10x	2-1/2	**HC4831190**	Price	**HC5038260**	Price	**-**	-
.055	1/8	.082	1.5x	.660	12x	2-1/2	**HC4831200**	Price	**HC5038270**	Price	**HC4935100**	Price
.055	1/8	.082	1.5x	.825	15x	2-1/2	**HC4831210**	Price	**HC5038280**	Price	**-**	-
.055	1/8	.275	5x	-	-	2-1/2	**HC4831220**	Price	**HC5038290**	Price	**-**	-
.055	1/8	.385	7x	-	-	2-1/2	**HC4831230**	Price	**HC5038300**	Price	**HC4935110**	Price
.055	1/8	.385	7x	.770	14x	2-1/2	**HC4831240**	Price	**HC5038310**	Price	**HC4935120**	Price
.055	1/8	.660	12x	-	-	2-1/2	**HC4831250**	Price	**HC5038320**	Price	**-**	-
.060	1/8	.090	1.5x	.180	3x	2-1/2	**HC4831260**	Price	**HC5038330**	Price	**-**	-
.060	1/8	.090	1.5x	.312	5x	2-1/2	**HC4831270**	Price	**HC5038340**	Price	**HC4935130**	Price
.060	1/8	.090	1.5x	.500	8x	2-1/2	**HC4831280**	Price	**HC5038350**	Price	**HC4935140**	Price
.060	1/8	.090	1.5x	.625	10x	2-1/2	**HC4831290**	Price	**HC5038360**	Price	**-**	-
.060	1/8	.090	1.5x	.720	12x	2-1/2	**HC4831300**	Price	**HC5038370**	Price	**HC4935150**	Price
.060	1/8	.090	1.5x	.900	15x	2-1/2	**HC4831310**	Price	**HC5038380**	Price	**-**	-
.060	1/8	.312	5x	-	-	2-1/2	**HC4831320**	Price	**HC5038390**	Price	**-**	-
.060	1/8	.500	8x	-	-	2-1/2	**HC4831330**	Price	**HC5038400**	Price	**HC4935160**	Price
.062	1/8	.093	1.5x	.186	3x	2-1/2	**HC4831340**	Price	**HC5038410**	Price	**-**	-
.062	1/8	.093	1.5x	.312	5x	2-1/2	**HC4831350**	Price	**HC5038420**	Price	**HC4935170**	Price
.062	1/8	.093	1.5x	.500	8x	2-1/2	**HC4831360**	Price	**HC5038430**	Price	**HC4935180**	Price
.062	1/8	.093	1.5x	.625	10x	2-1/2	**HC4831370**	Price	**HC5038440**	Price	**-**	-
.062	1/8	.093	1.5x	.750	12x	2-1/2	**HC4831380**	Price	**HC5038450**	Price	**HC4935190**	Price
.062	1/8	.093	1.5x	.950	15x	2-1/2	**HC4831390**	Price	**HC5038460**	Price	**HC4935200**	Price
.062	1/8	.093	1.5x	1.125	18x	2-1/2	**HC4831400**	Price	**HC5038470**	Price	**-**	-
.062	1/8	.093	1.5x	1.250	20x	2-1/2	**HC4831410**	Price	**HC5038480**	Price	**-**	-
.062	1/8	.093	1.5x	1.375	22x	3	**HC4831420**	Price	**HC5038490**	Price	**-**	-
.062	1/8	.093	1.5x	1.550	25x	3	**HC4831430**	Price	**HC5038500**	Price	**-**	-
.062	1/8	.312	5x	-	-	2-1/2	**HC4831440**	Price	**HC5038510**	Price	**HC4935210**	Price
.062	1/8	.500	8x	-	-	2-1/2	**HC4831450**	Price	**HC5038520**	Price	**HC4935220**	Price
.062	1/8	.500	8x	1.000	16x	2-1/2	**HC4831460**	Price	**HC5038530**	Price	**HC4935230**	Price
.062	1/8	.625	10x	-	-	2-1/2	**HC4831470**	Price	**HC5038540**	Price	**-**	-
.062	1/8	.750	12x	-	-	2-1/2	**HC4831480**	Price	**HC5038550**	Price	**HC4935240**	Price
.062	1/8	.950	15x	-	-	2-1/2	**HC4831490**	Price	**HC5038560**	Price	**HC4935250**	Price
.065	1/8	.097	1.5x	.325	5x	2-1/2	**HC4831500**	Price	**HC5038570**	Price	**-**	-
.065	1/8	.097	1.5x	.530	8x	2-1/2	**HC4831510**	Price	**HC5038580**	Price	**HC4935260**	Price
.065	1/8	.097	1.5x	.800	12x	2-1/2	**HC4831520**	Price	**HC5038590**	Price	**-**	-
.065	1/8	.325	5x	-	-	2-1/2	**HC4831530**	Price	**HC5038600**	Price	**-**	-
.065	1/8	.500	8x	-	-	2-1/2	**HC4831540**	Price	**HC5038610**	Price	**HC4935270**	Price
.070	1/8	.105	1.5x	.375	5x	2-1/2	**HC4831550**	Price	**HC5038620**	Price	**-**	-
.070	1/8	.105	1.5x	.570	8x	2-1/2	**HC4831560**	Price	**HC5038630**	Price	**HC4935280**	Price
.070	1/8	.105	1.5x	.850	12x	2-1/2	**HC4831570**	Price	**HC5038640**	Price	**-**	-
.070	1/8	.105	1.5x	1.062	15x	2-1/2	**HC4831580**	Price	**HC5038650**	Price	**-**	-
.070	1/8	.375	5x	-	-	2-1/2	**HC4831590**	Price	**HC5038660**	Price	**-**	-
.070	1/8	.500	7x	-	-	2-1/2	**HC4831600**	Price	**HC5038670**	Price	**HC4935290**	Price
.070	1/8	.500	7x	1.000	14x	2-1/2	**HC4831610**	Price	**HC5038680**	Price	**HC4935300**	Price
.075	1/8	.112	1.5x	.375	5x	2-1/2	**HC4831620**	Price	**HC5038690**	Price	**-**	-
.075	1/8	.112	1.5x	.625	8x	2-1/2	**HC4831630**	Price	**HC5038700**	Price	**HC4935310**	Price
.075	1/8	.112	1.5x	.900	12x	2-1/2	**HC4831640**	Price	**HC5038710**	Price	**-**	-
.075	1/8	.375	5x	-	-	2-1/2	**HC4831650**	Price	**HC5038720**	Price	**-**	-
.075	1/8	.500	7x	-	-	2-1/2	**HC4831660**	Price	**HC5038730**	Price	**HC4935320**	Price
.078	1/8	.117	1.5x	.234	3x	2-1/2	**HC4831670**	Price	**HC5038740**	Price	**-**	-
.078	1/8	.117	1.5x	.406	5x	2-1/2	**HC4831680**	Price	**HC5038750**	Price	**HC4935330**	Price
.078	1/8	.117	1.5x	.625	8x	2-1/2	**HC4831690**	Price	**HC5038760**	Price	**HC4935340**	Price
.078	1/8	.117	1.5x	.800	10x	2-1/2	**HC4831700**	Price	**HC5038770**	Price	**-**	-
.078	1/8	.117	1.5x	.940	12x	2-1/2	**HC4831710**	Price	**HC5038780**	Price	**HC4935350**	Price
.078	1/8	.117	1.5x	1.187	15x	2-1/2	**HC4831720**	Price	**HC5038790**	Price	**-**	-
.078	1/8	.117	1.5x	1.562	20x	3	**HC4831730**	Price	**HC5038800**	Price	**-**	-
.078	1/8	.406	5x	-	-	2-1/2	**HC4831740**	Price	**HC5038810**	Price	**HC4935360**	Price
.078	1/8	.500	6x	1.000	12x	2-1/2	**HC4831750**	Price	**HC5038820**	Price	**HC4935370**	Price
.078	1/8	.625	8x	-	-	2-1/2	**HC4831760**	Price	**HC5038830**	Price	**HC4935380**	Price
.078	1/8	.800	10x	-	-	2-1/2	**HC4831770**	Price	**HC5038840**	Price	**-**	-
.078	1/8	.940	12x	-	-	2-1/2	**HC4831780**	Price	**HC5038850**	Price	**HC4935390**	Price
.078	1/8	1.187	15x	-	-	2-1/2	**HC4831790**	Price	**HC5038860**	Price	**HC4935400**	Price
.080	1/8	.120	1.5x	.406	5x	2-1/2	**HC4831800**	Price	**HC5038870**	Price	**-**	-
.080	1/8	.120	1.5x	.650	8x	2-1/2	**HC4831810**	Price	**HC5038880**	Price	**HC4935410**	Price
.080	1/8	.120	1.5x	.960	12x	2-1/2	**HC4831820**	Price	**HC5038890**	Price	**-**	-
.080	1/8	.406	5x	-	-	2-1/2	**HC4831830**	Price	**HC5038900**	Price	**-**	-
.080	1/8	.750	9x	-	-	2-1/2	**HC4831840**	Price	**HC5038910**	Price	**HC4935420**	Price
.080	1/8	.750	9x	1.250	15x	2-1/2	**HC4831850**	Price	**HC5038920**	Price	**HC4935430**	Price
.080	1/8	.960	12x	-	-	2-1/2	**HC4831860**	Price	**HC5038930**	Price	**-**	-
.085	1/8	.127	1.5x	.425	5x	2-1/2	**HC4831870**	Price	**HC5038940**	Price	**-**	-
.085	1/8	.127	1.5x	.700	8x	2-1/2	**HC4831880**	Price	**HC5038950**	Price	**HC4935440**	Price
.085	1/8	.127	1.5x	1.020	12x	2-1/2	**HC4831890**	Price	**HC5038960**	Price	**-**	-
.085	1/8	.425	5x	-	-	2-1/2	**HC4831900**	Price	**HC5038970**	Price	**-**	-
.085	1/8	.750	9x	-	-	2-1/2	**HC4831910**	Price	**HC5038980**	Price	**HC4935450**	Price
.085	1/8	.750	9x	1.250	14x	2-1/2	**HC4831920**	Price	**HC5038990**	Price	**HC4935460**	Price

(Continued on next page)

RAPIDKUT® 3 Flute Solid Carbide Miniature End Mills *(continued from previous page)*

Square End



							Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	Flute Length x Diameter Ratio	Length Below Shank (in.)	Reach	OAL	Order No.	Price	Order No.	Price	Order No.	Price
.090	1/8	.135	1.5x	.450	5x	2-1/2	**HC4831930**	Price	**HC5039000**	Price	**-**	-
.090	1/8	.135	1.5x	.750	8x	2-1/2	**HC4831940**	Price	**HC5039010**	Price	**HC4935470**	Price
.090	1/8	.135	1.5x	1.080	12x	2-1/2	**HC4831950**	Price	**HC5039020**	Price	**-**	-
.090	1/8	.450	5x	-	-	2-1/2	**HC4831960**	Price	**HC5039030**	Price	**-**	-
.090	1/8	.750	8x	-	-	2-1/2	**HC4831970**	Price	**HC5039040**	Price	**HC4935480**	Price
.090	1/8	.750	8x	1.250	13x	2-1/2	**HC4831980**	Price	**HC5039050**	Price	**HC4935490**	Price
.090	1/8	1.080	12x	-	-	2-1/2	**HC4831990**	Price	**HC5039060**	Price	**-**	-
.093	1/8	.139	1.5x	.279	3x	2-1/2	**HC4832000**	Price	**HC5039070**	Price	**-**	-
.093	1/8	.139	1.5x	.500	5x	2-1/2	**HC4832010**	Price	**HC5039080**	Price	**HC4935500**	Price
.093	1/8	.139	1.5x	.750	8x	2-1/2	**HC4832020**	Price	**HC5039090**	Price	**HC4935510**	Price
.093	1/8	.139	1.5x	.950	10x	2-1/2	**HC4832030**	Price	**HC5039100**	Price	**-**	-
.093	1/8	.139	1.5x	1.125	12x	2-1/2	**HC4832040**	Price	**HC5039110**	Price	**HC4935520**	Price
.093	1/8	.139	1.5x	1.400	15x	3	**HC4832050**	Price	**HC5039120**	Price	**HC4935530**	Price
.093	1/8	.139	1.5x	1.675	18x	3	**HC4832060**	Price	**HC5039130**	Price	**-**	-
.093	1/8	.139	1.5x	1.875	20x	4	**HC4832070**	Price	**HC5039140**	Price	**-**	-
.093	1/8	.500	5x	-	-	2-1/2	**HC4832080**	Price	**HC5039150**	Price	**HC4935540**	Price
.093	1/8	.750	8x	-	-	2-1/2	**HC4832090**	Price	**HC5039160**	Price	**HC4935550**	Price
.093	1/8	.750	8x	1.250	13x	2-1/2	**HC4832100**	Price	**HC5039170**	Price	**HC4935560**	Price
.093	1/8	.950	10x	-	-	2-1/2	**HC4832110**	Price	**HC5039180**	Price	**-**	-
.093	1/8	1.125	12x	-	-	2-1/2	**HC4832120**	Price	**HC5039190**	Price	**HC4935570**	Price
.093	1/8	1.400	15x	-	-	3	**HC4832130**	Price	**HC5039200**	Price	**HC4935580**	Price
.095	1/8	.142	1.5x	.500	5x	2-1/2	**HC4832140**	Price	**HC5039210**	Price	**-**	-
.095	1/8	.142	1.5x	.750	8x	2-1/2	**HC4832150**	Price	**HC5039220**	Price	**HC4935590**	Price
.095	1/8	.142	1.5x	1.150	12x	2-1/2	**HC4832160**	Price	**HC5039230**	Price	**-**	-
.100	1/8	.150	1.5x	.500	5x	2-1/2	**HC4832170**	Price	**HC5039240**	Price	**-**	-
.100	1/8	.150	1.5x	.800	8x	2-1/2	**HC4832180**	Price	**HC5039250**	Price	**HC4935600**	Price
.100	1/8	.150	1.5x	1.200	12x	2-1/2	**HC4832190**	Price	**HC5039260**	Price	**-**	-
.100	1/8	.150	1.5x	1.500	15x	3	**HC4832200**	Price	**HC5039270**	Price	**-**	-
.100	1/8	.500	5x	-	-	2-1/2	**HC4832210**	Price	**HC5039280**	Price	**-**	-
.100	1/8	.750	7.5x	-	-	2-1/2	**HC4832220**	Price	**HC5039290**	Price	**HC4935610**	Price
.100	1/8	.750	7.5x	1.250	12x	2-1/2	**HC4832230**	Price	**HC5039300**	Price	**HC4935620**	Price
.100	1/8	1.200	12x	-	-	2-1/2	**HC4832240**	Price	**HC5039310**	Price	**-**	-
.109	1/8	.163	1.5x	.570	5x	2-1/2	**HC4832250**	Price	**HC5039320**	Price	**-**	-
.109	1/8	.163	1.5x	.900	8x	2-1/2	**HC4832260**	Price	**HC5039330**	Price	**-**	-
.109	1/8	.570	5x	-	-	2-1/2	**HC4832270**	Price	**HC5039340**	Price	**-**	-
.109	1/8	.900	8x	-	-	2-1/2	**HC4832280**	Price	**HC5039350**	Price	**-**	-
.118	1/8	.177	1.5x	.625	5x	2-1/2	**HC4832290**	Price	**HC5039360**	Price	**-**	-
.118	1/8	.177	1.5x	.950	8x	2-1/2	**HC4832300**	Price	**HC5039370**	Price	**-**	-
.118	1/8	.177	1.5x	1.420	12x	3	**HC4832310**	Price	**HC5039380**	Price	**-**	-
.118	1/8	.625	5x	-	-	2-1/2	**HC4832320**	Price	**HC5039390**	Price	**-**	-
.118	1/8	.950	8x	-	-	2-1/2	**HC4832330**	Price	**HC5039400**	Price	**-**	-
.125	1/8	.187	1.5x	.375	3x	2-1/2	**HC4832340**	Price	**HC5039410**	Price	**-**	-
.125	1/8	.187	1.5x	.625	5x	2-1/2	**HC4832350**	Price	**HC5039420**	Price	**HC4935630**	Price
.125	1/8	.187	1.5x	1.000	8x	2-1/2	**HC4832360**	Price	**HC5039430**	Price	**HC4935640**	Price
.125	1/8	.187	1.5x	1.250	10x	2-1/2	**HC4832370**	Price	**HC5039440**	Price	**-**	-
.125	1/8	.187	1.5x	1.500	12x	3	**HC4832380**	Price	**HC5039450**	Price	**HC4935650**	Price
.125	1/8	.187	1.5x	1.875	15x	3	**HC4832390**	Price	**HC5039460**	Price	**-**	-
.125	1/8	.187	1.5x	2.250	18x	4	**HC4832400**	Price	**HC5039470**	Price	**-**	-
.125	1/8	.187	1.5x	2.500	20x	4	**HC4832410**	Price	**HC5039480**	Price	**-**	-
.125	1/8	.187	1.5x	3.125	25x	4	**HC4832420**	Price	**HC5039490**	Price	**-**	-
.125	1/8	.625	5x	-	-	2-1/2	**HC4832430**	Price	**HC5039500**	Price	**HC4935660**	Price
.125	1/8	1	8x	-	-	2-1/2	**HC4832440**	Price	**HC5039510**	Price	**HC4935670**	Price
.125	1/8	1	8x	1.500	12x	2-1/2	**HC4832450**	Price	**HC5039520**	Price	**HC4935680**	Price
.125	1/8	1.250	10x	-	-	2-1/2	**HC4832460**	Price	**HC5039530**	Price	**-**	-
.125	1/8	1.500	12x	-	-	3	**HC4832470**	Price	**HC5039540**	Price	**HC4935690**	Price
.125	1/8	1.875	15x	-	-	3	**HC4832480**	Price	**HC5039550**	Price	**HC4935700**	Price
.140	3/16	.211	1.5x	.750	5x	3	**HC4832490**	Price	**HC5039560**	Price	**-**	-
.140	3/16	.211	1.5x	1.125	8x	3	**HC4832500**	Price	**HC5039570**	Price	**-**	-
.156	3/16	.234	1.5x	.470	3x	3	**HC4832510**	Price	**HC5039580**	Price	**-**	-
.156	3/16	.234	1.5x	.750	5x	3	**HC4832520**	Price	**HC5039590**	Price	**-**	-
.156	3/16	.234	1.5x	1.250	8x	3	**HC4832530**	Price	**HC5039600**	Price	**-**	-
.156	3/16	.234	1.5x	1.875	12x	4	**HC4832540**	Price	**HC5039610**	Price	**-**	-
.156	3/16	.234	1.5x	2.375	15x	4	**HC4832550**	Price	**HC5039620**	Price	**-**	-
.187	3/16	.281	1.5x	.570	3x	3	**HC4832560**	Price	**HC5039630**	Price	**-**	-
.187	3/16	.281	1.5x	1.000	5x	3	**HC4832570**	Price	**HC5039640**	Price	**HC4935710**	Price
.187	3/16	.281	1.5x	1.500	8x	3	**HC4832580**	Price	**HC5039650**	Price	**HC4935720**	Price
.187	3/16	.281	1.5x	1.875	10x	4	**HC4832590**	Price	**HC5039660**	Price	**-**	-
.187	3/16	.281	1.5x	2.250	12x	4	**HC4832600**	Price	**HC5039670**	Price	**HC4935730**	Price
.187	3/16	.281	1.5x	2.812	15x	4	**HC4832610**	Price	**HC5039680**	Price	**-**	-
.187	3/16	.281	1.5x	3.750	20x	6	**HC4832620**	Price	**HC5039690**	Price	**-**	-
.187	3/16	1.125	6x	1.625	8x	3	**HC4832630**	Price	**HC5039700**	Price	**HC4935740**	Price
.250	1/4	.375	1.5x	1.250	5x	4	**HC4832640**	Price	**HC5039710**	Price	**HC4935750**	Price
.250	1/4	.375	1.5x	2.000	8x	4	**HC4832650**	Price	**HC5039720**	Price	**HC4935760**	Price
.250	1/4	.375	1.5x	2.500	10x	4	**HC4832660**	Price	**HC5039730**	Price	**-**	-
.250	1/4	.375	1.5x	3.000	12x	6	**HC4832670**	Price	**HC5039740**	Price	**HC4935770**	Price
.250	1/4	.375	1.5x	3.750	15x	6	**HC4832680**	Price	**HC5039750**	Price	**-**	-
.250	1/4	1.500	6x	2.000	8x	4	**HC4832690**	Price	**HC5039760**	Price	**HC4935780**	Price

RAPIDKUT 3 Flute Variable Pitch End Mills

Solid Carbide • Variable Helix



- Micrograin carbide
- nACRo coated

Size	Shank Dia.	Flute Length	OAL	Radius	Reach	Order No.	Price
.031	1/8	.046	1-1/2	.005	-	**HC5230100**	Price
.031	1/8	.046	2-1/2	.005	.156	**HC5230105**	Price
.031	1/8	.046	2-1/2	.005	.250	**HC5230110**	Price
.031	1/8	.093	1-1/2	None	-	**HC5230115**	Price
.031	1/8	.093	1-1/2	.005	-	**HC5230120**	Price
.031	1/8	.156	2-1/2	.005	-	**HC5230125**	Price
.047	1/8	.070	1-1/2	.005	-	**HC5230130**	Price
.047	1/8	.070	2-1/2	.005	.250	**HC5230135**	Price
.047	1/8	.070	2-1/2	.005	.375	**HC5230140**	Price
.047	1/8	.141	1-1/2	None	-	**HC5230145**	Price
.047	1/8	.141	1-1/2	.005	-	**HC5230150**	Price
.047	1/8	.250	2-1/2	.005	-	**HC5230155**	Price
.055	1/8	.083	1-1/2	.005	-	**HC5230160**	Price
.055	1/8	.165	1-1/2	.005	-	**HC5230165**	Price
.055	1/8	.275	1-1/2	.005	-	**HC5230170**	Price
.062	1/8	.093	1-1/2	.010	-	**HC5230175**	Price
.062	1/8	.093	2-1/2	.010	.312	**HC5230180**	Price
.062	1/8	.093	2-1/2	.010	.500	**HC5230185**	Price
.062	1/8	.186	1-1/2	None	-	**HC5230190**	Price
.062	1/8	.186	1-1/2	.010	-	**HC5230195**	Price
.062	1/8	.312	2-1/2	.010	-	**HC5230200**	Price
.078	1/8	.177	1-1/2	.010	-	**HC5230205**	Price
.078	1/8	.234	1-1/2	None	-	**HC5230210**	Price
.078	1/8	.234	1-1/2	.010	-	**HC5230215**	Price
.093	1/8	.140	1-1/2	.010	-	**HC5230220**	Price
.093	1/8	.140	2-1/2	.010	.500	**HC5230225**	Price
.093	1/8	.140	2-1/2	.010	.750	**HC5230230**	Price
.093	1/8	.279	1-1/2	None	-	**HC5230235**	Price
.093	1/8	.279	1-1/2	.010	-	**HC5230240**	Price
.093	1/8	.500	2-1/2	.010	-	**HC5230245**	Price
1.5mm	4mm	2.2mm	50mm	0.20mm	-	**HC5230250**	Price
1.5mm	4mm	2.2mm	50mm	0.20mm	12mm	**HC5230255**	Price
1.5mm	4mm	2.2mm	50mm	0.20mm	7.5mm	**HC5230260**	Price
1.5mm	4mm	4.5mm	50mm	0.20mm	-	**HC5230265**	Price
1.6mm	4mm	2.4mm	50mm	0.20mm	-	**HC5230270**	Price
1.6mm	4mm	5mm	50mm	0.20mm	-	**HC5230275**	Price
1mm	4mm	1.5mm	50mm	0.10mm	-	**HC5230280**	Price
1mm	4mm	1.5mm	50mm	0.10mm	5mm	**HC5230285**	Price
1mm	4mm	1.5mm	50mm	0.10mm	8mm	**HC5230290**	Price
1mm	4mm	3mm	50mm	0.10mm	-	**HC5230295**	Price
2mm	4mm	3mm	50mm	0.20mm	-	**HC5230305**	Price
2mm	4mm	3mm	50mm	0.20mm	10mm	**HC5230310**	Price
2mm	4mm	3mm	50mm	0.20mm	16mm	**HC5230315**	Price
2mm	4mm	6mm	50mm	0.20mm	-	**HC5230320**	Price
2.5mm	4mm	3.8mm	50mm	0.20mm	-	**HC5230300**	Price
3mm	4mm	4.5mm	50mm	0.20mm	-	**HC5230325**	Price
3mm	4mm	4.5mm	50mm	0.20mm	15mm	**HC5230330**	Price
3mm	4mm	9mm	50mm	0.20mm	-	**HC5230335**	Price

RAPIDKUT 4 Flute Solid Carbide End Mills

Square • Radius End



- CVD coated

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
.015	1/8	.023	1-1/2	None	**HC5310015**	Price
.015	1/8	.045	1-1/2	None	**HC5310017**	Price
.020	1/8	.060	1-1/2	None	**HC5310020**	Price
1/32	1/8	.047	1-1/2	None	**HC5310031**	Price
1/32	1/8	.093	1-1/2	None	**HC5310035**	Price
1/32	1/8	.093	1-1/2	.005	**HC5330031**	Price
.039	1/8	.117	1-1/2	None	**HC5310039**	Price
.040	1/8	.120	1-1/2	None	**HC5310040**	Price
3/64	1/8	.071	1-1/2	None	**HC5310046**	Price
3/64	1/8	.141	1-1/2	None	**HC5310048**	Price
3/64	1/8	.141	1-1/2	.005	**HC5330046**	Price
.050	1/8	.150	1-1/2	None	**HC5310050**	Price
.060	1/8	.180	1-1/2	None	**HC5310060**	Price
1/16	1/8	.093	1-1/2	None	**HC5310062**	Price
1/16	1/8	.186	1-1/2	None	**HC5310065**	Price
1/16	1/8	.186	1-1/2	.010	**HC5330062**	Price
5/64	1/8	.117	1-1/2	None	**HC5310078**	Price
5/64	1/8	.234	1-1/2	None	**HC5310080**	Price
5/64	1/8	.234	1-1/2	.010	**HC5330078**	Price
3/32	1/8	.140	1-1/2	None	**HC5310093**	Price
3/32	1/8	.279	1-1/2	None	**HC5310095**	Price
3/32	1/8	.279	1-1/2	.010	**HC5330093**	Price
.100	1/8	.300	1-1/2	None	**HC5310100**	Price
.118	1/8	.354	1-1/2	None	**HC5310118**	Price
1/8	1/8	.187	1-1/2	None	**HC5310125**	Price
1/8	1/8	.375	1-1/2	None	**HC5310127**	Price
1/8	1/8	.500	1-1/2	None	**HC5310129**	Price
1/8	1/8	.500	1-1/2	.015	**HC5330125**	Price
.156	3/16	.470	2	None	**HC5310156**	Price
3/16	3/16	.625	2	None	**HC5310187**	Price
3/16	3/16	.625	2	.020	**HC5330187**	Price
1/4	1/4	.750	2-1/2	None	**HC5310250**	Price
1/4	1/4	.750	2-1/2	.020	**HC5330250**	Price
1/4	1/4	.750	2-1/2	.030	**HC5330255**	Price
5/16	5/16	.8125	2-1/2	None	**HC5310312**	Price
3/8	3/8	1.000	2-1/2	None	**HC5310375**	Price
3/8	3/8	1.000	2-1/2	.020	**HC5330375**	Price
3/8	3/8	1.000	2-1/2	.030	**HC5330380**	Price
1/2	1/2	1.000	3	.020	**HC5330500**	Price
1/2	1/2	1.000	3	.030	**HC5330505**	Price
1/2	1/2	1.000	3	.060	**HC5330510**	Price

RAPIDKUT 3 Flute Solid Carbide Miniature End Mills

Ball Nose



- Center cutting
- 30° Helix
- Good for materials less than HRc 48
- Tolerance +/- .0005" < 1/8 +.000 - .002" > 1/8

AlTiN coating is ideal for high temperature cutting operations in many materials such as titanium and nickel alloys, Co-Cr-Mo, stainless steel, alloy steels and cast iron

PCD (Amorphous DLC) Diamond coating for increased lubricity in non-ferrous materials

							Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	Flute Length x Diameter Ratio	Length Below Shank	Reach	OAL	Order No.	Price	Order No.	Price	Order No.	Price
.010	1/8	.015	1.5x	.050	5x	2-1/2	**HC4832700**	Price	**HC5039770**	Price	**HC4935790**	Price
.010	1/8	.015	1.5x	.080	8x	2-1/2	**HC4832710**	Price	**HC5039780**	Price	**HC4935800**	Price
.010	1/8	.015	1.5x	.125	12x	2-1/2	**HC4832720**	Price	**HC5039790**	Price	**HC4935810**	Price
.010	1/8	.015	1.5x	.150	15x	2-1/2	**HC4832730**	Price	**HC5039800**	Price	**HC4935820**	Price
.010	1/8	.050	5x	-	-	2-1/2	**HC4832740**	Price	**HC5039810**	Price	**HC4935830**	Price
.010	1/8	.050	5x	.100	10x	2-1/2	**HC4832750**	Price	**HC5039820**	Price	**HC4935840**	Price
.015	1/8	.022	1.5x	.045	3x	2-1/2	**HC4832760**	Price	**HC5039830**	Price	-	-
.015	1/8	.022	1.5x	.078	5x	2-1/2	**HC4832770**	Price	**HC5039840**	Price	**HC4935850**	Price
.015	1/8	.022	1.5x	.125	8x	2-1/2	**HC4832780**	Price	**HC5039850**	Price	**HC4935860**	Price
.015	1/8	.022	1.5x	.156	10x	2-1/2	**HC4832790**	Price	**HC5039860**	Price	**HC4935870**	Price
.015	1/8	.022	1.5x	.187	12x	2-1/2	**HC4832800**	Price	**HC5039870**	Price	**HC4935880**	Price
.015	1/8	.022	1.5x	.225	15x	2-1/2	**HC4832810**	Price	**HC5039880**	Price	**HC4935890**	Price
.015	1/8	.022	1.5x	.300	20x	2-1/2	**HC4832820**	Price	**HC5039890**	Price	**HC4935900**	Price
.015	1/8	.078	5x	-	-	2-1/2	**HC4832830**	Price	**HC5039900**	Price	**HC4935910**	Price
.015	1/8	.078	5x	.150	10x	2-1/2	**HC4832840**	Price	**HC5039910**	Price	**HC4935920**	Price

(continued on next page)

RAPIDKUT® 3 Flute Solid Carbide Miniature End Mills *(continued from previous page)*

Ball Nose



							Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	Flute Length x Diameter Ratio	Length Below Shank	Reach	OAL	Order No.	Price	Order No.	Price	Order No.	Price
.015	1/8	.125	8x	-	-	2-1/2	HC4832850	Price	HC5039920	Price	HC4935930	Price
.020	1/8	.030	1.5x	.060	3x	2-1/2	HC4832860	Price	HC5039930	Price	-	-
.020	1/8	.030	1.5x	.100	5x	2-1/2	HC4832870	Price	HC5039940	Price	HC4935940	Price
.020	1/8	.030	1.5x	.160	8x	2-1/2	HC4832880	Price	HC5039950	Price	HC4935950	Price
.020	1/8	.030	1.5x	.200	10x	2-1/2	HC4832890	Price	HC5039960	Price	-	-
.020	1/8	.030	1.5x	.250	12x	2-1/2	HC4832900	Price	HC5039970	Price	HC4935960	Price
.020	1/8	.030	1.5x	.300	15x	2-1/2	HC4832910	Price	HC5039980	Price	HC4935970	Price
.020	1/8	.030	1.5x	.400	20x	2-1/2	HC4832920	Price	HC5039990	Price	-	-
.020	1/8	.100	5x	-	-	2-1/2	HC4832930	Price	HC5040000	Price	HC4935980	Price
.020	1/8	.100	5x	.200	10x	2-1/2	HC4832940	Price	HC5040010	Price	HC4935990	Price
.020	1/8	.160	8x	-	-	2-1/2	HC4832950	Price	HC5040020	Price	-	-
.025	1/8	.037	1.5x	.075	3x	2-1/2	HC4832960	Price	HC5040030	Price	-	-
.025	1/8	.037	1.5x	.125	5x	2-1/2	HC4832970	Price	HC5040040	Price	HC4936000	Price
.025	1/8	.037	1.5x	.203	8x	2-1/2	HC4832980	Price	HC5040050	Price	HC4936010	Price
.025	1/8	.037	1.5x	.312	12x	2-1/2	HC4832990	Price	HC5040060	Price	HC4936020	Price
.025	1/8	.037	1.5x	.375	15x	2-1/2	HC4833000	Price	HC5040070	Price	HC4936030	Price
.030	1/8	.045	1.5x	.156	5x	2-1/2	HC4833010	Price	HC5040080	Price	HC4936040	Price
.030	1/8	.045	1.5x	.250	8x	2-1/2	HC4833020	Price	HC5040090	Price	HC4936050	Price
.030	1/8	.045	1.5x	.375	12x	2-1/2	HC4833030	Price	HC5040100	Price	HC4936060	Price
.030	1/8	.045	1.5x	.450	15x	2-1/2	HC4833040	Price	HC5040110	Price	-	-
.030	1/8	.150	5x	-	-	2-1/2	HC4833050	Price	HC5040120	Price	HC4936070	Price
.030	1/8	.150	5x	.300	10x	2-1/2	HC4833060	Price	HC5040130	Price	HC4936080	Price
.031	1/8	.046	1.5x	.093	3x	2-1/2	HC4833070	Price	HC5040140	Price	HC4936090	Price
.031	1/8	.046	1.5x	.156	5x	2-1/2	HC4833080	Price	HC5040150	Price	HC4936100	Price
.031	1/8	.046	1.5x	.250	8x	2-1/2	HC4833090	Price	HC5040160	Price	HC4936110	Price
.031	1/8	.046	1.5x	.312	10x	2-1/2	HC4833100	Price	HC5040170	Price	HC4936120	Price
.031	1/8	.046	1.5x	.375	12x	2-1/2	HC4833110	Price	HC5040180	Price	HC4936130	Price
.031	1/8	.046	1.5x	.470	15x	2-1/2	HC4833120	Price	HC5040190	Price	HC4936140	Price
.031	1/8	.046	1.5x	.565	18x	2-1/2	HC4833130	Price	HC5040200	Price	HC4936150	Price
.031	1/8	.046	1.5x	.625	20x	2-1/2	HC4833140	Price	HC5040210	Price	HC4936160	Price
.031	1/8	.046	1.5x	.775	25x	2-1/2	HC4833150	Price	HC5040220	Price	-	-
.031	1/8	.156	5x	-	-	2-1/2	HC4833160	Price	HC5040230	Price	HC4936170	Price
.031	1/8	.156	5x	.310	10x	2-1/2	HC4833170	Price	HC5040240	Price	HC4936180	Price
.031	1/8	.250	8x	-	-	2-1/2	HC4833180	Price	HC5040250	Price	HC4936190	Price
.031	1/8	.312	10x	-	-	2-1/2	HC4833190	Price	HC5040260	Price	-	-
.031	1/8	.375	12x	-	-	2-1/2	HC4833200	Price	HC5040270	Price	HC4936200	Price
.031	1/8	.470	15x	-	-	2-1/2	HC4833210	Price	HC5040280	Price	-	-
.035	1/8	.052	1.5x	.187	5x	2-1/2	HC4833220	Price	HC5040290	Price	HC4936210	Price
.035	1/8	.052	1.5x	.281	8x	2-1/2	HC4833230	Price	HC5040300	Price	HC4936220	Price
.035	1/8	.175	5x	-	-	2-1/2	HC4833240	Price	HC5040310	Price	HC4936230	Price
.040	1/8	.060	1.5x	.120	3x	2-1/2	HC4833250	Price	HC5040320	Price	-	-
.040	1/8	.060	1.5x	.203	5x	2-1/2	HC4833260	Price	HC5040330	Price	HC4936240	Price
.040	1/8	.060	1.5x	.325	8x	2-1/2	HC4833270	Price	HC5040340	Price	HC4936250	Price
.040	1/8	.060	1.5x	.400	10x	2-1/2	HC4833280	Price	HC5040350	Price	-	-
.040	1/8	.060	1.5x	.480	12x	2-1/2	HC4833290	Price	HC5040360	Price	HC4936260	Price
.040	1/8	.060	1.5x	.600	15x	2-1/2	HC4833300	Price	HC5040370	Price	HC4936270	Price
.040	1/8	.060	1.5x	.800	20x	2-1/2	HC4833310	Price	HC5040380	Price	-	-
.040	1/8	.200	5x	-	-	2-1/2	HC4833320	Price	HC5040390	Price	HC4936280	Price
.040	1/8	.200	5x	.400	10x	2-1/2	HC4833330	Price	HC5040400	Price	HC4936290	Price
.040	1/8	.325	8x	-	-	2-1/2	HC4833340	Price	HC5040410	Price	-	-
.040	1/8	.480	12x	-	-	2-1/2	HC4833350	Price	HC5040420	Price	-	-
.045	1/8	.067	1.5x	.225	5x	2-1/2	HC4833360	Price	HC5040430	Price	HC4936300	Price
.045	1/8	.067	1.5x	.375	8x	2-1/2	HC4833370	Price	HC5040440	Price	HC4936310	Price
.045	1/8	.067	1.5x	.550	12x	2-1/2	HC4833380	Price	HC5040450	Price	HC4936320	Price
.045	1/8	.225	5x	.450	10x	2-1/2	HC4833390	Price	HC5040460	Price	HC4936330	Price
.047	1/8	.070	1.5x	.141	3x	2-1/2	HC4833400	Price	HC5040470	Price	-	-
.047	1/8	.070	1.5x	.250	5x	2-1/2	HC4833410	Price	HC5040480	Price	HC4936340	Price
.047	1/8	.070	1.5x	.375	8x	2-1/2	HC4833420	Price	HC5040490	Price	HC4936350	Price
.047	1/8	.070	1.5x	.480	10x	2-1/2	HC4833430	Price	HC5040500	Price	-	-
.047	1/8	.070	1.5x	.570	12x	2-1/2	HC4833440	Price	HC5040510	Price	HC4936360	Price
.047	1/8	.070	1.5x	.710	15x	2-1/2	HC4833450	Price	HC5040520	Price	HC4936370	Price
.047	1/8	.070	1.5x	.950	20x	2-1/2	HC4833460	Price	HC5040530	Price	HC4936380	Price
.047	1/8	.070	1.5x	1.187	25x	2-1/2	HC4833470	Price	HC5040540	Price	-	-
.047	1/8	.250	5x	-	-	2-1/2	HC4833480	Price	HC5040550	Price	HC4936390	Price
.047	1/8	.250	5x	.500	10x	2-1/2	HC4833490	Price	HC5040560	Price	HC4936400	Price
.047	1/8	.375	8x	-	-	2-1/2	HC4833500	Price	HC5040570	Price	HC4936410	Price
.050	1/8	.075	1.5x	.250	5x	2-1/2	HC4833510	Price	HC5040580	Price	HC4936420	Price
.050	1/8	.075	1.5x	.400	8x	2-1/2	HC4833520	Price	HC5040590	Price	HC4936430	Price
.050	1/8	.075	1.5x	.600	12x	2-1/2	HC4833530	Price	HC5040600	Price	HC4936440	Price
.050	1/8	.300	6x	-	-	2-1/2	HC4833540	Price	HC5040610	Price	HC4936450	Price
.050	1/8	.300	6x	.600	12x	2-1/2	HC4833550	Price	HC5040620	Price	HC4936460	Price
.055	1/8	.082	1.5x	.165	3x	2-1/2	HC4833560	Price	HC5040630	Price	-	-
.055	1/8	.082	1.5x	.275	5x	2-1/2	HC4833570	Price	HC5040640	Price	HC4936470	Price
.055	1/8	.082	1.5x	.450	8x	2-1/2	HC4833580	Price	HC5040650	Price	HC4936480	Price
.055	1/8	.082	1.5x	.660	12x	2-1/2	HC4833590	Price	HC5040660	Price	HC4936490	Price
.055	1/8	.275	5x	-	-	2-1/2	HC4833600	Price	HC5040670	Price	-	-
.060	1/8	.090	1.5x	.180	3x	2-1/2	HC4833610	Price	HC5040680	Price	-	-
.060	1/8	.090	1.5x	.312	5x	2-1/2	HC4833620	Price	HC5040690	Price	HC4936500	Price
.060	1/8	.090	1.5x	.500	8x	2-1/2	HC4833630	Price	HC5040700	Price	HC4936510	Price
.060	1/8	.090	1.5x	.625	10x	2-1/2	HC4833640	Price	HC5040710	Price	-	-
.060	1/8	.090	1.5x	.720	12x	2-1/2	HC4833650	Price	HC5040720	Price	HC4936520	Price
.060	1/8	.312	5x	-	-	2-1/2	HC4833660	Price	HC5040730	Price	-	-
.060	1/8	.500	8x	1.000	16x	2-1/2	HC4833670	Price	HC5040740	Price	HC4936530	Price
.062	1/8	.093	1.5x	.186	3x	2-1/2	HC4833680	Price	HC5040750	Price	HC4936540	Price

(Continued on next page)

RAPIDKUT® 3 Flute Solid Carbide Miniature End Mills *(continued from previous page)*

Ball Nose



							Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	Flute Length x Diameter Ratio	Length Below Shank	Reach	OAL	Order No.	Price	Order No.	Price	Order No.	Price
.062	1/8	.093	1.5x	.312	5x	2-1/2	HC4833690	Price	HC5040760	Price	HC4936550	Price
.062	1/8	.093	1.5x	.500	8x	2-1/2	HC4833700	Price	HC5040770	Price	HC4936560	Price
.062	1/8	.093	1.5x	.625	10x	2-1/2	HC4833710	Price	HC5040780	Price	HC4936570	Price
.062	1/8	.093	1.5x	.750	12x	2-1/2	HC4833720	Price	HC5040790	Price	HC4936580	Price
.062	1/8	.093	1.5x	.950	15x	2-1/2	HC4833730	Price	HC5040800	Price	HC4936590	Price
.062	1/8	.093	1.5x	1.125	18x	2-1/2	HC4833740	Price	HC5040810	Price	-	-
.062	1/8	.093	1.5x	1.250	20x	2-1/2	HC4833750	Price	HC5040820	Price	HC4936600	Price
.062	1/8	.093	1.5x	1.550	25x	3	HC4833760	Price	HC5040830	Price	-	-
.062	1/8	.312	5x	-	-	2-1/2	HC4833770	Price	HC5040840	Price	HC4936610	Price
.062	1/8	.500	8x	-	-	2-1/2	HC4833780	Price	HC5040850	Price	HC4936620	Price
.062	1/8	.500	8x	1.000	16x	2-1/2	HC4833790	Price	HC5040860	Price	HC4936630	Price
.062	1/8	.625	10x	-	-	2-1/2	HC4833800	Price	HC5040870	Price	-	-
.062	1/8	.750	12x	-	-	2-1/2	HC4833810	Price	HC5040880	Price	HC4936640	Price
.062	1/8	.950	15x	-	-	2-1/2	HC4833820	Price	HC5040890	Price	HC4936650	Price
.065	1/8	.097	1.5x	.325	5x	2-1/2	HC4833830	Price	-	-	-	-
.065	1/8	.097	1.5x	.530	8x	2-1/2	HC4833840	Price	HC5040900	Price	HC4936660	Price
.065	1/8	.500	8x	-	-	2-1/2	HC4833850	Price	HC5040910	Price	HC4936670	Price
.070	1/8	.105	1.5x	.375	5x	2-1/2	HC4833860	Price	-	-	-	-
.070	1/8	.105	1.5x	.570	8x	2-1/2	HC4833870	Price	HC5040920	Price	HC4936680	Price
.070	1/8	.500	7x	-	-	2-1/2	HC4833880	Price	HC5040930	Price	HC4936690	Price
.070	1/8	.500	7x	1.000	14x	2-1/2	HC4833890	Price	HC5040940	Price	HC4936700	Price
.075	1/8	.112	1.5x	.375	5x	2-1/2	HC4833900	Price	-	-	-	-
.075	1/8	.112	1.5x	.625	8x	2-1/2	HC4833910	Price	HC5040950	Price	HC4936710	Price
.078	1/8	.117	1.5x	.406	5x	2-1/2	HC4833920	Price	HC5040960	Price	HC4936720	Price
.078	1/8	.117	1.5x	.625	8x	2-1/2	HC4833930	Price	HC5040970	Price	HC4936730	Price
.078	1/8	.117	1.5x	.800	10x	2-1/2	HC4833940	Price	HC5040980	Price	-	-
.078	1/8	.117	1.5x	.940	12x	2-1/2	HC4833950	Price	HC5040990	Price	HC4936740	Price
.078	1/8	.117	1.5x	1.187	15x	2-1/2	HC4833960	Price	HC5041000	Price	-	-
.078	1/8	.117	1.5x	1.562	20x	3	HC4833970	Price	HC5041010	Price	-	-
.078	1/8	.406	5x	-	-	2-1/2	HC4833980	Price	HC5041020	Price	HC4936750	Price
.078	1/8	.500	6x	1.000	12x	2-1/2	HC4833990	Price	HC5041030	Price	HC4936760	Price
.078	1/8	.625	8x	-	-	2-1/2	HC4834000	Price	HC5041040	Price	HC4936770	Price
.078	1/8	.940	12x	-	-	2-1/2	HC4834010	Price	HC5041050	Price	HC4936780	Price
.078	1/8	1.187	15x	-	-	2-1/2	HC4834020	Price	HC5041060	Price	HC4936790	Price
.085	1/8	.127	1.5x	.425	5x	2-1/2	HC4834030	Price	HC5041070	Price	-	-
.085	1/8	.750	9x	1.250	14x	2-1/2	HC4834040	Price	HC5041080	Price	HC4936800	Price
.090	1/8	.135	1.5x	.450	5x	2-1/2	HC4834050	Price	-	-	-	-
.090	1/8	.750	8x	1.250	13x	2-1/2	HC4834060	Price	HC5041090	Price	HC4936810	Price
.093	1/8	.139	1.5x	.279	3x	2-1/2	HC4834070	Price	HC5041100	Price	-	-
.093	1/8	.139	1.5x	.500	5x	2-1/2	HC4834080	Price	HC5041110	Price	HC4936820	Price
.093	1/8	.139	1.5x	.750	8x	2-1/2	HC4834090	Price	HC5041120	Price	HC4936830	Price
.093	1/8	.139	1.5x	.950	10x	2-1/2	HC4834100	Price	HC5041130	Price	-	-
.093	1/8	.139	1.5x	1.125	12x	2-1/2	HC4834110	Price	HC5041140	Price	HC4936840	Price
.093	1/8	.139	1.5x	1.400	15x	3	HC4834120	Price	HC5041150	Price	HC4936850	Price
.093	1/8	.139	1.5x	1.875	20x	4	HC4834130	Price	HC5041160	Price	-	-
.093	1/8	.139	1.5x	2.312	25x	4	HC4834140	Price	HC5041170	Price	-	-
.093	1/8	.500	5x	-	-	2-1/2	HC4834150	Price	HC5041180	Price	HC4936860	Price
.093	1/8	.750	8x	-	-	2-1/2	HC4834160	Price	HC5041190	Price	HC4936870	Price
.093	1/8	.750	8x	1.250	13x	2-1/2	HC4834170	Price	HC5041200	Price	HC4936880	Price
.093	1/8	1.125	12x	-	-	2-1/2	HC4834180	Price	HC5041210	Price	HC4936890	Price
.093	1/8	1.400	15x	-	-	3	HC4834190	Price	HC5041220	Price	HC4936900	Price
.100	1/8	.150	1.5x	.500	5x	2-1/2	HC4834200	Price	HC5041230	Price	-	-
.100	1/8	.150	1.5x	.800	8x	2-1/2	HC4834210	Price	HC5041240	Price	HC4936910	Price
.100	1/8	.150	1.5x	1.200	12x	2-1/2	HC4834220	Price	HC5041250	Price	-	-
.100	1/8	.500	5x	-	-	2-1/2	HC4834230	Price	HC5041260	Price	-	-
.125	1/8	.187	1.5x	.375	3x	2-1/2	HC4834240	Price	HC5041270	Price	-	-
.125	1/8	.187	1.5x	.625	5x	2-1/2	HC4834250	Price	HC5041280	Price	HC4936920	Price
.125	1/8	.187	1.5x	1.000	8x	2-1/2	HC4834260	Price	HC5041290	Price	HC4936930	Price
.125	1/8	.187	1.5x	1.250	10x	2-1/2	HC4834270	Price	HC5041300	Price	-	-
.125	1/8	.187	1.5x	1.500	12x	3	HC4834280	Price	HC5041310	Price	HC4936940	Price
.125	1/8	.187	1.5x	1.875	15x	3	HC4834290	Price	HC5041320	Price	HC4936950	Price
.125	1/8	.187	1.5x	2.250	18x	4	HC4834300	Price	HC5041330	Price	-	-
.125	1/8	.187	1.5x	2.500	20x	4	HC4834310	Price	HC5041340	Price	HC4936960	Price
.125	1/8	.187	1.5x	3.125	25x	4	HC4834320	Price	-	-	-	-
.125	1/8	.625	5x	-	-	2-1/2	HC4834330	Price	HC5041350	Price	HC4936970	Price
.125	1/8	1.000	8x	-	-	2-1/2	HC4834340	Price	HC5041360	Price	HC4936980	Price
.125	1/8	1.000	8x	1.500	12x	2-1/2	HC4834350	Price	HC5041370	Price	HC4936990	Price
.125	1/8	1.250	10x	-	-	2-1/2	HC4834360	Price	HC5041380	Price	-	-
.125	1/8	1.500	12x	-	-	3	HC4834370	Price	HC5041390	Price	HC4937000	Price
.125	1/8	1.875	15x	-	-	3	HC4834380	Price	HC5041400	Price	HC4937010	Price
.156	3/16	.234	1.5x	1.250	8x	3	HC4834390	Price	HC5041410	Price	-	-
.187	3/16	.281	1.5x	1.000	5x	3	HC4834400	Price	HC5041420	Price	HC4937020	Price
.187	3/16	.281	1.5x	1.500	8x	3	HC4834410	Price	HC5041430	Price	HC4937030	Price
.187	3/16	.281	1.5x	1.875	10x	4	HC4834420	Price	HC5041440	Price	-	-
.187	3/16	.281	1.5x	2.250	12x	4	HC4834430	Price	HC5041450	Price	HC4937040	Price
.187	3/16	.281	1.5x	2.812	15x	4	HC4834440	Price	HC5041460	Price	-	-
.250	1/4	.375	1.5x	1.250	5x	4	HC4834450	Price	HC5041470	Price	HC4937050	Price
.250	1/4	.375	1.5x	2.000	8x	4	HC4834460	Price	HC5041480	Price	HC4937060	Price
.250	1/4	.375	1.5x	2.500	10x	4	HC4834470	Price	HC5041490	Price	-	-
.250	1/4	.375	1.5x	3.000	12x	6	HC4834480	Price	HC5041500	Price	HC4937070	Price
.250	1/4	.375	1.5x	3.750	15x	6	HC4834490	Price	HC5041510	Price	-	-

RAPIDKUT® 4 Flute Solid Carbide Miniature End Mills

Square End



- Center cutting
- 30° Helix
- Good for materials less than HRc 48
- Tolerance +/- .0005”

AlTiN coating is ideal for high temperature cutting operations in many materials such as titanium and nickel alloys, Co-Cr-Mo, stainless steel, alloy steels and cast iron

PCD (Amorphous DLC) Diamond coating for increased lubricity in non-ferrous materials

				Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
.005	1/8	.008	1-1/2	HC4516940	Price	-	-	-	-
.005	1/8	.015	1-1/2	HC4517490	Price	-	-	-	-
.006	1/8	.009	1-1/2	HC4516950	Price	-	-	-	-
.006	1/8	.018	1-1/2	HC4517500	Price	-	-	-	-
.007	1/8	.011	1-1/2	HC4516960	Price	-	-	-	-
.007	1/8	.021	1-1/2	HC4517510	Price	-	-	-	-
.008	1/8	.012	1-1/2	HC4516970	Price	-	-	-	-
.008	1/8	.024	1-1/2	HC4517520	Price	-	-	-	-
.009	1/8	.014	1-1/2	HC4516980	Price	-	-	-	-
.009	1/8	.027	1-1/2	HC4517530	Price	-	-	-	-
.010	1/8	.015	1-1/2	HC4516990	Price	HC4710860	Price	HC4613520	Price
.010	1/8	.030	1-1/2	HC4517540	Price	HC4710870	Price	HC4613550	Price
.011	1/8	.017	1-1/2	HC4517000	Price	HC4710890	Price	-	-
.011	1/8	.033	1-1/2	HC4517550	Price	HC4710910	Price	HC4613560	Price
.012	1/8	.018	1-1/2	HC4517010	Price	HC4710930	Price	-	-
.012	1/8	.036	1-1/2	HC4517560	Price	HC4710950	Price	HC4613570	Price
.013	1/8	.020	1-1/2	HC4517020	Price	HC4710970	Price	-	-
.013	1/8	.039	1-1/2	HC4517570	Price	HC4710990	Price	HC4613580	Price
.014	1/8	.021	1-1/2	HC4517030	Price	HC4711010	Price	-	-
.014	1/8	.042	1-1/2	HC4517580	Price	HC4711030	Price	HC4613590	Price
.015	1/8	.023	1-1/2	HC4517040	Price	HC4711060	Price	HC4613610	Price
.026	1/8	.078	1-1/2	HC4517700	Price	HC4711510	Price	HC4613800	Price
.015	1/8	.045	1-1/2	HC4517590	Price	HC4711070	Price	HC4613630	Price
.016	1/8	.024	1-1/2	HC4517050	Price	HC4711090	Price	-	-
.016	1/8	.048	1-1/2	HC4517600	Price	HC4711110	Price	HC4613640	Price
.017	1/8	.026	1-1/2	HC4517060	Price	HC4711130	Price	-	-
.017	1/8	.051	1-1/2	HC4517610	Price	HC4711150	Price	HC4613650	Price
.018	1/8	.027	1-1/2	HC4517070	Price	HC4711170	Price	-	-
.018	1/8	.054	1-1/2	HC4517620	Price	HC4711190	Price	HC4613660	Price
.019	1/8	.029	1-1/2	HC4517080	Price	HC4711210	Price	-	-
.019	1/8	.057	1-1/2	HC4517630	Price	HC4711230	Price	HC4613670	Price
.020	1/8	.030	1-1/2	HC4517090	Price	HC4711260	Price	HC4613690	Price
.020	1/8	.060	1-1/2	HC4517640	Price	HC4711270	Price	HC4613710	Price
.021	1/8	.032	1-1/2	HC4517100	Price	HC4711290	Price	-	-
.021	1/8	.063	1-1/2	HC4517650	Price	HC4711310	Price	HC4613720	Price
.022	1/8	.033	1-1/2	HC4517110	Price	HC4711330	Price	-	-
.022	1/8	.066	1-1/2	HC4517660	Price	HC4711350	Price	HC4613730	Price
.023	1/8	.035	1-1/2	HC4517120	Price	HC4711370	Price	-	-
.023	1/8	.069	1-1/2	HC4517670	Price	HC4711390	Price	HC4613740	Price
.024	1/8	.036	1-1/2	HC4517130	Price	HC4711410	Price	-	-
.024	1/8	.072	1-1/2	HC4517680	Price	HC4711430	Price	HC4613750	Price
.025	1/8	.038	1-1/2	HC4517140	Price	HC4711460	Price	HC4613770	Price
.025	1/8	.075	1-1/2	HC4517690	Price	HC4711470	Price	HC4613790	Price
.026	1/8	.039	1-1/2	HC4517150	Price	HC4711490	Price	-	-
.027	1/8	.041	1-1/2	HC4517160	Price	HC4711530	Price	-	-
.027	1/8	.081	1-1/2	HC4517710	Price	HC4711550	Price	HC4613810	Price
.028	1/8	.042	1-1/2	HC4517170	Price	HC4711570	Price	-	-
.028	1/8	.084	1-1/2	HC4517720	Price	HC4711590	Price	HC4613820	Price
.029	1/8	.044	1-1/2	HC4517180	Price	HC4711610	Price	-	-
.029	1/8	.087	1-1/2	HC4517730	Price	HC4711630	Price	HC4613830	Price
.030	1/8	.045	1-1/2	HC4517190	Price	HC4711660	Price	HC4613850	Price
.030	1/8	.090	1-1/2	HC4517740	Price	HC4711670	Price	HC4613870	Price
.031	1/8	.047	1-1/2	HC4517200	Price	HC4711700	Price	HC4613890	Price
.031	1/8	.093	1-1/2	HC4517750	Price	HC4711710	Price	HC4613910	Price
.032	1/8	.048	1-1/2	HC4517210	Price	HC4711730	Price	-	-
.032	1/8	.096	1-1/2	HC4517760	Price	HC4711750	Price	-	-
.033	1/8	.050	1-1/2	HC4517220	Price	HC4711770	Price	-	-
.033	1/8	.099	1-1/2	HC4517770	Price	HC4711790	Price	-	-
.034	1/8	.051	1-1/2	HC4517230	Price	HC4711810	Price	-	-
.034	1/8	.102	1-1/2	HC4517780	Price	HC4711830	Price	-	-
.035	1/8	.053	1-1/2	HC4517240	Price	HC4711860	Price	HC4613930	Price
.035	1/8	.105	1-1/2	HC4517790	Price	HC4711870	Price	HC4613950	Price
.036	1/8	.054	1-1/2	HC4517250	Price	HC4711890	Price	-	-
.036	1/8	.108	1-1/2	HC4517800	Price	HC4711910	Price	-	-
.037	1/8	.056	1-1/2	HC4517260	Price	HC4711930	Price	-	-
.037	1/8	.111	1-1/2	HC4517810	Price	HC4711950	Price	-	-
.038	1/8	.057	1-1/2	HC4517270	Price	HC4711970	Price	-	-
.038	1/8	.114	1-1/2	HC4517820	Price	HC4711990	Price	-	-
.039	1/8	.059	1-1/2	HC4517280	Price	HC4712010	Price	-	-
.039	1/8	.117	1-1/2	HC4517830	Price	HC4712030	Price	-	-
.040	1/8	.060	1-1/2	HC4517290	Price	HC4712060	Price	HC4613970	Price
.040	1/8	.120	1-1/2	HC4517840	Price	HC4712070	Price	HC4613990	Price
.041	1/8	.123	1-1/2	HC4517850	Price	HC4712090	Price	-	-
.042	1/8	.126	1-1/2	HC4517860	Price	HC4712110	Price	-	-
.043	1/8	.129	1-1/2	HC4517870	Price	HC4712130	Price	-	-
.044	1/8	.132	1-1/2	HC4517880	Price	HC4712150	Price	-	-
.045	1/8	.068	1-1/2	HC4517300	Price	HC4712170	Price	HC4614000	Price
.045	1/8	.135	1-1/2	HC4517890	Price	HC4712190	Price	HC4614030	Price
.046	1/8	.138	1-1/2	HC4517900	Price	HC4712210	Price	-	-
.047	1/8	.071	1-1/2	HC4517310	Price	HC4712240	Price	HC4614040	Price
.047	1/8	.141	1-1/2	HC4517910	Price	HC4712250	Price	HC4614070	Price
.048	1/8	.144	1-1/2	HC4517920	Price	HC4712270	Price	-	-
.049	1/8	.147	1-1/2	HC4517930	Price	HC4712290	Price	-	-
.050	1/8	.075	1-1/2	HC4517320	Price	HC4712310	Price	HC4614080	Price
.050	1/8	.150	1-1/2	HC4517940	Price	HC4712330	Price	HC4614110	Price
.051	1/8	.153	1-1/2	HC4517950	Price	HC4712350	Price	-	-
.052	1/8	.156	1-1/2	HC4517960	Price	HC4712370	Price	-	-
.053	1/8	.159	1-1/2	HC4517970	Price	HC4712390	Price	-	-
.054	1/8	.162	1-1/2	HC4517980	Price	HC4712410	Price	-	-
.055	1/8	.083	1-1/2	HC4517330	Price	HC4712430	Price	HC4614120	Price
.055	1/8	.165	1-1/2	HC4517990	Price	HC4712450	Price	HC4614150	Price
.056	1/8	.168	1-1/2	HC4518000	Price	HC4712470	Price	-	-
.057	1/8	.171	1-1/2	HC4518010	Price	HC4712490	Price	-	-
.058	1/8	.174	1-1/2	HC4518020	Price	HC4712510	Price	-	-
.059	1/8	.177	1-1/2	HC4518030	Price	HC4712530	Price	-	-
.060	1/8	.090	1-1/2	HC4517340	Price	HC4712550	Price	HC4614160	Price
.060	1/8	.180	1-1/2	HC4518040	Price	HC4712570	Price	HC4614190	Price
.062	1/8	.093	1-1/2	HC4517350	Price	HC4712590	Price	HC4614200	Price
.062	1/8	.186	1-1/2	HC4518050	Price	HC4712600	Price	HC4614210	Price
.065	1/8	.098	1-1/2	HC4517360	Price	HC4712620	Price	-	-
.065	1/8	.195	1-1/2	HC4518060	Price	HC4712640	Price	HC4614230	Price
.070	1/8	.105	1-1/2	HC4517370	Price	HC4712660	Price	-	-
.070	1/8	.210	1-1/2	HC4518070	Price	HC4712680	Price	HC4614250	Price
.075	1/8	.113	1-1/2	HC4517380	Price	HC4712700	Price	-	-
.075	1/8	.225	1-1/2	HC4518080	Price	HC4712720	Price	HC4614260	Price
.078	1/8	.117	1-1/2	HC4517390	Price	HC4712730	Price	HC4614280	Price
.078	1/8	.234	1-1/2	HC4518090	Price	HC4712760	Price	HC4614300	Price
.080	1/8	.120	1-1/2	HC4517400	Price	HC4712780	Price	-	-
.080	1/8	.240	1-1/2	HC4518100	Price	HC4712800	Price	HC4614330	Price
.085	1/8	.128	1-1/2	HC4517410	Price	HC4712820	Price	-	-
.085	1/8	.255	1-1/2	HC4518110	Price	HC4712840	Price	HC4614340	Price
.090	1/8	.135	1-1/2	HC4517420	Price	HC4712860	Price	-	-
.090	1/8	.270	1-1/2	HC4518120	Price	HC4712880	Price	HC4614350	Price
.093	1/8	.140	1-1/2	HC4517430	Price	HC4712890	Price	HC4614370	Price
.093	1/8	.279	1-1/2	HC4518130	Price	HC4712920	Price	HC4614390	Price
.095	1/8	.143	1-1/2	HC4517440	Price	HC4712940	Price	-	-
.095	1/8	.285	1-1/2	HC4518140	Price	HC4712960	Price	HC4614400	Price
.100	1/8	.150	1-1/2	HC4517450	Price	HC4712980	Price	-	-
.100	1/8	.300	1-1/2	HC4518150	Price	HC4713000	Price	HC4614420	Price
.105	1/8	.158	1-1/2	HC4517460	Price	HC4713010	Price	-	-
.105	1/8	.315	1-1/2	HC4518160	Price	HC4713030	Price	HC4614430	Price
.110	1/8	.165	1-1/2	HC4517470	Price	HC4713040	Price	-	-
.110	1/8	.330	1-1/2	HC4518170	Price	HC4713060	Price	HC4614440	Price
.115	1/8	.173	1-1/2	HC4517480	Price	HC4713070	Price	-	-
.115	1/8	.345	1-1/2	HC4518180	Price	HC4713090	Price	HC4614450	Price

RAPIDKUT® 4 Flute Corner Radius End Mills



Solid Carbide • 30° Helix

- Micrograin carbide

					AlTiN		DLC		Uncoated	
Size	Shank Dia.	Flute Length	OAL	Radius	Order No.	Price	Order No.	Price	Order No.	Price
.020	1/8	.060	1-1/2	.005	HC5450405	Price	HC5450410	Price	HC5450400	Price
.025	1/8	.075	1-1/2	.005	HC5450420	Price	HC5450425	Price	HC5450415	Price
.030	1/8	.090	1-1/2	.005	HC5450435	Price	HC5450440	Price	HC5450430	Price
.031	1/8	.093	1-1/2	.005	HC5450450	Price	HC5450455	Price	HC5450445	Price
.035	1/8	.105	1-1/2	.005	HC5450465	Price	HC5450470	Price	HC5450460	Price
.039	1/8	.117	1-1/2	.005	HC5450480	Price	-	-	HC5450475	Price
.040	1/8	.120	1-1/2	.005	HC5450490	Price	HC5450495	Price	HC5450485	Price
.040	1/8	.120	1-1/2	.010	HC5450505	Price	HC5450510	Price	HC5450500	Price
.045	1/8	.135	1-1/2	.005	HC5450520	Price	HC5450525	Price	HC5450515	Price
.045	1/8	.135	1-1/2	.010	HC5450535	Price	HC5450540	Price	HC5450530	Price
.047	1/8	.141	1-1/2	.005	HC5450550	Price	HC5450555	Price	HC5450545	Price
.047	1/8	.141	1-1/2	.010	HC5450565	Price	HC5450570	Price	HC5450560	Price
.050	1/8	.150	1-1/2	.005	HC5450580	Price	HC5450585	Price	HC5450575	Price
.050	1/8	.150	1-1/2	.010	HC5450595	Price	HC5450600	Price	HC5450590	Price
.055	1/8	.165	1-1/2	.005	HC5450610	Price	HC5450615	Price	HC5450605	Price
.055	1/8	.165	1-1/2	.010	HC5450625	Price	HC5450630	Price	HC5450620	Price
.060	1/8	.180	1-1/2	.005	HC5450640	Price	HC5450645	Price	HC5450635	Price
.060	1/8	.180	1-1/2	.010	HC5450655	Price	HC5450660	Price	HC5450650	Price
.062	1/8	.186	1-1/2	.005	HC5450670	Price	HC5450675	Price	HC5450665	Price
.062	1/8	.186	1-1/2	.010	HC5450685	Price	HC5450690	Price	HC5450680	Price
.062	1/8	.186	1-1/2	.015	HC5450700	Price	HC5450705	Price	HC5450695	Price
.065	1/8	.195	1-1/2	.005	HC5450715	Price	HC5450720	Price	HC5450710	Price
.065	1/8	.195	1-1/2	.010	HC5450730	Price	HC5450735	Price	HC5450725	Price
.065	1/8	.195	1-1/2	.015	HC5450745	Price	HC5450750	Price	HC5450740	Price
.070	1/8	.210	1-1/2	.005	HC5450760	Price	HC5450765	Price	HC5450755	Price
.070	1/8	.210	1-1/2	.010	HC5450775	Price	HC5450780	Price	HC5450770	Price
.070	1/8	.210	1-1/2	.015	HC5450790	Price	HC5450795	Price	HC5450785	Price
.075	1/8	.225	1-1/2	.005	HC5450805	Price	HC5450810	Price	HC5450800	Price
.075	1/8	.225	1-1/2	.010	HC5450820	Price	HC5450825	Price	HC5450815	Price
.075	1/8	.225	1-1/2	.015	HC5450835	Price	HC5450840	Price	HC5450830	Price
.078	1/8	.234	1-1/2	.005	HC5450850	Price	HC5450855	Price	HC5450845	Price
.078	1/8	.234	1-1/2	.010	HC5450865	Price	HC5450870	Price	HC5450860	Price
.078	1/8	.234	1-1/2	.015	HC5450880	Price	HC5450885	Price	HC5450875	Price
.080	1/8	.240	1-1/2	.005	HC5450895	Price	HC5450900	Price	HC5450890	Price
.080	1/8	.240	1-1/2	.010	HC5450910	Price	HC5450915	Price	HC5450905	Price
.080	1/8	.240	1-1/2	.015	HC5450925	Price	HC5450930	Price	HC5450920	Price
.085	1/8	.255	1-1/2	.005	HC5450940	Price	HC5450945	Price	HC5450935	Price
.085	1/8	.255	1-1/2	.010	HC5450955	Price	HC5450960	Price	HC5450950	Price
.085	1/8	.255	1-1/2	.015	HC5450970	Price	HC5450975	Price	HC5450965	Price
.090	1/8	.270	1-1/2	.005	HC5450985	Price	HC5450990	Price	HC5450980	Price
.090	1/8	.270	1-1/2	.010	HC5451000	Price	HC5451005	Price	HC5450995	Price
.090	1/8	.270	1-1/2	.015	HC5451015	Price	HC5451020	Price	HC5451010	Price
.093	1/8	.279	1-1/2	.005	HC5451030	Price	HC5451035	Price	HC5451025	Price
.093	1/8	.279	1-1/2	.010	HC5451045	Price	HC5451050	Price	HC5451040	Price
.093	1/8	.279	1-1/2	.015	HC5451060	Price	HC5451065	Price	HC5451055	Price
.093	1/8	.279	1-1/2	.020	HC5451075	Price	HC5451080	Price	HC5451070	Price
.093	1/8	.279	1-1/2	.030	HC5451090	Price	-	-	HC5451085	Price
.095	1/8	.285	1-1/2	.005	HC5451100	Price	HC5451105	Price	HC5451095	Price
.095	1/8	.285	1-1/2	.010	HC5451115	Price	HC5451120	Price	HC5451110	Price
.095	1/8	.285	1-1/2	.015	HC5451130	Price	HC5451135	Price	HC5451125	Price
.100	1/8	.300	1-1/2	.005	HC5451145	Price	HC5451150	Price	HC5451140	Price
.100	1/8	.300	1-1/2	.010	HC5451160	Price	HC5451165	Price	HC5451155	Price
.100	1/8	.300	1-1/2	.015	HC5451175	Price	HC5451180	Price	HC5451170	Price
1/8	1/8	1/2	1-1/2	.005	HC5451190	Price	HC5451195	Price	HC5451185	Price
1/8	1/8	1/2	1-1/2	.010	HC5451205	Price	HC5451210	Price	HC5451200	Price
1/8	1/8	1/2	1-1/2	.015	HC5451220	Price	HC5451225	Price	HC5451215	Price
1/8	1/8	1/2	1-1/2	.020	HC5451235	Price	HC5451240	Price	HC5451230	Price
1/8	1/8	1/2	1-1/2	.030	HC5451250	Price	HC5451255	Price	HC5451245	Price
5/32	3/16	9/16	2	.010	HC5451265	Price	-	-	HC5451260	Price
5/32	3/16	9/16	2	.015	HC5451275	Price	-	-	HC5451270	Price
5/32	3/16	9/16	2	.030	HC5451285	Price	-	-	HC5451280	Price
3/16	3/16	5/8	2	.010	HC5451295	Price	HC5451300	Price	HC5451290	Price
3/16	3/16	5/8	2	.015	HC5451310	Price	HC5451315	Price	HC5451305	Price
3/16	3/16	5/8	2	.020	HC5451325	Price	-	-	HC5451320	Price
3/16	3/16	5/8	2	.030	HC5451335	Price	HC5451340	Price	HC5451330	Price
3/16	3/16	5/8	2	.045	HC5451350	Price	HC5451355	Price	HC5451345	Price
1/4	1/4	3/4	2-1/2	.010	HC5451365	Price	HC5451370	Price	HC5451360	Price
1/4	1/4	3/4	2-1/2	.015	HC5451380	Price	HC5451385	Price	HC5451375	Price
1/4	1/4	3/4	2-1/2	.020	HC5451395	Price	-	-	HC5451390	Price
1/4	1/4	3/4	2-1/2	.030	HC5451405	Price	HC5451410	Price	HC5451400	Price
1/4	1/4	3/4	2-1/2	.045	HC5451420	Price	HC5451425	Price	HC5451415	Price
1/4	1/4	3/4	2-1/2	.060	HC5451435	Price	HC5451440	Price	HC5451430	Price
3/8	3/8	1	2-1/2	.030	HC5451450	Price	-	-	HC5451445	Price
3/8	3/8	1	2-1/2	.060	HC5451460	Price	-	-	HC5451455	Price
1/2	1/2	1	3	.030	HC5451470	Price	-	-	HC5451465	Price
1/2	1/2	1	3	.060	HC5451480	Price	-	-	HC5451475	Price

RAPIDKUT® 4 Flute Solid Carbide Miniature End Mills

Ball Nose



- Center cutting
- 30° Helix
- Good for materials less than HRc 48
- Tolerance +/- .0005”

AlTiN coating is ideal for high temperature cutting operations in many materials such as titanium and nickel alloys, Co-Cr-Mo, stainless steel, alloy steels and cast iron

PCD (Amorphous DLC) Diamond coating for increased lubricity in non-ferrous materials

				Uncoated		AlTiN		DLC	
Size	Shank Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
.010	1/8	.015	1-1/2	HC4518190	Price	HC4710840	Price	HC4613530	Price
.010	1/8	.030	1-1/2	HC4518200	Price	HC4710850	Price	HC4613540	Price
.011	1/8	.017	1-1/2	HC4518210	Price	HC4710880	Price	-	-
.011	1/8	.033	1-1/2	HC4518220	Price	HC4710900	Price	-	-
.012	1/8	.018	1-1/2	HC4518230	Price	HC4710920	Price	-	-
.012	1/8	.036	1-1/2	HC4518240	Price	HC4710940	Price	-	-
.013	1/8	.020	1-1/2	HC4518250	Price	HC4710960	Price	-	-
.013	1/8	.039	1-1/2	HC4518260	Price	HC4710980	Price	-	-
.014	1/8	.021	1-1/2	HC4518270	Price	HC4711000	Price	-	-
.014	1/8	.042	1-1/2	HC4518280	Price	HC4711020	Price	-	-
.015	1/8	.023	1-1/2	HC4518290	Price	HC4711050	Price	HC4613620	Price
.015	1/8	.045	1-1/2	HC4518300	Price	HC4711040	Price	HC4613600	Price
.016	1/8	.024	1-1/2	HC4518310	Price	HC4711080	Price	-	-
.016	1/8	.048	1-1/2	HC4518320	Price	HC4711100	Price	-	-
.017	1/8	.026	1-1/2	HC4518330	Price	HC4711140	Price	-	-
.017	1/8	.051	1-1/2	HC4518340	Price	HC4711120	Price	-	-
.018	1/8	.027	1-1/2	HC4518350	Price	HC4711160	Price	-	-
.018	1/8	.054	1-1/2	HC4518360	Price	HC4711180	Price	-	-
.019	1/8	.029	1-1/2	HC4518370	Price	HC4711200	Price	-	-
.019	1/8	.057	1-1/2	HC4518380	Price	HC4711220	Price	-	-
.020	1/8	.030	1-1/2	HC4518390	Price	HC4711240	Price	HC4613680	Price
.020	1/8	.060	1-1/2	HC4518400	Price	HC4711250	Price	HC4613700	Price
.021	1/8	.032	1-1/2	HC4518410	Price	HC4711280	Price	-	-
.021	1/8	.063	1-1/2	HC4518420	Price	HC4711300	Price	-	-
.022	1/8	.033	1-1/2	HC4518430	Price	HC4711320	Price	-	-
.022	1/8	.066	1-1/2	HC4518440	Price	HC4711340	Price	-	-
.023	1/8	.035	1-1/2	HC4518450	Price	HC4711360	Price	-	-
.023	1/8	.069	1-1/2	HC4518460	Price	HC4711380	Price	-	-
.024	1/8	.036	1-1/2	HC4518470	Price	HC4711400	Price	-	-
.024	1/8	.072	1-1/2	HC4518480	Price	HC4711420	Price	-	-
.025	1/8	.038	1-1/2	HC4518490	Price	HC4711440	Price	HC4613760	Price
.025	1/8	.075	1-1/2	HC4518500	Price	HC4711450	Price	HC4613780	Price
.026	1/8	.039	1-1/2	HC4518510	Price	HC4711480	Price	-	-
.026	1/8	.078	1-1/2	HC4518520	Price	HC4711500	Price	-	-
.027	1/8	.041	1-1/2	HC4518530	Price	HC4711520	Price	-	-
.027	1/8	.081	1-1/2	HC4518540	Price	HC4711540	Price	-	-
.028	1/8	.042	1-1/2	HC4518550	Price	HC4711560	Price	-	-
.028	1/8	.084	1-1/2	HC4518560	Price	HC4711580	Price	-	-
.029	1/8	.044	1-1/2	HC4518570	Price	HC4711600	Price	-	-
.029	1/8	.087	1-1/2	HC4518580	Price	HC4711620	Price	-	-
.030	1/8	.045	1-1/2	HC4518590	Price	HC4711640	Price	HC4613840	Price
.030	1/8	.090	1-1/2	HC4518600	Price	HC4711650	Price	HC4613860	Price
.031	1/8	.047	1-1/2	HC4518610	Price	HC4711680	Price	HC4613880	Price
.031	1/8	.093	1-1/2	HC4518620	Price	HC4711690	Price	HC4613900	Price
.032	1/8	.048	1-1/2	HC4518630	Price	HC4711720	Price	-	-
.032	1/8	.096	1-1/2	HC4518640	Price	HC4711740	Price	-	-
.033	1/8	.050	1-1/2	HC4518650	Price	HC4711760	Price	-	-
.033	1/8	.099	1-1/2	HC4518660	Price	HC4711780	Price	-	-
.034	1/8	.051	1-1/2	HC4518670	Price	HC4711800	Price	-	-
.034	1/8	.102	1-1/2	HC4518680	Price	HC4711820	Price	-	-
.035	1/8	.053	1-1/2	HC4518690	Price	HC4711840	Price	HC4613920	Price
.035	1/8	.105	1-1/2	HC4518700	Price	HC4711850	Price	HC4613940	Price
.036	1/8	.054	1-1/2	HC4518710	Price	HC4711880	Price	-	-
.036	1/8	.108	1-1/2	HC4518720	Price	HC4711900	Price	-	-
.037	1/8	.056	1-1/2	HC4518730	Price	HC4711920	Price	-	-
.037	1/8	.111	1-1/2	HC4518740	Price	HC4711940	Price	-	-
.038	1/8	.057	1-1/2	HC4518750	Price	HC4711960	Price	-	-
.038	1/8	.114	1-1/2	HC4518760	Price	HC4711980	Price	-	-
.039	1/8	.059	1-1/2	HC4518770	Price	HC4712000	Price	-	-
.039	1/8	.117	1-1/2	HC4518780	Price	HC4712020	Price	-	-
.040	1/8	.060	1-1/2	HC4518790	Price	HC4712040	Price	HC4613960	Price
.040	1/8	.120	1-1/2	HC4518800	Price	HC4712050	Price	HC4613980	Price
.041	1/8	.123	1-1/2	HC4518810	Price	HC4712080	Price	-	-
.042	1/8	.126	1-1/2	HC4518820	Price	HC4712100	Price	-	-
.043	1/8	.129	1-1/2	HC4518830	Price	HC4712120	Price	-	-
.044	1/8	.132	1-1/2	HC4518840	Price	HC4712140	Price	-	-
.045	1/8	.068	1-1/2	HC4518850	Price	HC4712160	Price	HC4614010	Price
.045	1/8	.135	1-1/2	HC4518860	Price	HC4712180	Price	HC4614020	Price
.046	1/8	.138	1-1/2	HC4518870	Price	HC4712200	Price	-	-
.047	1/8	.071	1-1/2	HC4518880	Price	HC4712220	Price	HC4614050	Price
.047	1/8	.141	1-1/2	HC4518890	Price	HC4712230	Price	HC4614060	Price
.048	1/8	.144	1-1/2	HC4518900	Price	HC4712260	Price	-	-
.049	1/8	.147	1-1/2	HC4518910	Price	HC4712280	Price	-	-
.050	1/8	.075	1-1/2	HC4518920	Price	HC4712300	Price	HC4614090	Price
.050	1/8	.150	1-1/2	HC4518930	Price	HC4712320	Price	HC4614100	Price
.051	1/8	.153	1-1/2	HC4518940	Price	HC4712340	Price	-	-
.052	1/8	.156	1-1/2	HC4518950	Price	HC4712360	Price	-	-
.053	1/8	.159	1-1/2	HC4518960	Price	HC4712380	Price	-	-
.054	1/8	.162	1-1/2	HC4518970	Price	HC4712400	Price	-	-
.055	1/8	.083	1-1/2	HC4518980	Price	HC4712420	Price	HC4614130	Price
.055	1/8	.165	1-1/2	HC4518990	Price	HC4712440	Price	HC4614140	Price
.056	1/8	.168	1-1/2	HC4519000	Price	HC4712460	Price	-	-
.057	1/8	.171	1-1/2	HC4519010	Price	HC4712480	Price	-	-
.058	1/8	.174	1-1/2	HC4519020	Price	HC4712500	Price	-	-
.059	1/8	.177	1-1/2	HC4519030	Price	HC4712520	Price	-	-
.060	1/8	.090	1-1/2	HC4519040	Price	HC4712540	Price	HC4614170	Price
.060	1/8	.180	1-1/2	HC4519050	Price	HC4712560	Price	HC4614180	Price
.062	1/8	.093	1-1/2	HC4519060	Price	HC4712580	Price	HC4614220	Price
.065	1/8	.098	1-1/2	HC4519070	Price	HC4712610	Price	-	-
.065	1/8	.195	1-1/2	HC4519080	Price	HC4712630	Price	HC4614240	Price
.070	1/8	.105	1-1/2	HC4519090	Price	HC4712650	Price	-	-
.070	1/8	.210	1-1/2	HC4519100	Price	HC4712670	Price	HC4614270	Price
.075	1/8	.113	1-1/2	HC4519110	Price	HC4712690	Price	-	-
.075	1/8	.225	1-1/2	HC4519120	Price	HC4712710	Price	-	-
.078	1/8	.117	1-1/2	HC4519130	Price	HC4712740	Price	HC4614290	Price
.078	1/8	.234	1-1/2	HC4519140	Price	HC4712750	Price	HC4614310	Price
.080	1/8	.120	1-1/2	HC4519150	Price	HC4712770	Price	-	-
.080	1/8	.240	1-1/2	HC4519160	Price	HC4712790	Price	HC4614320	Price
.085	1/8	.128	1-1/2	HC4519170	Price	HC4712810	Price	-	-
.085	1/8	.255	1-1/2	HC4519180	Price	HC4712830	Price	-	-
.090	1/8	.135	1-1/2	HC4519190	Price	HC4712850	Price	-	-
.090	1/8	.270	1-1/2	HC4519200	Price	HC4712870	Price	HC4614360	Price
.093	1/8	.140	1-1/2	HC4519210	Price	HC4712900	Price	HC4614380	Price
.093	1/8	.279	1-1/2	HC4519220	Price	HC4712910	Price	HC4614410	Price
.095	1/8	.143	1-1/2	HC4519230	Price	HC4712930	Price	-	-
.095	1/8	.285	1-1/2	HC4519240	Price	HC4712950	Price	-	-
.100	1/8	.150	1-1/2	HC4519250	Price	HC4712970	Price	-	-
.100	1/8	.300	1-1/2	HC4519260	Price	HC4712990	Price	HC4614460	Price
.105	1/8	.315	1-1/2	HC4519270	Price	HC4713020	Price	-	-
.110	1/8	.330	1-1/2	HC4519280	Price	HC4713050	Price	-	-
.115	1/8	.345	1-1/2	HC4519290	Price	HC4713080	Price	-	-
.120	1/8	.360	1-1/2	HC4519300	Price	HC4713100	Price	-	-

RAPIDKUT® 4 Flute Spherical Ball Nose End Mills

Solid Carbide

- nACo coated for hard materials
- Made from premium submicron grain carbide



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach	Style	Order No.	Price
1/16	1/8	.040	1-1/2	.2590	Ball 220°	**HC5541535**	Price
3/32	1/8	.060	1-1/2	.2600	Ball 220°	**HC5541540**	Price
1/8	1/8	3/32	1-1/2	.2738	Ball 220°	**HC5541545**	Price
1/8	1/8	3/32	3	.2738	Ball 220°	**HC5541550**	Price
1/8	1/8	.084	3	1.0840	Ball 220°	**HC5541555**	Price
1/8	1/8	.084	3	1.5840	Ball 220°	**HC5541560**	Price
1/8	1/8	3/32	1-1/2	.5940	Ball 220°	**HC5541565**	Price
1/8	1/8	.107	1-1/2	.2320	Ball 270°	**HC5541570**	Price
1/8	1/8	.107	1-1/2	.6070	Ball 270°	**HC5541575**	Price
1/8	1/8	.107	3	1.1070	Ball 270°	**HC5541580**	Price
1/8	1/8	.107	1-1/2	.4820	Ball 270°	**HC5541585**	Price
1/8	1/8	.107	2	.7320	Ball 270°	**HC5541590**	Price
1/8	1/8	.107	2	.8570	Ball 270°	**HC5541595**	Price
1/8	1/8	.107	3	1.6070	Ball 270°	**HC5541605**	Price
1/8	1/8	.116	1-1/2	.2090	Ball 300°	**HC5541610**	Price
1/8	1/8	.107	3	1.3570	Ball 270°	**HC5541600**	Price
1/8	1/8	.116	1-1/2	.3970	Ball 300°	**HC5541615**	Price
9/64	3/16	.119	2	.3690	Ball 270°	**HC5541620**	Price
9/64	3/16	.119	2	.6190	Ball 270°	**HC5541625**	Price
5/32	3/16	.145	2	.3950	Ball 300°	**HC5541630**	Price
3/16	3/16	9/64	2	.3356	Ball 220°	**HC5541635**	Price
3/16	3/16	9/64	3	.3356	Ball 220°	**HC5541640**	Price
3/16	3/16	.126	3	1.1260	Ball 220°	**HC5541645**	Price
3/16	3/16	9/64	2	.6410	Ball 220°	**HC5541650**	Price
3/16	3/16	.160	2	.2850	Ball 270°	**HC5541655**	Price
3/16	3/16	.160	2	.6600	Ball 270°	**HC5541660**	Price
3/16	3/16	.160	2	.5350	Ball 270°	**HC5541665**	Price
3/16	3/16	.160	2	.9100	Ball 270°	**HC5541670**	Price
3/16	3/16	.160	3	1.1600	Ball 270°	**HC5541675**	Price
3/16	3/16	.160	3	1.4100	Ball 270°	**HC5541680**	Price
3/16	3/16	.160	3	1.6600	Ball 270°	**HC5541685**	Price
3/16	3/16	.160	3	1.9100	Ball 270°	**HC5541690**	Price
3/16	3/16	.174	2	.2990	Ball 300°	**HC5541695**	Price
3/16	3/16	.174	2	.6110	Ball 300°	**HC5541700**	Price
1/4	1/4	3/16	2-1/2	.3975	Ball 220°	**HC5541705**	Price
1/4	1/4	3/16	4	.3975	Ball 220°	**HC5541710**	Price
1/4	1/4	.168	4	1.6680	Ball 220°	**HC5541715**	Price
1/4	1/4	.168	4	2.4180	Ball 220°	**HC5541720**	Price
1/4	1/4	3/16	2-1/2	.9380	Ball 220°	**HC5541725**	Price
1/4	1/4	.213	2-1/2	.5880	Ball 270°	**HC5541730**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach	Style	Order No.	Price
1/4	1/4	.213	2-1/2	.9630	Ball 270°	**HC5541735**	Price
1/4	1/4	.213	2-1/2	.7130	Ball 270°	**HC5541745**	Price
1/4	1/4	.213	4	1.7130	Ball 270°	**HC5541740**	Price
1/4	1/4	.213	2-1/2	.8380	Ball 270°	**HC5541750**	Price
1/4	1/4	.213	2-1/2	1.3380	Ball 270°	**HC5541755**	Price
1/4	1/4	.213	4	2.2130	Ball 270°	**HC5541760**	Price
1/4	1/4	.213	4	2.4630	Ball 270°	**HC5541765**	Price
1/4	1/4	.213	4	2.7130	Ball 270°	**HC5541770**	Price
1/4	1/4	.233	2-1/2	.4200	Ball 300°	**HC5541775**	Price
1/4	1/4	.233	2-1/2	.8580	Ball 300°	**HC5541780**	Price
5/16	5/16	.210	2-1/2	.9600	Ball 220°	**HC5541785**	Price
5/16	5/16	.210	4	1.7100	Ball 220°	**HC5541790**	Price
5/16	5/16	.266	2-1/2	.6410	Ball 270°	**HC5541795**	Price
5/16	5/16	.266	2-1/2	1.0160	Ball 270°	**HC5541805**	Price
5/16	5/16	.266	4	1.7660	Ball 270°	**HC5541800**	Price
5/16	5/16	.266	4	1.3910	Ball 270°	**HC5541810**	Price
5/16	5/16	.266	4	2.2660	Ball 270°	**HC5541815**	Price
5/16	5/16	.266	4	2.5160	Ball 270°	**HC5541820**	Price
5/16	5/16	.291	2-1/2	.5410	Ball 300°	**HC5541825**	Price
5/16	5/16	.291	2-1/2	.7280	Ball 300°	**HC5541830**	Price
3/8	3/8	9/32	2-1/2	.5223	Ball 220°	**HC5541835**	Price
3/8	3/8	9/32	4	.5223	Ball 220°	**HC5541840**	Price
3/8	3/8	.252	4	1.7520	Ball 220°	**HC5541845**	Price
3/8	3/8	.252	4	2.5020	Ball 220°	**HC5541850**	Price
3/8	3/8	.281	2-1/2	1.0310	Ball 220°	**HC5541855**	Price
3/8	3/8	.320	2-1/2	.5070	Ball 270°	**HC5541860**	Price
3/8	3/8	.320	2-1/2	1.0700	Ball 270°	**HC5541865**	Price
3/8	3/8	.320	4	1.8200	Ball 270°	**HC5541870**	Price
3/8	3/8	.320	4	2.3200	Ball 270°	**HC5541875**	Price
3/8	3/8	.349	2-1/2	.5990	Ball 300°	**HC5541880**	Price
3/8	3/8	.349	3	1.3490	Ball 300°	**HC5541885**	Price
1/2	1/2	3/8	3	.6460	Ball 220°	**HC5541890**	Price
1/2	1/2	3/8	6	.6460	Ball 220°	**HC5541895**	Price
1/2	1/2	.336	3	1.3360	Ball 220°	**HC5541905**	Price
1/2	1/2	.336	6	2.3360	Ball 220°	**HC5541900**	Price
1/2	1/2	.427	3	.9270	Ball 270°	**HC5541910**	Price
1/2	1/2	.427	6	1.9270	Ball 270°	**HC5541915**	Price
1/2	1/2	.466	3	.7780	Ball 300°	**HC5541920**	Price
1/2	1/2	.466	4	1.7160	Ball 300°	**HC5541925**	Price

RAPIDKUT® 4 Flute Solid Carbide End Mills

Ball Nose

- CVD coated



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
.015	1/8	.023	1-1/2	**HC5350015**	Price
.015	1/8	.045	1-1/2	**HC5350017**	Price
.020	1/8	.030	1-1/2	**HC5350020**	Price
.020	1/8	.060	1-1/2	**HC5350025**	Price
1/32	1/8	.047	1-1/2	**HC5350031**	Price
1/32	1/8	.093	1-1/2	**HC5350033**	Price
.040	1/8	.120	1-1/2	**HC5350040**	Price
3/64	1/8	.071	1-1/2	**HC5350046**	Price
3/64	1/8	.141	1-1/2	**HC5350048**	Price
.050	1/8	.075	1-1/2	**HC5350050**	Price
.050	1/8	.150	1-1/2	**HC5350055**	Price
.060	1/8	.090	1-1/2	**HC5350060**	Price
.060	1/8	.180	1-1/2	**HC5350063**	Price
1/16	1/8	.093	1-1/2	**HC5350065**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/8	.186	1-1/2	**HC5350067**	Price
5/64	1/8	.117	1-1/2	**HC5350078**	Price
5/64	1/8	.234	1-1/2	**HC5350080**	Price
3/32	1/8	.140	1-1/2	**HC5350093**	Price
3/32	1/8	.279	1-1/2	**HC5350095**	Price
.100	1/8	.150	1-1/2	**HC5350100**	Price
.100	1/8	.300	1-1/2	**HC5350105**	Price
1/8	1/8	.500	1-1/2	**HC5350125**	Price
.156	3/16	.470	2	**HC5350156**	Price
3/16	3/16	.625	2	**HC5350187**	Price
1/4	1/4	.750	2-1/2	**HC5350250**	Price
5/16	5/16	.8125	2-1/2	**HC5350312**	Price
3/8	3/8	1.000	2-1/2	**HC5350375**	Price

Metric 2 Flute Rib Processing Ball Nose WXL® Coated Carbide End Mills

- For rib processing in non-ferrous and hardened steels
- WXL® coated, enhanced geometry and substrate EXOCARB
- Radius tolerance ±0.005mm
- OSG List #3790



Dia.	Shank Dia.	Flute Length	OAL	Neck Dia.	Neck Length	Order No.	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	3mm	**TP483110530**	Price
0.8mm	4mm	0.6mm	45mm	0.75mm	8mm	**TP483110880**	Price
1mm	4mm	0.8mm	45mm	0.95mm	5mm	**TP483111050**	Price
1mm	4mm	0.8mm	45mm	0.95mm	6mm	**TP483111060**	Price
1mm	4mm	0.8mm	45mm	0.95mm	8mm	**TP483111080**	Price
1mm	4mm	0.8mm	45mm	0.95mm	10mm	**TP483111100**	Price
1mm	4mm	0.8mm	45mm	0.95mm	12mm	**TP483111112**	Price
1mm	4mm	0.8mm	50mm	0.95mm	16mm	**TP483111116**	Price
1mm	4mm	0.8mm	55mm	0.95mm	20mm	**TP483111120**	Price
1.5mm	4mm	1.2mm	45mm	1.45mm	8mm	**TP483111580**	Price
1.5mm	4mm	1.2mm	45mm	1.45mm	12mm	**TP483111612**	Price
1.5mm	4mm	1.2mm	55mm	1.45mm	16mm	**TP483111616**	Price
1.6mm	4mm	1.3mm	45mm	1.55mm	8mm	**TP483111680**	Price
1.6mm	4mm	1.3mm	50mm	1.55mm	16mm	**TP483111716**	Price
2mm	4mm	1.6mm	45mm	1.95mm	8mm	**TP483112080**	Price
2mm	4mm	1.6mm	45mm	1.95mm	10mm	**TP483112100**	Price
2mm	4mm	1.6mm	45mm	1.95mm	12mm	**TP483112112**	Price
2mm	4mm	1.6mm	50mm	1.95mm	16mm	**TP483112116**	Price
2mm	4mm	1.6mm	55mm	1.95mm	20mm	**TP483112120**	Price
3mm	6mm	2.4mm	50mm	2.85mm	10mm	**TP483123100**	Price
3mm	6mm	2.4mm	55mm	2.85mm	16mm	**TP483123116**	Price
3mm	6mm	2.4mm	60mm	2.85mm	20mm	**TP483123120**	Price
3mm	6mm	2.4mm	80mm	2.85mm	35mm	**TP483123135**	Price
4mm	6mm	3.2mm	60mm	3.85mm	16mm	**TP483124116**	Price
6mm	6mm	4.8mm	80mm	5.85mm	30mm	**TP483126130**	Price

PREMIER HP HIGH PERFORMANCE 2 Flute Rib Processing End Mills Ball Nose

- High speed cutting and finish milling with high feed rate
- AlTiN coating provides higher wear resistance when dry-milling
- Suitable for mold and die work
- Shank tolerance: 0 ~ -.0003”
- O.D. tolerance: .0005” ~ -.0015”



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Effective Length (in.)	Neck Dia.	Order No.	Price
1/32	1/8	3/64	1-7/8	3/16	.029	**DD25EM96700201**	Price
1/32	1/8	3/64	1-7/8	9/32	.029	**DD25EM96700202**	Price
3/64	1/8	1/16	1-7/8	1/4	.045	**DD25EM96700302**	Price
3/64	1/8	1/16	1-7/8	15/32	.045	**DD25EM96700303**	Price
3/64	1/8	1/16	1-7/8	3/16	.045	**DD25EM96700301**	Price
1/16	1/8	3/32	1-7/8	15/32	.060	**DD25EM96700402**	Price
1/16	1/8	3/32	1-7/8	19/32	.060	**DD25EM96700403**	Price
1/16	1/8	3/32	1-7/8	9/32	.060	**DD25EM96700401**	Price
5/64	1/8	1/8	1-7/8	15/32	.076	**DD25EM96700501**	Price
5/64	1/8	1/8	1-7/8	19/32	.076	**DD25EM96700502**	Price
3/32	1/8	9/64	1-7/8	15/32	.090	**DD25EM96700601**	Price
3/32	1/8	9/64	1-7/8	19/32	.090	**DD25EM96700602**	Price
1/8	1/4	3/16	2-1/8	17/32	.120	**DD25EM96700801**	Price
1/8	1/4	3/16	2-1/8	23/32	.120	**DD25EM96700802**	Price

PREMIER HP HIGH PERFORMANCE 2 Flute Rib Processing End Mills

- High speed cutting and finish milling with high feed rate
- AlTiN coating provides higher wear resistance when dry-milling
- Suitable for mold and die work
- Shank tolerance: 0 ~ -.0003”
- O.D. tolerance: .0005” ~ -.0015”



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Effective Length (in.)	Neck Dia.	Order No.	Price
1/32	1/8	3/64	1-7/8	3/16	.029	**DD25EM96600201**	Price
1/32	1/8	3/64	1-7/8	9/32	.029	**DD25EM96600202**	Price
3/64	1/8	1/16	1-7/8	1/4	.045	**DD25EM96600302**	Price
3/64	1/8	1/16	1-7/8	15/32	.045	**DD25EM96600303**	Price

Metric 2 Flute Rib Processing WXS® Coated Carbide End Mills EXOCARB

- For rib processing hardened steels up to 70 HRC
- WXS® coated, higher speeds & feeds
- Radius tolerance ±0.005mm
- OSG List #4590



Dia.	Shank Dia.	Flute Length	OAL	Neck Dia.	Neck Length	Order No.	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	1mm	**TP483050500**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	1.5mm	**TP483050501**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	2mm	**TP483050502**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	2.5mm	**TP483049952**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	3mm	**TP483050503**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	3.5mm	**TP483049953**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	4mm	**TP483050504**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	4.5mm	**TP483049954**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	5mm	**TP483050505**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	6mm	**TP483050506**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	8mm	**TP483050508**	Price
0.5mm	4mm	0.4mm	45mm	0.45mm	10mm	**TP483050510**	Price
0.6mm	4mm	0.5mm	45mm	0.55mm	1.2mm	**TP483050601**	Price
0.6mm	4mm	0.5mm	45mm	0.55mm	2.5mm	**TP483049962**	Price
0.6mm	4mm	0.5mm	45mm	0.55mm	2mm	**TP483050602**	Price
0.6mm	4mm	0.5mm	45mm	0.55mm	3mm	**TP483050603**	Price
0.6mm	4mm	0.5mm	45mm	0.55mm	3.5mm	**TP483049963**	Price
0.6mm	4mm	0.5mm	45mm	0.55mm	4mm	**TP483050604**	Price
0.6mm	4mm	0.5mm	45mm	0.55mm	5mm	**TP483050605**	Price
0.8mm	4mm	0.6mm	45mm	0.75mm	3mm	**TP483050803**	Price
0.8mm	4mm	0.6mm	45mm	0.75mm	8mm	**TP483050808**	Price
0.8mm	4mm	0.6mm	50mm	0.75mm	12mm	**TP483050812**	Price
1mm	4mm	0.8mm	45mm	0.95mm	3mm	**TP483051003**	Price
1mm	4mm	0.8mm	45mm	0.95mm	8mm	**TP483051008**	Price
1mm	4mm	0.8mm	45mm	0.95mm	10mm	**TP483051010**	Price
1mm	4mm	0.8mm	45mm	0.95mm	12mm	**TP483051012**	Price
1mm	4mm	0.8mm	50mm	0.95mm	14mm	**TP483051014**	Price
1mm	4mm	0.8mm	50mm	0.95mm	16mm	**TP483051016**	Price
1mm	4mm	0.8mm	55mm	0.95mm	18mm	**TP483051018**	Price
1.5mm	4mm	1.2mm	45mm	1.45mm	8mm	**TP483051508**	Price
1.5mm	4mm	1.2mm	45mm	1.45mm	12mm	**TP483051512**	Price
1.5mm	4mm	1.2mm	50mm	1.45mm	14mm	**TP483051514**	Price
1.6mm	4mm	1.3mm	45mm	1.55mm	12mm	**TP483051612**	Price
1.6mm	4mm	1.3mm	50mm	1.55mm	16mm	**TP483051616**	Price
2mm	4mm	1.6mm	45mm	1.95mm	6mm	**TP483052006**	Price
2mm	4mm	1.6mm	45mm	1.95mm	8mm	**TP483052008**	Price
2mm	4mm	1.6mm	45mm	1.95mm	10mm	**TP483052010**	Price
2mm	4mm	1.6mm	45mm	1.95mm	12mm	**TP483052012**	Price
2mm	4mm	1.6mm	55mm	1.95mm	20mm	**TP483052020**	Price
2.5mm	4mm	2mm	45mm	2.35mm	10mm	**TP483052510**	Price
2.5mm	4mm	2mm	65mm	2.35mm	25mm	**TP483052525**	Price
3mm	6mm	2.4mm	50mm	2.85mm	6mm	**TP483053006**	Price
3mm	6mm	2.4mm	50mm	2.85mm	8mm	**TP483053008**	Price
3mm	6mm	2.4mm	55mm	2.85mm	12mm	**TP483053012**	Price
3mm	6mm	2.4mm	60mm	2.85mm	20mm	**TP483053020**	Price
3mm	6mm	2.4mm	90mm	2.85mm	40mm	**TP483053040**	Price
4mm	6mm	3.2mm	60mm	3.85mm	8mm	**TP483054008**	Price
4mm	6mm	3.2mm	70mm	3.85mm	25mm	**TP483054025**	Price
5mm	6mm	4mm	70mm	4.85mm	25mm	**TP483055025**	Price

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Effective Length (in.)	Neck Dia.	Order No.	Price
3/64	1/8	1/16	1-7/8	3/16	.045	**DD25EM96600301**	Price
1/16	1/8	3/32	1-7/8	11/32	.060	**DD25EM96600402**	Price
1/16	1/8	3/32	1-7/8	15/32	.060	**DD25EM96600403**	Price
1/16	1/8	3/32	1-7/8	19/32	.060	**DD25EM96600404**	Price
1/16	1/8	3/32	1-7/8	9/32	.060	**DD25EM96600401**	Price
5/64	1/8	1/8	1-7/8	15/32	.076	**DD25EM96600501**	Price
5/64	1/8	1/8	1-7/8	19/32	.076	**DD25EM96600502**	Price
3/32	1/8	9/64	1-7/8	15/32	.090	**DD25EM96600601**	Price
3/32	1/8	9/64	1-7/8	19/32	.090	**DD25EM96600602**	Price
1/8	1/4	3/16	2-1/8	17/32	.120	**DD25EM96600801**	Price
1/8	1/4	3/16	2-1/8	23/32	.120	**DD25EM96600802**	Price

EXOCARB® WXS® Carbide End Mills

2 Flute



- Reduced neck
- OSG List No. 4592

Size	Shank Dia.	Neck Dia.	Neck Length	Flute Length	OAL	Order No.	Price
0.4mm	4mm	0.37mm	-	0.3mm	50mm	**TP483100403**	Price
0.4mm	4mm	0.37mm	3 mm	0.3mm	50mm	**TP483100404**	Price
0.4mm	4mm	0.37mm	4 mm	0.3mm	50mm	**TP483100405**	Price
0.5mm	4mm	0.46mm	2 mm	0.4mm	50mm	**TP483100508**	Price
0.5mm	4mm	0.46mm	-	0.4mm	50mm	**TP483100510**	Price
0.5mm	4mm	0.46mm	6 mm	0.4mm	50mm	**TP483100512**	Price
1mm	4mm	0.95mm	10 mm	0.8mm	50mm	**TP483101004**	Price
1mm	4mm	0.95mm	12 mm	0.8mm	50mm	**TP483101005**	Price
1mm	4mm	0.95mm	4 mm	0.8mm	50mm	**TP483101006**	Price
1mm	4mm	0.95mm	6 mm	0.8mm	50mm	**TP483101007**	Price
1mm	4mm	0.95mm	8 mm	0.8mm	50mm	**TP483101008**	Price
1mm	4mm	0.95mm	10 mm	0.8mm	50mm	**TP483101009**	Price
1mm	4mm	0.95mm	4 mm	0.8mm	50mm	**TP483101011**	Price
1mm	4mm	0.95mm	6 mm	0.8mm	50mm	**TP483101012**	Price
1mm	4mm	0.95mm	8 mm	0.8mm	50mm	**TP483101013**	Price
1mm	4mm	0.95mm	10 mm	0.8mm	50mm	**TP483101014**	Price
1mm	4mm	0.95mm	16 mm	0.8mm	50mm	**TP483101016**	Price
1mm	4mm	0.95mm	20 mm	0.8mm	50mm	**TP483101017**	Price
1mm	4mm	0.95mm	4 mm	0.8mm	50mm	**TP483101018**	Price
1mm	4mm	0.95mm	8 mm	0.8mm	50mm	**TP483101020**	Price
1mm	4mm	0.95mm	12 mm	0.8mm	50mm	**TP483101022**	Price
1.5mm	4mm	1.45mm	6 mm	1.2mm	50mm	**TP483101501**	Price
1.5mm	4mm	1.45mm	8 mm	1.2mm	50mm	**TP483101502**	Price
1.5mm	4mm	1.45mm	10 mm	1.2mm	50mm	**TP483101503**	Price
1.5mm	4mm	1.45mm	16 mm	1.2mm	50mm	**TP483101505**	Price
1.5mm	4mm	1.45mm	-	1.2mm	50mm	**TP483101506**	Price
1.5mm	4mm	1.45mm	8 mm	1.2mm	50mm	**TP483101507**	Price
1.5mm	4mm	1.45mm	12 mm	1.2mm	50mm	**TP483101509**	Price
2mm	4mm	1.95mm	16 mm	1.6mm	60mm	**TP483102004**	Price
2mm	4mm	1.95mm	20 mm	1.6mm	60mm	**TP483102011**	Price
2mm	4mm	1.95mm	25 mm	1.6mm	70mm	**TP483102012**	Price
2mm	4mm	1.95mm	8 mm	1.6mm	50mm	**TP483102013**	Price
2mm	4mm	1.95mm	10 mm	1.6mm	50mm	**TP483102014**	Price
2mm	4mm	1.95mm	16 mm	1.6mm	60mm	**TP483102016**	Price
2mm	4mm	1.95mm	8 mm	1.6mm	50mm	**TP483102019**	Price
2mm	4mm	1.95mm	-	1.6mm	50mm	**TP483102020**	Price
2mm	4mm	1.95mm	12 mm	1.6mm	50mm	**TP483102021**	Price
2mm	4mm	1.95mm	16 mm	1.6mm	60mm	**TP483102022**	Price
2mm	4mm	1.95mm	20 mm	1.6mm	60mm	**TP483102023**	Price
2mm	4mm	1.95mm	25 mm	1.6mm	70mm	**TP483102024**	Price
2mm	4mm	1.95mm	25 mm	1.6mm	70mm	**TP483102006**	Price
2.5mm	4mm	2.4mm	20 mm	2.2mm	60mm	**TP483102502**	Price
2.5mm	4mm	2.4mm	30 mm	2.2mm	70mm	**TP483102503**	Price
3mm	6mm	2.85mm	8 mm	2.5mm	60mm	**TP483103001**	Price
3mm	6mm	2.85mm	12 mm	2.5mm	60mm	**TP483103002**	Price
3mm	6mm	2.85mm	16 mm	2.5mm	60mm	**TP483103003**	Price
3mm	6mm	2.85mm	20 mm	2.5mm	70mm	**TP483103004**	Price
3mm	6mm	2.85mm	25 mm	2.5mm	70mm	**TP483103005**	Price
3mm	6mm	2.85mm	20 mm	2.5mm	70mm	**TP483103010**	Price
3mm	6mm	2.85mm	25 mm	2.5mm	70mm	**TP483103011**	Price
3mm	6mm	2.85mm	30 mm	2.5mm	70mm	**TP483103018**	Price
3mm	6mm	2.85mm	35 mm	2.5mm	80mm	**TP483103019**	Price

MICRO 100® Solid Carbide Ball End Mold Making End Mills

2 Flute • AlTiN Coated



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reduced Neck Dia. (in.)	Reduced Neck Length (in.)	Order No.	Price
1mm	6mm	-	50mm	.95	8mm	**GE45MMBM0108X**	Price
1mm	6mm	1mm	57mm	.95mm	11mm	**GE45MMBM01011X**	Price
1mm	6mm	-	50mm	.95mm	15mm	**GE45MMBM01015X**	Price
1mm	6mm	1mm	57mm	.95mm	20mm	**GE45MMBM01020X**	Price
1.5mm	6mm	1.5mm	57mm	1.45mm	7mm	**GE45MMBM0157X**	Price
1.5mm	6mm	1.5mm	57mm	1.45mm	15mm	**GE45MMBM01515X**	Price
1.5mm	6mm	1.5mm	57mm	1.45mm	20mm	**GE45MMBM01520X**	Price
2mm	6mm	2mm	57mm	1.9mm	7mm	**GE45MMBM0207X**	Price
2mm	6mm	2mm	57mm	1.9mm	15mm	**GE45MMBM02015X**	Price
2mm	6mm	2mm	57mm	1.9mm	20mm	**GE45MMBM02020X**	Price
3mm	6mm	3mm	57mm	2.9mm	12mm	**GE45MMBM03012X**	Price
3mm	6mm	3mm	57mm	2.9mm	15mm	**GE45MMBM03015X**	Price

RAPIDKUT® 3 Flute Solid Carbide 35° Helix End Mills



Center Cutting • Radius End

- Special helix for difficult to machine materials such as stainless or inconel
- Small corner radius for added strength and smoother cutting action
- Made from premium submicron grain carbide
- Tolerances +.000/-.002”

					Uncoated		AlTiN	
Dia. (in.)	Radius	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	.010	1/8	1/2	1-1/2	**DD8116709**	Price	**DD8156709**	Price
5/32	.010	3/16	9/16	2	**DD8117722**	Price	**DD8157722**	Price
3/16	.010	3/16	9/16	2	**DD8117723**	Price	**DD8157723**	Price
7/32	.020	1/4	3/4	2-1/2	**DD8117724**	Price	**DD8157724**	Price
1/4	.020	1/4	3/4	2-1/2	**DD8116702**	Price	**DD8156702**	Price
5/16	.020	5/16	13/16	2-1/2	**DD8117727**	Price	**DD8157727**	Price
3/8	.020	3/8	1	2-1/2	**DD8117729**	Price	**DD8157729**	Price
7/16	.020	7/16	1	2-3/4	**DD8117730**	Price	**DD8157730**	Price
1/2	.035	1/2	1-1/4	3	**DD8116708**	Price	**DD8156708**	Price
5/8	.035	5/8	1-5/8	3-1/2	**DD8117732**	Price	**DD8157732**	Price
3/4	.035	3/4	1-5/8	4	**DD8117733**	Price	**DD8157733**	Price

RAPIDKUT® 3 Flute Solid Carbide 60° Helix End Mills



Center Cutting

- Used for stainless and high temperature alloy materials
- High helix provides excellent shearing action
- Made from premium submicron grain carbide
- Cutting diameter tolerance: +.000/-.002”

				Uncoated		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
3/16	3/16	5/8	2	**DD8110797**	Price	**DD8150797**	Price
1/4	1/4	3/4	2-1/2	**DD8114238**	Price	**DD8154238**	Price
5/16	5/16	13/16	2-1/2	**DD8114240**	Price	**DD8154240**	Price
3/8	3/8	1	2-1/2	**DD8114242**	Price	**DD8154242**	Price
7/16	7/16	1	3	**DD8114246**	Price	**DD8154246**	Price
1/2	1/2	1	3	**DD8114248**	Price	**DD8154248**	Price
9/16	9/16	1-1/4	3-1/2	**DD8114250**	Price	**DD8154250**	Price
5/8	5/8	1-1/4	3-1/2	**DD8114252**	Price	**DD8154252**	Price
3/4	3/4	1-1/2	4	**DD8114254**	Price	**DD8154254**	Price
1	1	1-1/2	4	**DD8114256**	Price	**DD8154256**	Price

MICRO 100® Solid Carbide Mold Making End Mills

2 Flute • AlTiN Coated



Size (in)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reduced Neck Dia. (in.)	Order No.	Price
1mm	6mm	1mm	57mm	.95mm	**GE45MMRM0105X**	Price
1mm	6mm	1mm	50mm	.95mm	**GE45MMRM0108X**	Price
1mm	6mm	1mm	57mm	.95mm	**GE45MMRM01010X**	Price
1mm	6mm	1mm	50mm	.95mm	**GE45MMRM01012X**	Price
1mm	6mm	1mm	57mm	.95mm	**GE45MMRM01020X**	Price
1.5mm	6mm	1.5mm	57mm	1.45mm	**GE45MMRM0157X**	Price
1.5mm	6mm	1.5mm	57mm	1.45mm	**GE45MMRM01515X**	Price
1.5mm	6mm	1.5mm	57mm	1.45mm	**GE45MMRM01525X**	Price
2mm	5mm	2mm	57mm	1.9mm	**GE45MMRM0207X**	Price
2mm	5mm	2mm	57mm	1.9mm	**GE45MMRM02015X**	Price
2mm	5mm	2mm	57mm	1.9mm	**GE45MMRM02030X**	Price
3mm	6mm	3mm	57mm	2.9mm	**GE45MMRM0308X**	Price
3mm	6mm	3mm	57mm	2.9mm	**GE45MMRM03015X**	Price
3mm	6mm	3mm	57mm	2.9mm	**GE45MMRM03030X**	Price
4mm	6mm	4mm	57mm	3.8mm	**GE45MMRM0409X**	Price
4mm	6mm	4mm	57mm	3.8mm	**GE45MMRM04015X**	Price
4mm	6mm	4mm	57mm	3.8mm	**GE45MMRM04030X**	Price
5mm	6mm	5mm	57mm	4.8mm	**GE45MMRM05030X**	Price
6mm	6mm	6mm	57mm	5.8mm	**GE45MMRM06011X**	Price

RAPIDKUT® 2 Flute Solid Carbide Spherical Ball Nose End Mills

Center Cutting • nACO Coated for Hardened Steel

- High performance ball nose plus end mills are used in the mold industry and have a full 220° arc cutting capability
- Tools are stocked with a coating to optimize cutting performance
- Made from premium submicron grain carbide
- Cutting diameter tolerance: +.000/-.002”



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/8	.040	1-1/2	DD8182231	Price
3/32	1/8	.060	1-1/2	DD8182233	Price
1/8	1/8	3/32	1-1/2	DD8180041	Price
1/8	1/8	3/32	3	DD8180321	Price
3/16	3/16	9/64	3	DD8180323	Price
1/4	1/4	3/16	4	DD8180325	Price
3/8	3/8	9/32	2-1/2	DD8180047	Price
3/8	3/8	9/32	4	DD8180327	Price
1/2	1/2	3/8	3	DD8180049	Price
1/2	1/2	3/8	6	DD8180329	Price

RAPIDKUT® Solid Carbide nACo Coated End Mills



2 Flute • For Hardened Steel

- Short flute length with reduced neck for maximum rigidity
- nACo coated for durability
- Use air mist coolant for materials harder than Rc40
- Made from premium submicron grain carbide
- Cutting diameter tolerance: +.000/-.002”

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/8	1/16	3	DD8113485	Price
3/32	1/8	3/32	3	DD8113486	Price
1/8	1/8	1/8	3	DD8113136	Price
3/16	3/16	3/16	3	DD8113137	Price
1/4	1/4	1/4	3	DD8113138	Price
5/16	5/16	5/16	3	DD8113139	Price
3/8	3/8	3/8	4	DD8113140	Price
1/2	1/2	1/2	4	DD8113141	Price

Metric 2 Flute Ball Nose WXL® Coated Carbide End Mills EXOCARB®

- For profile milling in non-ferrous and hardened steels
- WXL® coated
- Tolerance for milling diameter: less than 6 +0.005mm — greater than 6 +0.010mm
- OSG List #3710



Dia.	Shank Dia.	Flute Length	OAL	Order No.	Price
0.4mm	4mm	0.8mm	40mm	TP483105040	Price
0.5mm	4mm	1.1mm	40mm	TP483105050	Price
0.6mm	4mm	1.1mm	40mm	TP483105060	Price
0.8mm	4mm	2.0mm	40mm	TP483105080	Price
1.0mm	4mm	1.5mm	50mm	TP483105100	Price
1.2mm	4mm	3.0mm	50mm	TP483105120	Price
2.0mm	6mm	5.0mm	50mm	TP483106200	Price
3.0mm	6mm	8.0mm	60mm	TP483106301	Price
5.0mm	6mm	8.0mm	80mm	TP483106500	Price
6.0mm	6mm	12.0mm	90mm	TP483106601	Price
8.0mm	8mm	14.0mm	100mm	TP483106621	Price
10.0mm	10mm	18.0mm	100mm	TP483106641	Price
12.0mm	12mm	18.0mm	110mm	TP483106660	Price

Metric 2 Flute Ball Nose WXS® Coated Carbide End Mills EXOCARB®

- For profile milling in hardened steels up to 70 HRC
- WXS® coated, higher speeds & feeds
- Tolerance for milling diamater: R<6 +0.005mm; R>6 +0.010mm
- OSG List #4510



Dia.	Shank Dia.	Flute Length	OAL	Neck Dia.	Neck Length	Order No.	Price
1mm	4mm	1mm	50mm	0.95mm	2mm	TP483041410	Price
1.5mm	4mm	1.5mm	50mm	1.45mm	3mm	TP483041415	Price
2mm	6mm	2mm	50mm	1.95mm	4mm	TP483041420	Price
3mm	6mm	3mm	60mm	2.85mm	6mm	TP483041430	Price
4mm	4mm	4mm	60mm	3.85mm	8mm	TP483041441	Price
4mm	6mm	4mm	70mm	3.85mm	8mm	TP483041440	Price
5mm	6mm	5mm	80mm	4.85mm	10mm	TP483041450	Price
6mm	6mm	9mm	90mm	-	-	TP483041460	Price
8mm	8mm	12mm	100mm	-	-	TP483041480	Price
10mm	10mm	15mm	100mm	-	-	TP483041500	Price
12mm	12mm	18mm	110mm	-	-	TP483041520	Price

TuffCut® DM 2 Flute High Performance End Mills



Metric Sizes

- Designed for high productivity milling of hard and difficult to cut materials Rc 45-60
- Coated with ALtima® 52 for materials Rc 52 and above
- 12° Helix, ball end
- M. A. Ford Series #156

Size	Shank Dia.	Flute Length	OAL	Neck Length	Order No.	Price
0.5mm	6mm	0.5mm	63mm	0.5mm	DD1515602	Price
1mm	6mm	1mm	63mm	1mm	DD1515616	Price
1mm	6mm	1mm	63mm	6mm	DD1515618	Price
1mm	6mm	1mm	63mm	8mm	DD1515620	Price
1mm	6mm	1mm	63mm	10mm	DD1515622	Price
1mm	6mm	1mm	63mm	16mm	DD1515626	Price
1mm	6mm	1mm	63mm	12mm	DD1515624	Price
1.5mm	6mm	1.5mm	63mm	1.5mm	DD1515628	Price
2mm	6mm	2mm	63mm	8mm	DD1515634	Price
2mm	6mm	2mm	63mm	20mm	DD1515638	Price
2mm	6mm	2mm	63mm	12mm	DD1515636	Price
2mm	6mm	2mm	63mm	2mm	DD1515632	Price
3mm	6mm	3mm	75mm	3mm	DD1515648	Price
3mm	6mm	3mm	75mm	20mm	DD1515650	Price
3mm	6mm	3mm	75mm	12mm	DD1515676	Price
4mm	6mm	4mm	75mm	4mm	DD1515658	Price
4mm	6mm	4mm	75mm	12mm	DD1515678	Price
4mm	6mm	4mm	75mm	20mm	DD1515679	Price
5mm	6mm	5mm	75mm	12mm	DD1515681	Price
5mm	6mm	5mm	75mm	5mm	DD1515680	Price
5mm	6mm	5mm	75mm	25mm	DD1515682	Price
6mm	6mm	6mm	75mm	12mm	DD1515683	Price
6mm	6mm	6mm	75mm	6mm	DD1515660	Price
6mm	6mm	6mm	75mm	25mm	DD1515684	Price
8mm	8mm	8mm	80mm	8mm	DD1515666	Price
10mm	10mm	10mm	82mm	-	DD1515670	Price
12mm	12mm	12mm	100mm	-	DD1515672	Price

RAPIDKUT® 2 Flute Solid Carbide Ball Nose End Mills



Metric Sizes • Center Cutting • AlTiN Coated for Hard Materials

- Specially designed for profiling hardened steels up to 56 Rc

Dia.	Shank Dia.	No. of Flutes	Flute Length	OAL	Order No.	Price
1mm	6mm	2	3mm	50mm	DC6110001	Price
2mm	6mm	2	4mm	50mm	DC6110002	Price
3mm	6mm	2	5mm	50mm	DC6110003	Price
4mm	6mm	2	6mm	50mm	DC6110004	Price
5mm	6mm	2	7mm	50mm	DC6110005	Price
6mm	6mm	2	7mm	51mm	DC6110006	Price
8mm	8mm	2	9mm	59mm	DC6110007	Price
10mm	10mm	2	10mm	60mm	DC6110008	Price
12mm	12mm	2	14mm	71mm	DC6110009	Price
16mm	16mm	2	16mm	76mm	DC6110010	Price
20mm	20mm	2	20mm	82mm	DC6110011	Price

3 Flute Solid Carbide Ball Nose End Mills



Variable Helix • Eccentric OD

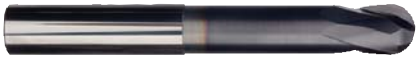
- 45° Chamfer
- PCT List #0360

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/4	1/4	3/8	4	2-1/8	CW8050000	Price
1/4	1/4	1/2	2	-	CW8050010	Price
3/8	3/8	1/2	4	2-1/8	CW8050060	Price
3/8	3/8	1	2-1/2	-	CW8050080	Price
1/2	1/2	5/8	6	4-1/8	CW8050120	Price
1/2	1/2	1	3	-	CW8050130	Price
5/8	5/8	3/4	5	3-1/8	CW8050160	Price
5/8	5/8	3/4	6	4-1/8	CW8050170	Price
5/8	5/8	1-1/4	3-1/2	-	CW8050180	Price
3/4	3/4	1	4	2	CW8050200	Price
3/4	3/4	1	5	3	CW8050210	Price
3/4	3/4	1	6	4	CW8050220	Price
3/4	3/4	1-1/2	4	-	CW8050230	Price
1	1	1-1/4	5	3	CW8050250	Price
1	1	1-1/4	6	4	CW8050260	Price
1	1	1-1/2	4	-	CW8050270	Price

truCORE® E520B Solid Carbide 2 Flute Ball End Die Mold Mill

MADE IN THE USA

- Designed for general contouring applications in hardened materials
- Added length and necked shank allow for stability when machining in deeper cavities
- AlTiN coated
- 15° Helix



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Neck Relief	Neck Dia.	Order No.	Price
1/8	1/4	1/8	3	3/8	.118	**DD4034288**	Price
3/16	1/4	3/16	3	9/16	.176	**DD4034289**	Price
1/4	1/4	1/4	3	1-5/8	.235	**DD4034290**	Price
3/8	3/8	3/8	4	2-1/4	.355	**DD4034292**	Price
1/2	1/2	1/2	4	2-1/4	.475	**DD4034293**	Price

TuffCut® DM 2 Flute High Performance End Mills

Fractional Sizes



- Designed for high productivity milling of hard and difficult to cut materials Rc 45-60
- Coated with ALtima® 52 for materials Rc 52 and above
- 12° Helix, ball end
- M. A. Ford Series #156

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Neck Length	Order No.	Price
1/64	1/4	1/64	2-1/2	1/64	**DD1515600**	Price
1/32	1/4	1/32	2-1/2	1/32	**DD1515604**	Price
1/32	1/4	1/32	2-1/2	1/4	**DD1515606**	Price
1/32	1/4	1/32	2-1/2	5/16	**DD1515608**	Price
1/32	1/4	1/32	2-1/2	3/8	**DD1515610**	Price
1/32	1/4	1/32	2-1/2	1/2	**DD1515612**	Price
1/32	1/4	1/32	2-1/2	5/8	**DD1515614**	Price
1/16	1/4	1/16	2-1/2	1/16	**DD1515630**	Price
3/32	1/4	3/32	2-1/2	3/32	**DD1515640**	Price
3/32	1/4	3/32	2-1/2	5/16	**DD1515642**	Price
3/32	1/4	3/32	2-1/2	1/2	**DD1515644**	Price
3/32	1/4	3/32	2-1/2	3/4	**DD1515646**	Price
1/8	1/4	1/8	3	1/8	**DD1515652**	Price
1/8	1/4	1/8	3	3/4	**DD1515654**	Price
5/32	1/4	5/32	3	5/32	**DD1515656**	Price
1/4	1/4	1/4	3	1/4	**DD1515662**	Price
5/16	5/16	5/16	3-1/8	5/16	**DD1515664**	Price
3/8	3/8	3/8	3-1/4	3/8	**DD1515668**	Price
1/2	1/2	1/2	4	1/2	**DD1515674**	Price

2 Flute Ball Nose WXS® Coated Carbide End Mills

EXOCARB®



- High efficiency milling in mild, stainless, and hardened steels up to 70 HRC
- WXS® coating utilizes nanotechnology coating increasing productivity and tool life versus TiAlN
- EXO® coating is a patented multilayer TiAlN and allows for high spindle speeds and feeds with long life in cast irons and steels up to 60 HRC
- TiAlN coated SUS end mills are particularly designed for exotic materials, including stainless steels, titanium, and nickel based alloys
- SUS end mills have a patented anti-vibration design, reducing chatter and increasing
- Tolerance for milling diameter: R<1/4 +0.0002"; R>1/4 +0.0004"
- OSG List #4410

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Neck Dia.	Neck Length	Order No.	Price
1/32	1/4	1/32	1-1/2	.0290	.0780	**TP4844100111**	Price
1/16	1/4	1/16	1-1/2	.0580	.1260	**TP4844100211**	Price
3/32	1/4	3/32	1-1/2	.0900	.1890	**TP4844100511**	Price
1/8	1/4	1/8	2	.1210	.2500	**TP4844100711**	Price
3/16	1/4	3/16	2-1/2	.1830	.3780	**TP4844100911**	Price
1/4	1/4	1/4	3	.2460	.5040	**TP4844101111**	Price
5/16	5/16	5/16	3-1/2	.3080	.6300	**TP4844101311**	Price
3/8	3/8	3/8	3-1/2	.3710	.7560	**TP4844101411**	Price
1/2	1/2	1/2	4	0.496"	1	**TP4844101611**	Price

2 Flute Ball Nose WXL® Coated Carbide End Mills

EXOCARB®

- High efficiency milling in a wide range of materials including non-ferrous, mild steels, and hardened steels up to 50 HRc
- For profile milling in non ferrous and hardened steels
- WXL® coated, enhanced geometry and substrate
- Tolerance for milling diameter: R<1/4 +.0002"; R>1/4 +.0004"
- OSG List #3610



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/32	1/4	1/32	2-1/2	**TP4836100111**	Price
1/16	1/4	1/16	2-1/2	**TP4836100211**	Price
3/32	1/4	3/32	2-1/2	**TP4836100311**	Price
1/8	1/4	1/8	3	**TP4836100411**	Price
3/16	1/4	3/16	3	**TP4836100511**	Price
1/4	1/4	1/4	3	**TP4836100611**	Price
5/16	5/16	5/16	4	**TP4836100711**	Price
3/8	3/8	3/8	4	**TP4836100811**	Price
1/2	1/2	1/2	4	**TP4836100911**	Price

3 Flute Solid Carbide End Mills

Variable Helix • Eccentric OD

- 45° Chamfer
- PCT List #0360



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/4	1/4	1/2	2	-	**CW8050015**	Price
1/4	1/4	3/8	4	2-1/8	**CW8050005**	Price
3/8	3/8	1/2	4	2-1/8	**CW8050065**	Price
3/8	3/8	1	2-1/2	-	**CW8050085**	Price
1/2	1/2	5/8	6	4-1/8	**CW8050125**	Price
1/2	1/2	1	3	-	**CW8050135**	Price
5/8	5/8	3/4	5	3-1/8	**CW8050165**	Price
5/8	5/8	3/4	6	4-1/8	**CW8050175**	Price
5/8	5/8	1-1/4	3-1/2	-	**CW8050185**	Price
3/4	3/4	1	4	2	**CW8050205**	Price
3/4	3/4	1	5	3	**CW8050215**	Price
3/4	3/4	1	6	4	**CW8050225**	Price
3/4	3/4	1-1/2	4	-	**CW8050235**	Price
1	1	1-1/4	5	3	**CW8050255**	Price
1	1	1-1/4	6	4	**CW8050265**	Price
1	1	1-1/2	4	-	**CW8050275**	Price

WIDIA Solid Carbide Varimill GP Ball Nose End Mills

2 Flute • TiAlN Coated



- Center cutting
- Cylindrical shanks
- TiAlN coated for longer tool life

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Order No.	Price
1/16	1/8	3/16	**WK405878173**	Price
1/8	1/8	1/2	**WK405878180**	Price
3/16	3/16	5/8	**WK405878186**	Price
3/16	3/16	1	**WK405878188**	Price
1/4	1/4	1/2	**WK405878190**	Price
1/4	1/4	3/4	**WK405878191**	Price
3/8	3/8	7/8	**WK405878200**	Price
1/2	1/2	1	**WK405878207**	Price

HAIMER 4 Flute Carbide End Mills - F2014

With Corner Radius

- Straight shank with optional patented Safe-Lock tool pull out protection
- Center cutting
- Runout <.0004”
- Variable helix for roughing and finishing
- For most all materials but best for ISO P, and M
- Straight shank shown



					Safe-Lock		Straight Shank	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Corner Radius (in.)	Order No.	Price	Order No.	Price
1/4	1/4	7/16	2-1/2	.015	-	-	**HA76NH14ZR015DA**	Price
1/4	1/4	7/16	2-1/2	.030	-	-	**HA76NH14ZR030DA**	Price
5/16	5/16	13/16	2-1/2	.015	-	-	**HA76NH516ZR015D**	Price
5/16	5/16	13/16	2-1/2	.030	-	-	**HA76NH516ZR030D**	Price
3/8	3/8	7/8	2-1/2	.030	-	-	**HA76NH38ZR030DA**	Price
1/2	1/2	5/8	2-1/2	.015	-	-	**HA76KH12ZR015DA**	Price
1/2	1/2	5/8	2-1/2	.030	-	-	**HA76KH12ZR030DA**	Price
1/2	1/2	1	3	.030	**HA76NL12ZR030DA**	Price	**HA76NH12ZR030DA**	Price
1/2	1/2	1	3	.060	**HA76NL12ZR060DA**	Price	**HA76NH12ZR060DA**	Price
1/2	1/2	1-1/4	3-1/2	.015	**HA76LL12ZR015DA**	Price	**HA76LH12ZR015DA**	Price
1/2	1/2	1-1/4	3-1/2	.030	**HA76LL12ZR030DA**	Price	**HA76LH12ZR030DA**	Price
1/2	1/2	1-1/4	3-1/2	.060	**HA76LL12ZR060DA**	Price	**HA76LH12ZR060DA**	Price
5/8	5/8	1-1/4	4	.030	**HA76NL58ZR030DA**	Price	**HA76NH58ZR030DA**	Price
5/8	5/8	1-1/4	4	.060	**HA76NL58ZR060DA**	Price	**HA76NH58ZR060DA**	Price
3/4	3/4	1-1/2	4	.030	**HA76NL34ZR030DA**	Price	**HA76NH34ZR030DA**	Price
3/4	3/4	1-1/2	4	.060	**HA76NL34ZR060DA**	Price	**HA76NH34ZR060DA**	Price
3/4	3/4	1-1/2	4	.090	**HA76NL34ZR090DA**	Price	**HA76NH34ZR090DA**	Price
3/4	3/4	1-1/2	4	.125	**HA76NL34ZR125DA**	Price	**HA76NH34ZR125DA**	Price

RAPIDKUT 4 Flute Solid Carbide End Mills

Variable Helix • Full Eccentric Grind

nACO

Maximize productivity when machining titanium, stainless and alloyed steels and all ferrous materials

- Chatter-free machining
- Heavier feed rates
- Superior surface finishes
- Effective in machining all ferrous materials up to 54 HRc

Versatile tooling for roughing, semi-finishing & finishing operations
Heavy slotting — can slot up to 1xD axial depth
Heavy profiling — up to full flute length and 50% radial depth of cut



Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	Chamfer	Order No.	Price
1/8	1/8	1/2	1-1/2	.011 x 45°	**DD8115671**	Price
3/16	3/16	5/8	2	.011 x 45°	**DD8115672**	Price
1/4	1/4	1/2	2	.011 x 45°	**DD8115673**	Price
1/4	1/4	3/4	2-1/2	.011 x 45°	**DD8115675**	Price
5/16	5/16	13/16	2-1/2	.011 x 45°	**DD8115676**	Price
3/8	3/8	5/8	2	.011 x 45°	**DD8115677**	Price
3/8	3/8	1	2-1/2	.011 x 45°	**DD8115679**	Price
1/2	1/2	5/8	2-1/2	.011 x 45°	**DD8115681**	Price
1/2	1/2	1	3	.011 x 45°	**DD8115683**	Price
1/2	1/2	1-1/4	3	.011 x 45°	**DD8115685**	Price
5/8	5/8	3/4	3	.022 x 45°	**DD8115687**	Price
5/8	5/8	1-1/4	3-1/2	.022 x 45°	**DD8115689**	Price
3/4	3/4	1	3	.022 x 45°	**DD8115691**	Price
3/4	3/4	1-1/2	4	.022 x 45°	**DD8115693**	Price
1	1	1-1/2	4	.022 x 45°	**DD8115695**	Price

RAPIDKUT 4 Flute Solid Carbide Variable Helix End Mills

Center Cutting • Radius End

AlTiN

- Helix changes along flutes
- Substantial increases in speed
- AlTiN coated for improved tool life and increased production output
- Made from premium submicron grain carbide
- Cutting diameter tolerance: +.000/.002”



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/8	1/8	1/2	1-1/2	.015	**DD8110813**	Price
3/16	3/16	3/8	1-1/2	.020	**DD8112375**	Price
3/16	3/16	5/8	2	.020	**DD8110981**	Price
1/4	1/4	1/2	2	.020	**DD8110003**	Price
1/4	1/4	3/4	2-1/2	.020	**DD8110005**	Price
1/4	1/4	1-1/8	3	.020	**DD8110007**	Price
5/16	5/16	1/2	2	.020	**DD8110009**	Price
5/16	5/16	13/16	2-1/2	.020	**DD8110011**	Price
5/16	5/16	1-1/8	3	.020	**DD8110013**	Price
3/8	3/8	5/8	2	.020	**DD8110015**	Price
3/8	3/8	1	2-1/2	.020	**DD8110017**	Price
3/8	3/8	1-1/8	3	.020	**DD8110019**	Price
7/16	7/16	1	2-3/4	.020	**DD8110021**	Price
1/2	1/2	5/8	2-1/2	.030	**DD8110023**	Price
1/2	1/2	1	3	.030	**DD8110025**	Price
1/2	1/2	1-1/4	3	.030	**DD8112371**	Price
1/2	1/2	2	4	.030	**DD8110027**	Price
5/8	5/8	3/4	3	.035	**DD8110029**	Price
5/8	5/8	1-1/4	3-1/2	.035	**DD8110031**	Price
5/8	5/8	2-1/4	5	.035	**DD8110033**	Price
3/4	3/4	1	3	.035	**DD8110035**	Price
3/4	3/4	1-1/2	4	.035	**DD8110037**	Price
3/4	3/4	2-1/4	5	.035	**DD8110039**	Price
1	1	1-1/2	4	.035	**DD8110985**	Price
1	1	2-1/4	5	.035	**DD8113049**	Price
1-1/4	1-1/4	2-1/4	5	.035	**DD8113051**	Price

4 Flute Solid Carbide End Mills

Variable Helix

- Variantra ® Supral (TiAlCN) coated
- 45° Chamfer
- PCT List #0451



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/8	1/8	1/2	1-1/2	-	**CW8055230**	Price
3/16	3/16	5/8	2	-	**CW8055260**	Price
1/4	1/4	3/4	2-1/2	-	**CW8055300**	Price
1/4	1/4	3/8	4	2-1/8	**CW8005195**	Price
5/16	5/16	1/2	2	-	**CW8051T40505002**	Price
5/16	5/16	7/8	2-1/2	-	**CW8055320**	Price
3/8	3/8	1/2	6	3-3/8	**CW8005255**	Price
3/8	3/8	1	3	-	**CW8021540**	Price
7/16	7/16	1	2-3/4	-	**CW8021595**	Price
1/2	1/2	5/8	5	3-1/8	**CW8005310**	Price
1/2	1/2	5/8	6	4-1/8	**CW8005315**	Price
1/2	1/2	1-1/4	3	-	**CW8055410**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/2	1/2	2	4	-	**CW8021700**	Price
5/8	5/8	3/4	5	3-1/8	**CW8005360**	Price
5/8	5/8	3/4	6	4-1/8	**CW8005365**	Price
5/8	5/8	1-1/4	3-1/2	-	**CW8055430**	Price
3/4	3/4	1	5	3	**CW8005400**	Price
3/4	3/4	1	6	4	**CW8005405**	Price
3/4	3/4	1-1/2	4	-	**CW8055500**	Price
1	1	1-1/4	6	3-1/8	**CW8005440**	Price
1	1	1-1/4	7	4-1/8	**CW8005445**	Price
1	1	1-1/2	4	-	**CW8021950**	Price
1	1	3	6	-	**CW8021990**	Price

POW•R•FEED® M904 Solid Carbide 4 Flute Variable Index End Mills

- Known for it's power, balance, and versatility in a wide range of materials
- AlTiNX coating for higher hot hardness than conventional "general purpose" tools
- Unique vibration dampening geometry for chatter-free machining
- Round shank, 38° helix

S Best in Titanium Alloys K Good in Cast Iron
M Best in Stainless Steels P Good in Carbon and Tool Steels





					Round Shank		Weldon Shank	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price	Order No.	Price
1/8	1/8	1/4	1-1/2	.015	**DD4063248**	Price	-	-
1/8	1/8	1/2	1-1/2	.015	**DD4063064**	Price	-	-
1/8	1/8	1/2	1-1/2	None	**DD4063010**	Price	-	-
5/32	3/16	9/16	2	.015	**DD4063118**	Price	-	-
5/32	3/16	9/16	2	None	**DD4063011**	Price	-	-
3/16	3/16	5/16	2	.015	**DD4063249**	Price	-	-
3/16	3/16	5/8	2	.015	**DD4063065**	Price	-	-
3/16	3/16	5/8	2	None	**DD4063012**	Price	-	-
7/32	1/4	5/8	2-1/2	.020	**DD4063119**	Price	-	-
7/32	1/4	5/8	2-1/2	None	**DD4063013**	Price	-	-
1/4	1/4	3/8	2	.020	**DD4063058**	Price	-	-
1/4	1/4	3/8	2	None	**DD4063003**	Price	-	-
1/4	1/4	3/4	2-1/2	.020	**DD4063066**	Price	-	-
1/4	1/4	3/4	2-1/2	.030	**DD4063466**	Price	-	-
1/4	1/4	3/4	2-1/2	None	**DD4063014**	Price	-	-
1/4	1/4	1-1/8	3	.020	**DD4063420**	Price	-	-
1/4	1/4	1-1/2	4	.020	**DD4063425**	Price	-	-
5/16	5/16	13/16	2-1/2	.020	**DD4063067**	Price	-	-
5/16	5/16	13/16	2-1/2	None	**DD4063016**	Price	-	-
3/8	3/8	1/2	2	.020	**DD4063059**	Price	-	-
3/8	3/8	1/2	2	None	**DD4063004**	Price	-	-
3/8	3/8	7/8	2-1/2	.020	**DD4063068**	Price	**DD4063083**	Price
3/8	3/8	7/8	2-1/2	.030	**DD4063390**	Price	**DD4063400**	Price
3/8	3/8	7/8	2-1/2	None	**DD4063018**	Price	**DD4063043**	Price
3/8	3/8	1-1/8	3	.020	**DD4063421**	Price	-	-
3/8	3/8	1-3/4	4	.020	**DD4063426**	Price	-	-
7/16	7/16	1	2-3/4	.020	**DD4063069**	Price	-	-
7/16	7/16	1	2-3/4	None	**DD4063020**	Price	-	-
1/2	1/2	5/8	2-1/2	.030	**DD4063060**	Price	-	-
1/2	1/2	5/8	2-1/2	None	**DD4063005**	Price	-	-
1/2	1/2	1	3	.030	**DD4063070**	Price	**DD4063085**	Price
1/2	1/2	1	3	None	**DD4063022**	Price	**DD4063045**	Price
1/2	1/2	1-1/4	3	.030	**DD4063098**	Price	**DD4063099**	Price
1/2	1/2	1-1/4	3	.060	-	-	**DD4063401**	Price
1/2	1/2	1-1/4	3	.125	**DD4063393**	Price	**DD4063403**	Price
1/2	1/2	1-1/4	3	None	**DD4063100**	Price	**DD4063101**	Price
1/2	1/2	2	4	.030	**DD4063422**	Price	-	-
1/2	1/2	2-1/2	5	.030	**DD4063427**	Price	-	-
5/8	5/8	1-1/4	3-1/2	None	**DD4063024**	Price	**DD4063046**	Price
5/8	5/8	1-1/4	3-1/2	.030	**DD4063071**	Price	**DD4063086**	Price
3/4	3/4	1-1/2	4	.060	-	-	**DD4063405**	Price
3/4	3/4	1-1/2	4	.030	**DD4063072**	Price	**DD4063087**	Price
3/4	3/4	1-1/2	4	.125	**DD4063397**	Price	**DD4063407**	Price
3/4	3/4	1-1/2	4	None	**DD4063025**	Price	**DD4063047**	Price
3/4	3/4	2-1/4	5	.030	**DD4063423**	Price	-	-
3/4	3/4	3	6	.030	**DD4063428**	Price	-	-
1	1	1-1/2	4	.030	**DD4063073**	Price	-	-
1	1	1-1/2	4	None	**DD4063026**	Price	-	-
1	1	3	6	.030	**DD4063429**	Price	-	-
1	1	4-1/8	7	.030	**DD4063432**	Price	-	-

POW•R•FEED® M924 Solid Carbide 4 Flute Variable Index End Mill

MADE IN THE USA

Square End and Corner Radius Styles

- Top of its class for aggressive slotting, peripheral milling and plunging in all ferrous materials
- New advanced coating and tool design improves tool life exponentially
- Unique vibration dampening geometry for chatter-free machining
- AlCrN-X coating
- 38° Helix, round or Weldon style shank

K Best in Cast Iron
M Best in Stainless Steels
P Best in Carbon and Tool Steels
S Good in Titanium Alloys





					.015		.030		.060		.120		None	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1/4	1-1/2	Round Shank	DD4167495	Price	-	-	-	-	-	-	DD4167494	Price
1/8	1/8	1/2	1-1/2	Round Shank	DD4167499	Price	-	-	-	-	-	-	DD4167498	Price
1/8	1/8	3/4	2-1/4	Round Shank	DD4167503	Price	-	-	-	-	-	-	DD4167502	Price
5/32	3/16	5/16	2	Round Shank	DD4167538	Price	-	-	-	-	-	-	DD4167536	Price
5/32	3/16	9/16	2	Round Shank	DD4167539	Price	-	-	-	-	-	-	DD4167537	Price
3/16	3/16	5/16	2	Round Shank	DD4167507	Price	DD4167508	Price	-	-	-	-	DD4167506	Price
3/16	3/16	9/16	2	Round Shank	DD4167511	Price	DD4167512	Price	-	-	-	-	DD4167510	Price
3/16	3/16	3/4	2-1/2	Round Shank	DD4167515	Price	DD4167516	Price	-	-	-	-	DD4167514	Price
7/32	1/4	3/4	2-1/2	Round Shank	DD4167544	Price	-	-	-	-	-	-	DD4167542	Price
1/4	1/4	3/8	2	Round Shank	DD4167519	Price	DD4167520	Price	-	-	-	-	DD4167518	Price
7/32	1/4	3/8	2	Round Shank	DD4167543	Price	-	-	-	-	-	-	DD4167541	Price
1/4	1/4	3/4	2-1/2	Round Shank	DD4167525	Price	DD4167526	Price	DD4167527	Price	-	-	DD4167524	Price
1/4	1/4	1-1/4	3	Round Shank	DD4167531	Price	DD4167532	Price	-	-	-	-	DD4167530	Price
1/4	1/4	1-3/4	4	Round Shank	DD4167547	Price	DD4167548	Price	-	-	-	-	DD4167546	Price
9/32	5/16	3/4	2-1/2	Round Shank	DD4167550	Price	DD4167551	Price	-	-	-	-	DD4167549	Price
5/16	5/16	7/16	2	Round Shank	DD4167093	Price	DD4167094	Price	-	-	-	-	DD4167092	Price
5/16	5/16	13/16	2-1/2	Round Shank	DD4167099	Price	DD4167100	Price	DD4167101	Price	-	-	DD4167098	Price
5/16	5/16	1-1/4	3	Round Shank	DD4167105	Price	DD4167106	Price	-	-	-	-	DD4167104	Price
5/16	5/16	2-1/8	4	Round Shank	DD4167111	Price	DD4167112	Price	-	-	-	-	DD4167110	Price
3/8	3/8	1/2	2	Round Shank	DD4167117	Price	DD4167118	Price	-	-	-	-	DD4167116	Price
3/8	3/8	7/8	2-1/2	Round Shank	DD4167125	Price	DD4167126	Price	DD4167127	Price	-	-	DD4167124	Price
3/8	3/8	7/8	2-1/2	Weldon Shank	DD4168116	Price	DD4168117	Price	-	-	-	-	DD4168195	Price
3/8	3/8	1-1/4	3	Round Shank	DD4167133	Price	DD4167134	Price	DD4167135	Price	-	-	DD4167132	Price
3/8	3/8	1-1/4	3	Weldon Shank	DD4168119	Price	DD4168120	Price	-	-	-	-	DD4168196	Price
3/8	3/8	2	4	Round Shank	DD4167165	Price	DD4167166	Price	DD4167167	Price	-	-	DD4167164	Price
7/16	7/16	1	2-3/4	Round Shank	-	-	DD4167190	Price	-	-	-	-	DD4167188	Price
1/2	1/2	5/8	2-1/2	Round Shank	-	-	DD4167206	Price	DD4167207	Price	-	-	DD4167204	Price
1/2	1/2	1	3	Round Shank	DD4167214	Price	DD4167215	Price	DD4167216	Price	DD4167218	Price	DD4167213	Price
1/2	1/2	1-1/4	3	Round Shank	DD4167223	Price	DD4167224	Price	DD4167225	Price	DD4167227	Price	DD4167222	Price
1/2	1/2	1-1/4	3	Weldon Shank	DD4168131	Price	DD4168132	Price	-	-	-	-	DD4168201	Price
1/2	1/2	1-5/8	4	Round Shank	-	-	DD4167233	Price	DD4167234	Price	DD4167236	Price	-	-
1/2	1/2	1-5/8	4	Weldon Shank	-	-	DD4168136	Price	-	-	-	-	DD4168202	Price
1/2	1/2	2-1/8	4	Round Shank	-	-	DD4167251	Price	DD4167252	Price	DD4167254	Price	DD4167249	Price
1/2	1/2	2-5/8	5	Round Shank	-	-	DD4167260	Price	DD4167261	Price	-	-	DD4167258	Price
1/2	1/2	3-1/4	6	Round Shank	-	-	DD4167269	Price	DD4167270	Price	-	-	DD4167267	Price
5/8	5/8	3/4	3	Round Shank	-	-	DD4167278	Price	DD4167279	Price	-	-	DD4167276	Price
5/8	5/8	1-3/8	3-1/2	Round Shank	-	-	DD4167288	Price	DD4167289	Price	-	-	DD4167286	Price
5/8	5/8	1-3/8	3-1/2	Weldon Shank	-	-	DD4168147	Price	-	-	-	-	DD4168206	Price
5/8	5/8	2-1/8	4	Round Shank	-	-	DD4167298	Price	DD4167299	Price	-	-	DD4167296	Price
5/8	5/8	2-1/8	4	Weldon Shank	-	-	DD4168149	Price	-	-	-	-	DD4168207	Price
5/8	5/8	2-5/8	5	Round Shank	-	-	DD4167318	Price	DD4167319	Price	-	-	DD4167316	Price
5/8	5/8	3-1/4	6	Round Shank	-	-	-	-	-	-	-	-	DD4167326	Price
3/4	3/4	1	3	Round Shank	-	-	DD4167348	Price	DD4167349	Price	-	-	DD4167346	Price
3/4	3/4	1-5/8	4	Round Shank	-	-	DD4167358	Price	DD4167359	Price	DD4167361	Price	DD4167356	Price
3/4	3/4	1-5/8	4	Weldon Shank	-	-	DD4168155	Price	-	-	-	-	DD4168210	Price
3/4	3/4	2-3/8	5	Round Shank	-	-	DD4167368	Price	DD4167369	Price	DD4167371	Price	DD4167366	Price
3/4	3/4	2-3/8	5	Weldon Shank	-	-	DD4168158	Price	-	-	-	-	DD4168211	Price
3/4	3/4	3-1/4	6	Round Shank	-	-	DD4167388	Price	DD4167389	Price	-	-	DD4167386	Price
3/4	3/4	4-1/8	7	Round Shank	-	-	DD4167398	Price	DD4167399	Price	-	-	DD4167396	Price
1	1	1-3/4	4	Round Shank	-	-	DD4167408	Price	DD4167409	Price	-	-	DD4167406	Price
1	1	1-3/4	4	Weldon Shank	-	-	DD4168167	Price	-	-	-	-	DD4168214	Price
1	1	2-1/4	5	Round Shank	-	-	DD4167419	Price	-	-	-	-	DD4167417	Price
1	1	2-1/4	5	Weldon Shank	-	-	DD4168171	Price	-	-	-	-	DD4168215	Price
1	1	3-1/4	6	Round Shank	-	-	DD4167441	Price	-	-	-	-	DD4167439	Price
1	1	4-1/4	7	Round Shank	-	-	DD4167452	Price	-	-	-	-	DD4167450	Price

Weldon style shanks available in most sizes-call for quote!

WIDIA Solid Carbide HP Varimill I™ End Mills

4 Flute • AlTiN or TiAlN Coated

- Unequal flute spacing
- 38° Helix
- Center cutting
- Coated for longer tool life



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Chamfer (in.)	Shank Type	Coating	Order No.	Price
1/8	1/8	1/4	1-1/2	None	-	Round	AlTiN	**WK405576591**	Price
1/8	1/8	1/4	1-1/2	None	.010	Round	AlTiN	**WK405576590**	Price
1/8	1/8	1/2	2	None	-	Round	AlTiN	**WK405576346**	Price
1/8	1/8	1/2	2	None	.010	Round	AlTiN	**WK405576345**	Price
1/8	1/8	1/2	2	.015	-	Round	AlTiN	**WK405576530**	Price
3/16	3/16	5/16	1-1/2	None	-	Round	AlTiN	**WK405576593**	Price
3/16	3/16	5/16	1-1/2	None	.010	Round	AlTiN	**WK405576592**	Price
3/16	3/16	5/8	2-1/4	None	-	Round	AlTiN	**WK405576348**	Price
3/16	3/16	5/8	2-1/4	None	.010	Round	AlTiN	**WK405576347**	Price
3/16	3/16	5/8	2-1/4	.015	-	Round	AlTiN	**WK405576531**	Price
3/16	3/16	5/8	2-1/4	.030	-	Round	AlTiN	**WK405576532**	Price
1/4	1/4	3/8	2	None	-	Round	AlTiN	**WK405576596**	Price
1/4	1/4	3/8	2	None	.016	Round	AlTiN	**WK405576595**	Price
1/4	1/4	3/8	2	.030	-	Round	AlTiN	**WK405576610**	Price
1/4	1/4	3/4	2-1/2	None	-	Round	AlTiN	**WK405576510**	Price
1/4	1/4	3/4	2-1/2	None	.016	Round	AlTiN	**WK405576349**	Price
1/4	1/4	3/4	2-1/2	.015	-	Round	AlTiN	**WK405576533**	Price
1/4	1/4	3/4	2-1/2	.030	-	Round	AlTiN	**WK405576534**	Price
1/4	1/4	3/4	2-1/2	.060	-	Round	AlTiN	**WK405576535**	Price
1/4	1/4	1-1/4	3-1/4	None	-	Round	AlTiN	**WK405576566**	Price
1/4	1/4	1-1/4	3-1/4	.015	-	Round	AlTiN	**WK405576577**	Price
1/4	1/4	1-1/4	3-1/4	.030	-	Round	AlTiN	**WK405576579**	Price
1/4	1/4	1-3/4	4	None	-	Round	TiAlN	**WK402837447**	Price
5/16	5/16	1/2	2	None	-	Round	AlTiN	**WK405576598**	Price
5/16	5/16	1/2	2	None	.016	Round	AlTiN	**WK405576597**	Price
5/16	5/16	1/2	2	.030	-	Round	AlTiN	**WK405576611**	Price
5/16	5/16	3/4	2-1/2	None	-	Round	AlTiN	**WK405576512**	Price
5/16	5/16	3/4	2-1/2	None	.016	Round	AlTiN	**WK405576511**	Price
5/16	5/16	3/4	2-1/2	.015	-	Round	AlTiN	**WK405576536**	Price
5/16	5/16	3/4	2-1/2	.030	-	Round	AlTiN	**WK405576537**	Price
5/16	5/16	1-1/4	3-1/4	None	-	Round	AlTiN	**WK405576567**	Price
5/16	5/16	1-1/4	3-1/4	.030	-	Round	AlTiN	**WK405576580**	Price
5/16	5/16	1-5/8	4	None	-	Round	TiAlN	**WK402837441**	Price
3/8	3/8	1/2	2	None	-	Round	AlTiN	**WK405576600**	Price
3/8	3/8	1/2	2	None	.020	Round	AlTiN	**WK405576599**	Price
3/8	3/8	1/2	2	.030	-	Round	AlTiN	**WK405576612**	Price
3/8	3/8	7/8	2-1/2	None	-	Round	AlTiN	**WK405576514**	Price
3/8	3/8	7/8	2-1/2	None	.020	Round	AlTiN	**WK405576513**	Price
3/8	3/8	7/8	2-1/2	.015	-	Round	AlTiN	**WK405576539**	Price
3/8	3/8	7/8	2-1/2	.030	-	Round	AlTiN	**WK405576540**	Price
3/8	3/8	7/8	2-1/2	.060	-	Round	AlTiN	**WK405576542**	Price
3/8	3/8	7/8	2-1/2	.090	-	Round	AlTiN	**WK405576543**	Price
3/8	3/8	1-1/2	4	None	-	Round	AlTiN	**WK405576568**	Price
3/8	3/8	1-1/2	4	.030	-	Round	AlTiN	**WK405576581**	Price
3/8	3/8	1-1/2	4	.060	-	Weldon	AlTiN	**WK405576582**	Price
7/16	7/16	7/8	2-1/2	None	-	Round	AlTiN	**WK405576516**	Price
7/16	7/16	2	4	None	-	Round	AlTiN	**WK405576569**	Price
1/2	1/2	5/8	2-1/2	None	-	Weldon	AlTiN	**WK405576605**	Price
1/2	1/2	5/8	2-1/2	None	.020	Weldon	AlTiN	**WK405576604**	Price
1/2	1/2	5/8	2-1/2	.030	-	Weldon	AlTiN	**WK405576613**	Price
1/2	1/2	5/8	2-1/2	.060	-	Weldon	AlTiN	**WK405576614**	Price
1/2	1/2	1	3	None	-	Weldon	AlTiN	**WK405576518**	Price
1/2	1/2	1	3	None	.020	Weldon	AlTiN	**WK405576517**	Price
1/2	1/2	1-1/4	3	None	-	Weldon	AlTiN	**WK405576520**	Price
1/2	1/2	1-1/4	3	None	.020	Weldon	AlTiN	**WK405576519**	Price
1/2	1/2	1-1/4	3	.015	-	Weldon	AlTiN	**WK405576544**	Price
1/2	1/2	1-1/4	3	.030	-	Weldon	AlTiN	**WK405576545**	Price
1/2	1/2	1-1/4	3	.060	-	Weldon	AlTiN	**WK405576546**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Chamfer (in.)	Shank Type	Coating	Order No.	Price
1/2	1/2	1-1/4	3	.090	-	Weldon	AlTiN	**WK405576547**	Price
1/2	1/2	1-1/4	3	.120	-	Weldon	AlTiN	**WK405576548**	Price
1/2	1/2	1-1/2	4	None	-	Weldon	AlTiN	**WK405576622**	Price
1/2	1/2	1-1/2	4	None	.020	Weldon	AlTiN	**WK405576621**	Price
1/2	1/2	1-1/2	4	.030	-	Weldon	AlTiN	**WK405576636**	Price
1/2	1/2	1-1/2	4	.060	-	Weldon	AlTiN	**WK405576637**	Price
1/2	1/2	2	4	None	-	Weldon	AlTiN	**WK405576570**	Price
1/2	1/2	2	4	.030	-	Weldon	AlTiN	**WK405576583**	Price
1/2	1/2	2	4	.060	-	Weldon	AlTiN	**WK405576584**	Price
1/2	1/2	2-1/4	4-1/2	None	-	Weldon	AlTiN	**WK405576623**	Price
1/2	1/2	3	5	None	-	Round	TiAlN	**WK402837414**	Price
1/2	1/2	3	5	.030	-	Round	TiAlN	**WK403704326**	Price
5/8	5/8	3/4	3	None	-	Weldon	AlTiN	**WK405576607**	Price
5/8	5/8	3/4	3	None	.020	Weldon	AlTiN	**WK405576606**	Price
5/8	5/8	1-1/4	3-1/2	None	-	Weldon	AlTiN	**WK405576528**	Price
5/8	5/8	1-1/4	3-1/2	None	.020	Weldon	AlTiN	**WK405576521**	Price
5/8	5/8	1-1/4	3-1/2	.030	-	Weldon	AlTiN	**WK405576549**	Price
5/8	5/8	1-1/4	3-1/2	.120	-	Weldon	AlTiN	**WK405576552**	Price
5/8	5/8	1-5/8	4-1/8	None	-	Weldon	AlTiN	**WK405576625**	Price
5/8	5/8	1-5/8	4-1/8	None	.020	Weldon	AlTiN	**WK405576624**	Price
5/8	5/8	2-1/4	5	None	-	Weldon	AlTiN	**WK405576572**	Price
5/8	5/8	2-1/4	5	None	.020	Weldon	AlTiN	**WK405576571**	Price
5/8	5/8	2-1/4	5	.060	-	Weldon	AlTiN	**WK405576585**	Price
5/8	5/8	3	5-1/4	None	-	Round	TiAlN	**WK402837408**	Price
3/4	3/4	7/8	3-1/2	None	-	Weldon	AlTiN	**WK405576609**	Price
3/4	3/4	7/8	3-1/2	None	.020	Weldon	AlTiN	**WK405576608**	Price
3/4	3/4	7/8	3-1/2	.030	-	Weldon	AlTiN	**WK405576618**	Price
3/4	3/4	7/8	3-1/2	.060	-	Weldon	AlTiN	**WK405576619**	Price
3/4	3/4	7/8	3-1/2	.120	-	Weldon	AlTiN	**WK405576620**	Price
3/4	3/4	1-1/2	4	None	-	Weldon	AlTiN	**WK405576529**	Price
3/4	3/4	1-1/2	4	None	.020	Weldon	AlTiN	**WK405576522**	Price
3/4	3/4	1-1/2	4	.030	-	Weldon	AlTiN	**WK405576553**	Price
3/4	3/4	1-1/2	4	.060	-	Weldon	AlTiN	**WK405576554**	Price
3/4	3/4	1-1/2	4	.120	-	Weldon	AlTiN	**WK405576557**	Price
3/4	3/4	1-5/8	4	None	-	Weldon	AlTiN	**WK405576631**	Price
3/4	3/4	1-5/8	4	None	.020	Weldon	AlTiN	**WK405576630**	Price
3/4	3/4	2-1/4	5	None	-	Weldon	AlTiN	**WK405576574**	Price
3/4	3/4	2-1/4	5	None	.020	Weldon	AlTiN	**WK405576573**	Price
3/4	3/4	2-1/4	5	.030	-	Weldon	AlTiN	**WK405576586**	Price
3/4	3/4	2-1/4	5	.060	-	Weldon	AlTiN	**WK405576587**	Price
3/4	3/4	3	6	None	-	Weldon	AlTiN	**WK405576627**	Price
3/4	3/4	3	6	None	.020	Weldon	AlTiN	**WK405576626**	Price
3/4	3/4	3	6	.030	-	Weldon	AlTiN	**WK405576651**	Price
3/4	3/4	4	6-1/4	None	-	Round	TiAlN	**WK402837395**	Price
1	1	1-1/2	4	None	-	Weldon	AlTiN	**WK405576525**	Price
1	1	1-1/2	4	None	.020	Weldon	AlTiN	**WK405576523**	Price
1	1	1-1/2	4	.030	-	Weldon	AlTiN	**WK405576558**	Price
1	1	1-1/2	4	.060	-	Weldon	AlTiN	**WK405576560**	Price
1	1	2-1/4	5	None	-	Weldon	AlTiN	**WK405576576**	Price
1	1	2-1/4	5	None	.020	Weldon	AlTiN	**WK405576575**	Price
1	1	2-1/4	5	.030	-	Weldon	AlTiN	**WK405576588**	Price
1	1	2-1/4	5	.060	-	Weldon	AlTiN	**WK405576589**	Price
1	1	3	6	None	-	Round	TiAlN	**WK402837384**	Price
1	1	3	6	None	.020	Round	TiAlN	**WK402837388**	Price
1	1	4	7	None	-	Weldon	AlTiN	**WK405576635**	Price
1	1	4	7	None	.020	Weldon	AlTiN	**WK405576634**	Price
1	1	4	7	.030	-	Weldon	AlTiN	**WK405576653**	Price
1	1	4	7	.060	-	Weldon	AlTiN	**WK405576654**	Price

WIDIA Solid Carbide HP Varimill I™ Extended Reach End Mills

Necked Style • 4 Flute • TiAlN Coated

- Unequal flute spacing
- 38° Helix
- Center cutting
- TiAlN coated for longer tool life



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Neck Dia. (in.)	Shank Type	Order No.	Price
1/4	1/4	3/8	4	None	.235	Round	**WK402837188**	Price
1/4	1/4	3/8	4	.015	.235	Round	**WK403738940**	Price
3/8	3/8	1/2	4	None	.353	Round	**WK402837182**	Price
3/8	3/8	1/2	4	.030	.353	Round	**WK403738973**	Price
1/2	1/2	5/8	4	None	.470	Weldon	**WK402837178**	Price
1/2	1/2	5/8	4	.030	.470	Weldon	**WK403738975**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Neck Dia. (in.)	Shank Type	Order No.	Price
1/2	1/2	5/8	4	.120	.470	Weldon	**WK403738977**	Price
5/8	5/8	3/4	4-1/8	None	.588	Weldon	**WK402837171**	Price
5/8	5/8	3/4	5	None	.588	Weldon	**WK402837160**	Price
3/4	3/4	1	4-1/4	None	.705	Weldon	**WK402837154**	Price
3/4	3/4	1	5-1/4	None	.705	Weldon	**WK402837146**	Price
1	1	1-1/8	6-1/2	None	.940	Weldon	**WK402837110**	Price

WIDIA Solid Carbide HP Varimill I™ Extended Reach End Mills

4 Flute • TiAlN Coated

- Unequal flute spacing
- Center cutting
- Cylindrical shanks
- TiAlN coated for longer tool life



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Chamfer	Order No.	Price
3/8	3/8	1/2	4	None	**WK402837032**	Price
1/2	1/2	5/8	5	.020	**WK402837025**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Chamfer	Order No.	Price
1/2	1/2	5/8	6	.020	**WK402837007**	Price
3/4	3/4	1	7	.020	**WK402836916**	Price

M.A. FORD 4 Flute TuffCut® XR HP ALtima® Coated End Mill

Center Cutting • Variable Helix • Fractional Sizes

- Recommended for slotting and general purpose milling
- Very high feed rates & excellent surface finish
- Unique flute geometry allows for increased feeds and speeds while reducing harmonics
- Coated with ALtima® (AlTiN) for extended tool life
- M A Ford Series #177



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/16	1/8	1/8	1-1/2	None	**DD1517692**	Price
3/32	1/8	3/16	1-1/2	None	**DD1517696**	Price
1/8	1/8	1/8	1-1/2	None	**DD1517700**	Price
1/8	1/8	1/8	1-1/2	.015	**DD1517729**	Price
1/8	1/8	3/8	1-1/2	None	**DD1617701**	Price
1/8	1/8	3/8	1-1/2	.015	**DD1517730**	Price
5/32	3/16	3/16	2	None	**DD1517702**	Price
5/32	3/16	3/16	2	.015	**DD1617731**	Price
5/32	3/16	7/16	2	.015	**DD1517732**	Price
5/32	3/16	7/16	2	None	**DD1517703**	Price
7/32	1/4	1/4	2	.015	**DD1517737**	Price
7/32	1/4	1/4	2	.030	**DD1617738**	Price
7/32	1/4	7/16	2-1/2	None	**DD1517707**	Price
7/32	1/4	7/16	2-1/2	.015	**DD1617739**	Price
7/32	1/4	7/16	2-1/2	.030	**DD1617740**	Price
3/16	3/16	3/16	2	None	**DD1517704**	Price
3/16	3/16	3/16	2	.015	**DD1517733**	Price
3/16	3/16	3/16	2	.030	**DD1517734**	Price
3/16	3/16	7/16	2	None	**DD1617705**	Price
3/16	3/16	7/16	2	.015	**DD1517735**	Price
3/16	3/16	7/16	2	.030	**DD1517736**	Price
1/4	1/4	1/4	2	None	**DD1517708**	Price
1/4	1/4	1/4	2	.015	**DD1517741**	Price
1/4	1/4	1/4	2	.030	**DD1617742**	Price

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/4	1/4	1/2	2-1/2	None	**DD1617709**	Price
1/4	1/4	1/2	2-1/2	.015	**DD1517743**	Price
1/4	1/4	1/2	2-1/2	.030	**DD1517744**	Price
9/32	5/16	5/8	2-1/2	None	**DD1517710**	Price
9/32	5/16	5/8	2-1/2	.015	**DD1517745**	Price
9/32	5/16	5/8	2-1/2	.030	**DD1617746**	Price
5/16	5/16	5/16	2	None	**DD1517711**	Price
5/16	5/16	5/16	2	.015	**DD1517747**	Price
5/16	5/16	5/16	2	.030	**DD1517748**	Price
5/16	5/16	13/16	2-1/2	None	**DD1617712**	Price
5/16	5/16	13/16	2-1/2	.015	**DD1517749**	Price
5/16	5/16	13/16	2-1/2	.030	**DD1517750**	Price
11/32	3/8	13/16	2-1/2	None	**DD1517713**	Price
11/32	3/8	13/16	2-1/2	.015	**DD1617751**	Price
11/32	3/8	13/16	2-1/2	.030	**DD1617752**	Price
3/8	3/8	3/8	2	None	**DD1517714**	Price
3/8	3/8	3/8	2	.015	**DD1517753**	Price
3/8	3/8	3/8	2	.030	**DD1517754**	Price
3/8	3/8	7/8	2-1/2	None	**DD1617715**	Price
3/8	3/8	7/8	2-1/2	.015	**DD1517755**	Price
3/8	3/8	7/8	2-1/2	.030	**DD1517756**	Price
13/32	7/16	15/16	2-3/4	None	**DD1617716**	Price
13/32	7/16	15/16	2-3/4	.015	**DD1617757**	Price
13/32	7/16	15/16	2-3/4	.030	**DD1617758**	Price

(continued on next page)

4 Flute TuffCut® XR HP ALtima® Coated End Mill (cont.)



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
7/16	7/16	7/16	2-1/2	None	**DD1517717**	Price
7/16	7/16	7/16	2-1/2	.015	**DD1617759**	Price
7/16	7/16	7/16	2-1/2	.030	**DD1617760**	Price
7/16	7/16	1	2-3/4	None	**DD1517718**	Price
7/16	7/16	1	2-3/4	.015	**DD1517761**	Price
7/16	7/16	1	2-3/4	.030	**DD1517762**	Price
15/32	1/2	1	3	None	**DD1617719**	Price
15/32	1/2	1	3	.030	**DD1617764**	Price
15/32	1/2	1	3	.015	**DD1617763**	Price
1/2	1/2	1/2	2-1/2	None	**DD1517720**	Price
1/2	1/2	1/2	2-1/2	.015	**DD1517765**	Price
1/2	1/2	1/2	2-1/2	.030	**DD1517766**	Price
1/2	1/2	1	3	None	**DD1617721**	Price
1/2	1/2	1	3	.015	**DD1517767**	Price
1/2	1/2	1	3	.030	**DD1517768**	Price
1/2	1/2	1	3	.090	**DD1617902**	Price
1/2	1/2	1	3	.125	**DD1617903**	Price
1/2	1/2	1-1/4	3	None	**DD1518094**	Price
1/2	1/2	1-1/4	3	.015	**DD1618095**	Price
1/2	1/2	1-1/4	3	.030	**DD1518096**	Price
1/2	1/2	1-1/4	3	.060	**DD1518097**	Price
1/2	1/2	1-1/4	3	.090	**DD1618098**	Price
1/2	1/2	1-1/4	3	.125	**DD1618099**	Price
9/16	9/16	1-1/8	3-1/2	None	**DD1617722**	Price
9/16	9/16	1-1/8	3-1/2	.015	**DD1617769**	Price
9/16	9/16	1-1/8	3-1/2	.030	**DD1617770**	Price
1/2	1/2	1	3	.060	**DD1517901**	Price
5/8	5/8	5/8	3	None	**DD1517723**	Price
5/8	5/8	5/8	3	.015	**DD1618000**	Price
5/8	5/8	5/8	3	.030	**DD1517771**	Price

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
5/8	5/8	5/8	3	.045	**DD1617772**	Price
5/8	5/8	1-1/4	3-1/2	None	**DD1617724**	Price
5/8	5/8	1-1/4	3-1/2	.015	**DD1518001**	Price
5/8	5/8	1-1/4	3-1/2	.030	**DD1517773**	Price
5/8	5/8	1-1/4	3-1/2	.045	**DD1517774**	Price
5/8	5/8	1-1/4	3-1/2	.060	**DD1617904**	Price
5/8	5/8	1-1/4	3-1/2	.090	**DD1617905**	Price
5/8	5/8	1-1/4	3-1/2	.125	**DD1617906**	Price
3/4	3/4	3/4	3	None	**DD1517725**	Price
3/4	3/4	3/4	3	.015	**DD1618002**	Price
3/4	3/4	3/4	3	.030	**DD1617775**	Price
3/4	3/4	3/4	3	.045	**DD1617776**	Price
3/4	3/4	1-1/2	4	None	**DD1617726**	Price
3/4	3/4	1-1/2	4	.015	**DD1518003**	Price
3/4	3/4	1-1/2	4	.030	**DD1517777**	Price
3/4	3/4	1-1/2	4	.045	**DD1617778**	Price
3/4	3/4	1-1/2	4	.060	**DD1517907**	Price
3/4	3/4	1-1/2	4	.090	**DD1617908**	Price
3/4	3/4	1-1/2	4	.125	**DD1517909**	Price
1	1	1	4	None	**DD1517727**	Price
1	1	1	4	.015	**DD1618004**	Price
1	1	1	4	.030	**DD1617779**	Price
1	1	1	4	.045	**DD1617780**	Price
1	1	1-1/2	4	None	**DD1617728**	Price
1	1	1-1/2	4	.015	**DD1518005**	Price
1	1	1-1/2	4	.030	**DD1517781**	Price
1	1	1-1/2	4	.045	**DD1517782**	Price
1	1	1-1/2	4	.060	**DD1617910**	Price
1	1	1-1/2	4	.090	**DD1617911**	Price
1	1	1-1/2	4	.125	**DD1617912**	Price

POW•R•FEED® M924N Solid Carbide 4 Flute Variable Index (1xD Flute Length) End Mills with Neck Relief

MADE IN THE USA

- Go deeper per pass in cavities with special flute length and no loss of tool rigidity
- Neck relieved for machining in cavities and against tight walls
- Unique vibration dampening geometry for chatter-free machining
- New advanced coating and tool design improves tool life exponentially
- Round shank 1xD
- 38° Helix, AlCrNX, corner radius



K Best in Cast Iron
M Best in Stainless Steels
P Best in Carbon and Tool Steels
S Good in Titanium Alloys

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Neck Length	Radius	Order No.	Price
1/8	1/8	1/4	2-1/2	3/8	.015	**DD4167562**	Price
1/8	1/8	1/4	2-1/2	1-1/8	.015	**DD4167731**	Price
3/16	3/16	3/8	3	1/2	.015	**DD4167564**	Price
3/16	3/16	3/8	3	1-3/8	.015	**DD4167733**	Price
1/4	1/4	1/2	3	1-3/8	.015	**DD4167740**	Price
1/4	1/4	1/2	4	2-3/8	.015	**DD4167744**	Price
3/8	3/8	3/4	4	2-3/8	.015	**DD4168324**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Neck Length	Radius	Order No.	Price
3/8	3/8	3/4	4	2-3/8	.030	**DD4168325**	Price
3/8	3/8	3/4	6	4-3/8	.015	**DD4168330**	Price
3/8	3/8	3/4	6	4-3/8	.030	**DD4168331**	Price
1/2	1/2	1	4	2-1/4	.030	**DD4167858**	Price
1/2	1/2	1	6	4-1/4	.030	**DD4167864**	Price
3/4	3/4	1-1/2	6	3-7/8	.030	**DD4167879**	Price

4 Flute High Performance Carbide End Mills

Variable Helix • Unequal Index • Corner Radius

- Reduces vibration and chatter
- AlTiN coated
- Maximum material removal and feed rates
- Excellent finish in high speed machining
- Center cutting
- Diameter tolerance +.000 / -.002”



Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Radius	Order No.	Price
1/8	1/8	1/4	1-1/2	.015	**DC25294001011**	Price
1/8	1/8	1/2	1-1/2	.015	**DC25294002011**	Price
3/16	3/16	3/8	2	.015	**DC25294001021**	Price
3/16	3/16	5/8	2	.015	**DC25294002021**	Price
1/4	1/4	1/2	2	.020	**DC25294001031**	Price
1/4	1/4	3/4	2-1/2	.020	**DC25294002031**	Price
1/4	1/4	1-1/8	4	.020	**DC25294003031**	Price
5/16	5/16	5/8	2	.030	**DC25294001041**	Price
5/16	5/16	3/4	2-1/2	.030	**DC25294002041**	Price
3/8	3/8	5/8	2	.030	**DC25294001051**	Price
3/8	3/8	1	2-1/2	.030	**DC25294002051**	Price
3/8	3/8	1-1/2	4	.030	**DC25294003051**	Price
7/16	7/16	1	2-3/4	.030	**DC25294002056**	Price
1/2	1/2	5/8	2-1/2	.030	**DC25294001061**	Price
1/2	1/2	1-1/4	3	.030	**DC25294002061**	Price
1/2	1/2	2	4	.030	**DC25294003061**	Price
5/8	5/8	3/4	3	.040	**DC25294001071**	Price
5/8	5/8	1-1/4	3-1/2	.040	**DC25294002071**	Price
5/8	5/8	2-1/4	5	.040	**DC25294003071**	Price
3/4	3/4	1	3	.050	**DC25294001081**	Price
3/4	3/4	1-1/2	4	.050	**DC25294002081**	Price
3/4	3/4	2-1/4	5	.050	**DC25294003081**	Price
1	1	1-1/2	4	.060	**DC25294002091**	Price
1	1	2-1/4	5	.060	**DC25294003091**	Price

HY-PRO® CARB VGx High Performance End Mills

4 Flute • Variable Geometry

- TiAlN coated
- 35° Helix
- OSG List #VG436



Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Corner Chamfer	Shank Type	Order No.	Price
1/8	1/8	1/8	1-1/2	.010	Round	**TP45VG4361252**	Price
1/8	1/8	1/4	1-1/2	.010	Round	**TP45VG4361250**	Price
1/8	1/8	1/2	1-1/2	.010	Round	**TP45VG4361251**	Price
3/16	3/16	5/16	2	.010	Round	**TP45VG4361875**	Price
3/16	3/16	5/8	2-1/4	.010	Round	**TP45VG4361876**	Price
1/4	1/4	3/8	2	.016	Round	**TP45VG4362500**	Price
1/4	1/4	3/4	2-1/2	.016	Round	**TP45VG4362501**	Price
5/16	5/16	1/2	2	.016	Round	**TP45VG4363125**	Price
5/16	5/16	3/4	2-1/2	.016	Round	**TP45VG4363126**	Price
3/8	3/8	1/2	2	.020	Weldon	**TP45VG4363750**	Price
3/8	3/8	7/8	2-1/2	.020	Weldon	**TP45VG4363751**	Price
7/16	7/16	5/8	2-1/2	.020	Weldon	**TP45VG4364375**	Price
7/16	7/16	7/8	2-3/4	.020	Weldon	**TP45VG4364376**	Price
1/2	1/2	5/8	2-1/2	.020	Weldon	**TP45VG4365000**	Price
1/2	1/2	1	3	.020	Weldon	**TP45VG4365001**	Price
1/2	1/2	1-1/4	3-1/2	.020	Weldon	**TP45VG4365002**	Price
1/2	1/2	1-1/2	4	.020	Weldon	**TP45VG4365003**	Price
5/8	5/8	3/4	3	.020	Weldon	**TP45VG4366250**	Price
5/8	5/8	1-1/4	3-1/2	.020	Weldon	**TP45VG4366251**	Price
5/8	5/8	1-5/8	4-1/8	.020	Weldon	**TP45VG4366252**	Price
3/4	3/4	7/8	3-1/2	.020	Weldon	**TP45VG4367500**	Price
3/4	3/4	1-1/2	4	.020	Weldon	**TP45VG4367501**	Price
3/4	3/4	1-5/8	4	.020	Weldon	**TP45VG4367502**	Price
1	1	1-1/2	4	.020	Weldon	**TP45VG4361000**	Price
1	1	2	5	.020	Weldon	**TP45VG4361001**	Price

EXOPRO® UVX-Ni Solid Carbide End Mills For Nickel Alloys

5 Flute • Variable Helix

- Specifically designed for nickel alloys like Inconel 718
- OSG List #2055



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/4	1/4	5/8	2-1/2	.015	**TP5220552501**	Price
1/4	1/4	5/8	2-1/2	.030	**TP5220552502**	Price
1/4	1/4	5/8	2-1/2	.060	**TP5220552503**	Price
5/16	5/16	3/4	2-1/2	.015	**TP5220553121**	Price
5/16	5/16	3/4	2-1/2	.030	**TP5220553122**	Price
5/16	5/16	3/4	2-1/2	.060	**TP5220553123**	Price
3/8	3/8	7/8	2-1/2	.015	**TP5220553751**	Price
3/8	3/8	7/8	2-1/2	.030	**TP5220553752**	Price
3/8	3/8	7/8	2-1/2	.060	**TP5220553753**	Price
1/2	1/2	5/8	2-1/2	.030	**TP5220555001**	Price
1/2	1/2	1	3	.030	**TP5220555002**	Price
1/2	1/2	1	3	.060	**TP5220555003**	Price
1/2	1/2	1-1/4	3-1/2	.015	**TP5220555004**	Price
1/2	1/2	1-1/4	3-1/2	.030	**TP5220555005**	Price
1/2	1/2	1-1/4	3-1/2	.060	**TP5220555006**	Price
1/2	1/2	1-1/4	3-1/2	.090	**TP5220555007**	Price
1/2	1/2	1-1/4	3-1/2	.120	**TP5220555008**	Price
5/8	5/8	1-1/4	3-1/2	.030	**TP5220556251**	Price
5/8	5/8	1-1/4	3-1/2	.060	**TP5220556252**	Price
5/8	5/8	1-1/4	3-1/2	.090	**TP5220556253**	Price
5/8	5/8	1-1/4	3-1/2	.120	**TP5220556254**	Price
3/4	3/4	1-1/2	4	.030	**TP5220557501**	Price
3/4	3/4	1-1/2	4	.060	**TP5220557502**	Price
3/4	3/4	1-1/2	4	.090	**TP5220557503**	Price
3/4	3/4	1-1/2	4	.120	**TP5220557504**	Price
1	1	1-1/2	4	.030	**TP5220551001**	Price
1	1	1-1/2	4	.060	**TP5220551002**	Price
1	1	1-1/2	4	.090	**TP5220551003**	Price
1	1	1-1/2	4	.120	**TP5220551004**	Price

HY-PRO® CARB VGx® Variable Geometry Corner Radius End Mills

- High performance carbide
- Center cutting
- TiALN coating
- 4 Flute
- Recommended for cast iron, carbon steels, alloy steels, die steels, stainless steels, hardened steels up to 45 HrC and high heat alloys
- OSG List #VG434



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Corner Radius	Shank Type	Order No.	Price
1/8	1/8	3/8	1-1/2	.010	Round Shank	**TP45VG4341250**	Price
1/8	1/8	3/8	1-1/2	.015	Round Shank	**TP45VG4341251**	Price
3/16	3/16	7/16	2	.015	Round Shank	**TP45VG4341875**	Price
3/16	3/16	7/16	2	.030	Round Shank	**TP45VG4341876**	Price
1/4	1/4	7/16	2-1/2	.015	Round Shank	**TP45VG4342500**	Price
1/4	1/4	3/4	2-1/2	.015	Round Shank	**TP45VG4342502**	Price
1/4	1/4	7/16	2-1/2	.030	Round Shank	**TP45VG4342501**	Price
1/4	1/4	3/4	2-1/2	.030	Round Shank	**TP45VG4342503**	Price
1/4	3/4	3/4	2-1/2	.060	Round Shank	**TP45VG4342504**	Price
5/16	5/16	13/16	2-1/2	.015	Round Shank	**TP45VG4343125**	Price
5/16	5/16	13/16	2-1/2	.030	Round Shank	**TP45VG4343126**	Price
3/8	7/8	7/8	2-1/2	.015	Round Shank	**TP45VG4343759**	Price
3/8	7/8	7/8	2-1/2	.015	Weldon Shank	**TP45VG4343758**	Price
3/8	3/8	1/2	2-1/2	.030	Round Shank	**TP45VG4343750**	Price
3/8	3/8	1/2	2-1/2	.030	Weldon Shank	**TP45VG4343754**	Price
3/8	3/8	7/8	2-1/2	.030	Round Shank	**TP45VG4343751**	Price
3/8	3/8	7/8	2-1/2	.030	Weldon Shank	**TP45VG4343755**	Price
3/8	3/8	7/8	2-1/2	.045	Round Shank	**TP45VG4343752**	Price
3/8	3/8	7/8	2-1/2	.045	Weldon Shank	**TP45VG4343756**	Price
3/8	3/8	7/8	2-1/2	.060	Round Shank	**TP45VG4343753**	Price
3/8	3/8	7/8	2-1/2	.060	Weldon Shank	**TP45VG4343757**	Price
7/16	7/16	1	2-3/4	.015	Round Shank	**TP45VG4344375**	Price
7/16	7/16	1	2-3/4	.030	Round Shank	**TP45VG4344376**	Price
7/16	7/16	1	2-3/4	.030	Weldon Shank	**TP45VG4344378**	Price
1/2	5/8	5/8	2-1/2	.015	Round Shank	**TP45VG4345021**	Price
1/2	5/8	5/8	2-1/2	.015	Weldon Shank	**TP45VG4345020**	Price
1/2	1/2	1-1/4	3-1/2	.015	Round Shank	**TP45VG4345012**	Price
1/2	1/2	1-1/4	3-1/2	.015	Weldon Shank	**TP45VG4345003**	Price
1/2	1-1/2	1-1/2	4	.020	Round Shank	**TP45VG4345019**	Price
1/2	1-1/2	1-1/2	4	.020	Weldon Shank	**TP45VG4345018**	Price
1/2	1/2	5/8	2-1/2	.030	Round Shank	**TP45VG4345009**	Price
1/2	1/2	5/8	2-1/2	.030	Weldon Shank	**TP45VG4345000**	Price
1/2	1/2	1	3	.030	Round Shank	**TP45VG4345010**	Price
1/2	1/2	1	3	.030	Weldon Shank	**TP45VG4345001**	Price
1/2	1/2	1-1/4	3-1/2	.030	Round Shank	**TP45VG4345013**	Price
1/2	1/2	1-1/4	3-1/2	.030	Weldon Shank	**TP45VG4345004**	Price
1/2	1/2	1-1/4	3-1/2	.045	Round Shank	**TP45VG4345014**	Price
1/2	1/2	1-1/4	3-1/2	.045	Weldon Shank	**TP45VG4345005**	Price
1/2	1/2	1	3	.060	Round Shank	**TP45VG4345011**	Price
1/2	1/2	1	3	.060	Weldon Shank	**TP45VG4345002**	Price
1/2	1/2	1-1/4	3-1/2	.060	Round Shank	**TP45VG4345015**	Price
1/2	1/2	1-1/4	3-1/2	.060	Weldon Shank	**TP45VG4345006**	Price
1/2	1/2	1-1/4	3-1/2	.090	Weldon Shank	**TP45VG4345007**	Price
1/2	1/2	1-1/4	3-1/2	.090	Round Shank	**TP45VG4345016**	Price
1/2	1/2	1-1/4	3-1/2	.125	Round Shank	**TP45VG4345017**	Price
1/2	1/2	1-1/4	3-1/2	.125	Weldon Shank	**TP45VG4345008**	Price
5/8	5/8	1-1/4	3-1/2	.030	Round Shank	**TP45VG4346254**	Price
5/8	5/8	1-1/4	3-1/2	.030	Weldon Shank	**TP45VG4346250**	Price
5/8	5/8	1-1/4	3-1/2	.060	Round Shank	**TP45VG4346255**	Price
5/8	5/8	1-1/4	3-1/2	.060	Weldon Shank	**TP45VG4346251**	Price
5/8	5/8	1-1/4	3-1/2	.090	Round Shank	**TP45VG4346256**	Price
5/8	5/8	1-1/4	3-1/2	.125	Round Shank	**TP45VG4346257**	Price
3/4	1-5/8	1-5/8	4	.020	Round Shank	**TP45VG4347510**	Price
3/4	1-5/8	1-5/8	4	.020	Weldon Shank	**TP45VG4347508**	Price
3/4	3/4	1-1/2	4	.030	Round Shank	**TP45VG4347504**	Price
3/4	3/4	1-1/2	4	.030	Weldon Shank	**TP45VG4347500**	Price
3/4	3/4	1-1/2	4	.060	Round Shank	**TP45VG4347505**	Price
3/4	3/4	1-1/2	4	.060	Weldon Shank	**TP45VG4347501**	Price
3/4	2-1/4	2-1/4	5	.060	Round Shank	**TP45VG4347511**	Price
3/4	2-1/4	2-1/4	5	.060	Weldon Shank	**TP45VG4347509**	Price
3/4	3/4	1-1/2	4	.090	Round Shank	**TP45VG4347506**	Price
3/4	3/4	1-1/2	4	.090	Weldon Shank	**TP45VG4347502**	Price
3/4	3/4	1-1/2	4	.125	Round Shank	**TP45VG4347507**	Price
3/4	3/4	1-1/2	4	.125	Weldon Shank	**TP45VG4347503**	Price
1	1	1-1/2	4	.030	Round Shank	**TP45VG4341004**	Price
1	1	1-1/2	4	.030	Weldon Shank	**TP45VG4341000**	Price
1	1	1-1/2	4	.060	Round Shank	**TP45VG4341005**	Price
1	1	1-1/2	4	.090	Round Shank	**TP45VG4341006**	Price
1	1	1-1/2	4	.125	Round Shank	**TP45VG4341007**	Price

HY-PRO® CARB VGx® Variable Geometry End Mills

- High performance carbide
- Center cutting
- TiALN coating
- Square end
- 4 Flute
- Recommended for cast iron, carbon steels, alloy steels, die steels, stainless steels, hardened steels up to 45 HrC and high heat alloys
- OSG List #VG441



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price
1/8	1/8	3/8	1-1/2	Round Shank	**TP45VG4411250**	Price
3/16	3/16	7/16	2	Round Shank	**TP45VG4411875**	Price
1/4	1/4	7/16	2-1/2	Round Shank	**TP45VG4412500**	Price
1/4	1/4	3/4	2-1/2	Round Shank	**TP45VG4412501**	Price
1/4	1/4	1-1/4	3-1/4	Round Shank	**TP45VG4412502**	Price
5/16	5/16	13/16	2-1/2	Round Shank	**TP45VG4413125**	Price
5/16	5/16	1-5/8	4	Round Shank	**TP45VG4413127**	Price
5/16	5/16	1-1/4	3-1/4	Round Shank	**TP45VG4413126**	Price
3/8	3/8	1/2	2-1/2	Round Shank	**TP45VG4413750**	Price
3/8	3/8	1/2	2-1/2	Weldon Shank	**TP45VG4413752**	Price
3/8	3/8	7/8	2-1/2	Round Shank	**TP45VG4413751**	Price
3/8	3/8	7/8	2-1/2	Weldon Shank	**TP45VG4413753**	Price
3/8	3/8	1-1/2	4	Round Shank	**TP45VG4413754**	Price
3/8	3/8	1-1/2	4	Weldon Shank	**TP45VG4413755**	Price
3/8	3/8	2-1/2	4	Round Shank	**TP45VG4413756**	Price
3/8	3/8	2-1/2	4	Weldon Shank	**TP45VG4413757**	Price
7/16	7/16	1	2-3/4	Weldon Shank	**TP45VG4414376**	Price
1/2	1/2	5/8	2-1/2	Round Shank	**TP45VG4415007**	Price
1/2	1/2	1	3	Round Shank	**TP45VG4415008**	Price
1/2	1/2	5/8	2-1/2	Weldon Shank	**TP45VG4415000**	Price
1/2	1/2	1	3	Weldon Shank	**TP45VG4415001**	Price
1/2	1/2	1-1/4	3-1/2	Round Shank	**TP45VG4415009**	Price
1/2	1/2	1-1/4	3-1/2	Weldon Shank	**TP45VG4415002**	Price
1/2	1/2	1-1/2	4	Round Shank	**TP45VG4415010**	Price
1/2	1/2	1-1/2	4	Weldon Shank	**TP45VG4415003**	Price
1/2	1/2	2	4	Round Shank	**TP45VG4415011**	Price
1/2	1/2	2	4	Weldon Shank	**TP45VG4415004**	Price
1/2	1/2	2-1/2	4	Round Shank	**TP45VG4415012**	Price
1/2	1/2	2-1/2	4	Weldon Shank	**TP45VG4415005**	Price
1/2	1/2	3	5	Round Shank	**TP45VG4415013**	Price
1/2	1/2	3	5	Weldon Shank	**TP45VG4415006**	Price
5/8	5/8	3/4	3	Round Shank	**TP45VG4416255**	Price
5/8	5/8	3/4	3	Weldon Shank	**TP45VG4416250**	Price
5/8	5/8	1-1/4	3-1/2	Round Shank	**TP45VG4416256**	Price
5/8	5/8	1-1/4	3-1/2	Weldon Shank	**TP45VG4416251**	Price
5/8	5/8	1-5/8	5	Round Shank	**TP45VG4416257**	Price
5/8	5/8	1-5/8	5	Weldon Shank	**TP45VG4416252**	Price
5/8	5/8	2-1/4	5	Round Shank	**TP45VG4416258**	Price
5/8	5/8	2-1/4	5	Weldon Shank	**TP45VG4416253**	Price
3/4	3/4	7/8	3-1/2	Round Shank	**TP45VG4417506**	Price
3/4	3/4	7/8	3-1/2	Weldon Shank	**TP45VG4417500**	Price
3/4	3/4	1-1/2	4	Round Shank	**TP45VG4417507**	Price
3/4	3/4	1-1/2	4	Weldon Shank	**TP45VG4417501**	Price
3/4	3/4	1-5/8	4	Round Shank	**TP45VG4417508**	Price
3/4	3/4	1-5/8	4	Weldon Shank	**TP45VG4417502**	Price
3/4	3/4	2-1/4	5	Round Shank	**TP45VG4417509**	Price
3/4	3/4	2-1/4	5	Weldon Shank	**TP45VG4417503**	Price
3/4	3/4	3	6	Round Shank	**TP45VG4417510**	Price
3/4	3/4	3	6	Weldon Shank	**TP45VG4417504**	Price
3/4	3/4	4	6-1/4	Round Shank	**TP45VG4417511**	Price
3/4	3/4	4	6-1/4	Weldon Shank	**TP45VG4417505**	Price
1	1	1-1/2	4	Round Shank	**TP45VG4411005**	Price
1	1	1-1/2	4	Weldon Shank	**TP45VG4411000**	Price
1	1	2	5	Round Shank	**TP45VG4411006**	Price
1	1	2	5	Weldon Shank	**TP45VG4411001**	Price
1	1	4	7	Round Shank	**TP45VG4411009**	Price
1	1	4	7	Weldon Shank	**TP45VG4411004**	Price

TuffCut® XT 4 Flute Carbide End Mills

Necked • Variable Helix • Altima® Blaze Coated

- Variable 38°/41° helix
- Center cutting
- M.A. Ford List #277N



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Neck Length (in.)	Order No.	Price
1/8	1/8	3/16	3	.015	5/8	**DD1627723**	Price
3/16	3/16	1/4	3	.015	15/16	**DD1627728**	Price
3/16	3/16	1/4	3	.030	15/16	**DD1627729**	Price
1/4	1/4	3/8	4	.015	1-1/4	**DD1627735**	Price
1/4	1/4	3/8	4	.030	1-1/4	**DD1627736**	Price
3/8	3/8	1/2	4	.015	1-7/8	**DD1627750**	Price
3/8	3/8	1/2	4	.030	1-7/8	**DD1627751**	Price
1/2	1/2	5/8	6	.015	2-1/2	**DD1627766**	Price
1/2	1/2	5/8	6	.030	2-1/2	**DD1627767**	Price
5/8	5/8	3/4	6	.030	3-1/8	**DD1627782**	Price
3/4	3/4	1	6	.030	3-3/4	**DD1627801**	Price
3/4	3/4	1	6	.250	3-3/4	**DD1627806**	Price

TuffCut® XT 4 Flute Carbide End Mills

Variable Helix • Altima® Blaze Coated

- Variable 38°/41° helix
- Center cutting
- M.A. Ford List #277



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/8	1/8	1/8	1-1/2	None	**DD1618700**	Price
1/8	1/8	1/8	1-1/2	.015	**DD1618701**	Price
1/8	1/8	3/8	1-1/2	None	**DD1618702**	Price
1/8	1/8	3/8	1-1/2	.015	**DD1618703**	Price
1/8	1/8	1/2	1-1/2	None	**DD1618704**	Price
3/16	3/16	3/16	2	None	**DD1618710**	Price
3/16	3/16	3/16	2	.015	**DD1618711**	Price
3/16	3/16	7/16	2	None	**DD1618713**	Price
3/16	3/16	7/16	2	.015	**DD1618714**	Price
3/16	3/16	3/4	2-1/2	None	**DD1618716**	Price
1/4	1/4	3/8	2	None	**DD1618725**	Price
1/4	1/4	3/8	2	.015	**DD1618726**	Price
1/4	1/4	3/4	2-1/2	None	**DD1618728**	Price
1/4	1/4	3/4	2-1/2	.015	**DD1618729**	Price
1/4	1/4	1-1/4	3	None	**DD1618731**	Price
1/4	1/4	1-3/4	4	None	**DD1618734**	Price
5/16	5/16	13/16	2-1/2	None	**DD1618744**	Price
5/16	5/16	13/16	2-1/2	.015	**DD1618745**	Price
3/8	3/8	1/2	2	None	**DD1618759**	Price
3/8	3/8	1/2	2	.015	**DD1618760**	Price
3/8	3/8	7/8	2-1/2	None	**DD1618763**	Price
3/8	3/8	7/8	2-1/2	.015	**DD1618764**	Price
3/8	3/8	1-1/4	3	None	**DD1614498**	Price
3/8	3/8	1-1/4	3	.015	**DD1614499**	Price
3/8	3/8	1-1/2	4	None	**DD1618767**	Price
3/8	3/8	2-1/2	4	None	**DD1618771**	Price
1/2	1/2	1	3	None	**DD1618791**	Price
1/2	1/2	1	3	.015	**DD1618792**	Price
1/2	1/2	1	3	.030	**DD1618793**	Price
1/2	1/2	1-1/4	3	None	**DD1618797**	Price
1/2	1/2	1-1/4	3	.015	**DD1618798**	Price
1/2	1/2	1-1/4	3	.030	**DD1618799**	Price
1/2	1/2	2	4	None	**DD1618803**	Price
1/2	1/2	3	5	None	**DD1618807**	Price
5/8	5/8	1-1/4	3-1/2	None	**DD1618818**	Price
5/8	5/8	1-1/4	3-1/2	.015	**DD1618819**	Price
5/8	5/8	1-1/4	3-1/2	.030	**DD1618820**	Price
5/8	5/8	2-1/4	5	None	**DD1618824**	Price
5/8	5/8	3	6	None	**DD1618828**	Price
3/4	3/4	1-5/8	4	None	**DD1618836**	Price
3/4	3/4	1-5/8	4	.015	**DD1618837**	Price
3/4	3/4	1-5/8	4	.030	**DD1618838**	Price
3/4	3/4	2-1/4	5	None	**DD1618844**	Price
3/4	3/4	3	6	None	**DD1618848**	Price

Fusion™ End Mill Series 4 Flute, Advanced Purpose



Variable Helix - Unequal Index

- General-purpose has finally evolved
- Advanced geometry increases speed, feeds, and stability
- Harmonics and vibration are dramatically reduced
- Excellent finishes in high-speed machining

Quark™ Coating

- Most advanced multi-layer coating available
- Operates at speeds and temperatures far beyond regular AlTiN
- Optimal for dry or wet environments
- Increase operating temperatures up to 1700°F

				Quark		Uncoated	
Dia. (in.)	Shank	LOC	OAL	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	**DC2020000**	Price	**DC2010000**	Price
1/8	1/8	3/4	2-1/4	**DC2020001**	Price	**DC2010001**	Price
1/8	1/8	1	3	**DC2020002**	Price	**DC2010002**	Price
3/16	3/16	5/8	2	**DC2020003**	Price	**DC2010003**	Price
3/16	3/16	3/4	2-1/2	**DC2020004**	Price	**DC2010004**	Price
1/4	1/4	3/4	2-1/2	**DC2020006**	Price	**DC2010006**	Price
1/4	1/4	1-1/8	3	**DC2020007**	Price	**DC2010007**	Price
5/16	5/16	13/16	2-1/2	**DC2020008**	Price	**DC2010008**	Price
5/16	5/16	1-1/8	3	**DC2020009**	Price	**DC2010009**	Price
5/16	5/16	1-5/8	4	**DC2020010**	Price	**DC2010010**	Price
3/8	3/8	1	2-1/2	**DC2020011**	Price	**DC2010011**	Price
3/8	3/8	1-1/8	3	**DC2020012**	Price	**DC2010012**	Price
7/16	7/16	1	2-3/4	**DC2020013**	Price	**DC2010013**	Price
7/16	7/16	2	4	**DC2020014**	Price	**DC2010014**	Price
7/16	7/16	3	6	**DC2020015**	Price	**DC2010015**	Price
1/2	1/2	1	3	**DC2020016**	Price	**DC2010016**	Price
1/2	1/2	1-1/4	3	**DC2020017**	Price	**DC2010017**	Price
1/2	1/2	1-1/2	4	**DC2020018**	Price	**DC2010018**	Price
1/2	1/2	2	4	**DC2020019**	Price	**DC2010019**	Price
5/8	5/8	1-1/4	3-1/2	**DC2020021**	Price	**DC2010021**	Price
5/8	5/8	3	6	**DC2020023**	Price	**DC2010023**	Price
5/8	5/8	2-1/4	5	**DC2020022**	Price	**DC2010022**	Price
3/4	3/4	1-1/2	4	**DC2020024**	Price	**DC2010024**	Price
3/4	3/4	2-1/4	5	**DC2020025**	Price	**DC2010025**	Price
3/4	3/4	3	6	**DC2020026**	Price	**DC2010026**	Price
3/4	3/4	4	7	**DC2020027**	Price	**DC2010027**	Price
1	1	1-1/2	4	**DC2020028**	Price	**DC2010028**	Price
1	1	2-1/4	5	**DC2020029**	Price	**DC2010029**	Price
1	1	3	6	**DC2020030**	Price	**DC2010030**	Price

Additional sizes available

MICRO 100 super carbide V-Hemoth - Variable Helix

ALTiN Coated 4 Flute End Mills

- Variable pitch
- High production / high speed milling
- Excellent surface finish
- Eliminates chatter / reduces machine vibration
- Eccentric grind for better edge strength
- Corner radius as standard
- All tools 3/8" and up have Weldon flats





Dia. (in.)	Shank (in.)	OAL (in.)	Flute Length (in.)	Corner Radius	Order No.	Price
1/8	1/8	1-1/2	1/2	.010	**GE45VHM1254X**	Price
3/16	3/16	2	5/8	.010	**GE45VHM1874X**	Price
3/16	3/16	2-1/2	3/4	.010	**GE45VLM1874X**	Price
3/16	3/16	3	3/8	.010	**GE45VLR1874X**	Price
1/4	1/4	2-1/2	3/4	.020	**GE45VHM2504X**	Price
1/4	1/4	3	1-1/8	.020	**GE45VLM2504X**	Price
1/4	1/4	4	1/2	.020	**GE45VLR2504X**	Price
5/16	5/16	2-1/2	13/16	.020	**GE45VHM3124X**	Price
5/16	5/16	3	1-1/8	.020	**GE45VLM3124X**	Price
3/8	3/8	2-1/2	3/4	.020	**GE45VHM3754X**	Price
3/8	3/8	3	1-1/4	.020	**GE45VLM3754X**	Price
3/8	3/8	4	3/4	.020	**GE45VLR3754X**	Price
7/16	7/16	2-1/2	1	.020	**GE45VHM4374X**	Price
1/2	1/2	3	1	.030	**GE45VHM5004X**	Price
1/2	1/2	4-1/2	2-1/4	.030	**GE45VLM5004X**	Price
5/8	5/8	5	2-1/4	.030	**GE45VLM6254X**	Price
3/4	3/4	4	1-1/2	.030	**GE45VHM7504X**	Price
3/4	3/4	5	2-1/2	.030	**GE45VLM7504X**	Price

RAPIDKUT® 4 Flute Variable Helix Carbide End Mills



Variable Index • Variable Rake

- Advanced performance in steels, stainless steels, alloy, steels, titanium and hardened steels
- AlCrN coating provides increased wear resistance

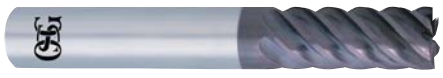
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Style	Radius	Order No.	Price
1/8	1/8	1/4	1-1/2	Round	None	**PE1010086**	Price
1/8	1/8	1/4	1-1/2	Round	.010	**PE1010091**	Price
1/8	1/8	1/2	1-1/2	Round	None	**PE1010096**	Price
1/8	1/8	1/2	1-1/2	Round	.010	**PE1010101**	Price
3/16	3/16	7/16	2	Round	None	**PE1010106**	Price
3/16	3/16	7/16	2	Round	.010	**PE1010111**	Price
3/16	3/16	7/16	2	Round	.030	**PE1010116**	Price
3/16	3/16	5/8	2	Round	None	**PE1010121**	Price
3/16	3/16	5/8	2	Round	.010	**PE1010126**	Price
3/16	3/16	5/8	2	Round	.030	**PE1010131**	Price
1/4	1/4	3/8	2	Round	None	**PE1010136**	Price
1/4	1/4	3/8	2	Round	.010	**PE1010141**	Price
1/4	1/4	3/8	2	Round	.020	**PE1010146**	Price
1/4	1/4	3/8	2	Round	.030	**PE1010151**	Price
1/4	1/4	3/8	2	Round	.060	**PE1010156**	Price
1/4	1/4	3/4	2-1/2	Round	None	**PE1010161**	Price
1/4	1/4	3/4	2-1/2	Round	.010	**PE1010166**	Price
1/4	1/4	3/4	2-1/2	Round	.020	**PE1010171**	Price
1/4	1/4	3/4	2-1/2	Round	.030	**PE1010176**	Price
1/4	1/4	3/4	2-1/2	Round	.060	**PE1010181**	Price
1/4	1/4	3/4	2-1/2	Round	.090	**PE1010186**	Price
1/4	1/4	3/4	3	Round	.020	**PE1010191**	Price
1/4	1/4	3/4	4	Round	.020	**PE1010196**	Price
5/16	5/16	1/2	2	Round	None	**PE1010201**	Price
5/16	5/16	1/2	2	Round	.020	**PE1010206**	Price
5/16	5/16	1/2	2	Round	.030	**PE1010211**	Price
5/16	5/16	3/4	4	Round	.020	**PE1010221**	Price
5/16	5/16	7/8	2-1/2	Round	None	**PE1010216**	Price
5/16	5/16	7/8	2-1/2	Round	.020	**PE1010226**	Price
5/16	5/16	7/8	2-1/2	Round	.030	**PE1010231**	Price
5/16	5/16	7/8	2-1/2	Round	.060	**PE1010236**	Price
3/8	3/8	1/2	2-1/2	Round	None	**PE1010241**	Price
3/8	3/8	1/2	2-1/2	Round	.020	**PE1010246**	Price
3/8	3/8	1/2	2-1/2	Round	.060	**PE1010251**	Price
3/8	3/8	3/4	4	Round	.020	**PE1010256**	Price
3/8	3/8	1	2-1/2	Round	None	**PE1010261**	Price
3/8	3/8	1	2-1/2	Round	.020	**PE1010266**	Price
3/8	3/8	1	2-1/2	Round	.030	**PE1010271**	Price
3/8	3/8	1	2-1/2	Round	.060	**PE1010276**	Price
3/8	3/8	1	2-1/2	Round	.120	**PE1010281**	Price
3/8	3/8	1	3	Round	.090	**PE1010286**	Price
3/8	3/8	2	4	Round	.020	**PE1010291**	Price
7/16	7/16	1	2-3/4	Round	None	**PE1010296**	Price
7/16	7/16	1	2-3/4	Round	.020	**PE1010301**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Style	Radius	Order No.	Price
7/16	7/16	1	2-3/4	Round	.060	**PE1010306**	Price
1/2	1/2	5/8	3	Round	None	**PE1010311**	Price
1/2	1/2	5/8	3	Round	.030	**PE1010316**	Price
1/2	1/2	3/4	4	Round	.030	**PE1010321**	Price
1/2	1/2	1	3	Round	None	**PE1010326**	Price
1/2	1/2	1	3	Round	.030	**PE1010331**	Price
1/2	1/2	1	3	Weldon	.030	**PE1010336**	Price
1/2	1/2	1	3	Round	.060	**PE1010341**	Price
1/2	1/2	1	3	Round	.120	**PE1010346**	Price
1/2	1/2	1-1/4	3	Round	None	**PE1010351**	Price
1/2	1/2	1-1/4	3	Round	.030	**PE1010356**	Price
1/2	1/2	1-1/4	3	Weldon	.030	**PE1010361**	Price
1/2	1/2	1-1/4	3	Round	.060	**PE1010366**	Price
1/2	1/2	1-1/4	3	Round	.120	**PE1010371**	Price
1/2	1/2	2	4	Round	.030	**PE1010376**	Price
5/8	5/8	3/4	3-1/2	Round	None	**PE1010381**	Price
5/8	5/8	3/4	3-1/2	Round	.030	**PE1010386**	Price
5/8	5/8	3/4	3-1/2	Round	.035	**PE1010391**	Price
5/8	5/8	3/4	6	Round	.035	**PE1010396**	Price
5/8	5/8	1-1/2	3-1/2	Round	None	**PE1010401**	Price
5/8	5/8	1-1/2	3-1/2	Round	.035	**PE1010406**	Price
5/8	5/8	1-1/2	3-1/2	Round	.060	**PE1010411**	Price
5/8	5/8	1-1/2	3-1/2	Round	.120	**PE1010416**	Price
5/8	5/8	2-1/4	5	Round	.035	**PE1010421**	Price
3/4	3/4	7/8	4	Round	None	**PE1010426**	Price
3/4	3/4	7/8	4	Round	.020	**PE1010436**	Price
3/4	3/4	7/8	4	Round	.030	**PE1010441**	Price
3/4	3/4	7/8	4	Round	.035	**PE1010446**	Price
3/4	3/4	7/8	4	Round	.120	**PE1010451**	Price
3/4	3/4	7/8	4	Round	.250	**PE1010456**	Price
3/4	3/4	1-1/2	4	Round	None	**PE1010461**	Price
3/4	3/4	1-1/2	4	Round	.030	**PE1010466**	Price
3/4	3/4	1-1/2	4	Round	.035	**PE1010471**	Price
3/4	3/4	1-1/2	4	Weldon	.035	**PE1010476**	Price
3/4	3/4	1-1/2	4	Round	.120	**PE1010481**	Price
3/4	3/4	2-1/4	5	Round	.035	**PE1010486**	Price
3/4	3/4	3/4	6	Round	.035	**PE1010431**	Price
1	1	1-1/2	4	Round	None	**PE1010491**	Price
1	1	1-1/2	4	Weldon	None	**PE1010496**	Price
1	1	1-1/2	4	Round	.035	**PE1010501**	Price
1	1	2-1/4	5	Round	.035	**PE1010506**	Price
1	1	2-1/4	5	Round	.060	**PE1010511**	Price
1	1	2-1/4	5	Round	.120	**PE1010516**	Price

EXOCARB® WXS® Carbide End Mills

4 Flute

- 45° Helix
- OSG List #4540



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1mm	6mm	2.5mm	60mm	**TP483041010**	Price
1.5mm	6mm	4mm	60mm	**TP483041015**	Price
2mm	6mm	6mm	60mm	**TP483041020**	Price
2.5mm	6mm	8mm	60mm	**TP483041025**	Price
3mm	6mm	8mm	60mm	**TP483041030**	Price
3.5mm	6mm	10mm	60mm	**TP483041035**	Price
4mm	6mm	11mm	60mm	**TP483041040**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
4.5mm	6mm	11mm	60mm	**TP483041045**	Price
5mm	6mm	13mm	60mm	**TP483041050**	Price
5.5mm	6mm	13mm	60mm	**TP483041055**	Price
6mm	6mm	13mm	60mm	**TP483041060**	Price
8mm	8mm	19mm	70mm	**TP483041080**	Price
10mm	10mm	22mm	80mm	**TP483041100**	Price
12mm	12mm	26mm	90mm	**TP483041120**	Price

4 Flute WXL® Coated Corner Radius Carbide End Mills

- For side milling & shallow slotting in non-ferrous and hardened steels
- WXL® coated, enhanced geometry and substrate
- Tolerance for milling diameter: R < 1/2 0 ~ –.0008" 1/2> D 0 ~ –.0012"
- OSG List #3670

EXOCARB®



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/16	1/8	3/16	1-1/2	.010	**TP4836700111**	Price
5/64	1/8	1/4	1-1/2	.010	**TP4836700211**	Price
3/32	1/8	3/8	1-1/2	.010	**TP4836700311**	Price
1/8	1/8	1/2	1-1/2	.010	**TP4836700511**	Price
1/8	1/8	1/2	1-1/2	.020	**TP4836700611**	Price
5/32	3/16	9/16	2	.030	**TP4836700911**	Price
3/16	3/16	5/8	2	.020	**TP4836701011**	Price
1/4	1/4	3/4	2-1/2	.020	**TP4836701411**	Price
1/4	1/4	3/4	2-1/2	.030	**TP4836701511**	Price
1/4	1/4	3/4	2-1/2	.060	**TP4836701711**	Price
3/8	3/8	1	2-1/2	.020	**TP4836702011**	Price
3/8	3/8	1	2-1/2	.030	**TP4836702111**	Price
3/8	3/8	1	2-1/2	.060	**TP4836702311**	Price
1/2	1/2	1	3	.030	**TP4836702711**	Price
1/2	1/2	1	3	.060	**TP4836702911**	Price

EXOCARB® WXS® Carbide High Performance End Mills

4 Flute

- 45° Helix
- Center cutting
- WXS® coating
- OSG List #4471



Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Radius	Neck Dia. (in.)	Neck Length (in.)	Order No.	Price
1/16	1/8	1/16	2-1/4	.010	.0580	1/4	**TP48447100111**	Price
3/32	1/8	3/32	2-1/4	.010	.0890	3/8	**TP48447100311**	Price
1/8	1/8	1/8	2-1/4	.010	.1200	1/2	**TP48447100511**	Price
1/8	1/8	1/8	2-1/4	.020	.1200	1/2	**TP48447100711**	Price
3/16	3/16	3/16	2-1/4	.020	.1810	1/2	**TP48447101011**	Price
3/16	3/16	3/16	2-1/4	.030	.1810	1/2	**TP48447101111**	Price
1/4	1/4	1/4	2-1/2	.010	.2420	3/4	**TP48447101411**	Price
1/8	1/8	1/8	2-1/4	.015	.1200	1/2	**TP48447100611**	Price
1/4	1/4	1/4	2-1/2	.020	.2420	3/4	**TP48447101511**	Price
1/4	1/4	1/4	2-1/2	.030	.2420	3/4	**TP48447101611**	Price
3/8	3/8	3/8	3	.020	.3670	1	**TP48447102011**	Price
3/8	3/8	3/8	3	.030	.3670	1	**TP48447102111**	Price
3/8	3/8	3/8	3	.060	.3670	1	**TP48447102211**	Price
1/2	1/2	1/2	3-1/4	.030	.4880	1-1/2	**TP48447102611**	Price
1/2	1/2	1/2	3-1/4	.060	.4880	1-1/2	**TP48447102711**	Price

Multiple Flute 45° Helix WXS® Coated Carbide End Mills

EXOCARB®

- For side milling in hardened steels up to 70 HRc
- Benefits: WXS® coated, higher speeds & feeds
- Tolerance for milling diameter: R<1/2 +0 / –.0008; greater than1/2 D +0 / –.0012"
- OSG List #4440



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	No. of Flutes	OAL (in.)	Order No.	Price
1/16	1/4	3/16	4	2-1/2	**TP4844400311**	Price
3/32	1/4	5/16	4	2-1/2	**TP4844400511**	Price
1/8	1/4	3/8	4	2-1/2	**TP4844400711**	Price
3/16	1/4	1/2	4	2-1/2	**TP4844400911**	Price
1/4	1/4	5/8	6	2-1/2	**TP4844401111**	Price
5/16	5/16	3/4	6	2-3/4	**TP4844401311**	Price
3/8	3/8	1	6	3	**TP4844401411**	Price
1/2	1/2	1-1/8	6	3-1/2	**TP4844401611**	Price
5/8	5/8	1-1/2	6	4	**TP4844401811**	Price
3/4	3/4	1-3/4	6	4-1/4	**TP4844402011**	Price

4 Flute Square End WXL® Coated Carbide End Mills

- For side milling & shallow slotting in non-ferrous and hardened steels
- WXL® coated, enhanced geometry and substrate
- Tolerance for milling diameter: R<1/2 0 ~ –.0008" 1/2 D> 0 ~ –.0012"
- OSG List #3604

EXOCARB®



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/8	3/16	1-1/2	**TP4836040111**	Price
3/32	1/8	3/8	1-1/2	**TP4836040311**	Price
1/8	1/8	1/2	1-1/2	**TP4836040511**	Price
3/16	3/16	5/8	2	**TP4836040711**	Price
1/4	1/4	3/4	2-1/2	**TP4836040911**	Price
5/16	5/16	13/16	2-1/2	**TP4836041111**	Price
3/8	3/8	1	2-1/2	**TP4836041211**	Price
1/2	1/2	1	3	**TP4836041411**	Price
5/8	5/8	1-1/4	3-1/2	**TP4836041511**	Price

RAPIDKUT® Solid Carbide 4 Flute End Mills

Center Cutting • Round Shanks

- 4 Flute design with 35-38° helix for high performance milling
- Specifically designed for stainless steel applications



					AlCrN		Uncoated	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	.020	**DC6210094**	Price	**DC6010076**	Price
3/16	3/16	5/8	2	.020	**DC6210095**	Price	**DC6010077**	Price
1/4	1/4	3/4	2-1/2	.020	**DC6210096**	Price	**DC6010078**	Price
5/16	5/16	13/16	2-1/2	.020	**DC6210097**	Price	**DC6010079**	Price
3/8	3/8	7/8	2-1/2	.020	**DC6210098**	Price	**DC6010080**	Price
1/2	1/2	1-1/4	3	.020	**DC6210099**	Price	**DC6010081**	Price
5/8	5/8	1-5/8	3-1/2	.040	**DC6210100**	Price	**DC6010082**	Price
3/4	3/4	1-5/8	4	.040	**DC6210101**	Price	**DC6010083**	Price

RAPIDKUT® 4 Flute High Feed End Mills

Solid Carbide

- TiAlN coated for greater lubricity
- Diameter tolerance +0 / -.002"
- Length of cut tolerance +/- .015"
- Overall length tolerance +/- .062"
- Corner radius tolerance +/- .003"



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Neck Length (in.)	Order No.	Price
1/8	3/16	3/8	2-1/2	.090	**PE1612510**	Price
1/8	3/16	3/8	2-1/2	.400	**PE1612505**	Price
3/16	1/4	3/8	2-1/2	.562	**PE1618705**	Price
3/16	1/4	3/8	2-1/2	1.000	**PE1618710**	Price
1/4	1/4	3/8	3	.800	**PE1625005**	Price
1/4	1/4	3/8	3	1.300	**PE1625010**	Price
5/16	5/16	3/8	4	1.000	**PE1631205**	Price
5/16	5/16	3/8	4	1.600	**PE1631210**	Price
3/8	3/8	3/8	4	1.100	**PE1637505**	Price
3/8	3/8	3/8	4	1.900	**PE1637510**	Price
1/2	1/2	3/8	4	1.600	**PE1650005**	Price
1/2	1/2	3/8	6	3.000	**PE1650010**	Price

PREMIER HP HIGH PERFORMANCE 4 Flute 30° Helix Medium Length End Mills

For Production-High Performance • AlTiN Coated

- Made of micro-grain carbide, which is processed by special high temperature furnaces-this process allows no porosity after cooling and creates a tougher, stronger end mill
- Can be widely used for milling from raw materials to hardened steels
- Superior workpiece finishes
- Longevity is more than five times as long as non-coated end mill
- AlTiN coated for better endurance when dry-milling
- Best for work material 60HRc or above
- O.D. tolerance: -.0005" -.0015"
- Shank tolerance: 0 -.0003"



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/8	5/16	2	**DD25M304004**	Price
1/8	1/8	5/8	2	**DD25M304008**	Price
3/16	3/16	3/4	2-1/8	**DD25M304012**	Price
1/4	1/4	1	2-3/4	**DD25M304016**	Price
5/16	5/16	1	2-3/4	**DD25M304020**	Price
3/8	3/8	1	2-3/4	**DD25M304024**	Price
1/2	1/2	1-1/2	3-1/2	**DD25M304032**	Price
5/8	5/8	1-3/4	4	**DD25M304040**	Price
3/4	3/4	2	4-1/2	**DD25M304048**	Price
1	1	2	4-1/2	**DD25M304100**	Price

RAPIDKUT 4 Flute 40° Helix Square Carbide End Mills

- High helix for excellent chip ejection
- Higher shearing action
- Used for stainless steel and exotic materials
- Made from premium submicron grain carbide
- Cutting diameter tolerance : +.000/ -.002"



				Uncoated		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	1/8	3/32	1-1/2	**DD8112169**	Price	**DD8152169**	Price
3/64	1/8	1/8	1-1/2	**DD8112171**	Price	**DD8152171**	Price
1/16	1/8	3/16	1-1/2	**DD8112175**	Price	**DD8152175**	Price
3/32	1/8	3/8	1-1/2	**DD8112087**	Price	**DD8152087**	Price
1/8	1/8	1/2	1-1/2	**DD8112076**	Price	**DD8152076**	Price
9/64	3/16	9/16	2	**DD8112015**	Price	**DD8152015**	Price
5/32	3/16	9/16	2	**DD8112017**	Price	**DD8152017**	Price
11/64	3/16	9/16	2	**DD8112181**	Price	**DD8152181**	Price
3/16	3/16	5/8	2	**DD8112019**	Price	**DD8152019**	Price
13/64	1/4	5/8	2-1/2	**DD8112183**	Price	**DD8152183**	Price
7/32	1/4	5/8	2-1/2	**DD8112185**	Price	**DD8152185**	Price
15/64	1/4	3/4	2-1/2	**DD8112187**	Price	**DD8152187**	Price
1/4	1/4	3/4	2-1/2	**DD8112089**	Price	**DD8152089**	Price
17/64	5/16	3/4	2-1/2	**DD8112020**	Price	**DD8152020**	Price
5/16	5/16	13/16	2-1/2	**DD8112023**	Price	**DD8152023**	Price
3/8	3/8	1	2-1/2	**DD8112147**	Price	**DD8152147**	Price
7/16	7/16	1	2-3/4	**DD8112155**	Price	**DD8152155**	Price
1/2	1/2	1	3	**DD8112077**	Price	**DD8152077**	Price
5/8	5/8	1-1/4	3-1/2	**DD8112163**	Price	**DD8152163**	Price
3/4	3/4	1-1/2	4	**DD8112165**	Price	**DD8152165**	Price

EXOCARB®-WXS® End Mills

- High performance micrograin carbide
- WXS coating
- Corner radius
- For high feed milling
- Recommended for carbon steels, alloy steels, tool steels, hardened steels up to 65 HrC and cast iron
- OSG List #4470



Dia. (in.)	Shank Dia. (in.)	Flute Length	OAL (in.)	Neck Dia.	Neck Length (in.)	Corner Radius (in.)	No. of Flutes	Order No.	Price
1/8	1/4	.0600	2-1/4	.1100	3/8	1/32	3	**TP4840700111**	Price
3/16	1/4	.0900	2-1/4	.1800	9/16	1/16	3	**TP4840700211**	Price
1/4	1/4	.1000	3	.2200	1	1/16	4	**TP4844700311**	Price
5/16	5/16	.1300	3	.2800	1-1/4	3/32	4	**TP4840700411**	Price
3/8	3/8	.1500	4	.3300	1-1/2	3/32	4	**TP4840700511**	Price
1/2	1/2	.2000	5	.4600	2	1/8	4	**TP4844700611**	Price

EXOCARB® WXS® Carbide High Performance End Mills

4 Flute

- 45° Helix
- Center cutting
- WXS® coating
- OSG List #4571



Size	Shank Dia.	LOC	OAL	Radius	Neck Dia.	Order No.	Price
3mm	6mm	5mm	60mm	0.2mm	2.85mm	**TP48457103011**	Price
3mm	6mm	5mm	60mm	0.5mm	2.85mm	**TP48457103211**	Price
3mm	6mm	5mm	70mm	0.2mm	2.85mm	**TP48457103111**	Price
3mm	6mm	5mm	70mm	0.5mm	2.85mm	**TP48457103311**	Price
4mm	6mm	6mm	70mm	0.2mm	3.8mm	**TP48457104011**	Price
4mm	6mm	6mm	70mm	0.5mm	3.8mm	**TP48457104211**	Price
4mm	6mm	6mm	80mm	0.2mm	3.8mm	**TP48457104111**	Price
4mm	6mm	6mm	80mm	0.5mm	3.8mm	**TP48457104311**	Price
5mm	6mm	8mm	80mm	0.2mm	4.8mm	**TP48457105011**	Price
5mm	6mm	8mm	80mm	0.5mm	4.8mm	**TP48457105211**	Price
5mm	6mm	8mm	90mm	0.2mm	4.8mm	**TP48457105111**	Price
5mm	6mm	8mm	90mm	0.5mm	4.8mm	**TP48457105311**	Price
6mm	6mm	9mm	90mm	0.5mm	5.8mm	**TP48457106011**	Price
6mm	6mm	9mm	90mm	1mm	5.8mm	**TP48457106111**	Price
6mm	6mm	9mm	100mm	0.5mm	5.8mm	**TP48457106311**	Price
6mm	6mm	9mm	100mm	1mm	5.8mm	**TP48457106211**	Price
8mm	8mm	12mm	100mm	0.5mm	7.7mm	**TP48457108011**	Price
8mm	8mm	12mm	100mm	1mm	7.7mm	**TP48457108211**	Price
8mm	8mm	12mm	110mm	0.5mm	7.7mm	**TP48457108111**	Price
8mm	8mm	12mm	110mm	1mm	7.7mm	**TP48457108311**	Price
10mm	10mm	15mm	100mm	0.5mm	9.7mm	**TP48457110011**	Price
10mm	10mm	15mm	100mm	1mm	9.7mm	**TP48457110211**	Price
10mm	10mm	15mm	100mm	2mm	9.7mm	**TP48457110411**	Price
10mm	10mm	15mm	120mm	0.5mm	9.7mm	**TP48457110111**	Price
10mm	10mm	15mm	120mm	1mm	9.7mm	**TP48457110311**	Price
10mm	10mm	15mm	120mm	2mm	9.7mm	**TP48457110511**	Price
12mm	12mm	18mm	110mm	1mm	11.7mm	**TP48457112011**	Price
12mm	12mm	18mm	110mm	2mm	11.7mm	**TP48457112211**	Price
12mm	12mm	18mm	130mm	1mm	11.7mm	**TP48457112111**	Price
12mm	12mm	18mm	130mm	2mm	11.7mm	**TP48457112311**	Price

RAPIDKUT Solid Carbide 4 Flute Metric High Spiral End Mills

Center Cutting • Round Shanks

- Uncoated, AlCrN or AlTiN coated
- 4 Flute design with 35-38° helix for high performance milling
- Specifically designed for stainless steel applications



				Uncoated		AlTiN		AlCrN	
Size	Shank Dia.	Flute Length	OAL	Order No.	Price	Order No.	Price	Order No.	Price
3mm	6mm	8mm	57mm	**DC6010001**	Price	**DC6310001**	Price	**DC6210001**	Price
4mm	6mm	11mm	57mm	**DC6010002**	Price	**DC6310002**	Price	**DC6210002**	Price
5mm	6mm	13mm	57mm	**DC6010003**	Price	**DC6310003**	Price	**DC6210003**	Price
6mm	6mm	13mm	57mm	**DC6010004**	Price	**DC6310004**	Price	**DC6210004**	Price
7mm	8mm	19mm	63mm	**DC6010005**	Price	**DC6310005**	Price	**DC6210005**	Price
8mm	8mm	19mm	63mm	**DC6010006**	Price	**DC6310006**	Price	**DC6210006**	Price
9mm	10mm	22mm	72mm	**DC6010007**	Price	**DC6310007**	Price	**DC6210007**	Price
10mm	10mm	22mm	72mm	**DC6010008**	Price	**DC6310008**	Price	**-**	-
10mm	10mm	25mm	72mm	**-**	-	**-**	-	**DC6210008**	Price
11mm	12mm	26mm	83mm	**DC6010009**	Price	**DC6310009**	Price	**DC6210009**	Price
12mm	12mm	26mm	83mm	**DC6010010**	Price	**DC6310010**	Price	**DC6210010**	Price
13mm	14mm	26mm	83mm	**DC6010011**	Price	**DC6310011**	Price	**DC6210011**	Price
14mm	14mm	26mm	83mm	**DC6010060**	Price	**DC6310060**	Price	**DC6210060**	Price
16mm	16mm	32mm	92mm	**DC6010065**	Price	**DC6310065**	Price	**DC6210065**	Price
18mm	18mm	32mm	92mm	**DC6010070**	Price	**DC6310070**	Price	**DC6210070**	Price
20mm	20mm	38mm	104mm	**DC6010075**	Price	**DC6310075**	Price	**DC6210075**	Price

WIDIA Solid Carbide HP Varimill I™ Extended Reach Ball Nose End Mills

4 Flute • TiAlN Coated



- Unequal flute spacing
- 38° Helix
- Center cutting
- Cylindrical shanks
- TiAlN coated for longer tool life

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	1/4	3/8	4	**WK402837105**	Price
3/8	3/8	1/2	4	**WK403018276**	Price
1/2	1/2	5/8	5	**WK402837088**	Price
5/8	5/8	3/4	6	**WK402837081**	Price
3/4	3/4	1	6	**WK402837073**	Price

4 Flute Solid Carbide Ball Nose End Mills

Variable Helix



- Variantra ® Supral (TiAlCN) coated
- 45° Chamfer
- PCT List #0451

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/8	1/8	1/2	1-1/2	-	**CW8021350**	Price
3/16	3/16	5/8	2	-	**CW8021355**	Price
1/4	1/4	3/4	2-1/2	-	**CW8021395**	Price
1/4	1/4	3/8	4	2-1/8	**CW8021390**	Price
5/16	5/16	1/2	2	-	**CW8021445**	Price
5/16	5/16	7/8	2-1/2	-	**CW8021450**	Price
3/8	3/8	1/2	6	3-3/8	**CW8021520**	Price
3/8	3/8	1	3	-	**CW8021535**	Price
7/16	7/16	1	2-3/4	-	**CW8021590**	Price
1/2	1/2	5/8	5	3-1/8	**CW8021650**	Price
1/2	1/2	5/8	6	4-1/8	**CW8021660**	Price
1/2	1/2	1-1/4	3	-	**CW801T40812503B**	Price
1/2	1/2	2	4	-	**CW8021695**	Price
5/8	5/8	3/4	5	3-1/8	**CW8021755**	Price
5/8	5/8	3/4	6	4-1/8	**CW8021765**	Price
5/8	5/8	1-1/4	3-1/2	-	**CW8021770**	Price
3/4	3/4	1	5	3	**CW8021850**	Price
3/4	3/4	1	6	4	**CW8021860**	Price
3/4	3/4	1-1/2	4	-	**CW8021870**	Price
1	1	1-1/4	6	3-1/8	**CW8021930**	Price
1	1	1-1/4	7	4-1/8	**CW8021940**	Price
1	1	1-1/2	4	-	**CW8021945**	Price
1	1	3	6	-	**CW8021985**	Price

WIDIA Solid Carbide Varimill GP Ball Nose End Mills

4 Flute • TiAlN Coated



- Center cutting
- Cylindrical shanks
- TiAlN coated for longer tool life

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/32	1/8	5/64	1-1/2	**WK405825624**	Price
3/64	1/8	1/8	1-1/2	**WK405825625**	Price
1/16	1/8	3/16	1-1/2	**WK405825626**	Price
3/32	1/8	3/16	1-1/2	**WK405825628**	Price
3/32	1/8	3/8	1-1/2	**WK405825643**	Price
1/8	1/8	1/4	1-1/2	**WK405825646**	Price
1/8	1/8	1/2	1-1/2	**WK405825647**	Price
1/8	1/8	3/4	2-1/4	**WK405825648**	Price
1/8	1/8	3/4	3	**WK405825649**	Price
5/32	3/16	9/16	2	**WK405825652**	Price
3/16	3/16	5/16	1-1/2	**WK405825654**	Price
3/16	3/16	5/8	2	**WK405825655**	Price
3/16	3/16	3/4	2-1/2	**WK405825656**	Price
3/16	3/16	1	4	**WK405825657**	Price
7/32	1/4	5/8	2-1/2	**WK405825659**	Price
1/4	1/4	1/2	2	**WK405825661**	Price
1/4	1/4	3/4	2-1/2	**WK405825663**	Price
1/4	1/4	1-1/8	3	**WK405825664**	Price
1/4	1/4	1-1/2	4	**WK405825665**	Price
5/16	5/16	13/16	2-1/2	**WK405825670**	Price
3/8	3/8	1	2-1/2	**WK405825684**	Price
3/8	3/8	1	4	**WK405825685**	Price
3/8	3/8	1-1/8	3	**WK405825686**	Price
3/8	3/8	1-1/2	6	**WK405825687**	Price
1/2	1/2	1	3	**WK405825689**	Price
1/2	1/2	1	4	**WK405825690**	Price
1/2	1/2	1-1/2	6	**WK405825691**	Price
1/2	1/2	2	4	**WK405825692**	Price
5/8	5/8	1-1/4	3-1/2	**WK405825697**	Price
3/4	3/4	1	3	**WK405825700**	Price
3/4	3/4	1-1/2	4	**WK405825711**	Price

RAPIDKUT® 4 Flute Variable Helix Carbide Ball Nose End Mills



Variable Index • Variable Rake

- Advanced performance in steels, stainless steels, alloy, steels, titanium and hardened steels
- AlCrN coating provides increased wear resistance

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	1/4	1-1/2	**PE1010001**	Price
1/8	1/8	1/2	1-1/2	**PE1010006**	Price
3/16	3/16	5/8	2	**PE1010011**	Price
1/4	1/4	3/8	2	**PE1010016**	Price
1/4	1/4	3/4	2-1/2	**PE1010021**	Price
5/16	5/16	7/8	2-1/2	**PE1010026**	Price
3/8	3/8	1/2	2-1/2	**PE1010031**	Price
3/8	3/8	1	2-1/2	**PE1010036**	Price
7/16	7/16	1	2-3/4	**PE1010041**	Price
1/2	1/2	5/8	3	**PE1010046**	Price
1/2	1/2	1	3	**PE1010051**	Price
1/2	1/2	1-1/4	3	**PE1010056**	Price
5/8	5/8	3/4	3-1/2	**PE1010061**	Price
5/8	5/8	1-1/2	3-1/2	**PE1010066**	Price
3/4	3/4	7/8	4	**PE1010076**	Price
3/4	3/4	3/4	4	**PE1010071**	Price
1	1	1-1/2	4	**PE1010081**	Price

RAPIDKUT® 4 Flute Solid Carbide Spherical Ball End Mills

Center Cutting • nACO Coated for Hardened Steel

- High performance ball nose plus end mills are used in the mold industry and have a full 220° arc cutting capability
- Tools are stocked with a coating to optimize cutting performance
- Made from premium submicron grain carbide
- Cutting diameter tolerance: +.000/-.002”



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	3/32	3	**DD8180331**	Price
3/16	3/16	9/64	3	**DD8180333**	Price
1/4	1/4	3/16	2-1/2	**DD8180055**	Price
1/4	1/4	3/16	4	**DD8180335**	Price
3/8	3/8	9/32	2-1/2	**DD8180057**	Price
3/8	3/8	9/32	4	**DD8180337**	Price
1/2	1/2	3/8	3	**DD8180059**	Price
1/2	1/2	3/8	6	**DD8180339**	Price

RAPIDKUT® 4 Flute Solid Carbide 40° Helix Ball End Mills



- High helix for excellent chip ejection
- Higher shearing action
- Used for stainless steel and exotic materials
- Made from premium submicron grain carbide
- Cutting diameter tolerance : +.000/ -.002”

				Uncoated		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	1/8	3/32	1-1/2	**DD8112173**	Price	**DD8152173**	Price
1/16	1/8	3/16	1-1/2	**DD8112101**	Price	**DD8152101**	Price
3/32	1/8	3/8	1-1/2	**DD8112179**	Price	**DD8152179**	Price
1/8	1/8	1/2	1-1/2	**DD8112025**	Price	**DD8152025**	Price
5/32	3/16	9/16	2	**DD8112027**	Price	**DD8152027**	Price
3/16	3/16	5/8	2	**DD8112029**	Price	**DD8152029**	Price
7/32	1/4	5/8	2-1/2	**-**	-	**DD8152189**	Price
1/4	1/4	3/4	2-1/2	**DD8112031**	Price	**DD8152031**	Price
5/16	5/16	13/16	2-1/2	**DD8112141**	Price	**DD8152141**	Price
3/8	3/8	1	2-1/2	**DD8112149**	Price	**DD8152149**	Price
1/2	1/2	1	3	**DD8112159**	Price	**DD8152159**	Price

MICRO 100® High Performance Solid Carbide Ball End Mills

2 & 4 Flute — Center Cutting — 30° Helix

- Shank diameter tolerance: .0001” to – .0003”
- Ball radius tolerance: +.005 – .000”
- T.I.R. maximum: .0005”
- Cutter diameter tolerances:
  1/32 to 1/4” +.000 – .002”
  9/32 to 1” +.000 – .003”



Flutes - 2							
				AlTiN		Uncoated	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	1/8	5/64	1-1/2	**-**	-	**GE45BEM03102**	Price
1/16	1/8	3/16	1-1/2	**GE45BEM06202X**	Price	**GE45BEM06202**	Price
3/32	1/8	3/8	1-1/2	**GE45BEM09302X**	Price	**GE45BEM09302**	Price
1/8	1/8	1/2	1-1/2	**GE45BEM12502X**	Price	**GE45BEM12502**	Price
3/16	3/16	5/8	2	**GE45BEM18702X**	Price	**GE45BEM18702**	Price
7/32	1/4	5/8	2-1/2	**-**	-	**GE45BEM21802**	Price
1/4	1/4	3/4	2-1/2	**GE45BEM25002X**	Price	**GE45BEM25002**	Price
5/16	5/16	13/16	2-1/2	**GE45BEM31202X**	Price	**GE45BEM31202**	Price
3/8	3/8	7/8	2-1/2	**GE45BEM37502X**	Price	**GE45BEM37502**	Price
1/2	1/2	1	3	**GE45BEM50002X**	Price	**GE45BEM50002**	Price

Flutes - 4							
				AlTiN		Uncoated	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
3/64	1/8	7/64	1-1/2	**GE45BEM04604X**	Price	**GE45BEM04604**	Price
1/16	1/8	3/16	1-1/2	**GE45BEM06204X**	Price	**GE45BEM06204**	Price
5/64	1/8	3/16	1-1/2	**GE45BEM07804X**	Price	**GE45BEM07804**	Price
3/32	1/8	3/8	1-1/2	**GE45BEM09304X**	Price	**GE45BEM09304**	Price
1/8	1/8	1/2	1-1/2	**GE45BEM12504X**	Price	**GE45BEM12504**	Price
5/32	3/16	9/16	2	**GE45BEM15604X**	Price	**GE45BEM15604**	Price
3/16	3/16	5/8	2	**GE45BEM18704X**	Price	**GE45BEM18704**	Price
7/32	1/4	5/8	2-1/2	**-**	-	**GE45BEM21804**	Price
1/4	1/4	3/4	2-1/2	**GE45BEM25004X**	Price	**GE45BEM25004**	Price
9/32	5/16	3/4	2-1/2	**GE45BEM28104X**	Price	**GE45BEM28104**	Price
5/16	5/16	13/16	2-1/2	**GE45BEM31204X**	Price	**GE45BEM31204**	Price
3/8	3/8	7/8	2-1/2	**GE45BEM37504X**	Price	**GE45BEM37504**	Price
1/2	1/2	1	3	**GE45BEM50004X**	Price	**GE45BEM50004**	Price
1	1	1-1/2	4	**-**	-	**GE45BEM00104**	Price

PREMIER HP HIGH PERFORMANCE Carbide 4 Flute 30° Helix Long Reach Ball End Mills with AlTiN Coating

(For Production — High Performance)

- Can be widely used for milling from raw materials, pre-hardened steels, and to hardened steels
- Deep slotting milling is possible by reduced neck
- For copy-milling machines
- Longevity is more than five times as long as non-coated end mill
- AlTiN coating provides higher wear resistance when dry-milling
- OD tolerance: -.0005” ~ -.0015”
- Shank tolerance: 0 ~ -.0003”
- Radius tolerance: ± .001”



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Neck Dia.	Length Below Shank (in.)	OAL (in.)	Order No.	Price
1/8	1/8	1/8	-	-	2-3/4	**DD25LB304008**	Price
3/16	3/16	3/16	-	-	3-1/8	**DD25LB304012**	Price
1/4	1/4	1/4	.242	7/8	3-1/8	**DD25LB304016**	Price
5/16	5/16	5/16	.305	1-1/16	3-1/2	**DD25LB304020**	Price
3/8	3/8	3/8	.367	1-1/4	4	**DD25LB304024**	Price
1/2	1/2	1/2	.492	1-1/2	4-1/4	**DD25LB304032**	Price
5/8	5/8	5/8	.617	2	5-1/2	**DD25LB304040**	Price
3/4	3/4	3/4	.742	2-1/4	6-1/4	**DD25LB304048**	Price
1	1	1	.992	3	7	**DD25LB304100**	Price

RAPIDKUT® 4 Flute Solid Carbide Ball End Mills



Center Cutting • Variable Helix

- Helix changes along flute
- Radius ball for contouring parts and surfaces
- Cutting diameter tolerance: +.000/-.002"

AlTiN

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	1/4	3/4	2-1/2	**DD8112279**	Price
5/16	5/16	13/16	2-1/2	**DD8112297**	Price
3/8	1/4	3/4	2-1/2	**DD8112298**	Price
1/2	1/2	1	3	**DD8112299**	Price
5/8	5/8	1-1/4	3-1/2	**DD8112300**	Price
3/4	3/4	1-1/2	4	**DD8112301**	Price

HY-PRO® CARB VGx High Performance End Mills

4 Flute • Ball Nose • Variable Geometry

- TiAlN coated
- 35° Helix
- OSG List #VG441BN



Size (in.)	Shank Dia. (in.)	LOC (in.)	OAI (in.)	Shank Type	Order No.	Price
1/8	1/8	1/2	2	Round	**TP45VG4411250BN**	Price
3/16	3/16	5/8	2-1/4	Round	**TP45VG4411875BN**	Price
1/4	1/4	3/4	2-1/2	Round	**TP45VG4412500BN**	Price
5/16	5/16	3/4	2-1/2	Round	**TP45VG4413125BN**	Price
3/8	3/8	7/8	2-1/2	Weldon	**TP45VG4413750BN**	Price
7/16	7/16	7/8	2-1/2	Weldon	**TP45VG4414375BN**	Price
1/2	1/2	1	3	Weldon	**TP45VG4415000BN**	Price
1/2	1/2	1-1/4	3	Weldon	**TP45VG4415010BN**	Price
5/8	5/8	1-1/4	3-1/2	Weldon	**TP45VG4416250BN**	Price
3/4	3/4	1-1/2	4	Weldon	**TP45VG4417500BN**	Price
1	1	1-1/2	4	Weldon	**TP45VG4411000BN**	Price
1-1/4	1-1/4	2-1/4	5	Weldon	**TP45VG4411010BN**	Price

TuffCut® XT 4 Flute Carbide Ball Nose End Mills

Variable Helix • Altima® Blaze Coated



- Variable 35°/38° helix
- Center cutting
- Higher feeds over similar end mills
- Reduced vibration harmonics
- Improved part finishes
- Maintains cutting edge strength & sharpness for improved tool life
- Slotting at 1X diameter deep
- State-of-the-art ALtima® Blaze coating for superior tool life and higher metal removal rates
- Designed for specific applications in steels, stainless steels, special alloys, cast iron, titanium inconel, and high temp alloys
- M.A. Ford List #279

Size (in.)	Shank Dia, (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/2	1/2	1-1/4	3	**DD1627932**	Price
1/2	1/2	5/8	2-1/2	**DD1627930**	Price
1/4	1/4	3/4	2-1/2	**DD1627920**	Price
1/4	1/4	3/8	2	**DD1627918**	Price
1/8	1/8	1/4	1-1/2	**DD1627910**	Price
1/8	1/8	3/8	1-1/2	**DD1627912**	Price
3/16	3/16	3/8	2	**DD1627914**	Price
3/16	3/16	5/8	2	**DD1627916**	Price
3/4	3/4	1-1/2	4	**DD1627936**	Price
3/8	3/8	1/2	2	**DD1627926**	Price
3/8	3/8	7/8	2-1/2	**DD1627928**	Price
5/16	5/16	1/2	2	**DD1627922**	Price
5/16	5/16	13/16	2-1/2	**DD1627924**	Price
5/8	5/8	1-1/4	3-1/2	**DD1627934**	Price
7/16	1	7/16	2-1/2	**DD1627931**	Price
7/16	1/2	7/16	2-1/2	**DD1627929**	Price

POW•R•FEED® M924B Solid Carbide 4 Flute Variable Index Ball Nose End Mill

- Excellent for contouring applications in a wide range of materials
- Advanced coating and tool design improves tool life exponentially
- Top of its class for agressive slotting, perimeter milling and plunging in all ferrous metals
- 38° Helix, round shank

MADE IN THE USA

K Best in Cast Iron M Best in Stainless Steels

P Best in Carbon and Tool Steels S Good in Titanium Alloys



				Round Shank	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	1/2	1-1/2	**DD4167501**	Price
5/32	3/16	9/16	2	**DD4167540**	Price
3/16	3/16	9/16	2	**DD4167513**	Price
1/4	1/4	3/4	2-1/2	**DD4167529**	Price
5/16	5/16	13/16	2-1/2	**DD4167103**	Price
3/8	3/8	7/8	2-1/2	**DD4167131**	Price
7/16	7/16	1	2-3/4	**DD4167195**	Price
1/2	1/2	1	3	**DD4167221**	Price
1/2	1/2	1-1/4	3	**DD4167230**	Price
5/8	5/8	1-3/8	3-1/2	**DD4167295**	Price
3/4	3/4	1-5/8	4	**DD4167365**	Price

TuffCut® XR 4 Flute ALtima® Coated HP Ball Nose End Mills



Center Cutting • Fractional Sizes • 35°/38° Helix

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/8	1/8	1-1/2	**DD1618284**	Price
5/64	1/8	5/32	1-1/2	**DD1618286**	Price
3/32	1/8	3/16	1-1/2	**DD1618288**	Price
1/8	1/8	1/4	1-1/2	**DD1618034**	Price
1/8	1/8	3/8	1-1/2	**DD1618035**	Price
3/16	3/16	3/8	2	**DD1618038**	Price
3/16	3/16	5/8	2	**DD1618039**	Price
1/4	1/4	3/8	2	**DD1518042**	Price
1/4	1/4	3/4	2-1/2	**DD1618043**	Price
1/4	1/4	1/2	4	**DD1618063**	Price
5/16	5/16	1/2	2	**DD1618045**	Price
5/16	5/16	13/16	2-1/2	**DD1618046**	Price
3/8	3/8	1/2	2	**DD1618048**	Price
3/8	3/8	7/8	2-1/2	**DD1618049**	Price
3/8	3/8	9/16	4	**DD1618064**	Price
1/2	1/2	5/8	2-1/2	**DD1618054**	Price
1/2	1/2	1-1/4	3	**DD1618055**	Price
1/2	1/2	5/8	5	**DD1618065**	Price
5/8	5/8	1-1/4	3-1/2	**DD1618058**	Price
5/8	5/8	3/4	6	**DD1618066**	Price
3/4	3/4	1	6	**DD1618067**	Price
3/4	3/4	1-1/2	4	**DD1618060**	Price
1	1	1-1/2	4	**DD1618062**	Price
1	1	1-1/4	6	**DD1618068**	Price

POW•R•FEED® M904B Solid Carbide 4 Flute Variable Index Ball End Mill

- Well known for its power, balance, and versatility in a wide range of materials
- Unique vibration dampening geometry for chatter-free machining
- AlTiN-X coating for higher hot hardness than conventional 'general purpose' tools
- 38° Helix with either round or Weldon style shank

MADE IN THE USA



S Best in Titanium Alloys K Good in Cast Iron

M Best in Stainless Steels P Good in Carbon and Tool Steels

				Round Shank		Weldon Shank	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	**DD4063139**	Price	-	-
3/8	3/8	7/8	2-1/2	**DD4063148**	Price	**DD4063176**	Price
1/2	1/2	1	3	**DD4063152**	Price	**DD4063180**	Price
1/2	1/2	1-1/4	3	**DD4063153**	Price	**DD4063181**	Price
3/16	3/16	5/8	2	**DD4063142**	Price	-	-
1/4	1/4	3/4	2-1/2	**DD4063144**	Price	-	-
3/4	3/4	1-1/2	4	**DD4063156**	Price	-	-

enDURO® M525 Solid Carbide 5 Flute Variable Index End Mills



S Best in Titanium Alloys K Good in Cast Iron
M Best in Stainless Steels P Good in Carbon and Tool Steels

Square End and Corner Radius Styles

- Advanced cutting edge design for higher metal removal rates in hard to machine materials
- Unique vibration dampening geometry for maximum tool stability and longer tool life
- Specifically designed to run wet or dry on today's high speed, high-efficiency machines
- Round shank
- 40° Helix, AlCrN-X coated

Great for HEM

				.015		.030		.060		None	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1/4	1-1/2	DD4065002	Price	-	-	-	-	DD4065001	Price
1/8	1/8	1/2	1-1/2	DD4065006	Price	-	-	-	-	DD4065005	Price
1/8	1/8	3/4	2-1/2	DD4065010	Price	-	-	-	-	DD4065009	Price
3/16	3/16	5/16	2	DD4065014	Price	-	-	-	-	DD4065013	Price
3/16	3/16	9/16	2	DD4065018	Price	-	-	-	-	DD4065017	Price
3/16	3/16	3/4	2-1/2	DD4065022	Price	-	-	-	-	DD4065021	Price
1/4	1/4	3/8	2	DD4065026	Price	DD4065027	Price	-	-	DD4065025	Price
1/4	1/4	3/4	2-1/2	DD4065050	Price	DD4065051	Price	DD4065052	Price	DD4065049	Price
1/4	1/4	1-1/8	3	DD4065056	Price	DD4065057	Price	-	-	DD4065055	Price
5/16	5/16	7/16	2	DD4065062	Price	DD4065063	Price	DD4065064	Price	DD4065061	Price
5/16	5/16	13/16	2-1/2	DD4065068	Price	DD4065069	Price	DD4065070	Price	DD4065067	Price
5/16	5/16	1-1/4	3	DD4065074	Price	DD4065075	Price	DD4065076	Price	DD4065073	Price
5/16	5/16	2-1/8	4	DD4065080	Price	DD4065081	Price	DD4065082	Price	DD4065079	Price
3/8	3/8	1/2	2	DD4065086	Price	DD4065087	Price	-	-	DD4065085	Price
3/8	3/8	1	2-1/2	DD4065134	Price	DD4065135	Price	DD4065136	Price	DD4065133	Price
3/8	3/8	1-1/4	3	DD4065142	Price	DD4065143	Price	-	-	DD4065141	Price
3/8	3/8	2	4	DD4065174	Price	DD4065175	Price	DD4065176	Price	DD4065173	Price
7/16	7/16	1	2-3/4	DD4065198	Price	DD4065199	Price	-	-	DD4065197	Price
1/2	1/2	5/8	2-1/2	DD4065214	Price	DD4065215	Price	DD4065216	Price	DD4065213	Price
1/2	1/2	1	3	DD4065259	Price	DD4065260	Price	DD4065261	Price	DD4065258	Price
1/2	1/2	1-1/4	3	DD4065268	Price	DD4065269	Price	DD4065270	Price	DD4065267	Price
1/2	1/2	2-1/8	4	DD4065295	Price	DD4065296	Price	DD4065297	Price	DD4065294	Price
1/2	1/2	2-5/8	5	DD4065304	Price	DD4065305	Price	DD4065306	Price	DD4065303	Price
1/2	1/2	3-1/4	6	DD4065313	Price	DD4065314	Price	DD4065315	Price	DD4065312	Price
5/8	5/8	3/4	3	DD4065322	Price	DD4065323	Price	DD4065324	Price	DD4065321	Price
5/8	5/8	1-5/8	3-1/2	DD4065362	Price	DD4065363	Price	DD4065364	Price	DD4065361	Price
5/8	5/8	2-1/8	4	DD4065372	Price	DD4065373	Price	DD4065374	Price	DD4065371	Price
5/8	5/8	2-5/8	5	DD4065392	Price	DD4065393	Price	DD4065394	Price	DD4065391	Price
5/8	5/8	3-1/4	6	DD4065402	Price	DD4065403	Price	DD4065404	Price	DD4065401	Price
3/4	3/4	1	3	DD4065422	Price	DD4065423	Price	DD4065424	Price	DD4065421	Price
3/4	3/4	1-5/8	4	DD4065462	Price	DD4065463	Price	DD4065464	Price	DD4065461	Price
3/4	3/4	2-3/8	5	DD4065472	Price	DD4065473	Price	DD4065474	Price	DD4065471	Price
3/4	3/4	3-1/4	6	DD4065492	Price	DD4065493	Price	DD4065494	Price	DD4065491	Price
3/4	3/4	4-1/8	7	DD4065502	Price	DD4065503	Price	DD4065504	Price	DD4065501	Price
1	1	1-3/4	4	DD4065556	Price	DD4065557	Price	DD4065558	Price	DD4065555	Price
1	1	2-5/8	5	DD4065567	Price	DD4065568	Price	DD4065569	Price	DD4065566	Price
1	1	3-1/4	6	DD4065589	Price	DD4065590	Price	DD4065591	Price	DD4065588	Price

enDURO® M525N Solid Carbide 5 Flute Variable Index End Mills

MADE IN THE USA

Square End and Corner Radius Styles with Neck Relief

- Neck relief permits clearance in deeper cavities
- Short flute length for for increased stability of the end mill in the cut
- Amazing corner strength for longer tool life in hard metals
- Round shank
- 40° Helix, AlCrN-X coated

Great for HEM

S Best in Titanium Alloys K Good in Cast Iron
M Best in Stainless Steels P Good in Carbon and Tool Steels



					.015		.030		None	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Reach (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/4	1/4	3/8	1-3/8	3	DD4065687	Price	DD4065688	Price	DD4065686	Price
1/4	1/4	3/8	2-3/8	4	DD4065693	Price	DD4065694	Price	DD4065692	Price
3/8	3/8	1/2	2-3/8	4	DD4065715	Price	DD4065716	Price	DD4065714	Price
1/2	1/2	5/8	2-1/4	4	DD4065748	Price	DD4065749	Price	DD4065747	Price
1/2	1/2	5/8	4-1/4	6	DD4065766	Price	DD4065767	Price	DD4065765	Price
5/8	5/8	3/4	2-1/8	4	-	-	DD4065776	Price	DD4065774	Price
5/8	5/8	3/4	4-1/8	6	-	-	DD4065796	Price	DD4065794	Price
3/4	3/4	1	3-7/8	6	-	-	DD4065826	Price	DD4065824	Price

APC5 POW.R.PATH 5 Flute End Mills

Square End and Corner Radius for High Efficiency Machining (HEM) in Aluminum Alloys

N Best in Aluminum and Non-ferrous

- Benefit from the unique Chip Management System (CMS)
- CMS breaks up long, stringy chips, which eliminates recutting chips and chip packing and allows for deep, free cutting tool movement in aluminum
- The results are great chip control and very high metal removal rates



Size (in.)	Shank Dia. (in.)	Max Axial Depth xD	LOC (in.)	OAL (in.)	Radius (in.)	Order No.	Price
3/8	3/8	3xD	1-1/8	3	None	**DD4461420**	Price
3/8	3/8	3xD	1-1/8	3	.015	**DD4461421**	Price
3/8	3/8	4xD	1-1/2	3-1/2	None	**DD4461422**	Price
3/8	3/8	4xD	1-1/2	3-1/2	.015	**DD4461423**	Price
1/2	1/2	2.5xD	1-1/4	3-1/4	None	**DD4461424**	Price
1/2	1/2	2.5xD	1-1/4	3-1/4	.030	**DD4461425**	Price
1/2	1/2	3xD	1-1/2	3-1/2	None	**DD4461426**	Price
1/2	1/2	3xD	1-1/2	3-1/2	.030	**DD4461427**	Price
1/2	1/2	3.5xD	1-3/4	4	None	**DD4461428**	Price
1/2	1/2	3.5xD	1-3/4	4	.030	**DD4461429**	Price
1/2	1/2	4xD	2	4	None	**DD4461430**	Price
1/2	1/2	4xD	2	4	.030	**DD4461431**	Price
5/8	5/8	2xD	1-1/4	3-1/2	None	**DD4461432**	Price

Size (in.)	Shank Dia. (in.)	Max Axial Depth xD	LOC (in.)	OAL (in.)	Radius (in.)	Order No.	Price
5/8	5/8	2xD	1-1/4	3-1/2	.030	**DD4461433**	Price
5/8	5/8	3xD	1-7/8	4	None	**DD4461434**	Price
5/8	5/8	3xD	1-7/8	4	.030	**DD4461435**	Price
5/8	5/8	4xD	2-1/2	5	None	**DD4461436**	Price
5/8	5/8	4xD	2-1/2	5	.030	**DD4461437**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	None	**DD4461438**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	.030	**DD4461439**	Price
3/4	3/4	3xD	2-1/4	5	None	**DD4461440**	Price
3/4	3/4	3xD	2-1/4	5	.030	**DD4461441**	Price
3/4	3/4	3.5xD	2-5/8	5	None	**DD4461442**	Price
3/4	3/4	3.5xD	2-5/8	5	.030	**DD4461443**	Price
3/4	3/4	4xD	3	6	None	**DD4461444**	Price
3/4	3/4	4xD	3	6	.030	**DD4461445**	Price

5 Flute Variable Solid Carbide End Mills

Eccentric OD

- Silver-Exx® (AlTiCrN) coated
- 35° Helix
- PCT List #558



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/4	1/4	3/8	4	2-1/8	**CW8023910**	Price
1/4	1/4	1/2	2	-	**CW800558T804002**	Price
1/4	1/4	3/4	2-1/2	-	**CW80558T847525**	Price
1/4	1/4	1	3	-	**CW8058T80410003**	Price
5/16	5/16	1/2	2	-	**CW8058T80505002**	Price
5/16	5/16	1	3	-	**CW8023955**	Price
3/8	3/8	1/2	2	-	**CW800558T806052**	Price
3/8	3/8	1/2	3	1-1/8	**CW8023980**	Price
3/8	3/8	1/2	4	2-1/8	**CW8023990**	Price
3/8	3/8	1	2-1/2	-	**CW8055530**	Price
3/8	3/8	1	3	-	**CW8024005**	Price
7/16	7/16	1	2-3/4	-	**CW8024020**	Price
1/2	1/2	5/8	2-1/2	-	**CW80558T8862525**	Price
1/2	1/2	5/8	4	2-1/8	**CW8024055**	Price
1/2	1/2	5/8	6	3-3/8	**CW8024065**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/2	1/2	1-1/4	3	-	**CW8080812503**	Price
1/2	1/2	2	4	-	**CW800558T808204**	Price
5/8	5/8	3/4	3	-	**CW8055540**	Price
5/8	5/8	3/4	4	1-5/8	**CW8024110**	Price
5/8	5/8	3/4	6	3-3/8	**CW8024130**	Price
5/8	5/8	1-5/8	3-1/2	-	**CW80558T862535**	Price
3/4	3/4	1	3	-	**CW80558T823**	Price
3/4	3/4	1	4	2	**CW800558T812142**	Price
3/4	3/4	1	6	4	**CW8024185**	Price
3/4	3/4	1-5/8	4	-	**CW8058T81216254**	Price
3/4	3/4	2-1/4	5	-	**CW8055910**	Price
1	1	1-1/4	6	3-3/8	**CW8024245**	Price
1	1	1-1/4	7	4-3/8	**CW8024255**	Price
1	1	2	4-1/2	-	**CW8024265**	Price
1	1	2-1/4	5	-	**CW8024275**	Price

APT5N POW.R.PATH 5 Flute End Mills

Square End and Corner Radius W/ Neck Relief for High Efficiency Machining (HEM) in Aluminum Alloys

- Added neck shank to offer a high performance tool that permits clearance in deeper cavities and easier machining against tight walls
- Neck relief and short flute length combine to increase end mill stability in the cut for more precise tolerances
- Great for work in pockets

N Best in Aluminum and Non-ferrous



Size (in.)	Shank Dia. (in.)	LOC (in.)	Reach (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/4	1/4	3/8	7/8	2-1/2	None	**DD4461609**	Price
1/4	1/4	3/8	7/8	2-1/2	.030	**DD4461611**	Price
1/4	1/4	3/8	7/8	2-1/2	.060	**DD4461612**	Price
1/4	1/4	3/8	1-3/8	3	None	**DD4461613**	Price
1/4	1/4	3/8	1-3/8	3	.030	**DD4461615**	Price
1/4	1/4	3/8	1-3/8	3	.060	**DD4461616**	Price
1/4	1/4	3/8	2-1/4	4	None	**DD4461617**	Price
1/4	1/4	3/8	2-1/4	4	.030	**DD4461619**	Price
3/8	3/8	9/16	1-1/16	2-1/2	None	**DD4461620**	Price
3/8	3/8	9/16	1-1/16	2-1/2	.030	**DD4461622**	Price
3/8	3/8	9/16	1-1/16	2-1/2	.060	**DD4461623**	Price
3/8	3/8	9/16	1-1/8	3	None	**DD4461625**	Price
3/8	3/8	9/16	1-1/8	3	.030	**DD4461627**	Price
3/8	3/8	9/16	1-1/8	3	.060	**DD4461628**	Price
3/8	3/8	9/16	2-3/16	4	None	**DD4461630**	Price
3/8	3/8	9/16	2-3/16	4	.030	**DD4461632**	Price
1/2	1/2	3/4	1-1/4	3	None	**DD4461633**	Price
1/2	1/2	3/4	1-1/4	3	.030	**DD4461635**	Price
1/2	1/2	3/4	1-1/4	3	.060	**DD4461636**	Price
1/2	1/2	3/4	1-1/4	3	.125	**DD4461638**	Price
1/2	1/2	3/4	2-1/8	4	None	**DD4461639**	Price
1/2	1/2	3/4	2-1/8	4	.030	**DD4461641**	Price
1/2	1/2	3/4	2-1/8	4	.060	**DD4461642**	Price
1/2	1/2	3/4	2-1/8	4	.125	**DD4461644**	Price
1/2	1/2	3/4	3-1/8	5	None	**DD4461645**	Price
1/2	1/2	3/4	3-1/8	5	.030	**DD4461647**	Price
1/2	1/2	3/4	3-1/8	5	.060	**DD4461648**	Price
1/2	1/2	3/4	3-1/8	5	.125	**DD4461650**	Price
1/2	1/2	3/4	4-1/8	6	None	**DD4461651**	Price

Size (in.)	Shank Dia. (in.)	LOC (in.)	Reach (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/2	1/2	3/4	4-1/8	6	.030	**DD4461653**	Price
1/2	1/2	3/4	4-1/8	6	.060	**DD4461654**	Price
1/2	1/2	3/4	4-1/8	6	.125	**DD4461655**	Price
5/8	5/8	15/16	1-9/16	4	None	**DD4461656**	Price
5/8	5/8	15/16	1-9/16	4	.030	**DD4461657**	Price
5/8	5/8	15/16	1-9/16	4	.060	**DD4461658**	Price
5/8	5/8	15/16	1-9/16	4	.125	**DD4461660**	Price
5/8	5/8	15/16	2-3/16	5	None	**DD4461661**	Price
5/8	5/8	15/16	2-3/16	5	.030	**DD4461662**	Price
5/8	5/8	15/16	2-3/16	5	.060	**DD4461663**	Price
5/8	5/8	15/16	2-3/16	5	.125	**DD4461665**	Price
5/8	5/8	15/16	3-3/16	6	None	**DD4461666**	Price
5/8	5/8	15/16	3-3/16	6	.030	**DD4461667**	Price
5/8	5/8	15/16	3-3/16	6	.125	**DD4461668**	Price
3/4	3/4	1-1/8	1-5/8	4	None	**DD4461669**	Price
3/4	3/4	1-1/8	1-5/8	4	.030	**DD4461670**	Price
3/4	3/4	1-1/8	1-5/8	4	.060	**DD4461671**	Price
3/4	3/4	1-1/8	1-5/8	4	.125	**DD4461673**	Price
3/4	3/4	1-1/8	2-1/4	5	None	**DD4461675**	Price
3/4	3/4	1-1/8	2-1/4	5	.030	**DD4461676**	Price
3/4	3/4	1-1/8	2-1/4	5	.060	**DD4461677**	Price
3/4	3/4	1-1/8	2-1/4	5	.125	**DD4461679**	Price
3/4	3/4	1-1/8	3-1/4	6	None	**DD4461681**	Price
3/4	3/4	1-1/8	3-1/4	6	.030	**DD4461682**	Price
3/4	3/4	1-1/8	3-1/4	6	.060	**DD4461683**	Price
3/4	3/4	1-1/8	3-1/4	6	.125	**DD4461684**	Price

POW•R•FEED® M905 Solid Carbide 5 Flute Variable Index End Mill

MADE IN THE USA

Square End and Corner Radius Styles

- Well known for its power, balance, and versatility in a wide range of materials
- Unique vibration dampening geometry for chatter-free machining
- 38° Helix with either round and Weldon style shank
- AlTiN-X coating



S Best in Titanium Alloys K Good in Cast Iron
M Best in Stainless Steels P Good in Carbon and Tool Steels

					Round Shank	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/4	1/4	3/4	2-1/2	None	**DD4063338**	Price
1/4	1/4	3/4	2-1/2	.015	**DD4063287**	Price
3/8	3/8	7/8	2-1/2	None	**DD4063340**	Price
3/8	3/8	7/8	2-1/2	.015	**DD4063289**	Price
3/8	3/8	7/8	2-1/2	.030	**DD4063370**	Price
1/2	1/2	1-1/4	3	None	**DD4063342**	Price
1/2	1/2	1-1/4	3	.030	**DD4063291**	Price
5/8	5/8	1-1/4	3-1/2	None	**DD4063343**	Price
5/8	5/8	1-1/4	3-1/2	.030	**DD4063292**	Price
3/4	3/4	1-1/2	4	None	**DD4063344**	Price
3/4	3/4	1-1/2	4	.030	**DD4063293**	Price

RAPIDKUT® 5 Flute Solid Carbide 45° Helix End Mills

Center Cutting

- Five flute design provides excellent cutting performance at faster feed rates
- Smooth cutting action in tough to machine material with excellent chip ejection
- Made from premium submicron grain carbide
- Cutting diameter tolerance: +.000/.002”



				Uncoated		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	1/8	1/4	1-1/2	**DD8117698**	Price	**DD8157698**	Price
1/8	1/8	1/2	1-1/2	**DD8115942**	Price	**DD8155942**	Price
5/32	3/16	5/16	2	**DD8117699**	Price	**DD8157699**	Price
5/32	3/16	9/16	2	**DD8115943**	Price	**DD8155943**	Price
3/16	3/16	5/16	2	**DD8117700**	Price	**DD8157700**	Price
3/16	3/16	9/16	2	**DD8115944**	Price	**DD8155944**	Price
7/32	1/4	3/8	2	**DD8117701**	Price	**DD8157701**	Price
7/32	1/4	3/4	2-1/2	**DD8115945**	Price	**DD8155945**	Price
1/4	1/4	3/8	2	**DD8117702**	Price	**DD8157702**	Price
1/4	1/4	3/4	2-1/2	**DD8115946**	Price	**DD8155946**	Price
1/4	1/4	1-1/2	4	**DD8115947**	Price	**DD8155947**	Price
5/16	5/16	7/16	2	**DD8117703**	Price	**DD8157703**	Price
5/16	5/16	13/16	2-1/2	**DD8115948**	Price	**DD8155948**	Price
3/8	3/8	1/2	2	**DD8117704**	Price	**DD8157704**	Price
3/8	3/8	1	2-1/2	**DD8115949**	Price	**DD8155949**	Price
3/8	3/8	1-3/4	4	**DD8115950**	Price	**DD8155950**	Price

				Uncoated		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
13/32	7/16	9/16	2-1/2	**DD8110739**	Price	**DD8150739**	Price
7/16	7/16	9/16	2-1/2	**DD8117705**	Price	**DD8157705**	Price
7/16	7/16	1	2-3/4	**DD8115951**	Price	**DD8155951**	Price
1/2	1/2	5/8	2-1/2	**DD8117706**	Price	**DD8157706**	Price
1/2	1/2	1-1/4	3	**DD8115952**	Price	**DD8155952**	Price
1/2	1/2	3	6	**DD8115953**	Price	**DD8155953**	Price
9/16	9/16	1-1/2	3-1/2	**DD8115954**	Price	**DD8155954**	Price
5/8	5/8	3/4	3	**DD8117707**	Price	**DD8157707**	Price
5/8	5/8	1-5/8	3-1/2	**DD8115955**	Price	**DD8155955**	Price
5/8	5/8	3	6	**DD8111203**	Price	**DD8151203**	Price
3/4	3/4	1	3	**DD8117708**	Price	**DD8157708**	Price
3/4	3/4	1-5/8	4	**DD8115956**	Price	**DD8155956**	Price
3/4	3/4	3	6	**DD8115957**	Price	**DD8155957**	Price
1	1	1-1/4	3	**DD8117709**	Price	**DD8157709**	Price
1	1	1-1/2	4	**DD8115958**	Price	**DD8155958**	Price
1	1	3	6	**DD8115959**	Price	**DD8155959**	Price

MICRO 100® High Tech End Mills

5 Flute — Center Cutting — 45° Helix

- Feature a 45° helix for finishing, roughing, and slotting in medium to hard steels, stainless steels, and high temperature alloys
- Higher metal removal rates as well as excellent finishes are achieved with these 5 flute end mills
- 45° helix diminishes chatter when machining in corners of parts



Length - Stub					
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/16	3/16	3/8	1-1/2	**GE45ASM1875**	Price
1/4	1/4	1/2	2	**GE45ASM2505**	Price
5/16	5/16	1/2	2	**GE45ASM3125**	Price

Length - Standard					
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/16	3/16	5/8	2	**GE45ARM1875**	Price
1/4	1/4	3/4	2-1/2	**GE45ARM2505**	Price
1/2	1/2	1	3	**GE45ARM5005†**	Price

† Sizes 3/8” and larger feature weldon flat

5 Flute High Performance Carbide End Mills

Unequal Index • Corner Radius

- 40° Helix
- Maximum material removal and feed rates
- Smoother cutting action, reduces vibrations
- Solid C2 grade sub-micron grade carbide with 10% cobalt
- Right hand spiral, right hand cut
- AlTiN coated
- Diameter tolerance +.000/ -.002”



Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Radius	Order No.	Price
1/8	1/8	1/4	2-1/2	.005-.010	**DC25295010125B**	Price
1/8	1/8	1/2	2-1/2	.005-.010	**DC25295020125B**	Price
3/16	3/16	3/8	2-1/2	.005-.010	**DC25295010187B**	Price
3/16	3/16	5/8	2-1/2	.005-.010	**DC25295020187B**	Price
1/4	1/4	3/8	2-1/2	.010-.020	**DC25295010250B**	Price
1/4	1/4	3/4	2-1/2	.010-.020	**DC25295020250B**	Price
1/4	1/4	1-1/4	4	.010-.020	**DC25295030250B**	Price
5/16	5/16	1/2	2-1/2	.010-.020	**DC25295010312B**	Price
5/16	5/16	13/16	2-1/2	.010-.020	**DC25295020312B**	Price
5/16	5/16	1-1/4	4	.010-.020	**DC25295030312B**	Price
3/8	3/8	1/2	2-1/2	.010-.020	**DC25295010375B**	Price
3/8	3/8	1	2-1/2	.010-.020	**DC25295020375B**	Price
3/8	3/8	1-1/2	4	.010-.020	**DC25295030375B**	Price

Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Radius	Order No.	Price
1/2	1/2	5/8	3	.010-.020	**DC25295010500B**	Price
1/2	1/2	1-1/4	3	.010-.020	**DC25295020500B**	Price
1/2	1/2	1-5/8	4	.010-.020	**DC25295030490B**	Price
1/2	1/2	2-1/8	4	.010-.020	**DC25295030500B**	Price
5/8	5/8	3/4	3-1/2	.010-.020	**DC25295010625B**	Price
5/8	5/8	1-1/4	3-1/2	.010-.020	**DC25295020625B**	Price
5/8	5/8	2-1/2	5	.010-.020	**DC25295030625B**	Price
3/4	3/4	1	4	.010-.020	**DC25295010750B**	Price
3/4	3/4	1-5/8	4	.010-.020	**DC25295020750B**	Price
3/4	3/4	2-1/2	5	.010-.020	**DC25295030750B**	Price
1	1	1-3/4	4	.010-.020	**DC25295021000B**	Price
1	1	2-5/8	6	.010-.020	**DC25295031000B**	Price

TuffCut® XR HP 5 Flute ALtima® Coated End Mills

Center Cutting • Fractional Sizes • 38° Helix

- Designed for extreme productivity
- Gain 20% or more in productivity over 4 flute styles
- Smooth cutting action to eliminate vibration
- M.A. Ford Series #178



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/8	1/8	1/8	1-1/2	None	**DD1517800**	Price
1/8	1/8	3/8	1-1/2	None	**DD1617801**	Price
5/32	3/16	3/16	2	None	**DD1617802**	Price
5/32	3/16	7/16	2	None	**DD1617803**	Price
7/32	1/4	1/4	2	None	**DD1617806**	Price
7/32	1/4	7/16	2-1/2	None	**DD1617807**	Price
3/16	3/16	3/16	2	None	**DD1517804**	Price
3/16	3/16	7/16	2	None	**DD1517805**	Price
1/4	1/4	3/8	2	None	**DD1517808**	Price
1/4	1/4	3/8	2	.015	**DD1617829**	Price
1/4	1/4	3/8	2	.030	**DD1617830**	Price
1/4	1/4	5/8	2-1/2	None	**DD1617809**	Price
1/4	1/4	5/8	2-1/2	.015	**DD1617831**	Price
1/4	1/4	5/8	2-1/2	.030	**DD1617832**	Price
9/32	5/16	5/8	2-1/2	None	**DD1517810**	Price
9/32	5/16	5/8	2-1/2	.015	**DD1617835**	Price
9/32	5/16	5/8	2-1/2	.030	**DD1617836**	Price
5/16	5/16	7/16	2	None	**DD1517811**	Price
5/16	5/16	7/16	2	.015	**DD1617837**	Price
5/16	5/16	7/16	2	.030	**DD1617838**	Price
5/16	5/16	13/16	2-1/2	None	**DD1517812**	Price
5/16	5/16	13/16	2-1/2	.015	**DD1617839**	Price
5/16	5/16	13/16	2-1/2	.030	**DD1517840**	Price
11/32	3/8	13/16	2-1/2	.015	**DD1617843**	Price
11/32	3/8	13/16	2-1/2	.030	**DD1617844**	Price
11/32	3/8	13/16	2-1/2	None	**DD1617813**	Price
3/8	3/8	1/2	2	None	**DD1617814**	Price
3/8	3/8	1/2	2	.015	**DD1517845**	Price
3/8	3/8	1/2	2	.030	**DD1517846**	Price
3/8	3/8	7/8	2-1/2	None	**DD1517815**	Price
3/8	3/8	7/8	2-1/2	.015	**DD1517847**	Price
3/8	3/8	7/8	2-1/2	.030	**DD1617848**	Price
13/32	7/16	7/8	2-3/4	None	**DD1617816**	Price
13/32	7/16	7/8	2-3/4	.015	**DD1617853**	Price
13/32	7/16	7/8	2-3/4	.030	**DD1617854**	Price
7/16	7/16	9/16	2-1/2	None	**DD1617817**	Price
7/16	7/16	9/16	2-1/2	.015	**DD1617855**	Price
7/16	7/16	9/16	2-1/2	.030	**DD1617856**	Price
7/16	7/16	1	2-3/4	None	**DD1517818**	Price
7/16	7/16	1	2-3/4	.015	**DD1617857**	Price
7/16	7/16	1	2-3/4	.030	**DD1617858**	Price
15/32	1/2	1	3	None	**DD1617819**	Price
15/32	1/2	1	3	.015	**DD1617863**	Price

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
15/32	1/2	1	3	.030	**DD1617864**	Price
1/2	1/2	5/8	2-1/2	None	**DD1517820**	Price
1/2	1/2	5/8	2-1/2	.015	**DD1517865**	Price
1/2	1/2	5/8	2-1/2	.030	**DD1517866**	Price
1/2	1/2	1	3	None	**DD1617821**	Price
1/2	1/2	1	3	.015	**DD1617867**	Price
1/2	1/2	1	3	.030	**DD1517868**	Price
1/2	1/2	1	3	.045	**DD1617869**	Price
1/2	1/2	1	3	.060	**DD1517913**	Price
1/2	1/2	1	3	.090	**DD1617914**	Price
1/2	1/2	1	3	.125	**DD1617915**	Price
9/16	9/16	1-1/8	3-1/2	None	**DD1617822**	Price
9/16	9/16	1-1/8	3-1/2	.015	**DD1617875**	Price
9/16	9/16	1-1/8	3-1/2	.030	**DD1617876**	Price
5/8	5/8	3/4	3	None	**DD1617823**	Price
5/8	5/8	3/4	3	.015	**DD1518006**	Price
5/8	5/8	3/4	3	.030	**DD1617877**	Price
5/8	5/8	3/4	3	.045	**DD1617878**	Price
5/8	5/8	1-1/4	3-1/2	None	**DD1617824**	Price
5/8	5/8	1-1/4	3-1/2	.015	**DD1618007**	Price
5/8	5/8	1-1/4	3-1/2	.030	**DD1617879**	Price
5/8	5/8	1-1/4	3-1/2	.045	**DD1617880**	Price
5/8	5/8	1-1/4	3-1/2	.060	**DD1617916**	Price
5/8	5/8	1-1/4	3-1/2	.090	**DD1617917**	Price
5/8	5/8	1-1/4	3-1/2	.125	**DD1617918**	Price
3/4	3/4	1	3	None	**DD1617825**	Price
3/4	3/4	1	3	.015	**DD1618011**	Price
3/4	3/4	1	3	.030	**DD1617887**	Price
3/4	3/4	1	3	.045	**DD1617888**	Price
3/4	3/4	1-1/2	4	None	**DD1617826**	Price
3/4	3/4	1-1/2	4	.015	**DD1618012**	Price
3/4	3/4	1-1/2	4	.030	**DD1617889**	Price
3/4	3/4	1-1/2	4	.045	**DD1617890**	Price
3/4	3/4	1-1/2	4	.060	**DD1517919**	Price
3/4	3/4	1-1/2	4	.090	**DD1617920**	Price
3/4	3/4	1-1/2	4	.125	**DD1617921**	Price
1	1	1	4	None	**DD1617827**	Price
1	1	1-1/2	4	None	**DD1617828**	Price
1	1	1-1/2	4	.015	**DD1618015**	Price
1	1	1-1/2	4	.030	**DD1617895**	Price
1	1	1-1/2	4	.045	**DD1617896**	Price
1	1	1-1/2	4	.060	**DD1617922**	Price
1	1	1-1/2	4	.090	**DD1617923**	Price
1	1	1-1/2	4	.125	**DD1617924**	Price

WIDIA High Performance Solid Carbide VariMill II™ End Mills

5 Flute • AlTiN Coated



- Unequal flute spacing
- 38° Helix
- Center cutting
- Single tool for both roughing and finishing operations requiring fewer setups
- Slotting up to 1 x D

Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Radius (in.)	Shank	Order No.	Price
3/16	3/16	5/8	2-1/4	None	Round	**WK405577053**	Price
3/16	3/16	5/8	2-1/4	.015	Round	**WK405577051**	Price
3/16	3/16	5/8	2-1/4	.030	Round	**WK405577052**	Price
1/4	1/4	3/4	2-1/2	None	Round	**WK405577057**	Price
1/4	1/4	3/4	2-1/2	.015	Round	**WK405577054**	Price
1/4	1/4	3/4	2-1/2	.030	Round	**WK405577055**	Price
1/4	1/4	3/4	2-1/2	.060	Round	**WK405577056**	Price
5/16	5/16	3/4	2-1/2	None	Round	**WK405577101**	Price
5/16	5/16	3/4	2-1/2	.015	Round	**WK405577058**	Price
5/16	5/16	3/4	2-1/2	.030	Round	**WK405577059**	Price
5/16	5/16	3/4	2-1/2	.060	Round	**WK405577100**	Price
3/8	3/8	7/8	2-1/2	None	Round	**WK405577105**	Price
3/8	3/8	7/8	2-1/2	.015	Round	**WK405577102**	Price
3/8	3/8	7/8	2-1/2	.030	Round	**WK405577103**	Price
3/8	3/8	7/8	2-1/2	.060	Round	**WK405577104**	Price
1/2	1/2	1-1/4	3	None	Round	**WK405577116**	Price
1/2	1/2	1-1/4	3	None	Weldon	**WK405577117**	Price
1/2	1/2	1-1/4	3	.015	Round	**WK405577106**	Price
1/2	1/2	1-1/4	3	.015	Weldon	**WK405577107**	Price
1/2	1/2	1-1/4	3	.030	Round	**WK405577108**	Price
1/2	1/2	1-1/4	3	.030	Weldon	**WK405577109**	Price
1/2	1/2	1-1/4	3	.060	Round	**WK405577110**	Price

Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Radius (in.)	Shank	Order No.	Price
1/2	1/2	1-1/4	3	.060	Weldon	**WK405577111**	Price
1/2	1/2	1-1/4	3	.090	Round	**WK405577112**	Price
1/2	1/2	1-1/4	3	.090	Weldon	**WK405577113**	Price
1/2	1/2	1-1/4	3	.120	Round	**WK405577114**	Price
5/8	5/8	1-1/4	3-1/2	None	Round	**WK405577134**	Price
5/8	5/8	1-1/4	3-1/2	None	Weldon	**WK405577135**	Price
5/8	5/8	1-1/4	3-1/2	.030	Round	**WK405577118**	Price
5/8	5/8	1-1/4	3-1/2	.030	Weldon	**WK405577119**	Price
5/8	5/8	1-1/4	3-1/2	.060	Weldon	**WK405577131**	Price
3/4	3/4	1-1/2	4	None	Round	**WK405577164**	Price
3/4	3/4	1-1/2	4	None	Weldon	**WK405577165**	Price
3/4	3/4	1-1/2	4	.030	Round	**WK405577136**	Price
3/4	3/4	1-1/2	4	.030	Weldon	**WK405577137**	Price
3/4	3/4	1-1/2	4	.060	Round	**WK405577138**	Price
3/4	3/4	1-1/2	4	.060	Weldon	**WK405577139**	Price
3/4	3/4	1-1/2	4	.090	Weldon	**WK405577161**	Price
3/4	3/4	1-1/2	4	.120	Round	**WK405577162**	Price
3/4	3/4	1-1/2	4	.120	Weldon	**WK405577163**	Price
1	1	1-3/4	4-1/2	None	Weldon	**WK405577185**	Price
1	1	1-3/4	4-1/2	.030	Round	**WK405577166**	Price
1	1	1-3/4	4-1/2	.030	Weldon	**WK405577167**	Price
1	1	1-3/4	4-1/2	.120	Weldon	**WK405577183**	Price

WIDIA High Performance Solid Carbide VariMill II™ ER End Mills

5 Flute • AlTiN Coated



- Unequal flute spacing
- 38° Helix
- Center cutting
- Single tool for both roughing and finishing operations requiring fewer setups
- Slotting up to 1 x D

Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Radius (in.)	Shank	Order No.	Price
3/16	3/16	9/16	2	None	Round	**WK406146486**	Price
3/16	3/16	9/16	2	.015	Round	**WK406146487**	Price
1/4	1/4	3/4	2-1/2	None	Round	**WK406146526**	Price
1/4	1/4	3/4	2-1/2	.015	Round	**WK406146528**	Price
1/4	1/4	3/4	2-1/2	.030	Round	**WK406146529**	Price
1/4	1/4	3/4	2-1/2	.060	Round	**WK406146530**	Price
5/16	5/16	13/16	2-1/2	None	Round	**WK406146535**	Price
5/16	5/16	13/16	2-1/2	.015	Round	**WK406146536**	Price
3/8	3/8	7/8	2-1/2	None	Round	**WK405594859**	Price
3/8	3/8	7/8	2-1/2	.030	Round	**WK405594858**	Price
3/8	3/8	7/8	2-1/2	.015	Round	**WK405594857**	Price
3/8	3/8	1	2-1/2	None	Round	**WK406146544**	Price
3/8	3/8	1	2-1/2	.015	Round	**WK406146545**	Price
3/8	3/8	1	2-1/2	.030	Round	**WK406146546**	Price
3/8	3/8	1	2-1/2	.060	Round	**WK406146547**	Price
3/8	3/8	1	2-1/2	.120	Round	**WK406146548**	Price
1/2	1/2	1-1/4	3	None	Round	**WK406146567**	Price
1/2	1/2	1-1/4	3	None	Weldon	**WK405594871**	Price
1/2	1/2	1-1/4	3	None	Safe-Lock	**WK405594870**	Price
1/2	1/2	1-1/4	3	.015	Round	**WK406146562**	Price
1/2	1/2	1-1/4	3	.015	Weldon	**WK405594861**	Price
1/2	1/2	1-1/4	3	.015	Safe-Lock	**WK405594860**	Price
1/2	1/2	1	3	.030	Round	**WK406146558**	Price
1/2	1/2	1-1/4	3	.030	Round	**WK406146563**	Price
1/2	1/2	1-1/4	3	.030	Weldon	**WK405594863**	Price
1/2	1/2	1-1/4	3	.030	Safe-Lock	**WK405594862**	Price
1/2	1/2	1-1/4	3	.060	Round	**WK406146564**	Price
1/2	1/2	1-1/4	3	.060	Weldon	**WK405594865**	Price
1/2	1/2	1-1/4	3	.060	Safe-Lock	**WK405594864**	Price
1/2	1/2	1-1/4	3	.120	Round	**WK406146566**	Price
1/2	1/2	1-1/4	3	.120	Weldon	**WK405594869**	Price

Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Radius (in.)	Shank	Order No.	Price
1/2	1/2	1-1/4	3	.120	Safe-Lock	**WK405594868**	Price
5/8	5/8	1-1/4	3-1/2	None	Weldon	**WK405594877**	Price
5/8	5/8	1-1/4	3-1/2	None	Safe-Lock	**WK405594876**	Price
5/8	5/8	1-1/4	3-1/2	.030	Weldon	**WK405594873**	Price
5/8	5/8	1-1/4	3-1/2	.030	Safe-Lock	**WK405594872**	Price
5/8	5/8	1-1/4	3-1/2	.060	Weldon	**WK405594875**	Price
5/8	5/8	1-1/4	3-1/2	.060	Safe-Lock	**WK405594874**	Price
5/8	5/8	1-1/4	3-1/2	.120	Round	**WK406146578**	Price
3/4	3/4	1-1/2	4	.250	Weldon	**WK406146590**	Price
3/4	3/4	1-1/2	4	None	Weldon	**WK405594887**	Price
3/4	3/4	1-1/2	4	None	Round	**WK406146594**	Price
3/4	3/4	1-1/2	4	None	Safe-Lock	**WK405594886**	Price
3/4	3/4	1-1/2	4	.030	Round	**WK406146591**	Price
3/4	3/4	1-1/2	4	.030	Weldon	**WK405594879**	Price
3/4	3/4	1-1/2	4	.030	Safe-Lock	**WK405594878**	Price
3/4	3/4	1-1/2	4	.060	Round	**WK406146592**	Price
3/4	3/4	1-1/2	4	.060	Weldon	**WK405594881**	Price
3/4	3/4	1-1/2	4	.060	Safe-Lock	**WK405594880**	Price
3/4	3/4	1-1/2	4	.090	Weldon	**WK405594883**	Price
3/4	3/4	1-1/2	4	.120	Round	**WK405594884**	Price
3/4	3/4	1-1/2	4	.120	Weldon	**WK405594885**	Price
3/4	3/4	1-5/8	4	None	Safe-Lock	**WK406146598**	Price
3/4	3/4	1-5/8	4	.030	Safe-Lock	**WK406146595**	Price
3/4	3/4	1-5/8	4	.060	Safe-Lock	**WK406146596**	Price
1	1	1-3/4	4-1/2	None	Safe-Lock	**WK405594896**	Price
1	1	1-3/4	4-1/2	.030	Weldon	**WK405594889**	Price
1	1	1-3/4	4-1/2	.030	Safe-Lock	**WK405594888**	Price
1	1	1-3/4	4-1/2	.060	Safe-Lock	**WK405594890**	Price
1	1	1-3/4	4-1/2	.120	Weldon	**WK405594893**	Price
1	1	1-3/4	4-1/2	.120	Safe-Lock	**WK405594892**	Price

WIDIA High Performance Solid Carbide VariMill II™ ER End Mills

5 Flute • AlTiN Coated



- Unequal flute spacing
- 38° Helix
- Center cutting
- Optimized geometry for titanium and stainless steel
- Single tool for both roughing and finishing operations requiring fewer setups

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
3/16	3/16	5/16	2	None	**WK406146483**	Price
1/4	1/4	3/8	2	None	**WK406146522**	Price
1/4	1/4	3/8	2	.015	**WK406146523**	Price
1/4	1/4	3/8	2	.030	**WK406146524**	Price
1/4	1/4	3/8	2	.060	**WK406146525**	Price
3/8	3/8	1/2	2	None	**WK406146539**	Price
3/8	3/8	1/2	2	.015	**WK406146540**	Price
3/8	3/8	1/2	2	.030	**WK406146541**	Price
5/8	5/8	3/4	3	.030	**WK406146572**	Price
1/2	1/2	5/8	2-1/2	None	**WK406146557**	Price
1/2	1/2	5/8	2-1/2	.015	**WK406146552**	Price
1/2	1/2	5/8	2-1/2	.030	**WK406146553**	Price
1/2	1/2	5/8	2-1/2	.060	**WK406146554**	Price

WIDIA High Performance Solid Carbide VariMill II™ End Mills with Neck

5 Flute • AlTiN Coated



- 38° Helix
- Unequal flute spacing
- Center cutting
- Single tool for both roughing and finishing operations requiring fewer setups
- Slotting up to 1 x D

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Neck Dia. (in.)	Length Below Shank	Shank Type	Order No.	Price
3/8	3/8	7/8	4	.015	.3525	1-7/8	Round	**WK405594728**	Price
1/2	1/2	1-1/4	4	.030	.4700	2-1/4	Round	**WK405594729**	Price
1/2	1/2	1-1/4	4	.030	.4700	2-1/4	Weldon	**WK405594850**	Price
3/4	3/4	1-1/2	5-1/2	.030	.7050	3-1/4	Round	**WK405594853**	Price
3/4	3/4	1-1/2	5-1/2	.030	.7050	3-1/4	Weldon	**WK405594854**	Price

WIDIA High Performance Solid Carbide VariMill II™ ER End Mills with Neck

5 Flute • AlTiN Coated



- 38° Helix
- Unequal flute spacing
- Center cutting
- Optimized geometry for titanium and stainless steel
- Single tool for both roughing and finishing operations requiring fewer setups
- Slotting up to 1 x D

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Neck Dia. (in.)	Length Below Shank	Shank Type	Order No.	Price
1/2	1/2	1-1/4	4	.015	.4700	2-1/4	Round	**WK406168954**	Price
1/2	1/2	1-1/4	4	.030	.4700	2-1/4	Weldon	**WK405594900**	Price
1/2	1/2	1-1/4	4	.030	.4700	2-1/4	Safe-Lock	**WK405594899**	Price
1/2	1/2	1-1/4	4	.060	.4700	2-1/4	Round	**WK406168955**	Price
1/2	1/2	5/8	5	.120	.4700	7/8	Safe-Lock	**WK406168962**	Price
5/8	5/8	1-1/4	4	.030	.5875	2-1/4	Weldon	**WK405594902**	Price
5/8	5/8	1-1/4	4	.030	.5875	2-1/4	Safe-Lock	**WK405594901**	Price
3/4	3/4	1-1/2	5-1/2	.030	.7050	3-1/4	Weldon	**WK405594904**	Price
3/4	3/4	1-1/2	5-1/2	.030	.7050	3-1/4	Safe-Lock	**WK405594903**	Price
3/4	3/4	2-1/4	6	.060	.7050	3-1/4	Safe-Lock	**WK406168983**	Price
3/4	3/4	1-1/2	6	.120	.7050	3-1/4	Safe-Lock	**WK406168985**	Price
1	1	1-1/4	8	None	.7050	1-3/4	Safe-Lock	**WK406169008**	Price
1	1	1-1/4	6	.060	.9400	3-1/4	Safe-Lock	**WK406169006**	Price
1	1	1-3/4	5-1/2	.030	.9400	3-1/4	Weldon	**WK405594906**	Price

WIDIA High Performance Solid Carbide VariMill II™ ER End Mills

5 Flute • AlTiN Coated



- Unequal flute spacing
- 38° Helix
- Center cutting
- Optimized geometry for titanium and stainless steel
- Single tool for both roughing and finishing operations requiring fewer setups

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
3/16	3/16	3/4	2-1/2	None	**WK406146489**	Price
3/16	3/16	3/4	2-1/2	.015	**WK406146490**	Price
1/4	1/4	1-1/8	3	None	**WK406146531**	Price
3/8	3/8	1	3	.015	**WK406146550**	Price
3/8	3/8	1	3	.030	**WK406146551**	Price
1/2	1/2	1-5/8	4	None	**WK406146571**	Price
1/2	1/2	1-5/8	4	.030	**WK406146568**	Price
1/2	1/2	1-5/8	4	.060	**WK406146569**	Price
1/2	1/2	1-5/8	4	.120	**WK406146570**	Price
5/8	5/8	1-5/8	3-1/2	.030	**WK406146580**	Price
5/8	5/8	1-5/8	3-1/2	.060	**WK406146581**	Price
5/8	5/8	1-5/8	3-1/2	.120	**WK406146584**	Price
3/4	3/4	2-1/4	5	None	**WK406146601**	Price
3/4	3/4	1-5/8	5	.060	**WK406146599**	Price
3/4	3/4	2-1/4	5	.120	**WK406146600**	Price
1	1	3-1/4	6	None	**WK406146615**	Price
1	1	3-1/4	6	.120	**WK406146613**	Price

WIDIA High Performance Solid Carbide VariMill II™ Long End Mills

5 Flute • 4xD • AlTiN Coated



- Unequal flute spacing
- 43° Helix
- Center cutting
- Cylindrical shank
- For finishing and semi-finishing applications
- Coated for longer tool life

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/4	1/4	1	3	None	**WK405095167**	Price
3/8	3/8	1-1/2	4	.015	**WK405095345**	Price
3/8	3/8	1-1/2	4	.030	**WK405095346**	Price
1/2	1/2	2	5	None	**WK405095348**	Price
1/2	1/2	2	5	.015	**WK405095420**	Price
1/2	1/2	2	5	.030	**WK405095421**	Price
1/2	1/2	2	5	.060	**WK405095422**	Price
5/8	5/8	2-1/2	5-1/4	None	**WK405095423**	Price
5/8	5/8	2-1/2	5-1/4	.015	**WK405095425**	Price
5/8	5/8	2-1/2	5-1/4	.030	**WK405095426**	Price
5/8	5/8	2-1/2	5-1/4	.120	**WK405095428**	Price
3/4	3/4	3	6	None	**WK405095429**	Price
3/4	3/4	3	6	.030	**WK405095472**	Price
3/4	3/4	3	6	.060	**WK405095473**	Price
3/4	3/4	3	6	.120	**WK405095474**	Price
1	1	4	7	.030	**WK405095530**	Price

FULLERTON Solid Carbide Composite End Mills



Series 5500 - 5 Flute

- Multi-flute design allows for ultimate material removal rates
- Allows for high shear and low cutting forces that provide a clean edge without fibers
- Chipbreakers produce a clean shearing of fibers
- Right hand spiral, right hand cut
- Cutter diameter tolerance: +.0000 -.0005" / +0.000-0.013mm
- Shank diameter tolerance: h6
- Available uncoated or with FC-1 CVD diamond coating

					FC1		Uncoated	
Size (in.)	Shank Dia. (in.)	LOC (in.)	OAI (in.)	Radius	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	.010	**FT8525025**	Price	**FT8525000**	Price
1/8	1/8	1	3	.010	**FT8525026**	Price	**FT8525001**	Price
1/4	1/4	3/4	2-1/2	.020	**FT8525027**	Price	**FT8525002**	Price
1/4	1/4	1-1/2	4	.020	**FT8525028**	Price	**FT8525003**	Price
3/8	3/8	1	2-1/2	.030	**FT8525029**	Price	**FT8525004**	Price
3/8	3/8	2	4	.030	**FT8525030**	Price	**FT8525005**	Price
1/2	1/2	1-1/4	3-1/2	.030	**FT8525031**	Price	**FT8525006**	Price
1/2	1/2	2-3/8	5	.030	**FT8525032**	Price	**FT8525007**	Price
6mm	6mm	18mm	64mm	0.25mm	**FT8525041**	Price	**FT8525016**	Price
6mm	6mm	36mm	76.5mm	0.25mm	**FT8525042**	Price	**FT8525017**	Price
8mm	8mm	24mm	64mm	0.5mm	**FT8525043**	Price	**FT8525018**	Price
8mm	8mm	48mm	100mm	0.5mm	**FT8525044**	Price	**FT8525019**	Price
10mm	10mm	30mm	76mm	1.0mm	**FT8525045**	Price	**FT8525020**	Price
10mm	10mm	60mm	100mm	1.0mm	**FT8525046**	Price	**FT8525021**	Price
12mm	12mm	36mm	90mm	1.0mm	**FT8525047**	Price	**FT8525022**	Price
12mm	12mm	60mm	127mm	1.0mm	**FT8525048**	Price	**FT8525023**	Price

WIDIA Solid Carbide Finishing Square End Mills

5 Flute • Victory™ Grades

- Center cutting
- Cylindrical shanks
- AlTiN coated for longer tool life



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	1/2	1-1/2	**WK405577187**	Price
3/16	3/16	5/8	2	**WK405577188**	Price
1/4	1/4	3/4	2-1/2	**WK405577189**	Price
3/8	3/8	7/8	2-1/2	**WK405577241**	Price
3/8	3/8	1-1/2	4	**WK405577249**	Price
1/2	1/2	1	3	**WK405577242**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/2	1/2	1-1/4	3	**WK405577243**	Price
1/2	1/2	2	4-1/2	**WK405577250**	Price
5/8	5/8	1-1/4	3-1/2	**WK405577244**	Price
3/4	3/4	1-1/2	4	**WK405577245**	Price
3/4	3/4	2-1/4	5	**WK405577252**	Price
1	1	2-1/4	5	**WK405577253**	Price

HY-PRO® CARB VGx® Variable Geometry End Mills



- High performance carbide
- Non-center cutting
- TiALN coating
- Square end
- 5 Flute
- Recommended for cast iron, carbon steels, alloy steels, die steels, stainless steels, hardened steels up to 45 HrC and high heat alloys
- OSG List #VG541

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price
1/8	1/8	9/32	1-1/2	Round Shank	**TP45VG5411249**	Price
1/8	1/8	3/8	1-1/2	Round Shank	**TP45VG5411250**	Price
3/16	3/16	7/16	2	Round Shank	**TP45VG5411875**	Price
3/16	3/16	5/8	2-1/4	Round Shank	**TP45VG5411874**	Price
1/4	1/4	3/8	2	Round Shank	**TP45VG5412500**	Price
1/4	1/4	3/4	2-1/2	Round Shank	**TP45VG5412501**	Price
5/16	5/16	15/32	2	Round Shank	**TP45VG5413125**	Price
5/16	5/16	3/4	2-1/2	Round Shank	**TP45VG5413124**	Price
3/8	3/8	1/2	2	Round Shank	**TP45VG5413750**	Price
3/8	3/8	1/2	2	Weldon Shank	**TP45VG5413752**	Price
3/8	3/8	7/8	2-1/2	Round Shank	**TP45VG5413751**	Price
1/2	1/2	5/8	2-1/2	Round Shank	**TP45VG5415007**	Price
1/2	1/2	5/8	2-1/2	Weldon Shank	**TP45VG5415000**	Price
1/2	1/2	1-1/4	3-1/2	Round Shank	**TP45VG5415009**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price
1/2	1/2	1-1/4	3-1/2	Weldon Shank	**TP45VG5415002**	Price
5/8	5/8	3/4	3	Round Shank	**TP45VG5416255**	Price
5/8	5/8	3/4	3	Weldon Shank	**TP45VG5416250**	Price
5/8	5/8	1-1/4	3-1/2	Round Shank	**TP45VG5416256**	Price
5/8	5/8	1-1/4	3-1/2	Weldon Shank	**TP45VG5416251**	Price
3/4	3/4	1-1/8	4	Round Shank	**TP45VG5417512**	Price
3/4	3/4	1-1/8	4	Weldon Shank	**TP45VG5417513**	Price
3/4	3/4	1-1/2	4	Round Shank	**TP45VG5417507**	Price
3/4	3/4	1-1/2	4	Weldon Shank	**TP45VG5417501**	Price
1	1	1-1/4	4	Round Shank	**TP45VG5411010**	Price
1	1	1-1/4	4	Weldon Shank	**TP45VG5411011**	Price
1	1	1-1/2	4	Round Shank	**TP45VG5411005**	Price
1	1	1-1/2	4	Weldon Shank	**TP45VG5411000**	Price

TuffCut® XR HP 5 Flute ALtima® Coated End Mills

Center Cutting • Metric Sizes • 38° Helix

- Designed for extreme productivity
- Gain 20% or more in productivity over 4 flute styles
- Smooth cutting action to eliminate vibration
- M.A. Ford #178



Size	Shank Dia.	Flute Length	OAL	Radius	Order No.	Price
3mm	3mm	25mm	75mm	None	**DD1617998**	Price
3mm	6mm	8mm	57mm	None	**DD1617959**	Price
4mm	4mm	25mm	75mm	None	**DD1617999**	Price
4mm	6mm	11mm	57mm	None	**DD1617961**	Price
5mm	6mm	13mm	57mm	None	**DD1617963**	Price
5mm	5mm	25mm	75mm	None	**DD1618026**	Price
6mm	6mm	13mm	57mm	None	**DD1617965**	Price
6mm	6mm	13mm	57mm	0.5mm	**DD1617966**	Price
6mm	6mm	25mm	75mm	None	**DD1618027**	Price
8mm	8mm	19mm	63mm	None	**DD1617968**	Price
8mm	8mm	19mm	63mm	0.5mm	**DD1617969**	Price
8mm	8mm	30mm	75mm	None	**DD1618028**	Price
10mm	10mm	22mm	72mm	None	**DD1617971**	Price
10mm	10mm	22mm	72mm	0.5mm	**DD1617972**	Price
10mm	10mm	45mm	100mm	None	**DD1618029**	Price

Size	Shank Dia.	Flute Length	OAL	Radius	Order No.	Price
12mm	12mm	26mm	83mm	None	**DD1617974**	Price
12mm	12mm	26mm	83mm	0.75mm	**DD1617975**	Price
12mm	12mm	75mm	150mm	None	**DD1618030**	Price
14mm	14mm	26mm	83mm	None	**DD1617977**	Price
14mm	14mm	26mm	83mm	0.75mm	**DD1617978**	Price
16mm	16mm	32mm	92mm	None	**DD1617981**	Price
16mm	16mm	32mm	92mm	1mm	**DD1617982**	Price
16mm	16mm	75mm	150mm	None	**DD1618031**	Price
18mm	18mm	32mm	92mm	None	**DD1617983**	Price
18mm	18mm	32mm	92mm	1mm	**DD1617984**	Price
20mm	20mm	38mm	104mm	None	**DD1617986**	Price
20mm	20mm	38mm	104mm	1mm	**DD1617987**	Price
20mm	20mm	75mm	150mm	None	**DD1618032**	Price
25mm	25mm	38mm	104mm	None	**DD1617988**	Price
25mm	25mm	38mm	104mm	1mm	**DD1617989**	Price

RAPIDKUT® 5 Flute Solid Carbide Variable Helix End Mills

Center Cutting • AlTiN Coated

- Helix changes along flute
- Allows increase in speeds
- 3/8" diameter and larger have flats on shank
- Cutting diameter tolerance: +.000/-.002"



AlTiN

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/4	1/4	3/4	2-1/2	.015 - .020	**DD8112221**	Price
3/8	3/8	1	2-1/2	.015 - .020	**DD8112222**	Price
1/2	1/2	1	3	.025 - .030	**DD8112192**	Price

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
5/8	5/8	1-1/4	3-1/2	.030 - .035	**DD8112223**	Price
3/4	3/4	1-1/2	4	.030 - .035	**DD8112224**	Price
1	1	1-1/2	4	.030 - .035	**DD8112285**	Price

RAPIDKUT® 5 Flute Variable Index Carbide End Mills

Eccentric Relief

- Provides for maximum material removal and feed rates
- Advanced performance in steels, stainless steels, alloy steels, titanium and hardened steels
- AlCrN coating provides increased wear resistance
- Square end and corner radius



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Radius	Neck Dia.	Reach	OAL (in.)	Shank Type	Order No.	Price
1/8	1/8	5/32	.010	.1200	.3750	2	Round	**PE1510912**	Price
1/8	1/8	5/32	.010	.1200	.5000	2	Round	**PE1510913**	Price
1/8	1/8	5/32	.030	.1200	.5000	2	Round	**PE1510914**	Price
1/8	1/8	5/32	.010	.1200	.7500	2-1/2	Round	**PE1510915**	Price
3/16	3/16	7/32	.010	.1800	.5000	2	Round	**PE1510916**	Price
3/16	3/16	7/32	.030	.1800	.5000	2	Round	**PE1510917**	Price
3/16	3/16	7/32	.010	.1800	.7500	2-1/2	Round	**PE1510918**	Price
3/16	3/16	7/32	.010	.1800	1.1250	2-1/2	Round	**PE1510919**	Price
3/16	3/16	7/32	.030	.1800	.7500	2-1/2	Round	**PE1510920**	Price
1/4	1/4	3/8	None	-	-	2	Round	**PE1510925**	Price
1/4	1/4	3/8	.020	-	-	2	Round	**PE1510926**	Price
1/4	1/4	3/8	.030	-	-	2	Round	**PE1510927**	Price
1/4	1/4	3/8	.060	-	-	2	Round	**PE1510928**	Price
1/4	1/4	3/8	.020	.2400	2.1250	4	Round	**PE1510930**	Price
1/4	1/4	3/8	.030	.2400	.7500	4	Round	**PE1510931**	Price
1/4	1/4	3/8	.060	.2400	.7500	4	Round	**PE1510932**	Price
1/4	1/4	3/4	None	-	-	2-1/2	Round	**PE1510921**	Price
1/4	1/4	3/4	.020	-	-	2-1/2	Round	**PE1510922**	Price
1/4	1/4	3/4	.030	-	-	2-1/2	Round	**PE1510923**	Price
1/4	1/4	3/4	.060	-	-	2-1/2	Round	**PE1510924**	Price
1/4	1/4	1-1/4	None	-	-	3	Round	**PE1510929**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Radius	Neck Dia.	Reach	OAL (in.)	Shank Type	Order No.	Price
5/16	5/16	7/8	None	-	-	2-1/2	Round	**PE1510933**	Price
5/16	5/16	7/8	.020	-	-	2-1/2	Round	**PE1510934**	Price
5/16	5/16	7/8	.060	-	-	2-1/2	Round	**PE1510935**	Price
5/16	5/16	1	None	-	-	3	Round	**PE1510936**	Price
5/16	5/16	1	.030	-	-	3	Round	**PE1510937**	Price
5/16	5/16	1	.060	-	-	3	Round	**PE1510938**	Price
5/16	5/16	2	None	-	-	4	Round	**PE1510939**	Price
3/8	3/8	1/2	None	-	-	2-1/2	Round	**PE1510940**	Price
3/8	3/8	1/2	.020	-	-	2-1/2	Round	**PE1510941**	Price
3/8	3/8	1/2	.030	-	-	2-1/2	Round	**PE1510942**	Price
3/8	3/8	1/2	.060	-	-	2-1/2	Round	**PE1510943**	Price
3/8	3/8	1/2	.090	-	-	2-1/2	Round	**PE1510944**	Price
3/8	3/8	1/2	.020	.3600	1.1250	4	Round	**PE1510945**	Price
3/8	3/8	1/2	.020	.3600	2.1250	4	Round	**PE1510946**	Price
3/8	3/8	1/2	.030	.3600	1.1250	4	Round	**PE1510947**	Price
3/8	3/8	1/2	.030	.3600	2.1250	4	Round	**PE1510948**	Price
3/8	3/8	1/2	.060	.3600	1.1250	4	Round	**PE1510949**	Price
3/8	3/8	1/2	.060	.3600	2.1250	4	Round	**PE1510950**	Price
3/8	3/8	1/2	.020	.3600	3.1250	6	Round	**PE1510951**	Price
3/8	3/8	1/2	.020	.3600	4.1250	6	Round	**PE1510952**	Price
3/8	3/8	1	None	-	-	2-1/2	Round	**PE1510953**	Price

(continued on next page)

RAPIDKUT 5 Flute Variable Index Carbide End Mills (cont.)



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Radius	Neck Dia.	Reach	OAL (in.)	Shank Type	Order No.	Price
3/8	3/8	1	.020	-	-	2-1/2	Round	**PE1510954**	Price
3/8	3/8	1	.030	-	-	2-1/2	Round	**PE1510955**	Price
3/8	3/8	1	.060	-	-	2-1/2	Round	**PE1510956**	Price
3/8	3/8	1	.090	-	-	2-1/2	Round	**PE1510957**	Price
3/8	3/8	1	.120	-	-	2-1/2	Round	**PE1510958**	Price
3/8	3/8	1-1/4	None	-	-	3	Round	**PE1510959**	Price
3/8	3/8	2	None	-	-	4	Round	**PE1510960**	Price
3/8	3/8	2	.020	-	-	4	Round	**PE1510961**	Price
7/16	7/16	1	None	-	-	2-3/4	Round	**PE1510962**	Price
7/16	7/16	1	.020	-	-	2-3/4	Round	**PE1510963**	Price
7/16	7/16	1	.030	-	-	2-3/4	Round	**PE1510964**	Price
7/16	7/16	2	None	-	-	4	Round	**PE1510965**	Price
1/2	1/2	5/8	None	-	-	3	Round	**PE1510986**	Price
1/2	1/2	5/8	.030	-	-	3	Round	**PE1510988**	Price
1/2	1/2	5/8	.060	-	-	3	Round	**PE1510991**	Price
1/2	1/2	5/8	.120	-	-	3	Round	**PE1510994**	Price
1/2	1/2	5/8	.030	.4800	2.2500	4	Round	**PE1510987**	Price
1/2	1/2	5/8	.060	.4800	1.5000	4	Round	**PE1510989**	Price
1/2	1/2	5/8	.060	.4800	2.2500	4	Round	**PE1510990**	Price
1/2	1/2	5/8	.090	.4800	1.5000	4	Round	**PE1510992**	Price
1/2	1/2	5/8	.090	.4800	2.2500	4	Round	**PE1510993**	Price
1/2	1/2	5/8	.120	.4800	1.5000	4	Round	**PE1510995**	Price
1/2	1/2	5/8	.120	.4800	2.2500	4	Round	**PE1510996**	Price
1/2	1/2	5/8	.030	.4800	3.3750	6	Round	**PE1510997**	Price
1/2	1/2	5/8	.060	.4800	3.3750	6	Round	**PE1510998**	Price
1/2	1/2	5/8	.090	.4800	4.1250	6	Round	**PE1510999**	Price
1/2	1/2	1	None	-	-	3	Round	**PE1510966**	Price
1/2	1/2	1	.010	-	-	3	Round	**PE1510967**	Price
1/2	1/2	1	.015	-	-	3	Round	**PE1510971**	Price
1/2	1/2	1	.020	-	-	3	Round	**PE1510970**	Price
1/2	1/2	1	.030	-	-	3	Round	**PE1510968**	Price
1/2	1/2	1	.060	-	-	3	Round	**PE1510972**	Price
1/2	1/2	1	.090	-	-	3	Round	**PE1510973**	Price
1/2	1/2	1-1/4	None	-	-	3	Round	**PE1510974**	Price
1/2	1/2	1-1/4	.015	-	-	3	Round	**PE1510969**	Price
1/2	1/2	1-1/4	.030	-	-	3	Round	**PE1510975**	Price
1/2	1/2	1-1/4	.060	-	-	3	Round	**PE1510976**	Price
1/2	1/2	1-1/4	.090	-	-	3	Round	**PE1510977**	Price
1/2	1/2	1-1/4	.120	-	-	3	Round	**PE1510978**	Price
1/2	1/2	1-5/8	None	-	-	4	Round	**PE1510979**	Price
1/2	1/2	2	None	-	-	4	Round	**PE1510980**	Price
1/2	1/2	2	.020	-	-	4	Round	**PE1510981**	Price
1/2	1/2	2	.030	-	-	4	Round	**PE1510982**	Price
1/2	1/2	2	.060	-	-	4	Round	**PE1510983**	Price
1/2	1/2	2	.090	-	-	4	Round	**PE1510984**	Price
1/2	1/2	2	.120	-	-	4	Round	**PE1510985**	Price
5/8	5/8	3/4	None	-	-	3-1/2	Round	**PE1511000**	Price
5/8	5/8	3/4	.030	-	-	3-1/2	Round	**PE1511001**	Price
5/8	5/8	3/4	.035	-	-	3-1/2	Round	**PE1511002**	Price
5/8	5/8	3/4	.060	-	-	3-1/2	Round	**PE1511003**	Price
5/8	5/8	3/4	.120	-	-	3-1/2	Round	**PE1511004**	Price
5/8	5/8	3/4	.030	.6000	1.6250	4	Round	**PE1511005**	Price
5/8	5/8	3/4	.030	.6000	2.3750	6	Round	**PE1511006**	Price
5/8	5/8	3/4	.090	.6000	2.3750	6	Round	**PE1511007**	Price
5/8	5/8	1-1/2	None	-	-	3-1/2	Round	**PE1511008**	Price
5/8	5/8	1-1/2	.030	-	-	3-1/2	Round	**PE1511009**	Price
5/8	5/8	1-1/2	.035	-	-	3-1/2	Round	**PE1511010**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Radius	Neck Dia.	Reach	OAL (in.)	Shank Type	Order No.	Price
5/8	5/8	1-1/2	.060	-	-	3-1/2	Round	**PE1511011**	Price
5/8	5/8	1-1/2	.090	-	-	3-1/2	Round	**PE1511012**	Price
5/8	5/8	1-1/2	.120	-	-	3-1/2	Round	**PE1511013**	Price
5/8	5/8	1-5/8	None	-	-	4	Round	**PE1511014**	Price
5/8	5/8	1-5/8	.030	-	-	4	Round	**PE1511015**	Price
5/8	5/8	1-5/8	.035	-	-	4	Round	**PE1511016**	Price
5/8	5/8	1-5/8	.120	-	-	4	Round	**PE1511017**	Price
5/8	5/8	2-1/4	None	-	-	5	Round	**PE1511018**	Price
5/8	5/8	2-1/4	.035	-	-	5	Round	**PE1511019**	Price
5/8	5/8	3-1/4	None	-	-	6	Round	**PE1511020**	Price
3/4	3/4	7/8	None	-	-	4	Round	**PE1511021**	Price
3/4	3/4	7/8	.030	-	-	4	Round	**PE1511022**	Price
3/4	3/4	7/8	.035	-	-	4	Round	**PE1511023**	Price
3/4	3/4	7/8	.060	-	-	4	Round	**PE1511024**	Price
3/4	3/4	7/8	.120	-	-	4	Round	**PE1511025**	Price
3/4	3/4	1	.030	.7200	2.0000	4	Round	**PE1511026**	Price
3/4	3/4	1	.060	.7200	2.0000	4	Round	**PE1511027**	Price
3/4	3/4	1	.090	.7200	2.0000	4	Round	**PE1511028**	Price
3/4	3/4	1	.190	.7200	2.0000	4	Round	**PE1511029**	Price
3/4	3/4	1	.030	.7200	2.5000	6	Round	**PE1511030**	Price
3/4	3/4	1	.030	.7200	3.3570	6	Round	**PE1511031**	Price
3/4	3/4	1	.030	.7200	4.1250	6	Round	**PE1511032**	Price
3/4	3/4	1	.120	.7200	3.3570	6	Round	**PE1511033**	Price
3/4	3/4	1	.120	.7200	4.1250	6	Round	**PE1511034**	Price
3/4	3/4	1	.190	.7200	4.1250	6	Round	**PE1511036**	Price
3/4	3/4	1-1/4	.030	-	-	4	Round	**PE1511046**	Price
3/4	3/4	1-1/4	.120	-	-	4	Round	**PE1511047**	Price
3/4	3/4	1-1/2	None	-	-	4	Round	**PE1511035**	Price
3/4	3/4	1-1/2	.020	-	-	4	Round	**PE1511037**	Price
3/4	3/4	1-1/2	.030	-	-	4	Round	**PE1511038**	Price
3/4	3/4	1-1/2	.035	-	-	4	Round	**PE1511040**	Price
3/4	3/4	1-1/2	.035	-	-	4	Weldon	**PE1511039**	Price
3/4	3/4	1-1/2	.060	-	-	4	Round	**PE1511041**	Price
3/4	3/4	1-1/2	.090	-	-	4	Round	**PE1511042**	Price
3/4	3/4	1-1/2	.120	-	-	4	Round	**PE1511043**	Price
3/4	3/4	1-1/2	.250	-	-	4	Round	**PE1511044**	Price
3/4	3/4	1-5/8	None	-	-	4	Round	**PE1511045**	Price
3/4	3/4	1-5/8	.035	-	-	4	Round	**PE1511048**	Price
3/4	3/4	2-1/4	None	-	-	5	Round	**PE1511049**	Price
3/4	3/4	2-1/4	.035	-	-	5	Round	**PE1511050**	Price
3/4	3/4	3-1/4	None	-	-	6	Round	**PE1511051**	Price
1	1	1-1/4	.030	.9700	2.2500	4	Round	**PE1511052**	Price
1	1	1-1/4	.190	.9700	2.2500	4	Round	**PE1511053**	Price
1	1	1-1/4	.250	.9700	2.2500	4	Round	**PE1511054**	Price
1	1	1-1/2	None	-	-	4	Round	**PE1511055**	Price
1	1	1-1/2	.030	-	-	4	Round	**PE1511056**	Price
1	1	1-1/2	.035	-	-	4	Round	**PE1511057**	Price
1	1	1-1/2	.060	-	-	4	Round	**PE1511058**	Price
1	1	2	None	-	-	5	Round	**PE1511059**	Price
1	1	2-1/4	None	-	-	5	Round	**PE1511060**	Price
1	1	2-1/4	.030	-	-	5	Round	**PE1511061**	Price
1	1	2-1/4	.035	-	-	5	Round	**PE1511062**	Price
1	1	2-1/4	.060	-	-	5	Round	**PE1511063**	Price
1	1	2-1/4	.250	-	-	5	Round	**PE1511064**	Price
1	1	3-1/4	None	-	-	6	Round	**PE1511065**	Price
1	1	4-1/4	None	-	-	7	Round	**PE1511066**	Price

TuffCut® XT 5 Flute Carbide End Mills



Altima® Blaze Coated

- Higher feeds over similar end mills
- Reduced vibration harmonics
- Improved part finishes
- Maintains cutting edge strength & sharpness for improved tool life
- Slotting at 1X diameter deep
- State-of-the-art ALtima® Blaze coating for superior tool life and higher metal removal rates
- Designed for specific applications in steels, stainless steels, special alloys, cast iron, titanium inconel, and high temp alloys
- M.A. Ford List #278

Size (in.)	Shank Dia, (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/8	1/8	1/4	1-1/2	None	**DD1636992**	Price
1/8	1/8	1/4	1-1/2	.015	**DD1697002**	Price
1/8	1/8	1/4	1-1/2	.030	**DD1697003**	Price
1/8	1/8	3/8	1-1/2	None	**DD1636993**	Price
1/8	1/8	1/2	1-1/2	None	**DD1697005**	Price
1/8	1/8	1/2	1-1/2	.015	**DD1697006**	Price
1/8	1/8	1/2	1-1/2	.030	**DD1697007**	Price
1/8	1/8	3/4	2-1/2	None	**DD1697009**	Price
1/8	1/8	3/4	2-1/2	.015	**DD1697010**	Price
1/8	1/8	3/4	2-1/2	.030	**DD1697011**	Price
5/32	3/16	3/16	2	None	**DD1636994**	Price
5/32	3/16	7/16	2	None	**DD1636995**	Price
3/16	3/16	5/16	2	None	**DD1636996**	Price
3/16	3/16	5/16	2	.015	**DD1697014**	Price
3/16	3/16	7/16	2	None	**DD1636997**	Price
3/16	3/16	9/16	2	None	**DD1697017**	Price
3/16	3/16	9/16	2	.015	**DD1697018**	Price
3/16	3/16	3/4	2-1/2	None	**DD1697021**	Price
3/16	3/16	3/4	2-1/2	.015	**DD1697022**	Price
1/4	1/4	3/8	2	None	**DD1637000**	Price
1/4	1/4	3/8	2	.015	**DD1637001**	Price
1/4	1/4	3/8	2	.030	**DD1637002**	Price
1/4	1/4	3/4	2-1/2	None	**DD1637003**	Price
1/4	1/4	3/4	2-1/2	.015	**DD1637004**	Price
1/4	1/4	3/4	2-1/2	.030	**DD1637005**	Price
1/4	1/4	1-1/4	3	None	**DD1637006**	Price
1/4	1/4	1-1/4	3	.015	**DD1637007**	Price
1/4	1/4	1-1/4	3	.030	**DD1637008**	Price
1/4	1/4	1-3/4	4	None	**DD1637009**	Price
1/4	1/4	1-3/4	4	.015	**DD1637010**	Price
1/4	1/4	1-3/4	4	.030	**DD1637075**	Price
5/16	5/16	7/16	2	None	**DD1697061**	Price
5/16	5/16	7/16	2	.015	**DD1697062**	Price
5/16	5/16	7/16	2	.030	**DD1697063**	Price
3/8	3/8	1/2	2-1/2	None	**DD1637013**	Price
3/8	3/8	1/2	2-1/2	.015	**DD1637014**	Price
3/8	3/8	1/2	2-1/2	.030	**DD1637015**	Price
3/8	3/8	1	2-1/2	None	**DD1637016**	Price
3/8	3/8	1	2-1/2	.015	**DD1637017**	Price
3/8	3/8	1	2-1/2	.030	**DD1637018**	Price
3/8	3/8	1-1/4	3	None	**DD1697141**	Price
3/8	3/8	1-1/4	3	.015	**DD1697142**	Price
3/8	3/8	1-1/4	3	.030	**DD1697143**	Price
3/8	3/8	1-1/2	4	None	**DD1637019**	Price
3/8	3/8	1-1/2	4	.015	**DD1637020**	Price
3/8	3/8	1-1/2	4	.030	**DD1637076**	Price
3/8	3/8	1-5/8	3-1/2	None	**DD1697149**	Price
3/8	3/8	1-5/8	3-1/2	.015	**DD1697150**	Price
3/8	3/8	1-5/8	3-1/2	.030	**DD1697151**	Price
3/8	3/8	2	4	None	**DD1697173**	Price
3/8	3/8	2	4	.015	**DD1697174**	Price
3/8	3/8	2	4	.030	**DD1697175**	Price
3/8	3/8	2-1/2	4	None	**DD1637021**	Price
3/8	3/8	2-1/2	4	.015	**DD1637022**	Price
3/8	3/8	2-1/2	4	.030	**DD1637077**	Price
3/8	3/8	2-1/2	6	None	**DD1697181**	Price
3/8	3/8	2-1/2	6	.015	**DD1697182**	Price
3/8	3/8	2-1/2	6	.030	**DD1697183**	Price

Size (in.)	Shank Dia, (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
7/16	7/16	5/8	2-1/2	None	**DD1697189**	Price
7/16	7/16	5/8	2-1/2	.015	**DD1697190**	Price
7/16	7/16	5/8	2-1/2	.030	**DD1697191**	Price
7/16	7/16	5/8	2-1/2	.060	**DD1697192**	Price
7/16	7/16	1	2-3/4	None	**DD1697197**	Price
7/16	7/16	1	2-3/4	.015	**DD1697198**	Price
7/16	7/16	1	2-3/4	.030	**DD1697199**	Price
7/16	7/16	2	4	None	**DD1697205**	Price
7/16	7/16	2	4	.015	**DD1697206**	Price
7/16	7/16	2	4	.030	**DD1697207**	Price
7/16	7/16	2	4	.060	**DD1697208**	Price
1/2	1/2	5/8	3	None	**DD1637025**	Price
1/2	1/2	5/8	3	.015	**DD1637026**	Price
1/2	1/2	5/8	3	.030	**DD1637027**	Price
1/2	1/2	5/8	3	.060	**DD1697216**	Price
1/2	1/2	1	3	None	**DD1697258**	Price
1/2	1/2	1	3	.015	**DD1697259**	Price
1/2	1/2	1	3	.030	**DD1697260**	Price
1/2	1/2	1	3	.060	**DD1697261**	Price
1/2	1/2	1-1/4	3	None	**DD1637028**	Price
1/2	1/2	1-1/4	3	.015	**DD1637029**	Price
1/2	1/2	1-1/4	3	.030	**DD1637030**	Price
1/2	1/2	1-1/4	3	.060	**DD1637078**	Price
1/2	1/2	1-5/8	4	None	**DD1697276**	Price
1/2	1/2	1-5/8	4	.015	**DD1697277**	Price
1/2	1/2	1-5/8	4	.030	**DD1697278**	Price
1/2	1/2	1-5/8	4	.060	**DD1697279**	Price
1/2	1/2	1-5/8	6	None	**DD1697285**	Price
1/2	1/2	1-5/8	6	.015	**DD1697286**	Price
1/2	1/2	1-5/8	6	.030	**DD1697287**	Price
1/2	1/2	1-5/8	6	.060	**DD1697288**	Price
1/2	1/2	2	4	None	**DD1637031**	Price
1/2	1/2	2	4	.015	**DD1637032**	Price
1/2	1/2	2	4	.030	**DD1637033**	Price
1/2	1/2	2-1/8	4	None	**DD1697294**	Price
1/2	1/2	2-1/8	4	.015	**DD1697295**	Price
1/2	1/2	2-1/8	4	.030	**DD1697296**	Price
1/2	1/2	2-1/8	4	.060	**DD1697297**	Price
1/2	1/2	2-5/8	5	None	**DD1697303**	Price
1/2	1/2	2-5/8	5	.015	**DD1697304**	Price
1/2	1/2	2-5/8	5	.030	**DD1697305**	Price
1/2	1/2	2-5/8	5	.060	**DD1697306**	Price
1/2	1/2	3	5	None	**DD1637034**	Price
1/2	1/2	3	5	.015	**DD1637035**	Price
1/2	1/2	3	5	.030	**DD1637036**	Price
1/2	1/2	3-1/4	6	None	**DD1697312**	Price
1/2	1/2	3-1/4	6	.015	**DD1697313**	Price
1/2	1/2	3-1/4	6	.030	**DD1697314**	Price
1/2	1/2	3-1/4	6	.060	**DD1697315**	Price
5/8	5/8	3/4	3	None	**DD1697321**	Price
5/8	5/8	3/4	3	.015	**DD1697322**	Price
5/8	5/8	3/4	3	.030	**DD1697323**	Price
5/8	5/8	3/4	3	.060	**DD1697324**	Price
5/8	5/8	1-1/4	3-1/2	None	**DD1637039**	Price
5/8	5/8	1-1/4	3-1/2	.015	**DD1637040**	Price
5/8	5/8	1-1/4	3-1/2	.030	**DD1637041**	Price
5/8	5/8	1-1/4	3-1/2	.060	**DD1637042**	Price
5/8	5/8	1-5/8	3-1/2	None	**DD1697361**	Price

TuffCut® XT 5 Flute Carbide End Mills (cont.)



Size (in.)	Shank Dia, (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
5/8	5/8	1-5/8	3-1/2	.015	**DD1697362**	Price
5/8	5/8	1-5/8	3-1/2	.030	**DD1697363**	Price
5/8	5/8	1-5/8	3-1/2	.060	**DD1697364**	Price
5/8	5/8	2-1/8	4	None	**DD1697371**	Price
5/8	5/8	2-1/8	4	.015	**DD1697372**	Price
5/8	5/8	2-1/8	4	.030	**DD1697373**	Price
5/8	5/8	2-1/8	4	.060	**DD1697374**	Price
5/8	5/8	2-1/8	6	None	**DD1697381**	Price
5/8	5/8	2-1/8	6	.015	**DD1697382**	Price
5/8	5/8	2-1/8	6	.030	**DD1697383**	Price
5/8	5/8	2-1/8	6	.060	**DD1697384**	Price
5/8	5/8	2-1/4	5	None	**DD1637044**	Price
5/8	5/8	2-1/4	5	.015	**DD1637045**	Price
5/8	5/8	2-1/4	5	.030	**DD1637046**	Price
5/8	5/8	2-5/8	5	None	**DD1697391**	Price
5/8	5/8	2-5/8	5	.015	**DD1697392**	Price
5/8	5/8	2-5/8	5	.030	**DD1697393**	Price
5/8	5/8	2-5/8	5	.060	**DD1697394**	Price
5/8	5/8	3	6	None	**DD1637047**	Price
5/8	5/8	3	6	.015	**DD1637048**	Price
5/8	5/8	3	6	.030	**DD1637049**	Price
5/8	5/8	3-1/4	6	None	**DD1697401**	Price
5/8	5/8	3-1/4	6	.015	**DD1697402**	Price
5/8	5/8	3-1/4	6	.030	**DD1697403**	Price
5/8	5/8	3-1/4	6	.060	**DD1697404**	Price
5/8	5/8	4	6	None	**DD1697411**	Price
5/8	5/8	4	6	.015	**DD1697412**	Price
5/8	5/8	4	6	.030	**DD1697413**	Price
5/8	5/8	4	6	.060	**DD1697414**	Price
3/4	3/4	1	3	None	**DD1697421**	Price
3/4	3/4	1	3	.015	**DD1697422**	Price

Size (in.)	Shank Dia, (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
3/4	3/4	1	3	.030	**DD1697423**	Price
3/4	3/4	1	3	.060	**DD1697424**	Price
3/4	3/4	1-1/2	4	None	**DD1637052**	Price
3/4	3/4	1-1/2	4	.015	**DD1637053**	Price
3/4	3/4	1-1/2	4	.030	**DD1637054**	Price
3/4	3/4	1-1/2	4	.060	**DD1637055**	Price
3/4	3/4	1-5/8	4	None	**DD1697461**	Price
3/4	3/4	1-5/8	4	.015	**DD1697462**	Price
3/4	3/4	1-5/8	4	.030	**DD1697463**	Price
3/4	3/4	1-5/8	4	.060	**DD1697464**	Price
3/4	3/4	2-1/4	5	None	**DD1637057**	Price
3/4	3/4	2-1/4	5	.015	**DD1637058**	Price
3/4	3/4	2-1/4	5	.030	**DD1637059**	Price
3/4	3/4	2-3/8	5	None	**DD1697471**	Price
3/4	3/4	2-3/8	5	.015	**DD1697472**	Price
3/4	3/4	2-3/8	5	.030	**DD1697473**	Price
3/4	3/4	2-3/8	5	.060	**DD1697474**	Price
3/4	3/4	2-3/8	6	None	**DD1697481**	Price
3/4	3/4	2-3/8	6	.015	**DD1697482**	Price
3/4	3/4	2-3/8	6	.030	**DD1697483**	Price
3/4	3/4	2-3/8	6	.060	**DD1697484**	Price
3/4	3/4	3	6	None	**DD1637060**	Price
3/4	3/4	3	6	.015	**DD1637061**	Price
3/4	3/4	3	6	.030	**DD1637062**	Price
3/4	3/4	3-1/4	6	.015	**DD1697492**	Price
3/4	3/4	3-1/4	6	.030	**DD1697493**	Price
3/4	3/4	3-1/4	6	.060	**DD1697494**	Price
3/4	3/4	4-1/8	7	None	**DD1697501**	Price
3/4	3/4	4-1/8	7	.015	**DD1697502**	Price
3/4	3/4	4-1/8	7	.030	**DD1697503**	Price
3/4	3/4	4-1/8	7	.060	**DD1697504**	Price

TuffCut® DM Multi-Flute High Performance End Mills



Fractional Sizes

- Designed for hardened materials Rc 50-65
- ALtima® 52 coating for materials Rc 52 and above
- Square end or corner radius
- 45° Helix
- M.A. Ford Series #157

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Radius	Order No.	Price
1/8	1/4	3/8	3	4	None	**DD1515702**	Price
1/8	1/4	3/8	3	4	.015	**DD1515703**	Price
1/8	1/4	3/8	3	4	.020	**DD1515704**	Price
5/32	1/4	15/32	3	4	None	**DD1515705**	Price
5/32	1/4	15/32	3	4	.015	**DD1515706**	Price
5/32	1/4	15/32	3	4	.020	**DD1515707**	Price
3/16	1/4	9/16	3	4	None	**DD1515711**	Price
3/16	1/4	9/16	3	4	.015	**DD1515712**	Price
3/16	1/4	9/16	3	4	.020	**DD1515713**	Price
3/16	1/4	9/16	3	4	.030	**DD1515714**	Price
1/4	1/4	5/8	3-1/2	6	None	**DD1515723**	Price
1/4	1/4	5/8	3-1/2	6	.015	**DD1515724**	Price
1/4	1/4	5/8	3-1/2	6	.020	**DD1515725**	Price
1/4	1/4	5/8	3-1/2	6	.030	**DD1515726**	Price
1/4	1/4	5/8	3-1/2	6	.045	**DD1515727**	Price
5/16	5/16	3/4	4	6	None	**DD1515728**	Price
5/16	5/16	3/4	4	6	.015	**DD1515729**	Price
5/16	5/16	3/4	4	6	.020	**DD1515730**	Price
5/16	5/16	3/4	4	6	.030	**DD1515731**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Radius	Order No.	Price
5/16	5/16	3/4	4	6	.045	**DD1515732**	Price
3/8	3/8	1	4	6	None	**DD1515738**	Price
3/8	3/8	1	4	6	.015	**DD1515739**	Price
3/8	3/8	1	4	6	.020	**DD1515740**	Price
3/8	3/8	1	4	6	.030	**DD1515741**	Price
3/8	3/8	1	4	6	.045	**DD1515742**	Price
1/2	1/2	1-1/4	4	6	None	**DD1515754**	Price
1/2	1/2	1-1/4	4	6	.015	**DD1515755**	Price
1/2	1/2	1-1/4	4	6	.020	**DD1515756**	Price
1/2	1/2	1-1/4	4	6	.030	**DD1515757**	Price
1/2	1/2	1-1/4	4	6	.045	**DD1515758**	Price
1/2	1/2	1-1/4	4	6	.060	**DD1515759**	Price
5/8	5/8	1-9/16	6	6	None	**DD1515760**	Price
5/8	5/8	1-9/16	6	6	.015	**DD1515761**	Price
5/8	5/8	1-9/16	6	6	.020	**DD1515762**	Price
5/8	5/8	1-9/16	6	6	.030	**DD1515763**	Price
5/8	5/8	1-9/16	6	6	.045	**DD1515764**	Price
5/8	5/8	1-9/16	6	6	.060	**DD1515765**	Price
5/8	5/8	1-9/16	6	6	.090	**DD1515766**	Price

TuffCut® DM Multi-Flute High Performance End Mills



Metric Sizes

- Designed for hardened materials Rc 50-65
- ALtima® 52 coating for materials Rc 52 and above
- Square end or corner radius
- 45° Helix
- M.A. Ford Series #157

Size	Shank Dia.	Flute Length	OAL	No. of Flutes	Radius	Order No.	Price
3mm	6mm	10mm	76mm	4	None	**DD1515700**	Price
3mm	6mm	10mm	76mm	4	0.5mm	**DD1515701**	Price
4mm	6mm	12mm	76mm	4	None	**DD1515708**	Price
4mm	6mm	12mm	76mm	4	0.5mm	**DD1515709**	Price
4mm	6mm	12mm	76mm	4	0.75mm	**DD1515710**	Price
5mm	6mm	15mm	90mm	4	None	**DD1515715**	Price
5mm	6mm	15mm	90mm	4	0.5mm	**DD1515716**	Price
5mm	6mm	15mm	90mm	4	0.75mm	**DD1515717**	Price
5mm	6mm	15mm	90mm	4	1mm	**DD1515718**	Price
6mm	6mm	15mm	90mm	6	None	**DD1515719**	Price
6mm	6mm	15mm	90mm	6	0.5mm	**DD1515720**	Price
6mm	6mm	15mm	90mm	6	0.75mm	**DD1515721**	Price
6mm	6mm	15mm	90mm	6	1mm	**DD1515722**	Price
8mm	8mm	20mm	100mm	6	None	**DD1515733**	Price
8mm	8mm	20mm	100mm	6	0.5mm	**DD1515734**	Price
8mm	8mm	20mm	100mm	6	0.75mm	**DD1515735**	Price
8mm	8mm	20mm	100mm	6	1mm	**DD1515736**	Price
8mm	8mm	20mm	100mm	6	1.5mm	**DD1515737**	Price
10mm	10mm	25mm	100mm	6	None	**DD1515743**	Price

Size	Shank Dia.	Flute Length	OAL	No. of Flutes	Radius	Order No.	Price
10mm	10mm	25mm	100mm	6	0.5mm	**DD1515744**	Price
10mm	10mm	25mm	100mm	6	0.75mm	**DD1515745**	Price
10mm	10mm	25mm	100mm	6	1mm	**DD1515746**	Price
10mm	10mm	25mm	100mm	6	1.5mm	**DD1515747**	Price
12mm	12mm	30mm	100mm	6	None	**DD1515748**	Price
12mm	12mm	30mm	100mm	6	0.5mm	**DD1515749**	Price
12mm	12mm	30mm	100mm	6	0.75mm	**DD1515750**	Price
12mm	12mm	30mm	100mm	6	1mm	**DD1515751**	Price
12mm	12mm	30mm	100mm	6	1.5mm	**DD1515752**	Price
12mm	12mm	30mm	100mm	6	2mm	**DD1515753**	Price
16mm	16mm	40mm	150mm	6	None	**DD1515767**	Price
16mm	16mm	40mm	150mm	6	0.5mm	**DD1515768**	Price
16mm	16mm	40mm	150mm	6	0.75mm	**DD1515769**	Price
16mm	16mm	40mm	150mm	6	1mm	**DD1515770**	Price
16mm	16mm	40mm	150mm	6	1.5mm	**DD1515771**	Price
16mm	16mm	40mm	150mm	6	2mm	**DD1515772**	Price
16mm	16mm	40mm	150mm	6	2.5mm	**DD1515773**	Price
16mm	16mm	40mm	150mm	6	3mm	**DD1515774**	Price

enDURO® M525B Solid Carbide 5 Flute Variable Index Ball Nose End Mills

- Excellent for contouring applications in a variety of materials
- Unique vibration dampening geometry for chatter-free machining
- For maximum cutting edge engagement and higher metal removal
- 40° Helix, AlCrN-X coated
- Round shank

Great for HSM

MADE IN THE USA

S Best in Titanium Alloys K Good in Cast Iron

M Best in Stainless Steels P Good in Carbon and Tool Steels



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	1/4	3/8	2	**DD4065030**	Price
1/4	1/4	3/4	2-1/2	**DD4065054**	Price
1/4	1/4	1-1/8	3	**DD4065060**	Price
3/8	3/8	1	2-1/2	**DD4065140**	Price
3/8	3/8	1-5/8	3-1/2	**DD4065156**	Price
3/8	3/8	2	4	**DD4065180**	Price
1/2	1/2	1-1/4	3	**DD4065275**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/2	1/2	1-5/8	6	**DD4065293**	Price
1/2	1/2	2-1/8	4	**DD4065302**	Price
1/2	1/2	3-1/4	6	**DD4065320**	Price
5/8	5/8	1-5/8	3-1/2	**DD4065370**	Price
5/8	5/8	3-1/4	6	**DD4065410**	Price
3/4	3/4	1-5/8	4	**DD4065470**	Price
3/4	3/4	3-1/4	6	**DD4065500**	Price

RAPIDKUT® 6 Flute Solid Carbide 45° Helix End Mills



Center Cutting • nACo Coated for Increased Tool Life

- For material over 50 Rc
- Increased core diameter for added strength
- Used for light finishing cuts
- Made from premium submicron grain carbide
- Tolerances +.000/-.002”

nACO

Dia. (in.)	Shank Dia. (in.)	Flute Length	OAL (in.)	Radius	Order No.	Price
1/8	1/8	1/2	1-1/2	.010	**DD5016794**	Price
3/16	3/16	5/8	2	.010	**DD5016786**	Price
1/4	1/4	3/4	2-1/2	.015	**DD5016787**	Price
5/16	5/16	13/16	2-1/2	.020	**DD5016788**	Price
3/8	3/8	1	2-1/2	.020	**DD5016789**	Price

Dia. (in.)	Shank Dia. (in.)	Flute Length	OAL (in.)	Radius	Order No.	Price
1/2	1/2	1	3	.025	**DD5016790**	Price
5/8	5/8	1-1/4	3-1/2	.030	**DD5016791**	Price
3/4	3/4	1-1/2	4	.035	**DD5016792**	Price
1	1	1-1/2	4	.035	**DD5016793**	Price

FULLERTON Tool Company Inc. Solid Carbide End Mills

Series 3600



- Cutter diameter tolerance: +.0000 /-.002”
- Shank diameter tolerance: h6
- Good for use in: steels, stainless, high temp alloys, and titanium
- Center cuttting

No. of Flutes - 5						
Size (in.)	Shank Dia. (in.)	LOC (in.)	OAI (in.)	Radius	Order No.	Price
1/4	1/4	3/8	2-1/2	.015	**FT8536200**	Price
1/4	1/4	3/8	2-1/2	None	**FT8536244**	Price
1/4	1/4	1	3	.015	**FT8536201**	Price
1/4	1/4	1	3	None	**FT8536245**	Price
6mm	6mm	20mm	76mm	None	**FT8536280**	Price
6mm	6mm	20mm	76mm	0.50mm	**FT8536281**	Price
6mm	6mm	20mm	76mm	1.0mm	**FT8536282**	Price

No. of Flutes - 7						
Size (in.)	Shank Dia. (in.)	LOC (in.)	OAI (in.)	Radius	Order No.	Price
3/8	3/8	3/4	2-1/2	None	**FT8536246**	Price
3/8	3/8	3/4	2-1/2	.015	**FT8536202**	Price
3/8	3/8	1-1/8	3	.015	**FT8536203**	Price
1/2	1/2	5/8	2-1/2	.015	**FT8536208**	Price
1/2	1/2	5/8	2-1/2	.030	**FT8536209**	Price
1/2	1/2	5/8	2-1/2	.060	**FT8536210**	Price
1/2	1/2	1	3	None	**FT8536266**	Price
1/2	1/2	1	3	.015	**FT8536267**	Price
1/2	1/2	1	3	.030	**FT8536268**	Price
1/2	1/2	1	3	.060	**FT8536269**	Price
1/2	1/2	1-1/4	3	None	**FT8536275**	Price
1/2	1/2	1-1/4	3	.015	**FT8536276**	Price
1/2	1/2	1-1/4	3	.030	**FT8536277**	Price
1/2	1/2	1-1/4	3	.120	**FT8536279**	Price
1/2	1/2	1-1/2	4	None	**FT8536253**	Price
1/2	1/2	1-1/2	4	.015	**FT8536211**	Price
1/2	1/2	1-1/2	4	.030	**FT8536212**	Price
1/2	1/2	1-1/2	4	.060	**FT8536213**	Price
8mm	8mm	22mm	76mm	None	**FT8536283**	Price
8mm	8mm	22mm	76mm	0.50mm	**FT8536284**	Price
8mm	8mm	22mm	76mm	1.0mm	**FT8536285**	Price
8mm	8mm	30mm	76mm	0.50mm	**FT8536291**	Price
10mm	10mm	20mm	64mm	0.50mm	**FT8536204**	Price
10mm	10mm	30mm	76mm	None	**FT8536249**	Price
10mm	10mm	30mm	76mm	0.50mm	**FT8536205**	Price
12mm	12mm	16mm	63mm	0.50mm	**FT8536286**	Price
12mm	12mm	36mm	100mm	None	**FT8536251**	Price
12mm	12mm	16mm	63mm	1.0mm	**FT8536206**	Price

No. of Flutes - 7						
Size (in.)	Shank Dia. (in.)	LOC (in.)	OAI (in.)	Radius	Order No.	Price
12mm	12mm	16mm	63mm	2.50mm	**FT8536287**	Price
12mm	12mm	36mm	100mm	0.50mm	**FT8536288**	Price
12mm	12mm	36mm	100mm	1.0mm	**FT8536207**	Price

No. of Flutes - 9						
Size (in.)	Shank Dia. (in.)	LOC (in.)	OAI (in.)	Radius	Order No.	Price
5/8	5/8	3/4	3-1/2	None	**FT8536254**	Price
5/8	5/8	3/4	3-1/2	.030	**FT8536214**	Price
5/8	5/8	3/4	3-1/2	.060	**FT8536215**	Price
5/8	5/8	1-7/8	5	.030	**FT8536216**	Price
5/8	5/8	1-7/8	5	.060	**FT8536217**	Price
3/4	3/4	1	4	None	**FT8536258**	Price
3/4	3/4	1	4	.060	**FT8536220**	Price
3/4	3/4	1	4	.090	**FT8536221**	Price
3/4	3/4	1	4	.120	**FT8536222**	Price
3/4	3/4	1-5/8	4	None	**FT8236270**	Price
3/4	3/4	1-5/8	4	.015	**FT8536271**	Price
3/4	3/4	1-5/8	4	.060	**FT8536272**	Price
3/4	3/4	1-5/8	4	.090	**FT8536273**	Price
3/4	3/4	1-5/8	4	.120	**FT8536274**	Price
3/4	3/4	2-1/4	5	None	**FT8536259**	Price
3/4	3/4	2-1/4	5	.060	**FT8536223**	Price
3/4	3/4	2-1/4	5	.090	**FT8536224**	Price
3/4	3/4	2-1/4	5	.120	**FT8536225**	Price
1	1	1-1/4	4	.060	**FT8536238**	Price
1	1	1-1/4	4	.090	**FT8536239**	Price
1	1	1-1/4	4	.120	**FT8536240**	Price
1	1	3	6	None	**FT8536265**	Price
1	1	3	6	.060	**FT8536241**	Price
1	1	3	6	.090	**FT8536242**	Price
1	1	3	6	.120	**FT8536243**	Price
16mm	16mm	20mm	89mm	None	**FT8536256**	Price
16mm	16mm	20mm	89mm	1.50mm	**FT8536218**	Price
16mm	16mm	48mm	125mm	None	**FT8536257**	Price
16mm	16mm	48mm	125mm	1.50mm	**FT8536219**	Price
20mm	20mm	25mm	100mm	1.50mm	**FT8536226**	Price
20mm	20mm	25mm	100mm	2.50mm	**FT8536227**	Price
20mm	20mm	25mm	100mm	3.0mm	**FT8536228**	Price
20mm	20mm	60mm	125mm	1.50mm	**FT8536229**	Price
20mm	20mm	60mm	125mm	2.50mm	**FT8536230**	Price
20mm	20mm	60mm	125mm	3.0mm	**FT8536231**	Price
25mm	25mm	32mm	100mm	1.50mm	**FT8536232**	Price
25mm	25mm	32mm	100mm	2.50mm	**FT8536233**	Price
25mm	25mm	32mm	100mm	3.0mm	**FT8536234**	Price
25mm	25mm	75mm	150mm	1.50mm	**FT8536235**	Price
25mm	25mm	75mm	150mm	2.50mm	**FT8536236**	Price
25mm	25mm	75mm	150mm	3.0mm	**FT8536237**	Price

PCT Precision Cutting Tools 5 Flute Solid Carbide Ball Nose End Mills

Eccentric OD



- Silver-Exx® (AlTiCrN) coated
- 35° Helix
- PCT List #558

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/4	1/4	3/8	4	2-1/8	**CW8023915**	Price
1/4	1/4	1/2	2	-	**CW8023920**	Price
1/4	1/4	3/4	2-1/2	-	**CW8023925**	Price
1/4	1/4	1	3	-	**CW8023930**	Price
5/16	5/16	1/2	2	-	**CW8023940**	Price
5/16	5/16	1	3	-	**CW8023960**	Price
3/8	3/8	1/2	2	-	**CW8023975**	Price
3/8	3/8	1/2	3	1-1/8	**CW8023985**	Price
3/8	3/8	1/2	4	2-1/8	**CW8023995**	Price
3/8	3/8	1	2-1/2	-	**CW8024000**	Price
3/8	3/8	1	3	-	**CW8024010**	Price
7/16	7/16	1	2-3/4	-	**CW8024025**	Price
1/2	1/2	5/8	2-1/2	-	**CW8024040**	Price
1/2	1/2	5/8	4	2-1/8	**CW8024060**	Price
1/2	1/2	5/8	6	3-3/8	**CW8024070**	Price

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/2	1/2	1-1/4	3	-	**CW8024075**	Price
1/2	1/2	2	4	-	**CW8024080**	Price
5/8	5/8	3/4	3	-	**CW8024105**	Price
5/8	5/8	3/4	4	1-5/8	**CW8024115**	Price
5/8	5/8	3/4	6	3-3/8	**CW8024135**	Price
5/8	5/8	1-5/8	3-1/2	-	**CW8024140**	Price
3/4	3/4	1	3	-	**CW8024165**	Price
3/4	3/4	1	4	2	**CW8024170**	Price
3/4	3/4	1	6	4	**CW8024190**	Price
3/4	3/4	1-5/8	4	-	**CW8024195**	Price
3/4	3/4	2-1/4	5	-	**CW8024200**	Price
1	1	1-1/4	6	3-3/8	**CW8024250**	Price
1	1	1-1/4	7	4-3/8	**CW8024260**	Price
1	1	2	4-1/2	-	**CW8024270**	Price
1	1	2-1/4	5	-	**CW8024280**	Price

OMEGA® M706 Solid Carbide 6 Flute End Mills for Hard Materials

MADE IN THE USA

Square End and Corner Radius

- Six high-strength flutes increase cutting edge engagement for maximum stability
- Exceptionally thick core minimizes tool deflection and produces superior finishes
- Can run wet or dry based on work material
- Round or Weldon shank
- 45° Helix, TiAlN-X coated



H Best in Hardened Metals
P Good in Carbon and Tool Steels
S Best in High Temp Alloys
K Good in Cast Iron

					.015		.020		.030		None	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1/4	1-1/2	Round Shank	DD4062983	Price	-	-	-	-	DD4063190	Price
1/8	1/8	1/2	1-1/2	Round Shank	DD4062791	Price	-	-	-	-	DD4062781	Price
3/16	3/16	5/16	2	Round Shank	DD4062984	Price	-	-	-	-	DD4063192	Price
3/16	3/16	9/16	2	Round Shank	DD4062792	Price	-	-	-	-	DD4062782	Price
1/4	1/4	3/8	2-1/2	Round Shank	-	-	DD4062985	Price	-	-	DD4063194	Price
1/4	1/4	3/4	2-1/2	Round Shank	-	-	DD4062793	Price	DD4062838	Price	DD4062783	Price
1/4	1/4	3/4	2-1/2	Weldon Shank	-	-	DD4030568	Price	DD4062847	Price	DD4030491	Price
5/16	5/16	13/16	2-1/2	Round Shank	-	-	-	-	DD4062794	Price	DD4062784	Price
3/8	3/8	1/2	2-1/2	Round Shank	-	-	-	-	DD4062986	Price	DD4063196	Price
3/8	3/8	1	2-1/2	Round Shank	-	-	-	-	DD4062795	Price	DD4062785	Price
3/8	3/8	1	2-1/2	Weldon Shank	-	-	-	-	DD4030570	Price	DD4030493	Price
1/2	1/2	5/8	3	Round Shank	-	-	-	-	DD4062987	Price	DD4063198	Price
1/2	1/2	1-1/4	3	Round Shank	-	-	-	-	DD4062797	Price	DD4062787	Price
1/2	1/2	1-1/4	3	Weldon Shank	-	-	-	-	DD4030572	Price	DD4030495	Price
5/8	5/8	3/4	3-1/2	Round Shank	-	-	-	-	DD4062988	Price	DD4063199	Price
5/8	5/8	1-5/8	3-1/2	Round Shank	-	-	-	-	DD4062798	Price	DD4062788	Price
5/8	5/8	1-5/8	3-1/2	Weldon Shank	-	-	-	-	DD4030574	Price	DD4030497	Price
3/4	3/4	1	4	Round Shank	-	-	-	-	DD4062989	Price	DD4063200	Price
3/4	3/4	1-5/8	4	Round Shank	-	-	-	-	DD4062799	Price	DD4062789	Price
3/4	3/4	1-5/8	4	Weldon Shank	-	-	-	-	DD4030575	Price	DD4030498	Price
1	1	2	4	Round Shank	-	-	-	-	DD4062800	Price	DD4062790	Price
1	1	2	4	Weldon Shank	-	-	-	-	DD4062801	Price	DD4030499	Price

OMEGA® M706N Solid Carbide 6 Flute End Mills for Hard Materials

MADE IN THE USA

Square End and Corner Radius with Neck Relief

- Neck relief for more clearance in cavities and when machining against tight wall
- Six high-strength flutes increase cutting edge engagement for maximum stability
- Exceptionally thick core minimizes tool deflection and produces superior finishes
- Can run wet or dry according to work material
- Round or Weldon shank
- 45° Helix, TiAlN-X coated



H Best in Hardened Metals
P Good in Carbon and Tool Steels
S Best in High Temp Alloys
K Good in Cast Iron

						.020		.030		None	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Neck Relief (in.)	OAL (in.)	Shank Type	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1/4	1/2	1-1/2	Round Shank	-	-	-	-	DD4062820	Price
3/16	3/16	5/16	9/16	2	Round Shank	-	-	-	-	DD4062821	Price
1/4	1/4	3/8	1-1/8	2-1/2	Round Shank	DD4062903	Price	DD4062904	Price	DD4062822	Price
5/16	5/16	7/16	1-1/8	2-1/2	Round Shank	DD4062905	Price	DD4062906	Price	DD4062823	Price
3/8	3/8	1/2	1-1/8	2-1/2	Round Shank	DD4062907	Price	DD4062908	Price	DD4062824	Price
3/8	3/8	1/2	1-1/8	2-1/2	Weldon Shank	DD4031103	Price	DD4031104	Price	DD4031092	Price
1/2	1/2	5/8	1-3/8	3	Round Shank	DD4062910	Price	DD4062911	Price	DD4062825	Price
1/2	1/2	5/8	1-3/8	3	Weldon Shank	DD4031192	Price	DD4031193	Price	DD4031093	Price
3/4	3/4	1	1-3/4	4	Round Shank	-	-	DD4062914	Price	DD4062827	Price
3/4	3/4	1	1-3/4	4	Weldon Shank	-	-	DD4031197	Price	DD4031095	Price

OMEGA® M725N & M726N Solid Carbide 5 & 6 Flute End Mills with Neck Relief

For Hard Materials

MADE IN THE USA

- Neck relief for better clearance in deep cavities
- Mills steels heat treated up to 58-62 HRC with or without coolant
- Five or six high strength flutes for maximum stablility and less chatter
- 50° Helix creates a high shear plane for better efficiency and chip control



H Best in Hardened Materials
M Good in Stainless Steels
P Good in Carbon and Tool Steels
K Good in Cast Iron

Radius - .015							
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Reach (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1/8	1/8	1/4	1/2	2-1/2	5	DD4069353	Price
1/8	1/8	1/4	1-1/8	2-1/2	5	DD4069491	Price
3/16	3/16	3/8	5/8	3	5	DD4069357	Price
3/16	3/16	3/8	1-3/8	3	5	DD4069493	Price
1/4	1/4	5/8	7/8	3	6	DD4069362	Price
1/4	1/4	5/8	1-3/8	3	6	DD4069495	Price
1/4	1/4	5/8	7/8	4	6	DD4069365	Price
1/4	1/4	5/8	2-3/8	4	6	DD4069498	Price

Radius - .030							
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Reach (in.)	OAL (in.)	No. of Flutes	Order No.	Price
3/8	3/8	7/8	1-1/8	3	6	DD4069372	Price
3/8	3/8	7/8	1-3/8	3	6	DD4069502	Price
3/8	3/8	7/8	1-1/8	4	6	DD4069375	Price

Radius - .030							
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	Reach (in.)	OAL (in.)	No. of Flutes	Order No.	Price
3/8	3/8	7/8	2-3/8	4	6	DD4069505	Price
1/2	1/2	5/8	7/8	3	6	DD4069378	Price
1/2	1/2	5/8	1-3/8	3	6	DD4069508	Price
1/2	1/2	1-1/8	1-3/8	4	6	DD4069386	Price
1/2	1/2	1-1/8	2-1/4	4	6	DD4069516	Price
1/2	1/2	1-1/8	1-3/8	5	6	DD4069390	Price
1/2	1/2	1-1/8	3-1/4	5	6	DD4069520	Price
5/8	5/8	1-1/8	1-3/8	4	6	DD4069398	Price
5/8	5/8	1-1/8	2-1/8	4	6	DD4069528	Price
5/8	5/8	1-3/8	1-5/8	5	6	DD4069402	Price
5/8	5/8	1-3/8	3-1/8	5	6	DD4069532	Price
3/4	3/4	1-5/8	1-7/8	6	6	DD4069414	Price
3/4	3/4	1-5/8	3-7/8	6	6	DD4069544	Price

OMEGA® M725 & M726 Solid Carbide 5 & 6 Flute End Mills

H *Best in* **Hardened Materials**
M *Good in* **Stainless Steels**
P *Good in* **Carbon and Tool Steels**
K *Good in* **Cast Iron**

Square, Corner Radius • For Hard Materials

MADE IN THE USA

- Mills steels heat treated up to 58-62 HRC with or without coolant
- Optomized geometries, stronger cutting edges, superior balance
- Five or six high strength flutes for maximum stability and less chatter
- 50° Helix creates a high shear plane for better efficiency and chip control
- AlTiN-X coating



						None		.015		.030		.060	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL	No. of Flutes	Shank Type	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	5	Round Shank	DD4069052	Price	DD4069053	Price	-	-	-	-
1/8	1/8	1/4	1-1/2	5	Round Shank	DD4069050	Price	DD4069051	Price	-	-	-	-
3/16	3/16	5/16	2	5	Round Shank	DD4069054	Price	DD4069055	Price	-	-	-	-
3/16	3/16	9/16	2	5	Round Shank	DD4069056	Price	DD4069057	Price	-	-	-	-
1/4	1/4	3/4	2-1/2	6	Round Shank	DD4069058	Price	DD4069059	Price	DD4069060	Price	-	-
1/4	1/4	1-1/4	3	6	Round Shank	DD4069061	Price	DD4069062	Price	DD4069063	Price	-	-
3/8	3/8	7/8	2-1/2	6	Round Shank	DD4069070	Price	DD4069071	Price	DD4069072	Price	-	-
3/8	3/8	7/8	2-1/2	6	Weldon Shank	DD4069220	Price	DD4069221	Price	DD4069222	Price	-	-
3/8	3/8	1-1/4	3	6	Round Shank	DD4069073	Price	DD4069074	Price	DD4069075	Price	-	-
3/8	3/8	1-1/4	3	6	Weldon Shank	DD4069223	Price	DD4069224	Price	DD4069225	Price	-	-
3/8	3/8	2	4	6	Round Shank	DD4069076	Price	DD4069077	Price	DD4069078	Price	-	-
3/8	3/8	2	4	6	Weldon Shank	DD4069226	Price	DD4069227	Price	DD4069228	Price	-	-
1/2	1/2	1	3	6	Round Shank	DD4069079	Price	DD4069080	Price	DD4069081	Price	DD4069082	Price
1/2	1/2	1	3	6	Weldon Shank	DD4069229	Price	DD4069230	Price	DD4069231	Price	DD4069232	Price
1/2	1/2	1-1/4	3	6	Round Shank	DD4069083	Price	DD4069084	Price	DD4069085	Price	DD4069086	Price
1/2	1/2	1-1/4	3	6	Weldon Shank	DD4069233	Price	DD4069234	Price	DD4069235	Price	DD4069236	Price
1/2	1/2	1-5/8	3-1/2	6	Round Shank	DD4069087	Price	DD4069088	Price	DD4069089	Price	DD4069090	Price
1/2	1/2	1-5/8	3-1/2	6	Weldon Shank	DD4069237	Price	DD4069238	Price	DD4069239	Price	DD4069240	Price
1/2	1/2	2-1/8	4	6	Round Shank	DD4069091	Price	DD4069092	Price	DD4069093	Price	DD4069094	Price
1/2	1/2	2-1/8	4	6	Weldon Shank	DD4069241	Price	DD4069242	Price	DD4069243	Price	DD4069244	Price
1/2	1/2	2-5/8	5	6	Round Shank	DD4069095	Price	DD4069096	Price	DD4069097	Price	DD4069098	Price
1/2	1/2	2-5/8	5	6	Weldon Shank	DD4069245	Price	DD4069246	Price	DD4069247	Price	DD4069248	Price
5/8	5/8	1-3/8	3-1/2	6	Round Shank	DD4069099	Price	-	-	DD4069101	Price	DD4069102	Price
5/8	5/8	1-3/8	3-1/2	6	Weldon Shank	DD4069249	Price	-	-	DD4069251	Price	DD4069252	Price
5/8	5/8	1-7/8	4	6	Round Shank	DD4069103	Price	-	-	DD4069105	Price	DD4069106	Price
5/8	5/8	1-7/8	4	6	Weldon Shank	DD4069253	Price	-	-	DD4069255	Price	DD4069256	Price
5/8	5/8	2-5/8	5	6	Round Shank	DD4069107	Price	-	-	DD4069109	Price	DD4069110	Price
5/8	5/8	2-5/8	5	6	Weldon Shank	DD4069257	Price	-	-	DD4069259	Price	DD4069260	Price
3/4	3/4	1-5/8	4	6	Round Shank	DD4069111	Price	-	-	DD4069113	Price	DD4069114	Price
3/4	3/4	1-5/8	4	6	Weldon Shank	DD4069261	Price	-	-	DD4069263	Price	DD4069264	Price
3/4	3/4	2-5/8	5	6	Round Shank	DD4069115	Price	-	-	DD4069117	Price	DD4069118	Price
3/4	3/4	2-5/8	5	6	Weldon Shank	DD4069265	Price	-	-	DD4069267	Price	DD4069268	Price
3/4	3/4	3-3/8	6	6	Round Shank	DD4069119	Price	-	-	DD4069121	Price	DD4069122	Price
3/4	3/4	3-3/8	6	6	Weldon Shank	DD4069269	Price	-	-	DD4069271	Price	DD4069272	Price

INCONEX© M806 Solid Carbide 6 Flute End Mills

MADE IN THE USA



Round or Weldon Shanks • Corner Radius

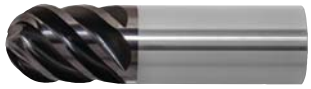
- Six high strength flutes for higher productivity and longer life in high temp alloys
- Unique cutting edge design keeps chip shorter for smooth evacuation
- Tough carbide core for durability in hard-to-machine metals
- 30° Helix
- AlCrNX Coated

					.015		.030	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Shank Type	Order No.	Price	Order No.	Price
1/4	1/4	3/8	2	Round	DD4268731	Price	-	-
1/4	1/4	3/4	2-1/2	Round	DD4268732	Price	-	-
5/16	5/16	7/16	2	Round	DD4268733	Price	-	-
5/16	5/16	13/16	2-1/2	Round	DD4268734	Price	-	-
3/8	3/8	1/2	2	Round	-	-	DD4268735	Price
3/8	3/8	7/8	2-1/2	Round	-	-	DD4268736	Price
3/8	3/8	7/8	2-1/2	Weldon	-	-	DD4268737	Price
3/8	3/8	1-1/4	3	Round	-	-	DD4268738	Price
3/8	3/8	1-1/4	3	Weldon	-	-	DD4268739	Price
1/2	1/2	5/8	2-1/2	Round	-	-	DD4268740	Price
1/2	1/2	1	3	Round	-	-	DD4268891	Price
1/2	1/2	1	3	Weldon	-	-	DD4268892	Price
1/2	1/2	1-1/4	3	Round	-	-	DD4268741	Price
1/2	1/2	1-1/4	3	Weldon	-	-	DD4268742	Price
1/2	1/2	1-5/8	3-1/2	Round	-	-	DD4268743	Price
1/2	1/2	1-5/8	3-1/2	Weldon	-	-	DD4268744	Price
5/8	5/8	1-3/8	3-1/2	Round	-	-	DD4268746	Price
5/8	5/8	1-3/8	3-1/2	Weldon	-	-	DD4268747	Price
5/8	5/8	2	4	Round	-	-	DD4268748	Price
5/8	5/8	2	4	Weldon	-	-	DD4268749	Price
3/4	3/4	1-5/8	4	Round	-	-	DD4268751	Price
3/4	3/4	1-5/8	4	Weldon	-	-	DD4268752	Price
3/4	3/4	2-3/8	5	Round	-	-	DD4268753	Price
3/4	3/4	2-3/8	5	Weldon	-	-	DD4268754	Price
1	1	1-1/2	4	Round	-	-	DD4268755	Price
1	1	1-1/2	4	Weldon	-	-	DD4268756	Price
1	1	2-1/2	5	Round	-	-	DD4268757	Price
1	1	2-1/2	5	Weldon	-	-	DD4268758	Price

6 Flute Solid Carbide Ball Nose End Mills

Variable Helix • Eccentric OD

- Variantra ® Supral (TiAlCN) coated
- 45° Chamfer
- PCT List #0374



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/4	1/4	3/4	2-1/2	-	**CW8019310**	Price
1/4	1/4	3/8	4	2-1/8	**CW8019290**	Price
3/8	3/8	1	2-1/2	-	**CW8019390**	Price
3/8	3/8	1/2	4	2-1/8	**CW8019350**	Price
3/8	3/8	1/2	6	3-1/8	**CW8019360**	Price
1/2	1/2	1	3	-	**CW8019450**	Price
1/2	1/2	5/8	4	2-1/8	**CW8019420**	Price
1/2	1/2	5/8	6	3-1/8	**CW8019430**	Price
5/8	5/8	1-5/8	3-1/2	-	**CW8019510**	Price
5/8	5/8	3/4	5	2-5/8	**CW8019480**	Price
5/8	5/8	3/4	6	3-3/8	**CW8019490**	Price
3/4	3/4	1	5	2-5/8	**CW8019540**	Price
3/4	3/4	1	6	3-3/8	**CW8019550**	Price
3/4	3/4	1-1/2	4	-	**CW8019570**	Price
1	1	1-1/4	5	2-5/8	**CW8019600**	Price
1	1	1-1/4	7	4-1/4	**CW8019620**	Price
1	1	1-1/2	4	-	**CW8019630**	Price

6 Flute Solid Carbide End Mills

Variable Helix • Eccentric OD

- Variantra ® Supral (TiAlCN) coated
- 45° Chamfer
- PCT List #0374



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Reach (in.)	Order No.	Price
1/4	1/4	3/4	2-1/2	-	**CW8019305**	Price
1/4	1/4	3/8	4	2-1/8	**CW8019285**	Price
3/8	3/8	1/2	4	2-1/8	**CW8019345**	Price
3/8	3/8	1/2	6	3-1/8	**CW8019355**	Price
3/8	3/8	1	2-1/2	-	**CW8019385**	Price
1/2	1/2	5/8	4	2-1/8	**CW8019415**	Price
1/2	1/2	5/8	6	3-1/8	**CW8019425**	Price
1/2	1/2	1	3	-	**CW8019445**	Price
5/8	5/8	3/4	5	2-5/8	**CW8019475**	Price
5/8	5/8	3/4	6	3-3/8	**CW8019485**	Price
5/8	5/8	1-5/8	3-1/2	-	**CW8019505**	Price
3/4	3/4	1	5	2-5/8	**CW8019535**	Price
3/4	3/4	1	6	3-3/8	**CW8019545**	Price
3/4	3/4	1-1/2	4	-	**CW8019565**	Price
1	1	1-1/4	5	2-5/8	**CW8019595**	Price
1	1	1-1/4	7	4-1/4	**CW8019615**	Price
1	1	1-1/2	4	-	**CW8019625**	Price

TuffCut® XR 7 Flute Carbide End Mills

Necked • Altima® Blaze Coated

- Uniquely designed heli-pitch grinding geometry promotes continual, vibration free cutting regardless of depth of cut or width of cut
- 38° Helix
- M.A. Ford List #180N



Size (in.)	Shank Dia, (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Neck Length (in.)	Order No.	Price
1/2	1/2	1-1/4	4	.030	2-1/8	**DD1618526**	Price
5/8	5/8	1-1/4	4	.030	2-1/8	**DD1618546**	Price
3/4	3/4	1-7/8	5	.030	3	**DD1618588**	Price
1	1	3	6	.045	4	**DD1618614**	Price

Solid Carbide Finishing Square End Mills

7 Flute • Victory™ Grade

- Center cutting
- Cylindrical shanks
- AlTiN coated for longer tool life



Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/8	3/8	7/8	2-1/2	**WK405577254**	Price
1/2	1/2	1	3	**WK405577258**	Price
5/8	5/8	1-1/4	3-1/2	**WK405577259**	Price
3/4	3/4	1-1/2	4	**WK405577260**	Price

TuffCut® XR 7 Flute Carbide End Mills

With Chipbreaker • Altima® Blaze Coated

- Uniquely designed heli-pitch grinding geometry promotes continual, vibration free cutting regardless of depth of cut or width of cut
- 38° Helix
- M.A. Ford List #180CB



Size (in.)	Shank Dia, (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/4	1/4	1-1/4	3	.030	**DD1618913**	Price
3/8	3/8	1-1/2	4	.030	**DD1618917**	Price
1/2	1/2	2	4	.030	**DD1618921**	Price
5/8	5/8	2-1/4	5	.030	**DD1618925**	Price
3/4	3/4	3	6	.030	**DD1618929**	Price

TuffCut® XR 7 Flute Carbide End Mills

Altima® Blaze Coated

- Uniquely designed heli-pitch grinding geometry promotes continual, vibration free cutting regardless of depth of cut or width of cut
- 38° Helix
- M.A. Ford List #180



Size (in.)	Shank Dia, (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/4	1/4	3/8	2	None	**DD1618900**	Price
1/4	1/4	3/8	2	.015	**DD1618901**	Price
1/4	1/4	3/4	2-1/2	None	**DD1618902**	Price
1/4	1/4	3/4	2-1/2	.015	**DD1618903**	Price
1/4	1/4	1-1/4	3	None	**DD1618904**	Price
3/8	3/8	1/2	2-1/2	None	**DD1618908**	Price
3/8	3/8	1/2	2-1/2	.015	**DD1618909**	Price
3/8	3/8	1/2	2-1/2	.030	**DD1618932**	Price
3/8	3/8	1	2-1/2	None	**DD1618910**	Price
3/8	3/8	1	2-1/2	.015	**DD1618911**	Price
3/8	3/8	1	2-1/2	.030	**DD1618934**	Price
3/8	3/8	1-1/2	4	None	**DD1618912**	Price
1/2	1/2	5/8	3	None	**DD1618512**	Price
1/2	1/2	5/8	3	.015	**DD1518515**	Price
1/2	1/2	5/8	3	.030	**DD1518517**	Price
1/2	1/2	5/8	3	.060	**DD1618519**	Price
1/2	1/2	1-1/4	3	None	**DD1518514**	Price
1/2	1/2	1-1/4	3	.015	**DD1518516**	Price
1/2	1/2	1-1/4	3	.030	**DD1518518**	Price
1/2	1/2	1-1/4	3	.060	**DD1618520**	Price
1/2	1/2	2	4	None	**DD1618916**	Price
5/8	5/8	3/4	3-1/2	None	**DD1618532**	Price
5/8	5/8	3/4	3-1/2	.015	**DD1618535**	Price
5/8	5/8	3/4	3-1/2	.030	**DD1618537**	Price
5/8	5/8	1-1/4	3-1/2	None	**DD1618534**	Price
5/8	5/8	1-1/4	3-1/2	.015	**DD1518536**	Price
5/8	5/8	1-1/4	3-1/2	.030	**DD1618538**	Price
5/8	5/8	2-1/4	5	None	**DD1618920**	Price
3/4	3/4	1	4	None	**DD1618570**	Price
3/4	3/4	1	4	.030	**DD1618575**	Price
3/4	3/4	1	4	.060	**DD1618577**	Price
3/4	3/4	1-1/2	4"	None	**DD1518572**	Price
3/4	3/4	1-1/2	4	.030	**DD1618576**	Price
3/4	3/4	1-1/2	4	.060	**DD1618578**	Price
3/4	3/4	2-1/4	5	None	**DD1618924**	Price

6 Flute High Performance Carbide End Mills



- 40° Helix
- TiAlN Coated
- C2 grade permium sub-micron grade carbide with 10% cobalt
- Right hand cut, right hand spiral
- Diameter tolerance +.000 / -.002”
- Suitable for any ferrous materials, including heat treated mold, die steels up to 60 HRC

Size (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	Radius	Order No.	Price
1/4	1/4	1/2	2	.010-.020	**DC25292201133**	Price
1/4	1/4	3/4	2-1/2	.010-.020	**DC25292301133**	Price
1/4	1/4	1-1/8	3	.010-.020	**DC25292401133**	Price
1/4	1/4	1-1/2	4	.010-.020	**DC25292501133**	Price
1/4	1/4	1-1/2	6	.010-.020	**DC25292601133**	Price
5/16	5/16	13/16	2-1/2	.010-.020	**DC25292301153**	Price
5/16	5/16	1-1/8	3	.010-.020	**DC25292401153**	Price
5/16	5/16	1-5/8	4	.010-.020	**DC25292501153**	Price
5/16	5/16	1-1/2	6	.010-.020	**DC25292601153**	Price
3/8	3/8	5/8	2	.010-.020	**DC25292201173**	Price
3/8	3/8	1	2-1/2	.010-.020	**DC25292301173**	Price
3/8	3/8	1-1/8	3	.010-.020	**DC25292401173**	Price
3/8	3/8	1-1/2	6	.010-.020	**DC25292601173**	Price
3/8	3/8	1-3/4	4	.010-.020	**DC25292501173**	Price
1/2	1/2	5/8	2-1/2	.010-.020	**DC25292201203**	Price
1/2	1/2	1	3	.010-.020	**DC25292301203**	Price
1/2	1/2	1-1/2	4	.010-.020	**DC25292401193**	Price
1/2	1/2	1-1/2	6	.010-.020	**DC25292601203**	Price
1/2	1/2	2	4	.010-.020	**DC25292401203**	Price
1/2	1/2	3	6	.010-.020	**DC25292501203**	Price
5/8	5/8	1	3	.010-.020	**DC25292201223**	Price
5/8	5/8	1-1/4	3-1/2	.010-.020	**DC25292301223**	Price
5/8	5/8	1-1/2	6	.010-.020	**DC25292601223**	Price
5/8	5/8	2-1/4	5	.010-.020	**DC25292401223**	Price
5/8	5/8	3-1/4	6	.010-.020	**DC25292501223**	Price
3/4	3/4	1	3	.010-.020	**DC25292201243**	Price
3/4	3/4	1-1/2	4	.010-.020	**DC25292301243**	Price
3/4	3/4	1-1/2	6	.010-.020	**DC25292601233**	Price
3/4	3/4	2-1/4	5	.010-.020	**DC25292401243**	Price
3/4	3/4	3-1/4	6	.010-.020	**DC25292501243**	Price
3/4	3/4	4	7	.010-.020	**DC25292601243**	Price
1	1	1-1/2	6	.010-.020	**DC25292601253**	Price
1	1	1-3/4	4	.010-.020	**DC25292301263**	Price
1	1	2-1/4	5	.010-.020	**DC25292401263**	Price
1	1	3-1/4	6	.010-.020	**DC25292501263**	Price
1	1	4	7	.010-.020	**DC25292601263**	Price

POW•R•PATH® IPC7 Solid Carbide 7 Flute HEM End Mills

Best for HEM

With Chip Management System

- Specifically designed to maiximize High Efficiency Machining (HEM) techniques
- Chip Management System (CMS) for maximum chip evacuation and longer tool life
- Corner radius with CMS
- 40° Helix
- AlCrNX Coated



S *Best using HEM in* **Titanium Alloys** P *Best using HEM in* **Carbon and Tool Steels**
M *Best using HEM in* **Stainless Steels** K *Best using HEM in* **Cast Iron**

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/8	3/8	1-1/8	3	**DD4463630**	Price
3/8	3/8	1-1/2	3-1/2	**DD4463631**	Price
1/2	1/2	1-1/4	3	**DD4463410**	Price
1/2	1/2	1-1/4	3	**DD4463411**	Price
1/2	1/2	1-1/2	3-1/2	**DD4463634**	Price
1/2	1/2	1-1/2	3-1/2	**DD4463635**	Price
1/2	1/2	1-3/4	4	**DD4463412**	Price
1/2	1/2	1-3/4	4	**DD4463413**	Price
1/2	1/2	2	4	**DD4463638**	Price
1/2	1/2	2	4	**DD4463639**	Price
5/8	5/8	1-1/4	3-1/2	**DD4463640**	Price
5/8	5/8	1-1/4	3-1/2	**DD4463641**	Price
5/8	5/8	1-9/16	3-1/2	**DD4463414**	Price
5/8	5/8	1-9/16	3-1/2	**DD4463415**	Price
5/8	5/8	1-7/8	4	**DD4463644**	Price
5/8	5/8	1-7/8	4	**DD4463645**	Price
5/8	5/8	2-3/16	4	**DD4463416**	Price
5/8	5/8	2-3/16	4	**DD4463417**	Price
5/8	5/8	2-1/2	5	**DD4463648**	Price
5/8	5/8	2-1/2	5	**DD4463649**	Price
3/4	3/4	1-1/2	4	**DD4463650**	Price
3/4	3/4	1-1/2	4	**DD4463651**	Price
3/4	3/4	1-7/8	4-1/2	**DD4463418**	Price
3/4	3/4	1-7/8	4-1/2	**DD4463419**	Price
3/4	3/4	2-1/4	5	**DD4463654**	Price
3/4	3/4	2-1/4	5	**DD4463655**	Price
3/4	3/4	2-5/8	5	**DD4463656**	Price
3/4	3/4	2-5/8	5	**DD4463657**	Price
3/4	3/4	3	6	**DD4463658**	Price
3/4	3/4	3	6	**DD4463659**	Price

enDURO® M527 Solid Carbide 7 Flute Variable Index End Mills

- Advanced cutting edge design for higher metal removal in hard-to-machine materials
- Unique vibration dampening geometry for maximum tool stability
- Specifically designed to run wet or dry on today’s high speed, high efficiency machines
- 40° Helix
- AlCrNX Coating

Great for HEM



S *Best in* **Titanium Alloys** K *Good in* **Cast Iron**
M *Best in* **Stainless Steels** P *Good in* **Carbon and Tool Steels**

				.015		.030		.060		.125		None	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/8	3/8	1/2	2	**DD4265921**	Price	**DD4265922**	Price	**DD4265923**	Price	-	-	**DD4265920**	Price
3/8	3/8	1-1/4	3	**DD4265977**	Price	**DD4265978**	Price	**DD4265979**	Price	-	-	**DD4265976**	Price
3/8	3/8	7/8	2-1/2	**DD4265969**	Price	**DD4265970**	Price	**DD4265971**	Price	-	-	**DD4265968**	Price
1/2	1/2	5/8	2-1/2	**DD4266001**	Price	**DD4266002**	Price	**DD4266003**	Price	**DD4266005**	Price	**DD4266000**	Price
1/2	1/2	1-1/4	3	**DD4266046**	Price	**DD4266047**	Price	**DD4266048**	Price	**DD4266050**	Price	**DD4266045**	Price
1/2	1/2	1-5/8	3-1/2	**DD4266055**	Price	**DD4266056**	Price	**DD4266057**	Price	**DD4266059**	Price	**DD4266054**	Price
1/2	1/2	2-1/8	4	**DD4266073**	Price	**DD4266074**	Price	**DD4266075**	Price	**DD4266077**	Price	**DD4266072**	Price
1/2	1/2	2-5/8	5	**DD4266082**	Price	**DD4266083**	Price	**DD4266084**	Price	**DD4266086**	Price	**DD4266081**	Price
5/8	5/8	3/4	3	-	-	**DD4266092**	Price	**DD4266093**	Price	**DD4266095**	Price	**DD4266090**	Price
5/8	5/8	1-3/8	3-1/2	-	-	**DD4266132**	Price	**DD4266133**	Price	**DD4266135**	Price	**DD4266130**	Price
5/8	5/8	2-1/8	4	-	-	**DD4266142**	Price	**DD4266143**	Price	**DD4266145**	Price	**DD4266140**	Price
5/8	5/8	2-5/8	5	-	-	**DD4266162**	Price	**DD4266163**	Price	**DD4266165**	Price	**DD4266160**	Price
5/8	5/8	3-1/4	6	-	-	**DD4266172**	Price	**DD4266173**	Price	**DD4266175**	Price	**DD4266170**	Price
3/4	3/4	1	3	-	-	**DD4266182**	Price	**DD4266183**	Price	**DD4266185**	Price	**DD4266180**	Price
3/4	3/4	1-5/8	4	-	-	**DD4266222**	Price	**DD4266223**	Price	**DD4266225**	Price	**DD4266220**	Price
3/4	3/4	2-3/8	5	-	-	**DD4266232**	Price	**DD4266233**	Price	**DD4266235**	Price	**DD4266230**	Price
3/4	3/4	3-1/4	6	-	-	**DD4266252**	Price	**DD4266253**	Price	**DD4266255**	Price	**DD4266250**	Price
3/4	3/4	4-1/8	7	-	-	**DD4266262**	Price	**DD4266263**	Price	**DD4266265**	Price	**DD4266260**	Price

POW•R•PATH® IPT7 Solid Carbide 7 Flute HEM End Mills



- Specifically designed to maximize High Efficiency Machining (HEM) techniques
- Unique flute design for maximum metal removal rates
- Thick core for maximum stability and tool life
- 40° Helix
- AlCrNX coated

Best for HEM

S *Best using HEM in* **Titanium Alloys**
P *Best using HEM in* **Carbon and Tool Steels**
M *Best using HEM in* **Stainless Steels**
K *Best using HEM in* **Cast Iron**

				.030		.060		.125		None	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/16	3/16	3/8	2	DD4463478	Price	-	-	-	-	DD4463476	Price
3/16	3/16	9/16	2	DD4463481	Price	-	-	-	-	DD4463479	Price
3/16	3/16	3/4	2-1/2	DD4463484	Price	-	-	-	-	DD4463482	Price
1/4	1/4	1/2	2	DD4463487	Price	DD4463488	Price	-	-	DD4463485	Price
1/4	1/4	3/4	2-1/2	DD4463491	Price	DD4463492	Price	-	-	DD4463489	Price
1/4	1/4	1	3	DD4463495	Price	DD4463496	Price	-	-	DD4463493	Price
3/8	3/8	3/4	2-1/2	DD4463499	Price	DD4463500	Price	-	-	DD4463497	Price
3/8	3/8	15/16	2-1/2	DD4463504	Price	DD4463505	Price	-	-	DD4463502	Price
3/8	3/8	1-1/8	3	DD4463509	Price	DD4463510	Price	-	-	DD4463507	Price
3/8	3/8	1-1/2	3-1/2	DD4463514	Price	DD4463515	Price	-	-	DD4463512	Price
1/2	1/2	1	3	DD4463517	Price	DD4463518	Price	DD4463520	Price	DD4463516	Price
1/2	1/2	1-1/4	3-1/4	DD4463215	Price	DD4463216	Price	DD4463218	Price	DD4463214	Price
1/2	1/2	1-1/2	3-1/2	DD4463527	Price	DD4463528	Price	DD4463530	Price	DD4463526	Price
1/2	1/2	1-3/4	4	DD4463220	Price	-	-	DD4463238	Price	DD4463219	Price
1/2	1/2	2	4	DD4463537	Price	DD4463538	Price	DD4463540	Price	DD4463536	Price
1/2	1/2	2-1/4	4	DD4463542	Price	DD4463543	Price	DD4463545	Price	DD4463541	Price
5/8	5/8	1-1/4	3-1/2	DD4463547	Price	DD4463548	Price	DD4463550	Price	DD4463546	Price
5/8	5/8	1-9/16	4	DD4463242	Price	DD4463244	Price	DD4463247	Price	DD4463240	Price
5/8	5/8	1-7/8	4	DD4463559	Price	DD4463560	Price	DD4463562	Price	DD4463558	Price
5/8	5/8	2-3/16	4-1/2	DD4463258	Price	DD4463262	Price	DD4463264	Price	DD4463253	Price
5/8	5/8	2-1/2	5	DD4463569	Price	DD4463570	Price	DD4463571	Price	DD4463568	Price
3/4	3/4	1-1/2	4	DD4463573	Price	DD4463574	Price	DD4463575	Price	DD4463572	Price
3/4	3/4	1-7/8	4-1/2	DD4463270	Price	DD4463271	Price	DD4463275	Price	DD4463269	Price
3/4	3/4	2-1/4	5	DD4463586	Price	DD4463587	Price	DD4463589	Price	DD4463585	Price
3/4	3/4	2-5/8	5	DD4463593	Price	DD4463594	Price	DD4463596	Price	DD4463592	Price
3/4	3/4	3	6	DD4463598	Price	DD4463599	Price	DD4463600	Price	DD4463597	Price

RAPIDKUT® Multiple Flute Solid Carbide Roughing End Mills

Center Cutting

- Form relieved on high strength carbide for excellent profile milling
- Made from premium submicron grain carbide
- Cutting diameter tolerance: +.000/-.002”



					Uncoated		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1/4	1/4	3/4	2-1/2	4	DD8115960	Price	DD8155960	Price
5/16	5/16	13/16	2-1/2	4	DD8115961	Price	DD8155961	Price
3/8	3/8	1	2-1/2	4	DD8115962	Price	DD8155962	Price
1/2	1/2	1-1/4	3	4	DD8115963	Price	DD8155963	Price
5/8	5/8	1-1/4	3-1/2	4	DD8115964	Price	DD8155964	Price
3/4	3/4	1-1/2	4	4	DD8115965	Price	DD8155965	Price
1	1	1-1/2	4	4	DD8115966	Price	-	-
1	1	1-1/2	4	5	-	-	DD8155966	Price

PREMIER HP HIGH PERFORMANCE Multi-Flute 45° Helix Carbide Roughing End Mills with TiAlN Coating

- Suitable for low hardened material (under HRc45), stainless steel
- Excellent performance in slotting cutting conditions



Style - Standard					
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/16	1/4	5/16	2-3/8	DD25EH96901201	Price
1/4	1/4	9/16	2-3/8	DD25EH96901601	Price
5/16	5/16	9/16	2-3/8	DD25EH96902001	Price
3/8	3/8	13/16	2-5/8	DD25EH96902401	Price
1/2	1/2	15/16	2-7/8	DD25EH96903201	Price
5/8	5/8	1-3/16	3-7/8	DD25EH96904001	Price
3/4	3/4	1-7/16	3-7/8	DD25EH96904801	Price
1	1	1-11/16	4-5/8	DD25EH96906401	Price

Style - Long Reach					
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	1/4	3/4	2-1/2	DD25EH970016	Price
5/16	5/16	3/4	2-1/2	DD25EH970020	Price
3/8	3/8	7/8	2-1/2	DD25EH970024	Price
1/2	1/2	1	3	DD25EH970032	Price
5/8	5/8	1-1/4	4	DD25EH970040	Price
3/4	3/4	1-5/8	4-3/8	DD25EH970048	Price

IPT9 POW.R.PATH 9 Flute End Mills

Corner Radius for High Efficiency Machining (HEM) in Wide Range of Materials

Best for HEM

- AlCrNX coated
- Increased feed rates and excellent surface finish
- Unique design runs up to 3.5X the tool diameter deep, generating high metal removal rates



S *Best using HEM in* **Titanium Alloys** P *Best using HEM in* **Carbon and Tool Steels**
M *Best using HEM in* **Stainless Steels** K *Best using HEM in* **Cast Iron**

Size (in.)	Shank Dia. (in.)	Max Axial Depth x D	LOC (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/4	1/4	2xD	1/2	2	.030	**DD4463933**	Price
1/4	1/4	2.5xD	5/8	2-1/2	.030	**DD4463935**	Price
1/4	1/4	3xD	3/4	2-1/2	.030	**DD4463937**	Price
1/4	1/4	3.5xD	7/8	3	.030	**DD4463939**	Price
3/8	3/8	2xD	3/4	2-1/2	.030	**DD4463941**	Price
3/8	3/8	2.5xD	15/16	2-1/2	.030	**DD4463943**	Price
3/8	3/8	3xD	1-1/8	3	.030	**DD4463945**	Price
3/8	3/8	3.5xD	1-5/16	3-1/2	.030	**DD4463947**	Price
1/2	1/2	2xD	1	3	.030	**DD4463948**	Price
1/2	1/2	2xD	1	3	.060	**DD4463949**	Price
1/2	1/2	2.5xD	1-1/4	3-1/4	.030	**DD4463950**	Price
1/2	1/2	2.5xD	1-1/4	3-1/4	.060	**DD4463951**	Price
1/2	1/2	3xD	1-1/2	3-1/2	.030	**DD4463952**	Price
1/2	1/2	3xD	1-1/2	3-1/2	.060	**DD4463953**	Price
1/2	1/2	3.5xD	1-3/4	4	.030	**DD4463954**	Price
1/2	1/2	3.5xD	1-3/4	4	.060	**DD4463955**	Price
5/8	5/8	2xD	1-1/4	3-1/2	.030	**DD4463956**	Price
5/8	5/8	2xD	1-1/4	3-1/2	.060	**DD4463957**	Price
5/8	5/8	2.5xD	1-9/16	4	.030	**DD4463958**	Price
5/8	5/8	2.5xD	1-9/16	4	.060	**DD4463959**	Price
5/8	5/8	3xD	1-7/8	4	.030	**DD4463960**	Price
5/8	5/8	3xD	1-7/8	4	.060	**DD4463961**	Price
5/8	5/8	3.5xD	2-3/16	4-1/2	.030	**DD4463962**	Price
5/8	5/8	3.5xD	2-3/16	4-1/2	.060	**DD4463963**	Price
3/4	3/4	2xD	1-1/2	4	.030	**DD4463964**	Price
3/4	3/4	2xD	1-1/2	4	.060	**DD4463965**	Price
3/4	3/4	2xD	1-1/2	4	.125	**DD4463966**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	.030	**DD4463967**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	.060	**DD4463968**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	.125	**DD4463969**	Price
3/4	3/4	3xD	2-1/4	5	.030	**DD4463970**	Price
3/4	3/4	3xD	2-1/4	5	.060	**DD4463971**	Price
3/4	3/4	3xD	2-1/4	5	.125	**DD4463972**	Price
3/4	3/4	3.5xD	2-5/8	5	.030	**DD4463973**	Price
3/4	3/4	3.5xD	2-5/8	5	.060	**DD4463974**	Price
3/4	3/4	3.5xD	2-5/8	5	.125	**DD4463975**	Price

IPT11 POW.R.PATH 11 Flute End Mills

Corner Radius for High Efficiency Machining (HEM) in Wide Range of Materials

Best for HEM

- AlCrNX coated
- Built for results with 11 cutting edges to yield incredible feed rates
- IPT11 has a very thick core for extra stability when machining materials up to 3.5X the tool diameter deep
- NOTE: The IPT11 is NOT designed for light duty machines and should only be run in machines with adequate spindle torque and horsepower



S *Best using HEM in* **Titanium Alloys** P *Best using HEM in* **Carbon and Tool Steels**
M *Best using HEM in* **Stainless Steels** K *Best using HEM in* **Cast Iron**

Size (in.)	Shank Dia. (in.)	Max Axial Depth x D	LOC (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/2	1/2	2xD	1	3	.030	**DD4464185**	Price
1/2	1/2	2xD	1	3	.060	**DD4464186**	Price
1/2	1/2	2.5xD	1-1/4	3-1/4	.030	**DD4464187**	Price
1/2	1/2	2.5xD	1-1/4	3-1/4	.060	**DD4464188**	Price
1/2	1/2	3xD	1-1/2	3-1/2	.030	**DD4464189**	Price
1/2	1/2	3xD	1-1/2	3-1/2	.060	**DD4464190**	Price
1/2	1/2	3.5xD	1-3/4	4	.030	**DD4464191**	Price
1/2	1/2	3.5xD	1-3/4	4	.060	**DD4464192**	Price
5/8	5/8	2xD	1-1/4	3-1/2	.030	**DD4464193**	Price
5/8	5/8	2xD	1-1/4	3-1/2	.060	**DD4464194**	Price
5/8	5/8	2.5xD	1-9/16	4	.030	**DD4464195**	Price
5/8	5/8	2.5xD	1-9/16	4	.060	**DD4464196**	Price
5/8	5/8	3xD	1-7/8	4	.030	**DD4464197**	Price
5/8	5/8	3xD	1-7/8	4	.060	**DD4464198**	Price
5/8	5/8	3.5xD	2-3/16	4-1/2	.030	**DD4464199**	Price
5/8	5/8	3.5xD	2-3/16	4-1/2	.060	**DD4464200**	Price
3/4	3/4	2xD	1-1/2	4	.030	**DD4464201**	Price
3/4	3/4	2xD	1-1/2	4	.060	**DD4464202**	Price
3/4	3/4	2xD	1-1/2	4	.125	**DD4464203**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	.030	**DD4464204**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	.060	**DD4464205**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	.125	**DD4464206**	Price
3/4	3/4	3xD	2-1/4	5	.030	**DD4464207**	Price
3/4	3/4	3xD	2-1/4	5	.060	**DD4464208**	Price
3/4	3/4	3xD	2-1/4	5	.125	**DD4464209**	Price
3/4	3/4	3.5xD	2-5/8	5	.030	**DD4464210**	Price
3/4	3/4	3.5xD	2-5/8	5	.060	**DD4464211**	Price
3/4	3/4	3.5xD	2-5/8	5	.125	**DD4464212**	Price

IPT13 POW.R.PATH 13 Flute End Mills

Corner Radius for High Efficiency Machining (HEM) in Wide Range of Materials

Best for HEM



- AlCrNX coated
- Built for results with 13 cutting edges to yield incredible feed rates
- IPT13 has a very thick core for extra stability when machining materials up to 3.5X the tool diameter deep
- NOTE: The IPT13 is NOT designed for light duty machines and should only be run in machines with adequate spindle torque and horsepower

Size (in.)	Shank Dia. (in.)	Max Axial Depth x D	LOC (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/2	1/2	2xD	1	3	.030	**DD4464271**	Price
1/2	1/2	2xD	1	3	.060	**DD4464272**	Price
1/2	1/2	2.5xD	1-1/4	3-1/4	.030	**DD4464273**	Price
1/2	1/2	2.5xD	1-1/4	3-1/4	.060	**DD4464274**	Price
1/2	1/2	3xD	1-1/2	3-1/2	.030	**DD4464275**	Price
1/2	1/2	3xD	1-1/2	3-1/2	.060	**DD4464276**	Price
1/2	1/2	3.5xD	1-3/4	4	.030	**DD4464277**	Price
1/2	1/2	3.5xD	1-3/4	4	.060	**DD4464278**	Price
5/8	5/8	2xD	1-1/4	3-1/2	.030	**DD4464279**	Price
5/8	5/8	2xD	1-1/4	3-1/2	.060	**DD4464280**	Price
5/8	5/8	2.5xD	1-9/16	4	.030	**DD4464281**	Price
5/8	5/8	2.5xD	1-9/16	4	.060	**DD4464282**	Price
5/8	5/8	3xD	1-7/8	4	.030	**DD4464283**	Price
5/8	5/8	3xD	1-7/8	4	.060	**DD4464284**	Price
5/8	5/8	3.5xD	2-3/16	4-1/2	.030	**DD4464285**	Price

S *Best using HEM in* **Titanium Alloys** P *Best using HEM in* **Carbon and Tool Steels**
M *Best using HEM in* **Stainless Steels** K *Best using HEM in* **Cast Iron**

Size (in.)	Shank Dia. (in.)	Max Axial Depth x D	LOC (in.)	OAL (in.)	Radius (in.)	Order No.	Price
5/8	5/8	3.5xD	2-3/16	4-1/2	.060	**DD4464286**	Price
3/4	3/4	2xD	1-1/2	4	.030	**DD4464287**	Price
3/4	3/4	2xD	1-1/2	4	.060	**DD4464288**	Price
3/4	3/4	2xD	1-1/2	4	.125	**DD4464289**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	.030	**DD4464290**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	.060	**DD4464291**	Price
3/4	3/4	2.5xD	1-7/8	4-1/2	.125	**DD4464292**	Price
3/4	3/4	3xD	2-1/4	5	.030	**DD4464293**	Price
3/4	3/4	3xD	2-1/4	5	.060	**DD4464294**	Price
3/4	3/4	3xD	2-1/4	5	.125	**DD4464295**	Price
3/4	3/4	3.5xD	2-5/8	5	.030	**DD4464296**	Price
3/4	3/4	3.5xD	2-5/8	5	.125	**DD4464297**	Price
3/4	3/4	3.5xD	2-5/8	5	.125	**DD4464298**	Price

3 Flute Roughing-Finishing End Mills with Corner Radius

- Chipbreaker style
- Designed to produce smooth part finish



					Uncoated		TiAlN	
Dia. (in.)	Shank	LOC	OAL	Radius	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	.005-.010	**DC1510000**	Price	**DC1520000**	Price
3/16	3/16	5/8	2	.005-.010	**DC1510001**	Price	**DC1520001**	Price
1/4	1/4	3/4	2-1/2	.005-.010	**DC1510002**	Price	**DC1520002**	Price
5/16	5/16	13/16	2-1/2	.005-.010	**DC1510003**	Price	**DC1520003**	Price
3/8	3/8	1	2-1/2	.010-.015	**DC1510004**	Price	**DC1520004**	Price
7/16	7/16	1	2-3/4	.010-.015	**DC1510005**	Price	**DC1520005**	Price
1/2	1/2	1	3	.010-.015	**DC1510006**	Price	**DC1520006**	Price
5/8	5/8	1-1/4	3-1/2	.015-.020	**DC1510007**	Price	**DC1520007**	Price
3/4	3/4	1-1/2	4	.015-.020	**DC1510008**	Price	**DC1520008**	Price

RAPIDKUT® Multiple Flute Solid Carbide Rougher/Finisher End Mills

Center Cutting

- Can remove material at high roughing speeds while producing finishes close to conventional end mills, due to the chip-breaker form
- Made from premium submicron grain carbide
- Cutting diameter tolerance: +.000/-.002”



					Uncoated		AlTiN	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price	Order No.	Price
1/4	1/4	3/4	2-1/2	4	**DD8113477**	Price	**DD8153477**	Price
5/16	5/16	13/16	2-1/2	4	**DD8113478**	Price	**DD8153478**	Price
3/8	3/8	1	2-1/2	4	**DD8113479**	Price	**DD8153479**	Price
1/2	1/2	1-1/4	3	4	**DD8113480**	Price	**DD8153480**	Price
5/8	5/8	1-1/4	3-1/2	4	**DD8113481**	Price	**DD8153481**	Price
3/4	3/4	1-1/2	4	4	**DD8113482**	Price	**DD8153482**	Price
1	1	1-1/2	4	5	**DD8113483**	Price	**DD8153483**	Price

3 Flute Ball Nose Carbide Roughing-Finishing End Mills

- Chipbreaker style



				Uncoated		TiAlN	
Dia. (in.)	Shank	LOC	OAL	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	**DC1510010**	Price	**DC1520010**	Price
3/16	3/16	5/8	2	**DC1510011**	Price	**DC1520011**	Price
1/4	1/4	3/4	2-1/2	**DC1510012**	Price	**DC1520012**	Price
5/16	5/16	13/16	2-1/2	**DC1510013**	Price	**DC1520013**	Price
3/8	3/8	1	2-1/2	**DC1510014**	Price	**DC1520014**	Price
7/16	7/16	1	2-3/4	**DC1510015**	Price	**DC1520015**	Price
1/2	1/2	1	3	**DC1510016**	Price	**DC1520016**	Price
5/8	5/8	1-1/4	3-1/2	**DC1510017**	Price	**DC1520017**	Price
3/4	3/4	1-1/2	4	**DC1510018**	Price	**DC1520018**	Price

M104 Solid Carbide 4 Flute Square End Rougher/Finisher End Mills

- Higher metal removal and smoother finishes than traditional roughers
- Exclusive flute design reduces cutting forces, creating smaller chips
- Reduces tool chatter from faster chip evacuation
- Round shank, 30° helix, AlTiN coated

MADE IN THE USA



P Best in Carbon and Tool Steels

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	1/4	1-1/2	**DD4033290**	Price
1/8	1/8	1/2	1-1/2	**DD4030423**	Price
3/16	3/16	3/8	2	**DD4033296**	Price
3/16	3/16	5/8	2	**DD4030462**	Price
1/4	1/4	1/2	2	**DD4091779**	Price
1/4	1/4	3/4	2-1/2	**DD4098991**	Price
1/4	1/4	1-1/8	3	**DD4033299**	Price
5/16	5/16	1/2	2	**DD4033163**	Price
5/16	5/16	13/16	2-1/2	**DD4030551**	Price
3/8	3/8	5/8	2	**DD4033103**	Price
3/8	3/8	1	2-1/2	**DD4033153**	Price
3/8	3/8	1-1/8	3	**DD4033300**	Price
1/2	1/2	5/8	2-1/2	**DD4033181**	Price
1/2	1/2	1	3	**DD4098961**	Price
1/2	1/2	2	4	**DD4030434**	Price
5/8	5/8	1-1/4	3-1/2	**DD4033157**	Price
5/8	5/8	2-1/4	5	**DD4097343**	Price
3/4	3/4	1	3	**DD4033297**	Price
3/4	3/4	1-1/2	4	**DD4033159**	Price
3/4	3/4	2-1/4	5	**DD4033301**	Price
1	1	1-1/2	4	**DD4033161**	Price
1	1	2-1/4	5	**DD4033302**	Price

Fine Pitch Solid Carbide Roughers

Progressive Unequal Index Geometry

MADE IN THE USA

- For shallow slotting and perpheral milling applications
- Good for difficult to machine & abrasive materials
- Solid C-2 grade premium sub-micron carbide with 10% cobalt
- Right hand cut / right hand spiral
- Weldon flats
- Diameter tolerance: +.000 / -.003”
- Shank tolerance: +.0000 / -.0003”
- Increase feed in speed rates with AlTiN coating



					Uncoated		AlTiN	
Dia.	Shank	LOC	OAL	Flutes	Order No.	Price	Order No.	Price
1/4	1/4	1/2	2	4	**DC1510019**	Price	**DC1520019**	Price
1/4	1/4	3/4	2-1/2	4	**DC1510020**	Price	**DC1520020**	Price
5/16	5/16	1/2	2	4	**DC1510021**	Price	**DC1520021**	Price
5/16	5/16	13/16	2-1/2	4	**DC1510022**	Price	**DC1520022**	Price
3/8	3/8	5/8	2	4	**DC1510023**	Price	**DC1520023**	Price
3/8	3/8	1	2-1/2	4	**DC1510024**	Price	**DC1520024**	Price
7/16	7/16	1	2-3/4	4	**DC1510025**	Price	**DC1520025**	Price
1/2	1/2	5/8	2-1/2	4	**DC1510026**	Price	**DC1520026**	Price
1/2	1/2	1-1/4	3	4	**DC1510027**	Price	**DC1520027**	Price
1/2	1/2	2	4	4	**DC1510028**	Price	**DC1520028**	Price
5/8	5/8	1-5/8	4	4	**DC1510030**	Price	**DC1520030**	Price
5/8	5/8	3/4	3	4	**DC1510029**	Price	**DC1520029**	Price
3/4	3/4	1	3-1/2	4	**DC1510031**	Price	**DC1520031**	Price
3/4	3/4	1-3/4	4	4	**DC1510032**	Price	**DC1520032**	Price
3/4	3/4	2-1/4	5	4	**DC1510034**	Price	**DC1520034**	Price
3/4	3/4	3	6	4	**DC1510036**	Price	**DC1520036**	Price
1	1	2	5	5	**DC1510033**	Price	**DC1520033**	Price
1	1	3-1/4	6	5	**DC1510037**	Price	**DC1520037**	Price
1	1	4-1/8	7	5	**DC1510038**	Price	**DC1520038**	Price
1	1	2-5/8	5	5	**DC1510035**	Price	**DC1520035**	Price

WIDIA Solid Carbide Roughing/ Finishing End Mills

2 Flute • TiAlN Coated



- Center cutting
- Cylindrical shanks
- TiAlN coated for longer tool life

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/8	1/2	2	**WK405872797**	Price
3/32	1/8	3/8	1-1/2	**WK405872800**	Price
1/8	1/8	1/2	1-1/2	**WK405872845**	Price
3/16	3/16	5/8	2	**WK405872853**	Price
1/4	1/4	1/2	2	**WK405872858**	Price
1/4	1/4	3/4	2-1/2	**WK405872859**	Price
1/4	1/4	1-1/8	3	**WK405872860**	Price
5/16	5/16	13/16	2-1/2	**WK405872863**	Price
3/8	3/8	1	2-1/2	**WK405872868**	Price
3/8	3/8	1-1/8	3	**WK405872869**	Price
1/2	1/2	1	3	**WK405872889**	Price

STREAKERS® M233 Solid Carbide 3 Flute Roughers

- For high performance machining in aluminum alloys
- Special cutting edge serrations reduce the horsepower needed to plow through aluminum alloys at high metal removal rates
- ZrN coating helps reduce chip packing even in heavy tool engagement cuts
- ZrN coating helps reduce chip packing even in heavy tool engagement cuts



N *Best in* ***Aluminum and Non-ferrous***

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius (in.)	Order No.	Price
1/4	1/4	3/4	2-1/2	.015	**DD4061108**	Price
1/4	1/4	1	3	.015	**DD4061109**	Price
3/8	3/8	15/16	2-1/2	.015	**DD4061110**	Price
3/8	3/8	1-1/8	3	.015	**DD4061111**	Price
3/8	3/8	1-1/2	3-1/2	.015	**DD4061112**	Price
1/2	1/2	1-1/4	3	.030	**DD4061113**	Price
1/2	1/2	1-1/2	3-1/2	.030	**DD4061114**	Price
1/2	1/2	2	4	.030	**DD4061115**	Price
5/8	5/8	1-1/4	3-1/2	.030	**DD4061116**	Price
5/8	5/8	1-7/8	4	.030	**DD4061117**	Price
3/4	3/4	1-5/8	4	.030	**DD4061118**	Price
3/4	3/4	2-1/4	5	.030	**DD4061119**	Price
1	1	1-1/4	4	.030	**DD4061120**	Price
1	1	2	5	.030	**DD4061121**	Price

WIDIA Solid Carbide Roughing/ Finishing End Mills

4 Flute • TiAlN Coated



- Center cutting
- Cylindrical shanks
- TiAlN coated for longer tool life

Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Radius	Order No.	Price
1/32	1/8	5/64	1-1/2	None	**WK405879054**	Price
1/16	1/8	7/64	1-1/2	None	**WK405879055**	Price
5/64	1/8	3/16	1-1/2	None	**WK405879056**	Price
3/32	1/8	3/8	1-1/2	None	**WK405879057**	Price
3/32	1/8	5/8	2	None	**WK405879058**	Price
7/64	1/8	3/8	1-1/2	None	**WK405879059**	Price
1/8	1/8	1/4	1-1/2	None	**WK405879060**	Price
1/8	1/8	1/2	1-1/2	None	**WK405879131**	Price
1/8	1/8	3/4	2-1/4	None	**WK405879132**	Price
1/8	1/8	1	3	None	**WK405879133**	Price
5/32	3/16	9/16	2	None	**WK405879135**	Price
3/16	3/16	5/8	2	None	**WK405879136**	Price
3/16	3/16	3/4	2-1/2	None	**WK405879138**	Price
3/16	3/16	1-1/8	3	None	**WK405879139**	Price
7/32	1/4	5/8	2-1/2	None	**WK405879143**	Price
7/32	1/4	7/16	2	None	**WK405879142**	Price
1/4	1/4	1/2	2	None	**WK405879145**	Price
1/4	1/4	3/4	2-1/2	None	**WK405879146**	Price
1/4	1/4	3/4	2-1/2	.015	**WK406282447**	Price
1/4	1/4	1-1/8	3	None	**WK405879147**	Price
1/4	1/4	1-1/2	4	None	**WK405879148**	Price
5/16	5/16	13/16	2-1/2	None	**WK405879153**	Price
5/16	5/16	1-1/8	3	None	**WK405879154**	Price
5/16	5/16	1-5/8	4	None	**WK405879155**	Price
23/64	3/8	1	2-1/2	None	**WK405879158**	Price
3/8	3/8	1	2-1/2	None	**WK405879160**	Price
3/8	3/8	1-1/8	3	None	**WK405879161**	Price
3/8	3/8	1-3/4	4	None	**WK405879162**	Price
7/16	7/16	1	2-3/4	None	**WK405879167**	Price
1/2	1/2	5/8	2-1/2	None	**WK405879173**	Price
1/2	1/2	1	3	None	**WK405879174**	Price
1/2	1/2	1	3	None	**WK405879527**	Price
1/2	1/2	2	4	None	**WK405879175**	Price
1/2	1/2	2	4	None	**WK405879528**	Price
1/2	1/2	3	6	None	**WK405879176**	Price
1/2	1/2	3	6	None	**WK405879529**	Price
9/16	9/16	1-1/4	3-1/2	None	**WK405879178**	Price
5/8	5/8	1-1/4	3-1/2	None	**WK405879181**	Price
5/8	5/8	2-1/4	5	None	**WK405879182**	Price
5/8	5/8	2-1/4	5	None	**WK405879555**	Price
11/16	3/4	1-3/8	4	None	**WK405879184**	Price
3/4	3/4	1	3	None	**WK405879185**	Price
3/4	3/4	1-1/2	4	None	**WK405879186**	Price
3/4	3/4	1-1/2	4	None	**WK405879558**	Price
3/4	3/4	1-1/2	4	.030	**WK406282538**	Price
3/4	3/4	2-1/4	5	None	**WK405879187**	Price
3/4	3/4	2-1/4	5	None	**WK405879559**	Price
3/4	3/4	3	6	None	**WK405879188**	Price
3/4	3/4	3	6	None	**WK405879560**	Price
7/8	7/8	1-1/2	4	None	**WK405879191**	Price
7/8	7/8	1-1/2	4	None	**WK405879562**	Price
1	1	3	6	None	**WK405879566**	Price
1	1	4	7	None	**WK405879567**	Price

STREAKERS® M233 Solid Carbide 3 Flute Roughers

- For high performance machining in aluminum alloys
- Special cutting edge serrations reduce the horsepower needed to plow through aluminum alloys at high metal removal rates
- ZrN coating helps reduce chip packing even in heavy tool engagement cuts



N *Best in* ***Aluminum and Non-ferrous***

Size	Shank Dia.	Flute Length	OAL	Radius	Order No.	Price
6mm	6mm	13mm	57mm	0.5mm	**DD4061329**	Price
6mm	6mm	18mm	63mm	0.5mm	**DD4061330**	Price
6mm	6mm	24mm	75mm	0.5mm	**DD4061331**	Price
10mm	10mm	25mm	72mm	0.5mm	**DD4061332**	Price
10mm	10mm	30mm	75mm	0.5mm	**DD4061333**	Price
10mm	10mm	40mm	88mm	0.5mm	**DD4061334**	Price
12mm	12mm	30mm	83mm	1.0mm	**DD4061335**	Price

Size	Shank Dia.	Flute Length	OAL	Radius	Order No.	Price
12mm	12mm	36mm	88mm	1.0mm	**DD4061336**	Price
12mm	12mm	48mm	100mm	1.0mm	**DD4061337**	Price
16mm	16mm	32mm	92mm	1.0mm	**DD4061338**	Price
16mm	16mm	48mm	110mm	1.0mm	**DD4061339**	Price
20mm	20mm	40mm	104mm	1.0mm	**DD4061340**	Price
20mm	20mm	60mm	125mm	1.0mm	**DD4061341**	Price

PREMIER HP HIGH PERFORMANCE Carbide Multi-Flute 20° Helix Long Length Roughing End Mills with TiAlN Coating

For Production — High Performance

- Suitable for high hardened steels, tool steels, alloy steels, mold steels, carbon steels, etc.
- High velocity milling and high stock removal rates
- TiAlN coating increases wear resistance when dry-milling



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Neck Dia.	No. of Flutes	Length Below Shank (in.)	Order No.	Price
1/4	1/4	5/16	2-1/2	.225	3	3/4	**DD25RL203016**	Price
5/16	5/16	3/8	2-1/2	.285	3	1	**DD25RL203020**	Price
3/8	3/8	9/16	2-1/2	.350	3	1-1/8	**DD25RL203024**	Price
1/2	1/2	5/8	3	.460	4	1-1/2	**DD25RL204032**	Price
5/8	5/8	7/8	4	.585	4	2	**DD25RL204040**	Price
3/4	3/4	1	4-3/8	.710	4	2-1/4	**DD25RL204048**	Price
1	1	1	5	.960	5	3	**DD25RL205100**	Price

PREMIER HP HIGH PERFORMANCE Multi-Flute 20° Helix Stub Length Carbide Roughing End Mills with TiAlN Coating



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1/4	1/4	5/16	2-1/8	3	**DD25EM666016**	Price
5/16	5/16	3/8	2-1/4	3	**DD25EM666020**	Price
3/8	3/8	9/16	2-1/2	3	**DD25EM666024**	Price
1/2	1/2	5/8	3	4	**DD25EM666032**	Price
5/8	5/8	7/8	3-1/4	4	**DD25EM666040**	Price
3/4	3/4	1	3-3/4	4	**DD25EM666048**	Price

MICRO 100 super carbide Carbide Roughing End Mills

- These 38° helix mills are designed to generate the maximum metal removal rates in most applications
- All tools 3/8" and up have Weldon flats
- ALTiN coated

SHREDDER

AlTiN



Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1/4	1/4	1-1/8	3	4	**GE45SHL2504X**	Price
1/4	1/4	3/4	2-1/2	4	**GE45SHR2504X**	Price
5/16	5/16	1-1/8	3	4	**GE45SHL3124X**	Price
5/16	5/16	13/16	2-1/2	4	**GE45SHR3124X**	Price
3/8	3/8	1-1/4	3	4	**GE45SHL3754X**	Price
3/8	3/8	7/8	2-1/2	4	**GE45SHR3754X**	Price
1/2	1/2	1	3	4	**GE45SHR5004X**	Price
1/2	1/2	2	4-1/2	4	**GE45SHL5004X**	Price
5/8	5/8	1-1/4	3-1/2	4	**GE45SHR6254X**	Price
5/8	5/8	2-1/4	5	4	**GE45SHL6254X**	Price
3/4	3/4	1-1/2	4	4	**GE45SHR7504X**	Price
3/4	3/4	2-1/2	5	4	**GE45SHL7504X**	Price
1	1	1-1/2	4	4	**GE45SHR0014X**	Price
1	1	2-1/2	5	4	**GE45SHL0014X**	Price

MONSTER TOOL COMPANY 3 Flute, Coarse Pitch Carbide Roughing End Mills

MADE IN THE USA

- Progressive unequal index geometry
- For rough milling, profiling, and open-ended slots
- ZrN coating offers excellent wear resistance & increased lubricity



					Uncoated		ZrN	
Dia. (in.)	Shank	LOC	OAL	Chamfer	Order No.	Price	Order No.	Price
3/16	3/16	3/4	2	.020	**DC1510048**	Price	**DC1520048**	Price
1/4	1/4	3/4	2-1/2	.020	**DC1510049**	Price	**DC1520049**	Price
5/16	5/16	7/8	2-1/2	.020	**DC1510050**	Price	**DC1520050**	Price
3/8	3/8	1	2-1/2	.020	**DC1510051**	Price	**DC1520051**	Price
1/2	1/2	1-1/4	3	.025	**DC1510052**	Price	**DC1520052**	Price
5/8	5/8	1-1/4	3-1/2	.025	**DC1510053**	Price	**DC1520053**	Price
3/4	3/4	1-5/8	4	.025	**DC1510054**	Price	**DC1520054**	Price
1	1	1-3/4	4	.025	**DC1510055**	Price	-	-

Diameter Tolerance: +0.000 / -0.003"

MONSTER TOOL COMPANY Medium Pitch Solid Carbide Roughers

Progressive Unequal Index Geometry

- Reduced chatter and vibaration
- Maximum material removal rates
- For shallow slotting and perpheral milling applications
- Good for difficult to machine & abrasive materials
- Solid C-2 grade premium sub-micron carbide with 10% cobalt



- Right hand cut / right hand spiral
- Weldon flats
- Diameter tolerance: +.000 / -.003"
- Shank tolerance: +.0000 / -.0003"
- Increase feed in speed rates with AlTiN coating

					Uncoated		AlTiN	
Dia. (in.)	Shank	LOC	OAL	Chamfer	Order No.	Price	Order No.	Price
3/16	3/16	5/8	2	.020	**DC1510040**	Price	**DC1520040**	Price
1/4	1/4	3/4	2-1/2	.020	**DC1510041**	Price	**DC1520041**	Price
5/16	5/16	3/4	2-1/2	.020	**DC1510042**	Price	**DC1520042**	Price
3/8	3/8	7/8	2-1/2	.020	**DC1510043**	Price	**DC1520043**	Price
7/16	7/16	1	4	.025	**DC1510044**	Price	**DC1520044**	Price
1/2	1/2	1-1/4	3	.025	**DC1510045**	Price	**DC1520045**	Price
5/8	5/8	1-5/8	3-1/2	.025	**DC1510046**	Price	**DC1520046**	Price
3/4	3/4	1-5/8	4	.025	**DC1510047**	Price	**DC1520047**	Price
1	1	1-3/4	4	.025	**DC1510039**	Price	**DC1520039**	Price

RAPIDKUT® 2 Flute and 4 Flute Drill Mills

60 • 82 • 90 Degree

- Can be used for drilling, slotting, chamfering and profile milling
- Made from premium submicron grain carbide
- Tolerance: + .000 / -.002”





Number of Flutes - 2															
				AlTiN						Uncoated					
				60 Degree		82 Degree		90 Degree		Price		82 Degree		90 Degree	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
.015	1/8	.045	1-1/2	-	-	-	-	HC5120155	Price	-	-	-	-	HC5120150	Price
.020	1/8	.060	1-1/2	-	-	-	-	HC5120165	Price	-	-	-	-	HC5120160	Price
.025	1/8	.075	1-1/2	-	-	-	-	HC5120175	Price	-	-	-	-	HC5120170	Price
.030	1/8	.090	1-1/2	-	-	-	-	HC5120185	Price	-	-	-	-	HC5120180	Price
1/32	1/8	3/32	1-1/2	-	-	-	-	HC5120195	Price	-	-	-	-	HC5120190	Price
.045	1/8	.105	1-1/2	-	-	-	-	HC5120205	Price	-	-	-	-	HC5120200	Price
1/8	1/8	1/2	1-1/2	HC5120295	Price	HC5120305	Price	HC5120315	Price	HC5120290	Price	HC5120300	Price	HC5120310	Price
3/64	1/8	1/8	1-1/2	-	-	-	-	HC5120215	Price	-	-	-	-	HC5120210	Price
.060	1/8	.180	1-1/2	-	-	-	-	HC5120225	Price	-	-	-	-	HC5120220	Price
1/16	1/8	3/16	1-1/2	HC5120235	Price	HC5120245	Price	HC5120255	Price	HC5120230	Price	HC5120240	Price	HC5120250	Price
5/64	1/8	3/16	1-1/2	-	-	-	-	HC5120265	Price	-	-	-	-	HC5120260	Price
3/32	1/8	3/8	1-1/2	HC5120275	Price	-	-	HC5120285	Price	HC5120270	Price	-	-	HC5120280	Price
5/32	3/16	9/16	2	-	-	-	-	HC5120325	Price	-	-	-	-	HC5120320	Price
3/16	3/16	5/8	2	HC5120335	Price	HC5120345	Price	HC5120355	Price	HC5120330	Price	HC5120340	Price	HC5120350	Price
1/4	1/4	3/4	2-1/2	HC5120365	Price	HC5120375	Price	HC5120385	Price	HC5120360	Price	HC5120370	Price	HC5120380	Price
5/16	5/16	13/16	2-1/2	-	-	-	-	HC5120395	Price	-	-	-	-	HC5120390	Price
3/8	3/8	1	2-1/2	HC5120405	Price	HC5120415	Price	HC5120425	Price	HC5120400	Price	HC5120410	Price	HC5120420	Price
7/16	7/16	1	2-3/4	-	-	-	-	DD8356088	Price	-	-	-	-	DD8316088	Price
1/2	1/2	1	3	HC5120435	Price	HC5120445	Price	HC5120455	Price	HC5120430	Price	-	-	HC5120450	Price
1/2	1/2	1-1/8	3-1/8	-	-	-	-	-	-	-	-	HC5120440	Price	-	-
5/8	5/8	1-1/4	3-1/2	-	-	-	-	DD8356090	Price	-	-	-	-	HC5120460	Price
3/4	3/4	1-1/2	4	-	-	-	-	DD8356091	Price	-	-	-	-	HC5120465	Price

Number of Flutes - 4																	
				AlTiN						TiN		Uncoated					
				60 Degree		82 Degree		90 Degree		90 Degree		60 Degree		82 Degree		90 Degree	
Size (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/32	1/8	3/32	1-1/2	HC5140305	Price	-	-	HC5140315	Price	-	-	HC5140300	Price	-	-	HC5140310	Price
3/64	1/8	1/8	1-1/2	HC5140330	Price	-	-	HC5140335	Price	-	-	HC5140320	Price	-	-	HC5140325	Price
1/16	1/8	3/16	1-1/2	HC5140345	Price	HC5140355	Price	HC5140365	Price	HC5140370	Price	HC5140340	Price	HC5140350	Price	HC5140360	Price
5/64	1/8	3/16	1-1/2	HC5140380	Price	HC5140390	Price	HC5140400	Price	-	-	HC5140375	Price	HC5140385	Price	HC5140395	Price
3/32	1/8	3/8	1-1/2	HC5140410	Price	HC5140420	Price	HC5140430	Price	HC5140435	Price	HC5140405	Price	HC5140415	Price	HC5140425	Price
1/8	1/8	1/2	1-1/2	HC5140445	Price	HC5140455	Price	HC5140465	Price	HC5140470	Price	HC5140440	Price	HC5140450	Price	HC5140460	Price
5/32	3/16	9/16	2	HC5140480	Price	-	-	HC5140490	Price	-	-	HC5140475	Price	-	-	HC5140485	Price
3/16	3/16	5/8	2	HC5140500	Price	HC5140510	Price	HC5140520	Price	HC5140525	Price	HC5140495	Price	HC5140505	Price	HC5140515	Price
1/4	1/4	3/4	2-1/2	HC5140535	Price	HC5140545	Price	HC5140555	Price	HC5140560	Price	HC5140530	Price	HC5140540	Price	HC5140550	Price
5/16	5/16	13/16	2-1/2	HC5140570	Price	HC5140580	Price	HC5140590	Price	HC5140595	Price	HC5140565	Price	HC5140575	Price	HC5140585	Price
3/8	3/8	1	2-1/2	HC5140605	Price	HC5140615	Price	HC5140625	Price	HC5140630	Price	HC5140600	Price	HC5140610	Price	HC5140620	Price
7/16	7/16	1	2-3/4	HC5140640	Price	-	-	HC5140650	Price	-	-	HC5140635	Price	-	-	HC5140645	Price
1/2	1/2	1	3	HC5140660	Price	HC5140670	Price	HC5140680	Price	HC5140685	Price	HC5140655	Price	HC5140665	Price	HC5140675	Price
5/8	5/8	1-1/4	3-1/2	HC5140695	Price	HC5140705	Price	HC5140715	Price	HC5140720	Price	HC5140690	Price	HC5140700	Price	HC5140710	Price
3/4	3/4	1-1/2	4	HC5140730	Price	HC5140740	Price	HC5140750	Price	HC5140755	Price	HC5140725	Price	HC5140735	Price	HC5140745	Price

HSS MORSE M PM M42 8% Cobalt Drill Mills

90° Point Angle • 2 Flute • 30° Right Hand Spiral

The drill mill is a new concept in end mill technology. Its basic design lends itself to performing many drilling and milling operations not presently done with the standard square end end mill. Among the many vertical milling machine operations the drill-mill performs are:



- Drilling
- Slotting
- NC milling
- Drilling & slotting
- Profile milling
- Chamfering (internal and external).

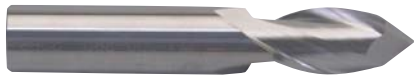
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/4	3/8	1/2	2-5/16	MT2044621	Price
5/16	3/8	9/16	2-5/16	MT2044622	Price
3/8	3/8	9/16	2-5/16	MT2044623	Price
7/16	3/8	13/16	2-1/2	MT2044624	Price
1/2	1/2	1	3	MT2044625	Price
9/16	1/2	1-1/8	3-1/8	MT2044626	Price
5/8	5/8	1-5/16	3-7/16	MT2044627	Price
11/16	5/8	1-5/16	3-7/16	MT2044628	Price

Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/4	3/4	1-5/16	3-9/16	MT2044629	Price
13/16	3/4	1-1/2	3-3/4	MT2044630	Price
7/8	3/4	1-1/2	3-3/4	MT2044631	Price
15/16	3/4	1-1/2	3-3/4	MT2044632	Price
1	3/4	1-1/2	3-3/4	MT2044633	Price

MICRO 100 Solid Carbide 2 or 4 Flute Drill Mills

90° Point Angle

- This new design allows many milling and drill operations not presently done with a conventional end mill
- Good for drilling, milling, spotting, chamfering, and countersinking
- 30° Right hand spiral
- Right hand cut
- Diameter tolerances: **1/8 - 1/4 diameters** +.000" -.002"; **5/16 - 3/4 diameters** +.000 -.003"
- T.I.R. maximum .0005"



				Uncoated				AlTiN			
				2 Flute		4 Flute		2 Flute		4 Flute	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/8	1/2	1-1/2	**GE45DM125290**	Price	**GE45DM125490**	Price	**GE45DM125290X**	Price	**GE45DM125490X**	Price
3/16	3/16	5/8	2	**GE45DM187290**	Price	**GE45DM187490**	Price	**GE45DM187290X**	Price	**GE45DM187490X**	Price
1/4	1/4	3/4	2-1/2	**GE45DM250290**	Price	**GE45DM250490**	Price	**GE45DM250290X**	Price	**GE45DM250490X**	Price
5/16	5/16	13/16	2-1/2	**GE45DM312290**	Price	**GE45DM312490**	Price	**GE45DM312290X**	Price	**GE45DM312490X**	Price
3/8	3/8	1	2-1/2	**GE45DM375290**	Price	**GE45DM375490**	Price	**GE45DM375290X**	Price	**GE45DM375490X**	Price
1/2	1/2	1	3	**GE45DM500290**	Price	**GE45DM500490**	Price	**GE45DM500290X**	Price	**GE45DM500490X**	Price
5/8	5/8	1-1/4	3-1/2	**GE45DM625290**	Price	-	-	-	-	-	-
3/4	3/4	1-1/2	4	**GE45DM750290**	Price	-	-	-	-	**GE45DM750490X**	Price

RAPIDKUT 2 Flute, Solid Carbide Marking Cutters - 90° Angle

- Designed for milling legible part numbers where fine detail of character is not necessary
- Burr free 2 flute cutting design has improved strength over single point engravers
- Eccentric relief improves durability over half round style engravers
- Requires less RPM than half round engravers



				Uncoated		AlTiN	
Drill Dia. (in.)	Web Thickness	Flute Length	OAL (in.)	Order No.	Price	Order No.	Price
1/8	.005	.062	1-1/2	**GE2010000**	Price	**GE2010020**	Price
1/8	.010	.058	1-1/2	**GE2010005**	Price	**GE2010025**	Price
3/16	.005	.093	2	**GE2010010**	Price	**GE2010030**	Price
1/4	.005	.125	2-1/2	**GE2010015**	Price	**GE2010035**	Price

FULLERTON Tool Company Inc Solid Carbide Chamfer Mills

Series 3730 • 60°, 90°, or 120°



- Straight flutes, right hand cut
- Uncoated or TiAlN coated
- 2 Flute chamfer mills designed for deburring and chamfering in small grooves and holes
- 4 Flute chamfer mills improve tool life and finish for profiling and chamfering larger features

No. of Flutes - 2								
					TIALN		Uncoated	
Body Dia.	LOC	OAL	Angle	Description	Order No.	Price	Order No.	Price
1/8	.1080	1-1/2	60°	Single End	**FT8536157**	Price	**FT8536156**	Price
1/8	1/16	1-1/2	90°	Single End	**FT8536161**	Price	**FT8536160**	Price
3/16	.1620	2	60°	Single End	**FT8536166**	Price	**FT8536165**	Price
3/16	3/32	2	90°	Single End	**FT8536174**	Price	**FT8536173**	Price
1/4	.2160	2-1/2	60°	Double End	**FT8536097**	Price	-	-
1/4	.2160	2-1/2	60°	Single End	**FT8536083**	Price	**FT8536141**	Price
1/4	1/8	2-1/2	90°	Double End	**FT8536094**	Price	-	-
1/4	1/8	2-1/2	90°	Single End	**FT8536089**	Price	**FT8536147**	Price
1/4	5/64	2-1/2	120°	Double End	**FT8736101**	Price	-	-
3/8	.3240	2-1/2	60°	Double End	**FT8536098**	Price	-	-
3/8	.3240	2-1/2	60°	Single End	**FT8536085**	Price	**FT8536143**	Price
3/8	3/16	2-1/2	90°	Double End	**FT8536095**	Price	-	-
3/8	3/16	2-1/2	90°	Single End	**FT8536091**	Price	**FT8536149**	Price
3/8	7/64	2-1/2	120°	Double End	**FT8536102**	Price	-	-
1/2	.4330	3	60°	Double End	**FT8536099**	Price	-	-
1/2	.4330	3	60°	Single End	**FT8536087**	Price	**FT8536145**	Price
1/2	1/4	3	90°	Double End	**FT8536096**	Price	-	-
1/2	1/4	3	90°	Single End	**FT8536093**	Price	**FT8536151**	Price
1/2	9/64	3	120°	Double End	**FT8536103**	Price	-	
Price	.6490	4	60°	Single End	**FT8536170**	Price	**FT8536169**	Price
3/4	3/8	4	90°	Single End	**FT8536178**	Price	**FT8536177**	Price

No. of Flutes - 4								
					TIALN		Uncoated	
Body Dia.	LOC	OAL	Angle	Description	Order No.	Price	Order No.	Price
10mm	5mm	64mm	90°	Single End	**FT8592854**	Price	**FT8592526**	Price
12mm	6mm	76mm	90°	Single End	**FT8592855**	Price	**FT8592527**	Price
3mm	1.5mm	38mm	90°	Single End	**FT8592850**	Price	**FT8592522**	Price
4mm	2mm	50mm	90°	Single End	**FT8592851**	Price	**FT8592523**	Price
6mm	3mm	64mm	90°	Single End	**FT8592852**	Price	**FT8592524**	Price
8mm	4mm	64mm	90°	Single End	**FT8592853**	Price	**FT8592525**	Price
1/8	.1080	1-1/2	60°	Single End	**FT8536155**	Price	**FT8536154**	Price
1/8	1/16	1-1/2	90°	Single End	**FT8736159**	Price	**FT8536158**	Price
3/16	.1620	2	60°	Single End	**FT8536164**	Price	**FT8536163**	Price
3/16	3/32	2	90°	Single End	**FT8536172**	Price	**FT8536171**	Price
1/4	.2160	2-1/2	60°	Single End	**FT8536082**	Price	**FT8536140**	Price
1/4	1/8	2-1/2	90°	Single End	**FT8536088**	Price	**FT8536146**	Price
3/8	.3240	2-1/2	60°	Single End	**FT8536084**	Price	**FT8536142**	Price
3/8	3/16	2-1/2	90°	Single End	**FT8536090**	Price	**FT8536148**	Price
1/2	.4330	3	60°	Single End	**FT8536086**	Price	**FT8536144**	Price
1/2	1/4	3	90°	Single End	**FT8536092**	Price	**FT8536150**	Price
1/2	1/4	3	120°	Single End	-	-	**FT8536152**	Price
3/4	.6490	4	60°	Single End	**FT8536168**	Price	**FT8536167**	Price
3/4	3/8	4	90°	Single End	**FT8536176**	Price	**FT8536175**	Price

Corner Rounding End Mills



High Speed Steel or Cobalt

- Cutter diameter: +.002" -.000"
- Shank diameter: +/- .002"
- Overall length: +/- .060"Radius: +/- .001"
- Keo Milling List CRE124-High speed steel
- Keo Milling List CRCO126-Cobalt

- High Speed Steel								
			Keo Milling		Rapidkut		Price	
Radius (in.)	Size (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/32	3/8	3/8	-	-	DK60CR032	Price	DK50RC1	Price
1/32	7/16	3/8	KE1114190	Price	-	-	-	-
1/16	7/16	3/8	KE1114200	Price	DK60CR062	Price	DK50RC2	Price
3/32	1/2	3/8	KE1114210	Price	DK60CR093	Price	DK50RC3	Price
1/8	5/8	1/2	KE1114220	Price	DK60CR125	Price	DK50RC4	Price
5/32	3/4	1/2	KE1114230	Price	DK60CR156	Price	DK50RC5	Price
3/16	7/8	1/2	-	-	DK60CR187	Price	DK50RC6A	Price
3/16	7/8	3/4	KE1114250	Price	DK60CR1871	Price	DK50RC6C	Price
3/16	7/8	1/2	KE1114240	Price	-	-	-	-
1/4	1	1/2	KE1114260	Price	DK60CR250	Price	DK50RC8A	Price
1/4	1	3/4	KE1114270	Price	DK60CR2501	Price	DK50RC8C	Price
5/16	1-1/8	1/2	KE1114280	Price	-	-	DK50RC10A	Price
5/16	1-1/8	5/8	-	-	-	-	DK50RC10B	Price
5/16	1-1/8	3/4	-	-	DK60CR312	Price	DK50RC10C	Price
5/16	1-1/8	7/8	KE1114290	Price	DK60CR3121	Price	DK50RC10D	Price
3/8	1-1/4	1/2	KE1114300	Price	-	-	DK50RC12A	Price
3/8	1-1/4	3/4	-	-	DK60CR375	Price	DK50RC12C	Price
3/8	1-1/4	7/8	KE1114310	Price	DK60CR3751	Price	DK50RC12D	Price
7/16	1-3/8	3/4	KE1114320	Price	DK60CR437	Price	DK50RC14C	Price
7/16	1-3/8	1	KE1114330	Price	DK60CR4371	Price	DK50RC14E	Price
1/2	1-1/2	3/4	KE1114340	Price	DK60CR500	Price	DK50RC16C	Price
1/2	1-1/2	1	KE1114350	Price	DK60CR5001	Price	DK50RC16E	Price
5/8	1-15/16	3/4	KE1114360	Price	DK60CR625	Price	DK50RC20C	Price
5/8	1-15/16	1	KE1114370	Price	DK60CR6251	Price	DK50RC20E	Price
3/4	2-1/4	3/4	KE1114380	Price	DK60CR7501	Price	DK50RC24C	Price
3/4	2-1/4	1	KE1114390	Price	DK60CR7502	Price	DK50RC24E	Price
7/8	2-1/2	3/4	-	-	-	-	DK50RC28C	Price
1	2-3/4	3/4	KE1114396	Price	-	-	-	-
1	2-5/8	3/4	-	-	-	-	DK50RC32C	Price
1	2-3/4	1	KE1114398	Price	-	-	-	-

- Cobalt						
			Keo Milling		ProCut	
Radius (in.)	Size (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price
1/32	3/8	3/8	-	-	DK55RC1CO	Price
1/16	7/16	3/8	KE1172751	Price	DK55RC2CO	Price
3/32	1/2	3/8	KE1172752	Price	DK55RC3CO	Price
1/8	5/8	1/2	KE1172753	Price	DK55RC4CO	Price
5/32	3/4	1/2	KE1172754	Price	DK55RC5CO	Price
3/16	7/8	1/2	-	-	DK55RC6ACO	Price
3/16	7/8	3/4	KE1172755	Price	DK55RC6CCO	Price
1/32	7/16	3/8	KE1172750	Price	-	-
1/4	1	1/2	-	-	DK55RC8ACO	Price
1/4	1	3/4	KE1172756	Price	DK55RC8CCO	Price
5/16	1-1/8	1/2	-	-	DK55RC10ACO	Price
5/16	1-1/8	7/8	KE1172757	Price	-	-
3/8	1-1/4	1/2	-	-	DK55RC12ACO	Price
3/8	1-1/4	3/4	-	-	DK55RC12CCO	Price
3/8	1-1/4	7/8	KE1172758	Price	-	-
7/16	1-3/8	3/4	-	-	DK55RC14CCO	Price
1/2	1-1/2	3/4	-	-	DK55RC16CCO	Price
1/2	1-1/2	1	KE1172759	Price	DK55RC16ECO	Price
5/8	1-15/16	3/4	-	-	DK55RC20CCO	Price
5/8	1-15/16	1	-	-	DK55RC20ECO	Price
3/4	2-1/4	3/4	-	-	DK55RC24CCO	Price
3/4	2-1/4	1	-	-	DK55RC24ECO	Price

RAPIDKUT® 3 & 4 Flute Solid Carbide Corner Rounding End Mills

Single End

MCG



- Can provide uniform finish on corners
- Radius is form relieved
- Made from premium submicron grain carbide
- Tolerances +.000/-.002"



				3 Flute		4 Flute	
Radius (in.)	Minor Dia. (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/32	1/8	3/16	2	DD8316092	Price	DD8316099	Price
1/16	1/8	1/4	2-1/2	DD8316093	Price	DD8316100	Price
3/32	3/16	3/8	2-1/2	DD8316094	Price	DD8316101	Price
1/8	1/4	1/2	3	DD8316095	Price	DD8316102	Price
5/32	5/16	5/8	3-1/2	DD8316096	Price	DD8316103	Price
3/16	3/8	3/4	4	DD8316097	Price	DD8316104	Price
1/4	1/2	1	4	DD8316098	Price	DD8316105	Price

PROCUT Corner Rounding End Mill Sets

High Speed Steel & Cobalt — 8 Pc. Sets



Description	Type of Steel	Order No.	Price
1/16R x 3/8, 3/32R x 3/8, 1/8R x 1/2, 5/32R x 1/2, 3/16R x 1/2, 1/4R x 1/2, 5/16R x 1/2, 3/8R x 1/2	Cobalt	DK55RCCO	Price
1/16R x 3/8, 3/32R x 3/8, 1/8R x 1/2, 5/32R x 1/2, 3/16R x 1/2, 1/4R x 1/2, 5/16R x 1/2, 3/8R x 1/2	High Speed Steel	DK50RC	Price
3/16R x 3/4, 1/4R x 3/4, 5/16R x 3/4, 3/8R x 3/4, 7/16R x 3/4, 1/2R x 3/4, 5/8R x 3/4, 3/4R x 3/4	High Speed Steel	DK50RC34†	Price

† Has 3/4" shanks

MICRO 100 Solid Carbide Corner Rounding End Mills

3 Flute • Double End



- Shank diameter tolerance: -.0001 to -.0003”
- Radius tolerance: +.0000 to -.0005”

				Uncoated		AlTiN	
Radius	Minor Dia.	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price
.010	.060	1/8	2	**GE45CRE125010**	Price	**GE45CRE125010X**	Price
.010	.060	5/16	2-1/2	**-**	-	**GE45CRE312100X**	Price
.0156	.060	1/8	2	**GE45CRE125015**	Price	**GE45CRE125015X**	Price
.020	.060	1/8	2	**GE45CRE125020**	Price	**GE45CRE125020X**	Price
.025	.060	1/8	2	**GE45CRE125025**	Price	**GE45CRE125025X**	Price
.030	.060	1/8	2	**GE45CRE125030**	Price	**GE45CRE125030X**	Price
.0312	.060	1/8	2	**GE45CRE125031**	Price	**GE45CRE125031X**	Price
.035	.060	3/16	2	**GE45CRE187035**	Price	**GE45CRE187035X**	Price
.040	.060	3/16	2	**GE45CRE187040**	Price	**GE45CRE187040X**	Price
.045	.060	3/16	2	**GE45CRE187045**	Price	**GE45CRE187045X**	Price
.0469	.060	3/16	2	**GE45CRE187047**	Price	**GE45CRE187047X**	Price
.050	.060	3/16	2	**GE45CRE187050**	Price	**GE45CRE187050X**	Price
.055	.060	3/16	2	**GE45CRE187055**	Price	**GE45CRE187055X**	Price
.060	.060	3/16	2	**GE45CRE187060**	Price	**GE45CRE187060X**	Price
.0625	.060	3/16	2	**GE45CRE187062**	Price	**GE45CRE187062X**	Price
.070	.060	1/4	2-1/2	**GE45CRE250070**	Price	**GE45CRE250070X**	Price
.075	.060	1/4	2-1/2	**GE45CRE250075**	Price	**GE45CRE250075X**	Price
.0781	.060	1/4	2-1/2	**GE45CRE250078**	Price	**GE45CRE250078X**	Price
.080	.060	1/4	2-1/2	**GE45CRE250080**	Price	**GE45CRE250080X**	Price
.090	.060	1/4	2-1/2	**GE45CRE250090**	Price	**GE45CRE250090X**	Price
.0938	.060	1/4	2-1/2	**GE45CRE250093**	Price	**GE45CRE250093X**	Price
.100	.060	5/16	2-1/2	**GE45CRE312100**	Price	**-**	-
.1094	.060	5/16	2-1/2	**GE45CRE312109**	Price	**GE45CRE312109X**	Price
.125	.060	5/16	2-1/2	**GE45CRE312125**	Price	**GE45CRE312125X**	Price
.1406	.060	3/8	2-1/2	**GE45CRE375140**	Price	**GE45CRE375140X**	Price
.1562	.060	3/8	2-1/2	**GE45CRE375156**	Price	**GE45CRE375156X**	Price
.1875	.120	1/2	3	**GE45CRE500187**	Price	**GE45CRE500187X**	Price
.2031	.120	5/8	3-1/2	**GE45CRE625203**	Price	**GE45CRE625203X**	Price
.2188	.120	5/8	3-1/2	**GE45CRE625218**	Price	**GE45CRE625218X**	Price
.2344	.120	5/8	3-1/2	**GE45CRE625234**	Price	**GE45CRE625234X**	Price
.250	.120	5/8	3-1/2	**GE45CRE625250**	Price	**GE45CRE625250X**	Price
.3125	.120	3/4	4	**GE45CRE750312**	Price	**GE45CRE750312X**	Price
.375	.120	1	4	**GE45CRE001375**	Price	**GE45CRE001375X**	Price
.437	.120	1	4	**GE45CRE001437**	Price	**GE45CRE001437X**	Price

KEO Corner Rounding End Mills- Metric



High Speed Steel

- Cutter diameter: +.002” -.000”
- Shank diameter: +/- .002”
- Overall length: +/- .060”
- Radius: +/- .001”
- Keo Milling List CRM125

Radius	End Size	Size (in.)	Shank Dia. (in.)	OAL (in.)	No. of Flutes	Order No.	Price
1mm	6mm	7/16	3/8	2-1/2	4	**KE1114401**	Price
1.5mm	6.5mm	7/16	3/8	2-1/2	4	**KE1114403**	Price
2mm	7mm	1/2	3/8	2-1/2	4	**KE1114405**	Price
2.5mm	6mm	1/2	3/8	2-1/2	4	**KE1114407**	Price
3mm	7mm	5/8	1/2	3	4	**KE1114409**	Price
3.5mm	7.5mm	3/4	1/2	3	4	**KE1114411**	Price
4mm	8mm	3/4	1/2	3	4	**KE1114413**	Price
4.5mm	10mm	7/8	1/2	3	4	**KE1114415**	Price
5mm	9mm	7/8	1/2	3	4	**KE1114419**	Price
6mm	10.5mm	1	3/4	3-1/4	4	**KE1114421**	Price
7mm	10mm	1	3/4	3-1/4	4	**KE1114423**	Price
8mm	9.5mm	1-1/8	3/4	3-1/4	4	**KE1114425**	Price
9mm	9mm	1-3/8	3/4	3-1/4	4	**KE1114427**	Price
11mm	10mm	1-3/8	1	3-3/4	4	**KE1114431**	Price
10mm	10.5mm	1-3/8	3/4	3-3/4	4	**KE1114429**	Price
12mm	11mm	1-1/2	1	4-1/8	4	**KE1114433**	Price
13mm	9mm	1-1/2	1	4-1/8	4	**KE1114435**	Price
14mm	12mm	1-5/8	1	4-1/8	4	**KE1114437**	Price
15mm	13mm	1-7/8	1	4-1/4	4	**KE1114439**	Price
16mm	14mm	2	1	4-1/4	4	**KE1114441**	Price
17mm	14mm	2-1/8	1	4-1/4	4	**KE1114443**	Price
18mm	16.5mm	2-1/4	1	4-1/4	4	**KE1114445**	Price
20mm	15.5mm	2-5/16	1	4-1/4	4	**KE1114449**	Price

RAPIDKUT 2 Flute Solid Carbide Corner Rounding End Mills

Double End





- Can provide uniform finish on corners
- Radius is form relieved
- Made from premium submicron grain carbide
- Tolerances +.000.-.002”

				Uncoated		AlTiN		TiCN		TiN	
Radius	Minor Dia.	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
.010	.105	1/8	1-1/2	**DD8316293**	Price	**DD8356293**	Price	**DD8346293**	Price	**DD8326293**	Price
.015	.095	1/8	1-1/2	**DD8316294**	Price	**DD8356294**	Price	**DD8346294**	Price	**DD8326294**	Price
.020	.085	1/8	1-1/2	**DD8316295**	Price	**DD8356295**	Price	**DD8346295**	Price	**DD8326295**	Price
.025	.075	1/8	1-1/2	**DD8316296**	Price	**DD8356296**	Price	**DD8346296**	Price	**DD8326296**	Price
.031	.063	1/8	1-1/2	**DD8316297**	Price	**DD8356297**	Price	**DD8346297**	Price	**DD8326297**	Price
.035	.055	1/8	1-1/2	**DD8316298**	Price	**DD8356298**	Price	**DD8346298**	Price	**DD8326298**	Price
.039	.047	1/8	1-1/2	**DD8316299**	Price	**DD8356299**	Price	**DD8346299**	Price	**DD8326299**	Price
.047	.094	3/16	2	**DD8316300**	Price	**DD8356300**	Price	**DD8346300**	Price	**DD8326300**	Price
.050	.088	3/16	2	**DD8316301**	Price	**DD8356301**	Price	**DD8346301**	Price	**DD8326301**	Price
.055	.078	3/16	2	**DD8316302**	Price	**DD8356302**	Price	**DD8346302**	Price	**DD8326302**	Price
.062	.064	3/16	2	**DD8316303**	Price	**DD8356303**	Price	**DD8346303**	Price	**DD8326303**	Price
.072	.106	1/4	2-1/2	**DD8316304**	Price	**DD8356304**	Price	**DD8346304**	Price	**DD8326304**	Price
.078	.094	1/4	2-1/2	**DD8316305**	Price	**DD8356305**	Price	**DD8346305**	Price	**DD8326305**	Price
.093	.064	1/4	2-1/2	**DD8316306**	Price	**DD8356306**	Price	**DD8346306**	Price	**DD8326306**	Price
.100	.050	1/4	2-1/2	**DD8316307**	Price	**DD8356307**	Price	**DD8346307**	Price	**DD8326307**	Price
.109	.095	5/16	2-1/2	**DD8316308**	Price	**DD8356308**	Price	**DD8346308**	Price	**DD8326308**	Price
.118	.077	5/16	2-1/2	**DD8316309**	Price	**DD8356309**	Price	**DD8346309**	Price	**DD8326309**	Price
.125	.063	5/16	2-1/2	**DD8316310**	Price	**DD8356310**	Price	**DD8346310**	Price	**DD8326310**	Price
.140	.095	3/8	2-1/2	**DD8316311**	Price	**DD8356311**	Price	**DD8346311**	Price	**DD8326311**	Price
.156	.063	3/8	2-1/2	**DD8316312**	Price	**DD8356312**	Price	**DD8346312**	Price	**DD8326312**	Price

Woodruff Keyseat Cutters - Shank Type

MADE IN THE USA



High Speed Steel, M-42 Cobalt, Carbide Tipped

- Woodruff keyseat cutters are extremely versatile profile milling cutter
- Although originally designed to mill standard woodruff keyseats, they now satisfy a variety of applications
- Staggered or straight tooth

				High Speed Steel				M-42 Cobalt				Carbide Tipped			
				Staggered		Straight		Staggered		Price		Staggered		Straight	
Cutter Dia. (in.)	Face Width (in.)	OAL (in.)	American Standard No.	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	1/16	2-1/16	202	AV4362015	Price	AV4362010	Price	AV4393933	Price	AV4393932	Price	-	-	-	-
5/16	1/16	2-1/16	202-1/2	AV4362025	Price	AV4362020	Price	AV4393939	Price	AV4393938	Price	-	-	-	-
5/16	3/32	2-3/32	302-1/2	AV4363025	Price	AV4363020	Price	AV4393945	Price	AV4393944	Price	-	-	-	-
3/8	1/16	2-1/16	203	AV4362035	Price	AV4362030	Price	AV4393951	Price	AV4393950	Price	-	-	-	-
3/8	3/32	2-3/32	303	AV4363035	Price	AV4363030	Price	AV4393957	Price	AV4393956	Price	-	-	-	-
3/8	1/8	2-1/8	403	AV4364035	Price	AV4364030	Price	AV4393963	Price	AV4393962	Price	-	-	-	-
1/2	1/16	2-1/16	204	AV4362045	Price	AV4362040	Price	AV4393969	Price	AV4393968	Price	AV4293972	Price	AV4293971	Price
1/2	3/32	2-3/32	304	AV4363045	Price	AV4363040	Price	AV4393975	Price	AV4393974	Price	AV4293978	Price	AV4293977	Price
1/2	1/8	2-1/8	404	AV4364045	Price	AV4364040	Price	AV4393987	Price	AV4393986	Price	AV4293984	Price	AV4293983	Price
5/8	3/32	2-3/32	305	AV4363055	Price	AV4363050	Price	AV4393981	Price	AV4393980	Price	AV4293990	Price	AV4293989	Price
5/8	1/8	2-1/8	405	AV4364055	Price	AV4364050	Price	AV4393993	Price	AV4393992	Price	AV4293996	Price	AV4293995	Price
5/8	5/32	2-5/32	505	AV4365055	Price	AV4365050	Price	AV4394005	Price	AV4394004	Price	AV4294002	Price	AV4294001	Price
5/8	3/16	2-3/16	605	AV4366055	Price	AV4366050	Price	AV4394011	Price	AV4394010	Price	AV4294008	Price	AV4294007	Price
3/4	1/8	2-1/8	406	AV4364065	Price	AV4364060	Price	AV4393999	Price	AV4393998	Price	AV4294014	Price	AV4294013	Price
3/4	5/32	2-5/32	506	AV4365065	Price	AV4365060	Price	AV4394017	Price	AV4394016	Price	AV4294020	Price	AV4294019	Price
3/4	3/16	2-3/16	606	AV4366065	Price	AV4366060	Price	AV4394035	Price	AV4394034	Price	AV4294026	Price	AV4294025	Price
3/4	1/4	2-1/4	806	AV4368065	Price	AV4368060	Price	AV4394023	Price	AV4394022	Price	AV4294032	Price	AV4294031	Price
7/8	3/16	2-3/16	607	AV4366075	Price	AV4366070	Price	AV4394041	Price	AV4394040	Price	AV4294044	Price	AV4294043	Price
7/8	5/32	2-5/32	507	AV4365075	Price	AV4365070	Price	AV4394029	Price	AV4394028	Price	AV4294038	Price	AV4294037	Price
7/8	7/32	2-7/32	707	AV4367075	Price	AV4367070	Price	AV4394047	Price	AV4394046	Price	AV4294050	Price	AV4294049	Price
7/8	1/4	2-1/4	807	AV4368075	Price	AV4368070	Price	AV4394077	Price	AV4394076	Price	AV4294056	Price	AV4294055	Price
1	3/16	2-3/16	608	AV4366085	Price	AV4366080	Price	AV4394053	Price	AV4394052	Price	AV4294062	Price	AV4294061	Price
1	7/32	2-7/32	708	AV4367085	Price	AV4367080	Price	AV4394059	Price	AV4394058	Price	AV4294068	Price	AV4294067	Price
1	1/4	2-1/4	808	AV4368085	Price	AV4368080	Price	AV4394083	Price	AV4394082	Price	AV4294074	Price	AV4294073	Price
1	5/16	2-5/16	1008	AV4360085	Price	AV4360080	Price	AV4394131	Price	AV4394130	Price	AV4294080	Price	AV4294079	Price
1	3/8	2-3/8	1208	AV4362085	Price	AV4362080	Price	AV4394065	Price	AV4394064	Price	AV4294086	Price	AV4294085	Price
1-1/8	3/16	2-3/16	609	AV4366095	Price	AV4366090	Price	AV4394071	Price	AV4394070	Price	AV4294092	Price	AV4294091	Price
1-1/8	7/32	2-7/32	709	AV4367095	Price	AV4367090	Price	AV4394089	Price	AV4394088	Price	AV4294098	Price	AV4294097	Price
1-1/8	1/4	2-1/4	809	AV4368095	Price	AV4368090	Price	AV4394095	Price	AV4394094	Price	AV4294104	Price	AV4294103	Price
1-1/8	5/16	2-5/16	1009	AV4360095	Price	AV4360090	Price	AV4394137	Price	AV4394136	Price	AV4294110	Price	AV4294109	Price
1-1/2	3/8	2-3/8	1212	AV4362125	Price	AV4362120	Price	AV4394173	Price	AV4394172	Price	AV4294175	Price	AV4294174	Price
1-1/4	3/16	2-3/16	610	AV4366105	Price	AV4366100	Price	AV4394101	Price	AV4394100	Price	AV4294116	Price	AV4294115	Price
1-1/4	7/32	2-7/32	710	AV4367105	Price	AV4367100	Price	AV4394107	Price	AV4394106	Price	AV4294122	Price	AV4294121	Price
1-1/4	1/4	2-1/4	810	AV4368105	Price	AV4368100	Price	AV4394113	Price	AV4394112	Price	AV4294128	Price	AV4294127	Price
1-1/4	5/16	2-5/16	1010	AV4360015	Price	AV4360010	Price	AV4394143	Price	AV4394142	Price	AV4294134	Price	AV4294133	Price
1-1/4	3/8	2-3/8	1210	AV4362105	Price	AV4362100	Price	AV4394161	Price	AV4394160	Price	AV4294140	Price	AV4294139	Price
1-3/8	1/4	2-1/4	811	AV4368115	Price	AV4368110	Price	AV4394119	Price	AV4394118	Price	AV4294146	Price	AV4294145	Price
1-3/8	5/16	2-5/16	1011	AV4360115	Price	AV4360110	Price	AV4394149	Price	AV4394148	Price	AV4294152	Price	AV4294151	Price
1-3/8	3/8	2-3/8	1211	AV4362115	Price	AV4362110	Price	AV4394167	Price	AV4394166	Price	AV4294158	Price	AV4294157	Price
1-1/2	1/4	2-1/4	812	AV4368125	Price	AV4368120	Price	AV4394125	Price	AV4394124	Price	AV4294164	Price	AV4294163	Price
1-1/2	5/16	2-5/16	1012	AV4360125	Price	AV4360120	Price	AV4394155	Price	AV4394154	Price	AV4294170	Price	AV4294169	Price

10 Pc. Woodruff Keyseat Cutter Sets

- Set consists of 1 each of the following sizes: 403, 204, 404, 305, 505, 406, 606, 806, 608, 808



		Keo		Price	
Tooth Type	Set Material	Order No.	Price	Order No.	Price
Straight	High Speed Steel	AV4360100	Price	DH52PT10	Price
Straight	Cobalt	-	-	DH52PT10CO	Price
Staggered	High Speed Steel	AV4360105	Price	DH52ST10	Price
Staggered	Cobalt	-	-	DH52ST10CO	Price

41 Pc. Woodruff Keyseat Cutter Sets

- Set consists of 1 each of the following sizes: from 202 to 1212
- High speed steel



	KEO		ProCut	
Tooth Type	Order No.	Price	Order No.	Price
Straight	AV4360000†	Price	DH52PT41	Price
Staggered	AV4360005†	Price	DH52ST41	Price

†Keo sets furnished in fitted box

Woodruff Keyseat Cutters

High Speed Steel, Cobalt and Carbide Tipped

- 1/2" Shanks
- Straight tooth
- Staggered tooth
- Also available in solid carbide & carbide tipped staggered tooth upon request. See index for arbor type keyseat cutters.





PROCUT WHITNEY TOOL COMPANY, INC.

				High Speed Steel				M-42 Cobalt				Carbide Tipped	
				Staggered		Straight		Staggered		Straight		Straight	
Cutter Dia. (in.)	Face Width (in.)	OAL (in.)	American Standard No.	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	1/16	2-1/16	202	DH51202	Price	DH50202	Price	-	-	-	-	-	-
5/16	1/16	2-1/16	202-1/2	DH5120212	Price	DH5020212	Price	-	-	-	-	-	-
5/16	3/32	2-3/32	302-1/2	DH5130212	Price	DH5030212	Price	-	-	-	-	-	-
3/8	1/16	2-1/16	203	DH51203	Price	DH50203	Price	-	-	-	-	-	-
3/8	3/32	2-3/32	303	DH51303	Price	DH50303	Price	-	-	-	-	-	-
3/8	1/8	2-1/8	403	DH51403	Price	DH50403	Price	DH71403	Price	DH70403	Price	-	-
1/2	1/16	2-1/16	204	DH51204	Price	DH50204	Price	DH71204	Price	DH70204	Price	DH54204	Price
1/2	3/32	2-3/32	304	DH51304	Price	DH50304	Price	DH71304	Price	DH70304	Price	DH54304	Price
1/2	1/8	2-1/8	404	DH51404	Price	DH50404	Price	DH71404	Price	DH70404	Price	DH54404	Price
5/8	1/8	2-1/8	405	DH51405	Price	DH50405	Price	DH71405	Price	DH70405	Price	DH54405	Price
5/8	3/32	2-3/32	305	DH51305	Price	DH50305	Price	DH71305	Price	DH70305	Price	DH54305	Price
5/8	5/32	2-5/32	505	DH51505	Price	DH50505	Price	DH71505	Price	DH70505	Price	DH54505	Price
5/8	3/16	2-3/16	605	DH51605	Price	DH50605	Price	DH71605	Price	DH70605	Price	DH54605	Price
3/4	1/8	2-1/8	406	DH51406	Price	DH50406	Price	DH71406	Price	DH70406	Price	DH54406	Price
3/4	5/32	2-5/32	506	DH51506	Price	DH50506	Price	-	-	-	-	DH54506	Price
3/4	3/16	2-3/16	606	DH51606	Price	DH50606	Price	DH71606	Price	DH70606	Price	DH54606	Price
3/4	1/4	2-1/4	806	DH51806	Price	DH50806	Price	DH71806	Price	DH70806	Price	DH54806	Price
7/8	5/32	2-5/32	507	DH51507	Price	DH50507	Price	DH71507	Price	DH70507	Price	DH54507	Price
7/8	3/16	2-3/16	607	DH51607	Price	DH50607	Price	-	-	-	-	DH54607	Price
7/8	7/32	2-7/32	707	DH51707	Price	DH50707	Price	-	-	-	-	DH54707	Price
7/8	1/4	2-1/4	807	DH51807	Price	DH50807	Price	-	-	-	-	DH54807	Price
1	3/16	2-3/16	608	DH51608	Price	DH50608	Price	DH71608	Price	DH70608	Price	DH54608	Price
1	7/32	2-7/32	708	DH51708	Price	DH50708	Price	-	-	-	-	DH54708	Price
1	1/4	2-1/4	808	DH51808	Price	DH50808	Price	DH71808	Price	DH70808	Price	DH54808	Price
1	5/16	2-5/16	1008	DH511008	Price	DH501008	Price	DH711008	Price	DH701008	Price	DH541008	Price
1	3/8	2-3/8	1208	DH511208	Price	DH501208	Price	DH711208	Price	DH701208	Price	DH541208	Price
1-1/8	3/16	2-3/16	609	DH51609	Price	DH50609	Price	-	-	-	-	DH54609	Price
1-1/8	7/32	2-7/32	709	DH51709	Price	DH50709	Price	-	-	-	-	DH54709	Price
1-1/8	1/4	2-1/4	809	DH51809	Price	DH50809	Price	-	-	-	-	DH54809	Price
1-1/8	5/16	2-5/16	1009	DH511009	Price	DH501009	Price	-	-	-	-	DH541009	Price
1-1/4	3/16	2-3/16	610	DH51610	Price	DH50610	Price	DH71610	Price	DH70610	Price	DH54610	Price
1-1/4	7/32	2-7/32	710	DH51710	Price	DH50710	Price	-	-	-	-	DH54710	Price
1-1/4	1/4	2-1/4	810	DH51810	Price	DH50810	Price	DH71810	Price	DH70810	Price	DH54810	Price
1-1/4	5/16	2-5/16	1010	DH511010	Price	DH501010	Price	-	-	-	-	DH541010	Price
1-1/4	3/8	2-3/8	1210	DH511210	Price	DH501210	Price	-	-	-	-	DH541210	Price
1-3/8	1/4	2-1/4	811	DH51811	Price	DH50811	Price	-	-	-	-	DH54811	Price
1-3/8	5/16	2-5/16	1011	DH511011	Price	DH501011	Price	-	-	-	-	DH541011	Price
1-3/8	3/8	2-3/8	1211	DH511211	Price	DH501211	Price	-	-	-	-	DH541211	Price
1-1/2	1/4	2-1/4	812	DH51812	Price	DH50812	Price	DH71812	Price	DH70812	Price	DH54812	Price
1-1/2	5/16	2-5/16	1012	DH511012	Price	DH501012	Price	DH711012	Price	DH701012	Price	DH541012	Price
1-1/2	3/8	2-3/8	1212	DH511212	Price	DH501212	Price	DH711212	Price	DH701212	Price	DH541212	Price

Small Solid Carbide Keyseat Cutters

- Solid carbide
- Smaller than standard sizes
- Large selection of sizes
- CNC precision
- C2 micrograin standard



KEO WHITNEY TOOL COMPANY, INC.

			Keo		Whitney Tool	
Cutter Dia. (in.)	Face Width	Shank Dia. (in.)	Order No.	Price	Order No.	Price
1/8	1/64	1/4	AV4261070	Price	DS9630300	Price
1/8	1/32	1/4	AV4261071	Price	DS9630301	Price
1/8	1mm	1/4	AV4261072	Price	DS9630302	Price
1/8	3/64	1/4	AV4261073	Price	DS9630303	Price
1/8	1/16	1/4	AV4261074	Price	DS9630304	Price
3/16	1/64	1/4	AV4261075	Price	DS9630305	Price
3/16	1/32	1/4	AV4261076	Price	DS9630306	Price
3/16	1mm	1/4	AV4261077	Price	DS9630307	Price
3/16	3/64	1/4	AV4261078	Price	DS9630308	Price
3/16	1/16	1/4	AV4261079	Price	DS9630309	Price
1/4	1/64	1/4	AV4261080	Price	DS9630310	Price
1/4	1/32	1/4	AV4261081	Price	DS9630311	Price

KEO WHITNEY TOOL COMPANY, INC.

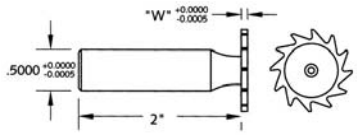
			Keo		Whitney Tool	
Cutter Dia. (in.)	Face Width	Shank Dia. (in.)	Order No.	Price	Order No.	Price
1/4	1mm	1/4	AV4261082	Price	DS9630312	Price
1/4	3/64	1/4	AV4261083	Price	DS9630313	Price
1/4	1/16	1/4	AV4261084	Price	DS9630314	Price
5/16	1/64	3/8	AV4261085	Price	DS9630315	Price
5/16	1/32	3/8	AV4261086	Price	DS9630316	Price
5/16	1mm	3/8	AV4261087	Price	DS9630317	Price
5/16	3/64	3/8	AV4261088	Price	DS9630318	Price
5/16	1/16	3/8	AV4261089	Price	DS9630319	Price
5/16	2mm	3/8	AV4261090	Price	DS9630320	Price
5/16	3/32	3/8	AV4261091	Price	DS9630321	Price
3/8	1/64	3/8	AV4261092	Price	DS9630322	Price
3/8	1/32	3/8	AV4261093	Price	DS9630323	Price
3/8	1mm	3/8	AV4261094	Price	DS9630324	Price
3/8	3/64	3/8	AV4261095	Price	DS9630325	Price
3/8	1/16	3/8	AV4261096	Price	DS9630326	Price
3/8	2mm	3/8	AV4261097	Price	DS9630327	Price
3/8	3/32	3/8	AV4261098	Price	DS9630328	Price
3/8	1/8	3/8	AV4261099	Price	DS9630329	Price

Woodruff Style Narrow Width Slotting Cutters

High Speed Steel & Cobalt

- Straight shank
- Right hand cut
- 1/2” Diameter straight shank
- 2” Underhead length





		High Speed Steel				M-42 Cobalt	
		Keo		Whitney		Whitney Tool	
Cutter Dia. (in.)	Face Width (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/4	1/64	**AV4368981**	Price	**DH6010165**	Price	-	-
1/4	1/32	**AV4368982**	Price	**DH6010166**	Price	-	-
1/4	3/64	**AV4368983**	Price	**DH6010167**	Price	-	-
5/16	1/64	**AV4368984**	Price	**DH6010168**	Price	-	-
5/16	1/32	**AV4368985**	Price	**DH6010169**	Price	-	-
5/16	3/64	**AV4368986**	Price	**DH6010170**	Price	-	-
3/8	1/64	**AV4368987**	Price	**DH6010171**	Price	-	-
3/8	1/32	**AV4368988**	Price	**DH6010172**	Price	-	-
3/8	3/64	**AV4368989**	Price	**DH6010173**	Price	-	-
1/2	1/64	**AV4368990**	Price	**DH6010174**	Price	**DH6120174**	Price
1/2	.020	**AV4368991**	Price	**DH6010175**	Price	**DH6120175**	Price
1/2	1/32	**AV4369000**	Price	**DH6010176**	Price	**DH6120176**	Price
1/2	3/64	**AV4369001**	Price	**DH6010177**	Price	**DH6120177**	Price
5/8	1/64	-	-	**DH6010178**	Price	**DH6120178**	Price
5/8	.020	**AV4369009**	Price	**DH6010179**	Price	**DH6120179**	Price
5/8	1/32	**AV4369010**	Price	**DH6010180**	Price	**DH6120180**	Price
5/8	3/64	**AV4369011**	Price	**DH6010181**	Price	**DH6120181**	Price
5/8	1/16	**AV4369020**	Price	**DH6010182**	Price	**DH6120182**	Price
5/8	5/64	**AV4369021**	Price	**DH6010183**	Price	**DH6120183**	Price
3/4	1/32	**AV4369030**	Price	**DH6010184**	Price	**DH6120184**	Price
3/4	3/64	**AV4369031**	Price	**DH6010185**	Price	**DH6120185**	Price
3/4	1/16	**AV4369040**	Price	**DH6010186**	Price	**DH6120186**	Price
3/4	5/64	**AV4369041**	Price	**DH6010187**	Price	**DH6120187**	Price
3/4	3/32	**AV4369050**	Price	**DH6010188**	Price	**DH6120188**	Price
3/4	7/64	**AV4369051**	Price	**DH6010189**	Price	**DH6120189**	Price
7/8	3/64	**AV4369061**	Price	**DH6010190**	Price	-	-
7/8	1/16	**AV4369070**	Price	**DH6010191**	Price	-	-
7/8	5/64	**AV4369071**	Price	**DH6010192**	Price	-	-
7/8	3/32	**AV4369080**	Price	**DH6010193**	Price	-	-
7/8	7/64	**AV4369081**	Price	**DH6010194**	Price	-	-
7/8	1/8	**AV4369090**	Price	**DH6010195**	Price	-	-
7/8	9/64	**AV4369091**	Price	**DH6010196**	Price	-	-
1	3/64	**AV4369099**	Price	**DH6010197**	Price	**DH6120197**	Price
1	1/16	**AV4369100**	Price	**DH6010198**	Price	**DH6120198**	Price
1	5/64	**AV4369101**	Price	**DH6010199**	Price	**DH6120199**	Price
1	3/32	**AV4369110**	Price	**DH6010200**	Price	**DH6120200**	Price
1	7/64	**AV4369111**	Price	**DH6010201**	Price	**DH6120201**	Price
1	1/8	**AV4369120**	Price	**DH6010202**	Price	**DH6120202**	Price
1	9/64	**AV4369121**	Price	**DH6010203**	Price	**DH6120203**	Price
1	5/32	**AV4369130**	Price	**DH6010204**	Price	**DH6120204**	Price
1	11/64	**AV4369131**	Price	**DH6010205**	Price	-	-
1-1/8	3/64	**AV4369139**	Price	**DH6010206**	Price	-	-
1-1/8	1/16	**AV4369140**	Price	**DH6010207**	Price	-	-
1-1/8	5/64	**AV4369141**	Price	**DH6010208**	Price	-	-
1-1/8	3/32	**AV4369150**	Price	**DH6010209**	Price	-	-
1-1/8	7/64	**AV4369151**	Price	**DH6010210**	Price	-	-
1-1/8	1/8	**AV4369160**	Price	**DH6010211**	Price	**DH6120211**	Price
1-1/8	9/64	**AV4369161**	Price	**DH6010212**	Price	-	-
1-1/8	5/32	**AV4369170**	Price	**DH6010213**	Price	-	-
1-1/8	11/64	**AV4369171**	Price	**DH6010214**	Price	-	-
1-1/4	3/64	**AV4369179**	Price	**DH6010215**	Price	-	-
1-1/4	1/16	**AV4369180**	Price	**DH6010216**	Price	**DH6120216**	Price
1-1/4	5/64	**AV4369181**	Price	**DH6010217**	Price	-	-
1-1/4	3/32	**AV4369190**	Price	**DH6010218**	Price	**DH6120218**	Price
1-1/4	7/64	**AV4369191**	Price	**DH6010219**	Price	-	-
1-1/4	1/8	**AV4369200**	Price	**DH6010220**	Price	**DH6120220**	Price
1-1/4	9/64	**AV4369201**	Price	**DH6010221**	Price	-	-
1-1/4	5/32	**AV4369210**	Price	**DH6010222**	Price	-	-
1-1/4	11/64	**AV4369211**	Price	**DH6010223**	Price	-	-
1-1/2	1/16	**AV4369280**	Price	**DH6010234**	Price	**DH6120234**	Price
1-1/2	5/64	**AV4369281**	Price	**DH6010235**	Price	-	-
1-1/2	3/32	**AV4369290**	Price	**DH6010236**	Price	-	-
1-1/2	7/64	**AV4369291**	Price	**DH6010237**	Price	-	-
1-1/2	1/8	**AV4369300**	Price	**DH6010238**	Price	**DH6120238**	Price
1-1/2	9/64	**AV4369301**	Price	**DH6010239**	Price	-	-
1-1/2	5/32	**AV4369310**	Price	**DH6010240**	Price	**DH6120240**	Price
1-1/2	11/64	**AV4369311**	Price	**DH6010241**	Price	-	-
1-1/2	3/16	**AV4369320**	Price	**DH6010242**	Price	**DH6120242**	Price
1-1/2	7/32	**AV4369330**	Price	**DH6010243**	Price	-	-

Metric Keyseat Cutters



High Speed Steel

- Extremely versatile profile milling cutters
- DIN 850, Form A, B

				Staggered		Straight	
Cutter Dia. (mm)	Face Width (mm)	Shank Dia. (mm)	OAL (mm)	Order No.	Price	Order No.	Price
4.5	1	6	50	**AV4268201**	Price	**AV4268200**	Price
7.5	1.5	6	50	**AV4268211**	Price	**AV4268210**	Price
7.5	2	6	50	**AV4268221**	Price	**AV4268220**	Price
10.5	2	6	50	**AV4268231**	Price	**AV4268230**	Price
10.5	2.5	6	50	**AV4268241**	Price	**AV4268240**	Price
10.5	3	6	50	**AV4268251**	Price	**AV4268250**	Price
13.5	3	10	56	**AV4268261**	Price	**AV4268260**	Price
13.5	4	10	56	**AV4268271**	Price	**AV4268270**	Price
16.5	3	10	56	**AV4268281**	Price	**AV4268280**	Price
16.5	4	10	56	**AV4268291**	Price	**AV4268290**	Price
16.5	5	10	56	**AV4268301**	Price	**AV4268300**	Price
19.5	4	10	63	**AV4268311**	Price	**AV4268310**	Price
19.5	5	10	63	**AV4268321**	Price	**AV4268320**	Price
19.5	6	10	63	**AV4268331**	Price	**AV4268330**	Price
22.5	5	10	63	**AV4268341**	Price	**AV4268340**	Price
22.5	6	10	63	**AV4268351**	Price	**AV4268350**	Price
22.5	8	10	63	**AV4268361**	Price	**AV4268360**	Price
25.5	6	10	63	**AV4268371**	Price	**AV4268370**	Price
28.5	6	10	71	**AV4268381**	Price	**AV4268380**	Price
28.5	8	10	71	**AV4268391**	Price	**AV4268390**	Price
28.5	10	12	71	**AV4268401**	Price	**AV4268400**	Price
32.5	7	12	71	**AV4268411**	Price	**AV4268410**	Price
32.5	8	12	71	**AV4268421**	Price	**AV4268420**	Price
32.5	10	12	71	**AV4268431**	Price	**AV4268430**	Price
45.5	10	12	71	**AV4268441**	Price	**AV4268440**	Price

Long Shank T-Slot Milling Cutters

- High speed steel or M42 cobalt
- Right hand cut
- Straight shank



				Cobalt		High Speed Steel	
Head Width (in.)	Head Dia. OD (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/8	1	5/8	4-15/16	**DS9620294**	Price	**DS9610294**	Price
1/8	1-1/2	1	5-5/16	**DS9620308**	Price	**DS9610308**	Price
1/8	1-1/4	3/4	5-1/8	**DS9620301**	Price	**DS9610301**	Price
3/16	1	5/8	4-15/16	**DS9620295**	Price	**DS9610295**	Price
3/16	1-1/2	1	5-5/16	**DS9620309**	Price	**DS9610309**	Price
3/16	1-1/4	3/4	5-1/8	**DS9620302**	Price	**DS9610302**	Price
3/16	2	1	5-11/16	**DS9620315**	Price	**DS9610315**	Price
1/4	1	5/8	4-15/16	**DS9620296**	Price	**DS9610296**	Price
1/4	1-1/2	1	5-5/16	**DS9620310**	Price	**DS9610310**	Price
1/4	1-1/4	3/4	5-1/8	**DS9620303**	Price	**DS9610303**	Price
1/4	2	1	5-11/16	**DS9620316**	Price	**DS9610316**	Price
5/16	1	5/8	4-15/16	**DS9620297**	Price	**DS9610297**	Price
5/16	1-1/2	1	5-5/16	**DS9620311**	Price	**DS9610311**	Price
5/16	1-1/4	3/4	5-1/8	**DS9620304**	Price	**DS9610304**	Price
5/16	2	1	5-11/16	**DS9620317**	Price	**DS9610317**	Price
3/8	1	5/8	4-15/16	**DS9620298**	Price	**DS9610298**	Price
3/8	1-1/2	1	5-5/16	**DS9620312**	Price	**DS9610312**	Price
3/8	1-1/4	3/4	5-1/8	**DS9620305**	Price	**DS9610305**	Price
3/8	2	1	5-11/16	**DS9620318**	Price	**DS9610318**	Price
1/2	1	5/8	4-15/16	**DS9620299**	Price	**DS9610299**	Price
1/2	1-1/2	1	5-5/16	**DS9620313**	Price	**DS9610313**	Price
1/2	1-1/4	3/4	5-1/8	**DS9620306**	Price	**DS9610306**	Price
1/2	2	1	5-11/16	**DS9620319**	Price	**DS9610319**	Price
5/8	1	5/8	4-15/16	**DS9620300**	Price	**DS9610300**	Price
5/8	1-1/2	1	5-5/16	**DS9620314**	Price	**DS9610314**	Price
5/8	1-1/4	3/4	5-1/8	**DS9620307**	Price	**DS9610307**	Price
5/8	2	1	5-11/16	**DS9620320**	Price	**DS9610320**	Price
3/4	2	1	5-11/16	**DS9620321**	Price	**DS9610321**	Price

T-Slot Cutters - Shank Type

High Speed Steel and Cobalt

- Keo Milling List TS109



					Price						Cobalt	
					Keo Milling		ProCut		Whitney Tool		Whitney Tool	
Bolt Size (in.)	Cutter Dia. (in.)	Face Width (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	9/16	15/64	1/2	2-19/32	**KE1110800**	Price	**DL501**	Price	**DS9010276**	Price	**DS9215276**	Price
5/16	21/32	17/64	1/2	2-11/16	**KE1110810**	Price	**DL502**	Price	**DS9010277**	Price	**DS9215277**	Price
3/8	25/32	21/64	3/4	3-1/4	**KE1110820**	Price	**DL503**	Price	**DS9010278**	Price	**DS9215278**	Price
1/2	31/32	25/64	3/4	3-7/16	**KE1110830**	Price	**DL504**	Price	**DS9010279**	Price	**DS9215279**	Price
5/8	1-1/4	31/64	1	3-15/16	**KE1110920**	Price	**DL505**	Price	**DS9010280**	Price	**DS9215280**	Price
3/4	1-15/32	5/8	1	4-7/16	**KE1110930**	Price	**DL506**	Price	**DS9010281**	Price	**DS9215281**	Price
1	1-27/32	53/64	1-1/4	4-13/16	**KE1111020**	Price	**DL507**	Price	**DS9010282**	Price	**DS9215282**	Price
1-1/4	2-7/32	1-3/32	1-1/4	5-3/8	**KE1111110**	Price	**DL508**	Price	**DS9010283**	Price	**DS9215283**	Price
1-1/2	2-21/32	1-11/32	1-1/4	5-29/32	**KE1111120**	Price	**DL509**	Price	**DS9010284**	Price	**DS9215284**	Price

T-Slot Milling Cutters

Carbide-Tipped

- For cast iron or steel



						Type 2720 Cast Iron		Type 2721 Steel	
Bolt Size (in.)	Cutter Dia. (in.)	Face Width (in.)	Shank Dia. (in.)	OAL (in.)	Neck Dia. (in.)	Order No.	Price	Order No.	Price
1/4	9/16	15/64	1/2	2-19/32	17/64	**BJ56272008**	Price	**BJ56272108**	Price
5/16	21/32	17/64	1/2	2-11/16	21/64	**BJ56272010**	Price	**BJ56272110**	Price
3/8	25/32	21/64	3/4	3-1/4	13/32	**BJ56272012**	Price	**BJ56272112**	Price
1/2	31/32	25/64	3/4	3-7/16	17/32	**BJ56272016**	Price	**BJ56272116**	Price
5/8	1-1/4	31/64	1	3-15/16	21/32	**BJ56272020**	Price	**BJ56272120**	Price
3/4	1-15/32	5/8	1	4-7/16	25/32	**BJ56272024**	Price	**BJ56272124**	Price
1	1-27/32	53/64	1-1/4	4-13/16	1-1/32	**BJ56272032**	Price	**BJ56272132**	Price
1-1/4	2-7/32	1-3/32	1-1/4	5-3/8	1-7/32	**BJ56272040**	Price	**BJ56272140**	Price
1-1/2	2-21/32	1-11/32	1-1/4	5-29/32	1-17/32	**BJ56272048**	Price	**BJ56272148**	Price

M-42 8% Cobalt Roughing T-Slot Cutters



Bolt Size (in.)	Cutter Dia. (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
1/2	31/32	3/4	3-7/16	**DL51TTS16**	Price
5/8	1-1/4	1	3-15/16	**DL51TTS20**	Price
3/4	1-15/32	1	4-7/16	**DL51TTS24**	Price
1	1-27/32	1-1/4	4-13/16	**DL51TTS32**	Price
1-1/4	2-7/32	1-1/4	5-3/8	**DL51TTS40**	Price
1-1/2	2-21/32	1-1/4	5-29/32	**DL51TTS48**	Price

7 Pc. HSS T-Slot Milling Cutter Set

Set Range (in.)	Order No.	Price
1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 1	**DL50TC**	Price



T-Slot Roughing Cutters

Cobalt • Rougher/Finisher

- Flute diameter : +.000 -.005”
- Length of cut: +.000 -.005”
- Overall length: +.062 -.000”
- Helix angle 30°
- Keo Milling List #TS111



				Uncoated		TiN		TiCN		TiAlN	
Bolt Size (in.)	Cutter Dia. (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/2	31/32	3/4	3-7/16	**KE1111135**	Price	**KE1111130**	Price	**KE1187808**	Price	**KE1116825**	Price
5/8	1-1/4	1	3-15/16	**KE1111145**	Price	**KE1111140**	Price	**KE1187809**	Price	**KE1116826**	Price
3/4	1-15/32	1	4-7/16	**KE1111155**	Price	**KE1111150**	Price	**KE1187810**	Price	**KE1116827**	Price
1	1-27/32	1-1/4	4-13/16	**KE1111165**	Price	**KE1111160**	Price	**KE1187811**	Price	**KE1116828**	Price
1-1/4	2-7/32	1-1/4	5-3/8	**KE1111175**	Price	**KE1111170**	Price	**KE1187812**	Price	**KE1116829**	Price
1-1/2	2-21/32	1-1/4	5-29/32	**KE1111185**	Price	**KE1111180**	Price	**KE1187813**	Price	**KE1116830**	Price

T-Slot Cutters

Cobalt • Finisher

- Cutter diameter : +.000 -.010”
- Overall length: +/- .060
- Helix angle 10°
- Keo Milling List #TS112



Bolt Size (in.)	Cutter Dia. (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
1/4	9/16	1/2	2-19/32	**KE1111200**	Price
5/16	21/32	1/2	2-11/16	**KE1111210**	Price
3/8	25/32	3/4	3-1/4	**KE1111220**	Price
1/2	31/32	3/4	3-7/16	**KE1111230**	Price
5/8	1-1/4	1	3-15/16	**KE1111240**	Price
3/4	1-15/32	1	4-7/16	**KE1111250**	Price
1	1-27/32	1-1/4	4-13/16	**KE1111260**	Price
1-1/4	2-7/32	1-1/4	5-3/8	**KE1111270**	Price
1-1/2	2-21/32	1-1/4	5-29/32	**KE1111280**	Price

Double Angle Shank Style Cutters

High Speed Steel or Carbide Tipped

- Cutter diameter: +.015” -.000”
- Shank diameter: -.0001” to -.0005”
- Overall length: +/- .060”
- Keo Milling List DA129



- Keo Milling

					High Speed Steel	
Cutter Dia.	Cutter Thickness	Shank Dia.	OAL	Angle	Order No.	Price
1	5/16	1/2	2-27/32	60°	**KE1172801**	Price
1	3/8	1/2	2-29/32	90°	**KE1172821**	Price
1-3/8	7/16	5/8	3-7/32	60°	**KE1172802**	Price
1-3/8	1/2	5/8	3-9/32	90°	**KE1172822**	Price
1-1/2	1/2	5/8	3-3/8	60°	**KE1172803**	Price
1-1/2	9/16	5/8	3-7/16	90°	**KE1172823**	Price
1-7/8	5/8	3/4	3-25/32	60°	**KE1172804**	Price
1-7/8	5/8	3/4	3-25/32	90°	**KE1172824**	Price
2-1/4	1/2	3/4	3-1/8	60°	**KE1112492**	Price
2-1/4	3/4	7/8	4-5/32	60°	**KE1172805**	Price
2-1/4	1/2	3/4	3-1/8	90°	**KE1112490**	Price
2-3/4	3/16	3/8	2-3/8	60°	**KE1172800**	Price
2-3/4	1/4	3/8	2-7/16	90°	**KE1172820**	Price
2-1/4	3/4	7/8	4-5/32	90°	**KE1172825**	Price

- ProCut

					High Speed Steel	
Cutter Dia.	Cutter Thickness	Shank Dia.	OAL	Angle	Order No.	Price
3/4	3/16	3/8	2-3/8	60°	**DS75682010**	Price
3/4	1/4	3/8	2-7/16	90°	**DS75682110**	Price
1	5/16	1/2	2-27/32	60°	**DS75682020**	Price
1	3/8	1/2	2-29/32	90°	**DS75682120**	Price
1-3/8	7/16	5/8	3-7/32	60°	**DS75682040**	Price
1-3/8	1/2	5/8	3-9/32	90°	**DS75682140**	Price
1-1/2	1/2	5/8	3-3/8	60°	**DS75682060**	Price
1-1/2	9/16	5/8	3-7/16	90°	**DS75682160**	Price
1-7/8	5/8	3/4	3-25/32	60°	**DS75682080**	Price
1-7/8	5/8	3/4	3-25/32	90°	**DS75682180**	Price
2-1/4	1/2	3/4	3-1/8	60°	**DS75682100**	Price
2-1/4	3/4	7/8	4-5/32	60°	**DS75682090**	Price
2-1/4	3/4	7/8	4-5/32	90°	**DS75682190**	Price
2-1/4	1/2	3/4	3-1/8	90°	**DS75682200**	Price

- Whitney Tool

					High Speed Steel		Carbide Tipped	
Cutter Dia.	Cutter Thickness	Shank Dia.	OAL	Angle	Order No.	Price	Order No.	Price
3/4	3/16	3/8	2-3/8	60°	**DS9110330**	Price	**DS9530104**	Price
3/4	1/4	3/8	2-7/16	90°	**DS9110336**	Price	**DS9530110**	Price
1	5/16	1/2	2-27/32	60°	**DS9110331**	Price	**DS9530105**	Price
1	3/8	1/2	2-29/32	90°	**DS9110337**	Price	**DS9530111**	Price
1-3/8	7/16	5/8	3-7/32	60°	**DS9110332**	Price	**DS9530106**	Price
1-3/8	1/2	5/8	3-9/32	90°	**DS9110338X**	Price	**DS9530112**	Price
1-1/2	1/2	5/8	3-3/8	60°	**DS9110333**	Price	**DS9530107**	Price
1-1/2	9/16	5/8	3-7/16	90°	**DS9110339X**	Price	**DS9530113**	Price
1-7/8	5/8	3/4	3-25/32	60°	**DS9110334**	Price	**DS9530108**	Price
1-7/8	5/8	3/4	3-25/32	90°	**DS9110340X**	Price	**DS9530114**	Price
2-1/4	3/4	7/8	4-5/32	60°	**DS9110335**	Price	**DS9530109**	Price
2-1/4	3/4	7/8	4-5/32	90°	**DS9110341X**	Price	**DS9530115**	Price

Single Angle Shank Style Cutters

High Speed Steel or Carbide Tipped

- Cutter diameter: +.010” -.000”
- Shank diameter: -.0001” to -.0005”
- Overall length: +/- .060”
- Keo Milling List CH126



Angle - 45°												
					High Speed Steel						Carbide Tipped	
					Keo Milling		ProCut		Whitney Tool		Whitney Tool	
Cutter Dia.	Face Width	Shank Dia.	OAL	Angle	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/2	1/8	3/8	2-1/8	45°	**KE1112640**	Price	**DS80680001**	Price	**DS9010322**	Price	**DS9530096**	Price
3/4	3/16	3/8	2-1/8	45°	**KE1112642**	Price	**DS80680002**	Price	**DS9010323**	Price	**DS9530097**	Price
1	5/16	1/2	2-1/2	45°	**KE1112644**	Price	**DS80680003**	Price	**DS9010324**	Price	**DS9530098**	Price
1-1/2	1/2	3/4	2-3/4	45°	**KE1112646**	Price	**DS80680004**	Price	**DS9010325**	Price	**DS9530099**	Price

Angle - 60°												
					High Speed Steel						Carbide Tipped	
					Keo Milling		ProCut		Whitney Tool		Whitney Tool	
Cutter Dia.	Face Width	Shank Dia.	OAL	Angle	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/2	7/32	3/8	2-1/8	60°	**KE1112650**	Price	**DS80680005**	Price	**DS9010326**	Price	**DS9530100**	Price
3/4	5/16	3/8	2-1/8	60°	**KE1112652**	Price	**DS80680006**	Price	**DS9010327**	Price	**DS9530101**	Price
1	7/16	1/2	2-1/2	60°	**KE1112654**	Price	**DS80680007**	Price	**DS9010328**	Price	**DS9530102**	Price
1-1/2	5/8	3/4	2-3/4	60°	**KE1112656**	Price	**DS80680008**	Price	**DS9010329**	Price	**DS9530103**	Price

Convex Radius Cutters - Shank Type

High Speed Steel

- Cutter diameter: +.030” -.000”
- Shank diameter: -.0001” to -.0005”
- Overall length: +/- .060”
- Keo Milling List CVS130



			Keo Milling			ProCut			Price		
Radius	Shank Dia.	OAL	Cutter Dia.	Order No.	Price	Cutter Dia.	Order No.	Price	Cutter Dia.	Order No.	Price
1/32	1/2	3	3/4	**KE1118927**	Price	3/4	**DS70690005**	Price	3/4	**DS9010344**	Price
1/16	1/2	3	3/4	**KE1118928**	Price	3/4	**DS70690010**	Price	3/4	**DS9010345**	Price
3/32	1/2	3	7/8	**KE1118929**	Price	7/8	**DS70690015**	Price	7/8	**DS9010346**	Price
1/8	3/4	3-1/2	1-1/4	**KE1118930**	Price	1-1/4	**DS70690020**	Price	1-1/4	**DS9010347**	Price
5/32	3/4	3-1/2	1-5/16	**KE1118931**	Price	1-5/16	**DS70690025**	Price	1-5/16	**DS9010348**	Price
3/16	3/4	3-1/2	1-3/8	**KE1118932**	Price	1-3/8	**DS70690030**	Price	1-3/8	**DS9010349**	Price
1/4	3/4	4	1-1/2	**KE1118933**	Price	1-1/2	**DS70690035**	Price	1-1/2	**DS9010350**	Price
5/16	3/4	4	1-5/8	**KE1118934**	Price	1-5/8	**DS70690040**	Price	1-3/4	**DS9010351**	Price
3/8	3/4	4	1-3/4	**KE1118935**	Price	1-3/4	**DS70690045**	Price	1-7/8	**DS9010352**	Price

Concave Radius Cutters - Shank Type

High Speed Steel

- Cutter diameter: +.015” -.000”
- Shank diameter: -.0001” to -.0005”
- Overall length: +/- .060”
- Keo Milling List CCS150



			Keo Milling			ProCut			Price		
Radius	Shank Dia.	OAL	Cutter Dia.	Order No.	Price	Cutter Dia.	Order No.	Price	Cutter Dia.	Order No.	Price
1/32	1/2	3	3/4	**KE1118900**	Price	3/4	**DS70693005**	Price	3/4	**DS9010360**	Price
1/16	1/2	3	3/4	**KE1118901**	Price	3/4	**DS70693010**	Price	3/4	**DS9010361**	Price
3/32	1/2	3	3/4	**KE1118902**	Price	3/4	**DS70693015**	Price	7/8	**DS9010362**	Price
1/8	3/4	3-1/2	1	**KE1118903**	Price	1	**DS70693020**	Price	1-1/4	**DS9010363**	Price
5/32	3/4	3-1/2	1	**KE1118904**	Price	1	**DS70693025**	Price	1-5/16	**DS9010364**	Price
3/16	3/4	3-1/2	1	**KE1118905**	Price	1	**DS70693030**	Price	1-3/8	**DS9010365**	Price
1/4	3/4	4	1-1/4	**KE1118906**	Price	1-1/4	**DS70693035**	Price	1-1/2	**DS9010366**	Price
5/16	3/4	4	1-1/4	**KE1118907**	Price	1-1/4	**DS70693040**	Price	1-3/4	**DS9010367**	Price
3/8	3/4	4	-	**-**	-	1-1/2	**DS70693045**	Price	1-7/8	**DS9010368**	Price
3/8	3/4	4-3/16	1-1/2	**KE1118908**	Price	-	**-**	-	-	**-**	-

Dovetail Cutters

High Speed Steel or Cobalt

- Available with 45° or 60° angles
- Right hand



					High Speed Steel		Cobalt	
Dia. (in.)	Angle	Face Width (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price
3/8	45°	1/8	3/8	2-1/8	**AV4275034**	Price	**AV4276034**	Price
3/8	60°	3/16	3/8	2-1/8	**AV4275036**	Price	**AV4276036**	Price
1/2	45°	1/8	3/8	2-1/8	**AV4275044**	Price	**AV4276044**	Price
1/2	60°	7/32	3/8	2-1/8	**AV4275046**	Price	**AV4276046**	Price
3/4	45°	3/16	3/8	2-1/8	**AV4275064**	Price	**AV4276064**	Price
3/4	60°	5/16	3/8	2-1/8	**AV4275066**	Price	**AV4276066**	Price
1	45°	1/4	1/2	2-1/2	**AV4275084**	Price	**AV4276084**	Price
1	60°	7/16	1/2	2-1/2	**AV4275086**	Price	**AV4276086**	Price
1-3/8	45°	3/8	5/8	2-7/8	**AV4275114**	Price	**AV4276114**	Price
1-3/8	60°	9/16	5/8	2-7/8	**AV4275116**	Price	**AV4276116**	Price
1-7/8	45°	1/2	7/8	3-1/4	**AV4275154**	Price	**AV4276154**	Price
1-7/8	60°	13/16	7/8	3-1/4	**AV4275156**	Price	**AV4276156**	Price
2-1/4	45°	11/16	1	3-3/4	**AV4275184**	Price	**AV4276184**	Price
2-1/4	60°	1-1/16	1	3-3/4	**AV4275186**	Price	**AV4276186**	Price
2-1/2	45°	3/4	1	3-3/4	**AV4275204**	Price	**AV4276204**	Price
2-1/2	60°	1-1/8	1	3-3/4	**AV4275206**	Price	**AV4276206**	Price

Carbide Tipped Dovetail Cutters

- These cutters have a .020" radius



Dia. (in.)	Angle	Face Width (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
1/2	45°	5/32	3/8	2-1/8	**AV4274044**	Price
1/2	60°	7/32	3/8	2-1/8	**AV4274046**	Price
3/4	45°	1/4	3/8	2-1/4	**AV4274064**	Price
3/4	60°	1/4	3/8	2-1/4	**AV4274066**	Price
1	45°	5/16	1/2	2-1/2	**AV4274084**	Price
1	60°	3/8	1/2	2-1/2	**AV4274086**	Price
1-1/4	45°	5/16	5/8	2-3/4	**AV4274114**	Price
1-1/4	60°	1/2	5/8	2-3/4	**AV4274116**	Price
1-1/2	45°	1/2	3/4	3-1/4	**AV4274154**	Price
1-1/2	60°	5/8	3/4	3-1/4	**AV4274156**	Price
2	45°	5/8	1	4-1/4	**AV4274184**	Price
2	60°	3/4	1	4-1/4	**AV4274186**	Price
2-1/2	45°	3/4	1-1/4	4-3/8	**AV4274204**	Price
2-1/2	60°	7/8	1-1/4	4-3/8	**AV4274206**	Price
3	45°	1	1-1/4	4-1/2	**AV4274244**	Price
3	60°	1-1/8	1-1/4	4-1/2	**AV4274246**	Price

Dovetail Angular Cutters

High Speed Steel and Cobalt



PROCUT WHITNEY TOOL COMPANY, INC. PROCUT WHITNEY TOOL COMPANY, INC.

Degree of Angle - 45°												
				High Speed Steel				Cobalt				
				ProCut		Whitney Tool		ProCut		Price		
Dia. (in.)	Face Width (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	.040	1/4	2	-	-	**DS9010597**	Price	-	-	**DS9220597**	Price
3/16	3/64	1/4	2	-	-	**DS9010599**	Price	-	-	**DS9220599**	Price
1/4	1/16	1/4	2	-	-	**DS9010600**	Price	-	-	**DS9220600**	Price
3/8	1/8	3/8	2-1/8	**DJ50AC412**	Price	**DS9010260**	Price	**DJ55AC412CO**	Price	**DS9220260**	Price
1/2	5/32	3/8	2-1/8	**DJ50AC416**	Price	**DS9010261**	Price	**DJ55AC416CO**	Price	**DS9220261**	Price
3/4	1/4	3/8	2-1/8	**DJ50AC424**	Price	**DS9010262**	Price	**DJ55AC424CO**	Price	**DS9220262**	Price
1-3/8	7/16	5/8	2-7/8	**DJ50AC444**	Price	**DS9010264**	Price	**DJ55AC444CO**	Price	**DS9220264**	Price
1-7/8	9/16	7/8	3-1/4	**DJ50AC460**	Price	**DS9010265**	Price	**DJ55AC460CO**	Price	**DS9220265**	Price
2-1/4	5/8	1	3-3/4	**DJ50AC472**	Price	**DS9010266**	Price	**DJ55AC472CO**	Price	**DS9220266**	Price

Degree of Angle - 60°											
				High Speed Steel				Cobalt			
				ProCut		Whitney Tool		ProCut		Whitney Tool	
Dia. (in.)	Face Width (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/16	1/4	2	-	-	**DS9010612**	Price	-	-	**DS9220614**	Price
3/16	3/32	1/4	2	-	-	**DS9010614**	Price	-	-	**DS9220615**	Price
1/4	1/8	1/4	2	-	-	**DS9010615**	Price	-	-	**DS9220616**	Price
3/8	3/16	3/8	2-1/8	**DJ50AC612**	Price	**DS9010268**	Price	**DJ55AC612CO**	Price	**DS9220268**	Price
1/2	1/4	3/8	2-1/8	**DJ50AC616**	Price	**DS9010269**	Price	**DJ55AC616CO**	Price	**DS9220269**	Price
3/4	5/16	3/8	2-1/8	**DJ50AC624**	Price	**DS9010270**	Price	**DJ55AC624CO**	Price	**DS9220270**	Price
1-3/8	9/16	5/8	2-7/8	**DJ50AC644**	Price	**DS9010272**	Price	**DJ55AC644CO**	Price	**DS9220272**	Price
1-7/8	13/16	7/8	3-1/4	**DJ50AC660**	Price	**DS9010273**	Price	**DJ55AC660CO**	Price	**DS9220273**	Price
2-1/4	1-1/16	1	3-3/4	**DJ50AC672**	Price	**DS9010274**	Price	**DJ55AC672CO**	Price	**DS9220274**	Price

Carbide Tipped Cutters available upon request

PROCUT Shank Type Dovetail Cutter Sets

High Speed Steel or Cobalt



Type	No. of Pieces	Set Range (in.)	Angle	Material	Order No.	Price
Dovetail	5	1/2, 3/4, 1-3/8, 1-7/8, 2-1/4	45°	High Speed Steel	**DJ50AC4S**	Price
Dovetail	5	1/2, 3/4, 1-3/8, 1-7/8, 2-1/4	60°	High Speed Steel	**DJ50AC6S**	Price
Dovetail	5	1/2, 3/4, 1-3/8, 1-7/8, 2-1/4	45°	Cobalt	**DJ55AC4SCO**	Price
Dovetail	5	1/2, 3/4, 1-3/8, 1-7/8, 2-1/4	60°	Cobalt	**DJ55AC6SCO**	Price

MICRO 100 Solid Carbide Dovetail Cutters



Uncoated or AlTiN Coated

- Corner radii enhances tool strength and rigidity
- Engineered for superior rupture strength and exceptional machining versatility
- Manufactured with Micro 100's exclusive proprietary treating process
- Shank diameter tolerance: -.0001" to -.0003"
- Cutter diameter tolerance: +.000" -.002"
- Included angle tolerance: +/- 1°
- Length of cut tolerance: +.020" -.000"
- Maximum TIR: .0005"

Included Angle - 30°

						Uncoated		AlTiN	
Cutter Dia. (in.)	Cutter Length (in.)	Neck Length (in.)	Neck Dia. (in.)	No. of Flutes	OAL (in.)	Order No.	Price	Order No.	Price
1/8	.095	1/8	.080	2	1-1/2	**GE45T125030010**	Price	**GE45T125030010X**	Price
3/16	.127	1/8	.125	2	2	**GE45T187030010**	Price	**GE45T187030010X**	Price
1/4	.161	1/8	.170	2	2-1/2	**GE45T250030010**	Price	**GE45T250030010X**	Price
5/16	.220	5/16	.200	2	2-1/2	**GE45T312030010**	Price	**GE45T312030010X**	Price
3/8	.263	3/8	.240	3	2-1/2	**GE45T375030010**	Price	**GE45T375030010X**	Price
1/2	.347	1/2	.320	3	3	**GE45T500030010**	Price	**GE45T500030010X**	Price

Included Angle - 60°

						Uncoated		AlTiN	
Cutter Dia. (in.)	Cutter Length (in.)	Neck Length (in.)	Neck Dia. (in.)	No. of Flutes	OAL (in.)	Order No.	Price	Order No.	Price
1/8	.065	1/8	.065	2	1-1/2	**GE45T125060010**	Price	**GE45T125060010X**	Price
3/16	.092	1/8	.095	2	2	**GE45T187060010**	Price	**GE45T187060010X**	Price
1/4	.125	1/8	.120	2	2-1/2	**GE45T250060010**	Price	**GE45T250060010X**	Price
5/16	.162	5/16	.140	2	2-1/2	**GE45T312060010**	Price	**GE45T312060010X**	Price
3/8	.190	3/8	.170	3	2-1/2	**GE45T375060010**	Price	**GE45T375060010X**	Price
1/2	.255	1/2	.220	3	3	**GE45T500060010**	Price	**GE45T500060010X**	Price

Included Angle - 90°

						Uncoated		AlTiN	
Cutter Dia. (in.)	Cutter Length (in.)	Neck Length (in.)	Neck Dia. (in.)	No. of Flutes	OAL (in.)	Order No.	Price	Order No.	Price
1/8	.042	1/8	.070	2	1-1/2	**GE45T125090010**	Price	**GE45T125090010X**	Price
3/16	.048	1/8	.070	2	2	**GE45T187090010**	Price	**GE45T187090010X**	Price
1/4	.064	1/8	.150	2	2-1/2	**GE45T250090010**	Price	**GE45T250090010X**	Price
5/16	.095	5/16	.150	2	2-1/2	**GE45T312090010**	Price	**GE45T312090010X**	Price
3/8	.127	3/8	.150	3	2-1/2	**GE45T375090010**	Price	**GE45T375090010X**	Price
1/2	.164	1/2	.200	3	3	**GE45T500090010**	Price	**GE45T500090010X**	Price

Carbide Tipped Side Milling Cutters

For non-ferrous material:

- Use for production milling of aluminum, magnesium, zinc, brass, bronze, plastics and non-metals
- Very large flute capacity assures good chip flow and permits high feed rates.



For cast iron:

- Use for heavy production milling of cast iron and malleable iron
- Large flute capacity but more teeth permits high metal removal at moderate speeds and feeds



- **For steel and tougher, harder alloys:**
- Steel cutting grade of carbide permits the heavy chip loads recommended for milling steel



Tooth Type - Straight

			Cast Iron			Non-Ferrous Materials			Price		
Dia. (in.)	Face Width (in.)	Hole Size (in.)	No. of Teeth	Order No.	Price	No. of Teeth	Order No.	Price	No. of Teeth	Order No.	Price
3	1/4	1	6	**EG51016**	Price	4	**EG50016**	Price	6	**EG52016**	Price
3	5/16	1	6	**EG51018**	Price	4	**EG50018**	Price	6	**EG52018**	Price
3	3/8	1	6	**EG51020**	Price	4	**EG50020**	Price	6	**EG52020**	Price
3	7/16	1	-	**-**	-	4	**EG50022**	Price	-	**-**	-
3	1/2	1	6	**EG51024**	Price	4	**EG50024**	Price	6	**EG52024**	Price
4	1/4	1	8	**EG51040**	Price	4	**EG50040**	Price	8	**EG52040**	Price
4	5/16	1	8	**EG51042**	Price	4	**EG50042**	Price	8	**EG52042**	Price
4	3/8	1	8	**EG51044**	Price	4	**EG50044**	Price	8	**EG52044**	Price
4	3/8	1-1/4	8	**EG51046**	Price	4	**EG50046**	Price	8	**EG52046**	Price
4	7/16	1	-	**-**	-	4	**EG50048**	Price	-	**-**	-
4	1/2	1	8	**EG51050**	Price	4	**EG50050**	Price	8	**EG52050**	Price
4	1/2	1-1/4	8	**EG51052**	Price	4	**EG50052**	Price	8	**EG52052**	Price
4	9/16	1	8	**EG51054**	Price	4	**EG50054**	Price	-	**-**	-
4	5/8	1	8	**EG51056**	Price	4	**EG50056**	Price	8	**EG52056**	Price
4	5/8	1-1/4	8	**EG51058**	Price	4	**EG50058**	Price	8	**EG52058**	Price
4	3/4	1	8	**EG51060**	Price	4	**EG50060**	Price	-	**-**	-
4	3/4	1-1/4	8	**EG51062**	Price	4	**EG50062**	Price	-	**-**	-
5	7/16	1-1/4	-	**-**	-	6	**EG50080**	Price	-	**-**	-
5	1/2	1	10	**EG51082**	Price	6	**EG50082**	Price	10	**EG52082**	Price
5	1/2	1-1/4	10	**EG51084**	Price	6	**EG50084**	Price	10	**EG52084**	Price
5	9/16	1-1/4	10	**EG51086**	Price	6	**EG50086**	Price	10	**EG52086**	Price
5	5/8	1-1/4	10	**EG51088**	Price	6	**EG50088**	Price	10	**EG52088**	Price
5	3/4	1	10	**EG51090**	Price	6	**EG50090**	Price	-	**-**	-
5	3/4	1-1/4	10	**EG51092**	Price	6	**EG50092**	Price	-	**-**	-
6	1/2	1	12	**EG51108**	Price	6	**EG50108**	Price	12	**EG52108**	Price
6	1/2	1-1/4	12	**EG51110**	Price	6	**EG50110**	Price	12	**EG52110**	Price
6	5/8	1-1/4	12	**EG51112**	Price	6	**EG50112**	Price	12	**EG52112**	Price
6	3/4	1	12	**EG51114**	Price	6	**EG50114**	Price	-	**-**	-
6	3/4	1-1/4	12	**EG51116**	Price	6	**EG50116**	Price	-	**-**	-
8	3/4	1-1/4	12	**EG51140**	Price	8	**EG50140**	Price	-	**-**	-
8	3/4	1-1/2	12	**EG51142**	Price	8	**EG50142**	Price	-	**-**	-

Straight Tooth Side Milling Cutters

High Speed Steel

- For general purpose use
- Excellent for thin-walled parts, interrupted cuts or finish requirements
- Keo Milling “B” Style



			Keo Milling			ProCut		
Cutter Dia.	Face Width	Hole Size	No. of Teeth	Order No.	Price	No. of Teeth	Order No.	Price
2	3/16	1/2	14	**KE1005000**	Price	14	**DP5020061**	Price
2	3/16	5/8	14	**KE1005010**	Price	14	**DP5020062**	Price
2	1/4	1/2	14	**KE1005020**	Price	14	**DP5020081**	Price
2	1/4	5/8	14	**KE1005030**	Price	14	**DP5020082**	Price
2	1/4	7/8	-	**-**	-	14	**DP5020083**	Price
2	5/16	7/8	-	**-**	-	14	**DP5020103**	Price
2	3/8	1/2	14	**KE1005040**	Price	14	**DP5020121**	Price
2	3/8	5/8	14	**KE1005050**	Price	14	**DP5020122**	Price
2	3/8	7/8	-	**-**	-	14	**DP5020123**	Price
2	7/16	7/8	-	**-**	-	14	**DP5020143**	Price
2-1/2	3/16	7/8	-	**-**	-	16	**DP5025061**	Price
2-1/2	3/16	1	-	**-**	-	16	**DP5025062**	Price
2-1/2	1/4	7/8	16	**KE1005060**	Price	16	**DP5025081**	Price
2-1/2	1/4	1	-	**-**	-	16	**DP5025082**	Price
2-1/2	5/16	7/8	16	**KE1005070**	Price	16	**DP5025101**	Price
2-1/2	5/16	1	-	**-**	-	16	**DP5025102**	Price
2-1/2	3/8	7/8	16	**KE1005080**	Price	16	**DP5025121**	Price
2-1/2	3/8	1	-	**-**	-	16	**DP5025122**	Price
2-1/2	7/16	7/8	-	**-**	-	16	**DP5025141**	Price
2-1/2	7/16	1	-	**-**	-	16	**DP5025142**	Price
2-1/2	1/2	7/8	-	**-**	-	16	**DP5025161**	Price
2-1/2	1/2	1	-	**-**	-	16	**DP5025162**	Price
2-1/2	5/8	1	-	**-**	-	16	**DP5025202**	Price
3	3/16	1	20	**KE1005100**	Price	18	**DP5030061**	Price
3	7/32	1	20	**KE1005110**	Price	-	**-**	-
3	1/4	1	20	**KE1005120**	Price	18	**DP5030081**	Price
3	1/4	1-1/4	-	**-**	-	18	**DP5030082**	Price
3	9/32	1	20	**KE1005130**	Price	18	**DP5030091**	Price
3	5/16	1	20	**KE1005140**	Price	18	**DP5030101**	Price
3	11/32	1	20	**KE1005150**	Price	18	**DP5030111**	Price
3	3/8	1	20	**KE1005160**	Price	18	**DP5030121**	Price
3	3/8	1-1/4	-	**-**	-	18	**DP5030122**	Price
3	13/32	1	20	**KE1005170**	Price	18	**DP5030131**	Price
3	7/16	1	20	**KE1005180**	Price	18	**DP5030141**	Price
3	7/16	1-1/4	-	**-**	-	18	**DP5030142**	Price
3	1/2	1	20	**KE1005190**	Price	18	**DP5030161**	Price
3	1/2	1-1/4	-	**-**	-	18	**DP5030162**	Price
3	1/2	7/8	16	**KE1005090**	Price	-	**-**	-
3	9/16	1	20	**KE1005200**	Price	18	**DP5030181**	Price
3	5/8	1	20	**KE1005210**	Price	18	**DP5030201**	Price
3	11/16	1	20	**KE1005220**	Price	18	**DP5030221**	Price
3	3/4	1	20	**KE1005230**	Price	18	**DP5030241**	Price
3	3/4	1-1/4	-	**-**	-	18	**DP5030242**	Price
3	13/16	1	20	**KE1005240**	Price	18	**DP5030261**	Price
3	7/8	1	20	**KE1005250**	Price	18	**DP5030281**	Price
3	15/16	1	20	**KE1005260**	Price	18	**DP5030301**	Price
3	1	1	20	**KE1005270**	Price	18	**DP5030321**	Price
3	1	1-1/4	-	**-**	-	18	**DP5030322**	Price
3-1/2	3/16	1	-	**-**	-	20	**DP5035061**	Price
3-1/2	1/4	1	-	**-**	-	20	**DP5035081**	Price
3-1/2	5/16	1	-	**-**	-	20	**DP5035101**	Price
3-1/2	3/8	1	-	**-**	-	20	**DP5035121**	Price

			Keo Milling			ProCut		
Cutter Dia.	Face Width	Hole Size	No. of Teeth	Order No.	Price	No. of Teeth	Order No.	Price
3-1/2	1/2	1	-	**-**	-	20	**DP5035161**	Price
3-1/2	5/8	1	-	**-**	-	20	**DP5035201**	Price
4	3/16	1	-	**-**	-	22	**DP5040061**	Price
4	7/32	1	24	**KE1005281**	Price	22	**DP5040071**	Price
4	7/32	1-1/4	24	**KE1005290**	Price	-	**-**	-
4	1/4	1	24	**KE1005300**	Price	22	**DP5040081**	Price
4	1/4	1-1/4	24	**KE1005310**	Price	22	**DP5040082**	Price
4	9/32	1	24	**KE1005320**	Price	22	**DP5040091**	Price
4	9/32	1-1/4	24	**KE1005330**	Price	-	**-**	-
4	5/16	1	24	**KE1005340**	Price	22	**DP5040101**	Price
4	5/16	1-1/4	24	**KE1005350**	Price	22	**DP5040102**	Price
4	11/32	1	24	**KE1005360**	Price	22	**DP5040111**	Price
4	11/32	1-1/4	24	**KE1005370**	Price	-	**-**	-
4	3/8	1	24	**KE1005380**	Price	22	**DP5040121**	Price
4	3/8	1-1/4	24	**KE1005390**	Price	22	**DP5040122**	Price
4	13/32	1	24	**KE1005400**	Price	-	**-**	-
4	13/32	1-1/4	24	**KE1005410**	Price	22	**DP5040142**	Price
4	7/16	1	24	**KE1005420**	Price	22	**DP5040131**	Price
4	7/16	1-1/4	24	**KE1005430**	Price	22	**-**	-
4	1/2	1	24	**KE1005440**	Price	22	**DP5040161**	Price
4	1/2	1-1/4	24	**KE1005450**	Price	22	**DP5040162**	Price
4	9/16	1	24	**KE1005460**	Price	-	**-**	-
4	9/16	1-1/4	24	**KE1005470**	Price	22	**DP5040182**	Price
4	5/8	1	24	**KE1005480**	Price	22	**DP5040201**	Price
4	5/8	1-1/4	24	**KE1005490**	Price	22	**DP5040202**	Price
4	11/16	1	24	**KE1005500**	Price	-	**-**	-
4	11/16	1-1/4	24	**KE1005510**	Price	-	**-**	-
4	3/4	1	24	**KE1005520**	Price	22	**DP5040241**	Price
4	3/4	1-1/4	24	**KE1005530**	Price	22	**DP5040242**	Price
4	13/16	1	24	**KE1005540**	Price	-	**-**	-
4	13/16	1-1/4	24	**KE1005550**	Price	-	**-**	-
4	7/8	1	24	**KE1005560**	Price	22	**DP5040281**	Price
4	7/8	1-1/4	24	**KE1005570**	Price	22	**DP5040282**	Price
4	15/16	1	24	**KE1005580**	Price	22	**DP5040301**	Price
4	15/16	1-1/4	24	**KE1005590**	Price	22	**DP5040302**	Price
4	1	1	24	**KE1005600**	Price	22	**DP5040321**	Price
4	1	1-1/4	24	**KE1005610**	Price	22	**DP5040322**	Price
4	1-1/4	1-1/4	-	**-**	-	22	**DP5040402**	Price
4-1/2	1/2	1-1/4	-	**-**	-	24	**DP5045162**	Price
5	1/4	1	26	**KE1005626**	Price	24	**DP5050081**	Price
5	1/4	1-1/4	26	**KE1005630**	Price	24	**DP5050082**	Price
5	9/32	1	26	**KE1005640**	Price	24	**DP5050091**	Price
5	9/32	1-1/4	26	**KE1005650**	Price	-	**-**	-
5	5/16	1	26	**KE1005660**	Price	24	**DP5050101**	Price
5	5/16	1-1/4	26	**KE1005670**	Price	24	**DP5050102**	Price
5	11/32	1	26	**KE1005680**	Price	-	**-**	-
5	11/32	1-1/4	26	**KE1005690**	Price	-	**-**	-
5	3/8	1	26	**KE1005700**	Price	24	**DP5050121**	Price
5	3/8	1-1/4	26	**KE1005710**	Price	24	**DP5050122**	Price
5	13/32	1	26	**KE1005720**	Price	-	**-**	-
5	13/32	1-1/4	26	**KE1005730**	Price	-	**-**	-
5	7/16	1	26	**KE1005740**	Price	-	**-**	-

Straight Tooth Side Milling Cutters

High Speed Steel

- For general purpose use
- Excellent for thin-walled parts, interrupted cuts or finish requirements
- Keo Milling “B” Style



			Keo Milling			ProCut		
Cutter Dia.	Face Width	Hole Size	No. of Teeth	Order No.	Price	No. of Teeth	Order No.	Price
5	7/16	1-1/4	26	KE1005750	Price	24	DP5050142	Price
5	1/2	1	26	KE1005760	Price	24	DP5050161	Price
5	1/2	1-1/4	26	KE1005770	Price	24	DP5050162	Price
5	9/16	1	26	KE1005780	Price	-	-	-
5	9/16	1-1/4	26	KE1005790	Price	24	DP5050182	Price
5	5/8	1	26	KE1005800	Price	24	DP5050201	Price
5	5/8	1-1/4	26	KE1005810	Price	24	DP5050202	Price
5	11/16	1	26	KE1005820	Price	24	DP5050221	Price
5	11/16	1-1/4	26	KE1005830	Price	-	-	-
5	3/4	1	26	KE1005840	Price	24	DP5050241	Price
5	3/4	1-1/4	26	KE1005850	Price	24	DP5050242	Price
5	13/16	1	26	KE1005860	Price	24	DP5050261	Price
5	13/16	1-1/4	26	KE1005870	Price	24	DP5050262	Price
5	7/8	1	26	KE1005880	Price	24	DP5050281	Price
5	7/8	1-1/4	26	KE1005890	Price	24	DP5050282	Price
5	15/16	1	26	KE1005900	Price	24	DP5050301	Price
5	15/16	1-1/4	26	KE1005910	Price	24	DP5050302	Price
5	1	1	26	KE1005920	Price	-	-	-
5	1	1-1/4	26	KE1005930	Price	24	DP5050322	Price
6	1/4	1	-	-	-	26	DP5060081	Price
6	1/4	1-1/4	30	KE1005945	Price	26	DP5060082	Price
6	9/32	1-1/4	30	KE1005950	Price	26	DP5060092	Price
6	5/16	1	-	-	-	26	DP5060101	Price
6	5/16	1-1/4	30	KE1005960	Price	26	DP5060102	Price
6	11/32	1-1/4	30	KE1005965	Price	26	DP5060112	Price
6	3/8	1	-	-	-	26	DP5060121	Price
6	3/8	1-1/4	30	KE1005980	Price	26	DP5060122	Price
6	13/32	1-1/4	30	KE1005990	Price	-	-	-
6	7/16	1	-	-	-	26	DP5060141	Price
6	7/16	1-1/4	30	KE1006000	Price	26	DP5060142	Price
6	1/2	1	30	KE1006010	Price	26	DP5060161	Price
6	1/2	1-1/4	30	KE1006020	Price	26	DP5060162	Price
6	9/16	1	-	-	-	26	DP5060181	Price
6	9/16	1-1/4	30	KE1006030	Price	26	DP5060182	Price
6	5/8	1-1/4	30	KE1006040	Price	26	DP5060202	Price
6	11/16	1	-	-	-	26	DP5060221	Price
6	11/16	1-1/4	30	KE1006050	Price	26	DP5060222	Price
6	3/4	1	30	KE1006060	Price	26	DP5060241	Price
6	3/4	1-1/4	30	KE1006070	Price	26	DP5060242	Price
6	13/16	1	-	-	-	26	DP5060261	Price
6	13/16	1-1/4	30	KE1006080	Price	26	DP5060262	Price
6	7/8	1-1/4	30	KE1006090	Price	26	DP5060282	Price
6	15/16	1-1/4	30	KE1006100	Price	26	-	-
6	1	1-1/4	30	KE1006110	Price	26	DP5060322	Price
7	1/4	1-1/4	32	KE1006120	Price	-	-	-
7	5/16	1-1/4	32	KE1006130	Price	-	-	-
7	3/8	1-1/4	32	KE1006140	Price	-	-	-
7	7/16	1-1/4	32	KE1006150	Price	-	-	-
7	1/2	1-1/4	32	KE1006160	Price	-	-	-
7	9/16	1-1/4	32	KE1006170	Price	-	-	-

			Keo Milling			ProCut		
Cutter Dia.	Face Width	Hole Size	No. of Teeth	Order No.	Price	No. of Teeth	Order No.	Price
7	5/8	1-1/4	32	KE1006180	Price	-	-	-
7	11/16	1-1/4	32	KE1006190	Price	28		Price
7	3/4	1-1/4	32	KE1006200	Price	-	-	-
7	13/16	1-1/4	32	KE1006210	Price	28	DP5070261	Price
7	7/8	1-1/4	32	KE1006220	Price	28	DP5070281	Price
7	15/16	1-1/4	32	KE1006230	Price	-	-	-
7	1	1-1/4	32	KE1006240	Price	28	DP5070321	Price
8	1/4	1	-	-	-	32	DP5080081	Price
8	1/4	1-1/4	34	KE1006250	Price	32	DP5080082	Price
8	5/16	1	-	-	-	32	DP5080101	Price
8	5/16	1-1/4	34	KE1006260	Price	-	-	-
8	3/8	1-1/4	34	KE1006270	Price	32	DP5080122	Price
8	7/16	1-1/4	34	KE1006280	Price	-	-	-
8	1/2	1-1/4	34	KE1006290	Price	32	DP5080162	Price
8	9/16	1-1/4	34	KE1006300	Price	-	-	-
8	5/8	1-1/4	34	KE1006310	Price	32	DP5080202	Price
8	11/16	1-1/4	34	KE1006320	Price	-	-	-
8	3/4	1-1/4	34	KE1006330	Price	32	DP5080242	Price
8	13/16	1-1/4	34	KE1006340	Price	32	DP5080262	Price
8	7/8	1-1/4	34	KE1006350	Price	-	-	-
8	15/16	1-1/4	34	KE1006360	Price	32	DP5080302	Price
8	1	1-1/4	34	KE1006370	Price	32	DP5080322	Price
9	1/4	1-1/4	36	KE1006380	Price	-	-	-
9	5/16	1-1/4	36	KE1006390	Price	-	-	-
9	3/8	1-1/4	36	KE1006400	Price	-	-	-
9	7/16	1-1/4	36	KE1006410	Price	-	-	-
9	1/2	1-1/4	36	KE1006420	Price	-	-	-
9	9/16	1-1/4	36	KE1006430	Price	-	-	-
9	5/8	1-1/4	36	KE1006440	Price	-	-	-
9	11/16	1-1/4	36	KE1006450	Price	-	-	-
9	3/4	1-1/4	36	KE1006460	Price	34	DP5090241	Price
9	13/16	1-1/4	36	KE1006470	Price	-	-	-
9	7/8	1-1/4	36	KE1006480	Price	-	-	-
9	15/16	1-1/4	36	KE1006490	Price	-	-	-
9	1	1-1/4	36	KE1006500	Price	-	-	-
10	1/4	1-1/2	38	KE1006510	Price	-	-	-
10	5/16	1-1/2	38	KE1006520	Price	-	-	-
10	3/8	1-1/2	38	KE1006530	Price	-	-	-
10	7/16	1-1/2	38	KE1006540	Price	-	-	-
10	1/2	1-1/2	38	KE1006550	Price	-	-	-
10	9/16	1-1/2	38	KE1006560	Price	36	DP50100182	Price
10	5/8	1-1/2	38	KE1006570	Price	36	DP50100202	Price
10	11/16	1-1/2	38	KE1006580	Price	-	-	-
10	3/4	1-1/2	38	KE1006590	Price	-	-	-
10	13/16	1-1/2	38	KE1006600	Price	36	DP50100262	Price
10	7/8	1-1/2	38	KE1006610	Price	36	DP50100282	Price
10	15/16	1-1/2	38	KE1006620	Price	36	DP50100302	Price
10	1	1-1/2	38	KE1006630	Price	-	-	-

Carbide Tipped Side Milling Cutters for Stainless Steel and Hi-Tech Alloys



- Use for production milling of stainless steel and related alloy steels, including AISI Type 200 thru 350 steels
- Larger number of teeth

Dia. (in.)	Face Width (in.)	Hole Size (in.)	No. of Teeth	Order No.	Price
3	1/4	1	8	**EG54016**	Price
3	5/16	1	8	**EG54018**	Price
3	3/8	1	8	**EG54020**	Price
3	1/2	1	8	**EG54024**	Price
4	1/4	1	10	**EG54040**	Price
4	5/16	1	10	**EG54042**	Price
4	3/8	1	10	**EG54044**	Price
4	3/8	1-1/4	10	**EG54046**	Price
4	1/2	1	10	**EG54050**	Price
4	1/2	1-1/4	10	**EG54052**	Price
4	5/8	1	10	**EG54056**	Price
4	5/8	1-1/4	10	**EG54058**	Price
4	3/4	1	10	**EG54060**	Price
4	3/4	1-1/4	10	**EG54062**	Price
5	1/2	1	12	**EG54082**	Price
5	1/2	1-1/4	12	**EG54084**	Price
5	5/8	1-1/4	12	**EG54088**	Price
5	3/4	1-1/4	12	**EG54094**	Price
6	1/2	1	14	**EG54108**	Price
6	1/2	1-1/4	14	**EG54110**	Price
6	5/8	1-1/4	14	**EG54112**	Price
6	3/4	1	14	**EG54114**	Price
6	3/4	1-1/4	14	**EG54116**	Price
8	3/4	1-1/4	14	**EG54140**	Price

PROCUT Double Angle Milling Cutters

High Speed Steel 45° — 60° — 90° Angles



Dia. (in.)	Face Width (in.)	Hole Dia. (in.)	Angle	No. of Teeth	Order No.	Price
2-3/4	1/2	1	45°	18	**DS525718005**	Price
2-3/4	1/2	1	60°	18	**DS525718010**	Price
2-3/4	1/2	1	90°	18	**DS525718015**	Price
3	3/4	1	60°	22	**DS525718035**	Price
3	3/4	1	90°	22	**DS525718040**	Price
3	5/8	1	45°	22	**DS525718020**	Price
3	5/8	1	60°	22	**DS525718025**	Price
3	5/8	1	90°	22	**DS525718030**	Price
4	1	1-1/4	60°	26	**DS525718090**	Price
4	1	1-1/4	90°	26	**DS525718095**	Price
4	1/2	1-1/4	45°	26	**DS525718045**	Price
4	1/2	1-1/4	60°	26	**DS525718050**	Price
4	1/2	1-1/4	90°	26	**DS525718055**	Price
4	3/4	1	45°	26	**DS525718060**	Price
4	3/4	1	60°	26	**DS525718065**	Price
4	3/4	1	90°	26	**DS525718070**	Price
4	3/4	1-1/4	45°	26	**DS525718075**	Price
4	3/4	1-1/4	60°	26	**DS525718080**	Price
4	3/4	1-1/4	90°	26	**DS525718085**	Price
5	1	1-1/4	45°	28	**DS525718115**	Price
5	1	1-1/4	60°	28	**DS525718120**	Price
6	1	1-1/4	45°	30	**DS525718145**	Price
6	1	1-1/4	60°	30	**DS525718150**	Price
6	1-1/2	1-1/4	45°	30	**DS525718160**	Price
6	3/4	1-1/4	45°	30	**DS525718130**	Price
6	3/4	1-1/4	60°	30	**DS525718135**	Price
6	3/4	1-1/4	90°	30	**DS525718140**	Price

PROCUT Single Angle Milling Cutters

High Speed Steel Right Hand and Left Hand • 45° and 60° Angles



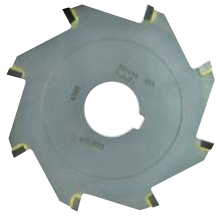
Left Hand



Right Hand

					Left Hand		Right Hand	
Dia. (in.)	Face Width (in.)	Hole Size (in.)	Angle	No. of Teeth	Order No.	Price	Order No.	Price
-	-	-	-	-	-	-	**DS505712005**	Price
2-1/2	1/2	7/8	60°	18	**DS515715010**	Price	**DS505712010**	Price
2-3/4	1/2	1	45°	18	**DS515715015**	Price	**DS505712015**	Price
2-3/4	1/2	1	60°	18	**DS515715020**	Price	**DS505712020**	Price
-	-	-	-	-	-	-	**DS505712025**	Price
3	1/2	1-1/4	60°	22	**DS515715030**	Price	**DS505712030**	Price
3	5/8	1	45°	22	**DS515715035**	Price	**DS505712035**	Price
3	5/8	1	60°	22	-	-	**DS505712040**	Price
3	5/8	1-1/4	60°	22	**DS515715050**	Price	**DS505712050**	Price
3	3/4	1	45°	22	-	-	**DS505712055**	Price
3	3/4	1	60°	22	**DS515715060**	Price	**DS505712060**	Price
3	3/4	1-1/4	60°	22	**DS515715070**	Price	**DS505712070**	Price
4	1/2	1	45°	26	**DS515715075**	Price	**DS505712075**	Price
4	1/2	1	60°	26	-	-	**DS505712080**	Price
4	1/2	1-1/4	60°	26	-	-	**DS505712090**	Price
4	1/2	1-1/4	45°	26	**DS515715085**	Price	-	-
4	3/4	1	45°	26	**DS515715095**	Price	**DS505712095**	Price
-	-	-	-	-	-	-	**DS505712100**	Price
4	3/4	1-1/4	45°	26	**DS515715105**	Price	**DS505712105**	Price
4	3/4	1-1/4	60°	26	**DS515715110**	Price	**DS505712110**	Price
4	1	1-1/4	45°	26	**DS515715115**	Price	**DS505712115**	Price
-	-	-	-	-	-	-	**DS505712120**	Price
5	3/4	1-1/4	60°	28	**DS515715130**	Price	**DS505712130**	Price
-	-	-	-	-	-	-	**DS505712135**	Price
5	1	1-1/4	60°	28	-	-	**DS505712140**	Price
6	3/4	1-1/4	45°	30	-	-	**DS505712145**	Price
6	3/4	1-1/4	60°	30	**DS515715150**	Price	-	-
6	1	1-1/4	60°	30	**DS515715160**	Price	-	-

Carbide Tipped Metal Slitting Saws



For Use With - Non-Ferrous Materials					
Dia. (in.)	Face Width (in.)	Hole Size (in.)	No. of Teeth	Order No.	Price
4	3/32	1	6	**EF50011**	Price
4	1/8	1	6	**EF50013**	Price
4	3/16	1	6	**EF50015**	Price
6	1/8	1-1/4	8	**EF50027**	Price
8	1/8	1-1/4	10	**EF50043**	Price

For Use With - Cast Iron					
Dia. (in.)	Face Width (in.)	Hole Size (in.)	No. of Teeth	Order No.	Price
4	1/8	1	8	**EF51011**	Price
4	3/16	1	8	**EF51013**	Price
6	1/8	1-1/4	12	**EF51025**	Price
6	3/16	1-1/4	12	**EF51027**	Price
6	1/4	1-1/4	12	**EF51029**	Price
8	3/16	1-1/4	16	**EF51041**	Price
8	1/4	1-1/4	16	**EF51043**	Price

For Use With - Steel					
Dia. (in.)	Face Width (in.)	Hole Size (in.)	No. of Teeth	Order No.	Price
4	1/8	1	8	**EF52011**	Price
4	3/16	1	8	**EF52013**	Price
6	1/8	1-1/4	12	**EF52025**	Price
6	3/16	1-1/4	12	**EF52027**	Price
6	1/4	1-1/4	12	**EF52029**	Price

For Use With - Steel					
Dia. (in.)	Face Width (in.)	Hole Size (in.)	No. of Teeth	Order No.	Price
8	3/16	1-1/4	16	**EF52041**	Price
8	1/4	1-1/4	16	**EF52043**	Price

For Use With - Stainless Steel					
Dia. (in.)	Face Width (in.)	Hole Size (in.)	No. of Teeth	Order No.	Price
3	3/32	1	8	**EF53003**	Price
3	1/8	1	8	**EF53004**	Price
3	3/16	1	8	**EF53006**	Price
4	3/32	1	10	**EF53009**	Price
4	1/8	1	10	**EF53010**	Price
4	3/16	1	10	**EF53012**	Price
5	3/32	1	12	**EF53015**	Price
5	1/8	1	12	**EF53017**	Price
5	3/16	1	12	**EF53019**	Price
6	1/8	1-1/4	14	**EF53021**	Price
6	3/16	1-1/4	14	**EF53023**	Price
6	1/4	1-1/4	14	**EF53025**	Price

Concave Milling Cutters

High Speed Steel



Dia. of Circle (in.)	Cutter Dia. (in.)	Hole Size (in.)	Order No.	Price
1/8	2-1/4	1	**ED51CC040**	Price
5/32	2-1/4	1	**ED51CC050**	Price
3/16	2-1/4	1	**ED51CC060**	Price
7/32	2-1/4	1	**ED51CC070**	Price
1/4	2-1/2	1	**ED51CC080**	Price
9/32	2-1/2	1	**ED51CC090**	Price
5/16	2-3/4	1	**ED51CC100**	Price
3/8	2-3/4	1	**ED51CC120**	Price
7/16	3	1	**ED51CC140**	Price
1/2	2-1/4	7/8	**ED51CC161**	Price
9/16	3	1	**ED51CC180**	Price
5/8	2-3/4	1	**ED51CC202**	Price
5/8	3	1	**ED51CC201**	Price
5/8	3-1/2	1-1/4	**ED51CC200**	Price
11/16	3	1	**ED51CC220**	Price
3/4	3	1	**ED51CC240**	Price
3/4	3-3/4	1-1/4	**ED51CC241**	Price
7/8	3-1/4	1	**ED51CC280**	Price
15/16	3-1/2	1	**ED51CC300**	Price
1	3-1/4	1	**ED51CC320**	Price
1	4-1/4	1-1/4	**ED51CC321**	Price
1-1/16	4	1-1/4	**ED51CC340**	Price
1-1/4	4	1-1/4	**ED51CC400**	Price
1-1/2	4-1/4	1-1/4	**ED51CC480**	Price
1-3/4	5-1/2	1-1/4	**ED51CC560**	Price
1-7/8	6	1-1/2	**ED51CC600**	Price

Convex Milling Cutters

High Speed Steel



Circle Dia. (in.)	Cutter Dia. (in.)	Hole Size (in.)	Order No.	Price
3/32	2-1/4	1	**ED50CV030**	Price
1/8	2	7/8	**ED50CV040**	Price
1/8	2-1/4	1	**ED50CV041**	Price
5/32	2-1/4	1	**ED50CV050**	Price
3/16	2-1/4	1	**ED50CV061**	Price
1/4	2	7/8	**ED50CV080**	Price
1/4	2-1/2	1	**ED50CV081**	Price
1/4	2-1/4	1	**ED50CV082**	Price
9/32	2-1/2	1	**ED50CV090**	Price
5/16	2-3/4	1	**ED50CV100**	Price
11/32	2-3/4	1	**ED50CV110**	Price
3/8	2-1/4	7/8	**ED50CV120**	Price
3/8	2-3/4	1	**ED50CV121**	Price
13/32	2-3/4	1	**ED50CV130**	Price
7/16	3	1	**ED50CV140**	Price
1/2	3	1	**ED50CV161**	Price
9/16	2-3/4	1	**ED50CV180**	Price
9/16	3	1	**ED50CV181**	Price
5/8	2-3/4	1	**ED50CV200**	Price
5/8	3	1	**ED50CV201**	Price
5/8	3-1/2	1-1/4	**ED50CV202**	Price
11/16	3	1	**ED50CV220**	Price
3/4	3-3/4	1-1/4	**ED50CV241**	Price
7/8	3-1/4	1	**ED50CV280**	Price
7/8	4	1-1/4	**ED50CV281**	Price
1-3/8	4-1/4	1-1/4	**ED50CV440**	Price
1-1/2	4-1/4	1-1/4	**ED50CV480**	Price
1-5/8	5-1/2	1-1/4	**ED50CV520**	Price

PROCUT Jewelers Slotting Saws

High Speed Steel

- Designed for cutting off thin tubing and wire and for slotting very thin material



			1/4" Hole	5/16" Hole	3/8" Hole	1/2" Hole	
Dia. (in.)	Thick-ness	No. of Teeth	Order No.	Order No.	Order No.	Order No.	Price
1	.008	98	DZ53746001	DZ53746002	DZ53746003	DZ53746004	Price
1	.010	98	-	DZ53746007	DZ53746005	-	Price
1	.012	98	DZ53746011	-	DZ53746010	DZ53746013	Price
1	.014	76	DZ53746016	DZ53746017†	DZ53746015	DZ53746018	Price
1	.016	76	DZ53746021	DZ53746022†	DZ53746020	DZ53746023	Price
1	.018	76	DZ53746026	DZ53746027†	DZ53746025	DZ53746028	Price
1	.020	76	DZ53746031	DZ53746032	DZ53746030	DZ53746033	Price
1	.023	76	-	DZ53746037†	DZ53746035	DZ53746038	Price
1	.025	76	DZ53746039	DZ53746041†	DZ53746040	DZ53746042	Price
1	.028	76	DZ53746043	DZ53746044†	DZ53746045	DZ53746046	Price
1	.032	76	DZ53746047	-	DZ53746050	DZ53746049	Price
1-1/4	.008	120	-	DZ53746051†	DZ53746052	DZ53746053	Price
1-1/4	.010	120	-	-	DZ53746055	DZ53746056	Price
1-1/4	.012	120	-	DZ53746059†	DZ53746060	DZ53746061	Price
1-1/4	.014	98	-	DZ53746064†	DZ53746065	DZ53746066	Price
1-1/4	.016	98	-	-	DZ53746070	DZ53746071	Price
1-1/4	.018	98	-	DZ53746074	-	DZ53746076	Price
1-1/4	.020	98	-	DZ53746079	DZ53746080	DZ53746081	Price
1-1/4	.023	98	-	DZ53746084	DZ53746085	-	Price
1-1/4	.025	98	-	DZ53746089	DZ53746090	-	Price
1-1/4	.028	98	-	-	DZ53746095	DZ53746096	Price
1-1/4	.032	98	-	-	DZ53746100	DZ53746101	Price
1-1/2	.008	140	-	-	DZ53746102	DZ53746103	Price
1-1/2	.010	140	-	-	DZ53746104	DZ53746105	Price
1-1/2	.012	140	-	-	DZ53746109	DZ53746110	Price
1-1/2	.014	110	-	-	DZ53746114	DZ53746115	Price
1-1/2	.016	110	-	-	DZ53746119	DZ53746120	Price
1-1/2	.018	110	-	-	DZ53746124	DZ53746125	Price
1-1/2	.020	110	-	-	DZ53746129	DZ53746130	Price
1-1/2	.023	110	-	-	-	DZ53746135	Price
1-1/2	.025	110	-	-	DZ53746139	DZ53746140	Price
1-1/2	.028	110	-	-	DZ53746144	DZ53746145	Price
1-1/2	.032	110	-	-	DZ53746149	DZ53746150	Price
1-3/4	.008	160	-	-	-	DZ53746153	Price
1-3/4	.010	160	-	-	DZ53746154	-	Price
1-3/4	.012	160	-	-	DZ53746159	DZ53746160	Price
1-3/4	.014	132	-	-	DZ53746164	DZ53746165	Price
1-3/4	.016	132	-	-	DZ53746169†	DZ53746170	Price
1-3/4	.018	132	-	-	DZ53746174	DZ53746175	Price
1-3/4	.020	132	-	-	DZ53746179	DZ53746180	Price
1-3/4	.023	132	-	-	-	DZ53746185	Price
1-3/4	.025	132	-	-	DZ53746189	DZ53746190	Price
1-3/4	.032	132	-	-	DZ53746199	DZ53746200	Price
2	.008	190	-	-	DZ53746202	DZ53746203	Price
2	.010	190	-	-	DZ53746204	DZ53746205	Price
2	.012	190	-	-	DZ53746209	DZ53746210	Price
2	.014	152	-	-	DZ53746214	DZ53746215	Price
2	.016	152	-	-	DZ53746219	DZ53746220	Price
2	.018	152	-	-	DZ53746224	DZ53746225	Price
2	.020	152	-	-	DZ53746229	DZ53746230	Price
2	.025	152	-	-	DZ53746239	DZ53746240	Price
2	.028	152	-	-	DZ53746244	DZ53746245	Price
2	.032	110	-	-	DZ53746249	DZ53746250	Price
2	.035	110	-	-	DZ53746254	DZ53746255	Price
2	.036	110	-	-	-	DZ53746258	Price
2	.040	110	-	-	DZ53746259	DZ53746260	Price
2	.045	110	-	-	-	DZ53746265	Price
2	.051	110	-	-	DZ53746269	DZ53746270	Price
2	.057	110	-	-	DZ53746274	DZ53746275	Price
2-1/4	.010	210	-	-	-	DZ53746277	Price
2-1/2	.010	240	-	-	-	DZ53746280	Price
2-1/2	.012	240	-	-	-	DZ53746285	Price
2-1/2	.014	190	-	-	-	DZ53746290	Price

			1/2" Hole	3/4" Hole	1" Hole	
Dia. (in.)	Thick-ness	No. of Teeth	Order No.	Order No.	Order No.	Price
2-1/2	.016	190	DZ53746295	-	-	Price
2-1/2	.018	190	DZ53746300	-	-	Price
2-1/2	.020	190	DZ53746305	-	-	Price
2-1/2	.023	190	DZ53746310	-	-	Price
2-1/2	.028	190	DZ53746320	-	-	Price
2-1/2	.035	140	DZ53746330	-	-	Price
2-1/2	.045	140	DZ53746340	-	-	Price
2-1/2	.051	140	DZ53746345	-	-	Price
2-1/2	.057	140	DZ53746350	-	-	Price
3	.010	280	DZ53746355	DZ53746430	DZ53746505	Price
3	.012	280	DZ53746360	-	DZ53746510	Price
3	.014	230	DZ53746365	DZ53746440†	DZ53746515	Price
3	.016	230	DZ53746370	DZ53746445†	DZ53746520	Price
3	.018	230	DZ53746375	DZ53746450†	DZ53746525	Price
3	.020	230	DZ53746380	-	DZ53746530	Price
3	.023	230	-	DZ53746460†	DZ53746535	Price
3	.025	230	DZ53746390	-	DZ53746540	Price
3	.028	230	DZ53746395	DZ53746470	DZ53746545	Price
3	.032	168	DZ53746400	DZ53746475	DZ53746550	Price
3	.035	168	DZ53746405	DZ53746480	DZ53746555	Price
3	.040	168	DZ53746410	DZ53746485	DZ53746560	Price
3	.045	168	DZ53746415	DZ53746490†	DZ53746565	Price
3	.051	168	DZ53746420	DZ53746495	DZ53746570	Price
3	.057	168	DZ53746425	-	DZ53746575	Price
4	.016	310	DZ53746580	-	-	Price
4	.018	310	DZ53746585	DZ53746650†	DZ53746715	Price
4	.020	310	DZ53746590	-	DZ53746720	Price
4	.023	310	DZ53746595	DZ53746660†	DZ53746725	Price
4	.025	310	DZ53746600	-	DZ53746730	Price
4	.028	310	DZ53746605	-	DZ53746735	Price
4	.032	220	DZ53746610	DZ53746675	DZ53746740	Price
4	.035	220	DZ53746615	-	DZ53746745	Price
4	.040	220	DZ53746620	DZ53746685	DZ53746750	Price
4	.045	220	-	DZ53746690	DZ53746755	Price
4	.051	220	DZ53746630	DZ53746695	DZ53746760	Price
4	.057	220	DZ53746635	DZ53746700	DZ53746765	Price
4	.064	220	DZ53746640	DZ53746705	DZ53746770	Price
5	.025	280	DZ53746785	-	-	Price
5	.028	280	DZ53746790	-	DZ53746845	Price
5	.032	280	DZ53746795	-	DZ53746850	Price
5	.035	280	DZ53746800	-	DZ53746855	Price
5	.040	280	DZ53746805	-	DZ53746860	Price
5	.045	280	DZ53746810	-	DZ53746865	Price
5	.051	280	DZ53746815	-	DZ53746870	Price
5	.057	280	DZ53746820	-	DZ53746875	Price
5	.064	280	DZ53746825	-	DZ53746880	Price
6	.040	340	DZ53746895	-	-	Price
6	.045	340	DZ53746900	-	DZ53746935	Price
6	.051	232	DZ53746905	-	DZ53746940	Price
6	.057	232	DZ53746910†	-	DZ53746945	Price
6	.064	232	DZ53746915	-	DZ53746950	Price
6	.072	232	DZ53746952†	-	DZ53746953	Price
6	.081	232	DZ53746955†	-	DZ53746956	Price
6	.091	232	DZ53746958†	-	DZ53746959	Price
6	.102	232	DZ53746961†	-	DZ53746962	Price
6	.114	232	-	-	DZ53746965	Price
6	.128	232	-	-	DZ53746968	Price

†Items may have lower prices

Staggered Tooth Side Chip Slitting Saws

High Speed Steel

- Excellent for deep slotting
- Free cutting
- Recommended where chip packing is a problem
- Keo Milling “MS” Style



			Keo Milling			ProCut		
Dia.	Thick-ness	Hole Size	No. of Teeth	Order No.	Price	No. of Teeth	Order No.	Price
3	1/16	1	36	**KE1009270**	Price	-	**-**	-
3	3/32	1	28	**KE1007500**	Price	-	**-**	-
3	1/8	1	28	**KE1007510**	Price	32	**DX503081**	Price
3	5/32	1	28	**KE1007520**	Price	32	**DX503101**	Price
3	3/16	1	28	**KE1007530**	Price	32	**DX503121**	Price
3	7/32	1	28	**KE1007540**	Price	-	**-**	-
3	1/4	1	28	**KE1007550**	Price	32	**DX503161**	Price
4	3/32	1	32	**KE1007560**	Price	-	**-**	-
4	3/32	1-1/4	32	**KE1007570**	Price	-	**-**	-
4	1/8	1	32	**KE1007580**	Price	34	**DX504081**	Price
4	1/8	1-1/4	32	**KE1007590**	Price	34	**DX504082**	Price
4	5/32	1	32	**KE1007600**	Price	34	**DX504101**	Price
4	5/32	1-1/4	32	**KE1007610**	Price	34	**DX504102**	Price
4	3/16	1	32	**KE1007620**	Price	34	**DX504121**	Price
4	3/16	1-1/4	32	**KE1007630**	Price	-	**-**	-
4	1/4	1	32	**KE1007660**	Price	34	**DX504161**	Price
4	1/4	1-1/4	32	**KE1007670**	Price	34	**DX504162**	Price
5	3/32	1	36	**KE1007680**	Price	-	**-**	-
5	3/32	1-1/4	36	**KE1007690**	Price	-	**-**	-
5	1/8	1	36	**KE1007700**	Price	-	**-**	-
5	1/8	1-1/4	36	**KE1007710**	Price	38	**DX505082**	Price
5	5/32	1	36	**KE1007720**	Price	38	**DX505101**	Price
5	5/32	1-1/4	36	**KE1007730**	Price	-	**-**	-
5	3/16	1	36	**KE1007740**	Price	38	**DX505121**	Price
5	3/16	1-1/4	36	**KE1007750**	Price	38	**DX505122**	Price
5	1/4	1	36	**KE1007780**	Price	38	**DX505161**	Price
5	1/4	1-1/4	36	**KE1007790**	Price	-	**-**	-
6	1/8	1	-	**-**	-	42	**DX506081**	Price
6	1/8	1-1/4	-	**-**	-	42	**DX506082**	Price
6	5/32	1	40	**KE1007820**	Price	-	**-**	-
6	5/32	1-1/4	40	**KE1007830**	Price	42	**DX506102**	Price
6	3/16	1	40	**KE1007840**	Price	42	**DX506121**	Price
6	3/16	1-1/4	40	**KE1007850**	Price	42	**DX506122**	Price
6	1/4	1	40	**KE1007880**	Price	42	**DX506161**	Price
6	1/4	1-1/4	40	**KE1007890**	Price	42	**DX506162**	Price
6	3/8	1	40	**KE1007900**	Price	-	**-**	-
6	3/8	1-1/4	40	**KE1007910**	Price	-	**-**	-
8	3/16	1-1/4	48	**KE1008000**	Price	50	**DX508122**	Price
8	1/4	1-1/4	48	**KE1008040**	Price	50	**DX508162**	Price
8	3/8	1-1/4	48	**KE1008060**	Price	-	**-**	-
10	3/16	1-1/4	56	**KE1008080**	Price	50	**DX5010122**	Price
10	1/4	1-1/4	56	**KE1008120**	Price	50	**DX5010162**	Price
10	3/8	1-1/4	56	**KE1008140**	Price	-	**-**	-

Straight Tooth Side Chip Slitting Saws

High Speed Steel

- Excellent for slotting and plunging
- Fully ground surfaces
- Recommended for thin-walled parts
- Keo Milling “MT” Style



			Keo Milling			ProCut		
Dia.	Thick-ness	Hole Size	No. of Teeth	Order No.	Price	No. of Teeth	Order No.	Price
2	1/8	5/8	-	**-**	-	22	**DW501081**	Price
2	3/32	5/8	-	**-**	-	22	**DW501061**	Price
2	5/32	5/8	-	**-**	-	22	**DW501101**	Price
2-1/2	1/16	7/8	28	**KE1008300**	Price	28	**DW502041**	Price
2-1/2	3/32	7/8	28	**KE1008310**	Price	28	**DW502061**	Price
2-1/2	1/8	1	-	**-**	-	28	**DW502082**	Price
2-1/2	1/8	7/8	28	**KE1008320**	Price	28	**DW502081**	Price
3	1/16	1	32	**KE1008330**	Price	32	**DW503041**	Price
3	5/64	1	32	**KE1008336**	Price	32	**DW503051**	Price
3	3/32	1	32	**KE1008340**	Price	32	**DW503061**	Price
3	7/64	1	32	**KE1008346**	Price	-	**-**	-
3	1/8	1	32	**KE1008350**	Price	32	**DW503081**	Price
3	5/32	1	32	**KE1008360**	Price	32	**DW503101**	Price
3	3/16	1	32	**KE1008370**	Price	32	**DW503121**	Price
3	7/32	1	32	**KE1008380**	Price	-	**-**	-
3	1/4	1	32	**KE1008390**	Price	32	**DW503161**	Price
4	1/16	1	36	**KE1008400**	Price	36	**DW504041**	Price
4	5/64	1	36	**KE1008412**	Price	36	**DW504051**	Price
4	3/32	1	36	**KE1008420**	Price	36	**DW504061**	Price
4	3/32	1-1/4	-	**-**	-	36	**DW504062**	Price
4	7/64	1	36	**KE1008432**	Price	-	**-**	-
4	1/8	1	36	**KE1008440**	Price	36	**DW504081**	Price
4	1/8	1-1/4	-	**-**	-	36	**DW504082**	Price
4	5/32	1	36	**KE1008460**	Price	36	**DW504101**	Price
4	3/16	1	36	**KE1008480**	Price	36	**DW504121**	Price
4	3/16	1-1/4	-	**-**	-	36	**DW504122**	Price
4	7/32	1	36	**KE1008500**	Price	-	**-**	-
4	1/4	1	36	**KE1008520**	Price	36	**DW504161**	Price
5	1/16	1	40	**KE1008540**	Price	-	**-**	-
5	3/32	1	40	**KE1008560**	Price	40	**DW505061**	Price
5	1/8	1	40	**KE1008580**	Price	40	**DW505081**	Price
5	1/8	1-1/4	-	**-**	-	40	**DW505082**	Price
5	5/32	1	40	**KE1008600**	Price	40	**DW505101**	Price
5	5/32	1-1/4	-	**-**	-	40	**DW505102**	Price
5	3/16	1	40	**KE1008620**	Price	40	**DW505121**	Price
5	3/16	1-1/4	-	**-**	-	40	**DW505122**	Price
5	7/32	1	40	**KE1008640**	Price	-	**-**	-
5	1/4	1	40	**KE1008660**	Price	-	**-**	-
6	1/16	1	42	**KE1008680**	Price	42	**DW506041**	Price
6	1/16	1-1/4	42	**KE1008690**	Price	-	**-**	-
6	3/32	1	42	**KE1008700**	Price	42	**DW506061**	Price
6	3/32	1-1/4	42	**KE1008710**	Price	-	**-**	-
6	1/8	1	42	**KE1008720**	Price	42	**DW506081**	Price
6	1/8	1-1/4	42	**KE1008730**	Price	42	**DW506082**	Price
6	5/16	1	42	**KE1008220**	Price	-	**-**	-
6	5/32	1	42	**KE1008740**	Price	-	**-**	-
6	5/32	1-1/4	42	**KE1008750**	Price	-	**-**	-
6	3/16	1	42	**KE1008760**	Price	42	**DW506121**	Price
6	3/16	1-1/4	42	**KE1008770**	Price	42	**DW506122**	Price
6	1/4	1	42	**KE1008800**	Price	-	**-**	-
6	1/4	1-1/4	42	**KE1008810**	Price	-	**-**	-
6	5/16	1-1/4	42	**KE1008230**	Price	-	**-**	-
6	3/8	1	42	**KE1008820**	Price	-	**-**	-
6	3/8	1-1/4	42	**KE1008830**	Price	-	**-**	-
8	1/8	1	48	**KE1008880**	Price	-	**-**	-
8	1/8	1-1/4	48	**KE1008890**	Price	42	**DW508082**	Price
8	5/32	1-1/4	48	**KE1008910**	Price	-	**-**	-
8	3/16	1-1/4	48	**KE1008930**	Price	42	**DW508121**	Price
8	1/4	1-1/4	48	**KE1008970**	Price	48	**DW508161**	Price
8	3/8	1-1/4	48	**KE1008990**	Price	-	**-**	-

Slitting Saws - Concave

High Speed Steel

- Designed for slitting and cutoff operations
- OD Cutting only-no side teeth
- Fully ground surfaces
- Square cornered with side concavity
- Keo Milling "MC" Style



			Keo Milling			ProCut		
Dia.	Thickness	Hole Size	No. of Teeth	Order No.	Price	No. of Teeth	Order No.	Price
2-1/2	1/32	7/8	36	**KE1009200**	Price	28	**DV502021**	Price
2-1/2	3/64	7/8	36	**KE1009210**	Price	28	**DV502031**	Price
2-1/2	1/16	7/8	36	**KE1009220**	Price	28	**DV502041**	Price
2-1/2	1/16	1	-	**-**	-	28	**DV502042**	Price
2-1/2	3/32	7/8	36	**KE1009230**	Price	28	**DV502061**	Price
2-1/2	1/8	7/8	36	**KE1009240**	Price	28	**DV502081**	Price
3	1/32	1	36	**KE1009250**	Price	30	**DV503021**	Price
3	3/64	1	36	**KE1009260**	Price	30	**DV503031**	Price
3	1/16	1	-	**-**	-	30	**DV503041**	Price
3	5/64	1	-	**-**	-	30	**DV503051**	Price
3	3/32	1	36	**KE1009280**	Price	30	**DV503061**	Price
3	1/8	1	36	**KE1009290**	Price	30	**DV503081**	Price
3	5/32	1	36	**KE1009300**	Price	30	**DV503101**	Price
3	3/16	1	-	**-**	-	30	**DV503121**	Price
4	1/32	1	40	**KE1009310**	Price	36	**DV504021**	Price
4	1/32	1-1/4	40	**KE1009314**	Price	-	**-**	-
4	3/64	1	40	**KE1009320**	Price	36	**DV504031**	Price
4	3/64	1-1/4	40	**KE1009324**	Price	-	**-**	-
4	1/16	1	40	**KE1009330**	Price	36	**DV504041**	Price
4	1/16	1-1/4	40	**KE1009334**	Price	-	**-**	-
4	5/64	1	-	**-**	-	36	**DV504051**	Price
4	3/32	1	40	**KE1009340**	Price	36	**DV504061**	Price
4	3/32	1-1/4	40	**KE1009344**	Price	-	**-**	-
4	1/8	1	40	**KE1009350**	Price	36	**DV504081**	Price
4	1/8	1-1/4	40	**KE1009354**	Price	-	**-**	-
4	5/32	1	40	**KE1009360**	Price	36	**DV504101**	Price
4	5/32	1-1/4	40	**KE1009364**	Price	-	**-**	-
4	3/16	1	40	**KE1009370**	Price	36	**DV504121**	Price
4	3/16	1-1/4	40	**KE1009374**	Price	-	**-**	-
5	1/32	1	44	**KE1009376**	Price	-	**-**	-
5	1/32	1-1/4	44	**KE1009378**	Price	-	**-**	-
5	1/16	1	44	**KE1009380**	Price	40	**DV505041**	Price
5	1/16	1-1/4	44	**KE1009384**	Price	40	**DV505042**	Price
5	3/32	1	44	**KE1009390**	Price	40	**DV505061**	Price
5	3/32	1-1/4	44	**KE1009394**	Price	40	**DV505062**	Price
5	1/8	1	44	**KE1009400**	Price	40	**DV505081**	Price
5	1/8	1-1/4	44	**KE1009410**	Price	40	**DV505082**	Price
5	5/32	1	44	**KE1009412**	Price	40	**DV505101**	Price
5	5/32	1-1/4	44	**KE1009414**	Price	40	**DV505102**	Price
5	3/16	1	44	**KE1009416**	Price	40	**DV505121**	Price
5	3/16	1-1/4	44	**KE1009418**	Price	40	**DV505122**	Price
6	1/32	1	48	**KE1009436**	Price	-	**-**	-
6	1/32	1-1/4	48	**KE1009438**	Price	-	**-**	-
6	1/16	1	48	**KE1009420**	Price	42	**DV506041**	Price
6	1/16	1-1/4	48	**KE1009424**	Price	42	**DV506042**	Price
6	3/32	1	48	**KE1009430**	Price	42	**DV506061**	Price
6	3/32	1-1/4	48	**KE1009434**	Price	42	**DV506062**	Price
6	1/8	1	48	**KE1009440**	Price	42	**DV506081**	Price
6	1/8	1-1/4	48	**KE1009450**	Price	42	**DV506082**	Price
6	5/32	1	48	**KE1009452**	Price	42	**DV506101**	Price
6	5/32	1-1/4	48	**KE1009454**	Price	42	**DV506102**	Price
6	3/16	1	48	**KE1009458**	Price	42	**DV506121**	Price
6	3/16	1-1/4	48	**KE1009460**	Price	42	**-**	-
8	3/32	1-1/4	-	**-**	-	48	**DV508062**	Price
8	1/8	1	58	**KE1009470**	Price	48	**DV508081**	Price
8	1/8	1-1/4	58	**KE1009480**	Price	48	**DV508082**	Price
8	3/16	1	-	**-**	-	48	**DV508121**	Price
8	3/16	1-1/4	-	**-**	-	48	**DV508122**	Price
10	3/32	1-1/4	-	**-**	-	56	**DV5010062**	Price
10	1/8	1-1/4	-	**-**	-	56	**DV5010082**	Price
10	3/16	1-1/4	-	**-**	-	56	**DV5010122**	Price

Circular Saw Arbors

- For saw blades .001" to 3/16" thickness
- Steel, heat treated shank 1/2" diameter



Flange (in.)	Dia. Blade Hole (in.)	Order No.	Price
1/2	1/4	**GK60CSA1**	Price
5/8	3/8	**GK60CSA2**	Price
3/4	1/2	**GK60CSA3**	Price

3 Pc. Circular Saw Arbor Set

In Wooden Block
Contains 1 Each:
GK60-CSA-1, GK60-CSA-2, GK60-CSA-3



Order No.	Price
GK60CSA123	Price

Circular Saw Arbor

- .001 Square shank to cutter locating area
- Deep low profile caps allows closest cutter to work area
- Weldon shank



Hole Size (in.)	Shank Size (in.)	Model Number	Order No.	Price
1/4	1/2	SA-250	**GP25SA250**	Price
3/8	1/2	SA-375	**GP25SA375**	Price
1/2	1/2	SA-500	**GP25SA500**	Price
5/8	3/4	SA-625	**GP25SA625**	Price
1	3/4	SA-1000	**GP25SA1000**	Price
1-1/4	3/4	SA-1250	**GP25SA1250**	Price
1/4", 3/8", 1/2"	3/4	SA-3S-SET	**GP25SA3S**	Price
5/8", 1", 1-1/4"	1/2	SA-3L-SET	**GP25SA3L**	Price

Vari Arbors

- Accommodates saws and cutters having five standard hole sizes: 1/2", 5/8", 3/4", 7/8" and 1"; with thicknesses up to 3/16" and diameters to 4".
- Locked in telescopic centering assembly accepts standard cutters, various wheel brushes, etc.



Shank	Order No.	Price
1/2	**GK60VA12**	Price
R8	**GK60VAR8**	Price

duMont® Keyway Broaches

High Speed Steel

Supplied with shims



Size Broach (in.)	Broach Dim. (in.)	No. of Shims	Order No.	Price
1/16-A	1/8 x 5	0	**FB5022201**	Price
3/32-A	1/8 x 5	0	**FB5022202**	Price
3/32-B	3/16 x 6-3/4	0	**FB5022204**	Price
1/8-A	1/8 x 5	1	**FB5022203**	Price
1/8-B	3/16 x 6-3/4	1	**FB5022205**	Price
5/32-B	3/16 x 6-3/4	1	**FB5022206**	Price
3/16-B	3/16 x 6-3/4	1	**FB5022207**	Price
3/16-C	3/8 x 11-3/4	1	**FB5022208**	Price
1/4-C	3/8 x 11-3/4	1	**FB5022209**	Price
5/16-C	3/8 x 11-3/4	2	**FB5022210**	Price
5/16-D	9/16 x 13-7/8	2	**FB5022212**	Price
3/8-C	3/8 x 11-3/4	2	**FB5022211**	Price
3/8-D	9/16 x 13-7/8	2	**FB5022213**	Price
7/16-D	9/16 x 13-7/8	3	**FB5022214**	Price
1/2-D	9/16 x 13-7/8	3	**FB5022215**	Price
5/8-E	3/4 x 15-1/2	4	**FB5022216**	Price
3/4-E	3/4 x 15-1/2	5	**FB5022217**	Price
7/8-F	1 x 20-1/4	6	**FB5022218**	Price
1-F	1 x 20-1/4	7	**FB5022219**	Price

Special sizes and types available. All broaches available TiN coated.

duMont® Square Broaches



High Speed Steel

Square Size (in.)	Limits	Broach Length (in.)	Pilot Size†	Min. Length of Cut (in.)	Max. Length of Cut (in.)	Order No.	Price
1/8	.1255 - .1265	4-1/8	.1285	3/16	1/2	**FB5066601**	Price
5/32	.1565 - .1575	5-1/8	.1590	1/4	1/2	**FB5066602**	Price
3/16	.188 - .189	5-9/16	.1935	1/4	5/8	**FB5066603**	Price
7/32	.219 - .220	6-3/8	.2280	1/4	3/4	**FB5066604**	Price
1/4	.2505 - .2515	6-1/2	.2656	1/4	3/4	**FB5066605**	Price
9/32	.2815 - .2825	7-3/4	.2969	5/16	1	**FB5066606**	Price
5/16	.313 - .314	7-7/8	.3281	3/8	1	**FB5066607**	Price
11/32	.344 - .345	9-3/8	.3594	3/8	1-1/4	**FB5066608**	Price
3/8	.3755 - .3765	9-3/8	.3906	3/8	1-1/4	**FB5066609**	Price
13/32	.4065 - .4075	10-5/8	.4219	1/2	1-3/8	**FB5066610**	Price
7/16	.4380 - .4390	10-7/8	.4531	1/2	1-3/8	**FB5066611**	Price
15/32	.469 - .470	12	.5000	1/2	1-3/8	**FB5066612**	Price
1/2	.5005 - .5015	12	.5312	1/2	1-3/8	**FB5066613**	Price
9/16	.563 - .564	14-3/4	.5938	1/2	1-1/2	**FB5066614**	Price
5/8	.626 - .627	16-5/16	.6562	5/8	1-5/8	**FB5066615**	Price
11/16	.6885 - .6895	17-3/4	.7500	5/8	1-5/8	**FB5066616**	Price
3/4	.751 - .752	17-3/4	.8125	5/8	1-5/8	**FB5066617**	Price
7/8	.8765 - .8775	22-3/4	.9375	5/8	2	**FB5066618**	Price
1	1.002 - 1.003	24-1/8	1.0938	5/8	2	**FB5066619**	Price

†Tolerance - basic minus .0005-.001
Special sizes and types available. All broaches available TiN coated.

duMont® Metric Keyway Broaches

High Speed Steel

Supplied with shims



Broach	Keyway Width (mm)	Broach Dim. (in.)	No. of Shims	Order No.	Price
A	2	1/8 x 5	0	**FB5044401**	Price
A	3	1/8 x 5	1	**FB5044402**	Price
B-1	4	1/4 x 6-3/4	1	**FB5044403**	Price
B-1	5	1/4 x 6-3/4	1	**FB5044404**	Price
C	5	3/8 x 11-3/4	1	**FB5044405**	Price
C	6	3/8 x 11-3/4	1	**FB5044406**	Price
C	8	3/8 x 11-3/4	2	**FB5044407**	Price
D	10	9/16 x 13-7/8	2	**FB5044408**	Price
D	12	9/16 x 13-7/8	2	**FB5044409**	Price
D	14	9/16 x 13-7/8	2	**FB5044410**	Price
E	16	3/4 x 15-1/2	3	**FB5044411**	Price
E	18	3/4 x 15-1/2	3	**FB5044412**	Price
F	20	1 x 20-1/4	3	**FB5044413**	Price
F	22	1 x 20-1/4	4	**FB5044414**	Price
F	24	1 x 20-1/4	5	**FB5044415**	Price
F	25	1 x 20-1/4	4	**FB5044494**	Price

The duMONT Company LLC has been designing and manufacturing precision broaches since 1945. duMONT broaches are recognized all over the world for quality, durability, and engineering detail.

duMont® Hexagon Broaches

High Speed Steel



Hex Size (in.)	Limits	Broach Length (in.)	Pilot Size† (in.)	Min. Length of Cut (in.)	Max. Length of Cut (in.)	Order No.	Price
1/8	.1255 - .1265	4-1/8	1/8	3/16	3/8	**FB5077701**	Price
5/32	.1565 - .1575	4-15/16	5/32	1/4	1/2	**FB5077702**	Price
3/16	.188 - .189	5-1/16	3/16	1/4	5/8	**FB5077703**	Price
7/32	.219 - .220	5-3/8	7/32	1/4	3/4	**FB5077704**	Price
1/4	.2505 - .2515	6	1/4	1/4	3/4	**FB5077705**	Price
9/32	.2815 - .2825	7-1/4	9/32	5/16	1	**FB5077706**	Price
5/16	.313 - .314	7-3/4	5/16	3/8	1	**FB5077707**	Price
11/32	.344 - .345	7-3/4	11/32	3/8	1-1/4	**FB5077708**	Price
3/8	.3755 - .3765	8-1/2	3/8	3/8	1-1/4	**FB5077709**	Price
13/32	.4065 - .4075	9-5/8	13/32	1/2	1-3/8	**FB5077710**	Price
7/16	.4380 - .4390	10-1/2	7/16	1/2	1-3/8	**FB5077711**	Price
15/32	.469 - .470	11-7/8	15/32	1/2	1-3/8	**FB5077712**	Price
1/2	.5005 - .5015	11-7/8	1/2	1/2	1-3/8	**FB5077713**	Price
9/16	.563 - .564	13-3/4	9/16	1/2	1-5/8	**FB5077714**	Price
5/8	.626 - .627	16-1/4	5/8	5/8	2	**FB5077715**	Price
11/16	.6885 - .6895	16-3/4	11/16	5/8	2	**FB5077716**	Price
3/4	.751 - .752	17-1/4	3/4	5/8	2	**FB5077717**	Price
7/8	.8765 - .8775	18-1/2	7/8	5/8	2	**FB5077718**	Price
1	1.002 - 1.003	19-3/4	1.0000	5/8	2	**FB5077719**	Price

†Tolerance - basic minus .0005-.001
Special sizes and types available. All broaches available TiN coated.

duMont® Keyway Broach Sets



- Now you can make precision holes or keyways in seconds... a few at a time or production quantities... by a simple push-through broaching operation using a hand operated arbor press or hydraulic press
- All sets furnished in handsome varnished wood box come complete with precision broaches, slotted bushings, and necessary shims
- **Set No. 00** - the most common keyway combinations for small keyways and bores. 3 broaches & 5 bushings = 15 combinations

Keyway Sizes (in.)	Broach Style	Bushing Dimensions Bore Sizes - Collared Only (in.)	Order No.	Price
1/16, 3/32, 1/8	A	1/4, 5/16, 3/8, 7/16, 1/2	**FB5011101**	Price

No. 10 Standard Set

Our best selling broach set.
4 broaches & 9 bushings = 18 combinations

Keyway Sizes (in.)	Broach Style	Bushing Diameters Bore Sizes - Plain Only(in.)	Order No.	Price
1/8, 3/16, 1/4, 3/8	B, C	1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2	**FB5011104**	Price

No. 10A Standard Set

Same as No. 10 Set, but for sixteenth-sized bores.
4 broaches & 9 bushings = 18 combinations

Keyway Sizes (in.)	Broach Style	Bushing Diameters Bore Sizes - Collared Only (in.)	Order No.	Price
1/8, 3/16, 1/4, 3/8	B, C	9/16, 11/16, 13/16, 15/16, 1-1/16, 1-3/16, 1-5/16, 1-7/16, 1-9/16	**FB5011108**	Price

No. 10-10A Combination Set

Combines 10 and 10A sets.
4 broaches & 18 bushings = 36 combinations

Keyway Sizes (in.)	Bushing Diameters Bore Sizes - Collared Only (in.)	Broach Style	Order No.	Price
1/8, 3/16, 1/4, 3/8	1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 9/16, 11/16, 13/16, 15/16, 1-1/16, 1-3/16, 1-5/16, 1-7/16, 1-9/16	B, C	**FB5011120**	Price

No. 20 Combination Set

Same as No. 10-10A combination set, but adds a 5/16" keyway for 11 extra combinations.
5 broaches & 18 bushings = 47 combinations

Keyway Sizes (in.)	Broach Style	Bushing Diameters Bore Sizes - Collared Only (in.)	Order No.	Price
1/8, 3/16, 1/4, 5/16, 3/8	B, C	1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 9/16, 11/16, 13/16, 15/16, 1-1/16, 1-3/16, 1-5/16, 1-7/16, 1-9/16	**FB5011121**	Price

No. 40A Set

The most common keyway combinations for medium-sized keyways and bores.
4 broaches & 8 bushings = 32 combinations

Keyway Sizes (in.)	Broach Style	Bushing Diameters Bore Sizes - Plain Only (in.)	Order No.	Price
5/16, 3/8, 7/16, 1/2	D	1-1/2, 1-5/8, 1-3/4, 1-7/8, 2, 2-1/8, 2-1/4, 2-1/2	**FB5011127**	Price

No. 40 Set

Same as No. 40A, but for sixteenth-sized bores.
4 broaches & 8 bushings = 32 combinations

Keyway Sizes (in.)	Broach Style	Bushing Diameters Bore Sizes - Plain Only (in.)	Order No.	Price
5/16, 3/8, 7/16, 1/2	D	1-7/16, 1-9/16, 1-11/16, 1-13/16, 1-15/16, 2-3/16, 2-7/16, 2-15/16	**FB5011129**	Price

No. 40-1/2A Heavy Duty Set

The most common keyway combinations for large keyways.
2 broaches & 6 bushings = 12 combinations

Keyway Sizes (in.)	Broach Style	Bushing Diameters Bore Sizes - Plain Only (in.)	Order No.	Price
5/8, 3/4	E	2-3/8, 2-1/2, 2-5/8, 2-3/4, 2-7/8, 3	**FB5011131**	Price

No. 40-1/2 Heavy Duty Set

Same as No. 40-1/2A, but for sixteenth-sized bores.
2 broaches & 6 bushings = 12 combinations

Keyway Sizes (in.)	Broach Style	Bushing Diameters Bore Sizes - Plain Only (in.)	Order No.	Price
5/8, 3/4	E	2-5/16, 2-7/16, 2-9/16, 2-11/16, 2-13/16, 2-15/16	**FB5011133**	Price

No. 50 Heavy Duty Set

Includes the most common keyway combinations for medium and large keyways.
3 broaches & 17 bushings = 29 combinations

Keyway Sizes (in.)	Broach Style	Bushing Diameters Bore Sizes - Plain Only (in.)	Order No.	Price
1/2, 5/8, 3/4	D, E	2, 2-1/16, 2-1/8, 2-3/16, 2-1/4, 2-5/16, 2-3/8, 2-7/16, 2-1/2, 2-9/16, 2-5/8, 2-11/16, 2-3/4, 2-13/16, 2-7/8, 2-15/16, 3	**FB5011135**	Price

No. 100 Heavy Duty Combination Set

Includes all popular combinations without duplication. Furnished in three handsome varnished wood boxes for convenient handling and storage; with broaches, slotted bushings, and shims.
9 broaches & 44 bushings = 102 combinations
Collared bushings for B & C style broaches
Plain bushings for D & E style broaches

Keyway Sizes (in.)	Broach Style	Bushing Diameters Bore Sizes	Order No.	Price
1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4	B,C,D,E	1/2-7/8 by 16ths Style B, 15/16-1-9/16 by 16ths Style C, 1-7/16-2-1/4 by 16ths Style D, 2-5/16-3" by 16ths Style E	**FB5011136**	Price

duMont® Keyway Broach Sets

No. 60 Metric Set

The most common metric keyway combinations for small keyways and bores.
2 broaches & 3 bushings = 6 combinations

Keyway Sizes (mm)	Broach Style	Bushing Diameters Bore Sizes - Collared Only (mm)	Order No.	Price
2mm, 3mm	A	6, 8, 10	**FB5044497**	Price

No. 70 Metric Set

Our most popular metric broach set.
4 broaches & 13 bushings = 26 combinations

Keyway Sizes (mm)	Broach Style	Bushing Diameters Bore Sizes - Collared Only (mm)	Order No.	Price
4mm, 5mm, 6mm, 8mm	B, C	12, 14, 15, 16, 18, 19, 20, 22, 24, 25, 26, 28, 30	**FB5044498**	Price

No. 80 Metric Set

The most common metric keyway combinations for medium-sized keyways and bores.
3 broaches & 12 bushings = 36 combinations

Keyway Sizes (mm)	Broach Style	Bushing Diameters Bore Sizes - Collared Only (mm)	Order No.	Price
10mm, 12mm, 14mm	D	32, 34, 35, 36, 38, 40, 42, 44, 45, 46, 48, 50	**FB5044499**	Price

No. 90 Metric Set

The most common metric keyway combination for large keyways and bores.
2 broaches & 8 bushings = 16 combinations

Keyway Sizes (mm)	Broach Style	Bushing Diameters Bore Sizes - Plain Only (mm)	Order No.	Price
16mm, 18mm	E	52, 54, 55, 56, 58, 60, 62, 65	**FB5044500**	Price

HASSAY-SAVAGE
Internal Hex Rotary/Punch Broaches

Also Referred To As "Wobble," "Blind Hole" & Rotary Broaches

- For use with screw machines, CNC turning machines and arbor presses
- For use in automotive, aerospace, medical and other various fields
- Other sizes, metric, square, Torx© octagon & spline forms available, please call
- All tools are manufactured in M-2 high speed steel



Shank Size (in.) - 1/2" - .500 - American				
Hex Size (in./mm)	Depth of Cut (in.)	OAL (in.)	Order No.	Price
3/32	9/64	1 3/4	**FB5566106**	Price
7/64	5/32	1 3/4	**FB5566107**	Price
1/8	3/16	1 3/4	**FB5566108**	Price
9/64	7/32	1 3/4	**FB5566109**	Price
5/32	1/4	1 3/4	**FB5566110**	Price
3/16	9/32	1 3/4	**FB5566112**	Price
7/32	9/32	1 3/4	**FB5566114**	Price
1/4	3/8	1 3/4	**FB5566116**	Price
9/32	7/16	1 3/4	**FB5566118**	Price
5/16	1/2	1 3/4	**FB5566120**	Price
11/32	9/16	1 3/4	**FB5566122**	Price
3/8	9/16	1 3/4	**FB5566124**	Price
7/16	5/8	1 3/4	**FB5566128**	Price
1/2	5/8	1 3/4	**FB5566132**	Price
9/16	5/8	1 3/4	**FB5566136**	Price
5/8	3/4	1 3/4	**FB5566140**	Price
11/16	3/4	1 3/4	**FB5566144**	Price
3/4	7/8	1 3/4	**FB5566148**	Price

Shank Size (in.) - 1/2" - .500 - Metric				
Hex Size (in./mm)	Depth of Cut (in.)	OAL (in.)	Order No.	Price
2mm	5/32	1-1/2	**FB5566302**	Price
2.5mm	5/32	1-1/2	**FB55663025**	Price
3mm	3/16	1-1/2	**FB5566303**	Price
4mm	1/4	1-1/2	**FB5566304**	Price
5mm	5/16	1-1/2	**FB5566305**	Price
6mm	3/8	1-1/2	**FB5566306**	Price
7mm	1/2	1-1/2	**FB5566307**	Price
8mm	1/2	1-1/2	**FB5566308**	Price
10mm	9/16	1-1/2	**FB5566310**	Price
11mm	9/16	2	**FB5566311**	Price
12mm	5/8	2	**FB5566312**	Price

HASSAY-SAVAGE
Square Rotary/Punch Broaches



Shank Size (in.) - 1/2" - .500 - American				
Square Size (in.)	Depth of Cut (in.)	OAL (in.)	Order No.	Price
3/32	9/64	1-1/2	**FB5568106**	Price
1/8	3/16	1-1/2	**FB5568108**	Price
5/32	1/4	1-1/2	**FB5568110**	Price
3/16	9/32	1-1/2	**FB5568112**	Price
7/32	11/32	1-1/2	**FB5568114**	Price
1/4	3/8	1-1/2	**FB5568116**	Price
5/16	1/2	1-1/2	**FB5568120**	Price
3/8	5/8	2	**FB5568124**	Price
7/16	5/8	2	**FB5568128**	Price
1/2	5/8	2	**FB5568132**	Price
9/16	3/4	2	**FB5568136**	Price
5/8	7/8	2	**FB5568140**	Price

Shank Size (in.) - 8mm - .315 - American				
Square Size (in.)	Depth of Cut (in.)	OAL (in.)	Order No.	Price
1/16	1/8	1-1/4	**FB5568004**	Price
3/32	9/64	1-1/4	**FB5568006**	Price
1/8	3/16	1-1/4	**FB5568008**	Price
5/32	1/4	1-1/4	**FB5568010**	Price
3/16	9/32	1-1/4	**FB5568012**	Price
7/32	11/32	1-1/4	**FB5568014**	Price
1/4	3/8	1-1/2	**FB5568016**	Price
9/32	3/8	1-1/2	**FB5568018**	Price
5/16	3/8	1-1/2	**FB5568020**	Price
11/32	3/8	1-1/2	**FB5568022**	Price
3/8	3/8	1-1/2	**FB5568024**	Price

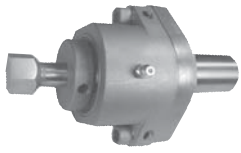
Shank Size (in.) - 1/2" - .500 - Metric				
Hex Size (in./mm)	Depth of Cut (in.)	OAL (in.)	Order No.	Price
14mm	5/8	2	**FB5566314**	Price
16mm	5/8	2	**FB5566316**	Price
18mm	7/8	2	**FB5566318**	Price

Shank Size (in.) - 3/4" - .750 - American				
Hex Size (in./mm)	Depth of Cut (in.)	OAL (in.)	Order No.	Price
3/8	1/2	2 1/2	**FB5566524**	Price
7/16	1/2	2 1/2	**FB5566528**	Price
1/2	5/8	2 1/2	**FB5566532**	Price
9/16	3/4	2 1/2	**FB5566536**	Price
5/8	3/4	2 1/2	**FB5566540**	Price
3/4	7/8	2 3/4	**FB5566548**	Price
7/8	7/8	2 3/4	**FB5566556**	Price
1	7/8	2 3/4	**FB5566564**	Price

Shank Size (in.) - 8mm - .315 - American				
Hex Size (in./mm)	Depth of Cut (in.)	OAL (in.)	Order No.	Price
.050	5/64	1 1/4	**FB5566002**	Price
1/16	3/32	1 1/4	**FB5566004**	Price
5/64	7/64	1 1/4	**FB5566005**	Price
3/32	9/64	1 1/4	**FB5566006**	Price
7/64	5/32	1 1/4	**FB5566007**	Price
1/8	3/16	1 1/4	**FB5566008**	Price
9/64	7/32	1 1/4	**FB5566009**	Price
5/32	1/4	1 1/4	**FB5566010**	Price
3/16	9/32	1 1/4	**FB5566012**	Price
7/32	1 1/32	1 1/4	**FB5566014**	Price
1/4	3/8	1 1/4	**FB5566016**	Price
9/32	3/8	1 1/4	**FB5566018**	Price
5/16	3/8	1 1/4	**FB5566020**	Price
11/32	7/16	1 1/4	**FB5566022**	Price
3/8	1/2	1 1/4	**FB5566024**	Price
7/16	1/2	1 1/4	**FB5566028**	Price

Shank Size (in.) - 8mm - .315 - Metric				
Hex Size (in./mm)	Depth of Cut (in.)	OAL (in.)	Order No.	Price
1.3mm	3/32	1-1/4	**FB55662013**	Price
1.5mm	3/32	1-1/4	**FB55662015**	Price
2mm	7/64	1-1/4	**FB5566202**	Price
2.5mm	5/32	1-1/4	**FB55662025**	Price
3mm	3/16	1-1/4	**FB5566203**	Price
4mm	1/4	1-1/4	**FB5566204**	Price
5mm	5/16	1-1/4	**FB5566205**	Price
6mm	3/8	1-1/4	**FB5566206**	Price
7mm	3/8	1-1/2	**FB5566207**	Price
8mm	3/8	1-1/2	**FB5566208**	Price
9mm	3/8	1-1/2	**FB5566209**	Price
10mm	1/2	1-1/2	**FB5566210**	Price
11mm	1/2	1-1/2	**FB5566211**	Price
12mm	1/2	1-1/2	**FB5566212**	Price

HASSAY-SAVAGE
Rotary Broach Holders



Accepts Internal Hex Rotary/ Punch Broaches

Applications: For use on any type of CNC or manual turning, milling, drilling or screw machine.

Features:

- The holder has an internal live spindle, which holds the end cutting broach tool
- The centerline of the cutting tool is offset at 1° from the centerline of the workpiece
- This offset causes the broach to wobble creating a shearing effect as the broach is advanced into the workpiece or vice versa.

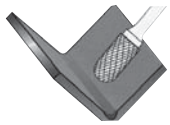
Holds - Holds 1/2"					
Shank Dia. (in.)	Shank Lgth. (in.)	Broach Shank Depth (in.)	OAL (in.)	Order No.	Price
1	2	.742	4-17/32	**FB55P67064**	Price
3/4	2	.742	4-17/32	**FB55P67048**	Price

Holds - Holds 3/4"					
Shank Dia. (in.)	Shank Lgth. (in.)	Broach Shank Depth (in.)	OAL (in.)	Order No.	Price
1-1/2	3	1-1/4	7-9/16	**FB55P67072HDS**	Price
1-3/4	3	1-1/4	7-9/16	**FB55P67076HD**	Price

Holds - Holds .315"					
Shank Dia. (in.)	Shank Lgth. (in.)	Broach Shank Depth (in.)	OAL (in.)	Order No.	Price
3/4	2	9/16	3-59/64	**FB55P67048S**	Price
5/8	1-1/2	9/16	3-27/64	**FB55P67040**	Price

Cylinder Shape with Radius End Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish





RAPIDKUT®

M.A. FORD High Performance Cutting Tools

			Rapidkut				M A Ford			
			Single		Double		Price		Double	
Burr No.	Size (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SC41	3/32 x 7/16	1/8	FP50SC41	Price	FP50SC41D	Price	FP6069040020	Price	FP6069040027	Price
SC11	1/8 x 1/2	1/4	FP50SC11	Price	FP50SC11D	Price	FP6042125020	Price	FP6042125027	Price
SC42	1/8 x 9/16	1/8	FP50SC42	Price	FP50SC42D	Price	FP6069030020	Price	FP6069030027	Price
SC42L2†	1/8 x 9/16	1/8	FP50SC42L2	Price	FP50SC42L2D	Price	-	-	-	-
SC42L3†	1/8 x 9/16	1/8	FP50SC42L3	Price	FP50SC42L3D	Price	FP6069030020L3	Price	FP6069030027L3	Price
SC12	1/8 x 5/8	1/4	FP50SC12	Price	FP50SC12D	Price	-	-	-	-
SC52	5/32 x 1/2	1/8	-	-	FP50SC52D	Price	FP6072020020	Price	FP6072020027	Price
SC13	5/32 x 5/8	1/4	-	-	-	-	FP6042156220	Price	FP6042156227	Price
SC53	3/16 x 1/2	1/8	FP50SC53	Price	FP50SC53D	Price	FP6072040020	Price	FP6072040027	Price
SC81	3/16 x 5-8	3/16	-	-	-	-	FP6074020020	Price	FP6074020027	Price
SC14	3/16 x 5/8	1/4	-	-	FP50SC14D	Price	FP6042187520	Price	FP6042187527	Price
SC1	1/4 x 5/8	1/4	FP50SC1	Price	FP50SC1D	Price	FP6042250020	Price	FP6042250027	Price
SC1L6†	1/4 x 5/8	1/4	FP50SC1L6	Price	FP50SC1L6D	Price	FP6042250020L6	Price	FP6042250027L6	Price
SC51	1/4 x 1/2	1/8	FP50SC51	Price	FP50SC51D	Price	FP6070020020	Price	FP6070020027	Price
SC1L	1/4 x 1	1/4	FP50SC1L	Price	FP50SC1LD	Price	-	-	-	-
SC2	5/16 x 3/4	1/4	FP50SC2	Price	FP50SC2D	Price	FP6042312520	Price	FP6042312527	Price
SC3	3/8 x 3/4	1/4	FP50SC3	Price	FP50SC3D	Price	FP6042375020	Price	FP6042375027	Price
SC3L6†	3/8 x 3/4	1/4	FP50SC3L6	Price	FP50SC3L6D	Price	FP6042375020L6	Price	FP6042375027L6	Price
SC3L	3/8 x 1	1/4	FP50SC3L	Price	FP50SC3LD	Price	-	-	-	-
SC3X	3/8 x 1-1/2	1/4	-	-	FP50SC3XD	Price	-	-	-	-
SC4	7/16 x 1	1/4	-	-	FP50SC4D	Price	FP6042437520	Price	FP6042437527	Price
SC5	1/2 x 1	1/4	FP50SC5	Price	FP50SC5D	Price	FP6042500020	Price	FP6042500027	Price
SC5L6†	1/2 x 1	1/4	FP50SC5L6	Price	FP50SC5L6D	Price	FP6042500020L6	Price	FP6042500027L6	Price
SC6	5/8 x 1	1/4	FP50SC6	Price	FP50SC6D	Price	FP6042625020	Price	FP6042625027	Price
SC16	3/4 x 3/4	1/4	FP50SC16	Price	FP50SC16D	Price	-	-	-	-
SC7	3/4 x 1	1/4	FP50SC7	Price	FP50SC7D	Price	FP6042750020	Price	FP6042750027	Price
SC9	1 x 1	1/4	FP50SC9	Price	FP50SC9D	Price	FP6042100020	Price	FP6042100027	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" Shank Length

Taper with Radius End Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish





RAPIDKUT®

M.A. FORD High Performance Cutting Tools

				Rapidkut				M A Ford			
				Single		Double		Single		Price	
Burr No.	Size (in.)	Shank Size (in.)	Included Angle	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SL41	1/8 x 3/8	1/8	8°	FP50SL41	Price	FP50SL41D	Price	FP6069145020	Price	FP6069145027	Price
SL42	1/8 x 1/2	1/8	8°	FP50SL42	Price	FP50SL42D	Price	FP6069150020	Price	FP6069150027	Price
SL42L2†	1/8 x 1/2	1/8	8°	FP50SL42L2	Price	FP50SL42LD	Price	-	-	-	-
SL42L3†	1/8 x 1/2	1/8	8°	-	-	-	-	FP6069150020L3	Price	FP6069150027L3	Price
SL81	3/16 x 1/2	3/16	14°	-	-	-	-	FP6074100020	Price	FP6074100027	Price
SL53	3/16 x 1/2	1/8	14°	-	-	FP50SL53D	Price	FP6072120020	Price	FP6072120027	Price
SL1	1/4 x 5/8	1/4	14°	FP50SL1	Price	FP50SL1D	Price	FP6048250020	Price	FP6048250027	Price
SL1L6†	1/4 x 5/8	1/4	14°	FP50SL1L6	Price	FP50SL1L6D	Price	-	-	-	-
SL2	5/16 x 15/16	1/4	14°	FP50SL2	Price	FP50SL2D	Price	FP6048312520	Price	FP6048312527	Price
SL3	3/8 x 1-1/8	1/4	14°	FP50SL3	Price	FP50SL3D	Price	FP6048375020	Price	FP6048375027	Price
SL3L6†	3/8 x 1-1/8	1/4	14°	FP50SL3L6	Price	FP50SL3L6D	Price	FP6048375020L6	Price	FP6048375027L6	Price
SL4	1/2 x 1-3/16	1/4	14°	FP50SL4	Price	FP50SL4D	Price	FP6048500020	Price	FP6048500027	Price
SL4L6†	1/2 x 1-3/16	1/4	14°	FP50SL4L6	Price	FP50SL4L6D	Price	FP6048500020L6	Price	FP6048500027L6	Price
SL5	5/8 x 1-3/16	1/4	14°	FP50SL5	Price	FP50SL5D	Price	-	-	-	-
SL6	5/8 x 1-5/16	1/4	14°	FP50SL6	Price	-	-	FP6048625020	Price	FP6048625027	Price
SL7	3/4 x 1-9/16	1/4	14°	FP50SL7	Price	FP50SL7D	Price	FP6048750020	Price	FP6048750027	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" Shank Length

Cylinder Shape Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish



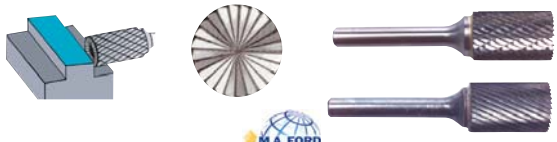
RAPIDKUT

			Rapidkut				M A Ford			
			Single		Double		Price		Double	
Burr No.	Size (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SA41	1/16 x 1/4	1/8	FP50SA41	Price	-	-	FP6069000020	Price	FP6069000027	Price
SA41L3†	1/16 x 1/4	1/8	FP50SA41L3	Price	-	-	-	-	-	-
SA42	3/32 x 7/16	1/8	FP50SA42	Price	FP50SA42D	Price	FP6069020020	Price	FP6069020027	Price
SA42L2†	3/32 x 7/16	1/8	-	-	FP50SA42L2D	Price	-	-	-	-
SA42L3	3/32 x 7/16	1/8	-	-	FP50SA42L3	Price	-	-	-	-
SA11	1/8 x 1/2	1/4	FP50SA11	Price	FP50SA11D	Price	FP6041125020	Price	FP6041125027	Price
SA43	1/8 x 9/16	1/8	FP50SA43	Price	FP50SA43D	Price	FP6069010020	Price	FP6069010027	Price
SA43L3†	1/8 x 9/16	1/8	FP50SA43L3S	Price	FP50SA43L3	Price	FP6069010020L3	Price	FP6069010027L3	Price
SA12	1/8 x 5/8	1/4	-	-	FP50SA12D	Price	-	-	-	-
SA52	5/32 x 1/2	1/8	-	-	-	-	FP6072010020	Price	FP6072010027	Price
SA13	5/32 x 5/8	1/4	-	-	FP50SA13D	Price	FP6041156220	Price	FP6041156227	Price
SA53	3/16 x 1/2	1/8	-	-	FP50SA53D	Price	FP6072030020	Price	FP6072030027	Price
SA81	3/16 x 1/2	3/16	-	-	-	-	FP6074010020	Price	FP6074010027	Price
SA14	3/16 x 5/8	1/4	-	-	FP50SA14D	Price	FP6041187520	Price	FP6041187527	Price
SA51	1/4 x 1/2	1/8	FP50SA51	Price	FP50SA51D	Price	FP6070010020	Price	FP6070010027	Price
SA1L6†	1/4 x 1/2	1/4	FP50SA1L6	Price	FP50SA1L6D	Price	-	-	-	-
SA1	1/4 x 5/8	1/4	FP50SA1	Price	FP50SA1D	Price	FP6041250020	Price	FP6041250027	Price
SA1L	1/4 x 1	1/4	FP50SA1L	Price	FP50SA1LD	Price	-	-	-	-
SA2	5/16 x 3/4	1/4	FP50SA2	Price	FP50SA2D	Price	FP6041312520	Price	FP6041312527	Price
SA3	3/8 x 3/4	1/4	FP50SA3	Price	FP50SA3D	Price	FP6041375020	Price	FP6041375027	Price
SA3L6†	3/8 x 3/4	1/4	FP50SA3L6	Price	FP50SA3L6D	Price	-	-	-	-
SA3L	3/8 x 1	1/4	FP50SA3L	Price	FP50SA3LD	Price	-	-	-	-
SA3X	3/8 x 1-1/2	1/4	-	-	FP50SA3XD	Price	-	-	-	-
SA4	7/16 x 1	1/4	FP50SA4	Price	FP50SA4D	Price	FP6041437520	Price	FP6041437527	Price
SA5	1/2 x 1	1/4	FP50SA5	Price	FP50SA5D	Price	FP6041500020	Price	FP6041500027	Price
SA5L6†	1/2 x 1	1/4	FP50SA5L6	Price	FP50SA5L6D	Price	-	-	-	-
SA6	5/8 x 1	1/4	FP50SA6	Price	FP50SA6D	Price	FP6041625020	Price	FP6041625027	Price
SA15	3/4 x 1/2	1/4	-	-	-	-	FP6041750120	Price	FP6041750127	Price
SA7	3/4 x 1	1/4	-	-	FP50SA7D	Price	FP6041750020	Price	FP6041750027	Price
SA16	3/4 x 3/4	1/4	FP50SA16	Price	FP50SA16D	Price	FP6041750220	Price	FP6041750227	Price
SA9	1 x 1	1/4	FP50SA9	Price	FP50SA9D	Price	FP6041100020	Price	FP6041100027	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" OAL

Cylinder Shape with End Cut Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish



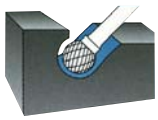
RAPIDKUT

			Rapidkut				M A Ford			
			Single		Double		Price		Double	
Burr No.	Size (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SB41	1/16 x 1/4	1/8	-	-	-	-	FP6069000020E	Price	FP6069000027E	Price
SB42	3/32 x 7/16	1/8	-	-	FP50SB42D	Price	FP6069020020E	Price	FP6069020027E	Price
SB42L3†	3/32 x 7/16	1/8	-	-	FP50SB42L3D	Price	-	-	-	-
SB43	3/32 x 9/16	1/8	FP50SB43	Price	FP50SB43D	Price	-	-	-	-
SB11	1/8 x 1/2	1/4	FP50SB11	Price	FP50SB11D	Price	FP6041125020E	Price	FP6041125027E	Price
SB43	1/8 x 9/16	1/8	-	-	-	-	FP6069010020E	Price	FP6069010027E	Price
SB43L2†	1/8 x 9/16	1/8	-	-	FP50SB43L2D	Price	-	-	-	-
SB43L3†	1/8 x 9/16	1/8	FP50SB43L3	Price	FP50SB43L3D	Price	-	-	FP6069010027L3E	Price
SB12	1/8 x 5/8	1/4	-	-	FP50SB12D	Price	-	-	-	-
SB13	5/32 x 5/8	1/4	-	-	FP50SB13D	Price	FP6041156220E	Price	FP6041156227E	Price
SB14	3/16 x 5/8	1/4	-	-	FP50SB14D	Price	FP6041187520E	Price	FP6041187527E	Price
SB51	1/4 x 3/16	1/8	-	-	FP50SB51D	Price	FP6070000020E	Price	FP6070000027E	Price
SB1	1/4 x 5/8	1/4	FP50SB1	Price	FP50SB1D	Price	FP6041250020E	Price	FP6041250027E	Price
SB1L	1/4 x 1	1/4	FP50SB1L	Price	FP50SB1LD	Price	-	-	-	-
SB2	5/16 x 3/4	1/4	FP50SB2	Price	FP50SB2D	Price	FP6041312520E	Price	FP6041312527E	Price
SB3	3/8 x 3/4	1/4	FP50SB3	Price	FP50SB3D	Price	FP6041375020E	Price	FP6041375027E	Price
SB3L	3/8 x 1	1/4	FP50SB3L	Price	FP50SB3LD	Price	-	-	-	-
SB3X	3/8 x 1-1/2	1/4	-	-	FP50SB3XD	Price	-	-	-	-
SB4	7/16 x 1	1/4	FP50SB4	Price	FP50SB4D	Price	FP6041437520E	Price	FP6041437527E	Price
SB5	1/2 x 1	1/4	FP50SB5	Price	FP50SB5D	Price	FP6041500020E	Price	FP6041500027E	Price
SB6	5/8 x 1	1/4	FP50SB6	Price	FP50SB6D	Price	FP6041625020E	Price	FP6041625027E	Price
SB15	3/4 x 3/4	1/4	-	-	-	-	FP6041750120E	Price	FP6041750127E	Price
SB16	3/4 x 3/4	1/4	-	-	-	-	FP6041750220E	Price	FP6041750227E	Price
SB7	3/4 x 1	1/4	FP50SB7	Price	FP50SB7D	Price	FP6041750020E	Price	FP6041750027E	Price
SB9	1 x 1	1/4	FP50SB9	Price	FP50SB9D	Price	FP6041100020E	Price	FP6041100027E	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" OAL

Ball Shape Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish





RAPIDKUT®

M.A. FORD

			Rapidkut				M A Ford			
			Single		Double		Price		Double	
Burr No.	Size (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SD61	3/32 x 3/32	3/32	-	-	FP50SD61D	Price	-	-	-	-
SD41	3/32 x 5/64	1/8	FP50SD41	Price	FP50SD41D	Price	FP6069045020	Price	FP6069045027	Price
SD11	1/8 x 7/64	1/4	FP50SD11	Price	FP50SD11D	Price	FP6043125020	Price	FP6043125027	Price
SD42	1/8 x 7/64	1/8	FP50SD42	Price	FP50SD42D	Price	FP6069050020	Price	FP6069050027	Price
SD42L3†	1/8 x 7/64	1/8	FP50SD42L3	Price	FP50SD42L3D	Price	FP6069050020L3	Price	FP6069050027L3	Price
SD52	5/32 x 5/32	1/8	-	-	FP50SD52D	Price	-	-	-	-
SD53	3/16 x 5/32	1/8	FP50SD53	Price	FP50SD53D	Price	FP6072050020	Price	FP6072050027	Price
SD81	3/16 x 5/32	3/16	-	-	-	-	FP6074030020	Price	FP6074030027	Price
SD14	3/16 x 5/32	1/4	FP50SD14	Price	FP50SD14D	Price	FP6043187520	Price	FP6043187527	Price
SD51	1/4 x 7/32	1/8	FP50SD51	Price	FP50SD51D	Price	FP6070030020	Price	FP6070030027	Price
SD1	1/4 x 7/32	1/4	FP50SD1	Price	FP50SD1D	Price	FP6043250020	Price	FP6043250027	Price
SD1L6†	1/4 x 7/32	1/4	FP50SD1L6	Price	FP50SD1L6D	Price	FP6043250020L6	Price	FP6043250027L6	Price
SD2	5/16 x 9/32	1/4	FP50SD2	Price	FP50SD2D	Price	FP6043312520	Price	FP6043312527	Price
SD3	3/8 x 5/16	1/4	FP50SD3	Price	FP50SD3D	Price	FP6043375020	Price	FP6043375027	Price
SD3L6†	3/8 x 5/16	1/4	FP50SD3L6	Price	FP50SD3L6D	Price	FP6043375020L6	Price	FP6043375027L6	Price
SD4	7/16 x 3/8	1/4	FP50SD4	Price	FP50SD4D	Price	FP6043437520	Price	FP6043437527	Price
SD5	1/2 x 7/16	1/4	FP50SD5	Price	FP50SD5D	Price	FP6043500020	Price	FP6043500027	Price
SD5L6†	1/2 x 7/16	1/4	FP50SD5L6	Price	FP50SD5L6D	Price	FP6043500020L6	Price	FP6043500027L6	Price
SD6	5/8 x 9/16	1/4	FP50SD6	Price	FP50SD6D	Price	FP6043625020	Price	FP6043625027	Price
SD7	3/4 x 11/16	1/4	FP50SD7	Price	FP50SD7D	Price	FP6043750020	Price	FP6043750027	Price
SD9	1 x 15/16	1/4	-	-	-	-	FP6043100020	Price	FP6043100027	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" Shank Length

Oval Shape Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish





RAPIDKUT®

M.A. FORD

			Rapidkut				M A Ford			
			Single		Double		Price		Double	
Burr No.	Size (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SE41	1/8 x 7/32	1/8	-	-	FP50SE41D	Price	FP6069060020	Price	FP6069060027	Price
SE41L2†	1/8 x 7/32	1/8	-	-	-	-	FP6069060020L2	Price	-	-
SE41L3†	1/8 x 7/32	1/8	-	-	FP50SE41L3D	Price	FP6069060020L3	Price	FP6069060027L3	Price
SE53	3/16 x 9/32	1/8	-	-	-	-	FP6072060020	Price	FP6072060027	Price
SE81	3/16 x 9/32	3/16	-	-	-	-	FP6074040020	Price	FP6074040027	Price
SE11	3/16 x 5/16	1/4	FP50SE11	Price	FP50SE11D	Price	-	-	-	-
SE51	1/4 x 3/8	1/8	FP50SE51	Price	FP50SE51D	Price	FP6070040020	Price	FP6070040027	Price
SE1	1/4 x 3/8	1/4	FP50SE1	Price	FP50SE1D	Price	FP6044250020	Price	FP6044250027	Price
SE1L6†	1/4 x 3/8	1/4	FP50SE1L6	Price	FP50SE1L6D	Price	FP6044250020L6	Price	FP6044250027L6	Price
SE3	3/8 x 5/8	1/4	FP50SE3	Price	FP50SE3D	Price	FP6044375020	Price	FP6044375027	Price
SE3L6†	3/8 x 5/8	1/4	FP50SE3L6	Price	FP50SE3L6D	Price	FP6044375020L6	Price	FP6044375027L6	Price
SE5	1/2 x 7/8	1/4	FP50SE5	Price	FP50SE5D	Price	FP6044500020	Price	FP6044500027	Price
SE5L6†	1/2 x 7/8	1/4	FP50SE5L6	Price	FP50SE5L6D	Price	FP6044500020L6	Price	FP6044500027L6	Price
SE6	5/8 x 1	1/4	FP50SE6	Price	FP50SE6D	Price	FP6044625020	Price	FP6044625027	Price
SE7	3/4 x 1	1/4	FP50SE7	Price	FP50SE7D	Price	FP6044750020	Price	FP6044750027	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" Shank Length

Tree Shape with Pointed End Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish





RAPIDKUT®

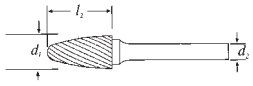
M.A. FORD

			Rapidkut				M A Ford			
			Single		Double		Price		Double	
Burr No.	Size (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SG41	1/8 x 1/4	1/8	-	-	FP50SG41D	Price	FP6069090020	Price	FP6069090027	Price
SG42	1/8 x 5/16	1/8	-	-	FP50SG42D	Price	FP6069095020	Price	FP6069095027	Price
SG43	1/8 x 3/8	1/8	FP50SG43	Price	FP50SG43D	Price	FP6069100020	Price	FP6069100027	Price
SG44	1/8 x 1/2	1/8	FP50SG44	Price	FP50SG44D	Price	-	-	-	-
SG44L3†	1/8 x 1/2	1/8	-	-	FP50SG44L3D	Price	-	-	-	-
SG53	3/16 x 1/2	1/8	-	-	FP50SG53D	Price	FP6072090020	Price	FP6072090027	Price
SG81	3/16 x 1/2	3/16	-	-	-	-	FP6074070020	Price	FP6074070027	Price
SG51	1/4 x 1/2	1/8	FP50SG51	Price	FP50SG51D	Price	FP6070060020	Price	FP6070060027	Price
SG1	1/4 x 5/8	1/4	FP50SG1	Price	FP50SG1D	Price	FP6046250020	Price	FP6046250027	Price
SG1L6†	1/4 x 5/8	1/4	FP50SG1L6	Price	FP50SG1L6D	Price	FP6046250020L6	Price	FP6046250027L6	Price
SG2	5/16 x 3/4	1/4	FP50SG2	Price	FP50SG2D	Price	FP6046312520	Price	FP6046312527	Price
SG3	3/8 x 3/4	1/4	FP50SG3	Price	FP50SG3D	Price	FP6046375020	Price	FP6046375027	Price
SG3L6†	3/8 x 3/4	1/4	FP50SG3L6	Price	FP50SG3L6D	Price	FP6046375020L6	Price	FP6046375027L6	Price
SG13	1/2 x 3/4	1/4	FP50SG13	Price	FP50SG13D	Price	FP6046500120	Price	FP6046500127	Price
SG5	1/2 x 1	1/4	FP50SG5	Price	FP50SG5D	Price	FP6046500020	Price	FP6046500027	Price
SG5L6†	1/2 x 1	1/4	FP50SG5L6	Price	FP50SG5L6D	Price	FP6046500020L6	Price	FP6046500027L6	Price
SG6	5/8 x 1	1/4	FP50SG6	Price	FP50SG6D	Price	FP6046625020	Price	FP6046625027	Price
SG7	3/4 x 1	1/4	FP50SG7	Price	FP50SG7D	Price	FP6046750020	Price	FP6046750027	Price
SG15	3/4 x 1-1/2	1/4	-	-	-	-	FP6046750120	Price	FP6046750127	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" Shank Length

Tree Shape with Radius End Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish







RAPIDKUT®

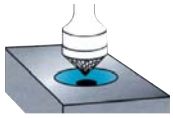
M.A. FORD

			Rapidkut				M A Ford			
			Single		Double		Price		Double	
Burr No.	Size (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SF61	3/32 x 1/4	3/32	FP50SF61	Price	-	-	-	-	-	-
SF41	1/8 x 1/4	1/8	FP50SF41	Price	FP50SF41D	Price	FP6069070020	Price	FP6069070027	Price
SF42	1/8 x 1/2	1/8	FP50SF42	Price	FP50SF42D	Price	FP6069080020	Price	FP6069080027	Price
SF11	1/8 x 1/2	1/4	-	-	FP50SF11D	Price	FP6045125020	Price	FP6045125027	Price
SF42L2†	1/8 x 1/2	1/8	-	-	FP50SF42L2D	Price	-	-	-	-
SF42L3†	1/8 x 1/2	1/8	FP50SF42L3	Price	FP50SF42L3D	Price	FP6069080020L3	Price	FP6069080027L3	Price
SF53	3/16 x 1/2	1/8	FP50SF53	Price	FP50SF53D	Price	FP6072080020	Price	FP6072080027	Price
SF81	3/16 x 1/2	3/16	-	-	-	-	FP6074060020	Price	FP6074060027	Price
SF51	1/4 x 1/2	1/8	FP50SF51	Price	FP50SF51D	Price	FP6070050020	Price	FP6070050027	Price
SF1L6†	1/4 x 5/8	1/4	FP50SF1L6	Price	FP50SF1L6D	Price	FP6045250020L6	Price	FP6045250027L6	Price
SF1	1/4 x 5/8	1/4	FP50SF1	Price	FP50SF1D	Price	FP6045250020	Price	FP6045250027	Price
SF3	3/8 x 3/4	1/4	FP50SF3	Price	FP50SF3D	Price	FP6045375020	Price	FP6045375027	Price
SF3L6†	3/8 x 3/4	1/4	FP50SF3L6	Price	FP50SF3L6D	Price	FP6045375020L6	Price	FP6045375027L6	Price
SF4	7/16 x 1	1/4	FP50SF4	Price	FP50SF4D	Price	FP6045437520	Price	FP6045437527	Price
SF13	1/2 x 3/4	1/4	FP50SF13	Price	FP50SF13D	Price	FP6045500120	Price	FP6045500127	Price
SF5	1/2 x 1	1/4	FP50SF5	Price	FP50SF5D	Price	FP6045500020	Price	FP6045500027	Price
SF5L6†	1/2 x 1	1/4	FP50SF5L6	Price	FP50SF5L6D	Price	FP6045500020L6	Price	FP6045500027L6	Price
SF6	5/8 x 1	1/4	FP50SF6	Price	FP50SF6D	Price	FP6045625020	Price	FP6045625027	Price
SF7	3/4 x 1	1/4	FP50SF7	Price	FP50SF7D	Price	FP6045750120	Price	FP6045750127	Price
SF14	3/4 x 1-1/4	1/4	FP50SF14	Price	FP50SF14D	Price	FP6045750020	Price	FP6045750027	Price
SF15	3/4 x 1-1/2	1/4	-	-	-	-	FP6045750220	Price	FP6045750227	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" Shank Length

90° Cone Shape Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish






RAPIDKUT®

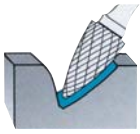
M.A. FORD

			Rapidkut				M A Ford			
			Single		Double		Price		Double	
Burr No.	Size (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SK42	1/8 x 1/16	1/8	**FP50SK42**	Price	**FP50SK42D**	Price	**FP6069117520**	Price	**FP6069117527**	Price
SK1	1/4 x 1/8	1/4	**FP50SK1**	Price	**FP50SK1D**	Price	**FP6029702500**	Price	**FP6029702507**	Price
SK3	3/8 x 3/16	1/4	**FP50SK3**	Price	**FP50SK3D**	Price	**FP6029703750**	Price	**FP6029703757**	Price
SK5	1/2 x 1/4	1/4	**FP50SK5**	Price	**FP50SK5D**	Price	**FP6029705000**	Price	**FP6029705007**	Price
SK6	5/8 x 5/16	1/4	**-**	-	**-**	-	**FP6029706250**	Price	**FP6029706257**	Price
SK7	3/4 x 3/8	1/4	**FP50SK7**	Price	**FP50SK7D**	Price	**FP6029707500**	Price	**FP6029707507**	Price
SK9	1 x 1/2	1/4	**FP50SK9**	Price	**FP50SK9D**	Price	**FP6029710000**	Price	**FP6029710007**	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" OAL

Flame Shape Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish






RAPIDKUT®

M.A. FORD

			Rapidkut				M A Ford			
			Single		Double		Price		Double	
Burr No.	Size (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SH41	1/8 x 1/4	1/8	**FP50SH41**	Price	**FP50SH41D**	Price	**FP6069160020**	Price	**FP6069160027**	Price
SH41L2†	1/8 x 1/4	1/8	**FP50SH41L2**	Price	**-**	-	**-**	-	**-**	-
SH41L3†	1/8 x 1/4	1/8	**-**	-	**-**	-	**FP6069160020L3**	Price	**FP6069160027L3**	Price
SH53	3/16 x 3/8	1/8	**-**	-	**FP50SH53D**	Price	**FP6072070020**	Price	**FP6072070027**	Price
SH1	1/4 x 5/8	1/4	**-**	-	**FP50SH1D**	Price	**FP6049250020**	Price	**FP6049250027**	Price
SH2	5/16 x 3/4	1/4	**FP50SH2**	Price	**FP50SH2D**	Price	**FP6049312520**	Price	**FP6049312527**	Price
SH2L6†	5/16 x 3/4	1/4	**FP50SH2L6**	Price	**FP50SH2L6D**	Price	**FP6049312520L6**	Price	**FP6049312527L6**	Price
SH5	1/2 x 1-1/4	1/4	**FP50SH5**	Price	**FP50SH5D**	Price	**FP6049500020**	Price	**FP6049500027**	Price
SH5L6†	1/2 x 1-1/4	1/4	**FP50SH5L6**	Price	**FP50SH5L6D**	Price	**FP6049500020L6**	Price	**FP6049500027L6**	Price
SH6	5/8 x 1-7/16	1/4	**FP50SH6**	Price	**FP50SH6D**	Price	**FP6049625020**	Price	**FP6049625027**	Price
SH7	3/4 x 1-5/8	1/4	**FP50SH7**	Price	**FP50SH7D**	Price	**FP6049750020**	Price	**FP6049750027**	Price

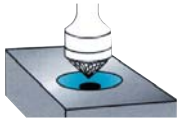
† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" OAL

60° Cone Shape Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish







RAPIDKUT®

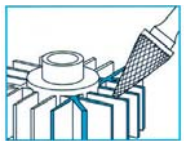
M.A. FORD

			Rapidkut				M A Ford			
			Single		Double		Price		Double	
Burr No.	Size (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SJ42	1/8 x 3/32	1/8	**-**	-	**FP50SJ42**	Price	**FP6069110020**	Price	**FP6069110027**	Price
SJ1	1/4 x 3/16	1/4	**FP50SJ1**	Price	**FP50SJ1D**	Price	**FP6029602500**	Price	**FP6029602507**	Price
SJ3	3/8 x 5/16	1/4	**FP50SJ3**	Price	**FP50SJ3D**	Price	**FP6029603750**	Price	**FP6029603757**	Price
SJ5	1/2 x 7/16	1/4	**FP50SJ5**	Price	**FP50SJ5D**	Price	**FP6029605000**	Price	**FP6029605007**	Price
SJ6	5/8 x 1/2	1/4	**-**	-	**-**	-	**FP6029606250**	Price	**FP6029606257**	Price
SJ7	3/4 x 9/16	1/4	**FP50SJ7**	Price	**FP50SJ7D**	Price	**FP6029607500**	Price	**FP6029607507**	Price
SJ9	1 x 13/16	1/4	**FP50SJ9**	Price	**FP50SJ9D**	Price	**FP6029610000**	Price	**FP6029610007**	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" OAL

Cone Shape Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish





RAPIDKUT®

								M A Ford			
				Single		Double		Single		Price	
Burr No.	Size (in.)	Shank Size (in.)	Included Angle	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SM61	3/32 x 1/4	3/32	10°	-	-	FP50SM61D	Price	-	-	-	-
SM41	1/8 x 3/8	1/8	12°	FP50SM41	Price	FP50SM41D	Price	FP6069125020	Price	FP6069125027	Price
SM42	1/8 x 7/16	1/8	14°	FP50SM42	Price	FP50SM42D	Price	FP6069130020	Price	FP6069130027	Price
SM42L2†	1/8 x 7/16	1/8	14°	FP50SM42L2	Price	FP50SM42L2D	Price	FP6069130020L2	Price	-	-
SM42L3†	1/8 x 7/16	1/8	14°	FP50SM42L3	Price	FP50SM42L3D	Price	FP6069130020L3	Price	FP6069130027L3	Price
SM43	1/8 x 5/8	1/8	7°	FP50SM43	Price	FP50SM43D	Price	FP6069140020	Price	FP6069140027	Price
SM43L3†	1/8 x 5/8	1/8	7°	-	-	FP50SM43L3	Price	-	-	-	-
SM53	3/16 x 1/2	1/8	16°	FP50SM53	Price	FP50SM53D	Price	FP6072100020	Price	FP6072100027	Price
SM51	1/4 x 1/2	1/8	22°	-	-	FP50SM51D	Price	FP6070070020	Price	FP6070070027	Price
SM1	1/4 x 1/2	1/4	22°	FP50SM1	Price	FP50SM1D	Price	FP6047250020	Price	FP6047250027	Price
SM2	1/4 x 3/4	1/4	14°	FP50SM2	Price	FP50SM2D	Price	FP6047250120	Price	FP6047250127	Price
SM3	1/4 x 1	1/4	10°	FP50SM3	Price	FP50SM3D	Price	FP6047250220	Price	FP6047250227	Price
SM4	3/8 x 5/8	1/4	28°	FP50SM4	Price	FP50SM4D	Price	FP6047375020	Price	FP6047375027	Price
SM5	1/2 x 7/8	1/4	28°	FP50SM5	Price	FP50SM5D	Price	FP6047500020	Price	FP6047500027	Price
SM6	5/8 x 1	1/4	31°	FP50SM6	Price	FP50SM6D	Price	FP6047625020	Price	FP6047625027	Price

† Extra Length: L2 = 2" OAL, L3 = 3" OAL, L6 = 6" OAL

Inverted Cone Shape Burrs

- Double Cut - Rapid stock removal in tough applications. Design reduces the pulling action, reduces the size of chips, ensures rapid stock removal
- Single Cut - General Purpose. Recommended for steel, cast iron, ferrous materials. Offers good stock removal and smooth workpiece finish





RAPIDKUT®

								M A Ford			
				Single		Double		Single		Price	
Burr No.	Size (in.)	Shank Size (in.)	Included Angle	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SN41	3/32 x 1/8	1/8	10°	-	-	-	-	FP6069165020	Price	FP6069165027	Price
SN42	1/8 x 3/16	1/8	10°	FP50SN42	Price	-	-	FP6069170020E	Price	FP6069170027E	Price
SN53	3/16 x 1/4	1/8	10°	-	-	FP50SN53D	Price	FP6072110020	Price	FP6072110027	Price
SN81	3/16 x 1/4	3/16	10°	-	-	-	-	FP6074090020	Price	FP6074090027	Price
SN51	1/4 x 1/4	1/8	10°	FP50SN51	Price	FP50SN51D	Price	FP6070080020	Price	FP6070080027	Price
SN1	1/4 x 5/16	1/4	10°	FP50SN1	Price	FP50SN1D	Price	FP6050025020	Price	FP6050025027	Price
SN2	3/8 x 3/8	1/4	13°	FP50SN2	Price	FP50SN2D	Price	FP6050037520	Price	FP6050037527	Price
SN4	1/2 x 1/2	1/4	28°	FP50SN4	Price	FP50SN4D	Price	FP6050050020	Price	FP6050050027	Price
SN6	5/8 x 3/4	1/4	18°	FP50SN6	Price	FP50SN6D	Price	FP6050062520	Price	FP6050062527	Price
SN7	3/4 x 5/8	1/4	30°	FP50SN7	Price	FP50SN7D	Price	FP6050075020	Price	FP6050075027	Price

Carbide Burr Sets

- Solid carbide
- Assorted shapes

MADE IN THE USA



Burrs in Set	Shank Size (in.)	Cut	Brand Name	Order No.	Price
SA1 SC1 SF1, SD1, SM1	1/4	Double	ProCut	FP45BS1405DC	Price
SA1, SA3, SA5, SC1, SC3, SC5, SF1, SF3, SF5	1/4	Double	Rapidkut	FP50120015	Price
SA1, SB1, SC1, SD1, SE1, SF1, SG1, SH1, SJ1, SK1, SM1, SN1	1/4	Double	Rapidkut	FP50120009	Price
SA1, SC1, SD1, SE1, SF1, SG1, SL1, SM2	1/4	Double	Rapidkut	FP50151122	Price
SA1, SC1, SD1, SE1, SF1, SG1,SH1, SJ1, SK1, SL1, SM1, SN1	1/4	Double	ProCut	FP45BS1412DC	Price
SA11, SB14, SC13, SD14, SE11, SF11, SG1, SH1, SJ1, SK1, SM1, SN1	1/4	Double	Rapidkut	FP50120011	Price
SA42, SA43, SC41, SC42, SD42, SE41,SF42, SG42, SH41, SL42, SM42, SN42	1/8	Double	ProCut	FP45BS1812DC	Price
SA42, SA43, SC42, SD42, SE41, SF41, SF42, SG41, SL42, SM43, SN41, SN42	1/8	Double	Rapidkut	FP50120001	Price
SA5, SC3, SC5, SD5, SF3, SF5, SG3, SL4	1/4	Double	Rapidkut	FP50151124	Price
SA5, SC5, SD5, SE5, SG5, SH5, SK5, SM5	1/4	Double	Rapidkut	FP50120019	Price
SA51, SB51, SC51, SD51, SE51, SF51, SG51, SM51, SN51,	1/8	Double	ProCut	FP45BS1809DC	Price
SA51, SC51, SF51, SD51, SM51	1/8	Double	ProCut	FP45BS1805DC	Price
SB1, SB3, SB5, SD1, SD3, SD5, SE1, SE3, SE5	1/4	Double	Rapidkut	FP50120016	Price
SB1, SC1, SD1, SE1, SF1, SG1, SH1, SJ1, SK1, SL1, SM1, SN1	1/4	Double	Rapidkut	FP50120010	Price
R1Thru R8 & R10	1/8	Single	Generic USA	FP50R100	Price
R15 Thru R23	1/8	Single	Generic USA	FP50R110	Price
R24, R26R31 & R33	1/4	Single	Generic USA	FP50R120	Price

RAPIDKUT® NF Burrs For Aluminum - 1/4" Shank



Designed for use on aluminum, non-ferrous metals, soft steel, reinforced plastics, and other soft materials. High flute finish for easy chip flow and fast stock removal. Also provides excellent work finish with minimum loading when cutting soft, sticky metals

MADE IN THE USA

Shape - 14° Taper Shape				
Size (in.)	Burr No.	Shape	Order No.	Price
3/8 x 1-1/16	SL3NF	14°Taper Shape	**FP50SL3NF**	Price
1/2 x 1-1/8	SL4NF	14°Taper Shape	**FP50SL4NF**	Price
5/8 x 1-5/16	SL6NF	14°Taper Shape	**FP50SL6NF**	Price
3/4 x 1-1/2	SL7NF	14°Taper Shape	**FP50SL7NF**	Price

Shape - Ball End				
Size (in.)	Burr No.	Shape	Order No.	Price
1/4 x 3/16	SD1NF	Ball End	**FP50SD1NF**	Price
3/8 x 5/16	SD3NF	Ball End	**FP50SD3NF**	Price
1/2 x 7/16	SD5NF	Ball End	**FP50SD5NF**	Price
5/8 x 9/16	SD6NF	Ball End	**FP50SD6NF**	Price
3/4 x 11/16	SD7NF	Ball End	**FP50SD7NF**	Price

Shape - Cylindrical				
Size (in.)	Burr No.	Shape	Order No.	Price
1/4 x 3/4	SA1NF	Cylindrical	**FP50SA1NF**	Price
3/8 x 3/4	SA3NF	Cylindrical	**FP50SA3NF**	Price
1/2 x 1	SA5NF	Cylindrical	**FP50SA5NF**	Price
5/8 x 1	SA6NF	Cylindrical	**FP50SA6NF**	Price
3/4 x 1	SA7NF	Cylindrical	**FP50SA7NF**	Price

Shape - Cylindrical Radius End				
Size (in.)	Burr No.	Shape	Order No.	Price
1/4 x 3/4	SC1NF	Cylindrical Radius End	**FP50SC1NF**	Price
3/8 x 3/4	SC3NF	Cylindrical Radius End	**FP50SC3NF**	Price
1/2 x 1	SC5NF	Cylindrical Radius End	**FP50SC5NF**	Price
5/8 x 1	SC6NF	Cylindrical Radius End	**FP50SC6NF**	Price
3/4 x 1	SC7NF	Cylindrical Radius End	**FP50SC7NF**	Price

Shape - Oval				
Size (in.)	Burr No.	Shape	Order No.	Price
3/8 x 5/8	SE3NF	Oval	**FP50SE3NF**	Price
1/2 x 7/8	SE5NF	Oval	**FP50SE5NF**	Price
5/8 x 1	SE6NF	Oval	**FP50SE6NF**	Price
3/4 x 1	SE7NF	Oval	**FP50SE7NF**	Price

Shape - Taper Shape Radius End				
Size (in.)	Burr No.	Shape	Order No.	Price
1/4 x 3/4	SF1NF	Taper Shape Radius End	**FP50SF1NF**	Price
3/8 x 3/4	SF3NF	Taper Shape Radius End	**FP50SF3NF**	Price
1/2 x 1	SF5NF	Taper Shape Radius End	**FP50SF5NF**	Price
5/8 x 1	SF6NF	Taper Shape Radius End	**FP50SF6NF**	Price
3/4 x 1	SF7NF	Taper Shape Radius End	**FP50SF7NF**	Price

M.A. FORD Carbide Burrs for Aluminum

Shape - 14° Taper Shape			
Burr No.	Size	Order No.	Price
SL3NF	3/8 x 1-1/16	**FP6148375150**	Price
SL4NF	1/2 x 1-1/8	**FP6148500150**	Price
SL6NF	5/8 x 1-5/16	**FP6148625150**	Price

Shape - Ball End			
Burr No.	Size	Order No.	Price
SD3NF	3/8 x 5/16	**FP6143375150**	Price
SD5NF	1/2 x 7/16	**FP6143500150**	Price
SD6NF	5/8 x 9/16	**FP6143625150**	Price

Shape - Cylindrical			
Burr No.	Size	Order No.	Price
SA3NF	3/8 x 3/4	**FP6141375150**	Price
SA5NF	1/2 x 1	**FP6141500150**	Price
SA7NF	3/4 x 1	**FP6141625150**	Price

Shape - Cylindrical Radius End			
Burr No.	Size	Order No.	Price
SC3NF	3/8 x 3/4	**FP6142375150**	Price
SC5NF	1/2 x 1	**FP6142500150**	Price
SC7NF	3/4 x 1	**FP6142625150**	Price

Shape - Oval			
Burr No.	Size	Order No.	Price
SE3NF	3/8 x 5/8	**FP6144375150**	Price
SE5NF	1/2 x 7/8	**FP6144500150**	Price
SE6NF	5/8 x 1	**FP6144625150**	Price

Shape - Taper Shape Radius End			
Burr No.	Size	Order No.	Price
SF3NF	3/8 x 3/4	**FP6145375150**	Price
SF5NF	1/2 x 1	**FP6145500150**	Price
SF6NF	5/8 x 1	**FP6145625150**	Price

Solid Carbide Burrs 1/8" Shanks

MADE IN THE USA

Item	Size (in.)	Order No.	Price
	1/8 x 1/4	**FP50R7**	Price
	1/8 x 1/4	**FP50R8**	Price
	1/8 x 1/8	**FP50R12**	Price
	1/8 x 1/8	**FP50R13**	Price
	1/8 x 1/8	**FP50R14**	Price
	1/8 x 1/8	**FP50R5**	Price
	1/8 x 13/32	**FP50R10**	Price
	1/8 x 3/16	**FP50R11**	Price
	1/8 x 3/16	**FP50R6**	Price
	1/8 x 3/16	**FP50R9**	Price
	1/8 x 5/8	**FP50R1**	Price
	1/8 x 5/8	**FP50R3**	Price
	3/32 x 1/2	**FP50R2**	Price
	3/32 x 1/2	**FP50R4**	Price

Carbide Burrs 1/4" Shank 2" OAL

MADE IN THE USA

Item	Size (in.)	Order No.	Price
	1/4 x 1/2	**FP50R33**	Price
	1/4 x 1/4	**FP50R28**	Price
	1/4 x 1/4	**FP50R35**	Price
	1/4 x 5/8	**FP50R37**	Price
	1/4 x 3/8	**FP50R29**	Price
	1/4 x 3/8	**FP50R34**	Price
	1/4 x 5/8	**FP50R24**	Price
	1/4 x 5/8	**FP50R26**	Price
	1/4 x 5/8	**FP50R30**	Price
	1/4 x 5/8	**FP50R31**	Price
	1/4 x 60°	**FP50R32**	Price
	1/4 x 82°	**FP50R36**	Price
	3/16 x 1/2	**FP50R25**	Price
	3/16 x 1/2	**FP50R27**	Price

1/4" Diameter Carbide Burrs 1/8" Steel Shank

MADE IN THE USA

Item	Size (in.)	Order No.	Price
	1/4 x 1/2	**FP50R15**	Price
	1/4 x 1/2	**FP50R17**	Price
	1/4 x 1/2	**FP50R20**	Price
	1/4 x 1/2	**FP50R21**	Price
	1/4 x 1/2	**FP50R22**	Price
	1/4 x 1/4	**FP50R16**	Price
	1/4 x 1/4	**FP50R18**	Price
	1/4 x 1/4	**FP50R23**	Price
	1/4 x 3/8	**FP50R19**	Price

RAPIDKUT® Cylinder Shape

MADE IN THE USA

1/4" Shank



Size (in.)	Order No.	Price
1/8 x 1/2	FP40125A	Price
1/4 x 1	FP40250A	Price
5/16 x 1	FP40312A	Price
3/8 x 1	FP40375A	Price
1/2 x 1	FP40500A	Price
5/8 x 1	FP40625A	Price
3/4 x 3/4	FP40750A	Price

RAPIDKUT® Oval Shape

MADE IN THE USA

1/4" Shank



Size (in.)	Order No.	Price
3/8 x 5/8	FP40375Q	Price
5/8 x 1	FP40625Q	Price

RAPIDKUT® Inverted Cone Shape

MADE IN THE USA

1/4" Shank



Size (in.)	Order No.	Price
1/2 x 1/2	FP40500N	Price
1/4 x 1/2	FP40250N	Price

RAPIDKUT® Concave Shape

MADE IN THE USA

1/4" Shank



Size (in.)	Order No.	Price
1/4 x 1	FP40250BI	Price

RAPIDKUT® Ball Shape

MADE IN THE USA

1/4" Shank



Size (in.)	Order No.	Price
1/8	FP40125B	Price
3/16	FP40187B	Price
1/4	FP40250B	Price
5/16	FP40312B	Price
3/8	FP40375B	Price
1/2	FP40500B	Price
5/8	FP40625B	Price
3/4	FP40750B	Price

RAPIDKUT® Tree Shape Radius End

MADE IN THE USA

1/4" Shank



Size (in.)	Order No.	Price
1/2 x 1	FP40500R	Price
1/2 x 1-1/8	FP40500RB	Price
1/4 x 3/4	FP40250R	Price
3/4 x 1-1/4	FP40750R	Price
3/8 x 3/4	FP40375R	Price
5/8 x 1-1/8	FP40625R	Price

RAPIDKUT® Cylindrical Radius End

MADE IN THE USA

1/4" Shank



Size (in.)	Order No.	Price
1/8 x 1/2	FP40125C	Price
1/4 x 1	FP40250C	Price
5/16 x 1	FP40312C	Price
3/8 x 1	FP40375C	Price
1/2 x 1	FP40500C	Price
5/8 x 1	FP40625C	Price
3/4 x 1-1/4	FP40750C	Price

RAPIDKUT® Tree Shape Pointed End

MADE IN THE USA

1/4" Shank

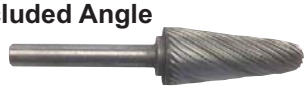


Size (in.)	Order No.	Price
1/2 x 3/4	FP40500TA	Price
1/4 x 5/8	FP40250T	Price

RAPIDKUT® Tapered Shape Radius End

MADE IN THE USA

1/4" Shank
14° Included Angle



Size (in.)	Order No.	Price
1/4 x 5/8	FP40250HD	Price

RAPIDKUT® Cone Shape

MADE IN THE USA

1/4" Shank



Included Angle	Size	Order No.	Price
10° Cone	1/4 x 1	FP40250H	Price
14° Cone	1/4 x 3/4	FP40250HB	Price
22° Cone	1/4 x 1/2	FP40250HA	Price
28° Cone	1/2 x 7/8	FP40500H	Price
31° Cone	5/8 x 1	FP40625H	Price
8° Cone	5/16 x 1	FP40312H	Price

RAPIDKUT® Burr Sets

MADE IN THE USA



Shank Size (in.)	Size	Order No.	Price
1/8	H1 thru H20	FP4020	Price
1/4	20 Most Popular	FP4025	Price

RAPIDKUT® 1/8" Shank Burrs

MADE IN THE USA

Item	Size (in.)	Order No.	Price
	1/8 x 1/8	FP40H22	Price
	1/8 x 1/4	FP40H11	Price
	1/8 x 5/8	FP40H14	Price
	1/8 x 9/16	FP40H10	Price
	1/8 x 5/8	FP40H13	Price
	1/8 x 5/16	FP40H26	Price
	3/16 x 3/16	FP40H31	Price
	3/16 x 3/8	FP40H27	Price
	3/16 x 3/8	FP40H28	Price
	3/16 x 5/8	FP40H21	Price
	3/16 x 5/8	FP40H23	Price
	1/4 x 1/4	FP40H7	Price
	1/4 x 1/4	FP40H8	Price
	1/4 x 1/4	FP40H30	Price
	1/4 x 1/2	FP40H1	Price
	1/4 x 1/2	FP40H20	Price
	1/4 x 1/2	FP40H4	Price
	1/4 x 1/2	FP40H2	Price
	1/4 x 1/2	FP40H33	Price
	1/4 x 5/8	FP40H32	Price
	3/8 x 1/32	FP40H29	Price
	3/8 x 3/8	FP40H19	Price
	5/8 x 1/8	FP40H15	Price
	5/8 x 1/8	FP40H16	Price
	5/8 x 1/8	FP40H18	Price

Solid Carbide Grinding Burrs



Size x L.O.C.(in.)	Shank Size (in.)	Neck Length (in.)	OAL (in.)	Order No.	Price
1/16 x 1/8	1/8	3/8	1-1/2	**FP501450**	Price
3/32 x 1/8	1/8	3/8	1-1/2	**FP501452**	Price
1/8 x 1/8	1/8	7/16	1-1/2	**FP501454**	Price
5/32 x 3/16	3/16	1/2	2	**FP501456**	Price
3/16 x 3/16	3/16	9/16	2	**FP501458**	Price
7/32 x 1/4	1/4	5/8	2	**FP501460**	Price
1/4 x 1/4	1/4	3/4	2	**FP501462**	Price
9/32 x 5/16	1/4	-	2-1/2	**FP501463**	Price
5/16 x 5/16	1/4	-	2-1/2	**FP501464**	Price

Solid Carbide Grinding Burrs

with Heat Treated Steel Shanks



Size x L.O.C. (in.)	Shank Size (in.)	OAL (in.)	Order No.	Price
5/16 x 5/16	1/4	2-1/2	**FP501467**	Price
3/8 x 5/16	1/4	2-1/2	**FP501468**	Price
7/16 x 5/16	1/4	2-1/2	**FP501469**	Price
1/2 x 5/16	1/4	2-1/2	**FP501470**	Price
5/8 x 3/8	3/8	2-1/2	**FP501472**	Price
3/4 x 3/8	3/8	2-1/2	**FP501473**	Price
7/8 x 3/8	3/8	2-1/2	**FP501474**	Price
1 x 3/8	3/8	2-1/2	**FP501475**	Price

Huot Carbide Burr Dispenser

- Holds the following burs: SA-1, SC-1, SD-1, SE-1, SF-1, SG-1, SL-1, SM-3, SA-3, SC-3, SD-3, SE-3, SF-3, SG-3, SL-3, SM-4, SA-5, SC-5, SE-5, SF-5, SG-5, SL-4, SM-5
- Shipping weight: 11 lbs
- Separates and protects valuable carbide burrs
- All steel cabinet with extruded vinyl compartments
- Easy to read identification numbers
- Sturdy and stackable
- High quality epoxy finish
- Dimensions: 7-3/8 x 7-3/4 x 14-5/8

MADE IN THE USA



Order No.	Price
AP5313200	Price

25 Pc. Solid Carbide Burr Mix

1/4" Shank

1/8” thru 3/8” Diameter Heads

MADE IN THE USA



Order No.	Price
FP800250	Price

20 Pc. Solid Carbide Burr Mix - 1/8" Shank

1/8” Diameter Heads

MADE IN THE USA



Order No.	Price
FP800125	Price

EXOPRO® Aero-BNC Routers

Nicked Routers

- Type 1 - Non end cutting
- Type 2 - Bur end
- Type 3 - End mill cut
- Type 4 - Drill point
- OSG List #2061



Cutter Dia. (in.)	Shank Dia. (in.)	LOC (in.)	OAL (in.)	No. of Flutes	Type	Order No.	Price
1/8	1/8	1/4	1-1/2	6	Type 2 - Bur End	**TP5220610116**	Price
1/8	1/8	3/8	1-1/2	6	Type 3 - End Mill Cut	**TP5220611116**	Price
1/8	1/8	1/2	1-1/2	8	Type 3 - End Mill Cut	**TP5220612116**	Price
3/16	3/16	3/8	2	6	Type 2 - Bur End	**TP5220610216**	Price
3/16	3/16	9/16	2	6	Type 3 - End Mill Cut	**TP5220611216**	Price
3/16	3/16	3/4	2	8	Type 3 - End Mill Cut	**TP5220612216**	Price
1/4	1/4	1/2	2-1/2	8	Type 2 - Bur End	**TP5220610316**	Price
1/4	1/4	3/4	2-1/2	10	Type 2 - Bur End	**TP5220612316**	Price
1/4	1/4	3/4	2-1/2	10	Type 3 - End Mill Cut	**TP5220611316**	Price
1/4	1/4	3/4	2-1/2	8	Type 2 - Bur End	**TP5220613416**	Price
1/4	1/4	3/4	2-1/2	12	Type 2 - Bur End	**TP5220612416**	Price
1/4	1/4	1	3	8	Type 2 - Bur End	**TP5220613216**	Price
1/4	1/4	1	3	10	Type 2 - Bur End	**TP5220614316**	Price
1/4	1/4	1	3	12	Type 2 - Bur End	**TP5220614400**	Price
1/4	1/4	1	3	12	Type 2 - Bur End	**TP5220614416**	Price
1/4 w/.030 R	1/4	1	3	12	Type 2 - Bur End	**TP5220617316**	Price
1/4	1/4	1	3	10	Type 3 - End Mill Cut	**TP5220613316**	Price
1/4	1/4	1	3	8	Type 4 - Drill Point	**TP5220616316**	Price
1/4	1/4	1	3	12	Type 4 - Drill Point	**TP5220616416**	Price
1/4	1/4	1-1/4	4	12	Type 1 - Non End Cutting	**TP5220615316**	Price
1/4	1/4	1-1/4	4	8	Type 2 - Bur End	**TP5220615216**	Price
5/16	5/16	1	2-1/2	10	Type 3 - End Mill Cut	**TP5220610416**	Price
3/8	3/8	3/4	2-1/2	12	Type 2 - Bur End	**TP5220610516**	Price
3/8	3/8	1-1/8	3	12	Type 2 - Bur End	**TP5220612516**	Price
3/8	3/8	1-1/8	3	12	Type 3 - End Mill Cut	**TP5220611516**	Price
3/8 w/.030 R	3/8	1-1/8	3	12	Type 2 - Bur End	**TP5220616816**	Price
3/8	3/8	1-1/4	3	12	Type 4 - Drill Point	**TP5220616516**	Price
3/8	3/8	1-1/2	4	12	Type 2 - Bur End	**TP5220614516**	Price
3/8	3/8	1-1/2	4	12	Type 3 - End Mill Cut	**TP5220613516**	Price
3/8	3/8	2	4	12	Type 1 - Non End Cutting	**TP5220615516**	Price
1/2	1/2	1	3	14	Type 2 - Bur End	**TP5220611716**	Price
1/2 w/.030 R	1/2	1	3	12	Type 2 - Bur End	**TP5220613716**	Price
1/2	1/2	1	3	14	Type 3 - End Mill Cut	**TP5220610716**	Price
1/2	1/2	1	3	14	Type 4 - Drill Point	**TP5220615716**	Price
1/2	1/2	2	4	16	Type 2 - Bur End	**TP5220612716**	Price

MICRO 100® Solid Carbide Single Flute Routers

MADE IN THE USA

For Plastic & Composites or Aluminum & Non-Ferrous

- Optimized rake and clearance angles produce highest material removal rates and improved surface finishes
- Innovative single flute end mill geometry avoids chip melting and chip re-welding problems
- Special coating available upon request
- Shank diameter tolerance: -.0001 to -.0002”
- Cutter diameter tolerance: +.000 to -.002”
- T.I.R. maximum: .0005”



- Routers					
				RH for Aluminum	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/8	1/4	1-1/2	**GE45SFA06222**	Price
1/8	1/8	1/4	1-1/2	**GE45SFA12522**	Price
1/8	1/4	1/4	2	**GE45SFA12542**	Price
1/8	1/8	1/2	1-1/2	**GE45SFA12524**	Price
1/8	1/4	1/2	2	**GE45SFA12544**	Price
5/32	1/4	5/8	2	**GE45SFA15645**	Price
3/16	3/16	1/2	2	**GE45SFA18733**	Price
3/16	1/4	1/2	2	**GE45SFA18744**	Price
3/16	3/16	5/8	2	**GE45SFA18735**	Price
3/16	1/4	5/8	2	**GE45SFA18745**	Price
7/32	1/4	3/4	2-1/2	**GE45SFA21846**	Price
1/4	1/4	3/8	2-1/2	**GE45SFA25043**	Price
1/4	1/4	3/4	2-1/2	**GE45SFA25046**	Price
1/4	1/4	1-1/4	3	**GE45SFA250410**	Price
3/8	3/8	1-1/8	3	**GE45SFA37569**	Price
1/2	1/2	1	3	**GE45SFA50088**	Price
1/2	1/2	1-1/2	3	**GE45SFA500812**	Price

- Routers- LH Spiral RH Cut					
				LH Spiral RH Cut for Plastics	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/8	1/4	1/2	2	**GE45SFL12544**	Price

- Routers- LH Spiral RH Cut					
				LH Spiral RH Cut for Plastics	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
3/16	1/4	5/8	2	**GE45SFL18745**	Price

- Routers- RH Spiral RH Cut					
				RH Spiral RH Cut for Plastics	
Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	OAL (in.)	Order No.	Price
1/16	1/8	1/4	1-1/2	**GE45SFP06222**	Price
1/16	1/4	1/4	2	**GE45SFP06242**	Price
1/8	1/8	1/4	1-1/2	**GE45SFP12522**	Price
1/8	1/4	1/4	2	**GE45SFP12542**	Price
1/8	1/8	1/2	1-1/2	**GE45SFP12524**	Price
1/8	1/4	1/2	2	**GE45SFP12544**	Price
5/32	1/4	5/8	2	**GE45SFP15645**	Price
3/16	3/16	5/8	2	**GE45SFP18735**	Price
3/16	1/4	5/8	2	**GE45SFP18745**	Price
1/4	1/4	3/8	2-1/2	**GE45SFP25043**	Price
1/4	1/4	3/4	2-1/2	**GE45SFP25046**	Price
1/4	1/4	1-1/4	3	**GE45SFP250410**	Price
3/8	3/8	1-1/8	3	**GE45SFP37569**	Price
1/2	1/2	1	3	**GE45SFP50088**	Price
1/2	1/2	1-1/2	3	**GE45SFP500812**	Price

MICRO 100® SFAM Series Metric High Performance Router, Single Flute

- For aluminum and non-ferrous cutting applications
- Rake and clearance angles produce highest material removal rates and improved surface finishes
- Single flute geometry avoids chip melting and chip rewelding problems
- T.I.R. maximum .013mm



Dia. (D1, mm)	Shank Dia. (D2, mm)	Flute Length (L2, mm)	OAL (L1, mm)	Order No.	Price
4mm	6mm	16	57	**GE45SFAM040020**	Price
5mm	6mm	20	57	**GE45SFAM050025**	Price
6mm	6mm	25	57	**GE45SFAM060030**	Price
8mm	8mm	30	75	**GE45SFAM080040**	Price

Dia. (D1, mm)	Shank Dia. (D2, mm)	Flute Length (L2, mm)	OAL (L1, mm)	Order No.	Price
8mm	8mm	20	100	**GE45SFAM080100**	Price
10mm	10mm	35	90	**GE45SFAM100050**	Price
12mm	12mm	40mm	90mm	**GE45SFAM120050**	Price

RAPIDKUT® Solid Carbide Diamond Cut Routers

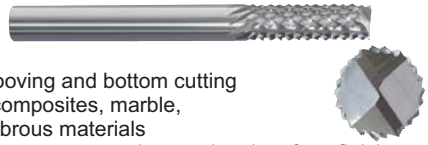


Burr End Cut

- Applications include grooving and bottom cutting
- For use on fiberglass, composites, marble, ceramic tile and other fibrous materials
- Ideal for smooth, precise contours and exceptional surface finishes
- Offers longer tool life, fast chip clearance and accurate cutting

Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	Order No.	Price
1/16	1/8	3/16	1-1/2	**CB2010025**	Price
3/32	1/8	3/8	1-1/2	**CB2010027**	Price
1/8	1/8	1/2	1-1/2	**CB2010029**	Price
3/16	3/16	5/8	2	**CB2010031**	Price
3/16	1/4	5/8	2	**CB2010033**	Price
1/4	1/4	3/4	2	**CB2010035**	Price
1/4	1/4	3/4	2-1/2	**CB2010037**	Price
1/4	1/4	1	3	**CB2010039**	Price
5/16	5/16	1	2-1/2	**CB2010041**	Price
3/8	3/8	1	2-1/2	**CB2010043**	Price
1/2	1/2	1	3	**CB2010045**	Price

RAPIDKUT® Solid Carbide Diamond Cut Routers



End Mill Style

- Applications include grooving and bottom cutting
- For use on fiberglass, composites, marble, ceramic tile and other fibrous materials
- Ideal for smooth, precise contours and exceptional surface finishes
- Offers longer tool life, fast chip clearance and accurate cutting

Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	Order No.	Price
1/16	1/8	3/16	1-1/2	**CB2010047**	Price
3/32	1/8	3/8	1-1/2	**CB2010049**	Price
1/8	1/8	1/2	1-1/2	**CB2010051**	Price
3/16	3/16	5/8	2	**CB2010053**	Price
3/16	1/4	5/8	2	**CB2010055**	Price
1/4	1/4	3/4	2	**CB2010057**	Price
1/4	1/4	3/4	2-1/2	**CB2010059**	Price
1/4	1/4	1	3	**CB2010061**	Price
5/16	5/16	1	2-1/2	**CB2010063**	Price
3/8	3/8	1	2-1/2	**CB2010065**	Price
1/2	1/2	1	3	**CB2010067**	Price

RAPIDKUT® Solid Carbide Diamond Cut Routers



Drill Point



- Applications include plunge feeding in brittle or hard materials
- 135° Drill point for faster penetration
- For use on fiberglass, composites, marble, ceramic tile and other fibrous materials
- Ideal for smooth, precise contours and exceptional surface finishes
- Offers longer tool life, fast chip clearance and accurate cutting

Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	Order No.	Price
1/16	1/8	3/16	1-1/2	**CB2010069**	Price
3/32	1/8	3/8	1-1/2	**CB2010071**	Price
1/8	1/8	1/2	1-1/2	**CB2010073**	Price
3/16	3/16	5/8	2	**CB2010075**	Price
3/16	1/4	5/8	2	**CB2010077**	Price
15/64	1/4	1	3	**CB2010079**	Price
1/4	1/4	3/4	2	**CB2010081**	Price
1/4	1/4	3/4	2-1/2	**CB2010083**	Price
1/4	1/4	1	3	**CB2010085**	Price
5/16	5/16	1	2-1/2	**CB2010087**	Price
3/8	3/8	1	2-1/2	**CB2010091**	Price
1/2	1/2	1	3	**CB2010093**	Price

RAPIDKUT® Solid Carbide Diamond Cut Routers



Fishtail Style



- No splintering
- Minimum burr formation
- Applications include plunge feeding
- For use on fiberglass, composites, marble, ceramic tile and other fibrous materials
- Ideal for smooth, precise contours and exceptional surface finishes
- Offers longer tool life, fast chip clearance and accurate cutting

Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	Order No.	Price
1/16	1/8	3/16	1-1/2	**CB2010099**	Price
3/32	1/8	3/8	1-1/2	**CB2010101**	Price
1/8	1/8	1/2	1-1/2	**CB2010103**	Price
3/16	3/16	5/8	2	**CB2010105**	Price
3/16	1/4	5/8	2	**CB2010107**	Price
1/4	1/4	3/4	2	**CB2010109**	Price
1/4	1/4	3/4	2-1/2	**CB2010111**	Price
1/4	1/4	1	3	**CB2010113**	Price
5/16	5/16	1	2-1/2	**CB2010115**	Price
3/8	3/8	1	2-1/2	**CB2010117**	Price
1/2	1/2	1	3	**CB2010119**	Price

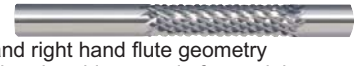
RAPIDKUT® Solid Carbide Internal Grinding Tools



- Diamond cut pattern with end cutting
- Suitable for any ferrous materials, including heat-treated mold & die steels up to 60 Hrc
- Diameters 1/4" and smaller are solid carbide with a back-tapered neck
- Diameters 9/32" and larger are brazed onto a carbide shank

Dia. (in.)	Shank (in.)	LOC (in.)	Neck Length	Order No.	Price
.030	1/8	3/32	1/8	**CB2530030**	Price
.040	1/8	3/32	3/16	**CB2530040**	Price
.050	1/8	1/8	1/4	**CB2530050**	Price
1/16	1/8	1/8	3/8	**CB2530062**	Price
5/64	1/8	5/32	3/8	**CB2530078**	Price
3/32	1/8	5/32	3/8	**CB2530094**	Price
7/64	1/8	3/16	1/2	**CB2530109**	Price
1/8	1/8	3/16	1/2	**CB2530125**	Price
9/64	3/16	7/32	5/8	**CB2530140**	Price
5/32	3/16	7/32	5/8	**CB2530156**	Price
11/64	3/16	1/4	5/8	**CB2530172**	Price
3/16	3/16	1/4	5/8	**CB2530188**	Price
13/64	1/4	9/32	3/4	**CB2530203**	Price
7/32	1/4	9/32	3/4	**CB2530219**	Price
15/64	1/4	5/16	3/4	**CB2530234**	Price
1/4	1/4	5/16	3/4	**CB2530250**	Price
9/32	1/4	11/32	-	**CB2530281**	Price
5/16	1/4	11/32	-	**CB2530312**	Price
11/32	1/4	3/8	-	**CB2530344**	Price
3/8	1/4	3/8	-	**CB2530375**	Price
1/2	3/8	3/8	-	**CB2530500**	Price

RAPIDKUT® Solid Carbide Die Trimmers



- Double cut, featuring both left and right hand flute geometry - offering better operator control and rapid removal of material
- The pilot allows excess welding or filler material to be removed from the surface without marking the die beyond the repair area
- Use on any ferrous material including heat treated molds and die steels up to 60 Hrc

Dia (in.)	Shank (in.)	LOC (in.)	Pilot Length (in.)	OAL (in.)	Order No.	Price
1/8	1/8	1	1/2	2-1/2	**CB2520540**	Price
1/8	1/8	1	1/2	3	**CB2520520**	Price
3/16	3/16	1	1/2	2-1/2	**CB2520560**	Price
1/4	1/4	1	1/2	2-1/2	**CB2520580**	Price
1/4	1/4	1	1/2	3	**CB2520600**	Price
3/8	3/8	1	1/2	2-1/2	**CB2520620**	Price
1/2	1/2	1	1/2	2-1/2	**CB2520640**	Price

RAPIDKUT® Solid Carbide Diamond Cut Routers



No End Cut



- Applications include edge routing, smoothing and finishing
- For use on fiberglass, composites, marble, ceramic tile and other fibrous materials
- Ideal for smooth, precise contours and exceptional surface finishes
- Offers longer tool life, fast chip clearance and accurate cutting

Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	Order No.	Price
1/16	1/8	3/16	1-1/2	**CB2010003**	Price
3/32	1/8	3/8	1-1/2	**CB2010005**	Price
1/8	1/8	1/2	1-1/2	**CB2010007**	Price
3/16	3/16	5/8	2	**CB2010009**	Price
3/16	1/4	5/8	2	**CB2010011**	Price
1/4	1/4	3/4	2	**CB2010013**	Price
1/4	1/4	3/4	2-1/2	**CB2010015**	Price
1/4	1/4	1	3	**CB2010017**	Price
5/16	5/16	1	2-1/2	**CB2010019**	Price
3/8	3/8	1	2-1/2	**CB2010021**	Price
1/2	1/2	1	3	**CB2010023**	Price

FULLERTON Solid Carbide PCD Routers

Series 6900



- Made from pure Polycrystalline Diamond (PCD) to create the most abrasive resistant tooling
- Produces clean part edges, increases resistance to abrasive wear and reduces formation of built-up edges
- Straight flute, right hand cut
- Shank diameter tolerance: h6
- Cutter diameter tolerance: +.0000 -.0005" / +0.000-0.013mm

Style - .010 Corner Radius					
Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	Order No.	Price
1/4	1/4	3/8	2-1/2	**FT8525700**	Price
1/4	1/4	3/4	3	**FT8525701**	Price
3/8	3/8	3/8	2-1/2	**FT8525702**	Price
3/8	3/8	3/4	4	**FT8525703**	Price
1/2	1/2	1/2	4	**FT8525718**	Price
1/2	1/2	1	4	**FT8525719**	Price

Style - .060 Corner Radius					
Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	Order No.	Price
1/2	1/2	1/2	4	**FT8525704**	Price
1/2	1/2	1	4	**FT8525705**	Price

Style - .25mm Corner Radius					
Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	Order No.	Price
6mm	6mm	10mm	64mm	**FT8525706**	Price
6mm	6mm	20mm	76mm	**FT8525707**	Price
10mm	10mm	10mm	64mm	**FT8525708**	Price
10mm	10mm	20mm	100mm	**FT8525709**	Price
12mm	12mm	12mm	90mm	**FT8525710**	Price
12mm	12mm	25mm	115mm	**FT8525711**	Price

Style - Ball Full					
Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	Order No.	Price
1/4	1/4	3/8	2-1/2	**FT8525712**	Price
1/4	1/4	1/2	3	**FT8525713**	Price
3/8	3/8	3/8	2-1/2	**FT8525714**	Price
3/8	3/8	3/4	4	**FT8525715**	Price
1/2	1/2	1/2	4	**FT8525716**	Price
1/2	1/2	1	4	**FT8525717**	Price

FULLERTON Solid Carbide Composite Routers





Series 5600

- Produces clean shearing of material's fibers and allows for aggressive removal rates
- Increased relief angles deliver results without tearing fibers and provides minimal delamination
- Right hand spiral, right hand cut
- Uncoated or FC-1 CVD diamond coating
- Shank diameter tolerance: +.0000 -.0005" / +0.000-0.013mm
- Cutter diameter tolerance: +.0000 -.0005" / +0.000-0.013mm

Style - Style A - No End Cut

Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	No. of Flutes	FC1 Order No.	FC1 Price	Uncoated Order No.	Uncoated Price
1/8	1/8	1/2	1-1/2	7	FT8525250	Price	FT8525200	Price
3/16	3/16	5/8	2	8	FT8525251	Price	FT8525201	Price
1/4	1/4	3/4	2-1/2	10	FT8525252	Price	FT8525202	Price
1/4	1/4	1	3	10	FT8525253	Price	FT8525203	Price
3/8	3/8	1	2-1/2	14	FT8525254	Price	FT8525204	Price
1/2	1/2	1	3	17	FT8525255	Price	FT8525205	Price

Style - Style C - End Mill Type End Cut

Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	No. of Flutes	FC1 Order No.	FC1 Price	Uncoated Order No.	Uncoated Price
1/8	1/8	1/2	1-1/2	7	FT8525262	Price	FT8525212	Price
3/16	3/16	5/8	2	8	FT8525263	Price	FT8525213	Price
1/4	1/4	3/4	2-1/2	10	FT8525264	Price	FT8525214	Price
1/4	1/4	1	3	10	FT8525265	Price	FT8525215	Price
3/8	3/8	1	2-1/2	14	FT8525266	Price	FT8525216	Price
1/2	1/2	1	3	17	FT8525267	Price	FT8525217	Price

Style - Style B - Burr Type End Cut

Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	No. of Flutes	FC1 Order No.	FC1 Price	Uncoated Order No.	Uncoated Price
1/8	1/8	1/2	1-1/2	7	FT8725256	Price	FT8725206	Price
3/16	3/16	5/8	2	8	FT8725257	Price	FT8725207	Price
1/4	1/4	3/4	2-1/2	10	FT8725258	Price	FT8725208	Price
1/4	1/4	1	3	10	FT8725259	Price	FT8725209	Price
3/8	3/8	1	2-1/2	14	FT8725260	Price	FT8725210	Price
1/2	1/2	1	3	17	FT8725261	Price	FT8725211	Price

Style - Style D - 135° Drill Point

Cutter Dia. (in.)	Shank (in.)	LOC (in.)	OAL (in.)	No. of Flutes	FC1 Order No.	FC1 Price	Uncoated Order No.	Uncoated Price
1/8	1/8	1/2	1-1/2	7	FT8725268	Price	FT8725218	Price
3/16	3/16	5/8	2	8	FT8725269	Price	FT8725219	Price
1/4	1/4	3/4	2-1/2	10	FT8725270	Price	FT8725220	Price
1/4	1/4	1	3	10	FT8725271	Price	FT8725221	Price
3/8	3/8	1	2-1/2	14	FT8725272	Price	FT8725222	Price
1/2	1/2	1	3	17	FT8725273	Price	FT8725223	Price

NOGA N Promo Set

- Deburrs: steel, aluminum and plastic.
- Includes: NogaGrip 2 handle, 10 Pcs. N1 blades



Order No.	Price
FN55NG8000	Price

NOGA N Cobalt Set

- Deburrs: plastic and hard materials
- Includes: NogaGrip 2 handle, 20 Pcs. N10 cobalt blades.



Order No.	Price
FN55NG8100	Price

NOGA N Tele Set

- Deburrs: steel, aluminum, plastic, brass and cast iron
- Includes: NogaGrip 3 handle, N holder, 5 Pcs. N1 blades, 5 Pcs. N2 blades



Order No.	Price
FN55NG8300	Price

NOGA S Promo Set

- Deburrs: steel, aluminum and plastic.
- Includes: NogaGrip 1 handle, 10 Pcs. S10 blades



Order No.	Price
FN55NG8150	Price

NOGA S Cobalt Set

- Deburrs: plastic and hard materials
- Includes: NogaGrip 1 handle, 20 Pcs. S100 cobalt blades



Order No.	Price
FN55NG8250	Price

NOGA S Tele Set

- Deburrs: steel, aluminum, plastic, brass and cast iron
- Includes: NogaGrip, 3 handle, S holder, 5 Pcs. S10 blades, 5 Pcs., S20 blades.



Order No.	Price
FN55NG8350	Price

NOGA Bronze Unikit

Most economical deburring kit for all machinists

- Includes: NogaGrip 3 handle, N holder, S holder, C holder + C20, D holder + D50, blades: N1, N2, S10, S20, S30 and S150



Order No.	Price
FN55NG9200	Price

NOGA Silver Unikit Set

Most suitable for MRO

- Includes: NogaGrip 3 handle & S holder, medium reversible countersink, plastic edge-off handle, 3.2mm RotoDrive countersink, 10.4mm RotoDrive countersink, 16.5mm RotoDrive countersink, 18mm external RotoDrive, blades: S10, S20 and S30



Order No.	Price
FN55NG9300	Price

NOGA Micro Deburring Set

Model FT3000

- Contains 3 micro tools, (1) micro deburring tool FT1000, (1) micro scraper FT1100 and (1) micro rotodrive countersink FT1200
- Ideal for tool and die maker
- For extra fine jobs
- Blades are not replaceable



Order No.	Price
FN55FT3000	Price

Gold Box Set

The most complete box for professional machinists

- Includes: NogaGrip 3 handle, adjustable scraper, plastic edge-off handle, S & C holders, C20 blade, D holder, D50 blade, K holder, N80K blade. PLUS N1, N2, S10, S20, S30, S150 blades, D66 and 10.4 countersinr RotoDrive and hex key (1.5mm)



Order No.	Price
FN55NG9400	Price

Platinum Box Set

Collected to meet the total requirements of tool and die makers and for deburring specialists



- Includes: Double Burr, NogaGrip 1 & 3 handles, Teddy Burr handle, S & N holders, K holder, N80K blade, D holder, D50 blade, D66 blade, C holder, C20 blade, T holder, T70 blade, 18mm external RotoDrive blade, 10.4mm countersink RotoDrive, blades: N1, N2, S10, S20, S30 and S150, hex key (1.5mm)

Order No.	Price
FN55NG9500	Price

Magic Burr 2

- Will do almost all of your deburring jobs
- Includes: NG-2 handle, N1 and N2 blades



Order No.	Price
FN55NG2002	Price

Magic Burr 3

- Will do almost all of your deburring jobs
- Includes: NG-1 handle, S10, S20 and S35 blades



Order No.	Price
FN55NG1003	Price

Magic Burr 4

- Same as NG2002 with extra blades for cross holes in difficult to reach more places
- Includes: NG-2 handle, N1, N2, N3 and N6 blades

Order No.	Price
FN55NG2004	Price

Magic Burr 5

- Same as NG1003 but with 2 extra blades
- Suitable for coarse to extra fine deburring operations
- Includes: NG-1 handle, S10, S20, S35, S101 and S202 blades

Order No.	Price
FN55NG1005	Price

Tele Burr

- Holds 2.6mm N blades
- Includes: NG-3 handle, N holder, N1 and N2 blades



Order No.	Price
FN55NG3002	Price

Super Burr

- For heavy duty jobs
- Includes: NG-3 handle, S holder, S100, S20 and S30 blades



Order No.	Price
FN55NG3003	Price

Replacement Blades

Item	Description	Blade No.	Shaviv Equiva-lent	Order No.	1 pair	10 pair	100 pair
	Steel, Aluminum, Plastic, Cobalt	B10CO	-	FN55B10CO	Price	Price	Price
	Steel, Aluminum, Plastic	N1	B10	FN55N1	Price	Price	Price
	Steel, Aluminum, Plastic, Solid Carbide	N1C	B10C	FN55N1C	Price	Price	Price
	Steel, Aluminum, Plastic, Diamond Coated	N1D	-	FN55N1D	Price	Price	Price
	Steel, Aluminum, Plastic - Left Handed	N1LH	-	FN55N1LH	Price	Price	Price
	High Wear Materi-als, TiN Coated	N1TiN	B10P	FN55N1TIN	Price	Price	Price
	Brass, Cast Iron	N2	B20	FN55N2	Price	Price	Price
	Brass, Cast Iron	N2C	B20C	FN55N2C	Price	Price	Price
	Remove External & Internal Burrs	N3	B30	FN55N3	Price	Price	Price
	Inside Cross Holes and Back Side of Walls	N6	B60	FN55N6	Price	Price	Price
	Steel, Aluminum, Plastic	S10	E100	FN55S10	Price	Price	Price
	Stainless Steel	S100	-	FN55S100	Price	Price	Price

Item	Description	Blade No.	Shaviv Equiva-lent	Order No.	1 pair	10 pair	100 pair
	Small Holes	S101	-	FN55S101	Price	Price	Price
	Small Holes - Left Handed	S101LH	-	FN55S101LH	Price	Price	Price
	Steel, Aluminum, Plastic, Diamond Coated	S10D	-	FN55S10D	Price	Price	Price
	Steel, Aluminum, Plastic - Left Handed	S10LH	-	FN55S10LH	Price	Price	Price
	High Wear Materi-als, TiN Coated	S10TiN	E100P	FN55S10TIN	Price	Price	Price
	Very Small Holes	S150	-	FN55S150	Price	Price	Price
	Very Small Holes, TiN Coated	S150-TiN	-	FN55BK3112	Price	Price	Price
	Brass, Cast Iron	S20	E200	FN55S20	Price	Price	Price
	Fine Point for Brass + Cast Iron	S202	-	FN55S202	Price	Price	Price
	Remove External & Internal Burrs	S30	E300	FN55S30	Price	Price	Price
	For Straight Edges	S35	E350	FN55S35	Price	Price	Price
	Inside Cross Holes and Back Side of Walls	S60	E600	FN55S60	Price	Price	Price

NOGA NG Handles & S & N Holders

Item	Holds	Type	Order No.	Price
	N Blades	N Blade Holder	**FN55EL01003**	Price
	N Blades	NG-2 Handle	**FN55NG2000**	Price
	S Blades	S Blade Holder	**FN55EL02003**	Price
	S Blades	NG-1 Handle	**FN55NG1000**	Price
	All Blade Holders	NG-3 Handle	**FN55NG3000**	Price

NOGA Countersink

- Standard tool for countersinking
- Useful for chamfering deep holes
- Includes: NG-3 handle, C holder and C20 countersink (20mm)



Order No.	Price
FN55NG3100	Price

NOGA Countersink "C" holder

Item	For Use With	Order No.	Price
	C Blades	**FN55EL03003**	Price

NOGA Countersink Blades

Item	Blade No.	Deburring Application	Shaviv Equivalent	Order No.	Price
	C12	1/2 Countersink for Chamfering Deep Holes	F12	**FN55C12**	Price
	C20	3/4 Countersink for Chamfering Deep Holes	F20	**FN55C20**	Price
	C20-TiN	3/4 Countersink for Chamfering Deep Holes	F20-TiN	**FN55BC2012**	Price
	C30	1-1/4 Countersink for Chamfering Deep Holes	F30	**FN55C30**	Price

NOGA Rotodrive Blades

Item	Blade No.	Deburring Application	Order No.	Price
	RD03.2	3.2mm RotoDrive for Chamfering	**FN55BC3201**	Price
	RD06.3	6.3mm RotoDrive for Chamfering	**FN55BC6301**	Price
	RD08.3	8.3mm RotoDrive for Chamfering	**FN55BC8301**	Price
	RD10.4	10.4mm RotoDrive for Chamfering	**FN55BC1041**	Price
	RD16.5	16.5mm RotoDrive for Chamfering	**FN55BC1651**	Price

NOGA H.D. Rotodrive

- 40mm displacement allows for heavy duty burrs to be removed
- Continuous rotation of countersink enables very fast chamfering
- Includes: NG-3 handle, heavy duty cranked RotoDrive holder and C20 countersink





Order No.	Price
FN55NG3400	Price

NOGA Rotodrive

- Quickest way to chamfer by hand
- Single flute countersink provides a smoother cut
- Includes: NG-1 handle and RD10.4 RotoDrive countersink



Order No.	Price
FN55NG1200	Price

NOGA Universal Handy Chuck Holder

Model PV1000

- Aluminum handle with non-slip covering
- 3-Jaw chuck helps with the quick and secure clamping of a wide variety of tools. blades and blade holders such as scrapers, countersinks, files, etc.
- Hardness 58 HrC



Order No.	Price
FN55PV1000	Price

NOGA Ext. Rotodrive

- Chamfers the OD on bars and tubes
- Quickest way to chamfer OD on almost all materials
- Range: 4-18mm
- Includes: NG-1 handle and external RotoDrive EX18 countersink



Order No.	Price
FN55NG1700	Price

NOGA H.D. Ext. Rotodrive

- Chamfers the OD on bars and tubes
- Range: 4-28mm
- Includes: NG-3 handle, heavy duty external RotoDrive holder, and EX28 countersink



Order No.	Price
FN55NG3500	Price

H.D. Ext. Rotodrive Replacement Holder

- Heavy duty cranked holder
- Accepts EX28 external countersink
- 40mm displacement



Order No.	Price
FN55EL0902	Price

NOGA Ext.& H.D. Ext. Rotodrive Blades

Item	Blade No.	Deburring Application	Order No.	Price
	EX18	Chamfering the O.D on Bars and Tubes	**FN55EX2001**	Price
	EX28	Chamfering the O.D on Bars and Tubes	**FN55EX3001**	Price

NOGA Reversible Countersinks

- RC1000 - very fine tool for deburring both back side and front side of holes. Unique 2 pairs of cutting edges. Cuts in both clockwise and anti clockwise directions.
- RC2000 - similar to RC1000 only larger
- RC2200 - similar to RC2000 only larger



Range	Set Includes	Type	Order No.	Price
3-5.5mm	Steel Handle / R1 Blade	Mini-Reversible Set	**FN55RC1000**	Price
5-10mm	Steel Handle / R2 Blade	Medium-Reversible Set	**FN55RC2000**	Price
10-22mm	Steel Handle / R3 Blade	Large-Reversible Set	**FN55RC2200**	Price
3.5 - 22mm	Set of all 3	Mini, Medium, Large	**FN55RC3300**	Price

NOGA Mini, Medium & Large Reversible Blades

Item	Blade No.	Deburring Application	Order No.	Price
	R1	5.5mm Mini-Revisible	**FN55BR1001**	Price
	R2	10mm Medium Reversible	**FN55BR2001**	Price
	R3	Chamfering the O.D on Bars and Tubes	**FN55BR3001**	Price

NOGA Non-Scratch Deburring Blade

- Integrated plastic safety cap protects from scratches
- The plastic cap cannot be removed
- Works best on steel, aluminum and plastic
- HSS, hardness 62-64 RC
- Fits FN55NG1000 NG-1 handle or FN55PV1000 universal chuck holder
- Included angle 40 degrees



Order No.	Price
FN55BS91111	Price

Double Burr

- Simultaneously removes burrs from both sides of sheet metal
- DB handle with safety guard to protect your hand
- Range: 0-12mm. For corners, use one blade only
- Includes: DB handle, hand guard and two N80 blades



Order No.	Price
FN55DB1000	Price

Double Burr Blades

Item	Blade No.	Deburring Application	Order No.	Price
	N80	Removes Burrs from Both Sides of Sheet Metal	FN55N80	Price
	N80-M42	Removes Burrs from Both Sides of Sheet Metal	FN55N80M42	Price

007

- Deburring, cleaning, finishing and countersinking
- Includes: RB handle, o-ring blade, RD16.5 RotoDrive countersink, EX18 External RotoDrive countersink, thread cleaner blade, S100 blade, S150 blade



Order No.	Price
FN55007	Price

Plastic Edge Off Set

- The most economical set
- Includes: EO handle + S10 blade, green sleeve (for aluminum), EO handle + S20 blade, red sleeve (for brass & cast iron), EO handle + S100 blade, blue sleeve (for steel), EO handle + S150 blade, yellow sleeve (for plastic)



Order No.	Price
FN55EO2100	Price

MultiBurr

- A handy universal deburring set with multi-purpose blades
- Has 4 folding shafts that lock into position while working and folding back into the handle allowing the tool to be carried anywhere

Includes 1 of each:

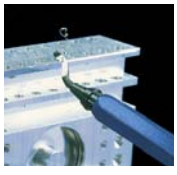
- S10 blade - best on steel, aluminum and plastic
- D50 scraper blade-ideal for tool and die makers
- N2 blade - best on brass and cast iron
- BC1041 Rotodrive countersink blade - 90° angle (patented)



Order No.	Price
FN55RG1000	Price

Teddyburr

- Designed for hard to reach locations
- Holds 2.6mm blades
- Includes: 8mm painted hexagonal aluminum handle and N1 blade





Order No.	Price
FN55TB1000	Price

O-Ring Burr

- Removes burrs from internal O-ring grooves
- Range: 0-3mm (groove width)
- Includes: NG-1 handle and O-ring blade.



Order No.	Price
FN55NG1100	Price

O-Ring Burr Blades

Item	Blade No.	Deburring Application	Order No.	Price
	O-Ring	For Internal O-Ring Grooves	FN55BO1001	Price

Keyway Burr

- Effectively removes burrs from internal and external keyways
- Range: 2.4-11mm
- Includes: NG-3 handle, K holder and N80K blade



Order No.	Price
FN55NG3300	Price

K Holder

- Holds K blades with M3 screw
- Length: 135mm



Order No.	Price
FN55EL04003	Price

Keyway Burr Blades

Item	Blade No.	Deburring Application	Order No.	Price
	N70K	For Internal and External Keyways (2.8mm)	FN55N70	Price
	N80K	For Internal and External Keyways (11mm)	FN55N80K	Price
	N80K-M42	For Internal and External Keyways (11mm)	FN55N80KM42	Price
	N90K	For Internal and External Keyways (15mm)	FN55N90K	Price

Edge Off

- Disposable tool
- A handy pocket clip is a standard feature of this tool.
- Includes: S10 blade mounted in an 8mm painted hexagonal aluminum handle





Order No.	Price
FN55EO1000	Price

Rapid Burr

- Steel housing for long life of handle.
- Blade is replaceable. Includes:
- 12mm hexagonal painted handle and S10 blade





Order No.	Price
FN55RB1000	Price

Soft Cut Tool

- Ideal for deburring soft abrasive plastic
- Comes with handle and 65° blade



Description	Order No.	Price
Handle with 65° Blade	FN55NC5100	Price
Handle Only	FN55NC5000	Price
Blade Only 65°	FN55CR6000	Price

Liza Burr



Includes: UNI-Handle, SN-Holder, N1 & N2 blades

- Designed to accommodate both light duty “N” series blades and heavy duty “S” series blades in its unique double sided blade holder
- Blade holder telescopes from 20-94mm with “N” blades. 20-110mm with “S” blades
- Blades are stored inside the handle

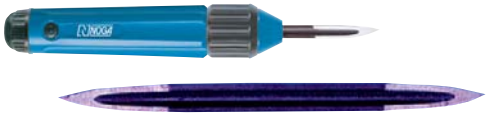


Order No.	Price
FN55LB1000	Price

Scraper

Great for deburring larger sized tubing.

- Includes: Uni-handle, double end triangular scraper T120
- Has two sharp triangular ends for double tool life





Deburring Application	Order No.	Price
Scraping, Trimming, Deburring	**FN55SC1000**	Price
Scraper Blade for SC Holder (120mm)	**FN55T120**	Price

YT1200 Scraper



- Ideal for scraping, trimming and deburring almost all materials
- Includes: YT1000 handle and T80 double ended triangular scraper

Description	Order No.	Price
YT1200 Adjustable Scraper	**FN55YT1200**	Price
T80 Triangular Replacement Blade	**FN55T80**	Price

Adjustable Scraper



- Ideal for scraping, trimming and deburring almost all materials
- Includes: 12mm anodized handle and T80 double ended triangular scraper



Deburring Application	Order No.	Price
Scraping, Trimming, Deburring	**FN55SC8000**	Price
Scraper Blade for SC Holder (80mm)	**FN55T80**	Price

Ceramic Convexed Cera-Cut & Blades

- Ideal for all plastic materials, soft metals, surface scraping and parting line deflashing
- Blade can be replaced
- Includes: Cera-Cut handle and 250mm convexed radius blade



Description	Order No.	Price
Holder and Convexed Blade	**FN55CR2000**	Price
Convex Blade Only	**FN55CR2200**	Price
Concave Blade Only	**FN55CR2500**	Price

Mini Ceramic Handle and Convexed Blade

Model CR1500



- Ideal for surface scraping and parting line deflashing
- Perfect for plastic materials and soft metals

Order No.	Price
FN55CR1500	Price

Mini Scraper



- Ideal for tool and die makers
- Includes: NG-3 handle, D holder, (an M3 setscrew is holding the blade) triangular mini scraper D50 blade and hex key



Order No.	Price
FN55NG3700	Price

Internal Scraper



- Ideal for cross-holes deburring
- Includes: NG-3 handle, D holder and Internal scraper



Order No.	Price
FN55NG3710	Price

D Holder



- D holder is designed to hold D50 and D66 blades
- A 3mm setscrew is holding the blade

Order No.	Price
FN55EL05003	Price

D Blades

Item	Blade No.	Deburring Application	Order No.	Price
	D50-TiN	Tool and Die Makers	**FN55BD5012**	Price
	D50	Tool and Die Makers	**FN55D50**	Price
	D55	Tool and Die Makers	**FN55D55**	Price
	D66	Cross-Hole Deburring	**FN55D66**	Price
	D75	Scraper Blade	**FN55D75**	Price
	D77	Scraper Blade	**FN55D77**	Price

SC Holder



- 12mm Anodized handle
- Knurled locking collar to control blade extension
- Holds: D50, D66, D75, D77 and T80 scrapers

Order No.	Price
FN55SC1300	Price

Ceramic Double Burr



- Ideal for deburring both sides of a workpiece simultaneously
- Blade can be replaced
- Includes: V-shaped ceramic blade mounted in ergonomically designed DB handle with safety guard to protect your hand

Order No.	Price
FN55DB5000	Price

V-Shaped Blade For Ceramic Double Burr



• Removes burrs from both sides simultaneously

Order No.	Price
FN55CR5100	Price

Adjustable Ceramic Mini Scraper

Model CR4100



- Ideal for surface cleaning, trimming, deburring and parting line deflashing of almost all plastics
- Special blade design for safety

Order No.	Price
FN55CR4100	Price

Set B — Deburring Sets

The Workhorse

- Popular set for holes, slots & edges
- Supports all B blades
- Blades can be inserted axially or perpendicular to holder
- Deburrs steel, aluminum copper, brass, cast iron and plastics






Set B with Classic Handle


Set B with Aluminum Handle


Set B with Mango II Handle

Blades





Set Includes	Order No.	Price
Aluminum Handle / B10, B20 Blades	**FN50BAL**	Price
Mango II Handle / B10, B20	**FN50BMAN2**	Price
Plastic Handle / B10, B20 Blades	**FN50B**	Price

Set E — Deburring Sets

Heavy DeBurr

- Rugged deburring set for heavy-duty deburring of holes, slots and edges
- Supports all E blades
- Deburrs steel, aluminum copper, brass, cast iron and plastics





Blades

Plastic Handle / E100, E200, E300 Blades




Set E with Mango II Handle


Set E with Classic Handle

Set Includes	Order No.	Price
Mango II Handle / E100, E200, E300	**FN50EMAN2**	Price
Plastic Handle / E100, E200, E300 Blades	**FN50E**	Price

Replacement Blades — Style B

Item	Description	Noga Equiv.	Blade No.	Order No.	1-9 Price	10-99 Price	100+ Price
	The basic HSS blade used for steel & aluminum with special nose for the worker's protection	N1	B10	**FN50B10**	Price	Price	Price
	Solid carbide blade similar to B10, for extra hard applications	N1C	B10C	**FN50B10C**	Price	Price	Price
	Same as B10 blade with TiN coating for extended life when deburring exotic & abrasive materials	N1TiN	B10P	**FN50B10P**	Price	Price	Price
	Excellent for aluminum, plastics & copper. Can deburr a min. hole diameter of 2mm	-	B11	**FN50B11**	Price	Price	Price
	The basic HSS blade used for plastics	N1	B12	**FN50B12**	Price	Price	Price
	This HSS blade is used for brass & cast iron, it can rotate clockwise & counter-clockwise	N2	B20	**FN50B20**	Price	Price	Price
	Solid carbide blade similar to B20, for extra hard applications	N2C	B20C	**FN50B20C**	Price	Price	Price
	Same as B20 blade with TiN coating for extended life when deburring exotic and abrasive materials	-	B20P	**FN50B20P**	Price	Price	Price
	Same as B20 blade, used for plastics	N2	B25	**FN50B25**	Price	Price	Price
	Removes external & internal burrs simultaneously from holes drilled into tubing & sheet metal	N3	B30	**FN50B30**	Price	Price	Price
	Same as B30 except for brass and cast iron	-	B32	**FN50B32**	Price	Price	Price
	Scriber, carbide tipped. Can be reground many times. To remove from holder, just pull out	-	B50	**FN50B50**	Price	Price	Price
	HSS internal deburring blade. Facilitates deburring in the most inaccessible locations	N6	B60	**FN50B60**	Price	Price	Price
	Carbide tipped deburring blade for sheet-metal up to 3mm (1/8") thickness	-	B70	**FN50B70**	Price	Price	Price

Replacement Blades — Style E

Item	Description	Noga Equiv.	Blade No.	Order No.	1-9 Price	10-99 Price	100+ Price
	The basic blade used for steel & aluminum	S10	E100	**FN50E100**	Price	Price	Price
	ame as E100 blade with TiN coating for extended life when deburring exotic & abrasive materials	S10TiN	E100P	**FN50E100P**	Price	Price	Price
	Solid carbide blade similar to E100, for extra hard applications	-	E100C	**FN50E100C**	Price	Price	Price
	Heavy duty blade for steel & aluminum with special design for versatility	S101	E110	**FN50E110**	Price	Price	Price
	Excellent for aluminum, plastic & copper. Can deburr a minimum hole dia. of 1.5mm	-	E111	**FN50E111**	Price	Price	Price
	Used for brass & cast iron. Can rotate clockwise & counter-clockwise	S20	E200	**FN50E200**	Price	Price	Price
	Same as E200 blade with TiN coating for extended life when deburring exotic & abrasive materials	-	E200P	**FN50E200P**	Price	Price	Price
	Solid carbide blade similar to E200, for extra hard applications	-	E200C	**FN50E200C**	Price	Price	Price
	Removes external & internal burrs simultaneously from holes drilled into tubing and sheet metal	S30	E300	**FN50E300**	Price	Price	Price
	Same as E300 exceept for brass & cast iron	-	E320	**FN50E320**	Price	Price	Price
	Expecially handy for straigh edges, keyways, etc.	S35	E350	**FN50E350**	Price	Price	Price
	Heavy duty HSS internal blade. Facilitates deburring in the most inaccessible locations	S60	E600	**FN50E600**	Price	Price	Price
	Ideal for removing burrs from plastic workpieces	-	E700	**FN50E700**	Price	Price	Price

Holders for Styles B & E

Item	B Holder	Order No.	Price
	B Blade Holder	**FN50BHB**	Price

Item	E Holder	Order No.	Price
	E Blade Holder	**FN50BHE**	Price

Mango Click Set E

For Heavy Duty E Blades

- Contains Mango Click n' Go handle, and (12) E-100 heavy-duty blades
- For deburring materials with spiral chips, such as aluminum, steel, copper, and plastic







Order No.	Price
FN50MCE	Price

Set C Scraping Kit

- Features triangular blades with 3 cutting edges for high quality finishing & scraping
- The telescopic blade holder lets you get to difficult-to-reach areas
- Includes key for safely removing blades





Order No.	Price
FN50C	Price

Triangular HSS Scraper Blades

Style C

Precision ground after hardening.

Item	Deburring Application	Order No.	Price
	Large Triangular Scraper (8mm)	FN50C42	Price
	Small Triangular Scraper (4mm) for Delicate Precision Work	FN50C40	Price

MB-2000 Deburring Tool

- Includes: 1 Pc. E-100 blade
- Steel collar for long life
- Accepts all "E" style blades
- Easy blade change–depress collar and switch blades



Order No.	Price
FN50MB2000	Price

Ceramix Set Q10

- Heavy duty handle with Ceramix Q10 blade
- Adjust the cutting angle between the blade and the material for best results and prevent scratches
- Flip blade for 2 types of jobs







Order No.	Price
FN50Q10	Price

The Original Heavy Duty Deburring Tool

- Offers the best solution for heavy-duty, straightforward and hole deburring
- Includes 1 handle (without extension), and 1 blade each: E100, E200, E300



Order No.	Price
FN50PBB1	Price

Set HC Handy Chuck

- Delivers pin vise versatility for finishing & scraping applications
- Used for gripping miniature files, drills, reamers, taps, wires, countersinks, and other small objects- .04" - .32" (1-8mm) in diameter
- Handy for assembling electronic components and watch repair
- Deburrs steel, aluminum, copper, brass, cast iron, stainless steel, and plastics



Includes	Order No.	Price
Double Sided .19" Blade	FN50HC6	Price
Double Sided .30" Blade	FN50HC5	Price

Replacement Scraper Blades

For Set HC

Item	Blade Size	Order No.	Price
	Scraper Blade .19"	FN50C60	Price
	Scraper Blade .30"	FN50C50	Price

Replacement Handy Chuck

- Delivers pin vise versatility for finishing & scraping applications
- Used for gripping miniature files, drills, reamers, taps, wires, countersinks, and other small objects- .04" - .32" (1-8mm) in diameter
- Handy for assembling electronic components and watch repair



Order No.	Price
FN50HC1	Price

Handguard

- Stainless steel protection
- Fits All SHAVIV blade holders
- Slides to position and locks where convenient



Recommended Especially for Sets D, G.

Order No.	Price
FN503G	Price

Handguard Shown with Set D (not included)

Replacement Handle

- Fits all Shaviv blade holders
- Includes convenient blade storage compartment in handle

Item	Type	Order No.	Price
	Plastic Replacement Handle	FN50HA	Price
	Mango Replacement Handle	FN50HM	Price
	Aluminum Replacement Handle with sure grip surface for heavy duty use and long term performance	FN50HAL	Price

Set D The Sheet Cleaner

- Perfect for sheet metal from .02” to .16” thick (.5mm- 4mm)
- Blades deburr both sides of sheet in one pass
- For added safety, use with handguard
- Deburrs steel, aluminum copper, brass, cast iron, stainless steel, hardened steel, and plastics



Order No.	Price
FN50D	Price

Set G Slot Edge Cleaner

- Ideal for deburring and cleaning edges of internal & external keyways and slots up to .6” (15mm) wide
- Blade features 8 cutting edges
- Deburrs steel, aluminum copper, brass, cast iron, stainless steel, and plastics



Order No.	Price
FN50G	Price

Blades

For Sets D, G3, G

Blade Holder - D				
Item	Deburring Application	Material	Order No.	Price
	6 cutting edges for deburring sheet metal up to 1/8" thick plus 6 edges for flat scraping	Carbide	FN50D80	Price
	Deburring sheet metal up to 5/16" thick	Carbide - HD	FN50D82	Price
	6 cutting edges with unique chip breaker for deburring sheet metal up to 9/32" thick (Requires D5 Holder)	High Speed Steel	FN50D85	Price

Blade Holder - G				
Item	Deburring Application	Material	Order No.	Price
	Large Keyways up to .6" Wide	High Speed Steel	FN50G10	Price
	Small Keyways up to .4" Wide	High Speed Steel	FN50G20	Price
	Very Narrow Slots up to .08" Wide	Carbide	FN50G40C	Price

Blade Holder - G3				
Item	Deburring Application	Material	Order No.	Price
	3 cutting corners for extended life	High Speed Steel	FN50G30	Price

Blade Holders

For Sets D, G3, G, F, FR

Item	Description	Order No.	Price
	D Blade Holder	FN50BHD	Price
	D5 Blade Holder	FN50BHD5	Price
	F Blade Holder	FN50BHF	Price
	FR Ratchet Holder	FN50BHFR	Price
	G Blade Holder	FN50BHG	Price
	G3 Blade Holder	FN50BHG3	Price

G3 Triple Corner Cleaner

- Cleans corners & removes rough edges after machining to ensure smooth flush mating of adjoining faces
- Special angled blade holder enables easy access to work area
- Blade feature 3 cutting corners
- Deburrs steel, aluminum copper, brass, cast iron, stainless steel, and plastics



Order No.	Price
FN50G3	Price

Set F & FR Countersink Kits

- Deburrs steel, aluminum copper, brass, cast iron, stainless steel, and plastics





Description	Order No.	Price
Features Ratchet Holder, ideal for rotational chamfering	FN50FR	Price
With Standard Holder, powerful tool, excellent for chamfering & countersinking	FN50F	Price

Countersinks

For Kits F & FR

Item	Deburring Application	Order No.	Price
	Countersink 1/2" Diameter	FN50F12	Price
	Countersink 3/4" Diameter	FN50F20	Price
	Countersink 1-1/4" Diameter	FN50F30	Price

Burr-Bi

For Deburring of Heavy Duty Materials

The two-insert tool for double-edge deburring on heavy duty materials. Stays sharper longer! Can be used repeatedly. Supplied with a built-in handguard for worker safety. For all thicknesses up to 14mm (.56”).

Set contains:

- Blade holder Burr-Bi
- 2 universal blades R10
- Handle A and key
- Blades can be positioned in 2 ways



Description	Order No.	Price
Burr-Bi Guard	FN503LBR	Price
Burr-Bi Set	FN503SBRKI	Price

Burr-Bi Blades

Item	Deburring Application	Order No.	Price
	Double Edged for Massive Deburring of Steel, Aluminum, Stainless Steel, Hard Metals	FN50R20	Price
	Double Edged Square Blade for Hard Material w/ Spiral Chips: Single Straight Edge- aluminum, brass, hard metal and stainless steel Double Straight Edges- steel, aluminum, hard metal and stainless steel (up to 16mm/.63" thick)	FN50R30	Price
	Double Sided Round Blade with unique cutting angle: Side A- steel, aluminum, stainless steel and hard metals Side B- brass and plastics	FN50R10	Price

Kit Mango KWC

The Universal Box

Excellent all-around deburring kit for your workshop. You get all the tools you need for 1000+ applications.

Kit Contains:
- Mango handle
- Mango adapter B and adapter E
- Holder – B, C, D, E & F
- Blades – B10, B20, B30, B50, B60, B70, C40, C42, D80, E100, E200, E300, E350, E600 & F20



Order No.	Price
FN50KWCM	Price

Kit Classic KWC

The Universal Box - Wood Case

Excellent all-around deburring kit for your workshop. You get all the tools you need for 1000+ applications.

Kit Contains:
- Classic handle A
- Holder – B, C, D, E & F
- Blades – B10, B20, B30, B50, B60, B70, C40, C42, D80, E100, E200, E300, E350, E600 & F20



Order No.	Price
FN50KWC	Price

Glo-Burr B & E Rainbow Series Set

- 4 popular, easy-to-grip deburring tools
- Strong, yet lightweight
- Features a convenient pocket clip and blade storage
- Glo-Burr B supplied with B10, B20, B30, B11 blades
- Glo-Burr E supplied with E100, E200, E300 & E111 blades
- Holds other popular B or E blades



Type	Order No.	Price
Glo-Burr B Rainbow Set	**FN50GB4B**	Price
Glo-Burr E Rainbow Set	**FN50GB4E**	Price

Glo-Burr B & E

Plus 20 Cobalt Blades



Includes:
- 2 Slim grip Glo-Burr tools for light & heavy deburring
- 10 B10S cobalt blades
- 10 E100S cobalt blades

Order No.	Price
FN50GB20BE	Price

Kit Classic KWC

The Universal Box Plastic Case

Excellent all-around deburring kit for your workshop. You get all the tools you need for 1000+ applications.

Kit Contains:
- Classic handle A
- Holder – B, C, D, E & F
- Blades – B10, B20, B30, B50, B60, B70, C40, C42, D80, E100, E200, E300, E350, E600 & F20



Order No.	Price
FN50KWCP	Price

Scrape-Burr 40

The All-Purpose Scraper

- An all-purpose standard scraper that features a heavy-duty triangular blade with 3 cutting edges for a high quality finishing and scraping



Order No.	Price
FN5090078	Price

Scrape-Burr 42

The Heavy Duty Scraper

- Features a high-duty triangular blade with 3 cutting edges for a high quality finishes and scraping



Order No.	Price
FN5090079	Price

Scrape-Burr 400

The Fine Finish Scraper

- This mini-tool delivers a fine finish to precision work pieces
- Features extra-thin, heavy duty triangular blade with 3 cutting edges for high quality and accurate finishing and scraping



Order No.	Price
FN5090080	Price

Throwaway Deburring Tools

A handy tool to clip to your pocket and carry around with you. Available with the standard B10 blade for lighter jobs or with the heavy duty E100 blades for tougher jobs.



Application	Set Includes	Order No.	Price
Heavy Duty Deburring	Hexagonal Handle / E100 Blade	**FN50VB1**	Price
Light Duty Deburring	Hexagonal Handle / B10 Blade	**FN50VB2**	Price

Carbide

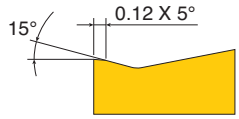
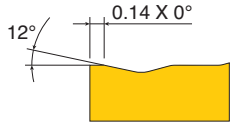
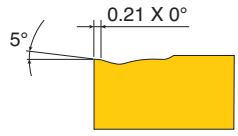
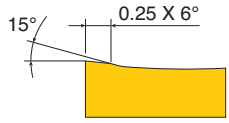
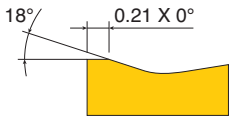
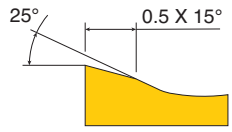
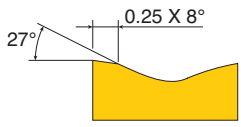
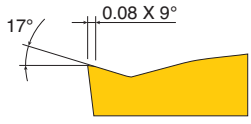
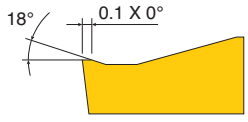
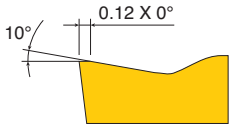
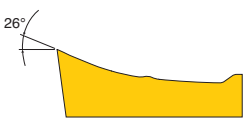


API Inserts B86-B92
Boring Bars, Carbide Tipped & Cobalt . . . B116-B119
Boring Bars, Indexable B34-B61
Boring Bars, Solid Carbide B108-B110
Brazed Carbide Tool Bits B120-B127
Carbide Blanks, Rods & Rounds . . B128, B131-B133
Ceramic Inserts B19
Cermet Inserts B18
Countersinks & Chamfering Tools, Indexable B62-B65
Cut-Off & Grooving Inserts and Tooling B73-B77
Cut-Off Blades & HSS Tool Bits B130
Dovetail Cutters, Indexable. B64-B65
Drills, Indexable B66
End Mills, Indexable B69, B71-B73
Engraving Blanks, Solid Carbide B128
Engraving Indexable B61
Face Milling Cutters, Indexable. B70
Grooving, Indexable B79-B85, B93-B95
Grooving Inserts B79-B83, B93-B95
Grooving, Solid Carbide B111-B112, B114
Grooving Toolholders B84-B85
High Feed Milling Cutter, Indexable B71
Milling Cutters, Indexable B69-B73
Milling Inserts B67-B68, B72
Procut Inserts B11-B17
Profiling Tools, Solid Carbide B114
Rapidkut Boring Bars B34-B36, B94
Rapidkut Boring Bars, Solid Carbide B108
Rapidkut Brazed Carbide Tool Bits B120-B123, B126-B127
Rapidkut Countersink, Indexable B62
Rapidkut Cut-Off Inserts & Blades B73-B75
Rapidkut Engraving Blanks, Carbide B128
Rapidkut Milling Cutters, Indexable B69-B71
Rapidkut Milling Inserts B67, B72
Rapidkut Threading & Grooving B93, B95-B96
Rapidkut Turning Inserts. B5-B10
Rapidkut Turning Tool Holders B20-B21
Spare Parts, Tool Holders. B134-B138
Spotting Drills, Indexable B61
Swiss Machine Toolholders B22-B23
Threading, Indexable B86-B107
Threading, Solid Carbide B113
Tool-Flo. B79-B92
Turning Inserts B5-B19
Turning Tool Holders. B20-B33, B43-B44, B78, B129

RAPIDKUT® Carbide Grades

GRADE	COATING PROCESS	COATING	ISO MATERIAL	APPLICATION	DESCRIPTION	AVAILABLE CHIPBREAKERS
KT1125	CVD	TiCN-Al2O3-TiN	K	TURNING	The ideal choice for medium turning applications in cast iron. Offers high wear resistance and superior toughness. Use for semi-finishing to roughing applications and continuous to heavy interruptions.	M45, R53, M51
NT9125	N/A	UNCOATED	N	TURNING	Ideal for semi-finishing to roughing in aluminum alloys and other non-ferrous materials. Offers high hardness and wear resistance.	MAU
PT1115	CVD	TiN-TiCN-Al2O3-TiN	P	TURNING	First recommendation for high speed maching in steel. Good combination of wear resistance and toughness. Improved chipping resistance.	F41, F43, M45, M46, M51, M86, R52, R53
PT1225	CVD	TiN-TiCN-Al2O3-TiN	P	TURNING	Use for general machining in steel. Wide application range thanks to good wear resistance and toughness. Imporved chipping resistance.	F41, F43, M45, M46, M51, M86, R52, R53
PT425	CVD	TiN-TiCN-Al2O3-TiN	P	TURNING	For general machinging and semi-finishing in Low Carbon Steel, Low Carbon Alloy Steel and Stainless Steel. Use for interrupted cutting in general Steel. Provides excellent toughness.	F41, M42, M45, M46
ME9125	N/A	UNCOATED	N	MILLING	Ideal for semi-finishing to roughing in aluminum alloys and other non-ferrous materials. Offers high hardness and wear resistance. Mirror like J-polish on the top surface.	NONE
ME425	PVD	TiAlN	P, M, K, S	MILLING	Designed for a wide range of medium machining applications. Use for semi-finishing to light roughing. Excellent wear resistance and tool likfe in a wide variety of materias. General purpose grade.	NONE
ME8425	PVD	AlCrN	P, M, K	MILLING	Complimentary grade for Steel, Stainless Steel and Cast Iron materials. High hardness substrate offers increased wear resistance.	HM, MM
ME8430	PVD	TiAlN	P, M, K, S, H	MILLING	Universal fisrt-choice grade with broad application range. Use in Steel, Stainless Steel, Cast Iron and Heat-resistant Super Alloys. Outstanding wear resistance and long tool life in difficult cutting conditions.	HM, MM
ME3125	PVD	TiAlN	P, M, K	GROOVING	Great for finishing to semi-finishing operations in Steel, Stainless Steel and Cast Iron. High resistance to thermal and mechanical shock with excellent wear resistance.	Molded Chipbreaker
ME435	CVD	TiN	P, M, K, S	CUT-OFF	A general purpose grade suitable for a wide range of materials with primary usage in steel and stainless steel. Suitable for interrupted cuts and unfavorable cutting conditions with lower to medium cutting speeds.	NONE
ME1025	PVD	TiCN	P, M	CUT-OFF	Use for general cut off operations in steel, alloy steels, and stainless steel. Hffers high toughness at medium cutting speeds.	NONE
ME2205	PVD	TiN -TiCN	P, M	CUT-OFF	Designed for use in Stainless Steel, carbon steel, alloy steel, aluminum alloys, cast steel and exotc alloys. Use for roughing at low speeds with high feed. Use for interrupted cuts, has high resistance to mechanical and thermal shock.	NONE

RAPIDKUT® Chipbreakers

Type	Chipbreaker	Application	Edge Geometry
NEGATIVE	F41	For medium machining and finishing applications. Good chip evacuation in low feed and depth of cut. Excellent chip control.	
	F43	For semi-finishing to medium machining in steel and alloy steel. Balanced between strength and sharpness. Good chip control in profiling.	
	M86	For semi-finishing, medium and semi-roughing in steel. Use for a wide range of turning. Low cutting force with good chip evacuation in low and high depth of cut.	
	M46	For medium machining of carbon steel and alloy steel. Also for medium machinging to finishing of cast iron. Suitable for coninuous to interrupted machining. Geometry of low cutting force.	
	R53	For medium to roughing applications in steel and cast iron. Has strong cutting edge. Recommended for unstable conditions.	
	M42	For medium machining in stainless steel and low carbon steel. Low cutting force with sharp edge geometry.	
	M45	For medium machining in stainless steel, low carbon steel and low carbon alloy steel. For semi-finishing operations in cast iron. Minimum of built-up edge from sharp edge geometry.	
POSITIVE	F41	For finishing in boring applications. Good chip evacuation in low feed and depth of cut. Low cutting force and good chip control.	
	M51	Used for semi-finishing to medium machining. Good chip evacuation in low feed and depth of cut. Good chip control.	
	R52	For medium machining to roughing applications in steel and cast iron. Use for both interrupted and continuous cutting operations.	
	MAU	For aluminum machining. Low cutting force, excellent chip evacuation.	

Rapidkut High Feed Milling Recommendations.

WorkPiece Material	Hardness	Grade	Recommended Cutting Speed	RPM 2" Diameter
*Calculations use starting vlaues				
Mild Steel	< HB200	ME8430	680 (570 - 750)	1300 (1100 - 1400)
Carbon Steel / Alloy Steel	< HRc 35	ME8430	570 (450 - 750)	1100 (860 - 1400)
Carbon Steel / Alloy Steel	HRc 35-45	ME8430	450 (340 - 550)	860 (650 - 1100)
Stainless Steel	< HRc 35	ME8430	450 (340 - 550)	860 (650 - 1100)
Cast Iron / Nodular Cast Iron	HB < 350	ME8430	680 (570 - 750)	1300 (1100 - 1400)
Heat Resitant Super Alloys / Titanium Alloy	< HRc 35	ME8430	150 (115 - 230)	290 (220 - 375)
Hardened Steel	HRc 45-55	ME8430	300 (230 - 380)	573 (375 - 725)

Medium Machining Parameters		Roughing Machining Parameters	
Feed Per Tooth Medium	2 inch dia 4 tooth IPM	Feed per Tooth Roughing	2 inch dia 4 tooth IPM
.047 (.031 - .060)	244 IPM	.06 (.039 - .079)	312 IPM
.047 (.031 - .060)	206 IPM	.06 (.039 - .079)	264 IPM
.039 (.022 - .047)	134 IPM	.047 (.031 - .060)	160 IPM
.031 (.024 - .039)	107 IPM	.039 (.031 - .047)	134 IPM
.047 (.031 - .060)	206 IPM	.06 (.039 - .079)	264 IPM
.012 (.006 - .016)	14 IPM	.016 (.008 - .024)	18 IPM
.008 (.004 - .012)	18 IPM	.012 (.006 - .016)	27 IPM

Turning Grade Comparison Chart

GRADE	Sandvik	Taegu Tec	Walter	Tungaloy	Mitsubishi	Iscar	Kennametal	Sumitomo	Kyocera	Seco
ME115 PT1115	GC4015 GC4205	TT8115 TT8125	WPP01 WPP05 WAK20	T9105 T9115	UE6105 UE6110	IC9150 IC8150 IC425	KCP10 TN7005 TN7010	AC810P AC820P	CA5505 CA5515 CA5525	TP0500 TP1500 TP2500
ME125 PT1115	GC4015 GC4225 GC4025 GC4215	TT8125 TT5100	WPP10 WPP20	T9115 T9125 T9015	UE6110 UE6010 UE6020	IC9250 IC8250 IC9150 IC8150	KCP25 TN7015	AC820P AC830P	CA5515 CA5525 CA5025 CR9025	TP1500 TP2500 TP200 TP2000
ME1225 PT1225	GC4015 GC4225 GC4025 GC4215	TT8125 TT5100	WPP10 WPP20	T9115 T9125 T9015	UE6110 UE6010 UE6020	IC9250 IC8250 IC9150 IC8150	KCP25 TN7015	AC820P AC830P	CA5515 CA5525 CA5025 CR9025	TP1500 TP2500 TP200 TP2000
ME1135	GC4225 GC4235 GC4025 GC4035	TT8125 TT8135 TT5100 TT7100	WPP20 WPP30	T9125 T9135 T9025	UE6020 UE6035 UH6400	IC8350 IC9350 IC656	KCP30 TN7025	AC820P AC830P	CA5525 CA5535 CR9025	TP2500 TP3500 TP300 TP3000
ME425 PT425	GC1025 GG1125	TT9020 TT7010 TT7220	WSM21 WSM20	AH710 AH725 SH730	VP15TF VP20MF	IC807 IC907 IC808 IC908	KCU25 KC5025 KC5525		PR915 PR930 PR1115 PR1225	CP200 TS2500
MS3115	GC1115 GC1025 GC1125 GC4125	TT5080 TT9020 TT9080	WSM10 WSM20 WSM21	AH725 GH330 SH730 GH330	VP15TF VP20MF	IC3028 IC354 IC907	KCU25 KC5025 KC5525	AC520U	PR915 PR930 PR1115 PR1225	TS2500 CP200 CP500
ME1125	GC2015 GC2025	TT9215 TT9225		T6120 T9125 T6020	MC7015 MC7025 US7020	IC6015 IC6025 IC8250	KCM15 KCM25 TN7015	AC610M AC630M	CA6525 CA6515	TM2000 TM4000
ME3125	GC1125 GC2035	TT8020 TT9020 TT9080	WSM20 WSM21 WSM30	AH120 AH725 GH130	VP15TF VP20MF	IC3028 IC354 IC908 IC928	KC5025 KC5525	AC520U AC530U	PR1025 PR1125 PR1225	CP500
ME9125 NT9125	H10 H13A	K10	WK1	KS15F TH10	HTi10	IC20	K313	H1	KW10	890
KT1125 MK1125	GC3215	TT7015 TT7310	WAK10 WAK20 WPP10	T5115 T5125	UC5115 MC5015	IC5010	KCK20 KCP25	AC415K AC420K	CA4515 CA4115 CA4120	TK2001 TP2500
ME435	GC4035	TT9030	WXP20 WTA41	TD915 T7020	F7030 UE6035	IC950 IC9025	KC725 KC9040	AC230 AC3000		F30M
ME1025	GC4025 GC1025	TT7220			AP25N UP35N	IC354	KC810 KC850	T2000Z T130Z		T25M S25M
ME2205	GC2040	TT8020			UE6010 UE6020	IC328	KC720	ACZ350		T25M

RAPIDKUT Turning Inserts

Style CCGT



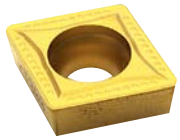
- 80 Degree diamond shape
- 7 Degree relief with countersunk hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
CCGT 21.50.5-MAU	NT9125	MAU	1/4	.094	.008	N	**ME1062610**	Price
CCGT 21.51-MAU	NT9125	MAU	1/4	.094	.016	N	**ME1062620**	Price
CCGT 32.50.5-MAU	NT9125	MAU	3/8	.156	.008	N	**ME1062630**	Price
CCGT 32.51-MAU	NT9125	MAU	3/8	.156	.016	N	**ME1062640**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
CCGT 32.52-MAU	NT9125	MAU	3/8	.156	.031	N	**ME1062650**	Price
CCGT 431-MAU	NT9125	MAU	1/2	.187	.016	N	**ME1062660**	Price
CCGT 432-MAU	NT9125	MAU	1/2	.187	.031	N	**ME1062670**	Price

RAPIDKUT Turning Inserts

Style CCMT



- 80 Degree diamond shape
- 7 Degree relief with countersunk hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
CCMT 21.51-F41	PT1115	F41	1/4	.094	.016	P	**RE1010010**	Price
CCMT 21.51-F41	PT1225	F41	1/4	.094	.016	P	**RE1010020**	Price
CCMT 21.51-R52	PT1115	R52	1/4	.094	.016	P	**RE1010030**	Price
CCMT 21.51-R52	PT1225	R52	1/4	.094	.016	P	**RE1010040**	Price
CCMT 32.51-F41	PT1115	F41	3/8	.156	.016	P	**RE1010050**	Price
CCMT 32.51-F41	PT1225	F41	3/8	.156	.016	P	**RE1010060**	Price
CCMT 32.51-M51	KT1125	M51	3/8	.156	.016	K	**RE1010070**	Price
CCMT 32.51-M51	PT1115	M51	3/8	.156	.016	P	**RE1010080**	Price
CCMT 32.51-M51	PT1225	M51	3/8	.156	.016	P	**RE1010090**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
CCMT 32.51-R52	PT1115	R52	3/8	.156	.016	P	**RE1010100**	Price
CCMT 32.51-R52	PT1225	R52	3/8	.156	.016	P	**RE1010110**	Price
CCMT 32.52-F41	PT1115	F41	3/8	.156	.031	P	**RE1010120**	Price
CCMT 32.52-F41	PT1225	F41	3/8	.156	.031	P	**RE1010130**	Price
CCMT 32.52-M51	KT1125	M51	3/8	.156	.031	K	**RE1010140**	Price
CCMT 32.52-M51	PT1115	M51	3/8	.156	.031	P	**RE1010150**	Price
CCMT 32.52-M51	PT1225	M51	3/8	.156	.031	P	**RE1010160**	Price
CCMT 32.52-R52	PT1115	R52	3/8	.156	.031	P	**RE1010170**	Price
CCMT 32.52-R52	PT1225	R52	3/8	.156	.031	P	**RE1010180**	Price

RAPIDKUT Turning Inserts

Style CNMA



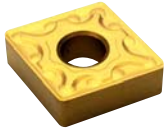
- 80 Degree diamond shape
- Negative with hole

Item No.	Grade	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
CNMA 431	KT1125	1/2	.187	.016	K	**RE1010190**	Price
CNMA 432	KT1125	1/2	.187	.031	K	**RE1010200**	Price

Item No.	Grade	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
CNMA 433	KT1125	1/2	.187	.047	K	**RE1010210**	Price

RAPIDKUT Turning Inserts

Style CNMG



- 80 Degree diamond shape
- Negative with hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
CNMG 431-F41	PT1115	F41	1/2	.187	.016	P	**RE1010230**	Price
CNMG 431-F41	PT1225	F41	1/2	.187	.016	P	**RE1010240**	Price
CNMG 431-F41	PT425	F41	1/2	.187	.016	P,M,K	**RE1010220**	Price
CNMG 431-F43	PT1115	F43	1/2	.187	.016	P	**RE1010260**	Price
CNMG 431-F43	PT1225	F43	1/2	.187	.016	P	**RE1010270**	Price
CNMG 431-M42	PT425	M42	1/2	.187	.016	P,M,K	**RE1010250**	Price
CNMG 431-M45	PT1115	M45	1/2	.187	.016	P	**RE1010290**	Price
CNMG 431-M45	PT1225	M45	1/2	.187	.016	P	**RE1010300**	Price
CNMG 431-M45	PT425	M45	1/2	.187	.016	P,M,K	**RE1010280**	Price

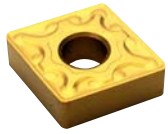
Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
CNMG 431-M46	PT1115	M46	1/2	.187	.016	P	**RE1010320**	Price
CNMG 431-M46	PT1225	M46	1/2	.187	.016	P	**RE1010330**	Price
CNMG 431-M46	PT425	M46	1/2	.187	.016	P,M,K	**RE1010310**	Price
CNMG 431-R53	KT1125	R53	1/2	.187	.016	K	**RE1010340**	Price
CNMG 431-R53	PT1115	R53	1/2	.187	.016	P	**RE1010350**	Price
CNMG 431-R53	PT1225	R53	1/2	.187	.016	P	**RE1010360**	Price
CNMG 432-F41	PT1115	F41	1/2	.187	.031	P	**RE1010380**	Price
CNMG 432-F41	PT1225	F41	1/2	.187	.031	P	**RE1010390**	Price
CNMG 432-F41	PT425	F41	1/2	.187	.031	P,M,K	**RE1010370**	Price

(continued)

RAPIDKUT Turning Inserts

Style CNMG

- 80 Degree diamond shape
- Negative with hole



(continued)

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
CNMG 432-F43	PT1115	F43	1/2	.187	.031	P	**RE1010410**	Price
CNMG 432-F43	PT1225	F43	1/2	.187	.031	P	**RE1010420**	Price
CNMG 432-M42	PT425	M42	1/2	.187	.031	P,M,K	**RE1010400**	Price
CNMG 432-M45	PT1115	M45	1/2	.187	.031	P	**RE1010440**	Price
CNMG 432-M45	PT1225	M45	1/2	.187	.031	P	**RE1010450**	Price
CNMG 432-M45	PT425	M45	1/2	.187	.031	P,M,K	**RE1010430**	Price
CNMG 432-M46	KT1125	M46	1/2	.187	.031	K	**RE1010470**	Price
CNMG 432-M46	PT1115	M46	1/2	.187	.031	P	**RE1010480**	Price
CNMG 432-M46	PT1225	M46	1/2	.187	.031	P	**RE1010490**	Price
CNMG 432-M46	PT425	M46	1/2	.187	.031	P,M,K	**RE1010460**	Price
CNMG 432-M86	PT1115	M86	1/2	.187	.031	P	**RE1010530**	Price
CNMG 432-M86	PT1225	M86	1/2	.187	.031	P	**RE1010540**	Price
CNMG 432-R53	KT1125	R53	1/2	.187	.031	K	**RE1010500**	Price
CNMG 432-R53	PT1115	R53	1/2	.187	.031	P	**RE1010510**	Price
CNMG 432-R53	PT1225	R53	1/2	.187	.031	P	**RE1010520**	Price
CNMG 433-F41	PT1115	F41	1/2	.187	.047	P	**RE1010550**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
CNMG 433-F41	PT1225	F41	1/2	.187	.047	P	**RE1010560**	Price
CNMG 433-F43	PT1115	F43	1/2	.187	.047	P	**RE1010580**	Price
CNMG 433-F43	PT1225	F43	1/2	.187	.047	P	**RE1010590**	Price
CNMG 433-M42	PT425	M42	1/2	.187	.047	P,M,K	**RE1010570**	Price
CNMG 433-M45	PT1115	M45	1/2	.187	.047	P	**RE1010610**	Price
CNMG 433-M45	PT1225	M45	1/2	.187	.047	P	**RE1010620**	Price
CNMG 433-M45	PT425	M45	1/2	.187	.047	P,M,K	**RE1010600**	Price
CNMG 433-M46	KT1125	M46	1/2	.187	.047	K	**RE1010640**	Price
CNMG 433-M46	PT1115	M46	1/2	.187	.047	P	**RE1010650**	Price
CNMG 433-M46	PT1225	M46	1/2	.187	.047	P	**RE1010660**	Price
CNMG 433-M46	PT425	M46	1/2	.187	.047	P,M,K	**RE1010630**	Price
CNMG 433-M86	PT1115	M86	1/2	.187	.047	P	**RE1010700**	Price
CNMG 433-M86	PT1225	M86	1/2	.187	.047	P	**RE1010710**	Price
CNMG 433-R53	KT1125	R53	1/2	.187	.047	K	**RE1010670**	Price
CNMG 433-R53	PT1115	R53	1/2	.187	.047	P	**RE1010680**	Price
CNMG 433-R53	PT1225	R53	1/2	.187	.047	P	**RE1010690**	Price

RAPIDKUT Turning Inserts

Style DCGT

- 55 Degree diamond shape
- 7 Degree relief with countersunk hole



Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
DCGT 21.50.5-MAU	NT9125	MAU	1/4	.094	.008	N	**ME1062680**	Price
DCGT 21.51-MAU	NT9125	MAU	1/4	.094	.016	N	**ME1062690**	Price
DCGT 32.50.5-MAU	NT9125	MAU	3/8	.156	.008	N	**ME1062700**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
DCGT 32.51-MAU	NT9125	MAU	3/8	.156	.016	N	**ME1062710**	Price
DCGT 32.52-MAU	NT9125	MAU	3/8	.156	.031	N	**ME1062720**	Price

RAPIDKUT Turning Inserts

Style DCMT

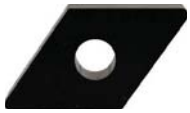
- 55 Degree diamond shape
- 7 Degree relief with countersunk hole



Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
DCMT 21.51-R52	PT1115	R52	1/4	.094	.016	P	**RE1010720**	Price
DCMT 21.51-R52	PT1225	R52	1/4	.094	.016	P	**RE1010730**	Price
DCMT 32.51-F41	PT1115	F41	3/8	.156	.016	P	**RE1010740**	Price
DCMT 32.51-F41	PT1225	F41	3/8	.156	.016	P	**RE1010750**	Price
DCMT 32.51-M51	KT1125	M51	3/8	.156	.016	K	**RE1010760**	Price
DCMT 32.51-M51	PT1115	M51	3/8	.156	.016	P	**RE1010770**	Price
DCMT 32.51-M51	PT1225	M51	3/8	.156	.016	P	**RE1010780**	Price
DCMT 32.51-R52	PT1115	R52	3/8	.156	.016	P	**RE1010790**	Price
DCMT 32.51-R52	PT1225	R52	3/8	.156	.016	P	**RE1010800**	Price
DCMT 32.52-F41	PT1115	F41	3/8	.156	.031	P	**RE1010820**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
DCMT 32.52-F41	PT1225	F41	3/8	.156	.031	P	**RE1010830**	Price
DCMT 32.52-F41	PT425	F41	3/8	.156	.031	P,M,K	**RE1010810**	Price
DCMT 32.52-M51	KT1125	M51	3/8	.156	.031	K	**RE1010840**	Price
DCMT 32.52-M51	PT1115	M51	3/8	.156	.031	P	**RE1010850**	Price
DCMT 32.52-M51	PT1225	M51	3/8	.156	.031	P	**RE1010860**	Price
DCMT 32.52-R52	PT1115	R52	3/8	.156	.031	P	**RE1010870**	Price
DCMT 32.52-R52	PT1225	R52	3/8	.156	.031	P	**RE1010880**	Price
DCMT 32.53-M51	KT1125	M51	3/8	.156	.047	K	**RE1010890**	Price
DCMT 32.53-M51	PT1115	M51	3/8	.156	.047	P	**RE1010900**	Price
DCMT 32.53-M51	PT1225	M51	3/8	.156	.047	P	**RE1010910**	Price

RAPIDKUT Turning Inserts
Style DNMA

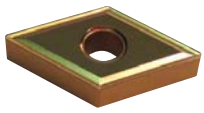


- 55 Degree diamond shape
- Negative with hole

Item No.	Grade	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
DNMA 433	KT1125	1/2	.187	.047	K	**RE1010920**	Price

Item No.	Grade	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
DNMA 442	KT1125	1/2	.187	.031	K	**RE1010930**	Price

RAPIDKUT Turning Inserts
Style DNMG



- 55 Degree diamond shape
- Negative with hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
DNMG 432-F41	PT1115	F41	1/2	.187	.031	P	**RE1010940**	Price
DNMG 432-F41	PT1225	F41	1/2	.187	.031	P	**RE1010950**	Price
DNMG 432-F43	PT1115	F43	1/2	.187	.031	P	**RE1010960**	Price
DNMG 432-F43	PT1225	F43	1/2	.187	.031	P	**RE1010970**	Price
DNMG 432-M46	PT1225	M46	1/2	.187	.031	P	**RE1011000**	Price
DNMG 432-M86	PT1115	M86	1/2	.187	.031	P	**RE1010980**	Price
DNMG 432-M86	PT1225	M86	1/2	.187	.031	P	**RE1010990**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
DNMG 433-F43	PT1115	F43	1/2	.187	.047	P	**RE1011010**	Price
DNMG 433-F43	PT1225	F43	1/2	.187	.047	P	**RE1011020**	Price
DNMG 433-M45	PT1115	M45	1/2	.187	.047	P	**RE1011030**	Price
DNMG 433-R53	KT1125	R53	1/2	.187	.047	K	**RE1011040**	Price
DNMG 441-M42	PT425	M42	1/2	.250	.016	P,M,K	**RE1011050**	Price
DNMG 442-M42	PT425	M42	1/2	.250	.031	P,M,K	**RE1011060**	Price
DNMG 443-M42	PT425	M42	1/2	.250	.047	P,M,K	**RE1011070**	Price

RAPIDKUT Turning Inserts
Style SCGT



- Square shape
- 7 Degree relief with countersunk hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
SCGT 431-MAU	NT9125	MAU	1/2	.187	.016	N	**ME1062730**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
SCGT 432-MAU	NT9125	MAU	1/2	.187	.031	N	**ME1062740**	Price

RAPIDKUT Turning Inserts
Style SCMT



- Square shape
- 7 Degree relief with countersunk hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
SCMT 32.51-F41	PT1115	F41	3/8	.156	.016	P	**RE1011080**	Price
SCMT 32.51-F41	PT1225	F41	3/8	.156	.016	P	**RE1011090**	Price
SCMT 32.51-M51	KT1125	M51	3/8	.156	.016	K	**RE1011100**	Price
SCMT 32.51-M51	PT1115	M51	3/8	.156	.016	P	**RE1011110**	Price
SCMT 32.51-M51	PT1225	M51	3/8	.156	.016	P	**RE1011120**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
SCMT 32.52-F41	PT1115	F41	3/8	.156	.031	P	**RE1011130**	Price
SCMT 32.52-F41	PT1225	F41	3/8	.156	.031	P	**RE1011140**	Price
SCMT 32.52-M51	KT1125	M51	3/8	.156	.031	K	**RE1011150**	Price
SCMT 32.52-M51	PT1115	M51	3/8	.156	.031	P	**RE1011160**	Price
SCMT 32.52-M51	PT1225	M51	3/8	.156	.031	P	**RE1011170**	Price

RAPIDKUT Turning Inserts
Style SNMA



- Square shape
- Negative with hole

Item No.	Grade	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
SNMA 432	KT1125	1/2	.187	.031	K	**RE1011180**	Price

Item No.	Grade	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
SNMA 433	KT1125	1/2	.187	.047	K	**RE1011190**	Price

RAPIDKUT Turning Inserts
Style SNMG



- Square shape
- Negative with hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
SNMG 431-M42	PT425	M42	1/2	.187	.016	P,M,K	**RE1011200**	Price
SNMG 431-M45	PT1115	M45	1/2	.187	.016	P	**RE1011220**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
SNMG 431-M45	PT1225	M45	1/2	.187	.016	P	**RE1011230**	Price

(continued)

RAPIDKUT® Turning Inserts

Style SNMG

- Square shape
- Negative with hole



(continued)

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
SNMG 431-M45	PT425	M45	1/2	.187	.016	P,M,K	**RE1011210**	Price
SNMG 431-M46	PT1115	M46	1/2	.187	.016	P	**RE1011250**	Price
SNMG 431-M46	PT1225	M46	1/2	.187	.016	P	**RE1011260**	Price
SNMG 431-M46	PT425	M46	1/2	.187	.016	P,M,K	**RE1011240**	Price
SNMG 431-R53	KT1125	R53	1/2	.187	.016	K	**RE1011270**	Price
SNMG 431-R53	PT1115	R53	1/2	.187	.016	P	**RE1011280**	Price
SNMG 431-R53	PT1225	R53	1/2	.187	.016	P	**RE1011290**	Price
SNMG 432-F41	PT1115	F41	1/2	.187	.031	P	**RE1011300**	Price
SNMG 432-M42	PT425	M42	1/2	.187	.031	P,M,K	**RE1011310**	Price
SNMG 432-M45	PT1115	M45	1/2	.187	.031	P	**RE1011330**	Price
SNMG 432-M45	PT1225	M45	1/2	.187	.031	P	**RE1011340**	Price
SNMG 432-M45	PT425	M45	1/2	.187	.031	P,M,K	**RE1011320**	Price
SNMG 432-M46	KT1125	M46	1/2	.187	.031	K	**RE1011360**	Price
SNMG 432-M46	PT1115	M46	1/2	.187	.031	P	**RE1011370**	Price
SNMG 432-M46	PT1225	M46	1/2	.187	.031	P	**RE1011380**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
SNMG 432-M46	PT425	M46	1/2	.187	.031	P,M,K	**RE1011350**	Price
SNMG 432-R53	KT1125	R53	1/2	.187	.031	K	**RE1011390**	Price
SNMG 432-R53	PT1115	R53	1/2	.187	.031	P	**RE1011400**	Price
SNMG 432-R53	PT1225	R53	1/2	.187	.031	P	**RE1011410**	Price
SNMG 433-M42	PT425	M42	1/2	.187	.047	P,M,K	**RE1011420**	Price
SNMG 433-M45	PT1115	M45	1/2	.187	.047	P	**RE1011440**	Price
SNMG 433-M45	PT1225	M45	1/2	.187	.047	P	**RE1011450**	Price
SNMG 433-M45	PT425	M45	1/2	.187	.047	P,M,K	**RE1011430**	Price
SNMG 433-M46	KT1125	M46	1/2	.187	.047	K	**RE1011470**	Price
SNMG 433-M46	PT1115	M46	1/2	.187	.047	P	**RE1011480**	Price
SNMG 433-M46	PT1225	M46	1/2	.187	.047	P	**RE1011490**	Price
SNMG 433-M46	PT425	M46	1/2	.187	.047	P,M,K	**RE1011460**	Price
SNMG 433-R53	KT1125	R53	1/2	.187	.047	K	**RE1011500**	Price
SNMG 433-R53	PT1115	R53	1/2	.187	.047	P	**RE1011510**	Price
SNMG 433-R53	PT1225	R53	1/2	.187	.047	P	**RE1011520**	Price

RAPIDKUT® Turning Inserts

Style TCGT

- Triangle shape
- 7 Degree relief with countersunk hole



Item No.	Grade	Chip Breaker	IC (in.)	Thickness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
TCGT 32.51-MAU	NT9125	MAU	3/8	.156	.016	N	**ME1062760**	Price

RAPIDKUT® Turning Inserts

Style TCMT

- Triangle shape
- 7 Degree relief with countersunk hole



Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
TCMT 21.51-R52	PT1115	R52	1/4	.094	.016	P	**RE1011530**	Price
TCMT 21.51-R52	PT1225	R52	1/4	.094	.016	P	**RE1011540**	Price
TCMT 32.51-F41	PT1115	F41	3/8	.156	.016	P	**RE1011550**	Price
TCMT 32.51-F41	PT1225	F41	3/8	.156	.016	P	**RE1011560**	Price
TCMT 32.51-M51	KT1125	M51	3/8	.156	.016	K	**RE1011570**	Price
TCMT 32.51-M51	PT1115	M51	3/8	.156	.016	P	**RE1011580**	Price
TCMT 32.51-M51	PT1225	M51	3/8	.156	.016	P	**RE1011590**	Price
TCMT 32.52-F41	PT1115	F41	3/8	.156	.031	P	**RE1011600**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
TCMT 32.52-F41	PT1225	F41	3/8	.156	.031	P	**RE1011610**	Price
TCMT 32.52-M51	KT1125	M51	3/8	.156	.031	K	**RE1011620**	Price
TCMT 32.52-M51	PT1115	M51	3/8	.156	.031	P	**RE1011630**	Price
TCMT 32.52-M51	PT1225	M51	3/8	.156	.031	P	**RE1011640**	Price
TCMT 32.53-M51	KT1125	M51	3/8	.156	.047	K	**RE1011650**	Price
TCMT 32.53-M51	PT1115	M51	3/8	.156	.047	P	**RE1011660**	Price
TCMT 32.53-M51	PT1225	M51	3/8	.156	.047	P	**RE1011670**	Price

RAPIDKUT® Turning Inserts

Style TNMA

- Triangle shape
- Negative with hole



Item No.	Grade	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
TNMA 331	KT1125	3/8	.187	.016	K	**RE1011680**	Price
TNMA 332	KT1125	3/8	.187	.031	K	**RE1011690**	Price

Item No.	Grade	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
TNMA 333	KT1125	3/8	.187	.047	K	**RE1011700**	Price

RAPIDKUT Turning Inserts

Style TNMG



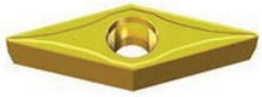
- Triangle shape
- Negative with hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
TNMG 331-F41	PT1115	F41	3/8	.187	.016	P	**RE1011710**	Price
TNMG 331-F41	PT1225	F41	3/8	.187	.016	P	**RE1011720**	Price
TNMG 331-F43	PT1115	F43	3/8	.187	.016	P	**RE1011740**	Price
TNMG 331-F43	PT1225	F43	3/8	.187	.016	P	**RE1011750**	Price
TNMG 331-M42	PT425	M42	3/8	.187	.016	P,M,K	**RE1011730**	Price
TNMG 331-M45	PT1115	M45	3/8	.187	.016	P	**RE1011770**	Price
TNMG 331-M45	PT1225	M45	3/8	.187	.016	P	**RE1011780**	Price
TNMG 331-M45	PT425	M45	3/8	.187	.016	P,M,K	**RE1011760**	Price
TNMG 331-M46	PT1115	M46	3/8	.187	.016	P	**RE1011800**	Price
TNMG 331-M46	PT1225	M46	3/8	.187	.016	P	**RE1011810**	Price
TNMG 331-M46	PT425	M46	3/8	.187	.016	P,M,K	**RE1011790**	Price
TNMG 331-R53	KT1125	R53	3/8	.187	.016	K	**RE1011820**	Price
TNMG 331-R53	PT1115	R53	3/8	.187	.016	P	**RE1011830**	Price
TNMG 331-R53	PT1225	R53	3/8	.187	.016	P	**RE1011840**	Price
TNMG 332-F41	PT1115	F41	3/8	.187	.031	P	**RE1011850**	Price
TNMG 332-F41	PT1225	F41	3/8	.187	.031	P	**RE1011860**	Price
TNMG 332-F43	PT1115	F43	3/8	.187	.031	P	**RE1011880**	Price
TNMG 332-F43	PT1225	F43	3/8	.187	.031	P	**RE1011890**	Price
TNMG 332-M42	PT425	M42	3/8	.187	.031	P,M,K	**RE1011870**	Price
TNMG 332-M45	PT1115	M45	3/8	.187	.031	P	**RE1011910**	Price
TNMG 332-M45	PT1225	M45	3/8	.187	.031	P	**RE1011920**	Price
TNMG 332-M45	PT425	M45	3/8	.187	.031	P,M,K	**RE1011900**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
TNMG 332-M46	KT1125	M46	3/8	.187	.031	K	**RE1011960**	Price
TNMG 332-M46	PT1115	M46	3/8	.187	.031	P	**RE1011970**	Price
TNMG 332-M46	PT1225	M46	3/8	.187	.031	P	**RE1011980**	Price
TNMG 332-M46	PT425	M46	3/8	.187	.031	P,M,K	**RE1011950**	Price
TNMG 332-M86	PT1115	M86	3/8	.187	.031	P	**RE1011930**	Price
TNMG 332-M86	PT1225	M86	3/8	.187	.031	P	**RE1011940**	Price
TNMG 332-R53	KT1125	R53	3/8	.187	.031	K	**RE1011990**	Price
TNMG 332-R53	PT1115	R53	3/8	.187	.031	P	**RE1012000**	Price
TNMG 332-R53	PT1225	R53	3/8	.187	.031	P	**RE1012010**	Price
TNMG 333-F43	PT1115	F43	3/8	.187	.047	P	**RE1012030**	Price
TNMG 333-F43	PT1225	F43	3/8	.187	.047	P	**RE1012040**	Price
TNMG 333-M42	PT425	M42	3/8	.187	.047	P,M,K	**RE1012020**	Price
TNMG 333-M45	PT1115	M45	3/8	.187	.047	P	**RE1012060**	Price
TNMG 333-M45	PT1225	M45	3/8	.187	.047	P	**RE1012070**	Price
TNMG 333-M45	PT425	M45	3/8	.187	.047	P,M,K	**RE1012050**	Price
TNMG 333-M46	KT1125	M46	3/8	.187	.047	K	**RE1012090**	Price
TNMG 333-M46	PT1115	M46	3/8	.187	.047	P	**RE1012100**	Price
TNMG 333-M46	PT1225	M46	3/8	.187	.047	P	**RE1012110**	Price
TNMG 333-M46	PT425	M46	3/8	.187	.047	P,M,K	**RE1012080**	Price
TNMG 333-R53	KT1125	R53	3/8	.187	.047	K	**RE1012120**	Price
TNMG 333-R53	PT1115	R53	3/8	.187	.047	P	**RE1012130**	Price
TNMG 333-R53	PT1225	R53	3/8	.187	.047	P	**RE1012140**	Price

RAPIDKUT Turning Inserts

Style VBMT



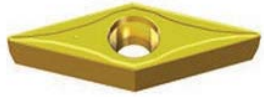
- 35 Degree diamond shape
- 5 Degree relief

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
VBMT 331-F41	PT1115	F41	3/8	.187	.016	P	**RE1012150**	Price
VBMT 331-F41	PT1225	F41	3/8	.187	.016	P	**RE1012160**	Price
VBMT 331-M51	KT1125	M51	3/8	.187	.016	K	**RE1012170**	Price
VBMT 331-M51	PT1115	M51	3/8	.187	.016	P	**RE1012180**	Price
VBMT 331-M51	PT1225	M51	3/8	.187	.016	P	**RE1012190**	Price
VBMT 331-R52	PT1115	R52	3/8	.187	.016	P	**RE1012200**	Price
VBMT 331-R52	PT1225	R52	3/8	.187	.016	P	**RE1012210**	Price
VBMT 332-F41	PT1115	F41	3/8	.187	.031	P	**RE1012220**	Price
VBMT 332-F41	PT1225	F41	3/8	.187	.031	P	**RE1012230**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
VBMT 332-M51	KT1125	M51	3/8	.187	.031	K	**RE1012240**	Price
VBMT 332-M51	PT1115	M51	3/8	.187	.031	P	**RE1012250**	Price
VBMT 332-M51	PT1225	M51	3/8	.187	.031	P	**RE1012260**	Price
VBMT 332-R52	PT1115	R52	3/8	.187	.031	P	**RE1012270**	Price
VBMT 332-R52	PT1225	R52	3/8	.187	.031	P	**RE1012280**	Price
VBMT 333-M51	KT1125	M51	3/8	.187	.047	K	**RE1012290**	Price
VBMT 333-M51	PT1115	M51	3/8	.187	.047	P	**RE1012300**	Price
VBMT 333-M51	PT1225	M51	3/8	.187	.047	P	**RE1012310**	Price

RAPIDKUT Turning Inserts

Style VBMT



Item No.	Grade	Chip-breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
VBMT 221-XF	ME1125	XF	1/4	.125	.016	M	**ME1062370**	Price
VBMT 221-XF	ME115	XF	1/4	.125	.016	P,K	**ME1062372**	Price
VBMT 221-XF	ME1225	XF	1/4	.125	.016	P	**ME1062374**	Price
VBMT 221-XF	MS3115	XF	1/4	.125	.016	M,S	**ME1062376**	Price
VBMT 331-XF	ME1125	XF	3/8	.187	.016	M	**ME1062378**	Price
VBMT 331-XF	ME115	XF	3/8	.187	.016	P,K	**ME1062380**	Price

Item No.	Grade	Chip-breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
VBMT 331-XF	ME1225	XF	3/8	.187	.016	P	**ME1062382**	Price
VBMT 331-XF	MS3115	XF	3/8	.187	.016	M,S	**ME1062384**	Price
VBMT 332-XF	ME1125	XF	3/8	.187	.031	M	**ME1062386**	Price
VBMT 332-XF	ME115	XF	3/8	.187	.031	P,K	**ME1062388**	Price
VBMT 332-XF	ME1225	XF	3/8	.187	.031	P	**ME1062390**	Price
VBMT 332-XF	MS3115	XF	3/8	.187	.031	M,S	**ME1062392**	Price

RAPIDKUT Turning Inserts

Style VCGT



- 35 Degree diamond shape
- 7 Degree relief with countersunk hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
VCGT 220.5-MAU	NT9125	MAU	1/4	.125	.008	N	**ME1062780**	Price
VCGT 221-MAU	NT9125	MAU	1/4	.125	.016	N	**ME1062790**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
VCGT 331-MAU	NT9125	MAU	3/8	.187	.016	N	**ME1062800**	Price
VCGT 332-MAU	NT9125	MAU	3/8	.187	.031	N	**ME1062810**	Price

RAPIDKUT Turning Inserts

Style VNMG



- 35 Degree diamond shape
- Negative with hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
VNMG 331-F41	PT1115	F41	3/8	.187	.016	P	**RE1012320**	Price
VNMG 331-F41	PT1225	F41	3/8	.187	.016	P	**RE1012330**	Price
VNMG 331-M45	PT1115	M45	3/8	.187	.016	P	**RE1012350**	Price
VNMG 331-M45	PT1225	M45	3/8	.187	.016	P	**RE1012360**	Price
VNMG 331-M45	PT425	M45	3/8	.187	.016	P,M,K	**RE1012340**	Price
VNMG 331-M46	PT1115	M46	3/8	.187	.016	P	**RE1012380**	Price
VNMG 331-M46	PT1225	M46	3/8	.187	.016	P	**RE1012390**	Price
VNMG 331-M46	PT425	M46	3/8	.187	.016	P,M,K	**RE1012370**	Price
VNMG 331-R53	KT1125	R53	3/8	.187	.016	K	**RE1012400**	Price
VNMG 331-R53	PT1115	R53	3/8	.187	.016	P	**RE1012410**	Price
VNMG 331-R53	PT1225	R53	3/8	.187	.016	P	**RE1012420**	Price
VNMG 332-F41	PT1115	F41	3/8	.187	.031	P	**RE1012430**	Price
VNMG 332-F41	PT1225	F41	3/8	.187	.031	P	**RE1012440**	Price
VNMG 332-M45	PT1115	M45	3/8	.187	.031	P	**RE1012460**	Price
VNMG 332-M45	PT1225	M45	3/8	.187	.031	P	**RE1012470**	Price
VNMG 332-M45	PT425	M45	3/8	.187	.031	P,M,K	**RE1012450**	Price
VNMG 332-M46	KT1125	M46	3/8	.187	.031	K	**RE1012490**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
VNMG 332-M46	PT1115	M46	3/8	.187	.031	P	**RE1012500**	Price
VNMG 332-M46	PT1225	M46	3/8	.187	.031	P	**RE1012510**	Price
VNMG 332-M46	PT425	M46	3/8	.187	.031	P,M,K	**RE1012480**	Price
VNMG 332-R53	KT1125	R53	3/8	.187	.031	K	**RE1012520**	Price
VNMG 332-R53	PT1115	R53	3/8	.187	.031	P	**RE1012530**	Price
VNMG 332-R53	PT1225	R53	3/8	.187	.031	P	**RE1012540**	Price
VNMG 333-M45	PT1115	M45	3/8	.187	.047	P	**RE1012560**	Price
VNMG 333-M45	PT1225	M45	3/8	.187	.047	P	**RE1012570**	Price
VNMG 333-M45	PT425	M45	3/8	.187	.047	P,M,K	**RE1012550**	Price
VNMG 333-M46	KT1125	M46	3/8	.187	.047	K	**RE1012590**	Price
VNMG 333-M46	PT1115	M46	3/8	.187	.047	P	**RE1012600**	Price
VNMG 333-M46	PT1225	M46	3/8	.187	.047	P	**RE1012610**	Price
VNMG 333-M46	PT425	M46	3/8	.187	.047	P,M,K	**RE1012580**	Price
VNMG 333-R53	KT1125	R53	3/8	.187	.047	K	**RE1012620**	Price
VNMG 333-R53	PT1115	R53	3/8	.187	.047	P	**RE1012630**	Price
VNMG 333-R53	PT1225	R53	3/8	.187	.047	P	**RE1012640**	Price

RAPIDKUT Turning Inserts

Style WNMA



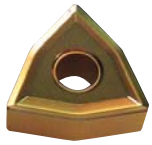
- 80 Degree trigon shape
- Negative with hole

Item No.	Grade	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
WNMA 432	KT1125	1/2	.187	.031	K	**RE1012650**	Price

Item No.	Grade	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
WNMA 433	KT1125	1/2	.187	.047	K	**RE1012660**	Price

RAPIDKUT Turning Inserts

Style WNMG



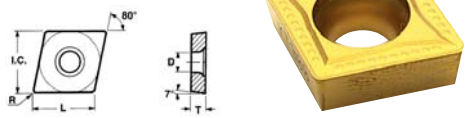
- 80 Degree trigon shape
- Negative with hole

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
WNMG 331-M45	PT1115	M45	3/8	.187	.016	P	**RE1012680**	Price
WNMG 331-M45	PT1225	M45	3/8	.187	.016	P	**RE1012690**	Price
WNMG 331-M45	PT425	M45	3/8	.187	.016	P,M,K	**RE1012670**	Price
WNMG 332-M45	PT1115	M45	3/8	.187	.031	P	**RE1012710**	Price
WNMG 332-M45	PT1225	M45	3/8	.187	.031	P	**RE1012720**	Price
WNMG 332-M45	PT425	M45	3/8	.187	.031	P,M,K	**RE1012700**	Price
WNMG 431-F41	PT1115	F41	1/2	.187	.016	P	**RE1012730**	Price
WNMG 431-F43	PT1115	F43	1/2	.187	.016	P	**RE1012750**	Price
WNMG 431-F43	PT1225	F43	1/2	.187	.016	P	**RE1012760**	Price
WNMG 431-M42	PT425	M42	1/2	.187	.016	P,M,K	**RE1012740**	Price
WNMG 431-M45	PT1115	M45	1/2	.187	.016	P	**RE1012780**	Price
WNMG 431-M45	PT1225	M45	1/2	.187	.016	P	**RE1012790**	Price
WNMG 431-M45	PT425	M45	1/2	.187	.016	P,M,K	**RE1012770**	Price
WNMG 431-M46	PT1115	M46	1/2	.187	.016	P	**RE1012810**	Price
WNMG 431-M46	PT1225	M46	1/2	.187	.016	P	**RE1012820**	Price
WNMG 431-M46	PT425	M46	1/2	.187	.016	P,M,K	**RE1012800**	Price
WNMG 431-R53	KT1125	R53	1/2	.187	.016	K	**RE1012830**	Price
WNMG 432-F41	PT1115	F41	1/2	.187	.031	P	**RE1012850**	Price
WNMG 432-F41	PT1225	F41	1/2	.187	.031	P	**RE1012860**	Price
WNMG 432-F41	PT425	F41	1/2	.187	.031	P,M,K	**RE1012840**	Price
WNMG 432-F43	PT1115	F43	1/2	.187	.031	P	**RE1012880**	Price
WNMG 432-F43	PT1225	F43	1/2	.187	.031	P	**RE1012890**	Price
WNMG 432-M42	PT425	M42	1/2	.187	.031	P,M,K	**RE1012870**	Price
WNMG 432-M45	PT1115	M45	1/2	.187	.031	P	**RE1012910**	Price
WNMG 432-M45	PT1225	M45	1/2	.187	.031	P	**RE1012920**	Price
WNMG 432-M45	PT425	M45	1/2	.187	.031	P,M,K	**RE1012900**	Price

Item No.	Grade	Chip Breaker	IC (in.)	Thick-ness (in.)	Radius (in.)	For Use with ISO Code(s)	Order No.	Price
WNMG 432-M46	KT1125	M46	1/2	.187	.031	K	**RE1012960**	Price
WNMG 432-M46	PT1115	M46	1/2	.187	.031	P	**RE1012970**	Price
WNMG 432-M46	PT1225	M46	1/2	.187	.031	P	**RE1012980**	Price
WNMG 432-M46	PT425	M46	1/2	.187	.031	P,M,K	**RE1012950**	Price
WNMG 432-M86	PT1115	M86	1/2	.187	.031	P	**RE1012930**	Price
WNMG 432-M86	PT1225	M86	1/2	.187	.031	P	**RE1012940**	Price
WNMG 432-R53	KT1125	R53	1/2	.187	.031	K	**RE1012990**	Price
WNMG 433-F41	PT1115	F41	1/2	.187	.047	P	**RE1013000**	Price
WNMG 433-F41	PT1225	F41	1/2	.187	.047	P	**RE1013010**	Price
WNMG 433-F43	PT1115	F43	1/2	.187	.047	P	**RE1013030**	Price
WNMG 433-F43	PT1225	F43	1/2	.187	.047	P	**RE1013040**	Price
WNMG 433-M42	PT425	M42	1/2	.187	.047	P,M,K	**RE1013020**	Price
WNMG 433-M45	PT1115	M45	1/2	.187	.047	P	**RE1013060**	Price
WNMG 433-M45	PT1115	M45	1/2	.187	.047	P	**RE1013090**	Price
WNMG 433-M45	PT1225	M45	1/2	.187	.047	P	**RE1013070**	Price
WNMG 433-M45	PT1225	M45	1/2	.187	.047	P	**RE1013100**	Price
WNMG 433-M45	PT425	M45	1/2	.187	.047	P,M,K	**RE1013050**	Price
WNMG 433-M45	PT425	M45	1/2	.187	.047	P,M,K	**RE1013080**	Price
WNMG 433-M46	KT1125	M46	1/2	.187	.047	K	**RE1013140**	Price
WNMG 433-M46	PT1115	M46	1/2	.187	.047	P	**RE1013150**	Price
WNMG 433-M46	PT1225	M46	1/2	.187	.047	P	**RE1013160**	Price
WNMG 433-M46	PT425	M46	1/2	.187	.047	P,M,K	**RE1013130**	Price
WNMG 433-M86	PT1115	M86	1/2	.187	.047	P	**RE1013110**	Price
WNMG 433-M86	PT1225	M86	1/2	.187	.047	P	**RE1013120**	Price
WNMG 433-R53	KT1125	R53	1/2	.187	.047	K	**RE1013170**	Price
WNMG 433-R53	PT1225	R53	1/2	.187	.047	P	**RE1013180**	Price

PROCUT CCMT – 80° Diamond 7° Positive with Molded Chipbreaker

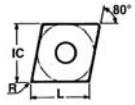
- Single-sided for semi-finishing and finishing
- Chip breaking in moderate range of feeds
- Positive cut, low cutting forces
- For a wide range of materials, soft materials and exotic alloys

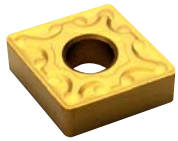


Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
CCMT 2-1	1/4	.248	.094	.016	**FF4810000**	Price	**FF4850000**	Price	**FF4820000**	Price	**FF4830000**	Price
CCMT 2-2	1/4	.248	.094	.031	**FF4810010**	Price	**FF4850010**	Price	**FF4820010**	Price	**FF4830010**	Price
CCMT 3-1	3/8	.374	.156	.016	**FF4810020**	Price	**FF4850020**	Price	**FF4820020**	Price	**FF4830020**	Price
CCMT 3-2	3/8	.374	.156	.031	**FF4810030**	Price	**FF4850030**	Price	**FF4820030**	Price	**FF4830030**	Price
CCMT 432	1/2	.508	.187	.031	**FF4810040**	Price	**FF4850040**	Price	**FF4820040**	Price	**FF4830040**	Price

PROCUT CNMG – 80° Diamond Negative with Molded Chipbreaker

- Double-sided for semi-roughing and roughing
- Chip breaking in feed range from .007 to .024 IPR
- For a wide range of materials and machining conditions

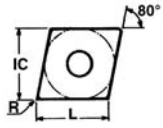




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
CNMG 431	1/2	.508	.187	.016	-	-	**FF5050150**	Price	-	-	**FF5030150**	Price
CNMG 432	1/2	.508	.187	.031	**FF5010160**	Price	**FF5050160**	Price	**FF5020160**	Price	**FF5030160**	Price
CNMG 543	5/8	.626	.250	.047	-	-	**FF5050200**	Price	-	-	-	-
CNMG 642	3/4	.760	.250	.031	**FF5010210**	Price	-	-	-	-	**FF5030210**	Price
CNMG 643	3/4	.760	.250	.047	-	-	-	-	-	-	**FF5030220**	Price

PROCUT CNMP – 80° Diamond Negative 5° Positive Chipbreaker

- Double-sided for semi-finishing and finishing
- Chip breaking in feed range from .004 to .160”
- Positive cut (+5)
- Low cutting forces for machining soft materials and exotic alloys

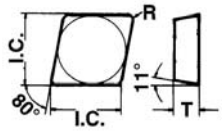




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC300	
					Order No.	Price
CNMP 431	1/2	.508	.187	.016	**FF5030260**	Price
CNMP 432	1/2	.508	.187	.031	**FF5030270**	Price

PROCUT CPG – 80° Diamond 11° Positive Ground All Over

- Single-sided without chipformer
- Positive cut, low cutting forces
- Suited to problem-free chip forming materials

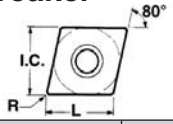




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
CPG 421	1/2	.500	.125	.016	**FF5010320**	Price	**FF5050320**	Price	-	-	**FF5030320**	Price
CPG 422	1/2	.500	.125	.031	**FF5010330**	Price	**FF5050330**	Price	**FF5020330**	Price	**FF5030330**	Price

PROCUT CPGM – 80° Diamond 11° Positive with Molded Chipbreaker

- Single-sided for semi-finishing and finishing
- Chip breaking in moderate range of feeds
- Positive cut, low cutting forces
- For a wide range of materials, soft materials and exotic alloys





Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC5		PC300	
					Order No.	Price	Order No.	Price
CPGM 32.51	3/8	.540	.156	.016	**FF5050380**	Price	-	-
CPGM 32.52	3/8	.540	.156	.031	-	-	**FF5030390**	Price

Carbide Grades

PC2 - **(C2)** General purpose for cast iron and non-ferrous metals (exotics)

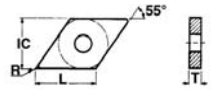
PC5 - **(C5)** Steel cutting

PC200 - **(C2 Coated)** Aluminum oxide coated for cast iron and non-ferrous metals exotics

PC300 - **(C5 Coated)** TiN-TiC-TiN Steel cutting at higher speeds with greater lubricity

DNMG – 55° Diamond Negative with Molded Chipbreaker

- Double-sided for semi-roughing and roughing
- Chip breaking in feed range from .007 to .024 IPR
- For a wide range of materials and machining conditions

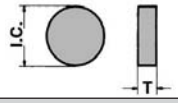




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
DNMG 431	1/2	.500	.187	.016	-	-	-	-	**FF5020420**	Price	**FF5030420**	Price
DNMG 432	1/2	.500	.187	.031	**FF5010430**	Price	**FF5050430**	Price	**FF5020430**	Price	**FF5030430**	Price
DNMG 542	5/8	.625	.250	.031	-	-	**FF5050490**	Price	-	-	**FF5030490**	Price
DNMG 543	5/8	.625	.250	.047	-	-	-	-	-	-	**FF5030500**	Price

RNG – Round Negative Ground All Over

- Plain, double-sided inserts for machining short chipping materials such as cast iron, hardened steel or when a very strong cutting edge is needed

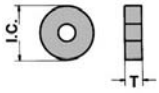




Insert Style	I.C. (in.)	L (in.)	T (in.)	PC2		PC5	
				Order No.	Price	Order No.	Price
RNG 32	3/8	.375	.125	**FF5010530**	Price	**FF5050530**	Price
RNG 42	1/2	.500	.125	**FF5010540**	Price	-	-

RNMA – Round Negative Ground Top and Bottom

- Plain, double-sided inserts for machining short chipping materials such as cast iron, hardened steel or when a very strong cutting edge is needed





Insert Style	I.C. (in.)	L (in.)	T (in.)	PC2		PC5		PC300	
				Order No.	Price	Order No.	Price	Order No.	Price
RNMA 32	3/8	.375	.125	-	-	**FF5050570**	Price	**FF5030570**	Price
RNMA 43	1/2	.500	.187	**FF5010580**	Price	-	-	**FF5030580**	Price
RNMA 84	1	1.00	.250	-	-	**FF5050610**	Price	-	-

RNMG – Round Negative with Molded Chipbreaker

- Double-sided inserts for general machining at medium feeds
- Suitable for straight turning ductile materials





Insert Style	I.C. (in.)	L (in.)	T (in.)	PC5		PC200		PC300	
				Order No.	Price	Order No.	Price	Order No.	Price
RNMG 43	1/2	.500	.187	**FF5050650**	Price	**FF5020650**	Price	**FF5030650**	Price
RNMG 64	3/4	.750	.250	**FF5050670**	Price	-	-	**FF5030670**	Price
RNMG 86	1	1.00	.375	-	-	**FF5020690**	Price	**FF5030690**	Price

RPG – Round Positive Ground All Over

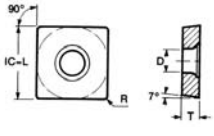
- Round positive for higher metal removal rates, better finish, more cutting edges



Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price
RPG 42	1/2	-	.125	-	**FF5013510**	Price	**FF5053510**	Price	**FF5033510**	Price

SCMT – Square 7° Positive with Molded Chipbreaker

- Single-sided for semi-finishing and finishing
- Chip breaking in moderate range of feeds
- Positive cut, low cutting forces
- For a wide range of materials and exotic alloys



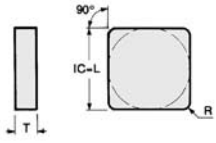


Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC300	
					Order No.	Price
SCMT 432	1/2	.500	.187	.031	**FF5030740**	Price

SNG – Square Negative Ground All Over

Carbide Grades
PC2 - (C2) General purpose for cast iron and non-ferrous metals (exotics)
PC5 - (C5) Steel cutting
PC300 - (C5 Coated) TiN-TiC-TiN Steel cutting at higher speeds with greater lubricity

- Double-sided, without chipformer
- Suited to problem-free chip forming materials, i.e. cast iron

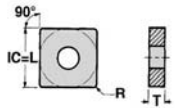




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price
SNG 432	1/2	.500	.187	.031	-	-	-	-	**FF5030850**	Price
SNG 433	1/2	.500	.187	.047	-	-	**FF5050860**	Price	**FF5030860**	Price
SNG 434	1/2	.500	.187	.063	-	-	-	-	**FF5030870**	Price
SNG 633	3/4	.750	.187	.047	-	-	**FF5050930**	Price	**FF5030930**	Price
SNG 634	3/4	.750	.187	.063	**FF5010940**	Price	-	-	**FF5030940**	Price
SNG 638	3/4	.750	.187	.125	-	-	**FF5050950**	Price	-	-

PROCUT SNMA – Square Negative with Hole

- Double-sided, without chipformer
- Suited to problem-free chip forming materials, i.e. cast iron

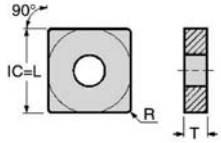




Insert Style	I.C. (in.)	(in.)	T (in.)	R	PC2		PC5		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price
SNMA 322	3/8	.375	.125	.016	-	-	**FF5050970**	Price	**FF5030970**	Price
SNMA 432	1/2	.500	.187	.031	**FF5010980**	Price	-	-	-	-
SNMA 543	5/8	.625	.250	.047	-	-	**FF5051010**	Price	-	-
SNMA 866	1	1.00	.375	.094	-	-	**FF5051050**	Price	-	-

PROCUT SNMG – Square Negative Molded Chipbreaker

- Double-sided, for semi-roughing and roughing
- Chip breaking in feed range from .007 to .024 IPR
- For a wide range of materials and machining conditions

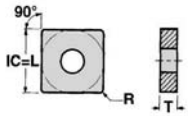




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC5		PC300	
					Order No.	Price	Order No.	Price
SNMG 322	3/8	.375	.125	.031	-	-	**FF5031070**	Price
SNMG 432	1/2	.500	.187	.031	-	-	**FF5031100**	Price
SNMG 542	5/8	.625	.250	.031	-	-	**FF5031130**	Price
SNMG 643	3/4	.750	.250	.047	**FF5051180**	Price	**FF5031180**	Price
SNMG 644	3/4	.750	.250	.063	-	-	**FF5031190**	Price

PROCUT SNU – Square Negative Ground Top and Bottom

- Double-sided, without chipformer
- Suited to problem-free chip forming materials, i.e. cast iron



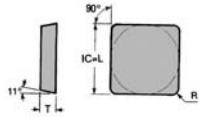


Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC5		PC300	
					Order No.	Price	Order No.	Price
SNU 432	1/2	.500	.187	.031	**FF5051350**	Price	**FF5031350**	Price
SNU 433	1/2	.500	.187	.047	**FF5051360**	Price	**FF5031360**	Price
SNU 633	3/4	.750	.187	.047	**FF5051390**	Price	**FF5031390**	Price
SNU 634	3/4	.750	.187	.063	**FF5051400**	Price	**FF5031400**	Price

PROCUT SPG – Square 11° Positive Ground All Over

- Single-sided, without chipformer
- Positive cut, low cutting forces
- Suited to short chipping materials

Carbide Grades
PC2 - (C2) General purpose for cast iron and non-ferrous metals (exotics).
PC5 - (C5) Steel cutting.
PC200 - (C2 Coated) Aluminum oxide coated for cast iron and non-ferrous metals (exotics)
PC300 - (C5 Coated) TiN-TiC-TiN Steel cutting at higher speeds with greater lubricity

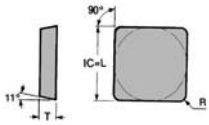


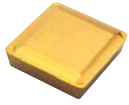


Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
SPG 322	3/8	.375	.125	.031	**FF5011460**	Price	-	-	-	-	-	-
SPG 420	1/2	.500	.125	.005	-	-	-	-	-	-	**FF5031490**	Price
SPG 421	1/2	.500	.125	.016	-	-	**FF5051500**	Price	-	-	**FF5031500**	Price
SPG 422	1/2	.500	.125	.031	**FF5011510**	Price	**FF5051510**	Price	**FF5021510**	Price	**FF5031510**	Price
SPG 423	1/2	.500	.125	.047	-	-	**FF5051520**	Price	-	-	**FF5031520**	Price
SPG 424	1/2	.500	.125	.063	**FF5011530**	Price	**FF5051530**	Price	**FF5021530**	Price	**FF5031530**	Price
SPG 432	1/2	.500	.187	.031	-	-	**FF5051540**	Price	-	-	**FF5031540**	Price
SPG 433	1/2	.500	.187	.047	-	-	**FF5051550**	Price	-	-	**FF5031550**	Price
SPG 533	5/8	.625	.187	.031	-	-	-	-	-	-	**FF5031590**	Price
SPG 631	3/4	.750	.187	.016	-	-	-	-	-	-	**FF5031610**	Price
SPG 632	3/4	.750	.187	.031	**FF5011620**	Price	**FF5051620**	Price	**FF5021620**	Price	**FF5031620**	Price
SPG 633	3/4	.750	.187	.047	-	-	**FF5051630**	Price	-	-	**FF5031630**	Price
SPG 634	3/4	.750	.187	.063	**FF5011640**	Price	**FF5051640**	Price	-	-	**FF5031640**	Price
SPG 638	3/4	.750	.187	.125	-	-	**FF5051650**	Price	-	-	**FF5031650**	Price

PROCUT SPMR – Square 11° Positive Molded Chipbreaker

- Single-sided, without chipformer
- Positive cut, low cutting forces
- Suited to short chipping materials

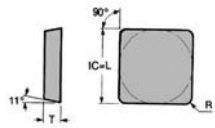




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC300	
					Order No.	Price
SPMR 422	1/2	.500	.187	.031	**FF5031690**	Price

PROCUT SPU – Square 11° Positive Ground Top and Bottom

- Single-sided, without chipformer
- Positive cut, low cutting forces
- Suited to short chipping materials

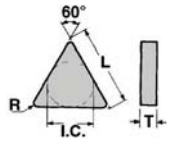




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC5		PC300	
					Order No.	Price	Order No.	Price
SPU 422	1/2	.500	.125	.031	**FF5051750**	Price	**FF5031750**	Price
SPU 423	1/2	.500	.125	.047	**-**	-	**FF5031760**	Price
SPU 432	1/2	.500	.187	.031	**FF5051790**	Price	**FF5031790**	Price
SPU 533	5/8	.625	.187	.047	**FF5051820**	Price	**FF5031820**	Price
SPU 632	3/4	.750	.187	.031	**-**	-	**FF5031840**	Price
SPU 633	3/4	.750	.187	.047	**FF5051850**	Price	**FF5031850**	Price

PROCUT TCMT – Triangle 7° Positive with Molded Chipbreaker

- Single-sided for semi-finishing and finishing
- Chip breaking in moderate range of feeds
- Positive cut, low cutting forces
- For a wide range of materials, soft materials and exotic alloys

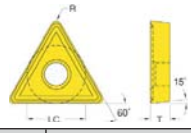


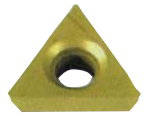


Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
TCMT 21	1/4	.433	.094	.016	**FF4811870**	Price	**FF4851870**	Price	**FF4821870**	Price	**FF4831870**	Price
TCMT 22	1/4	.433	.094	.031	**-**	-	**FF4851880**	Price	**FF4821880**	Price	**FF4831880**	Price
TCMT 31	3/8	.650	.156	.016	**FF4811890**	Price	**FF4851890**	Price	**FF4821890**	Price	**FF4831890**	Price
TCMT 32	3/8	.650	.156	.031	**FF4811900**	Price	**-**	-	**FF4821900**	Price	**FF4831900**	Price
TCMT 432	1/2	.866	.187	.031	**-**	-	**FF4851910**	Price	**-**	-	**FF4831910**	Price

PROCUT TDGW – Triangle 15° Positive without Chipbreaker

Grade Description
C-2 uncoated = DM22
C-5 TiN coated = PVD56





Insert Style	I.C. (in.)	T (in.)	R	Hole Dia.	DM22		PVD56	
					Order No.	Price	Order No.	Price
TDGW 21.51E	1/4	.094	.016	.110	**-**	-	**EJ90127114**	Price
TDGW 21.52E	1/4	.094	.031	.110	**-**	-	**EJ90127115**	Price
TDGW 321E	3/8	.125	.016	.168	**EJ90127110**	Price	**EJ90127116**	Price
TDGW 322E	3/8	.125	.031	.168	**EJ90127111**	Price	**EJ90127117**	Price
TDGW 431E	1/2	.187	.016	.180	**EJ90127112**	Price	**-**	-
TDGW 432E	1/2	.187	.031	.180	**EJ90127113**	Price	**EJ90127120**	Price

PROCUT TNG – Triangle Negative Ground All Over

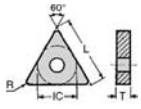
- Double-sided, without chipformer
- Suited to short chipping materials, i.e. cast iron



Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC300	
					Order No.	Price
TNG 221	1/4	.433	.125	.016	**FF5031930**	Price
TNG 322	3/8	.650	.125	.031	**FF5031980**	Price
TNG 332	3/8	.650	.187	.031	**FF5032030**	Price
TNG 432	1/2	.866	.187	.031	**FF5032090**	Price

PROCUT TNMA – Triangle Negative Ground Top and Bottom

- Double-sided, without chipformer
- Suited to roughing and semi-roughing short chipping materials





Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price
TNMA 322	3/8	.650	.125	.031	**FF5012180**	Price	**FF5052180**	Price	**FF5032180**	Price
TNMA 323	3/8	.650	.125	.047	**-**	-	**-**	-	**FF5032190**	Price
TNMA 324	3/8	.650	.125	.063	**FF5012200**	Price	**-**	-	**FF5032200**	Price
TNMA 431	1/2	.866	.187	.016	**FF5012210**	Price	**-**	-	**-**	-
TNMA 432	1/2	.866	.187	.031	**FF5012220**	Price	**-**	-	**-**	-
TNMA 433	1/2	.866	.187	.047	**-**	-	**FF5052230**	Price	**-**	-
TNMA 434	1/2	.866	.187	.063	**-**	-	**FF5052240**	Price	**-**	-
TNMA 438	1/2	.866	.187	.125	**-**	-	**FF5052250**	Price	**FF5032250**	Price

Carbide Grades

PC2 - **(C2)** General purpose for cast iron and non-ferrous metals (exotics)

PC5 - **(C5)** Steel cutting

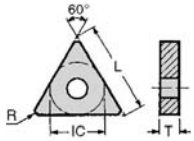
PC200 - **(C2 Coated)** Aluminum oxide coated for cast iron and non-ferrous metals exotics

PC300 - **(C5 Coated)** TiN-TiC-TiN Steel cutting at higher speeds with greater lubricity

PROCUT TNMG – Triangle Negative Molded Chipbreaker

Carbide Grades
PC2 - (C2) General purpose for cast iron and non-ferrous metals (exotics)
PC5 - (C5) Steel cutting
PC200 - (C2 Coated) Aluminum oxide coated for cast iron and non-ferrous metals (exotics)
PC300 - (C5 Coated) TiN-TiC-TiN Steel cutting at higher speeds with greater lubricity

- Double-sided, for semi-roughing and roughing
- Chip breaking in feed range from .007 to .024 IPR
- For a wide range of materials and machining conditions
- Inserts with .094 in corner radius have a special chipformer for heavy machining

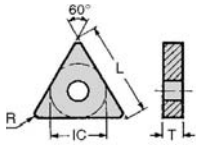




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
TNMG 221	1/4	.433	.125	.016	-	-	**FF5052300**	Price	**FF5022300**	Price	**FF5032300**	Price
TNMG 222	1/4	.433	.125	.031	-	-	**FF5052310**	Price	-	-	**FF5032310**	Price
TNMG 321	3/8	.650	.125	.016	**FF5012320**	Price	**FF5052320**	Price	**FF5022320**	Price	**FF5032320**	Price
TNMG 322	3/8	.650	.125	.031	**FF5012330**	Price	**FF5052330**	Price	**FF5022330**	Price	**FF5032330**	Price
TNMG 323	3/8	.650	.125	.047	-	-	**FF5052340**	Price	-	-	**FF5032340**	Price
TNMG 324	3/8	.650	.125	.063	-	-	**FF5052350**	Price	-	-	-	-
TNMG 331	3/8	.650	.187	.016	-	-	-	-	-	-	**FF5032360**	Price
TNMG 332	3/8	.650	.187	.031	**FF5012370**	Price	**FF5052370**	Price	-	-	**FF5032370**	Price
TNMG 431	1/2	.866	.187	.016	-	-	**FF5052390**	Price	-	-	**FF5032390**	Price
TNMG 432	1/2	.866	.187	.031	**FF5012400**	Price	**FF5052400**	Price	**FF5022400**	Price	**FF5032400**	Price
TNMG 433	1/2	.866	.187	.047	-	-	**FF5052410**	Price	-	-	-	-
TNMG 434	1/2	.866	.187	.063	**FF5012420**	Price	**FF5052420**	Price	-	-	**FF5032420**	Price
TNMG 438	1/2	.866	.187	.125	-	-	**FF5052450**	Price	-	-	**FF5032450**	Price
TNMG 542	5/8	1.083	.250	.031	**FF5012460**	Price	**FF5052460**	Price	-	-	**FF5032460**	Price
TNMG 543	5/8	1.083	.250	.047	-	-	**FF5052470**	Price	-	-	**FF5032470**	Price
TNMG 544	5/8	1.083	.250	.063	-	-	-	-	-	-	**FF5032480**	Price
TNMG 666	3/4	1.300	.375	.094	-	-	-	-	-	-	**FF5032500**	Price

PROCUT TNMP – Square Negative Ground All Over

- Double-sided, for semi-finishing and finishing
- Chip breaking in feed range from .004 to .016 IPR
- Depths of cut from .04 to .016”
- Positive cut (+5°).
- Low cutting forces for machining soft materials and exotic alloys

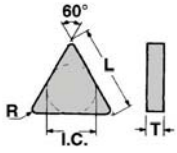




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC5		PC300	
					Order No.	Price	Order No.	Price
TNMP 321	3/8	.650	.125	.016	-	-	**FF5032510**	Price
TNMP 322	3/8	.650	.125	.031	**FF5052520**	Price	**FF5032520**	Price
TNMP 331	3/8	.650	.187	.016	-	-	**FF5032540**	Price
TNMP 332	3/8	.650	.187	.031	-	-	**FF5032550**	Price
TNMP 431	1/2	.866	.187	.016	-	-	**FF5032570**	Price
TNMP 432	1/2	.866	.187	.031	-	-	**FF5032580**	Price

PROCUT TNU – Triangle Negative Ground Top and Bottom

- Double-sided, without chipformer
- Suited to short chipping materials, i.e. cast iron



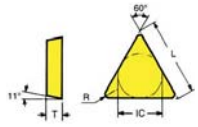


Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC300	
					Order No.	Price
TNU 433	1/2	.866	.187	.047	**FF5032760**	Price

TPG – Triangle Positive Ground All Over

Carbide Grades
PC2 - (C2) General purpose for cast iron and non-ferrous metals (exotics)
PC5 - (C5) Steel cutting
PC200 - (C2 coated) Aluminum oxide coated for cast iron and non-ferrous metals (exotics)
PC300 - (C5 coated) TiN-TiC-TiN Steel cutting at higher speeds with greater lubricity

- Single-sided, ground all over without chipformer
- Positive cut, low cutting forces
- Suited for short chipping materials

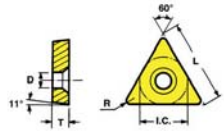


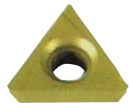


Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
TPG 221	1/4	.433	.125	.016	**FF5012820**	Price	**FF5052820**	Price	**FF5022820**	Price	**FF5032820**	Price
TPG 222	1/4	.433	.125	.031	**-**	-	**FF5052830**	Price	**-**	-	**FF5032830**	Price
TPG 320	3/8	.650	.125	.005	**FF5012840**	Price	**FF5052840**	Price	**FF5022840**	Price	**FF5032840**	Price
TPG 321	3/8	.650	.125	.016	**FF5012850**	Price	**FF5052850**	Price	**FF5022850**	Price	**FF5032850**	Price
TPG 322	3/8	.650	.125	.031	**FF5012860**	Price	**FF5052860**	Price	**FF5022860**	Price	**FF5032860**	Price
TPG 323	3/8	.650	.125	.047	**FF5012870**	Price	**FF5052870**	Price	**-**	-	**FF5032870**	Price
TPG 324	3/8	.650	.125	.063	**FF5012880**	Price	**FF5052880**	Price	**FF5022880**	Price	**FF5032880**	Price
TPG 332	3/8	.650	.187	.031	**-**	-	**FF5052900**	Price	**-**	-	**-**	-
TPG 431	1/2	.866	.187	.016	**FF5012930**	Price	**FF5052930**	Price	**FF5022930**	Price	**FF5032930**	Price
TPG 432	1/2	.866	.187	.031	**FF5012940**	Price	**FF5052940**	Price	**FF5022940**	Price	**FF5032940**	Price
TPG 433	1/2	.866	.187	.047	**FF5012950**	Price	**FF5052950**	Price	**-**	-	**FF5032950**	Price
TPG 434	1/2	.866	.187	.063	**-**	-	**FF5052960**	Price	**-**	-	**FF5032960**	Price
TPG 438	1/2	.866	.187	.125	**-**	-	**-**	-	**-**	-	**FF5032970**	Price
TPG 542	5/8	1.083	.250	.031	**-**	-	**-**	-	**-**	-	**FF5033000**	Price

TPGB – Triangle 11° Positive Countersink Hole

- Single-sided, without chipformer
- Suited to short chipping materials, i.e. cast iron





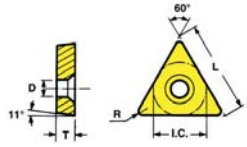
Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price
TPGB 321	3/8	.650	.125	.016	**FF4813110**	Price	**FF4853110**	Price	**FF4833110**	Price
TPGB 322	3/8	.650	.125	.031	**FF4813120**	Price	**FF4853120**	Price	**FF4833120**	Price

TPGH – Triangle 11° Positive with Chipbreaker

Insert Style	I.C. (in.)	T (in.)	R	PC2		PC5		PC300	
				Order No.	Price	Order No.	Price	Order No.	Price
TPGH 21.50	1/4	.094	.005	**FF48126982**	Price	**-**	-	**-**	-
TPGH 21.51	1/4	.094	.016	**FF48126997**	Price	**-**	-	**FF48127001**	Price
TPGH 21.52	1/4	.094	.031	**-**	-	**FF48127006**	Price	**FF48127009**	Price
TPGH 321	3/8	.125	.016	**FF48014242**	Price	**FF48059412**	Price	**FF48054734**	Price

TPGM – Triangle 11° Positive with Molded Chipbreaker

- Single-sided for semi-finishing and finishing
- Chip breaking in moderate range of feeds
- Positive cut, low cutting forces
- For a wide range of materials, soft materials and exotic alloys

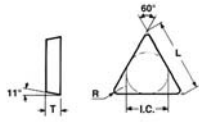




Insert Style	I.C. (in.)	Length (in.)	T (in.)	R	PC5		PC300	
					Order No.	Price	Order No.	Price
TPGM 21.51	1/4	.371	.094	.016	**-**	-	**FF5033170**	Price
TPGM 21.52	1/4	.371	.094	.031	**-**	-	**FF5033180**	Price
TPGM 32.51	3/8	.546	.156	.016	**FF5053190**	Price	**FF5033190**	Price
TPGM 32.52	3/8	.546	.156	.031	**FF5053200**	Price	**FF5033200**	Price
TPGM 321	3/8	.650	.125	.016	**-**	-	**FF50097631**	Price

TPMR – Triangle 11° Positive with Molded Chipbreaker

- Single-sided for semi-finishing and finishing
- Positive chipformer, low cutting forces
- Especially suited to internal turning

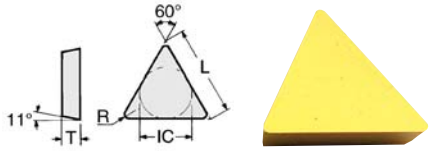




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
TPMR 221	1/4	.433	.125	.016	**-**	-	**-**	-	**-**	-	**FF5033230**	Price
TPMR 222	1/4	.433	.125	.031	**-**	-	**-**	-	**-**	-	**FF5033240**	Price
TPMR 321	3/8	.650	.125	.016	**-**	-	**FF5053250**	Price	**FF5023250**	Price	**FF5033250**	Price
TPMR 322	3/8	.650	.125	.031	**FF5013260**	Price	**FF5053260**	Price	**-**	-	**FF5033260**	Price
TPMR 432	1/2	.866	.187	.031	**-**	-	**FF5053280**	Price	**-**	-	**FF5033280**	Price

PROCUT TPU – Triangle 11° Positive Ground Top and Bottom

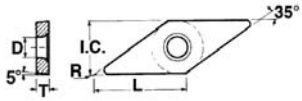
- Single-sided, molded, without chipformer
- Positive cut, low cutting forces
- Suited for short chipping materials



Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
TPU 221	1/4	.433	.125	.016	-	-	**FF5053290**	Price	-	-	**FF5033290**	Price
TPU 222	1/4	.433	.125	.031	-	-	**FF5053300**	Price	-	-	**FF5033300**	Price
TPU 321	3/8	.650	.125	.016	**FF5013310**	Price	-	-	-	-	**FF5033310**	Price
TPU 322	3/8	.650	.125	.031	**FF5013320**	Price	**FF5053320**	Price	**FF5023320**	Price	**FF5033320**	Price
TPU 323	3/8	.650	.125	.047	-	-	**FF5053330**	Price	-	-	**FF5033330**	Price
TPU 324	3/8	.650	.125	.063	-	-	**FF5053340**	Price	-	-	**FF5033340**	Price
TPU 431	1/2	.866	.187	.016	**FF5013350**	Price	-	-	-	-	**FF5033350**	Price
TPU 432	1/2	.866	.187	.031	**FF5013360**	Price	**FF5053360**	Price	-	-	**FF5033360**	Price
TPU 433	1/2	.866	.187	.047	-	-	**FF5053370**	Price	-	-	-	-
TPU 434	1/2	.866	.187	.063	-	-	**FF5053380**	Price	**FF5023380**	Price	-	-
TPU 544	5/8	1.083	.250	.063	-	-	**FF5053390**	Price	-	-	-	-

PROCUT VBMT – 35° Diamond 5° Positive with Molded Chipbreaker

- Single-sided for semi-finishing and finishing
- Chip breaking in moderate range of feeds
- Positive cut, low cutting forces
- For a wide range of materials, soft materials and exotic alloys

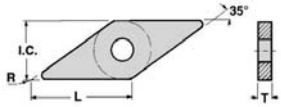




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC5		PC300	
					Order No.	Price	Order No.	Price
VBMT 331	3/8	.654	.187	.016	**FF5053400**	Price	**FF5033400**	Price
VBMT 332	3/8	.654	.187	.031	**FF5053410**	Price	**FF5033410**	Price

PROCUT VNMG – 35° Diamond Negative with Molded Chipbreaker

- Double-sided, for semi-roughing and roughing
- Chip breaking in feed range from .007 to .024 IPR
- For a wide range of materials and machining conditions

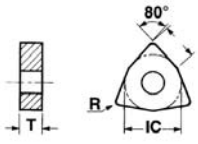




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PC2		PC5		PC200		PC300	
					Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
VNMG 331	3/8	.654	.187	.016	-	-	**FF5053420**	Price	-	-	**FF5033420**	Price
VNMG 332	3/8	.654	.187	.031	**FF5013430**	Price	**FF5053430**	Price	-	-	**FF5033430**	Price
VNMG 431	1/2	.870	.187	.016	-	-	-	-	**FF5023450**	Price	**FF5033450**	Price
VNMG 432	1/2	.870	.187	.031	**FF5013460**	Price	**FF5053460**	Price	**FF5023460**	Price	**FF5033460**	Price
VNMG 433	1/2	.870	.187	.047	-	-	-	-	**FF5023470**	Price	-	-

PROCUT WNMG – Negative Trigon with Hole and Chipbreaker

- The trigon shape combines the advantage of six cutting edges with the strength of the 80° C-geometry
- For general purpose machining





Insert Style	I.C. (in.)	T (in.)	R	PC5		PC300	
				Order No.	Price	Order No.	Price
WNMG 432	1/2	.187	.031	**FF48WNMG432PC5**	Price	**FF48026199**	Price

CERMET

Of uniform structure and composition, CERMET is composed of titanium carbide (TiC) and titanium nitrade (TiN) with a super-alloy metal binder. CERMET has a low friction coefficient which eliminates built up edge and improves surface finish. Its high resistance to thermal deformation and its low conductivity make higher cutting speeds possible and result in lower flank wear and edge cratering. Its high degree of hardness and toughness, with resistance to oxidation, extend tool life.

PCT20:

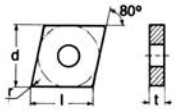
- Of TiCN alloy, good red hardness, high wear resistance, and good oxidation resistance.

Physical Properties:

- Hardness: 91.8/92.5
- Strength: 1700ISO
- Grade: K05/K10/M10/P05/P15
- Typical Applications: Suitable for finishing and semi-finishing of low-alloy steels and stainless steels.

CNMG

- Double-sided for semi-finishing and finishing
- Suitable for general use

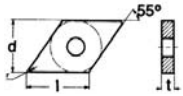


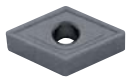


Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PCT20 Order No.	PCT20 Price
CNMG 432	1/2	.500	.187	.031	**FF5640010**	Price
CNMG 433	1/2	.500	.187	.047	**FF5640020**	Price

DNMG

- Double-sided for semi-finishing and finishing
- Suitable for general use

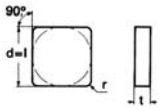




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PCT20 Order No.	PCT20 Price
DNMG 431	1/2	.500	.187	.016	**FF5640040**	Price
DNMG 432	1/2	.500	.187	.031	**FF5640050**	Price

SNG

- Double-sided without chipformer
- Suited to problem-free forming materials

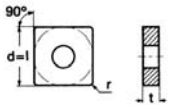




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PCT20 Order No.	PCT20 Price
SNG 321	3/8	.375	.125	.016	**FF5640060**	Price
SNG 322	3/8	.375	.125	.031	**FF5640070**	Price
SNG 323	3/8	.375	.125	.047	**FF5640080**	Price
SNG 431	1/2	.500	.187	.016	**FF5640090**	Price
SNG 432	1/2	.500	.187	.031	**FF5640100**	Price
SNG 433	1/2	.500	.187	.047	**FF5640110**	Price
SNG 434	1/2	.500	.187	.063	**FF5640120**	Price

SNMG

- Double-sided for semi-finishing and finishing
- Suitable for general use

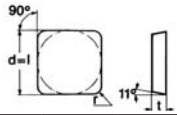




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PCT20 Order No.	PCT20 Price
SNMG 322	3/8	.375	.125	.031	**FF5640140**	Price
SNMG 431	1/2	.500	.187	.016	**FF5640160**	Price
SNMG 432	1/2	.500	.187	.031	**FF5640170**	Price
SNMG 433	1/2	.500	.187	.047	**FF5640180**	Price

SPG

- Single-sided, without chipformer
- Positive cut, low cutting forces
- Suited to short chipping materials

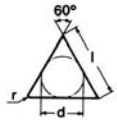




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PCT20 Order No.	PCT20 Price
SPG 421	1/2	.500	.125	.016	**FF5640200**	Price
SPG 422	1/2	.500	.125	.031	**FF5640210**	Price
SPG 423	1/2	.500	.125	.047	**FF5640220**	Price
SPG 432	1/2	.500	.187	.031	**FF5640230**	Price
SPG 433	1/2	.500	.187	.047	**FF5640240**	Price

TNG

- Double-sided, without chipformer
- Suited to short chipping materials

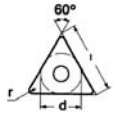




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PCT20 Order No.	PCT20 Price
TNG 221	1/4	.359	.125	.016	**FF5640250**	Price
TNG 321	3/8	.546	.125	.016	**FF5640270**	Price
TNG 322	3/8	.532	.125	.031	**FF5640280**	Price
TNG 331	3/8	.546	.187	.016	**FF5640300**	Price
TNG 332	3/8	.532	.187	.031	**FF5640310**	Price
TNG 432	1/2	.719	.187	.031	**FF5640340**	Price
TNG 433	1/2	.703	.187	.047	**FF5640350**	Price

TNMA

- Double-sided, without chipformer
- Suited to roughing and semi-roughing, short chipping materials

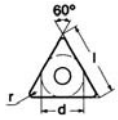


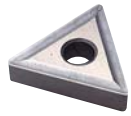


Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PCT20 Order No.	PCT20 Price
TNMA 432	1/2	.719	.187	.031	**FF5640360**	Price

TNMG

- Double-sided for semi-finishing and finishing
- Suitable for general use

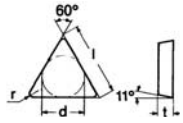




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PCT20 Order No.	PCT20 Price
TNMG 321	3/8	.546	.125	.016	**FF5640380**	Price
TNMG 322	3/8	.532	.125	.031	**FF5640390**	Price
TNMG 332	3/8	.532	.187	.031	**FF5640400**	Price
TNMG 432	1/4	.719	.187	.031	**FF5640430**	Price

TPG

- Double-sided for semi-finishing and finishing
- Suitable for general use

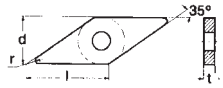




Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PCT20 Order No.	PCT20 Price
TPG 221	1/4	.359	.125	.016	**FF5640450**	Price
TPG 222	1/4	.344	.125	.031	**FF5640460**	Price
TPG 321	3/8	.546	.125	.016	**FF5640470**	Price
TPG 322	3/8	.532	.125	.031	**FF5640480**	Price
TPG 323	3/8	.516	.125	.047	**FF5640490**	Price
TPG 432	1/2	.719	.187	.031	**FF5640510**	Price
TPG 433	1/2	.703	.187	.047	**FF5640520**	Price

VNMG

- Double-sided for semi-roughing and roughing
- Chip breaking in feed range from 0.18 to .04mm/rev
- For a wide range of materials and machining conditions





Insert Style	I.C. (in.)	L (in.)	T (in.)	R	PCT20 Order No.	PCT20 Price
VNMG 332	3/8	.375	.187	.031	**FF5640530**	Price
VNMG 432	1/2	.500	.187	.031	**FF5640540**	Price

Ceramic Inserts

ISO 9001

Application Data

Use the strongest shape and largest nose radius possible. Round and square inserts should be used whenever possible since they are stronger than diamonds and triangles. For heavier cuts, 5/16" thick inserts are recommended. Use the largest lead angle possible. Use the largest side cutting edge that the shape of the workpiece allows. As the side cutting angle is increased, the length of the cutting edge that contracts the workpiece is increased and the load is distributed over a greater area of the cutting edge. Use proper edge preparation techniques. Proper edge factors in successfully applying ceramics over a wide range of materials and applications.

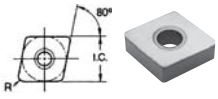
PCA-2 is Hot Pressed Black Ceramic

Roughing and finishing of hardened steel and chilled cast irons, and for machining cast irons with sandcast scale. Also clean irons or steel of hardness below 425 BHP or about rockwell C-45.

PCH-1 is Hydrostatic Pressed White Ceramic

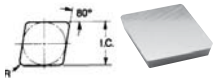
Used for roughing and finishing of cast irons, carbon and alloy steel, ferritic and martensitic stainless steels, and annealed tool and die steels. Inserts demand a rigid setup in machining operations and are not suited to milling or machining very hard iron or steel.

PROCUT CNGA 80° Negative Diamond With Hole



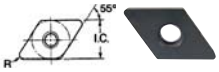
Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price
CNGA 432	1/2	.187	.031	**FF5510000**	Price
CNGA 434	1/2	.187	.063	**FF5510020**	Price
CNGA 643	3/4	.250	.047	**FF5510030**	Price
CNGA 644	3/4	.250	.063	**FF5510040**	Price

PROCUT CNGN 80° Negative Diamond Without Hole



Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price	PCH1 Order No.	PCH1 Price
CNGN 432	1/2	.187	.031	**FF5510050**	Price	-	-
CNGN 433	1/2	.187	.047	**FF5510060**	Price	**FF5520050**	Price
CNGN 644	3/4	.250	.063	**FF5510080**	Price	-	-
CNGN 648	3/4	.250	.125	**FF5510090**	Price	-	-

PROCUT DNGA 55° Negative Diamond With Hole



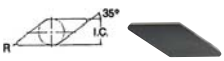
Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price	PCH1 Order No.	PCH1 Price
DNGA 432	1/2	.187	.031	**FF5510100**	Price	**FF5520080**	Price
DNGA 433	1/2	.187	.047	**FF5510110**	Price	-	-
DNGA 434	1/2	.187	.063	**FF5510120**	Price	-	-
DNGA 543	5/8	.250	.047	**FF5510130**	Price	-	-

PROCUT DNGN 55° Negative Diamond Without Hole



Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price	PCH1 Order No.	PCH1 Price
DNGN 432	1/2	.187	.031	**FF5510140**	Price	**FF5520120**	Price
DNGN 433	1/2	.187	.047	**FF5510150**	Price	**FF5520130**	Price
DNGN 434	1/2	.187	.063	**FF5510160**	Price	**FF5520140**	Price

PROCUT VNGN 35° Negative Diamond Without Hole



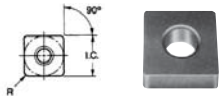
Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price
VNGN 332	3/8	.187	.031	**FF5510660**	Price

PROCUT RNGN Negative Round Without Hole



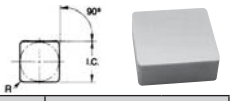
Insert Style	I.C (in.)	T (in.)	PCA2 Order No.	PCA2 Price	PCH1 Order No.	PCH1 Price
RNGN 32	3/8	.125	**FF5510210**	Price	**FF5520190**	Price
RNGN 33	3/8	.187	**FF5510220**	Price	-	-
RNGN 43	1/2	.187	**FF5510230**	Price	**FF5520210**	Price
RNGN 84	1	.250	-	-	**FF5520230**	Price

PROCUT SNGA Negative Square With Hole



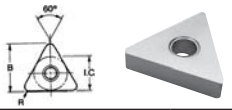
Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price	PCH1 Order No.	PCH1 Price
SNGA 322	3/8	.125	.031	**FF5510270**	Price	-	-
SNGA 433	1/2	.187	.047	**FF5510290**	Price	-	-
SNGA 434	1/2	.187	.063	**FF5510300**	Price	**FF5520280**	Price

PROCUT SNGN Negative Square Without Hole



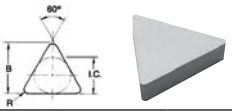
Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price	PCH1 Order No.	PCH1 Price
SNGN 322	3/8	.125	.031	**FF5510320**	Price	**FF5520300**	Price
SNGN 432	1/2	.187	.031	**FF5510330**	Price	**FF5520310**	Price
SNGN 433	1/2	.187	.047	**FF5510340**	Price	**FF5520320**	Price
SNGN 434	1/2	.187	.063	**FF5510350**	Price	**FF5520330**	Price
SNGN 643	3/4	.250	.063	**FF5510360**	Price	**FF5520340**	Price
SNGN 644	3/4	.250	.063	**FF5510370**	Price	**FF5520350**	Price

PROCUT TNGA Negative Triangle With Hole



Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price	PCH1 Order No.	PCH1 Price
TNGA 322	3/8	.125	.031	**FF5510380**	Price	-	-
TNGA 333	3/8	.187	.047	**FF5510400**	Price	**FF5520370**	Price
TNGA 432	1/2	.187	.031	**FF5510410**	Price	-	-
TNGA 434	1/2	.187	.063	**FF5510430**	Price	-	-

PROCUT TNGN Negative Triangle Without Hole



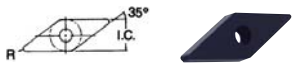
Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price	PCH1 Order No.	PCH1 Price
TNGN 222	1/4	.125	.031	**FF5510450**	Price	-	-
TNGN 322	3/8	.125	.031	**FF5510460**	Price	**FF5520430**	Price
TNGN 324	3/8	.125	.063	-	-	**FF5520440**	Price
TNGN 331	3/8	.187	.016	**FF5510480**	Price	-	-
TNGN 332	3/8	.187	.031	-	-	**FF5520450**	Price
TNGN 333	3/8	.187	.047	**FF5510500**	Price	**FF5520460**	Price
TNGN 334	3/8	.187	.063	**FF5510510**	Price	**FF5520470**	Price
TNGN 432	1/2	.187	.031	**FF5510520**	Price	**FF5520480**	Price
TNGN 433	1/2	.187	.047	-	-	**FF5520490**	Price

PROCUT TPGN 11° Positive Triangle Without Hole



Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price
TPGN 321	3/8	.125	.016	**FF5510570**	Price
TPGN 322	3/8	.125	.031	**FF5510580**	Price
TPGN 431	1/2	.187	.016	**FF5510590**	Price
TPGN 432	1/2	.187	.031	**FF5510600**	Price

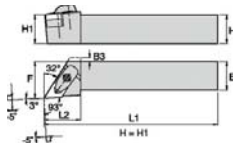
PROCUT VNGA 35° Diamond With Hole



Insert Style	I.C. (in.)	T (in.)	R	PCA2 Order No.	PCA2 Price
VNGA 332	3/8	.187	.031	**FF5510610**	Price

RAPIDKUT DCLNR/L Toolholders

- For turning, facing or contouring
- 95° lead angle
- Uses CNMG, CNMA, CNMP, CNGA or CNMM 80° diamond inserts
- Right hand shown, left hand opposite

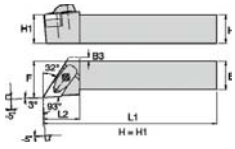




Shank Size (Sq.)	OAL	Head Length	Head Width	Uses Insert Style	Shim	Shim Screw	Clamp	Clamp Screw	Left			Right		
									Model Number	Order No.	Price	Model Number	Order No.	Price
.750	4.50	1.300	1.000	CN__432	ICSN433	PBSS4	PBCL4	PBCS4	DCLNL124B	**ME2420245**	Price	DCLNR124B	**ME2420240**	Price
1.000	6.00	1.600	1.250	CN__432	ICSN433	PBSS4	PBCL4	PBCS4	DCLNL164D	**ME2420265**	Price	DCLNR164D	**ME2420260**	Price
1.250	6.00	1.600	1.500	CN__432	ICSN433	PBSS4	PBCL4	PBCS4	DCLNL204D	**ME2420285**	Price	DCLNR204D	**ME2420280**	Price
1.250	6.00	1.600	1.500	CN__543	ICSN533	PBSS5	PBCL5	PBCS5	DCLNL205D	**ME2420325**	Price	DCLNR205D	**ME2420320**	Price
1.250	6.00	1.800	1.500	CN__643	ICSN633	PBSS6	PBCL6	PBCS6	DCLNL206D	**ME2420345**	Price	DCLNR206D	**ME2420340**	Price
1.500	6.00	1.800	2.000	CN__543	ICSN533	PBSS5	PBCL5	PBCS5	DCLNL245D	**ME2420365**	Price	DCLNR245D	**ME2420360**	Price
1.500	6.00	1.800	2.000	CN__643	ICSN633	PBSS6	PBCL6	PBCS6	DCLNL246D	**ME2420385**	Price	DCLNR246D	**ME2420380**	Price

RAPIDKUT DDJNR/L Toolholders

- For turning and profiling
- 3° lead angle
- Uses DNMG, DNMA, DNMP, DNGA or DNMM 55° diamond inserts
- Right hand shown, left hand opposite

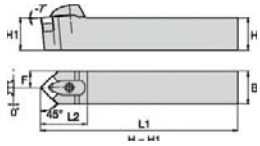




Shank Size (Sq.)	OAL	Head Length	Head Width	Uses Insert Style	Shim	Shim Screw	Clamp	Clamp Screw	Left			Right		
									Model Number	Order No.	Price	Model Number	Order No.	Price
.750	4.50	1.770	1.000	DN__432	IDSN433	PBSS4	PBCL4	PBCS4	DDJNL124B	**ME2421245**	Price	DDJNR124B	**ME2421240**	Price
1.000	6.00	1.600	1.250	DN__432	IDSN433	PBSS4	PBCL4	PBCS4	DDJNL164D	**ME2421263**	Price	DDJNR164D	**ME2421260**	Price
1.250	6.00	1.600	1.500	DN__432	IDSN433	PBSS4	PBCL4	PBCS4	DDJNL204D	**ME2421285**	Price	DDJNR204D	**ME2421280**	Price

RAPIDKUT DSDNR/L Toolholders

- For turning and chamfering
- 45° Cutting angle
- 0° Lead
- Uses SNMA, SNMG, SNMP, SNG or SNU inserts
- Right hand shown, left hand opposite

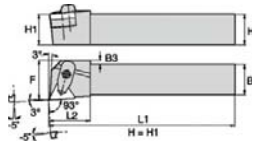




Shank Size (Sq.)	OAL	Head Length	Head Width	Uses Insert Style	Shim	Shim Screw	Clamp	Clamp Screw	Left			Right		
									Model Number	Order No.	Price	Model Number	Order No.	Price
1.000	6.00	1.440	1.250	SN__432	ISSN433	PBSS4	PBCL4	PBCS4	DSDNL164D	**ME2421305**	Price	DSDNR164D	**ME2421300**	Price
1.250	6.00	1.600	1.500	SN__543	ISSN533	PBSS5	PBCL5	PBCS5	DSDNL205D	**ME2421325**	Price	DSDNR205D	**ME2421320**	Price
1.250	6.00	1.600	1.500	SN__643	ISSN633	PBSS6	PBCL6	PBCS6	DSDNL206D	**ME2421345**	Price	DSDNR206D	**ME2421340**	Price
1.500	6.00	1.800	2.000	SN__543	ISSN533	PBSS5	PBCL5	PBCS5	DSDNL245D	**ME2421365**	Price	DSDNR245D	**ME2421360**	Price
1.500	6.00	1.800	2.000	SN__643	ISSN633	PBSS6	PBCL6	PBCS6	DSDNL246D	**ME2421385**	Price	DSDNR246D	**ME2421380**	Price

RAPIDKUT DTJNR/L Toolholders

- For turning and profiling
- 3° lead angle
- Uses TNMA, TNMG, TNMP, TNGA, TNMM, TNG or TNU inserts
- Right hand shown, left hand opposite

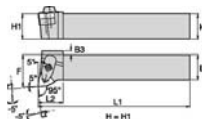




Shank Size (Sq.)	OAL	Head Length	Head Width	Uses Insert Style	Shim	Shim Screw	Clamp	Clamp Screw	Left			Right		
									Model Number	Order No.	Price	Model Number	Order No.	Price
1.000	6.00	1.000	1.250	TN__332	ITSN333	PBSS3	PBCL3	PBCS3	DTJNL163D	**ME2421405**	Price	DTJNR163D	**ME2421400**	Price
1.000	6.00	1.000	1.250	TN__432	ITSN433	PBSS4	PBCL4	PBCS4	DTJNL164D	**ME2421425**	Price	DTJNR164D	**ME2421420**	Price
1.250	6.00	1.000	1.500	TN__543	ITSN533	PBSS5	PBCL5	PBCS5	DTJNL205D	**ME2421445**	Price	DTJNR205D	**ME2421440**	Price
1.250	6.00	1.000	1.500	TN__643	ITSN633	PBSS6	PBCL5	PBCS6	DTJNL206D	**ME2421465**	Price	DTJNR206D	**ME2421460**	Price
1.500	6.00	1.000	2.000	TN__543	ITSN533	PBSS5	PBCL5	PBCS5	DTJNL245D	**ME2421485**	Price	DTJNR245D	**ME2421480**	Price
1.500	6.00	1.000	2.000	TN__643	ITSN633	PBSS6	PBCL6	PBCS6	DTJNL246D	**ME2421505**	Price	DTJNR246D	**ME2421500**	Price

RAPIDKUT DWLNR Toolholder

- 95° lead angle
- Uses WNMG, WNMP or WNMA inserts





Model Number	Shank Size (Sq.)	OAL	Head Length	Head Width	Uses Insert Style	Shim	Shim Screw	Clamp	Clamp Screw	Order No.	Price
DWLNR124B	.750	4.50	1.000	1.000	WN__432	IWSN433	PBSS4	PBCL4	PBCS4	**ME2421520**	Price
DWLNR164D	1.000	6.00	1.000	1.250	WN__432	IWSN433	PBSS4	PBCL4	PBCS4	**ME2421540**	Price
DWLNR204D	1.250	6.00	1.000	1.500	WN__432	IWSN433	PBSS4	PBCL4	PBCS4	**ME2421560**	Price

RAPIDKUT D Style Holder Replacement Parts

Type - Clamp		
Model No.	Order No.	Price
PBCL3	**ME2622640**	Price
PBCL4	**ME2622680**	Price
PBCL5	**ME2622720**	Price
PBCL5V	**ME2622730**	Price
PBCL6	**ME2622725**	Price
PBCS3	**ME2622760**	Price
PBCS4	**ME2622800**	Price
PBCS5	**ME2622840**	Price
PBCS6	**ME2622880**	Price

Type - Screw		
Model No.	Order No.	Price
PBSS3	**ME2622480**	Price
PBSS4	**ME2622520**	Price
PBSS5	**ME2622560**	Price
PBSS6	**ME2622600**	Price

Type - Shim		
Model No.	Order No.	Price
ICSN433	**ME2622000**	Price
ICSN533	**ME2622040**	Price

Type - Shim		
Model No.	Order No.	Price
ICSN633	**ME2622080**	Price
IDSN433	**ME2622120**	Price
ISSN433	**ME2622200**	Price
ISSN533	**ME2622240**	Price
ISSN633	**ME2622280**	Price
ITSN333	**ME2622320**	Price
ITSN433	**ME2622360**	Price
ITSN533	**ME2622400**	Price

Type - Shim		
Model No.	Order No.	Price
ITSN633	**ME2622440**	Price
IVSN322	**ME2622445**	Price
IWSN433	**ME2622160**	Price

RAPIDKUT MCLNR/L Toolholder





- For turning, facing or contouring
- Negative 5° lead angle
- Uses CNMG, CNMA, CNMP, CNGA or CNMM 80° diamond inserts
- Right hand shown

Shank Size (in.)	OAL (in.)	Head Length (in.)	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Left			Right		
									Model No.	Order No.	Price	Model No.	Order No.	Price
.750	4.50	1.250	CNM_43_	ICSN433	S46	NL46	CL20	XNS48	MCLNL124B	**ME1910000**	Price	MCLNR124B	**ME1910010**	Price
1.000	6.00	1.250	CNM_43_	ICSN433	S46	NL46	CL20	XNS48	MCLNL164D	**ME1910005**	Price	MCLNR164D	**ME1910015**	Price

RAPIDKUT MDJNR Toolholder





- For turning and profiling
- Negative 3° lead angle
- Uses DNMG, DNMA, DNMP, DNGA or DNMM 55° diamond inserts

Model No.	Shank Size (in.)	OAL (in.)	Head Length	Uses Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Right	
										Order No.	Price
MDJNR164D	1.000	6.00	1.250	DNM_43_	IDSN433	S46	NL46	CL20	XNS48	**ME1910025**	Price

RAPIDKUT MSDNN Toolholder





- For turning and chamfering
- 45° cutting angle
- Uses SNMA, SNMG, SNMP, SNG or SNU inserts

Model No.	Shank Size (in.)	OAL (in.)	Head Length	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Neutral	
										Order No.	Price
MSDNN124B	.750	4.50	1.375	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**ME1910030**	Price
MSDNN164D	1.000	6.00	1.375	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**ME1910035**	Price

RAPIDKUT MTENN Toolholder





- For turning and chamfering
- 60° cutting angle
- Uses TNMA, TNMG, TNMP, TNG, or TNU inserts

Model No.	Shank Size (in.)	OAL (in.)	Head Length	Insert Style	Seat	Lock Pin	Clamp	Clamp Screw	Neutral	
									Order No.	Price
MTENN103B	.625	4.50	1.125	TNM_32_	ITSN333	NL34L	CL6	XNS36	**ME1910040**	Price
MTENN124B	.750	4.50	1.500	TNM_43_	ITSN433	NL46	CL9	XNS59	**ME1910045**	Price
MTENN164D	1.000	6.00	1.500	TNM_43_	ITSN433	NL46	CL9	XNS59	**ME1910050**	Price

RAPIDKUT MTJNL/R Toolholder





- For turning and profiling
- Negative 3° lead angle
- Uses TNMA, TNMG, TNMP, TNGA, TNMM, TNG or TNU inserts
- Right hand shown

Shank Size	OAL (in.)	Head Length (in.)	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Left			Right		
									Model No.	Order No.	Price	Model No.	Order No.	Price
.750	4.50	1.000	TNM_32_	ITSN322	S34	NL34L	CL6	XNS36	MTJNL123B	**ME1910055**	Price	MTJNR123B	**ME1910065**	Price
1.000	6.00	1.000	TNM_32_	ITSN322	S34	NL34L	CL6	XNS36	-	**-**	-	MTJNR163D	**ME1910070**	Price
1.000	6.00	1.250	TNM_43_	ITSN433	S46	NL46	CL9	XNS510	MTJNL164D	**ME1910060**	Price	MTJNR164D	**ME1910080**	Price

RAPIDKUT MVJNL/R Toolholder





- For turning and profiling
- Negative 3° lead angle
- Uses VNMA, VNMG, VNMP, VNGA, or VNMS inserts
- Right hand shown

Shank Size	OAL (in.)	Head Length (in.)	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Left			Right		
									Model No.	Order No.	Price	Model No.	Order No.	Price
.750	4.50	1.750	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	MVJNL123B	**ME1910085**	Price	-	**-**	-
1.000	6.00	1.750	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	MVJNL163D	**ME1910090**	Price	MVJNR163D	**ME1910100**	Price

RAPIDKUT MWLNR Toolholder





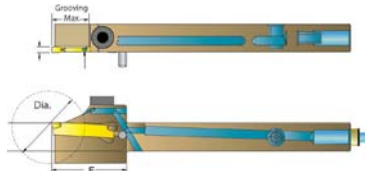
- Negative 5° lead angle
- Uses WNMG, WNMP or WNMA inserts

Model No.	Shank Size (in.)	OAL (in.)	Head Length (in.)	Uses Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Right	
										Order No.	Price
MWLNR124B	.750	4.50	1.250	WNM_43_	IWSN432	S46	NL46	CL9	XNS59	**ME1910105**	Price
MWLNR164D	1.000	6.00	1.250	WNM_43_	IWSN432	S46	NL46	CL9	XNS59	**ME1910110**	Price

Parts for above holders on pages B134-B138

Thru Coolant ADDN-TFR/L Toolholders for Swiss Machines

Thru Coolant External Turning, Grooving & Cut-Off



- Multiple coolant entry points
- High pressure coolant at edge
- Increased tool life
- Improved chip breaking and control

- Inch													
Shank Size	Insert Width	Overall Length	E (Tool Stop)	Grooving Depth	Max. Dia..	Insert	Left			Right			
							Model Number	Order No.	Price	Model Number	Order No.	Price
1/2	.079	4-1/4	1.250	12mm	.945	DN -22 N20	ADDN-TFL-08-20A-12	**FL4561045**	Price	ADDN-TFR-08-20A-12	**FL4561044**	Price
1/2	.118	4-1/4	1.250	14mm	1.102	DN -22 N30-	ADDN-TFL-08-30A-14	**FL4561047**	Price	ADDN-TFR-08-30A-14	**FL4561046**	Price

- Metric												
Shank Size	Insert Width	Overall Length	E (Tool Stop)	Grooving Depth	Max. Dia..	Insert	Left			Right		
							Model Number	Order No.	Price	Model Number	Order No.	Price
10mm	2mm	107mm	32mm	12mm	24mm	DN -22 N20	ADDN-TFL-1010-H20-12	**FL4561011**	Price	ADDN-TFR-1010-H20-12	**FL4561010**	Price
12mm	2mm	107mm	32mm	12mm	24mm	DN -22 N20	ADDN-TFL-1212-H20-12	**FL4561013**	Price	ADDN-TFR-1212-H20-12	**FL4561012**	Price
12mm	3mm	107mm	32mm	14mm	28mm	DN -22 N30-	ADDN-TFL-1212-H30-14	**FL4561019**	Price	ADDN-TFR-1212-H30-14	**FL4561018**	Price
16mm	2mm	107mm	32mm	12mm	24mm	DN -22 N20	ADDN-TFL-1616-H20-12	**FL4561015**	Price	ADDN-TFR-1616-H20-12	**FL4561014**	Price
16mm	3mm	107mm	32mm	14mm	28mm	DN -22 N30-	ADDN-TFL-1616-H30-14	**FL4561017**	Price	ADDN-TFR-1616-H30-14	**FL4561016**	Price
20mm	2mm	132mm	32mm	12mm	24mm	DN -22 N20	ADDN-TFL-2020-K20-12	**FL4561033**	Price	ADDN-TFR-2020-K20-12	**FL4561032**	Price
20mm	3mm	132mm	32mm	14mm	28mm	DN -22 N30-	ADDN-TFL-2020-K30-14	**FL4561035**	Price	ADDN-TFR-2020-K30-14	**FL4561034**	Price

Thru Coolant ASCNC R/L Toolholders for Swiss Machines

Style N

Negative 5° End or Side Cutting Edge Angle for 7° Positive 80° Diamond CC_W Inserts



- Multiple coolant entry points
- High pressure coolant at edge
- Increased tool life
- Improved chip breaking and control

Shank Size	OAL	E (Tool Stop)	Insert Style	Left			Right		
				Model No.	Order No.	Price	Model No.	Order No.	Price
1/2	4.000	.500	CCGW 21.51	ASCNCL08-2A	**FL4560699**	Price	ASCNCR08-2A	**FL4560698**	Price
1/2	4.000	.500	CCGW 32.52	ASCNCL08-3A	**FL4560702**	Price	ASCNCR08-3A	**FL4560701**	Price
10mm	100mm	25mm	CCGW 060204	ASCNCL1010-H06	**FL4560771**	Price	ASCNCR1010-H06	**FL4560770**	Price
12mm	100mm	25mm	CCGW 060204	ASCNCL1212-H06	**FL4560773**	Price	ASCNCR1212-H06	**FL4560772**	Price
12mm	100mm	25mm	CCGW 09T308	ASCNCL1212-H09	**FL4560777**	Price	ASCNCR1212-H09	**FL4560776**	Price
16mm	100mm	25mm	CCGW 060204	ASCNCL1616-H06	**FL4560775**	Price	ASCNCR1616-H06	**FL4560774**	Price
16mm	100mm	25mm	CCGW 09T308	ASCNCL1616-H09	**FL4560779**	Price	ASCNCR1616-H09	**FL4560778**	Price
20mm	125mm	25mm	CCGW 09T308	ASCNCL2020-K09	**FL4560781**	Price	ASCNCR2020-K09	**FL4560780**	Price

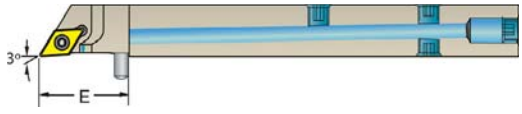
Thru Coolant ASDNC R/L Toolholders for Swiss Machines

Style N

3° Side Cutting Edge Angle for 7° Positive 55° Diamond DC_W Inserts

Right hand shown
Left hand opposite

R = Right hand
L = Left hand



- Inch									
Shank Size	OAL	E (Tool Stop)	Insert Style	Left			Right		
				Model No.	Order No.	Price	Model No.	Order No.	Price
1/2	4.000	1.000	DCGW 21.51	ASDNCL08-2A	**FL4560709**	Price	ASDNCR08-2A	**FL4560708**	Price
1/2	4.000	1.000	DCGW 32.52	ASDNCL08-3A	**FL4560712**	Price	-	**-**	-

- Metric									
Shank Size	OAL	E (Tool Stop)	Insert Style	Left			Right		
				Model No.	Order No.	Price	Model No.	Order No.	Price
10mm	100mm	25mm	DCGW 070204	-	**-**	-	ASDNCR1010-H07	**FL4560810**	Price
12mm	100mm	25mm	DCGW 070204	ASDNCL1212-H07	**FL4560813**	Price	ASDNCR1212-H07	**FL4560812**	Price
12mm	100mm	25mm	DCGW 11T308	ASDNCL1212-H11	**FL4560817**	Price	ASDNCR1212-H11	**FL4560816**	Price
16mm	100mm	25mm	DCGW 11T308	ASDNCL1616-H07	**FL4560815**	Price	-	**-**	-
16mm	100mm	25mm	DCGW 11T308	ASDNCL1616-H11	**FL4560819**	Price	ASDNCR1616-H11	**FL4560818**	Price
20mm	125mm	25mm	DCGW 11T308	ASDNCL2020-K11	**FL4560821**	Price	ASDNCR2020-K11	**FL4560820**	Price

High Pressure Disconnecting Pliers

To disconnect the hydraulic coolant hose, follow two safe and easy steps:

1. Plase the thinner section of the wrench-nose between the coolant hose and the connector
2. Close the wrench and it will disconnect notch 1 of the coolant hose. Use the thicker section of the wrench-nose and close again to disconnect notch 2.



Order No.	Price
FL4560476	Price

7 Pc. Coolant Hose Kit

- Swiss high pressure quick release coolant kit



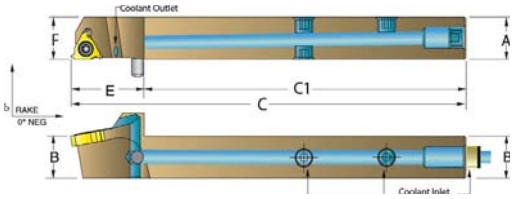
Order No.	Price
FL4560480	Price

Thru Coolant ASE R/L Threading Toolbar for Swiss Machines

For Laydown Inserts

Right hand shown
Left hand opposite

R = Right hand
L = Left hand



Shank Size	OAL	E (Tool Stop)	Insert Style	Left			Right		
				Model No.	Order No.	Price	Model No.	Order No.	Price
10mm	100mm	25mm	11-A60	-	-	-	ASER1010-H11	**FL4561078**	Price
12mm	100mm	25mm	11-A60	-	-	-	ASER1212-H11	**FL4561080**	Price
16mm	100mm	25mm	16-G60	ASEL1616-H16	**FL4561083**	Price	ASER1616-H16	**FL4561082**	Price

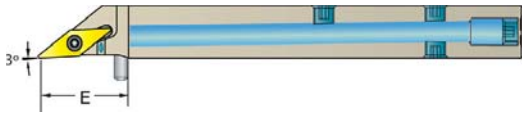
Thru Coolant ASVNC R/L Toolholders for Swiss Machines

Style N

3° Side Cutting Edge Angle for 7° Positive 35° Diamond VC_W Inserts

Right hand shown
Left hand opposite

R = Right hand
L = Left hand



- Inch									
Shank Size	OAL	E (Tool Stop)	Insert Style	Left			Right		
				Model No.	Order No.	Price	Model No.	Order No.	Price
1/2	4.000	1.000	VCGW 221	ASVNCL08-2A	**FL4560739**	Price	ASVNCR08-2A	**FL4560738**	Price
1/2	4.250	1.250	VCGW 332	ASVNCL08-3A	**FL4560742**	Price	ASVNCR08-3A	**FL4560741**	Price

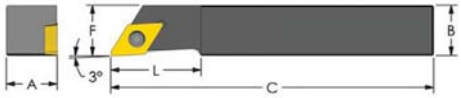
- Metric									
Shank Size	OAL	E (Tool Stop)	Insert Style	Left			Right		
				Model No.	Order No.	Price	Model No.	Order No.	Price
10mm	100mm	25mm	VCGW 110304	ASVNCL1010-H11	**FL4560915**	Price	ASVNCR1010-H11	**FL4560914**	Price
12mm	100mm	25mm	VCGW 110304	ASVNCL1212-H11	**FL4560917**	Price	ASVNCR1212-H11	**FL4560916**	Price
12mm	107mm	32mm	VCGW 160408	ASVNCL1212-K16	**FL4560921**	Price	ASVNCR1212-K16	**FL4560920**	Price
16mm	100mm	25mm	VCGW 110304	ASVNCL1616-H11	**FL4560919**	Price	ASVNCR1616-H11	**FL4560918**	Price
16mm	107mm	32mm	VCGW 160408	ASVNCL1616-K16	**FL4560923**	Price	ASVNCR1616-K16	**FL4560922**	Price
20mm	132mm	32mm	VCGW 160408	ASVNCL2020-K16	**FL4560925**	Price	ASVNCR2020-K16	**FL4560924**	Price

ULTRA-DEX SDJCR/L Swiss Style Toolholders

MADE IN THE USA

Positive 55° Diamond (-3° Lead) • No Coolant

- Proper insert alignment for Swiss processes
- Accepts standard inserts



Inch/Metric - Inch										
A & B	C	F	Uses Insert	Insert Screw	Left			Right		
					Description	Order No.	Price	Description	Order No.	Price
1/2	4	1/2	DCMT 32.51	MTS 35	SDJCL 08-3A	**FG5512121**	Price	SDJCR 08-3A	**FG5512126**	Price
5/8	4	5/8	DCMT 32.51	MTS 35	SDJCL 10-3A	**FG5512122**	Price	SDJCR 10-3A	**FG5512127**	Price

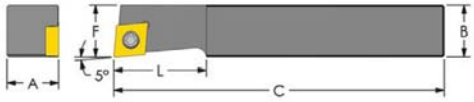
Inch/Metric - Metric										
A & B	C	F	Uses Insert	Insert Screw	Left			Right		
					Description	Order No.	Price	Description	Order No.	Price
12mm	100mm	12mm	DCMT 32.51	MTS 35	SDJCL 1212-3A	**FG5512123**	Price	SDJCR 1212-3A	**FG5512128**	Price
16mm	100mm	16mm	DCMT 32.51	MTS 35	SDJCL 1616-3A	**FG5512124**	Price	SDJCR 1616-3A	**FG5512129**	Price

ULTRA-DEX SCLCR/L Swiss Style Toolholders

MADE IN THE USA

Positive 80° Diamond (-5° Lead) • No Coolant

- Proper insert alignment for Swiss processes
- Accepts standard inserts



Inch/Metric - Inch										
A & B	C	F	Uses Insert	Insert Screw	Left			Right		
					Description	Order No.	Price	Description	Order No.	Price
1/2	4	1/2	CCMT 32.51	MTS 35	SCLCL 08-3A	**FG5512001**	Price	SCLCR 08-3A	**FG5512006**	Price
5/8	4	5/8	CCMT 32.51	MTS 35	SCLCL 10-3A	**FG5512002**	Price	SCLCR 10-3A	**FG5512008**	Price

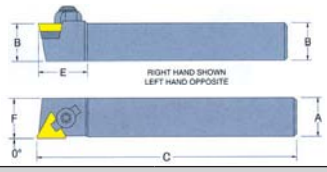
Inch/Metric - Metric										
A & B	C	F	Uses Insert	Insert Screw	Left			Right		
					Description	Order No.	Price	Description	Order No.	Price
12mm	100mm	12mm	CCMT 32.51	MTS 35	SCLCL 1212-3A	**FG5512003**	Price	SCLCR 1212-3A	**FG5512012**	Price
16mm	100mm	16mm	CCMT 32.51	MTS 35	SCLCL 1616-3A	**FG5512004**	Price	SCLCR 1616-3A	**FG5512014**	Price

CTAP R/L Toolholders

Style A

0° Side Cutting Edge Angle for Positive Triangle TPG_ Inserts

Right hand shown
Left hand opposite





MADE IN THE USA

Right/Left Hand - Left												
Description	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Seat Screw	Clamp Clip	Clamp	Clamp Screw	Order No.	Price
CTAPL 08-2J	.500	3.50	.875	.515	TPG 22	-	-	-	HC9	CS96	**FL4540030**	Price
CTAPL 12-3B	.750	4.50	1.250	.765	TPG 32	SM41	S4	CLP12	HC12	CS126	**FL4540090**	Price
CTAPL 16-3D	1.000	6.00	1.250	1.015	TPG 32	SM41	S4	CLP12	HC12	CS126	**FL4540110**	Price

Right/Left Hand - Right												
Description	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Seat Screw	Clamp Clip	Clamp	Clamp Screw	Order No.	Price
CTAPR 08-2J	.500	3.50	.875	.515	TPG 22	-	-	-	HC9	CS96	**FL4540020**	Price
CTAPR 12-3B	.750	4.50	1.250	.765	TPG 32	SM41	S4	CLP12	HC12	CS126	**FL4540080**	Price
CTAPR 16-3D	1.000	6.00	1.250	1.015	TPG 32	SM41	S4	CLP12	HC12	CS126	**FL4540100**	Price

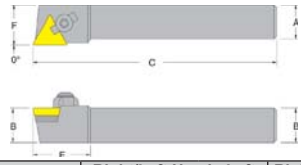
See pages B134-B138 for spare parts

CTGP R/L Toolholders

Style G

0° Side Cutting Edge Angle for 11° Positive Triangle TPG_ Inserts

Right hand shown, Left hand opposite



MADE IN THE USA

											Right/Left Hand - Left		Right/Left Hand - Right	
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Seat Screw	Clamp Clip	Clamp	Clamp Screw	Order No.	Price	Order No.	Price
CTGPR/L 10-3B	.625	4.50	1.000	.875	TPG 32	SM41	S4	CLP12	HC12	CS126	**FL4551493**	Price	**FL4551492**	Price
CTGPR/L 12-3B	.750	4.50	1.000	1.000	TPG 32	SM41	S4	CLP12	HC12	CS126	**FL4551497**	Price	**FL4551496**	Price

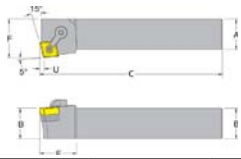
See pages B134-B138 for spare parts

MCKN R/L Toolholders

Style K

15° End Cutting Edge Angle for Negative 80° Diamond CNM_ Inserts

Right hand shown, Left hand opposite



Right/Left Hand - Left												
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	U (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MCKNL 16-4D	1.000	6.00	1.250	1.250	.123	CNM 43	ICSN433	S46	NL46	CL20	XNS48	**FL4550075**	Price
MCKNL 16-5D	1.000	6.00	1.375	1.250	.151	CNM 54	ICSN543	S58	NL58	CL9	XNS59	**FL4540398**	Price
MCKNL 20-6D	1.250	6.00	1.500	1.500	.184	CNM 64	ICSN643	S68	NL68	CL12	XNS510	**FL4540396**	Price

Right/Left Hand - Right												
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	U (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MCKNR12-4B	.750	4.50	1.250	1.000	.123	CNM 43	ICSN433	S46	NL46	CL20	XNS48	**FL4550066**	Price
MCKNR 16-4C	1.000	5.00	1.250	1.250	.123	CNM 43	ICSN433	S46	NL46	CL20	XNS48	**FL4550070**	Price
MCKNR 16-4D	1.000	6.00	1.250	1.250	.123	CNM 43	ICSN433	S46	NL46	CL20	XNS48	**FL4540401**	Price
MCKNR 16-5D	1.000	6.00	1.375	1.250	.151	CNM 54	ICSN543	S58	NL58	CL9	XNS59	**FL4540402**	Price
MCKNR 20-4D	1.250	6.00	1.250	1.500	.123	CNM 43	ICSN433	S46	NL46	CL20	XNS48	**FL4540391**	Price
MCKNR 20-6D	1.250	6.00	1.500	1.500	.184	CNM 64	ICSN643	S68	NL68	CL12	XNS510	**FL4540395**	Price

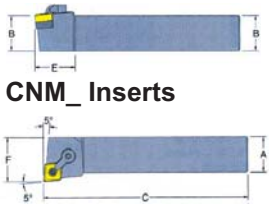
See pages B134-B138 for spare parts

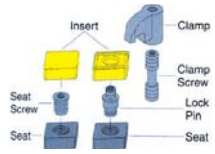
MCLN R/L Toolholders

Style L

Negative 5° End or Side Cutting Edge Angle for Negative 80° Diamond CNM_ Inserts

Right hand shown
Left hand opposite



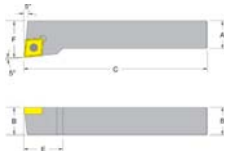


MADE IN THE USA

A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Left			Right		
											Order No.	Price		Order No.	Price
.500	4.00	1.000	.750	CNM 32	-	-	NL33	CL6	XNS37	-	-	-	MCLNR08-3A	**FL4550108**	Price
.625	4.00	1.000	.875	CNM 32	-	-	NL33	CL6	XNS37	-	-	-	MCLNR10-3A	**FL4550118**	Price
.625	4.50	1.250	1.000	CNM 43	ICSN433	S46	NL46	CL20	XNS48	MCLNL10-4B	**FL4540410**	Price	MCLNR10-4B	**FL4540400**	Price
.750	4.50	1.000	1.000	CNM 32	ICSN322	S34	NL34L	CL6	XNS37	MCLNL12-3B	**FL4550111**	Price	MCLNR12-3B	**FL4550110**	Price
.750	4.50	1.250	1.000	CNM 43	ICSN433	S46	NL46	CL20	XNS48	MCLNL12-4B	**FL4540430**	Price	MCLNR12-4B	**FL4540420**	Price
1.000	5.00	1.250	1.250	CNM 43	ICSN433	S46	NL46	CL20	XNS48	MCLNL16-4C	**FL4540450**	Price	MCLNR16-4C	**FL4540440**	Price
1.000	6.00	1.250	1.250	CNM 43	ICSN433	S46	NL46	CL20	XNS48	MCLNL16-4D	**FL4540470**	Price	MCLNR16-4D	**FL4540460**	Price
1.000	6.00	1.375	1.250	CNM 54	ICSN533	S58	NL58	CL9	XNS59	MCLNL16-5D	**FL4540570**	Price	MCLNR16-5D	**FL4540560**	Price
1.000	6.00	1.500	1.250	CNM 64	ICSN633	S68	NL68	CL12	XNS510	MCLNL16-6D	**FL4540650**	Price	MCLNR16-6D	**FL4540640**	Price
1.250	6.00	1.250	1.500	CNM 43	ICSN433	S46	NL46	CL20	XNS48	MCLNL20-4D	**FL4540490**	Price	MCLNR20-4D	**FL4540480**	Price
1.250	6.00	1.375	1.500	CNM 54	ICSN533	S58	NL58	CL9	XNS59	MCLNL20-5D	**FL4540590**	Price	MCLNR20-5D	**FL4540580**	Price
1.250	6.00	1.500	1.500	CNM 64	ICSN633	S68	NL68	CL12	XNS510	MCLNL20-6D	**FL4540670**	Price	MCLNR20-6D	**FL4540660**	Price
1.250	7.00	1.500	1.500	CNM 64	ICSN633	S68	NL68	CL12	XNS510	MCLNL20-6E	**FL4550175**	Price	MCLNR20-6E	**FL4550174**	Price
1.500	6.00	1.250	2.000	CNM 43	ICSN433	S46	NL46	CL20	XNS48	MCLNL24-4D	**FL4550137**	Price	MCLNR24-4D	**FL4550136**	Price
1.500	6.00	1.500	2.000	CNM 64	ICSN633	S68	NL68	CL12	XNS510	MCLNL24-6D	**FL4550177**	Price	MCLNR24-6D	**FL4550176**	Price
1.500	7.00	1.250	2.000	CNM 43	ICSN433	S46	NL46	CL20	XNS48	MCLNL24-4E	**FL4540510**	Price	MCLNR24-4E	**FL4540500**	Price
1.500	7.00	1.500	2.000	CNM 64	ICSN633	S68	NL68	CL12	XNS510	MCLNL24-6E	**FL4540690**	Price	MCLNR24-6E	**FL4540680**	Price

See pages B134-B138 for spare parts

SCLC R/L Toolholders



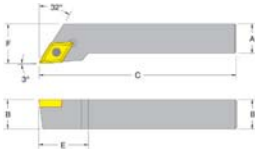
Style L
Negative 5° End or Side Cutting Angle for 7° Positive 80° Diamond CC_T Inserts

Right hand shown, Left hand opposite

						Left			Right		
A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Torx Screw	Description	Order No.	Price	Description	Order No.	Price
.375	3.50	.500	.500	CC_T 21.5_	TS25456M2	SCLCL06-2J	**FL4551801**	Price	SCLCR06-2J	**FL4551800**	Price
.500	4.00	.688	.625	CC_T 32.5_	TS4710M1	SCLCL08-3A	**FL4544120**	Price	SCLCR08-3A	**FL4544110**	Price
.625	4.50	.688	.750	CC_T 32.5_	TS4710M1	SCLCL10-3B	**FL4551809**	Price	SCLCR10-3B	**FL4551808**	Price
.750	4.50	.688	1.000	CC_T 32.5_	TS4710M1	SCLCL12-3B	**FL4544140**	Price	SCLCR12-3B	**FL4544130**	Price

See pages B134-B138 for spare parts

SDJC R/L Toolholders



Style J
Negative 3° Side Cutting Edge Angle for 7° Positive 55° Diamond DC_T Inserts

Right hand shown, Left hand opposite

						Left			Right		
A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Torx Screw	Description	Order No.	Price	Description	Order No.	Price
.375	3.50	.688	.500	DC_T 21.5_	TS25456M2	SDJCL06-2J	**FL4551873**	Price	SDJCR06-2J	**FL4551872**	Price
.500	4.00	1.000	.625	DC_T 32.5_	TS478M1	SDJCL08-3A	**FL4544180**	Price	SDJCR08-3A	**FL4544170**	Price
.750	4.50	1.000	1.000	DC_T 32.5_	TS478M1	SDJCL12-3B	**FL4544200**	Price	SDJCR12-3B	**FL4544190**	Price
.500	4.00	.688	.625	DC_T 21.5_	TS25456M2	SDJCL08-2A	**FL4544160**	Price	SDJCR08-2A	**FL4544150**	Price
.625	4.50	1.000	.750	DC_T 32.5_	TS478M1	SDJCL10-3B	**FL4551885**	Price	SDJCR10-3B	**FL4551884**	Price

See pages B134-B138 for spare parts

SSDCN Toolholders

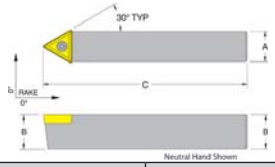


Style D
45° Side Cutting Edge Angle for 7° Positive SC_T Inserts

Model No.	A & B (in.)	C (in.)	Insert Style	Torx Screw	Order No.	Price
SSDCN08-3A	.500	4.00	SC_T 32.5_	TS4710M1	**FL4551932**	Price
SSDCN10-3B	.625	4.50	SC_T 32.5_	TS4710M1	**FL4551934**	Price
SSDCN12-3B	.750	4.50	SC_T 32.5_	TS4710M1	**FL4551936**	Price
SSDCN16-4D	1.000	6.00	SC_T 43_	TS5810M1	**FL4551938**	Price

See pages B134-B138 for spare parts

STECN Toolholders

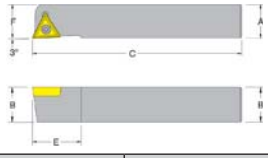


Style E
Negative 30° Side Cutting Edge Angle for 7° Positive Triangle TC_T Inserts

A & B (in.)	Model No.	C (in.)	Insert Style	Order No.	Price
.375	STECN06-2	2.50	TC_T 21.5_	**FL4551622**	Price
.500	STECN08-2J	3.50	TC_T 21.5_	**FL4551624**	Price
.750	STECN12-3D	4.50	TC_T 32.5_	**FL4551628**	Price
1.000	STECN64-3D	6.00	TC_T 32.5_	**FL4551630**	Price

See pages B134-B138 for spare parts

STNCR Toolholders



Style N
3° Side Cutting Edge Angle for 7° Positive Triangle TC_T Inserts

Right hand shown, left hand available

Description	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Torx Screw	Order No.	Price
STNCR06-2	.375	2.50	.625	-	TC_T 21.5_	TS25456M2	**FL4551734**	Price
STNCR64-3D	1.000	6.00	1.125	-	TC_T 32.5_	TS478M1	**FL4551742**	Price
STNCR08-2J	.500	3.50	.625	.500	TC_T 21.5_	TS25456M2	**FL4551736**	Price
STNCR10-2A	.625	4.00	.625	.625	TC_T 21.5_	TS25456M2	**FL4551738**	Price
STNCR12-3B	.750	4.50	1.125	.750	TC_T 32.5_	TS478M1	**FL4551740**	Price

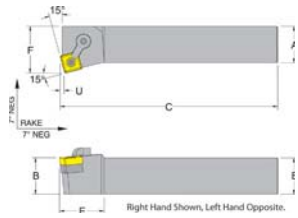
See pages B134-B138 for spare parts

MSKN R/L Toolholders

Style K

Negative 15° End Cutting Edge Angle for Negative Square SNM_ Inserts

Right hand shown, left hand opposite



- Left													
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	U (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MSKNL 16-4D	1.000	6.00	1.000	1.250	.123	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4550457**	Price
MSKNL 16-5D	1.000	6.00	1.375	1.250	.151	SNM_54_	ISSN533	S58	NL58	CL12	XNS510	**FL4550461**	Price
MSKNL 20-6D	1.250	6.00	1.500	1.500	.183	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4550473**	Price

- Right													
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	U (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MSKNR 16-4D	1.000	6.00	1.000	1.250	.123	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4541484**	Price
MSKNR 16-5D	1.000	6.00	1.375	1.250	.151	SNM_54_	ISSN533	S58	NL58	CL12	XNS510	**FL4550460**	Price
MSKNR 20-6D	1.250	6.00	1.500	1.500	.183	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4550472**	Price

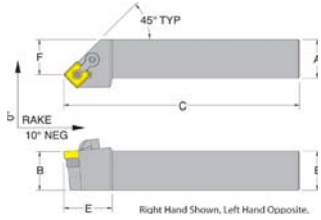
See pages B134-B138 for spare parts

MSSN R/L Toolholders

Style S

Negative 15° Side Cutting Edge Angle for Negative Square SNM_ Inserts

Right hand shown, left hand opposite



Description	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MSSNL 16-4D	1.000	6.00	1.250	.925	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4541782**	Price
MSSNR 16-4D	1.000	6.00	1.250	.925	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4550580**	Price
MSSNR 20-5D	1.250	6.00	1.375	1.097	SNM_54_	ISSN533	S58	NL58	CL9	XNS510	**FL4541786**	Price
MSSNL 20-5D	1.250	6.00	1.375	1.097	SNM_54_	ISSN533	S58	NL58	CL9	XNS510	**FL4550589**	Price
MSSNR 20-6D	1.250	6.00	1.500	1.011	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4550592**	Price
MSSNL 20-6D	1.250	6.00	1.500	1.011	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4550593**	Price

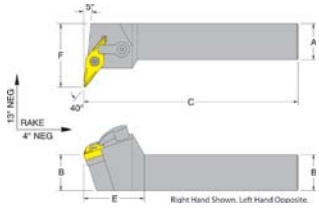
See pages B134-B138 for spare parts

MVLN R/L Toolholders

Style L

Negative 5° End Cutting Edge Angle for Negative 35° Diamond VNM_ Inserts

Right hand shown, left hand opposite



Right/Left Hand - Left											
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MVLNL 16-4D	1.000	6.00	1.500	1.750	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4542764**	Price
MVLNL 20-4D	1.250	6.00	1.500	2.000	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4551117**	Price

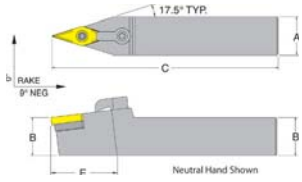
Right/Left Hand - Right											
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MVLNR 16-4D	1.000	6.00	1.500	1.750	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4542763**	Price
MVLNR 20-4D	1.250	6.00	1.500	2.000	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4551116**	Price

See pages B134-B138 for spare parts

MVLNN Toolholders

Style V

Negative 17.5° Side Cutting Edge Angle for Negative 35° Diamond VNM_ Inserts



Model No.	A & B (in.)	C (in.)	E (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Neutral	
										Order No.	Price
MVVNN12-3B	.750	4.50	1.750	VNM_33_	IVSN322	S34	NL34L	CL30	XNS58	**FL4542957**	Price
MVVNN16-3D	1.000	6.00	1.750	VNM_33_	IVSN322	S34	NL34L	CL30	XNS58	**FL4542958**	Price
MVVNN16-4D	1.000	6.00	2.250	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4542959**	Price

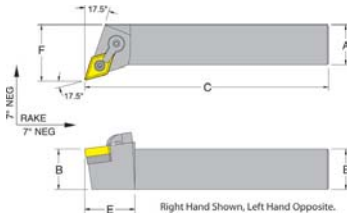
See pages B134-B138 for spare parts

MDQN R/L Toolholders

Style N

Negative 17.5° Side Cutting Edge Angle for Negative Diamond DNM_ Inserts

Right hand shown, left hand opposite



Right/Left Hand - Left												
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MDQNL 16-4D	1.000	6.00	1.375	1.250	DNM_43_	IDSN433	S46	NL46	CL20	XNS48	**FL4550381**	Price
MDQNL 20-4D	1.250	6.00	1.375	1.500	DNM_43_	IDSN433	S46	NL46	CL20	XNS48	**FL4550385**	Price

Right/Left Hand - Right												
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MDQNR 16-4D	1.000	6.00	1.375	1.250	DNM_43_	IDSN433	S46	NL46	CL20	XNS48	**FL4550379**	Price
MDQNR 20-4D	1.250	6.00	1.375	1.500	DNM_43_	IDSN433	S46	NL46	CL20	XNS48	**FL454550383**	Price

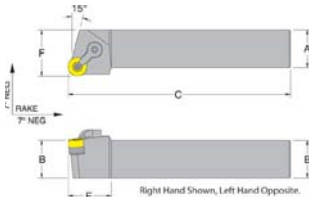
See pages B134-B138 for spare parts

MRGN R/L Toolholders

Style G

0° Side Cutting Edge Angle for Negative Round RNM_ Inserts

Right hand shown, left hand opposite



Right/Left Hand - Left												
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MRGNL 12-4B	.750	4.50	1.250	1.250	RNM_43	IRSN43	S46	NL46	CL9	XNS59	**FL4541324**	Price
MRGNL 16-3D	1.000	6.00	1.250	1.250	RNM_32	IRSN32	S34	NL34L	CL6	XNS36	**FL4551191**	Price
MRGNL 16-4D	1.000	6.00	1.250	1.250	RNM_43	IRSN43	S46	NL46	CL9	XNS59	**FL4551207**	Price
MRGNL 16-5D	1.000	6.00	1.250	1.250	RNM_54	IRSN53	S58	NL58	CL9	XNS58	**FL4551227**	Price
MRGNL 20-4D	1.250	6.00	1.250	1.500	RNM_43	IRSN43	S46	NL46	CL9	XNS59	**FL4551211**	Price
MRGNL 20-6D	1.500	6.00	1.375	1.500	RNM_64	IRSN63	S69	NL68	CL12	XNS58	**FL4541328**	Price
MRGNL 24-4E	1.500	7.00	1.250	2.000	RNM_43	IRSN43	S46	NL46	CL9	XNS59	**FL4551215**	Price
MRGNL 24-6E	1.500	7.00	1.375	1.004	RNM_64	IRSN63	S68	NL68	CL12	XNS58	**FL4551235**	Price

Right/Left Hand - Right												
Description	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MRGNR 12-4B	.750	4.50	1.250	1.250	RNM_43	IRSN43	S46	NL46	CL9	XNS59	**FL4541323**	Price
MRGNR 16-3D	1.000	6.00	1.250	1.250	RNM_32	IRSN32	S34	NL34L	CL6	XNS36	**FL4551190**	Price
MRGNR 16-4D	1.000	6.00	1.250	1.250	RNM_43	IRSN43	S46	NL46	CL9	XNS59	**FL4551206**	Price
MRGNR 16-5D	1.000	6.00	1.250	1.250	RNM_54	IRSN53	S58	NL58	CL9	XNS58	**FL4551226**	Price
MRGNR 20-4D	1.250	6.00	1.250	1.500	RNM_43	IRSN43	S46	NL46	CL9	XNS59	**FL4551210**	Price
MRGNR 20-6D	1.250	6.00	1.375	1.500	RNM_64	IRSN63	S69	NL68	CL12	XNS58	**FL4541327**	Price
MRGNR 24-4E	1.500	7.00	1.250	2.000	RNM_43	IRSN43	S46	NL46	CL9	XNS59	**FL4551214**	Price
MRGNR 24-6E	1.500	7.00	1.375	1.004	RNM_64	IRSN63	S68	NL68	CL12	XNS58	**FL4551234**	Price

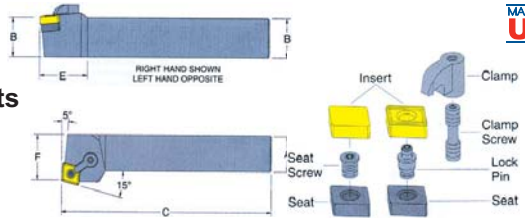
See pages B134-B138 for spare parts

MCRN R/L Toolholders

Style R

15° Side Cutting Edge Angle for Negative 80° Diamond CNM_ Inserts

Right hand shown
Left hand opposite



MADE IN THE USA

Right/Left Hand - Left												
Description	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MCRNL 16-4D	1.000	6.00	1.250	1.250	CNM_43_	ICSN433	S46	NL46	CL9	XNS58	**FL4540770**	Price
MCRNL 16-5D	1.000	6.00	1.375	1.250	CNMG-54_	ICSN533	S58	NL58	CL9	XNS510	**FL4540830**	Price
MCRNL 20-4D	1.250	6.00	1.250	1.500	CNM_43_	ICSN433	S46	NL46	CL9	XNS58	**FL4540790**	Price
MCRNL 20-5D	1.250	6.00	1.375	1.500	CNM_54_	ICSN533	S58	NL58	CL9	XNS510	**FL4540850**	Price
MCRNL 20-6D	1.250	6.00	1.500	1.500	CNM_64_	ICSN633	S68	NL68	CL12	XNS510	**FL4540910**	Price
MCRNL 24-6E	1.500	7.00	1.500	2.000	CNM_64_	ICSN633	S68	NL68	CL12	XNS510	**FL4540930**	Price

Right/Left Hand - Right												
Description	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MCRNR 12-4B	.750	4.50	1.250	.750	CNM_43_	ICSN433	S46	NL46	CL9	XNS58	**FL4540720**	Price
MCRNR 16-4D	1.000	6.00	1.250	1.250	CNM_43_	ICSN433	S46	NL46	CL9	XNS58	**FL4540760**	Price
MCRNR 16-5D	1.000	6.00	1.375	1.250	CNMG-54_	ICSN533	S58	NL58	CL9	XNS510	**FL4540820**	Price
MCRNR 20-4D	1.250	6.00	1.250	1.500	CNM_43_	ICSN433	S46	NL46	CL9	XNS58	**FL4540780**	Price
MCRNR 20-5D	1.250	6.00	1.375	1.500	CNM_54_	ICSN533	S58	NL58	CL9	XNS510	**FL4540840**	Price
MCRNR 20-6D	1.250	6.00	1.500	1.500	CNM_64_	ICSN633	S68	NL68	CL12	XNS510	**FL4540900**	Price
MCRNR 24-6E	1.500	7.00	1.500	2.000	CNM_64_	ICSN633	S68	NL68	CL12	XNS510	**FL4540920**	Price

See pages B134-B138 for spare parts

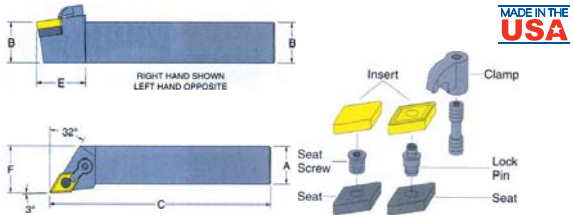
MDJN R/L Toolholders

MADE IN THE USA

Style J

3° Side Cutting Edge Angle for Negative 55° Diamond DNM_ Inserts

Right hand shown
Left hand opposite



Right/Left Hand - Left												
Description	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MDJNL 12-3B	.750	4.50	1.250	1.000	DNM_33_	IDSN322	S34	NL34L	CL7	XNS36	**FL4550313**	Price
MDJNL 12-4B	.750	4.50	1.250	1.000	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541010**	Price
MDJNL 16-3C	1.000	5.00	1.250	1.250	DNM_33_	IDSN322	S34	NL33	CL7	XNS36	**FL4550315**	Price
MDJNL 16-4C	1.000	5.00	1.250	1.250	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541030**	Price
MDJNL 16-4D	1.000	6.00	1.250	1.250	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541050**	Price
MDJNL 16-5D	1.000	6.00	1.750	1.250	DNM_54_	IDSN533	S58	NL58	CL12	XNS510	**FL4541170**	Price
MDJNL 20-4D	1.250	6.00	1.250	1.500	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541070**	Price
MDJNL 20-5D	1.250	6.00	1.750	1.500	DNM_54_	IDSN533	S58	NL58	CL12	XNS510	**FL4541190**	Price
MDJNL 24-4D	1.500	6.00	1.250	2.000	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541090**	Price
MDJNL 24-4E	1.500	7.00	1.250	2.000	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541110**	Price

Right/Left Hand - Right												
Description	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MDJNR 08-3A	.500	4.00	1.300	.750	DNM_33_	IDSN322	-	NL33	CL7	XNS36	**FL4540960**	Price
MDJNR 10-3B	.625	4.50	1.300	.875	DNM_33_	IDSN322	S34	NL33	CL7	XNS36	**FL4540980**	Price
MDJNR 12-3B	.750	4.50	1.250	1.000	DNM_33_	IDSN322	S34	NL34L	CL7	XNS36	**FL4550312**	Price
MDJNR 12-4B	.750	4.50	1.250	1.000	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541000**	Price
MDJNR 16-3C	1.000	4.50	1.250	1.250	DNM_33_	IDSN322	S34	NL33	CL7	XNS36	**FL4550314**	Price
MDJNR 16-4C	1.000	5.00	1.250	1.250	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541020**	Price
MDJNR 16-4D	1.000	6.00	1.250	1.250	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541040**	Price
MDJNR 16-5D	1.000	6.00	1.750	1.250	DNM_54_	IDSN533	S58	NL58	CL12	XNS510	**FL4541160**	Price
MDJNR 20-4D	1.250	6.00	1.250	1.500	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541060**	Price
MDJNR 20-5D	1.250	6.00	1.750	1.500	DNM_54_	IDSN533	S58	NL58	CL12	XNS510	**FL4541180**	Price
MDJNR 24-4D	1.500	6.00	1.250	2.000	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541080**	Price
MDJNR 24-4E	1.500	7.00	1.250	2.000	DNM_43_	IDSN433	S46	NL46	CL7	XNS36	**FL4541100**	Price

See pages B134-B138 for spare parts

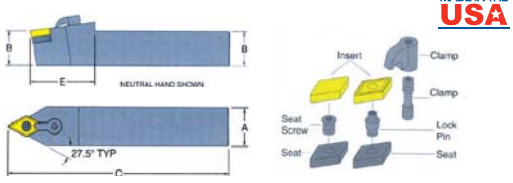
MDPN Toolholders

MADE IN THE USA

Style P

27.5° Side Cutting Edge Angle for Negative 55° Diamond DNM_ Inserts

Neutral hand shown



Description	A x B (in.)	C (in.)	E (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MDPNN12-4B	.750	4.50	1.750	DNM_43_	IDSN433	S46	NL46	CL12	XNS510	**FL4541260**	Price
MDPNN16-4D	1.000	6.00	1.750	DNM_43_	IDSN433	S46	NL46	CL12	XNS510	**FL4541270**	Price
MDPNN20-4D	1.250	6.00	1.750	DNM_43_	IDSN433	S46	NL46	CL12	XNS510	**FL4541280**	Price

See pages B134-B138 for spare parts

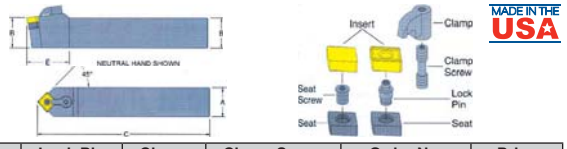
MSDNN Toolholders

MADE IN THE USA

Style D

45° Side Cutting Edge Angle for Negative Square SNM_ Inserts

Neutral hand shown



Description	A x B (in.)	C (in.)	E (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MSDNN08-3A	.500	4.00	1.000	SNM_32_	ISSN322	S34	NL34	CL6	XNS36	**FL4541330**	Price
MSDNN08-3B	.500	4.50	1.000	SNM_32_	ISSN322	S34	NL34	CL6	XNS36	**FL4541340**	Price
MSDNN10-3B	.625	4.50	1.000	SNM_32_	ISSN322	S34	NL34	CL6	XNS36	**FL4541350**	Price
MSDNN12-3B	.750	4.50	1.000	SNM_32_	ISSN322	S34	NL34	CL6	XNS36	**FL4541360**	Price
MSDNN12-4B	.750	4.50	1.375	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4541370**	Price
MSDNN16-4D	1.000	6.00	1.375	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4541380**	Price
MSDNN16-5D	1.000	6.00	1.625	SNM_54_	ISSN533	S58	NL58	CL12	XNS510	**FL4541400**	Price
MSDNN16-6D	1.000	6.00	1.750	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4541440**	Price
MSDNN20-5D	1.250	6.00	1.625	SNM_54_	ISSN533	S58	NL58	CL12	XNS510	**FL4541410**	Price
MSDNN20-6D	1.250	6.00	1.750	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4541450**	Price
MSDNN24-6E	1.500	7.00	1.750	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4541460**	Price
MSDNN85-4D	1.000 x 1.250	6.00	1.375	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4541390**	Price
MSDNN85-5D	1.000 x 1.250	6.00	1.625	SNM_54_	ISSN533	S58	NL58	CL12	XNS510	**FL4541420**	Price

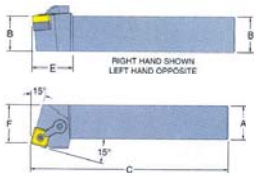
See pages B134-B138 for spare parts

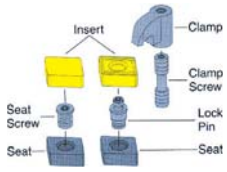
MSRN R/L Toolholders

Style R

15° Side Cutting Edge Angle for Negative Square SNM_ Inserts

Right hand shown
Left hand opposite





MADE IN THE USA

Right/Left Hand - Left												
Description	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MSRNL 12-3B	.750	4.50	1.000	.910	SNM_32_	ISSN322	S34	NL34	CL6	XNS36	**FL4541560**	Price
MSRNL 12-4B	.750	4.50	1.250	.880	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4541580**	Price
MSRNL 16-4D	1.000	6.00	1.250	1.130	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4541600**	Price
MSRNL 16-5D	1.000	6.00	1.375	1.103	SNM_54_	ISSN533	S58	NL58	CL12	XNS510	**FL4541660**	Price
MSRNL 16-6D	1.000	6.00	1.500	1.071	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4541720**	Price
MSRNL 20-5D	1.250	6.00	1.375	1.353	SNM_54_	ISSN533	S58	NL58	CL12	XNS510	**FL4541680**	Price
MSRNL 20-6D	1.250	6.00	1.500	1.315	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4541740**	Price
MSRNL 24-6E	1.500	7.00	1.500	1.821	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4541760**	Price

Right/Left Hand - Right												
Description	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MSRNR 12-3B	.750	4.50	1.000	.910	SNM_32_	ISSN322	S34	NL34	CL6	XNS36	**FL4541550**	Price
MSRNR 12-4B	.750	4.50	1.250	.880	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4541570**	Price
MSRNR 16-4D	1.000	6.00	1.250	1.130	SNM_43_	ISSN433	S46	NL46	CL9	XNS59	**FL4541590**	Price
MSRNR 16-5D	1.000	6.00	1.375	1.103	SNM_54_	ISSN533	S58	NL58	CL12	XNS510	**FL4541650**	Price
MSRNR 16-6D	1.000	6.00	1.500	1.071	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4541710**	Price
MSRNR 20-5D	1.250	6.00	1.375	1.353	SNM_54_	ISSN533	S58	NL58	CL12	XNS510	**FL4541670**	Price
MSRNR 20-6D	1.250	6.00	1.500	1.315	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4541730**	Price
MSRNR 24-6E	1.500	7.00	1.500	1.821	SNM_64_	ISSN633	S68	NL68	CL12	XNS510	**FL4541750**	Price

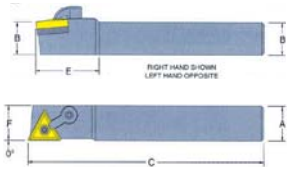
See pages B134-B138 for spare parts

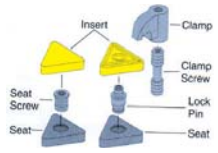
MTAN R/L Toolholders

Style A

0° Side Cutting Edge Angle for Negative Triangle TNM_ Inserts

Right hand shown
Left hand opposite





MADE IN THE USA

Right/Left Hand - Left											
Model No.	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MTANL08-2A	.500	4.00	.875	.500	TNM_22_	-	-	NL23	CL19	XNS36	**FL4541800**	Price
MTANL10-3B	.625	4.50	1.000	.625	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4541840**	Price
MTANL12-3B	.750	4.50	1.000	.750	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4541860**	Price
MTANL16-4D	1.000	6.00	1.300	1.000	TNM_43_	ITSN432	S46	NL46	CL9	XNS59	**FL4541900**	Price

Right/Left Hand - Right											
Model No.	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MTANR10-3B	.625	4.50	1.000	.625	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4541830**	Price
MTANR12-3B	.750	4.50	1.000	.750	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4541850**	Price
MTANR16-4D	1.000	6.00	1.300	1.000	TNM_43_	ITSN432	S46	NL46	CL9	XNS59	**FL4541890**	Price

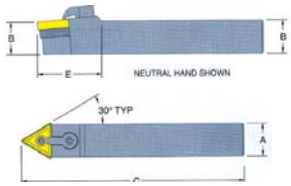
See pages B134-B138 for spare parts

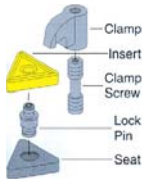
MTEN Toolholders

Style E

30° Side Cutting Edge Angle for Negtaive Triangle TNM_ Inserts

Neutral hand shown





MADE IN THE USA

Model No.	A x B (in.)	C (in.)	E (in.)	Insert Style	Seat	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MTENN08-2A	.500	4.00	1.000	TNM_22_	-	NL23	CL19	XNS36	**FL4542030**	Price
MTENN10-3B	.625	4.50	1.125	TNM_32_	ITSN333	NL34L	CL6	XNS36	**FL4542040**	Price
MTENN12-3B	.750	4.50	1.125	TNM_33_	ITSN332	NL34L	CL6	XNS36	**FL4542050**	Price
MTENN12-4B	.750	4.50	1.500	TNM_43_	ITSN433	NL46	CL9	XNS59	**FL4542070**	Price
MTENN16-4D	1.000	6.00	1.500	TNM_43_	ITSN433	NL46	CL9	XNS59	**FL4542080**	Price
MTENN20-5D	1.250	6.00	1.625	TNM_54_	ITSN533	NL58	CL9	XNS510	**FL4542110**	Price
MTENN20-5E	1.250	7.00	1.625	TNM_54_	ITSN533	NL58	CL9	XNS510	**FL4550708**	Price
MTENN24-5E	1.500	7.00	1.625	TNM_54_	ITSN533	NL58	CL9	XNS510	**FL4542120**	Price
MTENN85-4D	1.000 x 1.250	6.00	1.500	TNM_43_	ITSN433	NL46	CL9	XNS59	**FL4542090**	Price

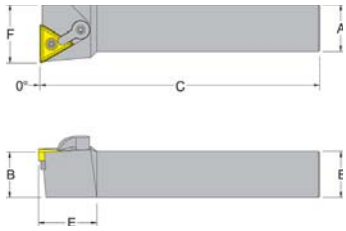
See pages B134-B138 for spare parts

MTFN R/L Toolholders

Style F

0° End Cutting Edge Angle for Negative Triangle TNM_ Inserts

Right hand shown, Left hand opposite



Right/Left Hand - Left												
Model No.	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MTFNL12-3B	.750	4.50	1.000	1.000	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4550739**	Price
MTFNL16-4D	1.000	6.00	1.250	1.250	TNM_43_	ITSN433	S46	NL46	CL9	XNS510	**FL4550755**	Price
MTFNL20-5D	1.250	6.00	1.375	1.500	TNM_54_	ITSN533	S58	NL58	CL12	XNS510	**FL4550779**	Price

Right/Left Hand - Right												
Model No.	A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MTFNR12-3B	.750	4.50	1.000	1.000	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4550738**	Price
MTFNR16-4D	1.000	6.00	1.250	1.250	TNM_43_	ITSN433	S46	NL46	CL9	XNS510	**FL4550754**	Price
MTFNR20-5D	1.250	6.00	1.375	1.500	TNM_54_	ITSN533	S58	NL58	CL12	XNS510	**FL4550778**	Price

See pages B134-B138 for spare parts

MTGN R/L Toolholders

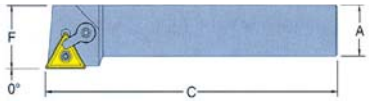
MADE IN THE USA

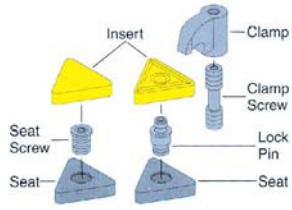
Style G

0° Side Cutting Edge Angle for Negative Triangle TNM_ Inserts

Right hand shown
Left hand opposite







Right/Left Hand - Left												
Model No.	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MTGNL08-2A	.500	4.00	.875	.625	TNM_22_	-	-	NL23	CL19	XNS36	**FL4542150**	Price
MTGNL10-3B	.625	4.50	1.000	.875	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4542190**	Price
MTGNL12-3B	.750	4.50	1.000	1.000	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4542210**	Price
MTGNL16-4D	1.000	6.00	1.375	1.250	TNM_43_	ITSN433	S46	NL46	CL9	XNS510	**FL4542270**	Price

Right/Left Hand - Right												
Model No.	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MTGNR08-2A	.500	4.00	.875	.625	TNM_22_	-	-	NL23	CL19	XNS36	**FL4542140**	Price
MTGNR10-3B	.625	4.50	1.000	.875	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4542180**	Price
MTGNR12-3B	.750	4.50	1.000	1.000	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4542200**	Price
MTGNR16-4D	1.000	6.00	1.375	1.250	TNM_43_	ITSN433	S46	NL46	CL9	XNS510	**FL4542260**	Price

See pages B134-B138 for spare parts

MTJN R/L Toolholders

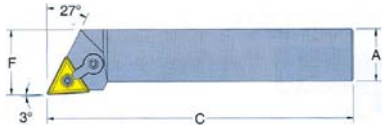
MADE IN THE USA

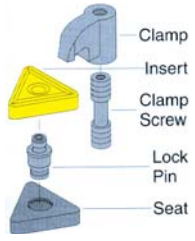
Style J

3° Side Cutting Edge Angle for Negative Triangle TNM_ Inserts

Right hand shown
Left hand opposite







Right/Left Hand - Left												
Description	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MTJNL08-2A	.500	4.00	1.000	.625	TNM_22_	-	-	NL23	CL19	XNS36	**FL4542490**	Price
MTJNL10-3B	.625	4.50	1.000	.875	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4542530**	Price
MTJNL12-3B	.750	4.50	1.000	1.000	TNM_32_	ITSN322	S34	NL34L	CL6	XNS36	**FL4542550**	Price
MTJNL16-3D	1.000	6.00	1.000	1.250	TNM_32_	ITSN322	S34	NL34L	CL6	XNS36	**FL4542570**	Price
MTJNL16-4D	1.000	6.00	1.250	1.250	TNM_43_	ITSN433	S46	NL46	CL9	XNS510	**FL4542590**	Price
MTJNL 16-5D	1.000	6.00	1.500	1.250	TNM_54_	ITSN533	S58	NL58	CL9	XNS510	**FL4542650**	Price
MTJNL20-4D	1.250	6.00	1.250	1.500	TNM_43_	ITSN433	S46	NL46	CL9	XNS510	**FL4542610**	Price
MTJNL20-5D	1.250	6.00	1.500	1.500	TNM_54_	ITSN533	S58	NL58	CL12	XNS510	**FL4542670**	Price
MTJNL24-5E	1.500	7.00	1.500	2.000	TNM_54_	ITSN533	S58	NL58	CL12	XNS510	**FL4542690**	Price
MTJNL24-6E	1.500	7.00	1.625	2.000	TNM_66_	ITSN636	S68	NL68L	CL12	XNS510	**FL4542750**	Price

Right/Left Hand - Right												
Description	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MTJNR08-2A	.500	4.00	1.000	.625	TNM_22_	-	-	NL23	CL19	XNS36	**FL4542480**	Price
MTJNR10-3B	.625	4.50	1.000	.875	TNM_32_	ITSN333	S34	NL34L	CL6	XNS36	**FL4542520**	Price
MTJNR12-3B	.750	4.50	1.000	1.000	TNM_32_	ITSN322	S34	NL34L	CL6	XNS36	**FL4542540**	Price
MTJNR16-3D	1.000	6.00	1.000	1.250	TNM_32_	ITSN322	S34	NL34L	CL6	XNS36	**FL4542560**	Price
MTJNR16-4D	1.000	6.00	1.250	1.250	TNM_43_	ITSN433	S46	NL46	CL9	XNS510	**FL4542580**	Price
MTJNR 16-5D	1.000	6.00	1.500	1.250	TNM_54_	ITSN533	S58	NL58	CL9	XNS510	**FL4542640**	Price
MTJNR20-4D	1.250	6.00	1.250	1.500	TNM_43_	ITSN433	S46	NL46	CL9	XNS510	**FL4542600**	Price
MTJNR20-5D	1.250	6.00	1.500	1.500	TNM_54_	ITSN533	S58	NL58	CL12	XNS510	**FL4542660**	Price
MTJNR24-5E	1.500	7.00	1.500	2.000	TNM_54_	ITSN533	S58	NL58	CL12	XNS510	**FL4542680**	Price
MTJNR24-6E	1.500	7.00	1.625	2.000	TNM_66_	ITSN636	S68	NL68L	CL12	XNS510	**FL4542740**	Price

See pages B134-B138 for spare parts

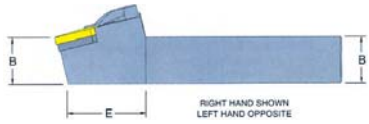
MVJN R/L Toolholders

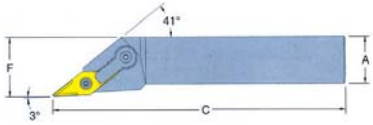
MADE IN THE USA

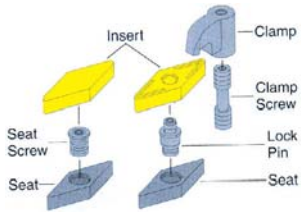
Style J

Negative 3° Side Cutting Edge Angle for Negative 35° Diamond VNM_ Inserts

Right hand shown
Left hand opposite







Right/Left Hand - Left												
Model No.	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MVJNL12-3B	.750	4.50	1.750	1.000	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4542770**	Price
MVJNL16-3C	1.000	5.00	1.750	1.250	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4542790**	Price
MVJNL16-3D	1.000	6.00	1.750	1.250	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4542810**	Price
MVJNL16-4D	1.000	6.00	2.125	1.250	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4542910**	Price
MVJNL20-3D	1.250	6.00	1.750	1.500	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4542830**	Price
MVJNL20-4D	1.250	6.00	2.125	1.500	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4542930**	Price
MVJNL24-4E	1.500	7.00	2.125	2.000	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4542950**	Price

Right/Left Hand - Right												
Model No.	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MVJNR12-3B	.750	4.50	1.750	1.000	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4542760**	Price
MVJNR16-3C	1.000	5.00	1.750	1.250	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4542780**	Price
MVJNR16-3D	1.000	6.00	1.750	1.250	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4542800**	Price
MVJNR16-4D	1.000	6.00	2.125	1.250	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4542900**	Price
MVJNR20-3D	1.250	6.00	1.750	1.500	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4542820**	Price
MVJNR20-4D	1.250	6.00	2.125	1.500	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4542920**	Price
MVJNR24-4E	1.500	7.00	2.125	2.000	VNM_43_	IVSN433	S46	NL46	CL30	XNS510	**FL4542940**	Price

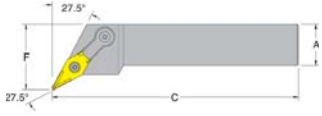
See pages B134-B138 for spare parts

MVTN R/L Toolholders

Style N

Negative 27.5° End Cutting Edge Angle for Negative 35° Diamond VNM_ Inserts

Right hand shown, Left hand opposite





Right/Left Hand - Left												
Model No.	A & B (in.)	C (in.)	E (in.)	F (in.)	Inset Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MVTNL16-3D	1.000	6.00	1.625	1.250	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4542954**	Price
MVTNL20-3D	1.250	6.00	1.625	1.500	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4551147**	Price

Right/Left Hand - Right												
Model No.	A & B (in.)	C (in.)	E (in.)	F (in.)	Inset Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MVTNR16-3D	1.000	6.00	1.625	1.250	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4542953**	Price
MVTNR20-3D	1.250	6.00	1.625	1.500	VNM_33_	IVSN322	S34	NL34L	CL30	XNS510	**FL4551146**	Price

See pages B134-B138 for spare parts

MWLN R/L Toolholders

MADE IN THE USA

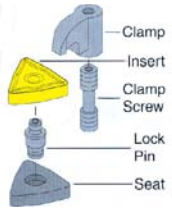
Style L

Negative 5° End or Side Cutting Edge Angle for Negative 80° Trigon WNM_ Inserts

Right hand shown
Left hand opposite







Right/Left Hand - Left												
Model No.	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MWLNL 12-3B	.750	4.50	1.000	1.000	WNM_33_	IWSN322	S34	NL34L	CL6	XNS36	**FL4542970**	Price
MWLNL 12-4B	.750	4.50	1.250	1.000	WNM_43_	IWSN432	S46	NL46	CL9	XNS59	**FL4542990**	Price
MWLNL 16-4D	1.000	6.00	1.250	1.250	WNM_43_	IWSN432	S46	NL46	CL9	XNS59	**FL4543010**	Price
MWLNL 20-4D	1.250	6.00	1.250	1.500	WNM_43_	IWSN432	S46	NL46	CL9	XNS59	**FL4543030**	Price

Right/Left Hand - Right												
Model No.	A x B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Seat	Optional Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
MWLNR 12-3B	.750	4.50	1.000	1.000	WNM_33_	IWSN322	S34	NL34L	CL6	XNS36	**FL4542960**	Price
MWLNR 12-4B	.750	4.50	1.250	1.000	WNM_43_	IWSN432	S46	NL46	CL9	XNS59	**FL4542980**	Price
MWLNR 16-4D	1.000	6.00	1.250	1.250	WNM_43_	IWSN432	S46	NL46	CL9	XNS59	**FL4543000**	Price
MWLNR 20-4D	1.250	6.00	1.250	1.500	WNM_43_	IWSN432	S46	NL46	CL9	XNS59	**FL4543020**	Price

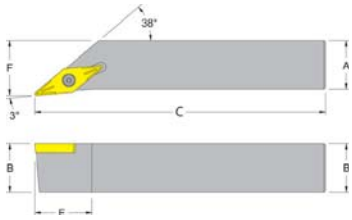
See pages B134-B138 for spare parts

SVJB R/L Toolholders

Style J

Negative 3° Cutting Edge Angle for 5° Positive 35° Diamond VB_T Inserts

Right hand shown, left hand opposite



A & B (in.)	C (in.)	E (in.)	F (in.)	Insert Style	Torx Screw	Left			Right		
						Description	Order No.	Price	Description	Order No.	Price
.750	4.50	1.250	1.000	VC_T 33_	TS478M1	SVJBL12-3B	**FL4544220**	Price	SVJBR12-3B	**FL4544210**	Price
1.000	6.00	1.250	1.250	VC_T 33_	TS478M1	SVJBL16-3D	**FL4544240**	Price	SVJBR16-3D	**FL4544230**	Price

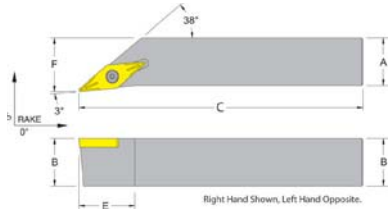
See pages B134-B138 for spare parts

SVJC R/L Toolholders

Style J

Negative 3° Cutting Edge Angle for 7° Positive 35° Diamond VC_T Inserts

Right hand shown, left hand opposite



A & B (in.)	C (in.)	E (in.)	Insert Style	Torx Screw	Left			Right		
					Model No.	Order No.	Price	Model No.	Order No.	Price
.500	4.00	1.000	VC_T 22_	TS25458M2	SVJCL08-2A	**FL4552033**	Price	SVJCR08-2A	**FL4552032**	Price
.625	4.50	1.000	VC_T 22_	TS25458M2	-	**-**	-	SVJCR10-2B	**FL4552036**	Price
.750	4.50	1.250	VC_T 33	TS4710M1	-	**-**	-	SVJCR12-3B	**FL4552040**	Price
1.000	6.00	1.250	VC_T 33_	TS4710M1	SVJCL16-3D	**FL4552049**	Price	SVJCR16-3D	**FL4552048**	Price

See pages B134-B138 for spare parts

ULTRA-DEX SVTBR/L Undercut & Profiling Toolholders

Positive 35° Diamond (-27.5° Lead) • No Coolant

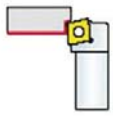


A & B (in.)	C (in.)	F (in.)	Uses Insert	Insert Screw	Left			Right		
					Description	Order No.	Price	Description	Order No.	Price
1	4.50	.935	VBMT 331	MTS 3.5L	SVTBL 16-3D	**FG5512852**	Price	SVTBR 16-3D	**FG5512858**	Price
3/4	4.50	.935	VBMT 21.51	MTS 2.5L	SVTBL 12-2B	**FG5512849**	Price	SVTBR 12-2B	**FG5512854**	Price
3/4	4.50	.935	VBMT 331	MTS 3.5L	SVTBL 12-3B	**FG5512850**	Price	SVTBR 12-3B	**FG5512856**	Price

MICRO 100 Multi-Purpose Sets

Turning & Facing Without Coolant

- Each holder includes high precision M2.5 x T-8 torx screw and torx key







Square Shank Size 6 Pcs. (in.)	Round Shank Size 1 Pc.	Set Includes	Order No.	Price
1/4	1/4	Set of 7 Pcs., 1 ea. SCLCR, SCLCL, SCBCR, SCKCR, SCMCN, SCSCR, SCLCR	**GE45407101**	Price
5/16	1/4	Set of 7 Pcs., 1 ea. SCLCR, SCLCL, SCBCR, SCKCR, SCMCN, SCSCR, SCLCR	**GE45407102**	Price
3/8	5/16	Set of 7 Pcs., 1 ea. SCLCR, SCLCL, SCBCR, SCKCR, SCMCN, SCSCR, SCLCR	**GE45407103**	Price
1/2	3/8	Set of 7 Pcs., 1 ea. SCLCR, SCLCL, SCBCR, SCKCR, SCMCN, SCSCR, SCLCR	**GE45407104**	Price
5/8	1/2	Set of 7 Pcs., 1 ea. SCLCR, SCLCL, SCBCR, SCKCR, SCMCN, SCSCR, SCLCR	**GE45407105**	Price

RAPIDKUT Tool Holder and Insert Kits

- Kit comes complete with (1) tool holder and (10) coated inserts
- Inserts are grade PT1225 and are used for medium machining applications in steel





Holder Style	Shank Size (in.)	OAL (in.)	Insert Style	Order No.	Price
MCLNR164D	1.00	6.00	CNMG 432	**ME2010020**	Price
MDJNR164D	1.00	6.00	DNMG 432	**ME2010025**	Price
MWLNR164D	1.00	6.00	WNMG 432	**ME2010030**	Price

7 Pc. Turning and Boring Sets

- Consists of 1) of each SCLCR, SCLCL, SCBCR, SCKCR, SCMCN, SCSCR and SCLCR toolholders, boring bar, inserts, screws, and key
- CCMT 21.51 coated inserts are used for general machining applications in steel
- Includes case



Tool Holder Shank	Boring Bar Shank	Order No.	Price
5/16	1/4	**FL5230300**	Price
3/8	5/16	**FL5230400**	Price
1/2	3/8	**FL5230500**	Price

Indexable Carbide Turning Tools & Accessories

Style	Shank Size (in.)	OAL (in.)	I.C. (in.)	Uses Insert Style	Borite Order No.	Borite Price	Quality Import Order No.	Quality Import Price
AL6	3/8 x 3/8	2-1/2	1/4	TT221	**GA52AL6**	Price	**FL5220040**	Price
AL8	1/2 x 1/2	3-1/2	3/8	TT321	**GA52AL8**	Price	**FL5220050**	Price
AL10	5/8 x 5/8	4	3/8	TT321	**GA52AL10**	Price	**FL5220000**	Price
AL12	3/4 x 3/4	4-1/2	3/8	TT321	**GA52AL12**	Price	**FL5220010**	Price
AL16	1 x 1	6	1/2	TT431	**GA52AL16**	Price	**FL5220030**	Price
AR6	3/8 x 3/8	2-1/2	1/4	TT221	**GA52AR6**	Price	**FL5220090**	Price
AR8	1/2 x 1/2	3-1/2	3/8	TT321	**GA52AR8**	Price	**FL5220100**	Price
AR10	5/8 x 5/8	4	3/8	TT321	**GA52AR10**	Price	**FL5220060**	Price
AR12	3/4 x 3/4	4-1/2	3/8	TT321	**GA52AR12**	Price	**FL5220070**	Price
AR16	1 x 1	6	1/2	TT431	**GA52AR16**	Price	**FL5220080**	Price
BL6	3/8 x 3/8	2-1/2	1/4	TT221	**GA52BL6**	Price	**FL5220140**	Price
BL8	1/2 x 1/2	3-1/2	3/8	TT321	**GA52BL8**	Price	**FL5220150**	Price
BL10	5/8 x 5/8	4	3/8	TT321	**GA52BL10**	Price	**FL5220110**	Price
BL12	3/4 x 3/4	4-1/2	3/8	TT321	**GA52BL12**	Price	**FL5220120**	Price
BL16	1 x 1	6	1/2	TT431	**GA52BL16**	Price	**FL5220130**	Price
BR6	3/8 x 3/8	2-1/2	1/4	TT221	**GA52BR6**	Price	**FL5220190**	Price
BR8	1/2 x 1/2	3-1/2	3/8	TT321	**GA52BR8**	Price	**FL5220200**	Price
BR10	5/8 x 5/8	4	3/8	TT321	**GA52BR10**	Price	**FL5220160**	Price
BR12	3/4 x 3/4	4-1/2	3/8	TT321	**GA52BR12**	Price	**FL5220170**	Price
BR16	1 x 1	6	1/2	TT431	**GA52BR16**	Price	**FL5220180**	Price
E6	3/8 x 3/8	2-1/2	1/4	TT221	**GA52E6**	Price	**FL5220230**	Price
E8	1/2 x 1/2	3-1/2	3/8	TT321	**GA52E8**	Price	**FL5220240**	Price
E10	5/8 x 5/8	4	3/8	TT321	**GA52E10**	Price	**FL5220250**	Price
E12	3/4 x 3/4	4-1/2	3/8	TT321	**GA52E12**	Price	**FL5220210**	Price
E16	1 x 1	6	1/2	TT431	**GA52E16**	Price	**FL5220220**	Price

Use 7° inserts for FL52 tool bits
Use 11° inserts for GA52 Borite

- **Efficiency:**
  A versatile and economical way to replace carbide tipped tool bits. Each tool cuts right, left, or plunges. Positive rake cutting and built-in chip breaker groove.
- Style AL - Left hand - suitable for facing to a square shoulder
- Style AR - Right hand - suitable for machining to a 90° square shoulder
- Style BR - Right hand 15° lead angle - for rough turning where a square shoulder is not required
- Style BL - Left hand 15° lead angle - for rough facing to center or where no shoulder is needed
- Style E - Neutral threading tool 60° included angle; used for U.S. standard universal threading. V-grooving, chamfering, turning, boring and facing



Indexable Carbide Turning Sets

- Sets include: 1 ea. same shank size AR, AL, BR, BL, & E.
- Note: Import sets do not include inserts

SQ (in.)	OAL (in.)	I.C. Insert (in.)	Borite Order No.	Borite Price	Quality Import Order No.	Quality Import Price
3/8 x 3/8	2-1/2	1/4	**GA52BICT6**	Price	**FL5220290**	Price
1/2 x 1/2	3-1/2	3/8	**GA52BICT8**	Price	**FL5220260**	Price
5/8 x 5/8	4	3/8	**GA52BICT10**	Price	**FL5220300**	Price
3/4 x 3/4	4-1/2	3/8	**GA52BICT12**	Price	**FL5220280**	Price
1 x 1	6	1/2	**GA52BICT16**	Price	**FL5220270**	Price



Replacement Screws

Item No.	Used With	Insert I.C. (in.)	Borite Order No.	Borite Price	Quality Import Order No.	Quality Import Price
SB2	6A	1/4	**GA526SCREW**	Price	**FL5220320**	Price
SB6	8A, 10A, 12A	3/8	**GA528SCREW**	Price	**FL5220330**	Price
SB10	16A	1/2	**GA5216SCREW**	Price	**FL5220310**	Price

Carbide Grades
PC2 - (C-2) general purpose for cast iron and non-ferrous metals (exotics)
PC5 - (C-5) steel cutting
PC300 - (C-5 coated) TiN-TiC-TiN steel cutting at higher speeds with greater lubricity

Carbide Inserts

Carbide Grades
PC2 - (C-2) general purpose for cast iron and non-ferrous metals (exotics)
PC5 - (C-5) steel cutting
PC300 - (C-5 coated) TiN-TiC-TiN steel cutting at higher speeds with greater lubricity

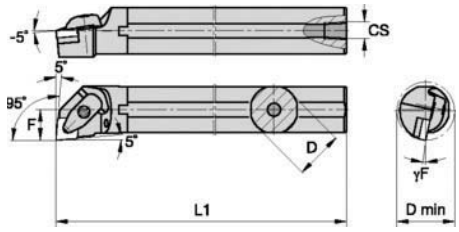
Insert Style	I.C. (in.)	Radius	11° Positive Rake for Borite Tool Bits: PC2 Order No.	PC2 Price	PC5 Order No.	PC5 Price	PC300 Order No.	PC300 Price	7° Positive Rake - Triangle For FL52 Tool Bits: PC2 Order No.	PC2 Price	PC5 Order No.	PC5 Price	PC300 Order No.	PC300 Price
TT 221	1/4	.016	**FF4842000**	Price	**FF4842020**	Price	**FF4842010**	Price	**FF4840000**	Price	**FF4840020**	Price	**FF4840010**	Price
TT 222	1/4	.031	**FF4842030**	Price	**FF4842050**	Price	**FF4842040**	Price	**FF4840030**	Price	**FF4840050**	Price	**FF4840040**	Price
TT 321	3/8	.016	**FF4842060**	Price	**FF4842080**	Price	**FF4842070**	Price	**FF4840060**	Price	**FF4840080**	Price	**FF4840070**	Price
TT 322	3/8	.031	**FF4842090**	Price	**FF4842110**	Price	**FF4842100**	Price	**FF4840090**	Price	**FF4840110**	Price	**FF4840100**	Price
TT 323	3/8	.047	**-**	-	**-**	-	**FF4842130**	Price	**-**	-	**FF4840140**	Price	**FF4840130**	Price
TT 431	1/2	.016	**FF4842150**	Price	**FF4842170**	Price	**FF4842160**	Price	**FF4840150**	Price	**FF4840170**	Price	**FF4840160**	Price
TT 432	1/2	.031	**FF4842180**	Price	**-**	-	**FF4842190**	Price	**-**	-	**FF4840200**	Price	**FF4840190**	Price
TT 433	1/2	.047	**-**	-	**FF4842240**	Price	**FF4842230**	Price	**FF4840210**	Price	**-**	-	**FF4840230**	Price

RAPIDKUT Clamp Style Boring Bars

Steel Shank • Coolant Thru • Style DCLNR

- 1/4-18 NPT Coupling size
- Right hand shown, left hand opposite





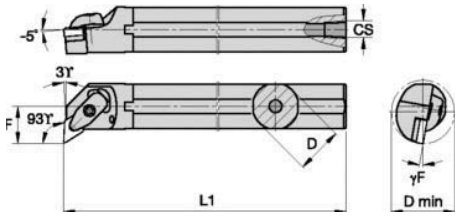
D Shank Dia.	D min Minimum Bore	F	Lead Angle	L1 OAL	Uses Insert	Shim	Shim Screw	Clamp	Clamp Screw	Left			Right		
										Model No.	Order No.	Price	Model No.	Order No.	Price
1.000	1.200	.640	95	10.000	CN_ _432	ICSN433	PBSS4	PBCL4	PBCS4	A16SDCLNL4	**ME2335125**	Price	A16SDCLNR4	**ME2335120**	Price
1.250	1.470	.765	95	14.000	CN_ _432	ICSN433	PBSS4	PBCL4	PBCS4	A20UDCLNL4	**ME2335145**	Price	A20UDCLNR4	**ME2335140**	Price
1.500	1.760	.890	95	14.000	CN_ _432	ICSN433	PBSS4	PBCL4	PBCS4	A24UDCLNL4	**ME2335165**	Price	A24UDCLNR4	**ME2335160**	Price
2.000	2.400	1.281	95	16.000	CN_ _432	ICSN433	PBSS4	PBCL4	PBCS4	A32VDCLNL4	**ME2335185**	Price	A32VDCLNR4	**ME2335180**	Price
2.000	2.400	1.281	95	16.000	CN_ _543	ICSN533	PBSS5	PBCL5	PBCS5	A32VDCLNL5	**ME2335205**	Price	A32VDCLNR5	**ME2335200**	Price
2.500	3.030	1.531	95	16.000	CN_ _543	ICSN533	PBSS5	PBCL5	PBCS5	A40VDCLNL5	**ME2335225**	Price	A40VDCLNR5	**ME2335220**	Price
2.500	3.030	1.531	95	16.000	CN_ _643	ICSN633	PBSS6	PBCL6	PBCS6	A40VDCLNL6	**ME2335245**	Price	A40VDCLNR6	**ME2335240**	Price

RAPIDKUT Clamp Style Boring Bars

Steel Shank • Coolant Thru • Style DDUNR

- 1/4-18 NPT Coupling size
- Right hand shown, left hand opposite





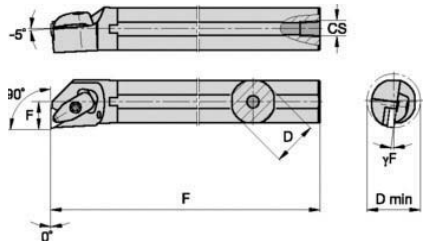
D Shank Dia.	D min Minimum Bore	F	Lead Angle	L1 OAL	Uses Insert	Shim	Shim Screw	Clamp	Clamp Screw	Left			Right		
										Model No.	Order No.	Price	Model No.	Order No.	Price
1.500	2.000	1.125	93	14.000	DN_ _432	IDSN443	PBSS4	PBCL4	PBCS4	A24UDDUNL4	**ME2335265**	Price	A24UDDUNR4	**ME2335260**	Price
2.000	2.500	1.375	93	16.000	DN_ _432	IDSN443	PBSS4	PBCL4	PBCS4	A32VDDUNL4	**ME2335285**	Price	A32VDDUNR4	**ME2335280**	Price

RAPIDKUT Clamp Style Boring Bars

Steel Shank • Coolant Thru • Style DTFNR

- 1/4-18 NPT Coupling size
- Right hand shown, left hand opposite





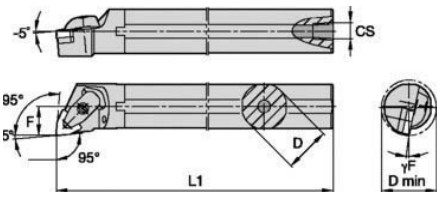
D Shank Dia.	D min Minimum Bore	F	Lead Angle	L1 OAL	Uses Insert	Shim	Shim Screw	Clamp	Clamp Screw	Left			Right		
										Model No.	Order No.	Price	Model No.	Order No.	Price
1.250	1.470	.765	93	14.000	TN_ _332	-	PBSS3	PBCL3	PBCS3	A20UDTFNL3	**ME2335305**	Price	A20UDTFNR3	**ME2335300**	Price
1.500	1.760	.890	90	14.000	TN_ _432	ITSN423	PBSS4	PBCL4	PBCS4	A24UDTFNL4	**ME2335325**	Price	A24UDTFNR4	**ME2335320**	Price
2.000	2.400	1.281	90	16.000	TN_ _432	ITSN433	PBSS4	PBCL4	PBCS4	A32VDTFNL4	**ME2335345**	Price	A32VDTFNR4	**ME2335340**	Price
2.000	2.400	1.281	90	16.000	TN_ _543	ITSN533	PBSS5	PBCL5	PBCS5	A32VDTFNL5	**ME2335365**	Price	A32VDTFNR5	**ME2335360**	Price
2.500	3.030	1.531	90	16.000	TN_ _643	ITSN633	PBSS6	PBCL6	PBCS6	A40VDTFNL6	**ME2335385**	Price	A40VDTFNR6	**ME2335380**	Price

RAPIDKUT Clamp Style Boring Bars

Steel Shank • Coolant Thru • Style DWLNR

- 1/4-18 NPT Coupling size
- Right hand shown, left hand opposite





D Shank Dia.	D min Minimum Bore	F	Lead Angle	L1 OAL	Uses Insert	Shim	Shim Screw	Clamp	Clamp Screw	Left			Right		
										Model No.	Order No.	Price	Model No.	Order No.	Price
1.500	1.760	.890	95	14.000	WN_ _432	IWSN433	PBSS4	PBCL4	PBCS4	A24UDWLNL4	**ME2335405**	Price	A24UDWLNR4	**ME2335400**	Price
2.000	2.400	1.281	95	16.000	WN_ _432	IWSN433	PBSS4	PBCL4	PBCS4	A32VDWLNL4	**ME2335425**	Price	A32VDWLNR4	**ME2335420**	Price

RAPIDKUT Steel Boring Bars





SCLC Style
- Positive 80°
- Uses CCMT style inserts

SDUC Style
- Positive 55°
- Uses DCMT style inserts

STFC Style
- Positive 60°
- Uses TCMT style inserts

Right hand shown

Type - SCLC

Shank Dia. (in.)	Min. Bore	OAL (in.)	Use Insert	Screw	Wrench	Left			Right		
						Model No.	Order No.	Price	Model No.	Order No.	Price
5/16	.3350	4.000	CCMT 21.5_	TX25	CT08	S05HSCLCL2	**ME1210125**	Price	S05HSCLCR2	**ME1210100**	Price
3/8	.4130	4.500	CCMT 21.5_	TX25	CT08	S06JSCLCL2	**ME1210130**	Price	S06JSCLCR2	**ME1210105**	Price
1/2	.5400	5.000	CCMT 21.5_	TX25	CT08	S08KSCLCL2	**ME1210135**	Price	S08KSCLCR2	**ME1210110**	Price
5/8	.6650	6.000	CCMT 21.5_	TX25	CT08	S10MSCLCL2	**ME1210140**	Price	S10MSCLCR2	**ME1210115**	Price
5/8	.7500	8.000	CCMT 32.5_	TX35	CT15	S10RSCLCL3	**ME1220009**	Price	S10RSCLCR3	**ME1220007**	Price
3/4	1.0000	10.000	CCMT 32.5_	TX25	CT08	S12SSCLCL3	**ME1210145**	Price	S12SSCLCR3	**ME1210120**	Price
1	1.2500	12.000	CCMT 32.5_	TX35	CT15	S16TSCLCL3	**ME1210146**	Price	S16TSCLCR3	**ME1210122**	Price

Type - SDUC

Shank Dia. (in.)	Min. Bore	OAL (in.)	Use Insert	Screw	Wrench	Left			Right		
						Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	.4130	4.500	DCMT 21.5_	TX25	CT08	S06JSDUCL2	**ME1210165**	Price	S06JSDUCR2	**ME1210150**	Price
1/2	.5400	5.000	DCMT 21.5_	TX25	CT08	S08KSDUCL2	**ME1210170**	Price	S08KSDUCR2	**ME1210151**	Price
5/8	.6650	6.000	DCMT 21.5_	TX25	CT08	S10MSDUCL2	**ME1210175**	Price	S10MSDUCR2	**ME1210155**	Price
5/8	.7500	8.000	DCMT 21.5_	TX25	CT08	S10RSDUCL2	**ME1210136**	Price	S10RSDUCR2	**ME1210156**	Price
3/4	1.0000	10.000	DCMT 32.5_	TX25	CT08	S12SSDUCL3	**ME1210180**	Price	S12SSDUCR3	**ME1210160**	Price
1	1.2500	12.000	DCMT 32.5_	TX35	CT15	S16TSDUCL3	**ME1210162**	Price	S16TSDUCR3	**ME1210182**	Price

Type - STFC

Shank Dia. (in.)	Min. Bore	OAL (in.)	Use Insert	Screw	Wrench	Left			Right		
						Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	.4130	4.500	TCMT 21.5_	TX25	CT08	S06JSTFCL2	**ME1210185**	Price	S06JSTFCR2	**ME1210190**	Price
1/2	.5400	5.000	TCMT 21.5_	TX25	CT08	S08KSTFCL2	**ME1210195**	Price	S08KSTFCR2	**ME1210200**	Price
5/8	.6650	6.000	TCMT 21.5_	TX25	CT08	S10MSTFCL2	**ME1210205**	Price	S10MSTFCR2	**ME1210210**	Price
5/8	.7500	8.000	TCMT 32.5_	TX35	CT15	S10RSTFCL3	**ME1210215**	Price	S10RSTFCR3	**ME1210220**	Price
3/4	1.0000	10.000	TCMT 32.5_	TX35	CT15	S12SSTFCL3	**ME1210225**	Price	S12SSTFCR3	**ME1210230**	Price
1	1.2500	12.000	TCMT 32.5_	TX35	CT15	S16TSTFCL3	**ME1210235**	Price	S16TSTFCR3	**ME1210240**	Price

RAPIDKUT Coolant Thru Steel Boring Bars

SCLC Style
- Positive 80°
- Uses CCMT style inserts

SDUC Style
- Positive 55°
- Uses DCMT style inserts

STFC Style
- Positive 60°
- Uses TCMT style inserts



Right hand shown

Type - SCLC

Shank Dia.	Min. Bore	OAL (in.)	Use Insert	Screw	Wrench	Left			Right		
						Model Number	Order No.	Price	Model Number	Order No.	Price
.312	.335	4.000	CCMT 21.5_	TX25	CT08	A05HSCLCL2	**ME1210002**	Price	A05HSCLCR2	**ME1210001**	Price
.375	.413	4.500	CCMT 21.5_	TX25	CT08	A06JSCLCL2	**ME1210003**	Price	A06JSCLCR2	**ME1210006**	Price
.500	.540	5.000	CCMT 21.5_	TX25	CT08	A08KSCLCL2	**ME1210011**	Price	A08KSCLCR2	**ME1210016**	Price
.625	.665	6.000	CCMT 21.5_	TX25	CT08	A10MSCLCL2	**ME1210021**	Price	A10MSCLCR2	**ME1220026**	Price
.625	.750	8.000	CCMT 32.5_	TX35	CT15	A10RSCLCL3	**ME1220017**	Price	A10RSCLCR3	**ME1220019**	Price
.750	1.000	10.000	CCMT 32.5_	TX35	CT15	A12SSCLCL3	**ME1210036**	Price	A12SSCLCR3	**ME1210038**	Price
1.000	1.250	12.000	CCMT 32.5_	TX35	CT15	A16TSCLCL3	**ME1210032**	Price	A16TSCLCR3	**ME1210037**	Price

Type - SDUC

Shank Dia.	Min. Bore	OAL (in.)	Use Insert	Screw	Wrench	Left			Right		
						Model Number	Order No.	Price	Model Number	Order No.	Price
.375	.413	4.500	DCMT 21.5_	TX25	CT08	A06JSDUCL2	**ME1210041**	Price	A06JSDUCR2	**ME1210046**	Price
.500	.540	5.000	DCMT 21.5_	TX25	CT08	A08KSDUCL2	**ME1210051**	Price	A08KSDUCR2	**ME1210056**	Price
.625	.665	6.000	DCMT 21.5_	TX25	CT08	A10MSDUCL2	**ME1210061**	Price	A10MSDUCR2	**ME1210066**	Price
.625	.750	8.000	DCMT 21.5_	TX25	CT08	A10RSDUCL2	**ME1210068**	Price	A10RSDUCR2	**ME1210069**	Price
.750	1.000	10.000	DCMT 32.5_	TX35	CT15	A12SSDUCL3	**ME1210071**	Price	A12SSDUCR3	**ME1210077**	Price
1.000	1.250	12.000	DCMT 32.5_	TX35	CT15	A16TSDUCL3	**ME1210078**	Price	A16TSDUCR3	**ME1210079**	Price

Type - STFC

Shank Dia.	Min. Bore	OAL (in.)	Use Insert	Screw	Wrench	Left			Right		
						Model Number	Order No.	Price	Model Number	Order No.	Price
.375	.413	4.500	TCMT 21.5_	TX25	CT08	A06JSTFCL2	**ME1210245**	Price	A06JSTFCR2	**ME1210250**	Price
.500	.540	5.000	TCMT 21.5_	TX25	CT08	A08KSTFCL2	**ME1210255**	Price	A08KSTFCR2	**ME1210260**	Price
.625	.665	6.000	TCMT 21.5_	TX25	CT08	A10MSTFCL2	**ME1210265**	Price	A10MSTFCR2	**ME1210270**	Price
.625	.750	8.000	TCMT 32.5_	TX35	CT15	A10RSTFCL3	**ME1210275**	Price	A10RSTFCR3	**ME1210280**	Price
.750	1.000	10.000	TCMT 32.5_	TX35	CT15	A12SSTFCL3	**ME1210285**	Price	A12SSTFCR3	**ME1210290**	Price
1.000	1.250	12.000	TCMT 32.5_	TX35	CT15	A16TSTFCL3	**ME1210295**	Price	A16TSTFCR3	**ME1210300**	Price

RAPIDKUT Solid & Coolant Thru Boring Bar Kits

- Uses CCMT, DCMT or TCMT 21.5_ inserts
- Inserts sold separately
- Coolant-thru and non coolant-thru available

Description	Set Includes	Uses Insert Style	Order No.	Price
Kit of 4 SCLCR Steel Boring Bars	S05HSCLCR2, S06JSCLCR2, S08KSCLCR2, S10MSCLCR2	CCMT	**ME1220005**	Price
Kit of 3 SDUCR Steel Boring Bars	S06JSDUCR2, S08KSDUCR2, S10MSDUCR2	DCMT	**ME1220000**	Price
Kit of 3 STFCR Steel Boring Bars	S06JSTFCR2, S08KSTFCR2, S10MSTFCR2	TCMT	**ME1220020**	Price
Kit of 4 SCLCR Coolant Thru Steel Boring Bars	A05HSCLCR2, A06JSCLCR2, A08KSCLCR2, A10MSCLCR2	CCMT	**ME1220015**	Price
Kit of 3 SDUCR Coolant Thru Steel Boring Bars	A06JSDUCR2, A08KSDUCR2, A10MSDUCR2	DCMT	**ME1220010**	Price
Kit of 3 STFCR Coolant Thru Steel Boring Bars	A06JSTFCR2, A08KSTFCR2, A10MSTFCR2	TCMT	**ME1220030**	Price



RAPIDKUT Boring Bar Kits

- Kit includes bar and 10 inserts
- 80° SCLC Style
- Uses CCMT21.51 or CCMT32.51 inserts
- All right hand
- Steel shank – coolant thru

Shank Dia. (in.)	Min. Bore (in.)	OAL (in.)	Model No.	Uses Insert	Order No.	Price
.375	.470	4.500	A06JSCLCR2	CCMT21.5_	**ME2010035**	Price
.500	.550	5.000	A08KSCLCR2	CCMT21.5_	**ME2010040**	Price
5/8	.7000	6.0000	A10MSCLCR2	CCMT21.5_	**ME2010045**	Price
.750	1.000	10.000	A12SSCLCR3	CCMT32.5_	**ME2010050**	Price

Replacement inserts - CCMT2151 grade PT1225 (order no. RE1010020, CCMT32.51 grade PT1225 (order no. RE1010060)
Material application: steel, stainless steel, cast iron and hi-temp alloys



RAPIDKUT Spare Parts

Model Number	Type	Order No.	Price
VS12	Clamp	**ME1490012**	Price
1240	Insert Screw	**ME1490005**	Price
1425	Insert Screw	**ME1490010**	Price
1440	Insert Screw	**ME1490015**	Price
TX25	Insert Screw	**ME1490100**	Price
TX25C	Insert Screw	**ME1490105**	Price
TX35	Insert Screw	**ME1490110**	Price
TX35L	Insert Screw	**ME1490115**	Price

Model Number	Type	Order No.	Price
TX40G	Insert Screw	**ME1490540**	Price
TX50	Insert Screw	**ME1490500**	Price
SSE10.3	Shim	**ME1490102**	Price
VF3	Shim Screw	**ME1490300**	Price
CHT4	Screwdriver	**ME1490400**	Price
CT08	Torx Driver	**ME1490120**	Price
CT15	Torx Driver	**ME1490125**	Price
CT20	Torx Driver	**ME1490220**	Price

RAPIDKUT Boring Bar Inserts

Popular Sizes for Boring Bars



Model No.	Grade	IC (in.)	Thickness (in.)	Radius (in.)	Order No.	Price
CCMT 21.51-F41	PT1225	1/4	.094	.016	**RE1010020**	Price
CCMT 32.51-F41	PT1115	3/8	.156	.016	**RE1010050**	Price
CCMT 32.51-M51	PT1225	3/8	.156	.016	**RE1010090**	Price
CCMT 32.52-F41	PT1225	3/8	.156	.031	**RE1010130**	Price
CCMT 32.52-M51	PT1225	3/8	.156	.031	**RE1010160**	Price
DCMT 21.51-R52	PT1115	1/4	.094	.016	**RE1010720**	Price
DCMT 32.51-F41	PT1115	3/8	.156	.016	**RE1010740**	Price
DCMT 32.51-M51	PT1225	3/8	.156	.016	**RE1010780**	Price

Model No.	Grade	IC (in.)	Thickness (in.)	Radius (in.)	Order No.	Price
DCMT 32.52-F41	PT1225	3/8	.156	.031	**RE1010830**	Price
DCMT 32.52-M51	PT1225	3/8	.156	.031	**RE1010860**	Price
TCMT 21.51-R52	PT1225	1/4	.094	.016	**RE1011540**	Price
TCMT 32.51-F41	PT1225	3/8	.156	.016	**RE1011560**	Price
TCMT 32.51-M51	PT1225	3/8	.156	.016	**RE1011590**	Price
TCMT 32.52-F41	PT1225	3/8	.156	.031	**RE1011610**	Price
TCMT 32.52-M51	PT1225	3/8	.156	.031	**RE1011640**	Price

See pages B1 - B3 for technical information

ALLIED MACHINE & ENGINEERING CORP Criterion TFX & CFX Boring Bars

Steel Shank



- Designed to accept either a flat top or a chip-controlled insert
- These bars are equally effective for internal bores as well as OD turning.
- The offset head permits an easy disposal of chips and a more than adequate coolant flow
- Features ground shank diameter for use in round holders and four flats for use on a flat surface — such as a turret-post holder
- When held in a round holder their 3-point contact assures solid clamping and maximum holding power and the set screw flats place the cutting edge on the exact centerline of the bar

Model No.	Shank Dia. A (in.)	Min. Bore D (in.)	OAL B (in.)	Insert I.C. (in.)	Uses Insert Style	Center Height	Insert Screw	Screw Wrench	Order No.	Price
CFX-0500	1/2	3/4	6	1/4	CP_ _	.380	SN-89TX	T7	**GE60CFX500**	Price
TFX-0500	1/2	3/4	6	1/4	TP_ _	.370	SN-116TX	T7	**GE60TFX500**	Price
CFX-0750	3/4	1	8	3/8	CP_ _	.500	TXS-009-1	T15	**GE60CFX750**	Price
TFX-0750	3/4	1	8	3/8	TP_ _	.500	SN-100TX	T20	**GE60TFX750**	Price
CFX-1000	1	1-3/8	10	3/8	CP_ _	.690	SN-59TX	T15	**GE60CFX1000**	Price
TFX-1000	1	1-3/8	10	3/8	TP_ _	.690	SN-100TX	T20	**GE60TFX1000**	Price

PROCUT Inserts



Grade Info

PC300 – C5 Coated TiN-TiC-TiN insert designed for steel cutting at higher speeds with greater lubricity

PC5 – General purpose steel cutting grade

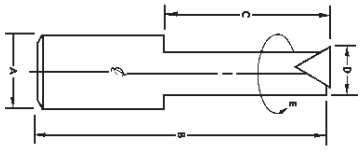
				PC5		PC300	
Item	IC (in.)	R (in.)	T (in.)	Order No.	Price	Order No.	Price
CPMT 21.51	1/4	.016	.094	**FF4830050**	Price	**FF4850050**	Price
CPMT 32.51	3/8	.016	.156	**FF4830055**	Price	**FF4850055**	Price
CCMT 432	1/2	.031	.187	**FF4850040**	Price	**FF4830040**	Price

				PC5		PC300	
Item	IC (in.)	R (in.)	T (in.)	Order No.	Price	Order No.	Price
TPGT 21.51	1/4	.016	.094	**FF4834000**	Price	**-**	-
TPGT 321	3/8	.016	.125	**FF4834005**	Price	**FF4854005**	Price
TPGT 322	3/8	.031	.125	**FF4831040**	Price	**FF4854010**	Price

BORITE Borite Boring Bars

The ultimate in boring tools for fine precision tool room or production boring work.

- 3-Position ground cutting edges
- Reliability within ±.001”
- Choice of carbide grades
- All bars use 1/4” IC TT style inserts 11° positive



Shank Dia. A (in.)	OAL B (in.)	Bore Depth C (in.)	Min. Bore Depth D (in.)	Order No.	Price
1/2	2-3/4	1-1/4	7/16	**FL517SB**	Price
1/2	3	1-1/2	1/2	**FL518SB**	Price
1/2	3-5/8	2-1/8	7/16	**FL517LB**	Price
1/2	4	2-1/2	1/2	**FL518LB**	Price
5/8	3	1-1/4	7/16	**FL517SD**	Price
5/8	3-1/4	1-1/2	1/2	**FL518SD**	Price
5/8	3-1/2	1-3/4	9/16	**FL519SD**	Price
5/8	3-7/8	2-1/8	7/16	**FL517LD**	Price
5/8	4-1/4	2-1/2	1/2	**FL518LD**	Price
5/8	4-5/8	2-7/8	9/16	**FL519LD**	Price
3/4	3-3/8	1-3/8	7/16	**FL517SC**	Price
3/4	3-5/8	1-5/8	1/2	**FL518SC**	Price
3/4	3-7/8	1-7/8	9/16	**FL519SC**	Price
3/4	4-1/4	2-1/4	7/16	**FL517LC**	Price
3/4	4-1/4	2-1/4	11/16	**FL5111SC**	Price
3/4	4-5/8	2-5/8	1/2	**FL518LC**	Price
3/4	5	3	9/16	**FL519LC**	Price
3/4	5-1/2	3-1/2	11/16	**FL5111LC**	Price

BORITE Borite Boring Bar Sets

Shank Dia. A (in.)	Order No.	Price
1/2	**FL51IB500**	Price
5/8	**FL51ID625**	Price
3/4	**FL51IC750**	Price



Carbide Inserts For BIB, BID & BIC Tools Not Shown



Style	Radius (in.)	Grade	Order No.	Price
TBEE 521	.016	PC5	**FF50TBEE521PC5**	Price
TBEE 521	.016	PC300	**FF50032305**	Price
TPEE 730	.005	PC5	**FF50TPEE730PC5**	Price
TPEE 731	.016	PC5	**FF50TPEE731PC5**	Price
TPEE 731	.016	PC300	**FF50040136**	Price
TPG 25.21	.016	PC5	**FF50TPG2521PC5**	Price
TPG 25.21	.016	PC300	**FF50040795**	Price

Inserts

Screw - FL51-ICS2 Box of 6



Insert Style	Radius	Grade	Order No.	Price
TT 221	.016	PC2	**FF4842000**	Price
TT 221	.016	PC5	**FF4842020**	Price
TT 221	.016	PC300	**FF4842010**	Price
TT 222	.031	PC2	**FF4842030**	Price
TT 222	.031	PC5	**FF4842050**	Price
TT 222	.031	PC300	**FF4842040**	Price

Individual Boring Bars

Regular and Long Lengths



Features:
- No special components
- The only replacement part is a cap screw
- Insert is held rigidly by a unique clamp design
- Uses standard 1/4" and 3/8" IC (TPG) triangle inserts-sold separately
- A wide variety of shank sizes and lengths

Shank Dia. (in.) - 1/2						
Min. Bore (in.)	Bore Depth (in.)	Dist. Across Flats (in.)	OAL (in.)	Inserts Size I.C. (in.)	Order No.	Price
1/2	1-1/2	7/16	3	1/4	**FL50LB8S**	Price
1/2	2-1/4	7/16	3-3/4	1/4	**FL50LB8M**	Price
9/16	1-3/4	7/16	3-1/4	1/4	**FL50LB9S**	Price
9/16	2-5/8	7/16	4-1/8	1/4	**FL50LB9M**	Price
9/16	-	7/16	8	1/4	**FL50LB9L**	Price
5/8	2	7/16	3-1/2	1/4	**FL50LB10S**	Price
5/8	3	7/16	4-1/2	1/4	**FL50LB10M**	Price

Shank Dia. (in.) - 5/8						
Min. Bore (in.)	Bore Depth (in.)	Dist. Across Flats (in.)	OAL (in.)	Inserts Size I.C. (in.)	Order No.	Price
1/2	1-1/2	9/16	3-1/4	1/4	**FL50LC8S**	Price
1/2	2-1/4	9/16	4	1/4	**FL50LC8M**	Price
5/8	2	9/16	3-3/4	1/4	**FL50LC10S**	Price
5/8	3	9/16	4-3/4	1/4	**FL50LC10M**	Price
11/16	-	9/16	9	3/8	**FL50LC11L**	Price
3/4	2-3/4	9/16	4-1/2	3/8	**FL50LC12S**	Price
3/4	3-3/4	9/16	5-1/2	3/8	**FL50LC12M**	Price

Shank Dia. (in.) - 3/4						
Min. Bore (in.)	Bore Depth (in.)	Dist. Across Flats (in.)	OAL (in.)	Inserts Size I.C. (in.)	Order No.	Price
1/2	1-1/2	5/8	3-1/2	1/4	**FL50LD8S**	Price
1/2	2-1/4	5/8	4-1/4	1/4	**FL50LD8M**	Price
5/8	2	5/8	4	1/4	**FL50LD10S**	Price
5/8	3	5/8	5	1/4	**FL50LD10M**	Price
3/4	2-3/4	5/8	4-3/4	3/8	**FL50LD12S**	Price
3/4	3-3/4	5/8	5-3/4	3/8	**FL50LD12M**	Price
13/16	3	5/8	5	3/8	**FL50LD13S**	Price
13/16	4-1/2	5/8	6-1/2	3/8	**FL50LD13M**	Price
13/16	-	5/8	10	3/8	**FL50LD13L**	Price

Shank Dia. (in.) - 1						
Min. Bore (in.)	Bore Depth (in.)	Dist. Across Flats (in.)	OAL (in.)	Inserts Size I.C. (in.)	Order No.	Price
3/4	3	7/8	5-1/4	3/8	**FL50LE12S**	Price
3/4	4	7/8	6-1/4	3/8	**FL50LE12M**	Price
13/16	3-1/4	7/8	5-1/2	3/8	**FL50LE13S**	Price
13/16	4-1/2	7/8	6-3/4	3/8	**FL50LE13M**	Price
15/16	3-1/2	7/8	5-3/4	3/8	**FL50LE15S**	Price
15/16	4-3/4	7/8	7	3/8	**FL50LE15M**	Price
1-1/16	4	7/8	6-1/4	3/8	**FL50LE17S**	Price
1-1/16	5-1/4	7/8	7-1/2	3/8	**FL50LE17M**	Price
1-1/16	-	7/8	12	3/8	**FL50LE17L**	Price

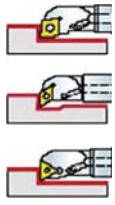
Super-Lok Boring Bar Sets

- No special components
- The only replacement part is a cap screw
- Insert is held by a unique clamp design
- Uses TPG22_1/4" IC or TPG32_3/8" IC triangle inserts (not included)
- Wide variety of shank sizes and lengths



Size	Shank Dia. (in.)	Insert IC	Order No.	Price
6-pc.	1/2	1/4	**FL50LB500**	Price
6-pc.	5/8	1/4, 3/8	**FL50LC625**	Price
8-pc.	3/4	1/4, 3/8	**FL50LD750**	Price
9-pc.	1	3/8	**FL50LE100**	Price

M100 DEX Coolant-Thru Boring Bars



Profile Boring & Facing

- High performance
- Heat treated tool holders
- Positive chip control
- Multi-layer coating
- In touch with the future
- Each holder includes high precision M2.5 x T-8 torx screw and torx key





Shank Dia. (in.)	Set Includes	Order No.	Price
1/4, 5/16, 3/8, 1/2	Set of 4 Pcs. SCLCR with CCMT 21.51 insert	**GE45400100**	Price
3/8, 1/2, 5/8	Set of 3 Pcs. SDUCR with DCMT 21.51 insert	**GE45402400**	Price
3/8, 1/2, 5/8	Set of 3 Pcs. STFCR with TCMT 21.51 insert	**GE45402100**	Price

Buy a Complete Boring Bar Set

Includes 4 Boring Bars and 20 TiN Coated Inserts

Set Includes:

Boring Bar No. (1 ea.)	Shank Size	Minimum Bore
• TPBN 06-2	1/2	.430
• TPBN 08-2	1/2	.590
• TPBN 10-2	5/8	.682
• TPBN 12-3	3/4	.845

- (10) TPGH 21.51 Inserts
- (10) TPGH 321 Inserts
- (1) Torx Key T7
- (1) Torx Key T10
- (1) Storage case

MADE IN THE USA



Note: Set includes TiN coated grade DPP306T carbide inserts for general purpose alloy steel, stainless and ductile iron applications.

Order No.	Price
FL4543840	Price

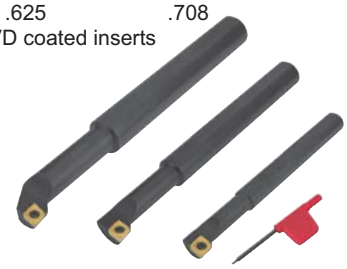
Indexable Miniature Boring Bar Set

- For precision finishing boring operations
- Includes 3 boring bars and 10 CVD coated inserts
- For use in alloy steel and stainless steel

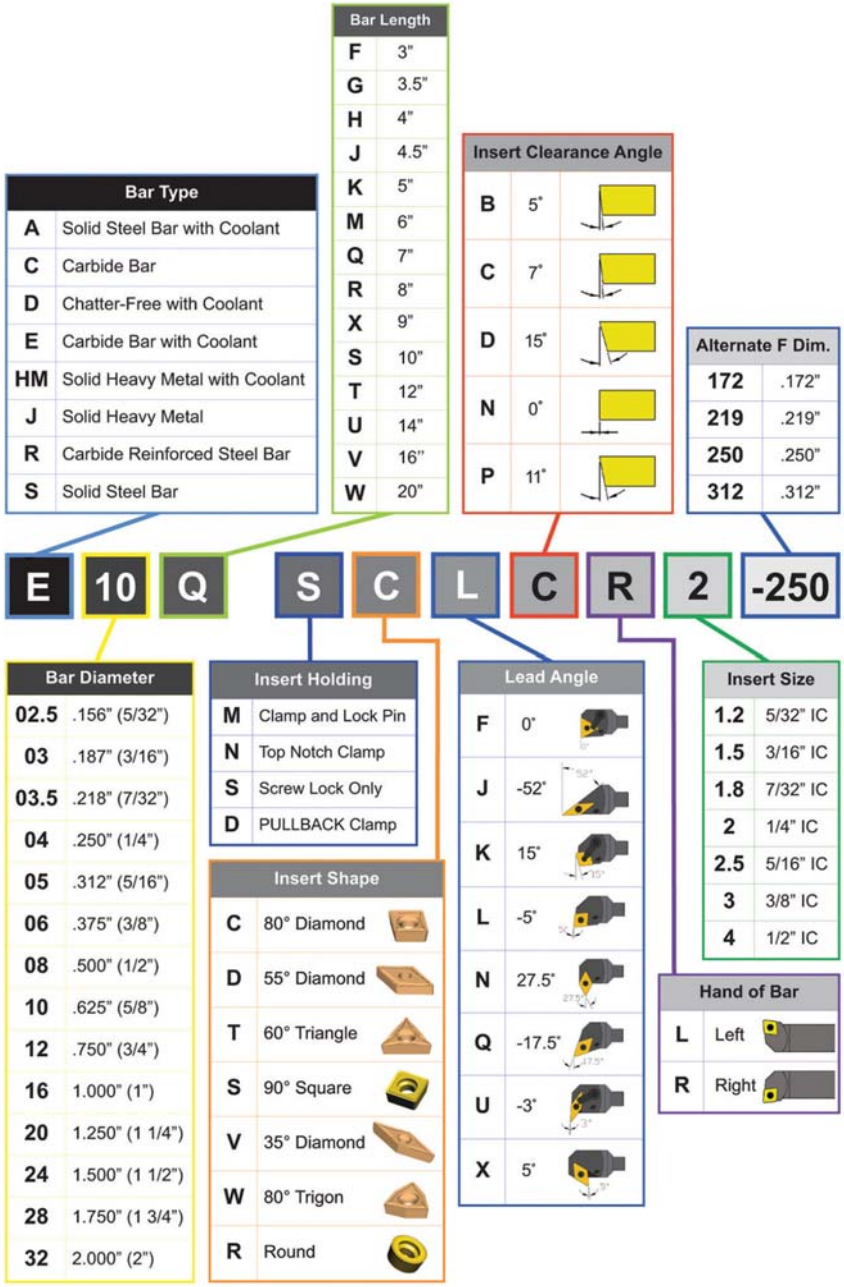
Set Includes:

Boring Bar	Shank Size	Minimum Bore
• S06H-SCLCR-2	.375	.394
• S08K-SCLCR-2	.500	.550
• S10M-SCLCR-2	.625	.708

- (10) CCMT 21.51 CVD coated inserts
- (1) T-8 Torx key
- (1) 82 case



Order No.	Price
FL4585064	Price



TPGH Carbide Inserts

MADE IN THE USA

- Molded chipbreaker
- Positive cut
- Low cutting force
  DC20 (C2) / C656 (C5TiN)



I.C. (in.)	Thickness (in.)	Descriptioin	Grade	Order No.	Price
1/4	.094	TPGH 21.51	DC20	**FL4543900**	Price
1/4	.094	TPGH 21.51	DC656	**FL4543910**	Price
1/4	.094	TPGH 21.52	DC20	**FL4543920**	Price
1/4	.094	TPGH 21.52	DC656	**FL4543930**	Price
3/8	.125	TPGH 321	DC20	**FL4543940**	Price
3/8	.125	TPGH 321	DC656	**FL4543950**	Price
3/8	.125	TPGH 322	DC20	**FL4543960**	Price
3/8	.125	TPGH 322	DC656	**FL4543970**	Price

Torx Key

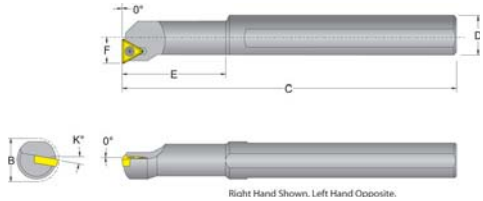
Model Number	Order No.	Price
T7	**FL4592002**	Price
T10	**FL4544070**	Price

TORX® Screw

Model Number	Order No.	Price
TS25.456M1	**FL4590970**	Price
TS443	**FL4544040**	Price

S-STFPR Boring Bars

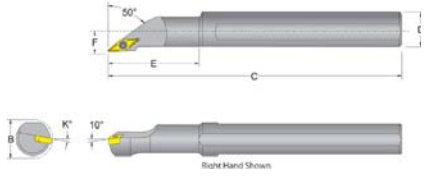
Style F
0° End Cutting Edge Angle for Positive Triangle TC_T Inserts



Description	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Neck Length E (in.)	F (in.)	K° Rake Angle	Insert Style	Torx Screw	Torx Key	Order No.	Price
S06M-STFPR-2	.4700	6.0000	.3750	.250	.2500	4°	TPG_21.5_	TS25456M2	T8	**FL4555636**	Price
S08M-STFPR-2	.6000	6.0000	.5000	.312	.3120	2°	TPG_21.5_	TS25456M2	T8	**FL4555640**	Price
S10R-STFPR-2	.7700	8.0000	.6250	.406	.4060	0°	TPG_21.5_	TS25456M2	T8	**FL4555644**	Price
S12S-STFPR-3	.9300	10.0000	.7500	.500	.5000	2°	TPG_3.5_	TS443M	T15	**FL4555648**	Price

S-SVMCR Boring Bars

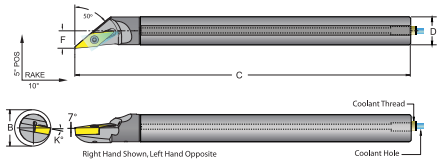
Style M
Negative 5° Side Cutting Edge Angle for 7° Positive 35° Diamond VC_T Inserts



Description	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Neck Length E (in.)	F (in.)	K° Rake Angle	Insert Style	Torx Screw	Torx Key	Order No.	Price
S08R-SVMCR-2	.5800	8.0000	.5000	1.250	.3120	5°	VC_T22_	TS25456M2	T8	**FL4555730**	Price
S10S-SVMCR-2	.9800	10.0000	.6250	1.500	.4060	5°	VC_T22_	TS25456M2	T8	**FL4555731**	Price
S12S-SVMCR-3	1.0000	10.0000	.7500	1.250	.5000	5°	VC_T33_	TS4710M1	T15	**FL4555732**	Price
S16T-SVMCR-3	1.3000	12.0000	1.0000	2.000	.6400	5°	VC_T33_	TS4710M1	T15	**FL4555733**	Price

E-SVMC R/L Boring Bars • Coolant Thru

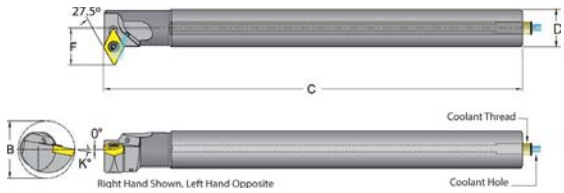
Style M
Negative 50° End Cutting Lead Angle for 7° positive 35 diamond VC_T inserts
Right hand shown, left hand opposite



Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	Torx Key	Left			Right		
										Model No.	Order No.	Price	Model No.	Order No.	Price
.500	.587	5.230	.312	-50°	.080	6 X 1mm	VCMT 221	TS-25.45-8M2	T8	E08K-SVMCL-2	**FL4659804**	Price	E08K-SVMCR-2	**FL4659803**	Price
.500	.587	8.230	.312	-50°	.080	6 X 1mm	VCMT 221	TS-25.45-8M2	T8	E08R-SVMCL-2	**FL4659808**	Price	E08R-SVMCR-2	**FL4659807**	Price
.625	.750	6.160	.406	-50°	.125	6 X 1mm	VCMT 221	TS-25.45-8M2	T8	E10M-SVMCL-2	**FL4659812**	Price	E10M-SVMCR-2	**FL4659811**	Price
.625	.750	10.160	.406	-50°	.125	6 X 1mm	VCMT 221	TS-25.45-8M2	T8	E10S-SVMCL-2	**FL4659816**	Price	E10S-SVMCR-2	**FL4659815**	Price

E-SDNC R/L Boring Bars • Coolant Thru

Style N
Negative 27.5° Lead Angle for 7° positive 55° diamond DC__ inserts
Right hand shown, left hand opposite

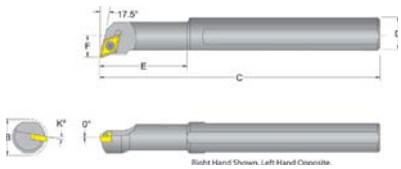


Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	Torx Key	Left			Right		
										Model No.	Order No.	Price	Model No.	Order No.	Price
.375	.581	6.000	.375	-27.5°	.060	-	DC_T 21.51	TS-25.45-6M2	T8	E06M-SDNCL-2	**FL4659672**	Price	E06M-SDNCR-2	**FL4659671**	Price
.500	.775	5.000	.500	-27.5°	.080	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E08K-SDNCL-2	**FL4659676**	Price	E08K-SDNCR-2	**FL4659675**	Price
.500	.775	8.000	.500	-27.5°	.080	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E08R-SDNCL-2	**FL4659680**	Price	E08R-SDNCR-2	**FL4659679**	Price
.625	.969	6.000	.625	-27.5°	.125	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E10M-SDNCL-2	**FL4659684**	Price	E10M-SDNCR-2	**FL4659683**	Price
.625	.969	10.000	.625	-27.5°	.125	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E10S-SDNCL-2	**FL4659688**	Price	E10S-SDNCR-2	**FL4659687**	Price

S-SDQCR Boring Bars

Style Q

Negative 17.5° End Cutting Edge Angle for 7° Positive 55° Diamond DC_T Inserts



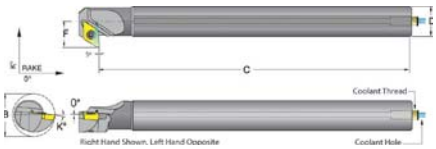
Description	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Neck Length E (in.)	F (in.)	K° Rake Angle	Insert Style	Torx Screw	Torx Key	Order No.	Price
S08M-SDQCR-2	.7300	6.0000	.5000	.875	.4370	10°	DC_T21.5_	TS25456M2	T8	**FL4555585**	Price
S10R-SDQCR-2	.8500	8.0000	.6250	1.000	.5000	7°	DC_T21.5_	TS25456M2	T8	**FL4555587**	Price
S12S-SDQCR-3	.9800	10.0000	.7500	1.250	.5620	7°	DC_T32.5_	T4710M1	T15	**FL4555589**	Price

E-SDXC R/L Boring Bars • Coolant Thru

Style X

Negative 5° Back Boring Lead Angle for 7° positive 55° diamond DC_T inserts

Right hand shown, left hand opposite



- Left												
Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	Torx Key	Model No.	Order No.	Price
.375	.581	5.660	.375	-5° (Back Boring)	.060	-	DC_T 21.51	TS-25.45-6M2	T8	E06M-SDXCL-2	**FL4659732**	Price
.500	.712	4.660	.437	-5° (Back Boring)	.080	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E08K-SDXCL-2	**FL4659736**	Price
.500	.712	7.660	.437	-5° (Back Boring)	.080	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E08R-SDXCL-2	**FL4659740**	Price
.625	.844	5.660	.500	-5° (Back Boring)	.125	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E10M-SDXCL-2	**FL4659744**	Price
.625	.844	9.660	.500	-5° (Back Boring)	.125	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E10S-SDXCL-2	**FL4659748**	Price
.750	.980	7.000	.562	-5° (Back Boring)	.157	1/8-27	DC_T 32.52	TS-35.6-9M1	T15	E12Q-SDXCL-3	**FL4660008**	Price
.750	.980	10.000	.562	-5° (Back Boring)	.157	1/8-27	DC_T 32.52	TS-35.6-9M1	T15	E12S-SDXCL-3	**FL4660010**	Price
1.000	1.300	8.000	.750	-5° (Back Boring)	.197	1/8-27	DC_T 32.52	TS-35.6-9M1	T15	E16R-SDXCL-3	**FL4660012**	Price
1.000	1.300	12.000	.750	-5° (Back Boring)	.197	1/8-27	DC_T 32.52	TS-35.6-9M1	T15	E16T-SDXCL-3	**FL4660014**	Price
1.250	1.600	14.000	1.000	-5° (Back Boring)	.197	1/8-27	DC_T 32.52	TS-35.6-9M1	T15	E20U-SDXCL-3	**FL4660016**	Price

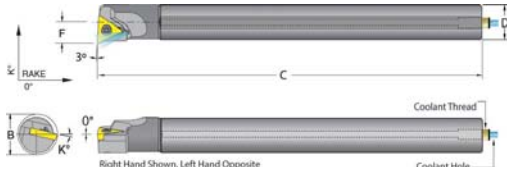
- Right												
Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	Torx Key	Model No.	Order No.	Price
.375	.581	5.660	.375	-5° (Back Boring)	.060	-	DC_T 21.51	TS-25.45-6M2	T8	E06M-SDXCR-2	**FL4659731**	Price
.500	.712	4.660	.437	-5° (Back Boring)	.080	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E08K-SDXCR-2	**FL4659735**	Price
.500	.712	7.660	.437	-5° (Back Boring)	.080	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E08R-SDXCR-2	**FL4659739**	Price
.625	.844	5.660	.500	-5° (Back Boring)	.125	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E10M-SDXCR-2	**FL4659743**	Price
.625	.844	9.660	.500	-5° (Back Boring)	.125	6 X 1mm	DC_T 21.51	TS-25.45-6M2	T8	E10S-SDXCR-2	**FL4659747**	Price
.750	.980	7.000	.562	-5° (Back Boring)	.157	1/8-27	DC_T 32.52	TS-35.6-9M1	T15	E12Q-SDXCR-3	**FL4660007**	Price
.750	.980	10.000	.562	-5° (Back Boring)	.157	1/8-27	DC_T 32.52	TS-35.6-9M1	T15	E12S-SDXCR-3	**FL4660009**	Price
1.000	1.300	8.000	.750	-5° (Back Boring)	.197	1/8-27	DC_T 32.52	TS-35.6-9M1	T15	E16R-SDXCR-3	**FL4660011**	Price
1.000	1.300	12.000	.750	-5° (Back Boring)	.197	1/8-27	DC_T 32.52	TS-35.6-9M1	T15	E16T-SDXCR-3	**FL4660013**	Price
1.250	1.600	14.000	1.000	-5° (Back Boring)	.197	1/8-27	DC_T 32.52	TS-35.6-9M1	T15	E20U-SDXCR-3	**FL4660015**	Price

E-STUP R/L Boring Bars • Coolant Thru

Style U

Negative 3° Lead Angle for 11° positive triangle TC__ inserts

Right hand shown, left hand opposite

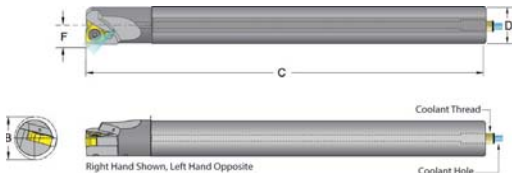


Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	Torx Key	Left			Right		
										Model No.	Order No.	Price	Model No.	Order No.	Price
.375	.456	6.000	.250	-3°	.060	-	TPMT 21.51	TS-25.45-6M2	T8	E06M-STUPL-2	**FL4659784**	Price	E06M-STUPR-2	**FL4659783**	Price
.500	.587	5.000	.312	-3°	.080	6 X 1mm	TPMT 21.51	TS-25.45-6M2	T8	E08K-STUPL-2	**FL4659788**	Price	E08K-STUPR-2	**FL4659787**	Price
.500	.587	8.000	.312	-3°	.080	6 X 1mm	TPMT 21.51	TS-25.45-6M2	T8	E08R-STUPL-2	**FL4659792**	Price	E08R-STUPR-2	**FL4659791**	Price
.625	.750	6.000	.406	-3°	.125	6 X 1mm	TPMT 21.51	TS-25.45-6M2	T8	E10M-STUPL-2	**FL4659796**	Price	E10M-STUPR-2	**FL4659795**	Price
.625	.750	10.000	.406	-3°	.125	6 X 1mm	TPMT 21.51	TS-25.45-6M2	T8	E10S-STUPL-2	**FL4659800**	Price	E10S-STUPR-2	**FL4659799**	Price

E-SN R/L Internal Threading Bars • Coolant Thru

For Laydown Threading Inserts

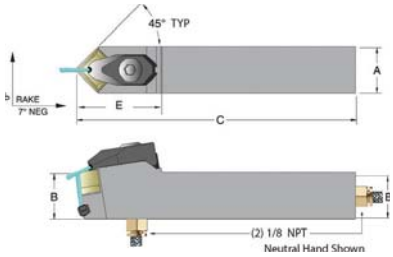
Right hand shown, left hand opposite



Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	Coolant Hole (in.)	Insert Style	Insert Screw	Torx Key	Left			Right		
								Model No.	Order No.	Price	Model No.	Order No.	Price
.218	.249	4.000	.129	.040	06IR A60	TS-06	T6	E03.5H-SNL-06	**FL4659920**	Price	E03.5H-SNR-06	**FL4659919**	Price
.250	.307	4.000	.165	.040	06IR A60	TS-06	T6	E04H-SNL-06	**FL4659924**	Price	E04H-SNR-06	**FL4659923**	Price
.312	.378	5.000	.215	.040	08IR A60	TS-08	T8	E05K-SNL-08	**FL4659928**	Price	E05K-SNR-08	**FL4659927**	Price
.375	.500	6.000	.250	.060	11IR A60	TS-25.45-6M2	T8	E06M-SNL-H11	**FL4659932**	Price	E06M-SNR-H11	**FL4659931**	Price
.500	.590	5.000	.315	.080	11IR A60	TS-25.45-6M2	T8	E08K-SNL-H11	**FL4659936**	Price	E08K-SNR-H11	**FL4659935**	Price
.500	.590	8.000	.315	.080	11IR A60	TS-25.45-6M2	T8	E08R-SNL-H11	**FL4659940**	Price	E08R-SNR-H11	**FL4659939**	Price
.625	.750	6.000	.406	.125	16IR A60	TS-35.6-9M1	T15	E10M-SNL-H16	**FL4659944**	Price	E10M-SNR-H16	**FL4659943**	Price
.625	.750	10.000	.406	.125	16IR A60	TS-35.6-9M1	T15	E10S-SNL-H16	**FL4659948**	Price	E10S-SNR-H16	**FL4659947**	Price

ADSDNN Toolholders

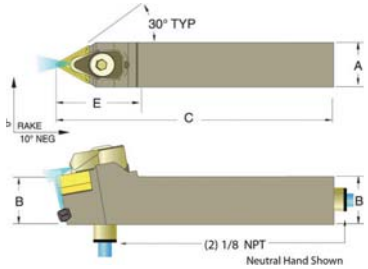
Style D
27.5° Side Cutting Lead Angle for DNMG Inserts



Model No.	Shank Size (in.)	OAL (in.)	Insert Style	Order No.	Price
ADSDNN12-4B	.750	4.500	SNMG 432	**FL4553053**	Price
ADSDNN16-4D	1.000	6.000	SNMG 432	**FL4553054**	Price
ADSDNN20-4D	1.250	6.000	SNMG 432	**FL4553055**	Price
ADSDNN20-5D	1.250	6.000	SNMG 543	**FL4553056**	Price

ADTENN Toolholders

Style E
30° Side Cutting Lead Angle for TNMG Inserts



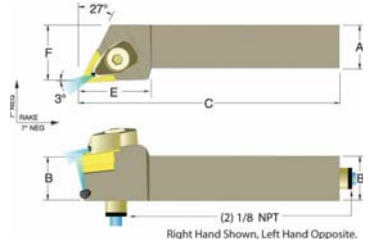
Model No.	Shank Size (in.)	OAL (in.)	Insert Style	Order No.	Price
ADTENN12-3B	.750	4.500	TNMG 332	**FL4553075**	Price
ADTENN12-4B	.750	4.500	TNMG 432	**FL4553076**	Price
ADTENN16-3D	1.000	6.000	TNMG 332	**FL4553077**	Price
ADTENN16-4D	1.000	6.000	TNMG 432	**FL4553078**	Price
ADTENN20-4D	1.250	6.000	TNMG 432	**FL4553079**	Price

ADTJN R/L Toolholders

Style J
3° Side Cutting Lead Angle for TNMG Inserts

Right hand shown
Left hand opposite

R = Right hand
L = Left hand



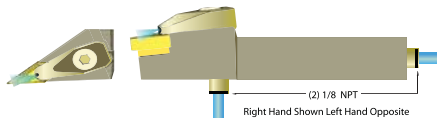
Shank Size (in.)	OAL (in.)	Insert Style	Left			Right		
			Model No.	Order No.	Price	Model No.	Order No.	Price
.750	4.500	TNMG 332	ADTJNL12-3B	**FL4553064**	Price	-	**-**	-
.750	4.500	TNMG 432	ADTJNL12-4B	**FL4553066**	Price	ADTJNR12-4B	**FL4553065**	Price
1.000	6.000	TNMG 332	ADTJNL16-3D	**FL4553068**	Price	ADTJNR16-3D	**FL4553067**	Price
1.000	6.000	TNMG 432	ADTJNL16-4D	**FL4553070**	Price	ADTJNR16-4D	**FL4553069**	Price
1.250	6.000	TNMG 432	ADTJNL20-4D	**FL4553072**	Price	ADTJNR20-4D	**FL4553071**	Price

ADVJN R/L Toolholders

Style J
Negative 3° Side Cutting Edge Angle for Negative 35° Diamond VNM_ Inserts

Right Hand Shown
Left Hand Opposite

R = Right Hand
L = Left Hand



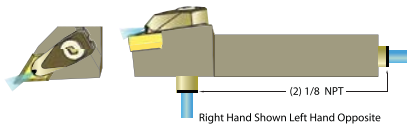
Shank Size (in.)	Insert Style	OAL (in.)	Left			Right		
			Model No.	Order No.	Price	Model No.	Order No.	Price
.750	VNMG 332	4.500	ADVJNL12-3B	**FL4553082**	Price	ADVJNR12-3B	**FL4553081**	Price
1.000	VNMG 332	6.000	ADVJNL16-3D	**FL4553084**	Price	ADVJNR16-3D	**FL4553083**	Price
1.250	VNMG 332	6.000	ADVJNL20-3D	**FL4553086**	Price	ADVJNR20-3D	**FL4553085**	Price

ADDJN R/L Toolholders

Style J
3° Side Cutting Edge Angle for Negative 55° Diamond DNM_ Inserts

Right hand shown
Left hand opposite

R = Right hand
L = Left hand



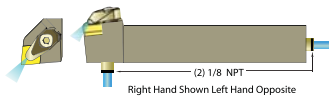
Shank Size (in.)	Insert Style	OAL (in.)	Left			Right		
			Model No.	Order No.	Price	Model No.	Order No.	Price
.750	DNM_332	4.500	ADDJNL-12-3B	**FL4553017**	Price	ADDJNR-12-3B	**FL4553016**	Price
.750	DNM_432	4.500	ADDJNL-12-4B	**FL4553019**	Price	ADDJNR-12-4B	**FL4553018**	Price
1.000	DNM_432	6.000	ADDJNL-16-4D	**FL4553021**	Price	ADDJNR-16-4D	**FL4553020**	Price
1.250	DNM_432	6.000	ADDJNL-20-4D	**FL4553023**	Price	ADDLNR-20-4D	**FL4553022**	Price

ADCLN R/L Toolholders

Style L
Negative 5° End or Side Cutting Edge Angle for Negative 80° Diamond CNM_ Inserts

Right hand shown
Left hand opposite

R = Right hand
L = Left hand



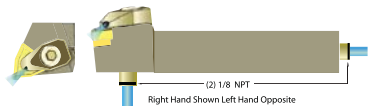
Shank Size (in.)	Insert Style	OAL (in.)	Left			Right		
			Model No.	Order No.	Price	Model No.	Order No.	Price
.750	CNM_432	4.500	ADCLNL-12-4B	**FL4553001**	Price	ADCLNR-12-4B	**FL4553000**	Price
1.000	CNM_432	6.000	ADCLNL-16-4D	**FL4553003**	Price	ADCLNR-16-4D	**FL4553002**	Price
1.250	CNM_432	6.000	ADCLNL-20-4D	**FL4553005**	Price	ADCLNR-20-4D	**FL4553004**	Price
1.250	CNM_543	6.000	ADCLNL-20-5D	**FL4553007**	Price	ADCLNR-20-5D	**FL4553006**	Price

ADWLN R/L Toolholders

Style L
Negative 5° End or Side Cutting Edge Angle for Negative 80° Trigon WNM_ Inserts

Right hand shown
Left hand opposite

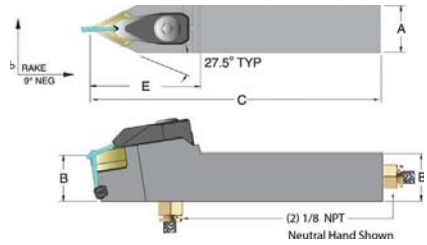
R = Right hand
L = Left hand



Shank Size (in.)	Insert Style	OAL (in.)	Left			Right		
			Model No.	Order No.	Price	Model No.	Order No.	Price
.750	WNMG 332	4.500	ADWLNL12-3B	**FL4553094**	Price	ADWLNR12-3B	**FL4553093**	Price
.750	WNMG 432	4.500	ADWLNL12-4B	**FL4553096**	Price	ADWLNR12-4B	**FL4553095**	Price
1.000	WNMG 332	6.000	ADWLNL16-3D	**FL4553098**	Price	ADWLNR16-3D	**FL4553097**	Price
1.000	WNMG 432	6.000	ADWLNL16-4D	**FL4553100**	Price	ADWLNR16-4D	**FL4553099**	Price
1.250	WNMG 432	6.000	ADWLNL20-4D	**FL4553102**	Price	ADWLNR20-4D	**FL4553101**	Price

ADDPNN Toolholders

Style P
27.5° Side Cutting Lead Angle for DNMG Inserts



Model No.	Shank Size (in.)	OAL (in.)	Insert Style	Order No.	Price
ADDPNN12-3B	.750	4.500	DNMG 332	**FL4553030**	Price
ADDPNN12-4B	.750	4.500	DNMG 432	**FL4553031**	Price
ADDPNN16-3D	1.000	6.000	DNMG 332	**FL4553032**	Price
ADDPNN16-4D	1.000	6.000	DNMG 432	**FL4553033**	Price
ADDPNN20-4D	1.250	6.000	DNMG 432	**FL4553034**	Price

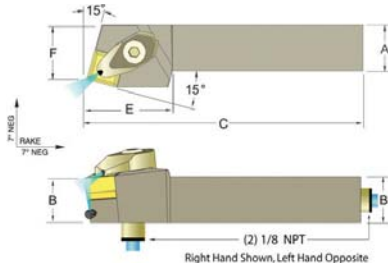
ADSRN R/L Toolholders

Style R

15° Side Cutting Lead Angle for SNMG Inserts

Right hand shown
Left hand opposite

R = Right hand
L = Left hand



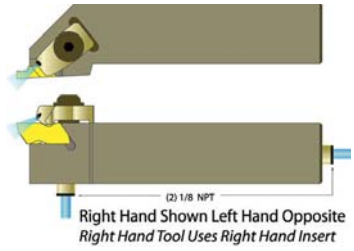
Shank Size (in.)	OAL (in.)	Insert Style	Left			Right		
			Model No.	Order No.	Price	Model No.	Order No.	Price
.750	4.500	SNMG 432	ADSRNL12-4B	**FL4553041**	Price	ADSRNR12-4B	**FL4553040**	Price
1.000	6.000	SNMG 432	ADSRNL16-4D	**FL4553044**	Price	ADSRNR16-4D	**FL4553043**	Price
1.250	6.000	SNMG 543	ADSRNL20-5D	**FL4553046**	Price	ADSRNR20-5D	**FL4553045**	Price

ADNS R/L Toolholders

For Threading and Grooving TopNotch Inserts

Right Hand Shown
Left Hand Opposite

R = Right Hand
L = Left Hand



		Left				Right			
Shank (in.)	OAL (in.)	Model No.	Uses Insert	Order No.	Price	Model No.	Uses Insert	Order No.	Price
.750	4.5000	ADNSL12-3B	NG3L	**FL4553451**	Price	ADNSR12-3B	NG3R	**FL4553450**	Price
1.000	6.0000	ADNSL16-3D	NG3L	**FL4553453**	Price	ADNSR16-3D	NG3R	**FL4553452**	Price
1.250	6.0000	ADNSL20-3D	NG3L	**FL4553455**	Price	ADNSR20-3D	NG3R	**FL4553454**	Price

AS-ADCLN R/L Boring Bars

Style L
Negative 5° Side and End Cutting Edge Angle for Negative 80° Diamond CNM_ Inserts

Right hand shown
Left hand opposite



Shank Dia. (in.)	Min. Bore (in.)	Insert Style	Left		
			Model No.	Order No.	Price
.750	1.000	CNM_322	AS-12R-ADCLNL-3	**FL4553121**	Price
1.000	1.282	CNM_432	AS-16R-ADCLNL-4	**FL4553123**	Price
1.250	1.530	CNM_432	AS-20S-ADCLNL-4	**FL4553125**	Price
1.500	1.780	CNM_432	AS-24S-ADCLNL-4	**FL4553127**	Price

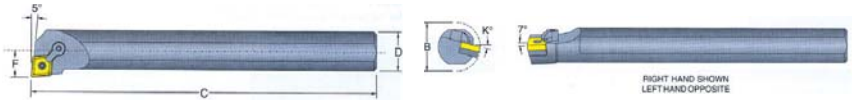
S-MCLN R/L Boring Bars

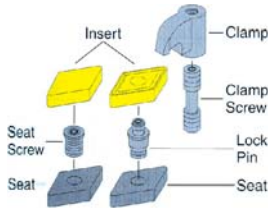
MADE IN THE USA

Style L

Negative 5° Side & End Cutting Edge Angle for Negative 80° Diamond CNM_ Inserts

Right hand shown
Left hand opposite





Right/Left Hand - Left													
Model No.	Min. Bore	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S12S-MCLNL-4	1.0000	10.0000	.7500	.5000	14°	CNM_43_	-	-	NL44	CL20	XNS47	**FL4555007**	Price
S16T-MCLNL-4	1.2800	12.0000	1.0000	.6400	14°	CNM_43_	-	-	NL44	CL20	XNS47	**FL4543370**	Price
S20U-MCLNL-4	1.5300	14.0000	1.2500	.7650	14°	CNM_43_	ICSN433	S46	NL46	CL20	XNS47	**FL4543390**	Price
S24U-MCLNL-4	1.7800	14.0000	1.5000	.8900	11°	CNM_43_	ICSN433	S46	NL46	CL20	XNS47	**FL4543410**	Price
S24U-MCLNL-5	2.3740	14.0000	1.5000	1.1870	11°	CNM_54_	ICSN533	S58	NL58	CL12	XNS510	**FL4543450**	Price
S28U-MCLNL-4	2.0300	14.0000	1.3750	1.0150	11°	CNM_43_	ICSN433	S46	NL46	CL20	XNS47	**FL4543430**	Price
S32V-MCLNL-4	2.5620	16.0000	2.0000	1.2810	11°	CNM_43_	ICSN433	S46	NL46	CL20	XNS48	**FL4555025**	Price
S32V-MCLNL-5	2.5620	16.0000	2.0000	1.2810	11°	CNM_54_	ICSN533	S58	NL58	CL12	XNS510	**FL4543470**	Price
S32V-MCLNL-6	2.5620	16.0000	2.0000	1.2810	11°	CNM_64_	ICSN633	S68	NL68	CL12	XNS510	**FL4543530**	Price
S40V-MCLNL-5	3.0620	16.0000	2.5000	1.5310	11°	CNM_54_	ICSN533	S58	NL58	CL12	XNS510	**FL4543490**	Price
S40V-MCLNL-6	3.0620	16.0000	2.5000	1.5310	11°	CNM_64_	ICSN633	S68	NL68	CL12	XNS510	**FL4543570**	Price

Right/Left Hand - Right													
Model No.	Min. Bore	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S12S-MCLNR-4	1.0000	10.0000	.7500	.5000	14°	CNM_43_	-	-	NL44	CL20	XNS47	**FL4555006**	Price
S16T-MCLNR-4	1.2800	12.0000	1.0000	.6400	14°	CNM_43_	-	-	NL44	CL20	XNS47	**FL4543360**	Price
S20U-MCLNR-4	1.5300	14.0000	1.2500	.7650	14°	CNM_43_	ICSN433	S46	NL46	CL20	XNS47	**FL4543380**	Price
S24U-MCLNR-4	1.7800	14.0000	1.5000	.8900	11°	CNM_43_	ICSN433	S46	NL46	CL20	XNS47	**FL4543400**	Price
S24U-MCLNR-5	2.3740	14.0000	1.5000	1.1870	11°	CNM_54_	ICSN533	S58	NL58	CL12	XNS510	**FL4543440**	Price
S28U-MCLNR-4	2.0300	14.0000	1.3750	1.0150	11°	CNM_43_	ICSN433	S46	NL46	CL20	XNS47	**FL4555022**	Price
S32V-MCLNR-4	2.5620	16.0000	2.0000	1.2810	11°	CNM_43_	ICSN433	S46	NL46	CL20	XNS48	**FL4555024**	Price
S32V-MCLNR-5	2.5620	16.0000	2.0000	1.2810	11°	CNM_54_	ICSN533	S58	NL58	CL12	XNS510	**FL4543460**	Price
S32V-MCLNR-6	2.5620	16.0000	2.0000	1.2810	11°	CNM_64_	ICSN633	S68	NL68	CL12	XNS510	**FL4543520**	Price
S36V-MCLNR-6	2.8120	16.0000	2.2500	1.4060	11°	CNM_64_	ICSN633	S68	NL68	CL12	XNS510	**FL4543540**	Price
S40V-MCLNR-5	3.0620	16.0000	2.5000	1.5310	11°	CNM_54_	ICSN533	S58	NL58	CL12	XNS510	**FL4543480**	Price
S40V-MCLNR-6	3.0620	16.0000	2.5000	1.5310	11°	CNM_64_	ICSN633	S68	NL68	CL12	XNS510	**FL4543560**	Price

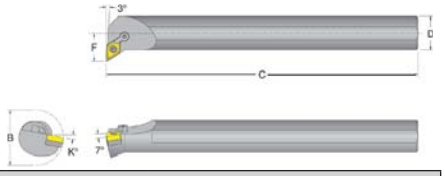
See pages B134-B138 for spare parts

S-MDUN R/L Boring Bars

Style U

Negative 3° End Cutting Edge Angle for Negative 55° Diamond DNM_ Inserts

Right hand shown, Left hand opposite



Right/Left Hand - Left													
Description	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S16T-MDUNL-3	1.3000	12.0000	1.0000	.7500	11°	DNM_33_	-	-	NL33	CL7	XNS36	**FL4555067**	Price
S20U-MDUNL-4	2.0000	14.0000	1.2500	1.0000	11°	DNM_43_	IDSN433	S46	NL46	CL12	XNS59	**FL4555071**	Price
S24U-MDUNL-4	2.2500	14.0000	1.5000	1.1250	11°	DNM_43_	IDSN433	S46	NL46	CL12	XNS59	**FL4555075**	Price
S28U-MDUNL-4	2.5000	14.0000	1.7500	1.2500	11°	DNM_43_	IDSN433	S46	NL46	CL12	XNS59	**FL4555079**	Price
S32V-MDUNL-4	3.0000	16.0000	2.0000	1.3750	11°	DNM_43_	IDSN433	S46	NL46	CL12	XNS59	**FL4555083**	Price
S40V-MDUNL-5	3.5000	16.0000	2.5000	1.7500	11°	DNM_54_	IDSN533	S58	NL58	CL30	XNS510	**FL4555099**	Price

Right/Left Hand - Right													
Description	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S16T-MDUNR-3	1.3000	12.0000	1.0000	.7500	11°	DNM_33_	-	-	NL33	CL7	XNS36	**FL4555066**	Price
S20U-MDUNR-4	2.0000	14.0000	1.2500	1.0000	11°	DNM_43_	IDSN433	S46	NL46	CL12	XNS59	**FL4543171**	Price
S24U-MDUNR-4	2.2500	14.0000	1.5000	1.1250	11°	DNM_43_	IDSN433	S46	NL46	CL12	XNS59	**FL4543191**	Price
S28U-MDUNR-4	2.5000	14.0000	1.7500	1.2500	11°	DNM_43_	IDSN433	S46	NL46	CL12	XNS59	**FL4555078**	Price
S32V-MDUNR-4	3.0000	16.0000	2.0000	1.3750	11°	DNM_43_	IDSN433	S46	NL46	CL12	XNS59	**FL4543291**	Price
S40V-MDUNR-5	3.5000	16.0000	2.5000	1.7500	11°	DNM_54_	IDSN533	S58	NL58	CL30	XNS510	**FL4555098**	Price

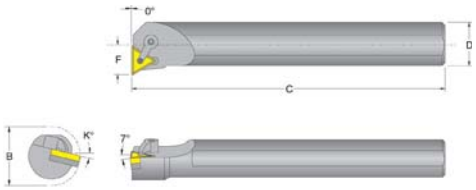
See pages B134-B138 for spare parts

S-MTFNR Boring Bars

Sytle F

0° End Cutting Edge Angle for Negative Triangle TNM_ Inserts

Right hand shown, Left hand available



Right/Left Hand - Right													
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S12S-MTFNR-3	1.0000	10.0000	.7500	.5000	14°	TNM_32_	-	-	NL33	CL7	XNS35	**FL4555150**	Price
S16T-MTFNR-3	1.2800	12.0000	1.0000	.6400	14°	TNM_32_	ITSN333	S34	NL34L	CL7	XNS36	**FL4543151**	Price
S20U-MTFNR-3	1.5300	14.0000	1.2500	.7650	14°	TNM_32_	ITSN333	S34	NL34L	CL7	XNS36	**FL4555158**	Price
S20U-MTFNR-4	1.5300	14.0000	1.2500	.7650	14°	TNM_43_	ITSN433	S46	NL46	CL9	XNS59	**FL4543172**	Price
S24U-MTFNR-4	2.0600	14.0000	1.5000	.8900	11°	TNM_43_	ITSN433	S46	NL46	CL9	XNS59	**FL4543192**	Price
S32V-MTFNR-4	2.5620	16.0000	2.0000	1.2810	11°	TNM_43_	ITSN433	S46	NL46	CL9	XNS59	**FL4555182**	Price

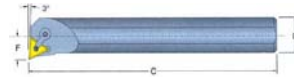
See pages B134-B138 for spare parts

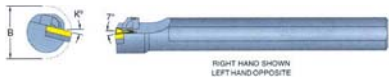
S-MTUN R/L Boring Bars

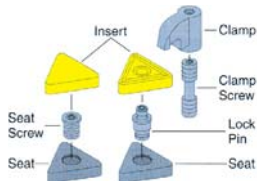
Style U

Negative 3° End Cutting Edge Angle for Negative Triangle TNM_ Inserts

Right hand shown
Left hand opposite







Right/Left Hand - Left													
Description	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S12S-MTUNL-3	1.0000	10.0000	.7500	.5000	14°	TNM_32_	-	-	NL33	CL7	XNS35	**FL4543590**	Price
S16T-MTUNL-3	1.2800	12.0000	1.0000	.6400	14°	TNM_32_	ITSN333	S-34	NL34L	CL7	XNS35	**FL4543610**	Price
S20U-MTUNL-3	1.5300	14.0000	1.2500	.7650	14°	TNM_32_	ITSN333	S34	NL34L	CL7	XNS35	**FL4543630**	Price
S20U-MTUNL-4	1.5300	14.0000	1.2500	.7650	14°	TNM_43	ITSN432	S46	NL46	CL9	XNS59	**FL4543670**	Price
S24U-MTUNL-3	2.0600	14.0000	1.5000	.8900	11°	TNM_32_	ITSN333	S34	NL34L	CL7	XNS35	**FL4543650**	Price
S24U-MTUNL-4	2.0600	14.0000	1.5000	.8900	11°	TNM_43	ITSN432	S46	NL46	CL9	XNS59	**FL4543690**	Price
S32V-MTUNL-4	2.5620	16.0000	2.0000	1.2810	11°	TNM_43_	ITSN432	S46	NL46	CL9	XNS59	**FL4543710**	Price

Right/Left Hand - Right													
Description	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S12S-MTUNR-3	1.0000	10.0000	.7500	.5000	14°	TNM_32_	-	-	NL33	CL7	XNS35	**FL4543580**	Price
S16T-MTUNR-3	1.2800	12.0000	1.0000	.6400	14°	TNM_32_	ITSN333	S34	NL34L	CL7	XNS35	**FL4543600**	Price
S20U-MTUNR-3	1.5300	14.0000	1.2500	.7650	14°	TNM_32_	ITSN333	S34	NL34L	CL7	XNS35	**FL4543620**	Price
S20U-MTUNR-4	1.5300	14.0000	1.2500	.7650	14°	TNM_43_	ITSN432	S46	NL46	CL9	XNS59	**FL4543660**	Price
S24U-MTUNR-3	2.0600	14.0000	1.5000	.8900	11°	TNM_32_	ITSN333	S34	NL34L	CL7	XNS35	**FL4543640**	Price
S24U-MTUNR-4	2.0600	14.0000	1.5000	.8900	11°	TNM_43_	ITSN432	S46	NL46	CL9	XNS59	**FL4543680**	Price
S32V-MTUNR-4	2.5620	16.0000	2.0000	1.2810	11°	TNM_43_	ITSN432	S46	NL46	CL9	XNS59	**FL4543700**	Price
S40V-MTUNR-4	3.0620	16.0000	2.5000	1.5310	11°	TNM_43_	ITSN432	S46	NL46	CL9	XNS59	**FL4543720**	Price

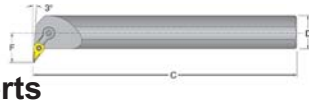
See pages B134-B138 for spare parts

S-MVUN R/L Boring Bars

Style U

Negative 3° Side cutting Edge Angle for Negative 35° Diamond VNM_ Inserts

Right hand shown
Left hand opposite





Right/Left Hand - Left													
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S16T-MVUNL-3	2.0000	12.0000	1.0000	1.0000	14°	VNM_33_	IVSN322	S34	NL34L	CL30	XNS59	**FL4555267**	Price
S20U-MVUNL-3	2.2500	14.0000	1.2500	1.1250	14°	VNM_33_	IVSN322	S34	NL34L	CL30	XNS59	**FL4555271**	Price
S24U-MVUNL-3	2.5000	14.0000	1.5000	1.2500	11°	VNM_33_	IVSN322	S34	NL34L	CL30	XNS59	**FL4555275**	Price
S28U-MVUNL-4	3.0000	14.0000	1.7500	1.5000	11°	VNM_43_	IVSN432	S46	NL46	CL30	XNS510	**FL4555279**	Price
S32V-MVUNL-4	3.2500	16.0000	2.0000	1.6250	11°	VNM_43_	IVSN432	S46	NL46	CL30	XNS510	**FL4555283**	Price

Right/Left Hand - Right													
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Seat Screw	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S16T-MVUNR-3	2.0000	12.0000	1.0000	1.0000	14°	VNM_33_	IVSN322	S34	NL34L	CL30	XNS59	**FL4555266**	Price
S20U-MVUNR-3	2.2500	14.0000	1.2500	1.1250	14°	VNM_33_	IVSN322	S34	NL34L	CL30	XNS59	**FL4543173**	Price
S24U-MVUNR-3	2.5000	14.0000	1.5000	1.2500	11°	VNM_33_	IVSN322	S34	NL34L	CL30	XNS59	**FL4543193**	Price
S28U-MVUNR-4	3.0000	14.0000	1.7500	1.5000	11°	VNM_43_	IVSN432	S46	NL46	CL30	XNS510	**FL4555278**	Price
S32V-MVUNR-4	3.2500	16.0000	2.0000	1.6250	11°	VNM_43_	IVSN432	S46	NL46	CL30	XNS510	**FL4543292**	Price
S40V-MVUNR-4	3.7500	16.0000	2.5000	1.8750	11°	VNM_43_	IVSN432	S46	NL46	CL30	XNS510	**FL4555290**	Price

See pages B134-B138 for spare parts

S-MWLN R/L Boring Bars

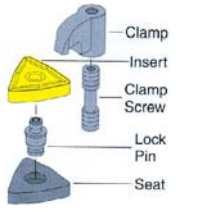
Style L

Negative 5° End & Side Cutting Edge Angle for Negative Trigon WNM_ Inserts

Right hand shown
Left hand opposite







Right/Left Hand - Left											
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S12S-MWLNL-3	1.0000	10.0000	.7500	.5000	14°	WNM_33_	-	NL33L	DHC7	DSHC7	**FL4543770**	Price
S16T-MWLNL-4	1.2800	12.0000	1.0000	.6400	14°	WNM_43_	-	NL44	CL20	XNS47	**FL4543790**	Price
S20U-MWLNL-4	1.5300	14.0000	1.2500	.7650	14°	WNM_43_	IWSN432	NL46	CL20	XNS47	**FL4543810**	Price
S24U-MWLNL-4	1.7800	14.0000	1.5000	.8900	11°	WNM_43_	IWSN432	NL46	CL20	XNS47	**FL4543830**	Price

Right/Left Hand - Right											
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	F (in.)	K° Rake Angle	Insert Style	Seat	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S12S-MWLNR-3	1.0000	10.0000	.7500	.5000	14°	WNM_33	-	NL33L	DHC7	DSHC7	**FL4543760**	Price
S16T-MWLNR-4	1.2800	12.0000	1.0000	.6400	14°	WNM_43_	-	NL44	CL20	XNS47	**FL4543780**	Price
S20U-MWLNR-4	1.5300	14.0000	1.2500	.7650	14°	WNM_43_	IWSN432	NL46	CL20	XNS47	**FL4543800**	Price
S24U-MWLNR-4	1.7800	14.0000	1.5000	.8900	11°	WNM_43_	IWSN432	NL46	CL20	XNS47	**FL4543820**	Price

See pages B134-B138 for spare parts

S-SCLPR Boring Bars





Style L

Negative 5° End & Side Cutting Edge Angle for 11° Positive 80° Diamond CP_T Inserts

Right hand shown, Left hand available

Description	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Neck Length E (in.)	F (in.)	K° Rake Angle	Insert Style	Torx Screw	Torx Key	Order No.	Price
S06M-SCLPR-2	.4800	6.0000	.3750	.625	.2500	6°	CP_T21.5_	TS25456M1/M2	T7	**FL4555761**	Price
S08R-SCLPR-2	.6000	8.0000	.5000	.750	.3120	3°	CP_T21.5_	TS478M1	T7	**FL4555763**	Price
S10S-SCLPR-3	.7700	10.0000	.6250	1.250	.4060	2°	CP_T32.5_	TS478M1	T15	**FL4555767**	Price
S12S-SCLPR-3	.9300	10.0000	.7500	1.250	.5000	2°	CP_T32.5_	TS478M1	T15	**FL4555769**	Price
S16T-SCLPR-3	1.2000	12.0000	1.0000	1.875	.6400	0°	CP_T32.5_	TS478M1	T15	**FL4555771**	Price

S-SCLC R/L Boring Bars





Style L

Negative 5° End & Side Cutting Edge Angle for 7° Positive 80° Diamond CC_T Inserts

Right hand shown, Left hand opposite

									Right			Left		
Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Depth of Cut E (in.)	F (in.)	K° Rake Angle	Insert Style	Torx Screw	Torx Key	Model No.	Order No.	Price	Model No.	Order No.	Price
.4770	6.0000	.3750	.625	.2500	15°	CC_T21.5	TS25456M1/M2	T7	S06M-SCLCR-2	**FL4555470**	Price	S06M-SCLCL-2	**FL4555471**	Price
.6020	6.0000	.5000	.750	.3120	13°	CC_T21.5_	TS25456M1/M2	T7	S08M-SCLCR-2	**FL4543111**	Price	S08M-SCLCL-2	**FL4555475**	Price
.6250	6.0000	.5000	1.250	.3120	13°	CC_T32.5_	TS478M1	T15	-	-	-	S08M-SCLCL-3	**FL4555483**	Price
.7800	6.0000	.5000	1.250	.3120	13°	CC_T32.5_	TS478M1	T15	S08M-SCLCR-3	**FL4543112**	Price	-	-	-
.7970	8.0000	.6250	1.250	.4060	10°	CC_T32.5_	TS478M1	T15	S10R-SCLCR-3	**FL4555486**	Price	S10R-SCLCL-3	**FL4555487**	Price
.8120	8.0000	.6250	1.250	.4060	10°	CC_T21.5_	TS25456M1/M2	T7	S10R-SCLCR-2	**FL4543115**	Price	S10R-SCLCL-2	**FL4555479**	Price
.9540	10.0000	.7500	1.875	.5000	8°	CC_T32.5_	TS478M1	T15	S12S-SCLCR-3	**FL4543131**	Price	S12S-SCLCL-3	**FL4555491**	Price
1.2500	12.0000	1.0000	2.500	.6250	7°	CC_T32.5_	TS478M1	T15	S16T-SCLCR-3	**FL4543152**	Price	S16T-SCLCL-3	**FL4555495**	Price
.3940	6.0000	.3750	1.250	.2360	11°	CC_T21.5_	TS25456M2	T8	S06H-SCLCR-2	**FL4555450**	Price	-	-	-
.5500	6.0000	.5000	1.500	.2750	9°	CC_T21.5_	TS25456M2	T8	S08K-SCLCR-2	**FL4555454**	Price	-	-	-
.7080	8.0000	.6250	2.000	.3540	7°	CC_T21.5_	TS25456M2	T8	S10M-SCLCR-2	**FL4555458**	Price	-	-	-

S-SDUC R/L Boring Bars





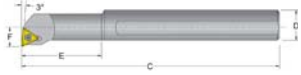
Style U

Negative 3° End Cutting Edge Angle for 7° Positive 55° Diamond DC_T Inserts

Right hand shown, Left hand available

Right/Left Hand - Right											
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Neck Length E (in.)	F (in.)	K° Rake Angle	Insert Style	Torx Screw	Torx Key	Order No.	Price
S06H-SDUCR-2	.4920	4.0000	.3750	.875	.3240	11°	DC_T 21.5	TS25456M2	T8	**FL4555540**	Price
S06M-SDUCR-2	.6250	6.0000	.3750	.625	.3750	11°	DC_T21.5_	TS25456M1/M2	T7	**FL4555560**	Price
S08K-SDUCR-2	.6100	5.0000	.5000	1.125	.3830	9°	DC_T 21.5	TS25456M2	T8	**FL4555544**	Price
S08M-SDUCR-2	.7800	6.0000	.5000	.750	.4370	11°	DC_T 21.5_	TS25456M2	T8	**FL4543113**	Price
S10R-SDUCR-2	.8400	8.0000	.6250	1.250	.5000	5°	DC_T21.5	TS25456M1/M2	T7	**FL4543116**	Price
S12S-SDUCR-3	1.1250	10.0000	.7500	1.275	.5620	6°	DC_T32.5_	TS478M1	T15	**FL4543132**	Price
S16T-SDUCR-3	1.5000	12.0000	1.0000	2.500	.7500	4°	DC_T 32.5	TS4710M1	T15	**FL4543153**	Price
S20U-SDUCR-3	1.7500	14.0000	1.1250	2.500	.8750	4°	DC_T32.5_	TS478M1	T15	**FL4555580**	Price

S-STUC R Boring Bars





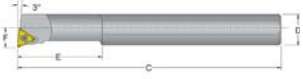
Style U

Negative 3° End Cutting Edge Angle for 7° Positive Triangle TC_T Inserts

Right hand shown

Right/Left Hand - Right										
Description	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Neck Length E (in.)	F (in.)	K° Rake Angle	Insert Style	Torx Screw	Torx Key	Order No.	Price
S06M-STUCR-2	.4770	6.0000	.3750	.625	.2500	15°	TC_T21.5_	TS25456M1/M2	T7	**FL4555628**	Price
S08H-STUCR-1.2-2	.2860	4.0000	.5000	-	.1430	7°	TC_T 1.21.20.5	TS06	T6	**FL4555724**	Price
S08H-STUCR-1.2-3	.3130	4.0000	.5000	-	.1570	7°	TC_T 1.21.20.5	TS06	T6	**FL4555726**	Price
S08H-STUCR-1.2-4	.3740	4.0000	.5000	-	.1890	7°	TC_T 1.21.20.5	TS06	T6	**FL4555728**	Price
S08M-STUCR-2	.6020	6.0000	.5000	.750	.3120	13°	TC_T21.5	TS25456M1/M2	T7	**FL4555629**	Price
S10R-STUCR-2	.7970	8.0000	.6250	1.250	.4060	10°	TC_T21.5	TS25456M1/M2	T7	**FL4543117**	Price
S12S-STUCR-3	.9540	10.0000	.7500	1.875	.5000	8°	TC_T32.5_	TS478M1	T15	**FL4555631**	Price
S16T-STUCR-3	1.2800	12.0000	1.0000	2.500	.6400	7°	TC_T32.5_	TS478M1	T15	**FL4555632**	Price

STCMB Boring Bars





From Roughing to Finishing

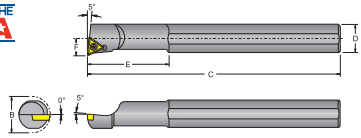
Square Shoulders to Through Bores for 7° positive triangle TC_T Inserts

Right hand shown

Right/Left Hand - Right									
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Neck Length E (in.)	F (in.)	Insert Style	Torx Screw	Torx Key	Order No.	Price
STCMB06-2	.5000	5.0000	.5000	1.250	2.0800	TC_T21.5_	TS25456M1/M2	T7	**FL4555738**	Price
STCMB08-2	.5900	6.0000	.5000	1.500	.2870	TC_T21.5_	TS25456M1/M2	T7	**FL4555740**	Price
STCMB10-2	.7500	8.0000	.6250	2.250	.3500	TC_T21.5_	TS25456M1/M2	T7	**FL4555742**	Price
STCMB16-3	1.1150	12.0000	1.0000	3.000	.5550	TC_T32.5_	TS478M1	T15	**FL4543154**	Price
STCMB20-4	1.3700	12.0000	1.2500	3.500	.6820	TC_T43_	TS5810M1	T20	**FL4555748**	Price

TPBN Boring Bars

MADE IN THE USA

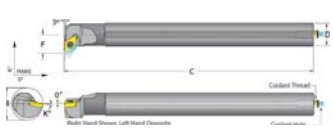


From Roughing to Finishing
Square Shoulders to Through Bores for 11° Positive Triangle TPGH or TPGB Inserts

Right hand shown

Right/Left Hand - Right									
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Neck Length E (in.)	F (in.)	TPGH Insert	Torx Screw	Torx Key	Order No.	Price
TPBN06-2	.4300	5.0000	.5000	1.250	.2080	TP_H21.5_	TS25456M1/M2	T7	**FL4543880**	Price
TPBN08-2	.5900	6.0000	.5000	1.500	.2870	TP_H21.5_	TS25456M1/M2	T7	**FL4543890**	Price
TPBN10-2	.6820	8.0000	.6250	2.250	.3500	TP_H21.5_	TS25456M1/M2	T7	**FL4543850**	Price
TPBN12-3	.8450	10.0000	.7500	2.500	.4220	TP_H32.	TS478M1	T15	**FL4543860**	Price
TPBN16-3	1.1150	12.0000	1.0000	3.000	.5550	TP_H32.	TS478M1	T15	**FL4543870**	Price
TPBN20-3	1.3700	12.0000	1.2500	3.500	.6820	TP_H32.	TS478M1	T15	**FL4555668**	Price
TPBN20-4	1.3700	12.0000	1.2500	3.500	.6820	TP_H43_	TS5810M1	T20	**FL4555670**	Price

E-SDUC R/L Boring Bars • Coolant Thru





Style U
Negative 3° Lead Angle for 7° Positive 55° Diamond DC__ Inserts

Right hand shown, left hand opposite

										Left			Right		
Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	K°	Torx Key	Model No.	Order No.	Price	Model No.	Order No.	Price
.375	.581	6.000	.375	.060	-	DC__21.51	TS-25.45-6M2	11	T8	E06M-SDUCL-2	**FL4659712**	Price	E06M-SDUCR-2	**FL4559711**	Price
.500	.712	5.000	.437	.080	6 X 1mm	DC__21.51	TS-25.45-6M2	11	T8	E08K-SDUCL-2	**FL4659716**	Price	E08K-SDUCR-2	**FL4559715**	Price
.500	.712	8.000	.437	.080	6 X 1mm	DC__21.51	TS-25.45-6M2	11	T8	E08R-SDUCL-2	**FL4659720**	Price	E08R-SDUCR-2	**FL4559719**	Price
.625	.844	6.000	.500	.125	1/8-27	DC__21.51	TS-25.45-6M2	7	T8	E10M-SDUCL-2	**FL4659724**	Price	E10M-SDUCR-2	**FL4559723**	Price
.625	.844	10.000	.500	.125	1/8-27	DC__21.51	TS-25.45-6M2	7	T8	E10S-SDUCL-2	**FL4659728**	Price	E10S-SDUCR-2	**FL4559727**	Price
.750	1.050	7.000	.562	.157	1/8-27	DC__32.52	TS-4.7-10M1	6	T15	E12Q-SDUCL-3	**FL4659988**	Price	E12Q-SDUCR-3	**FL4559987**	Price
.750	1.050	10.000	.562	.157	1/8-27	DC__32.52	TS-4.7-10M1	6	T15	E12S-SDUCL-3	**FL4659990**	Price	E12S-SDUCR-3	**FL4559989**	Price
1.000	1.300	8.000	.750	.197	1/8-27	DC__32.52	TS-4.7-10M1	4	T15	E16R-SDUCL-3	**FL4659992**	Price	E16R-SDUCR-3	**FL4559991**	Price
1.000	1.300	12.000	.750	.197	1/8-27	DC__32.52	TS-4.7-10M1	4	T15	E16T-SDUCL-3	**FL4659994**	Price	E16T-SDUCR-3	**FL4559993**	Price

E-STUC R/L Boring Bars • Coolant Thru



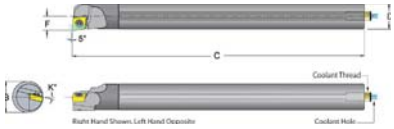


Style U
Negative 3° Lead Angle for 7° Positive Triangle TC__ Inserts

Right hand shown, left hand opposite

										Left			Right		
Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	Torx Key	Model No.	Order No.	Price	Model No.	Order No.	Price
.250	.281	4.000	.143	11	.060	-	TC__21.20.2	TS-06	T6	E04H-STUCL-1.2	**FL4659752**	Price	E04H-STUCR-1.2	**FL4559751**	Price
.312	.339	5.000	.167	8	.060	-	TC__21.20.2	TS-06	T6	E05K-STUCL-1.2	**FL4659756**	Price	E05K-STUCR-1.2	**FL4559755**	Price
.375	.409	6.000	.203	7	.060	-	TC__21.20.2	TS-06	T6	E06M-STUCL-1.2	**FL4659760**	Price	E06M-STUCR-1.2	**FL4559759**	Price
.375	.456	6.000	.250	15	.060	-	TC__21.51	TS-25.45-6M2	T8	E06M-STUCL-2	**FL4659764**	Price	E06M-STUCR-2	**FL4559763**	Price
.500	.587	5.000	.312	13	.080	1/8-27	TC__21.51	TS-25.45-6M2	T8	E08K-STUCL-2	**FL4659768**	Price	E08K-STUCR-2	**FL4559767**	Price
.500	.587	8.000	.312	13	.080	1/8-27	TC__21.51	TS-25.45-6M2	T8	E08R-STUCL-2	**FL4659772**	Price	E08R-STUCR-2	**FL4559771**	Price
.625	.750	6.000	.406	10	.125	1/8-27	TC__21.51	TS-25.45-6M2	T8	E10M-STUCL-2	**FL4659776**	Price	E10M-STUCR-2	**FL4559775**	Price
.625	.750	10.000	.406	10	.125	1/8-27	TC__21.51	TS-25.45-6M2	T8	E10S-STUCL-2	**FL4659780**	Price	E10S-STUCR-2	**FL4559779**	Price
.750	.930	7.000	.500	8	.157	1/8-27	TC__32.52	TS-4.7-10M1	T15	E12Q-STUCL-3	**FL4660028**	Price	E12Q-STUCR-3	**FL4560027**	Price
.750	.930	10.000	.500	8	.157	1/8-27	TC__32.52	TS-4.7-10M1	T15	E12S-STUCL-3	**FL4660030**	Price	E12S-STUCR-3	**FL4560029**	Price
1.000	1.200	8.000	.625	7	.197	1/8-27	TC__32.52	TS-4.7-10M1	T15	E16R-STUCL-3	**FL4660032**	Price	E16R-STUCR-3	**FL4560031**	Price
1.000	1.200	12.000	.625	7	.197	1/8-27	TC__32.52	TS-4.7-10M1	T15	E16T-STUCL-3	**FL4660034**	Price	E16T-STUCR-3	**FL4560033**	Price

E-SCLP R/L Boring Bars • Coolant Thru



Style L
Negative 5° Lead Angle for 11° Positive 80° Diamond CP_T Inserts

Right hand shown, left hand opposite

										Left			Right		
Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	K°	Torx Key	Model No.	Order No.	Price	Model No.	Order No.	Price
.312	.335	5.000	.167	.040	-	CP__1.81.20.5	TS-06	7	T6	E05K-SCLPL-1.8	**FL4659632**	Price	E05K-SCLPR-1.8	**FL4659631**	Price
.375	.396	6.000	.198	.060	-	CP__21.51	TS-25.45-6M2	6	T8	E06M-SCLPL-2	**FL4659636**	Price	E06M-SCLPR-2	**FL4559635**	Price
.500	.550	5.000	.275	.080	6 X 1mm	CP__21.51	TS-25.45-6M2	3	T8	E08K-SCLPL-2	**FL4659640**	Price	E08K-SCLPR-2	**FL4559639**	Price
.500	.550	8.000	.275	.080	6 X 1mm	CP__21.51	TS-25.45-6M2	3	T8	E08R-SCLPL-2	**FL4659644**	Price	E08R-SCLPR-2	**FL4559643**	Price
.625	.740	6.000	.395	.125	1/8-27	CP__21.51	TS-25.45-6M2	2	T8	E10M-SCLPL-2	**FL4659648**	Price	E10M-SCLPR-2	**FL4559647**	Price
.625	.740	10.000	.395	.125	1/8-27	CP__21.51	TS-25.45-6M2	2	T8	E10S-SCLPL-2	**FL4659652**	Price	E10S-SCLPR-2	**FL4559651**	Price
.500	.550	5.000	.280	.080	6 X 1mm	CP__32.52	TS-4.7-10M1	9	T15	E08K-SCLPL-3	**FL4659656**	Price	E08K-SCLPR-3	**FL4559655**	Price
.500	.550	8.000	.280	.080	6 X 1mm	CP__32.52	TS-4.7-10M1	9	T15	E08R-SCLPL-3	**FL4659660**	Price	E08R-SCLPR-3	**FL4559659**	Price
.625	.740	6.000	.395	.125	1/8-27	CP__32.52	TS-4.7-10M1	5	T15	E10M-SCLPL-3	**FL4659664**	Price	E10M-SCLPR-3	**FL4559663**	Price
.625	.740	10.000	.395	.125	1/8-27	CP__32.52	TS-4.7-10M1	5	T15	E10S-SCLPL-3	**FL4659668**	Price	E10S-SCLPR-3	**FL4559667**	Price

E-SCLD R/L Boring Bars • Coolant Thru

Style L

Negative 5° Lead Angle for 15° Positive 80° Diamond CD_T Inserts

Right hand shown, left hand opposite



- Left											
Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Insert Style	Insert Screw	Torx Key	Model No.	Order No.	Price
.156	.175	4.000	.093	12	.040	CD__1.20.60.2	TS-18.35-1M	T6	E02.5H-SCLDL-1.2	**FL4659576**	Price
.187	.205	4.000	.103	9	.040	CD__1.20.60.2	TS-18.35-1M	T6	E03.0H-SCLDL-1.2	**FL4659580**	Price
.218	.245	4.000	.123	7	.040	CD__1.20.60.2	TS-18.35-1M	T6	E03.5H-SCLDL-1.2	**FL4659584**	Price
.250	.270	4.000	.135	7	.040	CD__1.510.5	TS-18.35-1M	T6	E04H-SCLDL-1.5	**FL4659588**	Price
.312	.335	5.000	.167	7	.040	CD__1.510.5	TS-18.35-1M	T6	E05K-SCLDL-1.5	**FL4659592**	Price

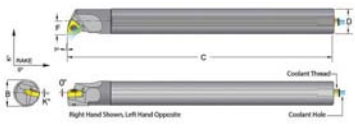
- Right											
Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Insert Style	Insert Screw	Torx Key	Model No.	Order No.	Price
.156	.175	4.000	.093	12	.040	CD__1.20.60.2	TS-18.35-1M	T6	E02.5H-SCLDR-1.2	**FL4559575**	Price
.187	.205	4.000	.103	9	.040	CD__1.20.60.2	TS-18.35-1M	T6	E03.0H-SCLDR-1.2	**FL4559579**	Price
.218	.245	4.000	.123	7	.040	CD__1.20.60.2	TS-18.35-1M	T6	E03.5H-SCLDR-1.2	**FL4559583**	Price
.250	.270	4.000	.135	7	.040	CD__1.510.5	TS-18.35-1M	T6	E04H-SCLDR-1.5	**FL4559587**	Price
.312	.335	5.000	.167	7	.040	CD__1.510.5	TS-18.35-1M	T6	E05K-SCLDR-1.5	**FL4559591**	Price

E-SWLC R/L Boring Bars • Coolant Thru

Style L

Negative 5° Lead Angle for 7° Positive 80° Trigon WC_T Inserts

Right hand shown, left hand opposite





- Left											
Model No.	Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	Torx Key	Order No.	Price
E03.0H-SWLCL-1.2	.187	.205	4.000	.103	-5°	.040	-	WC_T 1.210.2	TS-18.35-1M1	T6	**FL4659868**	Price
E03.5H-SWLCL-1.2	.218	.245	4.000	.125	-5°	.040	-	WC_T 1.210.2	TS-18.35-1M1	T6	**FL4659872**	Price
E04H-SWLCL-1.2	.250	.270	4.000	.135	-5°	.040	-	WC_T 1.210.2	TS-18.35-1M1	T6	**FL4659876**	Price
E05K-SWLCL-1.2	.312	.335	5.000	.167	-5°	.040	-	WC_T 1.210.2	TS-18.35-1M1	T6	**FL4659880**	Price
E06M-SWLCL-2	.375	.396	6.000	.198	-5°	.060	-	WC_T 21.51	TS-25.45-6M2	T8	**FL4659884**	Price
E08K-SWLCL-2	.500	.550	5.000	.275	-5°	.080	6 X 1mm	WC_T 21.51	TS-25.45-6M2	T8	**FL4659888**	Price
E08K-SWLCL-3	.500	.550	5.000	.275	-5°	.080	6 X 1mm	WC_T 32.52	TS-35.6-9M1	T15	**FL4659904**	Price
E08R-SWLCL-2	.500	.550	8.000	.275	-5°	.080	6 X 1mm	WC_T 21.51	TS-25.45-6M2	T8	**FL4659892**	Price
E08R-SWLCL-3	.500	.550	8.000	.275	-5°	.080	6 X 1mm	WC_T 32.52	TS-35.6-9M1	T15	**FL4659908**	Price
E10M-SWLCL-2	.625	.740	6.000	.395	-5°	.125	6 X 1mm	WC_T 21.51	TS-25.45-6M2	T8	**FL4659896**	Price
E10M-SWLCL-3	.625	.740	6.000	.395	-5°	.125	6 X 1mm	WC_T 32.52	TS-35.6-9M1	T15	**FL4659912**	Price
E10S-SWLCL-2	.625	.740	10.000	.395	-5°	.125	6 X 1mm	WC_T 21.51	TS-25.45-6M2	T8	**FL4659900**	Price
E10S-SWLCL-3	.625	.740	10.000	.395	-5°	.125	6 X 1mm	WC_T 32.52	TS-35.6-9M1	T15	**FL4659916**	Price
E12Q-SWLCL-3	.750	.930	7.000	.500	-5°	.157	1/8-27	WC_T 32.52	TS-35.6-9M1	T15	**FL4660048**	Price
E12S-SWLCL-3	.750	.930	10.000	.500	-5°	.157	1/8-27	WC_T 32.52	TS-35.6-9M1	T15	**FL4660050**	Price
E16R-SWLCL-3	1.000	1.200	8.000	.625	-5°	.197	1/8-27	WC_T 32.52	TS-35.6-9M1	T15	**FL4660052**	Price
E16T-SWLCL-3	1.000	1.200	12.000	.625	-5°	.197	1/8-27	WC_T 32.52	TS-35.6-9M1	T15	**FL4660054**	Price
E20U-SWLCL-4	1.250	1.530	14.000	.765	-5°	.197	1/8-27	WC_T 432	TS-5.8-10M1	T20	**FL4660056**	Price

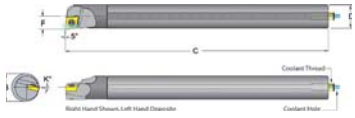
- Right											
Model No.	Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	Torx Key	Order No.	Price
E03.0H-SWLCR-1.2	.187	.205	4.000	.103	-5°	.040	-	WC_T 1.210.2	TS-18.35-1M1	T6	**FL4659867**	Price
E03.5H-SWLCR-1.2	.218	.245	4.000	.125	-5°	.040	-	WC_T 1.210.2	TS-18.35-1M1	T6	**FL4659871**	Price
E04H-SWLCR-1.2	.250	.270	4.000	.135	-5°	.040	-	WC_T 1.210.2	TS-18.35-1M1	T6	**FL4659875**	Price
E05K-SWLCR-1.2	.312	.335	5.000	.167	-5°	.040	-	WC_T 1.210.2	TS-18.35-1M1	T6	**FL4659879**	Price
E06M-SWLCR-2	.375	.396	6.000	.198	-5°	.060	-	WC_T 21.51	TS-25.45-6M2	T8	**FL4559883**	Price
E08K-SWLCR-2	.500	.550	5.000	.275	-5°	.080	6 X 1mm	WC_T 21.51	TS-25.45-6M2	T8	**FL4559887**	Price
E08K-SWLCR-3	.500	.550	5.000	.275	-5°	.080	6 X 1mm	WC_T 32.52	TS-35.6-9M1	T15	**FL4559903**	Price
E08R-SWLCR-2	.500	.550	8.000	.275	-5°	.080	6 X 1mm	WC_T 21.51	TS-25.45-6M2	T8	**FL4559891**	Price
E08R-SWLCR-3	.500	.550	8.000	.275	-5°	.080	6 X 1mm	WC_T 32.52	TS-35.6-9M1	T15	**FL4559907**	Price
E10M-SWLCR-2	.625	.740	6.000	.395	-5°	.125	6 X 1mm	WC_T 21.51	TS-25.45-6M2	T8	**FL4559895**	Price
E10M-SWLCR-3	.625	.740	6.000	.395	-5°	.125	6 X 1mm	WC_T 32.52	TS-35.6-9M1	T15	**FL4559911**	Price
E10S-SWLCR-2	.625	.740	10.000	.395	-5°	.125	6 X 1mm	WC_T 21.51	TS-25.45-6M2	T8	**FL4559899**	Price
E10S-SWLCR-3	.625	.740	10.000	.395	-5°	.125	6 X 1mm	WC_T 32.52	TS-35.6-9M1	T15	**FL4559915**	Price
E12Q-SWLCR-3	.750	.930	7.000	.500	-5°	.157	1/8-27	WC_T 32.52	TS-35.6-9M1	T15	**FL4560047**	Price
E12S-SWLCR-3	.750	.930	10.000	.500	-5°	.157	1/8-27	WC_T 32.52	TS-35.6-9M1	T15	**FL4560049**	Price
E16R-SWLCR-3	1.000	1.200	8.000	.625	-5°	.197	1/8-27	WC_T 32.52	TS-35.6-9M1	T15	**FL4560051**	Price
E16T-SWLCR-3	1.000	1.200	12.000	.625	-5°	.197	1/8-27	WC_T 32.52	TS-35.6-9M1	T15	**FL4560053**	Price
E20U-SWLCR-4	1.250	1.530	14.000	.765	-5°	.197	1/8-27	WC_T 432	TS-5.8-10M1	T20	**FL4660055**	Price

E-SCLC R/L Boring Bars • Coolant Thru

Style L

Negative 5° Lead Angle for 7° Positive 80° Diamond CC_T Inserts

Right hand shown, left hand opposite



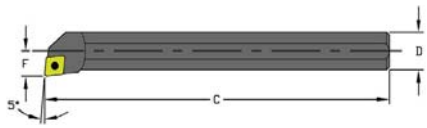


Shank Dia. D (in.)	Min Bore B (in.)	OAL C (in.)	F (in.)	K°	Coolant Hole (in.)	Coolant Thread	Insert Style	Insert Screw	Torx Key	Left			Right		
										Model No.	Order No.	Price	Model No.	Order No.	Price
.375	.396	6.000	.198	-5°	.060	-	CC_T 21.51	TS-25.45-6M2	T8	E06M-SCLCL-2	**FL4659596**	Price	E06M-SCLCR-2	**FL4559595**	Price
.500	.550	5.000	.275	-5°	.080	6 X 1mm	CC_T 21.51	TS-25.45-6M2	T8	E08K-SCLCL-2	**FL4659600**	Price	E08K-SCLCR-2	**FL4559599**	Price
.500	.550	8.000	.275	-5°	.080	6 X 1mm	CC_T 21.51	TS-25.45-6M2	T8	E08R-SCLCL-2	**FL4659604**	Price	E08R-SCLCR-2	**FL4559603**	Price
.625	.740	6.000	.395	-5°	.125	6 X 1mm	CC_T 21.51	TS-25.45-6M2	T8	E10M-SCLCL-2	**FL4659608**	Price	E10M-SCLCR-2	**FL4559607**	Price
.625	.740	10.000	.395	-5°	.125	6 X 1mm	CC_T 21.51	TS-25.45-6M2	T8	E10S-SCLCL-2	**FL4659612**	Price	E10S-SCLCR-2	**FL4559611**	Price
.500	.550	5.000	.275	-5°	.080	6 X 1mm	CC_T 32.52	TS-35.6-7M1	T15	E08K-SCLCL-3	**FL4659616**	Price	E08K-SCLCR-3	**FL4559615**	Price
.500	.550	8.000	.275	-5°	.080	6 X 1mm	CC_T 32.52	TS-35.6-7M1	T15	E08R-SCLCL-3	**FL4659620**	Price	E08R-SCLCR-3	**FL4559619**	Price
.625	.740	6.000	.395	-5°	.125	6 X 1mm	CC_T 32.52	TS-35.6-7M1	T15	E10M-SCLCL-3	**FL4659624**	Price	E10M-SCLCR-3	**FL4559623**	Price
.625	.740	10.000	.395	-5°	.125	6 X 1mm	CC_T 32.52	TS-35.6-7M1	T15	E10S-SCLCL-3	**FL4659628**	Price	E10S-SCLCR-3	**FL4559627**	Price
.750	.930	7.000	.500	-5°	.157	1/8-27	CC_T 32.52	TS-35.6-7M1	T15	E12Q-SCLCL-3	**FL4659968**	Price	E12Q-SCLCR-3	**FL4559967**	Price
.750	.930	10.000	.500	-5°	.157	1/8-27	CC_T 32.52	TS-35.6-7M1	T15	E12S-SCLCL-3	**FL4659970**	Price	E12S-SCLCR-3	**FL4559969**	Price
1.000	1.200	8.000	.625	-5°	.197	1/8-27	CC_T 32.52	TS-35.6-7M1	T15	E16R-SCLCL-3	**FL4659972**	Price	E16R-SCLCR-3	**FL4559971**	Price
1.000	1.200	12.000	.625	-5°	.197	1/8-27	CC_T 32.52	TS-35.6-7M1	T15	E16T-SCLCL-3	**FL4659974**	Price	E16T-SCLCR-3	**FL4559973**	Price
1.250	1.470	14.000	.765	-5°	.197	1/8-27	CC_T 432	TS-5.8-10M1	T20	E20U-SCLCL-4	**FL4659976**	Price	E20U-SCLCR-4	**FL4559975**	Price

ULTRA-DEX Positive 80° Diamond -5° Lead Boring Bars No Coolant

Steel Bars • 4:1 Ratio

- Right hand shown

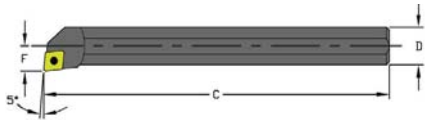


D Dia. (in.)	F (in.)	OAL (in.)	Min. Bore (in.)	Insert	Insert Screw	Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/16	.102	3.5	.205	CDHB 1.20.60	MTS-183	T-6	S03G SCLDL1.2	**FG551299**	Price	S03G SCLDR1.2	**FG551300**	Price
7/32	.125	3.5	.275	CDGW 1.510	MTS-184	T-6	S04G SCLDL1.5	**FG551302**	Price	S04G SCLDR1.5	**FG551304**	Price
3/8	.203	5	.410	CCMT 21.51	MTS-255	T-7	S06K SCLCL2	**FG551328**	Price	S06K SCLCR2	**FG551330**	Price
3/8	.203	5	.410	CPMT 21.51	MTS-255	T-7	S06K SCLPL2	**FG551332**	Price	S06K SCLPR2	**FG551334**	Price
1/2	.281	6	.560	CCMT 21.51	MTS-255	T-7	S08M SCLCL2	**FG551356**	Price	S08M SCLCR2	**FG551359**	Price
1/2	.281	6	.560	CPMT 21.51	MTS-255	T-7	S08M SCLPL2	**FG551362**	Price	S08M SCLPR2	**FG551365**	Price
1/2	.344	6	.625	CCMT 32.51	MTS-35	T-15	S08M SCLCL3	**FG551358**	Price	S08M SCLCR3	**FG551361**	Price
1/2	.344	6	.625	CPMT 32.51	MTS-35	T-15	S08M SCLPL3	**FG551364**	Price	S08M SCLPR3	**FG551367**	Price
5/8	.406	7	.760	CCMT 32.51	MTS-35	T-15	S10Q SCLCL3	**FG551391**	Price	S10Q SCLCR3	**FG551393**	Price
5/8	.406	7	.760	CPMT 32.51	MTS-35	T-15	S10Q SCLPL3	**FG551395**	Price	S10Q SCLPR3	**FG551397**	Price
3/4	.500	7	.920	CCMT 32.51	MTS-35	T-15	S12Q SCLCL3	**FG551417**	Price	S12Q SCLCR3	**FG551418**	Price
3/4	.500	7	.920	CPMT 32.51	MTS-35	T-15	S12Q SCLPL3	**FG551419**	Price	S12Q SCLPR3	**FG551420**	Price
3/4	.500	10	.920	CCMT 32.51	MTS-35	T-15	-	-	-	S12S SCLCR3	**FG551445**	Price
1	.625	8	1.185	CCMT 32.51	MTS-35	T-15	S16R SCLCL3	**FG551448**	Price	S16R SCLCR3	**FG551449**	Price
1-1/4	.765	14	1.465	CCMT 432	MTS-4	T-20	S20U SCLCL4	**FG551502**	Price	S20U SCLCR4	**FG551503**	Price

ULTRA-DEX Positive 80° Diamond -5° Lead Boring Bars Coolant Thru

Steel Bars • 4:1 Ratio

- Right hand shown

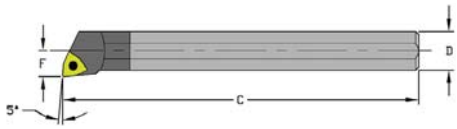


D Dia. (in.)	C OAL (in.)	Min. Bore	Insert	Left			Right		
				Model No.	Order No.	Price	Model No.	Order No.	Price
1/4	3.5	.275	CDGW 1.510	A04G SCLDL1.5	**FG550846**	Price	A04G SCLDR1.5	**FG550848**	Price
5/16	3.5	.340	CPMT 1.81.20.5	A05G SCLPL1.8	**FG550853**	Price	A05G SCLPR1.8	**FG550719**	Price
3/8	5	.410	CCMT 21.51	A06K SCLCL2	**FG550861**	Price	A06K SCLCR2	**FG550726**	Price
3/8	5	.410	CPMT 21.51	A06K SCLPL2	**FG550864**	Price	A06K SCLPR2	**FG550720**	Price
1/2	6	.560	CCMT 21.51	A08M SCLCL2	**FG550881**	Price	A08M SCLCR2	**FG550727**	Price
1/2	6	.560	CPMT 21.51	A08M SCLPL2	**FG550886**	Price	A08M SCLPR2	**FG550721**	Price
1/2	6	.625	CCMT 32.51	A08M SCLCL3	**FG550883**	Price	A08M SCLCR3	**FG550885**	Price
1/2	6	.625	CPMT 32.51	A08M SCLPL3	**FG550888**	Price	A08M SCLPR3	**FG550890**	Price
5/8	7	.760	CCMT 21.51	A10Q SCLCL2	**FG550907**	Price	A10Q SCLCR2	**FG550728**	Price
5/8	7	.760	CPMT 21.51	A10Q SCLPL2	**FG550909**	Price	A10Q SCLPR2	**FG550722**	Price
5/8	7	.760	CCMT 32.51	A10Q SCLCL3	**FG550908**	Price	A10Q SCLCR3	**FG550729**	Price
5/8	7	.760	CPMT 32.51	A10Q SCLPL3	**FG550910**	Price	A10Q SCLPR3	**FG550723**	Price
3/4	7	.920	CCMT 32.51	A12Q SCLCL3	**FG550921**	Price	A12Q SCLCR3	**FG550730**	Price
3/4	7	.920	CPMT 32.51	A12Q SCLPL3	**FG550922**	Price	A12Q SCLPR3	**FG550724**	Price
1	8	1.185	CCMT 32.51	A16R SCLCL3	**FG550943**	Price	A16R SCLCR3	**FG550731**	Price
1	8	1.185	CPMT 32.51	A16R SCLPL3	**FG552002**	Price	A16R SCLPR3	**FG550725**	Price
1-1/4	14	1.465	CCMT 431	A20U SCLCL4	**FG550984**	Price	A20U SCLCR4	**FG550732**	Price
1-1/2	14	1.730	CCMT 431	A24U SCLCL4	**FG550996**	Price	A24U SCLCR4	**FG550733**	Price

ULTRA-DEX Positive Trigon -5° Lead Boring Bars No Coolant

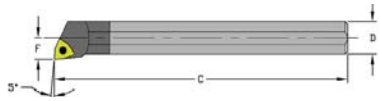
Steel Bars • 4:1 Ratio

- Right hand shown



Shank Dia. (in.)	OAL (in.)	F (in.)	Minimum Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	5	.203	.560	WCMT 21.51	MTS-255	T-7	S06K SWLCL2	**FG551352**	Price	S06K SWLCR2	**FG551353**	Price
1/2	6	.281	.760	WCMT 21.51	MTS-255	T-7	S08M SWLCL2	**FG551384**	Price	S08M SWLCR2	**FG551385**	Price
5/8	7	.406	.760	WCMT 21.51	MTS-255	T-7	S10Q SWLCL2	**FG551410**	Price	S10Q SWLCR2	**FG551412**	Price
5/8	7	.406	.760	WCMT 32.51	MTS-35	T-15	S10Q SWLCL3	**FG551411**	Price	S10Q SWLCR3	**FG551413**	Price
3/4	7	.500	.920	WCMT 32.51	MTS-35	T-15	S12Q SWLCL3	**FG551436**	Price	S12Q SWLCR3	**FG551437**	Price
1	8	.625	1.185	WCMT 32.51	MTS-35	T-15	S16R SWLCL3	**FG551464**	Price	S16R SWLCR3	**FG551465**	Price

ULTRA-DEX Positive Trigon -5° Lead Boring Bars Coolant Thru

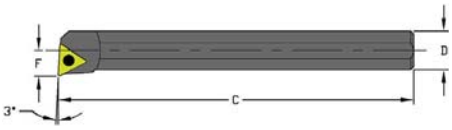


Steel Bars • 4:1 Ratio

• Right hand shown

D Dia. (in.)	C OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	5	.203	.410	WCMT 21.51	MTS 255	T-7	A06K SWLCL2	**FG550878**	Price	A06K SWLCR2	**FG550747**	Price
1/2	6	.281	.560	WCMT 21.51	MTS 255	T-7	A08M SWLCL2	**FG550903**	Price	A08M SWLCR2	**FG550748**	Price
5/8	7	.406	.760	WCMT 21.51	MTS 255	T-7	A10Q SWLCL2	**FG550917**	Price	A10Q SWLCR2	**FG550749**	Price
5/8	7	.406	.760	WCMT 32.51	MTS 35	T-15	A10Q SWLCL3	**FG550918**	Price	A10Q SWLCR3	**FG550750**	Price
3/4	7	.500	.920	WCMT 32.51	MTS 35	T-15	A12Q SWLCL3	**FG550933**	Price	A12Q SWLCR3	**FG550751**	Price
1	8	.625	1.180	WCMT 32.51	MTS 35	T-15	A16R SWLCL3	**FG550952**	Price	A16R SWLCR3	**FG550752**	Price

ULTRA-DEX Positive Triangle -3° Lead Boring Bars No Coolant

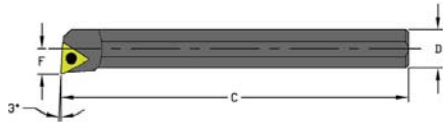


Steel Bars • 4:1 Ratio

• Right hand shown

D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
1/4	3.5	.138	.275	TCMT 1.21.20.5	MTS-184	T-6	S04G STUCL1.2	**FG551308**	Price	S04G STUCR1.2	**FG551310**	Price
5/16	3.5	.167	.340	TCMT 1.21.20.5	MTS-184	T-6	S05G STUCL1.2	**FG551319**	Price	S05G STUCR1.2	**FG551321**	Price
3/8	5	.203	.410	TCMT 21.51	MTS-255	T-7	S06K STUCL2	**FG551343**	Price	S06K STUCR2	**FG551346**	Price
3/8	5	.203	.410	TPMT 21.51	MTS-255	T-7	S06K STUPL2	**FG551348**	Price	S06K STUPR2	**FG551350**	Price
1/2	6	.281	.560	TCMT 21.51	MTS-255	T-7	S08M STUCL2	**FG551376**	Price	S08M STUCR2	**FG551378**	Price
1/2	6	.281	.560	TPMT 21.51	MTS-255	T-7	S08M STUPL2	**FG551380**	Price	S08M STUPR2	**FG551382**	Price
5/8	7	.406	.760	TCMT 21.51	MTS-255	T-7	S10Q STUCL2	**FG551405**	Price	S10Q STUCR2	**FG551406**	Price
3/4	8	.500	.920	TCMT 32.51	MTS-35	T-15	S12Q STUCL3	**FG551430**	Price	S12Q STUCR3	**FG551431**	Price

ULTRA-DEX Positive Triangle -3° Lead Boring Bars Coolant Thru

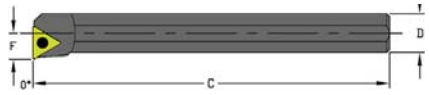


Steel Bars • 4:1 Ratio

• Right hand shown

D Dia. (in.)	C OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
1/4	3.5	.138	.275	TCMT 1.21.20.5	MTS 184	T-6	A04G STUCL1.2	**FG550850**	Price	A04G STUCR1.2	**FG550734**	Price
5/16	3.5	.167	.340	TCMT 1.21.20.5	MTS 184	T-6	A05G STUCL1.2	**FG550856**	Price	A05G STUCR1.2	**FG550735**	Price
3/8	5	.203	.410	TCMT 1.21.20.5	MTS 184	T-6	A06K STUCL1.2	**FG550871**	Price	A06K STUCR1.2	**FG550736**	Price
3/8	5	.203	.410	TCMT 21.51	MTS 255	T-7	A06K STUCL2	**FG550873**	Price	A06K STUCR2	**FG550740**	Price
3/8	5	.203	.410	TPMT 21.51	MTS 255	T-7	A06K STUPL2	**FG550875**	Price	A06K STUPR2	**FG550737**	Price
1/2	6	.281	.560	TCMT 21.51	MTS 255	T-7	A08M STUCL2	**FG550898**	Price	A08M STUCR2	**FG550741**	Price
1/2	6	.281	.560	TPMT 21.51	MTS 255	T-7	A08M STUPL2	**FG550900**	Price	A08M STUPR2	**FG550738**	Price
5/8	7	.406	.760	TCMT 21.51	MTS 255	T-7	A10Q STUCL2	**FG550915**	Price	A10Q STUCR2	**FG550742**	Price
5/8	7	.406	.760	TPMT 21.51	MTS 255	T-7	A10Q STUPL2	**FG550916**	Price	A10Q STUPR2	**FG550739**	Price
3/4	7	.500	.920	TCMT 32.51	MTS 35	T-15	A12Q STUCL3	**FG550931**	Price	A12Q STUCR3	**FG550745**	Price
3/4	7	.500	.920	TPMT 32.51	MTS 35	T-15	A12Q STUPL3	**FG550932**	Price	A12Q STUPR3	**FG550743**	Price
1	8	.625	1.185	TCMT 32.51	MTS 35	T-15	A16R STUCL3	**FG550950**	Price	A16R STUCR3	**FG550746**	Price
1	8	.625	1.185	TPMT 32.51	MTS 35	T-15	A16R STUPL3	**FG550951**	Price	A16R STUPR3	**FG550744**	Price

ULTRA-DEX Positive Triangle 0° Lead Boring Bars No Coolant

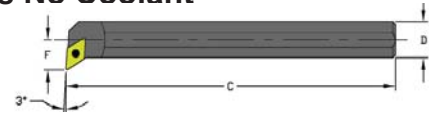


Steel Bars • 4:1 Ratio

• Right hand shown

D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
1/4	3-1/2	.172	.312	TCMT 1.21.20.5	MTS-184	T-7	S04G STFCL1.2	**FG551306**	Price	S04G STFCR1.2	**FG551307**	Price
5/16	3-1/2	.167	.340	TCMT 1.21.20.5	MTS-184	T-7	S05G STFCL1.2	**FG551317**	Price	S05G STFCR1.2	**FG551318**	Price
3/8	5	.250	.460	TCMT 1.21.20.5	MTS-184	T-7	S06K STFCL1.2	**FG551324**	Price	S06K STFCR1.2	**FG551325**	Price
3/8	5	.203	.410	TCMT 21.51	MTS-255	T-7	-	-	-	S06K STFCR2	**FG551340**	Price
1/2	6	.281	.560	TCMT 21.51	MTS-255	T-7	-	-	-	S08M STFCR2	**FG551374**	Price
1/2	6	.281	.560	TPMT 21.51	MTS-255	T-7	-	-	-	S08M STFPR2	**FG551375**	Price
5/8	7	.406	.760	TCMT 21.51	MTS-255	T-7	-	-	-	S10Q STFCR2	**FG551403**	Price
3/4	7	.500	.920	TCMT 32.51	MTS-35	T-7	-	-	-	S12Q STFCR3	**FG551414**	Price

ULTRA-DEX Positive 55° Diamond -3° Lead Profiling Boring Bars No Coolant



Steel Bars • 4:1 Ratio

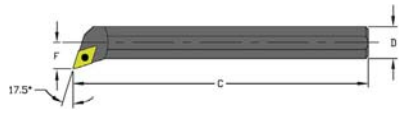
• Right hand shown

D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	5	.375	.585	DCMT 21.51	MTS-255	T-7	S06K SDUCL2	**FG551337**	Price	S06K SDUCR2	**FG551338**	Price
1/2	6	.437	.720	DCMT 21.51	MTS-255	T-7	S08M SDUCL2	**FG551369**	Price	S08M SDUCR2	**FG551370**	Price
5/8	7	.500	.850	DCMT 21.51	MTS-255	T-7	S10Q SDUCL2	**FG551400**	Price	S10Q SDUCR2	**FG551401**	Price
3/4	7	.625	1.050	DCMT 32.51	MTS-35	T-15	S12Q SDUCL3	**FG551422**	Price	S12Q SDUCR3	**FG551423**	Price

ULTRA-DEX Positive 55° Diamond -17.5° Lead Profiling Boring Bars No Coolant

Steel Bars • 4:1 Ratio

- Available in right hand only

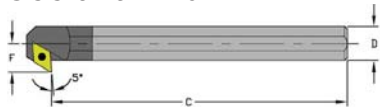


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Right		
							Model No.	Order No.	Price
3/8	5	.281	.490	DCMT 21.51	MTS-255	T-7	S06K SDQCR2	**FG551336**	Price
1/2	6	.341	.620	DCMT 21.51	MTS-255	T-7	S08M SDQCR2	**FG551368**	Price
5/8	7	.406	.760	DCMT 21.51	MTS-255	T-7	S10Q SDQCR2	**FG551399**	Price

ULTRA-DEX Positive 55° Diamond 5° Lead Back Facing Boring Bars Coolant Thru

Steel Bars • 4:1 Ratio

- Right hand shown

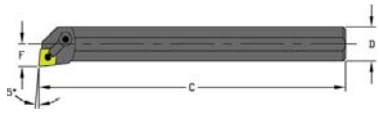


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	4.5	.375	.585	DCMT 21.51	MTS 255	T-7	A06J SDXCL2	**FG550859**	Price	A06J SDXCR2	**FG550860**	Price
1/2	6	.437	.720	DCMT 21.51	MTS 255	T-7	A08M SDXCL2	**FG550893**	Price	A08M SDXCR2	**FG550894**	Price
3/4	7	.625	1.050	DCMT 32.51	MTS 35	T-15	A12Q SDXCL3	**FG550927**	Price	A12Q SDXCR3	**FG550928**	Price

ULTRA-DEX Negative 80° Diamond -5° Lead Boring Bars No Coolant

Steel Bars • 4:1 Ratio

- Right hand shown

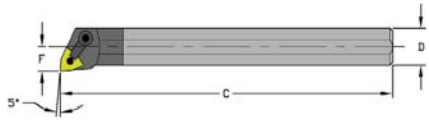


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Seat	Clamp	Clamp Screw	Lock Pin	Left			Right		
									Model No.	Order No.	Price	Model No.	Order No.	Price
3/4	8	.500	.920	CNMG 322	-	CL-7	XNS-36	NL-33	S12R MCLNL3	**FG551438**	Price	S12R MCLNR3	**FG551439**	Price
1	10	.640	1.200	CNMG 322	-	CL-7	XNS-36	NL-33	S16S MCLNL3	**FG551466**	Price	S16S MCLNR3	**FG551468**	Price
1	10	.640	1.200	CNMG 432	-	CL-20	XNS-47	NL-44	S16S MCLNL4	**FG551467**	Price	S16S MCLNR4	**FG551469**	Price
1-1/4	10	.765	1.470	CNMG 432	ICSN 433	CL-20	XNS-47	NL-46	S20S MCLNL4	**FG551483**	Price	S20S MCLNR4	**FG551484**	Price
1-1/2	14	.890	1.730	CNMG 432	ICSN 433	CL-20	XNS-47	NL-46	S24U MCLNL4	**FG551504**	Price	S24U MCLNR4	**FG551505**	Price
2	16	1.281	2.400	CNMG 432	ICSN 433	CL-20	XNS-47	NL-46	S32V MCLNL4	**FG551517**	Price	S32V MCLNR4	**FG551518**	Price

ULTRA-DEX Negative Trigon -5° Lead Boring Bars Coolant Thru

Steel Bars • 4:1 Ratio

- Right hand shown

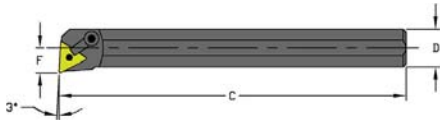


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Seat	Clamp	Clamp Screw	Lock Pin	Left			Right		
									Model No.	Order No.	Price	Model No.	Order No.	Price
1	10	.640	1.200	WNMG 332	-	CL7	XNS-36	NL 33L	A16S MWLNL3	**FG550961**	Price	A16S MWLNR3	**FG550963**	Price
1	10	.640	1.200	WNMG 432	IWSN 433	CL20	XNS-47	NL 44	A16S MWLNL4	**FG550962**	Price	A16S MWLNR4	**FG550964**	Price
1-1/4	10	.765	1.470	WNMG 432	IWSN 433	CL20	XNS-47	NL 46	A20S MWLNL4	**FG550969**	Price	A20S MWLNR4	**FG550970**	Price
1-1/4	14	.765	1.470	WNMG 432	IWSN 433	CL20	XNS-47	NL 46	A20U MWLNL4	**FG550982**	Price	A20U MWLNR4	**FG550983**	Price

ULTRA-DEX Negative Triangle -3° Lead Boring Bars No Coolant

Steel Bars • 4:1 Ratio

- Available in right hand only

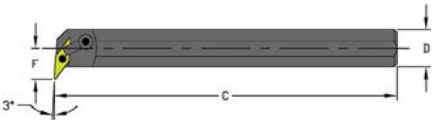


Model No.	D Dia. (in)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Seat	Clamp	Clamp Screw	Lock Pin	Order No.	Price
S16S MTUNR3	1	10	.640	1.200	TNMG 332	-	CL-7	XNS-36	NL-33L	**FG551472**	Price
S20S MTUNR3	1-1/4	10	.765	1.470	TNMG 332	ITSN 323	CL-7	XNS-36	NL-34L	**FG551486**	Price
S20U MTUNR3	1-1/4	10	.765	1.470	TNMG 332	ITSN 323	CL-7	XNS-36	NL-34L	**FG551499**	Price
S24U MTUNR4	1-1/2	14	.890	1.730	TNMG 432	ITSN 433	CL-20	XNS-47	NL-46	**FG551511**	Price

ULTRA-DEX Negative 35° Diamond -3° Lead Profiling Boring Bars No Coolant

Steel Bars • 4:1 Ratio

- Available in right hand only

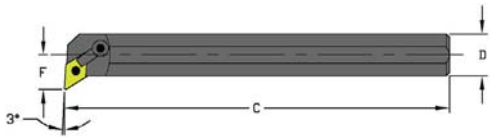


Model No.	Shank Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Seat	Clamp	Clamp Screw	Lock Pin	Order No.	Price
S16S MVUNR3	1	10	.875	1.435	VNMG 332	IVSN-322	CL-20	XNS-47	NL-34L	**FG551473**	Price
S20T MVUNR3	1-1/4	12	1.000	1.705	VNMG 332	IVSN-322	CL-20	XNS-47	NL-34L	**FG551495**	Price
S24U MVUNR3	1-1/2	14	1.120	1.960	VNMG 332	IVSN-322	CL-20	XNS-47	NL-34L	**FG551512**	Price

ULTRA-DEX Negative 55° Diamond -3° Lead Profiling Boring Bars No Coolant

Steel Bars • 4:1 Ratio

- Right hand shown



D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Seat	Clamp	Clamp Screw	Lock Pin	Left			Right		
									Model No.	Order No.	Price	Model No.	Order No.	Price
1	10	.750	1.310	DNMG 332	-	CL-7	XNS-36	NL-33L	S16S MDUNL3	**FG553070**	Price	S16S MDUNR3	**FG551470**	Price
1-1/4	12	1.000	1.700	DNMG 332	IDSN-322	CL-7	XNS-36	NL-46	S20T MDUNL4	**FG551491**	Price	S20T MDUNR3	**FG551493**	Price
1-1/2	14	1.125	1.960	DNMG 432	IDSN-433	CL-22	XNS-48	NL-46	S20T MDUNL4	**FG551492**	Price	S20T MDUNR4	**FG551494**	Price
1-1/2	14	1.125	1.960	DNMG 432	IDSN-433	CL-22	XNS-48	NL-46	S24U MDUNL4	**FG551508**	Price	S24U MDUNR4	**FG551509**	Price

ULTRA-DEX Negative 80° Diamond -5° Lead Boring Bars Coolant Thru

Steel Bars • 4:1 Ratio

- Right hand shown

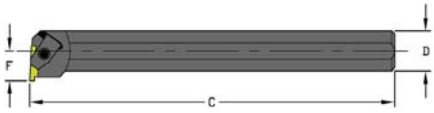


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Seat	Clamp	Clamp Screw	Lock Pin	Left			Right		
									Model No.	Order No.	Price	Model No.	Order No.	Price
3/4	8	.500	.920	CNMG 322	-	CL7	XNS-36	NL 33	A12R MCLNL3	**FG550934**	Price	A12R MCLNR3	**FG550935**	Price
1	10	.640	1.200	CNMG 432	-	CL20	XNS-47	NL 44	A16S MCLNL4	**FG550956**	Price	A16S MCLNR4	**FG550958**	Price
1-1/4	14	.765	1.470	CNMG 432	ICSN 433	CL20	XNS-47	NL 46	A20U MCLNL4	**FG550980**	Price	A20U MCLNR4	**FG550981**	Price
1-1/2	14	.890	1.730	CNMG 432	ICSN 433	CL20	XNS-47	NL 46	A24U MCLNL4	**FG550988**	Price	A24U MCLNR4	**FG550989**	Price
2	16	1.281	2.400	CNMG 432	ICSN 433	CL20	XNS-47	NL 46	A32V MCLNL4	**FG550997**	Price	A32V MCLNR4	**FG550998**	Price

ULTRA-DEX Threading/Grooving Top Notch Boring Bars No Coolant

Steel Bars • 4:1 Ratio

- Right hand shown

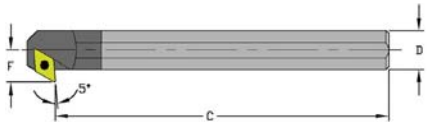


D Dia. (in)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Clamp	Clamp Screw	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
5/8	-	.500	1.000	NG 2R	CM-74	6-32	S10Q NEL2	**FG551388**	Price	S10Q NER2	**FG551389**	Price
3/4	7	.562	1.120	NG 2L/2R	CM-75	6-32	S12Q NEL2	**FG551415**	Price	S12Q NER2	**FG551416**	Price
1	8	.688	1.180	NG 3L/3R	CM-73	10-32	S16R NEL3	**FG551354**	Price	S12R NER3	**FG551446**	Price
1	8	.688	1.180	NG 3L/3R	CM-73	10-32	S16R NEL3	**FG551355**	Price	S16R NER3	**FG551447**	Price

ULTRA-DEX Positive 55° Diamond 5° Lead Back Facing Boring Bars Coolant Thru

Solid Carbide • 8:1 Ratio

- Right hand shown

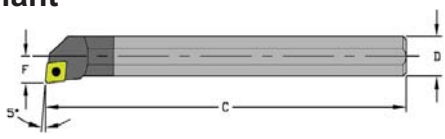


D Dia (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	6	.375	.585	DCMT 21.51	MTS 255	T-7	E06M SDXCL2	**FG550157**	Price	E06M SDXCR2	**FG550156**	Price
1/2	4.5	.437	.720	DCMT 21.51	MTS 255	T-7	E08J SDXCL2	**FG551129**	Price	E08J SDXCR2	**FG551130**	Price
1/2	8	.437	.720	DCMT 21.51	MTS 255	T-7	E08R SDXCL2	**FG550161**	Price	E08R SDXCR2	**FG550160**	Price
5/8	7	.500	.850	DCMT 21.51	MTS 255	T-7	E10Q SDXCL2	**FG551175**	Price	E10Q SDXCR2	**FG551176**	Price
5/8	10	.500	.850	DCMT 21.51	MTS 255	T-7	E10S SDXCL2	**FG551196**	Price	E10S SDXCR2	**FG551197**	Price
3/4	7	.625	1.050	DCMT 32.51	MTS 35	T-15	E12Q SDXCL3	**FG551216**	Price	E12Q SDXCR3	**FG550166**	Price
3/4	10	.625	1.050	DCMT 32.51	MTS 35	T-15	E12S SDXCL3	**FG551235**	Price	E12S SDXCR3	**FG550168**	Price
1	8	.750	1.310	DCMT 32.51	MTS 35	T-15	E16R SDXCL2	**FG551256**	Price	E16R SDXCR3	**FG551257**	Price
1	12	.750	1.310	DCMT 32.51	MTS 35	T-15	E16T SDXCL3	**FG551278**	Price	E16T SDXCR3	**FG550172**	Price

ULTRA-DEX Positive 80° Diamond -5° Lead Boring Bars No Coolant

Solid Carbide • 8:1 Ratio

- Right hand shown

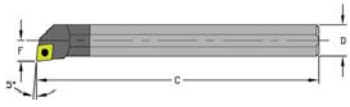


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
7/32	4	.125	.245	CDGW 1.510	MTS-184	T-6	-	-	-	C03.5H SCLDR1.5	**FG551004**	Price
3/16	4	.102	.205	CDHB 1.20.60	MTS-183	T-6	-	-	-	C03H SCLDR1.2	**FG551006**	Price
1/4	4	.138	.275	CDGW 1.510	MTS-184	T-6	C04H SCLDL1.5	**FG550008**	Price	C04H SCLDR1.5	**FG550007**	Price
5/16	5	.167	.340	CPMT 1.81.20.5	MTS-224	T-7	C05K SCLPL1.8	**FG550036**	Price	C05K SCLPR1.8	**FG550035**	Price
3/8	6	.203	.410	CCMT 21.51	MTS-255	T-7	C06M SCLCL2	**FG551020**	Price	C06M SCLCR2	**FG551022**	Price
3/8	6	.203	.410	CPMT 21.51	MTS-255	T-7	C06M SCLPL2	**FG550043**	Price	C06M SCLPR2	**FG550040**	Price
1/2	4.5	.281	.560	CCMT 21.51	MTS-255	T-7	C08J SCLCL2	**FG551036**	Price	C08J SCLCR2	**FG551039**	Price
1/2	4.5	.344	.625	CCMT 32.51	MTS-35	T-15	C08J SCLCL3	**FG551038**	Price	C08J SCLCR3	**FG551041**	Price
1/2	4.5	.281	.560	CPMT 21.51	MTS-255	T-7	-	-	-	C08J SCLPR2	**FG550056**	Price
1/2	4.5	.344	.625	CPMT 32.51	MTS-35	T-15	-	-	-	C08J SCLPR3	**FG551045**	Price
1/2	8	.281	.560	CCMT 21.51	MTS-255	T-7	C08R SCLCL2	**FG551058**	Price	C08R SCLCR2	**FG551061**	Price
1/2	8	.281	.560	CPMT 21.51	MTS-255	T-7	-	-	-	C08R SCLPR2	**FG550061**	Price
1/2	8	.344	.625	CPMT 32.51	MTS-35	T-15	C08R SCLPL3	**FG551065**	Price	C08R SCLPR3	**FG551067**	Price

ULTRA-DEX Positive 80° Diamond -5° Lead Boring Bars Coolant Thru

Solid Carbide • 8:1 Ratio

- Right hand shown

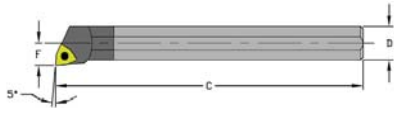


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/16	4	.102	.205	CDHB 1.20.60	MTS 183	T-6	-	-	-	E03H SCLDR1.2	**FG551083**	Price
1/4	4	.138	.270	CDGW 1.510	MTS 184	T-6	E04H SCLDL1.5	**FG550030**	Price	E04H SCLDR1.5	**FG550029**	Price
5/16	5	.167	.340	CPMT 1.81.20.5	MTS 224	T-7	E05K SCLPL1.8	**FG550037**	Price	E05K SCLPR1.8	**FG550033**	Price
3/8	6	.203	.410	CCMT 21.51	MTS 255	T-7	E06M SCLCL2	**FG551099**	Price	E06M SCLCR2	**FG551101**	Price
3/8	6	.203	.410	CPMT 21.51	MTS 255	T-7	E06M SCLPL2	**FG550039**	Price	E06M SCLPR2	**FG550038**	Price
1/2	4.5	.281	.560	CCMT 21.51	MTS 255	T-7	E08J SCLCL2	**FG551117**	Price	E08J SCLCR2	**FG551120**	Price
1/2	4.5	.344	.625	CCMT 32.51	MTS 35	T-15	-	-	-	E08J SCLCR3	**FG551122**	Price
1/2	4.5	.281	.560	CPMT 21.51	MTS 255	T-7	E08J SCLPL2	**FG550060**	Price	E08J SCLPR2	**FG550059**	Price
1/2	4.5	.344	.560	CPMT 32.51	MTS 35	T-15	-	-	-	E08J SCLPR3	**FG551126**	Price
1/2	8	.281	.560	CCMT 21.51	MTS 255	T-7	E08R SCLCL2	**FG551144**	Price	E08R SCLCR2	**FG551147**	Price
1/2	8	.344	.625	CCMT 32.51	MTS 35	T-15	E08R SCLCL3	**FG551146**	Price	E08R SCLCR3	**FG551149**	Price
1/2	8	.281	.560	CPMT 21.51	MTS 255	T-7	E08R SCLPL2	**FG550064**	Price	E08R SCLPR2	**FG550063**	Price
1/2	8	.344	.560	CPMT 32.51	MTS 35	T-15	-	-	-	E08R SCLPR3	**FG551153**	Price
5/8	7	.406	.760	CCMT 21.51	MTS 255	T-7	-	-	-	E10Q SCLCR2	**FG551168**	Price
5/8	7	.406	.760	CCMT 32.51	MTS 35	T-15	-	-	-	E10Q SCLCR3	**FG550079**	Price
5/8	7	.406	.770	CPMT 21.51	MTS 255	T-7	E10Q SCLPL2	**FG551169**	Price	E10Q SCLPR2	**FG551171**	Price
5/8	7	.406	.760	CPMT 32.51	MTS 35	T-15	E10Q SCLPL3	**FG551170**	Price	E10Q SCLPR3	**FG551172**	Price
5/8	10	.406	.760	CCMT 32.51	MTS 35	T-15	E10S SCLCL3	**FG551188**	Price	E10S SCLCR3	**FG550081**	Price
5/8	10	.406	.770	CPMT 21.51	MTS 255	T-7	-	-	-	E10S SCLPR2	**FG551192**	Price
5/8	10	.406	.760	CPMT 32.51	MTS 35	T-15	E10S SCLPL3	**FG551191**	Price	E10S SCLPR3	**FG551193**	Price
3/4	7	.500	.920	CCMT 32.51	MTS 35	T-15	-	-	-	E12Q SCLCR3	**FG550086**	Price
3/4	7	.500	.920	CPMT 32.51	MTS 35	T-15	E12Q SCLPL3	**FG551212**	Price	E12Q SCLPR3	**FG551213**	Price
3/4	10	.500	.920	CCMT 32.51	MTS 35	T-15	-	-	-	E12S SCLCR3	**FG550088**	Price
3/4	10	.500	.920	CPMT 32.51	MTS 35	T-15	-	-	-	E12S SCLPR3	**FG551230**	Price
1	8	.625	1.185	CCMT 32.51	MTS 35	T-15	E16T SCLCL3	**FG551272**	Price	E16R SCLCR3	**FG550095**	Price
1	12	.625	1.185	CCMT 32.51	MTS 35	T-15	-	-	-	E16T SCLCR3	**FG550097**	Price
1	12	.625	1.185	CPMT 32.51	MTS 35	T-15	-	-	-	E16T SCLPR3	**FG551274**	Price

ULTRA-DEX Positive Trigon -5° Lead Boring Bars No Coolant

Solid Carbide • 8:1 Ratio

- Right hand shown

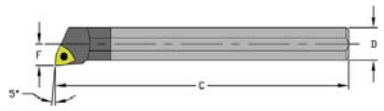


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Wrench	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/16	4	.102	.205	WCMT 1.210.5	MTS-183	T-6	-	-	-	C03H SWLCR1.2	**FG551007**	Price
1/4	4	.138	.275	WCMT 1.210.5	MTS-184	T-6	-	-	-	C04H SWLCR1.2	**FG551012**	Price
3/8	6	.203	.400	WCMT 21.51	MTS-255	T-7	-	-	-	C06M SWLCR2	**FG550194**	Price
1/2	4.5	.281	.560	WCMT 21.51	MTS-255	T-7	C08J SWLCL2	**FG550203**	Price	C08J SWLCR2	**FG550202**	Price
1/2	8	.281	.560	WCMT 21.51	MTS-255	T-7	C08R SWLCL2	**FG550207**	Price	C08R SWLCR2	**FG550206**	Price

ULTRA-DEX Positive Trigon -5° Lead Boring Bars Coolant Thru

Solid Carbide • 8:1 Ratio

• Right hand shown

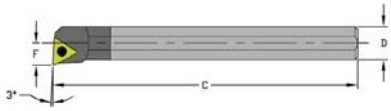


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/16	4	.102	.205	WCMT 1.210.5	MTS 183	T-6	-	-	-	E03H SWLCR1.2	**FG551084**	Price
1/4	4	.138	.275	WCMT 1.210.5	MTS 184	T-6	-	-	-	E04H SWLCR1.2	**FG551091**	Price
5/16	5	.167	.345	WCMT 1.51.50.5	MTS 2	T-6	-	-	-	E05K SWLCR1.5	**FG551098**	Price
3/8	6	.203	.410	WCMT 21.51	MTS 255	T-7	E06M SWLCL2	**FG550197**	Price	E06M SWLCR2	**FG550196**	Price
1/2	4.5	.281	.560	WCMT 21.51	MTS 255	T-7	E08J SWLCL2	**FG550205**	Price	E08J SWLCR2	**FG550204**	Price
1/2	8	.281	.560	WCMT 21.51	MTS 255	T-7	-	-	-	E08R SWLCR2	**FG550208**	Price
5/8	7	.406	.760	WCMT 21.51	MTS 255	T-7	E10Q SWLCL2	**FG551182**	Price	E10Q SWLCR2	**FG551184**	Price
5/8	7	.406	.760	WCMT 32.51	MTS 35	T-15	E10Q SWLCL3	**FG551183**	Price	E10Q SWLCR3	**FG550214**	Price
5/8	10	.406	.760	WCMT 32.51	MTS 35	T-15	E10S SWLCL3	**FG551206**	Price	E10S SWLCR3	**FG550216**	Price
5/8	10	.406	.760	WCMT 21.51	MTS 255	T-7	E10S SWLCL2	**FG551205**	Price	E10S SWLCR2	**FG551207**	Price
3/4	7	.500	.920	WCMT 32.51	MTS 35	T-15	E12Q SWLCL3	**FG550223**	Price	E12Q SWLCR3	**FG550222**	Price
3/4	10	.500	.920	WCMT 32.51	MTS 35	T-15	E12S SWLCL3	**FG551243**	Price	E12S SWLCR3	**FG550224**	Price
1	8	.625	1.185	WCMT 32.51	MTS 35	T-15	E16R SWLCL3	**FG550231**	Price	E16R SWLCR3	**FG550230**	Price
1	12	.625	1.185	WCMT 32.51	MTS 35	T-15	E16T SWLCL3	**FG551284**	Price	E16T SWLCR3	**FG550232**	Price

ULTRA-DEX Positive Triangle -3° Lead Boring Bars No Coolant

Solid Carbide • 8:1 Ratio

• Right hand shown

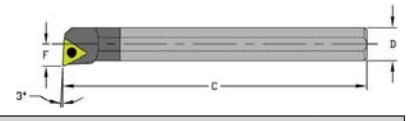


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
5/16	5	.167	.340	TCMT 1.21.20.5	MTS-184	T-6	C05K STUCL1.2	**FG551015**	Price	C05K STUCR1.2	**FG551017**	Price
3/8	6	.203	.410	TCMT 21.51	MTS-255	T-7	C06M STUCL2	**FG550546**	Price	C06M STUCR2	**FG550545**	Price
3/8	6	.203	.410	TPMT 21.51	MTS-255	T-7	C06M STUPL2	**FG551032**	Price	C06M STUPR2	**FG551034**	Price
1/2	4.5	.281	.560	TCMT 21.51	MTS-255	T-7	C08J STUCL2	**FG550566**	Price	C08J STUCR2	**FG550565**	Price
1/2	8	.281	.570	TCMT 21.51	MTS-255	T-7	C08R STUCL2	**FG550574**	Price	C08R STUCR2	**FG550573**	Price
1/2	8	.281	.560	TPMT 21.51	MTS-255	T-7	C08R STUPL2	**FG551072**	Price	C08R STUPR2	**FG551074**	Price

ULTRA-DEX Positive Triangle -3° Lead Boring Bars Coolant Thru

Solid Carbide • 8:1 Ratio

• Right hand shown



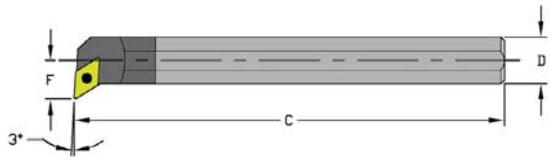
Inch/Metric - Inch												
D Dia.	OAL	F	Min. Bore	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	6	.203	.410	TCMT 21.51	MTS 255	T-7	E06M STUCL2	**FG550550**	Price	E06M STUCR2	**FG550549**	Price
1/2	4.5	.281	.560	TCMT 21.51	MTS 255	T-7	E08J STUCL2	**FG550570**	Price	E08J STUCR2	**FG550569**	Price
1/2	8	.281	.560	TCMT 21.51	MTS 255	T-7	E08R STUCL2	**FG550576**	Price	E08R STUCR2	**FG550575**	Price
5/8	7	.406	.760	TCMT 21.51	MTS 255	T-7	E10Q STUCL3	**FG551179**	Price	E10Q STUCR2	**FG550587**	Price
5/8	10	.406	.760	TCMT 21.51	MTS 35	T-7	E10S STUCL2	**FG551201**	Price	E10S STUCR2	**FG550591**	Price
3/4	7	.500	.920	TCMT 32.51	MTS 35	T-15	E12Q STUCL3	**FG550604**	Price	E12Q STUCR3	**FG550603**	Price
3/4	10	.500	.920	TCMT 32.51	MTS 35	T-15	E12Q STUCL3	**FG551238**	Price	E12S STUCR3	**FG550607**	Price
1	8	.625	1.185	TCMT 32.51	MTS 35	T-15	E16R STUCL3	**FG550618**	Price	E16R STUCR3	**FG550617**	Price
1	12	.625	1.185	TCMT 32.51	MTS 35	T-15	E16T STUCL3	**FG551281**	Price	E16T STUCR3	**FG550621**	Price

Inch/Metric - Metric												
D Dia.	OAL	F	Min. Bore	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
6mm	100mm	3.5mm	7mm	TCMT 1.21.20.5	MTS 184	T-6	M-E06H STUCL06	**FG5561010**	Price	M-E06H STUCR06	**FG5561015**	Price
8mm	125mm	6mm	11mm	TCMT 1.21.20.5	MTS 184	T-6	M-E08K STUCL06	**FG5561030**	Price	M-E08K STUCR06	**FG5561035**	Price
10mm	150mm	7mm	13mm	TCMT 21.51	MTS 255	T-7	M-E10M STUCL11	**FG5561060**	Price	M-E10M STUCR11	**FG5561065**	Price
12mm	180mm	9mm	16mm	TCMT 21.51	MTS 255	T-7	M-E12Q STUCL11	**FG5561090**	Price	M-E12Q STUCR11	**FG5561095**	Price
16mm	200mm	11mm	20mm	TCMT 21.51	MTS 255	T-7	M-E16R STUCL11	**FG5561120**	Price	M-E16R STUCR11	**FG5561125**	Price
20mm	250mm	13mm	25mm	TCMT 32.51	MTS 35	T-15	M-E20S STUCL16	**FG5561150**	Price	M-E20S STUCR16	**FG5561155**	Price
25mm	300mm	17mm	32mm	TCMT 32.51	MTS 35	T-15	M-E25T STUCL16	**FG5561180**	Price	M-E25T STUCR16	**FG5561185**	Price

ULTRA-DEX Positive 55° Diamond -3° Lead Profiling Boring Bars No Coolant

Solid Carbide • 8:1 Ratio

- Right hand shown

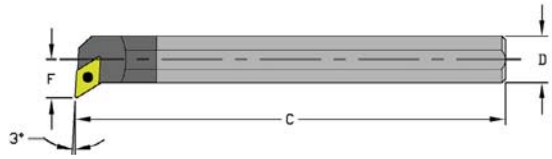


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Wrench	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	6	.375	.585	DCMT 21.51	MTS-255	T-7	C06M-SDUCL2	**FG550110**	Price	C06M SDUCR2	**FG550109**	Price
1/2	4.5	.437	.720	DCMT 21.51	MTS-255	T-7	C08J SDUCL2	**FG551046**	Price	C08J SDUCR2	**FG551047**	Price
1/2	8	.437	.720	DCMT 21.51	MTS-255	T-7	C08R-SDUCL2	**FG550118**	Price	C08R SDUCR2	**FG550117**	Price

ULTRA-DEX Positive 55° Diamond -3° Lead Profiling Boring Bars Coolant Thru

Solid Carbide • 8:1 Ratio

- Right hand shown



Inch/Metric- Inch

D Dia.	OAL	F	Min. Bore	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	6	.375	.585	DCMT 21.51	MTS 255	T-7	E06M SDUCL2	**FG550112**	Price	E06M SDUCR2	**FG550111**	Price
1/2	4.5	.437	.720	DCMT 21.51	MTS 255	T-7	E08J SDUCL2	**FG551127**	Price	E08J SDUCR2	**FG551128**	Price
1/2	8	.437	.720	DCMT 21.51	MTS 255	T-7	E08R SDUCL2	**FG550120**	Price	E08R SDUCR2	**FG550119**	Price
5/8	7	.500	.850	DCMT 21.51	MTS 255	T-7	E10Q SDUCL2	**FG551174**	Price	E10Q SDUCR2	**FG550125**	Price
5/8	10	.500	.850	DCMT 21.51	MTS 255	T-7	E10S SDUCL2	**FG551195**	Price	E10S SDUCR2	**FG550126**	Price
3/4	7	.625	1.050	DCMT 32.51	MTS 35	T-15	E12Q SDUCL3	**FG550135**	Price	E12Q SDUCR3	**FG550134**	Price
3/4	7	.625	1.050	DPMT 32.51	MTS 35	T-15	E12Q SDUPL3	**FG551214**	Price	E12Q SDUPR3	**FG551215**	Price
3/4	10	.625	1.050	DCMT 32.51	MTS 35	T-15	E12S SDUCL3	**FG551232**	Price	E12S SDUCR3	**FG550136**	Price
1	8	.750	1.310	DCMT 32.51	MTS 35	T-15	E16R SDUCL3	**FG550145**	Price	E16R SDUCR3	**FG550144**	Price
1	12	.750	1.310	DCMT 32.51	MTS 35	T-15	E16T SDUCL3	**FG551275**	Price	E16T SDUCR3	**FG550146**	Price
1	12	.750	1.310	DPMT 32.51	MTS 35	T-15	E16T SDUPL3	**FG551276**	Price	E16T SDUPR3	**FG551277**	Price

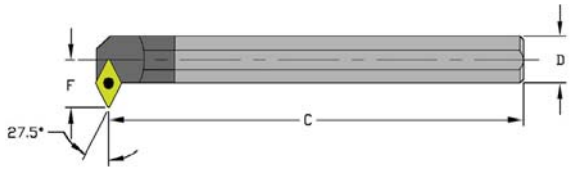
Inch/ Metric- Metric

D Dia.	OAL	F	Min. Bore	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
10mm	150mm	9mm	15mm	DCMT 21.51	MTS 255	T-7	M-E10M SDUCL07	**FG5561050**	Price	M-E10M SDUCR07	**FG5561055**	Price
12mm	180mm	11mm	18mm	DCMT 21.51	MTS 255	T-7	M-E12Q SDUCL07	**FG5561080**	Price	M-E12Q SDUCR07	**FG5561085**	Price
16mm	200mm	13mm	22mm	DCMT 21.51	MTS 255	T-7	M-E16R SDUCL07	**FG5561110**	Price	M-E16R SDUCR07	**FG5561115**	Price
20mm	250mm	15mm	27mm	DCMT 32.51	MTS 35	T-15	M-E20S SDUCL11	**FG5561140**	Price	M-E20S SDUCR11	**FG5561145**	Price
25mm	300mm	18mm	33mm	DCMT 32.51	MTS 35	T-15	M-E25T SDUCL11	**FG5561170**	Price	M-E25T SDUCR11	**FG5561175**	Price

ULTRA-DEX Positive 55° Diamond 27.5° Lead Profiling Boring Bars Coolant Thru

Solid Carbide • 8:1 Ratio

- Available in right hand only

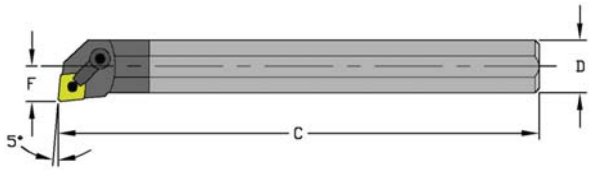


Model No.	D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Order No.	Price
E10Q SDNCR2	5/8	6.86	.562	.920	DCMT 21.51	MTS 255	T-7	**FG551173**	Price
E12S SDNCR3	3/4	9.8	.765	1.190	DCMT 32.51	MTS 35	T-15	**FG551231**	Price

ULTRA-DEX Negative 80° Diamond -5° Lead Boring Bars Coolant Thru

Solid Carbide • 8:1 Ratio

- Right hand shown

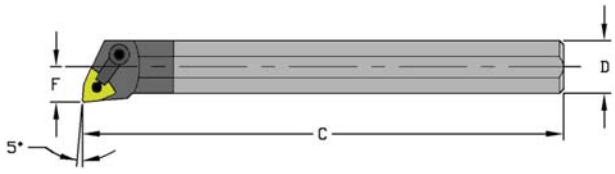


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Seat	Clamp	Clamp Screw	Lock Pin	Left			Right		
									Model No.	Order No.	Price	Model No.	Order No.	Price
3/4	7	.500	.920	CNMG 322	-	CL7	XNS-36	NL 33	-	-	-	E12Q MCLNR3	**FG551211**	Price
3/4	10	.500	.920	CNMG 322	-	CL7	XNS-36	NL 33	-	-	-	E12S MCLNR3	**FG551224**	Price
1	8	.640	1.200	CNMG 432	-	CL20	XNS-47	NL 44	E16R MCLNL4	**FG551247**	Price	E16R MCLNR4	**FG551249**	Price
1	12	.640	1.200	CNMG 432	-	CL20	XNS-47	NL 44	-	-	-	E16T MCLNR4	**FG551268**	Price
1-1/4	14	.765	1.470	CNMG 432	ICSN-433	CL20	XNS-47	NL 46	E20U MCLNL4	**FG551287**	Price	E20U MCLNR4	**FG551288**	Price
1-1/2	14	.890	1.730	CNMG 432	ICSN-433	CL20	XNS-47	NL 46	-	-	-	E24U MCLNR4	**FG551292**	Price

ULTRA-DEX Negative Trigon -5° Lead Boring Bars Coolant Thru

Solid Carbide • 8:1 Ratio

- Right hand shown



D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Seat	Clamp	Clamp Screw	Lock Pin	Left			Right		
									Model No.	Order No.	Price	Model No.	Order No.	Price
3/4	7	.500	.920	WNMG 332	-	CL7	XNS-36	NL 33L	-	-	-	E12Q MWLNR3	**FG550246**	Price
3/4	10	.500	.920	WNMG 332	-	CL7	XNS-36	NL 33L	-	-	-	E12S MWLNR3	**FG550248**	Price
1	8	.640	1.200	WNMG 332	-	CL7	XNS-36	NL 33L	E16R MWLNL3	**FG550251**	Price	E16R MWLNR3	**FG550250**	Price
1	12	.640	1.200	WNMG 332	-	CL7	XNS-36	NL 33L	-	-	-	E16T MWLNR3	**FG551271**	Price
1	12	.640	1.200	WNMG 432	-	CL20	XNS-47	NL 44	-	-	-	E16T MWLNR4	**FG550256**	Price
1-1/4	14	.765	1.470	WNMG 432	IWSN-433	CL20	XNS-47	NL 46	E20U MWLNL4	**FG551289**	Price	E20U MWLNR4	**FG550258**	Price

ULTRA-DEX Carbide Inserts

- Grade UD21 is a TiAlN coated grade in the C2 ISO category for cast iron, aluminum and non-ferrous materials
- Grade UD52 is a TiAlN coated grade in the C5 ISO category for use on steels and exotic steels

Insert	UD21		UD52	
	Order No.	Price	Order No.	Price
CDGW 1.510	**FG550347**	Price	**FG550344**	Price
CDGW 1.510.5	**FG550350**	Price	**FG550353**	Price
CDGW 1.511	**FG550356**	Price	**FG550359**	Price
CDHB 1.20.60	**FG553314**	Price	**FG550361**	Price
CPMT 1.81.20.5	**FG550300**	Price	**FG550304**	Price
CPMT 1.81.21	**FG550306**	Price	**FG550309**	Price
TCMT 1.21.20.5	**FG550759**	Price	**FG550760**	Price

Screws

Screw	Order No.	Price
MTS182	**FG550701**	Price
MTS183	**FG550702**	Price
MTS184	**FG550703**	Price
MTS224	**FG550704**	Price
MTS255	**FG550705**	Price
MTS35	**FG550706**	Price
MTS4	**FG550707**	Price
XNS36	**FF7173800**	Price
XNS47	**FF7173840**	Price

Clamps

Clamp	Order No.	Price
CL7	**FF7173380**	Price
CL20	**FF7173420**	Price

Wrenches

Wrench	Order No.	Price
T6	**KN5436306**	Price
T7	**KN5436307**	Price
T15	**KN5436315**	Price
T20	**KN5436320**	Price

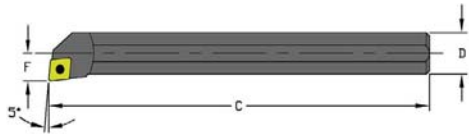
Pins

NL Pin	Order No.	Price
NL33L	**FF7172460**	Price
NL44	**FF7172500**	Price
NL46L	**FF7172520**	Price

ULTRA-DEX Heavy Metal Positive 80° Diamond -5° Lead Boring Bars-Coolant Thru

Vibration Dampening • 6:1 Ratio

- Help reduce chatter in your application
- 2 Times heavier than steel
- Machine deeper bores
- Achieve better precision and finish
- Right hand shown

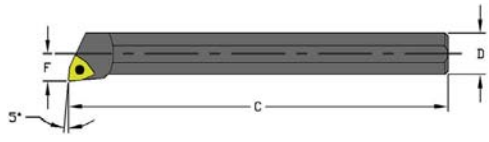


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	4.5	.203	.410	CCMT 21.51	MTS 255	T-7	HM06J SCLPL2	**FG552154**	Price	HM06J SCLCR2	**FG552152**	Price
3/8	4.5	.203	.410	CPMT 21.51	MTS 255	T-7	-	-	-	HM06J SCLPR2	**FG552156**	Price
3/8	7	.203	.410	CPMT 21.51	MTS 255	T-7	-	-	-	HM06Q SCLPR2	**FG552180**	Price
1/2	4.5	.281	.560	CCMT 21.51	MTS 255	T-7	-	-	-	HM08J SCLCR2	**FG552196**	Price
1/2	4.5	.281	.560	CPMT 21.51	MTS 255	T-7	-	-	-	HM08J SCLPR2	**FG552200**	Price
1/2	7	.281	.560	CCMT 21.51	MTS 255	T-7	HM08Q SCLPL2	**FG552218**	Price	HM08Q SCLCR2	**FG552216**	Price
1/2	7	.281	.560	CPMT 21.51	MTS 255	T-7	-	-	-	HM08Q SCLPR2	**FG552220**	Price
5/8	4.5	.406	.760	CPMT 21.51	MTS 255	T-7	-	-	-	HM10J SCLPR2	**FG552242**	Price
5/8	7	.406	.760	CCMT 32.51	MTS 35	T-15	-	-	-	HM10J SCLCR3	**FG553250**	Price
5/8	7	.406	.760	CCMT 32.51	MTS 35	T-15	-	-	-	HM10Q SCLCR3	**FG552260**	Price
5/8	7	.406	.760	CPMT 32.51	MTS 255	T-7	HM10Q SCLPL2	**FG552262**	Price	HM10Q SCLPR2	**FG552266**	Price

ULTRA-DEX Heavy Metal Positive Trigon -5° Lead Boring Bars-Coolant Thru

Vibration Dampening • 6:1 Ratio

- Help reduce chatter in your application
- 2 Times heavier than steel
- Machine deeper bores
- Achieve better precision and finish
- Right hand shown

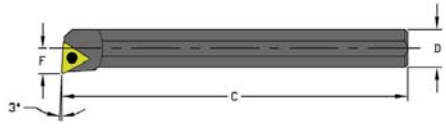


D Dia. (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Insert Screw	Torx Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	4.5	.203	.410	WCMT 21.51	MTS 255	T-7	-	-	-	HM06J SWLCR2	**FG553252**	Price
1/2	4.5	.281	.560	WCMT 21.51	MTS 255	T-7	HM08J SWLCL2	**FG553256**	Price	HM08J SWLCR2	**FG553254**	Price
1/2	7	.281	.560	WCMT 21.51	MTS 255	T-7	-	-	-	HM08Q SWLCR2	**FG553258**	Price
5/8	4.5	.406	.760	WCMT 21.51	MTS 255	T-7	-	-	-	HM10J SWLCR2	**FG553260**	Price
5/8	4.5	.406	.760	WCMT 32.51	MTS 35	T-15	HM10J SWLCL2	**FG553262**	Price	HM10J SWLCR3	**FG553264**	Price
3/4	4.5	.500	.920	WCMT 32.51	MTS 35	T-15	-	-	-	HM12J SWLCR3	**FG553266**	Price
3/4	7	.500	.920	WCMT 32.51	MTS 35	T-15	-	-	-	HM12Q SWLCR3	**FG553268**	Price

ULTRA-DEX Heavy Metal Positive Triangle -3° Lead Boring Bars-Coolant Thru

Vibration Dampening • 6:1 Ratio

- Help reduce chatter in your application
- 2 Times heavier than steel
- Machine deeper bores
- Achieve better precision and finish



Size (in.)	OAL (in.)	F (in.)	Min. Bore (in.)	Insert	Screw	Key	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	4.5	.203	.410	TPMT 21.51	MTS 255	T-7	-	-	-	HM06J STUPR2	**FG552168**	Price
3/8	7	.203	.410	TCMT 21.51	MTS 255	T-7	-	-	-	HM06Q STUCR2	**FG552188**	Price
1/2	4.5	.281	.560	TPMT 21.51	MTS 255	T-7	HM08J STUPL2	**FG552206**	Price	HM08J STUPR2	**FG552208**	Price
1/2	7	.281	.560	TCMT 21.51	MTS 255	T-7	HM08Q STUCL2	**FG552222**	Price	HM08Q STUCR2	**FG552224**	Price
5/8	4.5	.406	.760	TPMT 21.51	MTS 255	T-7	HM10J STUPL2	**FG552250**	Price	HM10J STUPR2	**FG552252**	Price
5/8	7	.406	.760	TCMT 21.51	MTS 255	T-7	-	-	-	HM10Q STUCR2	**FG552272**	Price
3/4	4.5	.500	.920	TCMT 32.51	MTS 35	T-15	-	-	-	HM12J STUCR3	**FG552288**	Price
3/4	4.5	.500	.920	TPMT 32.51	MTS 35	T-15	-	-	-	HM12J STUPR3	**FG552292**	Price
3/4	7	.500	.920	TCMT 32.51	MTS 35	T-15	-	-	-	HM12Q STUCR3	**FG552316**	Price

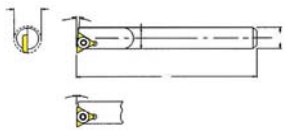
EVEREDE TOOL COMPANY

Small Hole Boring Tools — Minimum Bore 0.180" thru 0.290"

MADE IN THE USA

- Minimum bore diameter .180" – 1.094"
- Free cutting action due to positive rake angle
- Use solid carbide shank tools are available where vibration and chattering is a problem
- Fig. 1 Bars are cylindrical shanks without a flat
- Fig. 2 Bars have flats - (2) opposing





Style - Alloy Steel Boring Bars - 1 Flat					
Min. Bore	OAL	Shank Dia.	Insert Style	Order No.	Price
.230	2.5	.187	WCGT-0xx	**FG70SE5010**	Price
.300	4.00	.250	WCGT-0xx	**FG70SE6000**	Price
.438	5.00	.375	WCGT-2xx	**FG70SG6700**	Price
.563	6.00	.500	WCGT-2xx	**FG70SG6800**	Price
.719	7.00	.625	WCGT-3xx	**FG70SH7500**	Price
.844	8.00	.750	WCGT-3xx	**FG70SH7600**	Price
1.094	10.00	1.000	WCGT-3xx	**FG70SH7700**	Price

Style - Alloy Steel Boring Bars - Fig. 1						
Min. Bore	OAL	Shank Dia.	Bore Depth	Insert Style	Order No.	Price
.208	2.25	.375	1.00	CDCD	**FG70SA1405**	Price
.208	2.50	.500	1.00	CDCD	**FG70SA1605**	Price
.230	2.25	.375	1.00	CDCD	**FG70SA1420**	Price
.230	2.50	.500	1.00	CDCD	**FG70SA1620**	Price
.270	2.50	.500	1.00	TDAB/TDAC	**FG70SB2410**	Price
.270	4.00	.625	1.00	TDAB/TDAC	**FG70SB2510**	Price
.290	2.50	.375	1.25	CDCD	**FG70SA1440**	Price
.290	2.75	.500	1.25	CDCD	**FG70SA1640**	Price
.300	2.75	.500	1.25	TDAB/TDAC	**FG70SB2430**	Price
.300	4.00	.625	1.25	TDAB/TDAC	**FG70SB2530**	Price
.360	3.00	.500	1.50	TDAB/TDAC	**FG70SB2450**	Price
.438	4.00	.500	1.875	TPGB2/TPGH2/TPGC2	**FG70SC3030**	Price

Style - Alloy Steel Boring Bars - Fig. 2					
Min. Bore	OAL	Shank Dia.	Insert Style	Order No.	Price
.180	2.50	.187	CDCD	**FG70SA1000**	Price
.208	2.50	.187	CDCD	**FG70SA1005**	Price
.230	2.50	.187	CDCD	**FG70SA1010**	Price
.270	3.50	.187	TDAB/TDAC	**FG70SB1800**	Price
.290	3.00	.250	CDCD	**FG70SA1100**	Price
.300	4.00	.250	TDAB/TDAC	**FG70SB2000**	Price
.360	4.00	.312	TDAB/TDAC	**FG70SB2100**	Price
.438	5.00	.375	TPGB2/TPGH2/TPGC2	**FG70SC2700**	Price
.563	6.00	.500	TPGB2/TPGH2/TPGC2	**FG70SC2800**	Price
.625	6.00	.500	TPGB3/TPGH3/TPGC3	**FG70SD3400**	Price
.844	8.00	.750	TPGB3/TPGH3/TPGC3	**FG70SD3600**	Price
1.094	10.00	1.000	TPGB3/TPGH3/TPGC3	**FG70SD3700**	Price

Style - Carbide Boring Bars - 1 Flat					
Min. Bore	OAL	Shank Dia.	Insert Style	Order No.	Price
.230	4.00	.187	WCGT-0xx	**FG70CE5215**	Price
.300	6.00	.250	WCGT-0xx	**FG70CE5300**	Price
.438	6.00	.375	WCGT-2xx	**FG70CG6900**	Price
.563	6.00	.500	WCGT-2xx	**FG70CG7000**	Price
.719	10.00	.625	WCGT-3xx	**FG70CH7910**	Price
.844	10.00	.750	WCGT-3xx	**FG70CH8010**	Price
1.094	12.00	1.000	WCGT-3xx	**FG70CH8110**	Price

Style - Carbide Boring Bars - Fig. 1						
Min. Bore	OAL	Shank Dia.	Bore Depth	Insert Style	Order No.	Price
.208	2.375	.500	1.875	CDCD	**FG70CA1705**	Price
.230	3.50	.500	2.000	CDCD	**FG70CA1720**	Price
.270	3.50	.500	2.000	TDAB/TDAC	**FG70CB2462**	Price
.290	4.00	.500	2.500	CDCD	**FG70CA1740**	Price
.300	4.00	.500	2.500	TDAB/TDAC	**FG70CB2465**	Price
.360	4.625	.500	3.125	TDAB/TDAC	**FG70CB2470**	Price

Style - Carbide Boring Bars - Fig. 2					
Min. Bore	OAL	Shank Dia.	Insert Style	Order No.	Price
.180	4.00	.187	CDCD	**FG70CA1200**	Price
.208	4.00	.187	CDCD	**FG70CA1205**	Price
.230	4.00	.187	CDCD	**FG70CA1215**	Price
.270	4.00	.187	TDAB/TDAC	**FG70CB1900**	Price
.290	4.00	.250	CDCD	**FG70CA1300**	Price
.300	4.00	.250	TDAB/TDAC	**FG70CB2200**	Price
.360	6.00	.312	TDAB/TDAC	**FG70CB2310**	Price
.438	6.00	.375	TPGB2/TPGH2/TPGC2	**FG70CC2900**	Price
.563	8.00	.500	TPGB2/TPGH2/TPGC2	**FG70CC3000**	Price
.844	10.00	.750	TPGB3/TPGH3/TPGC3	**FG70CD4010**	Price
1.094	12.00	1.000	TPGB3/TPGH3/TPGC3	**FG70CD4110**	Price

EVEREDE TOOL COMPANY

CDCD Type Indexable Inserts



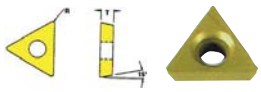
Grade - CS2 I.C. (in.) - 5/32 Thickness T (in.) - .040		
Radius R (in.)	Order No.	Price
.002	**FG71CDCD02CS2**	Price
.007	**FG71CDCD07CS2**	Price
.016	**FG71CDCD15CS2**	Price

Grade - CS6 I.C. (in.) - 5/32 Thickness T (in.) - .040		
Radius R (in.)	Order No.	Price
.002	**FG71CDCD02CS6**	Price
.007	**FG71CDCD07CS6**	Price
.016	**FG71CDCD15CS6**	Price

Grade - CVM2 I.C. (in.) - 5/32 Thickness T (in.) - .040		
Radius R (in.)	Order No.	Price
.002	**FG71CDCD02CVM2**	Price
.007	**FG71CDCD07CVM2**	Price
.016	**FG71CDCD15CVM2**	Price

Grade - TL120 I.C. (in.) - 5/32 Thickness T (in.) - .040		
Radius R (in.)	Order No.	Price
.002	**FG71CDCD02TL120**	Price
.007	**FG71CDCD07TL120**	Price
.016	**FG71CDCD15TL120**	Price

TDAB Type



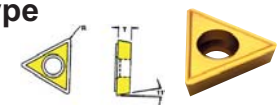
Grade - CS2 I.C. (in.) - .160 Thickness T (in.) - .047		
Radius R (in.)	Order No.	Price
.002	**FG71TDAB02CS2**	Price
.007	**FG71TDAB07CS2**	Price
.016	**FG71TDAB15CS2**	Price
.031	**FG71TDAB31CS2**	Price

Grade - CS6 I.C. (in.) - .160 Thickness T (in.) - .047		
Radius R (in.)	Order No.	Price
.002	**FG71TDAB02CS6**	Price
.007	**FG71TDAB07CS6**	Price
.016	**FG71TDAB15CS6**	Price
.031	**FG71TDAB31CS6**	Price

Grade - CVM2 I.C. (in.) - .160 Thickness T (in.) - .047		
Radius R (in.)	Order No.	Price
.002	**FG71TDAB02CVM2**	Price
.007	**FG71TDAB07CVM2**	Price
.016	**FG71TDAB15CVM2**	Price
.031	**FG71TDAB31CVM2**	Price

Grade - TL120 I.C. (in.) - .160 Thickness T (in.) - .047		
Radius R (in.)	Order No.	Price
.002	**FG71TDAB02TL120**	Price
.007	**FG71TDAB07TL120**	Price
.016	**FG71TDAB15TL120**	Price

TPGH2 Type



Grade - CS2 I.C. (in.) - 1/4 Thickness T (in.) - .096		
Radius R (in.)	Order No.	Price
.002	**FG71TPGH202CS2**	Price
.007	**FG71TPGH207CS2**	Price
.016	**FG71TPGH215CS2**	Price
.031	**FG71TPGH231CS2**	Price

Grade - CS6 I.C. (in.) - 1/4 Thickness T (in.) - .096		
Radius R (in.)	Order No.	Price
.002	**FG71TPGH202CS6**	Price
.007	**FG71TPGH207CS6**	Price
.031	**FG71TPGH231CS6**	Price

Grade - CV6 I.C. (in.) - 1/4 Thickness T (in.) - .093		
Radius R (in.)	Order No.	Price
.016	**FG71TPGH215CV6**	Price

Grade - CVM2 I.C. (in.) - 1/4 Thickness T (in.) - .096		
Radius R (in.)	Order No.	Price
.007	**FG71TPGH207CVM2**	Price
.031	**FG71TPGH231CVM2**	Price

Grade - TL120 I.C. (in.) - 1/4 Thickness T (in.) - .094		
Radius R (in.)	Order No.	Price
.007	**FG7110073**	Price
.016	**FG7110074**	Price

EVEREDE TOOL COMPANY

Replacement Parts – Torx Wrenches

Insert Style	Order No.	Price
TDAB/TDAC	**FG7019552**	Price
TPGB2/TPGH2/TPGC2	**FG7019553**	Price
WCGT-0xx	**FG7019551**	Price
WCGT-3xx	**FG7019555**	Price

EVEREDE TOOL COMPANY

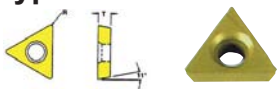
Replacement Parts – Screws

Insert Style	Order No.	Price
TDAB/TDAC	**FG7019503**	Price
TPGB2/TPGH2/TPGC2	**FG7019504**	Price
TPGB3/TPGH3/TPGC3	**FG7019507**	Price



EVEREDE TOOL COMPANY

TPGB2 Type



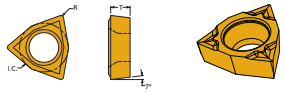
Grade - CS2 I.C. (in.) - 1/4 Thickness T (in.) - .096		
Radius R (in.)	Order No.	Price
.016	FG71TPGB215CS2	Price
.031	FG71TPGB231CS2	Price

Grade - CS6 I.C. (in.) - 1/4 Thickness T (in.) - .096		
Radius R (in.)	Order No.	Price
.016	FG71TPGB215CS6	Price
.031	FG71TPGB231CS6	Price

Grade - CVM2 I.C. (in.) - 1/4 Thickness T (in.) - .096		
Radius R (in.)	Order No.	Price
.016	FG71TPGB215CVM2	Price
.031	FG71TPGB231CVM2	Price

Grade - TL120 I.C. (in.) - 1/4 Thickness T (in.) - .094		
Radius R (in.)	Order No.	Price
.016	FG7110071	Price
.031	FG7110072	Price

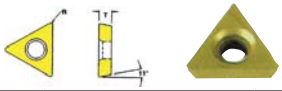
WCGT Type



Grade - CS2 I.C. (in.) - 1/4 Thickness T (in.) - .094		
Radius R (in.)	Order No.	Price
.008	FG71WCGT208CS2	Price
.016	FG71WCGT215CS2	Price

Grade - CS2 I.C. (in.) - 3/8 Thickness T (in.) - .156		
Radius R (in.)	Order No.	Price
.016	FG71WCGT315CS2	Price
.031	FG71WCGT331CS2	Price

TPGB3 Type



Grade - CS2 I.C. (in.) - 3/8 Thickness T (in.) - .125		
Radius R (in.)	Order No.	Price
.016	FG71TPGB315CS2	Price
.031	FG71TPGB331CS2	Price

Grade - CS6 I.C. (in.) - 3/8 Thickness T (in.) - .125		
Radius R (in.)	Order No.	Price
.016	FG71TPGB315CS6	Price
.031	FG71TPGB331CS6	Price

Grade - CVM2 I.C. (in.) - 3/8 Thickness T (in.) - .125		
Radius R (in.)	Order No.	Price
.016	FG71TPGB315CVM2	Price
.031	FG71TPGB331CVM2	Price

Grade - CS2 I.C. (in.) - 5/32 Thickness T (in.) - .062		
Radius R (in.)	Order No.	Price
.002	FG71WCGT002CS2	Price
.008	FG71WCGT008CS2	Price

Grade - TL120 I.C. (in.) - 0.187 Thickness T (in.) - .094		
Radius R (in.)	Order No.	Price
.008	FG7120010	Price

Grade - TL120 I.C. (in.) - 1/4 Thickness T (in.) - .094		
Radius R (in.)	Order No.	Price
.008	FG7110079	Price
.016	FG7110080	Price

TPGH3 Type



Grade - CS2 I.C. (in.) - 3/8 Thickness T (in.) - .125		
Radius R (in.)	Order No.	Price
.016	FG71TPGH315CS2	Price
.031	FG71TPGH331CS2	Price

Grade - CS6 I.C. (in.) - 3/8 Thickness T (in.) - .125		
Radius R (in.)	Order No.	Price
.016	FG71TPGH315CS6	Price
.031	FG71TPGH331CS6	Price

Grade - CV6 I.C. (in.) - 3/8 Thickness T (in.) - .125		
Radius R (in.)	Order No.	Price
.016	FG71TPGH315CV6	Price

Grade - CVM2 I.C. (in.) - 3/8 Thickness T (in.) - .125		
Radius R (in.)	Order No.	Price
.016	FG71TPGH315CVM2	Price
.031	FG71TPGH331CVM2	Price

Grade - TL120 I.C. (in.) - 3/8 Thickness T (in.) - .125		
Radius R (in.)	Order No.	Price
.016	FG7110075	Price
.031	FG7110076	Price

Grade - TL120 I.C. (in.) - 3/8 Thickness T (in.) - .156		
Radius R (in.)	Order No.	Price
.016	FG7110081	Price
.031	FG7110082	Price

Grade - TL120 I.C. (in.) - 5/32 Thickness T (in.) - .062		
Radius R (in.)	Order No.	Price
.002	FG7110077	Price
.008	FG7110078	Price

Grade Selection

CVM2 — Gold coated CM-2. Recommended applications are machining and finishing steel at high speeds. Can be used on some steels and alloys heat treated up to 60 RC. Extremely high wear resistance.

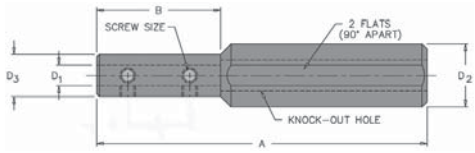
CS2 — General purpose machining, cast iron, high temperature alloys and non-ferrous materials. Excellent wear resistance.

CS6 — General purpose milling, turning and boring for light cuts at high cutting speeds on steels and alloyed irons.

EVEREDE TOOL COMPANY

Boring Bar Sleeves

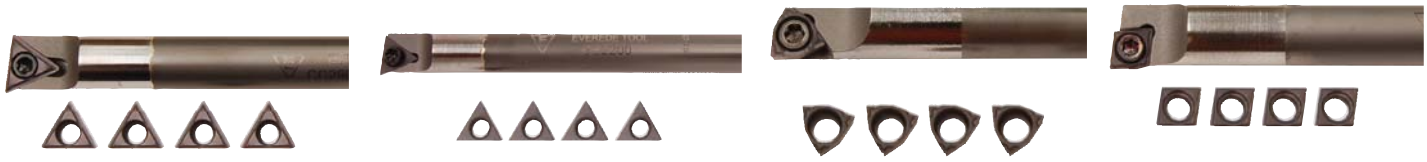
Bar Dia. (in.)	Shank Dia. (in.)	Bar Depth (in.)	OAL (in.)	Order No.	Price
1/8	3/8	3/4	4	FG7010001	Price
1/8	1/2	3/4	4	FG7010002	Price
1/8	5/8	3/4	4	FG7010003	Price
1/8	3/4	3/4	5	FG7010004	Price
1/8	1	3/4	6	FG7010000	Price
5/32	3/8	3/4	4	FG7010008	Price
5/32	1/2	3/4	4	FG7010009	Price
5/32	5/8	3/4	4	FG7010010	Price
5/32	3/4	3/4	5	FG7010011	Price
5/32	1	3/4	6	FG7010005	Price
5/32	1-1/4	3/4	8	FG7010006	Price
3/16	3/8	3/4	4	FG7010015	Price
3/16	1/2	3/4	4	FG7010016	Price
3/16	5/8	3/4	4	FG7010017	Price
3/16	3/4	3/4	5	FG7010018	Price
3/16	1	3/4	6	FG7010012	Price
3/16	1-1/4	3/4	8	FG7010013	Price
3/16	1-1/2	3/4	8	FG7010014	Price
1/4	1/2	1	4	FG7010022	Price
1/4	5/8	1	4	FG7010023	Price
1/4	3/4	1	5	FG7010024	Price
1/4	1	1	6	FG7010019	Price
1/4	1-1/4	1	8	FG7010020	Price
1/4	1-1/2	1	8	FG7010021	Price
5/16	5/8	1-1/4	4	FG7010028	Price



Bar Dia. (in.)	Shank Dia. (in.)	Bar Depth (in.)	OAL (in.)	Order No.	Price
5/16	3/4	1-1/4	5	FG7010029	Price
5/16	1	1-1/4	6	FG7010025	Price
5/16	1-1/4	1-1/4	8	FG7010026	Price
5/16	1-1/2	1-1/4	8	FG7010027	Price
3/8	5/8	1-1/2	4	FG7010033	Price
3/8	3/4	1-1/2	5	FG7010034	Price
3/8	1	1-1/2	6	FG7010030	Price
3/8	1-1/4	1-1/2	8	FG7010031	Price
3/8	1-1/2	1-1/2	8	FG7010032	Price
1/2	3/4	2	5	FG7010038	Price
1/2	1	2	6	FG7010035	Price
1/2	1-1/4	2	8	FG7010036	Price
1/2	1-1/2	2	8	FG7010037	Price
5/8	1-1/4	2	8	FG7010039	Price
5/8	1-1/2	2	8	FG7010040	Price
3/4	1-1/4	2-1/2	8	FG7010041	Price
3/4	1-1/2	2-1/2	8	FG7010042	Price

EVEREDE TOOL COMPANY Boring Bar Kits

- TL120 Grade is suitable for multiple industries, broad range of material groups and wide range of applications



Model No.	Holder	Shank Dia. (in.)	OAL (in.)	Min. Bore Dia.	Set Includes	Order No.	Price
CB1900/TL120 KIT	CB1900	3/16	4	.270	(1) carbide bar, (5) TDAB-07-TL120 inserts, (1) insert wrench	**FG70BBKIT1**	Price
CB2200/TL120 KIT	CV2200	1/4	4	.300	(1) carbide bar, (5) TDAB-07-TL120 inserts, (1) insert wrench	**FG70BBKIT2**	Price
CB2300/TL120 KIT	CB2300	5/16	4	.360	(1) carbide bar, (5) TDAB-07-TL120 inserts, (1) insert wrench	**FG70BBKIT3**	Price
CB2900/TL120 KIT	CC2900	3/8	6	.438	(1) carbide bar, (5) TPGH-215-TL120, (1) insert wrench	**FG70BBKIT4**	Price
CB3000/TL120 KIT	CC3000	1/2	8	.563	(1) carbide bar, (5) TPGH-215-TL120, (1) insert wrench	**FG70BBKIT5**	Price
CA1205/TL120 KIT	CA1205	3/16	4	.208	(1) carbide bar, (5) CDCH-07-TL120 inserts, (1) wrench	**FG70BBKIT6**	Price
CA1300/TL120 KIT	CA1300	1/4	4	.290	(1) carbide bar, (5) CDCH-07-TL120 inserts, (1) wrench	**FG70BBKIT7**	Price
CA1330/TL120 KIT	CA1330	5/16	6	.356	(1) carbide bar, (5) CDCH-07-TL120 inserts, (1) wrench	**FG70BBKIT8**	Price
CE5215/TL120 KIT	CE5215	3/16	4	.230	(1) carbide bar with flat, (5) WCGT-008-TL120 inserts, (1) wrench	**FG70BBKIT9**	Price
CE5300/TL120 KIT	CE5300	1/4	4	.290	(1) carbide bar with flat, (5) WCGT-008-TL120 inserts, (1) wrench	**FG70BBKIT10**	Price
CF6300/TL120 KIT	CF6300	5/16	4	.360	(1) carbide bar with flat, (5) WCGT-108-TL120 inserts, (1) wrench	**FG70BBKIT11**	Price

EVEREDE TOOL COMPANY Engraving Tool

- High positive rake angle
- High speeds, high feed rates - -up to 20,000 RPM
- Economical with each insert having two cutting edges with excellent repeatability



Angle	Holder	Inserts	Shank (in.)	Length (in.)	Order No.	Price
45°	99619-V045-06	V04506T1W06-NC2071	.236	1.575	**FG7010068**	Price
60°	99619-V060-06	V06006T1W06-NC2071	.236	1.575	**FG7010069**	Price

EVEREDE TOOL COMPANY Spotting Drills

- One tool will perform multiple applications
- Each insert has two or four cutting edges
- Great for spotting, chamfering, grooving and engraving applications



Angle - 82°						
Shank (in.)	Length (in.)	Angle	Holder	Inserts	Order No.	Price
3/8	3.5	82°	99619-V082-3/8	V0820802-NC2071	**FG7010060†**	Price
5/8	4	82°	99619-V082-5/8	V08212T3-NC2071	**FG7010061**	Price

Angle - 90°						
Shank (in.)	Length (in.)	Angle	Holder	Inserts	Order No.	Price
1/4	1.378	90°	99616-04-1/4	N9MT05T1CT-NC2071	**FG7010062**	Price
3/8	3.543	90°	99616-3/8	N9MT080204CT-NC40	**FG7010063**	Price
5/8	4	90°	99616-14-5/8	N9MT11T3CT-NC40	**FG7010064**	Price
1	6	90°	99616-22-1	N9MT1704CT-NC2071	**FG7010065**	Price

Angle - 142°						
Shank (in.)	Length (in.)	Angle	Holder	Inserts	Order No.	Price
5/8	4	142°	99619-V142-5/8	V1420803-NC2071	**FG7010066‡**	Price
1	4.75	142°	99619-V142-1.000	V1421604-NC2071	**FG7010067‡**	Price

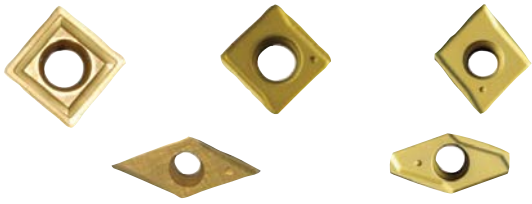
† For spotting, chamfering, grooving & engraving ‡ For spotting

EVEREDE TOOL COMPANY Spot Drill and Engraving Inserts

Grade Selection

NC40 – TiN coated universal insert for carbon steel, alloy steel and cast iron applications

NC2071 – TiN coated high positive geometry, fully ground edge and relief angle. Universal grade for most all materials.



IC (in.)	Thickness T (in.)	Radius R (in.)	Insert Description	Grade	Order No.	Price
.196	.071	.016	N9MT05T1CT	NC2071	**FG7120002**	Price
.236	.079	.008	V04506T1W06	NC2071	**FG7120008**	Price
.236	.079	.008	V06006T1W06	NC2071	**FG7120009**	Price
.312	.094	.031	N9MT080208CT	NC40	**FG7120003**	Price
.315	.094	.016	V0820802	NC2071	**FG7120000**	Price

IC (in.)	Thickness T (in.)	Radius R (in.)	Insert Description	Grade	Order No.	Price
.315	.094	.031	V1420803	NC2071	**FG7120006**	Price
.433	.156	.031	N9MT11T3CT	NC40	**FG7120004**	Price
.472	.156	.031	V08212T3	NC2071	**FG7120001**	Price
.630	.187	.047	V1421604	NC2071	**FG7120007**	Price
.669	.187	.047	N9MT1704CT	NC2071	**FG7120005**	Price

RAPIDKUT Indexable Positive Rake Countersinks

45 and 60 Degree

- Takes TCMT style inserts



Pt. Angle - 60°						
D. min.	Shank Dia. (in.)	OAL (in.)	Number of Inserts	Uses Insert	Order No.	Price
.212	.500	3	1	TCMT21.5_	**ME1480160**	Price
.567	.625	3	2	TCMT21.5_	**ME1480165**	Price
.669	1.00	4	2	TCMT32.5_	**ME1480170**	Price

Pt. Angle - 82°						
D. min.	Shank Dia. (in.)	OAL (in.)	Number of Inserts	Uses Insert	Order No.	Price
.109	.500	3	1	TCMT21.5_	**ME1480175**	Price
.435	.625	3	2	TCMT21.5_	**ME1480180**	Price
.609	1.00	4	2	TCMT32.5_	**ME1480185**	Price

Pt. Angle - 90°						
D. min.	Shank Dia. (in.)	OAL (in.)	Number of Inserts	Uses Insert	Order No.	Price
.047	.500	3	1	TCMT21.5_	**ME1480145**	Price
.244	.625	3	2	TCMT21.5_	**ME1480150**	Price
.409	1.00	4	2	TCMT32.5_	**ME1480155**	Price

RAPIDKUT Indexable Countersink Sets with Inserts

New!

Each set includes

- (1) Of each of the countersinks for that angle (3 total)
- (10) Of each TCMT 21.31 & TCMT 32.52 C5 inserts included in each set
- Handy, durable storage box



Angle	Order No.	Price
60°	**ME2120150**	Price
82°	**ME2120200**	Price
90°	**ME2120100**	Price

Indexable Countersink and Chamfering Tools

- Positive rake for smooth cutting without chatter
- Supplied with C6 (steel cutting) insert
- Uses inserts DG50 series only



Point Angle - 60°					
Cutter Body Min. (in.)	Cutter Body Max. (in.)	Shank Size (in.)	Use Insert No.	Order No.	Price
1/4	3/4	1/2	TPGH321	**DG50CC160**	Price
1/2	1-3/4	1/2	SPGH433	**DG50CC260**	Price
1-1/4	2-1/2	3/4	SPGH433	**DG50CC360**	Price

Point Angle - 82°					
Cutter Body Min. (in.)	Cutter Body Max. (in.)	Shank Size (in.)	Use Insert No.	Order No.	Price
1/4	3/4	1/2	TPGH321	**DG50CC182**	Price
1/2	1-3/4	1/2	SPGH433	**DG50CC282**	Price
1-1/4	2-1/2	3/4	SPGH433	**DG50CC382**	Price

Point Angle - 90°					
Cutter Body Min. (in.)	Cutter Body Max. (in.)	Shank Size (in.)	Use Insert No.	Order No.	Price
1/4	3/4	1/2	TPGH321	**DG50CC190**	Price
1/2	1-3/4	1/2	SPGH433	**DG50CC290**	Price
1-1/4	2-1/2	3/4	SPGH433	**DG50CC390**	Price

3 Pc. Indexable Countersink & Chamfering Sets

- Contains 1 of each: 1/4", 1/2" and 1-1/4" (min.)
- Inserts included with each set
- Supplied in wood block



Point Angle	Order No.	Price
60°	**DG50CCS60**	Price
82°	**DG50CCS82**	Price
90°	**DG50CCS90**	Price

EVEREDE TOOL COMPANY Indexable Countersinks

- Precision ground shanks for true concentricity
- Inserts are above center for better cutting action
- Inserts sold separately



Model Number	Body Size (in.)	Shank Dia. (in.)	Min. Cut Dia.	Max Cut Dia.	Included Angle	Uses Insert	Order No.	Price
IND-16-8-125	5/8	3/8	.125	.583	82°	TPGH 215	**FG7001286**	Price
IND-16-9-125	5/8	3/8	.125	.621	90°	TPGH 215	**FG7001287**	Price
IND-17-8-250	3/4	1/2	.250	.708	82°	TPGH 215	**FG7001290**	Price
IND-17-9-250	3/4	1/2	.250	.844	90°	TPGH 215	**FG7201291**	Price
IND-18-8-375	7/8	1/2	.375	.833	82°	TPGH 215	**FG7001296**	Price
IND-18-9-375	7/8	1/2	.375	.871	90°	TPGH 215	**FG7001297**	Price

EVEREDE TOOL COMPANY Indexable Countersink Kits

- TL120 grade is TiAlN coated, general purpose grade suitable for steel, stainless steel, cast iron, and hi-temp alloy applications
- Precision ground shanks for true concentricity
- Inserts are above center for better cutting action
- Each kit includes (1) holder, (5) TPGH-215-TL120 inserts, (1) wrench

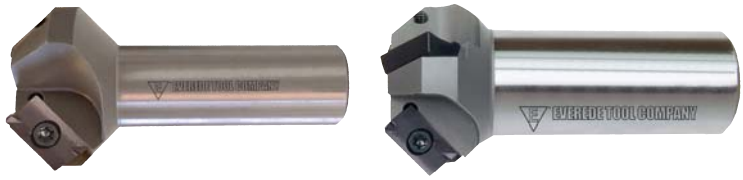


Included Angle - 82°						
Model No.	Holder	Included Angle	Shank Dia. (in.)	Chamfer Length	Order No.	Price
IND-16-8-125/TL120 KIT	IND-16-8-125	82°	3/8	.125-.583	**FG70BBKIT12**	Price
IND-17-8-250/TL120 KIT	IND-17-8-250	82°	1/2	.250-.708	**FG70BBKIT13**	Price
IND-18-8-375/TL120 KIT	IND-18-8-375	82°	1/2	.375-.833	**FG70BBKIT14**	Price

Included Angle - 90°						
Model No.	Holder	Included Angle	Shank Dia. (in.)	Chamfer Length	Order No.	Price
IND-16-9-125/TL120 KIT	IND-16-9-125	90°	3/8	.125-.621	**FG70BBKIT15**	Price
IND-17-9-250/TL120 KIT	IND-17-9-250	90°	1/2	.250-.746	**FG70BBKIT16**	Price
IND-18-9-375/TL120 KIT	IND-18-9-375	90°	1/2	.375-.871	**FG70BBKIT17**	Price

EVEREDE TOOL COMPANY Chamfer Mills

- Can be used for countersinking, chamfer milling and face milling
- Extra length of cut can be achieved when using a parallelogram insert
- Inserts sold separately



Model No.	Shank Size	Minimum Cut	Maximum Cut	Included Angle	Uses Insert	No. of Inserts Required	Order No.	Price
CHM-688-41	3/4	.688	1.414	82°	APLT 347	2	**FG7001268**	Price
CHM-688-45	3/4	.688	1.471	90°	APLT 347	2	**FG7001269**	Price
CHM-750-30	3/4	.750	1.303	60°	APLT 347	2	**FG7001270**	Price
CHM-938-41	1	.938	1.664	82°	APLT 347	3	**FG7001272**	Price
CHM-938-45	1	.938	1.721	90°	APLT 347	3	**FG7001273**	Price
CHM-1.000-30	1	1.000	1.553	60°	APLT 347	3	**FG7001258**	Price

EVEREDE TOOL COMPANY Chamfer Mill Kits

- TL120 grade is TiAlN coated, general purpose grade suitable for steel, stainless steel, cast iron, and hi-temp alloy applications
- Can be used for countersinking, chamfer milling and face milling
- Extra length of cut can be achieved when using a parallelogram insert



Model No.	Holder	Included Angle	Shank Dia. (in.)	Chamfer Length	Set Includes	Order No.	Price
CHM-688-41/TL120 KIT	CHM-688-41	82°	3/4	.688-1.414	(1) holder, (6) APLT-347-TL120 inserts, (1) wrench	**FG70BBKIT19**	Price
CHM-688-45/TL120 KIT	CHM-688-45	90°	3/4	.688-1.471	(1) holder, (6) APLT-347-TL120 inserts, (1) wrench	**FG70BBKIT20**	Price
CHM-750-30/ TL120 KIT	CHM-750-30	60°	3/4	.750-1.303	(1) holder, (6) APLT-347-TL120 inserts, (1) wrench	**FG70BBKIT18**	Price
CHM-938-41/TL120 KIT	CHM-938-41	82°	1	.938-1.664	(1) holder, (6) APLT-347-TL120 inserts, (1) wrench	**FG70BBKIT22**	Price
CHM-938-45/TL120 KIT	CHM-938-45	90°	1	.938-1.721	(1) holder, (6) APLT-347-TL120 inserts, (1) wrench	**FG70BBKIT23**	Price
CHM-1.000-30/TL120 KIT	CHM-1.000-30	60°	1	1.000-1.553	(1) holder, (6) APLT-347-TL120 inserts, (1) wrench	**FG70BBKIT21**	Price

EVEREDE TOOL COMPANY Chamfer Mills

- Can be used for countersinking, chamfer milling and face milling
- Extra length of cut can be achieved when using a parallelogram insert
- Inserts sold separately



Model No.	Min. Dia.	Max. Dia.	Shank Size	OAL	Uses Insert	Number of Inserts	Order No.	Price
99616-C10	.276	.433	.394	2.362	N9GX04T002	2	**FG7020388**	Price
99616-C20	.433	.630	.472	3.937	N9GX04T002	4	**FG7220391**	Price
99616-C30	.590	.827	.630	4.724	N9GX060204	4	**FG7220392**	Price
99616-C40	.748	.984	.787	5.118	N9GX060204	4	**FG7020395**	Price
99616-C50	.866	1.260	.787	5.118	N9GX090308	4	**FG7020396**	Price

EVEREDE TOOL COMPANY Inserts

Model Number	Grade	Order No.	Price
APLT 347	CS2	**FG7104003**	Price
APLT 347	CV6	**FG7104000**	Price
APLT 347	TL120	**FG70APLT347TL12**	Price
N9GX04T002	NC9071	**FG7220081**	Price
N9GX04T002	NC2032	**FG7120080**	Price
N9GX060204	NC2032	**FG7120082**	Price
N9GX060204	NC9071	**FG7220083**	Price
N9GX090308	NC2032	**FG7120084**	Price
N9GX090308	NC9071	**FG7120085**	Price
TPGH 21.51	TL120	**FG7110074**	Price

Grade Selection

CS2 Fine grain K20 roughing/semi-finish grade for non-ferrous applications.

CS6 Multi-layer CVD TiN/TiC/TiCN/P30 (gold) coating. General purpose steel cutting grade with minimum hone. Works well in low to medium heat applications and at low to medium speeds and feeds.

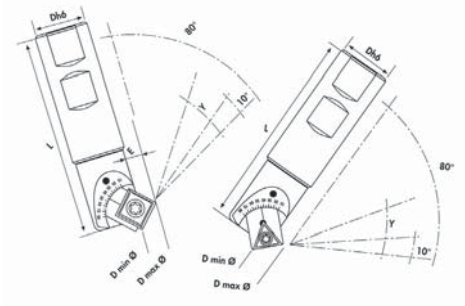
NC2032 K20F Grade, AlTiN coated. First choice for high carbon, high alloy and hardened steels as well as cast iron.

NC9071 K20F Grade, TiN coated. High positive rake angle and honed sharp edge. The best choice for low carbon steel, low carbon alloy steel, stainless steel, Al, Al-alloy, brass, bronze and most non-ferrous metal.

TL120 Multi-layer PVD TiAlN/K30 (black) coating. For tool steel 400/500 & PH series stainless, gray nodular cast iron and high-temp/high strength alloys in high heat applications at higher speeds. Works best in dry machining applications.

Niko Fleximill Countersink & Chamfering Tool 10° and 80°

Each tool comes with two pockets for & triangle inserts





Shank Size (in.)	Order No.	Price
3/4	**FG40330W2750**	Price
1	**FG40340W2100**	Price

Inserts sold separately. Industry standard.

NIKO Fleximill

Countersink & Chamfering Tool 10° to 80°

Square Pocket

D h6	L	Y	D. min. Ø	D. max. Ø				
1.000" / .750"	4"	10°	.292"	1.170"	S 12A	SCMT 43...	VT 50	T 20
		20°	.390"	1.248"				
		30°	.570"	1.267"				
		40°	.643"	1.306"				
		45°	.682"	1.306"				
		50°	.741"	1.306"				
		60°	.858"	1.306"				
		70°	.955"	1.306"				
		80°	1.053"	1.209"				

See page B12 for SCMT inserts

Triangle Pocket

D h6	L	Y	D. min.	D. max.				
1.000" / .750"	4"	10°	.195"	1.248"	S 16A	TCMT 3-2	VT 40	T 15
		20°	.234"	1.287"				
		30°	.273"	1.326"				
		40°	.390"	1.287"				
		45°	.429"	1.287"				
		50°	.507"	1.248"				
		60°	.624"	1.209"				
		70°	.741"	1.131"				
		80°	.897"	1.053"				

See page B14 for TCMT inserts

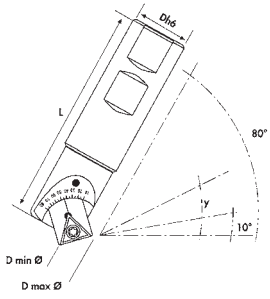
Parts for Fleximill

Type	Order No.	Price
Pocket for Square Flexmill	**FG40S12A**	Price
Pocket for Triangle Flexmill	**FG40S16A**	Price
3/4 Swing Plate	**FG40S11**	Price
1" Swing Plate	**FG40S16**	Price
3/4" Plate Screw	**FG401005**	Price
1" Plate Screw	**FG401006**	Price
Metric Hex Key	**KN60040**	Price
VT25 Screw	**FG40VT25**	Price
VT40 Screw	**FG40VT40**	Price
VT40A Insert Screw	**FG40VT40A**	Price
VT50 Insert Screw	**FG40VT50**	Price

Fleximill-Single Pocket

- Uses standard TCMT inserts (inserts sold separately)
- Capable of cutting angles from 10 to 80° with a simple twist of a torx key





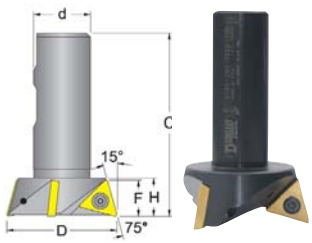
Dia. (in.)	Length L (in.)	Pt. Angle Y (in.)	D. min. ø	D. max. ø	Swing Plate	Insert	Torx Key	Screw	Order No.	Price
.750	4.00	10°-80°	ø.200	ø1.000	S11	TCMT2-1	T-8 / T-20	VT25	**FG40330W750**	Price
1.000	4.00	10°-80°	ø.200	ø1.250	S16	TCMT3-1	T-15 / 4mm	VT40A	**FG40340W100**	Price

See page B14 for TCMT inserts

DORIAN TOOL 15° Dovetail Cutter

Cutting Rake - 15° for 15° Positive TDEX Inserts

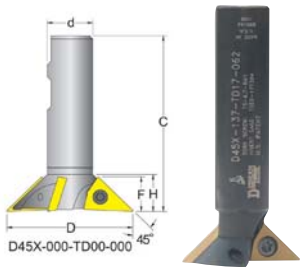
Description	C (in.)	D (in.)	Shank Size (in.)	F (in.)	H (in.)	Insert Qty.	Insert Style	Insert Torx Screw	Insert Torx Key	Order No.	Price
D15X-050-TD11-037	2.420	.5000	.375	.359	.420	1	TDEX 1102	TS25456M1/M2	T7	**FL4565225**	Price
D15X-100-TD11-050	2.420	1.0000	.500	.359	.420	3	TDEX 1102	TS25456M1/M2	T7	**FL4565226**	Price
D15X-187-TD16-075	3.200	1.8750	.750	.550	.750	3	TDEX 1603	TS478M1	T15	**FL4565227**	Price
D15X-250-TD22-100	3.750	2.5000	1.000	.750	1.000	3	TDEX 2204	TS5810M1	T20	**FL4565228**	Price



45° Dovetail Cutter

Cutting Rake - 11° for 11° Positive TDEX Inserts

Description	C (in.)	D (in.)	Shank Size (in.)	F (in.)	H (in.)	Insert Qty.	Insert Style	Insert Torx Screw	Insert Torx Key	Order No.	Price
D45X-050-TD09-037	2.390	.5000	.375	.247	.125	1	TDEX 0902	TS25456M1/M2	T7	**FL4565233**	Price
D45X-075-TD09-037	2.390	.7500	.375	.247	.214	2	TDEX 0902	TS25456M1/M2	T7	**FL4565234**	Price
D45X-100-TD09-050	2.390	1.0000	.500	.250	.244	3	TDEX 0902	TS25456M1/M2	T7	**FL4565235**	Price
D45X-137-TD17-062	2.940	1.3750	.625	.375	.320	2	TDEX 17T3	TS478M1	T15	**FL4565236**	Price
D45X-187-TD17-075	2.940	1.8750	.750	.468	.444	3	TDEX 17T3	TS478M1	T15	**FL4565237**	Price
D45X-225-TD25-100	3.500	2.2500	1.000	.700	.696	2	TDEX 2504	TS5810M1	T20	**FL4565238**	Price
D45X-250-TD25-100	3.500	2.5000	1.000	.700	.700	3	TDEX 2504	TS5810M1	T20	**FL4565239**	Price



Double 45° Chamfer Mill

Cutting Rake - 15° for 15° Positive Square SDHW & SPHX Inserts

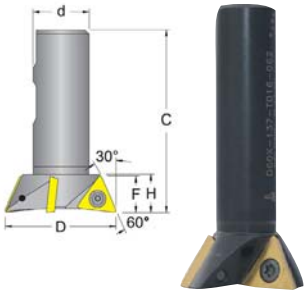
Description	C (in.)	D1 (in.)	Shank Size (in.)	F (in.)	H (in.)	Insert Qty.	Insert Style	Insert Torx Screw	Insert Torx Key	Order No.	Price
C45-062-SP06-062	3.000	.6250	.625	.159	.750	1	SPMT 060304	TS25456M1/M2	T7	**FL4565410**	Price
C45-075-SP06-062	3.000	.7500	.625	.159	.750	2	SPMT 060304	TS25456M1/M2	T7	**FL4565411**	Price
C45-112-SD09-075	3.375	1.1250	.750	.230	.750	2	SDHW 090308	TS478M1	T15	**FL4565414**	Price
C45-125-SD09-075	3.375	1.2500	.750	.230	.750	2	SDHW 090308	TS478M1	T15	**FL4565416**	Price
C45-150-SD09-100	3.500	1.5000	1.000	.230	1.000	3	SDHW 090308	TS478M1	T15	**FL4565418**	Price
C45XL-112-SD09-075	7.750	1.1250	.750	.230	.750	2	SDHW 090308	TS478M1	T15	**FL4565420**	Price
C45XL-150-SD09-100	7.750	1.5000	1.000	.230	1.000	3	SDHW 090308	TS478M1	T15	**FL4565421**	Price



60° Dovetail Cutter

Cutting Rake - 15° for 15° Positive Triangle TDEX Inserts

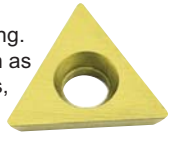
Description	C (in.)	D (in.)	Shank Size (in.)	F (in.)	H (in.)	Insert Qty.	Insert Style	Insert Torx Screw	Insert Torx Key	Order No.	Price
D60X-050-TD11-037	2.390	.5000	.375	.325	.142	1	TDEX 1102	TS25456M1/M2	T7	**FL4565244**	Price
D60X-075-TD11-037	2.390	.7500	.375	.325	.282	2	TDEX 1102	TS25456M1/M2	T7	**FL4565245**	Price
D60X-100-TD11-050	2.390	1.0000	.500	.325	.375	3	TDEX 1102	TS25456M1/M2	T7	**FL4565246**	Price
D60X-137-TD16-062	2.862	1.3750	.625	.510	.550	3	TDEX 1603	TS478M1	T15	**FL4565247**	Price
D60X-187-TD16-075	3.000	1.8750	.750	.510	.550	3	TDEX 1603	TS478M1	T15	**FL4565248**	Price
D60X-225-TD22-100	3.500	2.2500	1.000	.700	.750	3	TDEX 2204	TS5810M1	T20	**FL4565249**	Price
D60X-250-TD22-100	3.500	2.5000	1.000	.700	.750	3	TDEX 2204	TS5810M1	T20	**FL4565250**	Price



Inserts

DASK25B

C2 Substrate with PVD TiN-TiAlN-TiN multi-layer coating. For general purpose milling of non-ferrous metals such as aluminum, copper, brass, and bronze, high temp alloys, 300-series stainless steels and cast iron with medium to high SFM.



DASP35B/DUP30M

C5 Substrate with PVD TiN-TiAlN-TiN multi-layer coating. For general purpose milling of carbon steels, alloy steels and tool steels in annealed state with medium to high SFM.

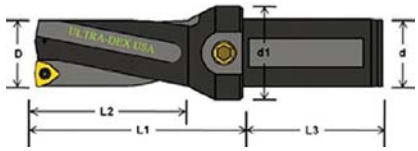
Insert Style	Corner Radius (in.)	Grade	Order No.	Price
SDHW 090308-EN	.030	DASK25B	**FL4594998**	Price
SDHW 090308-EN	.030	DASP35B	**FL4595002**	Price
SPMT 060304-EN	.015	DUP30M	**FL3195051**	Price
TDEX 090202-EN	.008	DASK25B	**FL4595492**	Price
TDEX 090202-EN	.008	DASP35B	**FL4595495**	Price
TDEX 090204-EN	.015	DASK25B	**FL4595502**	Price
TDEX 090204-EN	.015	DASP35B	**FL4595505**	Price
TDEX 110204-EN	.015	DASK25B	**FL4595422**	Price

Insert Style	Corner Radius (in.)	Grade	Order No.	Price
TDEX 110204-EN	.015	DASP35B	**FL4595426**	Price
TDEX 110208-EN	.030	DASK25B	**FL4595432**	Price
TDEX 110208-EN	.030	DASP35B	**FL4595436**	Price
TDEX 160304-EN	.015	DASK25B	**FL4595442**	Price
TDEX 160304-EN	.015	DASP35B	**FL4595446**	Price
TDEX 160308-EN	.030	DASK25B	**FL4595452**	Price
TDEX 160308-EN	.030	DASP35B	**FL4595456**	Price
TDEX 17T304-EN	.015	DASK25B	**FL4595512**	Price
TDEX 17T304-EN	.015	DASP35B	**FL4595515**	Price
TDEX 17T308-EN	.030	DASK25B	**FL4595522**	Price
TDEX 17T308-EN	.030	DASP35B	**FL4595525**	Price
TDEX 220404-EN	.015	DASK25B	**FL4595462**	Price
TDEX 220404-EN	.015	DASP35B	**FL4595466**	Price
TDEX 220408-EN	.030	DASP35B	**FL4595476**	Price
TDEX 250404-EN	.015	DASK25B	**FL4595532**	Price
TDEX 250404-EN	.015	DASP35B	**FL4595535**	Price
TDEX 250408-EN	.030	DASK25B	**FL4595542**	Price
TDEX 250408-EN	.030	DASP35B	**FL4595545**	Price

ULTRA-DEX Indexable Drills

2xD, 2.5xD, and 4xD

- 80° Trigon inserts offer 3 cutting edges
- Coolant-thru access on bottom of shank and the side of the drill body
- Spiral flutes to improve chip evacuation
- Insert pockets precisely positioned to keep cutting forces low and evenly distributed
- ION nitride coating available for tough applications
- Proudly made in the USA



Diameter Range	Uses Insert
.437 - .500	WCMT 1.211
.531 - .593	WCMT 1.51.51
.625 - .719	WCMX 1.81.52
.750 - .968	WCMX 21.52
1.000 - 1.219	WCMX 2.522
1.250 - 1.687	WCMX 32.52
1.750 - 2.375	WCMX 433

Type - 2xD

Model No.	Cutting Dia. D (in.)	Shank Dia. d (in.)	Head Dia. d1 (in.)	Head Lgth. L2 (in.)	Order No.	Price
UD-0625-2D-063	.625	.625	.987	1.375	**FG5530000**	Price
UD-0656-2D-063	.656	.625	.987	1.406	**FG5530005**	Price
UD-0687-2D-063	.687	.625	.987	1.437	**FG5530010**	Price
UD-0719-2D-063	.719	.625	.987	1.467	**FG5530020**	Price
UD-0750-2D-075	.750	.750	1.220	1.748	**FG5530025**	Price
UD-0781-2D-075	.781	.750	1.220	1.780	**FG5530030**	Price
UD-0812-2D-075	.812	.750	1.220	1.811	**FG5530035**	Price
UD-0844-2D-075	.844	.750	1.220	1.850	**FG5530040**	Price
UD-0875-2D-075	.875	.750	1.220	1.874	**FG5530045**	Price
UD-0906-2D-075	.906	.750	1.220	1.910	**FG5530050**	Price
UD-0937-2D-075	.937	.750	1.220	1.935	**FG5530055**	Price
UD-0968-2D-075	.968	.750	1.220	1.970	**FG5530060**	Price
UD-1000-2D-100	1.000	1.000	1.450	2.345	**FG5530065**	Price
UD-1031-2D-100	1.031	1.000	1.450	2.375	**FG5530070**	Price
UD-1062-2D-100	1.062	1.000	1.450	2.406	**FG5530075**	Price
UD-1094-2D-100	1.094	1.000	1.450	2.438	**FG5530080**	Price
UD-1125-2D-100	1.125	1.000	1.450	2.469	**FG5530085**	Price
UD-1156-2D-100	1.156	1.000	1.450	2.500	**FG5530090**	Price
UD-1187-2D-100	1.187	1.000	1.450	2.532	**FG5530095**	Price
UD-1219-2D-100	1.219	1.000	1.450	2.564	**FG5530100**	Price
UD-1250-2D-125	1.250	1.250	1.730	2.710	**FG5530105**	Price
UD-1312-2D-125	1.312	1.250	1.730	2.771	**FG5530110**	Price
UD-1343-2D-125	1.343	1.250	1.730	2.802	**FG5530115**	Price
UD-1375-2D-125	1.375	1.250	1.730	2.833	**FG5530120**	Price
UD-1437-2D-125	1.437	1.250	1.730	2.896	**FG5530125**	Price
UD-1500-2D-125	1.500	1.250	1.970	3.250	**FG5530130**	Price
UD-1562-2D-125	1.562	1.250	1.970	3.312	**FG5530135**	Price
UD-1625-2D-125	1.625	1.250	1.970	3.375	**FG5530140**	Price
UD-1687-2D-125	1.687	1.250	1.970	3.437	**FG5530145**	Price
UD-1750-2D-150	1.750	1.500	2.220	3.850	**FG553282**	Price
UD-1812-2D-150	1.812	1.500	2.220	3.912	**FG553284**	Price
UD-1875-2D-150	1.875	1.500	2.220	3.975	**FG553286**	Price
UD-1937-2D-150	1.937	1.500	2.220	4.036	**FG553288**	Price
UD-2000-2D-150	2.000	1.500	2.470	4.469	**FG553290**	Price
UD-2125-2D-150	2.125	1.500	2.470	4.593	**FG553292**	Price
UD-2250-2D-150	2.250	1.500	2.470	4.717	**FG553294**	Price
UD-2375-2D-150	2.375	1.500	2.470	4.840	**FG553296**	Price

Type - 4xD

Model No.	Cutting Dia. D (in.)	Shank Dia. d (in.)	Head Dia. d1 (in.)	Head Lgth. L2 (in.)	Order No.	Price
UD-0625-4D-063	.625	.625	.987	2.815	**FG5530150**	Price
UD-0656-4D-063	.656	.625	.987	2.847	**FG5530155**	Price
UD-0687-4D-063	.687	.625	.987	2.878	**FG5530160**	Price
UD-0719-4D-063	.719	.625	.987	2.911	**FG5530165**	Price
UD-0750-4D-075	.750	.750	1.220	3.698	**FG5530170**	Price
UD-0781-4D-075	.781	.750	1.220	3.729	**FG5530175**	Price
UD-0812-4D-075	.812	.750	1.220	3.761	**FG5530180**	Price
UD-0844-4D-075	.844	.750	1.220	3.792	**FG5530185**	Price
UD-0875-4D-075	.875	.750	1.220	3.824	**FG5530190**	Price
UD-0906-4D-075	.906	.750	1.220	3.855	**FG5530195**	Price
UD-0937-4D-075	.937	.750	1.220	3.855	**FG5530200**	Price
UD-0968-4D-075	.968	.750	1.220	3.918	**FG5530205**	Price
UD-1000-4D-100	1.000	1.000	1.450	4.635	**FG5530210**	Price
UD-1031-4D-100	1.031	1.000	1.450	4.666	**FG5530215**	Price
UD-1062-4D-100	1.062	1.000	1.450	4.696	**FG5530220**	Price
UD-1094-4D-100	1.094	1.000	1.450	4.728	**FG5530225**	Price
UD-1125-4D-100	1.125	1.000	1.450	4.760	**FG5530230**	Price
UD-1156-4D-100	1.156	1.000	1.450	4.792	**FG5530235**	Price
UD-1187-4D-100	1.187	1.000	1.450	4.822	**FG5530240**	Price
UD-1219-4D-100	1.219	1.000	1.450	4.864	**FG5530245**	Price
UD-1250-4D-125	1.250	1.250	1.730	5.585	**FG5530250**	Price
UD-1312-4D-125	1.312	1.250	1.730	5.646	**FG5530255**	Price
UD-1375-4D-125	1.375	1.250	1.730	5.708	**FG5530260**	Price
UD-1437-4D-125	1.437	1.250	1.730	5.771	**FG5530265**	Price
UD-1500-4D-125	1.500	1.250	1.970	6.632	**FG5530270**	Price
UD-1562-4D-125	1.562	1.250	1.970	6.695	**FG5530275**	Price
UD-1625-4D-125	1.625	1.250	1.970	6.757	**FG5530280**	Price
UD-1687-4D-125	1.687	1.250	1.970	6.820	**FG5530285**	Price
UD-1750-4D-150	1.750	1.500	2.220	7.724	**FG553298**	Price
UD-1812-4D-150	1.812	1.500	2.220	7.786	**FG553300**	Price
UD-1875-4D-150	1.875	1.500	2.220	7.849	**FG553302**	Price
UD-1937-4D-150	1.937	1.500	2.220	7.911	**FG553304**	Price
UD-2000-4D-150	2.000	1.500	2.470	9.263	**FG553306**	Price
UD-2125-4D-150	2.125	1.500	2.470	9.387	**FG553308**	Price
UD-2250-4D-150	2.250	1.500	2.470	9.512	**FG553310**	Price
UD-2375-4D-150	2.375	1.500	2.470	9.637	**FG553312**	Price

Type - 2.5xD

Model No.	Cutting Dia. D (in.)	Shank Dia. d (in.)	Head Dia. d1 (in.)	Head Lgth. L2 (in.)	Order No.	Price
UD-0437-2D-063	.437	.625	.970	1.280	**FG553270**	Price
UD-0468-2D-063	.468	.625	.970	1.310	**FG553272**	Price
UD-0500-2D-063	.500	.625	.970	1.340	**FG553274**	Price
UD-0531-2D-063	.531	.625	.970	1.370	**FG553276**	Price
UD-0562-2D-063	.562	.625	.970	1.400	**FG553278**	Price
UD-0593-2D-063	.593	.625	.970	1.430	**FG553280**	Price

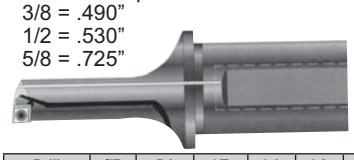
Mini Drills

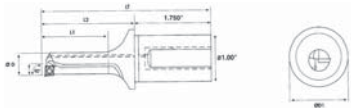
Coolant-Thru

WORLD CLASS QUALITY

- Introducing unique “Mini-Drills” that utilize a single, standard CCMT insert.
- Finally, a drill that lets you drill from solid, bore, internal turn and face without being locked into a special high priced insert or single source
- Designed to fit directly into turret, or 1” boring bar adapter
- ***For ØD 3/8”, tool must be .060”off center, X = .060”**
  For ØD 1/2”, tool must be .020”off center, X = .020”
  For ØD 5/8”, tool must be .050”off center, X = .050”

Actual bore produced:
3/8 = .490”
1/2 = .530”
5/8 = .725”





Drill Designation	ØD (in.)	D1 (in.)	LT (in.)	L1 (in.)	L2 (in.)	Insert	Torx Key	Screw	Order No.	Price
D-3/8	.375	1.380	3.620	1.000	1.870	CCMT 2-...	T-8	VT25	**FG40D38**	Price
D-1/2	.500	1.380	3.820	1.200	2.070	CCMT 2-...	T-8	VT25	**FG40D12**	Price
D-5/8	.625	1.380	4.600	2.000	2.850	CCMT 3-...	T-15	VT40	**FG40D58**	Price

ULTRA-DEX Inserts

- UD21 - for cast iron, stainless steel & nickel based high temp alloys
- UD32 - used in high speed applications for stainless steel and finishing of high temperature alloys
- UD52 - tough, general purpose grade for alloy steel, aluminum alloys, austenitic stainless & carbon steels



Insert	Grade	Order No.	Price
WCMT 1.211	UD21	**FG553327**	Price
WCMT 1.211	UD52	**FG553326**	Price
WCMT 1.51.51	UD21	**FG553329**	Price
WCMT 1.51.51	UD52	**FG553328**	Price
WCMT 21.51	UD21	**FG553320**	Price
WCMT 21.51	UD52	**FG550479**	Price
WCMT 21.52	UD21	**FG553322**	Price
WCMT 21.52	UD52	**FG550406**	Price
WCMT 32.51	UD52	**FG550408**	Price
WCMT 32.52	UD21	**FG553324**	Price
WCMT 32.52	UD52	**FG550410**	Price
WCMX 1.81.52	UD32	**FG5530425**	Price
WCMX 1.81.52	UD51	**FG5530400**	Price
WCMX 2.522	UD32	**FG5530435**	Price
WCMX 2.522	UD51	**FG5530410**	Price
WCMX 21.52	UD32	**FG5530430**	Price
WCMX 21.52	UD51	**FG5530405**	Price
WCMX 32.52	UD32	**FG5530440**	Price
WCMX 32.52	UD51	**FG5530415**	Price
WCMX 433	UD32	**FG5530445**	Price
WCMX 433	UD51	**FG5530420**	Price

RAPIDKUT Milling Inserts

- Grade ME425 is a PVD TiAlN coated insert designed for use with steel, stainless steel, cast iron and hi-temp alloy applications
- Grade ME9125 is for aluminum and aluminum alloys

Model No.	Length (in.)	Thickness (in.)	Grade	Order No.	Price
APGT 113508PDFR-AL	11mm	3.5mm	ME9125	**ME1059800**	Price
APKT 113508PDER-HM	11mm	3.5mm	ME8430	**ME1020012**	Price
APKT 113508PDER-LM	11mm	3.5mm	ME8430	**ME1020005**	Price
APKT 113508PDER-MM	11mm	3.5mm	ME8430	**ME1020011**	Price
APKT 160416PDER-M	.640	.187	ME425	**ME1020014**	Price
SEET 12T3AGEN-LM	12mm	3.97mm	ME8430	**ME1060090**	Price
SEET 12T3AGEN-MM	12mm	3.97mm	ME8430	**ME1060095**	Price
SEET 12T3AGSN-HM	12mm	3.97mm	ME8430	**ME1060105**	Price
SNEX 1306ANEN-LM	13.5mm	6.8mm	ME8430	**ME1060107**	Price
SNEX 1306ANEN-LM	13.5mm	6.8mm	MK4215	**ME1060110**	Price
SNEX 1306ANEN-MM	13.5mm	6.8mm	ME8430	**ME1060115**	Price
SNEX 1306ANEN-MM	13.5mm	6.8mm	MK4215	**ME1060120**	Price
SNEX 1306ANEN-WM	13.5mm	6.8mm	ME8430	**ME1060125**	Price
SNEX 1306ANEN-WM	13.5mm	6.8mm	MK4215	**ME1060130**	Price
SNEX 1306ANSN-HM	13.5mm	6.8mm	ME8430	**ME1060135**	Price
SNEX 1306ANSN-HM	13.5mm	6.8mm	MK4215	**ME1060140**	Price

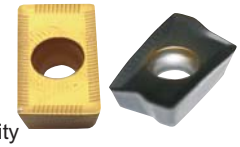


Model No.	Length (in.)	Thickness (in.)	Grade	Order No.	Price
ADKT 1505	15mm	.222	ME425	**ME2712120**	Price
ADKT 1705PETR	.669	.189	ME425	**ME1350005**	Price
AOMT 1236PETR	.472	.142	ME425	**ME1350000**	Price
APGT 1604PDFR-AL	.640	.187	ME9125	**ME1059990**	Price
APKT 1003	10mm	3.5mm	ME425	**ME2713130**	Price
APKT 1604	16mm	5.25mm	ME425	**ME2713500**	Price
APKT 160408PDER-M	.640	.187	ME425	**ME1020000**	Price
RPMT 1204MO	.500	.187	ME425	**ME1120200**	Price
RPMW 1204M0	.500	.187	ME425	**ME1120220**	Price
RPMW 1204M0T	.500	.187	ME425	**ME1120225**	Price
SEHT 43	.500	.187	ME425	**ME2714050**	Price
SEHX 43	.500	.187	ME425	**ME2714100**	Price
SEKN 42AFSN	.500	.125	ME425	**ME1120205**	Price
SEKN 42AFTN	.500	.125	ME425	**ME1120210**	Price
SNMX 1205	.500	.250	ME425	**ME2714110**	Price
XNEX 040304	-	.130	ME425	**ME2714120**	Price
XNEX 080608	-	.250	ME425	**ME2714130**	Price

PROCUT Milling Inserts

Many of the most popular sizes!

- PC5 is C-5 steel cutting
- PC300 is C-5 (coated) TiN-TiC-TiN steel cutting at higher speeds with greater lubricity

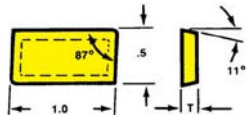


Brand - ProCut					
Model No.	Length	Thickness	Grade	Order No.	Price
APKT 10035PDSR	.413	.137	PC5	**FF5010035**	Price
APKT 10035PDSR	.413	.137	PC300	**FF5010036**	Price
APKT 1604PDR	.669	.188	PC2	**FF5016042**	Price
APKT 1604PDR	.669	.188	PC5	**FF5016045**	Price
APKT 1604PDR	.669	.188	PC300	**FF5016043**	Price
ADKT 1505PDSR	.600	.221	PC5	**FF5010037**	Price
ADKT 1505PDSR	.600	.221	PC300	**FF5010038**	Price

Ready Reference Grade Chart		
Grade	**ISO Grade**	**General Application**
PC2M	**C-2**	**Non Ferrous Metals**
PC5M	**C-5**	**Steel Cutting**
PC300M	**C5 TiN TiC TiN**	**Steel Cutting H.S.**

PROCUT BCB – 11° Positive 87° Parallelogram

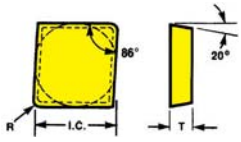
Tolerance: ±.001 IC ±.001 T



PROCUT Part No.	Carboloy Futurmill	IC (in.)	T (in.)	Radius	PC5M		PC300M	
					Order No.	Price	Order No.	Price
BCBP 15	BCBP15	-	1/8	.046	**FF7050000**	Price	**FF7030000**	Price

PROCUT MEC – 20° Positive 86° Parallelogram

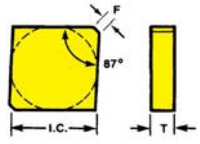
Tolerance: ± .0005 IC ± .001 T



PROCUT Part No.	Carboloy Futurmill	IC (in.)	T (in.)	Radius	PC5M		PC300M	
					Order No.	Price	Order No.	Price
MEC 632	MEC662A	3/4	3/16	.031	**FF7050040**	Price	**FF7030040**	Price

PROCUT NNC-N – Negative 87° Parallelogram

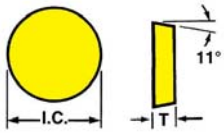
Tolerance: ± .0005 IC ± .001 T



PROCUT Part No.	Carboloy Futurmill	IC (in.)	T (in.)	X-Corner	PC5M	
					Order No.	Price
NNC 63N2	P66-NC1E	3/4	3/16	1/32-Flat	**FF7050070**	Price

PROCUT RPC – 11° Positive Round

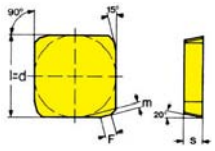
Tolerance: ± .0005 IC ± .001 T



PROCUT Part No.	Carboloy Futurmill	IC (in.)	T (in.)	PC300M	
				Order No.	Price
RPC 63	R66PE	3/4	3/16	**FF7030110**	Price

PROCUT SEAN-AFTN – Square 20° Positive

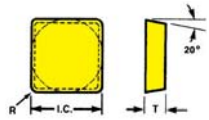
Tolerance: ± .0001 IC ± .001 T



PROCUT Part No.	I.C. (in.)	T (in.)	X-Corner	PC2M		PC5M		PC300M	
				Order No.	Price	Order No.	Price	Order No.	Price
SEAN 42AFTN	1/2	1/8	3/32 x 45°	**FF7010120**	Price	**FF7050120**	Price	**FF7030120**	Price
SEAN 43AFTN	1/2	3/16	3/32 x 45°	**-**	-	**FF7050130**	Price	**FF7030130**	Price
SEAN 53AFTN	5/8	3/16	1/8 x 45°	**-**	-	**FF7050140**	Price	**FF7030140**	Price

PROCUT SEC – Square 20° Positive

Tolerance: ±.0005 IC ±.001 T

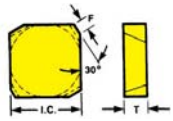


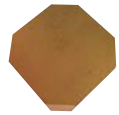


PROCUT Part No.	Carboloy Futurmill	I.C. (in.)	T (in.)	X-Corner	PC2M		PC5M		PC300M	
					Order No.	Price	Order No.	Price	Order No.	Price
SEC 422	SEC44R2	1/2	1/8	1/32- R x 20°	**FF7010150**	Price	**FF7050150**	Price	**FF7030150**	Price
SEC 432	SEC46R2	1/2	3/16	1/32- R x 20°	**-**	-	**FF7050170**	Price	**FF7030170**	Price
SEC 532	SEC53R2	5/8	3/16	1/32- R x 20°	**-**	-	**FF7050175**	Price	**FF7030175**	Price
SEC 634	SEC66R4	3/4	3/16	1/16- R x 20°	**FF7010180**	Price	**FF7050180**	Price	**FF7030180**	Price

PROCUT SHC-D – Square 0° Negative / 11° Positive

Tolerance: ±.0005 IC ±.001 T

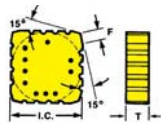




PROCUT Part No.	Carboloy Futurmill	I.C. (in.)	T (in.)	X-Corner	PC300M	
					Order No.	Price
SHC 63D9R	S66NPK8E	3/4	3/16	5/64 x 30° RH	**FF7030210**	Price

PROCUT SNW – Square 0° Negative / Heavy Stock Removal

Tolerance: ±.002 IC ±.001 T

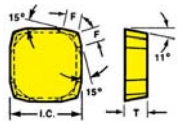


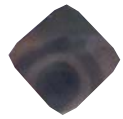


PROCUT Part No.	Carboloy Futurmill	IC (in.)	T (in.)	PC5M		PC300M	
				Order No.	Price	Order No.	Price
SNW 63	SNW66	3/4	3/16	**FF7050370**	Price	**FF7030370**	Price
SNW 64	SNW68	3/4	1/4	**-**	-	**FF7030380**	Price

PROCUT SPC – Square 11° Positive

Tolerance: ±.0005 IC ±.001 T

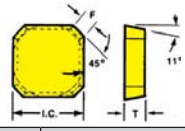




PROCUT Part No.	Carboloy Futurmill	I.C. (in.)	T (in.)	X-Corner	PC2M		PC5M		PC300M	
					Order No.	Price	Order No.	Price	Order No.	Price
SPC 42E4	SPC42ZR	1/2	1/8	.060 x 15° RH	**FF7010390**	Price	**FF7050390**	Price	**FF7030390**	Price
SPC 53E4	SPC53ZR	5/8	3/16	.060 x 15° RH	**-**	-	**FF7050420**	Price	**FF7030420**	Price
SPC 53H4	SPC53ZL	5/8	3/16	.060 x 15° LH	**-**	-	**FF7050430**	Price	**FF7030430**	Price

PROCUT SPC-A – Square 11° Positive

Tolerance: ±.0005 IC ±.001 T

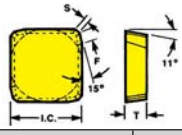


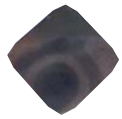


PROCUT Part No.	Carboloy Futurmill	I.C. (in.)	T (in.)	X-Corner	PC300M	
					Order No.	Price
SPC 43A3	S46PC2E	1/2	3/16	3/64 x 45°	**FF7030440**	Price

PROCUT SRC-H – Square 11° Positive

Tolerance: ±.0005 IC ±.001 T

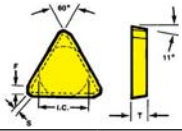




PROCUT Part No.	Carboloy Futurmill	I.C. (in.)	T (in.)	X-Corner	PC2M		PC5M	
					Order No.	Price	Order No.	Price
SRC 63H4R	S66PJ4E	3/4	3/16	1/16-1/8 x 15° RH	**FF7010500**	Price	**FF7050500**	Price

PROCUT TPC / TRC – Triangle 11° Positive

Tolerance: ±.0005 IC ±.001 T





PROCUT Part No.	Carboloy Futurmill	I.C. (in.)	T (in.)	X-Corner	PC2M		PC5M		PC300M	
					Order No.	Price	Order No.	Price	Order No.	Price
T32P3R	TPE32X	3/8	1/8	1/32 x 30° Incl RH	**FF7010530**	Price	**FF7050530**	Price	**FF7030530**	Price
TPC 43P4R	T46PY4E	1/2	3/16	1/16 x 30° INCL RH	**FF7010550**	Price	**-**	-	**FF7030550**	Price
TRC 53R4R	T56PY4E	5/8	3/16	1/16 x 30° INCL RH	**-**	-	**FF7050570**	Price	**FF7030570**	Price
T32P3L	TPE32Z	3/8	1/8	1/32 x 30° INCL LH	**-**	-	**FF7050540**	Price	**-**	-

RAPIDKUT 45° Indexable End Mills

Use SEHX Inserts

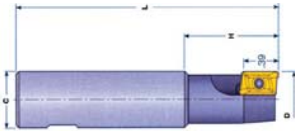
- Suitable for surface milling for roughing
- Recommended for CNC and traditional milling machines
- Uses SEHX 4-edged inserts
- SEHX43 Grade ME425
  ME2714100

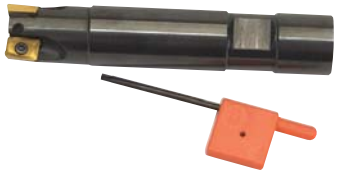


Cutter Dia. (in.)	No. of Inserts	Shank Dia. (in.)	OAL (in.)	Uses Insert	Screw	Wrench	Order No.	Price
1-1/2	4	1	5	SEHX 43	TX50	CT20	**ME1440150**	Price
2	4	1	5	SEHX 43	TX50	CT20	**ME1440200**	Price

RAPIDKUT 90° Indexable End Mills

- For shoulder milling, slotting and countersinking
- Industry standard cutters and inserts for economy and high quality





Uses Insert - ADKT 1505							
Cutting Dia. (in.)	Shank Dia. (in.)	No. of Inserts	OAL (in.)	Screw	Wrench	Order No.	Price
1	1	2	4-1/2	TX35L	CT15	**ME1492710**	Price
1	1	2	7-7/8	TX35L	CT15	**ME14927107**	Price
1-1/4	1	3	5	TX35L	CT15	**ME1492712**	Price
1-1/4	1	3	7-7/8	TX35L	CT15	**ME14927127**	Price
1-1/2	1	4	5-3/8	TX35L	CT15	**ME1492715**	Price

Uses Insert - APKT 1003							
Cutting Dia. (in.)	Shank Dia. (in.)	No. of Inserts	OAL (in.)	Screw	Wrench	Order No.	Price
3/8	1/2	1	3	TX25C	CT08	**ME1492403**	Price
1/2	5/8	1	3-1/4	TX25C	CT08	**ME1492405**	Price
5/8	5/8	2	3-1/4	TX25C	CT08	**ME1492406**	Price
5/8	5/8	2	7-7/8	TX25C	CT08	**ME14924067**	Price
7/8	3/4	4	4-1/2	TX25C	CT08	**ME1492408**	Price
7/8	3/4	3	7-7/8	TX25C	CT08	**ME14924087**	Price
3/4	3/4	3	4	TX25C	CT08	**ME1492407**	Price
3/4	3/4	3	7-7/8	TX25C	CT08	**ME14924077**	Price
1	1	4	4-1/2	TX25C	CT08	**ME1492410**	Price
1	1	4	7-7/8	TX25C	CT08	**ME14924107**	Price
1-1/4	1	5	5	TX25C	CT08	**ME1492412**	Price
1-1/4	1	5	7-7/8	TX25C	CT08	**ME14924127**	Price
1-1/2	1	4	7-7/8	TX25C	CT08	**ME14926157**	Price

Uses Insert - APKT 1604							
Cutting Dia. (in.)	Shank Dia. (in.)	No. of Inserts	OAL (in.)	Screw	Wrench	Order No.	Price
1	1	2	4-1/2	TX35	CT15	**ME1492110**	Price
1-1/4	1	3	5	TX35	CT15	**ME1492112**	Price
1-1/4	1	3	7-7/8	TX35	CT15	**ME14921127**	Price
1-1/2	1	4	5-3/8	TX35	CT15	**ME1492115**	Price
1-1/2	1-1/4	4	7-7/8	TX35	CT15	**ME14921157**	Price

RAPIDKUT 3 Pc 90° Indexable End Mill Kits

With Inserts

- For shoulder milling, slotting and countersinking
- Complete with (3) cutters and (20) inserts with case
- Includes 1", 1-1/4", 1-1/2" end mills



Order No.	Insert	Price
ME2110500	APKT1604	Price
ME2110550	ADKT1505	Price

RAPIDKUT 90° Indexable End Mills

Use XNEX Inserts

- Suitable for shoulder milling, surface milling for roughing
- Weldon style shank
- Uses XNEX 6-edged inserts



Cutter Dia. (in.)	No. of Inserts	Shank Dia. (in.)	OAL (in.)	Uses Insert	Screw	Wrench	Order No.	Price
3/4	2	3/4	4-1/2	XNEX 040304	TX25	CT08	**ME1481075**	Price
1	4	1	4-1/2	XNEX 040304	TX25	CT08	**ME1481100**	Price
1-1/4	5	1-1/4	5	XNEX 040304	TX25	CT08	**ME1481125**	Price
1-1/2	3	1-1/4	4-1/2	XNEX 080608	TX40G	CT15	**ME1481150**	Price
2	4	1-1/4	5	XNEX 080608	TX40G	CT15	**ME1481200**	Price

RAPIDKUT 90° Indexable End Mill Kits

With XNEX Inserts

- Suitable for shoulder milling, surface milling for roughing
- Weldon style shank
- Uses XNEX 6-edged inserts (10 included in set)
- Sturdy case



Set Includes	Order No.	Price
3/4" 90Deg Indexable End Mill with 10 XNEX 040304 Inserts, Case	**ME2110700**	Price
1" 90Deg Indexable End Mill with 10 XNEX 040304 Inserts, Case	**ME2110750**	Price

RAPIDKUT 90° Indexable End Mill Kits

With APKT Inserts

- For shoulder milling, slotting and countersinking
- Complete with industry standard cutters and inserts for economy and high quality



Set Includes	Order No.	Price
3/4" 90Deg Indexable End Mill with 10 APKT.PM 1003 Inserts, Case	**ME2110600**	Price
1" 90Deg Indexable End Mill with 10 APKT.PM 1003 Inserts, Case	**ME2110650**	Price

RAPIDKUT 90° Indexable End Mill Kits

- Kit comes complete with 10 inserts



Uses Insert - ADKT 1505		
Description	Order No.	Price
1", 1-1/4" & 1-1/2" 90 Degree Indexable End Mills PLUS 10 Inserts	**ME1410005**	Price

Uses Insert - APKT 1003		
Description	Order No.	Price
3/8", 1/2", 5/8" & 3/4" 90 Degree Indexable End Mills PLUS 10 Inserts	**ME1410001**	Price
5/8", 3/4" & 1" 90 Degree Indexable End Mills PLUS 10 Inserts	**ME1410150**	Price

Uses Insert - APKT 1604		
Description	Order No.	Price
1", 1-1/4" & 1-1/2" 90 Degree Indexable End Mills PLUS 10 Inserts	**ME1410100**	Price

RAPIDKUT® 45° Face Mills

Use SEKN Inserts

- Suitable for surface milling for roughing
- Recommended for CNC and traditional milling machines
- Uses SEKN 4-edged inserts



Cutter Dia. (in.)	No. of Inserts	Bore Dia. (in.)	Height (in.)	Uses Insert	Shim	Screw	Wrench	Order No.	Price
2	4	3/4	1.97	SEKN 42	SSE 10.3	VF3	CHT4	**ME1480200**	Price
2-1/2	5	3/4	1.97	SEKN 42	SSE 10.3	VF3	CHT4	**ME1480250**	Price
3	5	1	1.97	SEKN 42	SSE 10.3	VF3	CHT4	**ME1480300**	Price
4	6	1-1/2	1.97	SEKN 42	SSE 10.3	VF3	CHT4	**ME1480400**	Price
5	7	1-1/2	1.97	SEKN 42	SSE 10.3	VF3	CHT4	**ME1480500**	Price
6	8	2	1.97	SEKN 42	SSE 10.3	VF3	CHT4	**ME1480600**	Price

RAPIDKUT® 45° Face Mills

Use SNMX Inserts

- Suitable for surface milling for roughing
- Recommended for CNC and traditional milling machines
- Uses SNMX 8-edged inserts



Cutter Dia. (in.)	No. of Inserts	Bore Dia. (in.)	Height H (in.)	Uses Insert	Screw	Wrench	Order No.	Price
2	5	3/4	1.97	SNMX 1205	TX45	CT20	**ME1430200**	Price
2-1/2	6	3/4	1.97	SNMX 1205	TX45	CT20	**ME1430250**	Price
3	7	1	1.97	SNMX 1205	TX45	CT20	**ME1430300**	Price
4	8	1-1/2	1.97	SNMX 1205	TX45	CT20	**ME1430400**	Price
5	9	1-1/2	1.97	SNMX 1205	TX45	CT20	**ME1430500**	Price
6	10	2	1.97	SNMX 1205	TX45	CT20	**ME1430600**	Price

RAPIDKUT® 45° Face Mill Cutters

Use SEHX / SEHT Inserts

- Suitable for surface milling for roughing
- Recommended for CNC and traditional milling machines
- Uses SEHX / SEHT 4-edged inserts



Cutter Dia. (in.)	No. of Inserts	Bore Dia. (in.)	Height H (in.)	Uses Insert	Screw	Wrench	Order No.	Price
1-1/2	4	3/4	1.57	SEH_ 43	TX50	CT20	**ME1440155**	Price
2	4	3/4	1.57	SEH_ 43	TX50	CT20	**ME1440205**	Price
2-1/2	5	3/4	1.57	SEH_ 43	TX50	CT20	**ME1440255**	Price
3	6	1	1.97	SEH_ 43	TX50	CT20	**ME1440305**	Price
4	7	1-1/2	1.97	SEH_ 43	TX50	CT20	**ME1440405**	Price
5	7	1-1/2	1.97	SEH_ 43	TX50	CT20	**ME1440505**	Price
6	9	2	1.97	SEH_ 43	TX50	CT20	**ME1440605**	Price

RAPIDKUT® 45° Face Mill Kits

With Inserts

- Suitable for surface milling for roughing
- Includes case



Insert Style - SEHX		
Set Includes	Order No.	Price
2" 45 Degree Face Mill w/20 SEHX 43 Inserts	**ME2112200**	Price
3" 45 Degree Face Mill w/20 SEHX 43 Inserts	**ME2112250**	Price

Insert Style - SEKN		
Set Includes	Order No.	Price
2" 45 Degree Face Mill w/20 SEKN 42 Inserts	**ME2112300**	Price
3" 45 Degree Face Mill w/20 SEKN 42 Inserts	**ME2112350**	Price

Insert Style - SNMX		
Set Includes	Order No.	Price
2" 45 Degree Face Mill w/20 SNMX.M 1205 Inserts	**ME2112400**	Price
3" 45 Degree Face Mill w/20 SNMX.M 1205 Inserts	**ME2112450**	Price

RAPIDKUT® 75° Face Mill Cutters

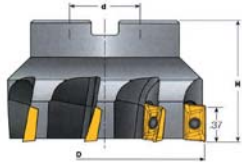
- For CNC and traditional milling machines
- Uses APKT or ADKT style inserts
- Perfect for medium to roughing applications



Cutter Dia. (in.)	No. of Inserts	H (in.)	Bore Dia. (in.)	Uses Insert	Screw	Torx Key	Order No.	Price
2-1/2	4	1.57	3/4	ADKT 1505	TX35L	CT 15	**ME1480115**	Price
2-1/2	7	1.57	3/4	APKT 1003	TX25C	CT 08	**ME1480130**	Price
2-1/2	4	1.57	3/4	APKT 1604	TX35	CT 15	**ME1480100**	Price
3	5	1.97	1	ADKT 1505	TX35L	CT 15	**ME1480120**	Price
3	8	1.97	1	APKT 1003	TX25C	CT 08	**ME1480135**	Price
3	5	1.97	1	APKT 1604	TX35	CT 15	**ME1480105**	Price
4	6	1.97	1-1/2	ADKT 1505	TX35L	CT 15	**ME1480125**	Price
4	11	1.97	1-1/2	APKT 1003	TX25C	CT 08	**ME1480140**	Price
4	6	1.97	1-1/2	APKT 1604	TX35	CT 15	**ME1480110**	Price

RAPIDKUT 90° Face Mills

- 90° Mills for shoulder milling, slotting and countersinking
- Industry standard cutters and inserts for economy and high quality
- Uses APKT / ADKT inserts





Uses Insert - ADKT 1505							
Cutting Dia. (in.)	No. of Inserts	Bore Dia.	Height H (in.)	Screw	Wrench	Order No.	Price
2	4	3/4	1.57	TX35	CT15	**ME1492620**	Price

Uses Insert - ADKT1505							
Cutting Dia. (in.)	No. of Inserts	Bore Dia.	Height H (in.)	Screw	Wrench	Order No.	Price
2-1/2	5	-	1.57	TX35L	CT15	**ME1492632**	Price
3	6	1	1.97	TX35L	CT15	**ME1492630**	Price

Uses Insert - APKT 1604							
Cutting Dia. (in.)	No. of Inserts	Bore Dia.	Height H (in.)	Screw	Wrench	Order No.	Price
2	4	3/4	1.57	TX35	CT15	**ME1492020**	Price
2-1/2	5	3/4	1.57	TX35	CT15	**ME1492025**	Price
3	6	1	1.97	TX35	CT15	**ME1492030**	Price

RAPIDKUT 90° Face Mill Kits

With Inserts

- Suitable for shoulder milling, surface milling or roughing
- Includes case



Insert Style - ADKT		
Set Includes	Order No.	Price
2" 90 Degree Face Mill W/20 ADKT 150512 Inserts	**ME2110350**	Price
3" 90 Degree Face Mill W/20 ADKT 150512 Inserts	**ME2110400**	Price

Insert Style - APKT		
Set Includes	Order No.	Price
2" 90 Degree Face Mill W/20 APKT.PM 1604 Inserts	**ME2110200**	Price
2-1/2" 90 Degree Face Mill W/20 APKT.PM 1604 Inserts	**ME2110250**	Price
3" 90 Degree Face Mill W/20 APKT.PM 1604 Inserts	**ME2110300**	Price

Insert Style - XNEX		
Set Includes	Order No.	Price
2" 90 Degree Face Mill W/20 XNEX 080608 Inserts	**ME2110100**	Price
3" 90 Degree Face Mill W/20 XNEX 080608 Inserts	**ME2110150**	Price

RAPIDKUT 90° Face Mills

Use XNEX Inserts

- Suitable for shoulder milling, surface milling for roughing
- Recommended for CNC and traditional milling machines
- Uses XNEX 6-edged inserts





Cutter Dia. (in.)	No. of Inserts	Bore Dia. (in.)	Height H (in.)	Uses Insert	Screw	Wrench	Order No.	Price
1-1/2	6	3/4	1-3/4	XNEX 040304	TX25	CT08	**ME1482150**	Price
2	4	3/4	1-3/4	XNEX 080608	TX40G	CT15	**ME1482204**	Price
2	8	3/4	1-3/4	XNEX 040304	TX25	CT08	**ME1482208**	Price
2-1/2	5	3/4	1-3/4	XNEX 080608	TX40G	CT15	**ME1482255**	Price
2-1/2	9	3/4	1-3/4	XNEX 040304	TX25	CT08	**ME1482259**	Price
3	6	1	2	XNEX 080608	TX40G	CT15	**ME1482300**	Price
4	8	1-1/2	2	XNEX 080608	TX40G	CT15	**ME1482400**	Price
5	8	1-1/2	2	XNEX 080608	TX40G	CT15	**ME1482500**	Price
6	10	2	2	XNEX 080608	TX40G	CT15	**ME1482600**	Price

RAPIDKUT High Feed Indexable End Mills

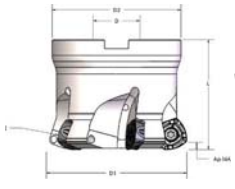


- Cylindrical Shank			
Cutting Diameter	Shank Dia./Style	Order No.	Price
1-1/2	1-1/2 Cylindrical	**ME2540120**	Price
1-1/2	1-1/4 Cylindrical	**ME2540110**	Price

- Weldon Shank			
Cutting Diameter	Shank Dia./Style	Order No.	Price
1-1/2	1-1/2 Weldon	**ME2540125**	Price
1-1/2	1-1/4 Weldon	**ME2540115**	Price

RAPIDKUT High Feed Milling Cutters

- Designed for high feed roughing in a variety of materials with depths of cut up to .150"
- Economical but robust insert with 4 cutting edges achieves excellent tool life at aggressive feed rates
- Positive geometry insert placement enables smooth chip evacuation and low cutting forces
- Electroless nickel plated finish gives a smooth hard surface that enhances chip flow and increases durability
- Uses MEHF style high feed milling inserts
- Theoretical radius: 12mm insert = .130"; 15mm insert = .197"





D1 Cutting Dia.	D2	D Bore Dia.	L Height	Ap MAX	Number of Inserts	Insert IC	Screw	Order No.	Price
1-1/2	1.13	16mm	1.88	.095	3	12mm	HFMS12	**ME2540100†**	Price
2	1.75	3/4	1.70	.095	4	12mm	HFMS12	**ME2540140**	Price
2	1.75	3/4	1.70	.095	5	12mm	HFMS12	**ME2540180**	Price
2-1/2	2.20	1	2.00	.150	4	15mm	HFMS15	**ME2540220**	Price
2-1/2	2.20	1	2.00	.150	5	15mm	HFMS15	**ME2540260**	Price
3	2.75	1	2.30	.150	5	15mm	HFMS15	**ME2540300**	Price
3	2.75	1	2.30	.095	7	12mm	HFMS12	**ME2540340**	Price
4	3.80	1-1/2	2.30	.095	6	15mm	HFMS15	**ME2540400**	Price
4	3.80	1-1/2	2.30	.095	9	12mm	HFMS12	**ME2540380**	Price

† 1.50" Dia. milling cutter has M16 ISO milling connection

RAPIDKUT® High Feed Milling Inserts

- Grade ME8425 is a new AlCrN PVD coating on top of a submicron substrate which allows for a broad application range of materials
- Grade ME8430 is used in a wide variety of applications on steel, stainless steel, cast iron and heat resistant super alloys
- HM = heavy roughing
- MM = medium roughing



Grade - ME8425				
ISO Number	IC	Thickness	Order No.	Price
MEHF 120512-HM	12mm	5mm	**ME1020562**	Price
MEHF 120512-MM	12mm	5mm	**ME1020552**	Price
MEHF 150512-HM	15mm	5mm	**ME1020582**	Price
MEHF 150512-MM	15mm	5mm	**ME1020572**	Price

Grade - ME8430				
ISO Number	IC	Thickness	Order No.	Price
MEHF 120512-HM	12mm	5mm	**ME1020522**	Price
MEHF 120512-MM	12mm	5mm	**ME1020512**	Price
MEHF 150512-HM	15mm	5mm	**ME1020542**	Price
MEHF 150512-MM	15mm	5mm	**ME1020532**	Price

RAPIDKUT® Hi-Feed Cutter Replacement Screws

Model No.	Order No.	Price
HFMS12	**ME2622920**	Price
HFMS15	**ME2622960**	Price

R-8 Bridgeport Shank Set

Buy A Set & Save

- Quick, accurate reindexing
- Uses standard triangular carbide inserts
- Lower cost



Shank (in.)	Consists of Sizes (in.)	Order No.	Price
Bridgeport R8	2, 2-1/2 & 3	**EJ609015505**	Price

Set includes hex wrench, attractive hardwood block.
Packed in a specially designed box for protection in transit.

Quad-Mill Indexable End Mills

15° & 45° Lead

Positive rake

- Uses SPG/SPU42_ inserts

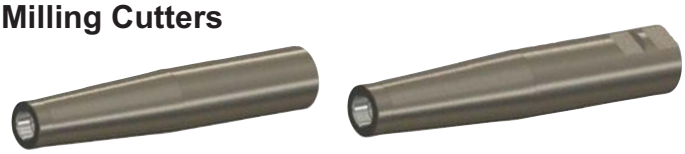


Shank Style - 1-1/4 Weldon				
Lead	Cutter Dia. (in.)	No. of Inserts	Order No.	Price
15°	2	3	**DG80QM20125**	Price
15°	2-1/2	5	**DG80QM250125**	Price
15°	3	5	**DG80QM30125**	Price
45°	2	3	**DG80QMD20125**	Price

Shank Style - R-8 Bridgeport				
Lead	Cutter Dia. (in.)	No. of Inserts	Order No.	Price
15°	2	3	**DG80QM20R8**	Price
15°	2-1/2	5	**DG80QM250R8**	Price
15°	3	5	**DG80QM30R8**	Price
45°	2	3	**DG80QMD20R8**	Price

Prices DO NOT Include Inserts.

RAPIDKUT® Shanks for High Feed Milling Cutters



Shank	Projection (in.)	Order No.	Price
Cat40	5	**ME2540130**	Price
Cat50	6	**ME2540135**	Price
1-1/4 Cylindrical	8	**ME2540145**	Price
1-1/4 Weldon	8	**ME2540150**	Price
1-1/2 Cylindrical	8	**ME2540155**	Price
1-1/2 Weldon	8	**ME2540160**	Price

Indexable Tooling System – End Mills

Positive Rake 90° – Right Hand Cut – Available Right Hand Only

Tool Angles:

- Cutting rake angle 0°
- Setting angle 90°
- Axial rake angle 0°
- Positive rake 90°

Note: end mIlls are furnished without cutting inserts





Size (in.)	No. of Inserts	Shank (in.)	Style of Insert	Order No.	Price
1	2	Weldon 3/4	TPG/TPU22	**EJ60901010**	Price
1	2	Bridgeport R8	TPG/TPU22	**EJ60901510**	Price
1-1/4	2	Weldon 3/4	TPG/TPU32	**EJ60901015**	Price
1-1/4	2	Bridgeport R8	TPG/TPU32	**EJ60901515**	Price
1-1/2	3	Weldon 3/4	TPG/TPU32	**EJ60901020**	Price
1-1/2	3	Weldon 1	TPG/TPU32	**EJ60901070**	Price
1-1/2	2	Bridgeport R8	TPG/TPU32	**EJ60901520**	Price
1-3/4	3	Bridgeport R8	TPG/TPU32	**EJ60901525**	Price
2	3	Weldon 3/4	TPG/TPU32	**EJ60901030**	Price
2	3	Weldon 1	TPG/TPU32	**EJ60901080**	Price
2	3	Bridgeport R8	TPG/TPU32	**EJ60901530**	Price
2-1/2	4	Bridgeport R8	TPG/TPU32	**EJ60901535**	Price
3	5	Bridgeport R8	TPG/TPU32	**EJ60901540**	Price

See pages B16-B17 for inserts

Spare Parts for 901 Style End Mills

Locking Screws

Used With Cutter Size	Order No.	Price
1/2	**EJ60999260**	Price
3/4, 7/8 & 1	**EJ60999262**	Price
1-1/2	**EJ60999268**	Price
all other sizes	**EJ60999270**	Price



Tri-Dex Sets

Inserts sold separately-see below.



Shank Dia. (in.)	Cutting Dia. (in.)	Order No.	Price
3/4	3/4, 7/8, 1	**DG50EM34**	Price
3/4	1-1/4, 1-1/2, 2	**DG50EM750**	Price
1	1-1/4, 1-1/2, 2	**DG50EM1000**	Price
R8	1, 1-1/4, 1-1/2	**DG50EM8R1**	Price
R8	2, 2-1/2, 3	**DG50EM8R2**	Price

Supplied in wood block

Tri-Dex Indexable End Mills

- Constructed with a minimum of parts
- Very adaptable for NC machining
- Uses standard 3/8 IC positive rake inserts (sold separately-see triangular insert ads on this page)
- 90° Positive rake
- Cutter body length is 1-5/8" on all sizes
- All straight shank end mills have an overall length of 3-7/8" with a shank length of 2-1/4"



Shank Dia. or Style - 3/4			
Cutting Dia. (in.)	No. of Inserts	Order No.	Price
3/4	1	**DG50EM07534**	Price
7/8	1	**DG50EM08734**	Price
1	1	**DG50EM10034**	Price
1-1/4	2	**DG50EM12534**	Price
1-3/8	2	**DG50EM13734**	Price
1-1/2	3	**DG50EM15034**	Price
1-3/4	3	**DG50EM17534**	Price
2	3	**DG50EM2034**	Price

Shank Dia. or Style - 1			
Cutting Dia. (in.)	No. of Inserts	Order No.	Price
1	1	**DG50EM1001**	Price
1-1/4	2	**DG50EM1251**	Price
1-3/8	2	**DG50EM1371**	Price
1-1/2	3	**DG50EM1501**	Price
1-5/8	3	**DG50EM1621**	Price
1-3/4	3	**DG50EM1751**	Price
2	3	**DG50EM201**	Price

Shank Dia. or Style - 1-1/4			
Cutting Dia. (in.)	No. of Inserts	Order No.	Price
2-1/2	5	**DG50EM250125**	Price
3	5	**DG50EM300125**	Price

Shank Dia. or Style - 30 STD			
Cutting Dia. (in.)	No. of Inserts	Order No.	Price
2	3	**DG50EM20S30**	Price

Shank Dia. or Style - 40 STD			
Cutting Dia. (in.)	No. of Inserts	Order No.	Price
2	3	**DG50EM20S40**	Price
3	5	**DG50EM300S40**	Price

Shank Dia. or Style - R8			
Cutting Dia. (in.)	No. of Inserts	Order No.	Price
1	1	**DG50EM100R8**	Price
1-1/4	2	**DG50EM125R8**	Price
1-3/8	2	**DG50EM137R8**	Price
1-1/2	3	**DG50EM150R8**	Price
1-5/8	3	**DG50EM162R8**	Price
1-3/4	3	**DG50EM175R8**	Price
2	3	**DG50EM20R8**	Price
2-1/2	5	**DG50EM250R8**	Price
3	5	**DG50EM300R8**	Price

Spare Parts for all DG50 & DG80 Cutters

Description	Order No.	Price
Hex Key for 6-32 Screw	**DG50CSW6**	Price
Hex Key for 8-32 Screw	**DG50CSW8**	Price

RAPIDKUT® Tool Blocks

- Positive blade design creates a strengthened clamping force for higher stability while machining
- For use on conventional or CNC machines
- Holds "MEFH" cut-off blade insert holders



Model No.	Blade Height	OAL (in.)	Height (in.)	Use with Holder No.	Order No.	Price
METBN162	.75	2.992	.625	MEFH19-2	**ME1710100**	Price
METBN195	1.03	3.425	.750	MEFH26-2 or 26-3	**ME1710105**	Price
METBN196	1.25	4.331	.750	MEFH32-2, 32-3, or 32-4	**ME1710115**	Price
METBN2545	1.03	3.425	1.00	MEFH26-2 or 26-3	**ME1710110**	Price
METBN2546	1.25	4.331	1.00	MEFH32-2, 32-3, or 32-4	**ME1710120**	Price
METBN3186	1.25	4.724	1.25	MEFH32-2, 32-3, or 32-4	**ME1710125**	Price

RAPIDKUT® Cut Off Blades

- Positive stop cut-off blades - "F" style
- Positive blade design creates a strengthened clamping force for higher stability while machining
- For use on conventional or CNC machines
- Uses "MEGFN" style inserts



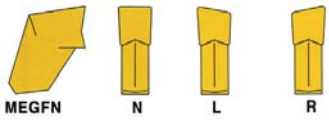
Insert Width	Max. Depth	Blade Thickness	Blade Height	OAL	Center Height	Use Insert(s)	Model No.	Order No.	Price
.079	1.50	.062	.75	3.375	.609	MEGFN/L/R2	MEFH19-2	**ME1710000**	Price
.079	2.00	.062	1.03	4.31	.840	MEGFN/L/R2	MEFH26-2	**ME1710001**	Price
.079	2.00	.062	1.25	5.87	.980	MEGFN/L/R2	MEFH32-2	**ME1710003**	Price
.122	3.00	.094	1.03	4.31	.840	MEGFN/L/R3	MEFH26-3	**ME1710002**	Price
.122	4.00	.094	1.25	5.87	.980	MEGFN/L/R3	MEFH32-3	**ME1710004**	Price
.161	4.00	.125	1.25	5.87	.980	MEGFN/L/R4	MEFH32-4	**ME1710005**	Price

RAPIDKUT® Cut Off Inserts

F Style

- Grade ME435 is AlTiN CVD coated
- Grades ME1025 and ME2205 are TiCN PVD coated
- Available in Left, Right, or Neutral





Width	Model No.	Radius	Angle	ST	SS	CI	S	Right/Left Hand	Grade	Order No.	Price
.079	MEGFL 2	.016	8°	x	x	x	x	Left	ME435	**ME1810006**	Price
.079	MEGFR 2	.016	8°	x	x	x	x	Right	ME435	**ME1810013**	Price
.079	MEGFN 2	.016	0°	x	x	x	x	Neutral	ME435	**ME1810009**	Price
.079	MEGFN 2	.016	0°	x	x	-	-	Neutral	ME1025	**ME1821000**	Price
.079	MEGFN 2	.016	0°	-	x	-	-	Neutral	ME2205	**ME1822000**	Price
.079	MEGFL 2-4D	.016	4°	x	x	-	-	Left	ME1025	**ME1821005**	Price
.079	MEGFR 2-4D	.016	4°	x	x	-	-	Right	ME1025	**ME1821010**	Price
.122	MEGFL 3	.020	8°	x	x	x	x	Left	ME435	**ME1810007**	Price
.122	MEGFR 3	.020	8°	x	x	x	x	Right	ME435	**ME1810014**	Price
.122	MEGFN 3	.020	0°	x	x	x	x	Neutral	ME435	**ME1810010**	Price
.122	MEGFN 3	.020	0°	x	x	-	-	Neutral	ME1025	**ME1821015**	Price
.122	MEGFN 3	.020	0°	-	x	-	-	Neutral	ME2205	**ME1822005**	Price
.122	MEGFR 3-4D	.020	4°	x	x	-	-	Right	ME1025	**ME1821030**	Price
.122	MEGFL 3-4D	.020	4°	x	x	-	-	Left	ME1025	**ME1821020**	Price
.122	MEGFR 3-4D	.020	4°	-	x	-	-	Right	ME2205	**ME1822010**	Price
.122	MEGFR 3-8D	.020	8°	x	x	-	-	Right	ME1025	**ME1821035**	Price
.122	MEGFR 3-8D	.020	8°	-	x	-	-	Right	ME2205	**ME1822015**	Price
.122	MEGFL 3-8D	.020	8°	x	x	-	-	Left	ME1025	**ME1821025**	Price
.161	MEGFL 4	.024	8°	x	x	x	x	Left	ME435	**ME1810008**	Price
.161	MEGFR 4	.024	8°	x	x	x	x	Right	ME435	**ME1810015**	Price
.161	MEGFN 4	.024	0°	x	x	x	x	Neutral	ME435	**ME1810011**	Price
.161	MEGFN 4	.024	0°	x	x	-	-	Neutral	ME1025	**ME1821040**	Price
.161	MEGFN 4	.024	0°	-	x	-	-	Neutral	ME2205	**ME1822020**	Price
.161	MEGFL 4-4D	.024	4°	x	x	-	-	Left	ME1025	**ME1821045**	Price
.161	MEGFR 4-4D	.024	4°	x	x	-	-	Right	ME1025	**ME1821055**	Price
.161	MEGFL 4-8D	.024	8°	x	x	-	-	Left	ME1025	**ME1821050**	Price
.161	MEGFR 4-8D	.024	8°	x	x	-	-	Right	ME1025	**ME1821060**	Price
.161	MEGFR 4-8D	.024	8°	-	x	-	-	Right	ME2205	**ME1822025**	Price
.201	MEGFN 5	.028	0°	x	x	x	x	Neutral	ME435	**ME1810012**	Price
.201	MEGFN 5	.028	0°	x	x	-	-	Neutral	ME1025	**ME1821065**	Price
.201	MEGFN 5	.028	0°	-	x	-	-	Neutral	ME2205	**ME1822030**	Price
.201	MEGFR 5-8D	.028	8°	x	x	-	-	Right	ME1025	**ME1821070**	Price

RAPIDKUT® Cut Off Inserts

T Style

- Grades ME1025 and ME2205 are TiCN PVD coated
- Available in left hand, right hand, or neutral
- Grades ME1025 and ME2205 are TiCN PVD coated
- Available in left hand, right hand, or neutral



Width	Model No.	Radius	Angle	ST	SS	CI	S	Right/Left Hand	Grade	Order No.	Price
.079	MEGTN 2	.016	0°	x	x	-	-	Neutral	ME1025	**ME1823000**	Price
.079	MEGTN 2	.016	0°	-	x	-	-	Neutral	ME2205	**ME1824000**	Price
.079	MEGTL 2-4D	.016	4°	x	x	-	-	Left	ME1025	**ME1823005**	Price
.079	MEGTR 2-4D	.016	4°	x	x	-	-	Right	ME1025	**ME1823010**	Price
.122	MEGTN 3	.020	0°	x	x	-	-	Neutral	ME1025	**ME1823015**	Price
.122	MEGTN 3	.020	0°	-	x	-	-	Neutral	ME2205	**ME1824005**	Price
.122	MEGTL 3-4D	.020	4°	x	x	-	-	Left	ME1025	**ME1823020**	Price
.122	MEGTR 3-4D	.020	4°	x	x	-	-	Right	ME1025	**ME1823025**	Price
.122	MEGTR 3-8D	.020	8°	x	x	-	-	Right	ME1025	**ME1823030**	Price
.161	MEGTN 4	.024	0°	x	x	-	-	Neutral	ME1025	**ME1823040**	Price
.161	MEGTN 4	.024	0°	-	x	-	-	Neutral	ME2205	**ME1824010**	Price
.161	MEGTL 4-4D	.024	4°	x	x	-	-	Left	ME1025	**ME1823045**	Price
.161	MEGTR 4-4D	.024	4°	x	x	-	-	Right	ME1025	**ME1823050**	Price
.201	MEGTN 5	.028	0°	x	x	-	-	Neutral	ME1025	**ME1823055**	Price
.201	MEGTN 5	.028	0°	-	x	-	-	Neutral	ME2205	**ME1824015**	Price
.201	MEGTR 5-8D	.028	8°	x	x	-	-	Right	ME1025	**ME1823065**	Price

RAPIDKUT "F" Style Cut-Off & Grooving Kits

- Kit comes with 1 blade and 10 AlTiN CVD coated inserts
- Positive stop design creates a strengthened clamping force for higher stability while machining
- Uses GFN style insert



Blade Description	Insert Width (in.)	Max Depth (in.)	OAL (in.)	Uses Insert	Order No.	Price
MEFH26-3	.122	3	4.31	MEGFN - 3	**ME2010000**	Price
MEFH32-3	.122	4	5.87	MEGFN/L/R - 3	**ME2010005**	Price

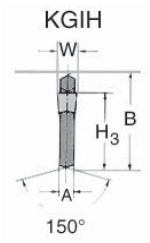
Replacement MEGFN-3 inserts - order no. ME1810010

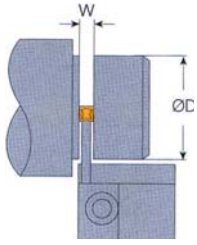
PROCUT D-GRIP KGIH Adjustable Cut-Off and Grooving Blades

All D-Grip Products are interchangeable with other major T-Style cut-off and grooving tool systems.

- No wrenches
- No clamps
- No screws
- No springs





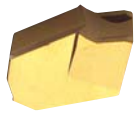


Insert Width W ± .004 (in.)	Max. Depth D (in.)	Blade Thickness A (in.)	Blade Hght. B (in.)	OAL L (in.)	Center Hght. H3 (in.)	Inserts	Description	Order No.	Price
.087 & .094	1.50	.062	.75	3.375	.609	KGTN/L/R2; 2.4	KGIH192	**EJ412300609**	Price
.087 & .094	2.00	.062	1.03	4.31	.840	KGTN/L/R2; 2.4	KGIH262	**EJ412300610**	Price
.087 & .094	2.00	.062	1.25	5.87	.980	KGTN/L/R2; 2.4	KGIH322	**EJ412300618**	Price
.122	3.00	.094	1.03	4.31	.840	KGTN/L/R3	KGIH263	**EJ412300612**	Price
.122	4.00	.094	1.25	5.87	.980	KGTN/L/R3	KGIH323	**EJ412300619**	Price
.161	3.00	.125	1.03	4.31	.840	KGTN/L/R4	KGIH264	**EJ412300614**	Price
.161	4.00	.125	1.25	5.87	.980	KGTN/L/R4	KGIH324	**EJ412300622**	Price
.250	3.00	.203	1.03	4.31	.840	KGTN/L/R6	KGIH266	**EJ412300617**	Price
.250	5.00	.203	1.25	5.87	.980	KGTN/L/R6	KGIH326	**EJ412300626**	Price

PROCUT Compare Our Prices and Our Quality for Tremendous Savings

D-GRIP KGTN/R/L Cut-Off and Grooving Inserts

The cutting forces help lock the insert firmly into place and increase the grip on the insert. Removal is possible by using a tool at the back of the insert. The unique chip breaker design of the insert shapes the chips which are narrower than the slot. The system has a cut-off capacity up to 23" diameter.
KGTN neutral, KGTL left hand, KGTR right hand





Notes on Selecting Insert Size

- Use 8° to reduce burr size
- Use KGTN 0° for flatness of surface, chip flow, large depth to width of cut ratio and high feed rate
- Use 0° and 8° for tubing

Lead angle: standard and neutral 0°, right 8°
See below for carbide grade selection chart

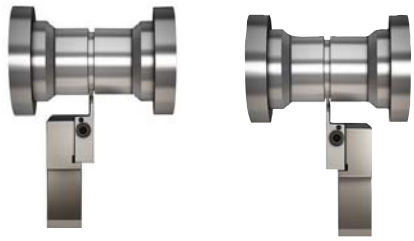
Carbide Grade Selection

For steel cutting
DC340 (C5) recommended for machining steel, austenitic stainless steel, machining to center, and interrupted cuts.
DC740 (C5-C6) TiC+TiCN+TiN coating, recommended for interrupted cuts, machining of steel, austenitic and martensitic stainless steel and pipes.

For cast iron and non-ferrous materials
DC210 (C2-C3) recommended for cast iron, non ferrous materials and plastics.

K Lead Angle (in.)	W ± .004 (in.)	Description	DC210		DC340		DC740	
			Order No.	Price	Order No.	Price	Order No.	Price
0°	.087	KGTN2	**EJ406000812**	Price	**EJ406000818**	Price	**EJ406000821**	Price
0°	.122	KGTN3	**EJ406000836**	Price	**EJ406000842**	Price	**EJ406000847**	Price
8°	.122	KGTR38D	**-**	-	**-**	-	**EJ406001013**	Price
0°	.161	KGTN4	**-**	-	**EJ406000874**	Price	**EJ406000878**	Price
8°	.161	KGTR48D	**-**	-	**-**	-	**EJ406001049**	Price
0°	.200	KGTN5	**-**	-	**EJ406000909**	Price	**EJ406000912**	Price
0°	.250	KGTN6	**-**	-	**EJ406000926**	Price	**-**	-

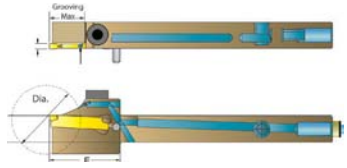
Kool Cut™ Modular Turning & Grooving System



- Modular with serrated connection
- Serrations provide precision, repeatability and rigidity
- Double jet coolant system for maximum insert life
- Interchangeable shanks and cartridges
- DUP35UG grade inserts optimized for multi material applications, primarily carbon and alloy steels and stainless steels but also affective on high temp alloys, cast irons and non-ferrous metals
- DNTQ and DNTR inserts have 3 chipbreakers for partoff and grooving as well as bi-directional turning operations

ADDN-MT R/L Straight Toolholders

Right hand shown, left hand opposite



Shank Size (in.)	Left			Right		
	Model Number	Order No.	Price	Model Number	Order No.	Price
.750	ADDN-MTL-12-C	**FL4561990**	Price	ADDN-MTR-12-C	**FL4561987**	Price
1.000	ADDN-MTL-16-D	**FL4561991**	Price	ADDN-MTR-16-D	**FL4561988**	Price
1.250	ADDN-MTL-20-E	**FL4561992**	Price	ADDN-MTR-20-E	**FL4561989**	Price

ADDN-MG R/L Gang 90° Toolholders

Right hand shown, left hand opposite



Shank Size (in.)	Left			Right		
	Model No.	Order No.	Price	Model No.	Order No.	Price
.750	ADDN-MGL-12-C	**FL4561993**	Price	ADDN-MGR-12-C	**FL4561996**	Price
1.000	ADDN-MGL-16-D	**FL4561994**	Price	ADDN-MGR-16-D	**FL4561997**	Price
1.250	ADDN-MGL-20-E	**FL4561995**	Price	ADDN-MGR-20-E	**FL4561998**	Price

ADKDN UR/UL Undercut Cartridges

Right hand shown, left hand opposite



Insert Width (in.)	Max. Groove Depth (in.)	Left			Right		
		Model No.	Order No.	Price	Model No.	Order No.	Price
.118	.236	ADKDN-UL30-06	**FL4561916**	Price	ADKDN-UR30-06	**FL4561911**	Price
.157	.315	ADKDN-UL40-08	**FL4561917**	Price	ADKDN-UR40-08	**FL4561912**	Price
.197	.394	ADKDN-UL50-10	**FL4561918**	Price	ADKDN-UR50-10	**FL4561913**	Price

ADKDN TR/TL Turning - Grooving - Partoff Cartridges

Right hand shown, left hand opposite



Insert Width (in.)	Max. Groove Depth (in.)	Left			Right		
		Model Number	Order No.	Price	Model Number	Order No.	Price
.079	.236	ADKDN-TL20-06	**FL4561768**	Price	ADKDN-TR20-06	**FL4561750**	Price
.079	.472	ADKDN-TL20-12	**FL4561769**	Price	ADKDN-TR20-12	**FL4561751**	Price
.079	.709	ADKDN-TL20-18	**FL4561770**	Price	ADKDN-TR20-18	**FL4561752**	Price
.118	.354	ADKDN-TL30-09	**FL4561771**	Price	ADKDN-TR30-09	**FL4561753**	Price
.118	.709	ADKDN-TL30-18	**FL4561772**	Price	ADKDN-TR30-18	**FL4561754**	Price
.118	1.063	ADKDN-TL30-27	**FL4561773**	Price	ADKDN-TR30-27	**FL4561755**	Price
.157	.472	ADKDN-TL40-12	**FL4561774**	Price	ADKDN-TR40-12	**FL4561756**	Price
.157	.709	ADKDN-TL40-18	**FL4561775**	Price	ADKDN-TR40-18	**FL4561757**	Price
.157	.945	ADKDN-TL40-24	**FL4561776**	Price	ADKDN-TR40-24	**FL4561758**	Price
.157	1.181	ADKDN-TL40-30	**FL4561777**	Price	ADKDN-TR40-30	**FL4561759**	Price
.197	.394	ADKDN-TL50-10	**FL4561778**	Price	ADKDN-TR50-10	**FL4561760**	Price
.197	.591	ADKDN-TL50-15	**FL4561779**	Price	ADKDN-TR50-15	**FL4561761**	Price
.197	.984	ADKDN-TL50-25	**FL4561780**	Price	ADKDN-TR50-25	**FL4561762**	Price
.197	1.575	ADKDN-TL50-40	**FL4561781**	Price	ADKDN-TR50-40	**FL4561763**	Price
.236	.472	ADKDN-TL60-12	**FL4561782**	Price	ADKDN-TR60-12	**FL4561764**	Price
.236	.709	ADKDN-TL60-18	**FL4561783**	Price	ADKDN-TR60-18	**FL4561765**	Price
.236	1.181	ADKDN-TL60-30	**FL4561784**	Price	ADKDN-TR60-30	**FL4561766**	Price
.236	1.890	ADKDN-TL60-48	**FL4561785**	Price	ADKDN-TR60-48	**FL4561767**	Price

ADCDN-FL Face Grooving Cartridges



Insert Width (in.)	Max. Groove Depth (in.)	First Cut Min. Dia. (in.)	First Cut Max. Dia. (in.)	Model No.	Order No.	Price
.118	.472	.866	1.181	ADCDN-FL30-022030-12	**FL4562208**	Price
.118	.472	1.181	1.496	ADCDN-FL30-030038-12	**FL4562209**	Price
.118	.472	1.496	1.890	ADCDN-FL30-038048-12	**FL4562210**	Price
.118	.472	1.890	2.362	ADCDN-FL30-048060-12	**FL4562211**	Price
.118	.472	2.362	2.953	ADCDN-FL30-060075-12	**FL4562212**	Price
.118	.472	2.953	3.937	ADCDN-FL30-075100-12	**FL4562213**	Price
.118	.472	3.937	7.874	ADCDN-FL30-100200-12	**FL4562214**	Price
.118	.472	7.874	11.811	ADCDN-FL30-200300-12	**FL4562215**	Price
.118	.472	11.81	>	ADCDN-FL30-300->-12	**FL4562216**	Price
.118	.709	2.362	2.953	ADCDN-FL30-060075-18	**FL4562217**	Price
.118	.709	2.953	3.937	ADCDN-FL30-075100-18	**FL4562218**	Price
.118	.709	3.937	7.874	ADCDN-FL30-100200-18	**FL4562219**	Price
.118	.709	7.874	11.811	ADCDN-FL30-200300-18	**FL4562220**	Price
.118	.709	11.811	>	ADCDN-FL30-300->-18	**FL4562221**	Price
.118	.945	3.937	7.874	ADCDN-FL30-100200-24	**FL4562222**	Price
.118	.945	7.874	11.811	ADCDN-FL30-200300-24	**FL4562223**	Price
.118	.945	11.811	>	ADCDN-FL30-300->-24	**FL4562224**	Price
.236	.512	1.969	2.953	ADCDN-FL60-050075-13	**FL4562253**	Price
.236	.512	2.953	5.118	ADCDN-FL60-075130-13	**FL4562254**	Price
.236	.512	5.118	11.811	ADCDN-FL60-130300-13	**FL4562255**	Price
.236	.512	11.811	19.685	ADCDN-FL60-300500-13	**FL4562256**	Price
.236	.512	19.685	>	ADCDN-FL60-500->-13	**FL4562257**	Price

Insert Width (in.)	Max. Groove Depth (in.)	First Cut Min. Dia. (in.)	First Cut Max. Dia. (in.)	Model No.	Order No.	Price
.236	1.024	2.953	5.118	ADCDN-FL60-075130-26	**FL4562258**	Price
.236	1.024	5.118	11.811	ADCDN-FL60-130300-26	**FL4562259**	Price
.236	1.024	11.811	19.685	ADCDN-FL60-300500-26	**FL4562260**	Price
.236	1.024	19.685	>	ADCDN-FL60-500->-26	**FL4562261**	Price
.236	1.535	2.953	5.118	ADCDN-FL60-075130-39	**FL4562262**	Price
.236	1.535	5.118	11.811	ADCDN-FL60-130300-39	**FL4562263**	Price
.236	1.535	11.811	19.685	ADCDN-FL60-300500-39	**FL4562264**	Price
.236	1.535	19.685	>	ADCDN-FL60-500->-39	**FL4562265**	Price

DNTQ / DNTR Grooving Inserts

- DUP35UG grade inserts optimized for multi material applications, primarily carbon and alloy steels and stainless steels but also affective on high temp alloys, cast irons and non-ferrous metals
- DNTQ (regular) and DNTR (full radius nose) inserts have 3 chipbreakers for partoff and grooving as well as bi-directional turning operations

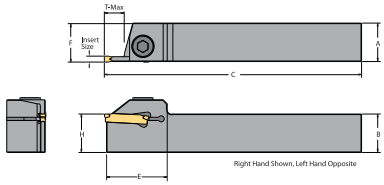


Style - Full Radius			
Insert Width (in.)	Insert Length (in.)	Order No.	Price
.118	.866	**FL4582459**	Price
.157	.984	**FL4582460**	Price
.197	.984	**FL4582461**	Price

Style - Regular			
Insert Width (in.)	Insert Length (in.)	Order No.	Price
.079	.866	**FL4582440**	Price
.118	.866	**FL4582442**	Price
.157	.984	**FL4582443**	Price
.197	.984	**FL4582444**	Price
.236	.984	**FL4582445**	Price

DETGF R/L Toolholders

Non-Coolant Turning, Grooving, and Partoff

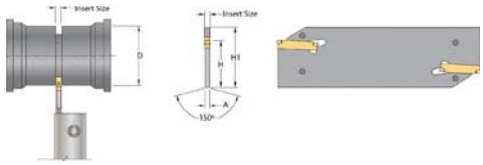


Shank Size (in.)	OAL C (in.)	H (in.)	F (in.)	Insert Width (in.)	Tmax (in.)	Left			Right		
						Model No.	Order No.	Price	Model No.	Order No.	Price
3/4 x 3/4	5.000	.750	.762	.118	.354	DETGFL12-030C-S09	**FL4563607**	Price	DETGFR12-030C-S09	**FL4563606**	Price
3/4 x 3/4	5.000	.750	.762	.157	.472	DETGFL12-040C-S12	**FL4563609**	Price	DETGFR12-040C-S12	**FL4563608**	Price
3/4 x 3/4	5.000	.750	.762	.118	.551	DETGFL12-030C-M14	**FL4563637**	Price	DETGFR12-030C-M14	**FL4563636**	Price
3/4 x 3/4	5.000	.750	.762	.157	.709	DETGFL12-040C-M18	**FL4563639**	Price	DETGFR12-040C-M18	**FL4563638**	Price
3/4 x 3/4	5.000	.750	.762	.118	.787	-	-	-	DETGFR12-030C-L20	**FL4563666**	Price
3/4 x 3/4	5.000	.750	.762	.157	.945	DETGFL12-040C-L24	**FL4563669**	Price	DETGFR12-040C-L24	**FL4563668**	Price
1 x 1	6.000	1.000	1.012	.118	.354	DETGFL16-030D-S09	**FL4563615**	Price	DETGFR16-030D-S09	**FL4563614**	Price
1 x 1	6.000	1.000	1.012	.157	.472	DETGFL16-040D-S12	**FL4563617**	Price	DETGFR16-040D-S12	**FL4563616**	Price
1 x 1	6.000	1.000	1.012	.118	.551	DETGFL16-030D-M14	**FL4563645**	Price	DETGFR16-030D-M14	**FL4563644**	Price
1 x 1	6.000	1.000	1.012	.157	.709	DETGFL16-040D-M18	**FL4563647**	Price	DETGFR16-040D-M18	**FL4563646**	Price
1 x 1	6.000	1.000	1.012	.157	.945	DETGFL16-040D-L24	**FL4563677**	Price	DETGFR16-040D-L24	**FL4563676**	Price
1 x 1-1/4	7.000	1.250	1.012	.118	.354	DETGFL85-030D-S09	**FL4563623**	Price	DETGFR85-030D-S09	**FL4563622**	Price
1 x 1-1/4	7.000	1.250	1.012	.157	.472	DETGFL85-040D-S12	**FL4563625**	Price	DETGFR85-040D-S12	**FL4563624**	Price
1 x 1-1/4	7.000	1.250	1.012	.118	.551	DETGFL85-030D-M14	**FL4563653**	Price	DETGFR85-030D-M14	**FL4563652**	Price
1 x 1-1/4	7.000	1.250	1.012	.157	.709	DETGFL85-040D-M18	**FL4563655**	Price	DETGFR85-040D-M18	**FL4563654**	Price
1 x 1-1/4	7.000	1.250	1.012	.118	.787	DETGFL85-030D-L20	**FL4563683**	Price	DETGFR85-030D-L20	**FL4563682**	Price
1 x 1-1/4	7.000	1.250	1.012	.157	.945	DETGFL85-040D-L24	**FL4563685**	Price	DETGFR85-040D-L24	**FL4563684**	Price

TWECOB-DNTF Blades

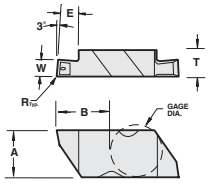
- 4.43" Overall length

Model No.	Blade Height (mm)	Tmax (in.)	Insert Width (in.)	Order No.	Price
TWECOB-DNTF-26-20	26mm	1.000	.079	**FL4561965**	Price
TWECOB-DNTF-26-30	26mm	1.550	.118	**FL4561966**	Price
TWECOB-DNTF-26-40	26mm	1.650	.157	**FL4561967**	Price
TWECOB-DNTF-32-20	32mm	1.150	.079	**FL4561968**	Price
TWECOB-DNTF-32-30	32mm	1.750	.118	**FL4561969**	Price
TWECOB-DNTF-32-40	32mm	1.950	.157	**FL4561970**	Price
TWECOB-DNTF-32-50	32mm	2.350	.197	**FL4561971**	Price
TWECOB-DNTF-32-60	32mm	2.750	.236	**FL4561972**	Price



TOOL-FLO Member IMC Group Flo-Lock Grooving Inserts

FLG





Carbide Grades

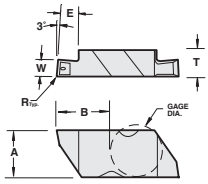
- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

						AC3			AC50			GP50		
Tool-Flo	Width (in.)	A (in.)	Radius R (in.)	T (in.)	E (in.)	Grade w/Hone	Order No.	Price	Grade w/ Hone	Order No.	Price	Grade w/ Hone	Order No.	Price
FLG-2031R	.031	.219	.002/.005	.150	.050	AC3R	**FG31562631RAC3R**	Price	AC50C	**FG31026170**	Price	GP50C	**FG31026190**	Price
FLG-2041R	.041	.219	.002/.005	.150	.050	-	**-**	-	-	**-**	-	GP50C	**FG31026210**	Price
FLG-2041L	.041	.219	.002/.005	.150	.050	-	**-**	-	-	**-**	-	GP50C	**FG31562641LN4C**	Price
FLG-2047R	.047	.219	.002/.005	.150	.050	AC3R	**FG31FLG2047RA**	Price	AC50C	**FG31026260**	Price	-	**-**	-
FLG-2047L	.047	.219	.002/.005	.150	.050	AC3R	**FG31FLG2047LA**	Price	AC50C	**FG31026220**	Price	-	**-**	-
FLG-2058L	.058	.219	.005/.010	.150	.050	-	**-**	-	-	**-**	-	GP50C	**FG31026310**	Price
FLG-2058R	.058	.219	.005/.010	.150	.050	-	**-**	-	-	**-**	-	GP50C	**FG31026330**	Price
FLG-2062R	.062	.219	.005/.010	.150	.110	AC3R	**FG31FLG2062RA**	Price	AC50C	**FG31026390**	Price	-	**-**	-
FLG-2062L	.062	.219	.005/.010	.150	.110	AC3R	**FG31FLG2062LA**	Price	AC50C	**FG31026350**	Price	-	**-**	-
FLG-2094R	.094	.219	.005/.010	.150	.110	AC3R	**FG31FLG2094RA**	Price	AC50C	**FG31026560**	Price	-	**-**	-
FLG-2094L	.094	.219	.005/.010	.150	.110	AC3R	**FG31FLG2094LA**	Price	AC50C	**FG31026510**	Price	-	**-**	-
FLG-2125R	.125	.219	.005/.010	.150	.110	AC3R	**FG31FLG2125RA**	Price	AC50C	**FG31562825RAC50**	Price	-	**-**	-
FLG-2125L	.125	.219	.005/.010	.150	.110	AC3R	**FG31FLG2125LA**	Price	AC50C	**FG31026610**	Price	-	**-**	-
FLG-3031R	.031	.344	.002/.005	.195	.050	AC3R	**FG3114080**	Price	AC50C	**FG31563631RAC50**	Price	GP50	**FG31563631RN4C**	Price
FLG-3031L	.031	.344	.002/.005	.195	.050	AC3R	**FG31027680**	Price	AC50C	**FG31563631LAC50**	Price	-	**-**	-
FLG-3047R	.047	.344	.005/.010	.195	.075	AC3R	**FG31FLG3047RA**	Price	AC50C	**FG31027830**	Price	-	**-**	-
FLG-3047L	.047	.344	.005/.010	.195	.075	AC3R	**FG31FLG3047LA**	Price	AC50C	**FG31027770**	Price	-	**-**	-
FLG-3062R	.062	.344	.005/.010	.195	.120	AC3R	**FG31FLG3062RA**	Price	AC50C	**FG31563662RAC50**	Price	-	**-**	-
FLG-3062L	.062	.344	.005/.010	.195	.120	AC3R	**FG31FLG3062LA**	Price	AC50C	**FG31563662LAC50**	Price	-	**-**	-
FLG-3072R	.072	.344	.005/.010	.195	.120	AC3R	**FG31028000**	Price	AC50C	**FG31028010**	Price	GP50C	**FG31028030**	Price
FLG-3072L	.072	.344	.005/.010	.195	.120	AC3R	**FG31027910**	Price	AC50C	**FG31027920**	Price	GP50C	**FG31027940**	Price
FLG-3078R	.078	.344	.005/.010	.195	.120	AC3R	**FG31028180**	Price	AC50C	**FG31028190**	Price	GP50	**FG315078**	Price
FLG-3078L	.078	.344	.005/.010	.195	.120	AC3R	**FG31028100**	Price	AC50C	**FG31028110**	Price	GP50C	**FG31028130**	Price
FLG-3088R	.088	.344	.005/.010	.195	.180	AC3R	**FG31563688RAC3R**	Price	AC50C	**FG31028330**	Price	GP50C	**FG31028350**	Price
FLG-3088L	.088	.344	.005/.010	.195	.180	AC3R	**FG31028260**	Price	AC50C	**FG31028270**	Price	GP50C	**FG31028280**	Price
FLG-3094R	.094	.344	.005/.010	.195	.195	AC3R	**FG31FLG3094RA**	Price	AC50C	**FG31563694RAC50**	Price	-	**-**	-
FLG-3094L	.094	.344	.005/.010	.195	.180	AC3R	**FG31FLG3094LA**	Price	AC50C	**FG31563694LAC50**	Price	-	**-**	-
FLG-3097R	.097	.344	.010/.015	.195	.180	AC3R	**FG31028550**	Price	-	**-**	-	GP50	**FG31563697RN4C**	Price
FLG-3097L	.097	.344	.010/.015	.195	.180	AC3R	**FG31028480**	Price	AC50C	**FG31028490**	Price	GP50C	**FG31028510**	Price
FLG-3105R	.105	.344	.005/.010	.195	.180	AC3R	**FG31028660**	Price	AC50C	**FG31028670**	Price	GP50C	**FG31563805RN4C**	Price
FLG-3105L	.105	.344	.005/.010	.195	.180	AC3R	**FG31028620**	Price	AC50C	**FG31028630**	Price	GP50C	**FG31028650**	Price
FLG-3110R	.110	.344	.005/.010	.195	.180	AC3R	**FG31028740**	Price	AC50C	**FG31563810RAC50**	Price	GP50C	**FG31028760**	Price
FLG-3110L	.110	.344	.005/.010	.195	.180	AC3R	**FG31028690**	Price	AC50C	**FG31028700**	Price	GP50C	**FG31028720**	Price
FLG-3122R	.122	.344	.005/.010	.195	.180	AC3R	**FG31028820**	Price	AC50C	**FG31028830**	Price	GP50C	**FG31028850**	Price
FLG-3122L	.122	.344	.005/.010	.195	.180	AC3R	**FG31028770**	Price	AC50C	**FG31028780**	Price	GP50C	**FG31028810**	Price
FLG-3125R	.125	.344	.005/.010	.195	.195	AC3R	**FG31FLG3125RA**	Price	AC50C	**FG31028920**	Price	-	**-**	-
FLG-3125L	.125	.344	.005/.010	.195	.180	AC3R	**FG31FLG3125LA**	Price	AC50C	**FG31563825LAC50**	Price	-	**-**	-
FLG-3142R	.142	.344	.005/.010	.195	.180	AC3R	**FG31563842RAC3R**	Price	AC50C	**FG31028980**	Price	GP50C	**FG31029000**	Price
FLG-3142L	.142	.344	.005/.010	.195	.180	AC3R	**FG31563842LAC3R**	Price	AC50C	**FG31563842LAC50**	Price	GP50C	**FG31028960**	Price
FLG-3156R	.156	.344	.005/.010	.195	.180	AC3R	**FG31563856RAC3R**	Price	AC50C	**FG31029060**	Price	GP50C	**FG31029080**	Price
FLG-3156L	.156	.344	.005/.010	.195	.180	-	**-**	-	AC50C	**FG31029030**	Price	GP50C	**FG31029050**	Price
FLG-3178R	.178	.344	.005/.010	.195	.180	AC3R	**FG31029130**	Price	AC50C	**FG31029140**	Price	GP50C	**FG31029160**	Price
FLG-3178L	.178	.344	.005/.010	.195	.180	AC3R	**FG31029090**	Price	AC50C	**FG31029100**	Price	GP50C	**FG31029120**	Price
FLG-3185R	.185	.344	.020/.025	.195	.180	AC3R	**FG31029200**	Price	AC50C	**FG31029210**	Price	GP50C	**FG31029230**	Price
FLG-3185L	.185	.344	.020/.025	.195	.180	AC3R	**FG31029170**	Price	-	**-**	-	GP50C	**FG31029190**	Price
FLG-3189R	.189	.344	.020/.025	.195	.180	AC3R	**FG31563889RAC3R**	Price	AC50C	**FG31029320**	Price	GP50	**FG3153189R**	Price

(continued)

TOOL-FLO Member IMC Group Flo-Lock Grooving Inserts *(continued)*

FLG



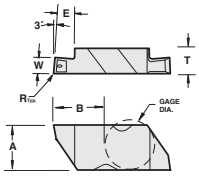


Carbide Grades
- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

Tool-Flo	Width (in.)	A (in.)	Radius R (in.)	T (in.)	E (in.)	AC3			AC50			GP50		
						Grade w/Hone	Order No.	Price	Grade w/ Hone	Order No.	Price	Grade w/ Hone	Order No.	Price
FLG-3189L	.189	.344	.020/.025	.195	.180	AC3R	**FG31029240**	Price	AC50C	**FG31029250**	Price	GP50	**FG3153189L**	Price
FLG-4125R	.125	.453	.005/.010	.255	.250	-	-	-	AC50C	**FG31030540**	Price	GP50C	**FG3114090**	Price
FLG-4125L	.125	.453	.005/.010	.255	.250	-	-	-	AC50C	**FG31564825LAC50**	Price	GP50	**FG31564825LN4C**	Price
FLG-4189R	.189	.453	.020/.025	.255	.250	AC3R	**FG31564889RAC3R**	Price	AC50C	**FG31030660**	Price	GP50C	**FG31030680**	Price
FLG-4189L	.189	.453	.020/.025	.255	.250	AC3R	**FG31564889LAC3R**	Price	AC50C	**FG31564889LAC50**	Price	GP50C	**FG31030620**	Price
FLG-4213R	.213	.453	.005/.010	.255	.250	-	-	-	-	-	-	GP50C	**FG31030730**	Price
FLG-4213L	.213	.453	.005/.010	.255	.250	-	-	-	-	-	-	GP50C	**FG31030710**	Price
FLG-4219R	.219	.453	.020/.025	.255	.250	-	-	-	-	-	-	GP50C	**FG31030770**	Price
FLG-4219L	.219	.453	.020/.025	.255	.250	-	-	-	-	-	-	GP50C	**FG31030750**	Price
FLG-4250R	.250	.453	.020/.025	.255	.250	AC3A	**FG31030850**	Price	AC50E	**FG31030860**	Price	-	-	-
FLG-4250L	.250	.453	.020/.025	.255	.550	AC3A	**FG31030780**	Price	AC50E	**FG31030790**	Price	GP50E	**FG3115015**	Price
FLG-4312R	.312	.453	.030/.035	.312	.250	-	-	-	-	-	-	GP50E	**FG31574212RN4E**	Price
FLG-4312L	.312	.453	.030/.035	.312	.250	-	-	-	-	-	-	GP50E	**FG31574212LN4E**	Price
FLG-6281R	.281	.453	.030/.035	.383	.250	-	-	-	-	-	-	GP50E	**FG31031030**	Price
FLG-6281L	.281	.453	.030/.035	.383	.250	-	-	-	-	-	-	GP50E	**FG31031020**	Price
FLG-6312R	.312	.453	.030/.035	.383	.250	-	-	-	-	-	-	GP50E	**FG31031050**	Price
FLG-6312L	.312	.453	.030/.035	.383	.250	-	-	-	-	-	-	GP50E	**FG31031040**	Price
FLG-6375R	.375	.453	.030/.035	.383	.250	-	-	-	-	-	-	GP50E	**FG31031070**	Price
FLG-6375L	.375	.453	.030/.035	.383	.250	-	-	-	-	-	-	GP50E	**FG31031060**	Price

TOOL-FLO Member IMC Group Chip-Flo Grooving Inserts with Chipbreaker

FLG-CB





Carbide Grades
- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

Tool-Flo	A (in.)	Width (in.)	Radius R (in.)	T (in.)	E (in.)	AC3			AC50			GP50		
						Grade W/Hone	Order No.	Price	Grade W/Hone	Order No.	Price	Grade W/Hone	Order No.	Price
FLG-2047R-CB	.219	.047	.002/.005	.150	.050	AC3R	**FG31FLG2047RCB**	Price	AC50C	**FG31026280**	Price	GP50	**FG315020**	Price
FLG-2047L-CB	.219	.047	.002/.005	.150	.050	AC3R	**FG31FLG2047LCB**	Price	AC50C	**FG31026240**	Price	GP50	**FG315021**	Price
FLG-2062R-CB	.219	.062	.005/.010	.150	.110	AC3R	**FG31FLG2062RCB**	Price	AC50C	**FG312662PRAC50C**	Price	GP50	**FG315022**	Price
FLG-2062L-CB	.219	.062	.005/.010	.150	.110	AC3R	**FG31FLG2062LCB**	Price	AC50C	**FG312662PLAC50C**	Price	GP50	**FG315023**	Price
FLG-2078R-CB	.219	.078	.005/.010	.150	.110	AC3R	**FG31026470**	Price	AC50C	**FG31026480**	Price	GP50C	**FG31026500**	Price
FLG-2078L-CB	.219	.078	.005/.010	.150	.110	AC3R	**FG31026430**	Price	AC50C	**FG31026440**	Price	GP50C	**FG31026460**	Price
FLG-2094R-CB	.219	.094	.005/.010	.150	.110	AC3R	**FG31FLG2094RCB**	Price	AC50C	**FG31026590**	Price	GP50	**FG315024**	Price
FLG-2094L-CB	.219	.094	.005/.010	.150	.110	AC3R	**FG31FLG2094LCB**	Price	AC50C	**FG31026540**	Price	GP50	**FG315025**	Price
FLG-2125R-CB	.219	.125	.005/.010	.150	.110	AC3R	**FG31FLG2125RCB**	Price	AC50C	**FG31026680**	Price	GP50	**FG315026**	Price
FLG-2125L-CB	.219	.125	.005/.010	.150	.110	AC3R	**FG31FLG2125LCB**	Price	AC50C	**FG31026640**	Price	GP50	**FG315027**	Price
FLG-3031R-CB	.344	.031	.002/.005	.195	.050	AC3R	**FG31027740**	Price	AC50C	**FG31563631PRAC5**	Price	GP50	**FG315031R**	Price
FLG-3031L-CB	.344	.031	.002/.005	.195	.050	AC3R	**FG31027710**	Price	AC50C	**FG31563631PLAC5**	Price	GP50	**FG315031L**	Price
FLG-3047R-CB	.344	.047	.005/.010	.195	.075	AC3R	**FG31FLG3047RCB**	Price	AC50C	**FG31563647PRAC5**	Price	GP50	**FG315028**	Price
FLG-3047L-CB	.344	.047	.005/.010	.195	.075	AC3R	**FG31FLG3047LCB**	Price	AC50C	**FG31027800**	Price	GP50	**FG315029**	Price
FLG-3062R-CB	.344	.062	.005/.010	.195	.120	AC3R	**FG31FLG3062RCB**	Price	AC50C	**FG31563662PRAC5**	Price	GP50	**FG315030**	Price
FLG-3062L-CB	.344	.062	.005/.010	.195	.120	AC3R	**FG31FLG3062LCB**	Price	AC50C	**FG31563662PLAC5**	Price	GP50	**FG315031**	Price
FLG-3072R-CB	.344	.072	.005/.010	.195	.120	AC3R	**FG31028040**	Price	AC50C	**FG31028050**	Price	GP50C	**FG31028070**	Price

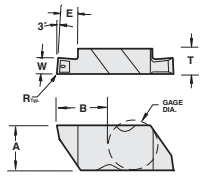
(continued)

TOOLFLO Member IMC Group Chip-Flo Grooving Inserts with Chipbreaker *(continued)*

FLG-CB

Carbide Grades

- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel





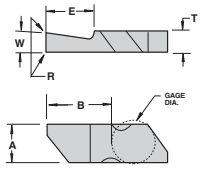
						AC3			AC50			GP50		
Tool-Flo	A (in.)	Width (in.)	Radius R (in.)	T (in.)	E (in.)	Grade W/Hone	Order No.	Price	Grade W/Hone	Order No.	Price	Grade W/Hone	Order No.	Price
FLG-3072L-CB	.344	.072	.005/.010	.195	.120	AC3R	**FG31027950**	Price	AC50C	**FG31027960**	Price	GP50C	**FG31027980**	Price
FLG-3078R-CB	.344	.078	.005/.010	.195	.120	AC3	**FG31028230**	Price	AC50C	**FG31028210**	Price	GP50	**FG315078R**	Price
FLG-3078L-CB	.344	.078	.005/.010	.195	.120	AC3R	**FG31028140**	Price	AC50C	**FG31028150**	Price	GP50	**FG315078L**	Price
FLG-3088R-CB	.344	.088	.005/.010	.195	.180	AC3R	**FG31028360**	Price	AC50C	**FG31028370**	Price	GP50	**FG31563688PRN4**	Price
FLG-3088L-CB	.344	.088	.005/.010	.195	.180	AC3R	**FG31028290**	Price	AC50C	**FG31028300**	Price	GP50C	**FG31028320**	Price
FLG-3094R-CB	.344	.094	.005/.010	.195	.195	AC3R	**FG31FLG3094RCB**	Price	AC50C	**FG31563694PRAC5**	Price	GP50	**FG315032**	Price
FLG-3094L-CB	.344	.094	.005/.010	.195	.195	AC3R	**FG31FLG3094LCB**	Price	AC50C	**FG31563694PLAC5**	Price	GP50C	**FG31563694PLN4C**	Price
FLG-3097R-CB	.344	.097	.010/.015	.195	.180	AC3R	**FG31028570**	Price	AC50C	**FG31028580**	Price	-	**-**	-
FLG-3097L-CB	.344	.097	.010/.015	.195	.180	-	**-**	-	-	**-**	-	GP50C	**FG31028540**	Price
FLG-3110L-CB	.344	.110	.005/.010	.195	.180	-	**-**	-	-	**-**	-	GP50C	**FG31028730**	Price
FLG-3125R-CB	.344	.125	.005/.010	.195	.195	AC3R	**FG31FLG3125RCB**	Price	AC50C	**FG31563825PRAC5**	Price	-	**-**	-
FLG-3142R-CB	.344	.142	.005/.010	.195	.180	-	**-**	-	AC50C	**FG31029010**	Price	-	**-**	-
FLG-3125L-CB	.344	.125	.005/.010	.195	.195	AC3R	**FG31FLG3125LCB**	Price	AC50C	**FG31028880**	Price	-	**-**	-
FLG-3189R-CB	.344	.189	.020/.025	.195	.180	AC3	**FG31029370**	Price	AC50C	**FG31029350**	Price	GP50	**FG31563889PRN4C**	Price
FLG-3189L-CB	.344	.189	.020/.025	.195	.180	AC3R	**FG31029290**	Price	AC50C	**FG31563889PLAC5**	Price	GP50C	**FG31563889PLN4C**	Price
FLG-4125R-CB	.453	.125	.005/.010	.255	.250	AC3R	**FG31030560**	Price	AC50C	**FG31030570**	Price	GP50C	**FG31030590**	Price
FLG-4125L-CB	.453	.125	.005/.010	.255	.250	AC3R	**FG31564825PLAC3**	Price	AC50C	**FG31030510**	Price	GP50C	**FG31564825PLN4C**	Price
FLG-4189R-CB	.453	.189	.020/.025	.255	.250	AC3	**FG31564889PRAC3**	Price	AC50C	**FG31564889PRAC5**	Price	GP50C	**FG31030690**	Price
FLG-4189L-CB	.453	.189	.020/.025	.255	.250	AC3	**FG31564889PLAC3**	Price	AC50C	**FG31564889PLAC5**	Price	GP50C	**FG31030640**	Price
FLG-4250R-CB	.453	.250	.020/.025	.255	.250	AC3A	**FG31574050PRAC3**	Price	AC50E	**FG31030880**	Price	GP50E	**FG31574050PRN4E**	Price
FLG-4250L-CB	.453	.250	.020/.025	.255	.250	AC3A	**FG31030810**	Price	AC50E	**FG31030820**	Price	GP50E	**FG31030840**	Price

TOOLFLO Member IMC Group Chip-Flo Deep Grooving Inserts Without Chipbreaker

FLGD

Carbide Grades

- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

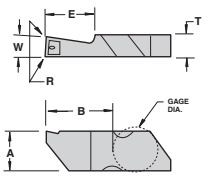




							AC3			AC50			GP50		
Tool-Flo	A (in.)	Width (in.)	Radius R (in.)	T (in.)	E (in.)	B (in.)	Grade w/Hone	Order No.	Price	Grade w/ Hone	Order No.	Price	Grade w/ Hone	Order No.	Price
FLGD-3062R	.344	.062	.005/.010	.195	.250	.5050	-	**-**	-	-	**-**	-	GP50C	**FG31031110**	Price
FLGD-3062L	.344	.062	.005/.010	.195	.250	.5050	-	**-**	-	-	**-**	-	GP50C	**FG31031090**	Price
FLGD-3094R	.344	.094	.005/.010	.195	.250	.5050	-	**-**	-	-	**-**	-	GP50	**FG315120**	Price
FLGD-3094L	.344	.094	.005/.010	.195	.250	.5050	AC3R	**FG39031120**	Price	-	**-**	-	GP50	**FG315121**	Price
FLGD-3125R	.344	.125	.005/.010	.195	.250	.5050	AC3R	**FG316334125RAC3**	Price	AC50C	**FG312411918**	Price	GP50	**FG315122**	Price
FLGD-3125L	.344	.125	.005/.010	.195	.250	.5050	AC3R	**FG39031210**	Price	AC50C	**FG31031220**	Price	GP50	**FG315123**	Price
FLGD-3189L	.344	.189	.020/.025	.195	.250	.5050	-	**-**	-	-	**-**	-	GP50	**FG315125**	Price
FLGD-3189R	.344	.189	.020/.025	.195	.250	.5050	-	**-**	-	-	**-**	-	GP50	**FG315124**	Price
FLGD-4125R	.453	.125	.005/.010	.255	.250	.6360	-	**-**	-	-	**-**	-	GP50	**FG315126**	Price
FLGD-4125L	.453	.125	.005/.010	.255	.250	.6360	-	**-**	-	-	**-**	-	GP50	**FG315127**	Price
FLGD-4189R	.453	.189	.020/.025	.255	.375	.7610	AC3R	**FG31031660**	Price	-	**-**	-	GP50	**FG315128**	Price
FLGD-4189L	.453	.189	.020/.025	.255	.375	.7610	AC3R	**FG316344189LAC3**	Price	-	**-**	-	GP50	**FG315129**	Price
FLGD-4250R	.453	.250	.020/.025	.255	.500	.8860	-	**-**	-	-	**-**	-	GP50	**FG315130**	Price
FLGD-4250L	.453	.250	.020/.025	.255	.500	.8860	-	**-**	-	-	**-**	-	GP50	**FG315131**	Price

TOOLFLO Member IMC Group Chip-Flo Deep Grooving Inserts with Chipbreaker

FLGD-CB





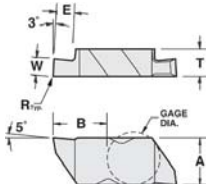
Carbide Grades

- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

Tool-Flo	Width (in.)	A (in.)	Radius R (in.)	T (in.)	E (in.)	B (in.)	AC3			AC50			GP50		
							Grade w/Hone	Order No.	Price	Grade w/ Hone	Order No.	Price	Grade w/ Hone	Order No.	Price
FLGD-3094R-CB	.094	.344	.005/.010	.195	.250	.5050	AC3R	**FG31031170**	Price	AC50	**FG31FLGD3094RCB**	Price	GP50	**FG315100**	Price
FLGD-3094L-CB	.094	.344	.005/.010	.195	.250	.5050	AC3	**FG31031130**	Price	-	**-**	-	-	**-**	-
FLGD-3125R-CB	.125	.344	.005/.010	.195	.250	.5050	AC3R	**FG31031280**	Price	AC50	**FG31FLGD3125RCB**	Price	GP50	**FG315102**	Price
FLGD-3125L-CB	.125	.344	.005/.010	.195	.250	.5050	AC3R	**FG316335125PLAC**	Price	AC50	**FG31FLGD3125LCB**	Price	GP50	**FG315103**	Price
FLGD-3189R-CB	.189	.344	.020/.025	.195	.250	.5050	AC3R	**FG31031390**	Price	AC50C	**FG31031400**	Price	GP50	**FG315104**	Price
FLGD-3189L-CB	.189	.344	.020/.025	.195	.250	.5050	AC3R	**FG31031330**	Price	AC50	**FG31FLGD3189LCB**	Price	GP50	**FG315105**	Price
FLGD-4125R-CB	.125	.453	.005/.010	.255	.250	.6360	AC3R	**FG31031530**	Price	AC50C	**FG31031540**	Price	GP50C	**FG31031560**	Price
FLGD-4125L-CB	.125	.453	.005/.010	.255	.250	.6360	AC3R	**FG31031460**	Price	AC50C	**FG31031470**	Price	-	**-**	-
FLGD-4189R-CB	.189	.453	.020/.025	.255	.375	.7610	AC3R	**FG31031680**	Price	AC50	**FG31FLGD4189RCB**	Price	GP50	**FG315106**	Price
FLGD-4189L-CB	.189	.453	.020/.025	.255	.375	.7610	AC3R	**FG31031610**	Price	AC50	**FG31FLGD4189LCB**	Price	GP50	**FG315107**	Price
FLGD-4250R-CB	.250	.453	.020/.025	.255	.500	.8860	AC3A	**FG3145250PRAC3A**	Price	AC50	**FG31FLGD4250RCB**	Price	GP50	**FG315108**	Price
FLGD-4250L-CB	.250	.453	.020/.025	.255	.500	.8860	AC3A	**FG31031740**	Price	AC50	**FG31FLGD4250LCB**	Price	GP50	**FG315109**	Price

TOOLFLO Member IMC Group Grooving Inserts

FLGP • Positive Rake





Carbide Grades

- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

Tool-Flo	Width (in.)	A (in.)	Radius R (in.)	E (in.)	T (in.)	AC3			AC50			GP50		
						Grade w/ Hone	Order No.	Price	Grade w/ Hone	Order No.	Price	Grade w/ Hone	Order No.	Price
FLGP-2031L	.031	.219	.002/.005	.050	.150	AC3R	**FG31031840**	Price	AC50C	**FG31031850**	Price	-	**-**	-
FLGP-2031R	.031	.219	.002/.005	.050	.150	AC3R	**FG31031870**	Price	AC50C	**FG31031880**	Price	GP50	**FG31572431RN4C**	Price
FLGP-2062L	.062	.219	.005/.010	.110	.150	AC3R	**FG31031940**	Price	AC50C	**FG31031950**	Price	GP50C	**FG31031970**	Price
FLGP-2062R	.062	.219	.005/.010	.110	.150	AC3R	**FG31031980**	Price	AC50C	**FG31031990**	Price	GP50	**FG31572462RN4C**	Price
FLGP-2125L	.125	.219	.005/.010	.110	.150	-	**-**	-	-	**-**	-	GP50C	**FG31032030**	Price
FLGP-2125R	.125	.219	.005/.010	.110	.150	AC3R	**FG31032040**	Price	-	**-**	-	GP50C	**FG31032070**	Price
FLGP-3047L	.047	.344	.005/.010	.075	.195	AC3R	**FG31032080**	Price	-	**-**	-	GP50C	**FG31032100**	Price
FLGP-3047R	.047	.344	.005/.010	.075	.195	AC3R	**FG31032120**	Price	AC50C	**FG31032130**	Price	GP50C	**FG31032160**	Price
FLGP-3062L	.062	.344	.005/.010	.120	.195	AC3R	**FG31573462LAC3R**	Price	AC50C	**FG31032180**	Price	GP50C	**FG31032200**	Price
FLGP-3062R	.062	.344	.005/.010	.120	.195	AC3R	**FG31573462RAC3R**	Price	AC50C	**FG31032220**	Price	GP50C	**FG31032240**	Price
FLGP-3088L	.088	.344	.005/.010	.180	.195	AC3R	**FG31032260**	Price	-	**-**	-	GP50C	**FG31032280**	Price
FLGP-3088R	.088	.344	.005/.010	.180	.195	AC3R	**FG31032290**	Price	-	**-**	-	GP50C	**FG31032310**	Price
FLGP-3094L	.094	.344	.005/.010	.180	.195	AC3R	**FG31573494LAC3R**	Price	AC50C	**FG31032320**	Price	GP50C	**FG31032340**	Price
FLGP-3094R	.094	.344	.005/.010	.180	.195	AC3R	**FG31573494RAC3R**	Price	AC50C	**FG31032360**	Price	GP50C	**FG31032390**	Price
FLGP-3125L	.125	.344	.005/.010	.180	.195	AC3R	**FG31032410**	Price	AC50C	**FG31032420**	Price	GP50C	**FG31032430**	Price
FLGP-3125R	.125	.344	.005/.010	.180	.195	AC3R	**FG31573625RAC3R**	Price	AC50C	**FG31032450**	Price	GP50C	**FG31032470**	Price
FLGP-3156L	.156	.344	.005/.010	.180	.195	-	**-**	-	-	**-**	-	GP50C	**FG31032500**	Price
FLGP-3156R	.156	.344	.005/.010	.180	.195	-	**-**	-	AC50C	**FG31573656RAC50**	Price	GP50C	**FG31032530**	Price
FLGP-3189L	.189	.344	.020/.025	.180	.195	AC3R	**FG31032550**	Price	AC50C	**FG31032560**	Price	GP50C	**FG31032580**	Price
FLGP-3189R	.189	.344	.020/.025	.180	.195	AC3R	**FG31032600**	Price	-	**-**	-	GP50C	**FG31032630**	Price
FLGP-4125L	.125	.453	.005/.010	.250	.255	AC3R	**FG31032650**	Price	-	**-**	-	GP50C	**FG31032670**	Price
FLGP-4125R	.125	.453	.005/.010	.250	.255	AC3R	**FG31032680**	Price	-	**-**	-	GP50C	**FG31574625RN4C**	Price
FLGP-4189L	.189	.453	.020/.025	.250	.255	AC3R	**FG31032700**	Price	-	**-**	-	GP50C	**FG31032720**	Price
FLGP-4189R	.189	.453	.020/.025	.250	.255	AC3R	**FG31032730**	Price	-	**-**	-	GP50C	**FG31032750**	Price
FLGP-4250L	.250	.453	.020/.025	.250	.255	AC3A	**FG31032760**	Price	AC50E	**FG31032770**	Price	GP50E	**FG31032790**	Price
FLGP-4250R	.250	.453	.020/.025	.250	.255	AC3A	**FG31032800**	Price	AC50E	**FG31032810**	Price	GP50	**FG315132**	Price

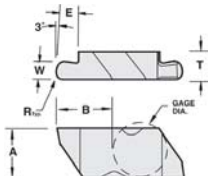
TOOL-FLO Member IMC Group Grooving Inserts

FLR

- Full nose radius

Carbide Grades

- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel





Tool-Flo	Width (in.)	A (in.)	Radius R (in.)	E (in.)	T (in.)	AC3 Grade w/Hone	AC3 Order No.	AC3 Price	AC50 Grade w/ Hone	AC50 Order No.	AC50 Price	GP50 Grade w/ Hone	GP50 Order No.	GP50 Price
FLR-2031L	.062	.219	.031	.110	.150	AC3R	**FG3114096**	Price	AC50	**FG31592031LAC50**	Price	GP50	**FG3152031L**	Price
FLR-2031R	.062	.219	.031	.110	.150	AC3R	**FG3114095**	Price	AC50C	**FG31035680**	Price	GP50C	**FG31035690**	Price
FLR-2047L	.094	.219	.047	.110	.150	AC3R	**FG31035700**	Price	AC50C	**FG31035710**	Price	GP50C	**FG31035730**	Price
FLR-2047R	.094	.219	.047	.110	.150	AC3R	**FG3114105**	Price	AC50C	**FG31035740**	Price	GP50C	**FG31035760**	Price
FLR-2062L	.125	.219	.062	.110	.150	AC3R	**FG31035770**	Price	AC50C	**FG31035780**	Price	GP50C	**FG31592062LN4C**	Price
FLR-2062R	.125	.219	.062	.110	.150	AC3R	**FG31035820**	Price	AC50C	**FG31035800**	Price	GP50C	**FG31592062RN4C**	Price
FLR-3031L	.062	.344	.031	.125	.195	AC3R	**FG31593031LAC3R**	Price	AC50C	**FG31593031LAC50**	Price	GP50C	**FG31593031LN4C**	Price
FLR-3031R	.062	.344	.031	.125	.195	AC3R	**FG3114110**	Price	AC50C	**FG31035900**	Price	GP50C	**FG3114115**	Price
FLR-3047L	.094	.344	.047	.180	.195	AC3R	**FG31593047LAC3R**	Price	AC50C	**FG31035950**	Price	GP50C	**FG31035980**	Price
FLR-3047R	.094	.344	.047	.180	.195	AC3R	**FG31036030**	Price	AC50C	**FG31036040**	Price	GP50C	**FG31593047RN4C**	Price
FLR-3062L	.125	.344	.062	.180	.195	AC3R	**FG31593062LAC3R**	Price	AC50C	**FG31593062LAC50**	Price	GP50C	**FG3114125**	Price
FLR-3062R	.125	.344	.062	.180	.195	AC3R	**FG31593062RAC3R**	Price	AC50C	**FG31593062RAC50**	Price	GP50C	**FG3113050**	Price
FLR-3078L	.156	.344	.078	.180	.195	AC3R	**FG31036190**	Price	AC50C	**FG31593078LAC50**	Price	GP50C	**FG31036210**	Price
FLR-3078R	.156	.344	.078	.180	.195	AC3R	**FG31036230**	Price	AC50C	**FG3114130**	Price	GP50C	**FG31036250**	Price
FLR-3094L	.189	.344	.094	.180	.195	AC3R	**FG31036290**	Price	AC50C	**FG31593094LAC50**	Price	GP50C	**FG31036310**	Price
FLR-3094R	.189	.344	.094	.180	.195	AC3R	**FG31593094RAC3R**	Price	AC50C	**FG31593094RAC50**	Price	GP50C	**FG31593094RN4C**	Price
FLR-3125L	.250	.344	.125	.180	.195	-	**-**	-	-	**-**	-	GP50E	**FG31036330**	Price
FLR-3125R	.250	.344	.125	.180	.195	-	**-**	-	-	**-**	-	GP50E	**FG31036340**	Price
FLR-4062L	.125	.453	.062	.250	.255	AC3R	**FG31594062LAC3R**	Price	AC50C	**FG31594062LAC50**	Price	GP50C	**FG31594062LN4C**	Price
FLR-4062R	.125	.453	.062	.250	.255	AC3R	**FG31594062RAC3R**	Price	AC50C	**FG31036410**	Price	GP50C	**FG31594062RN4C**	Price
FLR-4094L	.189	.453	.094	.250	.255	AC3R	**FG31036440**	Price	AC50C	**FG31036450**	Price	GP50C	**FG3114140**	Price
FLR-4094R	.189	.453	.094	.250	.255	AC3R	**FG31036480**	Price	AC50C	**FG31036490**	Price	GP50C	**FG31594094RN4C**	Price
FLR-4125L	.250	.453	.125	.250	.255	AC3A	**FG31036520**	Price	AC50E	**FG31594225LAC50**	Price	GP50E	**FG3114145**	Price
FLR-4125R	.250	.453	.125	.250	.255	AC3A	**FG31036550**	Price	AC50E	**FG31594225RAC50**	Price	GP50E	**FG31594225RN4C**	Price

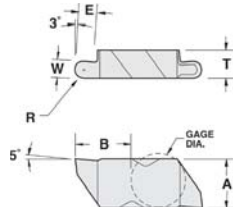
TOOL-FLO Member IMC Group Grooving Inserts

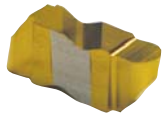
FLRP

- Full nose radius
- Positive rake

Carbide Grades:

- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel





Tool-Flo	Width (in.)	A (in.)	Radius R (in.)	E (in.)	T (in.)	AC3 Grade w/Hone	AC3 Order No.	AC3 Price	AC50 Grade w/ Hone	AC50 Order No.	AC50 Price	GP50 Grade w/ Hone	GP50 Order No.	GP50 Price
FLRP-3031L	.062	.344	.031	.079	.195	AC3R	**FG31036890**	Price	AC50C	**FG31036900**	Price	GP50	**FG31593831LN4C**	Price
FLRP-3031R	.062	.344	.031	.079	.195	AC3R	**FG3114150**	Price	AC50C	**FG31036930**	Price	GP50C	**FG31036950**	Price
FLRP-3047L	.094	.344	.047	.180	.195	AC3R	**FG31036960**	Price	AC50C	**FG31593847LAC50**	Price	GP50	**FG31593847LN4C**	Price
FLRP-3047R	.094	.344	.047	.180	.195	AC3R	**FG31593847RAC3R**	Price	AC50C	**FG31036990**	Price	GP50	**FG31593847RN4C**	Price
FLRP-3062L	.125	.344	.062	.180	.195	AC3R	**FG31037010**	Price	AC50C	**FG31037020**	Price	GP50C	**FG31037050**	Price
FLRP-3062R	.125	.344	.062	.180	.195	AC3R	**FG3114155**	Price	AC50C	**FG31037060**	Price	GP50	**FG31593862RN4C**	Price
FLRP-3078L	.156	.344	.078	.180	.195	-	**-**	-	-	**-**	-	GP50C	**FG31037100**	Price
FLRP-3078R	.156	.344	.078	.180	.195	AC3R	**FG31037110**	Price	AC50C	**FG31037120**	Price	GP50C	**FG31037140**	Price
FLRP-3094L	.189	.344	.094	.180	.195	AC3R	**FG31037150**	Price	AC50C	**FG31037160**	Price	GP50C	**FG31037190**	Price
FLRP-3094R	.189	.344	.094	.180	.195	AC3R	**FG31037200**	Price	AC50C	**FG31037210**	Price	GP50C	**FG31037240**	Price
FLRP-4062L	.125	.453	.062	.250	.255	AC3R	**FG31037250**	Price	AC50C	**FG31037260**	Price	GP50C	**FG31037280**	Price
FLRP-4062R	.125	.453	.062	.250	.255	AC3R	**FG31037290**	Price	AC50C	**FG31037300**	Price	GP50C	**FG31037320**	Price
FLRP-4094L	.189	.453	.094	.250	.255	AC3R	**FG31037330**	Price	-	**-**	-	GP50C	**FG31037350**	Price
FLRP-4094R	.189	.453	.094	.250	.255	AC3R	**FG31037360**	Price	-	**-**	-	GP50C	**FG31037380**	Price
FLRP-4125L	.250	.453	.125	.250	.255	AC3R	**FG31604025LAC3R**	Price	AC50E	**FG31037390**	Price	GP50E	**FG31037410**	Price
FLRP-4125R	.250	.453	.125	.250	.255	AC3R	**FG31037420**	Price	AC50E	**FG31037430**	Price	GP50A	**FG31037450**	Price

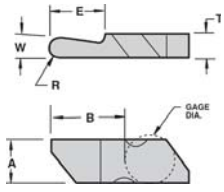
TOOL-FLO Member IMC Group Grooving Inserts

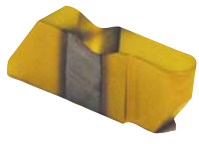
FLRD

- Single end
- Full nose radius

Carbide Grades

- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

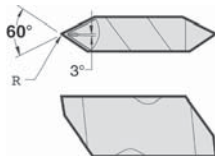




Tool-Flo	Width (in.)	A (in.)	Radius R (in.)	E (in.)	T (in.)	AC3 Grade W/ Hone	AC3 Order No.	AC3 Price	AC50 Grade W/ Hone	AC50 Order No.	AC50 Price	GP50 Grade W/ Hone	GP50 Order No.	GP50 Price
FLRD-3062L	.125	.344	.062	.250	.195	AC3R	**FG316336062LAC3**	Price	-	**-**	-	GP50C	**FG31036580**	Price
FLRD-3062R	.125	.344	.062	.250	.195	AC3R	**FG316336062RAC3**	Price	-	**-**	-	GP50C	**FG31036600**	Price
FLRD-3094L	.189	.344	.094	.250	.195	AC3R	**FG31036610**	Price	AC50C	**FG31036620**	Price	GP50C	**FG31036640**	Price
FLRD-3094R	.189	.344	.094	.250	.195	AC3R	**FG316336094RAC3**	Price	AC50C	**FG31036650**	Price	GP50C	**FG31036670**	Price
FLRD-4062L	.125	.453	.062	.500	.255	-	**-**	-	-	**-**	-	GP50C	**FG31036690**	Price
FLRD-4062R	.125	.453	.062	.500	.255	-	**-**	-	-	**-**	-	GP50C	**FG31036700**	Price
FLRD-4094L	.189	.453	.094	.500	.255	AC3R	**FG31036710**	Price	AC50C	**FG31036720**	Price	GP50C	**FG31036740**	Price
FLRD-4094R	.189	.453	.094	.500	.255	AC3R	**FG31036750**	Price	AC50C	**FG31036760**	Price	GP50C	**FG31036780**	Price
FLRD-4125L	.250	.453	.125	.500	.255	AC3A	**FG31036790**	Price	AC50C	**FG31036800**	Price	GP50E	**FG31036820**	Price
FLRD-4125R	.250	.453	.125	.500	.255	AC3A	**FG31036830**	Price	AC50C	**FG31036840**	Price	GP50E	**FG31036860**	Price

TOOLFLO Member IMC Group Flo-Lock/Chip-Flo Threading Inserts

FLT



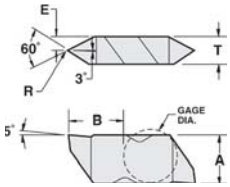


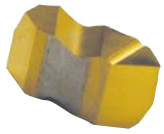
Carbide Grades:
- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

TPI External / Internal	Radius R	A (in.)	B (in.)	E (in.)	T (in.)	Gage Dia. (in.)	Grade w/ Hone	Left			Right		
								Tool-Flo	Order No.	Price	Tool-Flo	Order No.	Price
7-20 / 8-36	.003 / .005	.219	.2661	.075	.150	.1875	AC3R	FLT-2L	**FG31FLT2LA**	Price	FLT-2R	**FG31FLT2RA**	Price
7-20 / 8-36	.003 / .005	.219	.2661	.075	.150	.1875	AC50C	FLT-2L	**FG31038160**	Price	FLT-2R	**FG31038190**	Price
7-20 / 8-36	.003 / .005	.219	.2661	.075	.150	.1875	GP50	FLT-2L	**FG315041**	Price	FLT-2R	**FG315040**	Price
5-12 / 6-20	.005 / .008	.344	.3999	.098	.195	.3750	AC3R	FLT-3L	**FG31FLT3LA**	Price	FLT-3R	**FG31FLT3RA**	Price
5-12 / 6-20	.005 / .008	.344	.3999	.098	.195	.3750	AC50C	-	-	-	FLT-3R	**FG31603600RAC50**	Price
5-12 / 6-20	.005 / .008	.344	.3999	.098	.195	.3750	AC50	FLT-3L	**FG31FLT3L**	Price	-	-	-
5-12 / 6-20	.005 / .008	.344	.3999	.098	.195	.3750	GP50	FLT-3L	**FG315043**	Price	FLT-3R	**FG315042**	Price
5-12 / 6-18	.009 / .011	.344	.3999	.098	.195	.3750	AC3R	-	-	-	FLT-3010R	**FG31038250**	Price
5-12 / 6-18	.009 / .011	.344	.3999	.098	.195	.3750	AC50C	-	-	-	FLT-3010R	**FG31038260**	Price
5-12 / 6-18	.009 / .011	.344	.3999	.098	.195	.3750	GP50C	FLT-3010L	**FG31038240**	Price	FLT-3010R	**FG31038280**	Price
4-12 / 4-20	.005 / .008	.453	.6298	.128	.255	.3750	AC3A	FLT-4L	**FG31038600**	Price	FLT-4R	**FG31038620**	Price
4-12 / 4-20	.005 / .008	.453	.6298	.128	.255	.3750	AC50	FLT-4L	**FG31FLT4LAC50**	Price	FLT-4R	**FG31FLT4R**	Price
4-12 / 4-20	.005 / .008	.453	.6298	.128	.255	.3750	GP50E	FLT-4L	**FG315046**	Price	FLT-4R	**FG315047**	Price

TOOLFLO Member IMC Group 60° V-Threading Inserts

FLTP





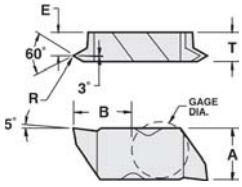
- Positive rake

Carbide Grades:
- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

TPI Int./Ext.	Radius R (in.)	A (in.)	B (in.)	E (in.)	T (in.)	Gage Dia. (in.)	Grade w/Hone	Left			Right		
								Tool-Flo	Order No.	Price	Tool-Flo	Order No.	Price
7-20 / 8-36	.003 / .005	.219	.2661	.075	.150	.1875	AC3R	FLTP-2L	**FG31612800LAC3R**	Price	FLTP-2R	**FG3114220**	Price
7-20 / 8-36	.003 / .005	.219	.2661	.075	.150	.1875	AC50C	FLTP-2L	**FG31040250**	Price	FLTP-2R	**FG31040270**	Price
7-20 / 8-36	.003 / .005	.219	.2661	.075	.150	.1875	GP50C	FLTP-2L	**FG31612800LN4C**	Price	FLTP-2R	**FG31040280**	Price
5-12 / 6-20	.005 / .008	.344	.3999	.098	.195	.3750	AC3R	FLTP-3L	**FG3114224**	Price	FLTP-3R	**FG3114225**	Price
5-12 / 6-20	.005 / .008	.344	.3999	.098	.195	.3750	AC50C	FLTP-3L	**FG31040290**	Price	FLTP-3R	**FG3114235**	Price
5-12 / 6-20	.005 / .008	.344	.3999	.098	.195	.3750	GP50	FLTP-3L	**FG315135L**	Price	FLTP-3R	**FG315135R**	Price
4-12 / 4-20	.005 / .008	.453	.6293	.128	.255	.3750	AC3A	FLTP-4L	**FG31040340**	Price	FLTP-4R	**FG31040370**	Price
4-12 / 4-20	.005 / .008	.453	.6293	.128	.255	.3750	AC50E	FLTP-4L	**FG3114800LAC50E**	Price	FLTP-4R	**FG3114800RAC50E**	Price
4-12 / 4-20	.005 / .008	.453	.6293	.128	.255	.3750	GP50E	FLTP-4L	**FG31040360**	Price	FLTP-4R	**FG31614800RN4E**	Price

TOOLFLO Member IMC Group 60° V-Threading Inserts

FLTK





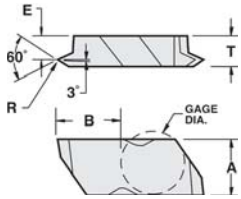
- Positive rake

Carbide Grades
- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

TPI Int/Ext	Radius R (in.)	A (in.)	B (in.)	E (in.)	T (in.)	Gage Dia. (in.)	Grade w/ Hone	Left			Right		
								Tool-Flo	Order No.	Price	Tool-Flo	Order No.	Price
12-24 / 14-44	.002 / .004	.219	.2679	.110	.150	.1875	AC3R	FLTK-2L	**FG31040100**	Price	FLTK-2R	**FG3114195**	Price
12-24 / 14-44	.002 / .004	.219	.2679	.110	.150	.1875	AC50C	FLTK-2L	**FG3112600LAC50C**	Price	FLTK-2R	**FG3112600RAC50C**	Price
12-24 / 14-44	.002 / .004	.219	.2679	.110	.150	.1875	GP50C	FLTK-2L	**FG31040120**	Price	FLTK-2R	**FG31612600RN4C**	Price
9-24 / 10-44	.002 / .004	.344	.4022	.141	.195	.3750	AC3R	FLTK-3L	**FG3114200**	Price	FLTK-3R	**FG3114210**	Price
9-24 / 10-44	.002 / .004	.344	.4022	.141	.195	.3750	AC50	FLTK-3L	**FG31040150**	Price	FLTK-3R	**FG31613600RAC50**	Price
9-24 / 10-44	.002 / .004	.344	.4022	.141	.195	.3750	GP50C	FLTK-3L	**FG31040180**	Price	FLTK-3R	**FG3114215**	Price
9-24 / 10-44	.002 / .004	.453	.6322	.201	.255	.3750	AC50C	FLTK-4L	**FG31040200**	Price	FLTK-4R	**FG31040230**	Price
9-24 / 10-44	.002 / .004	.453	.6322	.201	.255	.3750	GP50C	FLTK-4L	**FG31040220**	Price	FLTK-4R	**FG31040240**	Price

TOOLFLO Member IMC Group 60° V-Threading Inserts

FLTF





- Fine pitch

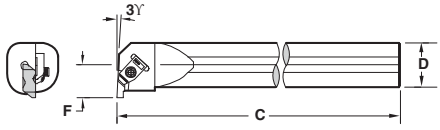
Carbide Grades:
- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel

TPI Int./Ext.	Radius R (in.)	A (in.)	B (in.)	E (in.)	T (in.)	Grade w/ Hone	Left			Right		
							Tool-Flo	Order No.	Price	Tool-Flo	Order No.	Price
12-24 / 14-44	.002 / .004	.219	.2679	.110	.150	AC3R	FLTF-2L	**FG3114170**	Price	FLTF-2R	**FG3114175**	Price
12-24 / 14-44	.002 / .004	.219	.2679	.110	.150	AC50C	FLTF-2L	**FG31039940**	Price	FLTF-2R	**FG31039970**	Price
12-24 / 14-44	.002 / .004	.219	.2679	.110	.150	GP50C	FLTF-2L	**FG31612400LN4C**	Price	FLTF-2R	**FG31612400RN4C**	Price
9-24 / 10-44	.002 / .004	.344	.4022	.141	.195	AC3R	FLTF-3L	**FG31040000**	Price	FLTF-3R	**FG3114180**	Price
9-24 / 10-44	.002 / .004	.344	.4022	.141	.195	AC50C	FLTF-3L	**FG31040010**	Price	FLTF-3R	**FG31040040**	Price
9-24 / 10-44	.002 / .004	.344	.4022	.141	.195	GP50C	FLTF-3L	**FG31613400LN4C**	Price	FLTF-3R	**FG31613400RN4**	Price
9-24 / 10-44	.002 / .004	.453	.6322	.201	.255	AC3R	FLTF-4L	**FG31040060**	Price	FLTF-4R	**FG31040090**	Price
9-24 / 10-44	.002 / .004	.453	.6322	.201	.255	GP50	FLTF-4L	**FG31614400LN4C**	Price	FLTF-4R	**FG31040080**	Price

TOOL-FLO Member IMC Group Flo-Lock Internal Bars

A-FLER/L

- Right hand shown
- Right hand holders (R) take left hand (L) inserts
- Left hand holders (L) take right hand (R) inserts





Right/Left Hand - Left									
Tool-Flo	D (in.)	Min. Bore (in.)	Insert	C (in.)	F† (in.)	Clamp	Clamp Screw	Order No.	Price
A08-FLEL2	.500	.730	FL-2R	8.000	.437	TF-74	S-310	**FG31009600**	Price
A10-FLEL2	.625	1.000	FL-2R	10.000	.500	TF-74	S-310	**FG31009640**	Price
A12-FLEL2	.750	1.125	FL-2R	10.000	.562	TF-74	S-310	**FG31009680**	Price
A16-FLEL2	1.000	1.375	FL-2R	12.000	.688	TF-74	S-310	**FG31009750**	Price
A16-FLEL3	1.000	1.375	FL-3R	12.000	.688	TF-72	S-412	**FG31009760**	Price
A20-FLEL3	1.250	1.750	FL-3R	14.000	.875	TF-72	S-412	**FG31009890**	Price
A28-FLEL4	1.750	2.250	FL-4R	16.000	1.250	TF-72	S-412	**FG31010100**	Price
A32-FLEL3	2.000	2.500	FL-3R	16.000	1.250	TF-72	S-412	**FG31010190**	Price
A32-FLEL4	2.000	2.750	FL-4R	16.000	1.296	TF-72	S-412	**FG31010200**	Price
A32-FLEL6	2.000	2.750	FL-6R	16.000	1.375	CM-121	S-412	**FG31010210**	Price

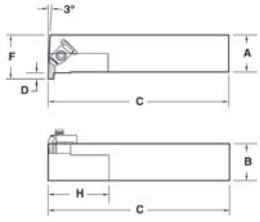
Right/Left Hand - Right									
Tool-Flo	D (in.)	Min. Bore (in.)	Insert	C (in.)	F† (in.)	Clamp	Clamp Screw	Order No.	Price
A08-FLER2	.500	.730	FL-2L	8.000	.437	TF-75	S-39	**FG31009610**	Price
A10-FLER2	.625	1.000	FL-2L	10.000	.500	TF-75	S-310	**FG31009650**	Price
A12-FLER2	.750	1.125	FL-2L	10.000	.562	TF-74	S-310	**FG31009690**	Price
A16-FLER3	1.000	1.375	FL-3L	12.000	.688	TF-73	S-412	**FG31009780**	Price
A16-FLER2	1.000	1.375	FL-2L	12.000	.688	TF-75	S-310	**FG31009770**	Price
A24-FLER3	1.500	2.000	FL-3L	14.000	1.000	TF-73	S-412	**FG31010000**	Price
A28-FLER3	1.750	2.250	FL-3L	14.000	1.125	TF-73	S-412	**FG31010110**	Price
A28-FLER4	1.750	2.250	FL-4L	16.000	1.250	TF-73	S-412	**FG31010120**	Price
A32-FLER3	2.000	2.500	FL-3L	16.000	1.250	TF-73	S-412	**FG31010220**	Price
A32-FLER4	2.000	2.750	FL-4L	16.000	1.296	TF-73	S-412	**FG31010230**	Price
A32-FLER6	2.000	2.750	FL-6L	16.000	1.375	CM-121	S-412	**FG31010240**	Price

† "F" DIM. over sharp point of grooving insert

TOOL-FLO Member IMC Group Grooving Tool Holders

FLER/L

- Right hand shown
- Right hand holders (R) take left hand inserts (L) inserts
- Left hand holders (L) take right hand (R) inserts





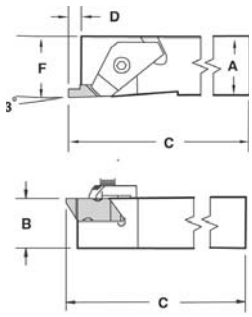
Right/Left Hand - Left										
Tool-Flo	Shank Size (in.)	Uses Insert Style	OAL (in.)	D (in.)	F (in.)	H (in.)	Clamp	Screw	Order No.	Price
FLEL-122B	3/4 x 3/4	FL_-2R	4.500	.1400	1.000	1.000	TF-74	S-310	**FG31024910**	Price
FLEL-123B	3/4 x 3/4	FL_-3R	4.500	.2100	1.250	2.000	TF-73	S-310	**FG31024920**	Price
FLEL-162C	1 x 1	FL_-2R	5.000	.1400	1.250	1.000	TF-74	S-310	**FG31024930**	Price
FLEL-163D	1 x 1	FL_-3R	6.000	.2100	1.250	2.000	TF-72	S-412	**FG31024940**	Price
FLEL-164D	1 x 1	FL_-4R	6.000	.2900	1.375	2.000	TF-72	S-412	**FG31024950**	Price
FLEL-203D	1-1/4 x 1-1/4	FL_-3R	6.000	.2100	1.500	2.000	TF-72	S-412	**FG31024960**	Price
FLEL-204D	1-1/4 x 1-1/4	FL_-4R	6.000	.2900	1.625	2.000	TF-72	S-412	**FG31024970**	Price
FLEL-205D	1-1/4 x 1-1/4	FL_-5R	6.000	.2900	2.000	2.000	TF-80	S-412	**FG31024980**	Price
FLEL-206D	1-1/4 x 1-1/4	FL_-6R	6.000	.2900	1.625	2.000	TF-120	S-412	**FG31024990**	Price

Right/Left Hand - Right										
Tool-Flo	Shank Size (in.)	Uses Insert Style	OAL (in.)	D (in.)	F (in.)	H (in.)	Clamp	Screw	Order No.	Price
FLER-82V	1/2 x 1/2	FL_-2L	3.500	.1400	.750	1.000	TF-75	S-310	**FG31025110**	Price
FLER-122B	3/4 x 3/4	FL_-2L	4.500	.1400	1.000	1.000	TF-75	S-310	**FG31025010**	Price
FLER-123B	3/4 x 3/4	FL_-3L	4.500	.2100	1.125	2.000	TF-73	S-310	**FG31025020**	Price
FLER-162C	1 x 1	FL_-2L	5.000	.1400	1.250	1.000	TF-75	S-310	**FG31025030**	Price
FLER-163D	1 x 1	FL_-3L	6.000	.2100	1.250	2.000	TF-73	S-412	**FG31025040**	Price
FLER-164D	1 x 1	FL_-4L	6.000	.2900	1.375	2.000	TF-73	S-412	**FG31025050**	Price
FLER-203D	1-1/4 x 1-1/4	FL_-3L	6.000	.2100	1.500	2.000	TF-73	S-412	**FG31025070**	Price
FLER-204D	1-1/4 x 1-1/4	FL_-3L	6.000	.2900	1.500	2.000	TF-73	S-412	**FG31025080**	Price
FLER-205D	1-1/4 x 1-1/4	FL_-4L	6.000	.2900	1.625	2.000	TF-81	S-412	**FG31025090**	Price
FLER-206D	1-1/4 x 1-1/4	FL_-5L	6.000	.2900	1.625	2.000	TF-121	S-412	**FG31025100**	Price

TOOL-FLO Member IMC Group Grooving Tool Holders

FLASR/L

- Right hand shown
- Right hand holders (R) take right hand inserts (R) inserts
- Left hand holders (L) take left hand (L) inserts





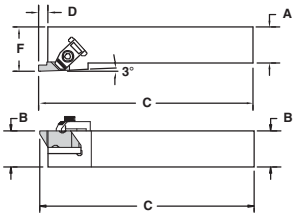
Right/Left Hand - Left									
Tool-Flo	Shank Size (in.)	Uses Insert Style	OAL C (in.)	D (in.)	F (in.)	Clamp	Screw	Order No.	Price
FLASL-082D	1/2 x 1/2	FL_-2L	6.000	.1380	.500	TF-182	S-310	**FG31023680**	Price
FLASL-103B	5/8 x 5/8	FL_-3L	4.500	.2100	.625	TF-185	S-412	**FG31023700**	Price

Right/Left Hand - Right									
Tool-Flo	Shank Size (in.)	Uses Insert Style	OAL C (in.)	D (in.)	F (in.)	Clamp	Screw	Order No.	Price
FLASR-062D	3/8 X 3/8	FL_-2R	6.000	.1380	.375	TF-182	S-310	**FG31023730**	Price
FLASR-082D	1/2 x 1/2	FL_-2R	6.000	.1380	.500	TF-182	S-310	**FG31023740**	Price
FLASR-102B	5/8 x 5/8	FL_-2R	4.500	.1380	.625	TF-185	S-412	**FG31023770**	Price
FLASR-103B	5/8 x 5/8	FL_-3R	4.500	.2100	.625	TF-185	S-412	**FG31023780**	Price

TOOL-FLO Member IMC Group Flo-Lock External Holders

FLSR/L

- Right hand shown
- Right hand holders (R) take right hand inserts (R) inserts
- Left hand holders (L) take left hand (L) inserts





Right/Left - Left									
Tool-Flo	A x B (in.)	Insert	C (in.)	D (in.)	F† (in.)	Clamp	Clamp Screw	Order No.	Price
FLSL-62C	3/8 x 3/8	FL_-2L	2.500	.1400	.562	TF-75	S-310	**FG31037810**	Price
FLSL-82V	1/2 x 1/2	FL_-2L	3.500	.1400	.750	TF-75	S-310	**FG31037820**	Price
FLSL-122B	3/4 x 3/4	FL_-2L	4.500	.1400	1.000	TF-75	S-310	**FG31037660**	Price
FLSL-123B	3/4 x 3/4	FL_-3L	4.500	.2100	1.000	TF-73	S-412	**FG31037670**	Price
FLSL-162C	1 x 1	FL_-2L	5.000	.1400	1.250	TF-75	S-310	**FG31037680**	Price
FLSL-163C	1 x 1	FL_-3R	5.000	.2100	1.250	TF-72	S-412	**FG31037690**	Price
FLSL-163D	1 x 1	FL_-3L	6.000	.2100	1.250	TF-73	S-412	**FG31037700**	Price
FLSL-164D	1 x 1	FL_-4L	6.000	.2900	1.250	TF-73	S-412	**FG31037710**	Price
FLSL-203D	1-1/4 x 1-1/4	FL_-3L	6.000	.2100	1.500	TF-73	S-412	**FG31037750**	Price
FLSL-204D	1-1/4 x 1-1/4	FL_-4L	6.000	.2900	1.500	TF-73	S-412	**FG31037760**	Price
FLSL-205D	1-1/4 x 1-1/4	FL_-5L	6.000	.4000	1.500	TF-81	S-352	**FG31037770**	Price

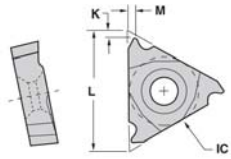
Right/Left - Right									
Tool-Flo	A x B (in.)	Insert	C (in.)	D (in.)	F† (in.)	Clamp	Clamp Screw	Order No.	Price
FLSR-62	3/8 x 3/8	FL_-2R	2.500	.1400	.562	TF-74	S-310	**FG31038080**	Price
FLSR-82V	1/2 x 1/2	FL_-2R	3.500	.1400	.750	TF-74	S-310	**FG31038090**	Price
FLSR-102B	5/8 x 5/8	FL_-2R	4.500	.1400	1.000	TF-74	S-310	**FG31037880**	Price
FLSR-122B	3/4 x 3/4	FL_-2R	4.500	.1400	1.000	TF-74	S-310	**FG31037890**	Price
FLSR-123B	3/4 x 3/4	FL_-3R	4.500	.2100	1.000	TF-72	S-412	**FG31037900**	Price
FLSR-162C	1 x 1	FL_-2R	5.000	.1400	1.250	TF-74	S-310	**FG31037910**	Price
FLSR-163C	1 x 1	FL_-3R	5.000	.2100	1.250	TF-72	S-412	**FG31037920**	Price
FLSR-163D	1 x 1	FL_-3R	6.000	.2100	1.250	TF-72	S-412	**FG31037930**	Price
FLSR-164D	1 x 1	FL_-4R	6.000	.2900	1.250	TF-72	S-412	**FG31037940**	Price
FLSR-203D	1-1/4 x 1-1/4	FL_-3R	6.000	.2100	1.500	TF-72	S-412	**FG31037990**	Price
FLSR-204D	1-1/4 x 1-1/4	FL_-4R	6.000	.2900	1.500	TF-72	S-412	**FG31038000**	Price
FLSR-205D	1-1/4 x 1-1/4	FL_-5R	6.000	.4000	1.500	TF-80	S-352	**FG31038010**	Price

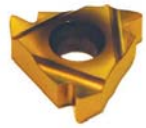
† "F" DIM. over sharp point of grooving insert

TOOLFLO Member IMC Group LAYDOWN-LT

API Round Threading - Multi-Tooth

New!



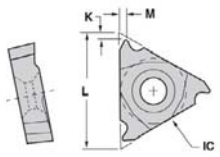


Description	TPI	IC	Length L (in.)	M	K	Grade AC22		Grade AC50	
						Order No.	Price	Order No.	Price
22ER 10RD2M	10	1/2	.870	.146	.094	**FG312412997**	Price	**FG31006980**	Price
27ER 8RD2M	8	5/8	1.080	.177	.114	**FG33009050**	Price	**FG33009060**	Price
22IR 10RD2M	10	1/2	.870	.146	.094	**FG312413051**	Price	**FG31007920**	Price
27IR 8RD2M	8	5/8	1.080	.177	.114	**FG33009540**	Price	**FG33009550**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

API VO.055 - American MT, AMT & AMMT*
Connection - NC10-NC16, VO .055, 1, 1-1/2 REG

New!





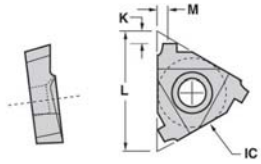
Description	TPI	TPF	IC	Length L (in.)	M	K	Grade AC22		Grade AC50	
							Order No.	Price	Order No.	Price
16ER 6P VO .055 MT	6	1-1/2	3/8	.650	.059	.051	**FG32002880**	Price	**FG332468658**	Price
22ER 6P VO .055 MT	6	1-1/2	1/2	.870	.072	.060	**FG31007520**	Price	**FG312404103**	Price
16IR 6P VO .055 MT	6	1-1/2	3/8	.650	.059	.051	**FG32005880**	Price	**FG312404104**	Price
22IR 6P VO .055 MT	6	1-1/2	1/2	.870	.072	.060	**FG31008460**	Price	**FG312404106**	Price

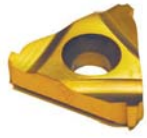
*** MT is Macaroni Tubing. AMT is American Macaroni Tubing and AMMT is American Mining Macaroni Tubing.**

TOOLFLO Member IMC Group LAYDOWN-LT

API VAM Threading

New!



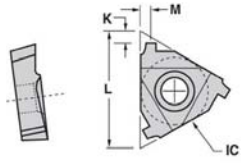


Description	TPI	IC	Length L (in.)	M	K	Grade AC22		Grade AC50	
						Order No.	Price	Order No.	Price
22ER 8VAM	8	1/2	.870	.059	.059	**FG332469876**	Price	**FG332469877**	Price
22ER 6VAM	6	1/2	.870	.079	.079	**FG332469874**	Price	**FG312404108**	Price
22ER 5VAM	5	1/2	.870	.079	.079	**FG332469872**	Price	**FG312404109**	Price
22IR 8VAM	8	1/2	.870	.059	.059	**FG332470036**	Price	**FG332470037**	Price
22IR 6VAM	6	1/2	.870	.079	.079	**FG332470033**	Price	**FG312404110**	Price
22IR 5VAM	5	1/2	.870	.079	.079	**FG332470030**	Price	**FG312404111**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

API X-Line Threading
Connection: 5 - 7-5/8 8-5/8 - 10-3/4

New!



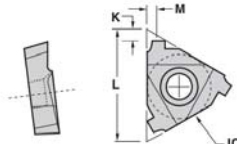


Description	TPI	TPF	IC	Length L (in.)	M	K	Grade AC22		Grade AC50	
							Order No.	Price		
22ER 6XL75	6	3/4	1/2	.870	.075	.078	**FG312489542**	Price	**FG312489326**	Price
22ER 6XL15	6	1-1/2	1/2	.870	.075	.086	**FG312489543**	Price	**FG312489327**	Price
22ER 5XL12	5	1-1/4	1/2	.870	.087	.083	**FG312489544**	Price	**FG312489328**	Price
22IR 6XL75	6	3/4	1/2	.870	.075	.078	**FG312489545**	Price	**FG312489329**	Price
22IR 6XL15	6	1-1/2	1/2	.870	.075	.086	**FG312489546**	Price	**FG312489330**	Price
22IR 5XL12	5	1-1/4	1/2	.870	.087	.083	**FG312404112**	Price	**FG312489331**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

API Buttress Threading
U.S. Improved Buttress 4-1/2 - 13-3/8 16 and larger

New!



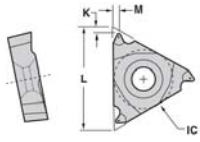


Description	TPI	TPF	IC	Length L (in.)	M	K	Grade AC22		Grade AC50	
							Order No.	Price	Order No.	Price
22ER 8B75	8	3/4	1/2	.870	.102	.073	**FG332488856**	Price	**FG332488850**	Price
22ER 5B75	5	3/4	1/2	.870	.087	.087	**FG31007400**	Price	**FG31007410**	Price
22ER 5B1	5	1	1/2	.870	.095	.087	**FG31007350**	Price	**FG31007360**	Price
22IR 8B75	8	3/4	1/2	.870	.102	.073	**FG332488857**	Price	**FG332489292**	Price
22IR 5B75	5	3/4	1/2	.870	.087	.087	**FG31008340**	Price	**FG31008350**	Price
22IR 5B1	5	1	1/2	.870	.095	.090	**FG31008300**	Price	**FG31008310**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

NPT Threading With Chipbreaker

New!



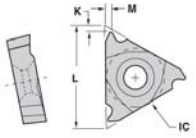


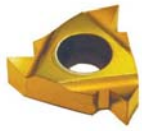
Description	TPI	IC	Length L (in.)	M	K	Grade AC22		Grade AC50	
						Order No.	Price	Order No.	Price
16ER 27NPT-CB	27	3/8	.650	.030	.020	**FG32002490**	Price	**FG32002500**	Price
16ER 18NPT-CB	18	3/8	.650	.030	.020	**FG32001860**	Price	**FG32001870**	Price
16ER 14NPT-CB	14	3/8	.650	.060	.020	**FG32001470**	Price	**FG32001480**	Price
16ER 11.5NPT-CB	11.5	3/8	.650	.060	.040	**FG32001030**	Price	**FG32001040**	Price
16ER 8NPT-CB	8	3/8	.650	.060	.040	**FG32003860**	Price	**FG32003000**	Price
16IR 27NPT-CB	27	3/8	.650	.030	.020	**FG32005690**	Price	**FG322493380**	Price
16IR 18NPT-CB	18	3/8	.650	.030	.020	**FG32005230**	Price	**FG322493387**	Price
16IR 14NPT-CB	14	3/8	.650	.060	.040	**FG32004900**	Price	**FG32004910**	Price
16IR 11.5NPT-CB	11.5	3/8	.650	.060	.040	**FG32004550**	Price	**FG32004560**	Price
16IR 8NPT-CB	8	3/8	.650	.060	.040	**FG32006810**	Price	**FG32005980**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

NPT Threading

New!



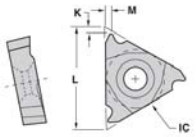


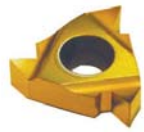
Description	TPI	IC	Length L (in.)	M	K	Grade	Order No.	Price
16ER 27NPT	27	3/8	.650	.030	.030	AC22	**FG325902132**	Price
16ER 18NPT	18	3/8	.650	.040	.030	AC22	**FG325902115**	Price
16ER 14NPT	14	3/8	.650	.050	.040	AC22	**FG325993047**	Price
16ER 11 .5NPT	11.5	3/8	.650	.060	.040	AC22	**FG325901814**	Price
16ER 8NPT	8	3/8	.650	.070	.050	AC22	**FG325901968**	Price
11IR 18NPT	18	1/4	.430	.040	.030	AC22	**FG325902041**	Price
16IR 27NPT	27	3/8	.650	.030	.030	AC22	**FG325996115**	Price
16IR 18NPT	18	3/8	.650	.040	.030	AC22	**FG325902181**	Price
16IR 14NPT	14	3/8	.650	.050	.040	AC22	**FG325993037**	Price
16IR 11 .5NPT	11.5	3/8	.650	.060	.040	AC22	**FG325901939**	Price
16IR 8NPT	8	3/8	.650	.060	.050	AC22	**FG325901938**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

NPT Threading – Multi-Tooth

New!



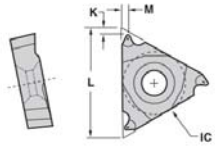


Description	No of Teeth	TPI	IC	Length L (in.)	M	K	Grade AC22		Grade AC50	
							Order No.	Price	Order No.	Price
22ER 11 .5NPT2M	2	11 .5	1/2	.870	.130	.090	**FG312498333**	Price	**FG31007000**	Price
27ER 11 .5NPT3M	3	11 .5	5/8	1.080	.220	.140	**FG312404101**	Price	**FG312489305**	Price
27ER 8NPT2M	2	8	5/8	1.080	.190	.110	**FG33009010**	Price	**FG312493399**	Price
22IR 11 .5NPT2M	2	11 .5	1/2	.870	.130	.090	**FG332470065**	Price	**FG31007940**	Price
27NR 11 .5NPT3M	3	11 .5	5/8	1.080	.220	.140	**FG312404102**	Price	**FG33009190**	Price
27NR 8NPT2M	2	8	5/8	1.080	.190	.110	**FG332470345**	Price	**FG33009520**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

NPTF Threading With Chipbreaker

New!



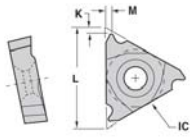


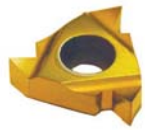
Description	TPI	IC	Length L (in.)	M	K	Grade	Order No.	Price
16ER 27NPTF-CB	27	3/8	.650	.030	.030	AC22	**FG332417545**	Price
16ER 18NPTF-CB	18	3/8	.650	.040	.030	AC22	**FG332417012**	Price
16ER 14NPTF-CB	14	3/8	.650	.050	.040	AC22	**FG332417009**	Price
16ER 11.5NPTF-CB	11.5	3/8	.650	.060	.040	AC22	**FG332417550**	Price
16ER 8NPTF-CB	8	3/8	.650	.070	.050	AC22	**FG332417551**	Price
16IR 27NPTF-CB	27	3/8	.650	.030	.030	AC22	**FG332488947**	Price
16IR 18NPTF-CB	18	3/8	.650	.030	.020	AC22	**FG332487196**	Price
16IR 14NPTF-CB	14	3/8	.650	.060	.040	AC22	**FG332487197**	Price
16IR 11.5NPTF-CB	11.5	3/8	.650	.060	.040	AC22	**FG332487199**	Price
16IR 8NPTF-CB	8	3/8	.650	.060	.040	AC22	**FG332487200**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

NPTF Threading

New!



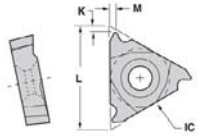


Description	TPI	IC	Length L (in.)	M	K	Grade	Order No.	Price
16ER 27NPTF	27	3/8	.650	.030	.030	AC22	**FG325902408**	Price
16ER 18NPTF	18	3/8	.650	.040	.030	AC22	**FG325902409**	Price
16ER 14NPTF	14	3/8	.650	.050	.040	AC22	**FG325902315**	Price
16ER 11 .5NPTF	11.5	3/8	.650	.060	.040	AC22	**FG325902314**	Price
16ER 8NPTF	8	3/8	.650	.070	.050	AC22	**FG312489691**	Price
11IR 27NPTF	27	1/4	.430	.030	.030	AC22	**FG312489535**	Price
16IR 27NPTF	27	3/8	.650	.030	.030	AC22	**FG312489632**	Price
16IR 18NPTF	18	3/8	.650	.040	.030	AC22	**FG325902526**	Price
16IR 14NPTF	14	3/8	.650	.050	.040	AC22	**FG325902515**	Price
16IR 11.5NPTF	11.5	3/8	.650	.060	.040	AC22	**FG325990378**	Price
16IR 8NPTF	8	3/8	.650	.070	.050	AC22	**FG325993665**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

API Rotary Shoulder Connection Threading

New!



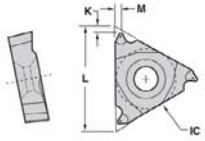


Description	TPI	TPF	IC	Length L (in.)	M	K	Grade AC22		Grade AC50	
							Order No.	Price	Order No.	Price
22ER 530	5	3	1/2	.870	.100	.080	**FG31007290**	Price	**FG31007310**	Price
22ER 4PAC	4	1-1/2	1/2	.870	.110	.080	**FG31007250**	Price	**FG312404099**	Price
22ER 438	4	3	1/2	.870	.110	.110	**FG31007210**	Price	**FG31007220**	Price
22ER 435	4	3	1/2	.870	.110	.080	**FG31007170**	Price	**FG31007180**	Price
22ER 42F	4	2	1/2	.870	.110	.080	**FG312489702**	Price	**FG312489323**	Price
22ER 428	4	2	1/2	.870	.100	.080	**FG31007120**	Price	**FG31007130**	Price
22ER 425	4	2	1/2	.870	.100	.080	**FG31007060**	Price	**FG31007080**	Price
22IR 530	5	3	1/2	.870	.100	.080	**FG31008250**	Price	**FG31008260**	Price
22IR 4PAC	4	1-1/2	1/2	.870	.110	.080	**FG31008200**	Price	**FG312404100**	Price
22IR 438	4	3	1/2	.870	.110	.110	**FG31008160**	Price	**FG31008170**	Price
22IR 435	4	3	1/2	.870	.110	.080	**FG31008120**	Price	**FG31008130**	Price
22IR 42F	4	2	1/2	.870	.110	.080	**FG312489703**	Price	**FG312489324**	Price
22IR 428	4	2	1/2	.870	.100	.080	**FG31008080**	Price	**FG312411865**	Price
22IR 425	4	2	1/2	.870	.100	.080	**FG31008040**	Price	**FG31008050**	Price
27ER 530	5	3	5/8	.108	.100	.070	**FG33009120**	Price	**FG332487943**	Price
27ER 438	4	3	5/8	.108	.110	.080	**FG332487935**	Price	**FG332487936**	Price
27ER 435	4	3	5/8	.108	.120	.080	**FG332487930**	Price	**FG332493034**	Price
27ER 428	4	2	5/8	.108	.110	.080	**FG332487916**	Price	**FG332487919**	Price
27ER 425	4	2	5/8	.108	.120	.080	**FG332487908**	Price	**FG332487909**	Price
27IR 530	5	3	5/8	.108	.110	.080	**FG332488041**	Price	**FG332488039**	Price
27IR 438	4	3	5/8	.108	.110	.080	**FG332487999**	Price	**FG332493055**	Price
27IR 435	4	3	5/8	.108	.120	.080	**FG332487990**	Price	**FG332493060**	Price
27IR 428	4	2	5/8	.108	.110	.080	**FG332487962**	Price	**FG332487964**	Price
27IR 425	4	2	5/8	.108	.120	.080	**FG332487950**	Price	**FG332487954**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

API Round Threading With Chipbreaker

New!



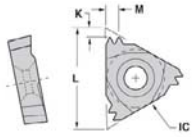


Description	TPI	IC	Length L (in.)	M	K	Grade	Order No.	Price
16ER 8RD-CB	8	3/8	.650	.051	.059	AC50	**FG32003120**	Price
16ER 10RD-CB	10	3/8	.650	.047	.059	AC50	**FG32000800**	Price
16IR 8RD-CB	8	3/8	.650	.051	.059	AC50	**FG32006090**	Price
16IR 10RD-CB	10	3/8	.650	.047	.059	AC50	**FG32004380**	Price

TOOLFLO Member IMC Group LAYDOWN-LT

API Round Threading

New!



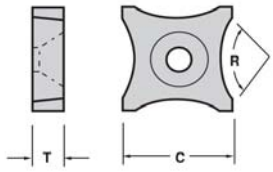


Description	TPI	TPF	IC	Length L (in.)	M	K	Grade	Order No.	Price
16ER 8RD	8	3/4	3/8	.650	.059	.056	AC50	**FG32003070**	Price
16ER 10RD	10	3/4	3/8	.650	.059	.056	AC50	**FG32000760**	Price
22ER 8RD	8	3/4	1/2	.870	.060	.056	AC50	**FG31007760**	Price
22ER 10RD	10	3/4	1/2	.870	.046	.048	AC50	**FG31006950**	Price
16IR 8RD	8	3/4	3/8	.650	.059	.056	AC50	**FG32006040**	Price
16IR 10RD	10	3/4	3/8	.650	.059	.056	AC50	**FG32004350**	Price
22IR 8RD	8	3/4	1/2	.870	.060	.056	AC50	**FG31008680**	Price
22IR 10RD	10	3/4	1/2	.870	.046	.048	AC50	**FG31007890**	Price

TOOLFLO Member IMC Group External Scarfing Inserts

SPUB-63 - External
3/4" Square 4-sided - OD

New!



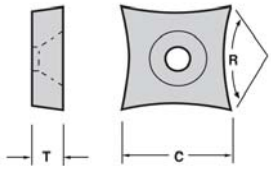


Description	Tube Diameter	Thickness (in.)	Width C (in.)	R - Radius (in.)	Grade	Order No.	Price
SPUB-63B-E	up to 7/8”	3/16	3/4	.475	ZA54	**FG33053450**	Price
SPUB-63C-E	7/8 - 1-1/8"	3/16	3/4	.590	ZA54	**FG33053470**	Price
SPUB-63D-E	1-1/8 - 1-1/2”	3/16	3/4	.785	ZA54	**FG33053490**	Price
SPUB-63E-E	1-1/2 - 1-7/8”	3/16	3/4	.985	ZA54	**FG332439001**	Price
SPUB-63F-E	1-7/8 - 2-1/4”	3/16	3/4	1.180	ZA54	**FG332439003**	Price
SPUB-63G-E	2-1/4 - 3-1/8”	3/16	3/4	1.575	ZA54	**FG332439005**	Price
SPUB-63H-E	3-1/8 - 3-7/8”	3/16	3/4	1.970	ZA54	**FG33053510**	Price
SPUB-63I-E	3-7/8 - 4-7/8”	3/16	3/4	2.470	ZA54	**FG33053530**	Price
SPUB-63J-E	4-7/8 - 5-7/8”	3/16	3/4	2.970	ZA54	**FG332492465**	Price
SPUB-63K-E	5-7/8 - 6-7/8”	3/16	3/4	3.470	ZA54	**FG33053570**	Price
SPUB-63L-E	6-7/8 - 7-7/8”	3/16	3/4	3.970	ZA54	**FG332439016**	Price
SPUB-63M-E	7-7/8 and up	3/16	3/4	None	ZA54	**FG332439018**	Price
SPUB-63M-30-E	30° Relief	3/16	3/4	None	ZA54	**FG332439020**	Price

TOOLFLO Member IMC Group External Scarfing Inserts

SQ86 - External
1” Square 4-sided - OD

New!



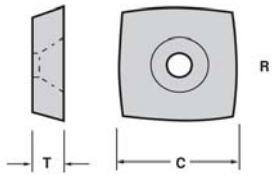


Description	Tube Diameter	Thickness (in.)	Width C (in.)	R - Radius (in.)	Grade	Order No.	Price
SQ86-14-0-E	ANY	3/8	1 .000	-	ZA54	**FG332496479**	Price
SQ86-14-2.5-E	3 - 4-3/4"	3/8	1 .000	2 .500	ZA54	**FG332439029**	Price
SQ86-10-3.4-E	4-3/4 - 6-3/4”	3/8	1 .000	3 .400	ZA54	**FG332439031**	Price
SQ86-14-4.5-E	6-3/4 - 8-3/4”	3/8	1 .000	4 .500	ZA54	**FG332439036**	Price
SQ86-10-9.5-E	8-3/4 - 18”	3/8	1 .000	9 .500	ZA54	**FG332439040**	Price

TOOLFLO Member IMC Group Scarfing Inserts

SQ86 - Internal
1” Square 4-sided - ID

New!



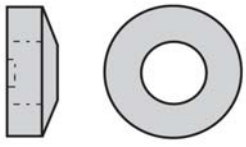


Description	Tube Diameter	Thickness (in.)	Width C (in.)	R - Radius	Grade	Order No.	Price
SQ86-14-0-I	ANY	3/8	1 .000	-	ZA54	**FG332439042**	Price
SQ86-14-2.5-I	3 - 4-3/4"	3/8	1 .000	2 .500	ZA54	**FG332439045**	Price
SQ86-10-3.4-I	4-3/4 - 6-3/4”	3/8	1 .000	3 .400	ZA54	**FG332439049**	Price

TOOLFLO Member IMC Group Internal Scarfing Inserts

IDR

New!



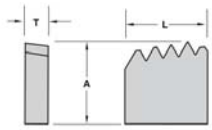


Description	Int'l Tube Diameter	Description	Grade	Order No.	Price
IDR-2010	9/16 - 11/16”	#1	ZA54	**FG332425584**	Price
IDR-2020	11/16 - 13/16"	#2	ZA54	**FG332425585**	Price
IDR-2030	13/16 - 1-1/32”	#3	ZA54	**FG332425586**	Price
IDR-2040	1-1/32 - 1-3/8”	#4	ZA54	**FG332425587**	Price
IDR-2050	5/16 - 1-7/16”	#5	ZA54	**FG332425588**	Price
IDR-2060	1-1/32 - 1-1/8”	#6	ZA54	**FG332425589**	Price
IDR-2070	1-1/8 - 1-3/16”	#7	ZA54	**FG332425590**	Price
IDR-2080	1-3/16 - 1-3/8”	#8	ZA54	**FG332425591**	Price
IDR-2090	1-14 - 1-5/8”	#9	ZA54	**FG332425592**	Price
IDR-2100	1-5/8 - 2”	#10	ZA54	**FG332425593**	Price
IDR-2110	1-7/8 - 2-7/8”	#11	ZA54	**FG332425594**	Price
IDR-2120	2-3/4 - 3-3/8"	#12	ZA54	**FG332452090**	Price
IDR-2130	3-3/8 - 4"	#13	ZA54	**FG332425596**	Price
IDR-2140	4 - 5"	#14	ZA54	**FG332489823**	Price
IDR-2150	5 - 6-1/4"	#15	ZA54	**FG332425598**	Price
IDR-2160	6 - 10-1/4"	#16	ZA54	**FG332425599**	Price

TOOLFLO Member IMC Group Chasers

External NPT and Waterwell

New!



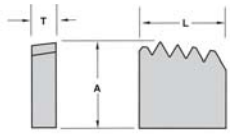


Description	TPI	TPF	Length L (in.)	Height A (in.)	Thickness (in.)	No. of Teeth	Grade	Order No.	Price
CR-8NPT-4E	8	3/4	.625	.620	.203	4	AC50	**FG33018460**	Price
CR-11.5NPT-4E	11.5	3/4	.625	.620	.1875	4	AC50	**FG33017980**	Price
CR-8P-3E WW	8	0'	.630	.592	.203	3	AC50	**FG332411410**	Price

TOOLFLO Member IMC Group Chasers

Internal NPT and Waterwell

New!



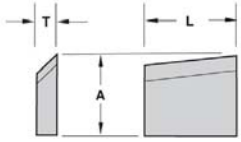


Description	TPI	TPF	Length L (in.)	Height A (in.)	Thickness (in.)	No. of Teeth	Grade	Order No.	Price
CR-8NPT-4I	8	3/4	.625	.620	.203	4	AC50	**FG33018462**	Price
CR-11.5NPT-4I	11.5	3/4	.625	.620	.1875	4	AC50	**FG332434586**	Price
CR-8NPT-7I	8	3/4	.625	.620	.1875	7	AC50	**FG332434583**	Price
CR-8P-3I WW	8	0°	.630	.592	.203	3	AC50	**FG332411397**	Price

TOOLFLO Member IMC Group Chipbreakers

External

New!



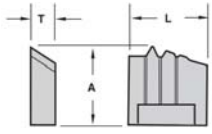


Description	Length L (in.)	Height A (in.)	Thickness (in.)	Inserts	Grade	Order No.	Price
CR-5B75/5B1-4E-CB	.800	.500	.125	CR-5B75-4E/CR-5B1-4E	AC2	**FG302413126**	Price
CR-8R/10R-3E/4E-CB	.630	.560	.125	CR-8R-3E/CR-8R-4E/CR-10R-3E/CR-8NPT-4E	AC2	**FG302412419**	Price
#3 CB W/O Coolant Grooves .170	.618	.560	.170	CR-8R-3E/CR-8R-4E/CR-10R-3E/CR-8NPT-4E	AC2	**FG302404096**	Price

TOOLFLO Member IMC Group Chipbreakers

External with coolant grooves

New!



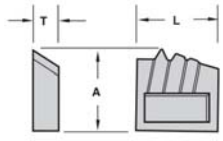


Description	Length L (in.)	Height A (in.)	Thickness (in.)	Coolant Grooves	Inserts	Grade	Order No.	Price
TD4601 5B75-1-CB	.665	.550	.170	x	CR-5B75-3E #1	AC2	**FG302412111**	Price
TD4602 5B75-2-CB	.668	.550	.170	x	CR-5B75-3E #2	AC2	**FG302412112**	Price
TD4603 5B75-3-CB	.668	.550	.170	x	CR-5B75-3E #3	AC2	**FG302412113**	Price
TD3931 8R-1-CB	.628	.510	.165	x	CR-8R-3E #1	AC2	**FG302412108**	Price
TD3932 8R-2-CB	.635	.526	.165	x	CR-8R-3E #2	AC2	**FG302412109**	Price
TD3933 8R-3-CB	.628	.520	.165	x	CR-8R-3E #3	AC2	**FG302412110**	Price
TA2237 10R-1-CB	.628	.503	.175	x	CR-10R-3E #1	AC2	**FG302486490**	Price
TA2238 10R-2-CB	.628	.512	.175	x	CR-10R-3E #2	AC2	**FG302486491**	Price
TA2238 10R-2-CB	.628	.515	.175	x	CR-10R-3E #3	AC2	**FG302486492**	Price
#3 CB W/Coolant Grooves .170	.618	.460	.170	x	CR-8R-3E	AC2	**FG302413038**	Price

TOOLFLO Member IMC Group Chipbreakers

External with coolant grooves and cavity

New!



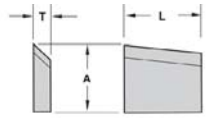


Description	Length L (in.)	Height A (in.)	Thickness (in.)	Coolant Grooves	Inserts	Grade	Order No.	Price
TD4601 5B75-1-CB w/Cavity	.665	.550	.170	x	CR-5B75-3E #1	AC2	**FG302412339**	Price
TD4602 5B75-2-CB w/Cavity	.668	.550	.170	x	CR-5B75-3E #2	AC2	**FG302412340**	Price
TD4603 5B75-3-CB w/Cavity	.665	.560	.170	x	CR-5B75-3E #3	AC2	**FG302412341**	Price
TD3931 8R-1-CB w/Cavity	.628	.518	.165	x	CR-8R-3E #1	AC2	**FG302412338**	Price
TD3932 8R-2-CB w/Cavity	.635	.526	.165	x	CR-8R-3E #2	AC2	**FG302412337**	Price
TD3933 8R-3-CB w/Cavity	.628	.520	.165	x	CR-8R-3E #3	AC2	**FG302412336**	Price

TOOLFLO Member IMC Group Chipbreakers

Internal

New!



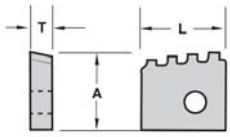


Description	Length L (in.)	Height A (in.)	Thickness (in.)	Coolant Grooves	Inserts	Grade	Order No.	Price
CR-5B75/5B1-4I-CB	.800	.500	.125		CR-5B75/5B1-4I/	AC2	**FG302413039**	Price
CR-8R/10R-3I/4I-CB	.630	.488	.125		CR-8R-3I/CR-8R-4I/CR-10R-3I/CR-8LPT-4I	AC2	**FG302413128**	Price
CR-5B75-5I-CB	1.000	.540	.125	x	CR-5B75-5I	AC2	**FG302412114**	Price
CR-8R-7I-CB	1.000	.520	.125		CR-8R-7I	AC2	**FG302413127**	Price
CR-8R-7I-CB	2.000	.520	.125	x	CR-8R-7I	AC2	**FG302412115**	Price

TOOLFLO Member IMC Group Chasers

External API Buttress

New!



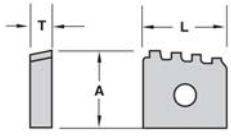


Description	TPI	TPF	Length L (in.)	Height A (in.)	Thickness (in.)	No. of Teeth	Grade	Order No.	Price
CR-5B75-3E #1	5	3/4	.670	.573	.205	3	ZA3	**FG392434274**	Price
CR-5B75-3E #2	5	3/4	.670	.582	.205	3	ZA3	**FG392417716**	Price
CR-5B75-3E #3	5	3/4	.670	.590	.205	3	ZA3	**FG392417549**	Price
CR-5B75-4E	5	3/4	.804	.625	.200	4	ZA3	**FG392414115**	Price
CR-5B1-4E	5	1	.800	.640	.200	4	ZA3	**FG332486470**	Price
CR-8B75-4E	8	3/4	.800	.605	.200	4	ZA3	**FG332486474**	Price

TOOLFLO Member IMC Group Chasers

Internal API Buttress

New!



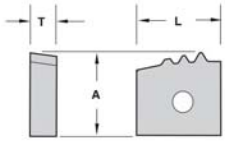


Description	TPI	TPF	Length L (in.)	Height A (in.)	Thickness (in.)	No. of Teeth	Grade	Order No.	Price
CR-5B75-2I	5	3/4	.630	.622	.204	2	ZA3	**FG392419658**	Price
CR-5B75-3I	5	3/4	.630	.577	.204	3	ZA3	**FG332486477**	Price
CR-5B75-4I	5	3/4	.800	.582	.205	4	ZA3	**FG332486479**	Price
CR-5B75-5I	5	3/4	1 .000	.590	.205	5	ZA3	**FG332414019**	Price
CR-5B1-3I	5	1	.635	.635	.200	3	ZA3	**FG332486487**	Price
CR-5B1-4I	5	1	.800	.640	.200	4	ZA3	**FG332486489**	Price
CR-8B75-4I	8	3/4	.800	.590	.205	4	ZA3	**FG332486572**	Price

TOOLFLO Member IMC Group Chasers

External API Round

New!



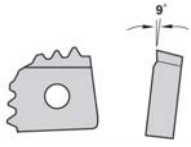


Description	TPI	TPF	Length L (in.)	Height A (in.)	Thickness (in.)	No. of Teeth	Grade	Order No.	Price
CR-8R-3E #1	8	3/4	.630	.577	.204	3	AC50	**FG33018530**	Price
CR-8R-3E #2	8	3/4	.630	.586	.204	3	AC50	**FG33018560**	Price
CR-8R-3E #3	8	3/4	.630	.591	.204	3	AC50	**FG33018590**	Price
CR-8R-3E	8	3/4	.630	.592	.204	3	AC50	**FG33018620**	Price
CR-8R-3E 6°	8	3/4	.640	.625	.200	4	AC50	**FG33018710**	Price
CR-8R-4E 12°	8	3/4	.635	.625	.200	4	AC50	**FG33018680**	Price
CR-10R-3E #1	10	3/4	.628	.563	.204	3	AC50	**FG33017840**	Price
CR-10R-3E #2	10	3/4	.628	.572	.204	3	AC50	**FG33017860**	Price
CR-10R-3E #3	10	3/4	.628	.572	.204	3	AC50	**FG33017890**	Price
CR-10R-3E	10	3/4	.630	.625	.204	3	AC50	**FG33017920**	Price

TOOLFLO Member IMC Group Chasers

External API Round and Buttress
CNGA Double Sided (2 cutting edges)

New!



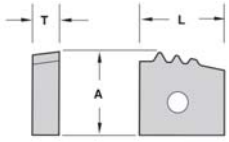


Description	TPI	TPF	No. of Teeth	Grade	Order No.	Price
CNGA-8R-3E	8	3/4	3	AC50	**FG33017350**	Price
CNGA-10R-3E	10	3/4	3	AC50	**FG33016950**	Price
CNGA-5B75-3E	5	3/4	3	AC50	**FG332414122**	Price
CNGA-5B75-3E	5	3/4	3	ZA3	**FG302419536**	Price

TOOLFLO Member IMC Group Chasers

Internal API Round

New!



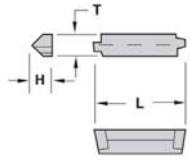


Description	TPI	TPF	Length L (in.)	Height A (in.)	Thickness (in.)	No. of Teeth	Grade	Order No.	
CR-8R-3I	8	3/4	.640	.592	.200	3	AC50	**FG33018650**	Price
CR-8R-4I 6"	8	3/4	.640	.625	.200	4	AC50	**FG33018740**	Price
CR-8R-4I	8	3/4	.640	.625	.200	4	AC50	**FG332410623**	Price
CR-8R-7I	8	3/4	1 .000	.625	.200	7	AC50	**FG332410619**	Price
CR-10R-3I	10	3/4	.630	.625	.200	3	AC50	**FG33018810**	Price

TOOLFLO Member IMC Group — VEE-Bottom

API X-Line Threading

New!



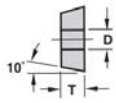


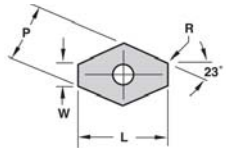
Description	TPI	TPF	Thickness (in.)	Length L (in.)	H	Connection	Grade	Order No.	Price
V84 5XL12 EXT	5	1-1/4	.250	1.000	.250	8-5/8 - 10-3/4	AC50	**FG332486763**	Price
V84 5XL12 INT	5	1-1/4	.250	1.000	.250	8-5/8 - 10-3/4	AC50	**FG332486766**	Price
V84 6XL15 EXT	6	1-1/2	.250	1.000	.250	5 - 7-5/8	AC50	**FG332486768**	Price
V84 6XL15 INT	6	1-1/2	.250	1.000	.250	5 - 7-5/8	AC50	**FG332486771**	Price
V84 6XL75 EXT	6	3/4	.250	1.000	.250	-	AC50	**FG332486773**	Price
V84 6XL75 INT	6	3/4	.250	1.000	.250	-	AC50	**FG332486775**	Price

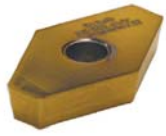
TOOLFLO Member IMC Group — Ring Grooving

API 46
APIP

New!





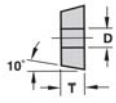


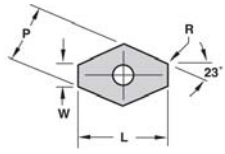
Description	Radius (in.)	W	P	Thickness (in.)	Length L (in.)	Hole Dia. D (in.)	Style	Grade AC6 Order No.	Grade AC6 Price	Grade GP6 Order No.	Grade GP6 Price
APIP 086-3	.015	.079	.372	.187	3/4	-	Clamp	**FG39754000AC6D**	Price	**FG39754000N1C**	Price
APIP 131-3	.031	.125	.407	.187	3/4	-	Clamp	**FG332418378**	Price	**FG332419322**	Price
APIP (PGN-1A)	.031	.131	.415	.187	3/4	-	Clamp	**FG332415580**	Price	**FG332416869**	Price
APIP 162-3 (PGN-6A)	.031	.156	.437	.187	3/4	-	Clamp	**FG332415401**	Price	**FG33011710**	Price
APIP (PGN-7A)	.031	.203	.484	.187	3/4	-	Clamp	**FG332486705**	Price	**FG332416662**	Price
APIP 203-3 (PGN-2A)	.031	.197	.574	.187	1”	-	Clamp	**FG332415421**	Price	**FG33011740**	Price
APIP 203-3H	.031	.197	.574	.187	1”	.203	Lock Pin	**FG332414818**	Price	**FG33011750**	Price
APIP 213-3	.062	.206	.574	.187	1”	.203	Lock Pin	**FG332486709**	Price	**FG33011500**	Price
APIP 265-3	.031	.260	.633	.187	1”	.250	Lock Pin	**FG332486711**	Price	**FG33011530**	Price
APIP 281-3	.031	.277	.645	.187	1”	.250	Lock Pin	**FG332486712**	Price	**FG312490553**	Price
APIP 300-3	.031	.295	.662	.187	1”	.250	Lock Pin	**FG332486713**	Price	**FG332417184**	Price
APIP 329-3	.031	.325	.683	.187	1”	.250	Lock Pin	**FG332486714**	Price	**FG33011590**	Price
APIP 355-3	.031	.350	.712	.187	1”	.250	Lock Pin	**FG332474076**	Price	**FG332418176**	Price
APIP 420-3	.031	.415	.772	.187	1”	.250	Lock Pin	**FG332486716**	Price	**FG332416682**	Price

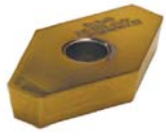
TOOLFLO Member IMC Group — Ring Grooving

API 46
APIP Heavy Duty

New!







Description	Radius (in.)	W	P	Thickness (in.)	Length L (in.)	Hole Dia. D (in.)	Style	Grade AC6 Order No.	Grade AC6 Price	Grade GP6 Order No.	Grade GP6 Price
APIP 284-3	.062	.278	.713	.187	1-3/16	.250	Lock Pin	**FG332486718**	Price	**FG33011570**	Price
APIP 162-4NL	.031	.156	.733	.250	1-1/2	.250	Lock Pin	**FG332474031**	Price	**FG332418116**	Price
APIP 162-4 (Counter sink hole)	.031	.156	.733	.250	1-1/2	.250	Screw	**FG332413808**	Price	**FG33011720**	Price
APIP 203-4NL	.031	.197	.773	.250	1-1/2	.250	Lock Pin	**FG332486720**	Price	**FG33011480**	Price
APIP 203-4 (Counter sink hole)	.031	.197	.773	.250	1-1/2	.250	Screw	**FG33011450**	Price	**FG33011470**	Price
APIP 213-4 (Counter sink hole)	.062	.206	.773	.250	1-1/2	.250	Screw	**FG332474054**	Price	**FG332416874**	Price
APIP 265-4 (Counter sink hole)	.031	.260	.773	.250	1-3/8	.250	Screw	**FG332474060**	Price	**FG33011540**	Price
APIP 281-4 (Counter sink hole)	.031	.277	.773	.250	1-5/16	.250	Screw	**FG332416738**	Price	**FG33011560**	Price
APIP 300-4 (Counter sink hole)	.031	.295	.773	.250	1-9/32	.250	Screw	**FG332474066**	Price	**FG332474072**	Price
APIP 329-4	.031	.324	.773	.250	1-7/32	.250	Lock Pin	**FG332486721**	Price	**FG332419263**	Price
APIP 355-4	.031	.350	.773	.250	1-5/32	.250	Lock Pin	**FG332486722**	Price	**FG332419194**	Price
APIP 420-4	.031	.415	.773	.250	1”	.250	Lock Pin	**FG332416575**	Price	**FG312495615**	Price

RAPIDKUT Top Notch Grooving Inserts

Ground Positive Rake



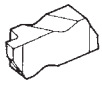
- Grade 3125 is a PVD coated insert suitable for all cutting materials in finishing to general machining applications

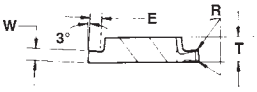
Maxx Edge Model No.	Industry Standard	Radius (in.)	Width (in.)	Depth of Cut (in.)	ME3125	
					Order No.	Price
MEGP2047R	NG 2	.0035	.047	.050	**ME1620004**	Price
MEGP2047L	NG 2	.0035	.047	.050	**ME1620005**	Price
MEGP2062R	NG 2	.0075	.062	.110	**ME1620006**	Price
MEGP2062L	NG 2	.0075	.062	.110	**ME1620007**	Price
MEGP2094R	NG 2	.0075	.094	.110	**ME1620008**	Price
MEGP2094L	NG 2	.0075	.094	.110	**ME1620009**	Price
MEGP2125R	NG 2	.0075	.125	.110	**ME1620010**	Price
MEGP2125L	NG 2	.0075	.125	.110	**ME1620011**	Price
MEGP3047R	NG 3	.0075	.047	.075	**ME1620012**	Price
MEGP3047L	NG 3	.0075	.047	.075	**ME1620013**	Price
MEGP3062R	NG 3	.0075	.062	.094	**ME1620014**	Price
MEGP3062L	NG 3	.0075	.062	.094	**ME1620015**	Price
MEGP3094R	NG 3	.0075	.094	.150	**ME1620016**	Price
MEGP3094L	NG 3	.0075	.094	.150	**ME1620017**	Price
MEGP3125R	NG 3	.0075	.125	.150	**ME1620018**	Price
MEGP3125L	NG 3	.0075	.125	.150	**ME1620019**	Price

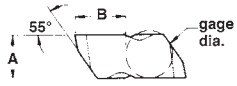
PROCUT PCG/NG Top Lock Grooving Inserts

Neutral
Precision
R = Right hand
L = Left hand
Interchangeable with standard industry NG-K but without chipform.









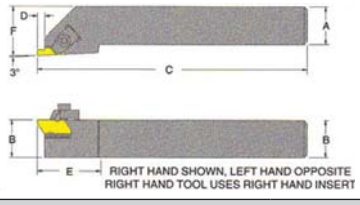
Carbide Grades
PC2 - (C2) General purpose for cast iron and non-ferrous metals (exotics)
PC5 - (C5) Steel cutting
PC300 - (C5 coated) TiN-TiC-TiN steel cutting at higher speeds with greater lubricity

Width W (in.)	Radius R (in.)	B (in.)	T (in.)	E (in.)	A (in.)	Gage Dia. (in.)	ProCut	Industry Standard	PC5		PC300	
									Order No.	Price	Order No.	Price
.041	.002/.005	.2700	.150	.0500	.219	.1875	PCG2041R	NG2041R	-	-	**FF4530080**	Price
.047	.005/.010	.4050	.195	.0750	.344	.3750	PCG3047R	NG3047R	-	-	**FF4530200**	Price
.062	.005/.010	.2700	.150	.1100	.219	.1875	PCG2062L	NG2062L	**FF4550150**	Price	**FF4530150**	Price
.062	.005/.010	.4050	.195	.0940	.344	.3750	PCG3062L	NG3062L	-	-	**FF4530230**	Price
.062	.005/.010	.4050	.195	.0940	.344	.3750	PCG3062R	NG3062R	**FF4550220**	Price	**FF4530220**	Price
.072	.005/.010	.4050	.195	.0940	.344	.3750	PCG3072L	NG3072L	**FF4550250**	Price	**FF4530250**	Price
.072	.005/.010	.4050	.195	.0940	.344	.3750	PCG3072R	NG3072R	-	-	**FF4530240**	Price
.088	.005/.010	.4050	.195	.0940	.344	.3750	PCG3088R	NG3088R	-	-	**FF4530280**	Price
.094	.005/.010	.2700	.150	.1100	.219	.1875	PCG2094L	NG2094L	-	-	**FF4530170**	Price
.094	.005/.010	.4050	.195	.1500	.344	.3750	PCG3094R	NG3094R	**FF4550300**	Price	**FF4530300**	Price
.105	.005/.010	.4050	.195	.1500	.344	.3750	PCG3105L	NG3105L	-	-	**FF4530350**	Price
.105	.005/.010	.4050	.195	.1500	.344	.3750	PCG3105R	NG3105R	-	-	**FF4530340**	Price
.125	.005/.010	.4050	.195	.1500	.344	.3750	PCG3125L	NG3125L	**FF4550410**	Price	**FF4530410**	Price
.125	.005/.010	.6360	.255	.1500	.453	.3750	PCG4125R	NG4125R	-	-	**FF4530520**	Price
.159	.020/.025	.6360	.255	.2500	.453	.3750	PCG4189L	NG4189L	-	-	**FF4530550**	Price
.185	.020/.025	.4050	.195	.1500	.344	.3750	PCG3185R	NG3185R	**FF4550480**	Price	**FF4530480**	Price
.250	.020/.025	.6360	.255	.2500	.453	.3750	PCG4250R	NG4250R	-	-	**FF4530600**	Price
.062	.005/.010	.2700	.150	.1100	.219	.1875	PCG2062R	NG2062R	-	-	**FF4530140**	Price
.094	.005/.010	.4050	.195	.1500	.344	.3750	PCG3094L	NG3094L	-	-	**FF4530310**	Price
.125	.005/.010	.4050	.195	.1500	.344	.3750	PCG3125R	NG3125R	**FF4550400**	Price	**FF4530400**	Price
.189	.020/.025	.4050	.195	.1500	.344	.3750	PCG3189L	NG3189L	-	-	**FF4530510**	Price

See index for tool holders, blocks, and blades.

RAPIDKUT Top Notch Holders

- External toolholder
- For use with all Top Notch and Top Lock style threading and grooving inserts



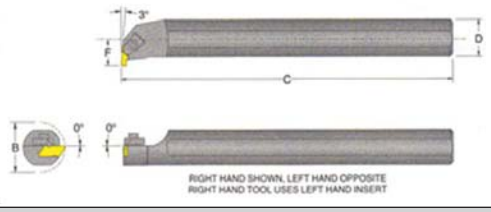


R/L - Left										
Model No.	A x B (in.)	C OAL (in.)	D	E (in.)	F (in.)	Uses Inserts	Clamp	Clamp Screw	Order No.	Price
NSL 10-2B	5/8 x 5/8	4.500	.138	.750	.875	NT 2, NG 2, NR 2	CM75	S310	**ME2210100**	Price
NSL 12-2B	3/4 x 3/4	4.500	.138	.750	1.000	NT 2, NG 2, NR 2	CM75	S310	**ME2210110**	Price
NSL 12-3B	3/4 x 3/4	4.500	.210	1.250	1.000	NT 3, NG 3, NR 3	CM73	S412	**ME2210130**	Price
NSL 16-2D	1 x 1	6.000	.138	.750	1.250	NT 2, NG 2, NR 2	CM75	S310	**ME2210120**	Price
NSL 16-3D	1 x 1	6.000	.210	1.250	1.250	NT 3, NG 3, NR 3	CM73	S412	**ME2210140**	Price
NSL 16-4D	1 x 1	6.000	.294	1.380	1.250	NT 4, NG 4, NR 4	CM73	S412	**ME2210160**	Price
NSL 20-3D	1-1/4 x 1-1/4	6.000	.210	1.250	1.500	NT 3, NG 3, NR 3	CM73	S412	**ME2210150**	Price
NSL 20-4D	1-1/4 x 1-1/4	6.000	.294	1.380	1.500	NT 4, NG 4, NR 4	CM73	S412	**ME2210170**	Price

R/L - Right										
Model No.	A x B (in.)	C OAL (in.)	D	E (in.)	F (in.)	Uses Inserts	Clamp	Clamp Screw	Order No.	Price
NSR 10-2B	5/8 x 5/8	4.500	.138	.750	.875	NT 2, NG 2, NR 2	CM74	S310	**ME2210180**	Price
NSR 12-2B	3/4 x 3/4	4.500	.138	.750	1.000	NT 2, NG 2, NR 2	CM74	S310	**ME2210190**	Price
NSR 12-3B	3/4 x 3/4	4.500	.210	1.250	1.000	NT 3, NG 3, NR 3	CM72	S412	**ME2210210**	Price
NSR 16-2D	1 x 1	6.000	.138	.750	1.250	NT 2, NG 2, NR 2	CM74	S310	**ME2210200**	Price
NSR 16-3D	1 x 1	6.000	.210	1.250	1.250	NT 3, NG 3, NR 3	CM72	S412	**ME2210220**	Price
NSR 16-4D	1 x 1	6.000	.294	1.380	1.250	NT 4, NG 4, NR 4	CM72	S412	**ME2210240**	Price
NSR 20-3D	1-1/4 x 1-1/4	6.000	.210	1.250	1.500	NT 3, NG 3, NR 3	CM72	S412	**ME2210230**	Price
NSR 20-4D	1-1/4 x 1-1/4	6.000	.294	1.380	1.500	NT 4, NG 4, NR 4	CM72	S412	**ME2210250**	Price

RAPIDKUT® Top Notch Boring Bars

- Internal toolholder
- For use with all Top Notch and Top Lock style threading and grooving inserts





R/L - Left									
Model No.	D Shank Dia. (in.)	C OAL (in.)	B (in.)	F (in.)	Uses Insert	Clamp	Clamp Screw	Order No.	Price
S08 NEL 2	1/2	10.000	.7500	.455	NT 2, NG 2, NR 2	CM74	S310	**ME2210260**	Price
S10 NEL 2	5/8	10.000	1.0000	.500	NT 2, NG 2, NR 2	CM74	S310	**ME2210270**	Price
S12 NEL 2	3/4	10.000	1.1250	.562	NT 2, NG 2, NR 2	CM74	S310	**ME2210280**	Price
S16 NEL 3	1	12.000	1.3750	.688	NT 3, NG 3, NR 3	CM72	S412	**ME2210290**	Price
S20 NEL 3	1-1/4	14.000	1.7500	.875	NT 3, NG 3, NR 3	CM72	S412	**ME2210300**	Price
S20 NEL 4	1-1/4	14.000	1.7500	.875	NT 4, NG 4, NR 4	CM72	S412	**ME2210310**	Price
S24 NEL 4	1-1/2	14.000	2.0000	1.000	NT 4, NG 4, NR 4	CM72	S412	**ME2210320**	Price

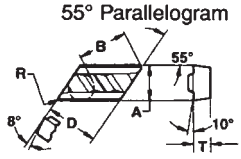
R/L - Right									
Model No.	D Shank Dia. (in.)	C OAL (in.)	B (in.)	F (in.)	Uses Insert	Clamp	Clamp Screw	Order No.	Price
S08 NER 2	1/2	10.000	.7500	.455	NT 2, NG 2, NR 2	CM75	S310	**ME2210330**	Price
S10 NER 2	5/8	10.000	1.0000	.500	NT 2, NG 2, NR 2	CM75	S310	**ME2210340**	Price
S12 NER 2	3/4	10.000	1.1250	.562	NT 2, NG 2, NR 2	CM75	S310	**ME2210350**	Price
S16 NER 3	1	12.000	1.3750	.688	NT 3, NG 3, NR 3	CM73	S412	**ME2210360**	Price
S20 NER 3	1-1/4	14.000	1.7500	.875	NT 3, NG 3, NR 3	CM73	S412	**ME2210370**	Price
S20 NER 4	1-1/4	14.000	1.7500	.875	NT 4, NG 4, NR 4	CM73	S412	**ME2210380**	Price
S24 NER 4	1-1/2	14.000	2.0000	1.000	NT 4, NG 4, NR 4	CM73	S412	**ME2210390**	Price

PROCUT Top Lock Profiling Inserts

PCP/NP

10° Positive
Precision ground





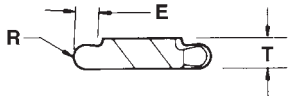


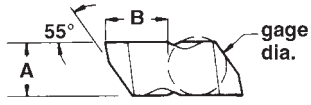
ProCut	Industry Standard	B (in.)	T (in.)	R (in.)	A (in.)	D (in.)	PC300 Order No.	PC300 Price
PCPL51	NPL51	.359	.125	.0156	.250	.375	**FF4530930**	Price
PCPR51	NPR51	.359	.125	.0156	.250	.375	**FF4530920**	Price
PCPR52	NPR52	.341	.125	.0312	.250	.375	**FF4530940**	Price

See index for toolholders

PROCUT PCR/NR Top Lock Grooving

Full radius
Neutral precision







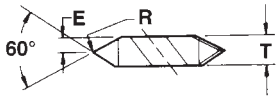
ProCut	Industry Standard	W (in.)	B (in.)	T (in.)	E (in.)	A (in.)	R (in.)	Gage Dia. (in.)	PC5 Order No.	PC5 Price	PC300 Order No.	PC300 Price
PCR3031L	NR3031L	.062	.4033	.195	.0940	.344	.031	.3750	-	-	**FF4530750**	Price
PCR3031R	NR3031R	.062	.4033	.195	.0940	.344	.031	.3750	**FF4550740**	Price	**FF4530740**	Price
PCR3047L	NR3047L	.094	.4025	.195	.1500	.344	.047	.3750	-	-	**FF4530770**	Price
PCR3047R	NR3047R	.094	.4025	.195	.0940	.344	.047	.3750	**FF4550760**	Price	**FF4530760**	Price
PCR3062R	NR3062R	.125	.4017	.195	.1500	.344	.062	.3750	**FF4550780**	Price	**FF4530780**	Price
PCR3078R	NR3078R	.156	.2600	.195	.1500	.344	.078	.3750	**FF4550800**	Price	**FF4530800**	Price
PCR3094R	NR3094R	.188	.4000	.195	.1500	.344	.094	.3750	-	-	**FF4530820**	Price

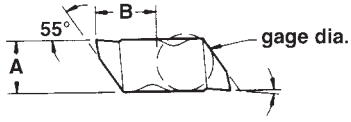
See index for toolholders

PROCUT PCTP/NTP

5° • Positive Precision

Positive cutting action for threading aluminum, exotics and difficult to machine material.







ProCut	Industry Standard	B Over Gage (in.)	T (in.)	E (in.)	A (in.)	R	Gage Dia. (in.)	PC2 Order No.	PC2 Price	PC5 Order No.	PC5 Price	PC300 Order No.	PC300 Price
PCTP2R	NTP2R	.2661	.150	.075	.219	.003/.005	3/16	-	-	**FF4550620**	Price	**FF4530620**	Price
PCTP3L	NTP3L	.3999	.195	.098	.344	.005/.008	3/8	-	-	**FF4550650**	Price	**FF4530650**	Price
PCTP3R	NTP3R	.3999	.195	.098	.344	.005/.008	3/8	**FF4510640**	Price	-	-	**FF4530640**	Price
PCTP4L	NTP4L	.6293	.255	.128	.453	.005/.008	3/8	-	-	-	-	**FF4530670**	Price
PCTP4R	NTP4R	.6293	.255	.128	.453	.005/.008	3/8	**FF4510660**	Price	-	-	**FF4530660**	Price

See index for toolholders

RAPIDKUT® TNMA/C On Edge Grooving Inserts

- Grade 3125 is a PVD coated insert suitable for all cutting materials in finishing to general machining applications
- TNMA has straight hole
- TNMC has countersunk hole
- R= Right hand
- L= Left hand



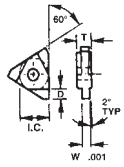
- TNMA						
					ME3125	
Industry Standard	Thickness (in.)	I.C. (in.)	Depth of Cut (in.)	Width (in.)	Order No.	Price
TNMA32NG.125	.127	3/8	.150	.125	**ME1620024**	Price
TNMA32NGL.062	.127	3/8	.150	.062	**ME1620020**	Price
TNMA32NGL.093	.127	3/8	.150	.093	**ME1620022**	Price
TNMA32NGR.062	.127	3/8	.150	.062	**ME1620021**	Price
TNMA32NGR.093	.127	3/8	.150	.093	**ME1620023**	Price
TNMA43NG.187	.189	1/2	.215	.187	**ME1620025**	Price
TNMA43NGL.125	.189	1/2	.215	.125	**ME1620026**	Price
TNMA43NGR.125	.189	1/2	.215	.125	**ME1620027**	Price

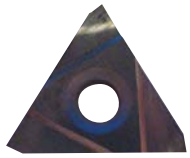
- TNMC						
					ME3125	
Industry Standard	Thickness (in.)	I.C. (in.)	Depth of Cut (in.)	Width (in.)	Order No.	Price
TNMC32NG.125	.127	3/8	.150	.125	**ME1620028**	Price
TNMC32NGL.062	.127	3/8	.150	.062	**ME1620029**	Price
TNMC32NGL.093	.127	3/8	.150	.093	**ME1620031**	Price
TNMC32NGR.062	.127	3/8	.150	.062	**ME1620030**	Price
TNMC32NGR.093	.127	3/8	.150	.093	**ME1620032**	Price
TNMC43NG.187	.189	1/2	.215	.187	**ME1620033**	Price
TNMC43NGL.125	.189	1/2	.215	.125	**ME1620034**	Price
TNMC43NGR.125	.189	1/2	.215	.125	**ME1620035**	Price
TNMC43NGR.156	.189	1/2	.215	.156	**ME1620036**	Price
TNMC54NG.187	.252	5/8	.275	.187	**ME1620037**	Price

PROCUT On Edge Grooving Inserts
TNMA/C-NG Grooving

TNMA has a straight hole
TNMC has a countersink hole

R = Right hand
L = Left hand





- TNMA										
					PC2		PC5		PC300	
Insert Style	I.C. (in.)	T (in.)	D (in.)	W (in.)	Order No.	Price	Order No.	Price	Order No.	Price
TNMA32NGL	3/8	.125	.1560	.093	-	-	-	-	**FF4630060**	Price
TNMA32NGR	3/8	.125	.1560	.062	-	-	-	-	**FF4630010**	Price
TNMA32NGR	3/8	.125	.1560	.125	-	-	**FF4650090**	Price	-	-
TNMA43NG	1/2	.187	.2340	.187	**FF4620210**	Price	**FF4650220**	Price	**FF4630220**	Price
TNMA43NGR	1/2	.187	.2340	.125	-	-	**FF4650130**	Price	**FF4630130**	Price

- TNMC										
					PC2		PC5		PC300	
Insert Style	I.C. (in.)	T (in.)	D (in.)	W (in.)	Order No.	Price	Order No.	Price	Order No.	Price
TNMC32NG	3/8	.125	.1560	.125	-	-	**FF4650110**	Price	**FF4630110**	Price
TNMC32NGL	3/8	.125	.1560	.062	-	-	**FF4650040**	Price	**FF4630040**	Price
TNMC32NGR	3/8	.125	.1560	.062	-	-	**FF4650030**	Price	**FF4630030**	Price
TNMC32NGR	3/8	.125	.1560	.093	-	-	**FF4650070**	Price	**FF4630070**	Price
TNMC43NG	1/2	.187	.2340	.187	**FF4620230**	Price	-	-	-	-
TNMC43NGL	1/2	.187	.2340	.125	-	-	-	-	**FF4630160**	Price
TNMC43NGR	1/2	.187	.2340	.125	-	-	**FF4650150**	Price	**FF4630150**	Price
TNMC54NGR	5/8	.250	.2960	.187	-	-	-	-	**FF4630270**	Price

See index for toolholders

RAPIDKUT® TPMA/C 10° Positive Rake Grooving Inserts

- Grade 3125 is a PVD coated insert suitable for all cutting materials in finishing to general machining applications
- TPMA has straight hole
- TPMC has countersunk hole
- R=Right hand
- L=Left hand

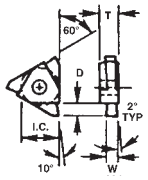


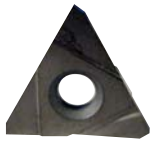
					ME3125	
Industry Standard	I.C. (in.)	Thickness (in.)	Depth of Cut (in.)	Width (in.)	Order No.	Price
TPMA32NGL.125	3/8	.127	.150	.125	**ME1620038**	Price
TPMA43NGR.062	1/2	.189	.156	.062	**ME1620040**	Price
TPMC43NGR.125	1/2	.189	.125	.125	**ME1620041**	Price

PROCUT TPMA/C-NG
10° Positive Rake, Grooving

TPMA has a straight hole
TPMC has a countersink hole

R = Right Hand
L = Left Hand





					PC5		PC300	
Insert Style	I.C. (in.)	T (in.)	D (in.)	W (in.)	Order No.	Price	Order No.	Price
TPMA32NGL	3/8	.125	.1560	.125	**FF4650620**	Price	**FF4630620**	Price
TPMC32NGR	3/8	.125	.1560	.062	**FF4650550**	Price	**FF4630550**	Price

Carbide Grades

PC2 - **(C2)** General purpose for cast iron and non-ferrous metals (exotics)

PC5 - **(C5)** Steel cutting

PC300 - **(C5 Coated)** TiN-TiC-TiN Steel cutting at higher speeds with greater lubricity

RAPIDKUT® Top Notch Threading Inserts

60° Threading • Ground Positive Rake



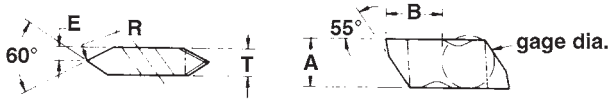
- Grade 3125 is a PVD coated insert suitable for all cutting materials in finishing to general machining applications

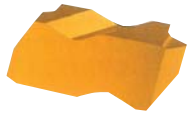
Maxx Edge Model No.	Thickness	Radius	IC	Width	ME3125	
					Order No.	Price
METP2R	.150	.0040	3/16	.075	**ME1620000**	Price
METP2L	.150	.0040	3/16	.075	**ME1620001**	Price
METP3R	.195	.0065	3/8	.098	**ME1620002**	Price
METP3L	.195	.0065	3/8	.098	**ME1620003**	Price

PROCUT Top Lock Threading

PCT/NT

Neutral precision
For general purpose threading





ProCut	Industry Standard	B (in.)	T (in.)	E (in.)	A (in.)	R	Gage Dia. (in.)	PC5		PC300	
								Order No.	Price	Order No.	Price
PCT2L	NT2L	.2661	.150	.075	.219	.003/.005	3/16	**FF4550010**	Price	**FF4530010**	Price
PCT3L	NT3L	.3999	.195	.098	.344	.005/.008	3/8	**FF4550030**	Price	**FF4530030**	Price
PCT3R	NT3R	.3999	.195	.098	.344	.005/.008	3/8	**FF4550020**	Price	**FF4530020**	Price
PCT4R	NT4R	.6293	.255	.128	.453	.005/.008	3/8	**-**	-	**FF4530040**	Price

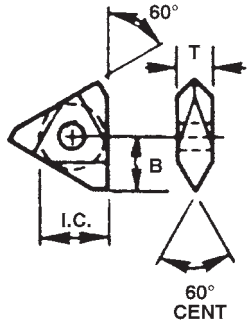
See index for toolholders

PROCUT On Edge Threading and Grooving

TNMA/C-NV 60° Vee Threading

TNMA has a straight hole
TNMC has a countersink hole



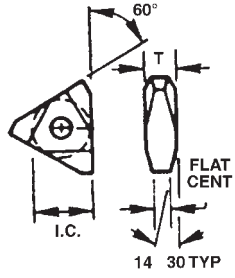


I.C. (in.)	B (in.)	T (in.)	Insert Style	PC2		PC5		PC300	
				Order No.	Price	Order No.	Price	Order No.	Price
3/8	.306	.125	TNMA32NV	**FF4621010**	Price	**FF4651010**	Price	**FF4631010**	Price
3/8	.306	.125	TNMC32NV	**FF4621020**	Price	**FF4651020**	Price	**FF4631020**	Price
1/2	.415	.187	TNMA43NV	**FF4621030**	Price	**FF4651030**	Price	**FF4631030**	Price
1/2	.415	.187	TNMC43NV	**FF4621040**	Price	**FF4651040**	Price	**FF4631040**	Price
5/8	.522	.250	TNMA54NV	**-**	-	**FF4651050**	Price	**FF4631050**	Price
5/8	.522	.250	TNMC54NV	**-**	-	**FF4651060**	Price	**FF4631060**	Price
3/4	.631	.375	TNMC66NV	**-**	-	**-**	-	**FF4631100**	Price

PROCUT TNMA/C-NT 29° Acme Threading

TNMA has a straight hole
TNMC has a countersink hole

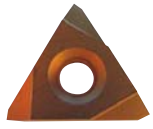


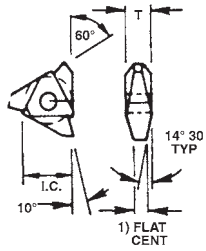


Insert Style	I.C. (in.)	T (in.)	Pitch	PC5		PC300	
				Order No.	Price	Order No.	Price
TNMC32NT	3/8	.125	6	**-**	-	**FF4631220**	Price
TNMC32NT	3/8	.125	8	**FF4651240**	Price	**FF4631240**	Price
TNMC43NT	1/2	.187	4	**-**	-	**FF4631300**	Price
TNMA43NT	1/2	.187	5	**FF4651310**	Price	**FF4631310**	Price
TNMC43NT	1/2	.187	6	**FF4651340**	Price	**FF4631340**	Price

PROCUT TPMA/C-NT 10° Positive Rake, 29° Acme Threading

TPMA has a straight hole
TPMC has a countersink hole



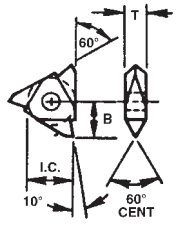


Insert Style	I.C. (in.)	T (in.)	Pitch	PC5		PC300	
				Order No.	Price	Order No.	Price
TPMC32NT	3/8	.125	10	**FF4651420**	Price	**FF4631420**	Price
TPMC43NT	1/2	.187	4	**FF4651460**	Price	**FF4631460**	Price

PROCUT TPMA/C-NV 10° Positive Rake, 60° Vee Threading

TPMA has a straight hole
TPMC has a countersink hole





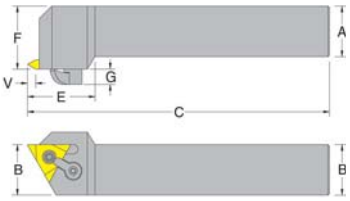
I.C. (in.)	B (in.)	T (in.)	Insert Style	PC2		PC5		PC300	
				Order No.	Price	Order No.	Price	Order No.	Price
3/8	.306	.125	TPMC32NV	**FF4621120**	Price	**FF4651120**	Price	**FF4631120**	Price
1/2	.415	.187	TPMC43NV	**FF4621140**	Price	**FF4651140**	Price	**FF4631140**	Price
5/8	.522	.250	TPMC54NV	**-**	-	**-**	-	**FF4631160**	Price

MTVO-A - On Edge Threading Toolholders

Style V

O.D. Threading and Shallow Grooving for Triangular TNMA Inserts

Right hand shown, Left hand opposite



Description	A & B (in.)	C (in.)	F	G	Max. Grv. Depth V	Gage Insert	Lock Pin	Clamp	Clamp Screw	Right	
										Order No.	Price
MTVOR08-3B-A	.500	4.50	.625	.250	.150	TNMA32_	NL33	CL6	XNS35	**FL4558126**	Price
MTVOR12-4B-A	.750	4.50	.875	.250	.230	TNMA43_	NL44	CL6	XNS36	**FL4558142**	Price
MTVOR16-3D-A	1.00	6.00	1.250	.250	.150	TNMA32_	NL33	CL6	XNS36	**FL4558138**	Price
MTVOR16-4D-A	1.00	6.00	1.250	.250	.230	TNMA43_	NL44	CL6	XNS36	**FL4558146**	Price
MTVOR20-4D-A	1.25	6.00	1.500	.250	.230	TNMA43_	NL44	CL6	XNS36	**FL4558150**	Price

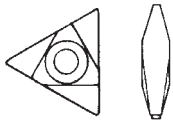
See pages B134-B138 for spare parts

STVO-A R/L Threading Toolholders

Style V

O.D. Threading and Shallow Grooving Triangle TNMC Inserts

Right hand shown, left hand opposite

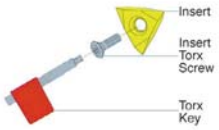


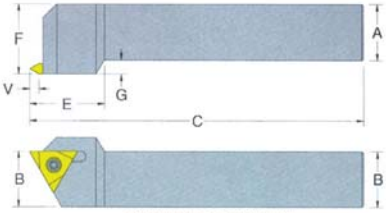
ACME



60° THREADING

GROOVING





RIGHT HAND SHOWN
LEFT HAND OPPOSITE

Right/Left Hand - Left										
Model No.	A & B (in.)	C (in.)	F	G	Max. Grv. Depth V (in.)	Gage Insert	Insert Screw	Torx Key	Order No.	Price
STVOL10-3B	.625	4.50	.750	.125	.150	TNMC32_	GTS1	T10	**FL4558075**	Price
STVOL12-3B	.750	4.50	.875	.125	.150	TNMC32_	GTS1	T10	**FL4558079**	Price
STVOL12-4B	.750	4.50	.875	.125	.230	TNMC43_	GTS2	T20	**FL4558087**	Price
STVOL16-3D	1.00	6.00	1.250	.250	.150	TNMC32_	GTS1	T10	**FL4558083**	Price
STVOL16-4D	1.00	6.00	1.250	.250	.230	TNMC43_	GTS2	T20	**FL4558091**	Price
STVOL16-5D	1.00	6.00	1.250	.250	.292	TNMC54_	GTS3	T20	**FL4558103**	Price
STVOL20-4D	1.25	6.00	1.500	.250	.230	TNMC43_	GTS2	T20	**FL4558095**	Price

Right/Left Hand - Right										
Model No.	A & B (in.)	C (in.)	F	G	Max. Grv. Depth V (in.)	Gage Insert	Insert Screw	Torx Key	Order No.	Price
STVOR 08-3A	.500	4.00	.625	.125	.150	TNMC32_	GTS1	T10	**FL4558070**	Price
STVOR 10-3B	.625	4.50	.750	.125	.150	TNMC32_	GTS1	T10	**FL4558074**	Price
STVOR 12-3B	.750	4.50	.875	.125	.150	TNMC32_	GTS1	T10	**FL4558078**	Price
STVOR 12-4B	.750	4.50	.875	.125	.230	TNMC43_	GTS2	T20	**FL4558086**	Price
STVOR 16-3D	1.00	6.00	1.250	.250	.150	TNMC32_	GTS1	T10	**FL4558082**	Price
STVOR 16-4D	1.00	6.00	1.250	.250	.230	TNMC43_	GTS2	T20	**FL4558090**	Price
STVOR 20-4D	1.25	6.00	1.500	.250	.230	TNMC43_	GTS2	T20	**FL4558094**	Price
STVOR16-5D	1.00	6.00	1.250	.250	.292	TNMC54_	GTS3	T20	**FL4558102**	Price
STVOR20-5D	1.25	6.00	1.500	.250	.292	TNMC54_	GTS3	T20	**FL4558106**	Price

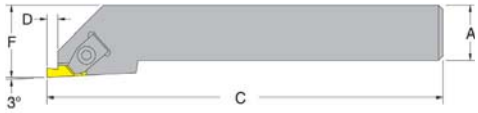
See pages B134-B138 for spare parts

NS - DORNOTCH Threading Toolholders

Style External

For Threading and Grooving DorNotch Inserts

Gage inserts - *for right hand tool; **for left hand tool
Right hand shown, left hand opposite





Right/Left Hand - Left									
Model No.	A & B (in.)	C (in.)	D (in.)	F	Gage Insert	Clamp	Clamp Screw	Order No.	Price
NSL12-2B	.750	4.50	.138	.188	**NG-2L	CM75	-	**FL4558783**	Price
NSL12-3B	.750	4.50	.210	1.000	*NG-3R, **NG-3L	CM73	S412	**FL4558795**	Price
NSL16-3D	1.00	6.00	.210	1.250	*NG-3R, **NG-3L	CM73	S412	**FL4558803**	Price
NSL16-4D	1.00	6.00	.294	1.250	*NG-4R, **NG-4L	CM73	S412	**FL4558815**	Price
NSL20-3D	1.25	6.00	.210	1.500	*NG-3R, **NG-3L	CM73	S412	**FL4558807**	Price

Right/Left Hand - Right									
Model No.	A & B (in.)	C (in.)	D (in.)	F	Gage Insert	Clamp	Clamp Screw	Order No.	Price
NSR 20-3D	1.25	6.00	.210	1.500	*NG-3R, **NG-3L	CM72	S412	**FL4558806**	Price
NSR12-2B	.750	4.50	.138	.188	*NG-2R	CM74	-	**FL4558782**	Price
NSR12-3B	.750	4.50	.210	1.000	*NG-3R, **NG-3L	CM72	S412	**FL4558794**	Price
NSR16-3D	1.00	6.00	.210	1.250	*NG-3R, **NG-3L	CM72	S412	**FL4558802**	Price
NSR16-4D	1.00	6.00	.294	1.250	*NG-4R, **NG-4L	CM72	S412	**FL4558814**	Price

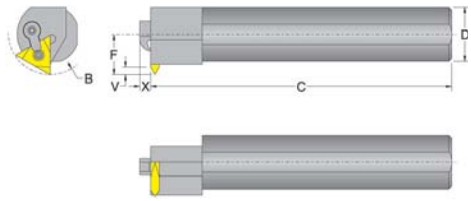
See pages B134-B138 for spare parts

S-MTHO-A - On Edge Threading Bars

Style H

I.D. Threading and Shallow Grooving for Triangular TNMA Inserts

Right hand shown, Left hand opposite



Right/Left Hand - Left										
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Max. Grv. Depth V	Gage Insert	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S16T-MTHOL-3-A	1.3880	12.0000	1.0000	.1200	TNMA32_	NL33	CL5	XNS36	**FL4558347**	Price
S20U-MTHOL-4-A	1.8120	14.0000	1.2500	.1900	TNMA43_	NL44	CL6	XNS37	**FL4558355**	Price
S24U-MTHOL-4-A	2.2500	14.0000	1.5000	.1900	TNMA43_	NL44	CL6	XNS37	**FL4558359**	Price
S32V-MTHOL-4-A	3.0000	16.0000	2.0000	.1900	TNMA43_	NL44	CL6	XNS37	**FL4558363**	Price
S32V-MTHOL-5-A	3.5000	16.0000	2.0000	.2500	TNMA54_	NL56	CL6	XNS37	**FL4558367**	Price
S40V-MTHOL-5-A	3.7500	16.0000	2.5000	.2500	TNMA54_	NL56	CL6	XNS37	**FL4558371**	Price

Right/Left Hand - Right										
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Max. Grv. Depth V	Gage Insert	Lock Pin	Clamp	Clamp Screw	Order No.	Price
S16T-MTHOR-3-A	1.3880	12.0000	1.0000	.1200	TNMA32_	NL33	CL5	XNS36	**FL4558346**	Price
S20U-MTHOR-4-A	1.8120	14.0000	1.2500	.1900	TNMA43_	NL44	CL6	XNS37	**FL4558354**	Price
S24U-MTHOR-4-A	2.2500	14.0000	1.5000	.1900	TNMA43_	NL44	CL6	XNS37	**FL4558358**	Price
S32V-MTHOR-4-A	3.0000	16.0000	2.0000	.1900	TNMA43_	NL44	CL6	XNS37	**FL4558362**	Price
S32V-MTHOR-5-A	3.5000	16.0000	2.0000	.2500	TNMA54_	NL56	CL6	XNS37	**FL4558366**	Price
S40V-MTHOR-5-A	3.7500	16.0000	2.5000	.2500	TNMA54_	NL56	CL6	XNS37	**FL4558370**	Price
S40V-MTHOR-66-A	4.0000	16.0000	2.5000	.3120	TNMA66_	NL66L	CL12	XNS59	**FL4558378**	Price

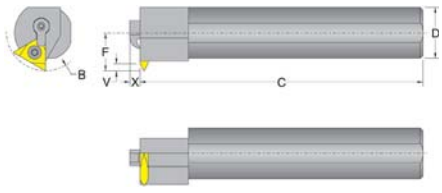
See pages B134-B138 for spare parts

S-MTHO-C - On Edge Threading Bars

Style H

I.D. Threading and Shallow Grooving for Triangular TNMC Inserts

Right hand shown, Left hand opposite



Right/Left Hand - Left											
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Max. Grv. Depth V	Gage Insert	Insert Screw	Torx Key	Clamp	Clamp Screw	Order No.	Price
S20U-MTHOL-4-C	1.8120	14.0000	1.2500	.1900	TNMC43_	GTS2	T20	CL7	XNS36	**FL4558309**	Price
S24U-MTHOL-4-C	2.2500	14.0000	1.5000	.1900	TNMC43_	GTS2	T20	CL7	XNS36	**FL4558313**	Price
S32V-MTHOL-4-C	3.0000	16.0000	2.0000	.1900	TNMC43_	GTS2	T20	CL7	XNS36	**FL4558317**	Price
S32V-MTHOL-5-C	3.5000	16.0000	2.0000	.2500	TNMC54_	GTS3	T20	CL20	XNS47	**FL4558321**	Price

Right/Left Hand - Right											
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Max. Grv. Depth V	Gage Insert	Insert Screw	Torx Key	Clamp	Clamp Screw	Order No.	Price
S16T-MTHOR-3-C	1.3880	12.0000	1.0000	.1200	TNMC32_	GTS1	T10	CL19	XNS36	**FL4558300**	Price
S20U-MTHOR-3-C	1.6560	14.0000	1.2500	.1200	TNMC32_	GTS1	T10	CL19	XNS36	**FL4558304**	Price
S20U-MTHOR-4-C	1.8120	14.0000	1.2500	.1900	TNMC43_	GTS2	T20	CL7	XNS36	**FL4558308**	Price
S24U-MTHOR-4-C	2.2500	14.0000	1.5000	.1900	TNMC43_	GTS2	T20	CL7	XNS36	**FL4558312**	Price
S32V-MTHOR-4-C	3.0000	16.0000	2.0000	.1900	TNMC43_	GTS2	T20	CL7	XNS36	**FL4558316**	Price
S32V-MTHOR-5C	3.5000	16.0000	2.0000	.2500	TNMC54_	GTS3	T20	CL20	XNS47	**FL4558320**	Price

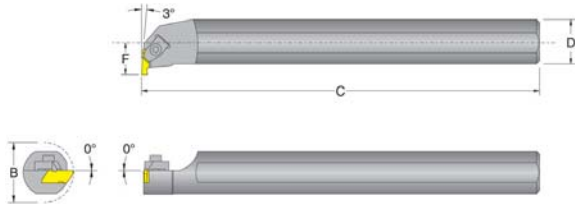
See pages B134-B138 for spare parts

S-NE-DORNOTCH Threading Bars

Style Internal

For Threading and Grooving DorNotch Inserts

Gage insert - *for left hand tool; **for right hand tool
Right hand shown, left hand opposite
Right hand tool uses left hand insert



Right/Left Hand - Left									
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Gage Line F (in.)	Gage Insert	Clamp	Clamp Screw	Order No.	Price
S10S-NEL-2	1.0000	10.0000	.6250	.500	*NG-2L, **NG-2R	CM75	S310	**FL4558971**	Price
S16T-NEL-3	1.3750	12.0000	1.0000	.688	*NG-3L, **NG-3R	CM73	S412	**FL4558979**	Price
S20U-NEL-3	1.7500	14.0000	1.2500	.875	*NG-3L, **NG-3R	CM73	S412	**FL4558983**	Price
S24U-NEL-3	2.0000	14.0000	1.5000	1.000	*NG-3L, **NG-3R	CM73	S412	**FL4558987**	Price

Right/Left Hand - Right									
Model No.	Min. Bore (in.)	OAL C (in.)	Shank Dia. D (in.)	Gage Line F (in.)	Gage Insert	Clamp	Clamp Screw	Order No.	Price
S10S-NER-2	1.0000	10.0000	.6250	.500	*NG-2L, **NG-2R	CM74	S310	**FL4558970**	Price
S16T-NER-3	1.3750	12.0000	1.0000	.688	*NG-3L, **NG-3R	CM72	S412	**FL4558978**	Price
S20U-NER-3	1.7500	14.0000	1.2500	.875	*NG-3L, **NG-3R	CM72	S412	**FL4558982**	Price
S24U-NER-3	2.0000	14.0000	1.5000	1.000	*NG-3L, **NG-3R	CM72	S412	**FL4558986**	Price

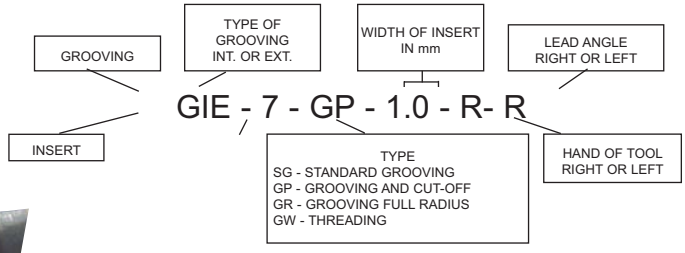
See pages B134-B138 for spare parts

NIKCOLE MINI-SYSTEMS™ Grooving and Cut-Off Inserts (GIE-7-GP)

Nikcole Mini-Systems™ is the only system that provides two cutting edges in one insert in extremely narrow widths. This system also features a full range of toolholders with minimum hardware...only one positive locking insert screw and the unique insert pocket design assures a repeatable cutting edge location.
Standard inserts are stocked in widths from .019" to .078" in uncoated and coated carbide grades.
The Mini-System™ is a unique method of producing narrow grooves and providing an economical means of cut-off...all in a wide variety of materials.
For grooving and cut-off under .078" width.

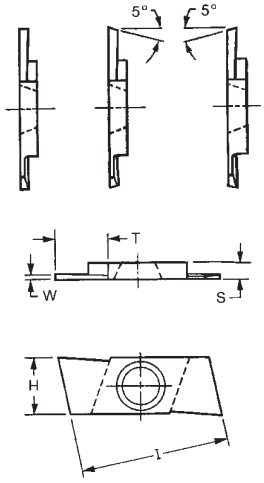
Carbide Grade Application
C2 - Uncoated grade recommended for cast iron and non-ferrous materials.
C5-PV - Coated grade recommended for machining steels, cutting solid bars to the center and for interrupted cuts.
C6-PV - Coated grade recommended for machining steels, cutting off and grooving at higher speeds.

For Grooving and Cut-Off Under .078″ Width



Lead angle, neutral, left hand, right hand
Right hand shown
T = .235"
H = .275"
S = .078"
I = .669"
Tolerance width +.0009" - .0000"





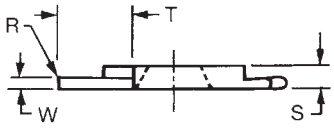
Item	Width W (in.)	C2		C5-PV Coated		C6-PV Coated	
		Order No.	Price	Order No.	Price	Order No.	Price
GIE-7-GP-1.0 L-L	.039	**FG4040020**	Price	**FG4040030**	Price	**FG4040040**	Price
GIE-7-GP-1.0 L-N	.039	**FG4040050**	Price	**FG4040060**	Price	**FG4040070**	Price
GIE-7-GP-1.0 L-R	.039	**FG4040080**	Price	**FG4040090**	Price	**FG4040100**	Price
GIE-7-GP-1.0 R-L	.039	**FG4040110**	Price	**FG4040120**	Price	**FG4040130**	Price
GIE-7-GP-1.0 R-N	.039	**FG4040000**	Price	**FG4040140**	Price	**FG4040150**	Price
GIE-7-GP-1.0 R-R	.039	**FG4040160**	Price	**FG4040170**	Price	**FG4040180**	Price
GIE-7-GP-1.5 L-L	.059	**FG4040190**	Price	**FG4040200**	Price	**FG4040210**	Price
GIE-7-GP-1.5 L-N	.059	**FG4040220**	Price	**FG4040230**	Price	**FG4040240**	Price
GIE-7-GP-1.5 L-R	.059	**FG4040250**	Price	**FG4040260**	Price	**FG4040270**	Price
GIE-7-GP-1.5 R-L	.059	**FG4040280**	Price	**FG4040290**	Price	**FG4040300**	Price
GIE-7-GP-1.5 R-N	.059	**FG4040310**	Price	**FG4040320**	Price	**FG4040330**	Price
GIE-7-GP-1.5 R-R	.059	**FG4040340**	Price	**FG4040350**	Price	**FG4040360**	Price
GIE-7-GP-2.0 L-L	.078	**FG4040370**	Price	**FG4040380**	Price	**FG4040390**	Price
GIE-7-GP-2.0 L-N	.078	**FG4040400**	Price	**FG4040410**	Price	**FG4040420**	Price
GIE-7-GP-2.0 L-R	.078	**FG4040430**	Price	**FG4040440**	Price	**FG4040450**	Price
GIE-7-GP-2.0 R-L	.078	**FG4040460**	Price	**FG4040470**	Price	**FG4040480**	Price
GIE-7-GP-2.0 R-N	.078	**FG4040490**	Price	**FG4040500**	Price	**FG4040510**	Price
GIE-7-GP-2.0 R-R	.078	**FG4040520**	Price	**FG4040530**	Price	**FG4040540**	Price

Right hand tools can only be used with left hand toolholders.
Left hand inserts can only be used with right hand toolholders.

NIKCOLE MINI-SYSTEMS™ Full Radius Grooving Inserts (GIE-7-GR)

T = .235"
H = .275"
S = .078" Right hand shown
I = .669" Tolerance width +.0009" -.0000"





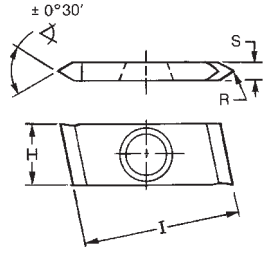
Item	Width W (in.)	Radius R (in.)	C2		C5-PV Coated		C6-PV Coated	
			Order No.	Price	Order No.	Price	Order No.	Price
GIE-7-GR-1.0 L	.039	.019	**FG4040630**	Price	**FG4040640**	Price	**FG4040550**	Price
GIE-7-GR-1.0 R	.039	.019	**FG4040560**	Price	**FG4040570**	Price	**FG4040580**	Price
GIE-7-GR-1.5 L	.059	.029	**FG4040650**	Price	**FG4040660**	Price	**FG4040590**	Price
GIE-7-GR-1.5 R	.059	.029	**FG4040600**	Price	**FG4040610**	Price	**FG4040620**	Price
GIE-7-GR-2.0 L	.078	.039	**FG4040710**	Price	**FG4040010**	Price	**FG4040670**	Price
GIE-7-GR-2.0 R	.078	.039	**FG4040680**	Price	**FG4040690**	Price	**FG4040700**	Price

Right hand tools can only be used with left hand toolholders.
Left hand inserts can only be used with right hand toolholders.

NIKCOLE MINI-SYSTEMS™ Full Threading Inserts (GIE-7-GW)

R = .004 / .005"
H = .275"
S = .078"
I = .669"
Right hand shown



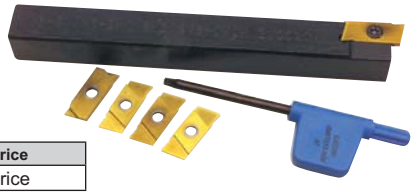


Item	Nose Angle	C2		C5-PV Coated		C6-PV Coated	
		Order No.	Price	Order No.	Price	Order No.	Price
GIE-7-GW-55 L	55°	**FG4040720**	Price	**FG4040730**	Price	**FG4040740**	Price
GIE-7-GW-55 R	55°	**FG4040750**	Price	**FG4040760**	Price	**FG4040770**	Price
GIE-7-GW-60 L	60°	**FG4040790**	Price	**FG4040800**	Price	**FG4040810**	Price
GIE-7-GW-60 R	60°	**FG4040820**	Price	**FG4040830**	Price	**FG4040780**	Price

Right hand tools can only be used with left hand toolholders.
Left hand inserts can only be used with right hand toolholders.

NIKCOLE MINI-SYSTEMS™ Carbide Indexable Grooving & Cut Off Kit

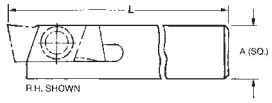
Set Includes
- (1) Toolholder (1/2" sq. shank, 4-1/2" long)
- (5) Carbide inserts, grade C6-PV (TiN Coated) in widths, .035", .043", .051", .063", .073
- (1) Torx screw & Torx key
- (1) Fitted case



Order No.	Price
FG4041340	Price

NIKCOLE MINI-SYSTEMS™ Mini-System Toolholders - Square Shank

External holders will accept all mini-system inserts of the same hand
Left hand shown





A Square (in.)	L (in.)	Left			Right		
		Item	Order No.	Price	Item	Order No.	Price
.375	4-1/2	THE738L	**FG4041400**	Price	THE738R	**FG4041410**	Price
.500	4-1/2	THE712L	**FG4041360**	Price	THE712R	**FG4041370**	Price
.625	5	THE758L	**FG4041420**	Price	THE758R	**FG4041430**	Price
1.000	4-3/4	-	-	-	THE710R	**FG4041500**	Price
16mm	125mm	THE1616L	**FG4041380**	Price	THE1616R	**FG4041390**	Price

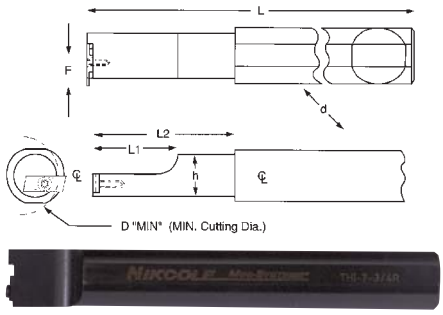
NIKCOLE MINI-SYSTEMS™ Grooving Inserts / For Standard Grooves (GIE-7-SG)
Two Cutting Edges in One Insert for Grooving & Cut-Off Under .078" Width



Item	Width W (in.)	T (in.)	Width	C2		C5-PV Coated		C6-PV Coated	
				Order No.	Price	Order No.	Price	Order No.	Price
GIE-7-SG-0.5 L	.019	.100	.019	**FG4040840**	Price	**FG4040850**	Price	**FG4040860**	Price
GIE-7-SG-0.5 R	.019	.100	.019	**FG4040870**	Price	**FG4040880**	Price	**FG4040890**	Price
GIE-7-SG-0.7 L	.027	.100	.027	**FG4040900**	Price	**FG4040910**	Price	**FG4040920**	Price
GIE-7-SG-0.7 R	.027	.100	.027	**FG4040930**	Price	**FG4040940**	Price	**FG4040950**	Price
GIE-7-SG-0.8 L	.031	.100	.031	**FG4040960**	Price	**FG4040980**	Price	**FG4040990**	Price
GIE-7-SG-0.8 R	.031	.100	.031	**FG4041000**	Price	**FG4041010**	Price	**FG4041020**	Price
GIE-7-SG-0.9 L	.035	.100	.035	**FG4041030**	Price	**FG4041040**	Price	**FG4041050**	Price
GIE-7-SG-0.9 R	.035	.100	.035	**FG4041060**	Price	**FG4041070**	Price	**FG4041080**	Price
GIE-7-SG-1.1 L	.043	.235	.043	**FG4041320**	Price	**FG4041130**	Price	**FG4041120**	Price
GIE-7-SG-1.1 R	.043	.235	.043	**FG4041090**	Price	**FG4041100**	Price	**FG4041110**	Price
GIE-7-SG-1.3 L	.051	.235	.057	**FG4041140**	Price	**FG4041150**	Price	**FG4041160**	Price
GIE-7-SG-1.3 R	.051	.235	.057	**FG4041170**	Price	**FG4041180**	Price	**FG4041190**	Price
GIE-7-SG-1.6 L	.063	.235	.063	**FG4041200**	Price	**FG4041210**	Price	**FG4041220**	Price
GIE-7-SG-1.6 R	.063	.235	.063	**FG4041230**	Price	**FG4041240**	Price	**FG4041250**	Price
GIE-7-SG-1.85 L	.073	.235	.073	**FG4041260**	Price	**FG4041310**	Price	**FG4041270**	Price
GIE-7-SG-1.85 R	.073	.235	.073	**FG4041280**	Price	**FG4041290**	Price	**FG4041300**	Price

Right hand inserts can only be used with left hand toolholders.
Left hand inserts can only be used with right hand toolholders.
R = .004/.005

NIKCOLE MINI-SYSTEMS™ Internal Toolholders



Holder Designation	d +.003 -.003 (in.)	h (in.)	L (in.)	L1 (in.)	L2 (in.)	F (in.)	D=Min. (in.)	Order No.	Price
THI-7-.75L	.750	.7500	5.5000	1.0000	2.000	.525	1.5000	**FG4041520**	Price
THI-7-.75R	.750	.7500	5.5000	1.0000	2.000	.525	1.5000	**FG4041510**	Price
THI-7-1.00L	1.000	.7500	6.0000	1.2500	2.500	.525	1.5000	**FG4041540**	Price
THI-7-1.00R	1.000	.7500	6.0000	1.2500	2.500	.525	1.5000	**FG4041530**	Price
THI-7-1.25L	1.250	.7500	6.0000	1.2500	2.500	.575	1.5000	**FG4041560**	Price
THI-7-1.25R	1.250	.7500	6.0000	1.2500	2.500	.575	1.5000	**FG4041550**	Price

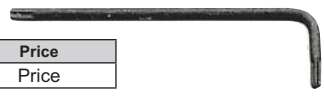
Right hand inserts can only be used with left hand toolholders.
Left hand inserts can only be used with right hand toolholders.

Replacement Torx Screw



Model Number	Order No.	Price
M3 x 8.0	**FG4041350**	Price

Replacement Torx Wrench



Model Number	Order No.	Price
T8	**FG4041480**	Price

Carbide Grade Application

C2 - Uncoated grade recommended for cast iron and non-ferrous materials.

C5-PV - Coated grade recommended for machining steels, cutting solid bars to the center and for interrupted cuts.

C6-PV - Coated grade recommended for machining steels, cutting off and grooving at higher speeds.

Carmex Precision Tools Ltd. Threading Sets

- A versatile solution for those who cut a variety of thread types in limited quantity and do not want to sacrifice thread quality

UN external kit FF59CTKE60 includes:
Inserts: 16 ER A60 P25C, 16 ER G60 P25C, 16 ER AG60 P25C, 16ER 8 UN P25C, 16 ER 12 UN P25C, 16 ER 14 UN P25C, 16 ER 16 UN P25C, 16 ER 18 UN P25C, 16 ER 20 UN P25C, 16 ER 24 UN P25C
3/4" Toolholder: SER 0750 K16

UN internal kit FF59CTKI60 includes:
Inserts: 16 IR A60 P25C, 16 IR G60 P25C, 16 IR AG60 P25C, 16 IR 8 UN P25C, 16 IR 12 UN P25C, 16 IR 14 UN P25C, 16 14 16 UN P25C, 16 IR 18 UN P25C, 16 IR 20 UN P25C, 16 IR 24 UN P25C
3/4' Toolholder SIR 0750 K16



Type	Order No.	Price
External	**FF59CTKE60**	Price
Internal	**FF59CTKI60**	Price

Carmex Precision Tools Ltd. Miniature Threading Kit

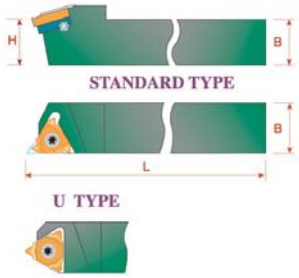
- An amazing combination of 06 (3/16") ultra miniature and 08 (5/32") miniature threading insert
- This product bites into a range considered until today a tap range
- Coated BXC low speed grade

Type	No. of Insrets	Insert	Grade	Boring Bars	Order No.	Price
Miniature	10	08IR A60	BXC	SIR 0265 K08	**FF59UM80**	Price



Carmex Precision Tools Ltd. External Toolholders

mm	IC	B=H Inch	L (in.)	Order No.	Price
16	3/8	.38 x .38	2.50	**FF59SER0375D16**	Price
16	3/8	.50 x .50	3.25	**FF59SER0500F16**	Price
16	3/8	.63 x .63	4.00	**FF59SER0625H16**	Price
16	3/8	.75 x .75	5.00	**FF59SER0750K16**	Price
16	3/8	1.00 x 1.00	6.00	**FF59SER1000M16**	Price
16	3/8	1.25 x 1.25	7.00	**FF59SER1250P16**	Price



Carmex Precision Tools Ltd. Internal Toolholders

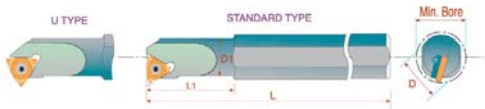
Right/Left Hand - Left								
mm	IC	D (in.)	D1 (in.)	Min. Bore Dia.	L (in.)	L1 (in.)	Order No.	Price
16	3/8	.62	.50	.64	6.00	1.25	**FF59SIL0500M16†**	Price
16	3/8	.75	.75	.90	7.00	-	**FF59SIL0750P16**	Price

Right/Left Hand - Right								
mm	IC	D (in.)	D1 (in.)	Min. Bore Dia.	L (in.)	L1 (in.)	Order No.	Price
6	5/32	.50	.20	.24	4.00	.47	**FF59SIR0205H06†**	Price
8	3/16	.62	.26	.31	5.00	.70	**FF59SIR0265K08†**	Price
11	1/4	.38	.38	.47	4.00	-	**FF59SIR0375H11†**	Price
11	1/4	.62	.38	.47	5.00	1.00	**FF59SIR0375K11†**	Price
11	1/4	.62	.50	.58	5.50	1.25	**FF59SIR0500L11†**	Price
16	3/8	.62	.50	.64	6.00	1.25	**FF59SIR0500M16†**	Price
16	3/8	.75	.62	.75	7.00	1.57	**FF59SIR0625P16†**	Price
16	3/8	.75	.75	.90	7.00	-	**FF59SIR0750P16**	Price
16	3/8	1.00	1.00	1.16	8.00	-	**FF59SIR1000R16**	Price
16	3/8	1.25	1.25	1.40	10.00	-	**FF59SIR1250S16**	Price
16	3/8	1.50	1.50	1.65	12.00	-	**FF59SIR1500T16**	Price

† Supplied without anvil



Right Hand Shown

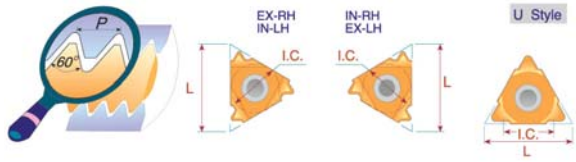


Spare Parts

mm Insert Size	Insert Screw		Torx Key		Anvil Screw		ER & IL Anvils		IR & EL Anvils	
	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
06	**FF59S6**	Price	**FF59K6**	Price	**-**	-	**-**	-	**-**	-
08	**FF59S8**	Price	**FF59K8**	Price	**-**	-	**-**	-	**-**	-
11	**FF59S11**	Price	**FF59K11**	Price	**-**	-	**-**	-	**-**	-
16	**FF59S16**	Price	**FF59K16**	Price	**FF59A16**	Price	**FF59AE16**	Price	**FF59AI16**	Price
22	**FF59S22**	Price	**FF59K22**	Price	**FF59A22**	Price	**FF59AE22**	Price	**FF59AI22**	Price
22U	**-**	-	**-**	-	**-**	-	**FF59AE22U**	Price	**FF59AI22U**	Price
27	**FF59S27**	Price	**FF59K27**	Price	**FF59A27**	Price	**FF59AE27**	Price	**FF59AI27**	Price
27U	**-**	-	**-**	-	**-**	-	**FF59AE27U**	Price	**FF59AI27U**	Price

Carmex Precision Tools Ltd. UN (Unified) Full Profile Inserts

- To form a quality complete thread profile including the crest
- For every thread standard and pitch a separate insert is required
- Inserts are supplied in packages of 10 inserts
- Price listed is per piece

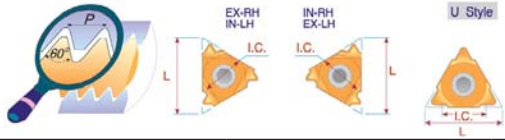


Grade - BXC Style - Miniature					
Length (mm)	IC (in.)	Pitch Range TPI	Insert Style	Order No.	Price
8	3/16	14	08IR14UN	**FF58014604**	Price
8	3/16	16	08IR16UN	**FF58078956**	Price
8	3/16	18	08IR18UN	**FF58035102**	Price
8	3/16	20	08IR20UN	**FF58072214**	Price
8	3/16	24	08IR24UN	**FF58101715**	Price
8	3/16	28	08IR28UN	**FF58065194**	Price
8	3/16	32	08IR32UN	**FF58091255**	Price

Grade - BXC Style - Ultra Miniature					
Length (mm)	IC (in.)	Pitch Range TPI	Insert Style	Order No.	Price
6	5/32	18	06IR18UN	**FF58059977**	Price
6	5/32	20	06IR20UN	**FF58045751**	Price
6	5/32	24	06IR24UN	**FF58092942**	Price
6	5/32	28	06IR28UN	**FF58019142**	Price
6	5/32	32	06IR32UN	**FF58025194**	Price

Carmex Precision Tools Ltd. Partial Profile 60° Inserts

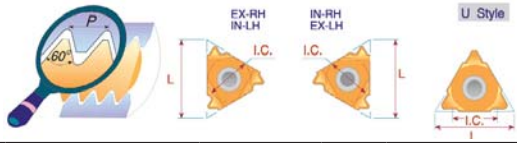
- The V (partial) profile insert cuts without “topping” the OD of the thread
- The same insert can be used for a range of different thread pitches
- Inserts are supplied in packages of 10 inserts (price listed is per piece)



Length (mm)	IC (in.)	TPI External / Internal	Insert Style	BMA		BXC		MXC	
				Order No.	Price	Order No.	Price	Order No.	Price
6	5/32	48-20	06IRA60	-	-	**FF58043927**	Price	-	-
8	3/16	48-16	08IRA60	-	-	**FF58018905**	Price	-	-
11	1/4	48-16	11IRA60	**FF58120003**	Price	-	-	**FF58128385**	Price
16	3/8	14-8	16ERG60	**FF58120009**	Price	-	-	**FF58133762**	Price
16	3/8	14-8	16IRG60	**FF58120011**	Price	-	-	**FF58133765**	Price
16	3/8	48-8	16ERAG60	**FF58120013**	Price	-	-	**FF58128405**	Price
16	3/8	48-8	16IRAG60	**FF58120015**	Price	-	-	**FF58133763**	Price
16	3/8	48-16	16ERA60	**FF58120005**	Price	-	-	**FF58128389**	Price
16	3/8	48-16	16IRA60	**FF58120007**	Price	-	-	**FF58133764**	Price

Carmex Precision Tools Ltd. UN (Unified) Full Profile Inserts

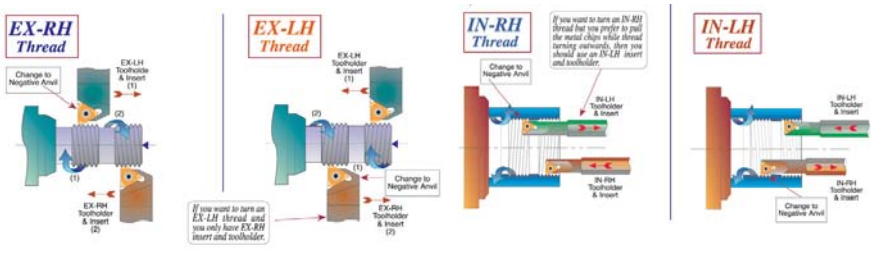
- To form a quality complete thread profile including the crest
- For every thread standard and pitch a separate insert is required
- Inserts are supplied in packages of 10 inserts (price listed is per piece)



Length (mm)	IC (in.)	TPI External / Internal	Insert Style	BMA		MXC	
				Order No.	Price	Order No.	Price
11	1/4	11	11IR11UN	**FF5812077**	Price	**FF58128685**	Price
11	1/4	12	11IR12UN	**FF5812075**	Price	**FF58128667**	Price
11	1/4	13	11IR13UN	**FF5812073**	Price	**FF58128659**	Price
11	1/4	14	11IR14UN	**FF5812071**	Price	**FF58128655**	Price
11	1/4	16	11IR16UN	**FF5812067**	Price	**FF58128647**	Price
11	1/4	18	11IR18UN	**FF5812063**	Price	**FF58128639**	Price
11	1/4	20	11IR20UN	**FF5812059**	Price	**FF58128631**	Price
11	1/4	24	11IR24UN	**FF5812055**	Price	**FF58128581**	Price
11	1/4	28	11IR28UN	**FF5812047**	Price	**FF58128545**	Price
11	1/4	32	11IR32UN	**FF5812043**	Price	**FF58128528**	Price
11	1/4	40	11IR40UN	**FF5812035**	Price	**FF58128508**	Price
16	3/8	8	16ER8UN	**FF58120143**	Price	**FF58128844**	Price
16	3/8	8	16IR8UN	**FF58120145**	Price	**FF58128848**	Price
16	3/8	9	16ER9UN	**FF58120139**	Price	**FF58128836**	Price
16	3/8	9	16IR9UN	**FF58120141**	Price	**FF58128840**	Price
16	3/8	10	16ER10UN	**FF58120135**	Price	**FF58128828**	Price
16	3/8	10	16IR10UN	**FF58120137**	Price	**FF58128832**	Price
16	3/8	11	16ER11UN	**FF58120131**	Price	**FF58128820**	Price
16	3/8	11	16IR11UN	**FF58120133**	Price	**FF58128824**	Price
16	3/8	12	16ER12UN	**FF58120123**	Price	**FF58128794**	Price

Length (mm)	IC (in.)	TPI External / Internal	Insert Style	BMA		MXC	
				Order No.	Price	Order No.	Price
16	3/8	12	16IR12UN	**FF58120125**	Price	**FF58128798**	Price
16	3/8	13	16ER13UN	**FF58120119**	Price	**FF58128785**	Price
16	3/8	13	16IR13UN	**FF58120121**	Price	**FF58128789**	Price
16	3/8	14	16ER14UN	**FF58120115**	Price	**FF58128777**	Price
16	3/8	14	16IR14UN	**FF58120117**	Price	**FF58128781**	Price
16	3/8	16	16IR16UN	**FF58120113**	Price	**FF58128772**	Price
16	3/8	16	16ER16UN	**FF58120111**	Price	**FF58128768**	Price
16	3/8	18	16ER18UN	**FF58120107**	Price	**FF58128760**	Price
16	3/8	18	16IR18UN	**FF58120109**	Price	**FF58128764**	Price
16	3/8	20	16ER20UN	**FF58120103**	Price	**FF58128752**	Price
16	3/8	20	16IR20UN	**FF58120105**	Price	**FF58128756**	Price
16	3/8	24	16ER24UN	**FF58120099**	Price	**FF58128744**	Price
16	3/8	24	16IR24UN	**FF58120101**	Price	**FF58128748**	Price
16	3/8	28	16ER28UN	**FF58120091**	Price	**FF58128728**	Price
16	3/8	28	16IR28UN	**FF58120093**	Price	**FF58128732**	Price
16	3/8	32	16ER32UN	**FF58120087**	Price	**FF58128720**	Price
16	3/8	32	16IR32UN	**FF58120089**	Price	**FF58128724**	Price
16	3/8	40	16ER40UN	**FF58120079**	Price	**FF58128694**	Price
16	3/8	40	16IR40UN	**FF58120081**	Price	**FF58128708**	Price

Turning Thread Methods



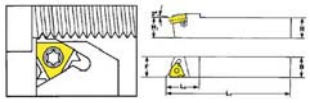
Insert Grade Selection

BMA (C-2 TiAlN)	PVD TiAlN coated sub-micrograin grade for stainless steels and exotic materials at medium to high cutting speeds.
BXC	PVD TiN coated grade for applications that require Super Low cutting speeds (such as very small diameters in which even high rotational speed generates only a low cutting speed).
MXC (K10-K20 P10-P25)	PVD TiN coated micrograin for steel, hard alloys, stainless steel and cast iron.

VARGUS USA External Toolholder

ISO 9002

- Prefix N = no anvil
- Prefix A = supplied with anvil
- Right hand shown



Insert Size I.C. (in.)	H= H1=B (in.)	F (in.)	L1 (in.)	L2 (in.)	Order No.	Price
1/4	.31 x .31	.43	5.37	.69	**FF65NL0312RH**	Price
3/8	.37 x .37	.63	2.45	.76	**FF65AL383RH**	Price
3/8	.37 x .37	.63	2.45	.76	**FF65AL383LH**	Price
3/8	.5 x .5	.63	3.25	.87	**FF65AL0503RH**	Price
3/8	.5 x .5	.63	3.25	.87	**FF65AL0503LH**	Price
3/8	.63 x .63	.63	5.00	1.20	**FF65AL06253RH**	Price
3/8	.63 x .63	.63	5.00	1.20	**FF65AL06253LH**	Price
3/8	.75 x .75	.75	5.00	1.20	**FF65AL0753RH**	Price
3/8	.75 x .75	.75	5.00	1.20	**FF65AL0753LH**	Price
3/8	1 x 1	1.00	6.00	1.20	**FF65AL1003RH**	Price
3/8	1 x 1	1.00	6.00	1.20	**FF65AL1003LH**	Price
3/8	1.25 x 1.25	1.25	7.00	1.18	**FF65AL1253RH**	Price
3/8	1.25 x 1.25	1.25	7.00	1.18	**FF65AL1253LH**	Price
1/2	1 x 1	1.00	6.00	1.42	**FF65AL1004RH**	Price
1/2	1 x 1	1.00	6.00	1.42	**FF65AL1004LH**	Price
1/2	1.25 x 1.25	1.25	7.00	1.42	**FF65AL1254RH**	Price
1/2	1.25 x 1.25	1.25	7.00	1.42	**FF65AL1254LH**	Price
1/2	1.5 x 1.5	1.50	8.00	1.42	**FF65AL1504RH**	Price
1/2	1.5 x 1.5	1.50	8.00	1.42	**FF65AL1504LH**	Price
5/8	1.25 x 1.25	1.25	7.00	1.47	**FF65AL1255RH**	Price
5/8	1.25 x 1.25	1.25	7.00	1.47	**FF65AL1255LH**	Price
5/8	1.5 x 1.5	1.50	8.00	1.57	**FF65AL1505RH**	Price

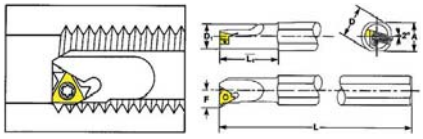
VARGUS USA Internal Boring Bar

ISO 9002

Coolant Thru • Right Hand

- Left hand available
- Supplied with 1-1/2° helix-angle - to obtain other angles see Vardex catalog
- Prefix N = no anvil used
- Prefix A = supplied with anvil





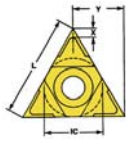
Insert Size I.C. (in.)	A (in.)	L (in.)	L1 (in.)	D (in.)	D1 (in.)	F (in.)	Min. Dia. of Thread	Right	
								Order No.	Price
1/4	.67	7.00	1.00	.75	.375	.28	.50	**FF65NVRC03752RH**	Price
1/4	.67	7.00	1.25	.75	.50	.34	.65	**FF65NVRC0502RH**	Price
3/8	.67	7.00	1.50	.75	.625	.46	.80	**FF65NVRC06253RH**	Price
3/8	1.12	10.00	2.50	1.25	1.25	.77	1.45	**FF65AVRC1253RH**	Price
5/8	1.12	10.00	2.50	1.25	1.25	.88	1.65	**FF65AVRC1255RH**	Price
3/8	.67	7.00	2.00	.75	.75	.51	.90	**FF65AVRC0753RH**	Price
3/8	1.12	10.00	2.50	1.25	1.00	.65	1.20	**FF65AVRC1003RH**	Price
1/2	.67	7.00	2.00	.75	.75	.59	1.00	**FF65NVRC0754RH**	Price
1/2	1.12	10.00	2.50	1.25	1.25	.85	1.50	**FF65AVRC1254RH**	Price
1/2	1.12	10.00	2.50	1.25	1.00	.71	1.25	**FF65AVRC1004RH**	Price

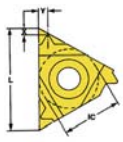
VARGUS USA 60° Partial Profile Threading Inserts

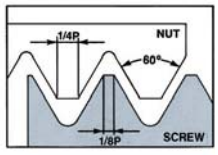
ISO 9002

- The V (partial) profile inserts cut without "topping" the OD of the thread
- The same insert can be used for a range of different thread pitches
- Stocked in 60° thread angle and are supplied in boxes of 10, with two Allen screws and one key (price listed is per insert)
- Made for right hand (RH) and left hand (LH), for internal (IN) and eternal (EX) threading

Style
ER - External right hand
EL - External left hand
IR - Internal right hand
IL - Internal left hand







Internal/External - External							
				Grade - VKX		Grade - VTX	
I.C. (in.)	Pitch (mm)	TPI	Style	Order No.	Price	Order No.	Price
1/4	.50 - 1.5	48-16	ER	**FF672ERA60VKX**	Price	**FF672ERA60VTX**	Price
3/8	.50 - 3.0	14-8	EL	**FF673ELG60VKX**	Price	-	-
3/8	.50 - 3.0	48-8	ER	**FF673ERAG60VKX**	Price	**FF673ERAG60VTX**	Price
3/8	1.75 - 3.0	48-8	EL	**FF673ELAG60VKX**	Price	-	-
3/8	.50 - 1.5	48-16	ER	**FF673ERA60VKX**	Price	-	-
3/8	.50 - 1.5	48-16	ER	**FF673ERG60VKX**	Price		
3/8	.50 - 1.5	8-14	ER	**-**	-	**FF6750993**	Price
3/8	.50 - 1.5	48-16	EL	**FF673ELA60VKX**	Price	**FF6754230**	Price
1/2	3.5 - 5.0	7-5	ER	**FF674ERN60VKX**	Price	-	-
1/2	3.5 - 5.0	7-5	EL	**FF674ELN60VKX**	Price	-	-
5/8	5.5 - 6	4.5-4	ER	**FF665ERQ60VKX**	Price	-	-

Internal/External - Internal							
				Grade - VKX		Grade - VTX	
I.C. (in.)	Pitch (mm)	TPI	Style	Order No.	Price	Order No.	Price
1/4	.50 - 1.5	48-16	IR	**FF672IRA60VKX**	Price	**FF6750272**	Price
1/4	.50 - 1.5	48-16	IL	**FF672ILA60VKX**	Price	-	-
3/8	1.75 - 3.0	14-8	IR	**FF673IRG60VKX**	Price	**FF6752216**	Price
3/8	1.75 - 3.0	14-8	IL	**FF673ILA60VKX**	Price	**FF6751973**	Price
3/8	1.75 - 3.0	14-8	IL	**FF673ILG60VKX**	Price	-	-
3/8	.50 - 3.0	48-8	IR	**FF673IRAG60VKX**	Price	**FF673IRAG60VTX**	Price
3/8	.50 - 3.0	48-8	IL	**FF673ILAG60VKX**	Price	**FF6753217**	Price
3/8	.50 - 1.5	48-16	IR	**FF673IRA60VKX**	Price	**FF6752195**	Price
1/2	3.5 - 5.0	7-5	IR	**FF674IRN60VKX**	Price	**FF6758722**	Price
1/2	3.5 - 5.0	7-5	IL	**FF674ILN60VKX**	Price	-	-
5/8	5.5 - 6	4.5-4	IR	**FF665IRQ60VKX**	Price	**FF665IRQ60VTX**	Price
5/8	5.5 - 6	4.5-4	IL	**FF605ILQ60VKX**	Price	-	-

See index for tool holders

NOTE: *Price shown is per insert*

VARGUS USA 60° Full-Profile Threading Inserts

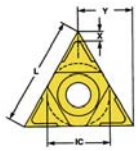
ISO 9002

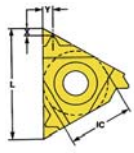
American UN External or Internal Threading — Right Hand

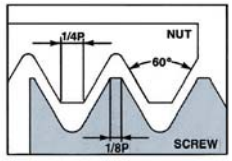


- The "Full-Profile" inserts will form the complete thread-profile, including the crest - for every thread pitch a separate insert is required
- Inserts are supplied in boxes of 10, with two Allen screws and one key; 5/8 IC supplied in boxes of 5 (price listed is per insert)

Style
E - External
I - Internal







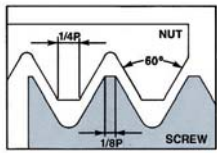
Internal/External - External						
I.C. (in.)	Pitch	Style	VKX		VTX	
			Order No.	Price	Order No.	Price
3/8	8	E	**FF673ER8UNVKX**	Price	**FF6751924**	Price
3/8	9	E	**FF673ER9UNVKX**	Price	**FF6754236**	Price
3/8	10	E	**FF673ER10UNVKX**	Price	**-**	-
3/8	11	E	**FF673ER11UNVKX**	Price	**-**	-
3/8	11.5	E	**FF673ER115UNVKX**	Price	**FF6753533**	Price
3/8	12	E	**FF673ER12UNVKX**	Price	**FF6751291**	Price
3/8	13	E	**FF673ER13UNVKX**	Price	**FF6752889**	Price
3/8	14	E	**FF673ER14UNVKX**	Price	**FF6751383**	Price
3/8	16	E	**FF673ER16UNVKX**	Price	**FF6751451**	Price
3/8	18	E	**FF673ER18UNVKX**	Price	**-**	-
3/8	20	E	**FF673ER20UNVKX**	Price	**FF6751591**	Price
3/8	27	E	**FF673ER27UNVKX**	Price	**-**	-
3/8	24	E	**FF673ER24UNVKX**	Price	**-**	-
3/8	28	E	**-**	-	**FF6751697**	Price
3/8	32	E	**-**	-	**FF6751746**	Price
3/8	40	E	**FF673ER40UNVKX**	Price	**FF6753669**	Price
3/8	44	E	**FF673ER44UNVKX**	Price	**-**	-
5/8	4	E	**FF665ER4UNVKX**	Price	**FF6658983**	Price
5/8	4.5	E	**FF665ER45UNVKX**	Price	**FF6658988**	Price

Internal/External - Internal						
I.C. (in.)	Pitch	Style	VKX		VTX	
			Order No.	Price	Order No.	Price
3/8	8	I	**FF673IR8UNVKX**	Price	**FF6752853**	Price
3/8	9	I	**FF673IR9UNVKX**	Price	**-**	-
3/8	10	I	**FF673IR10UNVKX**	Price	**-**	-
3/8	11	I	**FF673IR11UNVKX**	Price	**-**	-
3/8	11.5	I	**FF673IR115UNVKX**	Price	**FF6753534**	Price
3/8	12	I	**FF673IR12UNVKX**	Price	**FF6752421**	Price
3/8	13	I	**FF673IR13UNVKX**	Price	**FF6754242**	Price
3/8	14	I	**FF673IR14UNVKX**	Price	**-**	-
3/8	16	I	**FF673IR16UNVKX**	Price	**FF6752556**	Price
3/8	18	I	**FF673IR18UNVKX**	Price	**-**	-
3/8	20	I	**FF673IR20UNVKX**	Price	**-**	-
3/8	24	I	**FF673IR24UNVKX**	Price	**-**	-
3/8	28	I	**FF673IR28UNVKX**	Price	**-**	-
3/8	32	I	**FF673IR32UNVKX**	Price	**-**	-
3/8	40	I	**FF673IR40UNVKX**	Price	**-**	-
5/8	4	I	**FF665IR4UNVKX**	Price	**FF6659491**	Price
5/8	4.5	I	**FF665IR45UNVKX**	Price	**FF665IR45UNVTX**	Price

VARGUS USA Style J Full-Profile Threading Inserts

ISO 9002

UNJ External or Internal Threading — Right Hand

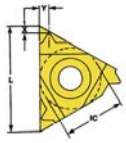


- "Full-profile" inserts will form the complete thread-profile, including the crest - for every thread pitch a separate insert is required
- Inserts are supplied in boxes of 10, with two Allen screws and one key (price shown is per insert)

Style
E - External
I - Internal







Internal/External - External				
I.C. (in.)	Pitch	Style	VKX	
			Order No.	Price
1/4	14	E	**FF672ER14UNJVKX**	Price
1/4	16	E	**FF672ER16UNJVKX**	Price
1/4	24	E	**FF672ER24UNJVKX**	Price
1/4	28	E	**FF672ER28UNJVKX**	Price
1/4	32	E	**FF672ER32UNJVKX**	Price
3/8	12	E	**FF673ER12UNJVKX**	Price
3/8	13	E	**FF673ER13UNJVKX**	Price
3/8	14	E	**FF673ER14UNJVKX**	Price
3/8	16	E	**FF673ER16UNJVKX**	Price
3/8	18	E	**FF673ER18UNJVKX**	Price
3/8	20	E	**FF673ER20UNJVKX**	Price
3/8	24	E	**FF673ER24UNJVKX**	Price
3/8	28	E	**FF673ER28UNJVKX**	Price
3/8	32	E	**FF673ER32UNJVKX**	Price
3/8	44	E	**FF673ER44UNJVKX**	Price
5/8	4	E	**FF665ER4UNJVKX**	Price

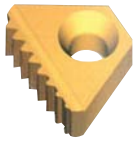
Internal/External - Internal				
I.C. (in.)	Pitch	Style	VKX	
			Order No.	Price
1/4	14	I	**FF672IR14UNJVKX**	Price
1/4	16	I	**FF672IR16UNJVKX**	Price
1/4	18	I	**FF672IR18UNJVKX**	Price
1/4	20	I	**FF672IR20UNJVKX**	Price
1/4	24	I	**FF672IR24UNJVKX**	Price
1/4	28	I	**FF672IR28UNJVKX**	Price
3/8	8	I	**FF673IR8UNJVKX**	Price
3/8	9	I	**FF673IR9UNJVKX**	Price
3/8	10	I	**FF673IR10UNJVKX**	Price
3/8	11	I	**FF673IR11UNJVKX**	Price
3/8	12	I	**FF673IR12UNJVKX**	Price
3/8	13	I	**FF673IR13UNJVKX**	Price
3/8	14	I	**FF673IR14UNJVKX**	Price
3/8	16	I	**FF673IR16UNJVKX**	Price
3/8	18	I	**FF673IR18UNJVKX**	Price
3/8	20	I	**FF673IR20UNJVKX**	Price
3/8	28	I	**FF673IR28UNJVKX**	Price
3/8	36	I	**FF673IR36UNJVKX**	Price
3/8	40	I	**FF673IR40UNJVKX**	Price
3/8	44	I	**FF673IR44UNJVKX**	Price
3/8	48	I	**FF673IR48UNJVKX**	Price

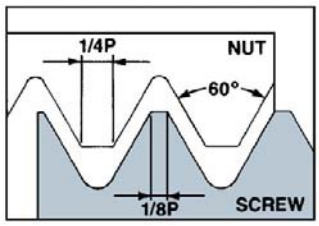
See Index for Tool Holders

VARGUS USA For CNC Machining Centers and Milling Machines

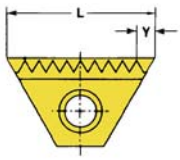
ISO 9001

American UN









- Work for making a thread on a non-rotable bulky part
- Higher machine speeds
- Multi-tooth type inserts
- Less downtime and tooling changes
- Cost saving tooling system less expensive than high speed steel taps and dies
- Less machine power required
- Better thread surface finish yields better sealing and engagement
- No undercut is necessary due to CNC control accuracy
- Carbide inserts for a wide variety of workpiece materials

Internal/External - External

Insert Size I.C. (in.)	L (in.)	Pitch TPI	Y (in.)	VK2		VKX		VTX	
				Order No.	Price	Order No.	Price	Order No.	Price
1/4	.43	16	.06	-	-	FF662E16UNTMVKX	Price	FF6664132	Price
1/4	.43	18	.05	FF662E18UNTMVK2	Price	FF662E18UNTMVKX	Price	-	-
1/4	.43	20	.05	-	-	FF662E20UNTMVKX	Price	-	-
1/4	.43	24	.05	-	-	FF662E24UNTMVKX	Price	-	-
1/4	.43	28	.04	-	-	FF662E28UNTMVKX	Price	-	-
1/4	.43	32	.03	FF662E32UNTMVK2	Price	-	-	-	-
3/8	.65	12	.07	FF663E12UNTMVK2	Price	FF663E12UNTMVKX	Price	FF6664387	Price
3/8	.65	13	.10	FF663E13UNTMVK2	Price	FF663E13UNTMVKX	Price	-	-
3/8	.65	14	.07	FF663E14UNTMVK2	Price	FF663E14UNTMVKX	Price	-	-
3/8	.65	16	.07	FF663E16UNTMVK2	Price	FF663E16UNTMVKX	Price	-	-
3/8	.65	18	.07	FF663E18UNTMVK2	Price	FF663E18UNTMVKX	Price	-	-
3/8	.65	20	.07	FF663E20UNTMVK2	Price	FF663E20UNTMVKX	Price	-	-
3/8	.65	24	.05	FF663E24UNTMVK2	Price	FF663E24UNTMVKX	Price	-	-
3/8	.65	28	.05	FF663E28UNTMVK2	Price	FF663E28UNTMVKX	Price	-	-
5/8	1.08	6	.21	-	-	FF665E6UNTMVKX	Price	-	-
5/8	1.08	8	.16	FF665E8UNTMVK2	Price	FF665E8UNTMVKX	Price	-	-
5/8	1.08	9	.15	-	-	FF665E9UNTMVKX	Price	-	-
5/8	1.08	10	.14	FF665E10UNTMVK2	Price	FF665E10UNTMVKX	Price	-	-
5/8	1.08	11	.09	-	-	FF665E11UNTMVKX	Price	-	-
5/8	1.08	12	.08	FF665E12UNTMVK2	Price	FF665E12UNTMVKX	Price	-	-
5/8	1.08	13	.08	-	-	FF665E13UNTMVKX	Price	-	-
5/8	1.08	14	.08	FF665E14UNTMVK2	Price	FF665E14UNTMVKX	Price	-	-
5/8	1.08	16	.07	FF665E16UNTMVK2	Price	FF665E16UNTMVKX	Price	-	-
5/8	1.08	18	.07	FF665E18UNTMVK2	Price	-	-	-	-
5/8	1.08	20	.07	-	-	FF665E20UNTMVKX	Price	-	-
5/8	1.08	24	.06	FF665E24UNTMVK2	Price	FF665E24UNTMVKX	Price	-	-

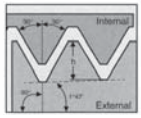
Internal/External - Internal

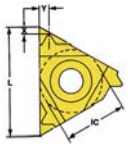
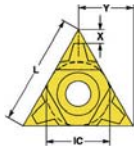
Insert Size I.C. (in.)	L (in.)	Pitch TPI	Y (in.)	VK2		VKX		VTX	
				Order No.	Price	Order No.	Price	Order No.	Price
1/4	.43	16	.06	FF662I16UNTMVK2	Price	FF662I16UNTMVKX	Price	-	-
1/4	.43	18	.05	FF662I18UNTMVK2	Price	FF662I18UNTMVKX	Price	-	-
1/4	.43	20	.04	FF662I20UNTMVK2	Price	FF662I20UNTMVKX	Price	FF6664905	Price
1/4	.43	24	.05	-	-	FF662I24UNTMVKX	Price	FF6664205	Price
1/4	.43	28	.04	-	-	FF662I28UNTMVKX	Price	-	-
1/4	.43	32	.03	FF662I32UNTMVK2	Price	-	-	-	-
3/8	.65	12	.07	FF663I12UNTMVK2	Price	FF663I12UNTMVKX	Price	FF6664475	Price
3/8	.65	13	.10	FF663I13UNTMVK2	Price	FF663I13UNTMVKX	Price	-	-
3/8	.65	14	.07	FF663I14UNTMVK2	Price	-	-	FF6664486	Price
3/8	.65	16	.07	FF663I16UNTMVK2	Price	FF663I16UNTMVKX	Price	FF6664493	Price
3/8	.65	18	.07	FF663I18UNTMVK2	Price	FF663I18UNTMVKX	Price	FF6664500	Price
3/8	.65	20	.07	FF663I20UNTMVK2	Price	FF663I20UNTMVKX	Price	FF663I20UNTMVTX	Price
3/8	.65	24	.05	-	-	FF663I24UNTMVKX	Price	FF6664519	Price
3/8	.65	28	.05	FF663I28UNTMVK2	Price	FF663I28UNTMVKX	Price	-	-
3/8	.65	32	.04	-	-	FF663I32UNTMVKX	Price	FF6664891	Price
5/8	1.08	6	.13	FF665I6UNTMVK2	Price	FF665I6UNTMVKX	Price	-	-
5/8	1.08	7	.11	-	-	FF665I7UNTMVKX	Price	-	-
5/8	1.08	8	.16	FF665I8UNTMVK2	Price	FF665I8UNTMVKX	Price	-	-
5/8	1.08	9	.15	FF665I9UNTMVK2	Price	-	-	FF6664747	Price
5/8	1.08	10	.09	FF665I10UNTMVK2	Price	FF665I10UNTMVKX	Price	-	-
5/8	1.08	11	.09	-	-	FF665I11UNTMVKX	Price	-	-
5/8	1.08	12	.08	FF665I12UNTMVK2	Price	FF665I12UNTMVKX	Price	FF6664686	Price
5/8	1.08	14	.08	FF665I14UNTMVK2	Price	FF665I14UNTMVKX	Price	-	-
5/8	1.08	16	.07	-	-	FF665I16UNTMVKX	Price	FF6664698	Price
5/8	1.08	18	.07	FF665I18UNTMVK2	Price	FF665I18UNTMVKX	Price	-	-
5/8	1.08	20	.07	FF665I20UNTMVK2	Price	FF665I20UNTMVKX	Price	-	-
5/8	1.08	24	.06	FF665I24UNTMVK2	Price	-	-	-	-

VARGUS USA American NPT Internal and External Threading

ISO 9002

Style: E = External I = Internal
Grade VK2-RH, V30-RH = Uncoated
Grade VSX-RH (VTX), VKX-RH = Coated

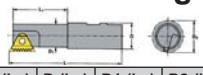



Internal/External - External				
			VKX Coated	
I.C. (in.)	Pitch TPI	Insert Style	Order No.	Price
1/4	14	2ER14NPT	**FF67117124**	Price
3/8	8	3ER8NPT	**FF67118225**	Price
3/8	11.5	3ER11.5NPT	**FF67117188**	Price
3/8	14	3ER14NPT	**FF67117194**	Price
3/8	18	3ER18NPT	**FF67205962**	Price
3/8	27	3ER27NPT	**FF67119639**	Price

Internal/External - Internal				
			VKX Coated	
I.C. (in.)	Pitch TPI	Insert Style	Order No.	Price
1/4	14	2IR14NPT	**FF67117147**	Price
1/4	27	2IR27NPT	**FF67117163**	Price
3/8	8	3IR8NPT	**FF67117253**	Price
3/8	11.5	3IR11.5NPT	**FF67116418**	Price
3/8	14	3IR14NPT	**FF67117243**	Price
3/8	18	3IR18NPT	**FF67205967**	Price
3/8	27	3IR27NPT	**FF67117246**	Price

Left hand available

VARGUS USA Thread Milling Cutters



ISO 9002

Insert Size I.C. (in.)	L (in.)	L1 (in.)	D (in.)	D1 (in.)	D2 (in.)	Order No.	Price
1/4	2.75	.47	.50	.35	.45	**FF65TMC0502**	Price
1/4	3.50	.79	.75	.35	.45	**FF65TMC0752**	Price
3/8	3.56	.87	.63	.54	.67	**FF65TMC06253**	Price
3/8	3.75	1.68	.75	.65	.79	**FF65TMC0753**	Price
5/8	4.38	2.03	1.00	.94	1.18	**FF65TMC1005**	Price
5/8	4.75	2.41	1.25	1.22	1.46	**FF65TMC1255**	Price

Left hand cutters available

VARGUS USA Long Thread Milling Cutters

ISO 9002

Insert Size I.C. (in.)	L (in.)	L1 (in.)	D (in.)	D1 (in.)	D2 (in.)	Order No.	Price
3/8	5.00	1.00	1.00	.65	.79	**FF65TMLC1003**	Price
5/8	5.88	3.53	1.00	.94	1.18	**FF65TMLC1005**	Price
5/8	6.33	4.00	1.25	1.22	1.46	**FF65TMLC1255**	Price

C = Coolant
All cutters supplied w/coolant hole
Left hand cutters available

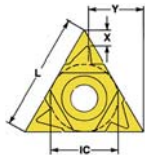
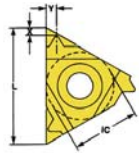
VARGUS USA American Buttress Internal and External Threading

ISO 9002

Partial Profile Inserts

- For applications involving exceptionally high stresses along the thread axis in one direction

Style
ER - External right hand
EL - External left hand
IR - Internal right hand
IL - Internal left hand

Internal/External - External				
			VKX Coated	
I.C. (in.)	Pitch TPI	Insert Style	Order No.	Price
1/4	16	2ER16ABUT	**FF67117127**	Price
3/8	10	3ER10ABUT	**FF67117186**	Price
3/8	10	3EL10ABUT	**FF67117167**	Price
3/8	12	3ER12ABUT	**FF67117191**	Price
3/8	12	3EL12ABUT	**FF67117172**	Price
3/8	16	3ER16ABUT	**FF67205933**	Price
3/8	16	3EL16ABUT	**FF67205945**	Price
3/8	20	3ER20ABUT	**FF67205941**	Price
1/2	6	4ER6ABUT	**FF67117262**	Price
1/2	8	4ER8ABUT	**FF67117265**	Price
1/2U	4	4UER4ABUT	**FF67117282**	Price
1/2U	4	4UEL4ABUT	**FF67117279**	Price

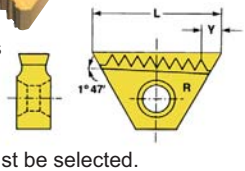
Internal/External - Internal				
			VKX Coated	
I.C. (in.)	Pitch TPI	Insert Style	Order No.	Price
1/4	16	2IR16ABUT	**FF67117150**	Price
3/8	10	3IR10ABUT	**FF67117231**	Price
3/8	12	3IR12ABUT	**FF67117240**	Price
3/8	12	3IL12ABUT	**FF67117211**	Price
3/8	16	3IR16ABUT	**FF67119660**	Price
3/8	20	3IR20ABUT	**FF67119650**	Price
1/2	6	4IR6ABUT	**FF67118226**	Price
1/2	6	4IL6ABUT	**FF67117268**	Price
1/2	8	4IR8ABUT	**FF67117276**	Price
1/2U	4	4UIL4ABUT	**FF67117285**	Price

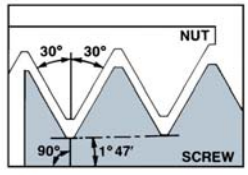
VARGUS USA External & Internal Inserts

ISO 9002

American NPT

- For CNC machining centers and milling machines
- Work for making a thread on a non-rotatable bulky part
- Higher machine speeds
- Multi-tooth type inserts
- Less downtime and tooling changes
- Less machine power required
- Better thread surface finish yields better sealing and engagement
- No undercut is necessary due to CNC control accuracy



NOTE: milling inserts can be used either right hand or left hand. However, appropriate holder must be selected. Right hand is standard, left hand is available on request.

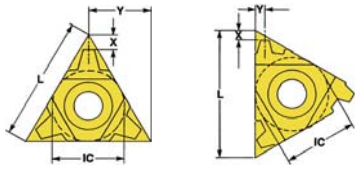
I.C. (in.)	L (in.)	Pitch TPI	Y (in.)	Insert Style	VK2 Order No.	VK2 Price	VKX Order No.	VKX Price	VTX Order No.	VTX Price
3/8	.65	11.5	.09	3EI11.5NPTTM	-	-	**FF66114019**	Price	**FF6664316**	Price
5/8	1.08	8	.15	5EI8NPTTM	**FF66026076**	Price	-	-	-	-
5/8	1.08	11.5	.12	5EI11.5NPTTM	**FF66104079**	Price	**FF66114047**	Price	**FF6664558**	Price

VARGUS USA 29° Acme Internal and External Threading

ISO 9002

Style
ER - External right hand
EL - External left hand
IR - Internal right hand
IL - Internal left hand





Internal/External - External				
			VKX	
			Coated	
I.C. (in.)	Pitch TPI	Insert Style	Order No.	Price
1/4	16	2ER16ACME	**FF67112421**	Price
1/4	16	2EL16ACME	**FF67112424**	Price
3/8	8	3EL8ACME	**FF67117728**	Price
3/8	8	3ER8ACME	**FF67117340**	Price
3/8	10	3ER10ACME	**FF67117736**	Price
3/8	12	3ER12ACME	**FF67112438**	Price
3/8	14	3ER14ACME	**FF67112433**	Price
3/8	14	3EL14ACME	**FF67112436**	Price
3/8	16	3ER16ACME	**FF67112427**	Price
1/2	5	4ER5ACME	**FF67117369**	Price
1/2	5	4EL5ACME	**FF67112446**	Price
1/2	6	4ER6ACME	**FF67117373**	Price
5/8	4	5ER4ACME	**FF66112448**	Price
5/8	4	5EL4ACME	**FF66112451**	Price

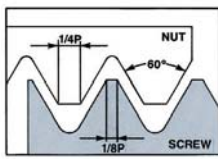
Internal/External - Internal				
			VKX	
			Coated	
I.C. (in.)	Pitch TPI	Insert Style	Order No.	Price
1/4	16	2IR16ACME	**FF67112454**	Price
1/4	16	2IL16ACME	**FF67112457**	Price
3/8	8	3IR8ACME	**FF67112482**	Price
3/8	8	3IL8ACME	**FF67112485**	Price
3/8	10	3IR10ACME	**FF67112476**	Price
3/8	10	3IL10ACME	**FF67112479**	Price
3/8	12	3IR12ACME	**FF67112471**	Price
3/8	12	3IL12ACME	**FF67112474**	Price
3/8	14	3IR14ACME	**FF67112465**	Price
3/8	14	3IL14ACME	**FF67112468**	Price
5/8	4	5IR4ACME	**FF66112499**	Price
5/8	4	5IL4ACME	**FF66112502**	Price

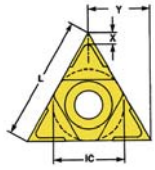
VARGUS USA American UN Multi-Tooth Inserts

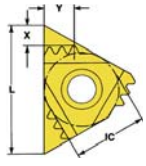
Internal and External Threading

Style
E - External
I - Internal









Internal/External - External						
			VKX		VTX	
			Coated		Coated	
I.C. (in.)	Pitch TPI	Insert Style	Order No.	Price	Order No.	Price
3/8	16	3ER16UN2M	-	-	**FF6663037**	Price
1/2	12	4ER12UN2M	**FF66117497**	Price	**FF6663347**	Price
1/2	12	4ER12UN3M	-	-	**FF6663138**	Price
1/2	16	4ER16UN3M	-	-	**FF6663150**	Price
5/8	8	5ER8UN2M	-	-	**FF665ER8UN2MVTX**	Price

Internal/External - Internal				
			VTX	
			Coated	
I.C. (in.)	Pitch TPI	Insert Style	Order No.	Price
1/2	12	4IR12UN2M	**FF6663352**	Price
5/8	8	5IR8UN2M	**FF6663348**	Price

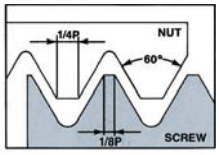
VARGUS USA American NPT Multi-Tooth Inserts

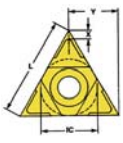
ISO 9002

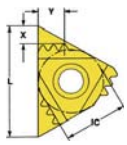
Internal and External Threading-

Style:
E = External
I = Internal









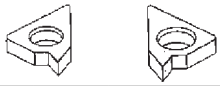
Internal/External - External							
				VK2		VTX	
				Uncoated		Coated	
I.C. (in.)	Pitch TPI	No. of Teeth	Inset Style	Order No.	Price	Order No.	Price
5/8	8	2	5ER8NPT2M	**FF66062723**	Price	**FF6663339**	Price

Internal/External - Internal					
				VKX	
				Coated	
I.C. (in.)	Pitch TPI	No. of Teeth	Inset Style	Order No.	Price
1/2	11.5	2	4IR11.5NPT2M	**FF66117529**	Price

Spare Parts

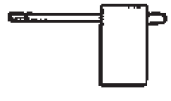


Insert Size I.C. (in.)	Order No.	Price
1/4	**FF65SN2T**	Price
3/8	**FF65SA3T**	Price
3/8	**FF65SY3T**	Price
1/2, 1/2U	**FF65SA4T**	Price
1/2, 1/2U	**FF65SY4T**	Price
5/8, 5/8U	**FF65SA5T**	Price
5/8, 5/8U	**FF65SY5T**	Price



Insert Size I.C. (in.)	LH Anvil		RH Anvil	
	Order No.	Price	Order No.	Price
3/8	**FF65YE3**	Price	**FF65YI3**	Price
1/2	**FF65YE4**	Price	**FF65YI4**	Price
1/2U	**FF65YE4U**	Price	**FF65YI4U**	Price
5/8	**FF65YE5**	Price	**FF65YI5**	Price
5/8U	**FF65YE5U**	Price	**FF65YI5U**	Price

Key



Insert Size I.C. (in.)	Order No.	Price
1/4	**FF65K2T**	Price
3/8	**FF65K3T**	Price
1/2, 1/2U	**FF65K4T**	Price
5/8, 5/8U	**FF65K5T**	Price

RAPIDKUT® Solid Carbide Boring Bars

- 4RMS finish
- Mirror polished cutting surface
- Lockdown flat automatically locates tool on center
- Diameter tolerance +.0000 /-.0005”



- 1/8” Shank Diameter - .003-.005” Radius					
Min. Bore (in.)	OAL (in.)	Max. Bore (in.)	Proj. (in.)	Order No.	Price
.050	1-1/2	.150	.013	**CB10050150**	Price
.050	1-1/2	.200	.013	**CB10050200**	Price
.050	1-1/2	.300	.013	**CB10050300**	Price
.050	1-1/2	.400	.013	**CB10050400**	Price
.060	1-1/2	.150	.015	**CB10060150**	Price
.060	1-1/2	.200	.015	**CB10060200**	Price
.060	1-1/2	.300	.015	**CB10060300**	Price
.060	1-1/2	.400	.015	**CB10060400**	Price
.060	1-1/2	.500	.015	**CB10060500**	Price
.080	1-1/2	.150	.020	**CB10080150**	Price
.080	1-1/2	.200	.020	**CB10080200**	Price
.080	1-1/2	.300	.020	**CB10080300**	Price
.080	1-1/2	.400	.020	**CB10080400**	Price
.080	1-1/2	.500	.020	**CB10080500**	Price
.080	1-1/2	.600	.020	**CB10080600**	Price
.100	1-1/2	.150	.025	**CB10100150**	Price
.100	1-1/2	.200	.025	**CB10100200**	Price
.100	1-1/2	.300	.025	**CB10100300**	Price
.100	1-1/2	.400	.025	**CB10100400**	Price
.100	1-1/2	.500	.025	**CB10100500**	Price
.100	1-1/2	.600	.025	**CB10100600**	Price
.100	1-1/2	.700	.025	**CB10100700**	Price
.110	1-1/2	.150	.028	**CB10110150**	Price
.110	1-1/2	.200	.028	**CB10110200**	Price
.110	1-1/2	.300	.028	**CB10110300**	Price
.110	1-1/2	.400	.028	**CB10110400**	Price
.110	1-1/2	.500	.028	**CB10110500**	Price
.110	1-1/2	.600	.028	**CB10110600**	Price
.110	1-1/2	.700	.028	**CB10110700**	Price

- 3/16” Shank Diameter - .005-.008” Radius					
Min. Bore (in.)	OAL (in.)	Max. Bore (in.)	Proj. (in.)	Order No.	Price
.120	2	.250	.030	**CB10120250**	Price
.120	2	.350	.030	**CB10120350**	Price
.120	2	.500	.030	**CB10120500**	Price
.120	2	.600	.030	**CB10120600**	Price
.120	2	.700	.030	**CB10120700**	Price
.120	2	.800	.030	**CB10120800**	Price
.140	2	.250	.035	**CB10140250**	Price
.140	2	.400	.035	**CB10140400**	Price
.140	2	.500	.035	**CB10140500**	Price
.140	2	.600	.035	**CB10140600**	Price
.140	2	.700	.035	**CB10140700**	Price
.140	2	.750	.035	**CB10140750**	Price
.140	2	.800	.035	**CB10140800**	Price
.160	2	.250	.040	**CB10160250**	Price
.160	2	.400	.040	**CB10160400**	Price
.160	2	.500	.040	**CB10160500**	Price
.160	2	.600	.040	**CB10160600**	Price
.160	2	.750	.040	**CB10160750**	Price
.160	2	.900	.040	**CB10160900**	Price
.160	2	1.000	.040	**CB10161000**	Price

- 1/4” Shank Diameter - .005-.008” Radius					
Min. Bore (in.)	OAL (in.)	Max. Bore (in.)	Proj. (in.)	Order No.	Price
.180	2-1/2	.350	.045	**CB10180350**	Price
.180	2-1/2	.500	.045	**CB10180500**	Price
.180	2-1/2	.600	.045	**CB10180600**	Price
.180	2-1/2	.750	.045	**CB10180750**	Price
.180	2-1/2	.900	.045	**CB10180900**	Price
.180	2-1/2	1.000	.045	**CB10181000**	Price
.180	2-1/2	1.100	.045	**CB10181100**	Price
.180	2-1/2	1.250	.045	**CB10181250**	Price
.180	2-1/2	1.500	.045	**CB10181500**	Price
.200	2-1/2	.400	.050	**CB10200400**	Price
.200	2-1/2	.500	.050	**CB10200500**	Price
.200	2-1/2	.600	.050	**CB10200600**	Price
.200	2-1/2	.700	.050	**CB10200700**	Price

- 1/4” Shank Diameter - .005-.008” Radius					
Min. Bore (in.)	OAL (in.)	Max. Bore (in.)	Proj. (in.)	Order No.	Price
.200	2-1/2	.800	.050	**CB10200800**	Price
.200	2-1/2	.900	.050	**CB10200900**	Price
.200	2-1/2	1.000	.050	**CB10201000**	Price
.200	2-1/2	1.100	.050	**CB10201100**	Price
.200	2-1/2	1.200	.050	**CB10201200**	Price
.200	2-1/2	1.300	.050	**CB10201300**	Price

- 5/16” Shank Diameter - .005-.008” Radius					
Min. Bore (in.)	OAL (in.)	Max. Bore (in.)	Proj. (in.)	Order No.	Price
.230	2-1/2	.400	.058	**CB10230400**	Price
.230	2-1/2	.500	.058	**CB10230500**	Price
.230	2-1/2	.600	.058	**CB10230600**	Price
.230	2-1/2	.700	.058	**CB10230700**	Price
.230	2-1/2	.800	.058	**CB10230800**	Price
.230	2-1/2	.900	.058	**CB10230900**	Price
.230	2-1/2	1.000	.058	**CB10231000**	Price
.230	2-1/2	1.100	.058	**CB10231100**	Price
.230	2-1/2	1.150	.058	**CB10231150**	Price
.230	2-1/2	1.200	.058	**CB10231200**	Price
.230	2-1/2	1.250	.058	**CB10231250**	Price
.230	2-1/2	1.400	.058	**CB10231400**	Price
.230	2-1/2	1.500	.058	**CB10231500**	Price
.230	2-1/2	1.600	.058	**CB10231600**	Price
.290	2-1/2	.500	.073	**CB10290500**	Price
.290	2-1/2	.600	.073	**CB10290600**	Price
.290	2-1/2	.750	.073	**CB10290750**	Price
.290	2-1/2	.900	.073	**CB10290900**	Price
.290	2-1/2	1.000	.073	**CB10291000**	Price
.290	2-1/2	1.100	.073	**CB10291100**	Price
.290	2-1/2	1.250	.073	**CB10291250**	Price
.290	2-1/2	1.350	.073	**CB10291350**	Price
.290	2-1/2	1.500	.073	**CB10291500**	Price
.290	2-1/2	1.600	.073	**CB10291600**	Price
.290	2-1/2	1.750	.073	**CB10291750**	Price

- 3/8” Shank Diameter - .005-.008” Radius					
Min. Bore (in.)	OAL (in.)	Max. Bore (in.)	Proj. (in.)	Order No.	Price
.320	2-1/2	.500	.080	**CB10320500**	Price
.320	2-1/2	.600	.080	**CB10320600**	Price
.320	2-1/2	.750	.080	**CB10320750**	Price
.320	2-1/2	.900	.080	**CB10320900**	Price
.320	2-1/2	1.000	.080	**CB10321000**	Price
.320	2-1/2	1.100	.080	**CB10321100**	Price
.320	2-1/2	1.250	.080	**CB10321250**	Price
.320	2-1/2	1.500	.080	**CB10321500**	Price
.320	2-1/2	1.600	.080	**CB10321600**	Price
.320	2-1/2	1.800	.080	**CB10321800**	Price
.320	4	2.000	.080	**CB10322000**	Price
.320	4	2.500	.080	**CB10322500**	Price
.320	4	3.000	.080	**CB10323000**	Price
.360	2-1/2	.500	.090	**CB10360500**	Price
.360	2-1/2	.600	.090	**CB10360600**	Price
.360	2-1/2	.750	.090	**CB10360750**	Price
.360	2-1/2	.900	.090	**CB10360900**	Price
.360	2-1/2	1.000	.090	**CB10361000**	Price
.360	2-1/2	1.150	.090	**CB10361150**	Price
.360	2-1/2	1.250	.090	**CB10361250**	Price
.360	2-1/2	1.500	.090	**CB10361500**	Price
.360	2-1/2	1.600	.090	**CB10361600**	Price
.360	2-1/2	1.800	.090	**CB10361800**	Price
.360	4	2.000	.090	**CB10362000**	Price
.360	4	2.500	.090	**CB10362500**	Price
.360	4	3.000	.090	**CB10363000**	Price

- 1/2” Shank Diameter - .005-.008” Radius					
Min. Bore (in.)	OAL (in.)	Max. Bore (in.)	Proj. (in.)	Order No.	Price
.490	3	.750	.123	**CB10490750**	Price
.490	3	1.000	.123	**CB10491000**	Price
.490	3	1.250	.123	**CB10491250**	Price
.490	3	1.500	.123	**CB10491500**	Price
.490	4	2.000	.123	**CB10492000**	Price
.490	4	2.500	.123	**CB10492500**	Price
.490	4	2.600	.123	**CB10492600**	Price
.490	4	2.750	.123	**CB10492750**	Price
.490	6	3.000	.123	**CB10493000**	Price
.490	6	3.500	.123	**CB10493500**	Price
.490	6	4.000	.123	**CB10494000**	Price
.490	6	4.500	.123	**CB10494500**	Price

MICRO 100 super carbide Solid Carbide Boring Bars

- Unique “2 Point” locking system engineered for maximum tool rigidity and centerline repeatability within ±.0005” from tool to tool
- Reduce machine setup, downtime, and tooling cost while boosting productivity

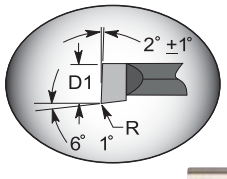
Super Carbide Tolerance

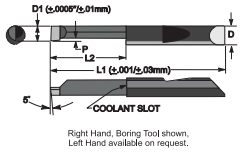
- Shank diameter: -.0001” (-0.005mm) to -.0002” (-0.01mm)
- Minimum bore diameter: +.000-.005”
- Maximum bore depth: +.050-.000”
- Overall length: ±1/64”

Quick Change Tolerance

- Shank diameter: -.0001” (-0.005mm) to -.0002” (-0.01mm)
- Minimum bore diameter: ±.0005” (±0.01mm)
- Maximum bore depth: ±.050” (±1.27mm)

30 Second Tool Change





Right Hand, Boring Tool shown.
Left Hand available on request.

Micro-Quik QUICK CHANGE TOOLING





Shank Diameter (in.) - 1/8				
		Solid Carbide Boring Tools		
Min. Bore	Max. Bore	OAL	Order No.	Price
.050	.150	1-1/2	**GE45BB050150**	Price
.050	.200	1-1/2	**GE45BB050200**	Price
.050	.300	1-1/2	**GE45BB050300**	Price
.050	.400	1-1/2	**GE45BB050400**	Price
.060	.150	1-1/2	**GE45BB060150**	Price
.060	.200	1-1/2	**GE45BB060200**	Price
.060	.300	1-1/2	**GE45BB060300**	Price
.060	.400	1-1/2	**GE45BB060400**	Price
.060	.500	1-1/2	**GE45BB060500**	Price
.080	.150	1-1/2	**GE45BB080150**	Price
.080	.200	1-1/2	**GE45BB080200**	Price
.080	.300	1-1/2	**GE45BB080300**	Price
.080	.400	1-1/2	**GE45BB080400**	Price
.080	.500	1-1/2	**GE45BB080500**	Price
.080	.600	1-1/2	**GE45BB080600**	Price
.100	.150	1-1/2	**GE45BB100150**	Price
.100	.200	1-1/2	**GE45BB100200**	Price
.100	.300	1-1/2	**GE45BB100300**	Price
.100	.400	1-1/2	**GE45BB100400**	Price
.100	.500	1-1/2	**GE45BB100500**	Price
.100	.600	1-1/2	**GE45BB100600**	Price
.100	.700	1-1/2	**GE45BB100700**	Price
.110	.150	1-1/2	**GE45BB110150**	Price
.110	.200	1-1/2	**GE45BB110200**	Price
.110	.300	1-1/2	**GE45BB110300**	Price
.110	.400	1-1/2	**GE45BB110400**	Price
.110	.500	1-1/2	**GE45BB110500**	Price
.110	.600	1-1/2	**GE45BB110600**	Price
.110	.700	1-1/2	**GE45BB110700**	Price

Shank Diameter (in.) - 3/16							
		Quik Change Boring Tools			Solid Carbide Boring Tools		
Min. Bore	Max. Bore	OAL	Order No.	Price	OAL	Order No.	Price
.050	.150	1-1/2	**GE46QBB050150**	Price	-	-	-
.060	.150	1-1/2	**GE46QBB060150**	Price	-	-	-
.080	.300	1-1/2	**GE46QBB080300**	Price	-	-	-
.080	.600	2	**GE46QBB080600**	Price	-	-	-
.100	.300	1-1/2	**GE46QBB100300**	Price	-	-	-
.120	.250	1-1/2	**GE46QBB120250**	Price	2	**GE45BB120250**	Price
.120	.350	1-1/2	**GE46QBB120350**	Price	2	**GE45BB120350**	Price

Shank Diameter (in.) - 3/16							
		Quik Change Boring Tools			Solid Carbide Boring Tools		
Min. Bore	Max. Bore	OAL	Order No.	Price	OAL	Order No.	Price
.120	.500	1-1/2	**GE46QBB120500**	Price	2	**GE45BB120500**	Price
.120	.600	-	-	-	2	**GE45BB120600**	Price
.120	.700	2	**GE46QBB120700**	Price	2	**GE45BB120700**	Price
.120	.800	2	**GE46QBB120800**	Price	2	**GE45BB120800**	Price
.140	.250	-	-	-	2	**GE45BB140250**	Price
.140	.400	1-1/2	**GE46QBB140400**	Price	2	**GE45BB140400**	Price
.140	.500	-	-	-	2	**GE45BB140500**	Price
.140	.600	2	**GE46QBB140600**	Price	2	**GE45BB140600**	Price
.140	.700	-	-	-	2	**GE45BB140700**	Price
.140	.750	-	-	-	2	**GE45BB140750**	Price
.140	.800	2	**GE46QBB140800**	Price	2	**GE45BB140800**	Price
.160	.250	-	-	-	2	**GE45BB160250**	Price
.160	.400	1-1/2	**GE46QBB160400**	Price	2	**GE45BB160400**	Price
.160	.500	-	-	-	2	**GE45BB160500**	Price
.160	.600	2	**GE46QBB160600**	Price	2	**GE45BB160600**	Price
.160	.750	2	**GE46QBB160750**	Price	2	**GE45BB160750**	Price
.160	.900	-	-	-	2	**GE45BB160900**	Price
.160	1.00	2	**GE46QBB1601000**	Price	2	**GE45BB1601000**	Price

Shank Diameter (in.) - 1/4							
		Quik Change Boring Tools			Solid Carbide Boring Tools		
Min. Bore	Max. Bore	OAL	Order No.	Price	OAL	Order No.	Price
.180	.350	-	-	-	2-1/2	**GE45BB180350**	Price
.180	.500	2	**GE46QBB180500**	Price	2-1/2	**GE45BB180500**	Price
.180	.600	-	-	-	2-1/2	**GE45BB180600**	Price
.180	.750	2	**GE46QBB180750**	Price	2-1/2	**GE45BB180750**	Price
.180	.900	-	-	-	2-1/2	**GE45BB180900**	Price
.180	1.00	2-1/2	**GE46QBB1801000**	Price	2-1/2	**GE45BB1801000**	Price
.180	1.10	-	-	-	2-1/2	**GE45BB1801100**	Price
.200	.400	-	-	-	2-1/2	**GE45BB200400**	Price
.200	.500	2	**GE46QBB200500**	Price	2-1/2	**GE45BB200500**	Price
.200	.600	-	-	-	2-1/2	**GE45BB200600**	Price
.200	.700	2	**GE46QBB200750**	Price	2-1/2	**GE45BB200700**	Price
.200	.800	-	-	-	2-1/2	**GE45BB200800**	Price
.200	.900	-	-	-	2-1/2	**GE45BB200900**	Price
.200	1.00	2-1/2	**GE46QBB2001000**	Price	2-1/2	**GE45BB2001000**	Price
.200	1.10	-	-	-	2-1/2	**GE45BB2001100**	Price
.200	1.20	2-1/2	**GE46QBB2001200**	Price	2-1/2	**GE45BB2001200**	Price
.200	1.30	-	-	-	2-1/2	**GE45BB2001300**	Price

(continued)

MICRO 100 super carbide Solid Carbide Boring Bars

- Unique “2 Point” locking system engineered for maximum tool rigidity and centerline repeatability within ±.0005” from tool to tool
- Reduce machine setup, downtime, and tooling cost while boosting productivity

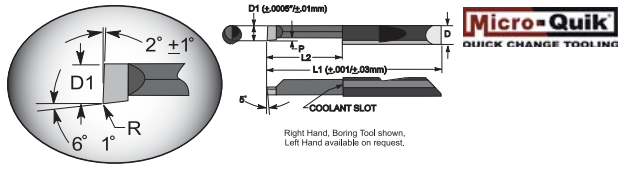
Super Carbide Tolerance

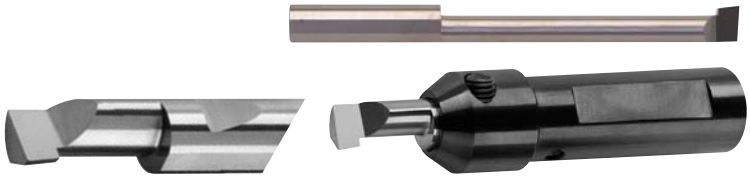
- Shank diameter: -.0001” (-0.005mm) to -.0002” (-0.01mm)
- Minimum bore diameter: +.000-.005”
- Maximum bore depth: +.050-.000”
- Overall length: ±1/64”

30 Second Tool Change

Quick Change Tolerance

- Shank diameter: -.0001” (-0.005mm) to -.0002” (-0.01mm)
- Minimum bore diameter: ±.0005” (±0.01mm)
- Maximum bore depth: ±.050” (±1.27mm)





(continued)

Shank Diameter (in.) - 5/16

Min. Bore	Max. Bore	Quik Change Boring Tools OAL	Quik Change Boring Tools Order No.	Quik Change Boring Tools Price	Solid Carbide Boring Tools OAL	Solid Carbide Boring Tools Order No.	Solid Carbide Boring Tools Price
.230	.400	-	-	-	2-1/2	GE45BB230400	Price
.230	.500	2	GE46QBB230500	Price	2-1/2	GE45BB230500	Price
.230	.600	-	-	-	2-1/2	GE45BB230600	Price
.230	.700	-	-	-	2-1/2	GE45BB230700	Price
.230	.800	-	-	-	2-1/2	GE45BB230800	Price
.230	.900	-	-	-	2-1/2	GE45BB230900	Price
.230	1.00	2-1/2	GE46QBB2301000	Price	2-1/2	GE45BB2301000	Price
.230	1.15	-	-	-	2-1/2	GE45BB2301150	Price
.230	1.20	-	-	-	2-1/2	GE45BB2301200	Price
.230	1.25	2-1/2	GE46QBB2301250	Price	2-1/2	GE45BB2301250	Price
.230	1.40	-	-	-	2-1/2	GE45BB2301400	Price
.230	1.50	3	GE46QBB2301500	Price	2-1/2	GE45BB2301500	Price
.230	1.60	3	GE46QBB2301600	Price	2-1/2	GE45BB2301600	Price
.290	.500	2	GE46QBB290500	Price	2-1/2	GE45BB290500	Price
.290	.600	-	-	-	2-1/2	GE45BB290600	Price
.290	.750	2	GE46QBB290750	Price	2-1/2	GE45BB290750	Price
.290	.900	-	-	-	2-1/2	GE45BB290900	Price
.290	1.00	2-1/2	GE46QBB2901000	Price	2-1/2	GE45BB2901000	Price
.290	1.10	-	-	-	2-1/2	GE45BB2901100	Price
.290	1.25	-	-	-	2-1/2	GE45BB2901250	Price
.290	1.35	-	-	-	2-1/2	GE45BB2901350	Price
.290	1.50	3	GE46QBB2901500	Price	2-1/2	GE45BB2901500	Price
.290	1.60	-	-	-	2-1/2	GE45BB2901600	Price
.290	1.75	3	GE46QBB2901750	Price	2-1/2	GE45BB2901750	Price

Shank Diameter (in.) - 3/8

Min. Bore	Max. Bore	Quik Change Boring Tools OAL	Quik Change Boring Tools Order No.	Quik Change Boring Tools Price	Solid Carbide Boring Tools OAL	Solid Carbide Boring Tools Order No.	Solid Carbide Boring Tools Price
.320	.500	2	GE46QBB320500	Price	2-1/2	GE45BB320500	Price
.320	.600	-	-	-	2-1/2	GE45BB320600	Price
.320	.750	-	-	-	2-1/2	GE45BB320750	Price
.320	.900	-	-	-	2-1/2	GE45BB320900	Price
.320	1.00	2-1/2	GE46QBB3201000	Price	2-1/2	GE45BB3201000	Price
.320	1.10	-	-	-	2-1/2	GE45BB3201100	Price

Shank Diameter (in.) - 3/8

Min. Bore	Max. Bore	Quik Change Boring Tools OAL	Quik Change Boring Tools Order No.	Quik Change Boring Tools Price	Solid Carbide Boring Tools OAL	Solid Carbide Boring Tools Order No.	Solid Carbide Boring Tools Price
.320	1.25	2-1/2	GE46QBB3201250	Price	2-1/2	GE45BB3201250	Price
.320	1.50	3	GE46QBB3201500	Price	2-1/2	GE45BB3201500	Price
.320	1.60	-	-	-	2-1/2	GE45BB3201600	Price
.320	1.80	-	-	-	2-1/2	GE45BB3201800	Price
.320	2.00	-	-	-	4	GE45BB3202000	Price
.320	2.50	-	-	-	4	GE45BB3202500	Price
.320	3.00	-	-	-	4	GE45BB3203000	Price
.360	.500	-	-	-	2-1/2	GE45BB360500	Price
.360	.600	-	-	-	2-1/2	GE45BB360600	Price
.360	.750	-	-	-	2-1/2	GE45BB360750	Price
.360	.900	-	-	-	2-1/2	GE45BB360900	Price
.360	1.00	-	-	-	2-1/2	GE45BB3601000	Price
.360	1.15	-	-	-	2-1/2	GE45BB3601150	Price
.360	1.25	-	-	-	2-1/2	GE45BB3601250	Price
.360	1.50	-	-	-	2-1/2	GE45BB3601500	Price
.360	1.60	-	-	-	2-1/2	GE45BB3601600	Price
.360	1.80	-	-	-	2-1/2	GE45BB3601800	Price
.360	2.00	-	-	-	4	GE45BB3602000	Price
.360	2.50	-	-	-	4	GE45BB3602500	Price
.360	3.00	-	-	-	4	GE45BB3603000	Price

Shank Diameter (in.) - 1/2

Min. Bore	Max. Bore	Quik Change Boring Tools OAL	Quik Change Boring Tools Order No.	Quik Change Boring Tools Price	Solid Carbide Boring Tools OAL	Solid Carbide Boring Tools Order No.	Solid Carbide Boring Tools Price
.490	.750	-	-	-	3	GE45BB490750	Price
.490	1.00	2-1/2	GE46QBB4901000	Price	3	GE45BB4901000	Price
.490	1.25	-	-	-	3	GE45BB4901250	Price
.490	1.50	-	-	-	3	GE45BB4901500	Price
.490	2.00	3-1/2	GE46QBB4902000	Price	4	GE45BB4902000	Price
.490	2.50	4	GE46QBB4902500	Price	4	GE45BB4902500	Price
.490	3.00	-	-	-	6	GE45BB4903000	Price
.490	4.50	-	-	-	6	GE45BB4904500	Price

MICRO 100 super carbide Solid Carbide Groove Tools

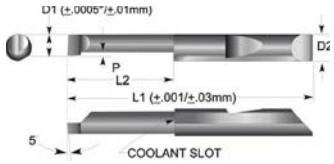
Super Carbide Tolerance

- Shank diameter: -.0001” (-0.005mm) to -.0002” (-0.01mm)
- Minimum hole diameter: +.000-.005”
- Maximum hole depth: +.050-.000”
- Overall length: ±1/64”



Quik Change Tolerance

- Shank diameter: -.0001” (-0.005mm) to -.0002” (-0.01mm)
- Minimum bore diameter: ±.0005” (±0.01mm)
- Maximum bore depth: ±.050” (+1.27mm)



Micro-Quik QUICK CHANGE TOOLING







Min. Hole Dia. (in.) - .1000						
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	Quik Change Retaining Ring Grooving Tool OAL (in.)	Order No.	Price
5/16	.3750	.1000	.0330/.0340	2.0000	**GE46QRR0336**	Price

Min. Hole Dia. (in.) - .1800						
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	Quik Change Retaining Ring Grooving Tool OAL (in.)	Order No.	Price
3/16	.2500	.0300	.0170	1.5000	**GE46QRR0174**	Price
3/16	.3750	.0300	.0170	1.5000	**GE46QRR0176**	Price
3/16	.5000	.0300	.0170	1.5000	**GE46QRR0178**	Price
3/16	.6250	.0300	.0170	2.0000	**GE46QRR01710**	Price
3/16	.2500	.0300	.0200	1.5000	**GE46QRR0204**	Price
3/16	.3750	.0300	.0200	1.5000	**GE46QRR0206**	Price
3/16	.5000	.0300	.0200	1.5000	**GE46QRR0208**	Price
3/16	.6250	.0300	.0200	2.0000	**GE46QRR02010**	Price

Min. Hole Dia. (in.) - .2450						
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	Quik Change Retaining Ring Grooving Tool OAL (in.)	Order No.	Price
1/4	.2500	.0500	.0250/.0260	2.0000	**GE46QRR0254**	Price
1/4	.3750	.0500	.0250/.0260	2.0000	**GE46QRR0256**	Price
1/4	.5000	.0500	.0250/.0260	2.0000	**GE46QRR0258**	Price
1/4	.6250	.0500	.0250/.0260	2.0000	**GE46QRR02510**	Price
1/4	.2500	.0500	.0300/.0310	2.0000	**GE46QRR0304**	Price
1/4	.3750	.0500	.0300/.0310	2.0000	**GE46QRR0306**	Price
1/4	.5000	.0500	.0300/.0310	2.0000	**GE46QRR0308**	Price
1/4	.6250	.0500	.0300/.0310	2.0000	**GE46QRR03010**	Price

Min. Hole Dia. (in.) - .2500						
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	RH Retaining Ring Grooving Tool OAL (in.)	Order No.	Price
1/4	.2500	.0500	.0170/.0180	2.5000	**GE45RR0174•**	Price
1/4	.3750	.0500	.0170/.0180	2.5000	**GE45RR0176**	Price
1/4	.5000	.0500	.0170/.0180	2.5000	**GE45RR0178**	Price
1/4	.6250	.0500	.0170/.0180	2.5000	**GE45RR01710**	Price
1/4	.2500	.0500	.0250/.0260	2.5000	**GE45RR0254**	Price
1/4	.3750	.0500	.0250/.0260	2.5000	**GE45RR0256**	Price
1/4	.5000	.0500	.0250/.0260	2.5000	**GE45RR0258**	Price
1/4	.6250	.0500	.0250/.0260	2.5000	**GE45RR02510•**	Price
1/4	.2500	.0500	.0300/.0310	2.5000	**GE45RR0304**	Price
1/4	.3750	.0500	.0300/.0310	2.5000	**GE45RR0306**	Price
1/4	.5000	.0500	.0300/.0310	2.5000	**GE45RR0308•**	Price
1/4	.6250	.0500	.0300/.0310	2.5000	**GE45RR03010•**	Price

Min. Hole Dia. (in.) - .3100						
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	Quik Change Retaining Ring Grooving Tool OAL (in.)	Order No.	Price
5/16	.5000	.1000	.0330/.0340	2.0000	**GE46QRR0338**	Price
5/16	.7500	.1000	.0330/.0340	2.0000	**GE46QRR03312**	Price

Min. Hole Dia. (in.) - .3100						
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	Quik Change Retaining Ring Grooving Tool OAL (in.)	Order No.	Price
5/16	.3750	.1000	.0380/.0390	2.0000	**GE46QRR0386**	Price
5/16	.5000	.1000	.0380/.0390	2.0000	**GE46QRR0388**	Price
5/16	.7500	.1000	.0380/.0390	2.0000	**GE46QRR03812**	Price

Min. Hole Dia. (in.) - .3125						
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	RH Retaining Ring Grooving Tool OAL (in.)	Order No.	Price
5/16	.2500	.1000	.0330/.0340	2.5000	**GE45RR0334**	Price
5/16	.3750	.1000	.0330/.0340	2.5000	**GE45RR0336**	Price
5/16	.5000	.1000	.0330/.0340	2.5000	**GE45RR0338**	Price
5/16	.7500	.0500	.0330/.0340	2.5000	**GE45RR03312**	Price
5/16	.2500	.1000	.0380/.0390	2.5000	**GE45RR0384**	Price
5/16	.3750	.1000	.0380/.0390	2.5000	**GE45RR0386**	Price
5/16	.5000	.1000	.0380/.0390	2.5000	**GE45RR0388•**	Price
5/16	.7500	.1000	.0380/.0390	2.5000	**GE45RR03812•**	Price

Min. Hole Dia. (in.) - .3700										
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	Quick Change Retaining Ring Grooving Tool OAL (in.)	Order No.	Price	Quik Change Retaining Ring Grooving Tool OAL (in.)	Order No.	Price
3/8	.5000	.1000	.0390/.0410	-	-	-	2.5000	**GE46QRR0398**	Price
3/8	.7500	.1000	.0390/.0410	-	-	-	2.0000	**GE46QRR03912**	Price
3/8	1.0000	.1000	.0390/.0410	-	-	-	2.0000	**GE46QRR03916**	Price
3/8	1.2500	.1000	.0390/.0410	-	-	-	2.0000	**GE46QRR03920**	Price
3/8	.5000	.1000	.0460/.0480	-	-	-	2.0000	**GE46QRR0468**	Price
3/8	.7500	.1000	.0460/.0480	-	-	-	2.0000	**GE46QRR04612**	Price
3/8	1.0000	.1000	.0460/.0480	-	-	-	2.5000	**GE46QRR04616**	Price
3/8	1.2500	.1000	.0460/.0480	-	-	-	2.5000	**GE46QRR04620**	Price
3/8	1.2500	.1000	.0550	-	-	-	2.5000	**GE46QRR05520**	Price
3/8	.5000	.1000	.0550/.0570	-	-	-	2.0000	**GE46QRR0558**	Price
3/8	.7500	.1000	.0550/.0570	-	-	-	2.0000	**GE46QRR05512**	Price
3/8	1.0000	.1000	.0550/.0570	-	-	-	2.5000	**GE46QRR05516**	Price
3/8	1.0000	.1000	.0690	2.5000	**GE46QRR06916**	Price	-	-	-

Min. Hole Dia. (in.) - .3750									
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	RH Retaining Ring Grooving Tool OAL (in.)	Order No.	Price	Quik Change Retaining Ring Grooving Tool OAL (in.)	Order No.	Price
3/8	.2500	.0500	.0390/.0410	2.5000	**GE45RR0394**	Price	-	-	-
3/8	.3750	.0500	.0390/.0410	2.5000	**GE45RR0396**	Price	-	-	-
3/8	.5000	.0500	.0390/.0410	2.5000	**GE45RR0398**	Price	-	-	-
3/8	.7500	.0500	.0390/.0410	2.5000	**GE45RR03912♦**	Price	-	-	-
3/8	1.0000	.0500	.0390/.0410	2.5000	**GE45RR03916**	Price	-	-	-

(continued)

MICRO 100 super carbide Solid Carbide Groove Tools

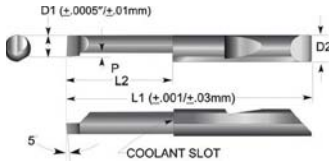
Super Carbide Tolerance

- Shank diameter: -.0001” (-0.005mm) to -.0002” (-0.01mm)
- Minimum hole diameter: +.000-.005”
- Maximum hole depth: +.050-.000”
- Overall length: ±1/64”



Quik Change Tolerance

- Shank diameter: -.0001” (-0.005mm) to -.0002” (-0.01mm)
- Minimum bore diameter: ±.0005” (±0.01mm)
- Maximum bore depth: ±.050” (+1.27mm)



Micro-Quik QUICK CHANGE TOOLING







(continued)

Min. Hole Dia. (in.) - .3750									
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	RH Retaining Ring Grooving Tool			Quik Change Retaining Ring Grooving Tool		
				OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
3/8	1.2500	.0500	.0390/.0410	2.5000	**GE45RR03920**	Price	-	-	-
3/8	.2500	.0500	.0460/.0480	2.5000	**GE45RR0464**	Price	-	-	-
3/8	.3750	.0500	.0460/.0480	2.5000	**GE45RR0466**	Price	-	-	-
3/8	.5000	.0500	.0460/.0480	2.5000	**GE45RR0468**	Price	-	-	-
3/8	.7500	.0500	.0460/.0480	2.5000	**GE45RR04612**	Price	-	-	-
3/8	1.0000	.0500	.0460/.0480	2.5000	**GE45RR04616♦**	Price	-	-	-
3/8	1.2500	.0500	.0460/.0480	2.5000	**GE45RR04620♦**	Price	-	-	-
3/8	.3750	.0500	.0550/.0570	2.5000	**GE45RR0556**	Price	-	-	-
3/8	.5000	.0500	.0550/.0570	2.5000	**GE45RR0558**	Price	-	-	-
3/8	.7500	.0500	.0550/.0570	2.5000	**GE45RR05512**	Price	-	-	-
3/8	1.0000	.0500	.0550/.0570	2.5000	**GE45RR05516**	Price	-	-	-
3/8	1.2500	.0500	.0550/.0570	2.5000	**GE45RR05520**	Price	-	-	-
3/8	.2500	.0500	.0620/.0640	2.5000	**GE45RR0624**	Price	-	-	-
3/8	.3750	.0500	.0620/.0640	2.5000	**GE45RR0626**	Price	-	-	-
3/8	.5000	.0500	.0620/.0640	2.5000	**GE45RR0628**	Price	-	-	-
3/8	.5000	.1000	.0620/.0640	-	-	-	2.0000	**GE46QRR0628**	Price
3/8	.7500	.0500	.0620/.0640	2.5000	**GE45RR06212♦**	Price	-	-	-
3/8	.7500	.1000	.0620/.0640	-	-	-	2.0000	**GE46QRR06212**	Price
3/8	1.0000	.0500	.0620/.0640	2.5000	**GE45RR06216**	Price	-	-	-
3/8	1.0000	.1000	.0620/.0640	-	-	-	2.5000	**GE46QRR06216**	Price
3/8	1.2500	.0500	.0620/.0640	2.5000	**GE45RR06220**	Price	-	-	-
3/8	1.2500	.1000	.0620/.0640	-	-	-	2.5000	**GE46QRR06220**	Price
3/8	.3750	.0500	.0690/.0710	2.5000	**GE45RR0696**	Price	-	-	-
3/8	.5000	.0500	.0690/.0710	2.5000	**GE45RR0698**	Price	-	-	-
3/8	.5000	.1000	.0690/.0710	-	-	-	2.0000	**GE46QRR0698**	Price
3/8	.7500	.0500	.0690/.0710	2.5000	**GE45RR06912**	Price	-	-	-
3/8	.7500	.1000	.0690/.0710	-	-	-	2.0000	**GE46QRR06912**	Price
3/8	1.0000	.0500	.0690/.0710	2.5000	**GE45RR06916**	Price	-	-	-
3/8	1.2500	.0500	.0690/.0710	2.5000	**GE45RR06920**	Price	-	-	-
3/8	1.2500	.1000	.0690/.0710	-	-	-	2.5000	**GE46QRR06920**	Price
3/8	.2500	.0500	.0870/.0890	2.5000	**GE45RR0874**	Price	-	-	-
3/8	.3750	.0500	.0870/.0890	2.5000	**GE45RR0876**	Price	-	-	-
3/8	.5000	.0500	.0870/.0890	2.5000	**GE45RR0878**	Price	-	-	-

Min. Hole Dia. (in.) - .3750									
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	RH Retaining Ring Grooving Tool			Quik Change Retaining Ring Grooving Tool		
				OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
3/8	.5000	.1000	.0870/.0890	-	-	-	2.0000	**GE46QRR0878**	Price
3/8	.7500	.0500	.0870/.0890	2.5000	**GE45RR08712♦**	Price	-	-	-
3/8	.7500	.1000	.0870/.0890	-	-	-	2.0000	**GE46QRR08712**	Price
3/8	1.0000	.0500	.0870/.0890	2.5000	**GE45RR08716**	Price	-	-	-
3/8	1.0000	.1000	.0870/.0890	-	-	-	2.5000	**GE46QRR08716**	Price
3/8	1.2500	.0500	.0870/.0890	2.5000	**GE45RR08720♦**	Price	-	-	-
3/8	1.2500	.1000	.0870/.0890	-	-	-	2.5000	**GE46QRR08720**	Price

Min. Hole Dia. (in.) - .4950									
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	Quik Change Full Radius Grooving Tool			Quik Change Retaining Ring Grooving Tool		
				OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
1/2	1.5000	.1500	.1250	-	-	-	3.0000	**GE46QRR12524**	Price
1/2	1.0000	.1500	.1560	2.5000	**GE46QRR15616**	Price	-	-	-

Min. Hole Dia. (in.) - .5000									
Shank Dia. (in.)	Max. Hole Depth (in.)	Projec-tion	Groove Width (in.)	RH Retaining Ring Grooving Tool			Quik Change Retaining Ring Grooving Tool		
				OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
1/2	.5000	.1500	.0930/.0950	3.0000	**GE45RR0938**	Price	-	-	-
1/2	.7500	.1500	.0930/.0950	3.0000	**GE45RR09312**	Price	2.5000	**GE46QRR09312**	Price
1/2	1.0000	.1500	.0930/.0950	3.0000	**GE45RR09316**	Price	2.5000	**GE46QRR09316**	Price
1/2	1.2500	.1500	.0930/.0950	3.0000	**GE45RR09320**	Price	3.0000	**GE46QRR09320**	Price
1/2	1.5000	.1500	.0930/.0950	3.0000	**GE45RR09324**	Price	3.0000	**GE46QRR09324**	Price
1/2	.7500	.1500	.1250/.1270	3.0000	**GE45RR12512**	Price	2.5000	**GE46QRR12512**	Price
1/2	1.0000	.1500	.1250/.1270	3.0000	**GE45RR12516**	Price	2.5000	**GE46QRR12516**	Price
1/2	1.2500	.1500	.1250/.1270	3.0000	**GE45RR12520**	Price	3.0000	**GE46QRR12520**	Price
1/2	1.5000	.1500	.1250/.1270	3.0000	**GE45RR12524**	Price	-	-	-
1/2	.7500	.1500	.1560/.1580	3.0000	**GE45RR15612**	Price	2.5000	**GE46QRR15612**	Price
1/2	1.0000	.1500	.1560/.1580	3.0000	**GE45RR15616**	Price	-	-	-
1/2	1.2500	.1500	.1560/.1580	3.0000	**GE45RR15620**	Price	3.0000	**GE46QRR15620**	Price
1/2	.7500	.1500	.1870/.1890	3.0000	**GE45RR18712**	Price	2.5000	**GE46QRR18712**	Price
1/2	1.0000	.1500	.1870/.1890	3.0000	**GE45RR18716**	Price	2.5000	**GE46QRR18716**	Price
1/2	1.5000	.1500	.1870/.1890	3.0000	**GE45RR18724**	Price	3.0000	**GE46QRR18724**	Price
1/2	1.0000	.1500	.2500/.2520	3.0000	**GE45RR25016**	Price	-	-	-

MICRO 100 super carbide Internal Threading Tools

- Shank diameter: -.0001" (-0.005mm) to -.0002" (-0.01mm)
- Minimum hole diameter: +.000-.005"
- Depth +.050-.000"
- Overall length ±1/64"
- Radius ±.001"



Micro-Quik QUICK CHANGE TOOLING



Shank Diameter (in.) - 1/8

Proj.	Min. Bore Dia. (in.)	Max. Bore Depth (in.)	TPI	Internal Threading Tool Right OAL (in.)	Order No.	Price
.0200	.050	.200	48 to 76	1-1/2	**GE45IT050200**	Price
.0200	.080	.250	32 to 76	1-1/2	**GE45IT080250**	Price
.0200	.080	.350	32 to 76	1-1/2	**GE45IT080350**	Price
.0200	.080	.500	32 to 76	1-1/2	**GE45IT080500**	Price
.0250	.100	.250	32 to 64	1-1/2	**GE45IT100250**	Price
.0250	.100	.350	32 to 64	1-1/2	**GE45IT100350**	Price
.0250	.100	.600	32 to 64	1-1/2	**GE45IT100600**	Price

Shank Diameter (in.) - 3/16

Proj.	Min. Bore Dia. (in.)	Max. Bore Depth (in.)	TPI	Internal Threading Tool Right OAL (in.)	Order No.	Price	Left OAL (in.)	Order No.	Price	Quick Change Internal Threading Tool Quick Change OAL (in.)	Order No.	Price
.0200	.050	.200	48 to 80	-	-	-	-	-	-	1-1/2	**GE46QIT050200**	Price
.0200	.080	.250	32 to 76	-	-	-	-	-	-	1-1/2	**GE46QIT080250**	Price
.0200	.080	.350	32 to 76	-	-	-	-	-	-	1-1/2	**GE46QIT080350**	Price
.0200	.080	.500	32 to 76	-	-	-	-	-	-	1-1/2	**GE46QIT080500**	Price
.0250	.100	.250	32 to 64	-	-	-	-	-	-	1-1/2	**GE46QIT100250**	Price
.0250	.100	.350	32 to 64	-	-	-	-	-	-	1-1/2	**GE46QIT100350**	Price
.0250	.100	.600	32 to 64	-	-	-	-	-	-	2	**GE46QIT100600**	Price
.0300	.120	.250	24 to 56	2	**GE45IT120250**	Price	2	**GE45ITL120250**	Price	1-1/2	**GE46QIT120250**	Price
.0300	.120	.400	24 to 56	2	**GE45IT120400**	Price	2	**GE45ITL120400**	Price	1-1/2	**GE46QIT120400**	Price
.0300	.120	.500	24 to 56	2	**GE45IT120500**	Price	2	**GE45ITL120500**	Price	1-1/2	**GE46QIT120500**	Price
.0300	.120	.600	24 to 56	2	**GE45IT120600**	Price	-	-	-	-	-	-
.0300	.120	.750	24 to 56	2	**GE45IT120750**	Price	-	-	-	-	-	-
.0350	.140	.250	20 to 56	2	**GE45IT140250**	Price	2	**GE45ITL140250**	Price	1-1/2	**GE46QIT140250**	Price
.0350	.140	.400	20 to 56	2	**GE45IT140400**	Price	2	**GE45ITL140400**	Price	1-1/2	**GE46QIT140400**	Price
.0350	.140	.500	20 to 56	2	**GE45IT140500**	Price	2	**GE45ITL140500**	Price	1-1/2	**GE46QIT140500**	Price
.0350	.140	.750	20 to 56	2	**GE45IT140750**	Price	2	**GE45ITL140750**	Price	2	**GE46QIT140750**	Price
.0400	.160	.500	20 to 56	2	**GE45IT160500**	Price	-	-	-	-	-	-
.0400	.160	.750	20 to 56	2	**GE45IT160750**	Price	-	-	-	-	-	-
.0400	.160	1.000	20 to 56	2	**GE45IT1601000**	Price	-	-	-	-	-	-

Shank Diameter (in.) - 1/4

Proj.	Min. Bore Dia. (in.)	Max. Bore Depth (in.)	TPI	Internal Threading Tool Left OAL (in.)	Order No.	Price	Right OAL (in.)	Order No.	Price	Quick Change Internal Threading Tool Quick Change OAL (in.)	Order No.	Price
.0400	.180	.350	18 to 56	2-1/2	**GE45ITL180350**	Price	2-1/2	**GE45IT180350**	Price	2	**GE46QIT180350**	Price
.0400	.180	.500	18 to 56	2-1/2	**GE45ITL180500**	Price	2-1/2	**GE45IT180500**	Price	2	**GE46QIT180500**	Price
.0400	.180	.750	18 to 56	-	-	-	2-1/2	**GE45IT180750**	Price	2	**GE46QIT180750**	Price
.0400	.180	1.000	18 to 56	-	-	-	2-1/2	**GE45IT1801000**	Price	2-1/2	**GE46QIT1801000**	Price
.0450	.200	.400	16 to 40	2-1/2	**GE45ITL200400**	Price	2-1/2	**GE45IT200400**	Price	2	**GE46QIT200400**	Price
.0450	.200	.600	16 to 40	2-1/2	**GE45ITL200600**	Price	2-1/2	**GE45IT200600**	Price	2	**GE46QIT200600**	Price
.0450	.200	.750	16 to 40	-	-	-	2-1/2	**GE45IT200750**	Price	2	**GE46QIT200750**	Price
.0450	.200	1.000	16 to 40	-	-	-	2-1/2	**GE45IT2001000**	Price	2-1/2	**GE46QIT2001000**	Price

Shank Diameter (in.) - 5/16

Proj.	Min. Bore Dia. (in.)	Max. Bore Depth (in.)	TPI	Internal Threading Tool Left OAL (in.)	Order No.	Price	Right OAL (in.)	Order No.	Price	Quick Change Internal Threading Tool Quick Change OAL (in.)	Order No.	Price
.0550	.230	.400	14 to 40	2-1/2	**GE45ITL230400**	Price	2-1/2	**GE45IT230400**	Price	2	**GE46QIT230400**	Price
.0550	.230	.600	14 to 40	2-1/2	**GE45ITL230600**	Price	2-1/2	**GE45IT230600**	Price	2	**GE46QIT230600**	Price
.0550	.230	.750	14 to 40	2-1/2	**GE45ITL230750**	Price	2-1/2	**GE45IT230750**	Price	2	**GE46QIT230750**	Price
.0550	.230	1.000	14 to 40	2-1/2	**GE45ITL2301000**	Price	2-1/2	**GE45IT2301000**	Price	2-1/2	**GE46QIT2301000**	Price
.0550	.230	1.500	14 to 40	-	-	-	2-1/2	**GE45IT2301500**	Price	2-1/2	**GE46QIT2301500**	Price
.0700	.290	.500	12 to 40	2-1/2	**GE45ITL290500**	Price	2-1/2	**GE45IT290500**	Price	2	**GE46QIT290500**	Price
.0700	.290	.750	12 to 40	2-1/2	**GE45ITL290750**	Price	2-1/2	**GE45IT290750**	Price	2	**GE46QIT290750**	Price
.0700	.290	1.000	12 to 40	2-1/2	**GE45ITL2901000**	Price	2-1/2	**GE45IT2901000**	Price	2	**GE46QIT2901000**	Price
.0700	.290	1.250	12 to 40	-	-	-	2-1/2	**GE45IT2901250**	Price	2-1/2	**GE46QIT2901250**	Price
.0700	.290	1.750	12 to 40	-	-	-	2-1/2	**GE45IT2901750**	Price	2-1/2	**GE46QIT2901750**	Price

Shank Diameter (in.) - 3/8

Proj.	Min. Bore Dia. (in.)	Max. Bore Depth (in.)	TPI	Internal Threading Tool Left OAL (in.)	Order No.	Price	Right OAL (in.)	Order No.	Price	Quick Change Internal Threading Tool Quick Change OAL (in.)	Order No.	Price
.0750	.320	.500	10 to 32	2-1/2	**GE45ITL320500**	Price	2-1/2	**GE45IT320500**	Price	2	**GE46QIT320500**	Price
.0750	.320	.750	10 to 32	2-1/2	**GE45ITL320750**	Price	2-1/2	**GE45IT320750**	Price	2	**GE46QIT320750**	Price
.0750	.320	1.000	10 to 32	2-1/2	**GE45ITL3201000**	Price	-	-	-	2-1/2	**GE46QIT3201000**	Price
.0750	.320	1.000	12 to 40	-	-	-	2-1/2	**GE45IT3201000**	Price	-	-	-
.0750	.320	1.250	10 to 32	2-1/2	**GE45ITL3201250**	Price	2-1/2	**GE45IT3201250**	Price	2-1/2	**GE46QIT3201250**	Price
.0750	.320	1.800	10 to 32	-	-	-	2-1/2	**GE45IT3201800**	Price	3	**GE46QIT3201800**	Price
.0850	.360	.500	10 to 32	2-1/2	**GE45ITL360500**	Price	2-1/2	**GE45IT360500**	Price	2	**GE46QIT360500**	Price
.0850	.360	.750	10 to 32	2-1/2	**GE45ITL360750**	Price	2-1/2	**GE45IT360750**	Price	2	**GE46QIT360750**	Price
.0850	.360	1.000	10 to 32	2-1/2	**GE45ITL3601000**	Price	2-1/2	**GE45IT3601000**	Price	2-1/2	**GE46QIT3601000**	Price
.0850	.360	1.250	10 to 32	2-1/2	**GE45ITL3601250**	Price	2-1/2	**GE45IT3601250**	Price	2-1/2	**GE46QIT3601250**	Price
.0850	.360	1.800	10 to 32	2-1/2	**GE45ITL3601800**	Price	2-1/2	**GE45IT3601800**	Price	3	**GE46QIT3601800**	Price

Shank Diameter (in.) - 1/2

Proj.	Min. Bore Dia. (in.)	Max. Bore Depth (in.)	TPI	Internal Threading Tool Left OAL (in.)	Order No.	Price	Right OAL (in.)	Order No.	Price	Quick Change Internal Threading Tool Quick Change OAL (in.)	Order No.	Price
.1200	.490	.750	8 to 24	2-1/2	**GE45ITL490750**	Price	2-1/2	**GE45IT490750**	Price	2-1/2	**GE46QIT490750**	Price
.1200	.490	1.500	8 to 24	2-1/2	**GE45ITL4901500**	Price	2-1/2	**GE45IT4901500**	Price	3	**GE46QIT4901500**	Price
.1200	.490	2.000	8 to 24	-	-	-	2-1/2	**GE45IT4902000**	Price	3-1/2	**GE46QIT4902000**	Price

MICRO 100 Undercut and Profile Grooving Tools

Solid Carbide

- Lockdown flat automatically locates tool on center



Groove Width (in.)	Shank Dia. (in.)	Projection (in.)	Min. Bore (in.)	Max. Bore Depth (in.)	OAL (in.)	AlTiN		Uncoated	
						Order No.	Price	Order No.	Price
.0300/.0320	1/4	.0500	.2600	1.0000	2.5000	**GE45UP2503016X**	Price	**GE45UP2503016**	Price
.0300/.0330	1/4	.0500	.2600	.5000	2.5000	**GE45UP250308X**	Price	**GE45UP250308**	Price
.0500/.0520	5/16	.1000	.3250	.5000	2.5000	**GE45UP310508X**	Price	**GE45UP310508**	Price
.0500/.0520	5/16	.1000	.3250	1.0000	2.5000	**GE45UP3105016X**	Price	**GE45UP3105016**	Price
.0620/.0640	3/8	.1000	.3850	1.0000	2.5000	**GE45UP3706216X**	Price	**GE45UP3706216**	Price
.0620/.0640	3/8	.1000	.3850	1.2500	2.5000	**GE45UP3706220X**	Price	**GE45UP3706220**	Price
.0620/.0640	5/16	.1000	.3250	1.0000	2.5000	**GE45UP3106216X**	Price	**GE45UP3106216**	Price
.0620/.0640	5/16	.1000	.3250	1.2500	2.5000	**GE45UP3106220X**	Price	**GE45UP3106220**	Price
.0930/.0950	3/8	.1000	.3850	1.0000	2.5000	**GE45UP3709316X**	Price	**GE45UP3709316**	Price
.1250/.1270	3/8	.1000	.3850	1.0000	2.5000	**GE45UP3712516X**	Price	**GE45UP3712516**	Price
.1250/.1280	3/8	.1000	.3850	1.2500	2.5000	**GE45UP3712520X**	Price	**GE45UP3712520**	Price

MICRO 100 Face Grooving Tools

- Lockdown flat automatically locates center on tool
- Shank diameters -.0001" to - .0003" tolerance
- Quick change tool overhang (QGF) .8530"



Groove Width (in.)	Shank Dia. (in.)	Proj. (in.)	Min. Groove Dia. (in.)	OAL (in.)	Order No.	Price
.0200	1/4	.0500	.2500	2.0000	**GE46QFG250020**	Price
.0200	1/4	.0500	.2500	2.0000	**GE46QFG250020X**	Price
.0300	1/4	.0500	.2500	2.0000	**GE46QFG250030**	Price
.0300	1/4	.0500	.2500	2.0000	**GE46QFG250030X**	Price
.0300	5/16	.0500	.3120	2.0000	**GE46QFG312030**	Price
.0300	5/16	.0500	.3120	2.0000	**GE46QFG312030X**	Price
.0400	5/16	.0500	.3120	2.0000	**GE46QFG312040**	Price
.0400	5/16	.0500	.3120	2.0000	**GE46QFG312040X**	Price
.0620	5/16	.1000	.3120	2.0000	**GE46QFG312062**	Price
.0620	5/16	.1000	.3120	2.0000	**GE46QFG312062X**	Price
.0620	3/8	.1000	.3750	2.0000	**GE46QFG375062**	Price
.0620	3/8	.1000	.3750	2.0000	**GE46QFG375062X**	Price
.0930	3/8	.1000	.3750	2.0000	**GE46QFG375093**	Price
.0930	3/8	.1000	.3750	2.0000	**GE46QFG375093X**	Price
.1250	3/8	.1500	.3750	2.0000	**GE46QFG375125**	Price
.1250	3/8	.1500	.3750	2.0000	**GE46QFG375125X**	Price
.0200/.0220	1/4	.0500	.2600	2.5000	**GE45FG250020**	Price
.0200/.0220	1/4	.0500	.2600	2.5000	**GE45FG250020X**	Price
.0300/.0320	1/4	.0500	.2600	2.5000	**GE45FG250030**	Price
.0300/.0320	1/4	.0500	.2600	2.5000	**GE45FG250030X**	Price
.0400/.0420	1/4	.0500	.2600	2.5000	**GE45FG250040**	Price
.0400/.0420	1/4	.0500	.2600	2.5000	**GE45FG250040X**	Price
.0500/.0520	1/4	.0500	.2600	2.5000	**GE45FG250050**	Price
.0500/.0520	1/4	.0500	.2600	2.5000	**GE45FG250050X**	Price
.0300/.0320	5/16	.0500	.3200	2.5000	**GE45FG312030**	Price
.0300/.0320	5/16	.0500	.3200	2.5000	**GE45FG312030X**	Price
.0400/.0420	5/16	.0500	.3200	2.5000	**GE45FG312040**	Price
.0400/.0420	5/16	.0500	.3200	2.5000	**GE45FG312040X**	Price
.0500/.0520	5/16	.0500	.3200	2.5000	**GE45FG312050**	Price
.0500/.0520	5/16	.0500	.3200	2.5000	**GE45FG312050X**	Price
.0620/.0640	5/16	.0750	.3200	2.5000	**GE45FG312062**	Price
.0620/.0640	5/16	.0750	.3200	2.5000	**GE45FG312062X**	Price
.0300/.0320	3/8	.0500	.3850	2.5000	**GE45FG375030**	Price
.0300/.0320	3/8	.0500	.3850	2.5000	**GE45FG375030X**	Price
.0620/.0640	3/8	.0750	.3850	2.5000	**GE45FG375062**	Price
.0620/.0640	3/8	.0750	.3850	2.5000	**GE45FG375062X**	Price
.0930/.0950	3/8	.1000	.3850	2.5000	**GE45FG375093**	Price
.0930/.0950	3/8	.1000	.3850	2.5000	**GE45FG375093X**	Price
.0930/.0950	3/8	.1000	.3850	2.5000	**GE45FG375125X**	Price
.1250	3/8	.1000	.3850	2.5000	**GE45FG375125**	Price

MICRO 100 Full Radius Grooving Tools

- Lockdown flat automatically locates center on tool
- Shank diameters -.0001" to - .0003" tolerance



Groove Width (in.)	Shank Dia. (in.)	Proj. (in.)	Min. Bore Dia. (in.)	Max. Bore Depth (in.)	OAL (in.)	Order No.	Price
.0170/.0180	1/4	.0500	.2500	.6250	2.5000	**GE45FR01710**	Price
.0250/.0260	1/4	.0500	.2500	.2500	2.5000	**GE45FR0254**	Price
.0300/.0310	1/4	.0500	.2500	.2500	2.5000	**GE45FR0304**	Price
.0300/.0310	1/4	.0500	.2500	.3750	2.5000	**GE45FR0306**	Price
.0300/.0310	1/4	.0500	.2500	.5000	2.5000	**GE45FR0308**	Price
.0250/.0260	1/4	.0500	.2500	.6250	2.5000	**GE45FR03010**	Price
.0330/.0340	5/16	.1000	.3125	.2500	2.5000	**GE45FR0334**	Price
.0330/.0340	5/16	.1000	.3125	.3750	2.5000	**GE45FR0336**	Price
.0330/.0340	5/16	.1000	.3125	.5000	2.5000	**GE45FR0338**	Price
.0330/.0340	5/16	.1000	.3125	.6250	2.5000	**GE45FR03310**	Price
.0380/.0390	5/16	.1000	.3125	.3750	2.5000	**GE45FR0386**	Price
.0380/.0390	5/16	.1000	.3125	.6250	2.5000	**GE45FR03810**	Price
.0390/.0410	3/8	.1000	.3125	1.0000	2.5000	**GE45FR03916**	Price
.0550/.0570	3/8	.1000	.3125	.3750	2.5000	**GE45FR0556**	Price
.0550/.0570	3/8	.1000	.3125	.7500	2.5000	**GE45FR05512**	Price
.0620/.0640	3/8	.1000	.3125	.5000	2.5000	**GE45FR0628**	Price
.0620/.0640	3/8	.1000	.3125	.7500	2.5000	**GE45FR06212**	Price
.0620/.0640	3/8	.1000	.3125	1.0000	2.5000	**GE45FR06216**	Price
.0870/.0890	3/8	.1000	.3125	.7500	2.5000	**GE45FR08712**	Price
.1250/.1270	1/2	.1500	.5000	1.5000	3.0000	**GE45FR12524**	Price

MICRO 100 Thread Relief Tools



Cutter Dia. (in.)	Shank Dia. (in.)	Proj. (in.)	Max. Depth (in.)	OAL (in.)	Flat (in.)	Tool Radius (in.)	Order No.	Price
.125	1/8	.0400	.125	1-1/2	1/16	.002-.004	**GE45LTR1256**	Price
.1875	3/16	.0400	.187	2	5/64	.003-.007	**GE45LTR1876**	Price
.1875	3/16	.0400	.187	2	5/64	.003-.007	**GE45LTR18712**	Price
.250	1/4	.0500	.250	2-1/2	3/32	.003-.007	**GE45LTR2508**	Price
.250	1/4	.0500	.250	2-1/2	3/32	.003-.007	**GE45LTR25016**	Price
.3125	5/16	.0750	.312	2-1/2	3/32	.003-.007	**GE45LTR31212**	Price
.3125	5/16	.0750	.312	2-1/2	3/32	.003-.007	**GE45LTR31220**	Price
.375	3/8	.1000	.375	2-1/2	1/8	.003-.007	**GE45LTR37512**	Price
.375	3/8	.1001	.375	2-1/2	1/8	.003-.007	**GE45LTR37520**	Price
.500	1/2	.1250	.500	3	5/32	.008-.012	**GE45LTR50016**	Price
.500	1/2	.1250	.500	3	5/32	.008-.012	**GE45LTR50024**	Price

MICRO 100 super carbide Quick Change Toolholders

Inch/Metric - Coolant Through Holes

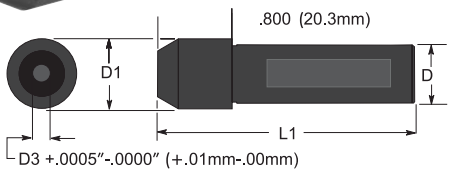
30 Second Tool Change

Micro-Quik QUICK CHANGE TOOLING



Featuring:

- Unique “2 Point” locking/locating system ensure tool to tool change repeatability of ±.0005”/±.0.01mm from tool to tool
- .0005”/0.01mm T.I.R.
- Coolant through capabilities
- Heat-treated tool holders
- Rotation of locking screw pushes tool downwards and back, against the locating pin for rigidity and centerline repeatability



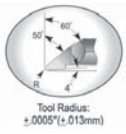
Fits - 1”/25.4mm Shanks					
Shank Size (in./mm)	ID in./mm)	OAL (in./mm)	Head Dia. (in./mm)	Order No.	Price
1.00/25.4	.1875/4.76	2.80/71	1.06/27.0	**GE46QTH405**	Price
1.00/25.4	.2500/6.35	2.80/71	1.06/27.0	**GE46QTH406**	Price
1.00/25.4	.3125/7.94	2.80/71	1.06/27.0	**GE46QTH407**	Price
1.00/25.4	.3750/9.53	2.80/71	1.06/27.0	**GE46QTH408**	Price
1.00/25.4	.500/12.70	2.80/71	1.06/27.0	**GE46QTH410**	Price

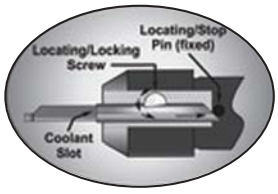
Fits - 1/2” / 12.7mm Shanks					
Shank Size (in./mm)	ID (in./mm)	OAL (in./mm)	Head Dia. (in./mm)	Order No.	Price
.500/12.7	.1875/4.76	2.80/71	.750/19.1	**GE46QTH85**	Price
.500/12.7	.2500/6.35	2.80/71	.750/19.1	**GE46QTH86**	Price
.500/12.7	.1875/4.76	5.80/147	.750/19.1	**GE46QTH85L**	Price
.500/12.7	.2500/6.35	5.80/147	.750/19.1	**GE46QTH86L**	Price

Fits - 3/4” / 19.1mm Shanks					
Shank Size (in./mm)	ID (in./mm)	OAL (in./mm)	Head Dia. (in./mm)	Order No.	Price
.750/19.1	.1875/4.76	5.80/147	.875/22.2	**GE46QTH205L**	Price

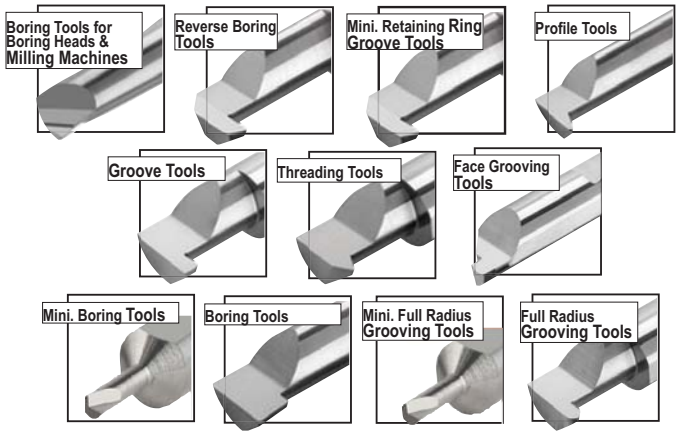
Fits - 3/4”/19.1mm Shanks					
Shank Size (in./mm)	ID (in./mm)	OAL (in./mm)	Head Dia. (in./mm)	Order No.	Price
.750/19.1	.1875/4.76	2.80/71	.875/22.2	**GE46QTH205**	Price
.750/19.1	.2500/6.35	2.80/71	.875/22.2	**GE46QTH206**	Price
.750/19.1	.3125/7.94	2.80/71	.875/22.2	**GE46QTH207**	Price
.750/19.1	.3750/9.53	2.80/71	1.00/25.4	**GE46QTH208**	Price
.750/19.1	.500/12.70	2.80/71	1.06/27.0	**GE46QTH210**	Price

Fits - 5/8” / 15.9mm Shanks					
Shank Size (in./mm)	ID (in./mm)	OAL (in./mm)	Head Dia. (in./mm)	Order No.	Price
.625/15.9	.1875/4.76	2.80/71	.750/19.1	**GE46QTH105**	Price
.625/15.9	.2500/6.35	2.80/71	.750/19.1	**GE46QTH106**	Price
.625/15.9	.3125/7.94	2.80/71	.875/22.2	**GE46QTH107**	Price
.625/15.9	.3750/9.53	2.80/71	1.00/25.4	**GE46QTH108**	Price
.625/15.9	.1875/4.76	5.80/147	.750/19.1	**GE46QTH105L**	Price
.625/15.9	.2500/6.35	5.80/147	.750/19.1	**GE46QTH106L**	Price
.625/15.9	.3125/7.94	5.80/147	.875/22.2	**GE46QTH107L**	Price
.625/15.9	.3750/9.53	5.80/147	1.00/25.4	**GE46QTH108L**	Price





Standard tools will not fit in Quick Change holders.

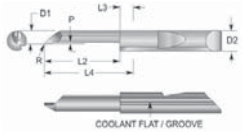


MICRO 100 Profiling Tools

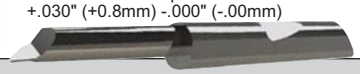
Quick Change

Tool design allow for clearance while machining a 45° cone

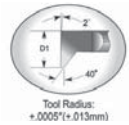




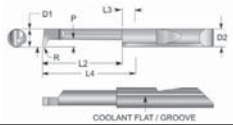
Shank Diameter
-.0001" (-.0025mm) to -.0003" (-.0076mm)
Minimum Bore Diameter
+.0005" (+.013mm)
Maximum Bore Depth
+.030" (+0.8mm) -.000" (-.00mm)



Type - QPF Profiling Tool								
					AlTiN		Uncoated	
Min. Bore (in.)	Max. Bore Depth (in.)	Shank Dia. (in.)	Projection	Radius	Order No.	Price	Order No.	Price
.110	.250	3/16	.040	.005	**GE46QPF110250X**	Price	**GE46QPF110250**	Price
.120	.500	3/16	.050	.008	**GE46QPF120500X**	Price	**GE46QPF120500**	Price
.180	.500	1/4	.080	.008	**GE46QPF180500X**	Price	**GE46QPF180500**	Price
.230	.750	5/16	.080	.008	**GE46QPF230750X**	Price	**GE46QPF230750**	Price
.230	1.000	5/16	.080	.008	**GE46QPF2301000X**	Price	**GE46QPF2301000**	Price
.300	1.000	5/16	.100	.008	**GE46QPF3001000X**	Price	**GE46QPF3001000**	Price
.360	1.000	3/8	.130	.008	**GE46QPF3601000X**	Price	**GE46QPF3601000**	Price







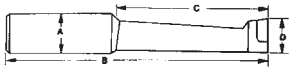


Type - QPR Profiling Tool								
					AlTiN		Uncoated	
Min. Bore (in.)	Max. Bore Depth (in.)	Shank Dia. (in.)	Projection	Radius	Order No.	Price	Order No.	Price
.110	.250	3/16	-	.005	**GE46QPR110250X**	Price	**GE46QPR110250**	Price
.120	.500	3/16	-	.008	**GE46QPR120500X**	Price	**GE46QPR120500**	Price
.180	.500	1/4	-	.008	**GE46QPR180500X**	Price	**GE46QPR180500**	Price
.230	.750	5/16	-	.008	**GE46QPR230750X**	Price	**GE46QPR230750**	Price
.230	1.000	5/16	-	.008	**GE46QPR2301000X**	Price	**GE46QPR2301000**	Price
.300	1.000	5/16	-	.008	**GE46QPR3001000X**	Price	**GE46QPR3001000**	Price
.360	1.000	3/8	-	.008	**GE46QPR3601000X**	Price	**GE46QPR3601000**	Price

BORITE Cobalt — Premium High Speed Steel

- All minimum hole sizes come in three lengths:
  Short — for counter boring and short hole work
  Medium — for general boring
  Long — for those extra depth holes where generally the tool room has to make up special tooling
- These tools are a quality tool designed to be used and sold as a boring tool bit





A Shank Dia. (in.)	B Length (in.)	C Bore Depth (in.)	D Min. Bore (in.)	Order No.	Price
3/8	1-13/16	9/16	3/16	**GA51AH3S**	Price
3/8	2	3/4	1/4	**GA51AH4S**	Price
3/8	2-3/16	15/16	3/16	**GA51AH3L**	Price
3/8	2-3/16	15/16	5/16	**GA51AH5S**	Price
3/8	2-3/8	1-1/8	3/8	**GA51AH6S**	Price
3/8	2-1/2	1-1/4	1/4	**GA51AH4L**	Price
3/8	2-13/16	1-9/16	5/16	**GA51AH5L**	Price
3/8	3-1/8	1-7/8	3/8	**GA51AH6L**	Price
1/2	2-1/8	3/4	1/4	**GA51BH4S**	Price
1/2	2-5/16	15/16	5/16	**GA51BH5S**	Price
1/2	2-1/2	1-1/8	3/8	**GA51BH6S**	Price
1/2	2-5/8	1-1/4	1/4	**GA51BH4L**	Price
1/2	2-11/16	1-5/16	7/16	**GA51BH7S**	Price
1/2	2-7/8	1-1/2	1/2	**GA51BH8S**	Price
1/2	2-15/16	1-9/16	5/16	**GA51BH5L**	Price
1/2	3-1/4	1-7/8	3/8	**GA51BH6L**	Price
1/2	3-9/16	2-3/16	7/16	**GA51BH7L**	Price
1/2	3-7/8	2-1/2	1/2	**GA51BH8L**	Price
5/8	2-5/8	1-1/8	3/8	**GA51DH6S**	Price
5/8	2-13/16	1-5/16	7/16	**GA51DH7S**	Price
5/8	3	1-1/2	1/2	**GA51DH8S**	Price
5/8	3-3/16	1-11/16	9/16	**GA51DH9S**	Price
5/8	3-3/8	1-7/8	3/8	**GA51DH6L**	Price
5/8	3-3/8	1-7/8	5/8	**GA51DH10S**	Price
5/8	3-11/16	2-3/16	7/16	**GA51DH7L**	Price
5/8	4	2-1/2	1/2	**GA51DH8L**	Price
5/8	4-5/16	2-13/16	9/16	**GA51DH9L**	Price
5/8	4-5/8	3-1/8	5/8	**GA51DH10L**	Price
3/4	2-7/8	1-1/8	3/8	**GA51CH6S**	Price
3/4	3-1/16	1-5/16	7/16	**GA51CH7S**	Price
3/4	3-1/4	1-1/2	1/2	**GA51CH8S**	Price
3/4	3-7/16	1-11/16	9/16	**GA51CH9S**	Price
3/4	3-5/8	1-7/8	3/8	**GA51CH6L**	Price
3/4	3-5/8	1-7/8	5/8	**GA51CH10S**	Price
3/4	3-13/16	2-1/16	11/16	**GA51CH11S**	Price
3/4	3-15/16	2-3/16	7/16	**GA51CH7L**	Price
3/4	4	2-1/4	3/4	**GA51CH12S**	Price
3/4	4-1/4	2-1/2	1/2	**GA51CH8L**	Price
3/4	4-9/16	2-13/16	9/16	**GA51CH9L**	Price
3/4	4-7/8	3-1/8	5/8	**GA51CH10L**	Price
3/4	5-3/16	3-7/16	11/16	**GA51CH11L**	Price
3/4	5-1/2	3-3/4	3/4	**GA51CH12L**	Price

BORITE Carbide Tipped — Grade C-2 or C-6



- All minimum hole sizes come in three lengths:
  Short — for counter boring and short hole work
  Medium — for general boring
  Long — for those extra depth holes where generally the tool room has to make up special tooling
- We offer two types of carbide tips:
  C2 —general purpose: for cast iron and non-ferrous
  C6— general purpose: for steel and steel alloys
- These tools are a quality tool designed to be used and sold as a boring tool bit

A Shank Dia. (in.)	B Length (in.)	C Bore Depth (in.)	D Min. Bore (in.)	C2		C6	
				Order No.	Price	Order No.	Price
3/8	2	3/4	5/16	**GA51A5SC2**	Price	**GA51A5SC6**	Price
3/8	2-3/16	15/16	3/8	**GA51A3SC2**	Price	**GA51A3SC6**	Price
3/8	2-3/8	1-1/8	5/16	**GA51A5MC2**	Price	**GA51A5MC6**	Price
3/8	2-3/8	1-1/8	7/16	**GA51A7SC2**	Price	**GA51A7SC6**	Price
3/8	2-21/32	1-13/32	3/8	**GA51A3MC2**	Price	**GA51A3MC6**	Price
3/8	2-3/4	1-1/2	5/16	**GA51A5LC2**	Price	**GA51A5LC6**	Price
3/8	2-15/16	1-11/16	7/16	**GA51A7MC2**	Price	**GA51A7MC6**	Price
3/8	3-1/8	1-7/8	3/8	**GA51A3LC2**	Price	**GA51A3LC6**	Price
3/8	3-1/2	2-1/4	7/16	**GA51A7LC2**	Price	**GA51A7LC6**	Price
1/2	2-1/4	3/4	5/16	**GA51B5SC2**	Price	**GA51B5SC6**	Price
1/2	2-5/8	1-1/8	5/16	**GA51B5MC2**	Price	**GA51B5MC6**	Price
1/2	2-5/8	1-1/8	7/16	**GA51B7SC2**	Price	**GA51B7SC6**	Price
1/2	3	1-1/2	5/16	**GA51B5LC2**	Price	**GA51B5LC6**	Price
1/2	3	1-1/2	9/16	**GA51B9SC2**	Price	**GA51B9SC6**	Price
1/2	3-3/16	1-11/16	7/16	**GA51B7MC2**	Price	**GA51B7MC6**	Price
1/2	3-3/4	2-1/4	7/16	**GA51B7LC2**	Price	**GA51B7LC6**	Price
1/2	3-3/4	2-1/4	9/16	**GA51B9MC2**	Price	**GA51B9MC6**	Price
1/2	4-1/2	3	9/16	**GA51B9LC2**	Price	**GA51B9LC6**	Price
5/8	2-1/4	3/4	5/16	**GA51D5SC2**	Price	**GA51D5SC6**	Price
5/8	2-5/8	1-1/8	5/16	**GA51D5MC2**	Price	**GA51D5MC6**	Price
5/8	2-5/8	1-1/8	7/16	**GA51D7SC2**	Price	**GA51D7SC6**	Price
5/8	3	1-1/2	5/16	**GA51D5LC2**	Price	**GA51D5LC6**	Price
5/8	3	1-1/2	9/16	**GA51D9SC2**	Price	**GA51D9SC6**	Price
5/8	3-3/16	1-11/16	7/16	**GA51D7MC2**	Price	**GA51D7MC6**	Price
5/8	3-3/8	1-7/8	11/16	**GA51D11SC2**	Price	**GA51D11SC6**	Price
5/8	3-3/4	2-1/4	7/16	**GA51D7LC2**	Price	**GA51D7LC6**	Price
5/8	3-3/4	2-1/4	9/16	**GA51D9MC2**	Price	**GA51D9MC6**	Price
5/8	4-5/16	2-13/16	11/16	**GA51D11MC2**	Price	**GA51D11MC6**	Price
5/8	4-1/2	3	9/16	**GA51D9LC2**	Price	**GA51D9LC6**	Price
5/8	5-1/4	3-3/4	11/16	**GA51D11LC2**	Price	**GA51D11LC6**	Price
3/4	3-1/8	1-1/8	7/16	**GA51C7SC2**	Price	**GA51C7SC6**	Price
3/4	3-1/2	1-1/2	9/16	**GA51C9SC2**	Price	**GA51C9SC6**	Price
3/4	3-11/16	1-11/16	7/16	**GA51C7MC2**	Price	**GA51C7MC6**	Price
3/4	3-7/8	1-7/8	11/16	**GA51C11SC2**	Price	**GA51C11SC6**	Price
3/4	4-1/4	2-1/4	7/16	**GA51C7LC2**	Price	**GA51C7LC6**	Price
3/4	4-1/4	2-1/4	9/16	**GA51C9MC2**	Price	**GA51C9MC6**	Price
3/4	4-1/4	2-1/4	13/16	**GA51C13SC2**	Price	**GA51C13SC6**	Price
3/4	4-13/16	2-13/16	11/16	**GA51C11MC2**	Price	**GA51C11MC6**	Price
3/4	5	3	9/16	**GA51C9LC2**	Price	**GA51C9LC6**	Price
3/4	5-3/8	3-3/8	13/16	**GA51C13MC2**	Price	**GA51C13MC6**	Price
3/4	5-3/4	3-3/4	11/16	**GA51C11LC2**	Price	**GA51C11LC6**	Price
3/4	6-1/2	4-1/2	13/16	**GA51C13LC2**	Price	**GA51C13LC6**	Price
1	5	3	9/16	**GA51E9LC2**	Price	**GA51E9LC6**	Price
1	5-3/4	3-3/4	11/16	**GA51E11LC2**	Price	**GA51E11LC6**	Price
1	6-1/2	4-1/2	7/8	**GA51E14LC2**	Price	**GA51E14LC6**	Price
1	6-1/2	4-1/2	1-1/16	**GA51E18LC2**	Price	**GA51E18LC6**	Price
1	7-3/4	5-3/4	1-1/4	**GA51E20LC2**	Price	**GA51E20LC6**	Price
1	8-1/4	6-1/4	1-1/2	**GA51E24LC2**	Price	**GA51E24LC6**	Price
1	9-1/2	7-1/2	1-5/8	**GA51E26LC2**	Price	**GA51E26LC6**	Price

BORITE Carbide & Cobalt Tipped Boring Bars & Sets

- All minimum hole sizes come in three lengths:
  Short - for counter boring and short hole work
  Medium - for general boring
  Long - for those extra depth holes where generally the tool room has to make up special tooling
- We offer two types of carbide sets:
  C-2 - general purpose: cast iron & non-ferrous
  C-6 - general purpose: steel & steel alloys
- These tools are a quality tool designed to be used and sold as a boring tool bit

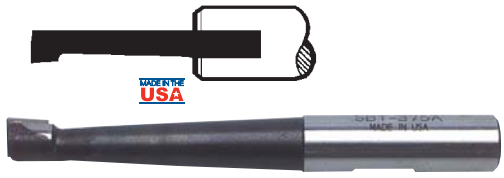


Type - Carbide Tipped Boring Bar Sets				
No. of Pieces	Shank Dia. (in.)	Grade	Order No.	Price
9 Pcs.	3/8	C2	**GA51A375C2**	Price
9 Pcs.	3/8	C6	**GA51A375C6**	Price
9 Pcs.	1/2	C2	**GA51B500C2**	Price
9 Pcs.	1/2	C6	**GA51B500C6**	Price
12 Pcs.	5/8	C2	**GA51D625C2**	Price
12 Pcs.	5/8	C6	**GA51D625C6**	Price
12 Pcs.	3/4	C2	**GA51C750C2**	Price
12 Pcs.	3/4	C6	**GA51C750C6**	Price
12 Pcs.	1	C2	**GA51E100C2**	Price
12 Pcs.	1	C6	**GA51E100C6**	Price

Type - Cobalt Boring Bar Sets				
No. of Pieces	Shank Dia. (in.)	Grade	Order No.	Price
8 Pcs.	3/8	-	**GA51AH375**	Price
10 Pcs.	1/2	-	**GA51BH500**	Price
10 Pcs.	5/8	-	**GA51DH625**	Price
14 Pcs.	3/4	-	**GA51CH750**	Price

ALLIED MACHINE & ENGINEERING CORP Criterion Carbide Tipped Boring Bars

Micrograin Carbide



- Designed with a length to diameter ratio of approximately 4-1/2 to 1
- Features set-screw flats that position the cutting edge on exact centerline when used in a Criterion boring head
- Carbide boring tools with a minimum boring diameters of 1/8, 3/16 and 1/4 feature a solid carbide neck and head as shown

Shank Dia. (in.)	Min. Bore Dia. (in.)	OAL (in.)	Max. Boring Depth (in.)	Micrograin	
				Order No.	Price
3/8	1/8	1-7/8	1/2	**GE60SBT125A**	Price
3/8	3/16	2-5/32	13/16	**GE60SBT187A**	Price
3/8	1/4	2-15/32	1-1/8	**GE60SBT250A**	Price
3/8	5/16	2-13/16	1-1/2	**GE60SBT312A**	Price
3/8	3/8	3-3/16	1-3/4	**GE60SBT375A**	Price
3/8	1/2	3-1/2	2-3/16	**GE60SBT500A**	Price
1/2	1/8	1-7/8	1/2	**GE60SBT125B**	Price
1/2	3/16	2-5/32	13/16	**GE60SBT187B**	Price
1/2	1/4	2-15/32	1-1/8	**GE60SBT250B**	Price
1/2	5/16	2-13/16	1-1/2	**GE60SBT312B**	Price
1/2	3/8	3-3/16	1-3/4	**GE60SBT375B**	Price
1/2	1/2	3-1/2	2-3/16	**GE60SBT500B**	Price

Shank Dia. (in.)	Min. Bore Dia. (in.)	OAL (in.)	Max. Boring Depth (in.)	Micrograin	
				Order No.	Price
5/8	1/8	2-1/4	1/2	**GE60SBT125C**	Price
5/8	3/16	2-9/16	13/16	**GE60SBT187C**	Price
5/8	1/4	2-7/8	1-1/8	**GE60SBT250C**	Price
5/8	3/8	3-1/2	1-3/4	**GE60SBT375C**	Price
5/8	1/2	3-13/16	2-1/8	**GE60SBT500C**	Price
5/8	5/8	4-1/8	2-1/2	**GE60SBT625C**	Price
3/4	1/2	4-1/4	2-1/2	**GE60SBT500D**	Price
3/4	5/8	4-15/32	2-3/4	**GE60SBT625D**	Price
3/4	3/4	4-11/16	3	**GE60SBT750D**	Price
3/4	1	5-1/8	3-1/2	**GE60SBT1000D**	Price
3/4	1-1/4	5-9/16	4	**GE60SBT1250D**	Price

1" Shank boring bars available — POA

ALLIED MACHINE & ENGINEERING CORP Criterion Stubbies

Micrograin Carbide



- This line of stubby boring tools are for when the greater length of a standard tool is a hindrance, rather than a help
- Maximum rigidity is assured whether used in a boring head or in the cross-slide of a lathe

Min. Hole Size (in.)	Max. Boring Dept (in.)	OAL (in.)	Shank Dia. (in.)	C2	
				Order No.	Price
1/8	1/4	1-21/32	1/2	**GE607125B**	Price
3/16	5/16	1-13/16	1/2	**GE607187B**	Price
1/4	7/16	2	1/2	**GE607250B**	Price
5/16	9/16	2-3/16	1/2	**GE607312B**	Price
3/8	11/16	2-3/8	1/2	**GE607375B**	Price
1/2	13/16	2-9/16	1/2	**GE607500B**	Price

Min. Hole Size (in.)	Max. Boring Dept (in.)	OAL (in.)	Shank Dia. (in.)	C2	
				Order No.	Price
1/2	1-5/16	2-15/16	3/4	**GE607500D**	Price
3/4	1-17/32	3-5/32	3/4	**GE607750D**	Price
1	1-3/4	3-3/8	1	**GE6071000E**	Price
1-1/4	1-31/32	3-19/32	1	**GE6071250E**	Price

Sets available - call for pricing!

Carbide Tipped Boring Bars Sets



- Grade C-6 Carbide for general purpose use in steel and steel alloys
- Set includes short, medium, and long length bars for each minimum bore diameter

Shank Dia. (in.)	No. Pcs. in Set	Order No.	Price
3/8	9	**GA51KBS375**	Price
1/2	9	**GA51KBS500**	Price
5/8	12	**GA51KBS625**	Price
3/4	12	**GA51KBS750**	Price

5 Pc. Double End Boring Bar Set



- Includes 1 each of: 1/4", 3/8", 1/2", 5/8", 3/4"
- In wooden block

Order No.	Price
FL60BD459	Price

Steel Boring Bars



- Single end boring bars
- 45° or 90°
- Broached holes to accept standard steel and carbide tool bits
- Tool bits not included

Bar Dia. (in.)	OAL (in.)	Tool Bit Size (in.)	45°		90°	
			Order No.	Price	Order No.	Price
1/4	2-1/2	5/32 Round	**FL60BA1**	Price	**FL60BS1**	Price
5/16	2-1/2	3/16 Round	**FL60BA2**	Price	**FL60BS2**	Price
3/8	3	3/16 Round	**FL60BA3**	Price	**FL60BS3**	Price
1/2	3	3/16 Square	**FL60BA4**	Price	**FL60BS4**	Price
9/16	4-1/2	3/16 Square	**FL60BA5**	Price	**FL60BS5**	Price
5/8	5	1/4 Square	**FL60BA6**	Price	**FL60BS6**	Price
3/4	6	1/4 Square	**FL60BA7**	Price	**FL60BS7**	Price
1	6	5/16 Square	**FL60BA9**	Price	**FL60BS9**	Price
1-1/4	8	1/2 Square	**FL60BA11**	Price	**FL60BS11**	Price
1-1/2	9	1/2 Square	**FL60BA15**	Price	**FL60BS15**	Price

Double End boring Bars

One End 45° — One end 90°



Bar Dia. (in.)	OAL (in.)	Tool Bit Size (in.)	Order No.	Price
1/4	5	5/32 Round	**FL60BD1**	Price
5/16	5	3/16 Round	**FL60BD2**	Price
3/8	6	3/16 Round	**FL60BD3**	Price
1/2	6	3/16 Square	**FL60BD4**	Price
9/16	9	3/16 Square	**FL60BD5**	Price
5/8	10	1/4 Square	**FL60BD6**	Price
3/4	12	1/4 Square	**FL60BD7**	Price
1	12	5/16 Square	**FL60BD9**	Price
1-1/4	16	1/2 Square	**FL60BD11**	Price
1-1/2	18	1/2 Square	**FL60BD15**	Price

Tool bits not included

BORITE Mini Bore Tools



- Ease and precision in small hole boring
- All tools ground from the solid
- Holders are available in four standard shank sizes
- High speed steel and carbide tools are interchangeable in holders

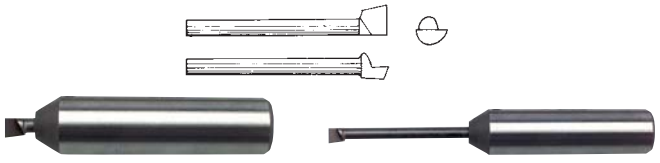
Shank Dia. (in.)	Min. Bore Dia. (in.)	Max. Bore Depth (in.)	OAL (in.)	Carbide Mini Boring Tools		High Speed Steel Mini Boring Tools	
				Order No.	Price	Order No.	Price
1/4	1/16	5/16	2	**GA52C1**	Price	**GA52H1**	Price
1/4	3/32	15/32	2	**GA52C2**	Price	**GA52H2**	Price
1/4	1/8	5/8	2	**GA52C3**	Price	**GA52H3**	Price
1/4	5/32	25/32	2	**GA52C4**	Price	**GA52H4**	Price
1/4	3/16	15/16	2	**GA52C5**	Price	**GA52H5**	Price
1/4	1/4	1-1/4	2	**GA52C6**	Price	**GA52H6**	Price

BORITE Ultrabore Adjustable Length Boring Tools

MADE IN THE USA

Ultrabore Carbide Boring Tools

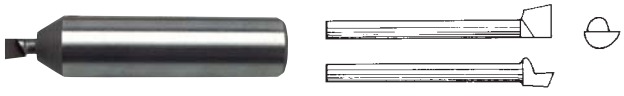
- Adjustable length allows use of only the neck length necessary, assuring maximum rigidity with finer finishes and straighter, truer holes...eliminating chatter and increasing tool life



Shank Dia. (in.)	Min. Bore Dia. (in.)	OAL (in.)	C2		C6	
			Order No.	Price	Order No.	Price
3/32	1/8	2-5/8	**GA52SC1C2**	Price	**GA52SC1C6**	Price
1/8	3/16	2-11/16	**GA52SC2C2**	Price	**GA52SC2C6**	Price
3/16	1/4	3-1/4	**GA52SC3C2**	Price	**GA52SC3C6**	Price
1/4	3/8	3-3/8	**GA52SC4C2**	Price	**GA52SC4C6**	Price
5/16	1/2	3-3/4	**GA52SC5C2**	Price	**GA52SC5C6**	Price

BORITE Ultrabore Holders

MADE IN THE USA



Shank Dia. (in.)	OAL (in.)	Hole Size (in.)	Order No.	Price
3/8	2-1/2	3/32	**GA52SH138**	Price
3/8	2-1/2	1/8	**GA52SH238**	Price
1/2	2-1/2	3/32	**GA52SH112**	Price
1/2	2-1/2	1/8	**GA52SH212**	Price
1/2	3	3/16	**GA52SH312**	Price
1/2	3	1/4	**GA52SH412**	Price
1/2	3	5/16	**GA52SH512**	Price
5/8	2-1/2	3/32	**GA52SH158**	Price
5/8	2-1/2	1/8	**GA52SH258**	Price
5/8	3	3/16	**GA52SH358**	Price
5/8	3	1/4	**GA52SH458**	Price
5/8	3	5/16	**GA52SH558**	Price
3/4	2-1/2	3/32	**GA52SH134**	Price
3/4	2-1/2	1/8	**GA52SH234**	Price
3/4	3	3/16	**GA52SH334**	Price
3/4	3	1/4	**GA52SH434**	Price
3/4	3	5/16	**GA52SH534**	Price

MICRO 100 Helical Back Rake Boring Tools

Neck is centered to shank for use in jig boring machines. The helical grind provides an ideal top rake for better chip control.
Shank diameter: –.0001 to –.0003”

- Minimum bore diameter: +.001 –.000”
- Maximum bore depth: +.030 –.000”
- Overall length: ± 1/64”



Min. Bore Dia.	Max. Bore Depth (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
.150	1	3/16	2	**GE45HBB1501000**	Price
.180	1-1/4	3/16	2	**GE45HBB1801250**	Price
.180	1-1/2	3/16	2	**GE45HBB1801500**	Price
.210	1	1/4	2-1/2	**GE45HBB2101000**	Price
.210	1-1/2	1/4	2-1/2	**GE45HBB2101500**	Price
.240	1-3/4	1/4	2-1/2	**GE45HBB2401750**	Price
.300	1	5/16	2-1/2	**GE45HBB3001000**	Price
.360	1-1/2	3/8	2-1/2	**GE45HBB3601500**	Price
.360	2-1/2	3/8	4	**GE45HBB3602500**	Price

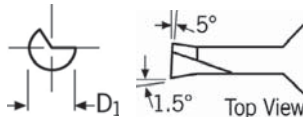
MICRO 100 super carbide Miniature Boring Tools Micro-Quik QUICK CHANGE TOOLING

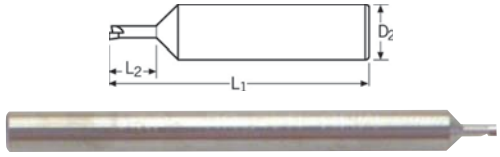
1/8” Shank

Lockdown flat automatically locates tool on center.

Tolerance:

- Shank diameter: –.0001 to –.0003”
- Minimum bore diameter: +.000 –.002”
- Maximum bore depth: +.025 –.000”
- Overall length: ± 1/64”





Min. Bore Dia. (in.)	Max. Bore Depth (in.)	OAL (in.)	Order No.	Price
.025	.100	1-1/2	**GE45MBB025100**	Price
.030	.100	1-1/2	**GE45MBB030100**	Price
.035	.100	1-1/2	**GE45MBB035100**	Price
.035	.150	1-1/2	**GE45MBB035150**	Price
.040	.100	1-1/2	**GE45MBB040100**	Price
.045	.100	1-1/2	**GE45MBB045100**	Price

MICRO 100 Brazed Back Chamfering Tools

For Milling Machines

- Uncoated
- Cutter diameter +.000” / -.005”
- Flat +.000” / -.005”



Cutter Dia. (in.)	Thickness (in.)	No. of Flutes	Shank Length (in.)	Flat (in.)	Order No.	Price
3/8	1/8	4	2-1/2	1/32	**GE45MBC375**	Price
1/2	1/8	5	2-1/2	1/32	**GE45MBC500**	Price
3/4	5/32	6	2-1/2	1/32	**GE45MBC750**	Price
1	3/16	7	3	1/32	**GE45MBC001**	Price

MICRO 100 Brazed Boring Bars Premium Micro-Grain Carbide Tipped

HELPFUL HINT:
When boring tools do not meet your expectations, simply grind 5-10° positive top rake, radius nose .010" to .020" and lightly hone cutting edge.



MADE IN THE USA

Shank Dia. (in.)	Length (in.)	Left Hand		Right Hand	
		Order No.	Price	Order No.	Price
1/4	4	**GE45TBBL250**	Price	**GE45TBB250**	Price
5/16	5	**GE45TBBL312**	Price	**GE45TBB312**	Price
3/8	6	**GE45TBBL375**	Price	**GE45TBB375**	Price
1/2	7	**GE45TBBL500**	Price	**GE45TBB500**	Price
5/8	8	**GE45TBBL625**	Price	**GE45TBB625**	Price
3/4	9	**GE45TBBL750**	Price	**GE45TBB750**	Price
1	10	**GE45TBBL001**	Price	**GE45TBB001**	Price

MICRO 100 Solid Carbide Internal Acme Threading Tools

MADE IN THE USA

29° Included Angle



Min. Bore Dia.	Shank Dia. (in.)	Flat	OAL (in.)	Depth	Projection	TPI	Order No.	Price
.200	1/4	.021	2-1/2	.400	.0450	16	**GE45IAT40016**	Price
.200	1/4	.021	2-1/2	.600	.0450	16	**GE45IAT60016**	Price
.200	1/4	.021	2-1/2	.750	.0450	16	**GE45IAT75016**	Price
.360	3/8	.028	2-1/2	.750	.0850	12	**GE45IAT75012**	Price
.360	3/8	.028	2-1/2	1.000	.0850	12	**GE45IAT100012**	Price
.490	1/2	.032	3	2.000	.1200	10	**GE45IAT200010**	Price
.490	1/2	.041	3	1.500	.1200	8	**GE45IAT15008**	Price
.490	1/2	.041	3	2.000	.1200	8	**GE45IAT20008**	Price
.490	1/2	.057	3	.750	.1200	6	**GE45IAT7506**	Price
.490	1/2	.057	3	1.500	.1200	6	**GE45IAT15006**	Price
.490	1/2	.057	3	2.000	.1200	6	**GE45IAT20006**	Price
.490	1/2	.069	3	1.500	.1200	5	**GE45IAT15005**	Price
.490	1/2	.069	3	2.000	.1200	5	**GE45IAT20005**	Price

MICRO 100 Solid Carbide 6 Pc. 60° Internal Threading Tool Set

Set contains bars:

- IT-180500 thru IT-360750
- 180" thru .360" minimum bore
- 1/4" thru 3/8" shank size
- .500" thru .750" depth
- All bars are 2-1/2" overall length



Order No.	Price
GE45IT1	Price

MICRO 100 5 Pc. Boring Bar Sets

- Includes sizes: 1/4", 3/8", 1/2", 5/8" & 3/4"



Style	Order No.	Price
Left Hand	**GE45TBBL5**	Price
Right Hand	**GE45TBB5**	Price

MICRO 100 Brazed Head Thread Mills

- Designed for milling precision ID and OD threads in all types of steels, non-ferrous metals and exotic materials
- Equally effective in laminated plastics, fiberglass and composites used in the aircraft industry
- Thread form generated is American Standard thread
- Minimum pitch listed is for an internal thread



Cutter Dia. (in.)	Shank Dia. (in.)	Shank Length (in.)	Flat	No. of Flutes	Min. Pitch	Max. Pitch	Order No.	Price
3/8	1/4	2-1/2	.002	4	32	12 to 32	**GE45TM375**	Price
1/2	5/16	2-1/2	.0035	5	20	11 to 32	**GE45TM500**	Price
3/4	3/8	2-1/2	.0045	6	16	7 to 16	**GE45TM750**	Price
1	1/2	3	.009	7	8	5 To 12	**GE45TM001**	Price

MICRO 100 Steel Holders

- Heat treated and precision ground
- Two lockdowns at 90° for secure fastening



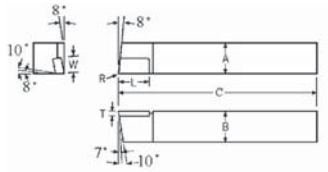


I.D. (in.)	O.D. (in.)	Order No.	Price
1/8	1/2	**GE45TH84**	Price
1/8	5/8	**GE45TH104**	Price
1/8	3/4	**GE45TH204**	Price
3/16	1/2	**GE45TH85**	Price
3/16	5/8	**GE45TH105**	Price
3/16	3/4	**GE45TH205**	Price
1/4	1/2	**GE45TH86**	Price
1/4	5/8	**GE45TH106**	Price
1/4	3/4	**GE45TH206**	Price
5/16	1/2	**GE45TH87**	Price
5/16	5/8	**GE45TH107**	Price
5/16	3/4	**GE45TH207**	Price
3/8	1/2	**GE45TH88**	Price
3/8	5/8	**GE45TH108**	Price
3/8	3/4	**GE45TH208**	Price
1/2	3/4	**GE45TH210**	Price

Styles AR and AL Standard Brazed Tool Bits

- Micrograin carbide
- Right hand shown





MADE IN THE USA

RAPIDKUT® MICRO 100®

Cut Style - Left												
A Shank Height (in.)	B Shank Width (in.)	C OAL (in.)	T Tip Thickness (in.)	W Tip Width (in.)	L Tip Length (in.)	R Radius (in.)	Rapidkut			Micro 100		
							Style	Order No.	Price	Style	Order No.	Price
1/4	1/4	2	1/16	3/16	1/4	1/64	AL4	**FE3010000**	Price	AL4	**GE40AL4M**	Price
5/16	5/16	2-1/4	1/16	1/4	5/16	1/64	AL5	**FE3010001**	Price	AL5	**GE40AL5M**	Price
3/8	3/8	2-1/2	1/8	1/4	1/2	1/64	AL6	**FE3010002**	Price	AL6	**GE40AL6M**	Price
7/16	7/16	3	1/8	1/4	1/2	1/32	AL7	**FE3010003**	Price	AL7	**GE40AL7M**	Price
1/2	1/2	3-1/2	1/8	1/4	5/8	1/32	AL8	**FE3010004**	Price	AL8	**GE40AL8M**	Price
5/8	5/8	4	5/32	3/8	3/4	1/32	AL10	**FE3010005**	Price	AL10	**GE40AL10M**	Price
3/4	3/4	4-1/2	3/16	7/16	13/16	1/32	AL12	**FE3010006**	Price	AL12	**GE40AL12M**	Price

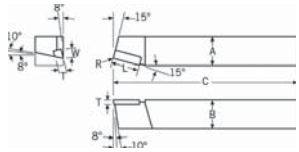
Cut Style - Right												
A Shank Height (in.)	B Shank Width (in.)	C OAL (in.)	T Tip Thickness (in.)	W Tip Width (in.)	L Tip Length (in.)	R Radius (in.)	Rapidkut			Micro 100		
							Style	Order No.	Price	Style	Order No.	Price
1/4	1/4	2	1/16	3/16	1/4	1/64	AR4	**FE3010007**	Price	AR4	**GE40AR4M**	Price
5/16	5/16	2-1/4	1/16	1/4	5/16	1/64	AR5	**FE3010008**	Price	AR5	**GE40AR5M**	Price
3/8	3/8	2-1/2	1/8	1/4	1/2	1/64	AR6	**FE3010009**	Price	AR6	**GE40AR6M**	Price
7/16	7/16	3	1/8	1/4	1/2	1/32	AR7	**FE3010010**	Price	AR7	**GE40AR7M**	Price
1/2	1/2	3-1/2	1/8	1/4	5/8	1/32	AR8	**FE3010011**	Price	AR8	**GE40AR8M**	Price
5/8	5/8	4	5/32	3/8	3/4	1/32	AR10	**FE3010012**	Price	AR10	**GE40AR10M**	Price
3/4	3/4	4-1/2	3/16	7/16	13/16	1/32	AR12	**FE3010013**	Price	AR12	**GE40AR12M**	Price

Styles BR and BL Standard Brazed Tool Bits

- Micrograin carbide







MADE IN THE USA

RAPIDKUT® MICRO 100®

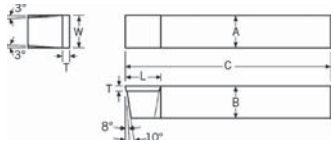
Cut Style - Left												
A Shank Height (in.)	B Shank Width (in.)	C OAL (in.)	T Tip Thickness (in.)	W Tip Width (in.)	L Tip Length (in.)	R Radius (in.)	Rapidkut			Micro 100		
							Style	Order No.	Price	Style	Order No.	Price
3/8	3/8	2-1/2	1/8	1/4	1/2	1/64	BL6	**FE3010014**	Price	BL6	**GE40BL6M**	Price
7/16	7/16	3	1/8	1/4	1/2	1/32	BL7	**FE3010015**	Price	BL7	**GE40BL7M**	Price
1/2	1/2	3-1/2	1/8	1/4	5/8	1/32	BL8	**FE3010016**	Price	BL8	**GE40BL8M**	Price
5/8	5/8	4	5/32	3/8	3/4	1/32	BL10	**FE3010017**	Price	BL10	**GE40BL10M**	Price
3/4	3/4	4-1/2	3/16	7/16	13/16	1/32	BL12	**FE3010018**	Price	-	-	-

Cut Style - Right												
A Shank Height (in.)	B Shank Width (in.)	C OAL (in.)	T Tip Thickness (in.)	W Tip Width (in.)	L Tip Length (in.)	R Radius (in.)	Rapidkut			Micro 100		
							Style	Order No.	Price	Style	Order No.	Price
3/8	3/8	2-1/2	1/8	1/4	1/2	1/64	BR6	**FE3010019**	Price	BR6	**GE40BR6M**	Price
7/16	7/16	3	1/8	1/4	1/2	1/32	BR7	**FE3010020**	Price	BR7	**GE40BR7M**	Price
1/2	1/2	3-1/2	1/8	1/4	5/8	1/32	BR8	**FE3010021**	Price	BR8	**GE40BR8M**	Price
5/8	5/8	4	5/32	3/8	3/4	1/32	BR10	**FE3010022**	Price	BR10	**GE40BR10M**	Price
3/4	3/4	4-1/2	3/16	7/16	13/16	1/32	BR12	**FE3010023**	Price	-	-	-

Style C Standard Brazed Tool Bits

- Micrograin carbide





MADE IN THE USA

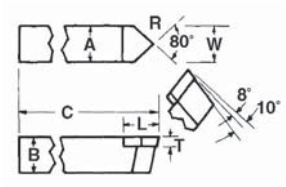
RAPIDKUT® MICRO 100®

A Shank Height (in.)	B Shank Width (in.)	C OAL (in.)	T Tip Thickness (in.)	W Tip Width (in.)	L Tip Length (in.)	Style	Rapidkut		Micro 100	
							Order No.	Price	Order No.	Price
1/4	1/4	2	1/16	1/4	1/4	C4	**FE3010024**	Price	**GE40C4M**	Price
5/16	5/16	2-1/4	3/32	5/16	3/8	C5	**FE3010025**	Price	**GE40C5M**	Price
3/8	3/8	2-1/2	3/32	3/8	3/8	C6	**FE3010026**	Price	**GE40C6M**	Price
7/16	7/16	3	3/32	7/16	1/2	C7	**FE3010027**	Price	**GE40C7M**	Price
1/2	1/2	3-1/2	1/8	1/2	1/2	C8	**FE3010028**	Price	**GE40C8M**	Price
5/8	5/8	4	5/32	5/8	5/8	C10	**FE3010029**	Price	**GE40C10M**	Price
3/4	3/4	4-1/2	3/16	3/4	3/4	C12	**FE3010030**	Price	**GE40C12M**	Price

Style D Standard Brazed Tool Bits

- Micrograin carbide





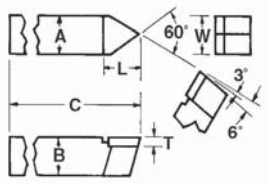
RAPIDKUT® MICRO 100®

A Shank Height (in.)	B Shank Width (in.)	C OAL (in.)	T Tip Thickness (in.)	W Tip Width (in.)	L Tip Length (in.)	R Radius (in.)	Style	Rapidkut		Micro 100	
								Order No.	Price	Order No.	Price
1/4	1/4	2	1/16	1/4	5/16	1/64	D4	**FE3010031**	Price	**GE40D4M**	Price
5/16	5/16	2-1/4	3/32	5/16	3/8	1/64	D5	**FE3010032**	Price	**GE40D5M**	Price
3/8	3/8	2-1/2	3/32	3/8	1/2	1/64	D6	**FE3010033**	Price	**GE40D6M**	Price
7/16	7/16	3	3/32	7/16	1/2	1/32	D7	**FE3010034**	Price	**GE40D7M**	Price
1/2	1/2	3-1/2	1/8	1/2	1/2	1/32	D8	**FE3010035**	Price	**GE40D8M**	Price
5/8	5/8	4	5/32	5/8	5/8	1/32	D10	**FE3010036**	Price	**GE40D10M**	Price
3/4	3/4	4-1/2	3/16	3/4	3/4	1/32	D12	**FE3010037**	Price	**GE40D12M**	Price

Style E Standard Brazed Tool Bits

- Micrograin carbide



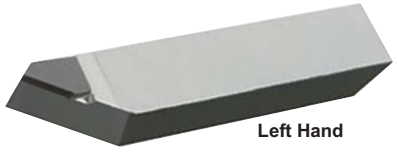


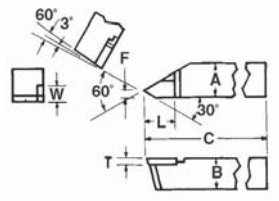
RAPIDKUT® MICRO 100®

A Shank Height (in.)	B Shank Width (in.)	C OAL (in.)	T Tip Thickness (in.)	W Tip Width (in.)	L Tip Length (in.)	Style	Rapidkut		Micro 100	
							Order No.	Price	Order No.	Price
1/4	1/4	2	3/32	1/4	3/8	E4	**FE3010038**	Price	**-**	-
5/16	5/16	2-1/4	3/32	5/16	3/8	E5	**FE3010039**	Price	**GE40E5M**	Price
3/8	3/8	2-1/2	3/32	3/8	1/2	E6	**FE3010040**	Price	**GE40E6M**	Price
1/2	1/2	3-1/2	1/8	1/2	1/2	E8	**FE3010041**	Price	**GE40E8M**	Price
5/8	5/8	4	5/32	5/8	5/8	E10	**FE3010042**	Price	**GE40E10M**	Price
3/4	3/4	4-1/2	3/16	3/4	3/4	E12	**FE3010043**	Price	**GE40E12M**	Price

Styles ER and EL Standard Brazed Tool Bits

- Micrograin carbide


Left Hand



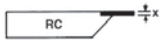
RAPIDKUT® MICRO 100®

Cut Style - Left												
A Shank Height (in.)	B Shank Width (in.)	C OAL (in.)	F Tip Flat (in.)	T Tip Thickness (in.)	W Tip Width (in.)	L Tip Length (in.)	Rapidkut			Micro 100		
							Style	Order No.	Price	Style	Order No.	Price
5/16	5/16	2-1/2	1/16	1/8	1/4	1/2	EL5	**FE3010044**	Price	EL5	**GE40EL5M**	Price
3/8	3/8	3	1/16	1/8	1/4	1/2	EL6	**FE3010045**	Price	EL6	**GE40EL6M**	Price
1/2	1/2	3-1/2	3/32	1/8	5/16	5/8	EL8	**FE3010046**	Price	EL8	**GE40EL8M**	Price
5/8	5/8	4	3/32	5/32	5/32	3/4	-	**-**	-	EL10	**GE40EL10M**	Price
3/4	3/4	4-1/2	1/8	3/16	13/16	13/16	EL12	**FE3010047**	Price	EL12	**GE40EL12M**	Price

Cut Style - Right												
A Shank Height (in.)	B Shank Width (in.)	C OAL (in.)	F Tip Flat (in.)	T Tip Thickness (in.)	W Tip Width (in.)	L Tip Length (in.)	Rapidkut			Micro 100		
							Style	Order No.	Price	Style	Order No.	Price
5/16	5/16	2-1/2	1/16	1/8	1/4	1/2	ER5	**FE3010048**	Price	ER5	**GE40ER5M**	Price
3/8	3/8	3	1/16	1/8	1/4	1/2	ER6	**FE3010049**	Price	ER6	**GE40ER6M**	Price
1/2	1/2	3-1/2	3/32	1/8	5/16	5/8	ER8	**FE3010050**	Price	ER8	**GE40ER8M**	Price
5/8	5/8	4	3/32	5/32	5/32	3/4	-	**-**	-	ER10	**GE40ER10M**	Price
3/4	3/4	4-1/2	1/8	3/16	13/16	13/16	ER12	**FE3010051**	Price	ER12	**GE40ER12M**	Price

Brazed Cut-Off Tools

Right Hand and Left Hand







Right Hand Shown

MADE IN THE USA

- All tools are ground with the required clearance angles
- Cut-off tools carbide protrusion = 3 times thickness specified
- Tolerance on thickness ± .000 -± .030”
- Micrograin carbide

RAPIDKUT®

MICRO 100®

			Rapidkut		Micro 100			
			Right		Left		Right	
X Tip Thickness	OAL (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price
.040	6	1/4	FE3010079	Price	-	-	-	-
.040	6	3/8	FE3010088	Price	GE45LC375040	Price	GE45RC375040	Price
.040	6	5/16	FE3010084	Price	GE45LC312040	Price	GE45RC312040	Price
.040	6	9/32	FE3010081	Price	-	-	-	-
.060	4	3/4	FE3010105	Price	-	-	GE45RC750060	Price
.060	4	5/8	FE3010100	Price	GE45LC625060	Price	GE45RC625060	Price
.060	6	1/2	FE3010096	Price	GE45LC500060	Price	GE45RC500060	Price
.060	6	1/4	FE3010080	Price	GE45LC250060	Price	-	-
.060	6	3/8	FE3010089	Price	GE45LC375060	Price	GE45RC375060	Price
.060	6	5/16	FE3010085	Price	GE45LC312060	Price	GE45RC312060	Price
.060	6	9/32	FE3010082	Price	-	-	-	-
.080	4	3/4	FE3010106	Price	-	-	GE45RC750080	Price
.080	4	5/8	FE3010101	Price	-	-	GE45RC625080	Price
.080	6	1/2	FE3010097	Price	GE45LC500080	Price	GE45RC500080	Price
.080	6	3/8	FE3010090	Price	GE45LC375080	Price	GE45RC375080	Price
.080	6	5/16	FE3010086	Price	GE45LC312080	Price	GE45RC312080	Price
.080	6	7/16	FE3010093	Price	-	-	-	-
.080	6	9/32	FE3010083	Price	-	-	-	-
.100	4	3/4	FE3010107	Price	GE45LC750100	Price	GE45RC750100	Price
.100	4	5/8	FE3010102	Price	GE45LC625100	Price	GE45RC625100	Price
.100	6	1/2	FE3010098	Price	GE45LC500100	Price	GE45RC500100	Price
.100	6	3/8	FE3010091	Price	GE45LC375100	Price	GE45RC375100	Price
.100	6	5/16	FE3010087	Price	GE45LC312100	Price	GE45RC312100	Price
.100	6	7/16	FE3010094	Price	-	-	-	-
.120	6	1/2	FE3010099	Price	GE45LC500120	Price	GE45RC500120	Price
.120	6	3/8	FE3010092	Price	GE45LC375120	Price	GE45RC375120	Price
.120	6	7/16	FE3010095	Price	GE45LC437120	Price	-	-
.125	4	3/4	FE3010108	Price	GE45LC750125	Price	GE45RC750125	Price
.125	4	5/8	FE3010103	Price	GE45LC625125	Price	GE45RC625125	Price
.187	4	3/4	FE3010109	Price	GE45LC750187	Price	GE45RC750187	Price
.187	4	5/8	FE3010104	Price	GE45LC625187	Price	GE45RC625187	Price

Styles AR and AL 0° Turning Tools

For turning to square shoulder. FE51 made in the USA





MADE IN THE USA

WORLD CLASS QUALITY

MADE IN THE USA

Cut Style - Left																	
				883E (C-2)		370E (C-5)		C2		C5/C6		K21 (C-5)		K68 (C-2)	
Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
AL4	1/4	1/4	2	FE51AL4883	Price	FE51AL4370	Price	FE50AL4C2	Price	FE50AL4C6	Price	FE51AL4K21	Price	FE51AL4K68	Price
AL5	5/16	5/16	2-1/4	FE51AL5883	Price	FE51AL5370	Price	FE50AL5C2	Price	FE50AL5C6	Price	FE51AL5K21	Price	FE51AL5K68	Price
AL6	3/8	3/8	2-1/2	FE51AL6883	Price	FE51AL6370	Price	FE50AL6C2	Price	FE50AL6C6	Price	FE51AL6K21	Price	FE51AL6K68	Price
AL7	7/16	7/16	3	FE51AL7883	Price	FE51AL7370	Price	FE50AL7C2	Price	FE50AL7C6	Price	FE51AL7K21	Price	FE51AL7K68	Price
AL8	1/2	1/2	3-1/2	FE51AL8883	Price	FE51AL8370	Price	FE50AL8C2	Price	FE50AL8C6	Price	FE51AL8K21	Price	FE51AL8K68	Price
AL10	5/8	5/8	4	FE51AL10883	Price	FE51AL10370	Price	FE50AL10C2	Price	FE50AL10C6	Price	FE51AL10K21	Price	FE51AL10K68	Price
AL12	3/4	3/4	4-1/2	FE51AL12883	Price	FE51AL12370	Price	FE50AL12C2	Price	FE50AL12C6	Price	FE51AL12K21	Price	FE51AL12K68	Price
AL16	1	1	7	FE51AL16883	Price	FE51AL16370	Price	FE50AL16C2	Price	FE50AL16C6	Price	FE51AL16K21	Price	FE51AL16K68	Price

Cut Style - Right																	
				883E (C-2)		370E (C-5)		C2		C5/C6		K21 (C-5)		K68 (C-2)	
Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
AR4	1/4	1/4	2	FE51AR4883	Price	FE51AR4370	Price	FE50AR4C2	Price	FE50AR4C6	Price	FE51AR4K21	Price	FE51AR4K68	Price
AR5	5/16	5/16	2-1/4	FE51AR5883	Price	FE51AR5370	Price	FE50AR5C2	Price	FE50AR5C6	Price	FE51AR5K21	Price	FE51AR5K68	Price
AR6	3/8	3/8	2-1/2	FE51AR6883	Price	FE51AR6370	Price	FE50AR6C2	Price	FE50AR6C6	Price	FE51AR6K21	Price	FE51AR6K68	Price
AR7	7/16	7/16	3	FE51AR7883	Price	FE51AR7370	Price	FE50AR7C2	Price	FE50AR7C6	Price	FE51AR7K21	Price	FE51AR7K68	Price
AR8	1/2	1/2	3-1/2	FE51AR8883	Price	FE51AR8370	Price	FE50AR8C2	Price	FE50AR8C6	Price	FE51AR8K21	Price	FE51AR8K68	Price
AR10	5/8	5/8	4	FE51AR10883	Price	FE51AR10370	Price	FE50AR10C2	Price	FE50AR10C6	Price	FE51AR10K21	Price	FE51AR10K68	Price
AR12	3/4	3/4	4	FE51AR12883	Price	-	-	-	-	-	-	-	-	-	-
AR12	3/4	3/4	4-1/2	-	-	FE51AR12370	Price	FE50AR12C2	Price	FE50AR12C6	Price	FE51AR12K21	Price	FE51AR12K68	Price
AR16	1	1	7	FE51AR16883	Price	FE51AR16370	Price	FE50AR16C2	Price	FE50AR16C6	Price	FE51AR16K21	Price	FE51AR16K68	Price

Styles BR and BL 15° Lead Angle Turning Tools

Used for turning when square shoulder is not required.
FE51 made in the USA



Right Hand



Left Hand

MADE IN THE USA — WORLD CLASS QUALITY — MADE IN THE USA

Cut Style - Left																			
Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	883E (C-2)		370E (C-5)		C2		C5/C6		K68 (C-2)		K21 (C-5)	
				Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
BL4	1/4	1/4	2	FE51BL4883	Price	-	-	FE50BL4C2	Price	FE50BL4C6	Price	FE51BL4K68	Price	FE51BL4K21	Price
BL5	5/16	5/16	2-1/4	FE51BL5883	Price	FE51BL5370	Price	FE50BL5C2	Price	FE50BL5C6	Price	FE51BL5K68	Price	FE51BL5K21	Price
BL6	3/8	3/8	2-1/2	FE51BL6883	Price	FE51BL6370	Price	FE50BL6C2	Price	FE50BL6C6	Price	FE51BL6K68	Price	FE51BL6K21	Price
BL7	7/16	7/16	3	FE51BL7883	Price	FE51BL7370	Price	FE50BL7C2	Price	FE50BL7C6	Price	FE51BL7K68	Price	FE51BL7K21	Price
BL8	1/2	1/2	3-1/2	FE51BL8883	Price	FE51BL8370	Price	FE50BL8C2	Price	FE50BL8C6	Price	FE51BL8K68	Price	FE51BL8K21	Price
BL10	5/8	5/8	4	FE51BL10883	Price	FE51BL10370	Price	FE50BL10C2	Price	FE50BL10C6	Price	FE51BL10K68	Price	FE51BL10K21	Price
BL12	3/4	3/4	4-1/2	FE51BL12883	Price	FE51BL12370	Price	FE50BL12C2	Price	FE50BL12C6	Price	FE51BL12K68	Price	FE51BL12K21	Price
BL16	1	1	7	FE51BL16883	Price	-	-	FE50BL16C2	Price	FE50BL16C6	Price	-	-	-	-

Cut Style - Right															
Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	883E (C-2)		370E (C-5)		C2		C5/C6		K68 (C-2)		K21 (C-5)	
				Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
BR4	1/4	1/4	2	FE51BR4883	Price	FE51BR4370	Price	FE50BR4C2	Price	FE50BR4C6	Price	FE51BR4K68	Price	FE51BR4K21	Price
BR5	5/16	5/16	2-1/4	FE51BR5883	Price	FE51BR5370	Price	FE50BR5C2	Price	FE50BR5C6	Price	FE51BR5K68	Price	FE51BR5K21	Price
BR6	3/8	3/8	2-1/2	FE51BR6883	Price	FE51BR6370	Price	FE50BR6C2	Price	FE50BR6C6	Price	FE51BR6K68	Price	FE51BR6K21	Price
BR7	7/16	7/16	3	FE51BR7883	Price	FE51BR7370	Price	FE50BR7C2	Price	FE50BR7C6	Price	FE51BR7K68	Price	FE51BR7K21	Price
BR8	1/2	1/2	3-1/2	FE51BR8883	Price	FE51BR8370	Price	FE50BR8C2	Price	FE50BR8C6	Price	FE51BR8K68	Price	FE51BR8K21	Price
BR10	5/8	5/8	4	FE51BR10883	Price	FE51BR10370	Price	FE50BR10C2	Price	FE50BR10C6	Price	FE51BR10K68	Price	FE51BR10K21	Price
BR12	3/4	3/4	4-1/2	FE51BR12883	Price	FE51BR12370	Price	FE50BR12C2	Price	FE50BR12C6	Price	FE51BR12K68	Price	FE51BR12K21	Price
BR16	1	1	7	FE51BR16883	Price	FE51BR16370	Price	FE50BR16C2	Price	FE50BR16C6	Price	-	-	-	-

Style C • Square Nose Tools

Great general purpose tool used for chamfering, facing and turning.
Can also be used to make special form tools. FE51 made in the USA



MADE IN THE USA — WORLD CLASS QUALITY — MADE IN THE USA

Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	883E (C-2)		370E (C-5)		C2		C5/C6		K68 (C-2)		K21 (C-5)	
				Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
C4	1/4	1/4	2	FE51C4883	Price	FE51C4370	Price	FE50C4C2	Price	FE50C4C6	Price	FE51C4K68	Price	FE51C4K21	Price
C5	5/16	5/16	2-1/4	FE51C5883	Price	FE51C5370	Price	FE50C5C2	Price	FE50C5C6	Price	FE51C5K68	Price	FE51C5K21	Price
C6	3/8	3/8	2-1/2	FE51C6883	Price	FE51C6370	Price	FE50C6C2	Price	FE50C6C6	Price	FE51C6K68	Price	FE51C6K21	Price
C7	7/16	7/16	3	FE51C7883	Price	FE51C7370	Price	FE50C7C2	Price	FE50C7C6	Price	FE51C7K68	Price	FE51C7K21	Price
C8	1/2	1/2	3-1/2	FE51C8883	Price	FE51C8370	Price	FE50C8C2	Price	FE50C8C6	Price	FE51C8K68	Price	FE51C8K21	Price
C10	5/8	5/8	4	FE51C10883	Price	FE51C10370	Price	FE50C10C2	Price	FE50C10C6	Price	FE51C10K68	Price	FE51C10K21	Price
C12	3/4	3/4	4-1/2	FE51C12883	Price	FE51C12370	Price	FE50C12C2	Price	FE50C12C6	Price	FE51C12K68	Price	FE51C12K21	Price
C16	1	1	7	FE51C16883	Price	FE51C16370	Price	FE50C16C2	Price	FE50C16C6	Price	FE51C16K68	Price	FE51C16K21	Price

Style D • 80° Included Angle Tools

Chamfering tool used for undercutting and ID and OD Chamfering.
FE51 made in the USA



MADE IN THE USA

Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	883E (C-2)		370E (C-5)		C2		C5/C6		K68 (C-2)		K21 (C-5)	
				Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
D4	1/4	1/4	2	FE51D4883	Price	FE51D4370	Price	FE50D4C2	Price	FE50D4C6	Price	FE51D4K68	Price	FE51D4K21	Price
D5	5/16	5/16	2-1/4	FE51D5883	Price	FE51D5370	Price	FE50D5C2	Price	FE50D5C6	Price	FE51D5K68	Price	FE51D5K21	Price
D6	3/8	3/8	2-1/2	FE51D6883	Price	FE51D6370	Price	FE50D6C2	Price	FE50D6C6	Price	FE51D6K68	Price	FE51D6K21	Price
D7	7/16	7/16	3	FE51D7883	Price	FE51D7370	Price	FE50D7C2	Price	FE50D7C6	Price	FE51D7K68	Price	FE51D7K21	Price
D8	1/2	1/2	3-1/2	FE51D8883	Price	FE51D8370	Price	FE50D8C2	Price	FE50D8C6	Price	FE51D8K68	Price	FE51D8K21	Price
D10	5/8	5/8	4	FE51D10883	Price	FE51D10370	Price	FE50D10C2	Price	FE50D10C6	Price	FE51D10K68	Price	FE51D10K21	Price
D12	3/4	3/4	4-1/2	FE51D12883	Price	FE51D12370	Price	FE50D12C2	Price	FE50D12C6	Price	FE51D12K68	Price	FE51D12K21	Price
D16	1	1	7	FE51D16883	Price	FE51D16370	Price	FE50D16C2	Price	FE50D16C6	Price	-	-	-	-

Styles TSA, TSC, and TSE Boring Tools

These tools are used primarily in steel boring bars.
TSA - for boring to a square shoulder in 90° bars.
TSC - for boring to a square shoulder in a 30° bar
TSE - for boring to a square shoulder in a 45° or for recessing
(Left hand tools shown)
FE51 made in the USA





MADE IN THE USA

WORLD CLASS QUALITY

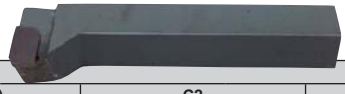
MADE IN THE USA

Style - TSA																
Shank Height (in.)	Shank Width (in.)	OAL (in.)	883E (C-2)		370E (C-5)		C2		C5/C6		K68 (C-2)		K21 (C-5)	
			Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
5/16	5/16	1-1/2	FE51TSA5883	Price	FE51TSA5370	Price	FE50TSA5C2	Price	FE50TSA5C6	Price	FE51TSA5K68	Price	FE51TSA5K21	Price
3/8	3/8	1-3/4	FE51TSA6883	Price	FE51TSA6370	Price	FE50TSA6C2	Price	FE50TSA6C6	Price	FE51TSA6K68	Price	FE51TSA6K21	Price
1/2	1/2	2-1/2	FE51TSA8883	Price	FE51TSA8370	Price	FE50TSA8C2	Price	FE50TSA8C6	Price	FE51TSA8K68	Price	FE51TSA8K21	Price
5/8	5/8	3	FE51TSA10883	Price	FE51TSA10370	Price	FE50TSA10C2	Price	FE50TSA10C6	Price	FE51TSA10K68	Price	FE51TSA10K21	Price
3/4	3/4	3-1/2	FE51TSA12883	Price	FE51TSA12370	Price	FE50TSA12C2	Price	FE50TSA12C6	Price	FE51TSA12K68	Price	FE51TSA12K21	Price

Style - TSC																
Shank Height (in.)	Shank Width (in.)	OAL (in.)	883E (C-2)		370E (C-5)		C2		C5/C6		K68 (C-2)		K21 (C-5)	
			Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
5/16	5/16	1-1/2	FE51TSC5883	Price	FE51TSC5370	Price	FE50TSC5C2	Price	FE50TSC5C6	Price	FE51TSC5K68	Price	FE51TSC5K21	Price
3/8	3/8	1-3/4	FE51TSC6883	Price	FE51TSC6370	Price	FE50TSC6C2	Price	FE50TSC6C6	Price	FE51TSC6K68	Price	FE51TSC6K21	Price
1/2	1/2	2-1/2	FE51TSC8883	Price	FE51TSC8370	Price	FE50TSC8C2	Price	FE50TSC8C6	Price	FE51TSC8K68	Price	FE51TSC8K21	Price
5/8	5/8	3	FE51TSC10883	Price	FE51TSC10370	Price	FE50TSC10C2	Price	FE50TSC10C6	Price	FE51TSC10K68	Price	FE51TSC10K21	Price
3/4	3/4	3-1/2	FE51TSC12883	Price	FE51TSC12370	Price	FE50TSC12C2	Price	FE50TSC12C6	Price	FE51TSC12K68	Price	FE51TSC12K21	Price

Style - TSE																
Shank Height (in.)	Shank Width (in.)	OAL (in.)	883E (C-2)		370E (C-5)		C2		C5/C6		K68 (C-2)		K21 (C-5)	
			Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
5/16	5/16	1-1/2	FE51TSE5883	Price	FE51TSE5370	Price	FE50TSE5C2	Price	FE50TSE5C6	Price	FE51TSE5K68	Price	FE51TSE5K21	Price
3/8	3/8	1-3/4	FE51TSE6883	Price	FE51TSE6370	Price	FE50TSE6C2	Price	FE50TSE6C6	Price	FE51TSE6K68	Price	FE51TSE6K21	Price
1/2	1/2	2-1/2	FE51TSE8883	Price	FE51TSE8370	Price	FE50TSE8C2	Price	FE50TSE8C6	Price	FE51TSE8K68	Price	FE51TSE8K21	Price
5/8	5/8	3	FE51TSE10883	Price	FE51TSE10370	Price	FE50TSE10C2	Price	FE50TSE10C6	Price	FE51TSE10K68	Price	FE51TSE10K21	Price
3/4	3/4	3-1/2	FE51TSE12883	Price	FE51TSE12370	Price	FE50TSE12C2	Price	FE50TSE12C6	Price	FE51TSE12K68	Price	FE51TSE12K21	Price

Styles FR and FL End Cutting Offset Tools



WORLD CLASS QUALITY

Cut Style - Left										
Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	370E (C-5)		883E (C-2)		C2		C5/C6	
				Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
FL8	1/2	1/2	3-1/2	FE51FL8370	Price	FE51FL8883	Price	FE50FL8C2	Price	FE50FL8C6	Price
FL10	5/8	5/8	4	FE51FL10370	Price	FE51FL10883	Price	FE50FL10C2	Price	FE50FL10C6	Price
FL12	3/4	3/4	4-1/2	FE51FL12370	Price	FE51FL12883	Price	FE50FL12C2	Price	FE50FL12C6	Price
FL16	1	1	7	-	-	FE51FL16883	Price	FE50FL16C2	Price	FE50FL16C6	Price

Cut Style - Right										
Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	370E (C-5)		883E (C-2)		C2		C5/C6	
				Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
FR8	1/2	1/2	3-1/2	FE51FR8370	Price	FE51FR8883	Price	FE50FR8C2	Price	FE50FR8C6	Price
FR10	5/8	5/8	4	FE51FR10370	Price	FE51FR10883	Price	FE50FR10C2	Price	FE50FR10C6	Price
FR12	3/4	3/4	4-1/2	FE51FR12370	Price	FE51FR12883	Price	FE50FR12C2	Price	FE50FR12C6	Price
FR16	1	1	7	-	-	FE51FR16883	Price	FE50FR16C2	Price	FE50FR16C6	Price

Styles GR and GL Side Cutting Offset Tools



WORLD CLASS QUALITY

Cut Style - Left										
Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	883E		370E		C2		C5/C6	
				Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
GL8	1/2	1/2	3-1/2	FE51GL8883	Price	FE51GL8370	Price	FE50GL8C2	Price	FE50GL8C6	Price
GL10	5/8	5/8	4	FE51GL10883	Price	FE51GL10370	Price	FE50GL10C2	Price	FE50GL10C6	Price
GL12	3/4	3/4	4-1/2	FE51GL12883	Price	FE51GL12370	Price	FE50GL12C2	Price	FE50GL12C6	Price
GL16	1	1	7	FE51GL16883	Price	FE51GL16370	Price	FE50GL16C2	Price	FE50GL16C6	Price

Cut Style - Right										
Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	883E		370E		C2		C5/C6	
				Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
GL8	1/2	1/2	3-1/2	FE51GR8883	Price	FE51GR8370	Price	FE50GR8C2	Price	FE50GR8C6	Price
GR10	1/2	1/2	3-1/2	-	-	FE51GR10370	Price	-	-	-	-
GR10	5/8	5/8	4	FE51GR10883	Price	-	-	FE50GR10C2	Price	FE50GR10C6	Price
GR12	3/4	3/4	4-1/2	FE51GR12883	Price	FE51GR12370	Price	FE50GR12C2	Price	FE50GR12C6	Price
GR16	1	1	7	FE51GR16883	Price	FE51GR16370	Price	FE50GR16C2	Price	FE50GR16C6	Price

Grade	Application
(883E, K68) = C2	General Purpose for Use in Cast Iron, Non-Ferrous Materials and Exotics
(370E, K21) = C5 / C6	General Purpose for All Types of Steel and Steel Alloys

Style E • 60° Included Angle Threading Tools

Standard 60° included angle universal threading tool. Can also be used for V-grooving, chamfering, turning, boring and facing. FE51 made in the USA.



Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	883E (C-2)		370E (C-5)		C2		C5/C6		K68 (C-2)		K21 (C-5)	
				Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
E4	1/4	1/4	2	**FE51E4883**	Price	**FE51E4370**	Price	**FE50E4C2**	Price	**FE50E4C6**	Price	**FE51E4K68**	Price	**FE51E4K21**	Price
E5	5/16	5/16	2-1/4	**FE51E5883**	Price	**FE51E5370**	Price	**FE50E5C2**	Price	**FE50E5C6**	Price	**FE51E5K68**	Price	**FE51E5K21**	Price
E6	3/8	3/8	2-1/2	**FE51E6883**	Price	**FE51E6370**	Price	**FE50E6C2**	Price	**FE50E6C6**	Price	**FE51E6K68**	Price	**FE51E6K21**	Price
E8	1/2	1/2	3-1/2	**FE51E8883**	Price	**FE51E8370**	Price	**FE50E8C2**	Price	**FE50E8C6**	Price	**FE51E8K68**	Price	**FE51E8K21**	Price
E10	5/8	5/8	4	**FE51E10883**	Price	**FE51E10370**	Price	**FE50E10C2**	Price	**FE50E10C6**	Price	**FE51E10K68**	Price	**FE51E10K21**	Price
E12	3/4	3/4	4-1/2	**FE51E12883**	Price	**FE51E12370**	Price	**FE50E12C2**	Price	**FE50E12C6**	Price	**FE51E12K68**	Price	**FE51E12K21**	Price
E16	1	1	7	**FE51E16883**	Price	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-

Styles ER & EL • 60° Offset Tools

- Used for turning in special applications
- Made in the USA



Cut Style - Left									
Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	370E (C-5)		883E (C-2)		K21	
				Order No.	Price	Order No.	Price	Order No.	Price
EL4	1/4	1/4	2	**FE51EL4370**	Price	**-**	-	**-**	-
EL6	3/8	3/8	2-1/2	**FE51EL6370**	Price	**FE51EL6883**	Price	**-**	-
EL8	1/2	1/2	3-1/2	**FE51EL8370**	Price	**FE51EL8883**	Price	**FE51EL8K21**	Price
EL10	5/8	5/8	4	**FE51EL10370**	Price	**FE51EL10883**	Price	**-**	-
EL12	3/4	3/4	4-1/2	**FE51EL12370**	Price	**-**	-	**-**	-

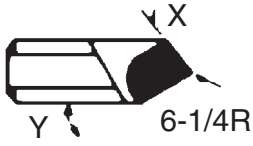
Cut Style - Right							
Style	Shank Height (in.)	Shank Width (in.)	OAL (in.)	370E (C-5)		883E (C-2)	
				Order No.	Price	Order No.	Price
ER4	1/4	1/4	2	**FE51ER4370**	Price	**FE51ER4883**	Price
ER5	5/16	5/16	2-1/4	**FE51ER5370**	Price	**-**	-
ER6	3/8	3/8	2-1/2	**FE51ER6370**	Price	**FE51ER6883**	Price
ER8	1/2	1/2	3-1/2	**FE51ER8370**	Price	**FE51ER8883**	Price
ER10	5/8	5/8	4	**FE51ER10370**	Price	**FE51ER10883**	Price
ER12	3/4	3/4	4-1/2	**FE51ER12370**	Price	**-**	-

Styles TRC and TRE Boring Tools

TRC - for boring to a square shoulder in 30° bars.
TRE - for boring to a square shoulder in 45° bars.
(Left Hand Tools)



Style	Shank Dia. (in.)	OAL (in.)	C2		C5/C6	
			Order No.	Price	Order No.	Price
TRC5	5/16	1-1/2	**FE50TRC5C2**	Price	**FE50TRC5C6**	Price
TRE5	5/16	1-1/2	**-**	-	**FE50TRE5C6**	Price
TRC6	3/8	1-3/4	**FE50TRC6C2**	Price	**FE50TRC6C6**	Price
TRE6	3/8	1-3/4	**FE50TRE6C2**	Price	**FE50TRE6C6**	Price
TRC8	1/2	2-1/2	**FE50TRC8C2**	Price	**FE50TRC8C6**	Price
TRE8	1/2	2-1/2	**FE50TRE8C2**	Price	**FE50TRE8C6**	Price



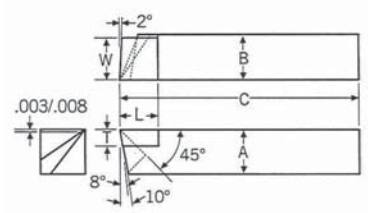
Round Boring Tools							
Type	Description	Y	X	Type	Description	Y	X
TRC	For Boring to a Square Shoulder in 30° Bars	30°	38°	TRE	For Boring to a Square Shoulder in 45° Bars or with 15° Lead in 30° Bars.	45°	53°

Grade	Application
(883E, K68) = C2	General Purpose for Use in Cast Iron, Non-Ferrous Materials and Exotics
(370E, K21) = C5 / C6	General Purpose for All Types of Steel and Steel Alloys

Brazed Box Turning Tools

For Box-Turning up to 5/8" Depth per Pass







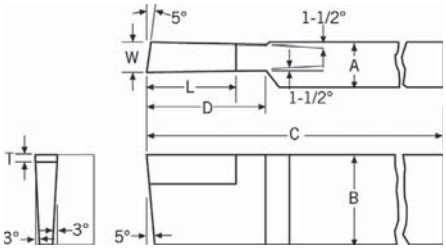
RAPIDKUT MICRO 100

MICRO 100

Cut Style - Left							
B Shank Dia. (in.)	C OAL (in.)	T Tip Thickness (in.)	W Tip Width (in.)	L Tip Length (in.)	Micro 100		
					Style	Order No.	Price
1/4	1-1/2	1/8	3/16	1/4	BTL4	**GE45BTL4**	Price
5/16	1-3/4	1/8	3/16	5/16	BTL5	**GE45BTL5**	Price
3/8	2	3/16	5/16	3/8	BTL6	**GE45BTL6**	Price
7/16	2-1/4	3/16	3/8	7/16	BTL7	**GE45BTL7**	Price
1/2	2-1/2	3/16	3/8	1/2	BTL8	**GE45BTL8**	Price

Cut Style - Right										
B Shank Dia. (in.)	C OAL (in.)	T Tip Thick-ness (in.)	W Tip Width (in.)	L Tip Length (in.)	Rapidkut			Micro 100		
					Style	Order No.	Price	Style	Order No.	Price
1/4	1-1/2	1/8	3/16	1/4	BT4	**FE3010052**	Price	BT4	**GE45BT4**	Price
5/16	1-3/4	1/8	3/16	5/16	BT5	**FE3010053**	Price	BT5	**GE45BT5**	Price
3/8	2	3/16	5/16	3/8	BT6	**FE3010054**	Price	BT6	**GE45BT6**	Price
7/16	2-1/4	3/16	3/8	7/16	BT7	**FE3010055**	Price	BTB7	**GE45BT7**	Price
1/2	2-1/2	3/16	3/8	1/2	BT8	**FE3010056**	Price	BT8	**GE45BT8**	Price
5/8	3	1/4	1/2	5/8	BT10	**FE3010057**	Price	-	-	-

Brazed Cut-Off Tools

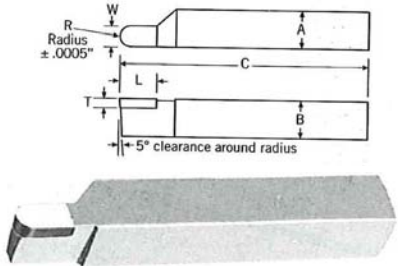




RAPIDKUT MICRO 100

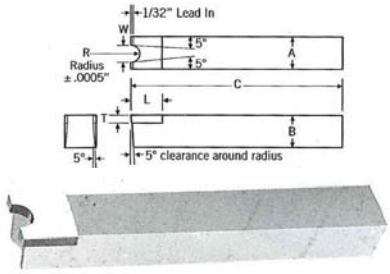
A Shank Width (in.)	B Shank Height (in.)	C OAL (in.)	D Nose Length (in.)	T Tip Thickness (in.)	W Tip Width (in.)	Style	L Tip Length (in.)	Rapidkut		Micro 100	
								Order No.	Price	Order No.	Price
1/2	1	5	1	3/16	5/16	CT120	7/16	**FE3010058**	Price	**GE45CT120**	Price
1/2	1	5	13/16	1/8	3/16	CT122	3/4	**FE3010060**	Price	**GE45CT122**	Price
1/2	1	5	1	1/8	1/4	CT121	3/4	**FE3010059**	Price	**GE45CT121**	Price
5/8	1-1/4	5	1-1/4	3/16	3/8	CT130	1/2	**FE3010061**	Price	**GE45CT130**	Price
3/4	1-1/2	6	1-1/4	3/16	3/8	CT140	5/8	**FE3010062**	Price	**GE45CT140**	Price

MICRO 100 Brazed Full Radius Convex Tools



Radius (in.)	Square Shank (in.)	OAL (in.)	T Tip Thickness (in.)	L Tip Length (in.)	Order No.	Price
1/32	3/8	2-1/2	3/32	3/8	**GE45FRT1**	Price
1/16	3/8	2-1/2	3/32	3/8	**GE45FRT2**	Price
3/32	3/8	2-1/2	3/32	3/8	**GE45FRT3**	Price
1/8	3/8	2-1/2	3/32	3/8	**GE45FRT4**	Price
5/32	3/8	2-1/2	3/32	3/8	**GE45FRT5**	Price
3/16	1/2	3-1/2	1/8	1/2	**GE45FRT6**	Price
1/4	1/2	3-1/2	1/8	1/2	**GE45FRT8**	Price
5/16	5/8	4	5/32	5/8	**GE45FRT10**	Price
3/8	3/4	4-1/2	3/16	3/4	**GE45FRT12**	Price

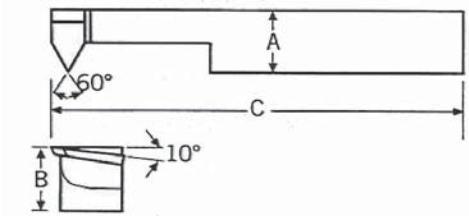
MICRO 100 Brazed Full Radius Concave Tools



Radius (in.)	Square Shank (in.)	OAL (in.)	T Tip Thickness (in.)	L Tip Length (in.)	Order No.	Price
1/32	3/8	2-1/2	3/32	3/8	**GE45CRT1**	Price
1/16	3/8	2-1/2	3/32	3/8	**GE45CRT2**	Price
3/32	3/8	2-1/2	3/32	3/8	**GE45CRT3**	Price
1/8	1/2	3-1/2	1/8	1/2	**GE45CRT4**	Price
3/16	1/2	3-1/2	1/8	1/2	**GE45CRT6**	Price
1/4	3/4	4-1/2	3/16	3/4	**GE45CRT8**	Price

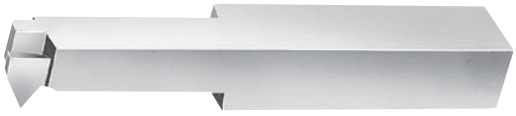
MICRO 100 Brazed Internal Threading Tools

Styles IDRT and IDLT





MADE IN THE USA



B Shank Dia. (in.)	C OAL (in.)	Neck Length (in.)	Left		Right	
			Order No.	Price	Order No.	Price
3/8	2-1/2	1/2	**GE45IDLT60**	Price	**GE45IDRT60**	Price
3/8	2-1/2	1	**GE45IDLT61**	Price	**GE45IDRT61**	Price
1/2	3-1/2	3/4	**GE45IDLT80**	Price	**GE45IDRT80**	Price
1/2	3-1/2	1-1/4	**GE45IDLT81**	Price	**GE45IDRT81**	Price

MICRO 100 Brazed Screw Machine Tools

Style RT • For Turning

- Brazed Screw Machine Tools
- Turning, Forming and Cut-Off Right Hand and Left Hand
- All tools are ground with the requiredclearance angles
- Cut-off tools: carbide protrusion = 3 times thickness specified Tolerance on thickness .000 .010”



Shank Dia. (in.)	OAL (in.)	Order No.	Price
1/4	6	**GE45RT250**	Price
9/32	6	**GE45RT281**	Price
5/16	6	**GE45RT312**	Price
3/8	6	**GE45RT375**	Price
7/16	6	**GE45RT437**	Price
1/2	6	**GE45RT500**	Price
5/8	4	**GE45RT625**	Price
3/4	4	**GE45RT750**	Price

MICRO 100 Full Radius Grooving Tools

Brazed Tip

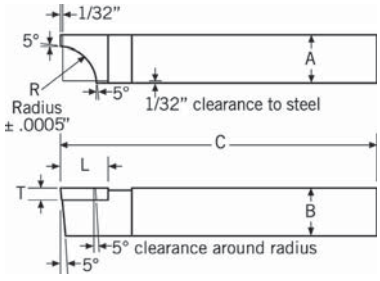
- 3/8 x 3/8” Shank on all
- 3” Overall length



Width (in.)	Tip Length (in.)	OAL (in.)	Order No.	Price
.018/.020	.060	3	**GE45GS018F**	Price
.028/.030	.090	3	**GE45GS028F**	Price
.038/.040	.120	3	**GE45GS038F**	Price
.060/.062	.210	3	**GE45GS060F**	Price

Brazed Radius Tools

- Set of 4: 1/16, 1/8, 1/4, 3/8 radius (RAD21)
- Set of 8: 1/32 to 1/4 radius in 1/32 increments† (RAD22)
- Set of 8: 1/16 to 1/2 radius in 1/16 increments (RAD23)



MADE IN THE USA



RAPIDKUT® MICRO 100

Radius (in.)	Square Shank (in.)	OAL (in.)	T Tip Thickness (in.)	L Tip Length (in.)	Style	Rapidkut		Micro 100	
						Order No.	Price	Order No.	Price
1/32	3/8	2-1/2	3/32	3/8	RAD1	**FE3010063**	Price	**GE45RAD1**	Price
1/16	3/8	2-1/2	3/32	3/8	RAD2	**FE3010064**	Price	**GE45RAD2**	Price
3/32	3/8	2-1/2	3/32	3/8	RAD3	**FE3010065**	Price	**GE45RAD3**	Price
1/8	3/8	2-1/2	3/32	3/8	RAD4	**FE3010066**	Price	**GE45RAD4**	Price
5/32	3/8	2-1/2	3/32	3/8	RAD5	**FE3010067**	Price	**-**	-
3/16	3/8	2-1/2	3/32	3/8	RAD6	**FE3010068**	Price	**GE45RAD6**	Price
7/32	3/8	2-1/2	3/32	3/8	RAD7	**FE3010069**	Price	**GE45RAD7**	Price
1/4	3/8	2-1/2	3/32	3/8	RAD8	**FE3010070**	Price	**GE45RAD8**	Price
9/32	1/2	3-1/2	1/8	1/2	RAD9	**FE3010071**	Price	**GE45RAD9**	Price
5/16	1/2	3-1/2	1/8	1/2	RAD10	**FE3010072**	Price	**GE45RAD10**	Price
11/32	1/2	3-1/2	1/8	1/2	RAD11	**FE3010073**	Price	**-**	-
3/8	1/2	3-1/2	1/8	1/2	RAD12	**FE3010074**	Price	**GE45RAD12**	Price
13/32	3/4	4-1/2	3/16	3/4	RAD13	**FE3010075**	Price	**-**	-
7/16	3/4	4-1/2	3/16	3/4	RAD14	**FE3010076**	Price	**GE45RAD14**	Price
15/32	3/4	4-1/2	3/16	3/4	RAD15	**FE3010077**	Price	**-**	-
1/2	3/4	4-1/2	3/16	3/4	RAD16	**FE3010078**	Price	**GE45RAD16**	Price
1/16,1/8,1/4,3/8	3/8 & 1/2	-	-	-	RAD21	**-**	-	**GE45RAD21**	Price
1/32 to 1/4 x 32nds	3/8	-	-	-	RAD22	**-**	-	**GE45RAD22†**	Price
1/16 to 1/2 x 16ths	3/8, 1/2, & 3/4	-	-	-	RAD23	**-**	-	**GE45RAD23**	Price

† All 3/8” square shanks, ideal for use on chuckers.

Solid Carbide Split End Blanks
Regular Length

MADE IN THE USA

Blank and Engraving Tool Tolerances:
- Shank diameter -.0001 to -.0002" finish ground
- Split tolerance +.001 - .000" of tool center
- Split length in proportion to length of tool



RAPIDKUT® MICRO 100®

Blank Style - Double End						
Shank Dia. (in.)	OAL (in.)	Split Length (in.)	Rapidkut		Micro 100	
			Order No.	Price	Order No.	Price
1/8	2	3/8	DD5710011	Price	GE45RS1252	Price
3/16	2	3/8	DD5710013	Price	GE45RS1872	Price
1/4	2-1/2	3/8	DD5710015	Price	GE45RS2502	Price
5/16	2-1/2	1/2	DD5710017	Price	GE45RS3122	Price
3/8	2-1/2	1/2	DD5710019	Price	GE45RS3752	Price
1/2	3	5/8	-	-	GE45RS5002	Price

Blank Style - Single End						
Shank Dia. (in.)	OAL (in.)	Split Length (in.)	Rapidkut		Micro 100	
			Order No.	Price	Order No.	Price
1/8	1-1/2	3/8	DD5710010	Price	GE45RS1251	Price
3/16	2	3/8	DD5710012	Price	GE45RS1871	Price
1/4	2-1/2	3/8	DD5710014	Price	GE45RS2501	Price
5/16	2-1/2	1/2	DD5710016	Price	GE45RS3121	Price
3/8	2-1/2	1/2	DD5710018	Price	GE45RS3751	Price
1/2	3	5/8	-	-	GE45RS5001	Price

MICRO 100® Split End • Extended Length

MADE IN THE USA

- Double end



Shank Dia. (in.)	OAL (in.)	Split Length (in.)	Order No.	Price
1/8	3	3/8	GE45RS12523	Price
3/16	3	3/8	GE45RS18723	Price
1/4	4	3/8	GE45RS25024	Price
5/16	4	1/2	GE45RS31224	Price
3/8	4	1/2	GE45RS37524	Price
1/2	4	5/8	GE45RS50024	Price

Other sizes also available.

MICRO 100® Double End • Extended Length



MADE IN THE USA

Shank Dia. (in.)	OAL (in.)	Split Length (in.)	Point Angle	Order No.	Price
1/8	3	3/8	30°	GE45RTC12523	Price
1/8	3	3/8	60°	GE45RSC12523	Price
1/8	3	3/8	90°	GE45RNC12523	Price
3/16	3	7/16	30°	GE45RTC18723	Price
3/16	3	7/16	60°	GE45RSC18723	Price
3/16	3	7/16	90°	GE45RNC18723	Price
1/4	4	1/2	30°	GE45RTC25024	Price
1/4	4	1/2	60°	GE45RSC25024	Price
1/4	4	1/2	90°	GE45RNC25024	Price

MICRO 100® Split-End Engraving Blanks
Single & Double End





MADE IN THE USA

Shank Dia. (in.)	OAL (in.)	Split Length (in.)	30°				60°				90°			
			Double End		Single End		Double End		Single End		Double End		Single End	
			Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	1-1/2	3/8	GE45RTC1252	Price	GE45RTC1251	Price	GE45RSC1252	Price	GE45RSC1251	Price	GE45RNC1252	Price	GE45RNC1251	Price
3/16	2	7/16	GE45RTC1872	Price	GE45RTC1871	Price	GE45RSC1872	Price	GE45RSC1871	Price	GE45RNC1872	Price	GE45RNC1871	Price
1/4	2-1/2	1/2	GE45RTC2502	Price	GE45RTC2501	Price	GE45RSC2502	Price	GE45RSC2501	Price	GE45RNC2502	Price	GE45RNC2501	Price
5/16	2-1/2	1/2	GE45RTC3122	Price	GE45RTC3121	Price	GE45RSC3122	Price	GE45RSC3121	Price	GE45RNC3122	Price	GE45RNC3121	Price
3/8	2-1/2	1/2	GE45RTC3752	Price	GE45RTC3751	Price	GE45RSC3752	Price	GE45RSC3751	Price	GE45RNC3752	Price	GE45RNC3751	Price
1/2	3	5/8	-	-	GE45RTC5001	Price	GE45RSC5002	Price	GE45RSC5001	Price	GE45RNC5002	Price	GE45RNC5001	Price

RAPIDKUT® Carbide Split End Engraving Blanks
Single or Double End





MADE IN THE USA

Shank Dia. (in.)	OAL (in.)	Split Length (in.)	30°				60°				90°			
			Double End		Single End		Double End		Single End		Double End		Single End	
			Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	2-1/2	1/2	DD5710035	Price	DD5710034	Price	DD5710026	Price	DD5710025	Price	DD5710005	Price	DD5710004	Price
1/8	1-1/2	3/8	DD5710029	Price	DD5710028	Price	DD5710020	Price	DD5710040	Price	DD5710001	Price	DD5710000	Price
3/16	2	7/16	DD5710032	Price	DD5710031	Price	DD5710023	Price	DD5710022	Price	DD5710003	Price	DD5710002	Price
3/8	2-1/2	1/2	-	-	-	-	DD5710039	Price	DD5710038	Price	DD5710009	Price	DD5710008	Price
5/16	2-1/2	1/2	-	-	-	-	-	-	-	-	DD5710007	Price	DD5710006	Price

RAPIDKUT® Carbide Split End Engraving Blanks
Extended Length • Double End



Shank Dia. (in.)	OAL (in.)	Split Length (in.)	30°		60°	
			Order No.	Price	Order No.	Price
1/8	3	3/8	DD5710030	Price	DD5710021	Price
3/16	3	7/16	DD5710033	Price	DD5710024	Price
1/4	4	1/2	DD5710036	Price	DD5710027	Price

Cutting-Off Tool Holders

- Cut-off blades not included

Holder Size (in.)	Cut-Off Blade (in.)	Approx. Swing of Lathe	Left		Right		Straight	
			Order No.	Price	Order No.	Price	Order No.	Price
5/16 x 13/16	3/32 x 1/2	6 to 8	**SE5529L**	Price	**SE5529R**	Price	**SE5519**	Price
3/8 x 31/32	3/32 x 5/8	9 to 10	**SE5530L**	Price	**SE5530R**	Price	**SE5520**	Price
1/2 x 1-3/16	1/8 x 3/4	11 to 14	**SE5531L**	Price	**SE5531R**	Price	**SE5521**	Price
5/8 x 1-3/8	1/8 x 7/8	14 to 16	**SE5532L**	Price	**SE5532R**	Price	**SE5522**	Price
3/4 x 1-5/8	3/16 x 1	16	**SE5533L**	Price	**SE5533R**	Price	**SE5523**	Price
7/8 x 1-3/4	3/16 x 1-1/8	18	**SE5534L**	Price	**SE5534R**	Price	**SE5524**	Price



Lathe Turning Tool Holders

For high speed tool bits
Tool bits not included



Holder Size (in.)	Square Size (in.)	Approx. Swing of Lathe	Left Hand		Right Hand		Straight	
			Order No.	Price	Order No.	Price	Order No.	Price
3/8 x 7/8 x 5	1/4	10 to 12	**SE550L**	Price	**SE550R**	Price	**SE550S**	Price
1/2 x 1-1/8 x 6	5/16	14 to 16	**SE551L**	Price	**SE551R**	Price	**SE551S**	Price
5/8 x 1-3/8 x 7	3/8	16 to 18	**SE552L**	Price	**SE552R**	Price	**SE552S**	Price
3/4 x 1-5/8 x 8	7/16	18 to 20	**SE553L**	Price	**SE553R**	Price	**SE553S**	Price
7/8 x 1-3/4 x 9	1/2	24 to 36	**SE554L**	Price	**SE554R**	Price	**SE554S**	Price

Carbide Turning Tool Holders

- For use with carbide tipped single points bits
- Tool bits **not** included



Holder Size (in.)	Square Size (in.)	Approx. Swing of Lathe	Left Hand		Right Hand		Straight	
			Order No.	Price	Order No.	Price	Order No.	Price
3/8 x 15/16 x 6	1/4	9 to 10	**SE55T0L**	Price	**SE55T0R**	Price	**SE55T0S**	Price
1/2 x 1-1/4 x 7	5/16	11 to 14	**SE55T1L**	Price	**SE55T1R**	Price	**SE55T1S**	Price
5/8 x 1-1/2 x 8	3/8	14 to 16	**SE55T2L**	Price	**SE55T2R**	Price	**SE55T2S**	Price
3/4 x 1-3/4 x 9	7/16	16	**SE55T3L**	Price	**SE55T3R**	Price	**SE55T3S**	Price
7/8 x 1-7/8 x 10	1/2	18	**SE55T4L**	Price	**SE55T4R**	Price	**SE55T4S**	Price

3-K Knurling Tool Holders

Revolving Head—Three Pairs of Knurls

- Complete with set of each - fine, medium and coarse knurls



Size of Holder (in.)	Dia. x Face x Hole	For Lathes of Approx. Swing (in.)	Order No.	Price
3/8 x 7/8 x 6	5/8 x 3/16 x 7/32	10 to 12	**SE573K0**	Price
1/2 x 1-1/8 x 7	3/4 x 3/8 x 1/4	14 to 16	**SE573K1**	Price
5/8 x 1-3/8 x 7-1/2	3/4 x 3/8 x 1/4	16 to 18	**SE573K2**	Price

Pivot Head Knurling Tool

- Self-adjusting
- Pivot head
- One pair of knurls



Size of Holder (in.)	Dia. x Face x Hole	Order No.	Price
1/2 x 1/2 x 4-1/2	3/4 x 3/8 x 1/4	**SE57PH1**	Price

Single Head Knurling Tool

- Supplied with medium cut high speed knurl
- Medium cut replacement knurls only



Holder Size (in.)	Knurl Wheel Size (in.)	Order No.	Price
4 x 1/2 x 1/2	3/4 x 1/4 x 1/4	**SE571K**	Price

Replacement Knurls

Size (in.)	Order No.	Price
3/4 x 1/4 x 1/4	**SE57E1KMS**	Price

Extra High Speed Knurls



Angle - Left						
Size (in.)	Coarse		Fine		Medium	
	Order No.	Price	Order No.	Price	Order No.	Price
5/8 x 5/16 x 7/32	**SE57EK0CL**	Price	**SE57EK0FL**	Price	**SE57EK0ML**	Price
3/4 x 3/8 x 1/4	**SE57EK1CL**	Price	**SE57EK1FL**	Price	**SE57EK1ML**	Price

Angle - Right						
Size (in.)	Coarse		Fine		Medium	
	Order No.	Price	Order No.	Price	Order No.	Price
5/8 x 5/16 x 7/32	**SE57EK0CR**	Price	**SE57EK0FR**	Price	**SE57EK0MR**	Price
3/4 x 3/8 x 1/4	**SE57EK1CR**	Price	**SE57EK1FR**	Price	**SE57EK1MR**	Price

Knurl Sets

1 Pair Coarse, Medium, and Fine Knurls

Style	Size (in.)	Order No.	Price
Pair of each-Coarse, Medium, Fine	3/4 x 3/8 x 1/4	**SE57SK0**	Price
Pair of each-Coarse, Medium, Fine	5/8 x 5/16 x 7/32	**SE57SK1**	Price

For additional sizes and styles see index for knurls

MICRO 100 Carbide Tipped Cut-Off Blades

- Hardened and precision ground
- T-style over entire blade length to fit all T-style holders
- Tips are hollow ground for improved chip control
- Superior rupture strength for exceptional machine versatility
- Will not chip or break under normal conditions and is excellent for interrupted cuts
- High shock resistant
- Longer tool life
- Vastly increased feeds



Width (in.)	Height (in.)	Length (in.)	Standard		V-Groove	
			Order No.	Price	Order No.	Price
1/16	1/2	4-1/2	**GE45T100**	Price	**GE45T100V**	Price
5/64	1/2	4-1/2	**GE45T101**	Price	**GE45T101V**	Price
3/32	1/2	4-1/2	**GE45T102**	Price	**GE45T102V**	Price
3/32	11/16	5	**GE45T104**	Price	**GE45T104V**	Price
1/8	1/2	4-1/2	**GE45T103**	Price	**GE45T103V**	Price
1/8	11/16	5	**GE45T105**	Price	**GE45T105V**	Price
1/8	3/4	5	**GE45T108**	Price	**GE45T108V**	Price
1/8	7/8	6	**GE45T111**	Price	**GE45T111V**	Price
1/8	1-1/8	6	**GE45T115**	Price	**GE45T115V**	Price
5/32	11/16	5	**GE45T106**	Price	**GE45T106V**	Price
5/32	3/4	5	**GE45T109**	Price	**GE45T109V**	Price
5/32	7/8	6	**GE45T112**	Price	**GE45T112V**	Price
3/16	11/16	5	**GE45T107**	Price	**GE45T107V**	Price
3/16	3/4	5	**GE45T110**	Price	**GE45T110V**	Price
3/16	7/8	6	**GE45T113**	Price	**GE45T113V**	Price
3/16	1-1/8	6	**GE45T116**	Price	**GE45T116V**	Price

"P" Type Cut-Off Blades

T-Shape Parallel Style

- High speed steel
- Cobalt
- Carbide tipped



Style	Width (in.)	Height (in.)	Length (in.)	High Speed Steel		Cobalt		Carbide Tipped	
				Order No.	Price	Order No.	Price	Order No.	Price
P1	1/16	1/2	4-1/2	**FD50P1**	Price	**FD51P1**	Price	**FD52P1**	Price
P1N	.040	1/2	3-1/2	**FD50P1N**	Price	**FD51P1N**	Price	-	-
P2	3/32	1/2	4-1/2	**FD50P2**	Price	**FD51P2**	Price	**FD52P2**	Price
P2N	5/64	1/2	4-1/2	**FD50P2N**	Price	**FD51P2N**	Price	**FD52P2N**	Price
P3	1/8	11/16	5	**FD50P3**	Price	**FD51P3**	Price	**FD52P3**	Price
P3N	3/32	11/16	5	**FD50P3N**	Price	**FD51P3N**	Price	**FD52P3N**	Price
P3S	1/8	1/2	4-1/2	**FD50P3S**	Price	**FD51P3S**	Price	**FD52P3S**	Price
P3W	1/8	3/4	5	**FD50P3W**	Price	**FD51P3W**	Price	**FD52P3W**	Price
P4	5/32	11/16	5	**FD50P4**	Price	**FD51P4**	Price	**FD52P4**	Price
P4W	5/32	3/4	5	**FD50P4W**	Price	**FD51P4W**	Price	-	-
P5	3/16	7/8	6	**FD50P5**	Price	**FD51P5**	Price	**FD52P5**	Price
P5N	5/32	7/8	6	**FD50P5N**	Price	**FD51P5N**	Price	**FD52P5N**	Price
P5S	3/16	11/16	5	**FD50P5S**	Price	**FD51P5S**	Price	**FD52P5S**	Price
P5W	3/16	3/4	5	**FD50P5W**	Price	-	-	-	-
P5X	1/8	7/8	6	**FD50P5X**	Price	**FD51P5X**	Price	**FD52P5X**	Price
P6	1/4	7/8	6	**FD50P6**	Price	**FD51P6**	Price	-	-
P8	3/16	1-1/8	6-1/2	**FD50P8**	Price	**FD51P8**	Price	**FD52P8**	Price
P8N	5/32	1-1/8	6-1/2	**FD50P8N**	Price	-	-	**FD52P8N**	Price
P8X	1/8	1-1/8	6-1/2	**FD50P8X**	Price	**FD51P8X**	Price	**FD52P8X**	Price
P9	1/4	1-1/8	6-1/2	**FD50P9**	Price	**FD51P9**	Price	-	-

Extra Long Square Tool Bits

Ground Finish



Size (Square)	OAL (in.)	M-2		5% Cobalt		Super Cobalt	
		Order No.	Price	Order No.	Price	Order No.	Price
1/4	4	**FC55001**	Price	**FC65001**	Price	**FC75001**	Price
1/4	6	**FC55002**	Price	**FC65002**	Price	**FC75002**	Price
1/4	8	**FC55003**	Price	**FC65003**	Price	**FC75003**	Price
5/16	4	**FC55004**	Price	**FC65004**	Price	**FC75004**	Price
5/16	6	**FC55005**	Price	**FC65005**	Price	**FC75005**	Price
5/16	8	-	-	**FC65005X**	Price	-	-
3/8	4	**FC55006**	Price	**FC65006**	Price	**FC75006**	Price
3/8	6	**FC55007**	Price	**FC65007**	Price	**FC75007**	Price
3/8	8	**FC55008**	Price	**FC65008**	Price	**FC75008**	Price
7/16	6	**FC55009**	Price	**FC65009**	Price	**FC75009**	Price
1/2	6	**FC55010**	Price	**FC65010**	Price	**FC75010**	Price
1/2	8	**FC55011**	Price	**FC65011**	Price	**FC75011**	Price
5/8	6	**FC55012**	Price	**FC65012**	Price	**FC75012**	Price
5/8	8	**FC55013**	Price	**FC65013**	Price	**FC75013**	Price
3/4	6	**FC55014**	Price	**FC65014**	Price	**FC75014**	Price
3/4	8	**FC55015**	Price	**FC65015**	Price	**FC75015**	Price
1	8	**FC55016**	Price	-	-	-	-

Rectangular Tool Bits

Ground Finish



M-2 High Speed Steel

- Performance and economy
- Use for a wide variety of general purpose applications in both ferrous and non-ferrous materials.

5% Cobalt Steel

- Increased performance
- Use for hard and tough materials, and in longer production runs at higher speeds and feeds in mild materials.

Super Cobalt

- High performance
- For heavy cuts in high tensile, high heat-resistant materials and the machining of milder materials in longer production runs at higher speeds and feeds

Width (in.)	Height (in.)	Length (in.)	M-2		5% Cobalt		Super Cobalt	
			Order No.	Price	Order No.	Price	Order No.	Price
1/8	1/2	4	**FC53020804**	Price	**FC63020804**	Price	**FC73020804**	Price
1/4	3/8	4	**FC53040604**	Price	**FC63040604**	Price	**FC73040604**	Price
1/4	3/8	6	**FC53040606**	Price	**FC63040606**	Price	**FC73040606**	Price
1/4	1/2	4	**FC53040804**	Price	**FC63040804**	Price	**FC73040804**	Price
1/4	1/2	6	**FC53040806**	Price	**FC63040806**	Price	**FC73040806**	Price
1/4	3/4	4	**FC53041204**	Price	**FC63041204**	Price	**FC73041204**	Price
1/4	3/4	6	**FC53041206**	Price	**FC63041206**	Price	**FC73041206**	Price
1/4	1	6	**FC53041606**	Price	**FC63041606**	Price	**FC73041606**	Price
5/16	3/8	4	**FC53050604**	Price	**FC63050604**	Price	**FC73050604**	Price
5/16	7/16	3	**FC53050703**	Price	**FC63050703**	Price	-	-
5/16	1/2	4	**FC53050804**	Price	**FC63050804**	Price	**FC73050804**	Price
5/16	3/4	4	**FC53051204**	Price	**FC63051204**	Price	**FC73051204**	Price
5/16	1	6	**FC53051606**	Price	**FC63051606**	Price	**FC73051606**	Price
3/8	1/2	4	**FC53060804**	Price	**FC63060804**	Price	**FC73060804**	Price
3/8	5/8	4	**FC53061004**	Price	**FC63061004**	Price	**FC73061004**	Price
3/8	5/8	5	**FC53061005**	Price	-	-	-	-
3/8	5/8	6	-	-	**FC63061006**	Price	**FC73061006**	Price
3/8	3/4	4	**FC53061204**	Price	**FC63061204**	Price	**FC73061204**	Price
3/8	3/4	6	**FC53061206**	Price	**FC63061206**	Price	**FC73061206**	Price
3/8	1	6	**FC53061606**	Price	**FC63061606**	Price	**FC73061606**	Price
1/2	3/4	4	**FC53081204**	Price	**FC63081204**	Price	**FC73081204**	Price
1/2	3/4	6	**FC53081206**	Price	**FC63081206**	Price	**FC73081206**	Price
1/2	1	7	**FC53081607**	Price	**FC63081607**	Price	**FC73081607**	Price
1/2	1-1/4	7	**FC53082007**	Price	**FC63082007**	Price	**FC73082007**	Price
1/2	1-1/2	7	**FC53082407**	Price	**FC63082407**	Price	**FC73082407**	Price
5/8	3/4	5	**FC53101205**	Price	**FC63101205**	Price	**FC73101205**	Price
5/8	7/8	6	-	-	**FC63101406**	Price	-	-
5/8	1	7	**FC53101607**	Price	**FC63101607**	Price	**FC73101607**	Price
5/8	1-1/4	7	**FC53102007**	Price	**FC63102007**	Price	**FC73102007**	Price
5/8	1-1/2	7	-	-	**FC63102407**	Price	**FC73102407**	Price
3/4	1	7	**FC53121607**	Price	**FC63121607**	Price	**FC73121607**	Price
3/4	1-1/4	7	**FC53122007**	Price	-	-	**FC73122007**	Price
3/4	1-1/2	7	**FC53122407**	Price	**FC63122407**	Price	**FC73122407**	Price
1	1-1/4	7	**FC53162007**	Price	**FC63162007**	Price	**FC73162007**	Price
1	1-1/2	7	**FC53162407**	Price	**FC63162407**	Price	**FC73162407**	Price

Square Tool Bits

Ground Finish



Size (Square) (in.)	OAL (in.)	M-2		5% Cobalt		Super Cobalt	
		Order No.	Price	Order No.	Price	Order No.	Price
1/8	2-1/2	**FC51002**	Price	**FC61002**	Price	**FC71002**	Price
3/16	2-1/2	**FC51003**	Price	**FC61003**	Price	**FC71003**	Price
1/4	2-1/2	**FC51004**	Price	**FC61004**	Price	**FC71004**	Price
5/16	2-1/2	**FC51005**	Price	**FC61005**	Price	**FC71005**	Price
3/8	3	**FC51006**	Price	**FC61006**	Price	**FC71006**	Price
7/16	3-1/2	**FC51007**	Price	**FC61007**	Price	**FC71007**	Price
1/2	4	**FC51008**	Price	**FC61008**	Price	**FC71008**	Price
5/8	4-1/2	**FC51010**	Price	**FC61010**	Price	**FC71010**	Price
3/4	5	**FC51012**	Price	**FC61012**	Price	**FC71012**	Price
7/8	6	**FC51014**	Price	**FC61014**	Price	**FC71014**	Price
1	7	**FC51016**	Price	**FC61016**	Price	**FC71016**	Price
1-1/2	10	**FC51024**	Price	**FC61024**	Price	-	-

Cobalt Tapered Cut-Off Blades

Ground and Cleared



Width (in.)	Height (in.)	Length (in.)	For Toolholder	Order No.	Price
1/16	1/2	4-1/2	-	**FD60001**	Price
1/16	11/16	5	-	**FD60002**	Price
3/32	1/2	4-1/2	19, 29R, 29L	**FD60003**	Price
3/32	5/8	5	20, 30R, 30L	**FD60004**	Price
1/8	1/2	4-1/2	19, 29R, 29L	**FD60005**	Price
1/8	3/4	5	21, 31R, 31L	**FD60006**	Price
1/8	7/8	6	22, 32R, 32L	**FD60007**	Price
3/16	3/4	6	21, 31R, 31L	**FD60008**	Price
3/16	1	6-1/2	23, 33R, 33L	**FD60009**	Price
3/16	1-1/8	7	24, 34R, 34L	**FD60010**	Price
1/4	1-1/8	7	25, 35R, 35L	**FD60011**	Price
1/4	1-1/4	7	-	**FD60012**	Price

MICRO 100 Solid Carbide Round Blanks

- Unexcelled in interrupted cuts
- Longer tool life
- Vastly increased feeds
- Shock resistant, will not chip or break under normal machining conditions
- High abrasion resistance
- Widest applications with only one carbide grade
- Diameter: -.0001 to -.0002” finish ground

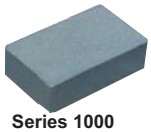
MADE IN THE USA



Dia. (in.)	Length (in.)	Order No.	Price
1/16	1	GE45SR0621	Price
1/16	4	GE45SR0624	Price
1/16	12	GE45SR06212	Price
3/32	6	GE45SR0936	Price
3/32	12	GE45SR09312	Price
1/8	1-1/2	GE45SR12515	Price
1/8	2	GE45SR1252	Price
1/8	3	GE45SR1253	Price
1/8	4	GE45SR1254	Price
1/8	6	GE45SR1256	Price
1/8	12	GE45SR12512	Price
5/32	1-1/2	GE45SR15615	Price
5/32	4	GE45SR1564	Price
5/32	6	GE45SR1566	Price
5/32	12	GE45SR15612	Price
3/16	1-1/2	GE45SR18715	Price
3/16	2	GE45SR1872	Price
3/16	4	GE45SR1874	Price
3/16	6	GE45SR1876	Price
3/16	12	GE45SR18712	Price
1/4	2	GE45SR2502	Price
1/4	2-1/2	GE45SR25025	Price
1/4	3	GE45SR2503	Price
1/4	4	GE45SR2504	Price
1/4	6	GE45SR2506	Price
1/4	12	GE45SR25012	Price
5/16	2	GE45SR3122	Price
5/16	2-1/2	GE45SR31225	Price
5/16	4	GE45SR3124	Price
5/16	12	GE45SR31212	Price
3/8	4	GE45SR3754	Price
3/8	6	GE45SR3756	Price
3/8	12	GE45SR37512	Price
7/16	6	GE45SR4376	Price
1/2	4	GE45SR5004	Price
1/2	6	GE45SR5006	Price
1/2	12	GE45SR50012	Price
5/8	3-1/2	GE45SR62535	Price
5/8	4	GE45SR6254	Price
5/8	6	GE45SR6256	Price
5/8	12	GE45SR62512	Price
3/4	4	GE45SR7504	Price
3/4	6	GE45SR7506	Price
3/4	12	GE45SR75012	Price
1	5	GE45SR0015	Price

MICRO 100 Solid Carbide Blanks

MADE IN THE USA



Series 1000



Series 2000



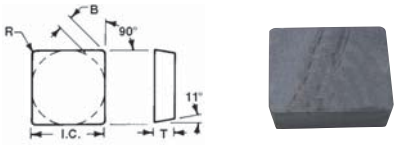
Series 6000

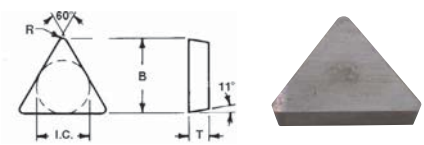
Thickness (in.)	Width (in.)	OAL (in.)	R Radius (in.)	Order No.	Price
1/32	1/16	3/4	-	GE45STB12A	Price
3/64	3/32	13/16	-	GE45STB13A	Price
1/16	1/8	3/4	1/4	GE45RT4	Price
1/16	3/16	1/4	1/8	GE452020	Price
1/16	1/4	1/4	-	GE451025	Price
1/16	1/4	5/16	1/64	GE455030	Price
1/16	1/4	5/16	1/8	GE452030	Price
3/32	3/16	7/8	5/16	GE45RT6	Price
3/32	1/4	3/8	-	GE457060	Price
3/32	5/16	3/8	-	GE451080	Price
3/32	5/16	3/8	-	GE456080	Price
3/32	5/16	3/8	1/64	GE455080	Price
3/32	3/8	3/8	-	GE451090	Price
3/32	3/8	1/2	-	GE456100	Price
3/32	3/8	1/2	1/64	GE455100	Price
3/32	7/16	1/2	-	GE451105	Price
3/32	7/16	1/2	1/32	GE455105	Price
1/8	3/16	5/16	-	GE451114	Price
1/8	1/4	1/2	1/8	GE452120	Price
1/8	1/4	3/4	-	GE451140	Price
1/8	1/4	1-1/4	1/4	GE45STB48	Price
1/8	5/16	5/8	-	GE457170	Price
1/8	1/2	1/2	-	GE451200	Price
1/8	1/2	1/2	-	GE456200	Price
1/8	1/2	1/2	1/32	GE455200	Price
5/32	3/8	3/4	-	GE457230	Price
5/32	3/8	3/4	1/8	GE452230	Price
5/32	5/8	5/8	-	GE451240	Price
5/32	5/8	5/8	-	GE456240	Price
5/32	5/8	5/8	1/32	GE455240	Price
3/16	5/16	7/16	-	GE451250	Price
3/16	3/8	1/2	-	GE451270	Price
1/4	1/2	5/8	-	GE451375	Price
1/4	1/2	3/4	-	GE451380	Price
1/4	1	3/4	1/32	GE455410	Price

MICRO 100 Style TPG Inserts

- A “space age” micro grain carbide developed for machining high strength thermal resistant alloys
- All surfaces ground
- IC ± .001”
- Thickness ± .005”

MADE IN THE USA





IC (in.)	T (in.)	R	Order No.	Price
1/4	.125	.031	GE45TPG222M	Price
3/8	.125	.016	GE45TPG321M	Price
3/8	.125	.031	GE45TPG322M	Price
1/2	.187	.031	GE45TPG432M	Price

STB Carbide Rectangular Strips

- Solid carbide rectangular strips are widely used as wear-proofing machine parts, tools, grinder rests & appliances
- Standard grade C-2 carbide
- Other grades available on request



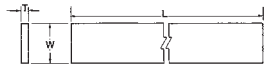
Blank No.	Thickness (in.)	Width (in.)	OAL (in.)	Order No.	Price
STB12	1/32	1/16	1	**FF51STB12**	Price
STB12A	1/32	1/16	1-1/2	**FF51STB12A**	Price
STB13	3/64	3/32	1	**FF51STB13**	Price
STB24A	1/16	1/8	1	**FF51STB24A**	Price
STB24C	1/16	1/8	1-1/4	**FF51STB24C**	Price
STB26A	1/16	3/16	1	**FF51STB26A**	Price
STB26C	1/16	3/16	3	**FF51STB26C**	Price
STB28A	1/16	1/4	1	**FF51STB28A**	Price
STB28B	1/16	1/4	1-1/4	**FF51STB28B**	Price
STB28D	1/16	1/4	3	**FF51STB28D**	Price
STB310A	3/32	5/16	2	**FF51STB310A**	Price
STB310B	3/32	5/16	3	**FF51STB310B**	Price
STB310C	3/32	5/16	5	**FF51STB310C**	Price
STB312	3/32	3/8	5	**FF51STB312**	Price
STB34	3/32	1/8	5	**FF51STB34**	Price
STB36A	3/32	3/16	1-1/4	**FF51STB36A**	Price
STB38A	3/32	1/4	1	**FF51STB38A**	Price
STB38B	3/32	1/4	1-1/2	**FF51STB38B**	Price
STB410	1/8	5/16	6	**FF51STB410**	Price
STB410A	1/8	5/16	1-1/2	**FF51STB410A**	Price
STB410B	1/8	5/16	3	**FF51STB410B**	Price
STB412A	1/8	3/8	2	**FF51STB412A**	Price
STB412B	1/8	3/8	3	**FF51STB412B**	Price
STB412C	1/8	3/8	6	**FF51STB412C**	Price
STB412D	1/8	3/8	1	**FF51STB412D**	Price
STB416	1/8	1/2	6	**FF51STB416**	Price
STB416A	1/8	1/2	1	**FF51STB416A**	Price
STB416B	1/8	1/2	1-1/2	**FF51STB416B**	Price
STB416C	1/8	1/2	3	**FF51STB416C**	Price

Blank No.	Thickness (in.)	Width (in.)	OAL (in.)	Order No.	Price
STB420	1/8	5/8	6	**FF51STB420**	Price
STB424	1/8	3/4	6	**FF51STB424**	Price
STB432	1/8	1	6	**FF51STB432**	Price
STB46	1/8	3/16	6	**FF51STB46**	Price
STB48A	1/8	1/4	1	**FF51STB48A**	Price
STB48B	1/8	1/4	1-1/4	**FF51STB48B**	Price
STB48C	1/8	1/4	2-1/4	**FF51STB48C**	Price
STB48D	1/8	1/4	3	**FF51STB48D**	Price
STB48E	1/8	1/4	6	**FF51STB48E**	Price
STB48F	1/8	1/4	1-1/2	**FF51STB48F**	Price
STB610	3/16	5/16	6	**FF51STB610**	Price
STB610A	3/16	5/16	3	**FF51STB610A**	Price
STB612	3/16	3/8	6	**FF51STB612**	Price
STB612A	3/16	3/8	3	**FF51STB612A**	Price
STB616	3/16	1/2	6	**FF51STB616**	Price
STB616A	3/16	1/2	3	**FF51STB616A**	Price
STB620	3/16	5/8	6	**FF51STB620**	Price
STB624A	3/16	3/4	4	**FF51STB624A**	Price
STB624B	3/16	3/4	2	**FF51STB624B**	Price
STB68	3/16	1/4	6	**FF51STB68**	Price
STB812	1/4	3/8	6	**FF51STB812**	Price
STB812A	1/4	3/8	3	**FF51STB812A**	Price
STB816	1/4	1/2	6	**FF51STB816**	Price
STB816A	1/4	1/2	3	**FF51STB816A**	Price
STB816C	1/4	1/2	2	**FF51STB816C**	Price
STB820	1/4	5/8	6	**FF51STB820**	Price
STB824	1/4	3/4	6	**FF51STB824**	Price
STB824A	1/4	3/4	3	**FF51STB824A**	Price

All blanks are unground with grind stock.

STBL Carbide Long Rectangular Blanks

Blank No.	Thickness (in.)	Width (in.)	OAL (in.)	Order No.	Price
STB22L	1/16	1/16	6	**FF51STB22L**	Price
STB24L	1/16	1/8	6	**FF51STB24L**	Price
STB26L	1/16	3/16	6	**FF51STB26L**	Price
STB28L	1/16	1/4	6	**FF51STB28L**	Price
STB34L	3/32	1/8	8	**FF51STB34L**	Price
STB36L	3/32	3/16	8	**FF51STB36L**	Price
STB38L	3/32	1/4	8	**FF51STB38L**	Price
STB44L	1/8	1/8	12	**FF51STB44L**	Price
STB48L	1/8	1/4	12	**FF51STB48L**	Price
STB66L	3/16	3/16	12	**FF51STB66L**	Price
STB68L	3/16	1/4	12	**FF51STB68L**	Price
STB88L	1/4	1/4	12	**FF51STB88L**	Price
STB210L	1/16	5/16	6	**FF51STB210L**	Price
STB212L	1/16	3/8	6	**FF51STB212L**	Price
STB216L	1/16	1/2	6	**FF51STB216L**	Price
STB220L	1/16	5/8	6	**FF51STB220L**	Price
STB224L	1/16	3/4	6	**FF51STB224L**	Price
STB232L	1/16	1	6	**FF51STB232L**	Price
STB310L	3/32	5/16	8	**FF51STB310L**	Price
STB316L	3/32	1/2	8	**FF51STB316L**	Price





Blank No.	Thickness (in.)	Width (in.)	OAL (in.)	Order No.	Price
STB412L	1/8	3/8	12	**FF51STB412L**	Price
STB416L	1/8	1/2	12	**FF51STB416L**	Price
STB420L	1/8	5/8	12	**FF51STB420L**	Price
STB424L	1/8	3/4	12	**FF51STB424L**	Price
STB616L	3/16	1/2	12	**FF51STB616L**	Price
STB620L	3/16	5/8	12	**FF51STB620L**	Price
STB624L	3/16	3/4	12	**FF51STB624L**	Price
STB632L	3/16	1	12	**FF51STB632L**	Price
STB812L	1/4	3/8	12	**FF51STB812L**	Price
STB816L	1/4	1/2	12	**FF51STB816L**	Price
STB820L	1/4	5/8	12	**FF51STB820L**	Price
STB824L	1/4	3/4	12	**FF51STB824L**	Price
STB832L	1/4	1	12	**FF51STB832L**	Price
STB1212L	3/8	3/8	12	**FF51STB1212L**	Price
STB1216L	3/8	1/2	12	**FF51STB1216L**	Price
STB1224L	3/8	3/4	12	**FF51STB1224L**	Price
STB1616L	1/2	1/2	12	**FF51STB1616L**	Price
STB1624L	1/2	3/4	12	**FF51STB1624L**	Price

RRG 12" Long Carbide Rod - Centerless Ground



- Sub micrograin
- 10% Cobalt
- Ask for special quote on quantities over 1,000 pieces.
- † Tolerance +.0000 - .0005

† Unless otherwise specified, centerless grinding tolerance on all round blanks will be +.0000 - .0005 triangulation and T.I.R. will be guaranteed only within the diameter tolerance, as measured in a V-block. No guarantee will be made on straightness of rods over 6" long or under 1/8" diameter, otherwise .0002" per inch.

Rod Dia. (in.)	Rod Length (in.)	Order No.	Price
.040	12	**FF53RRG212**	Price
1/16	12	**FF53RRG4**	Price
5/64	12	**FF53RRG5**	Price
3/32	12	**FF53RRG6**	Price
1/8	12	**FF53RRG8**	Price
9/64	12	**FF53RRG9**	Price
5/32	12	**FF53RRG10**	Price
11/64	12	**FF53RRG11**	Price
3/16	12	**FF53RRG12**	Price
7/32	12	**FF53RRG14**	Price
1/4	12	**FF53RRG16**	Price
3/8	12	**FF53RRG24**	Price
9/16	12	**FF53RRG36**	Price

Carbide Rounds - Ground



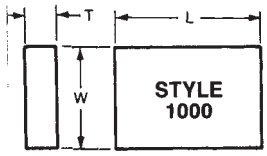
- Sub micrograin
- 10% Cobalt
- † Tolerance +.0000 - .0005

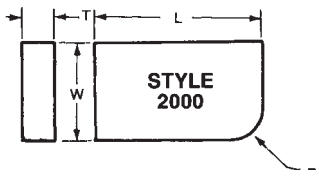
Dia. (in.)	Length (in.)	Order No.	Price
1/16	1-1/2	**FF52CY6**	Price
5/64	2	**FF52CY7**	Price
3/32	2	**FF52CY8**	Price
3/32	2-1/2	**FF52CY9**	Price
1/8	2	**FF52CY13**	Price
1/8	2-1/2	**FF52CY15**	Price
1/8	3	**FF52CY16**	Price
1/8	4	**FF52CY16A**	Price
1/8	6	**FF52CY16B**	Price
5/32	1-1/2	**FF52CY17**	Price
5/32	2	**FF52CY17A**	Price
5/32	2-1/2	**FF52CY18**	Price
5/32	3	**FF52CY18A**	Price
3/16	1-1/2	**FF52CY19**	Price
3/16	2	**FF52CY20**	Price
3/16	2-1/2	**FF52CY21**	Price
3/16	3	**FF52CY22**	Price
3/16	4	**FF52CY23**	Price
3/16	6	**FF52CY23A**	Price
1/4	1-1/4	**FF52CY25**	Price
1/4	1-1/2	**FF52CY24A**	Price
1/4	2	**FF52CY24**	Price
1/4	2-1/2	**FF52CY26**	Price

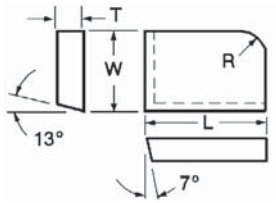
Dia. (in.)	Length (in.)	Order No.	Price
1/4	3	**FF52CY27**	Price
1/4	4	**FF52CY28**	Price
1/4	6	**FF52CY28A**	Price
5/16	2	**FF52CY29**	Price
5/16	2-1/2	**FF52CY30**	Price
5/16	4	**FF52CY32**	Price
5/16	6	**FF52CY33**	Price
3/8	2	**FF52CY34**	Price
3/8	2-1/2	**FF52CY35**	Price
3/8	3	**FF52CY36**	Price
3/8	4	**FF52CY38**	Price
3/8	6	**FF52CY39**	Price
1/2	2-1/2	**FF52CY43**	Price
1/2	3	**FF52CY44**	Price
1/2	4	**FF52CY46**	Price
1/2	6	**FF52CY47**	Price
5/8	6	**FF52CY50A**	Price
3/4	3-1/2	**FF52CY51**	Price
3/4	4	**FF52CY52**	Price
3/4	6	**FF52CY53**	Price
1	4	**FF52CY54**	Price
1	6	**FF52CY55**	Price

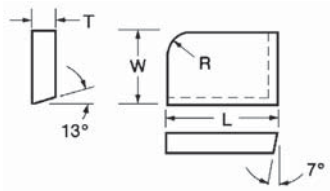
Standard Blanks

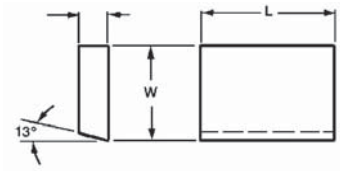












Thickness (in.)	Width (in.)	OAL (in.)	Radius (in.)	1000		2000	
				Order No.	Price	Order No.	Price
1/16	1/4	5/16	1/8	**FF541030**	Price	**FF542030**	Price
1/16	1/8	5/8	1/8	**FF541010**	Price	**-**	-
1/16	3/16	1/4	1/8	**FF541020**	Price	**-**	-
3/32	1/4	1/2	1/8	**FF541070**	Price	**-**	-
3/32	1/4	3/8	1/8	**FF541060**	Price	**FF542060**	Price
3/32	3/16	1/2	1/8	**-**	-	**FF542050**	Price
3/32	3/16	5/16	1/8	**FF541040**	Price	**-**	-
3/32	3/8	1/2	3/16	**FF541100**	Price	**-**	-
3/32	3/8	3/8	3/16	**FF541090**	Price	**-**	-
1/8	1/2	1/2	1/4	**FF541200**	Price	**FF542200**	Price
1/8	1/2	3/4	1/4	**FF541210**	Price	**FF542210**	Price
1/8	1/4	1/2	1/8	**FF541120**	Price	**FF542120**	Price
1/8	1/4	3/4	1/8	**FF541140**	Price	**FF542140**	Price
1/8	1/4	5/8	1/8	**FF541130**	Price	**FF542130**	Price
1/8	3/16	3/4	1/8	**FF541110**	Price	**-**	-
1/8	3/4	3/4	1/4	**FF541215**	Price	**FF542215**	Price
1/8	3/8	1/2	3/16	**FF541180**	Price	**FF542180**	Price
1/8	3/8	3/4	3/16	**FF541190**	Price	**FF542190**	Price
1/8	5/16	1/2	3/16	**FF541160**	Price	**FF542160**	Price
1/8	5/16	5/8	3/16	**-**	-	**FF542170**	Price
5/32	3/8	3/4	3/16	**FF541230**	Price	**-**	-
5/32	3/8	9/16	3/16	**FF541220**	Price	**-**	-
5/32	5/8	5/8	1/4	**FF541240**	Price	**-**	-
3/16	1/2	1/2	1/4	**FF541320**	Price	**-**	-
3/16	1/2	3/4	1/4	**FF541330**	Price	**-**	-
3/16	3/4	3/4	1/4	**FF541340**	Price	**-**	-
3/16	3/8	1/2	3/16	**FF541270**	Price	**-**	-
3/16	3/8	3/4	3/16	**FF541290**	Price	**-**	-
3/16	5/16	5/8	3/16	**FF541260**	Price	**-**	-
3/16	5/16	7/16	3/16	**FF541250**	Price	**-**	-
3/16	7/16	13/16	1/4	**FF541310**	Price	**-**	-
3/16	7/16	5/8	1/4	**FF541300**	Price	**-**	-

Also available in other styles call for quote.

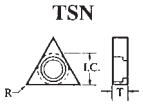
TS Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
TS424	1/2	1/8	1/64	**FF7171760**	Price



TSN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
TSN322	3/8	1/8	1/32	**FF7171770**	Price
TSN324	3/8	1/8	1/16	**FF7171790**	Price
TSN332	3/8	3/16	1/32	**FF7171800**	Price
TSN333	3/8	3/16	3/64	**FF7171810**	Price
TSN434	1/2	3/16	1/16	**FF7171820**	Price
TSN435	1/2	3/16	5/64	**FF7171830**	Price
TSN532	5/8	3/16	1/32	**FF7171840**	Price
TSN534	5/8	3/16	1/16	**FF7171850**	Price
TSN535	5/8	3/16	5/64	**FF7171860**	Price
TSN538	5/8	3/16	1/8	**FF7171870**	Price
TSN539	5/8	3/16	9/64	**FF7171880**	Price
TSN633	3/4	3/16	3/64	**FF7171890**	Price
TSN636	3/4	3/16	3/32	**FF7171900**	Price



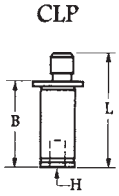
TSP Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
TSP321	3/8	1/8	1/64	**FF7171920**	Price
TSP431	1/2	3/16	1/64	**FF7171930**	Price



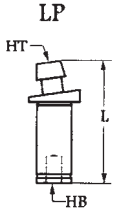
CLP Cam Pins

Model No.	Insert I.C. (in.)	L (in.)	B (in.)	H (in.)	Order No.	Price
CLP25	3/8	.62	.48	3/32	**FF7172990**	Price
CLP36	1/2	.75	.53	1/8	**FF7173010**	Price
CLP38	1/2	1.00	.80	1/8	**FF7173020**	Price
CLP48	5/8	1.00	.73	5/32	**FF7173050**	Price
CLP58	3/4	1.00	.73	5/32	**FF7173080**	Price
CLP312	1/2	1.50	1.28	1/8	**FF7173040**	Price
CLP410	5/8	1.25	.85	5/32	**FF7173060**	Price
CLP510	3/4	1.25	.98	5/32	**FF7173090**	Price
CLP512S	3/4	1.50	1.23	5/32	**FF7173100**	Price
CLP512T	3/4	1.50	1.10	5/32	**FF7173110**	Price
CLP612	1	1.50	1.10	7/32	**FF7173120**	Price
CLP616	1	2.00	1.60	7/32	**FF7173130**	Price



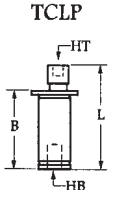
LP Cam Pins

Model No.	Insert I.C. (in.)	L (in.)	HT (in.)	HB (in.)	Order No.	Price
LP31	3/8	.59	3/64	3/32	**FF7173220**	Price
LP32	3/8	.97	3/64	3/32	**FF7173230**	Price
LP53	1/2	.63	3/32	1/8	**FF7173240**	Price
LP55	1/2	.71	3/32	1/8	**FF7173250**	Price
LP56	1/2	.96	3/32	1/8	**FF7173260**	Price
LP57	1/2	1.21	3/32	1/8	**FF7173270**	Price
LP58	1/2	1.46	3/32	1/8	**FF7173280**	Price
LP59	3/8	.45	3/32	1/8	**FF7173290**	Price
LP65	5/8	.97	7/64	5/32	**FF7173300**	Price
LP66	5/8	1.22	7/64	5/32	**FF7173310**	Price
LP67	5/8	1.47	7/64	5/32	**FF7173320**	Price
LP70	3/4	.97	5/32	5/32	**FF7173330**	Price
LP71	3/4	1.22	5/32	5/32	**FF7173340**	Price
LP72	3/4	1.47	5/32	5/32	**FF7173350**	Price



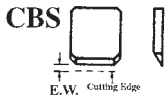
TCLP Cam Pins

Model No.	Insert I.C. (in.)	L (in.)	B (in.)	HT (in.)	HB (in.)	Order No.	Price
TCLP310	1/2	1.25	1.03	7/64	1/8	**FF7173170**	Price
TCLP410	5/8	1.25	.85	1/8	1/8	**FF7173180**	Price



CBS Chipbreakers

Model No.	I.C. (in.)	E.W. (in.)	Order No.	Price
CBS4L	1/2	.063	**FF7172130**	Price
CBS6H	3/4	.188	**FF7172150**	Price
CBS6L	3/4	.063	**FF7172160**	Price
CBS12	3/8	.062	**FF7172170**	Price
CBS16	1/2	.157	**FF7172180**	Price
CBS16F	1/2	.062	**FF7172190**	Price
CBS24	3/4	.188	**FF7172210**	Price
CBS24F	3/4	.062	**FF7172220**	Price
CBS24N	3/4	.101	**FF7172230**	Price



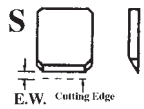
CBT Chipbreakers

Model No.	I.C. (in.)	E.W. (in.)	Order No.	Price
CBT3G	3/8	.094	**FF7171960**	Price
CBT3L	3/8	.063	**FF7171970**	Price
CBT4G	1/2	.094	**FF7171980**	Price
CBT4H	1/2	.156	**FF7171990**	Price
CBT4L	1/2	.063	**FF7172000**	Price
CBT5G	5/8	.156	**FF7172010**	Price
CBT6H	3/4	.345	**FF7172020**	Price
CBT6L	3/4	.156	**FF7172030**	Price
CBT8	1/4	.062	**FF7172040**	Price
CBT12	3/8	.129	**FF7172050**	Price
CBT12F	3/8	.057	**FF7172060**	Price
CBT12N	3/8	.081	**FF7172070**	Price
CBT16	1/2	.191	**FF7172080**	Price
CBT16F	1/2	.054	**FF7172090**	Price
CBT16N	1/2	.101	**FF7172100**	Price
CBT20	5/8	.191	**FF7172110**	Price
CBT20N	5/8	.101	**FF7172120**	Price



S Chipbreakers

Model No.	I.C. (in.)	E.W. (in.)	Order No.	Price
S43AD	1/2	.078	**FF7172260**	Price
S4AC	1/2	.061	**FF7172240**	Price
S63AD	3/4	.071	**FF7172270**	Price
S63AE	3/4	.091	**FF7172280**	Price
S63AG	3/4	.141	**FF7172290**	Price
S63AK	3/4	.203	**FF7172300**	Price



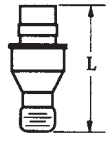
T Chipbreakers

Model No.	I.C. (in.)	E.W. (in.)	Order No.	Price
T2AC	1/4	.061	**FF7172310**	Price
T3AC	3/8	.061	**FF7172320**	Price
T3AE	3/8	.091	**FF7172330**	Price
T3AG	3/8	.125	**FF7172340**	Price
T4AC	1/2	.061	**FF7172350**	Price
T4AE	1/2	.091	**FF7172360**	Price
T4AG	1/2	.125	**FF7172370**	Price
T5AG	5/8	.141	**FF7172380**	Price
T33AC	3/8	.047	**FF7172390**	Price
T33AD	3/8	.071	**FF7172400**	Price
T33AH	3/8	.155	**FF7172410**	Price
T53AG	5/8	.123	**FF7172420**	Price



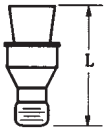
MN Lock Pins

Model No.	Insert I.C. (in.)	L (in.)	H (in.)	Thread	Order No.	Price
MN23	1/4	.30	1/16	8-32	**FF7172810**	Price
MN33	3/8	.32	5/64	10-32	**FF7172820**	Price
MN33L	3/8	.37	5/64	10-32	**FF7172830**	Price
MN34	3/8	.42	5/64	10-32	**FF7172840**	Price
MN34L	3/8	.48	5/64	10-32	**FF7172850**	Price
MN43	1/2	.40	5/64	10-32	**FF7172860**	Price
MN44	1/2	.49	3/32	1/4-28	**FF7172870**	Price
MN46	1/2	.65	3/32	1/4-28	**FF7172880**	Price
MN46L	1/2	.69	3/32	1/4-28	**FF7172890**	Price
MN56	5/8	.70	1/8	5/16-24	**FF7172900**	Price
MN58	5/8	.83	1/8	5/16-24	**FF7172910**	Price
MN66	3/4	.70	9/64	3/8-24	**FF7172920**	Price
MN66L	3/4	.83	9/64	3/8-24	**FF7172930**	Price
MN68	3/4	.83	9/64	3/8-24	**FF7172940**	Price
MN68L	3/4	.95	9/64	3/8-24	**FF7172950**	Price
MN810	1	1.14	5/32	7/16-20	**FF7172960**	Price



PL Lock Pins

Model No.	Insert I.C. (in.)	L (in.)	H (in.)	Thread	Order No.	Price
PL2.53	5/16	.32	1/16	8-32	**FF7172740**	Price
PL33	3/8	.34	5/64	10-32	**FF7172750**	Price
PL34	3/8	.45	5/64	10-32	**FF7172760**	Price
PL44	1/2	.52	3/32	1/4-28	**FF7172770**	Price
PL46	1/2	.67	3/32	1/4-28	**FF7172780**	Price
PL58	5/8	.86	1/8	5/16-24	**FF7172790**	Price
PL68	3/4	.86	9/64	3/8-24	**FF7172800**	Price

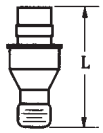


NLM Lock Pins

Model No.	Insert I.C. (in.)	L (mm)	H (mm)	Thread (mm)	Order No.	Price
NLM46	1/2	17.2	2.5mm	M6.3 x 1.0	**FF7172630**	Price
NLM54	5/8	18.6	2.5mm	M6.3 x 1.0	**FF7172640**	Price
NLM58	5/8	21.8	3mm	M8 x 1.0	**FF7172650**	Price
NLM68	3/4	21.8	4mm	M10 x 1.0	**FF7172660**	Price

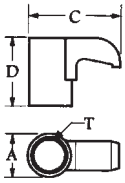
KL Lock Pins

Model No.	Insert I.C. (in.)	L (in.)	H (in.)	Thread	Order No.	Price
KL33L	3/8	.41	5/64	10-32	**FF7172670**	Price
KL34L	3/8	.51	5/64	10-32	**FF7172680**	Price
KL44	1/2	.51	3/32	1/4-28	**FF7172690**	Price
KL46	1/2	.67	3/32	1/4-28	**FF7172700**	Price
KL68	3/4	.86	9/64	3/8-24	**FF7172710**	Price
KL68L	3/4	.95	9/64	3/8-24	**FF7172720**	Price



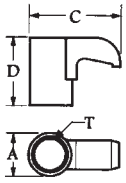
CL Clamps

Model No.	A (in.)	C (in.)	D (in.)	T	Order No.	Price
CL5	.28	.52	.35	10-32	**FF7173360**	Price
CL6	.31	.58	.44	10-32	**FF7173370**	Price
CL7	.31	.64	.31	10-32	**FF7173380**	Price
CL9	.43	.75	.66	5/16-24	**FF7173390**	Price
CL12	.43	.88	.66	5/16-24	**FF7173400**	Price
CL19	.31	.55	.31	10-32	**FF7173410**	Price
CL20	.37	.73	.38	1/4-28	**FF7173420**	Price
CL24	.49	1	.78	3/8-24	**FF7173430**	Price
CL30	.43	1	.66	5/16-24	**FF7173440**	Price
CL41	.43	.75	.66	5/16-24	**FF7173450**	Price
CL42	.43	.88	.66	5/16-24	**FF7173460**	Price
CL43	.37	.73	.53	1/4-28	**FF7173470**	Price
CL44	.37	.85	.53	1/4-28	**FF7173471**	Price
CL45	.49	1	.78	3/8-24	**FF7173480**	Price
CL46	.43	1	.66	5/16-24	**FF7173490**	Price
CL48	.31	.64	.31	10-32	**FF7173500**	Price



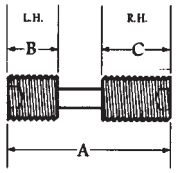
CK Clamps

Model No.	A (in.)	C (in.)	D (in.)	T	Order No.	Price
CK7	.31	.64	.31	10-32	**FF7173580**	Price
CK9	.43	.75	.66	5/16-24	**FF7173590**	Price
CK10	.43	.75	.44	5/16-24	**FF7173600**	Price
CK12	.43	.88	.69	5/16-24	**FF7173610**	Price
CK13	.43	.88	.47	5/16-24	**FF7173620**	Price
CK19	.31	.55	.28	10-32	**FF7173630**	Price
CK20	.37	.73	.40	1/4-28	**FF7173640**	Price
CK21	.37	.73	.53	1/4-28	**FF7173650**	Price
CK24	.49	1	.78	3/8-24	**FF7173660**	Price



Differential Screws

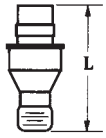
Model No.	A (in.)	B (in.)	C (in.)	H (in.)	T	Order No.	Price
CS30	1.16	.50	.41	5/32	5/16-24	**FF7173900**	Price
CS32	1.38	.50	.50	3/16	3/8-24	**FF7173910**	Price
CS33	1.16	.45	.45	1/8	1/4-28	**FF7173920**	Price
CS35	.59	.19	.19	3/32	10-32	**FF7173930**	Price
LS20	.62	.25	.25	3/32	10-32	**FF7173940**	Price
LS30	1.00	.40	.40	1/8	1/4-28	**FF7173950**	Price
MS36	.75	.25	.25	3/32	10-32	**FF7173960**	Price
MS48	1.00	.38	.38	1/8	1/4-28	**FF7173970**	Price
MS59	1.12	.50	.50	5/32	5/16-24	**FF7173980**	Price
MS510	1.25	.50	.50	5/32	5/16-24	**FF7173990**	Price
MS610	1.38	.50	.50	3/16	3/8-24	**FF7174000**	Price
STC4	1.16	.50	.41	5/32	5/16-24	**FF7174010**	Price
STC5	.84	.31	.31	3/32	10-32	**FF7174020**	Price
STC8	1.00	.50	.25	5/32	5/16-24	**FF7174030**	Price



Model No.	A (in.)	B (in.)	C (in.)	H (in.)	T	Order No.	Price
STC9	.59	.19	.19	5/32	10-32	**FF7174040**	Price
STC11	.81	.28	.28	1/8	1/4-28	**FF7174050**	Price
STC20	1.16	.45	.45	1/8	1/4-28	**FF7174060**	Price
XNS26	.75	.31	.31	5/64	8-32	**FF7173780**	Price
XNS35	.59	.22	.22	3/32	10-32	**FF7173790**	Price
XNS36	.75	.25	.25	3/32	10-32	**FF7173800**	Price
XNS37	.84	.31	.31	3/32	10-32	**FF7173810**	Price
XNS38	1.00	.37	.37	3/32	10-32	**FF7173820**	Price
XNS46	.75	.31	.31	1/8	1/4-28	**FF7173830**	Price
XNS47	.81	.28	.28	1/8	1/4-28	**FF7173840**	Price
XNS48	1.00	.37	.37	1/8	1/4-28	**FF7173850**	Price
XNS58	1.00	.28	.50	5/32	5/16-24	**FF7173860**	Price
XNS59	1.12	.41	.47	5/32	5/16-24	**FF7173870**	Price
XNS510	1.25	.50	.50	5/32	5/16-24	**FF7173880**	Price
XNS610	1.25	.50	.50	3/16	3/8-24	**FF7173890**	Price

NL Lock Pins

Model No.	Insert I.C. (in.)	L (in.)	H (in.)	Thread	Order No.	Price
NL2.52	5/16	.32	1/16	8-32	**FF7172430**	Price
NL23	1/4	.32	1/16	8-32	**FF7172440**	Price
NL33	3/8	.64	5/64	10-32	**FF7172450**	Price
NL33L	3/8	.41	5/64	10-32	**FF7172460**	Price
NL34	3/8	.45	5/64	10-32	**FF7172470**	Price
NL34L	3/8	.51	5/64	10-32	**FF7172480**	Price
NL43	1/2	.42	5/64	10-32	**FF7172490**	Price
NL44	1/2	.51	3/32	1/4-28	**FF7172500**	Price
NL46	1/2	.67	3/32	1/4-28	**FF7172510**	Price
NL46L	1/2	.73	3/32	1/4-28	**FF7172520**	Price
NL55	5/8	.64	1/8	5/16-24	**FF7172530**	Price
NL56	5/8	.70	1/8	5/16-24	**FF7172540**	Price
NL58	5/8	.86	1/8	5/16-24	**FF7172560**	Price
NL58L	5/8	.89	1/8	5/16-24	**FF7172570**	Price
NL66	3/4	.70	9/64	3/8-24	**FF7172580**	Price
NL66L	3/4	.83	9/64	3/8-24	**FF7172590**	Price
NL68	3/4	.86	9/64	3/8-24	**FF7172600**	Price
NL68L	3/4	.95	9/64	3/8-24	**FF7172610**	Price
NL810	1	1.17	5/32	7/16-20	**FF7172620**	Price

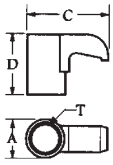


KLC Lock Pins

Model No.	Insert I.C. (in.)	L (mm)	H (in.)	Thread (mm)	Order No.	Price
KLC46	1/2	17.2mm	3/32	M6.3 x 1.0	**FF7172730**	Price

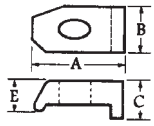
CLI Clamps

Model No.	A (in.)	C (in.)	D (in.)	T	Order No.	Price
CLI6	.31	.58	.44	10-32	**FF7173510**	Price
CLI9	.43	.75	.66	5/16-24	**FF7173520**	Price
CLI12	.43	.88	.66	5/16-24	**FF7173530**	Price
CLI30	.43	1	.66	5/16-24	**FF7173540**	Price



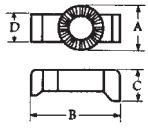
CM Clamps

Model No.	A (in.)	B (in.)	C (in.)	E	Order No.	Price
CM72 (RH)	.86	.43	.37	.31	**FF7173670**	Price
CM73 (LH)	.86	.43	.37	.31	**FF7173680**	Price
CM74 (RH)	.53	.34	.28	.24	**FF7173690**	Price
CM75 (LH)	.53	.34	.28	.24	**FF7173700**	Price



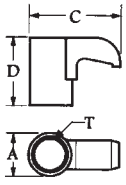
HC Clamps

Model No.	A (in.)	B (in.)	C (in.)	D (in.)	Order No.	Price
HC7	-	15/32	-	-	**FF7173560**	Price
HC9	3/8	5/8	.28	.17	**FF7173550**	Price
HC12	1/2	13/16	.35	.25	**FF7173570**	Price



MC Clamps

Model No.	A (in.)	C (in.)	D (in.)	Thread	Order No.	Price
MC6	.31	.58	.44	10-32	**FF7173710**	Price
MC9	.43	.75	.66	5/16-24	**FF7173720**	Price
MC12	.43	.88	.66	5/16-24	**FF7173730**	Price
MC19	.31	.55	.31	10-32	**FF7173740**	Price
MC20	.37	.73	.38	1/4-28	**FF7173750**	Price
MC24	.49	1	.78	3/8-24	**FF7173760**	Price
MC30	.43	1	.66	5/16-24	**FF7173770**	Price



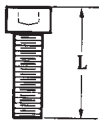
Flat Head Cap Screws

Model No.	L (in.)	T (in.)	Order No.	Price
S111	.375	4-40	**FF7174310**	Price
S125	.375	8-32	**FF7174320**	Price
SC205	.375	4-40	**FF7174330**	Price
SC235	.50	8-32	**FF7174340**	Price



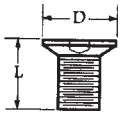
Socket Head Cap Screws

Model No.	L (in.)	T (in.)	Order No.	Price
S304	.188	2-56	**FF7174350**	Price
S327	.75	10-24	**FF7174360**	Price
S330	1.25	10-24	**FF7174370**	Price
S412	.75	10-32	**FF7174380**	Price
SC415	.25	4-40	**FF7174390**	Price



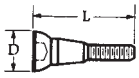
Shim Screws

Model No.	Insert I.C. (in.)	D (in.)	L (in.)	H (in.)	T	Order No.	Price
MF34	3/8	.24	.31	5/64	10-32	**FF7174120**	Price
MF46	1/2	.30	.50	3/32	1/4-28	**FF7174130**	Price
MF58	5/8	.40	.62	1/8	5/16-24	**FF7174140**	Price
MF68	3/4	.46	.62	9/64	3/8-24	**FF7174150**	Price
S34	3/8	.24	.31	5/64	10-32	**FF7174070**	Price
S46	1/2	.30	.50	3/32	1/4-28	**FF7174080**	Price
S58	5/8	.40	.62	1/8	5/16-24	**FF7174090**	Price
S68	3/4	.46	.62	9/64	3/8-24	**FF7174100**	Price



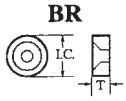
TORX® Lock Screws

Model No.	Insert I.C. (in.)	D (in.)	L (in.)	H (in.)	T	Order No.	Price
GTS3	5/8	.35	.75	T-20	10-32	**FF7174180**	Price
SD1	3/8	.22	.50	T-10	6-40	**FF7174190**	Price
SD2	1/2	.31	.75	3/32	10-32	**FF7174200**	Price
SD3	5/8	.35	.75	T-20	10-32	**FF7174210**	Price
VR1	3/8	.22	.50	T-10	6-40	**FF7174230**	Price
VR2	1/2	.31	.75	T-20	10-32	**FF7174240**	Price
VR3	5/8	.35	.75	T-20	10-32	**FF7174250**	Price
VR4	3/4	.41	1.12	T-30	1/4-20	**FF7174260**	Price



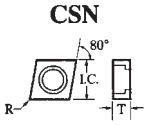
BR Shim Seats

Model No.	I.C. (in.)	T (in.)	Order No.	Price
BR162	1/2	1/8	**FF7170010**	Price



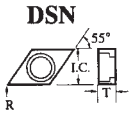
CSN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
CSN432	1/2	3/16	1/32	**FF7170020**	Price
CSN433	1/2	3/16	3/64	**FF7170030**	Price
CSN533	5/8	3/16	3/64	**FF7170040**	Price
CSN633	3/4	3/16	3/64	**FF7170050**	Price
CSN643	3/4	1/4	3/64	**FF7170060**	Price
CSN846	1	1/4	3/32	**FF7170070**	Price



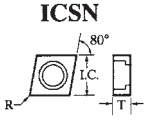
DSN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
DSN433	1/2	3/16	3/64	**FF7170080**	Price
DSN533	5/8	3/16	3/64	**FF7170090**	Price
DSN534	5/8	3/16	1/16	**FF7170100**	Price



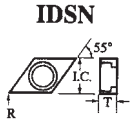
ICSN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
ICSN322	3/8	1/8	1/32	**FF7170120**	Price
ICSN422	1/2	1/8	1/32	**FF7170130**	Price
ICSN432	1/2	3/16	1/32	**FF7170140**	Price
ICSN433	1/2	3/16	3/64	**FF7170150**	Price
ICSN533	5/8	3/16	3/64	**FF7170160**	Price
ICSN633	3/4	3/16	3/64	**FF7170170**	Price
ICSN846	1	1/4	3/32	**FF7170180**	Price



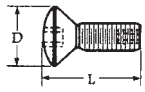
IDSN Shim Seats

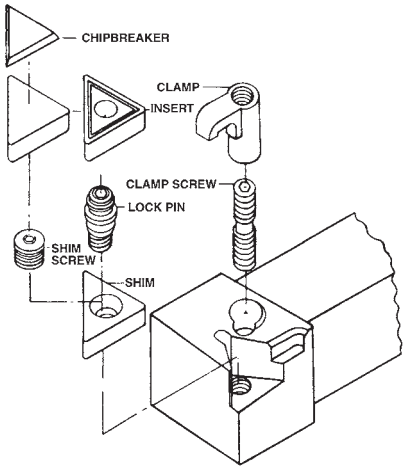
Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
IDSN322	3/8	1/8	1/32	**FF7170190**	Price
IDSN432	1/2	3/16	1/32	**FF7170200**	Price
IDSN433	1/2	3/16	3/64	**FF7170210**	Price
IDSN533	5/8	3/16	3/64	**FF7170220**	Price
IDSN538	5/8	3/16	1/8	**FF7170230**	Price

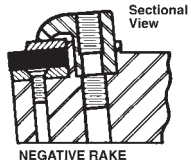


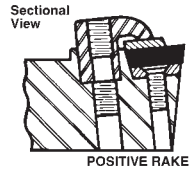
Clamp Screws

Model No.	D (in.)	L (in.)	H (in.)	T	Order No.	Price
CS94	.37	.58	1/8	10-32	**FF7174270**	Price
CS96	.37	.84	1/8	10-32	**FF7174280**	Price
SHC7	.049	.375	3/32	8-32	**FF7174300**	Price









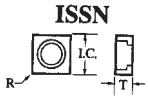
IRSN Shim Seats

Model No.	I.C. (in.)	T (in.)	Order No.	Price
IRSN32	3/8	1/8	**FF7170240**	Price
IRSN42	1/2	1/8	**FF7170250**	Price
IRSN43	1/2	3/16	**FF7170260**	Price
IRSN44	1/2	1/4	**FF7170270**	Price
IRSN63	3/4	3/16	**FF7170280**	Price
IRSN84	1	1/4	**FF7170290**	Price



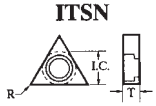
ISSN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
ISSN322	3/8	1/8	1/32	**FF7170300**	Price
ISSN323	3/8	1/8	3/4	**FF7170310**	Price
ISSN432	1/2	3/16	1/32	**FF7170320**	Price
ISSN433	1/2	3/16	3/64	**FF7170330**	Price
ISSN434	1/2	3/16	1/16	**FF7170340**	Price
ISSN443	1/2	1/4	3/64	**FF7170350**	Price
ISSN533	5/8	3/16	3/64	**FF7170360**	Price
ISSN543	5/8	1/4	3/64	**FF7170370**	Price
ISSN623	3/4	1/8	3/64	**FF7170380**	Price
ISSN633	3/4	3/16	3/64	**FF7170390**	Price
ISSN634	3/4	3/16	1/16	**FF7170400**	Price
ISSN643	3/4	1/4	3/64	**FF7170410**	Price



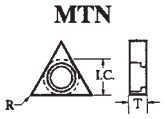
ITSN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
ITSN322	3/8	1/8	1/32	**FF7170420**	Price
ITSN323	3/8	1/8	3/64	**FF7170430**	Price
ITSN324	3/8	1/8	1/16	**FF7170440**	Price
ITSN332	3/8	3/16	1/32	**FF7170450**	Price
ITSN333	3/8	3/16	3/64	**FF7170460**	Price
ITSN423	1/2	1/8	3/64	**FF7170470**	Price
ITSN432	1/2	3/16	1/32	**FF7170480**	Price
ITSN433	1/2	3/16	3/64	**FF7170490**	Price
ITSN434	1/2	3/16	1/16	**FF7170500**	Price
ITSN438	1/2	3/16	1/8	**FF7170520**	Price
ITSN533	5/8	3/16	3/64	**FF7170530**	Price
ITSN534	5/8	3/16	1/16	**FF7170540**	Price
ITSN535	5/8	3/16	5/64	**FF7170550**	Price
ITSN538	5/8	3/16	1/8	**FF7170560**	Price
ITSN539	5/8	3/16	9/64	**FF7170570**	Price
ITSN543	5/8	1/4	3/64	**FF7170580**	Price
ITSN633	3/4	3/16	3/64	**FF7170590**	Price
ITSN636	3/4	3/16	3/32	**FF7170600**	Price
ITSN637	3/4	3/16	7/64	**FF7170610**	Price



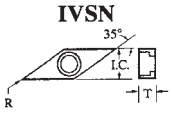
MTN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
MTN322	3/8	1/8	1/32	**FF7171010**	Price
MTN323	3/8	1/8	3/64	**FF7171020**	Price
MTN324	3/8	1/8	1/16	**FF7171030**	Price
MTN332	3/8	3/16	1/32	**FF7171040**	Price
MTN334	3/8	3/16	1/16	**FF7171050**	Price
MTN432	1/2	3/16	1/32	**FF7171060**	Price
MTN434	1/2	3/16	1/16	**FF7171070**	Price
MTN438	1/2	3/16	1/8	**FF7171080**	Price
MTN534	5/8	3/16	1/16	**FF7171090**	Price
MTN637	3/4	3/16	7/64	**FF7171100**	Price



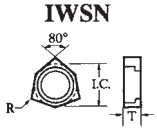
IVSN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
IVSN322	3/8	1/8	1/32	**FF7170620**	Price
IVSN324	3/8	1/8	1/16	**FF7170630**	Price
IVSN432	1/2	3/16	1/32	**FF7170640**	Price
IVSN433	1/2	3/16	3/64	**FF7170650**	Price



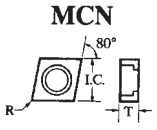
IWSN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
IWSN322	3/8	1/8	1/32	**FF7170670**	Price
IWSN432	1/2	3/16	1/32	**FF7170680**	Price
IWSN433	1/2	3/16	3/64	**FF7170690**	Price
IWSN533	5/8	3/16	3/64	**FF7170700**	Price



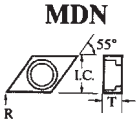
MCN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
MCN432	1/2	3/16	1/32	**FF7170710**	Price
MCN434	1/2	3/16	1/16	**FF7170720**	Price
MCN442	1/2	1/4	1/32	**FF7170730**	Price
MCN534	5/8	3/16	1/16	**FF7170740**	Price
MCN543	5/8	1/4	3/64	**FF7170750**	Price
MCN634	3/4	3/16	1/16	**FF7170760**	Price
MCN644	3/4	5/8	1/16	**FF7170770**	Price



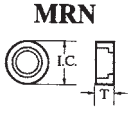
MDN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
MDN322	3/8	1/8	1/32	**FF7170780**	Price
MDN432	1/2	3/16	1/32	**FF7170800**	Price
MDN434	1/2	3/16	1/16	**FF7170810**	Price
MDN442	1/2	1/4	1/32	**FF7170820**	Price
MDN444	1/2	1/4	1/16	**FF7170830**	Price
MDN534	5/8	3/16	1/16	**FF7170840**	Price



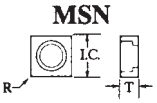
MRN Shim Seats

Model No.	I.C. (in.)	T (in.)	Order No.	Price
MRN32	3/8	1/8	**FF7170850**	Price
MRN33	3/8	3/16	**FF7170860**	Price
MRN43	1/2	3/16	**FF7170870**	Price
MRN44	1/2	1/4	**FF7170880**	Price
MRN53	5/8	3/16	**FF7170890**	Price
MRN63	3/4	3/16	**FF7170900**	Price
MRN84	1	1/4	**FF7170910**	Price



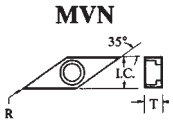
MSN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
MSN323	3/8	1/8	3/64	**FF7170920**	Price
MSN433	1/2	3/16	3/64	**FF7170930**	Price
MSN442	1/2	1/4	1/32	**FF7170940**	Price
MSN443	1/2	1/4	3/64	**FF7170950**	Price
MSN533	5/8	3/16	3/64	**FF7170960**	Price
MSN543	5/8	1/4	3/64	**FF7170970**	Price
MSN634	3/4	3/16	1/16	**FF7170980**	Price
MSN644	3/4	1/4	1/16	**FF7170990**	Price
MSN846	1	1/4	3/32	**FF7171000**	Price



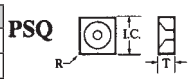
MVN Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
MVN322	3/8	1/8	1/32	**FF7171110**	Price
MVN433	1/2	3/16	3/64	**FF7171120**	Price



PSQ Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
PSQ3	1/2	1/8	1/64	**FF7171130**	Price
PSQ4	3/4	1/8	3/64	**FF7171140**	Price



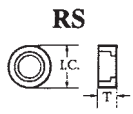
PTP Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
PTP3	3/8	1/8	1/64	**FF7171160**	Price
PTP4	1/2	1/8	3/64	**FF7171170**	Price
PTP4S	1/2	1/8	1/32	**FF7171180**	Price



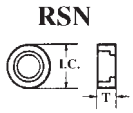
RS Shim Seats

Model No.	I.C. (in.)	T (in.)	Order No.	Price
RS43P	1/2	3/16	**FF7171190**	Price
RS53P	5/8	3/16	**FF7171200**	Price
RS63P	3/4	3/16	**FF7171210**	Price
RS83P	1	3/16	**FF7171220**	Price



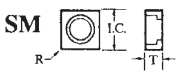
RSN Shim Seats

Model No.	I.C. (in.)	T (in.)	Order No.	Price
RSN32	3/8	1/8	**FF7171240**	Price
RSN33	3/8	3/16	**FF7171250**	Price
RSN43	1/2	3/16	**FF7171260**	Price
RSN53	5/8	3/16	**FF7171270**	Price
RSN63	3/4	3/16	**FF7171280**	Price
RSN84	1	1/4	**FF7171290**	Price



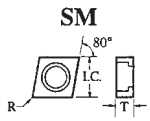
SM Square Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
SM297	1/2	3/16	1/32	**FF7171310**	Price
SM298	5/8	3/16	3/64	**FF7171320**	Price
SM299	3/4	3/16	3/64	**FF7171330**	Price
SM300	3/4	1/4	3/64	**FF7171340**	Price



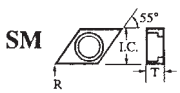
SM 80° Diamond Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
SM303	1/2	3/16	1/32	**FF7171350**	Price
SM304	3/4	3/16	3/64	**FF7171360**	Price
SM390	5/8	3/16	3/64	**FF7171370**	Price



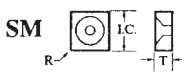
SM 55° Diamond Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
SM306	1/2	3/16	1/32	**FF7171380**	Price
SM307	5/8	3/16	3/64	**FF7171390**	Price



SM Square with Countersink

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
SM27	3/4	1/8	3/64	**FF7171410**	Price
SM43	1/2	1/8	1/16	**FF7171420**	Price
SM47	1/2	3/16	1/16	**FF7171430**	Price
SM216	3/4	3/16	3/64	**FF7171460**	Price



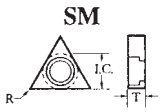
SM Square with Countersink

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
SM36	3/4	1/8	3/64	**FF7171470**	Price
SM40	1/2	1/8	1/32	**FF7171480**	Price



SM Triangle Shim Seats with Countersink

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
SM290	3/8	1/8	1/32	**FF7171490**	Price
SM292	1/2	3/16	3/64	**FF7171500**	Price
SM294	3/4	3/16	3/32	**FF7171510**	Price



SM Triangle Shim Seats with Countersink

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
SM26	1/2	1/8	3/64	**FF7171520**	Price
SM42	3/8	1/8	1/32	**FF7171530**	Price
SM48	3/8	3/16	1/32	**FF7171540**	Price
SM72	5/8	3/16	3/64	**FF7171550**	Price



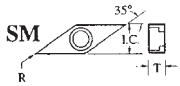
SM Triangle Shim Seats with Countersink

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
SM37	1/2	1/8	3/64	**FF7171570**	Price
SM41	3/8	1/8	1/64	**FF7171580**	Price



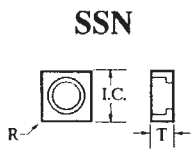
SM 35° Diamond Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
SM310	3/8	1/8	1/32	**FF7171590**	Price
SM386	1/2	1/8	1/32	**FF7171600**	Price



SSN Square Shim Seats

Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
SSN43	1/2	1/8	3/64	**FF7171610**	Price
SSN432	1/2	3/16	1/32	**FF7171620**	Price
SSN433	1/2	3/16	3/64	**FF7171630**	Price
SSN532	5/8	3/16	1/32	**FF7171640**	Price
SSN533	5/8	3/16	3/64	**FF7171650**	Price
SSN632	3/4	3/16	1/32	**FF7171670**	Price
SSN633	3/4	3/16	3/64	**FF7171680**	Price
SSN634	3/4	3/16	1/16	**FF7171690**	Price



STN Square Shim Seats

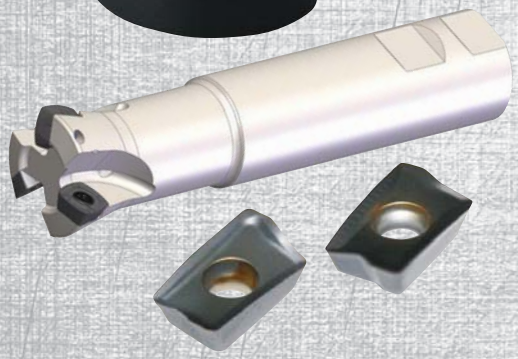
Model No.	I.C. (in.)	T (in.)	R (in.)	Order No.	Price
STN32	3/8	1/8	3/64	**FF7171700**	Price
STN43	1/2	1/8	1/16	**FF7171710**	Price
STN54	5/8	1/8	1/16	**FF7171720**	Price
STN54C	5/8	3/16	1/16	**FF7171730**	Price



RAPIDKUT®

Rapidkut is on the cutting edge of the industry.
Not only providing top quality products, BUT affordable products.
So if Dependability and top-end cutting tools are what you are looking for…
Buy Rapidkut for your industrial needs!





- **Boring Bars**
- **Cut Off Blades**
- **Cut Off Inserts**
- **End Mills**
- **Face Mill Cutters**
- **Grooving Inserts**
- **Milling Inserts**
- **Threading Inserts**
- **Tool Blocks**
- **Toolholders**
- **Turning Inserts**







ISCAR TOOL ADVISOR

Your Tool Advisor Genius



start

Online Data to Maximize Productivity

Features:

- Quick Search
- 3 Best Tool Options
- Up to 25 Tool Alternatives
- Sorting Options
- Considers Your Machine's Parameters
- Provides Cutting Conditions, Power Requirements and Metal Removal Rates

EC E-Catalog | Photo | Video | DXF | 3D STP

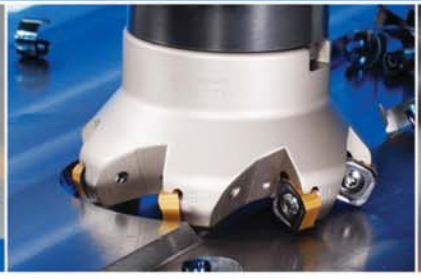




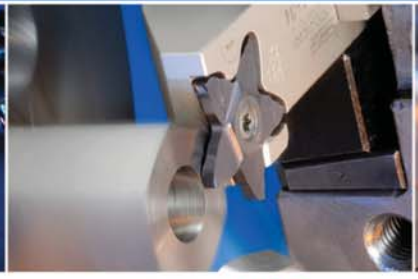
Let ITA Help You to Select the Most Productive Tool



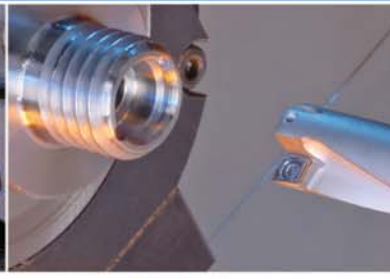
HELITURN LD



HELIDO 865 LINE



PENTACUT PARTING GROOVING LINE



DRDRILLS

Member IMC Group

ISCAR TOOL ADVISOR

ITA recommends the optimal tool based on application parameters and your machine power.
3 tool options, 25 alternatives, cutting data, power consumption, cutting time, metal removal rates, engineering support and more

ISCAR GRADE CHART

MACHINED MATERIALS**	MILLING	SC* ENDMILLS	DRILLING	PARTING	GROOVE TURNING	FACE GROOVING	ISO TURNING	THREADING
P Steel Material Groups 1-13	Hard IC808 IC5500 IC5400 **IC830** IC845 Tough	Hard IC902 IC608 **IC900/908** IC300 Tough	Hard IC8008 **IC808/908** IC328 Tough	Hard IC807 IC808 IC5400 **IC830** Tough	Hard IC20N IC807 **IC808** IC8250 IC5400 IC830 Tough	Hard **IC808** IC8250 IC830 Tough	Hard IC20N IC8150 **IC8250** IC808 IC8350 IC830 Tough	Hard IC1007 **IC908** Tough
M Stainless Steel Material Group 14	Hard IC808 **IC830** **IC840** IC330 IC882 Tough	Hard IC902 IC608 **IC900/908** IC300 IC08 Tough	Hard IC907 **IC808/908** IC328 Tough	Hard IC807 IC808 **IC5400** IC830 Tough	Hard IC20N IC807 **IC808** IC8250 IC830 Tough	Hard **IC808** IC8250 IC830 Tough	Hard IC807 IC6015 IC830 **IC6025** Tough	Hard IC1007 **IC908** Tough
K Cast Iron Material Groups 15-20	Hard IC5100 **IC810** Tough	Hard IC902 IC903 IC608 **IC900/908** IC808 Tough	Hard IC8008 IC907 **IC808/908** IC328 Tough	Hard **IC807** IC20 IC808 Tough	Hard IB90 **IC5010** IC830 IC808 Tough	Hard **IC5010** IC428 Tough	Hard IS6 IC23 IB90 IC5005 **IC5010** IS8 IC8150 Tough	Hard **IC1007** IC908 Tough
N Nonferrous Materials Material Groups 21-28	Hard ID5 ID8 IC08 **IC28** Tough	Hard **IC08** Tough	Hard ID5 IC907 IC908 **IC08** Tough	Hard IC807 **IC20** IC808 Tough	Hard ID5 **IC20** ICD7 IC808 Tough	Hard **IC20** IC808 Tough	Hard ID5 **IC20** Tough	Hard **IC908** Tough
S Super Alloys Material Groups 21-28	Hard IC808 IC5820 **IC882/840** Tough	Hard IC902 IC903 IC608 **IC900/908** IC300 IC08 Tough	Hard IC907 **IC808/908** IC328 Tough	Hard **IC807** IC808 Tough	Hard IC804 IC806 **IC807** IC808 IC830 Tough	Hard IC20 **IC808** Tough	Hard IB05S IB10S IC804 **IC806** IC07 Tough	Hard **IC908** Tough
H Hardened Materials Material Groups 38-41	Hard IB55 IC30N **IC808** Tough	Hard IC702 **IC902** IC903 IC608 IC900/908 Tough	Hard IC907 **IC808/908** IC328 Tough	Hard **IC807** IC808 Tough	Hard **IB50** IB55 IC808 Tough	Hard IC20 **IC808** Tough	Hard IB10HC IB10H **IB20H** IB25HA IB25HC IN22 IN420 Tough	Hard Tough

* Solid Carbide
** ISCAR material groups in accordance with VDI 3323 standard



Application Range And Coating Data For The Most Popular Grades

Cutting material grades	Range***	Coating	Application
			MILLING
IC830	P20-P40	PVD - TiAlN	
IC330	M30-M40	PVD - TiN+TiCN	
IC810	K15-K30	PVD - TiAlN	
IC28	N15-N30	Uncoated	
IC840	M20-M40	PVD - TiAlN	
IC882	S20-S30	PVD - ALTiN	
IC808	H10-H20	PVD - TiAlN	
			SOLID CARBIDE ENDMILLS
IC900/908	P15-P40	PVD - TiAlN	
	K05-K25	PVD - TiAlN	
	S15-S25	PVD - TiAlN	
IC08	N05-N20	Uncoated	
IC902	H01-H05	PVD - TiAlN	
			DRILLING
IC808/908	P15-P30	PVD - TiAlN	
	M20-M30	PVD - TiAlN	
	K20-K40	PVD - TiAlN	
	S15-S30	PVD - TiAlN	
	H10-H20	PVD - TiAlN	
IC08	N10-N25	Uncoated	
			PARTING
IC830	P20-P50	PVD - TiAlN	
IC5400	M20-M30	MT-CVD - TiCN+Al_2O_3	
IC807	K10-K30	PVD - TiAlN	
	S05-S20	PVD - TiAlN	
	H05-H15	PVD - TiAlN	
IC20	N05-N25	Uncoated	
			GROOVE TURNING
IC808	P15-P30	PVD - TiAlN	
	M20-M30	PVD - TiAlN	
IC5010	K10-K20	CVD - TiCn+Al_2O_3	
IC807	S05-S20	PVD - TiAlN	
IB50	H05-H15	Uncoated	
IC20	N10-N25	Uncoated	
			FACE GROOVING
IC808	P15-P30	PVD - TiAlN	
	M20-M30	PVD - TiAlN	
	S15-S25	PVD - TiAlN	
	H10-H20	PVD - TiAlN	
IC5010	K10-K20	CVD - TiCn+Al_2O_3	
IC20	N05-N25	Uncoated	
			ISO TURNING
IC8250	P10-P30	MT-CVD - TiCN+Al_2O_3	
IC6025	M20-M35	MT-CVD - TiCN+Al_2O_3	
IC5010	K05-K15	CVD - TiCN+Al_2O_3	
IC20	N05-N25	Uncoated	
IC806	S15-S25	PVD - TiAlN	
IB20H	H10-H20	Uncoated	
			THREADING
IC908	P15-P30	PVD - TiAlN	
	M20-P30	PVD - TiAlN	
	N15-P25	PVD - TiAlN	
	S15-S25	PVD - TiAlN	
IC1007	K20-P40	PVD - TiAlN	

*** In accordance with ISO 513 standard

Type Of Wear And Remedy

Flank wear	Crater wear	Notch wear	Chipping	Fracture	Comb cracks	Built-up edge	Plastic deformation
Possible causes: • Cutting speed too high • Heat development too high • Carbide grade too low-wear	**Possible causes:** • Cutting speed too high • Heat development too high • Feed too low	**Possible causes:** • Cutting speed too high • Carbide grade too low-wear	**Possible causes:** • Carbide grade too wear-resistant • Cutting edge too positive • Formation of edge	**Possible causes:** • Cutting edge too positive • Carbide grade too rigid • Vibrations	**Possible causes:** • Heat alternating voltage • Strongly interrupted cut • Thermal shock through coolant	**Possible causes:** • Low cutting speed • Feed too low • Cutting edge too negative	**Possible causes:** • Feed too high • Cutting speed too high • Carbide grade too tough
Possible remedy: • Reduce cutting speed • Harder carbide grade • Smaller lead angle	**Possible remedy:** • Reduce cutting speed • Harder carbide grade • Increase feed	**Possible remedy:** • Reduce cutting speed • Harder carbide grade • Vary cutting depth	**Possible remedy:** • Tougher carbide grade • Higher cutting speed • Choice of more stable cutting edge	**Possible remedy:** • Reduce cutting depth • Lower feed • More stable cutting wedge	**Possible remedy:** • Choice of tougher carbide grade • Improved coolant supply • Dry machining	**Possible remedy:** • High cutting speed • Increase feed • Smooth, positive cutting edge	**Possible remedy:** • Reduce cutting speed • Reduce feed • Choice of harder carbide grade

3354259 G 03/2018

Member IMC Group
www.iscar.com

MACHINING INTELLIGENTLY INDUSTRY 4.0

PENTACUT

Member IMC Group

Parting and Grooving Inserts



W±.004 (in.)	Radius R (in.)	Grade	Chip Breaker	Iscar No. Designation	Order No.	Price
.020	.000	IC908	J	PENTA 24N050J000	**EH6003104**	Price
.031	.000	IC908	J	PENTA 24N080J000	**EH6003105**	Price
.031	.002	IC908	NF	PENTA 24N080NF010LS	**EH6094304**	Price
.031	.004	IC908	-	PENTA 24N080010RS	**EH6094983**	Price
.039	.001	IC908	PF	PENTA 24N100PF010	**EH6093285**	Price
.039	.002	IC908	J	PENTA 24N100J050	**EH6004811**	Price
.039	.002	IC908	J	PENTA 24N100J004	**EH6003106**	Price
.039	.002	IC908	NF	PENTA 24N100NF010RS	**EH6080478**	Price
.039	.002	IC908	NF	PENTA 24N100NF010LS	**EH6080479**	Price
.041	.000	IC908	J	PENTA 24N104J000	**EH6003220**	Price
.047	.000	IC908	J	PENTA 24N120J000	**EH6003107**	Price
.047	.004	IC908	-	PENTA 24N119010RS	**EH6095473**	Price
.047	.004	IC908	-	PENTA 24N119010LS	**EH6099524**	Price
.047	.023	IC908	J	PENTA 24N120J060	**EH6004810**	Price
.049	.004	IC908	J	PENTA 24N125J010	**EH6004794**	Price
.055	.000	IC908	J	PENTA 24N140J000	**EH6003109**	Price
.055	.027	IC908	J	PENTA 24N140J070	**EH6004812**	Price
.058	.000	IC908	J	PENTA 24N147J000	**EH6003111**	Price
.059	.002	IC908	J	PENTA 34R150J06D	**EH6004770**	Price
.059	.002	IC908	J	PENTA 34R150J15D	**EH6004772**	Price
.059	.002	IC908	J	PENTA 34L150J06D	**EH6004771**	Price
.059	.002	IC908	J	PENTA 34L150J15D	**EH6004773**	Price
.059	.002	IC908	PB	PENTA 34R150PB6D	**EH6094458**	Price
.059	.002	IC908	PB	PENTA 34L150PB06D	**EH6095359**	Price
.059	.003	IC908	C	PENTA 34R150C08D	**EH6003643**	Price
.059	.003	IC908	C	PENTA 34L150C08D	**EH6003648**	Price
.059	.004	IC908	C	PENTA 24N150C010	**EH6004785**	Price
.059	.004	IC908	J	PENTA 24N150J010	**EH6003226**	Price
.059	.004	IC908	Z	PENTA 24N150Z010	**EH6003416**	Price
.059	.006	IC908	C	PENTA 34N150C015	**EH6003647**	Price
.059	.006	IC908	J	PENTA 34N150J015	**EH6004699**	Price
.059	.006	IC908	PB	PENTA 34N150PB015	**EH6004425**	Price
.059	.008	IC908	PF	PENTA 24N150PF020	**EH6093295**	Price
.062	.006	IC908	C	PENTA 24N157C015	**EH6004922**	Price
.062	.006	IC908	J	PENTA 24N157J015	**EH6003113**	Price
.062	.008	IC908	-	PENTA 24N157020RS	**EH6094993**	Price
.062	.008	IC908	-	PENTA 24N157020LS	**EH6099534**	Price
.062	.031	IC908	-	PENTA 24N157079RS	**EH6099484**	Price
.062	.031	IC908	J	PENTA 24N157J079	**EH6003114**	Price
.062	.031	IC908	NF	PENTA 24N157NF079LS	**EH6091555**	Price
.067	.004	IC908	J	PENTA 24N170J010	**EH6003115**	Price
.070	.007	IC908	C	PENTA 24N178C018	**EH6004923**	Price
.070	.007	IC908	J	PENTA 24N178J018	**EH6003116**	Price
.073	.006	IC908	J	PENTA 24N185J015	**EH6004795**	Price
.077	.006	IC908	J	PENTA 24N196J015	**EH6003118**	Price
.079	.002	IC908	C	PENTA 34R200C15D	**EH6003589**	Price
.079	.002	IC908	C	PENTA 34L200C15D	**EH6003590**	Price
.079	.002	IC908	J	PENTA 34R200J15D	**EH6004776**	Price
.079	.002	IC908	J	PENTA 34L200J15D	**EH6004777**	Price
.079	.004	IC908	C	PENTA 34R200C06D	**EH6003587**	Price
.079	.004	IC908	C	PENTA 34L200C06D	**EH6003588**	Price
.079	.004	IC908	J	PENTA 34R200J06D	**EH6004774**	Price
.079	.004	IC908	J	PENTA 34L200J06D	**EH6004775**	Price
.079	.004	IC908	PB	PENTA 34R200PB6D	**EH6003655**	Price
.079	.004	IC908	PB	PENTA 34L200PB06D	**EH6004424**	Price
.079	.008	IC908	-	PENTA 24N200020RS	**EH6097584**	Price
.079	.008	IC908	-	PENTA 24N200020LS	**EH6099544**	Price
.079	.008	IC908	C	PENTA 34N200C020	**EH6003537**	Price
.079	.008	IC908	C	PENTA 24N200C020	**EH6004780**	Price
.079	.008	IC908	J	PENTA 24N200J020	**EH6003218**	Price
.079	.008	IC908	J	PENTA 34N200J020	**EH6004619**	Price
.079	.008	IC908	PB	PENTA 34N200PB020	**EH6004426**	Price
.079	.008	IC908	PF	PENTA 24N200PF020	**EH6093315**	Price
.079	.008	IC908	Z	PENTA 24N200Z020	**EH6003380**	Price
.079	.039	IC908	C	PENTA 34N200C100	**EH6003601**	Price
.079	.039	IC908	C	PENTA 24N200C100	**EH6004924**	Price
.079	.039	IC908	J	PENTA 24N200J100	**EH6003120**	Price
.079	.039	IC908	J	PENTA 34N200J100	**EH6004761**	Price
.087	.006	IC908	C	PENTA 34N222C015	**EH6003602**	Price
.087	.006	IC908	J	PENTA 24N222J015	**EH6003121**	Price
.091	.008	IC908	C	PENTA 34N230C020	**EH6003603**	Price
.091	.008	IC908	C	PENTA 24N230C020	**EH6004925**	Price
.091	.008	IC908	J	PENTA 24N230J020	**EH6003122**	Price
.094	.006	IC908	-	PENTA 34F23901522RS	**EH6004555**	Price
.094	.006	IC908	-	PENTA 34F23901522LS	**EH6004558**	Price
.094	.006	IC908	C	PENTA 24N239C015	**EH6004926**	Price
.094	.006	IC908	C	PENTA 34N239C015	**EH6003604**	Price
.094	.006	IC908	J	PENTA 34N239J015	**EH6004762**	Price
.094	.006	IC908	J	PENTA 24N239J015	**EH6003123**	Price
.094	.006	IC908	PF	PENTA 24N239PF015	**EH6003500**	Price
.094	.008	IC908	-	PENTA 24N239020RS	**EH6095003**	Price
.094	.008	IC908	-	PENTA 24N239020LS	**EH6099554**	Price
.094	.047	IC908	-	PENTA 24N239119RS	**EH6099444**	Price
.094	.047	IC908	C	PENTA 34N239C120	**EH6003605**	Price
.094	.047	IC908	J	PENTA 34N239J120	**EH6004763**	Price
.094	.047	IC908	J	PENTA 24N239J120	**EH6003124**	Price
.094	.047	IC908	NF	PENTA 24N239NF119LS	**EH6099494**	Price
.097	.008	IC908	-	PENTA 34F24702022RS	**EH6004556**	Price
.097	.008	IC908	-	PENTA 34F24702022LS	**EH6004559**	Price
.097	.008	IC908	C	PENTA 34N247C020	**EH6003606**	Price
.097	.008	IC908	C	PENTA 24N247C020	**EH6004786**	Price
.097	.008	IC908	J	PENTA 24N247J020	**EH6003125**	Price
.098	.008	IC908	C	PENTA 34N250C020	**EH6003535**	Price
.098	.008	IC908	J	PENTA 34N250J020	**EH6004764**	Price
.098	.008	IC908	PF	PENTA 24N250PF020	**EH6093325**	Price
.106	.004	IC908	C	PENTA 34N270C010	**EH6003586**	Price
.106	.004	IC908	J	PENTA 24N270J010	**EH6003126**	Price
.106	.004	IC908	J	PENTA 34N270J010	**EH6004765**	Price
.113	.008	IC908	C	PENTA 34N287C020	**EH6003607**	Price
.113	.008	IC908	J	PENTA 24N287J020	**EH6003127**	Price
.118	.000	IC908	C	PENTA 34N300C000	**EH6003608**	Price
.118	.000	IC908	J	PENTA 34N300J000	**EH6004766**	Price
.118	.000	IC908	J	PENTA 24N300J000	**EH6003128**	Price
.118	.002	IC908	-	PENTA 24N3MT010RS	**EH6095483**	Price
.118	.002	IC908	C	PENTA 34R300C15D	**EH6003593**	Price
.118	.002	IC908	C	PENTA 34L300C15D	**EH6003594**	Price
.118	.004	IC908	-	PENTA 24N3MT05228RS	**EH6094184**	Price
.118	.008	IC908	C	PENTA 34R300C06D	**EH6003591**	Price
.118	.008	IC908	C	PENTA 34N300C020	**EH6003524**	Price
.118	.008	IC908	C	PENTA 24N300C020	**EH6004781**	Price
.118	.008	IC908	C	PENTA 34L300C06D	**EH6003592**	Price
.118	.008	IC908	J	PENTA 34N300J020	**EH6004700**	Price
.118	.008	IC908	J	PENTA 24N300J020	**EH6003129**	Price
.118	.008	IC908	NF	PENTA 24N300NF020RS	**EH6080480**	Price
.118	.008	IC908	NF	PENTA 24N300NF020LS	**EH6080481**	Price
.118	.008	IC908	PB	PENTA 34R300PB6D	**EH6004429**	Price
.118	.008	IC908	PB	PENTA 34N300PB020	**EH6004428**	Price
.118	.008	IC908	PF	PENTA 24N300PF020	**EH6093335**	Price
.118	.008	IC908	Z	PENTA 24N300Z020	**EH6003417**	Price
.118	.009	IC908	-	PENTA 34F30004022RS	**EH6004557**	Price
.118	.009	IC908	-	PENTA 34F30004022LS	**EH6004560**	Price
.118	.009	IC908	PB	PENTA 34L300PB06D	**EH6004430**	Price
.118	.016	IC908	C	PENTA 24N300C040	**EH6004927**	Price
.118	.016	IC908	C	PENTA 34N300C040	**EH6003536**	Price
.118	.016	IC908	J	PENTA 24N300J040	**EH6003130**	Price
.118	.016	IC908	J	PENTA 34N300J040	**EH6004767**	Price
.118	.059	IC908	C	PENTA 34N300C150	**EH6003609**	Price
.118	.059	IC908	J	PENTA 34N300J150	**EH6004768**	Price
.118	.059	IC908	J	PENTA 24N300J150	**EH6003091**	Price
.124	.006	IC908	C	PENTA 34N315C015	**EH6003610**	Price
.124	.006	IC908	J	PENTA 24N315J015	**EH6003131**	Price
.125	.008	IC908	-	PENTA 24N318020RS	**EH6095013**	Price
.125	.008	IC908	-	PENTA 24N318020LS	**EH6099564**	Price
.125	.008	IC908	C	PENTA 34N318C020	**EH6003611**	Price
.125	.008	IC908	C	PENTA 24N318C020	**EH6004787**	Price
.125	.008	IC908	J	PENTA 24N318J020	**EH6003092**	Price
.125	.008	IC908	J	PENTA 34N318J020	**EH6004769**	Price
.125	.062	IC908	-	PENTA 24N318159RS	**EH6099514**	Price
.125	.062	IC908	J	PENTA 24N318J159	**EH6004813**	Price
.125	.062	IC908	NF	PENTA 24N318NF159LS	**EH6099504**	Price
.130	.004	IC908	C	PENTA 34N330C010	**EH6003612**	Price
.130	.004	IC908	J	PENTA 24N330J010	**EH6004796**	Price
.137	.008	IC908	C	PENTA 34N348C020	**EH6003613**	Price
.137	.008	IC908	J	PENTA 24N348J020	**EH6004797**	Price
.138	.010	IC908	C	PENTA 34N350C025	**EH6003538**	Price
.140	.008	IC908	J	PENTA 24N356J020	**EH6004798**	Price
.147	.008	IC908	J	PENTA 24N374J020	**EH6004799**	Price
.157	.008	IC908	-	PENTA 24N400020RS	**EH6094624**	Price
.157	.008	IC908	C	PENTA 34N398C020	**EH6003614**	Price
.157	.008	IC908	J	PENTA 24N398J020	**EH6004800**	Price
.157	.008	IC908	NF	PENTA 24N400NF020LS	**EH6080482**	Price
.157	.009	IC908	-	PENTA 34F40004022RS	**EH6004611**	Price
.157	.009	IC908	-	PENTA 34F40004022LS	**EH6004561**	Price
.157	.012	IC908	C	PENTA 34N400C030	**EH6003539**	Price
.157	.016	IC908	J	PENTA 24N400J040	**EH6004801**	Price
.157	.079	IC908	J	PENTA 24N400J200	**EH6004802**	Price
.166	.004	IC908	J	PENTA 24N423J010	**EH6004803**	Price
.189	.008	IC908	-	PENTA 24N480020RS	**EH6095023**	Price

PENTACUT Face Grooving Inserts



W±.004 (in.)	Radius R (in.)	TMax (in.)	Iscar No. Designation	Order No.	Price
.094	.006	.1970	34F239-0.15-22L	**EH6003627**	Price
.094	.006	.1970	34F239-0.15-22R	**EH6003656**	Price
.097	.008	.1970	34F247-0.20-22L	**EH6003657**	Price
.097	.008	.1970	34F247-0.20-22R	**EH6003658**	Price

W±.004 (in.)	Radius R (in.)	TMax (in.)	Iscar No. Designation	Order No.	Price
.118	.016	.1970	34F300-0.40-22L	**EH6003659**	Price
.118	.016	.1970	34F300-0.40-22R	**EH6003660**	Price
.157	.016	.1970	34F400-0.40-22L	**EH6003628**	Price
.157	.016	.1970	34F400-0.40-22R	**EH6003661**	Price

PENTACUT PCHB R/L... PENTACUT Double-Ended Parting and Grooving Blades

Right hand shown

Right/Left Hand - Left						
Insert Width W (in.)	**Dia. Min.-Max. (in.)**	**Max. Depth T (in.)**	**Use Insert(s)**	**Iscar No.**	**Order No.**	**Price**
.020 & .246	See Insert	See Insert	PENTA 24N/R/L	PCHBL2624R	**EH2301688**	Price
.020 & .246	See Insert	See Insert	PENTA 24N/R/L	PCHBL3224R	**EH2301675**	Price
.059 & .157	See Insert	See Insert	PENTA 34N/R/L/F	PCHBL3234R	**EH2302303**	Price

Right/Left Hand - Right						
Insert Width W (in.)	**Dia. Min.-Max. (in.)**	**Max. Depth T (in.)**	**Use Insert(s)**	**Iscar No.**	**Order No.**	**Price**
.020 & .246	See Insert	See Insert	PENTA 24N/R/L	PCHBR2624R	**EH2302306**	Price
.059 & .157	See Insert	See Insert	PENTA 34N/R/L/F	PCHBR2634R	**EH2302307**	Price
.020 & .246	See Insert	See Insert	PENTA 24N/R/L	PCHBR2624L	**EH2301686**	Price
.020 & .246	See Insert	See Insert	PENTA 24N/R/L	PCHBR3224L	**EH2301674**	Price
.059 & .157	See Insert	See Insert	PENTA 34N/R/L/F	PCHBR2634L	**EH2302300**	Price
.059 & .157	See Insert	See Insert	PENTA 34N/R/L/F	PCHBR3234L	**EH2302301**	Price



PENTACUT PCH R/L.... PENTACUT Grooving, Parting and Recessing Holders

Right hand shown



Right/Left Hand - Left									
Shank (in.)	**Length (in.)**	**Insert Width (in.)**	**DMax (in.)**	**Use Insert(s)**	**Iscar No.**	**Screw**	**Torx Key**	**Order No.**	**Price**
1/2 x 1/2	5.0000	.020-.331	See Insert	PENTA 24N/R/L	PCHL 12.724	SR 16-212-01397L	T2101/5	**EH2301626**	Price
1 x 1	5.3000	.020-.331	See Insert	PENTA 24N***-**LS	PCHLS 25.4-24	SR 16-212-01397LS	T2101/5	**EH2398783**	Price
1 x 1	5.5000	.020-.331	See Insert	PENTA 24N/R/L	PCHPL 25.4-24	SR 16-212-01393	T2101/5	**EH2302460**	Price
1 x 1	5.5000	.020-.331	See Insert	PENTA 34N/R/L/F	PCHPL 25.4-34	SR 16-212-01394	T2101/5	**EH2302330**	Price
5/8 x 5/8	5.3150	.118-.126	1.57	PENTA D40	PCHL 16-D40-3-IQ	SR M7-R-L	BLD T20/S7	**EH2302573**	Price
3/4 x 3/4	5.3150	.118-.126	1.58	PENTA D40	PCHL 19-D40-3-IQ	SR M7-R-L	BLD T20/S7	**EH2302580**	Price
1 x 1	-	.079-.094	1.26	PENTA D32	PCHL 25.4-D32-2-IQ	SR M6-R-L	BLD T15/S7	**EH2302681**	Price
1 x 1	5.3150	.118-.126	1.58	PENTA D40	PCHL 25.4D40-3-IQ	SR M7-R-L	BLD T20/S7	**EH2302582**	Price

Right/Left Hand - Right									
Shank (in.)	**Length (in.)**	**Insert Width (in.)**	**DMax (in.)**	**Use Insert(s)**	**Iscar No.**	**Screw**	**Torx Key**	**Order No.**	**Price**
3/8 x 3/8	5.0000	.020-.331	See Insert	PENTA 24N/R/L	PCHR 9.524	SR 16-212-01397	T2101/5	**EH2393364**	Price
1/2 x 1/2	5.0000	.020-.331	See Insert	PENTA 24N/R/L	PCHR 12.724	SR 16-212-01397	T2101/5	**EH2301625**	Price
1 x 1	5.5000	.020-.331	See Insert	PENTA 34N/R/L/F	PCHR 25.4-34	SR 16-212-01397	T2101/5	**EH2302157**	Price
1/2 x 1/2	4.7000	.020-.331	See Insert	PENTA 24N***-**RS	PCHRS 12.7-24	SR 16-212-01397RS	T2101/5	**EH2391954**	Price
1 x 1	5.3000	.020-.331	See Insert	PENTA 24N***-**RS	PCHRS 25.4-24	SR 16-212-01397RS	T2101/5	**EH2394663**	Price
1 x 1	5.5000	.020-.331	See Insert	PENTA 24N/R/L	PCHPR 25.4-24	SR 16-212-01393	T2101/5	**EH2302459**	Price
1 x 1	5.5000	.020-.331	See Insert	PENTA 34N/R/L/F	PCHPR 25.4-34	SR 16-212-01394	T2101/5	**EH2302331**	Price
1/2 x 1/2	-	.079-.094	1.26	PENTA D32	PCHR 12.7-D32-2-IQ	SR M6-R-L	BLD T15/S7	**EH2302680**	Price
5/8 x 5/8	-	.079-.094	1.26	PENTA D32	PCHR 16-D32-2-IQ	SR M6-R-L	BLD T15/S7	**EH2302674**	Price
5/8 x 5/8	5.3150	.118-.126	1.57	PENTA D40	PCHR 16-D40-3-IQ	SR M7-R-L	BLD T20/S7	**EH2302572**	Price
3/4 x 3/4	-	.079-.094	1.26	PENTA D32	PCHR 19-D32-2-IQ	SR M6-R-L	BLD T15/S7	**EH2302684**	Price
3/4 x 3/4	5.3150	.118-.126	1.58	PENTA D40	PCHR 19-D40-3-IQ	SR M7-R-L	BLD T20/S7	**EH2302579**	Price
1 x 1	-	.079-.094	1.26	PENTA D32	PCHR 25.4-D32-2-IQ	SR M6-R-L	BLD T15/S7	**EH2302682**	Price
1 x 1	5.3150	.118-.126	1.58	PENTA D40	PCHR 25.4-D40-3I-Q	SR M7-R-L	BLD T20/S7	**EH2302581**	Price

HELIFACE Integral Holders

Right hand shown



H&B (in.)	Length (in.)	Width (in.)	Head Length (in.)	DMin (in.)	DMax (in.)	Insert	Iscar No.	Screw	Hex Key	Right/ Left Hand	Order No.	Price
3/8 x 3/8	5	.118	.750	.472	.630	HGPL 3...Y	HGHL9.5123T6	SR 76-1400	Torx T20/3	Left	**EH2500597**	Price
3/8 x 3/8	5	.118	.750	.472	.630	HGL/N/R 3.., GRIP 3..	HGHR9.5123T6	SR 76-1400	Torx T20/3	Right	**EH2500596**	Price
3/8 x 3/8	5	.118	.750	.630	.984	HGL/N/R 3.., GRIP 3..	HGHR9.5163T6	SR 76-1400	Torx T20/3	Right	**EH2500598**	Price
1/2 x 1/2	5	.118	.750	.472	.630	HGPL 3...Y	HGHL12.7123T6	SR 76-1400	Torx T20/3	Left	**EH2500601**	Price
1/2 x 1/2	5	.118	.750	.472	.630	HGPL 3...Y	HGHL12.7163T6	SR 76-1400	Torx T20/3	Left	**EH2500603**	Price
5/8 x 5/8	5	.118	.750	.472	.630	HGL/N/R 3.., GRIP 3..	HGHR15.9123T6	SR 76-1400	Torx T20/3	Right	**EH2500604**	Price
5/8 x 5/8	5	.118	.750	.472	.630	HGPL 3...Y	HGHL15.9123T6	SR 76-1400	Torx T20/3	Left	**EH2500605**	Price
5/8 x 5/8	5	.118	.750	.630	.984	HGL/N/R 3.., GRIP 3..	HGHR15.9163T6	SR 76-1400	Torx T20/3	Right	**EH2500606**	Price
3/4 x 3/4	5	.118	.750	.472	.630	HGL/N/R 3.., GRIP 3..	HGHR19123T6	SR 76-1400	Torx T20/3	Right	**EH2500696**	Price
3/4 x 3/4	5	.118	.750	.472	.630	HGPL 3...Y	HGHL19123T6	SR 76-1400	Torx T20/3	Left	**EH2500700**	Price
3/4 x 3/4	5	.118	.750	.630	.984	HGL/N/R 3.., GRIP 3..	HGHR19163T6	SR 76-1400	Torx T20/3	Right	**EH2500697**	Price
3/4 x 3/4	5	.118	.750	.630	.984	HGPL 3...Y	HGHL19163T6	SR 76-1400	Torx T20/3	Left	**EH2500701**	Price
1 x 1	5	.118	.750	.472	.630	HGL/N/R 3.., GRIP 3..	HGHR25.4123T6	SR 76-1400	Torx T20/3	Right	**EH2500698**	Price
1 x 1	5	.118	.750	.472	.630	HGPL 3...Y	HGHL25.4123T6	SR 76-1400	Torx T20/3	Left	**EH2500702**	Price
1 x 1	5	.118	.750	.630	.984	HGL/N/R 3.., GRIP 3..	HGHR25.4163T6	SR 76-1400	Torx T20/3	Right	**EH2500699**	Price
1 x 1	5	.118	.750	.630	.984	HGPL 3...Y	HGHL25.4163T6	SR 76-1400	Torx T20/3	Left	**EH2500703**	Price
1 x 1	6	.118	1.420	.790	3.150	HFPR 3../4../5../6..	HFHR25.4M	SR M6 x 20	Hex HW 5.0	Right	**EH2500143**	Price
1 x 1	6	.118	1.570	1.890	2.360	HFPR 3...	HFHR25.4483T22	SR M6 x 20	Hex HW 5.0	Right	**EH2500095**	Price
1 x 1	6	.118	1.570	2.360	2.960	DGL/N/R 4.., GRIP 4.., HFPR 4..	HFHR25.4603T22	SR M6 x 20	Hex HW 5.0	Right	**EH2500097**	Price
1 x 1	6	.118	1.690	2.950	3.940	HFPR 3...	HFHR25.4753T25	SR M6 x 20	Hex HW 5.0	Right	**EH2500099**	Price
1 x 1	6	.157	1.540	1.340	1.570	DGL/N/R 4.., GRIP 4.., HFPR 4..	HFHR254344T20	SR M6 x 20	Hex HW 5.0	Right	**EH2500199**	Price
1 x 1	6	.157	1.730	1.890	2.360	DGL/N/R 4.., GRIP 4.., HFPR 4..	HFHR25.4484T25	SR M6 x 20	Hex HW 5.0	Right	**EH2500203**	Price
1 x 1	6	.157	1.730	2.950	3.940	DGL/N/R 4.., GRIP 4.., HFPR 4..	HFHR25.4754T25	SR M6 x 20	Hex HW 5.0	Right	**EH2500207**	Price
1 x 1	6	.157	1.730	2.360	2.950	DGL/N/R 4.., GRIP 4.., HFPR 4..	HFHR25.4604T25	SR M6 x 20	Hex HW 5.0	Right	**EH2500205**	Price
1 x 1	6	.197	2.000	2.760	3.740	DGL/N/R 5.., GRIP 5.., HFPR 5..	HFHR25.4705T32	SR M6 x 20	Hex HW 5.0	Right	**EH2500131**	Price
1 x 1	6	.197	2.000	3.740	5.120	DGL/N/R 5.., GRIP 5.., HFPR 5..	HFHR25.4955T32	SR M6 x 20	Hex HW 5.0	Right	**EH2500133**	Price
1 x 1	6	.197	1.730	1.890	2.360	DGL/N/R 5.., GRIP 5.., HFPR 5..	HFHR25.4555T25	SR M6 x 20	Hex HW 5.0	Right	**EH2500129**	Price
1 x 1	6	.236	1.730	1.970	2.760	DGL/N/R 6.., GRIP 6.., HFPR 6..	HFHR25.4506T25	SR M6 x 20	Hex HW 5.0	Right	**EH2500324**	Price
1 x 1	6	.236	2.000	2.760	3.940	DGL/N/R 6.., GRIP 6.., HFPR 6..	HFHR25.4706T32	SR M6 x 20	Hex HW 5.0	Right	**EH2500326**	Price

TANG-GRIP IQ 350 LINE TGT R/L... TANG-GRIP Integral Shank Parting and Grooving Toolholder

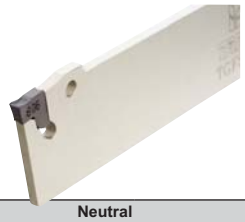
Integral Shank Tool for Parting and Grooving



Insert Width (in.)	D-Max (in.)	Shank Size (in.)	Use Insert(s)	Left			Right		
				Iscar No.	Order No.	Price	Iscar No.	Order No.	Price
.0410	.787	3/8	TAG N/R/L 1.4…	TGTL9.51.4IQ	**EH2302361**	Price	TGTR9.51.4IQ	**EH2302358**	Price
.0410	1.181	1/2	TAG N/R/L 1.4…	TGTL12.71.4IQ	**EH2302362**	Price	TGTR12.71.4IQ	**EH2302359**	Price
.0410	1.181	3/4	TAG N/R/L 1.4…	TGTL191.4IQ	**EH2302363**	Price	TGTR191.4IQ	**EH2302360**	Price
.0630	1.102	3/8	TAG N/R/L 2…	TGTL9.52IQ	**EH2301904**	Price	-	**-**	-
.0630	1.260	5/8	TAG N/R/L 2...	TGTL162IQ	**EH2301905**	Price	TGTR162IQ	**EH2301902**	Price
.0630	1.378	3/4	TAG N/R/L 2...	TGTL192IQ	**EH2301907**	Price	TGTR192IQ	**EH2301903**	Price
.0980	1.260	5/8	TAG N/R/L 3...	TGTL163IQ	**EH2301909**	Price	TGTR163IQ	**EH2301924**	Price
.1330	2.000	3/4	TAG N/R/L 4...	TGTL194IQ	**EH2301854**	Price	TGTR194IQ	**EH2301825**	Price
.1330	2.250	1	TAG N/R/L 4...	TGTL25.44IQ	**EH2301856**	Price	-	**-**	-
.1570	3.000	1	TAG N/R/L 5...	TGTL25.45IQ	**EH2302210**	Price	TGTR25.45IQ	**EH2302209**	Price
.0630	1.102	3/8	TAG N/R/L 2...	-	**-**	-	TGTR9.52IQ	**EH2301900**	Price
.0630	2.240	1	TAG N/R/L 2...	-	**-**	-	TGTR25.42IQ	**EH2302391**	Price
.2040	3.000	1	TAG N/R/L 6...	-	**-**	-	TGTR25.46IQ	**EH2302211**	Price

TANG-GRIP PARTING LINE TGTBU... Blocks for TGSU Parting and Grooving Blades

						Neutral	
Iscar No.	Center Hght. H (in.)	Width A (in.)	OAL C (in.)	Thickness B (in.)	T-Cut Blade Choices	Order No.	Price
TGTBU1935	.750	1.535	4.331	1.380	TGSU 35-...	**EH2302196**	Price
TGTBU25.435	1.000	1.772	4.331	1.380	TGSU 35-...	**EH2302197**	Price
TGTBU31.835	1.250	1.890	4.331	1.380	TGSU 35-...	**EH2302241**	Price
TGTBU38.135	1.500	2.283	4.331	1.380	TGSU 35-...	**EH2302242**	Price
TGTBU4035	1.575	2.362	4.331	1.380	TGSU 35-...	**EH2302240**	Price



TANG-GRIP PARTING LINE Blades for Parting and Grooving

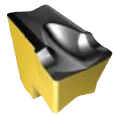
- TGSU..... Flat top blades with targentially oriented pocket for parting and grooving for Tang-Grip single-ended inserts
- TGFH..... Parting and grooving blades for other manufacturer's blocks, for Tang-Grip single-ended inserts

Blade Hght. B (in.)	Insert Width Min-Max (in.)	Blade Thickness A (in.)	OAL C (in.)	Use Insert(s)	Iscar No.	Neutral	
						Order No.	Price
.676	.079	.065	4.33	TAG N/R/L 2...	TGFS0172	**EH2301914**	Price
.685	.079	.065	4.33	TAG N/R/L 2...	TGFS5172	**EH2301915**	Price
.685	.118	.098	4.33	TAG N/R/L 3...	TGFS5173	**EH2301918**	Price
.750	.055	.098	3.39	TAG N/R/L 1.4...	TGFH191.4	**EH2302364**	Price
.750	.071 & .083	.065	3.39	TAG N/R/L 2...	TGFH192S	**EH2391927**	Price
.876	.118	.098	5.91	TAG N/R/L 3...	TGFS5223	**EH2301919**	Price
1.02	.055	.098	4.33	TAG N/R/L 1.4...	TGFH261.4	**EH2302276**	Price
1.02	.157	.134	4.33	TAG N/R/L 4...	TGFH264	**EH2301765**	Price
1.02	.185 & .217	.157	4.33	TAG N/R/L 5...	TGFH265	**EH2302239**	Price
1.125	.157	.134	5.91	TAG N/R/L 4...	TGFS5284	**EH2301922**	Price
1.26	.055	.098	5.91	TAG N/R/L 1.4...	TGFH321.4	**EH2302277**	Price
1.26	.110 & .138	.098	5.91	TAG N/R/L 3...	TGFH323	**EH2301743**	Price
1.26	.185 & .217	.157	5.91	TAG N/R/L 5...	TGFH325	**EH2302143**	Price
1.26	.224 & .256	.205	5.91	TAG N/R/L 6...	TGFH326	**EH2302138**	Price
1.38	.055	.098	7.09	TAG N/R/L 1.4...	TGSU351.4	**EH2302287**	Price
1.38	.079	.098	6.30	TAG N/R/L 2...	TGSU352	**EH2302190**	Price
1.38	.197	.157	7.09	TAG N/R/L 5...	TGSU355	**EH2302192**	Price
1.38	.236	.205	7.09	TAG N/R/L 6...	TGSU356	**EH2302193**	Price
1.38	.276	.236	7.09	TAG N/R/L 7...	TGSU357	**EH2302286**	Price
1.38	.315	.283	7.09	TAG N8..., TAGB 8...	TGSU35C8	**EH2302178**	Price
1.38	.374	.323	7.09	TAG N9...	TGSU35C9	**EH2302251**	Price
1.77	.118	.098	8.86	TAG N/R/L 3...	TGFH453	**EH2301890**	Price
1.77	.157	.134	8.86	TAG N/R/L 4...	TGFH454	**EH2301891**	Price
1.77	.197	.157	8.86	TAG N/R/L 5...	TGFH455	**EH2302177**	Price
1.77	.236	.205	8.86	TAG N/R/L 6...	TGFH456	**EH2302169**	Price
1.77	.276	.236	8.86	TAG N/R/L 7...	TGFH457	**EH2302170**	Price
2.20	.276	.236	10.2	TAG N/R/L 7...	TGSU56C7	**EH2302249**	Price
2.20	.315	.283	10.2	TAG N8..., TAGB 8...	TGSU56C8	**EH2302182**	Price
2.20	.374	.323	10.2	TAG N9...	TGSU56C9	**EH2302183**	Price
3.94	.343 & .374	.323	18.1	TAG N9...	TGFH1009	**EH2302148**	Price
3.94	.500	.394	18.1	TAG N12, TAGB 12	TGFH10012	**EH2302296**	Price
5.91	.500	.394	24.0	TAG N12, TAGB 12	TGFH15012	**EH2302297**	Price

TANG-GRIP PARTING LINE TANG-GRIP Parting and Grooving Inserts

- Grade IC808
- TiAlN PVD coated insert is good for steel, stainless steel, alloys and hard materials





W±.004 (in.)	R (in.)	Iscar No. Designation	Grade	ST	SS	CI	N	S	H	Order No.	Price
.055	.002	TAGN1.4J	IC808	x	x	-	-	x	x	**EH6004465**	Price
.055	.006	TAGR1.4J8D	IC808	x	x	-	-	x	x	**EH6004466**	Price
.079	.001	TAGL2JS15D	IC808	x	x	-	-	x	x	**EH6003638**	Price
.079	.001	TAGL2JS6D	IC808	x	x	-	-	x	x	**EH6003636**	Price
.079	.001	TAGN2JS	IC808	x	x	-	-	x	x	**EH6003695**	Price
.079	.002	TAGN2J	IC808	x	x	-	-	x	x	**EH6003584**	Price
.079	.006	TAGL2J15D	IC808	x	x	-	-	x	x	**EH6003634**	Price
.079	.008	TAGL2J6D	IC808	x	x	-	-	x	x	**EH6003632**	Price
.079	.008	TAGN2MF	IC5400	x	-	-	-	-	-	**EH6080677**	Price
.079	.008	TAGN2MF	IC808	x	x	-	-	x	x	**EH6004889**	Price
.079	.008	TAGN2MF	IC830	x	x	-	-	x	-	**EH6004890**	Price
.079	.008	TAGR2J6D	IC808	x	x	-	-	x	x	**EH6003631**	Price
.081	.008	TAGL2C6D	IC808	x	x	-	-	x	x	**EH6003640**	Price
.081	.008	TAGR2C6D	IC808	x	x	-	-	x	x	**EH6003639**	Price
.094	.006	TAGN2.4C	IC808	x	x	-	-	x	x	**EH6004486**	Price
.118	.001	TAGL3JS15D	IC808	x	x	-	-	x	x	**EH6004451**	Price
.118	.001	TAGL3JS6D	IC808	x	x	-	-	x	x	**EH6004448**	Price
.118	.008	TAGL3C15D	IC808	x	x	-	-	x	x	**EH6011401**	Price
.118	.008	TAGL3C6D	IC808	x	x	-	-	x	x	**EH6011403**	Price
.118	.008	TAGL3J15D	IC808	x	x	-	-	x	x	**EH6011405**	Price
.118	.008	TAGN3MF	IC5400	x	-	-	-	-	-	**EH6080678**	Price
.118	.008	TAGN3MF	IC808	x	x	-	-	x	x	**EH6004891**	Price
.118	.008	TAGN3MF	IC830	x	x	-	-	x	-	**EH6004892**	Price
.118	.008	TAGR3C15D	IC808	x	x	-	-	x	x	**EH6011433**	Price
.118	.008	TAGR3J15D	IC808	x	x	-	-	x	x	**EH6011434**	Price
.118	.008	TAGR3J6D	IC808	x	x	-	-	x	x	**EH6011400**	Price
.120	.001	TAGN3JS	IC808	x	x	-	-	x	x	**EH6004445**	Price
.120	.002	TAGN3J	IC5400	x	-	-	-	-	-	**EH6099347**	Price
.120	.002	TAGN3J	IC807	x	x	x	-	x	x	**EH6003626**	Price
.120	.002	TAGN3J	IC808	x	x	-	-	x	x	**EH6003578**	Price
.120	.008	TAGN3LF	IC5400	x	-	-	-	-	-	**EH6080434**	Price
.120	.008	TAGN3LF	IC808	x	x	-	-	x	x	**EH6004674**	Price
.120	.008	TAGN3LF	IC830	x	x	-	-	x	-	**EH6004673**	Price
.157	.002	TAGN4J	IC5400	x	-	-	-	-	-	**EH6080071**	Price

W±.004 (in.)	R (in.)	Iscar No. Designation	Grade	ST	SS	CI	N	S	H	Order No.	Price
.157	.002	TAGN4J	IC807	x	x	x	-	x	x	**EH6004432**	Price
.157	.002	TAGN4J	IC808	x	x	-	-	x	x	**EH6003580**	Price
.157	.002	TAGN4J	IC830	x	x	-	-	x	-	**EH6011389**	Price
.157	.009	TAGR4J4D	IC808	x	x	-	-	x	x	**EH6011437**	Price
.157	.010	TAGN4MF	IC5400	x	-	-	-	-	-	**EH6004963**	Price
.157	.010	TAGN4MF	IC808	x	x	-	-	x	x	**EH6004961**	Price
.157	.010	TAGN4MF	IC830	x	x	-	-	x	-	**EH6004960**	Price
.158	.009	TAGL4J4D	IC808	x	x	-	-	x	x	**EH6011411**	Price
.159	.009	TAGL4C4D	IC808	x	x	-	-	x	x	**EH6011409**	Price
.159	.009	TAGR4C4D	IC808	x	x	-	-	x	x	**EH6011435**	Price
.199	.002	TAGN5J	IC808	x	x	-	-	x	x	**EH6011427**	Price
.199	.002	TAGN5J	IC830	x	x	-	-	x	-	**EH6011428**	Price
.199	.010	TAGL5C4D	IC808	x	x	-	-	x	x	**EH6011413**	Price
.199	.010	TAGL5J4D	IC808	x	x	-	-	x	x	**EH6011415**	Price
.199	.010	TAGN5C	IC808	x	x	-	-	x	x	**EH6011425**	Price
.199	.010	TAGN5C	IC830	x	x	-	-	x	-	**EH6011426**	Price
.199	.010	TAGR5C4D	IC808	x	x	-	-	x	x	**EH6011439**	Price
.199	.010	TAGR5J4D	IC808	x	x	-	-	x	x	**EH6011441**	Price
.248	.014	TAGN6.3C	IC808	x	x	-	-	x	x	**EH6011429**	Price
.248	.014	TAGN6.3C	IC830	x	x	-	-	x	-	**EH6011430**	Price
.250	.002	TAGN6.3J	IC808	x	x	-	-	x	x	**EH6011431**	Price
.250	.002	TAGN6.3J	IC830	x	x	-	-	x	-	**EH6011432**	Price
.276	.020	TAGN7W	IC808	x	x	-	-	x	x	**EH6003624**	Price
.315	.020	TAGN8C	IC808	x	x	-	-	x	x	**EH6003616**	Price
.315	.031	TAGB808Y	IC808	x	x	-	-	x	x	**EH6404053**	Price
.315	.157	TAGB840Y	IC808	x	x	-	-	x	x	**EH6404052**	Price
.374	.020	TAGN9.5C	IC808	x	x	-	-	x	x	**EH6011451**	Price
.374	.020	TAGN9.5W	IC808	x	x	-	-	x	x	**EH6004489**	Price
.394	.031	TAGB1008Y	IC808	x	x	-	-	x	x	**EH6404327**	Price
.394	.197	TAGB1050Y	IC808	x	x	-	-	x	x	**EH6404054**	Price
.472	.031	TAGB1208Y	IC808	x	x	-	-	x	x	**EH6404180**	Price
.472	.236	TAGB1260H	IC808	x	x	-	-	x	x	**EH6404056**	Price
.472	.236	TAGB1260Y	IC808	x	x	-	-	x	x	**EH6404558**	Price
.500	.033	TAGN12.7W	IC808	x	x	-	-	x	x	**EH6011447**	Price

Cut-Off Inserts for Heliface, Do-Grip and Groove Turn



W±.004 (in.)	R (in.)	Iscar No. Designation	Iscar Grade	Order No.	Price
.039	.003	DGR 1001J-8D	IC328	**EH646002654**	Price
.039	.006	DGN 1002J	IC328	**EH646002653**	Price
.055	.001	DGR 1400JS15	IC1028	**EH646003077**	Price
.055	.006	DGL 1402J-8D	IC328	**EH646094307**	Price
.059	.002	DGR 1500P1-5D	IC508	**EH646002939**	Price
.079	.002	DGR 2000P-6D	IC508	**EH646002943**	Price
.079	.008	DGL 2002C-6D-XL	IC808	**EH6004711**	Price
.079	.008	DGL 2002C-6D-XL	IC830	**EH6004717**	Price
.079	.008	DGL 2002J-6D-XL	IC808	**EH6004707**	Price
.079	.008	DGL 2002J-6D-XL	IC830	**EH6004713**	Price
.079	.008	DGN 2002C	IC808	**EH646011380**	Price
.079	.008	DGN 2002C	IC830	**EH646011378**	Price
.079	.008	DGN 2002C-XL	IC5400	**EH646080399**	Price
.079	.008	DGN 2002C-XL	IC808	**EH646004645**	Price
.079	.008	DGN 2002C-XL	IC830	**EH646004644**	Price
.079	.008	DGN 2002J-XL	IC5400	**EH6080400**	Price
.079	.008	DGN 2002J-XL	IC808	**EH646004647**	Price
.079	.008	DGN 2002J-XL	IC830	**EH646004646**	Price
.079	.008	DGN 2002MF	IC5400	**EH646080679**	Price
.079	.008	DGN 2002MF	IC808	**EH6004881**	Price
.079	.008	DGN 2002MF	IC830	**EH6004882**	Price
.079	.008	DGN 2002Z	IC808	**EH646011379**	Price
.079	.008	DGR 2002C-6D-XL	IC808	**EH6004710**	Price
.079	.008	DGR 2002C-6D-XL	IC830	**EH6004716**	Price
.079	.008	DGR 2002J-6D-XL	IC808	**EH6004705**	Price
.079	.008	DGR 2002Z1-5D	IC908	**EH646003284**	Price
.087	.001	DGL 2200JS1-5D	IC328	**EH646002584**	Price
.087	.001	DGL 2200JS-6D	IC328	**EH646002586**	Price
.087	.001	DGR 2200JS1-5D	IC20	**EH646098696**	Price
.087	.001	DGR 2200JS1-5D	IC328	**EH646002583**	Price
.087	.001	DGR 2200JS1-5D	IC908	**EH646095707**	Price
.087	.001	DGR 2200JS-6D	IC908	**EH646096300**	Price
.087	.008	DGL 2202C-6D	IC328	**EH646002467**	Price
.087	.008	DGL 2202J-6D	IC328	**EH646002468**	Price
.087	.008	DGN 2202J	IC808	**EH646011372**	Price
.087	.008	DGR 2202J-6D	IC908	**EH646002950**	Price
.118	.002	DGN 3000P	IC508	**EH646003414**	Price

W±.004 (in.)	R (in.)	Iscar No. Designation	Iscar Grade	Order No.	Price
.118	.008	DGL 3002C-6D-XL	IC808	**EH626004947**	Price
.118	.008	DGL 3002C-6D-XL	IC830	**EH626004948**	Price
.118	.008	DGL 3002J-6D-XL	IC808	**EH626004949**	Price
.118	.008	DGL 3002J-6D-XL	IC830	**EH626004950**	28.80
.118	.008	DGN 3002C-XL	IC808	**EH6004919**	Price
.118	.008	DGN 3002C-XL	IC830	**EH6004918**	Price
.118	.008	DGN 3002J-XL	IC808	**EH6004921**	Price
.118	.008	DGN 3002J-XL	IC830	**EH6004920**	Price
.118	.008	DGN 3002MF	IC5400	**EH646080680**	Price
.118	.008	DGR 3002C-6D-XL	IC808	**EH6004943**	Price
.118	.008	DGR 3002C-6D-XL	IC830	**EH6004944**	Price
.118	.008	DGR 3002J-6D-XL	IC808	**EH626004945**	Price
.118	.008	DGR 3002J-6D-XL	IC830	**EH626004946**	Price
.118	.008	DGR 3002Z-6D	IC908	**EH646003287**	Price
.118	.010	DGN 3003UA	IC20	**EH646002543**	Price
.122	.001	DGL 3100JS1-5D	IC328	**EH646002580**	Price
.122	.001	DGN 3100JS	IC328	**EH646094767**	Price
.122	.001	DGR 3100JS1-5D	IC908	**EH646003037**	Price
.122	.001	DGR 3100JS-6D	IC908	**EH646095470**	Price
.122	.008	DGN 3102C	IC808	**EH646003581**	Price
.122	.008	DGN 3102C	IC830	**EH646011370**	Price
.122	.008	DGN 3102J	IC1028	**EH646003039**	Price
.122	.008	DGN 3102J	IC808	**EH646011371**	Price
.122	.008	DGN 3102J	IC830	**EH646011369**	Price
.122	.008	DGN 3102MF	IC5400	**EH6004902**	Price
.122	.008	DGN 3102MF	IC808	**EH6004885**	Price
.122	.008	DGN 3102MF	IC830	**EH6004886**	Price
.122	.008	DGR 3102C-6D	IC908	**EH646002968**	Price
.122	.008	DGR 3102J1-5D	IC328	**EH646097015**	Price
.122	.008	DGR 3102J1-5D	IC908	**EH646003038**	Price
.122	.008	DGR 3102J-6D	IC908	**EH646002967**	Price
.125	.008	DGN M 3202C	IC908	**EH646003294**	Price
.125	.008	DGN M 3202J	IC908	**EH646003291**	Price
.157	.012	DGN 4003MF	IC808	**EH6004959**	Price
.157	.012	DGN 4003MF	IC830	**EH6004958**	Price
.157	.012	DGR 4003C-4D	IC908	**EH646002952**	Price
.189	.012	DGR 4803J-8D	IC328	**EH646003232**	Price

Tool Blocks

Member IMC Group

ISO 9001

Basic Features:

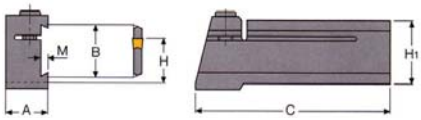
- Wedge clamping
- Prism on top and bottom secures central alignment of insert in seat
- Molded chipformer produces curled and narrowed chip for free flow and undamaged surface
- Large variety of machining applications
- Parting off and grooving
- Face grooving—trepanning, slot milling
- Cutting force enhances grip

F-W Cutoff Tool System

The lastest enhancement combines the System-W geometry with its double chipformer that excels in the machining of stainless steels and exotics, and the System-F concept, which features a redesign of the insert locking mechanism for greater stability and consistency. The result, System F-W, is available in the most critical sizes for those tough applications. If you have problems with inserts splitting while cutting or just need to do your cutoff application faster, try our System-F and System F-W cutoff tools. The following pages contain the components for the F-Cut and T-Cut System.

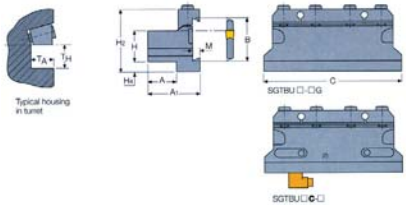
SGTBR/L

R-Right hand
L-Left hand
SINGLE-ENDED: Used in universal turning machines. Equipped for center height adjustment of cutting edge.



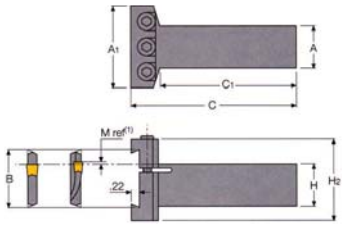
SGTBU-G

REMOVABLE TOP CLAMP: Used in CNC turning center. Specially for machines where the tool stations require lateral access to the tool holder screws.



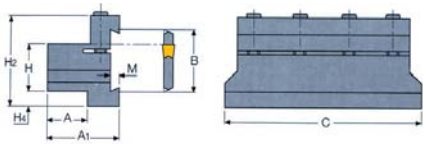
SGTBF

SQUARE SHANK PERPENDICULAR TO BLADE ADAPTER: Used mainly for face grooving. Also for cut-off and grooving on tool stations parallel to machine spindle.



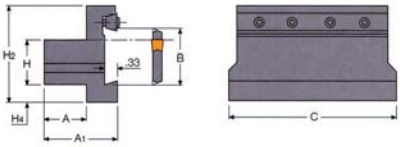
SGTBN

INTEGRAL FLEXIBLE CLAMPING: Applies for right and left hand turning. Cutting-edge height equals shank height. Used on CNC and universal turning machines.



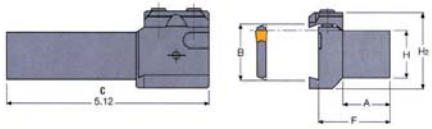
SGTBK

HEAVY DUTY APPLICATIONS: Wedge clamp strengthens hold on blades.
Best for large widths of cut and high loads.



UBHCR/L

R-Right hand
L-Left hand
UNIVERSAL TOOL BLOCK: To be mounted on CNC machine turrets. Using half and full length self-grip blades with a separate short clamp, holder block and blades are clamped separately.



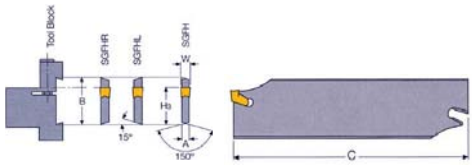
Iscar No.	Center Hght. H (in.)	Width A (in.)	OAL C (in.)	Thick-ness B (in.)	F-Cut Blade Choices	T-Cut Blade Choices	Order No.	Price
SGTBF25.4A	1.00	1.00	3.57	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300715**	Price
SGTBF31.7A	1.25	1.25	4.23	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300717**	Price
SGTBK329	1.25	1.10	4.72	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300719**	Price
SGTBK389	1.50	1.38	5.31	2.07	SGFH 52(8 & 9); SGFH 53(8 & 9); SGFHR/L 52-12	SGIH 52-9; SGIH 53(8 & 9)	**EH2300720**	Price
SGTBN162	.630	.630	3.00	.75	SGFH 19(1 & 2)	SGIH 19-2	**EH2300726**	Price
SGTBN165	.630	.630	3.00	1.02	SGFH 26(1 thru 5); SGFH 26C(3&4)	SGIH 26(2 thru 6)	**EH2300728**	Price
SGTBN195	.750	.750	3.40	1.02	SGFH 26(1 thru 5); SGFH 26C(3&4)	SGIH 26(2 thru 6)	**EH2300730**	Price
SGTBN196	.750	.750	3.94	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300733**	Price
SGTBN256	.980	.790	4.33	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300739**	Price
SGTBN25.46	1.00	.790	4.33	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300737**	Price
SGTBN31.86	1.25	1.12	4.72	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300741**	Price
SGTBN386	1.50	1.64	5.00	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300745**	Price
SGTBR192	.750	.750	4.00	.75	SGFH 19(1 & 2)	SGIH 19-2	**EH2300749**	Price
SGTBR256	.984	.790	4.72	1.02	SGFH 26(1 thru 5); SGFH 26C(3&4)	SGIH 26(2 thru 6)	**EH2300750**	Price
SGTBU165G	.630	.630	3.00	1.02	SGFH 26(1 thru 5); SGFH 26C(3&4)	SGIH 26(2 thru 6)	**EH2301025**	Price
SGTBU195G	.750	.790	3.40	1.02	SGFH 26(1 thru 5); SGFH 26C(3&4)	SGIH 26(2 thru 6)	**EH2300753**	Price
SGTBU196G	.750	.790	3.94	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300946**	Price
SGTBU25.45G	1.00	1.03	4.33	1.02	SGFH 26(1 thru 5); SGFH 26C(3&4)	SGIH 26(2 thru 6)	**EH2300762**	Price
SGTBU25.46G	1.00	1.03	4.33	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300765**	Price
SGTBU25.4C6	1.00	.900	4.33	1.26	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2301044**	Price
SGTBU31.86G	1.35	1.14	4.33	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2300770**	Price
SGTBU38.16G	1.50	1.65	4.50	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2390840**	Price
UBHCL25.432	1.00	1.00	5.12	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2800522**	Price
UBHCR25.432	1.00	1.00	5.12	1.25	SGFH 32(1 thru-9); SGFHR/L 32 (8 & 9); SGFH 32C (3 & 4)	SGIH 32(2 thru 8); SGIHR/L 32 (8 & 9)	**EH2800528**	Price

Parting and Grooving Blades
SGFH F-CUT

Blade Hght. B (in.)	Insert Wdth. W (in.)	Blade Thickness A (in.)	OAL C (in.)	Center Hght. H3 (in.)	Max. Depth D (in.)	Inserts GF_	Iscar No.	Order No.	Price
.75	.063	.047	3.38	.620	1.25	GF 1.6	SGFH191	**EH2300507**	Price
.75	.087 & .094	.063	3.38	.620	1.50	GF 2 & 2.4	SGFH192	**EH2300509**	Price
1.02	.063	.047	4.33	.840	1.37	GF 1.6	SGFH261	**EH2300510**	Price
1.02	.087 & .094	.063	4.33	.840	2.00	GF 2 & 2.4	SGFH262	**EH2300512**	Price
1.02	.118	.094	4.33	.840	3.00	GF 3	SGFH263	**EH2300514**	Price
1.02	.161	.125	4.33	.840	3.00	GF 4	SGFH264	**EH2300517**	Price
1.25	.063	.047	5.90	.980	1.50	GF 1.6	SGFH321	**EH2300521**	Price
1.25	.087 & .094	.063	5.90	.980	2.00	GF 2 & 2.4	SGFH322	**EH2300522**	Price
1.25	.118	.094	5.90	.980	4.00	GF 3	SGFH323	**EH2300524**	Price
1.25	.161	.125	5.90	.980	4.00	GF 4	SGFH324	**EH2300526**	Price
1.25	.189 & .201	.157	5.90	.980	5.00	GF 4.8 & 5	SGFH325	**EH2300528**	Price
1.25	.250	.205	5.90	.980	5.00	GF 6	SGFH326	**EH2300530**	Price
2.07	.375	.315	7.50	1.77	7.90	GF 9	SGFH529	**EH2300536**	Price
2.07	.375	.315	10.25	1.77	10.00	GF 9	SGFH539	**EH2300539**	Price

F-CUT: Fixed location of cutting edge provides repeated accuracy of depth of cut for:
- Pre-cutoff position
- Grooving
- Post-cutoff position
- Accuracy of center height of cutting edge
- Stopper ensures repeatability
- Stopper limits load on jaws
- Flush top for unobstructed chipflow

NOTE: F-CUT and T-CUT inserts are not inter-changeable with F-CUT and T-CUT blades.

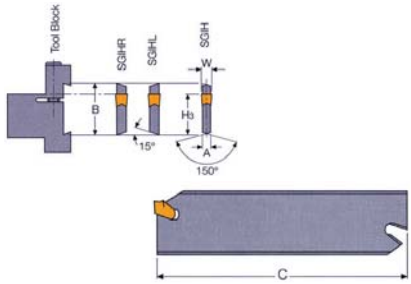


Parting and Grooving Blades
SGIH/R/L T-CUT

R = Right hand
L = Left hand

Blade Hght. B (in.)	Insert Wdth. W (in.)	Blade Thickness A (in.)	OAL C (in.)	Center Hght. H3 (in.)	Max. Depth D (in.)	Inserts GT_	Iscar No.	Order No.	Price
.75	.087 & .094	.063	3.38	.620	1.57	GTN/L/R2, 2.4	SGIH192	**EH2300609**	Price
1.02	.087	.063	4.33	.840	2.00	GTN/L/R2, 2.4	SGIH262	**EH2300610**	Price
1.02	.122	.094	4.33	.840	3.00	GTN/L/R3	SGIH263	**EH2300612**	Price
1.02	.161	.125	4.33	.840	3.15	GTN/L/R4	SGIH264	**EH2300614**	Price
1.02	.188, .201	.156	4.33	.840	3.15	GTN/L/R4.8, 5	SGIH265	**EH2300616**	Price
1.25	.087 & .094	.063	5.90	.980	1.57	GTN/L/R2, 2.4	SGIH322	**EH2300618**	Price
1.25	.122	.094	5.90	.980	3.94	GTN/L/R3	SGIH323	**EH2300619**	Price
1.25	.161	.125	5.90	.980	3.94	GTN/L/R4	SGIH324	**EH2300622**	Price
1.25	.188, .201	.156	5.90	.980	4.71	GTN/L/R4.8, 5	SGIH325	**EH2300625**	Price
1.25	.250	.203	5.90	.980	4.72	GTN/L/R6	SGIH326	**EH2300626**	Price
1.25	.315	.268	5.90	.980	5.51	GTN/L/R8	SGIH328	**EH2300628**	Price
1.25	.375	.312	5.90	.980	5.51	GTN/L/R9	SGIH329	**EH2300629**	Price
2.07	.315	.268	10.23	1.78	8.70	GTN/L/R8	SGIH538	**EH2300632**	Price
2.07	.375	.312	10.23	1.78	10.00	GTN/L/R9	SGIH539	**EH2300633**	Price

T-CUT: The original self-grip
- With high reliability
- High rigidity and high stability
- Superior straightness of cut



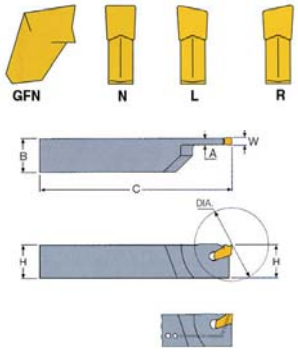
Parting and Grooving Holders SGTFR/L F-CUT

R = Right hand
L = Left hand

B (in.)	W(insert) (in.)	C (in.)	H (in.)	Dmax (in.)	Insert GF_	Iscar No.	Order No.	Price
.375	.063	3.00	.375	1.06	GF 1.6	SGTFR9.51.6	**EH2300828**	Price
.375	.087 & .094	3.00	.375	1.13	GF 2 & 2.4	SGTFL9.52	**EH2300782**	Price
.375	.087 & .094	3.00	.375	1.13	GF 2 & 2.4	SGTFR9.52	**EH2300830**	Price
.50	.063	4.33	.50	1.18	GF 1.6	SGTFL12.71.6	**EH2300785**	Price
.50	.063	4.33	.50	1.18	GF 1.6	SGTFR12.71.6	**EH2300833**	Price
.50	.087 & .094	4.33	.50	1.25	GF 2 & 2.4	SGTFR12.72	**EH2300835**	Price
.50	.118	4.33	.50	1.25	GF 3	SGTFR12.73	**EH2300836**	Price
.625	.087 & .094	4.50	.625	1.25	GF 2 & 2.4	SGTFR162	**EH2300841**	Price
.625	.118	4.50	.625	1.38	GF 3	SGTFL163	**EH2300794**	Price
.625	.118	4.50	.625	1.38	GF 3	SGTFR163	**EH2300842**	Price
.75	.087 & .094	4.50	.75	1.38	GF 2 & 2.4	SGTFL192	**EH2300800**	Price
.75	.087 & .094	4.50	.75	1.38	GF 2 & 2.4	SGTFR192	**EH2300848**	Price
.75	.118	4.50	.75	1.75	GF 3	SGTFL193	**EH2300801**	Price
.75	.118	4.50	.75	1.75	GF 3	SGTFR193	**EH2300849**	Price
.75	.161	4.50	.75	2.00	GF 4	SGTFL194	**EH2300803**	Price
.75	.161	4.50	.75	2.00	GF 4	SGTFR194	**EH2300851**	Price
1.00	.118	5.90	1.00	2.25	GF 3	SGTFL25.43	**EH2300813**	Price
1.00	.118	5.90	1.00	2.25	GF 3	SGTFR25.43	**EH2300861**	Price
1.00	.161	5.90	1.00	2.50	GF 4	SGTFL25.44	**EH2300815**	Price
1.00	.161	5.90	1.00	2.50	GF 4	SGTFR25.44	**EH2300863**	Price
1.00	.189 & .201	5.90	1.00	3.00	GF 4.8 & 5	SGTFR25.45	**EH2300865**	Price

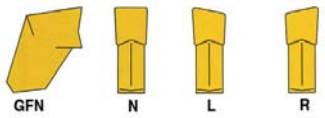
F-CUT: Fixed location of cutting edge provides repeated accuracy of depth of cut for:
- Pre-cutoff position
- Grooving
- Post-cutoff position
- Accuracy of center height of cutting edge
- Stopper ensures repeatability
- Stopper limits load on jaws
- Flush top for unobstructed chipflow

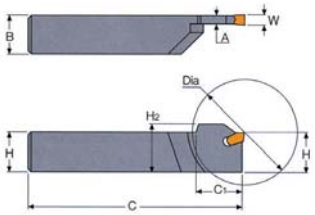
NOTE: F-CUT and T-CUT inserts are not inter-changeable with F-CUT and T-CUT holders.



Parting and Grooving Holders
SGTHR/L T-CUT

- The original self-grip
- With high reliability
- High rigidity and high stability
- Superior straightness of cut





R = Right hand
L = Left hand

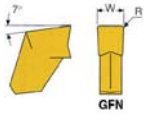
B (in.)	W (insert) (in.)	C (in.)	Dmax (in.)	H (in.)	Insert GT_	Iscar No.	Order No.	Price
.375	.087 & .094	3.000	1.130	.375	GT 2 & 2.4	SGTHR9.52	**EH2300909**	Price
.375	.087 & .094	4.330	1.250	.500	GT 2 & 2.4	SGTHR12.72	**EH2300912**	Price
.375	.122	3.380	1.100	.375	GT 3	SGTHR9.53	**EH2300910**	Price
.394	.087 & .094	4.500	1.250	.625	GT 2 & 2.4	SGTHR162	**EH2300918**	Price
.472	.118	4.500	1.380	.625	GT 3	SGTHR163	**EH2300919**	Price
.500	.118	4.500	1.750	.750	GT 3	SGTHL193	**EH2300890**	Price
.500	.118	4.500	1.750	.750	GT 3	SGTHR193	**EH2300922**	Price
1.000	.118	5.900	2.250	1.000	GT 3	SGTHL25.43	**EH2300901**	Price
1.000	.118	5.900	2.250	1.000	GT 3	SGTHR25.43	**EH2300934**	Price
1.000	.161	5.900	2.500	1.000	GT 4	SGTHL25.44	**EH2300902**	Price
1.000	.161	5.900	2.500	1.000	GT 4	SGTHR25.44	**EH2300935**	Price
1.000	.189 & .201	5.900	3.000	1.000	GT 4.8 & 5	SGTHR25.45	**EH2300936**	Price

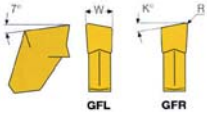
GFN/R/L
F-CUT Parting and Grooving Inserts

Fixed location of cutting edge provides repeated accuracy of depth of cut for:

- Grooving
- Accuracy of center height of cutting edge
- Stopper ensures repeatability

NOTE: F-CUT and T-CUT inserts are not interchangeable with F-CUT and T-CUT blades or holders.





R = Right hand
L = Left hand

- The original self-grip
- With high reliability
- High rigidity and high stability
- Superior straightness of cut

IC-20	Grade C2-C3 uncoated
IC-250	PVD TiCN + TiN coated
IC-30N	Cermet high speed machining
IC-328	PVD TiCN coated - heavy machining
IC-354	Grade C5-C6 PVD TiCN coated
IC-54	Grade C4-C5 uncoated
IC-908	PVD TiAlN coated - heavy machining

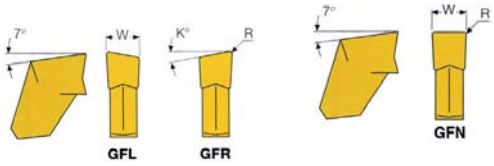
W±.004 (in.)	Radius R (in.)	Iscar Grade	Iscar No. Designation	Order No.	Price
.063	.006	IC20	GFN1.6	**EH6000241**	Price
.063	.006	IC20	GFR1.68D°	**EH6000387**	Price
.063	.006	IC328	GFN1.6	**EH6002611**	Price
.063	.006	IC354	GFL1.68D°	**EH6098326**	Price
.063	.006	IC354	GFN1.6	**EH6002657**	Price
.063	.006	IC354	GFR1.615D°	**EH6002675**	Price
.063	.006	IC354	GFR1.68D°	**EH6098336**	Price
.063	.006	IC54	GFN1.6	**EH6000245**	Price
.063	.006	IC54	GFR1.68D°	**EH6000390**	Price
.087	.006	IC20	GFN2	**EH6000259**	Price
.087	.006	IC328	GFN2	**EH6002500**	Price
.087	.006	IC354	GFN2	**EH6011364**	Price
.087	.006	IC354	GFR24D°	**EH6002625**	Price
.087	.006	IC354	GFR28D°	**EH6002443**	Price
.087	.006	IC54	GFN2	**EH6000263**	Price
.087	.006	IC908	GFN2	**EH6003138**	Price
.094	.006	IC20	GFN2.4	**EH6000267**	Price
.094	.006	IC20	GFR2.44D°	**EH6000424**	Price
.094	.006	IC20	GFR2.48D°	**EH6000427**	Price
.094	.006	IC328	GFN2.4	**EH6094235**	Price
.094	.006	IC354	GFN2.4	**EH6094535**	Price
.094	.006	IC354	GFR2.44D°	**EH6002674**	Price
.094	.006	IC354	GFR2.48D°	**EH6094435**	Price
.094	.006	IC54	GFN2.4	**EH6000268**	Price
.094	.006	IC54	GFR2.48D°	**EH6000428**	Price
.118	.008	IC20	GFL34D°	**EH6000133**	Price
.118	.008	IC20	GFL38D°	**EH6000142**	Price
.118	.008	IC20	GFN3	**EH6000286**	Price
.118	.008	IC20	GFR34D°	**EH6000432**	Price
.118	.008	IC20	GFR38D°	**EH6000443**	Price
.118	.008	IC250	GFN3	**EH6001577**	Price
.118	.008	IC30N	GFN3	**EH6000287**	Price
.118	.008	IC328	GFN3	**EH6002573**	Price

W±.004 (in.)	Radius R (in.)	Iscar Grade	Iscar No. Designation	Order No.	Price
.118	.008	IC328	GFR34D°	**EH6002595**	Price
.118	.008	IC328	GFR38D°	**EH6002502**	Price
.118	.008	IC354	GFL34D°	**EH6098646**	Price
.118	.008	IC354	GFL38D°	**EH6002593**	Price
.118	.008	IC354	GFN3	**EH6011365**	Price
.118	.008	IC354	GFR34D°	**EH6002596**	Price
.118	.008	IC354	GFR38D°	**EH6002444**	Price
.118	.008	IC54	GFN3	**EH6000292**	Price
.118	.008	IC54	GFR34D°	**EH6000434**	Price
.118	.008	IC54	GFR38D°	**EH6000447**	Price
.118	.008	IC908	GFN3	**EH6003143**	Price
.161	.009	IC20	GFN4	**EH6000320**	Price
.161	.009	IC20	GFR44D°	**EH6000472**	Price
.161	.009	IC328	GFN4	**EH6002574**	Price
.161	.009	IC354	GFN4	**EH6011366**	Price
.161	.009	IC54	GFN4	**EH6000324**	Price
.161	.009	IC908	GFN4	**EH6003147**	Price
.161	.016	IC354	GFN4B	**EH6095135**	Price
.161	.016	IC908	GFN4B	**EH6003149**	Price
.161	.009	IC354	GFL44D°	**EH6099246**	Price
.161	.009	IC354	GFL48D°	**EH6099406**	Price
.188	.008	IC20	GFR315D°	**EH6000455**	Price
.188	.008	IC354	GFR315D°	**EH6002626**	Price
.188	.011	IC354	GFN4.8	**EH6002659**	Price
.188	.011	IC354	GFR4.84D°	**EH6002672**	Price
.188	.011	IC354	GFR4.88D°	**EH6002664**	Price
.201	.011	IC354	GFN5	**EH6002598**	Price
.201	.011	IC328	GFN5	**EH6002597**	Price
.250	.014	IC328	GFN6	**EH6002599**	Price
.250	.014	IC354	GFN6	**EH6002600**	Price
.315	.016	IC354	GFN8	**EH6002624**	Price
.375	.018	IC354	GFN9	**EH6092617**	Price

GTN/R/L T-CUT Parting and Grooving Inserts

- The original self-grip
- With high reliability
- High rigidity and high stability
- Superior straightness of cut

N = Neutral
R = Right hand
L = Left hand



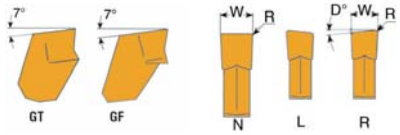
ISO 9001

W± .004 (in.)	R (in.)	Model No.	Iscar Grade	Order No.	Price
.087	.006	GTL24D°	IC354	**EH6002633**	Price
.087	.006	GTL28D°	IC354	**EH6002634**	Price
.087	.006	GTN2	IC20	**EH6000812**	Price
.087	.006	GTN2	IC354	**EH6002441**	Price
.087	.006	GTN2	IC54	**EH6000818**	Price
.087	.006	GTR28D°	IC20	**EH6000978**	Price
.087	.006	GTR215D°	IC354	**EH6002640**	Price
.087	.006	GTR24D°	IC354	**EH6099256**	Price
.087	.006	GTR28D°	IC354	**EH6002445**	Price
.087	.006	GTR24D°	IC54	**EH6000974**	Price
.087	.006	GTR28D°	IC54	**EH6000981**	Price
.094	.006	GTN2.4	IC354	**EH6093945**	Price
.118	.008	GTL315D°	IC354	**EH6090026**	Price
.118	.008	GTL34D°	IC354	**EH6092774**	Price
.118	.008	GTL38D°	IC354	**EH6091684**	Price
.118	.008	GTL38D°	IC54	**EH6000702**	Price
.118	.008	GTN3B°	IC354	**EH6091674**	Price
.118	.008	GTR34D°	IC20	**EH6001001**	Price
.118	.008	GTR38D°	IC20	**EH6001008**	Price
.118	.008	GTR315D°	IC354	**EH6096241**	Price
.118	.008	GTR34D°	IC354	**EH6099366**	Price
.118	.008	GTR38D°	IC354	**EH6002446**	Price
.118	.008	GTR38D°	IC54	**EH6001010**	Price
.118	.012	GTN3	IC20	**EH6000836**	Price
.118	.012	GTN3	IC328	**EH6094125**	Price
.118	.012	GTN3	IC354	**EH6002440**	Price
.118	.012	GTN3	IC54	**EH6000842**	Price
.161	.008	GTN4	IC20	**EH6000867**	Price
.161	.008	GTN4	IC328	**EH6094135**	Price
.161	.008	GTN4	IC354	**EH6002442**	Price
.161	.008	GTN4	IC54	**EH6000874**	Price
.161	.009	GTL44D°	IC354	**EH6099386**	Price
.161	.009	GTR44D°	IC354	**EH6002643**	Price
.161	.009	GTR48D°	IC354	**EH6002499**	Price
.161	.009	GTR44D°	IC54	**EH6001039**	Price
.161	.009	GTR48D°	IC54	**EH6001046**	Price
.188	.011	GTL4.84D°	IC354	**EH6002706**	Price
.188	.011	GTL4.8	IC354	**EH6097796**	Price
.188	.011	GTN4.8	IC20	**EH6000881**	Price
.188	.011	GTN4.8	IC354	**EH6002661**	Price
.188	.011	GTN4.8	IC54	**EH6000883**	Price
.188	.011	GTR4.84D°	IC354	**EH6002662**	Price
.201	.011	GTN5	IC20	**EH6000904**	Price
.201	.011	GTN5	IC354	**EH6091664**	Price
.201	.011	GTN5	IC54	**EH6000909**	Price
.250	.014	GTN6	IC20	**EH6000923**	Price
.250	.014	GTN6	IC354	**EH6099336**	Price
.250	.014	GTN6	IC54	**EH6000926**	Price
.315	.016	GTN8	IC354	**EH6002637**	Price
.375	.018	GTN9	IC20	**EH6000953**	Price

Grade IC-354 replaces IC-656

GFN/R/L-W F-CUT Parting & Grooving Inserts

N = Neutral
R = Right hand
L = Left hand



T-CUT: The original self-grip
With high reliability
- High rigidity and high stability
- Superior straightness of cut

F-CUT: Fixed location of cutting edge provides repeated accuracy of depth of cut for:
Pre-cutoff position
- Grooving
- Post-cutoff position
- Accuracy of center height of cutting edge
- Stopper ensures repeatability
- Stopper limits load on jaws
- Flush top for unobstructed chipflow

W-Type: Central ridge and double cavities. Most efficient on stainless steel and most types of steel at moderate feed rates.

J-Type: Positive rake and sharp curved cutting edge. For smooth chip flow and better surface quality at low feeds down to .0012 ipr. For stainless steel, steel and soft materials.

A-Type: Positive rake cavity and shoulders. For cutting ductile metals like aluminum and copper.

IC-20 Grade C2-C3 uncoated
IC-328 PVD TiCN coated - heavy machining
IC-354 Grade C5-C6 PVD TiCN coated
IC-54 Grade C4-C5 uncoated

W±.004 (in.)	R (in.)	Iscar No. Designation	Iscar Grade	Order No.	Price
.118	.008	GFL3W8D	IC354	**EH6002686**	Price
.118	.008	GFN3W	IC328	**EH6098458**	Price
.118	.008	GFN3W	IC354	**EH6097806**	Price
.118	.008	GFN3W	IC54	**EH6000314**	Price
.118	.008	GFR3W4D°	IC354	**EH6002681**	Price
.118	.008	GFR3W8D°	IC354	**EH6002628**	Price
.161	.009	GFN4W	IC354	**EH6002589**	Price
.189	.011	GFN4.8W	IC354	**EH6002691**	Price
.500	.033	GFN12W	IC20	**EH6000253**	Price
.500	.033	GFN12W	IC354	**EH6090586**	Price

GFN-A F-CUT Parting & Grooving Inserts

W±.004 (in.)	Radius R (in.)	Iscar No. Designation	Iscar Grade	Order No.	Price
.063	.006	GFN1.6A	IC20	**EH6000234**	Price
.087	.006	GFN2A	IC20	**EH6000235**	Price
.118	.008	GFN3A	IC20	**EH6000237**	Price
.161	.008	GFN4A	IC20	**EH6000238**	Price
.201	.011	GFN5A	IC20	**EH6000240**	Price

GTN-A T-CUT Parting & Grooving Inserts

W±.004 (in.)	R (in.)	Iscar No. Designation	Iscar Grade	Order No.	Price
.118	.008	GTN3A	IC20	**EH6000808**	Price

GTN/R/L-W T-CUT Parting & Grooving Inserts

N = Neutral
R = Right hand
L = Left hand

W±.004 (in.)	R (in.)	Iscar No. Designation	Iscar Grade	Order No.	Price
.118	.008	GTN3W	IC20	**EH6000857**	Price
.118	.008	GTN3W	IC354	**EH6097836**	Price
.118	.008	GTN3W	IC54	**EH6000861**	Price
.118	.008	GTR3W4D°	IC354	**EH6002590**	Price
.161	.008	GTN4W	IC354	**EH6097846**	Price
.161	.009	GTR4W4D°	IC354	**EH6099346**	Price
.201	.011	GTN5W	IC354	**EH6002636**	Price

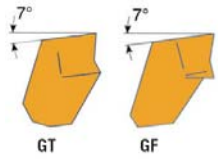
Grade IC-354 replaces IC-656
NOTE: F-CUT and T-CUT inserts are not interchangeable with F-CUT and T-CUT blades or holders.

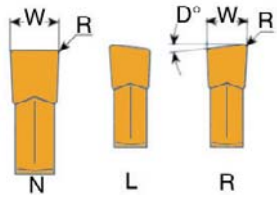
GFNR/L F-CUT Inserts

Fixed location of cutting edge provides repeated accuracy of depth of cut for:

- Pre-cutoff position
- Grooving
- Post-cutoff position
- Accuracy of center height of cutting edge
- Stopper ensures repeatability
- Stopper limits load on jaws
- Flush top for unobstructed chipflow

IC-20	Grade C2-C3 uncoated
IC-328	PVD TiCN coated - heavy machining
IC-354	Grade C5-C6 PVD TiCN coated
IC-54	Grade C4-C5 uncoated
IC-908	PVD TiAlN coated - heavy machining





W±.004 (in.)	R (in.)	Iscar No. Designation	Iscar Grade	Order No.	Price
.063	.006	GFN1.6J	IC328	**EH6094205**	Price
.063	.006	GFN1.6J	IC354	**EH6002621**	Price
.063	.006	GFR1.6J6D°	IC328	**EH6002885**	Price
.079	.007	GFN2J	IC328	**EH6002545**	Price
.079	.007	GFN2J	IC354	**EH6002547**	Price
.079	.007	GFN2J	IC908	**EH6003139**	Price
.118	.010	GFL3J6D°	IC354	**EH6002592**	Price
.118	.010	GFN3J	IC20	**EH6000304**	Price
.118	.010	GFN3J	IC328	**EH6002541**	Price
.118	.010	GFN3J	IC354	**EH6002549**	Price
.118	.010	GFN3J	IC54	**EH6001336**	Price
.118	.010	GFN3J	IC908	**EH6094249**	Price
.118	.010	GFR3J6D°	IC328	**EH6002594**	Price
.118	.010	GFR3J6D°	IC354	**EH6002591**	Price
.157	.010	GFN4J	IC20	**EH6000348**	Price
.157	.010	GFN4J	IC328	**EH6002610**	Price
.157	.010	GFN4J	IC354	**EH6002552**	Price
.157	.010	GFN4J	IC908	**EH6003148**	Price
.201	.010	GFN5J	IC328	**EH6096115**	Price
.201	.010	GFN5J	IC908	**EH6003151**	Price

Grade IC-354 replaces IC-656

Width of Cut (WOC) and depth of Cut (DOC)
In selecting WOC, the main factor to consider is the required DOC. The ratio DOC above 8x WOC is of practical use on alloy steel of average machinability: for example, applying a .118" WOC insert GFN-3 to cut-off a 1.890" solid bar.

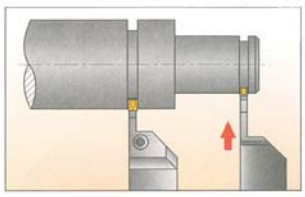
Additional factors which affect DOC capacity, relative to the ratio, are:

Lead Angle
A neutral insert with 0° lead angle increases DOC capacity.

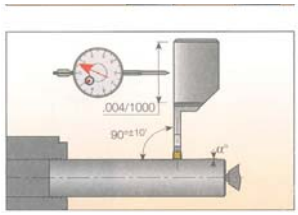
Holder or Blade Size
To minimize risk of vibration and deflection always choose:

- Blade or toolholder with smallest possible overhang
- Toolholder with maximum shank dimension
- Blade height (B) dimension which is larger than Tmax
- Blade or holder with maximum blade width (largest possible insert seat size.)

Example:
A WOC .374" on blade
SGFH 53-9 (B=2.07") extends the ratio of DOC to WOC by some 50% to 4.724".



Insert Support
A self-grip tool is recommended for deep radial machining. A screw-clamp holder is recommended for axial and small DOC machining.



90° Mounting
It is very important that the insert is mounted at 90° to the center line of the workpiece in order to obtain perpendicular surfaces and reduce the risk of vibration.

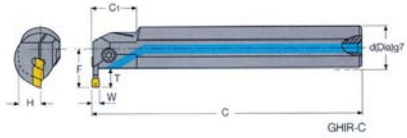
TGIR/L-C Internal Machining Boring Bars with Coolant

TOP-GRIP™ ISO 9001

Applications:

- Grooving
- Turning
- Threading

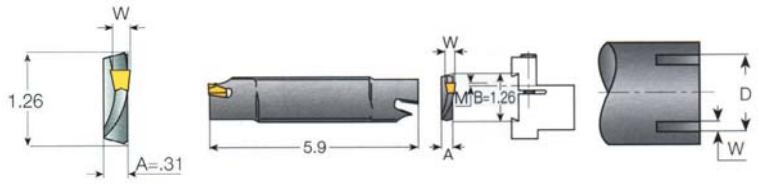
R = Right hand
L = Left hand



d Shank Dia. (in.)	D Min. Bore	T Max. Bore	H Center Hght	C OAL	C1 Proj.	F Dist. Across Flats	W Width	Use Insert	Iscar No.	Right/Left	Screw	Hex Key	Seal	Order No.	Price
.625	.8000	.220	.295	5.9000	1.00	.472	.118 - .125	TGMF/P3..	TGIR15.9C3	Right	SR76-1021	T20/5	-	**EH2850076**	Price
.750	.9500	.220	.335	7.1000	1.25	.559	.118 - .125	TGMF/P3..	TGIL19C3	Left	SR76-1021	T20/5	PL 075	**EH2850070**	Price
.750	.9500	.220	.335	7.1000	1.25	.559	.118 - .125	TGMF/P3..	TGIR19C3	Right	SR76-1021	T20/5	PL 075	**EH2850057**	Price
1.000	1.2600	.310	.453	7.8500	1.57	.740	.118 - .125	TGMF/P3..	TGIR25.4C3	Right	SR76-1021	T20/5	PL 100	**EH2850058**	Price
1.000	1.2600	.310	.453	7.8500	1.57	.740	.118 - .125	TGMF/P3..	TGIL25.4C3	Left	SR76-1021	T20/5	PL 100	**EH2850071**	Price
1.000	1.2800	.330	.453	7.8500	1.57	.768	.157 - .197	TGMF/P4..,5..	TGIL25.4C4	Left	SR76-1022	T20/5	PL 100	**EH2850072**	Price
1.000	1.2800	.330	.453	7.8500	1.57	.768	.157 - .197	TGMF/P4..,5..	TGIR25.4C4	Right	SR76-1022	T20/5	PL 100	**EH2850059**	Price
1.250	1.6500	.430	.571	8.6500	2.00	1.004	.157 - .197	TGMF/P4..,5..	TGIL31.7C4	Left	SR-M6 x 20	T20/5	PL 125	**EH2850073**	Price
1.250	1.6500	.430	.571	8.6500	2.00	1.004	.157 - .197	TGMF/P4..,5..	TGIR31.7C4	Right	SR-M6 x 20	T20/5	PL 125	**EH2850060**	Price
1.250	1.8500	.700	.571	8.6500	2.00	1.197	.236 - .250	TGMF/P3..,6..	TGIR31.7C6	Right	SR-M6 x 20	HW 5	PL 125	**EH2850061**	Price
1.500	2.2500	.720	.669	11.8000	2.36	1.354	.236 - .250	TGMF/P3..,6..	TGIL38.1C6	Left	SR-M6 x 25	HW 5	PL 150	**EH2850075**	Price
1.500	2.2500	.720	.669	11.8000	2.36	1.354	.236 - .250	TGMF/P3..,6..	TGIR38.1C6	Right	SR-M6 x 25	HW 5	PL 150	**EH2850062**	Price

See pages IMC-23 - IMC-24 for spare parts

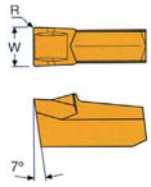
SGFFH F-CUT
Face Grooving Blades



Insert Width W (in.)	Dia. Min.-Max. (in.)	Max. Depth T (in.)	Center Hght. M (in.)	Blade Thickness A (in.)	Insert GFF	Iscar No.	Order No.	Price
.083	1.38 - 1.81	.790	.030	.200	GFF 2	SGFFH35L2	**EH2300301**	Price
.083	1.38 - 1.81	.790	.030	.200	GFF 2	SGFFH35R2	**EH2300302**	Price
.083	1.77 - 2.40	.790	.030	.200	GFF 2	SGFFH45R2	**EH2300304**	Price
.083	2.36 - 3.15	.790	.030	.200	GFF 2	SGFFH60R2	**EH2300306**	Price
.083	3.11 - 4.02	.790	.030	.156	GFF 2	SGFFH80R2	**EH2300308**	Price
.083	3.96 - 5.20	.790	.00	.156	GFF 2	SGFFH100R2	**EH2300310**	Price
.118	2.56 - 3.62	.790	.040	.200	GFF 3	SGFFH75R3	**EH2300312**	Price
.118	3.54 - 4.80	.790	.008	.200	GFF 3	SGFFH90R3	**EH2300314**	Price
.118	4.72 - 6.30	.980	.00	.200	GFF 3	SGFFH120L3	**EH2300315**	Price
.118	4.72 - 6.30	.980	.00	.200	GFF 3	SGFFH120R3	**EH2300316**	Price
.157	3.15 - 6.10	1.18	.100	.200	GFF 4	SGFFH80R4	**EH2300318**	Price
.157	5.90 - 19.70	1.18	.100	.200	GFF 4	SGFFH150L4	**EH2300319**	Price
.157	5.90 - 19.70	1.18	.100	.200	GFF 4	SGFFH150R4	**EH2300320**	Price
.197	3.15 - 6.38	1.26	.100	.200	GFF 5	SGFFH80L5	**EH2300321**	Price
.197	3.15 - 6.38	1.26	.100	.200	GFF 5	SGFFH80R5	**EH2300322**	Price
.197	5.90 - 23.60	1.38	.100	.200	GFF 5	SGFFH150L5	**EH2300323**	Price
.197	5.90 - 23.60	1.38	.100	.200	GFF 5	SGFFH150R5	**EH2300324**	Price
.236	3.54 - 5.90	1.26	.00	.310	GFF 6	SGFFH90R6	**EH2300326**	Price

IC20	Grade C2-C3 uncoated
IC354	Grade C5-C6 PVD coated (medium speed, high feed)
IC54	Grade C4-C5 uncoated
IC635	Grade C5-C6 CVD coated (low speed, high feed)

GFF F-CUT Inserts



F-CUT: Fixed location of cutting edge provides repeated accuracy of depth of cut for:

- Pre-cutoff position
- Grooving
- Post-cutoff position
- Accuracy of center height of cutting edge
- Stopper ensures repeatability
- Stopper limits load on jaws
- Flush top for unobstructed chipflow

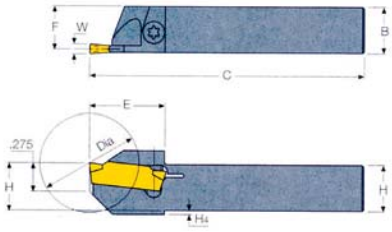


(1) GFF 3 R shown, right-hand for CCW rotation.
(2) GFF-3 L shown, left-hand for CW rotation.

W±.004 (in.)	Radius R (in.)	Iscar No. Designation	Iscar Grade	Order No.	Price
.083	.008	GFF2N	IC20	**EH6000006**	Price
.083	.008	GFF2N	IC354	**EH6002510**	Price
.083	.008	GFF2N	IC635	**EH6000008**	Price
.083	.008	GFF2N	IC656	**EH6000009**	Price
.083	.008	GFF2R	IC354	**EH6002511**	Price
.083	.008	GFF2R	IC635	**EH6000012**	Price
.083	.008	GFF2R	IC656	**EH6000013**	Price
.118	.012	GFF3N	IC20	**EH6000018**	Price
.118	.012	GFF3N	IC354	**EH6002512**	Price
.118	.012	GFF3N	IC635	**EH6000020**	Price
.118	.012	GFF3N	IC656	**EH6000021**	Price
.118	.012	GFF3R	IC354	**EH6002513**	Price
.118	.012	GFF3R	IC656	**EH6000025**	Price
.157	.010	GFF4N	IC20	**EH6000026**	Price
.157	.010	GFF4N	IC354	**EH6002514**	Price
.157	.010	GFF4N	IC54	**EH6000027**	Price
.157	.010	GFF4N	IC635	**EH6000028**	Price
.157	.010	GFF4N	IC656	**EH6000029**	Price
.197	.010	GFF5N	IC20	**EH6000030**	Price
.197	.010	GFF5N	IC354	**EH6002515**	Price
.197	.010	GFF5N	IC656	**EH6000033**	Price
.236	.010	GFF6N	IC20	**EH6000034**	Price
.236	.010	GFF6N	IC354	**EH6002516**	Price
.236	.010	GFF6N	IC635	**EH6000036**	Price
.236	.010	GFF6N	IC656	**EH6000037**	Price

External Shank Holders
Use with GDMW 2.4 inserts
PHSR/L

R = Right hand
L = Left hand
Application: External machining on Swiss automatics

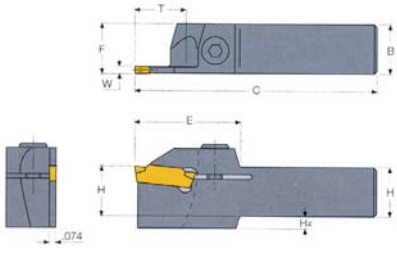


H x B (in.)	C (in.)	F (in.)	Dmax (in.)	E (in.)	H4 (in.)	Lock Screw	Wrench	Left			Right		
								Iscar No.	Order No.	Price	Iscar No.	Order No.	Price
1/2 x 1/2	5.9000	.437	1.000	.787	-	SR16-236/P	T-15/3	PHSL12.72	**EH2800756**	Price	PHSR12.72	**EH2800754**	Price
3/8 x 3/8	5.9000	.358	.787	.708	.1000	SR16-236/P	T-15/3	-	**-**	-	PHSR9.52	**EH2800753**	Price

See pages IMC-23 - IMC-24 for spare parts

PHGR/L

R = Right hand
L = Left hand
Application: external deep machining

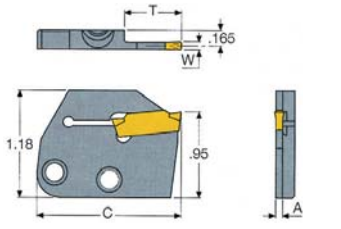


H x B (in.)	C (in.)	F (in.)	T (in.)	E (in.)	Lock Screw	Wrench	Left			Right		
							Iscar No.	Order No.	Price	Iscar No.	Order No.	Price
1 x 1	6.0000	.960	.670	1.300	SR M5 x 20	HW 4	-	**-**	-	PHGR25.42.4	**EH2800749**	Price
3/4 x 3/4	4.5000	.710	.670	1.300	SR M5 x 20	HW 4	PHGL192.4	**EH2800751**	Price	PHGR192.4	**EH2800748**	Price
5/8 x 5/8	4.3000	.590	.670	1.300	SR M5 x 20	HW 4	PHGL162.4	**EH2800721**	Price	PHGR162.4	**EH2800720**	Price

See pages IMC-23 - IMC-24 for spare parts

Exchangeable Adapter Seats
PADR/L

R = Right Hand
L = Left Hand
Adapter for PHAR/L & PHAPR/L



T (in.)	C (in.)	A (in.)	W (in.)	Left			Right		
				Iscar No.	Order No.	Price	Iscar No.	Order No.	Price
.64	1.61	.075	.0945	PADL2.4	**EH2800715**	Price	PADR2.4	**EH2800714**	Price

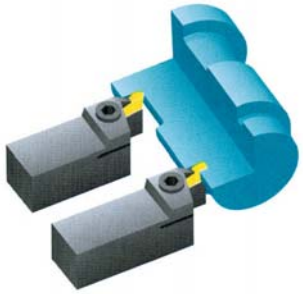
CUT-GRIP™

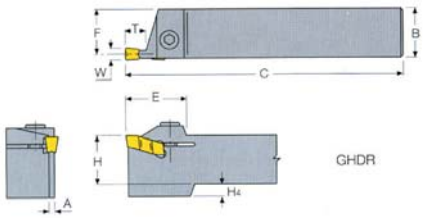
GHDR/L Toolholders for Turning and Grooving

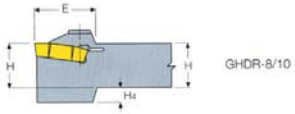


Tools for multidirectional machining. The GHD group is designed for grooving, threading, turning, profiling and parting with maximum stability. Tools with insert widths between .118, .250 and .315-.394 inch can be used for grooving depths of .394-.473 and 1.0 inch respectively.

GHDR/L
R = Right hand (shown)
L = Left hand





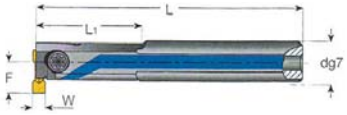


W (in.)	T (in.)	Iscar No.	H x B (in.)	C (in.)	F (in.)	A (in.)	E (in.)	H4 (in.)	Screw	Key	Inserts	Order No.	Price
.077 - .125	.320	GHDR12.72	1/2 x 1/2	4-1/2	.468	.062	1.030	.130	SR 76-1022	T-20/5	GIG, GIP, [GIPM, GIPA, GIPY, GIM, GIMY]	**EH2800141**	Price
.077 - .125	.320	GHDL12.72	1/2 x 1/2	4-1/2	.468	.062	1.030	.130	SR 76-1022	T-20/5	GIG, GIP, [GIPM, GIPA, GIPY, GIM, GIMY]	**EH2800077**	Price
.077 - .125	.330	GHDR192	3/4 x 3/4	4-1/2	.719	.062	1.030	-	SR M5 x 20	HW 4	GIG, GIP, [GIPM, GIPA, GIPY, GIM, GIMY]	**EH2800152**	Price
.110 - .157	.350	GHDR163	5/8 x 5/8	4-3/8	.583	.094	1.020	.157	SR M5 x 20	HW 4	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800146**	Price
.110 - .157	.350	GHDL163	5/8 x 5/8	4-3/8	.583	.094	1.020	.157	SR M5 x 20	HW 4	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800081**	Price
.110 - .157	.360	GHDR193	3/4 x 3/4	4-1/2	.703	.094	1.030	-	SR M5 x 20	HW 4	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800153**	Price
.110 - .157	.360	GHDL193	3/4 x 3/4	4-1/2	.703	.094	1.030	-	SR M5 x 20	HW 4	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800088**	Price
.110 - .157	.360	GHDR25.43	1 x 1	6	.953	.094	1.030	-	SR M5 x 25	HW 4	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800160**	Price
.110 - .157	.360	GHDL25.43	1 x 1	6	.953	.094	1.030	-	SR M5 x 25	HW 4	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800095**	Price
.110 - .157	.360	GHDR31.73	1-1/4 x 1-1/4	7	1.203	.094	1.020	-	SR M5 x 25	HW 4	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800171**	Price
.157 - .197	.400	GHDR194	3/4 x 3/4	4-1/2	.687	.126	1.030	-	SR M6 x 20	HW 5	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800154**	Price
.157 - .197	.400	GHDL194	3/4 x 3/4	4-1/2	.687	.126	1.030	-	SR M6 x 20	HW 5	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800089**	Price
.157 - .197	.400	GHDR25.44	1 x 1	6	.937	.126	1.060	-	SR M6 x 25	HW 5	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800161**	Price
.157 - .197	.400	GHDL25.44	1 x 1	6	.937	.126	1.060	-	SR M6 x 25	HW 5	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800096**	Price
.157 - .197	.400	GHDR31.74	1-1/4 x 1-1/4	7	1.187	.126	1.060	-	SR M6 x 25	HW 5	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800172**	Price
.157 - .197	.400	GHDL31.74	1-1/4 x 1-1/4	7	1.187	.126	1.060	-	SR M6 x 25	HW 5	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800107**	Price
.197 - .252	.500	GHDR195	3/4 x 3/4	4-1/2	.667	.165	1.160	-	SR M6 x 20	HW 5	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800737**	Price
.197 - .252	.500	GHDR25.45	1 x 1	6	.917	.165	1.160	-	SR M6 x 25	HW 5	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800739**	Price
.197 - .252	.500	GHDL25.45	1 x 1	6	.917	.165	1.160	-	SR M6 x 25	HW 5	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800740**	Price
.197 - .252	.500	GHDR31.75	1-1/4 x 1-1/4	7	1.167	.165	1.160	-	SR M6 x 25	HW 5	GIP, GIF, [GIPA, GIPY, GITM, GIM, GIMF, GIMY, GPV]	**EH2800745**	Price
.260 - .327	1.000	GHDR25.48	1 x 1	6	.884	.232	1.580	.299	SR M6 x 25	HW 5	GIF8, [GIPA/GIDA8, GDMY8, GDMF, GDMU]	**EH2800162**	Price
.260 - .327	1.000	GHDL25.48	1 x 1	6	.884	.232	1.580	.299	SR M6 x 25	HW 5	GIF8, [GIPA/GIDA8, GDMY8, GDMF, GDMU]	**EH2800097**	Price
.260 - .327	1.000	GHDR38.18	1-1/2 x 1-1/2	7	1.384	.232	1.580	-	SR M6 x 25	HW 5	GIF8, [GIPA/GIDA8, GDMY8, GDMF, GDMU]	**EH2800179**	Price
.275 - .327	1.440	GHDL31.7836	1-1/4 x 1-1/4	7	1.126	.248	2.140	.315	SR M8 x 30	HW 5	GIF8, [GIPA/GIDA8, GDMY8, GDMF, GDMU]	**EH2800811**	Price
.335 - .408	1.000	GHDR25.410	1 x 1	6	.854	.291	1.700	.299	SR M8 x 30	HW 6	GIF10, [GDPY10/11, GDPU10/11]	**EH2800159**	Price
.335 - .408	1.000	GHDR31.710	1-1/4 x 1-1/4	7	1.104	.291	1.700	-	SR M8 x 30	HW 6	GIF10, [GDPY10/11, GDPU10/13]	**EH2800170**	Price

† Upper jaw is coated with a hard layer to deflect aluminum chips.
(Additional alternative inserts not shown)
See pages IMC-23 - IMC-24 for spare parts

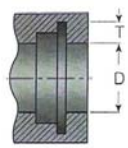
CUT-GRIP™ GEHIR





W Width	d Shank Dia.	Iscar No.	Dmin	Tmax	L OAL	L1 Proj.	F Dist. Across Flats	H Center Hght.	A Shim seat	Screw	Coolant Inlet	Insert	Order No.	Price
.075 - .095	3/8	GEHIR9.5132	.4920	.094	5	-	.295	.187	.063	SR 16-236	.138	GEMI,GEPI	**EH2801048**	Price
.075 - .095	1/2	GEHIR12.7142	.5510	.102	6	1.38	.358	.250	.063	SR 16-236	.250	GEMI,GEPI	**EH2801050**	Price
.075 - .095	5/8	GEHIR15.9132	.4920	.094	5	.86	.413	.287	.063	SR 16-236	PL 062(2)	GEMI,GEPI	**EH2801143**	Price
.075 - .095	5/8	GEHIR15.9162	.6300	.118	6	1.57	.433	.287	.063	SR 16-212	PL 062(2)	GEMI,GEPI	**EH2801151**	Price
.095 - .126	1/2	GEHIR12.7143	.5510	.102	6	1.38	.358	.250	.079	SR 16-236	.250	GEMI,GEPI	**EH2801139**	Price
.095 - .126	5/8	GEHIR15.9133	.4920	.094	5	.86	.413	.287	.079	SR 16-236	PL 062(2)	GEMI,GEPI	**EH2801052**	Price

R = Right hand (shown)



Key: torx T15/5 (1) torx T20/5 (2) plastic seals with M6 thread
Left hand available on request.
See pages IMC-23 - IMC-24 for spare parts

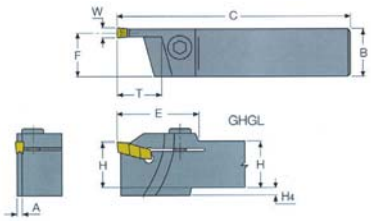
CUT-GRIP™ GHGR/L for Deep Turning and Grooving

ISO 9001

Tools for multidirectional machining.
The GHG group is designed for grooving, threading, turning, profiling and parting with maximum stability.
GHGR/L



R = Right hand



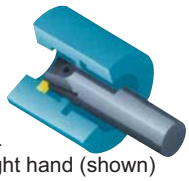


L = Left hand (shown)

W (in.)	T (in.)	Iscar No.	H x B (in.)	C (in.)	F (in.)	A (in.)	E (in.)	H4 (in.)	Screw	Key	Inserts	Order No.	Price
.077 - .118	.670	GHGR192	3/4 x 3/4	4-1/2	.717	.065	1.230	-	SR M5 x 20	HW 4	GIP, [GIPA, GIM, GIG, GIMY]	**EH2800610**	Price
.077 - .118	.670	GHGR25.42	1 x 1	6	.967	.065	1.300	-	SR M5 x 20	HW 4	GIP, [GIPA, GIM, GIG, GIMY]	**EH2800606**	Price
.118 - .157	.790	GHGR163	5/8 x 5/8	4-3/8	.578	.098	1.420	.157	SR M6 x 20	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800259**	Price
.118 - .157	.790	GHGR193	3/4 x 3/4	4-1/2	.703	.096	1.420	-	SR M6 x 20	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800261**	Price
.118 - .157	.790	GHGL193	3/4 x 3/4	4-1/2	.703	.096	1.420	-	SR M6 x 20	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800236**	Price
.118 - .157	.790	GHGR25.43	1 x 1	6	.953	.096	1.420	-	SR M6 x 25	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800267**	Price
.118 - .157	.790	GHGL25.43	1 x 1	6	.953	.096	1.420	-	SR M6 x 25	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800242**	Price
.157 - .197	.790	GHGR194	3/4 x 3/4	4-1/2	.685	.132	1.420	-	SR M6 x 20	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800262**	Price
.157 - .197	.790	GHGR25.44	1 x 1	6	.935	.132	1.420	-	SR M6 x 25	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800268**	Price
.157 - .197	.790	GHGL25.44	1 x 1	6	.935	.132	1.420	-	SR M6 x 25	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800243**	Price
.157 - .197	1.000	GHGR25.4425	1 x 1	6	.931	.140	1.600	-	SR M6 x 25	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800653**	Price
.197 - .257	1.000	GHGR25.45	1 x 1	6	.918	.167	1.600	-	SR M6 x 25	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800269**	Price
.197 - .257	1.000	GHGL25.45	1 x 1	6	.918	.167	1.600	-	SR M6 x 25	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800244**	Price
.197 - .257	1.000	GHGL31.75	1-1/4 x 1-1/4	7	1.170	.167	1.600	-	SR M6 x 25	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800252**	Price
.236 - .315	1.180	GHGR25.4630	1 x 1	6	.893	.212	1.760	-	SR M6 x 25	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800651**	Price
.236 - .315	1.180	GHGL25.4630	1 x 1	6	.893	.212	1.760	-	SR M6 x 25	HW 5	GIP, GIF, [GIPY, GITM, GIPA, GIM, GVP, GIMF, GIMY]	**EH2800652**	Price

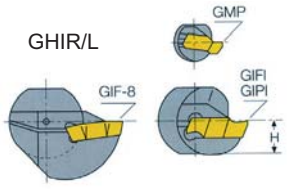
(Additional alternative inserts not shown.)
See pages IMC-23 - IMC-24 for spare parts

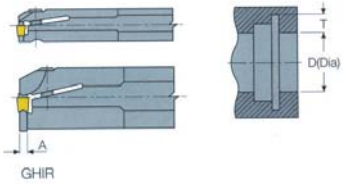
CUT-GRIP™ GHIR/L for Internal Machining Boring Bars

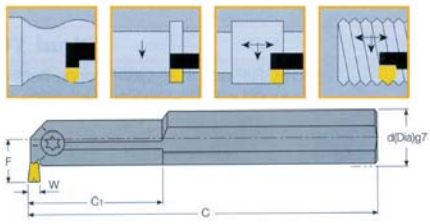


GHIR/L
R = Right hand (shown)
L = Left hand

GHIR/L





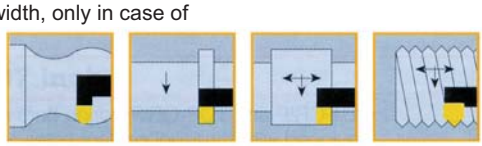


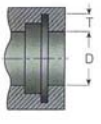
Width W (in.)	Shank Dia. d (in.)	Iscar No.	Min. Bore D (in.)	Max. Bore T (in.)	OAL C (in.)	Proj. C1	Dist. Across Flats F (in.)	Center Hght. H (in.)	Shim Seat A	Screw	Inserts	Order No.	Price
.078 - .137	3/4	GHIR193	.787	.177	8	1.50	.571	.339	.065	SR 76-1021	GIPI, GIFI, [GIMIY]	**EH2800336**	Price
.078 - .137	3/4	GHIL193	.787	.177	8	1.50	.571	.339	.065	SR 76-1021	GIPI, GIFI, [GIMIY]	**EH2800291**	Price
.098 - .157	1-1/4	GHIR31.74	1.480	.197	10	-	.827	.571	.085	SR 76-1022	GIPI, GIFI, [GIMIY]	**EH2800353**	Price
.098 - .157	1-1/4	GHIL31.74	1.480	.197	10	-	.827	.571	.085	SR 76-1022	GIPI, GIFI, [GIMIY]	**EH2800308**	Price
.098 - .157	1-1/2	GHIL38.14	1.730	.197	12	-	.950	.669	.085	SR 76-1022	GIPI, GIFI, [GIMIY]	**EH2800314**	Price
.118 - .189	3/4	GHIR194	.787	.177	8	1.50	.571	.339	.104	SR 76-1021	GIPI, GIFI, [GIMIY]	**EH2800337**	Price
.118 - .189	3/4	GHIL194	.787	.177	8	1.50	.571	.339	.104	SR 76-1021	GIPI, GIFI, [GIMIY]	**EH2800292**	Price
.157 - .252	1	GHIR25.46	.984	.197	8	2.00	.689	.461	.144	SR 76-1022	GIPI, GIFI, [GIMIY]	**EH2800346**	Price
.157 - .252	1	GHIL25.46	.984	.197	8	2.00	.689	.461	.144	SR 76-1022	GIPI, GIFI, [GIMIY]	**EH2800301**	Price
.157 - .252	1-1/4	GHIR31.76	1.520	.252	10	-	.874	.571	.144	SR 76-1022	GIPI, GIFI, [GIMIY]	**EH2800354**	Price
.157 - .252	1-1/2	GHIR38.16	1.850	.315	12	-	1.063	.669	.144	SR 76-1022	GIPI, GIFI, [GIMIY]	**EH2800360**	Price

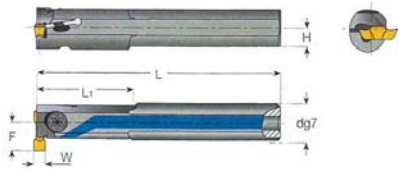
Supplied keys: (1) torx key T-15/5. (2) hex key HW 5. Other bars: torx key T-20/5.
(Additional alternative inserts not shown.)
See pages IMC-23 - IMC-24 for spare parts

CUT-GRIP™ Internal Machining Boring Bars with Coolant

- Right hand shown
- Key: torx T15/5 (1) torx T20/5 (2) plastic seals with M6 thread (3)
  The pocket can carry inserts up to .118" width, only in case of w>.079" cutting load should be restricted
- Left hand available on request







W Width	d Shank Dia. (in.)	Iscar No.	Dmin	Tmax	L OAL	L1 Proj.	F Dist. Across Flats	H Center Hght.	Screw	Coolant Inlet Dia.	Inserts	Order No.	Price
w>.079	3/8	GEHIMR9.513	.4920	.098	5	-	.300	.187	SR 16-236	.138	GEMI,GEPI	**EH2801191**	Price
w>.079	1/2	GEHIMR12.714	.5510	.098	6	1.38	.354	.250	SR 16-236	.157	GEMI,GEPI	**EH2801192**	Price
w>.079	5/8	GEHIMR15.913	.4920	.098	5	.860	.417	.287	SR 16-236	PL 062(2)	GEMI,GEPI	**EH2801193**	Price
w>.079	5/8	GEHIMR15.916	.6300	.098	6	1.57	.413	.287	SR 16-212	PL 062(2)	GEMI,GEPI	**EH2801195**	Price

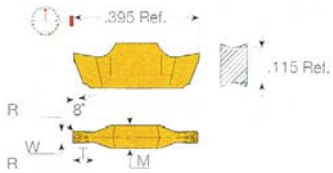
See pages IMC-23 - IMC-24 for spare parts

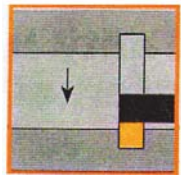
CUT-GRIP™ Precision Inserts for Internal Grooving

- Precision-ground
- Double-ended
- Internal grooving and turning in small diameters from .49"
- Low feeds

Repeatability ±.001







Grade chart on page IMC-2

W (in.)	R (in.)	T (in.)	Iscar M	Iscar No. Designation	Grade	Order No.	Price
.039	.004	.063	.071	GEPI1.00-0.10	IC908	**EH6403329**	Price
.047	-	.071	.071	GEPI1.20-0.00	IC908	**EH6403335**	Price
.049	.004	.079	.071	GEPI1.25-0.10	IC908	**EH6403337**	Price
.055	-	.079	.071	GEPI1.40-0.00	IC908	**EH6403339**	Price
.062	.006	.079	.071	GEPI1.57-0.15	IC908	**EH6403345**	Price
.067	.002	.098	.071	GEPI1.70-0.05	IC908	**EH6403347**	Price
.070	.006	.098	.071	GEPI1.78-0.15	IC908	**EH6403349**	Price
.077	.004	.098	.071	GEPI1.96-0.10	IC908	**EH6403353**	Price
.079	.039	.197	.071	GEPI2.00-1.00	IC908	**EH6403363**	Price

W (in.)	R (in.)	T (in.)	Iscar M	Iscar No. Designation	Grade	Order No.	Price
.079	.004	.197	.071	GEPI2.00-0.10	IC908	**EH6403357**	Price
.087	.004	.197	.071	GEPI2.22-0.10	IC908	**EH6403367**	Price
.094	.004	.197	.087	GEPI2.39-0.10	IC528	**EH6403369**	Price
.094	.006	.197	.087	GEPI2.39-0.15	IC908	**EH6403199**	Price
.098	.008	.197	.087	GEPI2.50-0.20	IC908	**EH6403203**	Price
.118	.008	.197	.087	GEPI3.00-0.20	IC908	**EH6403207**	Price
.118	.059	.197	.087	GEPI3.00-1.50	IC908	**EH6403209**	Price
.125	.008	.197	.087	GEPI3.18-0.20	IC908	**EH6403374**	Price
.125	.059	.197	.087	GEPI3.18-1.59	IC908	**EH6403376**	Price

CUT-GRIP™ GIF Precision Inserts for External Grooving

Repeatability ±.001

• Precision-ground • Double-ended • F-type chipformer (E-Honed)

GRIP SYSTEM Groove-Turn

Multifunction Operations

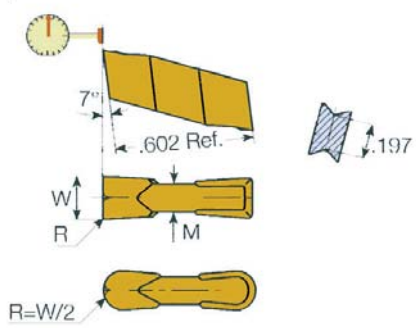
The Groove-Turn tools are multifunction tools, able to operate in a sequence of grooving and turning modes. Moving from turning to grooving requires consideration of the basic Grip principle, thereby eliminating the possibility of insert breakage. In this situation one must release the side deflection which is necessary in turning, but not recommended in grooving.

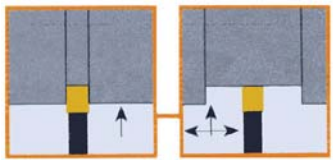
The following machining sequence is suggested:

After completing the longitudinal turning, but before starting the grooving, the side deflection must be released. Move the tool in the direction opposite that of feed, approximately .004", and return to the original position without side load.

Then, after the deflection has been released and the holder is perpendicular to the workpiece, the grooving operation may start.







W (in.)	R (in.)	M (in.)	Iscar No. Designation	Grade	Order No.	Price
.197	.016	157	GIF5.00E-0.40	IC20	**EH6400148**	Price

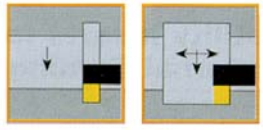
CUT-GRIP™ GIPI Precision Inserts for Internal Turning and Grooving

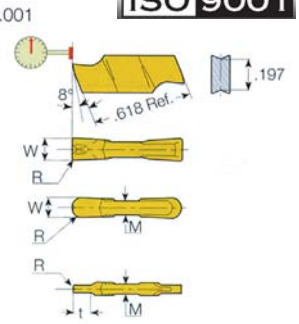
ISO 9001

• Precision-ground • Double-ended • P-type chipformer
• Medium feeds • Minimum bore: .787"

Repeatability ±.001







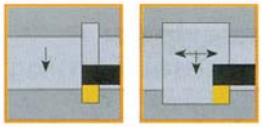
W (in.)	R (in.)	T (in.)	M (in.)	Iscar No. Designation	Grade	Order No.	Price
.062	.006	.098	.087	GIPI1.57-0.15	IC20	**EH6401204**	Price
.087	.004	.098	.087	GIPI2.22-0.10	IC20	**EH6401246**	Price
.094	.047	.236	.094	GIPI2.39-1.20	IC20	**EH6401260**	Price
.106	.004	-	.094	GIPI2.70-0.10	IC20	**EH6401268**	Price
.125	.063	-	.094	GIPI3.18-1.59	IC20	**EH6401309**	Price
.125	.008	-	.094	GIPI3.18-0.20	IC20	**EH6401305**	Price
.156	.008	-	.126	GIPI3.96-0.20	IC20	**EH6401342**	Price

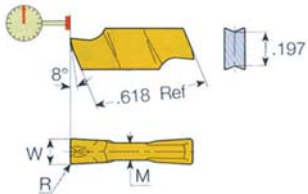
CUT-GRIP™ GIPI Precision Inserts for Internal Turning and Grooving

- Precision-ground
- Double-ended
- Medium feed
- P-type chipformer
- Minimum bore: .787" (E Honed)

Repeatability ±.001







W (in.)	R (in.)	M (in.)	Iscar No. Designation	Grade	Order No.	Price
.118	.016	.094	GIPI3.00E-0.40	IC20	**EH6401298**	Price

DO-GRIP DGFH Parting and Grooving Blades

HELI-GRIP

For DO-GRIP Inserts

- Standard						
Height (in.)	Insert Wdth. W (in.)	Length (in.)	Use Insert(s)	Iscar No.	Order No.	Price
1.02	.157	4.33	DGL/N/R 4.., GRIP 4.., HFPR 4..	DGFH 26-4	**EH2301243**	Price
1.26	.236/.250	5.90	DGL/N/R 6.., GRIP 6.., HFPR 6..	DGFH 32-6	**EH2301268**	Price
1.26	.157	5.90	DGL/N/R 4.., GRIP 4.., HFPR 4..	DGFH 32-4	**EH2301246**	Price
1.26	.197	5.90	DGL/N/R 5.., GRIP 5.., HFPR 5..	DGFH 32-5	**EH2301247**	Price
1.77	.236/.250	8.86	DGL/N/R 6.., GRIP 6.., HFPR 6..	DGFH 45-6	**EH2301325**	Price
1.77	.157	8.86	DGL/N/R 4.., GRIP 4.., HFPR 4..	DGFH 45-4	**EH2301323**	Price



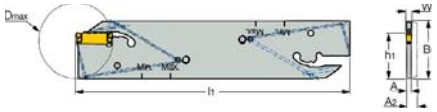
Extractor order number.: EH7001923

DO-GRIP DGFH-JHP Parting and Grooving Blades

JETCUT

For DO-GRIP Inserts

- Coolant channel for low and high pressure coolant





Insert Width	OAL	Use Insert(s)	Iscar No.	Order No.	Price
1.9mm	150mm	DGL/N/R 2.., GRIP 2.., HFPR 2..	DGFH 32-2-JHP	**EH2302645**	Price
3mm	150mm	DGL/N/R 3.., GRIP 3.., HFPR 3..	DGFH 32-3-JHP	**EH2302515**	Price
4mm	150mm	DGL/N/R 4.., GRIP 4.., HFPR 4..	DGFH 32-4-JHP	**EH2302770**	Price
5mm	150mm	DGL/N/R 5.., GRIP 5.., HFPR 5..	DGFH 32-5-JHP	**EH2302771**	Price
6mm	160mm	DGL/N/R 6.., GRIP 6.., HFPR 6..	DGFH 32-6-JHP	**EH2302772**	Price

Extractor order number.: EH7007212

DO-GRIP DGT R/L...Do-Grip Integral Shank Parting and Grooving Toolholders

Right hand shown

JHP-SL tools have channels for high pressure coolant and a side clamping mechanism



Type - Integral Shank Parting and Grooving Tools										
Shank Size (in.)	Insert Width (in.)	Length (in.)	Dmax (in.)	Use Insert(s)	Left			Right		
					Iscar No.	Order No.	Price	Iscar No.	Order No.	Price
1/2	.075	4.500	1.38	DG. 1.../DG. 2..	DGTL 12.7-2	**EH2301291**	Price	DGTR 12.7-2	**EH2301281**	Price
1/2	.118	4.500	1.38	DG. 1.../DG. 3..	DGTL 12.7-3	**EH2301294**	Price	DGTR 12.7-3	**EH2301284**	Price
3/4	.075	4.500	1.38	DG. 1.../DG. 2..	DGTL 19-2	**EH2301293**	Price	DGTR 19-2	**EH2301283**	Price
3/4	.118	4.500	1.38	DG. 1.../DG. 3..	DGTL 19-3	**EH2301296**	Price	DGTR 19-3	**EH2301286**	Price
3/4	.157	4.500	2.00	DG. 4.../GRIP 4..	DGTL 19-4	**EH2301298**	Price	DGTR 19-4	**EH2301288**	Price
1	.118	6.000	1.38	DG. 1.../DG. 3..	DGTL 25.4-3	**EH2301297**	Price	DGTR 25.4-3	**EH2301287**	Price
1	.157	6.000	2.00	DG. 4.../GRIP 4..	DGTL 25.4-4	**EH2301299**	Price	DGTR 25.4-4	**EH2301289**	Price
1	.189	6.000	3.00	DG. 5.../GRIP 5..	DGTL 25.4-5	**EH2301375**	Price	DGTR 25.4-5	**EH2301373**	Price
1	.236	6.000	3.00	DG. 6.../GRIP 6..	DGTL 25.4-6	**EH2301376**	Price	DGTR 25.4-6	**EH2301377**	Price

Type - Integral Shank Reinforced Parting and Grooving Tools										
Shank Size (in.)	Insert Width (in.)	Length (in.)	Dmax (in.)	Use Insert(s)	Left			Right		
					Iscar No.	Order No.	Price	Iscar No.	Order No.	Price
3/4	.075	5.906	2.36	DG. 2...	DGTL 19B-2XL-D60	**EH2302851**	Price	DGTR 19B-2XL-D60	**EH2302852**	Price
3/4	.118	5.906	2.56	DG. 3...	DGTL 19B-3XL-D65	**EH2302810**	Price	DGTR 19B-3XL-D65	**EH2302809**	Price
1	.079	5.906	2.36	DG. 2...	DGTL 25.4B-2XL-D60	**EH2302853**	Price	DGTR 25.4B-2XL-D60	**EH2302854**	Price
1	.118	5.906	2.56	DG. 3...	DGTL 25.4B-3XL-D65	**EH2302991**	Price	-	**-**	-
1	.118	5.906	2.56	DG. 4.../GRIP 4..	-	**-**	-	DGTR 25.4B-3XL-D65	**EH2302992**	Price

Type - Parting & Grooving Holder w/Coolant Channel										
Shank Size (in.)	Insert Width (in.)	Length (in.)	Dmax (in.)	Use Insert(s)	Left			Right		
					Iscar No.	Order No.	Price	Iscar No.	Order No.	Price
1/2	.075	3.937	.94	DG. 2...	-	**-**	-	DGTR 12.7B-2D24-JHP-SL	**EH2303003**	Price
1/2	.118	3.937	.94	DG. 3...	DGTL 12.7B-3D24-JHP-SL	**EH2303000**	Price	DGTR 12.7B-3D24-JHP-SL	**EH2303004**	Price
5/8	.075	4.724	1.38	DG. 2...	DGTL 16B-2D35-JHP-SL	**EH2393676**	Price	DGTR 16B-2D35-JHP-SL	**EH2393674**	Price
3/4	.075	5.512	1.38	DG. 2...	DGTL 19B-2D35-JHP-SL	**EH2303001**	Price	DGTR 19B-2D35-JHP-SL	**EH2303005**	Price
3/4	.118	5.512	1.57	DG. 3...	DGTL 19B-3D40-JHP-SL	**EH2303002**	Price	DGTR 19B-3D40-JHP-SL	**EH2303006**	Price

HELI-GRIP External Holder for Turning, Grooving and Parting

Right hand shown



Shank (in.)	Length (in.)	Width (in.)	Head Length (in.)	Screw	Key	Use Insert(s)	Left			Right		
							Iscar No.	Order No.	Price	Iscar No.	Order No.	Price
1/2 x 1/2	5-3/8	.118	1.18	SR M5 x 20	Hex HW 4	HGL/N/R 3.., GRIP 3..	HELIL12.73T12	**EH2500631**	Price	HELIR12.73T12	**EH2500630**	Price
3/4 x 3/4	5-1/2	.118	1.14	SR M5 x 20	Hex HW 4	HGL/N/R 3.., GRIP 3..	HELIL193T12	**EH2500523**	Price	HELIR193T12	**EH2500552**	Price
3/4 x 3/4	5-1/2	.118	1.43	SR M6 x 20	Hex HW 5	HGL/N/R 3.., GRIP 3..	HELIL193T20	**EH2500549**	Price	HELIR193T20	**EH2500526**	Price
3/4 x 3/4	5-1/2	.157	1.69	SR M6 x 20	Hex HW 5	DGL/N/R 4.., GRIP 4.., HFPR 4..	HELIL194T25	**EH2500550**	Price	HELIR194T25	**EH2500527**	Price
3/4 x 3/4	5-1/2	.157	1.14	SR M6 x 20	Hex HW 5	DGL/N/R 4.., GRIP 4.., HFPR 4..	HELIL194T12	**EH2500524**	Price	HELIR194T12	**EH2500553**	Price
3/4 x 3/4	5-1/2	.197	1.14	SR M6 x 20	Hex HW 5	DGL/N/R 5.., GRIP 5.., HFPR 5..	-	**-**	-	HELIR195T12	**EH2500554**	Price
3/4 x 3/4	5-1/2	.197	1.65	SR M6 x 20	Hex HW 5	DGL/N/R 5.., GRIP 5.., HFPR 5..	-	**-**	-	HELIR195T25	**EH2500528**	Price
1 x 1	6	.118	1.14	SR M5 x 25	Hex HW 4	HGL/N/R 3.., GRIP 3..	HELIL25.43T12	**EH2500555**	Price	HELIR25.43T12	**EH2500557**	Price
1 x 1	6	.157	1.14	SR M6 x 25	Hex HW 5	DGL/N/R 4.., GRIP 4.., HFPR 4..	HELIL25.44T12	**EH2500447**	Price	HELIR25.44T12	**EH2500446**	Price
1 x 1	6	.197	1.14	SR M6 x 25	Hex HW 5	DGL/N/R 5.., GRIP 5.., HFPR 5..	HELIL25.45T12	**EH2500449**	Price	HELIR25.45T12	**EH2500448**	Price
1 x 1	6	.236	1.14	SR M6 x 25	Hex HW 5	DGL/N/R 6.., GRIP 6.., HFPR 6..	HELIL25.46T12	**EH2500451**	Price	HELIR25.46T12	**EH2500450**	Price
1 x 1	6	.118	1.43	SR M6 x 25	Hex HW 5	HGL/N/R 3.., GRIP 3..	HELIL25.43T20	**EH2500556**	Price	HELIR25.43T20	**EH2500558**	Price
1 x 1	6	.157	1.65	SR M6 x 25	Hex HW 5	DGL/N/R 4.., GRIP 4.., HFPR 4..	HELIL25.44T25	**EH2500453**	Price	HELIR25.44T25	**EH2500452**	Price
1 x 1	6	.197	1.65	SR M6 x 25	Hex HW 5	DGL/N/R 5.., GRIP 5.., HFPR 5..	HELIL25.45T25	**EH2500455**	Price	HELIR25.45T25	**EH2500454**	Price
1 x 1	6	.236	2.02	SR M6 x 25	Hex HW 5	DGL/N/R 6.., GRIP 6.., HFPR 6..	HELIL25.46T30	**EH2500457**	Price	HELIR25.46T30	**EH2500456**	Price
1-1/4 x 1-1/4	7	.118	1.43	SR M6 x 25	Hex HW 5	HGL/N/R 3.., GRIP 3..	HELIL31.73T20	**EH2500609**	Price	HELIR31.73T20	**EH2500608**	Price
1-1/4 x 1-1/4	7	.157	1.65	SR M6 x 25	Hex HW 5	DGL/N/R 4.., GRIP 4.., HFPR 4..	HELIL31.74T25	**EH2500611**	Price	HELIR31.74T25	**EH2500610**	Price
1-1/4 x 1-1/4	7	.197	1.65	SR M6 x 25	Hex HW 5	DGL/N/R 5.., GRIP 5.., HFPR 5..	HELIL31.75T25	**EH2500613**	Price	HELIR31.75T25	**EH2500612**	Price
1-1/4 x 1-1/4	7	.236	2.02	SR M6 x 25	Hex HW 5	DGL/N/R 6.., GRIP 6.., HFPR 6..	HELIL31.76T30	**EH2500615**	Price	HELIR31.76T30	**EH2500614**	Price

HFF R/L... HELI-FACE Blades for Face Machining

Left hand tool shown



Right/Left Hand - Right						
Insert Width W (in.)	Dia. Min.-Max. (in.)	T-Max (in.)	Use Insert(s)	Iscar No.	Order No.	Price
.157	1.89 - 2.362	.984	DGL/N/R 4.., GRIP 4.., HFPR 4..	HFFR484T25	**EH2500348**	Price
.157	2.362 - 2.952	.984	DGL/N/R 4.., GRIP 4.., HFPR 4..	HFFR604T25	**EH2500360**	Price
.157	2.952 - 5.511	1.181	DGL/N/R 4.., GRIP 4.., HFPR 4..	HFFR754T30	**EH2500362**	Price
.157	5.511 - No Limit	1.181	DGL/N/R 4.., GRIP 4.., HFPR 4..	HFFR1404T30	**EH2500350**	Price
.197	2.756-3.740	1.259	DGL/N/R 5.., GRIP 5.., HFPR 5..	HFFR705T32	**EH2500352**	Price
.197	3.740 - 5.118	1.378	DGL/N/R 5.., GRIP 5.., HFPR 5..	HFFR955T35	**EH2500364**	Price
.197	5.118 - 7.086	1.496	DGL/N/R 5.., GRIP 5.., HFPR 5..	HFFR1305T38	**EH2500366**	Price
.197	7.086 - No Limit	1.496	DGL/N/R 5.., GRIP 5.., HFPR 5..	HFFR1805T38	**EH2500354**	Price
.236/.250	3.543 - 7.086	1.259	DGL/N/R 6.., GRIP 6.., HFPR 6..	HFFR906T32	**EH2500356**	Price
.236/.250	7.086 - 15.74	1.469	DGL/N/R 6.., GRIP 6.., HFPR 6..	HFFR1806T38	**EH2500358**	Price

Right/Left Hand - Left						
Insert Width W (in.)	Dia. Min.-Max. (in.)	T-Max (in.)	Use Insert(s)	Iscar No.	Order No.	Price
.157	1.89 - 2.362	.984	HGPL 4.., HFPL 4..	HFFL484T25	**EH2500349**	Price
.157	2.952 - 5.511	1.181	HGPL 4.., HFPL 4..	HFFL754T30	**EH2500363**	Price
.157	5.511 - No Limit	1.181	HGPL 4.., HFPL 4..	HFFL1404T30	**EH2500351**	Price
.197	5.118 - 7.086	1.496	HGPL 5.., HFPL 5..	HFFL1305T38	**EH2500367**	Price
.197	7.086 - No Limit	1.496	HGPL 5.., HFPL 5..	HFFL1805T38	**EH2500355**	Price
.236/.250	3.543 - 7.086	1.259	HGPL 6.., HFPL 6..	HFFL906T32	**EH2500357**	Price
.236/.250	7.086 - 15.74	1.469	HGPL 6.., HFPL 6..	HFFL1806T38	**EH2500359**	Price

Heli-Face Adapters for Integral Face Grooving and Turning



Right/Left Hand - Right											
Iscar No.	Width (in.)	Length (in.)	TMax (in.)	DMax (in.)	DMin (in.)	Head Length L1 (in.)	Lock Screw	Wrench	Uses Inserts	Order No.	Price
HFAIR100C6T32	.236	2.8740	1.260	7.087	3.937	1.535	SR M5 x 20	EDG-33B	HFPR/L 6004; HRPR/L 6030; HGPL 6...Y	**EH2550026**	Price
HFAIR404T20	.157	2.6380	.787	1.890	1.575	1.299	SR M5 x 20	Hex HW 4.0	HFPR/L 4004; HRPR/L 4020; GRIP 4007; DGN 4...; HGPL 4...Y	**EH2550071**	Price
HFAIR484T20	.157	2.6380	.787	2.362	1.890	1.299	SR M5 x 20	Hex HW 4.0	HFPR/L 4004; HRPR/L 4020; GRIP 4007; DGN 4...; HGPL 4...Y	**EH2550072**	Price
HFAIR55C5T25	.197	2.5980	.984	2.756	2.165	1.260	SR M5 x 20	EDG-33B	DGL/N/R 5.., GRIP 5.., HFPR 5..	**EH2550021**	Price
HFAIR604T25	.157	2.6380	.984	2.953	2.362	1.299	SR M5 x 20	Hex HW 4.0	HFPR/L 4004; HRPR/L 4020; GRIP 4007; DGN 4...; HGPL 4...Y	**EH2550073**	Price
HFAIR70C5T25	.197	2.5980	.984	3.740	2.756	1.260	SR M5 x 20	EDG-33B	HFPR/L 5004; HRPR/L 5025; HGPL 5...Y	**EH2550022**	Price

Right/Left Hand - Left											
Iscar No.	Width (in.)	Length (in.)	TMax (in.)	DMax (in.)	DMin (in.)	Head Length L1 (in.)	Lock Screw	Wrench	Uses Inserts	Order No.	Price
HFAIL100C6T32	.236	2.8740	1.260	3.937	2.756	1.535	SR M5 x 20	EDG-33B	HFPR/L 6004; HRPR/L 6030; HGPL 6...Y	**EH2550028**	Price
HFAIL344T18	.157	2.6380	.709	1.575	1.339	1.299	SR M5 x 20	Hex HW 4.0	HFPR/L 4004; HRPR/L 4020; GRIP 4007; DGN 4...; HGPL 4...Y	**EH2550062**	Price
HFAIL404T20	.157	2.6380	.709	1.890	1.575	1.299	SR M5 x 20	Hex HW 4.0	HFPR/L 4004; HRPR/L 4020; GRIP 4007; DGN 4...; HGPL 4...Y	**EH2550063**	Price
HFAIL484T20	.157	2.6380	.709	2.362	1.890	1.299	SR M5 x 20	Hex HW 4.0	HFPR/L 4004; HRPR/L 4020; GRIP 4007; DGN 4...; HGPL 4...Y	**EH2550064**	Price
HFAIL55C5T25	.197	2.5980	.984	2.756	2.165	1.260	SR M5 x 20	EDG-33B	HFPR/L 5004; HRPR/L 5025; HGPL 5...Y	**EH2550023**	Price
HFAIL604T25	.157	2.6380	.984	2.953	2.362	1.299	SR M5 x 20	Hex HW 4.0	HFPR/L 4004; HRPR/L 4020; GRIP 4007; DGN 4...; HGPL 4...Y	**EH2550065**	Price
HFAIL70C5T25	.197	2.5980	.984	3.740	2.756	1.260	SR M5 x 20	EDG-33B	HFPR/L 5004; HRPR/L 5025; HGPL 5...Y	**EH2550024**	Price

Heli-Face HAPL Adapters

Right/Left Hand - Left				
H x B (in.)	Length (in.)	Uses Adapters	Order No.	Price
1-1/4 x 1-1/4	5-43/64	HFAER/L, HGAER/L, HFAIR/L, HGAIR/L	**EH2500429**	Price
1 x 1	4-7/8	HFAER/L, HGAER/L, HFAIR/L, HGAIR/L	**EH2500427**	Price

Right/Left Hand - Right				
H x B (in.)	Length (in.)	Uses Adapters	Order No.	Price
1-1/4 x 1-1/4	5-43/64	HFAER/L, HGAER/L, HFAIR/L, HGAIR/L	**EH2500428**	Price
1 x 1	4-7/8	HFAER/L, HGAER/L, HFAIR/L, HGAIR/L	**EH2500426**	Price

Right/Left Hand - Universal				
H x B (in.)	Length (in.)	Uses Adapters	Order No.	Price
1 x 1	5-1/2	HFAER/L, HGAER/L, HFAIR/L, HGAIR/L	**EH2500419**	Price

Heli-Face Holders for Adapters

The HAI boring bars can be used with right and left-hand adapters.



H x B (in.)	Length (in.)	Insert Height (in.)	Iscar No.	Screw	Hex Key	Coolant Y/N	Order No.	Price
3/4	5	.338	HAI19	SR 14-519	T-20/3	N	**EH2500422**	Price
1	6	.460	HAI25.4C	SR 14-519	T-20/3	Y	**EH2500423**	Price

HELIDO 845 LINE H490 End Mills



Double-Sided Inserts with 4 Helical Cutting Edges for 90º Milling

- Due to its strong construction, unique chip deflector with positive cutting angles and excellent grade combinations, this new family features hight durability, low cutting forces and long tool life
- HELIDO tools can be used for machining steel, stainless steel, and cast iron at very high machining parameters

Cutter Dia. (in.)	Iscar No.	No. of Inserts	Head Length (in.)	OAL (in.)	Depth of Cut	Shank Dia. (in.)	Locking Screw	Torx Key	Uses Insert	Order No.	Price
5/8	H490E90AXD.622W.6209	2	1.00	3.25	.315	5/8	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105270**	Price
5/8	H490E90AXD.622C.6209B	2	1.50	6.00	.315	5/8	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105879**	Price
3/4	H490E90AXD.752W.7509	2	1.00	3.38	.315	3/4	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105890**	Price
3/4	H490E90AXD.753W.7509	3	1.57	3.38	.315	3/4	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105271**	Price
3/4	H490E90AXD.752C.7509B	2	1.00	6.00	.315	3/4	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105880**	Price
1	H490E90AXD1.03W.7509	3	1.24	3.38	.315	3/4	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105891**	Price
1	H490E90AXD1.04W.7509	4	1.24	3.38	.315	3/4	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105272**	Price
1	H490E90AXD1.03C1.009B	3	1.57	7.87	.315	1	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105881**	Price
1	H490E90AXD1.002C1.012	2	2.00	7.87	.472	1	SR 14-544/S	BLD T15/M7	H490 ANKX 120508PNTR	**EH3104765**	Price
1	H490E90AXD1.002W1.012	2	1.50	4.00	.472	1	SR 14-544/S	BLD T15/M7	H490 ANKX 120508PNTR	**EH3104764**	Price
1-1/4	H490E90AXD1.254W1.009	4	1.48	4.00	.315	1	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105892**	Price
1-1/4	H490E90AXD1.255W1.009	5	1.48	4.00	.315	1	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105273**	Price
1-1/4	H490E90AXD1.252W1.2517	2	1.57	4.00	.630	1-1/4	SR 14-591	BLD T20/M7	H490 ANKX 170608PNTR	**EH3104640**	Price
1-1/4	H490E90AXD1.253W1.2512	3	1.50	4.25	.472	1-1/4	SR 14-544/S	BLD T15/M7	H490 ANKX 120508PNTR	**EH3104766**	Price
1-1/4	H490E90AXD1.254C1.259B	4	1.57	7.87	.315	1-1/4	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105882**	Price
1-1/2	H490E90AXD1.505W1.009	5	1.48	4.00	.315	1	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105893**	Price
1-1/2	H490E90AXD1.506W1.009	6	1.52	4.00	.315	1	SR 10508082-HG	BLD T08/M7	H490 ANKX 090408PNTR	**EH3105266**	Price
1-1/2	H490E90AXD1.504W1.2512	4	1.50	4.25	.472	1-1/4	SR 14-544/S	BLD T15/M7	H490 ANKX 120508PNTR	**EH3104767**	Price
1-1/2	H490E90AXD1.53W1.2517	3	1.50	4.00	.630	1-1/4	SR14-591	BLD T-20/M7	H490 ANKX 170608PNTR	**EH3104641**	Price
2-1/2	H490SMD2.51.931.0017	3	-	2.76	2.76	Bore 1	SR 14-591	BLD T20/M7	H490 ANKX 170608PNTR	**EH3105517**	Price
3	H490SMD3.01.941.2517	4	-	2.76	2.76	Bore 1-1/4	SR 14-591	BLD T20/M7	H490 ANKX 170608PNTR	**EH3105518**	Price
4	H490SMD4.02.551.5017	5	-	3.35	3.35	Bore 1-1/2	SR 14-591	BLD T20/M7	H490 ANKX 170608PNTR	**EH3105519**	Price

HELIDO 845 LINE Up Feed End Mills

Combination Inserts with 6 Cutting Edges



- HELIDO-FEEDMILL trigon double-sided, 6-edged insert combines HELIDO's strength and FEEDMILL's special geometry to facilitate milling at very high feed rates of up to .08 IPT for high volume metal removal
- All of the tools have coolant holes and can be used for facing, ramping, plunging and helical interpolation applications, achieving excellent performance and tool life

Cutter Dia. (in.)	Iscar No.	No. of Inserts	Head Length (in.)	Uses Insert	OAL (in.)	Shank Dia. (in.)	Locking Screw	Torx Key	Order No.	Price
5/8	FFEWXD0.6221.5W0.6204	2	1.50	H600 WXCU 040310	3.55	5/8	SR M2.5X6-T7-60	T-6/51	**EH3105627**	Price
5/8	FFEWXD0.6222.0W0.7504	2	2.00	H600 WXCU 040310	4.35	3/4	SR M2.5X6-T7-60	T-6/51	**EH3105628**	Price
5/8	FFEWXD0.6223.0W0.7504	2	3.00	H600 WXCU 040310	5.35	3/4	SR M2.5X6-T7-60	T-6/51	**EH3105629**	Price
3/4	FFEWXD0.7531.5W0.7504	3	1.50	H600 WXCU 040310	3.65	3/4	SR M2.5X6-T7-60	T-6/51	**EH3105630**	Price
3/4	FFEWXD0.7532.5W0.7504	3	2.50	H600 WXCU 040310	4.65	3/4	SR M2.5X6-T7-60	T-6/51	**EH3105631**	Price
3/4	FFEWXD0.7533.5W0.7504	3	3.50	H600 WXCU 040310	5.65	3/4	SR M2.5X6-T7-60	T-6/51	**EH3105632**	Price
1	FFEWXD1.0032.0W1.0005	3	2.00	H600 WXCU 05T312	4.45	1	SR 10508600	T-9/51	**EH3105544**	Price
1	FFEWXD1.0033.0W1.0005	3	3.00	H600 WXCU 05T312	5.45	1	SR 10508600	T-9/51	**EH3105545**	Price
1	FFEWXD1.0035.0W1.0005	3	3.50	H600 WXCU 05T312	7.45	1	SR 10508600	T-9/51	**EH3105546**	Price
1-1/4	FFEWXD1.2542.5W1.0005	4	2.50	H600 WXCU 05T312	4.95	1	SR 10508600	T-9/51	**EH3105547**	Price
1-1/4	FFEWXD1.2542.5W1.2505	4	2.50	H600 WXCU 05T312	4.95	1-1/4	SR 10508600	T-9/51	**EH3105549**	Price
1-1/4	FFEWXD1.2544.0W1.0005	4	4.00	H600 WXCU 05T312	6.45	1	SR 10508600	T-9/51	**EH3105548**	Price
1-1/4	FFEWXD1.2544.0W1.2505	4	4.00	H600 WXCU 05T312	6.45	1-1/4	SR 10508600	T-9/51	**EH3105550**	Price
1-1/4	FFEWXD1.2546.0W1.2505	4	6.00	H600 WXCU 05T312	8.45	1-1/4	SR 10508600	T-9/51	**EH3105551**	Price
1-1/2	FFEWXD1.5052.5W1.2505	5	2.50	H600 WXCU 05T312	4.00	1-1/4	SR 10508600	T-9/51	**EH3105553**	Price
1-1/2	FFEWXD1.5056.0W1.2505	5	6.00	H600 WXCU 05T312	8.45	1-1/4	SR 10508600	T-9/51	**EH3105555**	Price
1-1/2	FFEWXD1.5057.5W1.5005	5	7.50	H600 WXCU 05T312	10.35	1-1/2	SR 10508600	T-9/51	**EH3105556**	Price
1-1/2	FFEWXD1.5054.0W1.2505	5	4.00	H600 WXCU 05T312	6.45	1-1/2	SR 10508600	T-9/51	**EH3105554**	Price

HELIDO ROUND H400 LINE HELIDO H400 End Mills

A Revolutionary Double-Sided Profiling Insert



- Double-sided multi-radius insert configuration for profile milling applications
- Four 120º segments of 0.236" radius round cutting edges
- Uses insert H400RNHU

Cutter Dia. (in.)	Iscar No.	No. of Inserts	Head Length (in.)	OAL (in.)	Shank Dia. (in.)	Locking Screw	Torx Key	Order No.	Price
1	H400ERD1.0032.5W10010	3	2.36	5.00	1	SR 10508600	T-9/51	**EH3106161**	Price
1-1/4	H400ERD1.2542.5W12512	4	2.36	4.72	1-1/4	SR 14-571	T-10/51	**EH3105952**	Price
1-1/4	H400ERD1.2552.5W12510	5	2.36	5.00	1-1/4	SR 10508600	T-9/51	**EH3106162**	Price

Depth of cut-- .340

HELI IQMILL 390 LINE HM390 ETP-10

90° Endmills Carrying the HM390 TPKT 1003 Triangular Inserts with 3 Helical Cutting Edges



- The construction of the new inserts is stronger compared to current 2-edged inserts
- The new family ensures productive milling of true 90° shoulders, providing an improved cost per cutting edge for various milling applications
- The HM390 TPKT 1003PDR insert features .315" maximum depth of cut
- Due to their advanced cutting geometries, the inserts reduce cutting forces and power consumption

Cutter Dia. (in.)	Iscar No.	No. of Inserts	Head Length (in.)	OAL (in.)	Depth of Cut	Shank Dia. (in.)	Locking Screw	Tork Key	Uses Insert	Order No.	Price
1	HM390ETPD1.002W1.010	2	1.000	3.750	.315	1.000	SR 14-562/S	BLD T10/S7	HM390 TPKT 1003PDR	**EH3106625**	Price
1	HM390ETPD1.003W1.010	3	1.000	3.750	.315	1.000	SR 14-562/S	BLD T10/S7	HM390 TPKT 1003PDR	**EH3106627**	Price
1-1/4	HM390ETPD1.253W1.010	3	1.000	4.000	.315	1.000	SR 14-562/S	BLD T10/S7	HM390 TPKT 1003PDR	**EH3106629**	Price
1-1/4	HM390ETPD1.254W1.010	4	1.000	4.000	.315	1.000	SR 14-562/S	BLD T10/S7	HM390 TPKT 1003PDR	**EH3106631**	Price
1-1/2	HM390ETPD1.505W1.010	5	1.000	4.000	.315	1.000	SR 14-562/S	BLD T10/S7	HM390 TPKT 1003PDR	**EH3106633**	Price

HELIDO 845 LINE 45º End Mills

With Double-Sided Inserts



- 45º Milling cutters can carry in their pockets either the S845 SNMU1305 or the ONMU 0505
- S845 SNMU 1305- square, double-sided inserts with 8 cutting edges
- ONMU 0505- octagonal, double-sided inserts with 16 cutting edges-- the most economical inserts regarding price per cutting edge
- Both inserts have helical cutting edges and positive rake angles, featuring low power consumption and excellent surface finish

Cutter Dia. (in.)	Iscar No.	No. of Inserts	Head Length (in.)	OAL (in.)	Shank Dia. (in.)	Locking Screw	Torx Key	Order No.	Price
1	SOE458/16D1.0002W.75R	2	1.30	4.00	3/4	SR 11800745	BLD IP15/S7	**EH3105302**	Price
1-1/4	SOE458/16D1.2503W1.0R	3	1.30	4.00	1	SR 11800745	BLD IP15/S7	**EH3105307**	Price
1-1/2	SOE458/16D1.504W1.25R	4	1.30	4.00	1-1/4	SR 11800745	BLD IP15/S7	**EH3105311**	Price

Depth of cut--.236

Member IMC Group

HELIDO 845 LINE 45º Face Mills

With Double-Sided Inserts



- 45º Milling cutters can carry in their pockets either the S845 SNMU1305 or the ONMU 0505
- S845 SNMU 1305- square, double-sided inserts with 8 cutting edges
- ONMU 0505- octagonal, double-sided inserts with 16 cutting edges-- the most economical inserts regarding price per cutting edge
- Both inserts have helical cutting edges and positive rake angles, featuring low power consumption and excellent surface finish

Cutter Dia. (in.)	Iscar No.	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Order No.	Price
1.50	SOF458/16D1.5040.75R	4	1.50	.75	SR11800745	BLD IP15/S7	**EH3105371**	Price
2.00	SOF458/16D2004075R	4	1.75	.75	SR11800745	BLD IP15/S7	**EH3104589**	Price
2.00	SOF458/16D2006075R	6	1.75	.75	SR11800745	BLD IP15/S7	**EH3104603**	Price
2.50	SOF458/16D2.5061.00R	6	1.75	1.00	SR11800745	BLD IP15/S7	**EH3104590**	Price
2.50	SOF458/16D2.5081.00R	8	1.75	1.00	SR11800745	BLD IP15/S7	**EH3104870**	Price
3.00	SOF458/16D3.0071.00R	7	1.75	1.00	SR11800745	BLD IP15/S7	**EH3104645**	Price
3.00	SOF458/16D3.0101.00R	10	1.75	1.00	SR11800745	BLD IP15/S7	**EH3104871**	Price
4.00	SOF458/16D4.0081.25R	8	2.00	1.25	SR11800745	BLD IP15/S7	**EH3104591**	Price
50mm	SOF45D0500422R13	4	38.8mm	22mm	SR11800745	BLD IP15/S7	**EH3106104**	Price

Depth of cut-- .138

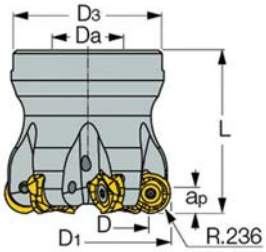
HELIDO ROUND H606 LINE H606 FR.50 Face Mills



Model No.	D1 Dia.	No. of Inserts	ap	Da	D	l	Order No.	Price
H606FRD2.00060.75.50	2.000	6	.250	.750	1.772	2.000	**EH3106609**	Price
H606FRD2.50071.00.50	2.500	7	.250	1.00	2.165	2.000	**EH3106610**	Price
H606FRD3.00081.00.50	3.000	8	.250	1.00	2.165	2.000	**EH3106611**	Price

HELIDO ROUND H606 LINE H606 FR-12 Face Mills

- Uses H606 series round double-sided inserts with 6mm radius





Model No.	D1 Dia.	No. of Inserts	ap	Da	D	L	Order No.	Price
H606FRD2.00060.7512	2.000	6	.250	.750	1.772	2.000	**EH3106380**	Price
H606FRD2.50071.0012	2.500	7	.250	1.00	2.168	2.000	**EH3106381**	Price
H606FRD3.00081.0012	3.000	8	.250	1.00	2.165	2.000	**EH3106382**	Price
H606FRD040041612	40mm	4	6mm	16mm	28mm	45mm	**EH3136959**	Price
H606FRD050062212	50mm	6	6mm	16mm	38mm	50mm	**EH3106101**	Price
H606FRD052062212	52mm	6	6mm	27mm	40mm	50mm	**EH3136801**	Price
H606FRD063072212	63mm	7	6mm	27mm	51mm	50mm	**EH3106102**	Price
H606FRD080082712	80mm	8	6mm	27mm	68mm	50mm	**EH3106103**	Price

HELIDO 690 LINE H690 F90AX 90° Face Mills

Coolant Thru



- Uses H690 TNKX 1606_ _ _ triangular inserts with 6 helical cutting edges

Model No.	D Dia.	Number of Inserts	ap	Da Arbor Size	D3	L	Order No.	Price
H690F90AXD2.003.7516	2“	3	-	.750	-	-	**EH3106641**	Price
H690F90AXD05042216	50mm	4	13.5mm	22mm	48mm	40mm	**EH3106385**	Price
H690F90AXD06342716	63mm	4	13.5mm	27mm	59mm	50mm	**EH3106386**	Price
H690F90AXD06352716	63mm	5	13.5mm	27mm	59mm	50mm	**EH3106544**	Price
H690F90AXD08052716	80mm	5	13.5mm	27mm	76mm	50mm	**EH3106387**	Price
H690F90AXD08062716	80mm	6	13.5mm	27mm	76mm	50mm	**EH3106388**	Price
H690F90AXD10083216	100mm	8	13.5mm	32mm	80mm	50mm	**EH3106390**	Price

HELIDO 845 LINE HELIDO S845 Face Mills

45º Coarse Pitch



- HELIDO S845 is one of the most popular
- Suitable for steel and cast iron
- For roughing, semi-finishing and finishing applications

Cutter Dia. (in.)	Iscar No.	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Uses Insert	Order No.	Price
3.00	S845F45SXD3.061.0R16	6	1.75	1.00	SR14-591	BLD T20/M7	S845 SXMU 1606ADTR-MM	**EH3104581**	Price
4.00	S845F45SXD4.071.5R16	7	2.00	1.50	SR14-591	BLD T20/M7	S845 SXMU 1606ADTR-MM	**EH3104582**	Price
5.00	S845F45SXD5.081.5R16	8	2.00	1.50	SR14-591	BLD T20/M7	S845 SXMU 1606ADTR-MM	**EH3104583**	Price
6.00	S845F45SXD6.0102.0R16	10	2.00	2.00	SR11800745	BLD T20/M7	S845 SXMU 1606ADTR-MM	**EH3104584**	Price

HELITANG T490 Face Mills

- 90° Face mills
- Uses tangentially clamped inserts with 4 helical long cutting edges



Cutter Dia. (in.)	Iscar No.	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Uses Insert	Order No.	Price
1.50	T490FLND1.504.75R13	4	1.57	.75	SR34-535-SN	BLD T15/S7	T490 LNMT 13-----	**EH3105320**	Price
1.50	T490FLND1.505.75R13	5	1.57	.75	SR34-535-SN	BLD T15/S7	T490 LNMT 13-----	**EH3105725**	Price
1.50	T490FLND1.506.7508	6	1.57	.75	SR10502813-HG-M	IP-7/51	T490 LNMT 08-----	**EH3104900**	Price
2.00	T490FLND2.005.7508	5	1.57	.75	SR10502813-HG-M	IP-7/51	T490 LNMT 08-----	**EH3104901**	Price
2.00	T490FLND2.005.75R13	5	1.57	.75	SR34-535-SN	BLD T15/S7	T490 LNMT 13-----	**EH3105321**	Price
2.00	T490FLND2.006.75R13	6	1.57	.75	SR34-535-SN	BLD T15/S7	T490 LNMT 13-----	**EH3105726**	Price
2.00	T490FLND2.007.7508	7	1.57	.75	SR10502813-HG-M	IP-7/51	T490 LNMT 08-----	**EH3104902**	Price
2.50	T490FLND2.5061.008	6	1.75	1.00	SR10502813-HG-M	IP-7/51	T490 LNMT 08-----	**EH3104903**	Price
2.50	T490FLND2.5061.0R13	6	1.75	1.00	SR34-535-SN	BLD T15/S7	T490 LNMT 13-----	**EH3105322**	Price
2.50	T490FLND2.5081.0R13	8	1.75	1.00	SR34-535-SN	BLD T15/S7	T490 LNMT 13-----	**EH3105727**	Price
3.00	T490FLND3.0071.0R13	7	2.00	1.00	SR34-535-SN	BLD T15/S7	T490 LNMT 13-----	**EH3105323**	Price
4.00	T490FLND4.0081.5R13	8	2.00	1.50	SR34-535-SN	BLD T15/S7	T490 LNMT 13-----	**EH3105324**	Price
5.00	T490FLND5.0091.5R13	9	2.00	1.50	SR34-535-SN	BLD T15/S7	T490 LNMT 13-----	**EH3106194**	Price
6.00	T490FLND6.00122.0R13	12	2.00	2.00	SR34-535-SN	BLD T15/S7	T490 LNMT 13-----	**EH3106195**	Price

HELIIQMILL HM390 FTD-15 Face Mills

90° Face Mills carrying the HM390 TDKT 1505 Triangular Inserts with 3 Helical Cutting Edges



- The construction of the new inserts is stronger compared to current 2-edged inserts
- The new family ensures productive milling of true 90° shoulders, providing an improved cost per cutting edge for various milling applications
- The HM390 TDKT 1505PDR insert, .512" maximum depth of cut
- Due to their advanced cutting geometries, the inserts reduce cutting forces and power consumption

Cutter Dia. (in.)	Iscar No.	No. of Inserts	Height (in.)	Hole Size (in.)	Depth of Cut	Locking Screw	Torx Key	Uses Insert	Order No.	Price
2.00	HM390FTDD20037515	3	1.57	.75	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106559**	Price
2.00	HM390FTDD20047515	4	1.57	.75	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106560**	Price
2.00	HM390FTDD20057515	5	1.57	.75	.512	SR 10511869	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106804**	Price
2.50	HM390FTDD25041015	4	1.75	1.00	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106561**	Price
2.50	HM390FTDD25051015	5	1.75	1.00	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106562**	Price
2.50	HM390FTDD25061001	6	1.75	1.00	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106805**	Price
3.00	HM390FTDD30051015	5	2.00	1.00	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106563**	Price
3.00	HM390FTDD30061015	6	2.00	1.00	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106564**	Price
3.00	HM390FTDD300710015	7	2.00	1.00	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106806**	Price
4.00	HM390FTDD40061515	6	2.00	1.50	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106565**	Price
4.00	HM390FTDD40081515	8	2.00	1.50	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106566**	Price
5.00	HM390FTDD50071515	7	2.50	1.50	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106567**	Price
5.00	HM390FTDD50091515	9	2.50	1.50	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106568**	Price
6.00	HM390FTDD60082015	8	2.50	2.00	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106569**	Price
8.00	HM390FTDD80092515	9	2.50	2.50	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106571**	Price
6.00	HM390FTDD600102015	10	2.50	2.00	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106570**	Price
8.00	HM390FTDD800112515	11	2.50	2.50	.512	SR 10505427	BLD IP20/S7	HM390 TDKT 1505PDR	**EH3106572**	Price

DOVEIQMILL IQ845 FSY-R07 Face Mills

Face Mills, Carrying Square Inserts with 8 Cutting Edges



- IQ845 FSY-R07 are indexable face mills carrying the IQ845 SYHU 0704 square double sided inserts with 8 cutting edges
- The new face mills can machine up to .180" depth of cut. They are available in nominal diameter ranges of 2.0 to 6.0 inch in both coarse and fine pitch configurations
- The new tools can be used in a wide range of face milling applications, roughing and finishing on a very wide range of engineering materials, including hard to cut austenitic stainless steel

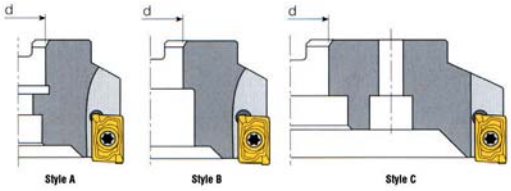
Cutter Dia. (in.)	Iscar No.	No. of Inserts	Height (in.)	Hole Size (in.)	Depth of Cut	Locking Screw	Torx Key	Uses Insert	Order No.	Price
2.00	IQ845FSYD2.0040.75R07	4	1.75	.75	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106545**	Price
2.00	IQ845FSYD2.0050.75R07	5	1.75	.75	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106546**	Price
2.50	IQ845FSYD2.5051.00R07	5	1.75	1.00	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106547**	Price
2.50	IQ845FSYD2.5071.00R07	7	1.75	1.00	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106548**	Price
3.00	IQ845FSYD3.0061.00R07	6	1.75	1.00	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106549**	Price
3.00	IQ845FSYD3.0081.00R07	8	1.75	1.00	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106550**	Price
4.00	IQ845FSYD4.0071.50R07	7	2.00	1.50	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106551**	Price
4.00	IQ845FSYD4.0101.50R07	10	2.00	1.50	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106552**	Price
5.00	IQ845FSYD5.0091.50R07	9	2.00	1.50	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106553**	Price
5.00	IQ845FSYD5.0121.50R07	12	2.00	1.50	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106554**	Price
6.00	IQ845FSYD6.0112.00R07	11	2.00	2.00	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106555**	Price
6.00	IQ845FSYD6.0152.00R07	15	2.00	2.00	.180	SR M4X0.7IP15	BLD IP15/S7	IQ845 SYHU 07...	**EH3106556**	Price

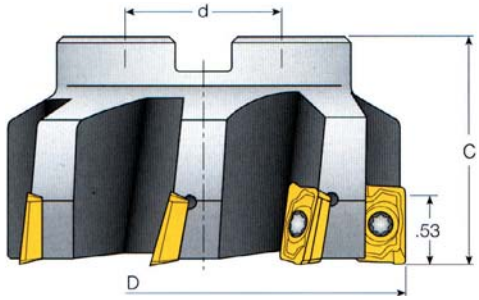
F90A – 90° Angle Face Mills – Arbor Mounting

M = Heavy duty

Applications:
- Heavy duty face milling
- Shoulder milling
- Slotting

Note: When using AD...1503 inserts a seat must be used.





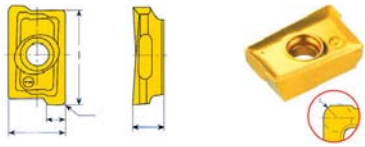
Insert Choices:

ADKT1505-HM	ADMM150308-88	ADKR1503
ADMT1505-HM	ADMT1505-HS	ADKR1505-HM
ADKT1505-RM		

Cutting Dia. (in.)	Iscar No.	No. of Inserts	C (in.)	d (in.)	Mt Style	Locking Screw	Torx Key	Seat	Order No.	Price
2.00	HM90F90AD2.005.75	5	1.57	.75	A	SR14-544/S	T-15/51	TSP-15R	**EH3102118**	Price
2.50	HM90F90AD2.5061.00	6	1.75	1.00	A	SR14-544/S	T-15/51	TSP-15R	**EH3102119**	Price
3.00	HM90F90AD3.0071.00	7	1.75	1.00	A	SR14-544/S	T-15/51	TSP-15R	**EH3102120**	Price
4.00	HM90F90AD4.0081.50	8	2.00	1.50	B	SR14-544/S	T-15/51	TSP-15R	**EH3102121**	Price
5.00	HM90F90AD5.0071.50	7	2.38	1.50	B	SR14-544/S	T-15/51	TSP-15R	**EH3102112**	Price
5.00	HM90F90AD5.0091.50	9	2.38	1.50	B	SR14-544/S	T-15/51	TSP-15R	**EH3102122**	Price

MILL2000 Inserts

These new 3M AXKT inserts have helical cutting edges and positive rake angles that reduce the cutting forces resulting in smooth, efficient operation. The inserts are available with .512 and .787 inch cutting edge lengths for use on heavy duty applications. They may be mounted on face mills, end mills and extended-flute cutters.



ISO Number	d (in.)	s (in.)	r (in.)	l (in.)	f	IC328		IC4050		IC910		IC928		IC950	
						Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3M AXKT 1304PDR	.331	.179	.024	.556	.084	**EH5601731**	Price	**EH5602398**	Price	**EH5602321**	Price	**EH5602381**	Price	**EH5601945**	Price
3M AXKT 2006PDTR	.531	.267	.039	.858	.131	**EH5602132**	Price	**EH5602400**	Price	**EH5602325**	Price	**EH5602399**	Price	**EH5602133**	Price

Allen Key



Model Number	Order No.	Price
HW3P	**EH7000042**	Price
HW3/32	**EH7000041**	Price

Cham Drill Key

Keys for DCM/DCT Indexable Drills



Model Number	Order No.	Price
KDCM12	**EH7002119**	Price

Clamp Screw



Model Number	Order No.	Price
SR35343.4	**EH7000241**	Price
SR352011	**EH7000238**	Price
XNS35	**EH7000401**	Price
XNS47	**EH7001915**	Price

Clamps & Clamp Sets



Model Number	Type	Order No.	Price
CL5	Clamp	**EH704300391**	Price
CL9	Clamp	**EH7000019**	Price
CL20	Clamp	**EH704300384**	Price
LC352633	Clamp Set	**EH4300063**	Price
LC250Set1	Clamp Set	**EH4300439**	Price

Hex Key



Model Number	Order No.	Price
HW2	**EH7000036**	Price
HW5/64	**EH7000048**	Price
T15/51	**EH7000263**	Price

Insert Screw



Model Number	Order No.	Price
SR14564	**EH7001866**	Price
SR16212	**EH7000223**	Price
SR16236	**EH7000224**	Price
SR34535C	**EH7003816**	Price
SR761021	**EH7000249**	Price
SR761022	**EH7000250**	Price
SRM6X25	**EH7001843**	Price
SRM8X30	**EH7001848**	Price

Lock Pins



Model Number	Order No.	Price
NL34L	**EH7000090**	Price
NL44	**EH7000091**	Price
NL46	**EH7000092**	Price
NL68	**EH7070025**	Price
ZNW3W	**EH7002061**	Price
ZNW4WI	**EH7002076**	Price
ZNW4W	**EH7001996**	Price

Locking Screws



Model Number	Order No.	Price
SR14536/S	**EH7000286**	Price
SR14541	**EH7000213**	Price
SR14544	**EH7000216**	Price
SR14544/S	**EH7000402**	Price
SR14591	**EH7000219**	Price
SR14591/H	**EH7000229**	Price
SR16236/P	**EH7000225**	Price
SR34506L	**EH7002024**	Price
SR34523	**EH7002008**	Price

Seal



Model Number	Order No.	Price
PL075	**EH7000831**	Price
PL125	**EH7000833**	Price

Seat

Model Number	Order No.	Price
NSE42R	**EH4300095**	Price
TLN15LHT	**EH705520219**	Price
TLN15RHT	**EH705520218**	Price
TWN423	**EH705520117**	Price





Seat Screw

Model Number	Order No.	Price
SRRS4	**EH7002843**	Price
SRM2.5x10	**EH7002796**	Price
SRTC604	**EH7001998**	Price



Shim Seats

Model Number	Order No.	Price
THOF07R	**EH7002774**	Price
TSP15R	**EH7002057**	Price



Torx Key







Model Number	Type	Order No.	Price
T8/53	Torx Key	**EH7000274**	Price
T15/51	Torx Key	**EH7000263**	Price
T15/S7	Torx Key	**EH7002096**	Price
T20/51	Torx Key	**EH7000267**	Price
T20/M7	Torx Key Blade	**EH7002089**	Price
T20/S7	Torx Key Blade	**EH7002090**	Price

Wedges

Model Number	Order No.	Price
LC252Set1	**EH4300454**	Price
LW352620S	**EH7002064**	Price



MULTI-MASTER Indexable Solid Carbide Holders



Shank Style - Conical Shank							
Model No.	Dia. (in.)	Length (in.)	Connec-tion	Shank Type	Shank Material	Order No.	Price
MMSBL3.00C.500T05	.300	3.00	T05	Round	Steel	**EH3103410**	Price
MMSDL3.50C.375T05C	.300	3.50	T05	Round	Carbide	**EH3103508**	Price
MMSDL4.00C.500T05	.300	4.00	T05	Round	Steel	**EH3103411**	Price
MMSDL4.50C.500T05C	.300	4.50	T05	Round	Carbide	**EH3103509**	Price
MMSDL6.00C.625T05C	.300	6.00	T05	Round	Carbide	**EH3103510**	Price
MMSDL5.50C.500T06C	.360	5.50	T06	Round	Carbide	**EH3103096**	Price
MMSDL6.30C.625T06	.360	6.30	T06	Round	Steel	**EH3102030**	Price
MMSDL6.50C.625T06C	.360	6.50	T06	Round	Carbide	**EH3103097**	Price
MMSDL6.70C.625T06W	.360	6.70	T06	Round	Tungsten	**EH3102925**	Price
MMSBL5.00C.625T06	.370	5.00	T06	Round	Steel	**EH3102031**	Price
MMSBL5.50C.750T06W	.370	5.50	T06	Round	Tungsten	**EH3102924**	Price
MMSBL5.50C.625T08	.480	5.50	T08	Round	Steel	**EH3102477**	Price
MMSDL6.50C.625T08C	.480	6.50	T08	Round	Carbide	**EH3103098**	Price
MMSDL6.50C.750T08	.480	6.50	T08	Round	Steel	**EH3102478**	Price
MMSDL7.00C.750T08C	.480	7.00	T08	Round	Carbide	**EH3103099**	Price
MMSBL5.50C.750T10	.600	5.50	T10	Round	Steel	**EH3103197**	Price
MMSDL6.50C.750T10C	.600	6.50	T10	Round	Carbide	**EH3103652**	Price
MMSDL7.50C.750T10	.600	7.50	T10	Round	Steel	**EH3103199**	Price
MMSDL8.80C.750T10C	.600	8.80	T10	Round	Carbide	**EH3103653**	Price
MMSBL6.30C1.00T12	.720	6.30	T12	Round	Steel	**EH3103859**	Price
MMSBL7.50C1.25T12	.720	7.50	T12	Round	Steel	**EH3103860**	Price
MMSDL8.00C1.00T12	.720	8.00	T12	Round	Steel	**EH3103861**	Price
MMSDL10.00C1.00T12C	.720	10.00	T12	Round	Carbide	**EH3103851**	Price
MMSBL8.00C1.25T15	.940	8.00	T15	Round	Steel	**EH3105426**	Price

Shank Style - ER Style							
Model No.	Dia. (in.)	Length (in.)	Connec-tion	Shank Type	Shank Material	Order No.	Price
MMSAH004ER11T05	.300	1.07	T05	ER11	Steel	**EH3105825**	Price
MMSAH004ER16T05	.300	1.44	T05	ER16	Steel	**EH3105826**	Price
MMSAH004ER20T05	.300	1.60	T05	ER20	Steel	**EH3105829**	Price
MMSAH025ER32T05H	.300	2.78	T05	ER32	Steel	**EH3105833**	Price
MMSAH040ER32T05H	.300	3.37	T05	ER32	Steel	**EH3105834**	Price
MMSAH004ER16T06	.350	1.44	T06	ER16	Steel	**EH3105827**	Price
MMSAH004ER20T06	.350	1.60	T06	ER20	Steel	**EH3105830**	Price
MMSAH025ER32T06H	.354	2.78	T06	ER32	Steel	**EH3105835**	Price
MMSAH040ER32T06H	.354	3.37	T06	ER32	Steel	**EH3105836**	Price
MMSAH004ER16T08	.470	1.44	T08	ER16	Steel	**EH3105828**	Price
MMSAH004ER20T08	.470	1.60	T08	ER20	Steel	**EH3105831**	Price
MMSAH013ER16T08	.470	1.80	T08	ER16	Steel	**EH3105646**	Price
MMSAH013ER20T08	.470	1.95	T08	ER20	Steel	**EH3105649**	Price
MMSAH025ER32T08H	.472	2.78	T08	ER32	Steel	**EH3105837**	Price
MMSAH050ER32T08H	.472	3.76	T08	ER32	Steel	**EH3105838**	Price
MMSAH025ER32T10H	.598	2.78	T10	ER32	Steel	**EH3105839**	Price
MMSAH050ER32T10H	.598	3.76	T10	ER32	Steel	**EH3105840**	Price
MMSAH004ER20T10	.600	1.60	T10	ER20	Steel	**EH3105832**	Price
MMSAH025ER32T12H	.720	2.78	T12	ER32	Steel	**EH3105841**	Price
MMSAH025ER32T15H	.940	2.78	T15	ER32	Steel	**EH3105843**	Price

MULTI-MASTER Indexable Solid Carbide Holders



Shank Style - Straight Shank							
Model No.	Dia. (in.)	Length (in.)	Connec-tion	Shank Type	Shank Material	Order No.	Price
MMSAH10.5ER16T05	.300	1.70	T05	ER16	Steel	**EH3105488**	Price
MMSAL2.18W.500T05	.300	2.18	T05	Weldon	Steel	**EH3104033**	Price
MMSAL2.50C.312T05	.300	2.50	T05	Round	Steel	**EH3103409**	Price
MMSAL3.00C.312T05C	.300	3.00	T05	Round	Carbide	**EH3103502**	Price
MMSAL3.50C.312T05C	.300	3.00	T05	Round	Carbide	**EH3103503**	Price
MMSAL4.00C.312T05C	.300	4.00	T05	Round	Carbide	**EH3103504**	Price
MMTSAL4.00C.312T05C	.312	4.00	T05	Round	Carbide	**EH3105068**	Price
MMTSAL6.50C.312T05C	.312	6.50	T05	Round	Carbide	**EH3199714**	Price
MMSAL2.58W.625T06	.360	2.58	T06	Weldon	Steel	**EH3102938**	Price
MMSAL3.00C.375T06	.360	3.00	T06	Round	Steel	**EH3102472**	Price
MMSAL3.55C.375T06W	.360	3.55	T06	Round	Tungsten	**EH3102923**	Price
MMSAH10.5ER16T06	.354	1.70	T06	ER16	Steel	**EH3105645**	Price
MMSAL4.00C.375T06C	.360	4.00	T06	Round	Carbide	**EH3103092**	Price
MMSAL4.75C.375T06C	.360	4.75	T06	Round	Carbide	**EH3103093**	Price
MMTSAL4.00C.375T06C	.375	4.00	T06	Round	Carbide	**EH3105069**	Price
MMTSAL7.00C.375T06C	.375	7.00	T06	Round	Carbide	**EH3199724**	Price
MMSAL4.00C.50T08MC	.450	4.00	T08	Round	Carbide	**EH3102958**	Price
MMSAL5.50C.50T08MC	.450	5.50	T08	Round	Carbide	**EH3102901**	Price
MMSAL2.58W.625T08	.480	2.58	T08	Weldon	Steel	**EH3102939**	Price
MMSAL3.50C.500T08	.480	3.50	T08	Round	Steel	**EH3102476**	Price
MMSAL4.00C.500T08C	.480	4.00	T08	Round	Carbide	**EH3103094**	Price
MMSAL4.25C.500T08W	.480	4.25	T08	Round	Tungsten	**EH3102926**	Price

Shank Style - Straight Shank							
Model No.	Dia. (in.)	Length (in.)	Connec-tion	Shank Type	Shank Material	Order No.	Price
MMSAL5.50C.500T08C	.480	5.50	T08	Round	Carbide	**EH3103095**	Price
MMTSAL4.00C.500T08C	.500	4.00	T08	Round	Carbide	**EH3105070**	Price
MMTSAL7.50C.500T08C	.500	7.50	T08	Round	Carbide	**EH3199734**	Price
MMSAL2.75W.750T10	.600	2.75	T10	Weldon	Steel	**EH3103195**	Price
MMSAL3.25C.625T10C	.600	3.25	T10	Round	Carbide	**EH3103515**	Price
MMSAL4.00C.625T10	.600	4.00	T10	Weldon	Steel	**EH3103196**	Price
MMSAL4.50C.625T10C	.600	4.50	T10	Round	Carbide	**EH3103516**	Price
MMSAL5.50C.625T10C	.600	5.50	T10	Round	Carbide	**EH3103517**	Price
MMSAL7.00C.625T10C	.600	7.00	T10	Round	Carbide	**EH3103518**	Price
MMTSAL8.00C.625T10C	.625	8.00	T10	Round	Carbide	**EH3199744**	Price
MMSAH050ER32T12H	.720	3.76	T12	ER32	Steel	**EH3105842**	Price
MMSAL3.00W1.00T12	.720	3.00	T12	Weldon	Steel	**EH3103853**	Price
MMSAL4.00C.750T12C	.720	4.00	T12	Round	Carbide	**EH3103842**	Price
MMSAL5.00C.750T12	.720	5.00	T12	Round	Steel	**EH3103852**	Price
MMSAL5.50C.750T12C	.720	5.50	T12	Round	Carbide	**EH3103843**	Price
MMSAL8.00C.750T12C	.720	8.00	T12	Round	Carbide	**EH3103844**	Price
MMSAH050ER32T15H	.940	3.76	T15	ER32	Steel	**EH3105844**	Price
MMSAL5.00C1.00T15C	.940	5.00	T15	Round	Carbide	**EH3105413**	Price
MMSAL5.30C1.00T15	.940	5.30	T15	Round	Steel	**EH3105423**	Price
MMSAL7.00C1.00T15C	.940	7.00	T15	Round	Carbide	**EH3105414**	Price
MMSAL10.00C1.00T15C	.940	10.00	T15	Round	Carbide	**EH3105415**	Price
MMTSAL4.00C.750T12C	.750	4.00	T12	Round	Carbide	**EH3105072**	Price

MULTI-MASTER

Indexable Solid Carbide Milling Heads

MM Grit Groove Milling Heads



- Grade IC528- Good for wide range of work piece materials at low to medium cutting speeds

Iscar No.	Width (in.)	Cutter Dia. (in.)	No. of Flutes	Radius	Connec-tion	Order No.	Price
MMGRIT16K1.500.10	.059	.610	3	.004	T06	**EH606403089**	Price
MMGRIT16P1.500.10	.059	.610	3	.004	T06	**EH606403521**	Price
MMGRIT16K1.570.20	.062	.610	3	.008	T06	**EH606403090**	Price
MMGRIT16K2.000.20	.079	.610	3	.008	T06	**EH606402872**	Price
MMGRIT16K2.390.20	.094	.610	3	.008	T06	**EH606403092**	Price
MMGRIT16K3.000.20	.118	.610	3	.008	T06	**EH606402873**	Price
MMGRIT16K3.170.20	.125	.610	3	.008	T06	**EH606403093**	Price
MMGRIT18K1.200.05	.047	.697	3	.002	T06	**EH606402863**	Price
MMGRIT18P1.200.60	.047	.697	3	.024	T06	**EH606403094**	Price
MMGRIT18K1.400.05	.055	.697	3	.002	T06	**EH606402864**	Price
MMGRIT18K1.500.10	.059	.697	3	.004	T06	**EH606402858**	Price
MMGRIT18K1.570.20	.062	.697	3	.008	T06	**EH606403095**	Price
MMGRIT18K1.700.05	.067	.697	3	.002	T06	**EH606402859**	Price
MMGRIT18K2.000.20	.079	.697	3	.008	T06	**EH606402671**	Price
MMGRIT18P2.001.00	.079	.697	3	.039	T06	**EH606402860**	Price
MMGRIT18P2.201.10	.087	.697	3	.043	T06	**EH606402862**	Price
MMGRIT18K2.390.20	.094	.697	3	.008	T06	**EH606403096**	Price
MMGRIT18K2.500.20	.098	.697	3	.008	T06	**EH606402861**	Price
MMGRIT18K3.000.20	.118	.697	3	.008	T06	**EH606402672**	Price
MMGRIT18P3.001.50	.118	.697	3	.059	T06	**EH606402865**	Price
MMGRIT18K3.170.20	.125	.697	3	.008	T06	**EH606403097**	Price
MMGRIT18K45A	.134	.697	3	.004	T06	**EH606403081**	Price
MMGRIT18P45A	.134	.697	3	.004	T06	**EH606499151**	Price
MMGRIT22K0.760.00	.030	.854	4	0	T08	**EH606403098**	Price
MMGRIT22K0.860.00	.034	.854	4	0	T08	**EH606403099**	Price
MMGRIT22K1.000.05	.039	.854	4	.002	T08	**EH606403101**	Price
MMGRIT22P1.000.05	.039	.854	4	.002	T08	**EH606403445**	Price
MMGRIT22K1.200.05	.047	.854	4	.002	T08	**EH606403102**	Price

Iscar No.	Width (in.)	Cutter Dia. (in.)	No. of Flutes	Radius	Connec-tion	Order No.	Price
MMGRIT22K1.400.05	.055	.854	4	.002	T08	**EH606403103**	Price
MMGRIT22K1.570.00	.062	.854	4	0	T08	**EH606403104**	Price
MMGRIT22P1.700.10	.067	.854	4	.004	T08	**EH606403740**	Price
MMGRIT22K1.700.10	.067	.854	4	.004	T08	**EH606403105**	Price
MMGRIT22K1.950.20	.077	.854	4	.008	T08	**EH606403106**	Price
MMGRIT22K2.000.20	.079	.854	4	.008	T08	**EH606403107**	Price
MMGRIT22P2.000.20	.079	.854	4	.008	T08	**EH606403446**	Price
MMGRIT22K2.250.20	.089	.854	4	.008	T08	**EH606403108**	Price
MMGRIT22K2.390.20	.094	.854	4	.008	T08	**EH606403109**	Price
MMGRIT22K2.500.20	.098	.854	4	.008	T08	**EH606403110**	Price
MMGRIT22P2.500.20	.098	.854	4	.008	T08	**EH606497911**	Price
MMGRIT22K2.750.20	.108	.854	4	.008	T08	**EH606403111**	Price
MMGRIT22K3.000.20	.118	.854	4	.008	T08	**EH606403078**	Price
MMGRIT22P3.000.20	.118	.854	4	.008	T08	**EH606491911**	Price
MMGRIT22K3.170.20	.125	.854	4	.008	T08	**EH606403112**	Price
MMGRIT22K3.250.20	.128	.854	4	.008	T08	**EH606403113**	Price
MMGRIT22K4.000.20	.157	.854	4	.008	T08	**EH606403114**	Price
MMGRIT22P4.002.00	.157	.854	4	.079	T08	**EH606498841**	Price
MMGRIT22P4.000.20	.157	.854	4	.008	T08	**EH606403447**	Price
MMGRIT22K4.250.20	.167	.854	4	.008	T08	**EH606403115**	Price
MMGRIT22K4.750.20	.187	.854	4	.008	T08	**EH606403116**	Price
MMGRIT22K5.250.20	.207	.854	4	.008	T08	**EH606403077**	Price
MMGRIT22K45A	.217	.854	4	0	T08	**EH606403082**	Price
MMGRIT22P45A	.217	.854	4	0	T08	**EH606496911**	Price
MMGRIT22K6.003.00	.236	.854	4	.118	T08	**EH6498769**	Price
MMGRIT28K2.500.2	.098	1.09	6	.008	T10	**EH6403753**	Price
MMGRIT28K5.250.2	.207	1.09	6	.008	T10	**EH6403502**	Price
MMGRIT28K10.00.2	.394	1.09	6	.008	T10	**EH6403754**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM EA 2, 3 Flute, 45º Helix for Aluminum



- Grade IC08- Best at low to medium cutting speeds

Iscar No.	Cutter Dia. (in.)	No. of Flutes	Radius	Depth of Cut (in.)	Connec-tion	Order No.	Price
MMEA.312B20R0203T0	.310	3	.020	.200	T05	**EH5621353**	Price
MMEA.375B27R0002T0	.375	2	0	.270	T06	**EH5622000**	Price
MMEA.375B27R0202T06	.375	2	.020	.270	T06	**EH5621316**	Price
MMEA.375B23R0313T0	.375	3	.031	.230	T06	**EH5622731**	Price
MMEA100B06R0.53T06	.394	3	.020	.260	T06	**EH5622386**	Price
MMEA100B07R1.02T06	.394	2	.039	.276	T06	**EH5621949**	Price
MMEA120H12R0.2CF3T08	.472	3	.008	.354	T08	**EH5623051**	Price
MMEA120B09R1.02T08	.472	2	.039	.354	T08	**EH5699802**	Price
MMEA120B08R3.03T08	.472	3	.118	.315	T08	**EH5622753**	Price
MMEA.500B37R0202T0	.500	2	.020	.370	T08	**EH5621328**	Price
MMEA.500B31R0313T0	.500	3	.031	.310	T08	**EH5622733**	Price
MMEA.500B31R0623T0	.500	3	.062	.310	T08	**EH5622734**	Price
MMEA.500B31R1253T0	.500	3	.125	.310	T08	**EH5622736**	Price
MMEA.625B39R0003T1	.625	3	0	.390	T10	**EH5621793**	Price
MMEA.625B39R0313T1	.625	3	.031	.390	T10	**EH5622737**	Price
MMEA160H16R0.2CF3T10	.630	3	.008	.394	T10	**EH5623052**	Price

Iscar No.	Cutter Dia. (in.)	No. of Flutes	Radius	Depth of Cut (in.)	Connec-tion	Order No.	Price
MMEA160B10R1.03T10	.630	3	.039	.394	T10	**EH5621722**	Price
MMEA160B10R3.03T10	.630	3	.118	.394	T10	**EH5621724**	Price
MMEA160B10R4.03T10	.630	3	.157	.394	T10	**EH5621725**	Price
MMEA.750B50R0083T1	.750	3	.008	.500	T12	**EH5622019**	Price
MMEA.750B50R0203T1	.750	3	.020	.500	T12	**EH5622258**	Price
MMEA.750B47R0623T1	.750	3	.062	.470	T12	**EH5622741**	Price
MMEA.750B47R1253T1	.750	3	.125	.470	T12	**EH5622743**	Price
MMEA200H20R0.2CF3T12	.787	3	.008	.472	T12	**EH5623053**	Price
MMEA200B12R0.53T12	.787	3	.020	.472	T12	**EH5622016**	Price
MMEA200B12R1.03T12	.787	3	.039	.472	T12	**EH5622017**	Price
MMEA200B12R2.03T12	.787	3	.078	.472	T12	**EH5622018**	Price
MMEA200B12R3.03T12	.787	3	.118	.472	T12	**EH5622754**	Price
MMEA200B12R4.03T12	.787	3	.157	.472	T12	**EH5622755**	Price
MMEA250H19R1.03T15	.984	3	.039	.748	T15	**EH5622621**	Price
MMEA250H19R3.03T15	.984	3	.118	.748	T15	**EH5622622**	Price
MMEA1.0H75R023T15	1.000	3	.020	.750	T12	**EH5622634**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM EC 4 Flute, 38º Helix



- Grade IC908- Good for a wide range of materials

Iscar No.	Cutter Dia. (in.)	Radius	Depth of Cut (in.)	Connec-tion	Order No.	Price
MMEC080E05R05CF4T05	.310	0	.200	T05	**EH5623026**	Price
MMEC312E20R0CF4T05	.310	0	.220	T05	**EH5606851**	Price
MMEC312E20C12CF4T05	.310	0	.220	T05	**EH5622601**	Price
MMEC312E20R15CF4T05	.310	.016	.220	T06	**EH5623032**	Price
MMEC375E27R0CF4T06	.375	0	.299	T06	**EH5606852**	Price
MMEC375E27C16CF4T06	.375	0	.299	T06	**EH5622602**	Price
MMEC375E27R15CF4T06	.375	.016	.299	T06	**EH5623033**	Price
MMEC100E07C4CF4T06	.394	0	.260	T06	**EH5622597**	Price
MMEC100E07R05CF4T06	.394	.020	.276	T06	**EH5623027**	Price

Iscar No.	Cutter Dia. (in.)	Radius	Depth of Cut (in.)	Connec-tion	Order No.	Price
MMEC120E09C5CF4T08	.472	0	.315	T08	**EH5622598**	Price
MMEC120E09R05CF4T08	.472	.020	.354	T08	**EH5623028**	Price
MMEC500E37C20CF4T08	.500	0	.381	T08	**EH5622603**	Price
MMEC160E12R05CF4T10	.630	0	.394	T10	**EH5623029**	Price
MMEC200E15C6CF4T12	.787	0	.472	T12	**EH5622600**	Price
MMEC200E15R05CF4T12	.787	.020	.472	T12	**EH5623030**	Price
MMEC250E22R05CF4T15	.984	0	.748	T15	**EH5623031**	Price
MMEC1.00E86C6CF4T15	1.000	0	.893	T15	**EH5622629**	Price
MMEC1.0E86R31CF4T15	1.000	.125	.893	T15	**EH5623037**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM ETR 6 Flute Torodial Head



- Torodial shape, excellent for die and mold applications
- Typical applications: cavities, fillets, pockets and helical interpolations
- Tapered contour enables machining of 90º high walls
- Very efficient for machining hardened steel
- Available in a selection of corner radii
- Grade IC908- Good for wide range of materials

Iscar No.	Cutter Dia. (in.)	Radius	Depth of Cut (in.)	Connec-tion	Order No.	Price
MMETR.312A16R0786T05	.312	.078	.160	T05	**EH5621395**	Price
MMETR.375A19R0316T06	.375	.031	.190	T06	**EH5622263**	Price
MMETR.375A19R1256T06	.375	.125	.190	T06	**EH5621396**	Price
MMETR100A05R3.06T06	.394	.118	.050	T06	**EH5621364**	Price
MMETR120A07R4.06T08	.472	.156	.070	T08	**EH5621365**	Price
MMETR.500A27R1566T08	.500	.156	.270	T08	**EH5621397**	Price
MMETR.625A35R2006T10	.625	.200	.350	T10	**EH5604524**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM ERS 4 - 6 Flute Rougher Head, 45º Helix



- Grade IC908- Good for wide range of materials

Iscar No.	Cutter Dia. (in.)	No. of Flutes	Depth of Cut	Connec-tion	Order No.	Price
MMERS080B094T05	.310	4	.090	T05	**EH5622418**	Price
MMERS.312B204T05	.310	4	.200	T05	**EH5621915**	Price
MMERS.375B274T06	.375	4	.270	T06	**EH5621626**	Price
MMERS120B094T08	.472	4	.090	T08	**EH5691111**	Price
MMERS120B094T08H	.472	4	.090	T08	**EH5607217**	Price
MMERS.500B374T08	.500	4	.370	T08	**EH5621627**	Price
MMERS.625B475T10	.625	5	.470	T10	**EH5621795**	Price
MMERS160B125T10H	.630	5	.120	T10	**EH5607218**	Price
MMERS.750B626T12	.750	6	.620	T12	**EH5622033**	Price
MMERS200B156T12	.787	6	.590	T12	**EH5622032**	Price
MMERS250B226T15	.984	6	.220	T15	**EH5622617**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM EB 2-4 Flute High Precision Ball Nose Head



- Grade IC908- Good for wide range of materials
- Grade IC08- Best at low to medium cutting speeds with stainless steel and high temp alloys

Iscar No.	Grade	Cutter Dia. (in.)	No. of Flutes	Radius	Depth of Cut (in.)	Connec-tion	Order No.	Price
MMEB.250E204T05	IC908	.250	4	.124	.200	T05	**EH5622237**	Price
MMEBA.312B202T05	IC08	.310	2	.156	.200	T05	**EH5622243**	Price
MMEB.312A204T05	IC908	.310	4	.156	.200	T05	**EH5621377**	Price
MMEB080A052T05	IC908	.310	2	.157	.196	T05	**EH5621346**	Price
MMEB080A054T05	IC908	.310	4	.157	.196	T05	**EH5621347**	Price
MMEB.375A272T06	IC908	.375	2	.187	.270	T06	**EH5621317**	Price
MMEBA375B272T06	IC08	.375	2	.187	.270	T06	**EH5622244**	Price
MMEB.375A274T06	IC908	.375	4	.187	.270	T06	**EH5621318**	Price
MMEB100A074T06	IC908	.394	4	.196	.275	T06	**EH5621333**	Price
MMEB120A092T08	IC908	.472	2	.235	.354	T08	**EH5621320**	Price
MMEBA500B372T08	IC08	.500	2	.249	.370	T08	**EH5622245**	Price
MMEB.500A374T08	IC908	.500	4	.249	.370	T08	**EH5621327**	Price
MMEB.500A372T08	IC908	.500	2	.249	.370	T08	**EH5621326**	Price
MMEBA.625B472T10	IC08	.625	2	.312	.470	T10	**EH5622246**	Price
MMEB.625A474T10	IC908	.625	4	.312	.470	T10	**EH5621379**	Price
MMEB.750A624T12	IC908	.750	4	.374	.620	T12	**EH5622035**	Price
MMEBA.750B502T12	IC08	.750	2	.374	.500	T12	**EH5622247**	Price
MMEB200A154T12	IC908	.787	4	.393	.590	T12	**EH5622034**	Price
MMEBA250B222T15	IC08	.984	2	.491	.220	T15	**EH5622624**	Price
MMEB250A224T15	IC908	.984	4	.491	.866	T15	**EH5622623**	Price
MMEBA1.00B862T15	IC08	1.000	2	.499	.860	T15	**EH5622636**	Price
MMEB1.00A864T15	IC908	1.000	4	.499	.275	T15	**EH5622635**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM HC 2 Flute Slot Drill, 10º Helix



- Axial and radial positive rake
- Variety of corner radii
- Shouldering, slotting and drilling applications
- Grade IC908- Good for wide range of materials
- Grade IC903- Good for alloys, hardened materials, and stainless steel

Iscar No.	Grade	Cutter Dia. (in.)	Radius	Connec-tion	Order No.	Price
MMHC080C08R0.42T05	IC903	.310	.016	T05	**EH5606435**	Price
MMHC080C08R1.02T05	IC903	.310	.039	T05	**EH5606433**	Price
MMHC.312C31R0162T05	IC908	.312	.016	T05	**EH5621916**	Price
MMHC.375C38R0162T06	IC908	.375	.016	T06	**EH5603360**	Price
MMHC100C10R0.42T06	IC903	.394	.016	T06	**EH5606436**	Price
MMHC100C10R1.02T06	IC903	.394	.039	T06	**EH5606437**	Price
MMHC100C10R1.02T06	IC908	.394	.039	T06	**EH5604038**	Price
MMHC100C10R2.02T06	IC903	.394	.078	T06	**EH5606438**	Price
MMHC120C13R0.42T08	IC903	.472	.016	T08	**EH5606439**	Price
MMHC120C13R1.02T08	IC903	.472	.039	T08	**EH5606440**	Price
MMHC120C13R1.02T08	IC908	.472	.039	T08	**EH5604650**	Price
MMHC120C13R2.02T08	IC903	.472	.078	T08	**EH5606441**	Price
MMHC.500C55R0162T08	IC908	.500	.016	T08	**EH5603361**	Price
MMHC.625C63R0162T10	IC908	.625	.016	T10	**EH5604117**	Price
MMHC.625C63R0322T10	IC908	.625	.032	T10	**EH5604118**	Price
MMHC160C16R0.42T10	IC903	.630	.016	T10	**EH5606442**	Price
MMHC160C16R0.42T10	IC908	.630	.016	T10	**EH5603802**	Price
MMHC160C16R0.82T10	IC903	.630	.032	T10	**EH5606426**	Price
MMHC160C16R0.82T10	IC908	.630	.032	T10	**EH5603803**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM HBR High Precision, Spherical Design Milling Head



- High accuracy
- May be used for both roughing and precision finishing applications
- 240º spherical cutting profile
- Ground, neutrally inclined rake
- Center cutting
- Recommended for finishing and may be used on hardened steel
- 2 flute
- Grade IC908- Good for wide range of materials

Iscar No.	Cutter Dia. (in.)	Radius	Connection	Order No.	Price
MMHBR.3752T05	.375	.188	T05	**EH5604523**	Price
MMHBR1002T05	.394	.197	T05	**EH5621372**	Price
MMHBR1202T06	.472	.236	T06	**EH5621367**	Price
MMHBR.5002T06	.500	.250	T06	**EH5621448**	Price
MMHBR.6252T08	.625	.312	T08	**EH5621371**	Price
MMHBR1602T08	.630	.315	T08	**EH5621630**	Price
MMHBR.7502T10	.750	.375	T10	**EH5621796**	Price
MMHBR2002T10	.787	.394	T10	**EH5603805**	Price
MMHBR2502T12	.984	.492	T12	**EH5604561**	Price
MMHBR1.002T12	1.000	.500	T12	**EH5604562**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM HCD 2 Flute Head for Center Drilling, Chamfering and Countersinking



- 140° point angle for center drilling
- Chamfering
- Countersinking for standard flat head cap screws
- Deburring
- Grade IC908- Good for wide range of materials

Iscar No.	Grade	Cutter Dia. (in.)	Depth of Cut	Connec-tion	Order No.	Price
MMHCD0800902T05	IC908	.315	.270	T05	**EH5604307**	Price
MMHCD0830902T05	IC908	.327	.290	T05	**EH5604306**	Price
MMHCD1000602T06	IC908	.394	.370	T06	**EH5604521**	Price
MMHCD1000902T06	IC908	.394	.350	T06	**EH5603363**	Price
MMHCD1001202T06	IC908	.394	.390	T06	**EH5604522**	Price
MMHCD1040902T06	IC908	.394	.350	T06	**EH5603362**	Price
MMHCD1200602T08	IC908	.472	.470	T08	**EH5605659**	Price
MMHCD1200902T08	IC908	.472	.470	T08	**EH5603806**	Price
MMHCD1201202T08	IC908	.472	.470	T08	**EH5605658**	Price

Iscar No.	Grade	Cutter Dia. (in.)	Depth of Cut	Connec-tion	Order No.	Price
MMHCD1240902T08	IC908	.488	.470	T08	**EH5603545**	Price
MMHCD.5000802T08	IC908	.500	.470	T08	**EH5603708**	Price
MMHCD1600602T10	IC908	.630	.590	T10	**EH5605656**	Price
MMHCD1600902T10	IC908	.630	.590	T10	**EH5603807**	Price
MMHCD1601202T10	IC908	.630	.610	T10	**EH5605657**	Price
MMHCD1650902T10	IC908	.649	.590	T10	**EH5604281**	Price
MMHCD2000602T12	IC908	.787	.720	T12	**EH5606496**	Price
MMHCD2000902T12	IC908	.787	.720	T12	**EH5604568**	Price
MMHCD2001202T12	IC908	.787	.720	T12	**EH5606497**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM HCR 2 Flute Ball Nose Milling Head



- Unique cutting geometry similar to our HELIBALL inserts
- Center cutting
- Closed tolerance
- May be used for both roughing and precision finishing applications
- Grade IC908- Good for wide range of materials

Iscar No.	Cutter Dia. (in.)	Radius	Depth of Cut	Connection	Order No.	Price
MMHCR.3122T05	.312	.156	.310	T05	**EH5603252**	Price
MMHCR0802T05	.310	.158	.500	T05	**EH5603250**	Price
MMHCR.3752T06	.375	.188	.380	T06	**EH5602587**	Price

Iscar No.	Cutter Dia. (in.)	Radius	Depth of Cut	Connection	Order No.	Price
MMHCR1002T06	.394	.197	.630	T06	**EH5602584**	Price
MMHCR.5002T08	.500	.250	.630	T08	**EH5603204**	Price
MMHCR.6252T10	.625	.312	.390	T10	**EH5603253**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM HDF 2 Flute 45º Double Chamfering Head

- Grade IC908- Good for wide range of materials

Iscar No.	Cutter Dia. (in.)	No. of Flutes	Connec-tion	Order No.	Price
MMHDF1200902T06	.465	2	T06	**EH5605164**	Price

Iscar No.	Cutter Dia. (in.)	No. of Flutes	Connection	Order No.	Price
MMHDF1600902T08	.622	2	T08	**EH5605165**	Price

MULTI-MASTER Indexable Solid Carbide Milling Heads

MM HT 2 Flute Torodial Head



- Ground, neutrally inclined rake face
- Tapered contour enables machining of 90º high walls
- May be used for machining hardened steel

Iscar No.	Grade	Cutter Dia. (in.)	Radius	Depth of Cut	Connec-tion	Order No.	Price
MMHT100N07R0.52T06	IC903	.394	.020	.270	T06	**EH5606429**	Price
MMHT100C08R0.52T06	IC908	.394	.020	.270	T06	**EH5603581**	Price
MMHT100N07R1.02T06	IC903	.394	.040	.270	T06	**EH5606425**	Price
MMHT100C08R1.02T06	IC908	.394	.040	.270	T06	**EH5603582**	Price
MMHT100N07R2.02T06	IC903	.394	.080	.270	T06	**EH5606427**	Price
MMHT100N06R2.02T06	IC908	.394	.080	.450	T06	**EH5604345**	Price
MMHT100N07R3.02T06	IC903	.394	.120	.270	T06	**EH5606428**	Price
MMHT120N06R1.62T08	IC908	.472	.060	.450	T08	**EH5621711**	Price
MMHT120N06R2.02T08	IC903	.472	.080	.240	T08	**EH5622730**	Price
MMHT120N06R3.02T06	IC908	.472	.120	.220	T06	**EH5621709**	Price

Iscar No.	Grade	Cutter Dia. (in.)	Radius	Depth of Cut	Connec-tion	Order No.	Price
MMHT120N06R3.02T08	IC908	.472	.120	.450	T08	**EH5603583**	Price
MMHT120N06R4.02T08	IC908	.472	.160	.240	T08	**EH5603584**	Price
MMHT.625N31R1872T10	IC908	.625	.190	.310	T10	**EH5604622**	Price
MMHT160N07R2.02T10	IC908	.630	.080	.283	T10	**EH5605660**	Price
MMHT160N08R5.02T10	IC903	.630	.200	.283	T10	**EH5606432**	Price
MMHT160N08R5.02T10	IC908	.630	.200	.315	T10	**EH5604123**	Price
MMHT.750N45R2502T12	IC908	.750	.250	.310	T12	**EH5604566**	Price
MMHT200N11R3.02T12	IC908	.787	.120	.440	T12	**EH5605652**	Price
MMHT200N11R8.02T12	IC908	.787	.310	.440	T12	**EH5605594**	Price
MMHT200N11R5.02T12	IC908	.787	.200	.450	T12	**EH5605653**	Price

Milling Inserts



ADKR

Iscar Designation	IC	Length	T (in.)	R	F	Grade	Order No.	Price
ADKR 1505PDR-HM	.375	.600	.236	.031	.063	IC28	**EH5600609**	Price
ADKR 1505PDR-HM	.375	.600	.236	.031	.063	IC328	**EH5601256**	Price
ADKR 1505PDR-HM	.375	.600	.236	.031	.063	IC928	**EH5692417**	Price
ADKT 150516R-HM	.375	.614	.220	.063	.054	IC250	**EH5600633**	Price
ADKT 150516R-HM	.375	.614	.220	.063	.054	IC328	**EH5601347**	Price
ADKT 150516R-HM	.375	.614	.220	.063	.054	IC520M	**EH5600632**	Price
ADKT 150516R-HM	.375	.614	.220	.063	.054	IC908	**EH5697611**	Price
ADKT 150516R-HM	.375	.614	.220	.063	.054	IC928	**EH5697878**	Price
ADKT 150516R-HM	.375	.614	.220	.063	.054	IC950	**EH5601898**	Price
ADKT 150524R-HM	.375	.614	.220	.094	.020	IC328	**EH5601348**	Price
ADKT 150532R-HM	.375	.614	.220	.125	-	IC908	**EH5697621**	Price
ADKT 150532R-HM	.375	.614	.220	.125	-	IC928	**EH5602367**	Price
ADKT 150532R-HM	.375	.614	.220	.125	-	IC950	**EH5695867**	Price
ADKT 150532R-HM	.375	.614	.220	.125	.020	IC328	**EH5601349**	Price
ADKT 150550R-HM	.375	.595	.212	.189	-	IC328	**EH5601350**	Price
ADKT 150564R-HM	.375	.583	.205	.250	-	IC250	**EH5600642**	Price
ADKT 150564R-HM	.375	.583	.205	.250	-	IC328	**EH5601351**	Price
ADKT 150564R-HM	.375	.583	.205	.250	-	IC928	**EH5697828**	Price
ADKT 1505ADR-HM	.375	.335	.205	.031	.063	IC328	**EH5693564**	Price
ADKT 1505ADR-HM	.375	.335	.205	.031	.063	IC520M	**EH5600779**	Price



ADKT

Iscar Designation	IC	Length	T (in.)	R	F	Grade	Order No.	Price
ADKT 1505PDR-HM	.375	.600	.230	.031	.063	IC250	**EH5600517**	Price
ADKT 1505PDR-HM	.375	.600	.230	.031	.063	IC28	**EH5600744**	Price
ADKT 1505PDR-HM	.375	.600	.230	.031	.063	IC328	**EH5601150**	Price
ADKT 1505PDR-HM	.375	.600	.230	.031	.063	IC520M	**EH5600513**	Price
ADKT 1505PDR-HM	.375	.600	.230	.031	.063	IC528	**EH5697386**	Price
ADKT 1505PDR-HM	.375	.600	.230	.031	.063	IC908	**EH5602360**	Price
ADKT 1505PDR-HM	.375	.600	.230	.031	.063	IC910	**EH5601900**	Price
ADKT 1505PDR-HM	.375	.600	.230	.031	.063	IC928	**EH5692407**	Price
ADKT 1505PDR-HM	.375	.600	.230	.031	.063	IC950	**EH5601896**	Price
ADKT 1505PDTR-76	.375	.600	.230	.039	.063	IC328	**EH5601339**	Price
ADKT 1505PDTR-76	.375	.600	.230	.039	.063	IC520M	**EH5601274**	Price
ADKT 1505PDTR-76	.375	.600	.230	.039	.063	IC910	**EH5602241**	Price
ADKT 1505PDTR-76	.375	.600	.230	.039	.063	IC928	**EH5602363**	Price
ADKT 1505PDTR-RM	.375	.600	.230	.039	.063	IC250	**EH5601362**	Price
ADKT 1505PDTR-RM	.375	.600	.230	.039	.063	IC328	**EH5601366**	Price
ADKT 1505PDTR-RM	.375	.600	.230	.039	.063	IC4050	**EH5601893**	Price
ADKT 1505PDTR-RM	.375	.600	.230	.039	.063	IC520M	**EH5601364**	Price
ADKT 1505PDTR-RM	.375	.600	.230	.039	.063	IC528	**EH5697416**	Price
ADKT 1505PDTR-RM	.375	.600	.230	.039	.063	IC910	**EH5601902**	Price
ADKT 1505PDTR-RM	.375	.600	.230	.039	.063	IC928	**EH5694867**	Price

Milling Inserts

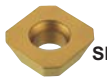

APKR


APKT


SEKR


SEKT


SEMT


SEMW


SPKR

Iscar Designation	IC	Length	T (in.)	R	F	Grade	Order No.	Price
ADKT 1505PDTR-RM	.375	.600	.230	.039	.063	IC950	**EH5601892**	Price
ADMM 150308-88	.375	.600	.125	.031	-	IC250	**EH5600506**	Price
ADMM 150308-88	.375	.600	.125	.031	-	IC520M	**EH5600037**	Price
ADMT 1503PDR-HM	.375	.600	.150	.031	.063	IC250	**EH5600900**	Price
ADMT 1503PDR-HM	.375	.600	.150	.031	.063	IC328	**EH5601455**	Price
ADMT 1505PDR-HS	.375	.600	.222	.031	.063	IC250	**EH5600749**	Price
ADMT 1505PDR-HS	.375	.600	.222	.031	.063	IC328	**EH5601467**	Price
APKR 1003PDR-HM	.263	.413	.137	.019	.047	IC328	**EH5601221**	Price
APKR 1003PDR-HM	.263	.413	.137	.019	.047	IC928	**EH5602366**	Price
APKT 100308PDTR-RM	.263	.413	.137	.031	.035	IC328	**EH5601634**	Price
APKT 100308PDTR-RM	.263	.413	.137	.031	.035	IC928	**EH5692339**	Price
APKT 100308PDTR-RM	.263	.413	.137	.031	.035	IC950	**EH5601963**	Price
APKT 100312TR-RM	.263	.413	.137	.047	-	IC328	**EH5601637**	Price
APKT 100312TR-RM	.263	.413	.137	.047	-	IC520M	**EH5600827**	Price
APKT 100312TR-RM	.263	.413	.137	.047	-	IC928	**EH5699148**	Price
APKT 100316PDTR-RM	.263	.413	.137	.063	.031	IC328	**EH5601612**	Price
APKT 100316PDTR-RM	.263	.413	.137	.063	.031	IC928	**EH5692349**	Price
APKT 100332TR-RM	.263	.413	.137	.125	-	IC28	**EH5601620**	Price
APKT 100332TR-RM	.263	.413	.137	.125	-	IC328	**EH5601617**	Price
APKT 100332TR-RM	.263	.413	.137	.125	-	IC928	**EH5691208**	Price
APKT 1003PDR-HM	.263	.413	.137	.019	.047	IC250	**EH5600501**	Price
APKT 1003PDR-HM	.263	.413	.137	.019	.047	IC328	**EH5601148**	Price
APKT 1003PDR-HM	.263	.413	.137	.019	.047	IC4050	**EH5603414**	Price
APKT 1003PDR-HM	.263	.413	.137	.019	.047	IC520M	**EH5600049**	Price
APKT 1003PDR-HM	.263	.413	.137	.019	.047	IC910	**EH5601901**	Price
APKT 1003PDR-HM	.263	.413	.137	.019	.047	IC928	**EH5691218**	Price
APKT 1003PDR-HM	.263	.413	.137	.019	.047	IC950	**EH5601939**	Price
APKT 1003PDTR-76	.263	.413	.137	.019	.047	IC250	**EH5601209**	Price
APKT 1003PDTR-76	.263	.413	.137	.019	.047	IC328	**EH5601196**	Price
APKT 1003PDTR-76	.263	.413	.137	.019	.047	IC910	**EH5602240**	Price
APKT 1003PDTR-76	.263	.413	.137	.019	.047	IC928	**EH5602362**	Price
APKT 1003PDTR-8M	.263	.413	.137	.019	.035	IC910	**EH5691931**	Price
APKT 1003PDTR-8M	.263	.413	.137	.019	.047	IC328	**EH5696925**	Price
APKT 1003PDTR-RM	.263	.413	.137	.019	.047	IC250	**EH5601368**	Price
APKT 1003PDTR-RM	.263	.413	.137	.019	.047	IC328	**EH5601371**	Price
APKT 1003PDTR-RM	.263	.413	.137	.019	.047	IC520M	**EH5601369**	Price
H400 RNHU 1004-AX	-	9.2mm	.159	.197	-	IC830	**EH5606804**	Price
H400 RNHU 1004-ML	-	9.2mm	.159	.197	-	IC830	**EH5606803**	Price
H400 RNHU 1205-AX	-	11mm	.205	.236	-	IC830	**EH5606741**	Price
H400 RNHU 1205-ML	-	11mm	.205	.236	-	IC830	**EH5606450**	Price
H400 RNHU 1606-AX	-	14.7mm	.307	.315	-	IC830	**EH5606807**	Price
H400 RNHU 1606-HP	-	14.7mm	.307	.315	-	IC830	**EH5606808**	Price
H490 ANCX 090404PDR	.260	.339	.205	.016	.150	IC810	**EH5606342**	Price
H490 ANCX 090404PDR	.260	.339	.205	.016	.150	IC830	**EH5606032**	Price
H490 ANCX 090408PDR	.260	.339	.205	.031	.138	IC810	**EH5606029**	Price
H490 ANCX 090408PDR	.260	.339	.205	.031	.138	IC830	**EH5606027**	Price
H490 ANCX 090412PDR	.260	.339	.205	.047	.126	IC810	**EH5606746**	Price
H490 ANCX 090412PDR	.260	.339	.205	.047	.126	IC830	**EH5606024**	Price
H490 ANCX 090416PDR	.260	.339	.205	.063	.110	IC810	**EH5606750**	Price
H490 ANCX 090416PDR	.260	.339	.205	.063	.110	IC830	**EH5606747**	Price
H490 ANCX 120508PDR	.394	.539	.360	.031	.138	IC810	**EH5606013**	Price
H490 ANCX 120508PDR	.394	.539	.360	.031	.138	IC830	**EH5606011**	Price
H490 ANCX 1205R15T-FF	.394	.539	.360	.059	.138	IC830	**EH5606016**	Price
H490 ANKX 090408PNTR	.260	.339	.205	.016	.197	IC810	**EH5606019**	Price
H490 ANKX 090408PNTR	.260	.339	.205	.016	.197	IC830	**EH5606020**	Price
H490 ANKX 120504PNTR	.394	.539	.360	.031	.150	IC830	**EH5606353**	Price
H490 ANKX 120508PNTR	.394	.539	.360	.031	.138	IC810	**EH5605567**	Price
H490 ANKX 120508PNTR	.394	.539	.360	.031	.138	IC830	**EH5605564**	Price
H490 ANKX 120510PNTR	.394	.539	.360	.031	.134	IC830	**EH5606007**	Price
H490 ANKX 120512PNTR	.394	.539	.360	.031	.126	IC830	**EH5606008**	Price
H490 ANKX 120516PNTR	.394	.539	.360	.031	.110	IC830	**EH5606009**	Price
H490 ANKX 1205PNTR-CS	.394	.539	.360	.031	.138	IC830	**EH5606938**	Price
H490 ANKX 1205PNTR-RM	.394	.539	.360	.031	.138	IC830	**EH5606912**	Price
H490 ANKX 1205R15T-FF	.394	.539	.360	.059	.138	IC830	**EH5606392**	Price
H490 ANKX 1706R15T-FF	.461	.657	.307	.063	.181	IC830	**EH5605989**	Price
H600 WXCU 040310HP	.254	.163	.122	.075	.038	IC830	**EH5606381**	Price
H600 WXCU 040310T	.254	.163	.122	.075	.038	IC830	**EH5606380**	Price
H600 WXCU 05T312HP	.339	.224	.165	.091	.047	IC830	**EH5606000**	Price
H600 WXCU 05T312T	.339	.224	.165	.091	-	IC810	**EH5606348**	Price
H600 WXCU 05T312T	.339	.224	.165	.091	-	IC830	**EH5606349**	Price
H600 WXCU 080612HP	.538	.346	.267	.130	-	IC830	**EH5605931**	Price
H600 WXCU 080612T	.538	.346	.267	.130	-	IC810	**EH5606036**	Price
H606 RXCU 1206AXMP	12.2mm	-	5.9mm	6mm	-	IC808	**EH5606917**	Price
H606 RXCU 1206AXT	12.2mm	-	5.9mm	6mm	-	IC808	**EH5606918**	Price
H606 RXCU 1206AXT	12.2mm	-	5.9mm	6mm	-	IC830	**EH5607421**	Price
H606 RXCU 43-AXMP	.510	-	.250	.236	-	IC380	**EH5667113**	Price
H606 RXCU 43-AXMP	.510	-	.267	-	-	IC330	**EH5667114**	Price
H606 RXCU 43AXT	.510	-	.250	.239	-	IC808	**EH5607686**	Price
H606 RXCU 43AXT	.510	-	.250	.239	-	IC830	**EH5607685**	Price
H690 TNKX 160610PNTR	12mm	-	10mm	1mm	-	IC330	**EH5607375**	Price
H690 TNKX 160610PNTR	12mm	-	10mm	1mm	-	IC5100	**EH455668377**	Price
H690 TNKX 160610PNTR	12mm	-	10mm	1mm	-	IC808	**EH5607501**	Price
H690 TNKX 160610PNTR	12mm	-	10mm	1mm	-	IC810	**EH5607502**	Price
H690 TNKX 160610PNTR	12mm	-	10mm	1mm	-	IC830	**EH5607650**	Price
HM390 TDKT 1505PDR	.449	.657	.230	-	-	IC330	**EH5607678**	Price
HM390 TDKT 1505PDR	.449	.657	.230	-	-	IC808	**EH5607506**	Price
HM390 TDKT 1505PDR	.449	.657	.230	-	-	IC810	**EH5607507**	Price
HM390 TDKT 1505PDR	.449	.657	.230	.031	-	IC5400	**EH5607679**	Price
HM390 TDKT 1505PDR	.449	.657	.230	.031	-	IC830	**EH5607423**	Price
HM390 TPKT 1003DR	.295	.429	.152	.031	-	IC330	**EH5607742**	Price

Iscar Designation	IC	Length	T (in.)	R	F	Grade	Order No.	Price
HM390 TPKT 1003DR	.295	.429	.152	.031	-	IC380	**EH5667743**	Price
HM390 TPKT 1003DR	.295	.429	.152	.031	-	IC5400	**EH5607743**	Price
HM390 TPKT 1003DR	.295	.429	.152	.031	-	IC808	**EH5607513**	Price
HM390 TPKT 1003DR	.295	.429	.152	.031	-	IC810	**EH5607514**	Price
HM390 TPKT 1003DR	.295	.429	.152	.031	-	IC830	**EH5607512**	Price
HM90 ADKT 150516PDR	.375	.637	.230	.063	.085	IC908	**EH5603474**	Price
HM90 ADKT 150524PDR	.375	.637	.230	.094	.085	IC908	**EH5603476**	Price
HM90 ADKT 150532PDR	.375	.637	.230	.125	.085	IC908	**EH5603477**	Price
HM90 ADKT 150540PDR	.375	.637	.230	.157	.085	IC908	**EH5603478**	Price
HM90 ADKT 150564PDR	.375	.637	.230	.250	.085	IC908	**EH5603480**	Price
HM90 ADKT 1505PDR	.375	.637	.230	.031	.085	IC328	**EH5602383**	Price
HM90 ADKT 1505PDR	.375	.637	.230	.031	.085	IC908	**EH5602499**	Price
HM90 ADKT 1505PDR	.375	.637	.230	.031	.085	IC928	**EH5602495**	Price
HM90 ADKT 1505PDR	.375	.637	.230	.031	.085	IC950	**EH5602497**	Price
HM90 APKT 100304PDR	.263	.637	.230	.031	.085	IC28	**EH5602961**	Price
HM90 APKT 100316PDR	.263	.637	.230	.063	.085	IC928	**EH5603832**	Price
HM90 APKT 1003PDR	.263	.637	.230	.031	.085	IC328	**EH5602417**	Price
HM90 APKT 1003PDR	.263	.637	.230	.031	.085	IC908	**EH5602494**	Price
HM90 APKT 1003PDR	.263	.637	.230	.031	.085	IC910	**EH5602493**	Price
HM90 APKT 1003PDR	.263	.637	.230	.031	.085	IC928	**EH5602490**	Price
HM90 APKT 1003PDR	.263	.637	.230	.031	.085	IC950	**EH5602492**	Price
HM90 AXCR 150508R-P	.394	.756	.197	.031	-	IC28	**EH5603552**	Price
ONHU 050500-N-HP	.512	13mm	.205	.020	.197	IC810	**EH5681499**	Price
ONHU 050500-PL	.512	13mm	.205	.020	.197	IC830	**EH5606445**	Price
ONHU 050505-TN	.512	13mm	.205	.020	.197	IC810	**EH5606286**	Price
ONHU 050505-TN	.512	13mm	.205	.020	.197	IC830	**EH5606079**	Price
ONHU 0505AN-8R-W	.517	13mm	.193	-	.177	IC808	**EH5606088**	Price
ONHU 0505AN-N-W	.517	13mm	.193	-	.185	IC810	**EH5606285**	Price
ONHU 0505AN-R-W	.517	13mm	.193	-	.177	IC808	**EH5606284**	Price
ONHU 0505AN-R-W	.517	13mm	.193	-	.177	IC810	**EH5606087**	Price
ONMU 050505-TN	.512	.197	.213	.020	-	IC810	**EH5605623**	Price
ONMU 050505-TN-MM	.512	.197	.205	.020	-	IC5400	**EH5606674**	Price
ONMU 050505-TN-MM	.512	.197	.213	.020	-	IC330	**EH5606333**	Price
ONMU 050505-TN-MM	.512	.197	.213	.020	-	IC830	**EH5606332**	Price
ONMU 080608-TN	.795	20.2mm	.236	.031	-	IC830	**EH5607420**	Price
ONMU 080608-TN	.795	20.2mm	.236	.031	.051	IC810	**EH5606601**	Price
ONMU 080608-TN-MM	.795	20.2mm	.236	.031	.051	IC330	**EH5606598**	Price
ONMU 080608-TN-MM	.795	20.2mm	.236	.031	.051	IC830	**EH5606599**	Price
QDMT 120516PDTN-M	-	.500	.197	.063	.500	IC910	**EH5603738**	Price
QDMT 120520PDTN-M	-	.500	.197	.079	.500	IC910	**EH5604480**	Price
QDMT 120520PDTN-M	-	.500	.197	.079	.500	IC928	**EH5604478**	Price
QDMT 120524PDTN-M	-	.500	.197	.094	.500	IC910	**EH5604484**	Price
QDMT 120524PDTN-M	-	.500	.197	.094	.500	IC928	**EH5603748**	Price
QDMT 120532PDTN-M	-	.500	.197	.126	.500	IC910	**EH5603750**	Price
QDMT 120532PDTN-M	-	.500	.197	.126	.500	IC928	**EH5604487**	Price
S845 SNHU 1305AN-N-W	.512	.512	.244	.031	.319	IC808	**EH5606300**	Price
S845 SNHU 1305AN-N-W	.512	.512	.244	.031	.319	IC810	**EH5606301**	Price
S845 SNHU 1305ANR-MM	.512	.512	.244	.031	.118	IC830	**EH5606297**	Price
S845 SNHU 1305ANTR	.512	.512	.244	.031	.118	IC810	**EH5606299**	Price
S845 SNMU 1305ANR-MM	.512	.512	.244	.031	.118	IC5400	**EH5606673**	Price
S845 SNMU 1305ANTR	.512	.512	.244	.031	.118	IC810	**EH5605385**	Price
S845 SXCU 160608AD-RMM	.638	.638	.300	.031	.112	IC830	**EH5605348**	Price
S845 SXHU 1606AD-R-W	.638	.638	.300	.031	-	IC808	**EH5605949**	Price
S845 SXMU 1606ADTR-MM	.638	.638	.300	.031	-	IC810	**EH5606103**	Price
S845 SXMU 1606ADTR-MM	.638	.638	.300	.031	-	IC810	**EH5606856**	Price
S845 SXMU 1606ADTR-MM	.638	.638	.300	.031	-	IC830	**EH5606101**	Price
S890 SNMU 1305PNTR	-	.512	.252	.031	.067	IC5400	**EH5606907**	Price
S890 SNMU 1305PNTR	-	.512	.252	.031	.067	IC810	**EH5606639**	Price
SDMT 1205PDNR-MM	-	.500	.197	.031	-	IC328	**EH5603683**	Price
SDMT 1205PDNR-MM	-	.500	.197	.031	-	IC910	**EH5603684**	Price
SDMT 1205PDNR-MM	-	.500	.197	.031	-	IC928	**EH5603686**	Price
SDMT 1606PDR-HQ-M	-	.646	.256	.031	.646	IC910	**EH5603691**	Price
SEK 42AFF-N	.500	.255	.125	-	.070	IC28	**EH5600136**	Price
SEK 42AF-TN	.500	.255	.125	-	.070	IC250	**EH5600505**	Price
SEK 42AF-TN	.500	.255	.125	-	.070	IC30N	**EH5600140**	Price
SEK 42AF-TN	.500	.255	.125	-	.070	IC328	**EH5692394**	Price
SEK 42AF-TN	.500	.255	.125	-	.070	IC910	**EH5601906**	Price
SEK 42AF-TN-42	.500	.255	.125	-	.070	IC520M	**EH5601117**	Price
SEK 53AF-TN	.625	.255	.187	-	.070	IC328	**EH5695045**	Price
SEKR 42AF-N-42	.500	.255	.125	-	.070	IC328	**EH5601266**	Price
SEKR 42AF-N-76	.500	.255	.125	-	.070	IC250	**EH5601216**	Price
SEKR 42AF-N-76	.500	.255	.125	-	.070	IC328	**EH5601218**	Price
SEKR 42AF-N-76	.500	.255	.125	-	.070	IC4050	**EH5601879**	Price
SEKR 42AF-N-76	.500	.255	.125	-	.070	IC520M	**EH5601272**	Price
SEKR 42AF-N-76	.500	.255	.125	-	.070	IC928	**EH5602380**	Price
SEKR 42AF-N-76	.500	.255	.125	-	.070	IC950	**EH5601878**	Price
SEKR 42AFR-HS	.500	.255	.125	-	.070	IC328	**EH5601333**	Price
SEKR 42AFR-HS	.500	.255	.125	-	.070	IC520M	**EH5600498**	Price
SEKR 42AFTR-HS	.500	.255	.125	-	.070	IC250	**EH5600509**	Price
SEKR 43AFTR-HS	.500	.255	.187	-	.078	IC328	**EH5601621**	Price
SEKT 43AF-R-HM	.500	.250	.200	-	.085	IC28	**EH5600745**	Price
SEKT 43AF-R-HM	.500	.250	.200	-	.085	IC328	**EH5601265**	Price
SEKT 43AF-R-HM	.500	.250	.200	-	.085	IC4050	**EH5603413**	Price
SEKT 43AF-R-HM	.500	.250	.200	-	.085	IC520M	**EH5600571**	Price
SEKT 43AF-R-HM	.500	.250	.200	-	.085	IC520M	**EH5601045**	Price
SEKT 43AF-R-HM	.500	.250	.200	-	.085	IC928	**EH5698628**	Price
SEMT 43AF-R-HS	.490	.230	.210	-	.050	IC328	**EH5601748**	Price
SEMW 43AF-TN	.500	.250	.188	-	.080	IC250	**EH5600943**	Price
SPKR 42EDTR-HS	.500	.375	.125	-	.055	IC328	**EH5601625**	Price
SPMT 100408TR-HQ-M	-	.402	.166	.028	-	IC910	**EH5603696**	Price

Turning Inserts



Member IMC Group

Style - CCMT 2-0						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CCMT 2-0	1/4	.094	.005	IC8250	**EH5550206**	Price
CCMT 2-0-PF	1/4	.094	.004	IC807	**EH5550207**	Price
CCMT 2-0-SM	1/4	.094	.004	IC8150	**EH5508200**	Price
CCMT 2-0-SM	1/4	.094	.004	IC8250	**EH5508087**	Price
CCMT 2-0-SM	1/4	.094	.004	IC9250	**EH5591636**	Price

Style - CCMT 2-1						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CCMT 2-1-14	1/4	.094	.016	IC5005	**EH5550208**	Price
CCMT 2-1-14	1/4	.094	.016	IC807	**EH5550209**	Price
CCMT 2-1-PF	1/4	.094	.016	IC807	**EH5550210**	Price
CCMT 2-1-PF	1/4	.094	.016	IC830	**EH5568585**	Price
CCMT 2-1-SM	1/4	.094	.016	IC807	**EH5550211**	Price
CCMT 2-1-SM	1/4	.094	.016	IC8250	**EH5508088**	Price
CCMT 2-1-SM	1/4	.094	.016	IC9150	**EH5591656**	Price
CCMT 2-1-SM	1/4	.094	.016	IC9250	**EH5507292**	Price
CCMT 2-1-WG	1/4	.094	.016	IC807	**EH5550212**	Price

Style - CCMT 2-2						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CCMT 2-2-SM	1/4	.094	.031	IC807	**EH5550213**	Price

Style - CCMT 3-0						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CCMT 3-0-PF	3/8	.156	.004	IC830	**EH5568616**	Price
CCMT 3-0-PF	3/8	.156	.008	IC807	**EH5550214**	Price
CCMT 3-0-SM	3/8	.156	.008	IC807	**EH5550215**	Price
CCMT 3-0-SM	3/8	.156	.004	IC907	**EH5505011**	Price

Style - CCMT 3-1						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CCMT 3-1-14	3/8	.156	.016	IC807	**EH5550216**	Price
CCMT 3-1-14	3/8	.156	.016	IC907	**EH5596411**	Price
CCMT 3-1-PF	3/8	.156	.016	IC830	**EH5568600**	Price
CCMT 3-1-SM	3/8	.156	.016	IC5005	**EH5508253**	Price
CCMT 3-1-SM	3/8	.156	.016	IC5010	**EH5508254**	Price
CCMT 3-1-SM	3/8	.156	.016	IC807	**EH5507890**	Price
CCMT 3-1-SM	3/8	.156	.016	IC8150	**EH5508202**	Price
CCMT 3-1-SM	3/8	.156	.016	IC8250	**EH5508089**	Price
CCMT 3-1-SM	3/8	.156	.016	IC830	**EH5509500**	Price
CCMT 3-1-SM	3/8	.156	.016	IC9250	**EH5507275**	Price
CCMT 3-1-WG	3/8	.156	.016	IC8250	**EH5550219**	Price
CCMT 3-1-SM	3/8	.156	.016	IC907	**EH5504773**	Price

Style - CCMT 3-2						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CCMT 3-2-14	3/8	.156	.031	IC428	**EH5593875**	Price
CCMT 3-2-14	3/8	.156	.031	IC5005	**EH5550220**	Price
CCMT 3-2-14	3/8	.156	.031	IC8250	**EH5508091**	Price
CCMT 3-2-14	3/8	.156	.031	IC830	**EH5567368**	Price
CCMT 3-2-SM	3/8	.156	.031	IC5005	**EH5508251**	Price
CCMT 3-2-SM	3/8	.156	.031	IC5010	**EH5508252**	Price
CCMT 3-2-SM	3/8	.156	.031	IC807	**EH5550221**	Price
CCMT 3-2-SM	3/8	.156	.031	IC8150	**EH5508203**	Price
CCMT 3-2-SM	3/8	.156	.031	IC9150	**EH5507222**	Price
CCMT 3-2-14	3/8	.156	.031	IC9250	**EH5507534**	Price
CCMT 3-2-SM	3/8	.156	.031	IC8250	**EH5508090**	Price
CCMT 3-2-SM	3/8	.156	.031	IC907	**EH5504774**	Price
CCMT 3-2-SM	3/8	.156	.031	IC9250	**EH5507018**	Price

Style - CCMT 431						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CCMT 431-SM	1/2	.187	.016	IC807	**EH5550223**	Price
CCMT 431-SM	1/2	.187	.016	IC8150	**EH5508204**	Price
CCMT 431-SM	1/2	.187	.016	IC8250	**EH5508092**	Price

Style - CCMT 432						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CCMT 432-14	1/2	.187	.031	IC830	**EH5568582**	Price
CCMT 432-16	1/2	.187	.031	IC8150	**EH5550224**	Price
CCMT 432-SM	1/2	.187	.031	IC807	**EH5550225**	Price
CCMT 432-SM	1/2	.187	.031	IC8150	**EH5508205**	Price
CCMT 432-SM	1/2	.187	.031	IC8250	**EH5508093**	Price
CCMT 432-SM	1/2	.187	.031	IC9250	**EH5507021**	Price
CCMT 432-WG	1/2	.187	.031	IC8250	**EH5550226**	Price
CCMT 432-SM	1/2	.187	.031	IC9150	**EH5507224**	Price

Style - CNMG 321						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 321-TF	3/8	.125	.016	IC8150	**EH5550239**	Price
CNMG 321-TF	3/8	.125	.016	IC8250	**EH5550240**	Price

Style - CNMG 322						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 322-TF	3/8	.125	.031	IC8250	**EH5550241**	Price

Style - CNMG 331						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 331-F3M	3/8	.187	.016	IC6015	**EH5567819**	Price
CNMG 331-F3P	3/8	.187	.016	IC6025	**EH5567820**	Price
CNMG 331-F3P	3/8	.187	.016	IC8150	**EH5510334**	Price
CNMG 331-F3P	3/8	.187	.016	IC8250	**EH5510335**	Price
CNMG 331-M3M	3/8	.187	.016	IC6015	**EH5510330**	Price
CNMG 331-M3M	3/8	.187	.016	IC6025	**EH5510331**	Price
CNMG 331-M3M	3/8	.187	.016	IC806	**EH5566734**	Price
CNMG 331-M3P	3/8	.187	.016	IC8150	**EH5567563**	Price
CNMG 331-M3P	3/8	.187	.016	IC8250	**EH5567564**	Price

Style - CNMG 332						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 332-F3M	3/8	.187	.031	IC6015	**EH5567821**	Price
CNMG 332-F3M	3/8	.187	.031	IC6025	**EH5567822**	Price
CNMG 332-F3P	3/8	.187	.016	IC8150	**EH5510336**	Price
CNMG 332-F3P	3/8	.187	.031	IC8250	**EH5510337**	Price
CNMG 332-M3M	3/8	.187	.031	IC6015	**EH5510332**	Price
CNMG 332-M3M	3/8	.187	.031	IC6025	**EH5510333**	Price
CNMG 332-M3M	3/8	.187	.031	IC806	**EH5566735**	Price
CNMG 332-M3P	3/8	.187	.031	IC8150	**EH5567565**	Price
CNMG 332-M3P	3/8	.187	.031	IC8250	**EH5567566**	Price

Style - CNMG 431						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 431-F3P	1/2	.187	.016	IC6025	**EH5510320**	Price
CNMG 431-GN	1/2	.187	.016	IC8150	**EH5507843**	Price
CNMG 431-GN	1/2	.187	.016	IC8250	**EH5507821**	Price
CNMG 431-GN	1/2	.187	.016	IC8350	**EH5507858**	Price
CNMG 431-NF	1/2	.187	.016	IC807	**EH5550243**	Price
CNMG 431-NF	1/2	.187	.016	IC8250	**EH5507822**	Price
CNMG 431-PP	1/2	.187	.016	IC10	**EH5502848**	Price
CNMG 431-PP	1/2	.187	.016	IC6015	**EH5509357**	Price
CNMG 431-PP	1/2	.187	.016	IC8250	**EH5507813**	Price
CNMG 431-PP	1/2	.187	.016	IC830	**EH5568612**	Price
CNMG 431-PP	1/2	.187	.016	IC8350	**EH5507861**	Price
CNMG 431-PP	1/2	.187	.016	IC9250	**EH5507321**	Price
CNMG 431-TF	1/2	.187	.016	IC6015	**EH5509356**	Price
CNMG 431-TF	1/2	.187	.016	IC807	**EH5507865**	Price
CNMG 431-TF	1/2	.187	.016	IC8250	**EH5507806**	Price
CNMG 431-TF	1/2	.187	.016	IC830	**EH5567678**	Price
CNMG 431-TF	1/2	.187	.016	IC9250	**EH5507285**	Price
CNMG 431-GN	1/2	.187	.016	IC9250	**EH5507320**	Price
CNMG 431-PP	1/2	.187	.016	IC807	**EH5507873**	Price
CNMG 431-PP	1/2	.187	.016	IC907	**EH5505454**	Price
CNMG 431-TF	1/2	.187	.016	IC907	**EH5592199**	Price

Style - CNMG 432						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 432	1/2	.187	.031	IC5005	**EH5508060**	Price
CNMG 432	1/2	.187	.031	IC5010	**EH5508061**	Price
CNMG 432-GN	1/2	.187	.031	IC5005	**EH5507730**	Price
CNMG 432-GN	1/2	.187	.031	IC5010	**EH5507745**	Price
CNMG 432-GN	1/2	.187	.031	IC6015	**EH5509360**	Price
CNMG 432-GN	1/2	.187	.031	IC807	**EH5507797**	Price
CNMG 432-GN	1/2	.187	.031	IC8150	**EH5507756**	Price
CNMG 432-GN	1/2	.187	.031	IC830	**EH5509498**	Price
CNMG 432-GN	1/2	.187	.031	IC8350	**EH5507758**	Price
CNMG 432-GN	1/2	.187	.031	IC9150	**EH5506970**	Price
CNMG 432-NF	1/2	.187	.031	IC807	**EH5550244**	Price
CNMG 432-NF	1/2	.187	.031	IC8150	**EH5507836**	Price
CNMG 432-NF	1/2	.187	.031	IC8250	**EH5508094**	Price
CNMG 432-NF	1/2	.187	.031	IC9150	**EH5507328**	Price
CNMG 432-NF	1/2	.187	.031	IC9250	**EH5507354**	Price
CNMG 432-NR	1/2	.187	.031	IC5005	**EH5507720**	Price
CNMG 432-NR	1/2	.187	.031	IC6015	**EH5509361**	Price
CNMG 432-NR	1/2	.187	.031	IC807	**EH5550245**	Price
CNMG 432-NR	1/2	.187	.031	IC8250	**EH5507815**	Price
CNMG 432-NR	1/2	.187	.031	IC8350	**EH5508557**	Price
CNMG 432-PP	1/2	.187	.031	IC10	**EH5502785**	Price
CNMG 432-PP	1/2	.187	.031	IC6015	**EH5509359**	Price
CNMG 432-PP	1/2	.187	.031	IC807	**EH5507798**	Price
CNMG 432-PP	1/2	.187	.031	IC8150	**EH5508206**	Price
CNMG 432-PP	1/2	.187	.031	IC8250	**EH5507805**	Price
CNMG 432-PP	1/2	.187	.031	IC830	**EH5509497**	Price
CNMG 432-PP	1/2	.187	.031	IC8350	**EH5507853**	Price
CNMG 432-PP	1/2	.187	.031	IC9150	**EH5592316**	Price

Turning Inserts



Member IMC Group

Style - CNMG 432						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 432-PP	1/2	.187	.031	IC9250	**EH5506976**	Price
CNMG 432-TF	1/2	.187	.031	IC507	**EH5504261**	Price
CNMG 432-TF	1/2	.187	.031	IC6015	**EH5509358**	Price
CNMG 432-TF	1/2	.187	.031	IC807	**EH5507750**	Price
CNMG 432-TF	1/2	.187	.031	IC8150	**EH5507832**	Price
CNMG 432-TF	1/2	.187	.031	IC8250	**EH5507754**	Price
CNMG 432-TF	1/2	.187	.031	IC830	**EH5507752**	Price
CNMG 432-TF	1/2	.187	.031	IC8350	**EH5507855**	Price
CNMG 432-TF	1/2	.187	.031	IC908	**EH5594061**	Price
CNMG 432-TF	1/2	.187	.031	IC920	**EH5570228**	Price
CNMG 432-TF	1/2	.187	.031	IC9250	**EH5506975**	Price
CNMG 432-WF	1/2	.187	.031	IC8150	**EH5507845**	Price
CNMG 432-WF	1/2	.187	.031	IC8250	**EH5550246**	Price
CNMG 432-WG	1/2	.187	.031	IC5005	**EH5550247**	Price
CNMG 432-WG	1/2	.187	.031	IC807	**EH5550248**	Price
CNMG 432-WG	1/2	.187	.031	IC8150	**EH5508207**	Price
CNMG 432-WG	1/2	.187	.031	IC8250	**EH5550249**	Price
CNMG 432-GN	1/2	.187	.031	IC8250	**EH5507802**	Price
CNMG 432-GN	1/2	.187	.031	IC9250	**EH5506974**	Price
CNMG 432-PP	1/2	.187	.031	IC907	**EH5591047**	Price
CNMG 432-TF	1/2	.187	.031	IC907	**EH5598518**	Price

Style - CNMG 433						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 433-GN	1/2	.187	.047	IC830	**EH5568603**	Price

Style - CNMG 434						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 434-M3M	1/2	.187	.062	IC6025	**EH5510176**	Price

Style - CNMG 542						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 542-TF	5/8	.250	.031	IC907	**EH5505377**	Price

Style - CNMG 642						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 642-GN	3/4	.250	.031	IC830	**EH5568596**	Price

Style - CNMG 643						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMG 643-GN	3/4	.250	.047	IC9150	**EH5507575**	Price

Style - CNMX 341						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMX 341-M3PW	3/8	.250	.016	IC8150	**EH5510338**	Price
CNMX 341-M3PW	3/8	.250	.016	IC8205	**EH5510339**	Price

Style - CNMX 342						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CNMX 342-M3PW	3/8	.250	.031	IC8150	**EH5560553**	Price
CNMX 342-M3PW	3/8	.250	.031	IC8205	**EH5510341**	Price
CNMX 342-M3PW	3/8	.250	.031	IC830	**EH5509547**	Price

Style - CPMT 2-1						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CPMT 2-1-PF	1/4	.094	.016	IC807	**EH5550285**	Price

Style - CPMT 2-2						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CPMT 2-2-PF	1/4	.094	.031	IC807	**EH5550286**	Price

Style - CPMT 3-1						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CPMT 3-1-PF	3/8	.156	.016	IC807	**EH5550287**	Price

Style - CPMT 3-2						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
CPMT 3-2-PF	3/8	.156	.031	IC807	**EH5550289**	Price

Style - DCMT 2.004						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DCMT 2.004-PF	1/4	.156	.004	IC807	**EH5550297**	Price

Style - DCMT 2-0						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DCMT 2-0	1/4	.094	.008	IC8150	**EH5508690**	Price
DCMT 2-0	1/4	.094	.008	IC8250	**EH5550298**	Price
DCMT 2-0-SM	1/4	.094	.008	IC807	**EH5550299**	Price

Style - DCMT 2-1						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DCMT 2-1	1/4	.094	.016	IC8150	**EH5508210**	Price
DCMT 2-1	1/4	.094	.016	IC830	**EH5568583**	Price
DCMT 2-1-PF	1/4	.094	.016	IC830	**EH5568609**	Price
DCMT 2-1-SM	1/4	.094	.016	IC807	**EH5550300**	Price
DCMT 2-1-SM	1/4	.094	.016	IC8150	**EH5508211**	Price
DCMT 2-1-SM	1/4	.094	.016	IC8250	**EH5508098**	Price
DCMT 2-1-SM	1/4	.094	.016	IC9250	**EH5507290**	Price

Style - DCMT 2-2						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DCMT 2-2-PF	1/4	.094	.031	IC807	**EH5550301**	Price
DCMT 2-2-SM	1/4	.094	.031	IC8250	**EH5508099**	Price

Style - DCMT 3-0						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DCMT 3-0-PF	3/8	.156	.008	IC807	**EH5550302**	Price
DCMT 3-0-PF	3/8	.156	.008	IC830	**EH5568594**	Price
DCMT 3-0-SM	3/8	.156	.008	IC807	**EH5550303**	Price
DCMT 3-0-SM	3/8	.156	.008	IC8250	**EH5508100**	Price

Style - DCMT 3-1						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DCMT 3-1-14	3/8	.156	.015	IC830	**EH5568586**	Price
DCMT 3-1-14	3/8	.156	.016	IC8150	**EH5508213**	Price
DCMT 3-1-PF	3/8	.156	.015	IC830	**EH5509499**	Price
DCMT 3-1-PF	3/8	.156	.016	IC807	**EH5550304**	Price
DCMT 3-1-SM	3/8	.156	.016	IC807	**EH5508240**	Price
DCMT 3-1-SM	3/8	.156	.016	IC8250	**EH5508101**	Price
DCMT 3-1-SM	3/8	.156	.016	IC8350	**EH5508553**	Price
DCMT 3-1-SM	3/8	.156	.016	IC9250	**EH5507024**	Price

Style - DCMT 3-2						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DCMT 3-2-14	3/8	.156	.031	IC5005	**EH5550305**	Price
DCMT 3-2-14	3/8	.156	.031	IC8150	**EH5508215**	Price
DCMT 3-2-D	3/8	.156	.031	IC830	**EH5568588**	Price
DCMT 3-2-PF	3/8	.156	.031	IC807	**EH5508226**	Price
DCMT 3-2-PF	3/8	.156	.031	IC830	**EH5509503**	Price
DCMT 3-2-SM	3/8	.156	.031	IC8250	**EH5508103**	Price
DCMT 3-2-SM	3/8	.156	.031	IC8350	**EH5508563**	Price
DCMT 3-2-SM	3/8	.156	.031	IC907	**EH5504875**	Price

Style - DNMG 330						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DNMG 330-NF	3/8	.187	.008	IC20N	**EH5502808**	Price
DNMG 330-NF	3/8	.187	.008	IC807	**EH5550311**	Price
DNMG 330-NF	3/8	.187	.008	IC8150	**EH5550312**	Price
DNMG 330-NF	3/8	.187	.008	IC8250	**EH5550313**	Price
DNMG 330-NF	3/8	.187	.008	IC8350	**EH5508561**	Price
DNMG 330-NF	3/8	.187	.008	IC907	**EH5592414**	Price

Style - DNMG 331						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DNMG 331-F3M	3/8	.187	.016	IC6015	**EH5567859**	Price
DNMG 331-F3M	3/8	.187	.016	IC6025	**EH5567860**	Price
DNMG 331-F3P	3/8	.187	.016	IC8150	**EH5560576**	Price
DNMG 331-F3P	3/8	.187	.016	IC8205	**EH5560577**	Price
DNMG 331-M3M	3/8	.187	.016	IC6015	**EH5560574**	Price
DNMG 331-M3M	3/8	.187	.016	IC6025	**EH5560575**	Price
DNMG 331-M3M	3/8	.187	.016	IC806	**EH5566742**	Price
DNMG 331-NF	3/8	.187	.016	IC20N	**EH5502733**	Price
DNMG 331-NF	3/8	.187	.016	IC5010	**EH5567617**	Price
DNMG 331-NF	3/8	.187	.016	IC507	**EH5504266**	Price
DNMG 331-NF	3/8	.187	.016	IC520N	**EH5503226**	Price
DNMG 331-NF	3/8	.187	.016	IC807	**EH5550314**	Price
DNMG 331-NF	3/8	.187	.016	IC8150	**EH5508216**	Price
DNMG 331-NF	3/8	.187	.016	IC9250	**EH5507287**	Price
DNMG 331-NF	3/8	.187	.031	IC8250	**EH5508104**	Price
DNMG 331-PP	3/8	.187	.016	IC20	**EH5502835**	Price
DNMG 331-PP	3/8	.187	.016	IC8250	**EH5508710**	Price
DNMG 331-SF	3/8	.187	.016	IC520N	**EH5504094**	Price
DNMG 331-SF	3/8	.187	.016	IC530N	**EH5504093**	Price
DNMG 331-SF	3/8	.187	.016	IC570	**EH5504095**	Price
DNMG 331-TF	3/8	.187	.016	IC20	**EH5503808**	Price
DNMG 331-TF	3/8	.187	.016	IC530N	**EH5503675**	Price
DNMG 331-TF	3/8	.187	.016	IC8250	**EH5508105**	Price
DNMG 331-TF	3/8	.187	.016	IC9250	**EH5591716**	Price
DNMG 331-VL	3/8	.187	.016	IC806	**EH5567596**	Price
DNMG 331-NF	3/8	.187	.016	IC907	**EH5594179**	Price

Turning Inserts



Member IMC Group

Style - DNMG 332

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DNMG 332-F3M	3/8	.187	.031	IC6025	**EH5567862**	Price
DNMG 332-F3P	3/8	.187	.031	IC8150	**EH5560578**	Price
DNMG 332-F3P	3/8	.187	.031	IC8250	**EH5560579**	Price
DNMG 332-GN	3/8	.187	.031	IC5010	**EH5508629**	Price
DNMG 332-GN	3/8	.187	.031	IC8150	**EH5508748**	Price
DNMG 332-GN	3/8	.187	.031	IC8250	**EH5508106**	Price
DNMG 332-GN	3/8	.187	.031	IC9250	**EH5591726**	Price
DNMG 332-M3M	3/8	.187	.031	IC6015	**EH5510253**	Price
DNMG 332-M3M	3/8	.187	.031	IC6025	**EH5510183**	Price
DNMG 332-M3M	3/8	.187	.031	IC806	**EH5566743**	Price
DNMG 332-M3P	3/8	.187	.031	IC8150	**EH5567482**	Price
DNMG 332-M3P	3/8	.187	.031	IC8250	**EH5567487**	Price
DNMG 332-NF	3/8	.187	.031	IC20N	**EH5502861**	Price
DNMG 332-NF	3/8	.187	.031	IC530N	**EH5503674**	Price
DNMG 332-NF	3/8	.187	.031	IC807	**EH5550315**	Price
DNMG 332-NF	3/8	.187	.031	IC8150	**EH5508219**	Price
DNMG 332-NF	3/8	.187	.031	IC8250	**EH5508085**	Price
DNMG 332-NF	3/8	.187	.031	IC907	**EH5505158**	Price
DNMG 332-PF	3/8	.187	.031	IC8150	**EH5508042**	Price
DNMG 332-PP	3/8	.187	.031	IC8150	**EH5550316**	Price
DNMG 332-PP	3/8	.187	.031	IC8250	**EH5550317**	Price
DNMG 332-VL	3/8	.187	.031	IC806	**EH5567597**	Price
DNMG 332-VL	3/8	.187	.031	IC908	**EH5507669**	Price

Style - DNMG 333

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DNMG 333-F3M	3/8	.187	.047	IC6015	**EH5567863**	Price
DNMG 333-F3M	3/8	.187	.047	IC6025	**EH5567864**	Price
DNMG 333-F3P	3/8	.187	.047	IC8150	**EH5566816**	Price
DNMG 333-F3P	3/8	.187	.047	IC8250	**EH5566817**	Price
DNMG 333-GN	3/8	.187	.047	IC8150	**EH5508925**	Price
DNMG 333-GN	3/8	.187	.047	IC8250	**EH5550318**	Price
DNMG 333-M3M	3/8	.187	.047	IC6015	**EH5510254**	Price
DNMG 333-M3M	3/8	.187	.047	IC6025	**EH5510184**	Price
DNMG 333-M3M	3/8	.187	.047	IC806	**EH5566744**	Price
DNMG 333-M3P	3/8	.187	.047	IC8150	**EH5567483**	Price
DNMG 333-TF	3/8	.187	.047	IC8250	**EH5550319**	Price

Style - DNMG 431

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DNMG 431-NF	1/2	.187	.016	IC807	**EH5550320**	Price
DNMG 431-NF	1/2	.187	.016	IC8250	**EH5550321**	Price
DNMG 431-TF	1/2	.187	.016	IC807	**EH5550322**	Price
DNMG 431-TF	1/2	.187	.016	IC8250	**EH5508107**	Price
DNMG 431-TF	1/2	.187	.016	IC907	**EH5505137**	Price
DNMG 431-TF	1/2	.187	.016	IC9250	**EH5507313**	Price

Style - DNMG 432

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DNMG 432-GN	1/2	.187	.031	IC8150	**EH5508220**	Price
DNMG 432-GN	1/2	.187	.031	IC830	**EH5568614**	Price
DNMG 432-GN	1/2	.187	.031	IC9150	**EH5507358**	Price
DNMG 432-GN	1/2	.187	.031	IC9250	**EH5507359**	Price
DNMG 432-M3M	1/2	.187	.031	IC6015	**EH5510255**	Price
DNMG 432-NF	1/2	.187	.031	IC8150	**EH5508928**	Price
DNMG 432-NF	1/2	.187	.031	IC8250	**EH5508927**	Price
DNMG 432-PP	1/2	.187	.031	IC8250	**EH5550323**	Price
DNMG 432-SWF	1/2	.187	.031	IC8250	**EH5508489**	Price
DNMG 432-TF	1/2	.187	.031	IC6015	**EH5509369**	Price
DNMG 432-TF	1/2	.187	.031	IC807	**EH5508275**	Price
DNMG 432-TF	1/2	.187	.031	IC8150	**EH5508932**	Price
DNMG 432-TF	1/2	.187	.031	IC8250	**EH5508086**	Price
DNMG 432-TF	1/2	.187	.031	IC920	**EH5570242**	Price
DNMG 432-TF	1/2	.187	.031	IC9250	**EH5507281**	Price
DNMG 432-WG	1/2	.187	.031	IC8250	**EH5550324**	Price
DNMG 432-GN	1/2	.187	.031	IC8250	**EH5508108**	Price
DNMG 432-TF	1/2	.187	.031	IC907	**EH5504876**	Price

Style - DNMG 442

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
DNMG 442-M3M	1/2	.250	.031	IC6025	**EH5510231**	Price
DNMG 442-TF	1/2	.250	.031	IC830	**EH5568595**	Price

Style - SCMT 3-1

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
SCMT 3-1-SM	3/8	.156	.016	IC807	**EH5550401**	Price
SCMT 3-1-SM	3/8	.156	.016	IC8150	**EH5508155**	Price
SCMT 3-1-SM	3/8	.156	.016	IC8250	**EH5508120**	Price
SCMT 3-1-SM	3/8	.156	.016	IC9150	**EH5591786**	Price

Style - SCMT 3-2

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
SCMT 3-2-17	3/8	.156	.031	IC830	**EH5568593**	Price
SCMT 3-2-SM	3/8	.156	.031	IC807	**EH5508276**	Price
SCMT 3-2-SM	3/8	.156	.031	IC8150	**EH5508156**	Price
SCMT 3-2-SM	3/8	.156	.031	IC8250	**EH5508121**	Price
SCMT 3-2-SM	3/8	.156	.031	IC830	**EH5568608**	Price

Style - SCMT 432

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
SCMT 432-19	1/2	.187	.031	IC830	**EH5568584**	Price
SCMT 432-SM	1/2	.187	.031	IC807	**EH5550409**	Price
SCMT 432-SM	1/2	.187	.031	IC8150	**EH5508157**	Price

Style - SNMG 322

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
SNMG 322-TF	3/8	.125	.031	IC9250	**EH5507557**	Price

Style - SNMG 331

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
SNMG 331-F3M	3/8	.187	.016	IC6015	**EH5567853**	Price
SNMG 331-F3M	3/8	.187	.016	IC6025	**EH5567854**	Price
SNMG 331-F3P	3/8	.187	.016	IC8150	**EH5550572**	Price
SNMG 331-F3P	3/8	.187	.016	IC8250	**EH5560565**	Price

Style - SNMG 332

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
SNMG 332-M3M	3/8	.187	.031	IC6015	**EH5550571**	Price
SNMG 332-M3M	3/8	.187	.031	IC6025	**EH5560560**	Price
SNMG 332-M3P	3/8	.187	.031	IC8150	**EH5567627**	Price
SNMG 332-M3P	3/8	.187	.031	IC8250	**EH5567568**	Price

Style - SNMG 431

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
SNMG 431-TF	1/2	.187	.016	IC8250	**EH5508123**	Price

Style - SNMG 432

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
SNMG 432-GN	1/2	.187	.031	IC5005	**EH5507729**	Price
SNMG 432-GN	1/2	.187	.031	IC5010	**EH5507744**	Price
SNMG 432-GN	1/2	.187	.031	IC8150	**EH5508158**	Price
SNMG 432-GN	1/2	.187	.031	IC8250	**EH5508124**	Price
SNMG 432-GN	1/2	.187	.031	IC8350	**EH5508546**	Price
SNMG 432-GN	1/2	.187	.031	IC9250	**EH5507284**	Price
SNMG 432-PP	1/2	.187	.031	IC830	**EH5568610**	Price
SNMG 432-TF	1/2	.187	.031	IC6015	**EH5509553**	Price
SNMG 432-TF	1/2	.187	.031	IC807	**EH5508239**	Price
SNMG 432-TF	1/2	.187	.031	IC8250	**EH5508125**	Price
SNMG 432-TF	1/2	.187	.031	IC830	**EH5568597**	Price
SNMG 432-TF	1/2	.187	.031	IC907	**EH5504977**	Price
SNMG 432-TF	1/2	.187	.031	IC9250	**EH5591816**	Price
SNMG 432-GN	1/2	.187	.031	IC9150	**EH5591806**	Price

Style - TCGT 2-1

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TCMT 2-1-SM	1/4	.094	.016	IC8150	**EH5508159**	Price

Style - TCMT 2-0

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TCMT 2-0-PF	1/4	.094	.004	IC807	**EH5550443**	Price

Style - TCMT 2-1

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TCMT 2-1-SM	1/4	.094	.016	IC5010	**EH5508256**	Price
TCMT 2-1-SM	1/4	.094	.016	IC807	**EH5550445**	Price
TCMT 2-1-SM	1/4	.094	.016	IC8250	**EH5508126**	Price
TCMT 2-1-SM	1/4	.094	.016	IC8350	**EH5508549**	Price
TCMT 2-1-SM	3/8	.094	.016	IC9250	**EH5506990**	Price

Style - TCMT 2-2

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TCMT 2-2-SM	1/4	.094	.031	IC807	**EH5550447**	Price

Style - TCMT 3-1

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TCMT 3-1-14	3/8	.156	.016	IC5005	**EH5550448**	Price
TCMT 3-1-SM	3/8	.156	.016	IC5005	**EH5550449**	Price
TCMT 3-1-SM	3/8	.156	.016	IC807	**EH5550450**	Price
TCMT 3-1-SM	3/8	.156	.016	IC8150	**EH5508160**	Price
TCMT 3-1-SM	3/8	.156	.016	IC8250	**EH5508128**	Price
TCMT 3-1-SM	3/8	.156	.016	IC830	**EH5568606**	Price
TCMT 3-1-SM	3/8	.156	.016	IC9250	**EH5507286**	Price

Turning Inserts



Style - TCMT 3-2						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TCMT 3-2-19	3/8	.156	.031	IC830	**EH5568589**	Price
TCMT 3-2-19	3/8	.187	.031	IC5005	**EH5550451**	Price
TCMT 3-2-SM	3/8	.156	.031	IC5005	**EH5509051**	Price
TCMT 3-2-SM	3/8	.156	.031	IC807	**EH5550452**	Price
TCMT 3-2-SM	3/8	.156	.031	IC8150	**EH5508162**	Price
TCMT 3-2-SM	3/8	.156	.031	IC830	**EH5568613**	Price
TCMT 3-2-SM	3/8	.156	.031	IC9150	**EH5506995**	Price
TCMT 3-2-SM	3/8	.156	.031	IC9250	**EH5506993**	Price

Style - TNMA 331						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMA 331	3/8	.187	.016	IC5005	**EH5507734**	Price
TNMA 331	3/8	.187	.016	IC5010	**EH5507749**	Price

Style - TNMA 332						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMA 332	3/8	.187	.031	IC5005	**EH5507727**	Price
TNMA 332	3/8	.187	.031	IC5010	**EH5507742**	Price

Style - TNMA 333						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMA 333	3/8	.187	.031	IC5005	**EH5508045**	Price
TNMA 333	3/8	.187	.047	IC5010	**EH5508046**	Price

Style - TNMA 334						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMA 334	3/8	.187	.063	IC5010	**EH5508687**	Price

Style - TNMG 321						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMG 321-TF	3/8	.125	.016	IC9250	**EH5507566**	Price

Style - TNMG 322						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMG 322-GN	3/8	.187	.031	IC8250	**EH5550457**	Price
TNMG 322-TF	3/8	.187	.031	IC807	**EH5550458**	Price

Style - TNMG 331						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMG 331-F3M	3/8	.187	.016	IC6025	**EH5567840**	Price
TNMG 331-F3P	3/8	.187	.016	IC8150	**EH5566834**	Price
TNMG 331-F3P	3/8	.187	.016	IC8150	**EH5567571**	Price
TNMG 331-F3P	3/8	.187	.016	IC8250	**EH5566837**	Price
TNMG 331-GN	3/8	.187	.016	IC428	**EH5507567**	Price
TNMG 331-GN	3/8	.187	.016	IC5005	**EH5550459**	Price
TNMG 331-M3P	3/8	.187	.016	IC8250	**EH5567572**	Price
TNMG 331-PP	3/8	.187	.016	IC20	**EH5503154**	Price
TNMG 331-PP	3/8	.187	.016	IC8250	**EH5508129**	Price
TNMG 331-PP	3/8	.187	.016	IC8350	**EH5508556**	Price
TNMG 331-PP	3/8	.187	.016	IC9250	**EH5507318**	Price
TNMG 331-SF	3/8	.187	.016	IC520N	**EH5503733**	Price
TNMG 331-SF	3/8	.187	.016	IC530N	**EH5503639**	Price
TNMG 331-SF	3/8	.187	.016	IC570	**EH5503640**	Price
TNMG 331-TF	3/8	.187	.016	IC6015	**EH5509551**	Price
TNMG 331-TF	3/8	.187	.016	IC806	**EH5509995**	Price
TNMG 331-TF	3/8	.187	.016	IC807	**EH5508493**	Price
TNMG 331-TF	3/8	.187	.016	IC8150	**EH5508161**	Price
TNMG 331-TF	3/8	.187	.016	IC8250	**EH5508130**	Price
TNMG 331-TF	3/8	.187	.016	IC830	**EH5568604**	Price
TNMG 331-TF	3/8	.187	.016	IC907	**EH5505124**	Price
TNMG 331-TF	3/8	.187	.016	IC9150	**EH5507225**	Price

Style - TNMG 332						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMG 332-F3M	3/8	.187	.031	IC6015	**EH5567841**	Price
TNMG 332-F3M	3/8	.187	.031	IC6025	**EH5567842**	Price
TNMG 332-F3P	3/8	.187	.031	IC8150	**EH5566835**	Price
TNMG 332-F3P	3/8	.187	.031	IC8250	**EH5566838**	Price
TNMG 332-GN	3/8	.187	.031	IC20	**EH5507568**	Price
TNMG 332-GN	3/8	.187	.031	IC428	**EH5591057**	Price
TNMG 332-GN	3/8	.187	.031	IC5005	**EH5507721**	Price
TNMG 332-GN	3/8	.187	.031	IC5010	**EH5507736**	Price
TNMG 332-GN	3/8	.187	.031	IC807	**EH5550460**	Price
TNMG 332-GN	3/8	.187	.031	IC8150	**EH5508163**	Price
TNMG 332-GN	3/8	.187	.031	IC8250	**EH5508131**	Price
TNMG 332-GN	3/8	.187	.031	IC830	**EH5568598**	Price
TNMG 332-GN	3/8	.187	.031	IC8350	**EH5508541**	Price
TNMG 332-GN	3/8	.187	.031	IC907	**EH5505754**	Price
TNMG 332-GN	3/8	.187	.031	IC9250	**EH5507278**	Price
TNMG 332-M3M	3/8	.187	.031	IC6015	**EH5510314**	Price
TNMG 332-M3M	3/8	.187	.031	IC6025	**EH5566702**	Price

Style - TNMG 332						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMG 332-M3P	3/8	.187	.031	IC8150	**EH5567500**	Price
TNMG 332-M3P	3/8	.187	.031	IC8250	**EH5567503**	Price
TNMG 332-NF	3/8	.187	.031	IC8150	**EH5508623**	Price
TNMG 332-NF	3/8	.187	.031	IC8150	**EH5595966**	Price
TNMG 332-NF	3/8	.187	.031	IC8250	**EH5508624**	Price
TNMG 332-PP	3/8	.187	.031	IC20	**EH5502905**	Price
TNMG 332-PP	3/8	.187	.031	IC8250	**EH5508132**	Price
TNMG 332-SF	3/8	.187	.031	IC530N	**EH5599949**	Price
TNMG 332-SF	3/8	.187	.031	IC570	**EH5504541**	Price
TNMG 332-SF	3/8	.187	.031	IC8250	**EH5550461**	Price
TNMG 332-TF	3/8	.187	.031	IC6015	**EH5509552**	Price
TNMG 332-TF	3/8	.187	.031	IC806	**EH5509905**	Price
TNMG 332-TF	3/8	.187	.031	IC807	**EH5592001**	Price
TNMG 332-TF	3/8	.187	.031	IC808	**EH5592102**	Price
TNMG 332-TF	3/8	.187	.031	IC8150	**EH5508164**	Price
TNMG 332-TF	3/8	.187	.031	IC8250	**EH5508133**	Price
TNMG 332-TF	3/8	.187	.031	IC907	**EH5504912**	Price
TNMG 332-VL	3/8	.187	.031	IC806	**EH5567602**	Price
TNMG 332-VL	3/8	.187	.031	IC806	**EH5596446**	Price
TNMG 332-VL	3/8	.187	.031	IC807	**EH5550462**	Price
TNMG 332-VL	3/8	.187	.031	IC907	**EH5506329**	Price
TNMG 332-VL	3/8	.187	.031	IC908	**EH5592852**	Price

Style - TNMG 333						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMG 333-F3M	3/8	.187	.047	IC6015	**EH5567843**	Price
TNMG 333-F3M	3/8	.187	.047	IC6025	**EH5567844**	Price
TNMG 333-F3P	3/8	.187	.047	IC8150	**EH5566836**	Price
TNMG 333-F3P	3/8	.187	.047	IC8250	**EH5566839**	Price
TNMG 333-GN	3/8	.187	.047	IC8150	**EH5508619**	Price
TNMG 333-GN	3/8	.187	.047	IC8250	**EH5508620**	Price
TNMG 333-M3M	3/8	.187	.047	IC6015	**EH5510276**	Price
TNMG 333-M3M	3/8	.187	.047	IC6025	**EH5510195**	Price
TNMG 333-M3P	3/8	.187	.047	IC8150	**EH5567501**	Price
TNMG 333-M3P	3/8	.187	.047	IC8250	**EH5567504**	Price
TNMG 333-TF	3/8	.187	.047	IC807	**EH5550464**	Price
TNMG 333-TF	3/8	.187	.047	IC8150	**EH5508621**	Price
TNMG 333-TF	3/8	.187	.047	IC8250	**EH5550465**	Price
TNMG 333-TF	3/8	.187	.047	IC907	**EH5505125**	Price

Style - TNMG 431						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMG 431-PP	1/2	.187	.016	IC8250	**EH5550466**	Price
TNMG 431-TF	1/2	.187	.016	IC807	**EH5550467**	Price
TNMG 431-TF	1/2	.187	.016	IC8150	**EH5508916**	Price
TNMG 431-TF	1/2	.187	.016	IC8250	**EH5550468**	Price
TNMG 431-TF	1/2	.187	.016	IC907	**EH5505126**	Price

Style - TNMG 432						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMG 432-GN	1/2	.187	.031	IC8150	**EH5508165**	Price
TNMG 432-GN	1/2	.187	.031	IC8250	**EH5508134**	Price
TNMG 432-GN	1/2	.187	.031	IC830	**EH5568602**	Price
TNMG 432-GN	1/2	.187	.031	IC8350	**EH5508555**	Price
TNMG 432-PP	1/2	.187	.031	IC8150	**EH5550469**	Price
TNMG 432-PP	1/2	.187	.031	IC8250	**EH5550470**	Price
TNMG 432-TF	1/2	.187	.031	IC807	**EH5550471**	Price
TNMG 432-TF	1/2	.187	.031	IC8150	**EH5508917**	Price
TNMG 432-TF	1/2	.187	.031	IC8250	**EH5508135**	Price
TNMG 432-TF	1/2	.187	.031	IC9250	**EH5507315**	Price
TNMG 432-GN	1/2	.187	.031	IC9150	**EH5592286**	Price
TNMG 432-GN	1/2	.187	.031	IC9250	**EH5507280**	Price
TNMG 432-TF	1/2	.187	.031	IC907	**EH5505127**	Price

Style - TNMG 433						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMG 433-M3P	1/2	.187	.047	IC830	**EH5568294**	Price
TNMG 433-TF	1/2	.187	.047	IC907	**EH5505128**	Price

Style - TNMG 543						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMG 543-GN	5/8	.250	.047	IC9350	**EH5507258**	Price

Style - TNMX 341						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMX 341-M3PW	3/8	.250	.016	IC8150	**EH5560566**	Price
TNMX 341-M3PW	3/8	.250	.016	IC8250	**EH5560567**	Price

Style - TNMX 342						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TNMX 342-M3PW	3/8	.250	.031	IC8150	**EH5560568**	Price
TNMX 342-M3PW	3/8	.250	.031	IC8250	**EH5560569**	Price

Turning Inserts



Member IMC Group

Style - TPG 322

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPG 322	3/8	.125	.031	IC9054	**EH5507589**	Price

Style - TPG 432

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPG 432	1/2	.187	.031	IC9054	**EH5507590**	Price

Style - TPGB 321

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPGB 321-60	3/8	.125	.016	IC570	**EH5503785**	Price

Style - TPGH 2-1

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPGH 2-1L	1/4	.094	.016	IC570	**EH5503787**	Price
TPGH 2-1XL	1/4	.094	.016	IC570	**EH5503788**	Price

Style - TPGH 2-2

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPGH 2-2L	1/4	.094	.031	IC570	**EH5503789**	Price

Style - TPGH 321

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPGH 321-L	3/8	.125	.016	IC570	**EH5503790**	Price

Style - TPMR 221

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPMR 221	1/4	.125	.016	IC830	**EH5568591**	Price

Style - TPMR 321

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPMR 321	3/8	.125	.016	IC830	**EH5568587**	Price
TPMR 321	3/8	.125	.016	IC907	**EH5505154**	Price

Style - TPMR 322

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPMR 322	3/8	.125	.031	IC20N	**EH5502717**	Price
TPMR 322	3/8	.125	.031	IC830	**EH5568605**	Price
TPMR 322	3/8	.125	.031	IC907	**EH5505155**	Price

Style - TPMT 2-1

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPMT 2-1	1/4	.094	.016	IC830	**EH5568601**	Price
TPMT 2-1	1/4	.094	.016	IC907	**EH5505570**	Price

Style - TPMT 321

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPMT 321	3/8	.125	.016	IC8250	**EH5508140**	Price
TPMT 321	3/8	.125	.016	IC830	**EH5568599**	Price
TPMT 321	3/8	.125	.016	IC8350	**EH5508543**	Price
TPMT 321	3/8	.125	.016	IC907	**EH5505522**	Price
TPMT 321	3/8	.125	.016	IC9250	**EH5507317**	Price

Style - TPMT 322

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPMT 322	3/8	.125	.031	IC830	**EH5568592**	Price
TPMT 322	3/8	.125	.031	IC907	**EH5505523**	Price

Style - TPU 322

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPU 322	3/8	.125	.031	IC520M	**EH555600424**	Price

Style - TPU 432

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
TPU 432	1/2	.187	.031	IC520M	**EH555600429**	Price

Style - VCMT 220

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VCMT 220-SM	1/4	.125	.008	IC807	**EH5550495**	Price

Style - VCMT 221

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VCMT 221-SM	1/4	.125	.016	IC807	**EH5550496**	Price

Style - VCMT 330

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VCMT 330-SM	3/8	.187	.008	IC807	**EH5550497**	Price

Style - VCMT 331

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VCMT 331-14	3/8	.187	.016	IC830	**EH5568590**	Price
VCMT 331-SM	3/8	.187	.016	IC807	**EH5550498**	Price
VCMT 331-SM	3/8	.187	.016	IC8150	**EH5508167**	Price

Style - VCMT 331

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VCMT 331-SM	3/8	.187	.016	IC8250	**EH5508141**	Price
VCMT 331-SM	3/8	.187	.016	IC9250	**EH5507001**	Price

Style - VCMT 332

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VCMT 332-SM	3/8	.187	.031	IC806	**EH5509900**	Price
VCMT 332-SM	3/8	.187	.031	IC807	**EH5550499**	Price
VCMT 332-SM	3/8	.187	.031	IC8150	**EH5508168**	Price
VCMT 332-SM	3/8	.187	.031	IC8250	**EH5508142**	Price
VCMT 332-SM	3/8	.187	.031	IC9150	**EH5507004**	Price
VCMT 332-SM	3/8	.187	.031	IC9250	**EH5507003**	Price

Style - VCMT 333

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VCMT 333-SM	3/8	.187	.047	IC807	**EH5550500**	Price

Style - VNMG 2.5-0

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VNMG 2.5-0-NF	1/4	.154	.008	IC830	**EH5568617**	Price
VNMG 2.5-0-NF	1/4	.156	.008	IC807	**EH5550503**	Price
VNMG 2.5-0-NF	1/4	.156	.008	IC8250	**EH5508143**	Price

Style - VNMG 2.5-1

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VNMG 2.5-1-NF	1/4	.156	.016	IC807	**EH5508221**	Price
VNMG 2.5-1-NF	1/4	.156	.016	IC8150	**EH5508169**	Price
VNMG 2.5-1-NF	1/4	.156	.016	IC8250	**EH5508144**	Price
VNMG 2.5-1-NF	1/4	.156	.016	IC830	**EH5509502**	Price
VNMG 2.5-1-NF	1/4	.156	.016	IC8350	**EH5508542**	Price

Style - VNMG 2.5-2

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VNMG 2.5-2-NF	1/4	.156	.031	IC5005	**EH5508064**	Price
VNMG 2.5-2-NF	1/4	.156	.031	IC5010	**EH5508065**	Price
VNMG 2.5-2-NF	1/4	.156	.031	IC807	**EH5550504**	Price
VNMG 2.5-2-NF	1/4	.156	.031	IC8150	**EH5508170**	Price
VNMG 2.5-2-NF	1/4	.156	.031	IC8250	**EH5508145**	Price
VNMG 2.5-2-NF	1/4	.156	.031	IC830	**EH5568607**	Price
VNMG 2.5-2-NF	1/4	.156	.031	IC8350	**EH5508550**	Price

Style - VNMG 331

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VNMG 331-NF	3/8	.187	.016	IC807	**EH5550505**	Price
VNMG 331-NF	3/8	.187	.016	IC8150	**EH5508171**	Price
VNMG 331-NF	3/8	.187	.016	IC8250	**EH5508147**	Price
VNMG 331-NF	3/8	.187	.016	IC9150	**EH5507396**	Price
VNMG 331-NF	3/8	.187	.016	IC9250	**EH5507370**	Price
VNMG 331-NF	3/8	.187	.016	IC907	**EH5505285**	Price

Style - VNMG 332

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VNMG 332-TF	3/8	.187	.031	IC507	**EH5504737**	Price
VNMG 332-TF	3/8	.187	.031	IC807	**EH5508508**	Price
VNMG 332-TF	3/8	.187	.031	IC8150	**EH5508172**	Price
VNMG 332-TF	3/8	.187	.031	IC8250	**EH5508146**	Price
VNMG 332-TF	3/8	.187	.031	IC907	**EH5505130**	Price
VNMG 332-TF	3/8	.187	.031	IC9250	**EH5507555**	Price

Style - VNMG 333

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
VNMG 333-TF	3/8	.187	.047	IC807	**EH5550506**	Price

Style - WNMA 331

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMA 331	3/8	.187	.016	IC5010	**EH5508039**	Price

Style - WNMA 332

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMA 331	3/8	.187	.016	IC428	**EH5599849**	Price
WNMA 332	3/8	.187	.031	IC5005	**EH5508037**	Price
WNMA 332	3/8	.187	.031	IC5010	**EH5508036**	Price

Style - WNMA 333

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMA 333	3/8	.187	.031	IC5005	**EH5510366**	Price
WNMA 333	3/8	.187	.031	IC5010	**EH5560555**	Price

Style - WNMG 3-0

Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 3-0-NF	3/8	.154	.004	IC20N	**EH5502707**	Price
WNMG 3-0-NF	3/8	.154	.004	IC907	**EH5591780**	Price

Turning Inserts



Member IMC Group

Style - WNMG 3-0						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 3-0-NF	3/8	.156	.008	IC807	**EH5550513**	Price
WNMG 3-0-NF	3/8	.156	.008	IC8150	**EH5550514**	Price
WNMG 3-0-NF	3/8	.156	.008	IC8250	**EH5507828**	Price
WNMG 3-0-NF	3/8	.156	.008	IC8350	**EH5507852**	Price

Style - WNMG 3-1						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 3-1-GN	3/8	.154	.016	IC9250	**EH5591896**	Price
WNMG 3-1-GN	3/8	.156	.016	IC8250	**EH5508148**	Price
WNMG 3-1-NF	3/8	.154	.016	IC20N	**EH5502654**	Price
WNMG 3-1-NF	3/8	.154	.016	IC907	**EH5504879**	Price
WNMG 3-1-NF	3/8	.154	.016	IC9150	**EH5507234**	Price
WNMG 3-1-NF	3/8	.154	.016	IC9250	**EH5591906**	Price
WNMG 3-1-NF	3/8	.156	.016	IC807	**EH5550515**	Price
WNMG 3-1-NF	3/8	.156	.016	IC8150	**EH5508173**	Price
WNMG 3-1-NF	3/8	.156	.016	IC8250	**EH5507812**	Price
WNMG 3-1-NF	3/8	.156	.016	IC8350	**EH5507849**	Price
WNMG 3-1-PP	3/8	.154	.016	IC10	**EH5503002**	Price
WNMG 3-1-PP	3/8	.154	.016	IC907	**EH5505629**	Price
WNMG 3-1-PP	3/8	.154	.016	IC9250	**EH5591916**	Price
WNMG 3-1-PP	3/8	.156	.016	IC807	**EH5550516**	Price
WNMG 3-1-PP	3/8	.156	.016	IC8250	**EH5507817**	Price
WNMG 3-1-PP	3/8	.156	.016	IC8350	**EH5507850**	Price
WNMG 3-1-SF	3/8	.156	.016	IC807	**EH5550517**	Price
WNMG 3-1-TF	3/8	.154	.016	IC907	**EH5504823**	Price
WNMG 3-1-TF	3/8	.156	.016	IC807	**EH5507872**	Price
WNMG 3-1-TF	3/8	.156	.016	IC8250	**EH5507808**	Price
WNMG 3-1-WG	3/8	.154	.016	IC9250	**EH5507288**	Price
WNMG 3-1-WG	3/8	.156	.016	IC8150	**EH5507841**	Price
WNMG 3-1-WG	3/8	.156	.016	IC8250	**EH5507809**	Price

Style - WNMG 3-2						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 3-2-GN	3/8	.156	.031	IC8150	**EH5507839**	Price
WNMG 3-2-GN	3/8	.156	.031	IC8250	**EH5507811**	Price
WNMG 3-2-GN	3/8	.156	.031	IC8350	**EH5507857**	Price
WNMG 3-2-NF	3/8	.154	.031	IC20N	**EH5502681**	Price
WNMG 3-2-NF	3/8	.154	.031	IC9250	**EH5591956**	Price
WNMG 3-2-NF	3/8	.156	.031	IC8150	**EH5550518**	Price
WNMG 3-2-NF	3/8	.156	.031	IC8250	**EH5507819**	Price
WNMG 3-2-NF	3/8	.156	.031	IC8350	**EH5507860**	Price
WNMG 3-2-PP	3/8	.154	.031	IC907	**EH5504824**	Price
WNMG 3-2-PP	3/8	.156	.031	IC807	**EH5550519**	Price
WNMG 3-2-PP	3/8	.156	.031	IC8150	**EH5550520**	Price
WNMG 3-2-PP	3/8	.156	.031	IC8250	**EH5550521**	Price
WNMG 3-2-PP	3/8	.156	.031	IC8350	**EH5507859**	Price
WNMG 3-2-TF	3/8	.154	.031	IC907	**EH5505153**	Price
WNMG 3-2-TF	3/8	.154	.031	IC9250	**EH5507283**	Price
WNMG 3-2-TF	3/8	.156	.031	IC807	**EH5507867**	Price
WNMG 3-2-TF	3/8	.156	.031	IC8150	**EH5508174**	Price
WNMG 3-2-TF	3/8	.156	.031	IC8250	**EH5507803**	Price
WNMG 3-2-WG	3/8	.156	.031	IC807	**EH5550522**	Price
WNMG 3-2-WG	3/8	.156	.031	IC8150	**EH5507844**	Price
WNMG 3-2-WG	3/8	.156	.031	IC8250	**EH5507818**	Price

Style - WNMG 3-3						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 3-3-GN	3/8	.156	.047	IC8250	**EH5550532**	Price
WNMG 3-3-TF	3/8	.156	.047	IC807	**EH5550534**	Price

Style - WNMG 330						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 330-NF	3/8	.187	.008	IC807	**EH5550523**	Price
WNMG 330-NF	3/8	.187	.008	IC907	**EH5506230**	Price
WNMG 330-WF	3/8	.187	.008	IC907	**EH5506229**	Price

Style - WNMG 331						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 331-F3M	3/8	.187	.016	IC6015	**EH5567827**	Price
WNMG 331-F3M	3/8	.187	.016	IC6025	**EH5567828**	Price
WNMG 331-F3P	3/8	.187	.016	IC8150	**EH5510356**	Price
WNMG 331-F3P	3/8	.187	.016	IC8250	**EH5510357**	Price
WNMG 331-GN	3/8	.187	.016	IC8250	**EH5550524**	Price
WNMG 331-M3M	3/8	.187	.016	IC6015	**EH5510354**	Price
WNMG 331-M3M	3/8	.187	.016	IC6025	**EH5510355**	Price
WNMG 331-M3M	3/8	.187	.016	IC806	**EH5566737**	Price
WNMG 331-M3P	3/8	.187	.016	IC8150	**EH5567569**	Price
WNMG 331-M3P	3/8	.187	.016	IC8250	**EH5567520**	Price
WNMG 331-NF	3/8	.187	.016	IC807	**EH5550525**	Price
WNMG 331-NF	3/8	.187	.016	IC8250	**EH5550526**	Price
WNMG 331-NF	3/8	.187	.016	IC907	**EH5506231**	Price

Style - WNMG 331						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 331-PP	3/8	.187	.016	IC807	**EH5550527**	Price
WNMG 331-PP	3/8	.187	.016	IC8250	**EH5550528**	Price
WNMG 331-PP	3/8	.187	.016	IC8350	**EH5507862**	Price
WNMG 331-PP	3/8	.187	.016	IC907	**EH5506170**	Price
WNMG 331-TF	3/8	.187	.016	IC807	**EH5508229**	Price
WNMG 331-TF	3/8	.187	.016	IC8250	**EH5508228**	Price
WNMG 331-TF	3/8	.187	.016	IC907	**EH5596391**	Price
WNMG 331-TF	3/8	.187	.016	IC9250	**EH5507683**	Price
WNMG 331-WF	3/8	.187	.016	IC807	**EH5550529**	Price
WNMG 331-WF	3/8	.187	.016	IC907	**EH5506227**	Price
WNMG 331-WG	3/8	.187	.016	IC530N	**EH5506297**	Price
WNMG 331-WG	3/8	.187	.016	IC807	**EH5508232**	Price
WNMG 331-WG	3/8	.187	.016	IC8150	**EH5550530**	Price
WNMG 331-WG	3/8	.187	.016	IC8250	**EH5508231**	Price

Style - WNMG 332						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 332-F3M	3/8	.187	.031	IC6025	**EH5567830**	Price
WNMG 332-F3P	3/8	.187	.031	IC8150	**EH5510358**	Price
WNMG 332-F3P	3/8	.187	.031	IC8250	**EH5510359**	Price
WNMG 332-GN	3/8	.187	.031	IC8250	**EH5507823**	Price
WNMG 332-GN	3/8	.187	.031	IC9250	**EH5591406**	Price
WNMG 332-M3M	3/8	.187	.031	IC6015	**EH5510313**	Price
WNMG 332-M3M	3/8	.187	.031	IC6025	**EH5510200**	Price
WNMG 332-M3M	3/8	.187	.031	IC806	**EH5566738**	Price
WNMG 332-M3P	3/8	.187	.031	IC8150	**EH5567570**	Price
WNMG 332-M3P	3/8	.187	.031	IC8250	**EH5567521**	Price
WNMG 332-NF	3/8	.187	.031	IC8150	**EH5508041**	Price
WNMG 332-PP	3/8	.187	.031	IC807	**EH5550531**	Price
WNMG 332-PP	3/8	.187	.031	IC8350	**EH5507863**	Price
WNMG 332-PP	3/8	.187	.031	IC907	**EH5506167**	Price
WNMG 332-TF	3/8	.187	.031	IC6015	**EH5567829**	Price
WNMG 332-TF	3/8	.187	.031	IC807	**EH5508230**	Price
WNMG 332-TF	3/8	.187	.031	IC8150	**EH5508175**	Price
WNMG 332-TF	3/8	.187	.031	IC8250	**EH5507825**	Price
WNMG 332-TF	3/8	.187	.031	IC907	**EH5594751**	Price
WNMG 332-TF	3/8	.187	.031	IC9250	**EH5591976**	Price
WNMG 332-WF	3/8	.187	.031	IC907	**EH5506228**	Price
WNMG 332-WG	3/8	.187	.031	IC807	**EH5508234**	Price
WNMG 332-WG	3/8	.187	.031	IC8150	**EH5508930**	Price
WNMG 332-WG	3/8	.187	.031	IC8250	**EH5508233**	Price

Style - WNMG 333						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 333-F3M	3/8	.187	.047	IC6015	**EH5567831**	Price
WNMG 333-F3P	3/8	.187	.047	IC8150	**EH5566844**	Price
WNMG 333-F3P	3/8	.187	.047	IC8250	**EH5566845**	Price
WNMG 333-GN	3/8	.187	.031	IC6025	**EH5567832**	Price
WNMG 333-GN	3/8	.187	.047	IC8150	**EH5508622**	Price
WNMG 333-M3M	3/8	.187	.047	IC6015	**EH5510284**	Price
WNMG 333-M3M	3/8	.187	.047	IC6025	**EH5510201**	Price
WNMG 333-M3M	3/8	.187	.047	IC806	**EH5566739**	Price
WNMG 333-M3P	3/8	.187	.047	IC8150	**EH5567513**	Price
WNMG 333-TF	3/8	.187	.047	IC807	**EH5508222**	Price
WNMG 333-TF	3/8	.187	.047	IC907	**EH5594761**	Price

Style - WNMG 431						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 431-GN	1/2	.187	.016	IC5005	**EH5508058**	Price
WNMG 431-GN	1/2	.187	.016	IC5010	**EH5508059**	Price
WNMG 431-GN	1/2	.187	.016	IC8150	**EH5508176**	Price
WNMG 431-GN	1/2	.187	.016	IC8250	**EH5507826**	Price
WNMG 431-GN	1/2	.187	.016	IC9250	**EH5591986**	Price
WNMG 431-NF	1/2	.187	.016	IC20N	**EH5503731**	Price
WNMG 431-NF	1/2	.187	.016	IC530N	**EH5503667**	Price
WNMG 431-NF	1/2	.187	.016	IC8250	**EH5507829**	Price
WNMG 431-PP	1/2	.187	.016	IC6015	**EH5509364**	Price
WNMG 431-PP	1/2	.187	.016	IC807	**EH5508273**	Price
WNMG 431-PP	1/2	.187	.016	IC8150	**EH5508926**	Price
WNMG 431-PP	1/2	.187	.016	IC8250	**EH5507816**	Price
WNMG 431-PP	1/2	.187	.016	IC830	**EH5568615**	Price
WNMG 431-PP	1/2	.187	.016	IC8350	**EH5507864**	Price
WNMG 431-PP	1/2	.187	.016	IC9250	**EH5591996**	Price
WNMG 431-TF	1/2	.187	.016	IC507	**EH5504735**	Price
WNMG 431-TF	1/2	.187	.016	IC6015	**EH5509363**	Price
WNMG 431-TF	1/2	.187	.016	IC807	**EH5507869**	Price
WNMG 431-TF	1/2	.187	.016	IC8150	**EH5508044**	Price
WNMG 431-TF	1/2	.187	.016	IC8250	**EH5507807**	Price
WNMG 431-TF	1/2	.187	.016	IC907	**EH5505131**	Price
WNMG 431-TF	1/2	.187	.016	IC9250	**EH5507309**	Price

Turning Inserts



Member IMC Group

Style - WNMG 432						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 432	1/2	.187	.031	IC28	**EH5502820**	Price
WNMG 432-GN	1/2	.187	.031	IC5005	**EH5507731**	Price
WNMG 432-GN	1/2	.187	.031	IC5010	**EH5507746**	Price
WNMG 432-GN	1/2	.187	.031	IC6015	**EH5509367**	Price
WNMG 432-GN	1/2	.187	.031	IC807	**EH5550536**	Price
WNMG 432-GN	1/2	.187	.031	IC8150	**EH5507831**	Price
WNMG 432-GN	1/2	.187	.031	IC8250	**EH5507801**	Price
WNMG 432-GN	1/2	.187	.031	IC830	**EH5509504**	Price
WNMG 432-GN	1/2	.187	.031	IC8350	**EH5507851**	Price
WNMG 432-GN	1/2	.187	.031	IC907	**EH5595309**	Price
WNMG 432-GN	1/2	.187	.031	IC9150	**EH5506967**	Price
WNMG 432-M3M	1/2	.187	.031	IC6015	**EH5560538**	Price
WNMG 432-M3M	1/2	.187	.031	IC6025	**EH5510202**	Price
WNMG 432-NF	1/2	.187	.031	IC530N	**EH5503666**	Price
WNMG 432-NF	1/2	.187	.031	IC8150	**EH5507833**	Price
WNMG 432-NF	1/2	.187	.031	IC8250	**EH5508149**	Price
WNMG 432-NF	1/2	.187	.031	IC9250	**EH5507357**	Price
WNMG 432-NR	1/2	.187	.031	IC5010	**EH5550537**	Price
WNMG 432-NR	1/2	.187	.031	IC807	**EH5550538**	Price
WNMG 432-NR	1/2	.187	.031	IC8250	**EH5508277**	Price
WNMG 432-PP	1/2	.187	.031	IC6015	**EH5509366**	Price
WNMG 432-PP	1/2	.187	.031	IC807	**EH5507868**	Price
WNMG 432-PP	1/2	.187	.031	IC8150	**EH5508177**	Price
WNMG 432-PP	1/2	.187	.031	IC8250	**EH5507810**	Price
WNMG 432-PP	1/2	.187	.031	IC8350	**EH5507854**	Price
WNMG 432-PP	1/2	.187	.031	IC907	**EH5504825**	Price
WNMG 432-PP	1/2	.187	.031	IC9250	**EH5506973**	Price
WNMG 432-TF	1/2	.187	.031	IC5010	**EH5550539**	Price
WNMG 432-TF	1/2	.187	.031	IC507	**EH5504263**	Price
WNMG 432-TF	1/2	.187	.031	IC6015	**EH5509365**	Price

Style - WNMG 432						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 432-TF	1/2	.187	.031	IC807	**EH5507751**	Price
WNMG 432-TF	1/2	.187	.031	IC8150	**EH5507835**	Price
WNMG 432-TF	1/2	.187	.031	IC8250	**EH5507755**	Price
WNMG 432-TF	1/2	.187	.031	IC830	**EH5507753**	Price
WNMG 432-TF	1/2	.187	.031	IC8350	**EH5508545**	Price
WNMG 432-TF	1/2	.187	.031	IC9250	**EH5506972**	Price
WNMG 432-WF	1/2	.187	.031	IC8150	**EH5508178**	Price
WNMG 432-WG	1/2	.187	.031	IC5005	**EH5550540**	Price
WNMG 432-WG	1/2	.187	.031	IC8150	**EH5507842**	Price
WNMG 432-WG	1/2	.187	.031	IC8250	**EH5507820**	Price
WNMG 432-GN	1/2	.187	.031	IC9250	**EH5506971**	Price
WNMG 432-TF	1/2	.187	.031	IC907	**EH5596898**	Price

Style - WNMG 433						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMG 433-GN	1/2	.187	.047	IC9250	**EH5507368**	Price
WNMG 433-M3M	1/2	.187	.047	IC6015	**EH5510286**	Price
WNMG 433-M3M	1/2	.187	.047	IC6025	**EH5510203**	Price
WNMG 433-M3M	1/2	.187	.047	IC830	**EH5567771**	Price

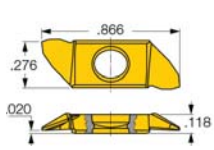
Style - WNMX 341						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMX 341-M3PW	3/8	.250	.016	IC8150	**EH5510360**	Price
WNMX 341-M3PW	3/8	.250	.016	IC8250	**EH5510361**	Price

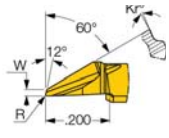
Style - WNMX 342						
Iscar Designation	IC (in.)	T (in.)	R (in.)	Grade	Order No.	Price
WNMX 342-M3PW	3/8	.250	.031	IC807	**EH5507992**	Price
WNMX 342-M3PW	3/8	.250	.031	IC8150	**EH5507993**	Price
WNMX 342-M3PW	3/8	.250	.031	IC8250	**EH5507686**	Price

SWISSCUT INNOVAL LINE Back Turning Inserts

SCIR/L - BR/BL

- Back turning inserts with a frontal lead angle
- Used on Swiss type automatics and small CNC lathes
- Grade IC1008 is good for general machining of steel, stainless steels, and cast iron





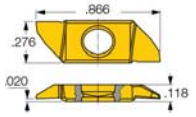


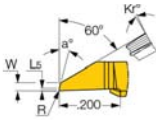
Iscar No.	Width (in.)	Ka°	Radius R (in.)	Right/Left Hand	Grade	Order No.	Price
SCIL 22-BL00-05K7 IC1008 INSERT	.020	7 Degrees	.000	Left	IC1008	**EH6405425**	Price
SCIL 22-BL08-10K7 IC1008 INSERT	.039	7 Degrees	.003	Left	IC1008	**EH6410052**	Price
SCIL 22-BL10-05K7 IC1008 INSERT	.020	7 Degrees	.004	Left	IC1008	**EH6405426**	Price
SCIR 22-BR00-05K7 IC1008 INSERT	.020	7 Degrees	.000	Right	IC1008	**EH6405424**	Price
SCIR 22-BR08-10K15 IC1008	.039	15 Degrees	.003	Right	IC1008	**EH6410054**	Price
SCIR 22-BR08-10K7 IC1008 INSERT	.039	7 Degrees	.003	Right	IC1008	**EH6410051**	Price
SCIR 22-BR10-05K15 IC1008 INSERT	.020	15 Degrees	.004	Right	IC1008	**EH6410053**	Price
SCIR 22-BR10-05K7 IC1008 INSERT	.020	7 Degrees	.004	Right	IC1008	**EH6404229**	Price

SWISSCUT INNOVAL LINE Back Turning Inserts

SCIR/L - ER/EL

- Back turning inserts with a flat top rake for short chipping materials
- Used on Swiss type automatics and small CNC lathes
- Grade IC1008 is good for general machining of steel, stainless steels, and cast iron





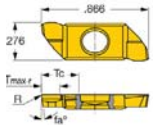


Iscar No.	Width (in.)	a°	Right/Left Hand	Grade	Order No.	Price
SCIR 22-ER00-03K0	.012	10 Degrees	Right	IC1008	**EH6411296**	Price
SCIL 22-EL00-03K0	.012	10 Degrees	Left	IC1008	**EH6411299**	Price
SCIR 22-ER00-07K0	.028	10 Degrees	Right	IC1008	**EH6405422**	Price
SCIL 22-EL00-07K0	.028	10 Degrees	Left	IC1008	**EH6405423**	Price
SCIR 22-EL00-07K0	.028	10 Degrees	Right	IC1008	**EH6405460**	Price
SCIR 22-ER00-07K10	.028	3 Degrees	Right	IC1008	**EH6410064**	Price

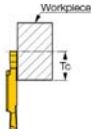
SWISSCUT INNOVAL LINE Turning Inserts

SCIR/L - AR/AL

- Turning inserts with a frontal lead angle
- Used on Swiss type automatics and small CNC lathes
- Grade IC1008 is good for general machining of steel, stainless steels, and cast iron









Iscar No.	Angle fa°	Kr°	Radius R (in.)	Right/Left Hand	Grade	Order No.	Price
SCIR 22-AR00-25K16	8 Degrees	16 Degrees	.000	Right	IC1008	**EH6405420**	Price
SCIL 22-AL00-25K16	12 Degrees	16 Degrees	.000	Left	IC1008	**EH6405418**	Price
SCIR 22-AR10-25K8	12 Degrees	8 Degrees	.004	Right	IC1008	**EH6405421**	Price
SCIL 22-AL10-25K8	8 Degrees	8 Degrees	.004	Left	IC1008	**EH6405419**	Price

DR-TWIST INDEXABLE DRILL LINE Twist Indexable Drills 2XD

DR Drills

Designed with twisted coolant channels which allow for a strong body with excellent resistance to torsion and very efficient chip evacuation



Item No.	Cutter Dia. (in.)	Depth of Cut (in.)	Insert	Shank Dia. (in.)	Order No.	Price
DR04690938063042DN	.469	.938	AOMT04020490	.625	**EH3202554**	Price
DR05001000063042DN	.500	1.000	AOMT04020490	.625	**EH3202555**	Price
DR05311062063042DN	.531	1.062	AOMT04020490	.625	**EH3202557**	Price
DR05621125075052DN	.562	1.125	SOMX050204	.750	**EH3201308**	Price
DR05781156075052DN	.578	1.156	SOMX050204	.750	**EH3201309**	Price
DR05941188075052DN	.594	1.188	SOMX050204	.750	**EH3201310**	Price
DR06251250075052DN	.625	1.250	SOMX050204	.750	**EH3201311**	Price
DR06561312075052DN	.656	1.312	SOMX050204	.750	**EH3201312**	Price
DR06881375075052DN	.688	1.375	SOMX050204	.750	**EH3201356**	Price
DR07031406075052DN	.703	1.406	SOMX050204	.750	**EH3201357**	Price
DR07341469100062DN	.734	1.469	SOMX060304	1.000	**EH3201358**	Price
DR07501500100062DN	.750	1.500	SOMX060304	1.000	**EH3201359**	Price
DR07811562100062DN	.781	1.562	SOMX060304	1.000	**EH3201360**	Price
DR0812162062DN	.812	1.625	SOMX060304	1.000	**EH3201392**	Price
DR08441688100072DN	.844	1.688	SOMX070305	1.000	**EH3201393**	Price
DR09061813100072DN	.906	1.813	SOMX070305	1.000	**EH3201395**	Price
DR0937187072DN	.937	1.875	SOMX070305	1.000	**EH3201396**	Price

3“ Shank Length

DR-TWIST INDEXABLE DRILL LINE Twist Indexable Drills 3XD

DR Drills

Designed with twisted coolant channels which allow for a strong body with excellent resistance to torsion and very efficient chip evacuation

Item No.	Cutter Dia. (in.)	Depth of Cut (in.)	Insert	Shank Dia. (in.)	Order No.	Price
DR04691407063043DN	.469	1.407	AOMT04020490	.625	**EH3202558**	Price
DR05001500063043DN	.500	1.500	AOMT04020490	.625	**EH3202559**	Price
DR05311593063043DN	.531	1.593	AOMT04020490	.625	**EH3202561**	Price
DR05621687075053DN	.562	1.687	SOMX050204	.750	**EH3201320**	Price
DR05941781075053DN	.594	1.781	SOMX050204	.750	**EH3201322**	Price
DR06251875075053DN	.625	1.875	SOMX050204	.750	**EH3201323**	Price
DR06561969075053DN	.656	1.969	SOMX050204	.750	**EH3201324**	Price
DR06882062075053DN	.688	2.062	SOMX050204	.750	**EH3201361**	Price
DR07032109075053DN	.703	2.109	SOMX050204	.750	**EH3201362**	Price
DR07502250100063DN	.750	2.250	SOMX060304	1.000	**EH3201364**	Price
DR07812344100063DN	.781	2.344	SOMX060304	1.000	**EH3201365**	Price
DR08122438100063DN	.812	2.438	SOMX060304	1.000	**EH3201397**	Price
DR08442531100073DN	.844	2.531	SOMX070305	1.000	**EH3201398**	Price
DR0875262073DN	.875	2.625	SOMX070305	1.000	**EH3201399**	Price
DR09062719100073DN	.906	2.719	SOMX070305	1.000	**EH3201400**	Price
DR09372813100073DN	.937	2.813	SOMX070305	1.000	**EH3201401**	Price
DR09842952125093DN	.984	2.952	SOMT09T306	1.250	**EH3201839**	Price
DR10003000125093DN	1.000	3.000	SOMT09T306	1.250	**EH3201840**	Price
DR10313093125093DN	1.031	3.093	SOMT09T306	1.250	**EH3201841**	Price
DR10623186125093DN	1.062	3.186	SOMT09T306	1.250	**EH3201842**	Price
DR11253375125093DN	1.125	3.375	SOMT09T306	1.250	**EH3201843**	Price
DR11873561125093DN	1.187	3.561	SOMT09T306	1.250	**EH3201844**	Price
DR12193657125093DN	1.219	3.657	SOMT09T306	1.250	**EH3201845**	Price
DR12503750125093DN	1.250	3.750	SOMT09T306	1.250	**EH3201846**	Price
DR12813843125093DN	1.281	3.843	SOMT09T306	1.250	**EH3201847**	Price
DR13123936125093DN	1.312	3.936	SOMT09T306	1.250	**EH3201848**	Price
DR13754125150123DN	1.375	4.125	SOMT120408	1.500	**EH3201849**	Price
DR14374311150123DN	1.437	4.311	SOMT120408	1.500	**EH3201850**	Price
DR15004500150123DN	1.500	4.500	SOMT120408	1.500	**EH3201851**	Price

3“ Shank Length

DR-TWIST INDEXABLE DRILL LINE Twist Indexable Drills 4XD

DR Drills

Designed with twisted coolant channels which allow for a strong body with excellent resistance to torsion and very efficient chip evacuation

Item No.	Cutter Dia. (in.)	Depth of Cut (in.)	Insert	Shank Dia. (in.)	Order No.	Price
DR04691876063044DN	.469	1.876	AOMT04020490	.625	**EH3202562**	Price
DR05002000063044DN	.500	2.000	AOMT04020490	.625	**EH3202563**	Price
DR05312124063044DN	.531	2.124	AOMT04020490	.625	**EH3202565**	Price
DR05622250075054DN	.562	2.250	SOMX050204	.750	**EH3201332**	Price
DR05782312075054DN	.578	2.312	SOMX050204	.750	**EH3201333**	Price
DR05942375075054DN	.594	2.375	SOMX050204	.750	**EH3201334**	Price
DR06252500075054DN	.625	2.500	SOMX050204	.750	**EH3201335**	Price
DR06562625075054DN	.656	2.625	SOMX050204	.750	**EH3201336**	Price
DR06882750075054DN	.688	2.750	SOMX050204	.750	**EH3201366**	Price
DR07032812075054DN	.703	2.812	SOMX050204	.750	**EH3201367**	Price
DR07342937100064DN	.734	2.937	SOMX060304	1.000	**EH3201368**	Price
DR0781312064DN	.781	3.125	SOMX060304	1.000	**EH3201370**	Price
DR08123250100064DN	.812	3.250	SOMX060304	1.000	**EH3201402**	Price
DR0844337074DN	.844	3.375	SOMX070305	1.000	**EH3201403**	Price
DR08753500100074DN	.875	3.500	SOMX070305	1.000	**EH3201404**	Price
DR0906362074DN	.906	3.625	SOMX070305	1.000	**EH3201405**	Price
DR09373750100074DN	.937	3.750	SOMX070305	1.000	**EH3201406**	Price
DR09843936125094DN	.984	3.936	SOMT09T306	1.250	**EH3201493**	Price
DR10004000125094DN	1.000	4.000	SOMT09T306	1.250	**EH3201494**	Price
DR10314124125094DN	1.031	4.124	SOMT09T306	1.250	**EH3201977**	Price
DR10624248125094DN	1.062	4.248	SOMT09T306	1.250	**EH3201495**	Price
DR11254500125094DN	1.125	4.500	SOMT09T306	1.250	**EH3201496**	Price
DR11874748125094DN	1.187	4.748	SOMT09T306	1.250	**EH3201497**	Price
DR12194876125094DN	1.219	4.876	SOMT09T306	1.250	**EH3260041**	Price
DR12505000125094DN	1.250	5.000	SOMT09T306	1.250	**EH3201499**	Price
DR12815124125094DN	1.281	5.124	SOMT09T306	1.250	**EH3201978**	Price
DR13125248125094DN	1.312	5.248	SOMT09T306	1.250	**EH3201500**	Price
DR13755500150124DN	1.375	5.500	SOMT120408	1.500	**EH3201501**	Price
DR14375748150124DN	1.437	5.748	SOMT120408	1.500	**EH3201502**	Price
DR15006000150124DN	1.500	6.000	SOMT120408	1.500	**EH3201503**	Price
DR15626248150124DN	1.562	6.248	SOMT120408	1.500	**EH3201504**	Price

3“ Shank Length

DR-TWIST INDEXABLE DRILL LINE Twist Indexable Drills 5XD

DR Drills

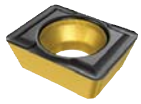
Designed with twisted coolant channels which allow for a strong body with excellent resistance to torsion and very efficient chip evacuation

Item No.	Cutter Dia. (in.)	Depth of Cut (in.)	Insert	Shank Dia. (in.)	Order No.	Price
DR05622815075055DN	.5620	2.815	SOMX050204	.750	**EH3202574**	Price
DR05782894075055DN	.5780	2.894	SOMX050204	.750	**EH3202575**	Price
DR05942972075055DN	.5940	2.972	SOMX050204	.750	**EH3202576**	Price
DR06253130075055DN	.6250	3.130	SOMX050204	.750	**EH3202577**	Price
DR06563287075055DN	.6560	3.287	SOMX050204	.750	**EH3202578**	Price
DR06883445075055DN	.6880	3.445	SOMX050204	.750	**EH3202579**	Price
DR07033524075055DN	.7030	3.524	SOMX050204	.750	**EH3202580**	Price
DR07091418100062DN	.7090	1.418	SOMX060304	1.000	**EH3260049**	Price
DR07093543100065DN	.7090	3.543	SOMX060304	1.000	**EH3202581**	Price
DR07343661100065DN	.7340	3.661	SOMX060304	1.000	**EH3260142**	Price
DR07503760100065DN	.7500	3.760	SOMX060304	1.000	**EH3202583**	Price
DR0812405065DN	.8120	4.055	SOMX060304	1.000	**EH3202585**	Price
DR08444212100075DN	.8440	4.212	SOMX070305	1.000	**EH3202586**	Price
DR08754370100075DN	.8750	4.370	SOMX070305	1.000	**EH3202587**	Price
DR09064527100075DN	.9060	4.527	SOMX070305	1.000	**EH3260144**	Price
DR0937468075DN	.9370	4.685	SOMX070305	1.000	**EH3202589**	Price

3“ Shank Length

DR-TWIST INDEXABLE DRILL LINE Twist Indexable Drills Inserts

IC808 – A hard, fine grain substrate with excellent chipping resistance, combined with a new “SUMO TEC” TiAlN PVD coating. Provides high wear resistance. Recommended for a very wide range of materials.
IC908 – A hard, fine grain substrate with excellent chipping resistance, combined with a Ti AlN PVD coating. Provides high wear resistance. Recommended for a very wide range of materials.
IC8080 – A hard, fine grain substrate with “SUMO TEC” MTCVD alpha Al203 coating. Features excellent chipping and wear resistance. Recommended for high speed drilling of cast iron and steel, to be used for the peripheral insert on DR drills.





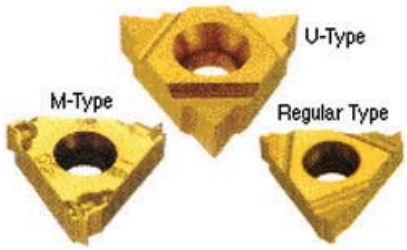
Iscar Designation	Grade	I.C. (in.)	T (in.)	R	Order No.	Price
AOMT04020490-DT	IC808	.157	.063	.016	**EH565507954**	Price
AOMT04020490-DT	IC908	.157	.063	.016	**EH565507955**	Price
SOMT 09T306-DT	IC8080	.354	.150	.024	**EH565507925**	Price
SOMT 100408-DT	IC808	.386	.169	.031	**EH565507941**	Price
SOMT-110408-DT	IC808	.453	.189	.031	**EH565507876**	Price
SOMT 120408-DT	IC8080	1/2	.187	.031	**EH565507927**	Price
SOMT 160512-DT	IC808	.630	.218	.047	**EH565507878**	Price
SOMT 160512-DT	IC8080	.630	.218	.047	**EH565507928**	Price
SOMX 050204-DT	IC808	.213	.094	.016	**EH565507879**	Price
SOMX 050204-DT	IC8080	.213	.094	.016	**EH565507922**	Price
SOMX 060304-DT	IC808	.244	.126	.016	**EH565507880**	Price
SOMX 060304-DT	IC8080	.244	.126	.016	**EH565507923**	Price
SOMX 070305-DT	IC808	.303	.142	.020	**EH565507881**	Price
SOMX 070305-DT	IC8080	.303	.142	.020	**EH565507924**	Price

ISCARTHREAD

Laydown Threading Inserts

UN Thread Style • 3/8" IC

- UN, full profile (UN, UNC, UNF, UNEF),
- IR / ER (IL/EL for left hand) - ground periphery and rake
- IRB / ERB - with a chipformer and peripherally ground
- IRM / ERM - with molded chipformer
- Application: general industry



Internal/External - External							
Model No.	Grade	TPI	Right/Left Hand	Radius (in.)	Teeth Per Corner	Order No.	Price
16ER8UN	IC908	8	Right	.0161	1	**EH5901994**	Price
16ERB8UN	IC908	8	Right	.0161	1	**EH5902814**	Price
16ERM8UN	IC908	8	Right	.0161	1	**EH5902383**	Price
16EL8UN	IC908	8	Left	.0161	1	**EH5995855**	Price
16ER9UN	IC908	9	Right	.0142	1	**EH5902143**	Price
16ER10UN	IC908	10	Right	.0126	1	**EH5901996**	Price
16ERB10UN	IC908	10	Right	.0126	1	**EH5902812**	Price
16EL10UN	IC908	10	Left	.0126	1	**EH5995865**	Price
16ER11UN	IC908	11	Right	.0110	1	**EH5902596**	Price
16ERB11UN	IC908	11	Right	.0110	1	**EH5902811**	Price
16ER11.5UN	IC908	11.5	Right	.0106	1	**EH5902522**	Price
16ERM12UN	IC808	12	Right	.0098	1	**EH5921246**	Price
16ER12UN	IC908	12	Right	.0102	1	**EH5993248**	Price
16ERB12UN	IC908	12	Right	.0102	1	**EH5902810**	Price
16ERM12UN	IC908	12	Right	.0098	1	**EH5901567**	Price
16ERM12UN	IC1007	12	Right	.0098	1	**EH5903442**	Price
16EL12UN	IC908	12	Left	.0102	1	**EH5902056**	Price
16ER13UN	IC908	13	Right	.0094	1	**EH5995875**	Price
16ERB13UN	IC908	13	Right	.0079	1	**EH5902809**	Price
16ERM13UN	IC908	13	Right	.0094	1	**EH5902339**	Price
16ERM14UN	IC808	14	Right	.0087	1	**EH5903371**	Price
16ER14UN	IC908	14	Right	.0087	1	**EH5993258**	Price
16ERB14UN	IC908	14	Right	.0087	1	**EH5902808**	Price
16ERM14UN	IC908	14	Right	.0087	1	**EH5902294**	Price
16ER14UN2M	IC908	14	Right	.0040	2	**EH5999673**	Price
16ERM16UN	IC808	16	Right	.0075	1	**EH5921255**	Price
16ER16UN	IC908	16	Right	.0071	1	**EH5901961**	Price
16ERB16UN	IC908	16	Right	.0071	1	**EH5902807**	Price
16ERM16UN	IC908	16	Right	.0075	1	**EH5901568**	Price
16ER16UN2M	IC908	16	Right	.0040	2	**EH5902375**	Price
16EL16UN	IC908	16	Left	.0071	1	**EH5902352**	Price
16ERM18UN	IC808	18	Right	.0071	1	**EH5903367**	Price
16ER18UN	IC908	18	Right	.0067	1	**EH5993268**	Price
16ERB18UN	IC908	18	Right	.0071	1	**EH5902806**	Price
16ERM18UN	IC908	18	Right	.0059	1	**EH5901569**	Price
16EL18UN	IC908	18	Left	.0067	1	**EH5996492**	Price
16ERM20UN	IC808	20	Right	.0055	1	**EH5903369**	Price
16ER20UN	IC908	20	Right	.0059	1	**EH5901964**	Price
16ERB20UN	IC908	20	Right	.0059	1	**EH5902805**	Price
16ERM20UN	IC908	20	Right	.0055	1	**EH5901570**	Price
16ER20UN	IC1007	20	Right	.0059	1	**EH593318610**	Price
16EL20UN	IC908	20	Left	.0059	1	**EH5902350**	Price
16ER24UN	IC908	24	Right	.0047	1	**EH5901966**	Price
16ERB24UN	IC908	24	Right	.0047	1	**EH5902804**	Price

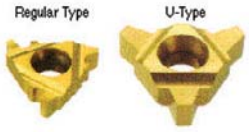
Internal/External - External							
Model No.	Grade	TPI	Right/Left Hand	Radius (in.)	Teeth Per Corner	Order No.	Price
16ERM24UN	IC908	24	Right	.0043	1	**EH5902384**	Price
16EL24UN	IC908	24	Left	.0047	1	**EH5902366**	Price
16EL28UN	IC908	28	Left	.0039	1	**EH5902420**	Price
16ER28UN	IC908	28	Right	.0039	1	**EH5902002**	Price
16ER32UN	IC908	32	Right	.0035	1	**EH5902004**	Price
16ER36UN	IC908	36	Right	.0028	1	**EH5902006**	Price
16ER40UN	IC908	40	Right	.0024	1	**EH5902008**	Price
16ER48UN	IC908	48	Right	.0020	1	**EH5902010**	Price
16ER56UN	IC908	56	Right	.0016	1	**EH5902012**	Price

Internal/External - Internal							
Model No.	Grade	TPI	Right/Left Hand	Radius (in.)	Teeth Per Corner	Order No.	Price
16IR8UN	IC908	8	Right	.0075	1	**EH5902015**	Price
16IRM8UN	IC908	8	Right	.0079	1	**EH5902387**	Price
16IR9UN	IC908	9	Right	.0067	1	**EH5902142**	Price
16IR10UN	IC908	10	Right	.0028	1	**EH5902017**	Price
16IRB10UN	IC908	10	Right	.0059	1	**EH5902816**	Price
16IR11UN	IC908	11	Right	.0055	1	**EH5999976**	Price
16IR11.5UN	IC908	11.5	Right	.0051	1	**EH5902520**	Price
16IRM12UN	IC808	12	Right	.0047	1	**EH5921251**	Price
16IR12UN	IC1007	12	Right	.0047	1	**EH593318604**	Price
16IR12UN	IC908	12	Right	.0047	1	**EH5901932**	Price
16IRM12UN	IC908	12	Right	.0047	1	**EH5901579**	Price
16IRM12UN	IC1007	12	Right	.0047	1	**EH5903452**	Price
16IL12UN	IC908	12	Left	.0047	1	**EH5902057**	Price
16IR14UN	IC908	14	Right	.0039	1	**EH5902018**	Price
16IRB14UN	IC908	14	Right	.0039	1	**EH5902818**	Price
16IRM14UN	IC808	14	Right	.0043	1	**EH5990323**	Price
16IRM14UN	IC908	14	Right	.0043	1	**EH5902295**	Price
16IR16UN	IC908	16	Right	.0035	1	**EH5901934**	Price
16IRB16UN	IC908	16	Right	.0035	1	**EH5996242**	Price
16IRM16UN	IC908	16	Right	.0035	1	**EH5901580**	Price
16IR16UN2M	IC908	16	Right	.0035	2	**EH593338321**	Price
16IL16UN	IC908	16	Left	.0035	1	**EH5902368**	Price
16IRM18UN	IC808	18	Right	.0030	1	**EH5903406**	Price
16IR18UN	IC908	18	Right	.0028	1	**EH5902020**	Price
16IRM18UN	IC908	18	Right	.0030	1	**EH5901581**	Price
16IR20UN	IC908	20	Right	.0020	1	**EH5901936**	Price
16IRB20UN	IC908	20	Right	.0024	1	**EH5902820**	Price
16IRM20UN	IC908	20	Right	.0020	1	**EH5901582**	Price
16IR24UN	IC908	24	Right	.0020	1	**EH5902499**	Price
16IRB24UN	IC908	24	Right	.0020	1	**EH5902821**	Price
16IR28UN	IC908	28	Right	.0016	1	**EH5902461**	Price
16IR32UN	IC908	32	Right	.0016	1	**EH5902571**	Price

ISCARTHREAD

Laydown Threading Inserts

NPT • NPTF • Right Hand



- National Pipe Thread (NPT) National Pipe Thread-Dryseal (NPTF)
- IR / ER - ground periphery and rake
- IRB / ERB - with a chipformer and peripherally ground
- IRM / ERM - with molded chipformer

Thread Form - NPT						
Model No.	Grade	TPI	Radius (in.)	Internal/External	Order No.	Price
16ER8NPT	IC908	8	.0047	External	**EH5901968**	Price
16ERM8NPT	IC808	8	.0059	External	**EH5903398**	Price
16ERM8NPT	IC908	8	.0059	External	**EH5901571**	Price
16IR8NPT	IC908	8	.0047	Internal	**EH5901938**	Price
16IRM8NPT	IC808	8	.0059	Internal	**EH5903408**	Price
16IRM8NPT	IC908	8	.0059	Internal	**EH5901583**	Price
16ER11.5NPT	IC908	11.5	.0035	External	**EH5901814**	Price
16ERB11.5NPT	IC908	11.5	.0035	External	**EH5902825**	Price
16ERM11.5NPT	IC908	11.5	.0035	External	**EH5901572**	Price
16ERM11.5NPT	IC1007	11.5	.0035	External	**EH5903458**	Price
16IR11.5NPT	IC908	11.5	.0035	Internal	**EH5901939**	Price
16IRB11.5NPT	IC908	11.5	.0035	Internal	**EH5902828**	Price
16IRM11.5NPT	IC908	11.5	.0035	Internal	**EH5901584**	Price
16ER14NPT	IC908	14	.0028	External	**EH5993047**	Price
16ERB14NPT	IC908	14	.0028	External	**EH5902823**	Price
16ERM14NPT	IC908	14	.0020	External	**EH5901573**	Price
16ERM14NPT	IC1007	14	.0020	External	**EH5903446**	Price
16IR14NPT	IC908	14	.0028	Internal	**EH5993037**	Price
16IRB14NPT	IC908	14	.0028	Internal	**EH5902601**	Price
16IRM14NPT	IC908	14	.0020	Internal	**EH5901585**	Price
16ER18NPT	IC908	18	.0024	External	**EH5902115**	Price
16ERB18NPT	IC908	18	.0024	External	**EH5902822**	Price
16ERM18NPT	IC908	18	.0020	External	**EH5902382**	Price
16ER27NPT	IC908	27	.0016	External	**EH5902132**	Price

Thread Form - NPTF						
Model No.	Grade	TPI	Radius (in.)	Internal/External	Order No.	Price
16ER11.5NPTF	IC908	11.5	-	External	**EH5902314**	Price
16ER14NPTF	IC908	14	-	External	**EH5902315**	Price
16ER18NPTF	IC908	18	-	External	**EH5902409**	Price
16IR14NPTF	IC908	14	-	Internal	**EH5902515**	Price

ISCARTHREAD

Laydown Threading Inserts

Whitworth • Right Hand



- Full profile laydown threading inserts
- IR / ER - ground periphery and rake
- IRB / ERB - with a chipformer and peripherally ground
- IRM / ERM - with molded chipformer
- Application: fittings and pipe couplings

Style	Grade	TPI	IC	Internal/ External	Radius (in.)	Teeth Per Corner	Order No.	Price
16IRM11	IC908	11	3/8	Internal	.011	1	**EH5901522**	Price
16IRM14W	IC908	14	3/8	Internal	.008	1	**EH5901577**	Price
16IR14W2M	IC908	14	3/8	Internal	.008	2	**EH5902453**	Price
16ER11W	IC908	11	3/8	External	.011	1	**EH5901957**	Price
16ERB11W	IC908	11	3/8	External	.011	1	**EH5902835**	Price
16ER14W	IC908	14	3/8	External	.009	1	**EH5992637**	Price
16ERB14W	IC908	14	3/8	External	.009	1	**EH5902836**	Price
16ER19W	IC908	19	3/8	External	.006	1	**EH5993278**	Price
16ERB19W	IC908	19	3/8	External	.007	1	**EH5902838**	Price
16ERM19W	IC908	19	3/8	External	.006	1	**EH5921219**	Price
16ER28W	IC908	28	3/8	External	.004	1	**EH5902134**	Price

ISCARTHREAD

Laydown Threading Inserts

American Buttress • Right Hand



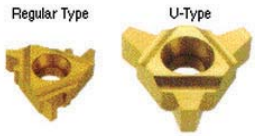
- For high force transmission in one direction
- ANSI B1.9-1973 Class 2

Style	Grade	TPI	IC	Internal/External	Radius (in.)	Order No.	Price
16IR10ABUT	IC908	10	3/8	Internal	.006	**EH5993819**	Price
16IR12ABUT	IC908	12	3/8	Internal	.005	**EH5902084**	Price
16IR16ABUT	IC908	16	3/8	Internal	.004	**EH5902213**	Price
16ER10ABUT	IC908	10	3/8	External	.006	**EH5902263**	Price
16ER12ABUT	IC908	12	3/8	External	.005	**EH5902116**	Price
16ER16ABUT	IC908	16	3/8	External	.004	**EH5902117**	Price

ISCARTHREAD

Laydown Threading Inserts

Acme • Stub Acme



- IR / ER - ground periphery and rake

Thread Form - ACME						
Model No.	Grade	TPI	Internal/External	Right/Left Hand	Order No.	Price
16ER8ACME	IC908	8	External	Right	**EH5902231**	Price
16ER10ACME	IC908	10	External	Right	**EH5903358**	Price
16ER12ACME	IC908	12	External	Right	**EH5902285**	Price
16ER16ACME	IC908	16	External	Right	**EH5902603**	Price
16IR8ACME	IC908	8	Internal	Right	**EH5902021**	Price
16IR12ACME	IC908	12	Internal	Right	**EH5902377**	Price

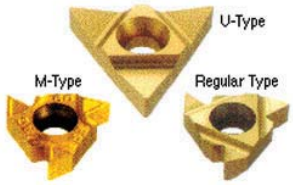
Thread Form - Stub ACME						
Model No.	Grade	TPI	Internal/External	Right/Left Hand	Order No.	Price
16ER6STACME	IC908	6	External	Right	**EH5902306**	Price
16ER8STACME	IC908	8	External	Right	**EH5995010**	Price
16ER10STACME	IC908	10	External	Right	**EH5995060**	Price
16ER12STACME	IC908	12	External	Right	**EH5902301**	Price
16ER16STACME	IC908	16	External	Right	**EH5990395**	Price
16IR6STACME	IC908	6	Internal	Right	**EH5990352**	Price
16IR8STACME	IC908	8	Internal	Right	**EH5995030**	Price
16IR10STACME	IC908	10	Internal	Right	**EH5995070**	Price
16IR12STACME	IC908	12	Internal	Right	**EH5902302**	Price

ISCARTHREAD

Laydown Threading Inserts

British Standard Pipe Thread • Right Hand

- IR / ER - ground periphery and rake
- IRB / ERB - with a chipformer and peripherally ground



Model No.	Grade	TPI	Radius (in.)	Internal/External	Order No.	Price
16ER11BSPT	IC908	11	.0110	External	**EH5901971**	Price
16ER14BSPT	IC908	14	.0083	External	**EH5901973**	Price
16ERB14BSPT	IC908	14	.0083	External	**EH5999776**	Price
16ER19BSPT	IC908	19	.0063	External	**EH5902141**	Price
16ER28BSPT	IC908	28	.0043	External	**EH5902227**	Price
16IR11BSPT	IC908	11	.0110	Internal	**EH5901940**	Price


GOLD RUSH
GOLD QUAD
GOLD MAX8
DI-QUAD 90° LINE
Your One-Stop Shop for
Maximum Metal Removal!
The widest selection of cutting tools…
The most comprehensive grades…
The most innovative geometries…
Whether for milling, turning or holemaking,
if you're in the business of metal removal
and you need to do it faster, we've got
you covered.
T-TURN
GOLD TWIST
DRILL LINE
Member IMC Group
Ingersoll
Cutting Tools
845 South Lyford Rd · Rockford, IL 61108-2749 · 866/690-1859 · Fax: 815/387-6968 · www.ingersoll-imc.com

Member IMC Group Ingersoll Cutting Tools

GRADE CHART

Grade	Coating	Material	Steel (P)	Stainless Steel (M)	Cast Iron (K)	Non-Ferrous (N)	Hi-Temp Alloys (S)	Hard Materials (H)	ISO Code
AB20	Al203 + TiCN	Ceramic			X			X	H05-H15
AB2010	Al203	Ceramic			X				K01-K10
AB30	Al203 + TiCN	Ceramic			X			X	H10-H20, K05-K15
AS10	SI3N4	Ceramic			X				K15-K25
AS20	SI3N4 + TiCN	Ceramic					X		S05-S15
AS500	SIAL203N	Ceramic			X				K10-K20
AW120	Al2O3 + ZrO2	Ceramic			X			X	
AW20	Al203	Ceramic			X				K01-K10
CT3000	None	Cermet	X	X	X				P05-P25, K05-K15, M05-M15
IN05S	None	Carbide				X			M10-M20
IN1030	PVD, TiCN	Carbide	X	X	X	X	X		M20-M40, K20-K30
IN1040	PVD, TiCN	Carbide		X	X				P20-P40
IN10K	None	Carbide				X			K20-K40
IN1505	TiCN-TiN	Carbide	X	X					P10-P30, M10-M30
IN1530	PVD-TiCN-TiN	Carbide		X	X		X		M30, K25-K40
IN15K	None	Carbide				X			K20-K40
IN2005	PVD, TiAlN	Carbide	X	X	X	X	X		M20-M40
IN2010	PVD, TiAlN	Carbide	X						K10-K40
IN2015	PVD, TiAlN	Carbide	X	X	X				K10-K40
IN2030	PVD, TiAlN	Carbide		X	X		X		K25-K40, M30-M40
IN2040	PVD, TiAlN	Carbide			X				P20-P40
IN2505	PVD, TiAlN, TiN	Carbide	X	X	X	X	X	X	P15-P35, M10-,30, K10-K30
IN2510	PVD, TiAlN, TiN	Carbide			X	X			K10-K30, N10-N30
IN2540	PVD, TiAlN, TiN	Carbide			X				P10-P40
IN30M	None	Carbide				X	X		M20-M40, K20-K50
IN6505	CVD	Carbide	X						
IN6515	MT-CVD, Al203	Carbide	X		X				K10-K30, P15-P30
IN6530	MT-CVD, Al203	Carbide	X	X	X		X		P25-P45, M25-M40
IN70N	None	Carbide				X			K10-K25
IN72N	None	Carbide		X	X				S01-S10
INDD15	MT-CVD + PVD	Carbide	X		X				K20-K40
K10	None	Carbide			X	X	X		K05-K20, N10-N20, S10-S20
KB50	None	CBN	X					X	H01-H10
KB90	None	CBN	X		X			X	K10-K20, S01-S10
KP300	None	PCD				X			N05-N15
PV3010	PVD, TiN	Cermet	X	X	X				P01-P20, K01-K15, M01-M20
PV3030	TiAlN	Cermet	X	X	X				P01-P15, M01-M25, K01-K15
SC10	Al203	Ceramic			X				K10-K20
TB650	None	CBN	X					X	H01-H10
TB670	None	CBN			X			X	
TB730	None	CBN			X			X	
TC430	Al203 SiC Whisker	Ceramic					X		
TD810		PCD				X			
TT1300	MT-CVD, TiN-TiCN-Al203-TiN	Carbide	X		X				K05-K15
TT3500	MT-CVD, TiN-TiCN-Al203-TiN	Carbide	X						P15-P35
TT5080	PVD-AlTiN/TiN	Carbide		X			X		M05-M15, S05-S15
TT5100	MT-CVD, TiN-TiCN-Al203-TiN	Carbide	X	X			X		P20-P40, M15-M35, S15-S25
TT7005	TiN-TiCN-Al203	Carbide	X		X				K01-K15, P05-P15
TT7015	TiN-TiCN-Al203	Carbide	X		X				K10-K25, P10-P20
TT7100	MT-CVD, TiN-TiCN-Al203-TiN	Carbide	X	X					P25-P45, M25-M40
TT7220	PVD, TiCN	Carbide	X						P20-P35
TT7310	MT-CVD, TiN-TiCN-Al203	Carbide	X		X				K10-K20, P05-P15
TT8020	PVD, TiCN	Carbide	X	X			X		S20-S30. P30-P45, M30-M40
TT8115	MT-CVD, TiN-TiCN-Al203-TiN	Carbide	X						P05-P25
TT8125	MT-CVD, TiN-TiCN-Al203-TiN	Carbide	X						P15-P30
TT8135	MT-CVD, TiN-TiCN-Al203-TiN	Carbide	X						P25-P40
TT9020	PVD, TiCN	Carbide	X	X			X		P15-P35, M10-M30, S15-S25
TT9030	PVD, TiCN	Carbide	X	X			X		P15-P35, M15-M35, S15-S25
TT9080	PVD-AlTiN/TiN	Carbide		X			X		M10-M30, S15-S25
TT9215	MT-CVD, TiCN-Al203-TiCN	Carbide		X			X		M10-M25, S10-S25
TT9225	MT-CVD, TiCN-Al203-TiCN	Carbide		X			X		M20-M35, S20-S35
TT9235	MT-CVD, TiCN-Al203-TiCN	Carbide		X			X		M30-M45, S30-S45

DIPOS TETRA™ 0° Face Mill with 4 Indexes

- Insert size: 16mm
- Uses ANHU16 insert style



Item No.	Cutter Dia. (in.)	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Order No.	Price
TJ5N20R01	2.00	4	1.57	.75	SM40-120-20	DS-T15T	**IC523025668**	Price
TJ5N25R01	2.50	5	1.75	1.00	SM40-120-20	DS-T15T	**IC523025670**	Price
TJ5N30R01	3.00	7	1.75	1.00	SM40-120-20	DS-T15T	**IC523025672**	Price
TJ5N40R01	4.00	8	2.00	1.50	SM40-120-20	DS-T15T	**IC523025674**	Price

GOLDMAX™ 0° Lead Face Mill with 4 Indexes

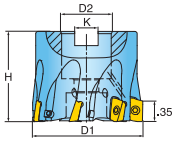
- Tangential style insert for faster feed rates
- Insert size: 0.54” DOC
- Uses DGE324R or DGM324R insert style



Item No.	Cutter Dia. (in.)	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Order No.	Price
SJ5J03R01	3.00	7	2.375	1.00	SM40-143-H0	DS-T15T	**IC523028450**	Price
SJ5J04R01	4.00	8	2.375	1.50	SM40-143-H0	DS-T15T	**IC523027580**	Price
SJ6J03R01	3.00	5	2.375	1.00	SM40-143-H0	DS-T15T	**IC523028476**	Price
SJ6J04R01	4.00	6	2.375	1.50	SM40-143-H0	DS-T15T	**IC523028486**	Price

HiPOS+™ 0° Lead Face Mill

- HiPos, clean shearing geometry
- Coolant thru
- Full range of insert grades
- Insert size: 9mm IC
- Uses BOCT09, BOMT06, BOMT09 insert styles

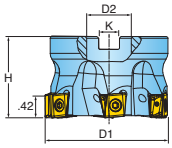




Item No.	Cutter Dia. (in.)	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Blade	Order No.	Price
2J1P15R01	1.50	6	1.57	.50	SM25-064-00	DS-T08W	**IC523028211**	Price
2J1P20R01	2.00	7	1.57	.75	SM25-064-00	DS-T08W	**IC523028212**	Price
2J1P-25R01	-	8	1.57	.75	SM25-064-00	DS-T08W	**IC522917451**	Price
2J1P30R01	3.00	9	1.75	1.00	SM25-064-00	DS-T08W	**IC523028213**	Price

GOLDMAX™ 0° Lead Face Mill with 4 Indexes

- Tangential style insert for faster feed rates
- Hi-shear, highly efficient cutting action
- Insert size: 0.42” DOC
- Uses DGE314R or DGM314R insert style





Item No.	Cutter Dia. (in.)	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Order No.	Price
SJ5F03R01	3.00	8	2.375	1.00	SM35-114-H0	DS-T156B	**IC523027448**	Price
SJ5F04R01	4.00	9	2.375	1.50	SM35-114-H0	DS-T156B	**IC523027447**	Price
SJ6F02R01	2.00	5	1.57	.75	SM35-114-H0	DS-T156B	**IC523026897**	Price
SJ6F02R02	2.50	6	1.57	.75	SM35-114-H0	DS-T156B	**IC523026914**	Price
SJ6F03R01	3.00	6	2.375	1.00	SM35-114-H0	DS-T156B	**IC523026928**	Price
SJ6F04R01	4.00	6	2.375	1.50	SM35-114-H0	DS-T156B	**IC523026929**	Price
SJ6F-05R01	5.00	7	2.375	1.50	SM35-114-H0	DS-T156B	**IC523029775**	Price

GOLDTRIO™ Series KJ 0° Lead Facemill

- Hi positive design with 3 cutting edges for performance and economy
- Ramping capability for cutting versatility
- Three insert sizes for complete diameter coverage

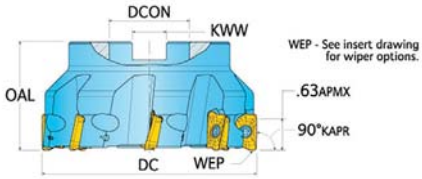
Item No.	Cutter Dia. (in.)	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Order No.	Price
KJ5D15R01	1.50	6	1.57	.50	SM25-065-R0	DS-T08W/TX-8	**IC523031428**	Price
KJ5D20R01	2.00	7	1.57	.75	SM25-065-R0	DS-T08W/TX-8	**IC523031429**	Price
KJ5G20R01	2.00	5	1.57	.75	SM40-100-R0	DS-T15T/TX-15	**IC523031431**	Price
KJ5G25R01	2.50	6	1.57	.75	SM40-100-R0	DS-T15T/TX-15	**IC523031432**	Price
KJ5G30R01	3.00	8	1.75	1.00	SM40-100-R0	DS-T15T/TX-15	**IC523031434**	Price
KJ5G40R01	4.00	10	2.00	1.50	SM40-100-R0	DS-T15T/TX-15	**IC523031436**	Price
KJ6D30R01	3.00	9	1.75	1.00	SM25-065-R0	DS-T08W/TX-8	**IC523031430**	Price
KJ6G50R01	5.00	11	2.00	1.50	SM40-100-R0	DS-T15T/TX-15	**IC523031437**	Price



HiPOS+™ 90° Face Mills

Series 2J1G

- .63” Maximum depth of cut
- Takes AOCT17/AOMT17/APKT17_DT/17/ZOMT17 inserts





Model No.	Cutter Dia. (in.)	No. of Flutes	Hole Size (in.)	Height (in.)	Uses Insert	Screw	Wrench	Torx Key Blade	Order No.	Price
2J1G-20R01	2.00	5	.75	1.57	AOCT, AOMT	SM40-120-20	DS-A00T	DS-T156B	**IC523018669**	Price
2J1G-25R01	2.50	6	.75	1.57	AOCT, AOMT	SM40-120-20	DS-A00T	DS-T156B	**IC523018666**	Price
2J1G-30R01	3.00	7	1.00	1.75	AOCT, AOMT	SM40-120-20	DS-A00T	DS-T156B	**IC523018671**	Price
2J1G-40R03	4.00	8	1.50	2.38	AOCT, AOMT	SM40-120-20	DS-A00T	DS-T156B	**IC522917447**	Price
2J1G-50R02	5.00	9	1.50	2.38	AOCT, AOMT	SM40-120-20	DS-A00T	DS-T156B	**IC522917449**	Price
2J1G-60R01	6.00	10	2.00	2.00	AOCT, AOMT	SM40-120-20	DS-A00T	DS-T156B	**IC523018675**	Price

GOLDMAX 90° Face Mills

Member IMC Group Ingersoll Cutting Tools

Series SJ2J

- Maximum depth of cut .54" on all sizes
- Replaceable steel seating pads ensure maximum cutter body life
- 4 Index inserts

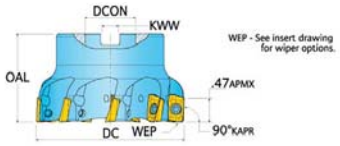


Model No.	Cutting Dia. (in.)	Bore Dia. (in.)	Number of Inserts	Uses Insert	Height (in.)	Screw	Handle	Torx Key Blade	Order No.	Price
SJ2J-05R01	5.000	1.50	7	DGE324R series, DGM324R series	2.375	SM40-143-H0	DS-A00T	BLD T15/S7	**IC523028483**	Price
SJ2J-06R01	6.000	1.50	8	DGE324R series, DGM324R series	2.375	SM40-143-H0	DS-A00T	BLD T15/S7	**IC523027581**	Price

HiePOS+ 90° Face Mills

Series 2J1R

- .47" Maximum depth of cut
- Takes BOCT/BOMT/ZOMT13 inserts



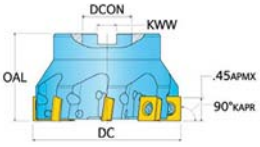


Model No.	Cutter Dia. (in.)	No. of Flutes	Bore Dia. (in.)	Height (in.)	Uses Insert	Screw	Wrench	Torx Key Blade	Order No.	Price
2J1R-20R01	2.00	5	.75	1.57	BOMT13 series / ZOMT13 series	SM35-088-10	DS-A00T	DS-T106B	**IC522916673**	Price
2J1R-25R01	2.50	6	.75	1.57	BOMT13 series / ZOMT13 series	SM35-088-10	DS-A00T	DS-T106B	**IC522916675**	Price
2J1R-30R01	3.00	9	1.00	1.75	BOMT13 series / ZOMT13 series	SM35-088-10	DS-A00T	DS-T106B	**IC522916676**	Price
2J1R-40R01	4.00	11	1.00	2.38	BOMT13 series / ZOMT13 series	SM35-088-10	DS-A00T	DS-T106B	**IC522916677**	Price
2J1R-50R01	5.00	13	1.00	2.38	BOMT13 series / ZOMT13 series	SM35-088-10	DS-A00T	DS-T106B	**IC522916678**	Price

GOLDQUAD 90° Face Mills

Series 5J5P

- Uses SDES/SDMS/ZDES/ZDMS1305 inserts
- Max DOC .45"





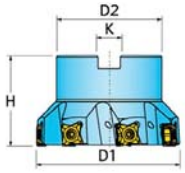
Cutter Style - For Large Corner Radius										
Model No.	Cutter Dia. (in.)	Bore Dia. (in.)	No. of Inserts	Height (in.)	Screw	Handle	Torx Key Blade	Cutter Style	Order No.	Price
5J5P-20R01-R	2.00	.75	5	1.57	SM40-100-R0	DS-A00T	BLD T15/S7	For Large Corner Radius	**IC522912698**	Price
5J5P-25R01-R	2.50	.75	6	1.57	SM40-100-R0	DS-A00T	BLD T15/S7	For Large Corner Radius	**IC522912699**	Price
5J5P-30R01-R	3.00	1.00	8	1.75	SM40-100-R0	DS-A00T	BLD T15/S7	For Large Corner Radius	**IC522912700**	Price
5J5P-40R01-R	4.00	1.50	10	2.375	SM40-100-R0	DS-A00T	BLD T15/S7	For Large Corner Radius	**IC522912701**	Price

Cutter Style - Regular										
Model No.	Cutter Dia. (in.)	Bore Dia. (in.)	No. of Inserts	Height (in.)	Screw	Handle	Torx Key Blade	Cutter Style	Order No.	Price
5J5P-20R01	2.00	.75	5	1.57	SM40-100-R0	DS-A00T	BLD T15/S7	Regular	**IC522912694**	Price
5J5P-25R01	2.50	.75	6	1.57	SM40-100-R0	DS-A00T	BLD T15/S7	Regular	**IC522912695**	Price
5J5P-30R01	3.00	1.00	8	1.75	SM40-100-R0	DS-A00T	BLD T15/S7	Regular	**IC522912696**	Price
5J5P-40R01	4.00	1.50	10	2.375	SM40-100-R0	DS-A00T	BLD T15/S7	Regular	**IC522912697**	Price

GOLDMAX 90° Face Mill with 8 Indexes

Series VJ6K

- Uses SGM-44R001 inserts





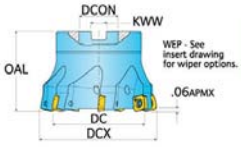
Model No.	Cutter Dia.	Bore Dia.	No. of Flutes	Max DOC (in.)	Height	Screw	Handle	Torx Key Blade	Order No.	Price
VJ6K-02R01	2.00	.75	5	.36	1.50	SM40-120-20	DS-A00T	BLD T15/S7	**IC523031481**	Price
VJ6K-02R02	2.50	1.00	6	.36	1.57	SM40-120-20	DS-A00T	BLD T15/S7	**IC523031480**	Price
VJ6K-03R01	3.00	1.00	8	.36	2.38	SM40-120-20	DS-A00T	BLD T15/S7	**IC523031404**	Price
VJ6K-04R01	4.00	1.50	9	.36	2.38	SM40-120-20	DS-A00T	BLD T15/S7	**IC523031446**	Price
VJ6K-06R01	6.00	1.50	13	.36	2.38	SM40-120-20	DS-A00T	BLD T15/S7	**IC523031447**	Price
VJ6K-08R01	8.00	2.50	13	.36	2.38	SM40-120-20	DS-A00T	BLD T15/S7	**IC523031478**	Price
VJ6K160R00	160mm	40mm	13	.24	63mm	SM40-120-20	DS-A00T	BLD T15/S7	**IC523031550**	Price

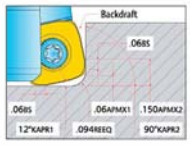
GOLDQUAD High Feed Face Mills

Series 5G5F / 5G6F

For use with the following:

- SDXS0904MPR-MR1 - specifically for Ti and hi-temps
- SDXS0904MPR-MM - for aggressive feed rates in stainless
- SDXS0904MPR-MR - designed for low cutting forces in low-alloy to high allow pre-hard steels
- SDXS0904MPR-MRH - reinforced cutting edge ideal for continuous machining in hardened steel



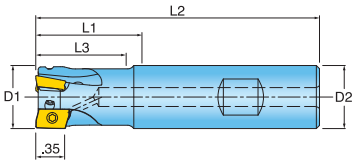




Model No.	Cutter Dia. (in.)	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Order No.	Price
5G5F-20R01	2.00	7	1.97	.75	SM30-075-R0	DS-T09W	**IC522912649**	Price
5G6F-20R01	2.00	6	1.97	.75	SM30-075-R0	DS-T09W	**IC522912648**	Price
5G5F-25R01	2.50	8	1.97	.75	SM30-075-R0	DS-T09W	**IC522912662**	Price
5G5F-30R01	3.00	9	2.0	1.00	SM30-075-R0	DS-T09W	**IC522912651**	Price
5G6F-30R01	3.00	7	2.0	1.00	SM30-075-R0	DS-T09W	**IC522912650**	Price

HiPOS+ 0° Lead End Mill

- HiPos, Clean shearing geometry
- Coolant thru
- Full range of insert grades
- Insert size: 9mm IC
- Uses BOCT09, BOMT09 insert styles





Item No.	Cutter Dia. (in.)	No. of Inserts	Head Length (in.)	OAL (in.)	Shank Dia. (in.)	Locking Screw	Torx Key	Order No.	Price
12J1P-0501379R01	.500	2	1.18	3.25	.625	SM25-054-00	DS-T08W	**IC523028196**	Price
12J1P-0601379R01	.625	2	1.18	3.25	.625	SM25-054-00	DS-T08W	**IC523028197**	Price
12J1P-0701784R01	.750	2	1.18	3.25	.750	SM25-064-00	DS-T08W	**IC523028198**	Price
12J1P-0701784R02	.750	3	1.18	3.25	.750	SM25-064-00	DS-T08W	**IC523028199**	Price
12J1P-0702784R01	.750	3	2.75	4.75	.750	SM25-064-00	DS-T08W	**IC523028200**	Price
12J1P-0704084R01	.750	2	2.75	6	.750	SM25-064-00	DS-T08W	**IC523028201**	Price
12J1P-0801784R01	.875	3	1.18	3.75	.750	SM25-064-00	DS-T08W	**IC523028202**	Price
12J1P-1001784R01	1.00	3	1.75	3.75	.750	SM25-064-00	DS-T08W	**IC523028203**	Price
12J1P-1001784R02	1.00	4	1.75	3.75	.750	SM25-064-00	DS-T08W	**IC523028204**	Price
12J1P-1201584R01	1.25	5	1.50	3.75	.750	SM25-064-00	DS-T08W	**IC523028205**	Price
12J1P-1501780R01	1.50	6	1.75	4	1.00	SM40-093-20	DS-T08W	**IC523028206**	Price

GOLDTRIO Ball Nose End Mills

SERIES 1KJ1 0° LEAD ENDMILL

- Hi positive design with 3 cutting edges for performance and economy
- Ramping capability for cutting versatility
- Three insert sizes for complete diameter coverage

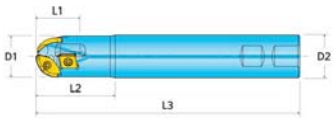


Cutter Dia. (in.)	Item No.	No. of Inserts	Head Length (in.)	OAL (in.)	Shank Dia. (in.)	Locking Screw	Uses Insert	Order No.	Price
.625	1KJ1D-0601279R01	1	1.22	3.16	.625	SM25-065-R0	TH_S0604	**IC523031482**	Price
.725	1KJ1D-0702084R01	2	1.80	4.00	.750	SM25-065-R0	TH_S0604	**IC523031479**	Price
.750	1KJ1D-0701184R01	2	1.05	3.25	.750	SM25-065-R0	TH_S0604	**IC523031477**	Price
.750	1KJ1D-0701784R01	2	1.55	3.75	.750	SM25-065-R0	TH_S0604	**IC523031472**	Price
.750	1KJ1D-0703084R01	2	2.80	5.00	.750	SM25-065-R0	TH_S0604	**IC523031471**	Price
.875	1KJ1D-0801784R01	2	1.75	3.75	.750	SM25-065-R0	TH_S0604	**IC523031464**	Price
1.00	1KJ1D-1001780R01	3	1.75	4.00	1.00	SM25-065-R0	TH_S0604	**IC523031462**	Price
1.00	1KJ1D-1001784R01	3	1.55	3.75	.750	SM25-065-R0	TH_S0604	**IC523031463**	Price
1.00	1KJ1D-1003784R01	3	3.55	6.00	.750	SM25-065-R0	TH_S0604	**IC523031461**	Price
1.25	1KJ1D-1201780R01	5	1.75	4.00	1.00	SM25-065-R0	TH_S0604	**IC523031445**	Price
1.25	1KJ1D-1201784R01	4	1.75	3.75	.750	SM25-065-R0	TH_S0604	**IC523031444**	Price
1.50	1KJ1D-1501780R01	6	1.75	4.00	1.00	SM25-065-R0	TH_S0604	**IC523031483**	Price
1.50	1KJ1D-1501784R01	5	1.75	3.75	.750	SM25-065-R0	TH_S0604	**IC523031455**	Price
1.50	1KJ1D-1502281R01	6	2.25	4.50	1.25	SM25-065-R0	TH_S0604	**IC523031485**	Price
1.25	1KJ1G-1201784R01	3	1.75	3.75	.750	SM40-100-R0	TH_S1005	**IC523031387**	Price
1.25	1KJ1G-1202281R01	2	2.05	4.50	1.25	SM40-100-R0	TH_S1005	**IC523031385**	Price
1.25	1KJ1G-1202281R02	3	2.05	4.50	1.25	SM40-100-R0	TH_S1005	**IC523031380**	Price
1.25	1KJ1G-1204281R01	3	4.05	6.50	1.25	SM40-100-R0	TH_S1005	**IC523031386**	Price
1.50	1KJ1G-1502281R01	3	2.20	4.50	1.25	SM40-100-R0	TH_S1005	**IC523031388**	Price
1.50	1KJ1G-1502281R02	4	2.20	4.50	1.25	SM40-100-R0	TH_S1005	**IC523031399**	Price
1.50	1KJ1G-1504281R01	3	4.25	6.50	1.25	SM40-100-R0	TH_S1005	**IC523031398**	Price
2.00	1KJ1G-2002281R01	5	2.25	4.50	1.25	SM40-100-R0	TH_S1005	**IC523031405**	Price

PROFILE TRIO Ball Nose Indexable End Mills

3 Flute • 2TW7K Style

- Unique double-sided insert for 2 cutting edges
- Coolant through





Series - 2TW7											
Model No.	Cutting Dia. (in.)	OAL (in.)	Shank Dia. (in.)	Shank Style	No. of Inserts	No. of Effective Flutes	Screw	Uses Insert(s)	Driver	Order No.	Price
2TW7K-1203781R01	1.25	6.00	1.25	Weldon	5	3	SM40-093-20	NCEU320500R (1) Center, NCEU320500R-P	DS-T15T	**IC522910433**	Price
2TW7K-1205281R01	1.25	7.50	1.25	Weldon	5	3	SM40-093-20	(2) Side Ball, DCM323R01 (2) Side	DS-T15T	**IC522910434**	Price
2TW7K-1504386R01	1.50	7.00	1.50	Weldon	5	3	SM40-120-00	NCEU320600R (1) Center, NCEU320600R-P	DS-T15T	**IC522910435**	Price
2TW7K-1506386R01	1.50	9.00	1.50	Weldon	5	3	SM40-120-00	(2) Side Ball, DCM323R01 (2) Side	DS-T15T	**IC522910436**	Price
2TW7K-2004782R01	2.00	8.00	2.00	Weldon	5	3	SM50-113-20	NCEU320700R (1) Center, NCEU320700R-P	DS-T20T	**IC522910437**	Price
2TW7K-2007582R01	2.00	11.00	2.00	Weldon	5	3	SM50-113-20	(2) Side Ball, DCM324R01 (2) Side	DS-T20T	**IC522910438**	Price

Series - ITW7											
Model No.	Cutting Dia. (in.)	OAL (in.)	Shank Dia. (in.)	Shank Style	No. of Inserts	No. of Effective Flutes	Screw	Uses Insert(s)	Driver	Order No.	Price
1TW7Q-0601379R01	.625	4.75	.625	Weldon	2	2	SM25-064-00	NBEU1603R	DS-T08S	**IC526166349**	Price
1TW7J-0702084R01	.750	4.00	.750	Weldon	2	2	SM30-072-00	NBEU1904R	DS-0022	**IC526166356**	Price
1TW7J-0702084R02	.750	4.00	.750	Weldon	2	2	SM30-072-00	NBEU1904R	DS-0022	**IC526166357**	Price
1TW7K-1002780R01	1.00	5.00	1.000	Weldon	2	2	SM35-087-00	NBEU25T4R	DS-0010	**IC526166363**	Price
1TW7K-1002780R02	1.00	6.00	1.000	Weldon	2	2	SM35-087-00	NBEU25T4R	DS-0010	**IC526166364**	Price

Series - ITW8											
Model No.	Cutting Dia. (in.)	OAL (in.)	Shank Dia. (in.)	Shank Style	No. of Inserts	No. of Effective Flutes	Screw	Uses Insert(s)	Driver	Order No.	Price
1TW8Q-06013S7R01	.625	5.00	.750	Cylindrical	2	2	SM25-064-00	NBEU1603R	DS-T08S	**IC526166351**	Price
1TW8Q-06013S7R02	.625	6.00	.750	Cylindrical	2	2	SM25-064-00	NBEU1603R	DS-T08S	**IC526166353**	Price
1TW8J-0701580R01	.750	6.00	1.000	Weldon	2	2	SM30-072-00	NBEU1904R	DS-0022	**IC526166360**	Price
1TW8J-0701580R02	.750	7.00	1.000	Weldon	2	2	SM30-072-00	NBEU1904R	DS-0022	**IC526166361**	Price
1TW8K-1001981R01	1.00	6.00	1.000	Weldon	2	2	SM35-087-00	NBEU25T4R	DS-0010	**IC526166367**	Price
1TW8K-1001981R02	1.00	7.00	1.250	Weldon	2	2	SM35-087-00	NBEU25T4R	DS-0010	**IC526166368**	Price

GOLDeMAX

0° Lead Face Mill with 4 Indexes



- Insert size: 0.31" DOC
- Uses DGM212R insert style
- Insert size: 0.31" DOC
- Uses DGM212R insert style

Item No.	Cutter Dia. (in.)	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Order No.	Price
SJ5Y01R01	1.50	6	1.57	.50	SM30-082-21	DS-T08W	**IC523029701**	Price
SJ6Y02R01	2.00	5	1.57	.50	SM30-082-21	DS-T08W	**IC523029702**	Price
SJ5Y02R01	2.00	7	1.57	.50	SM30-082-21	DS-T08W	**IC523029703**	Price
SJ5Y02R02	2.50	9	1.57	.50	SM30-082-21	DS-T08W	**IC523029705**	Price
SJ6Y03R01	3.00	7	2.375	.50	SM30-082-21	DS-T08W	**IC523029706**	Price

DIPOSoDEKA

20° Lead Face Mill with 10 Indexes



- Insert size: 0.23" DOC
- Uses PNCU08, PNCQ08 insert styles

Item No.	Cutter Dia. (in.)	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Order No.	Price
DM6G20R01	2.00	4	1.57	.75	SM40-100-10	DS-T15T	**IC523040742**	Price
DM5G20R01	2.00	6	1.57	.75	SM40-100-10	DS-T15T	**IC523040747**	Price
DM6G25R01	2.50	6	1.57	.75	SM40-100-10	DS-T15T	**IC523040743**	Price
DM5G25R01	2.50	8	1.57	.75	SM40-100-10	DS-T15T	**IC523040748**	Price
DM6G30R01	3.00	7	1.75	1.00	SM40-100-10	DS-T15T	**IC523040744**	Price
DM5G30R01	3.00	10	1.75	1.00	SM40-100-10	DS-T15T	**IC523040749**	Price
DM6G40R01	4.00	8	2.375	1.50	SM40-100-10	DS-T15T	**IC523040745**	Price
DM5G40R01	4.00	12	2.375	1.50	SM40-100-10	DS-T15T	**IC523040750**	Price

SoMAX™

80° Lead High Feed Face Mill with 4 Indexes



- SPGH uses DPM324 insert style
  SPGN uses DPM434 insert style
- SPGH D.O.C. is .08"
  SPGN D.O.C. is .12"

Item No.	Cutter Dia. (in.)	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Order No.	Price
SP6H02R02	2.00	4	1.75	.75	SM40-120-20	DS-T15T	**IC523026092**	Price
SP6H02R01	2.00	5	1.75	.75	SM40-120-20	DS-T15T	**IC523030241**	Price
SP6H03R02	3.00	7	1.75	1.00	SM40-120-20	DS-T15T	**IC523026108**	Price
SP6N04R01	4.00	6	2.50	1.50	SM50-160-10	DS-T20T	**IC523026093**	Price
SP6N04R02	4.00	7	2.50	1.50	SM50-160-10	DS-T20T	**IC523026094**	Price
SP6H04R02	4.00	9	2.50	1.50	SM40-120-20	DS-T15T	**IC523026991**	Price

OCTOePLUS

45° Lead Face Mill (Screw Held - 5mm Insert) with 16 Indexes



- Insert size: 0.12" DOC
- Uses ONCU05 insert style

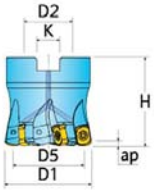
Item No.	Cutter Dia. (in.)	No. of Inserts	Height (in.)	Hole Size (in.)	Locking Screw	Torx Key	Order No.	Price
ON6H20R01	2.00	4	1.57	.75	SM40-100-10	DS-T15T	**IC523030036**	Price
ON5H20R01	2.00	6	1.57	.75	SM40-100-10	DS-T15T	**IC523030037**	Price
ON6H25R01	2.50	6	1.57	.75	SM40-100-10	DS-T15T	**IC523030038**	Price
ON6H30R01	3.00	7	1.75	1.00	SM40-100-10	DS-T15T	**IC523030039**	Price
ON5H30R01	3.00	10	1.75	1.00	SM40-100-10	DS-T15T	**IC523030040**	Price
ON6H40R01	4.00	8	2.375	1.50	SM40-100-10	DS-T15T	**IC523030041**	Price
ON5H40R01	4.00	12	2.375	1.50	SM40-100-10	DS-T15T	**IC523030042**	Price

GOLDeQUAD

High Feed Face Mills

Series TG1G / TG2G

- Maximum DOC .060"
- 4 Indexes provide cost effective machining
- Rigid clamping with unique pocket design & high tensile strength clamping screw
- Uses UNLU0904 inserts
- Coolant through





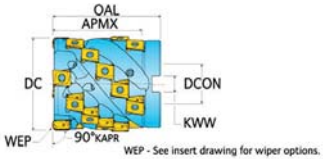
Model No.	Cutting Dia. (in.)	Bore Dia. (in.)	Height (in.)	No. of Inserts	Screw	Wrench	Torx Key Blade	Order No.	Price
TG2G-20R01	2.00	.75	1.97	6	SM35-088-10	DS-A00T	DS-T106B	**IC522906751**	Price
TG1G-20R01	2.00	.75	1.97	7	SM35-088-10	DS-A00T	DS-T106B	**IC522906727**	Price
TG1G-25R01	2.50	.75	1.97	8	SM35-088-10	DS-A00T	DS-T106B	**IC522908951**	Price
TG2G-30R01	3.00	1.00	1.75	7	SM35-088-10	DS-A00T	DS-T106B	**IC522906801**	Price
TG1G-30R01	3.00	1.00	1.75	9	SM35-088-10	DS-A00T	DS-T106B	**IC522906787**	Price

GOLDeMAX

Indexable Shell End Mills

Series 2SJ3J

Use DGE/DGM/ZGM324 inserts



WEP - See insert drawing for wiper options.



Model No.	Cutting Dia. (in.)	Bore Dia. (in.)	No. of Flutes	No. of Inserts	Max DOC	Screw	Wrench	Torx Key Blade	Order No.	Price
2SJ3J-25030D3R01	2.50	1.00	3	12	2.44	SM40-143-H0	DS-A00T	BLD T15/S7	**IC523028765**	Price
2SJ3J-30035D4R01	3.00	1.25	4	20	2.92	SM40-143-H0	DS-A00T	BLD T15/S7	**IC523028767**	Price
2SJ3J-40045D5R01	4.00	1.50	5	35	3.90	SM40-143-H0	DS-A00T	BLD T15/S7	**IC523028768**	Price

GOLDeMAX

Finish Mills

Series EF6J

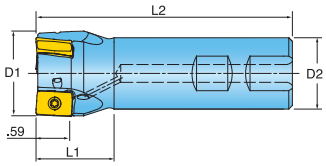
Use DFH324 inserts



Model No.	Cutter Dia. (in.)	Bore Dia. (in.)	No. of Inserts	Height (in.)	Screw	Wrench	Order No.	Price
EF6J-03R01	3.00	1.00	5	1.75	SM40-143-H0	DS-T15T	**IC523032586**	Price
EF6J-04R01	4.00	1.50	6	2.50	SM40-143-H0	DS-T15T	**IC523030815**	Price
EF6J-05R01	5.00	1.50	7	2.50	SM40-143-H0	DS-T15T	**IC523032615**	Price
EF6J-06R01	6.00	1.50	9	2.50	SM40-143-H0	DS-T15T	**IC523030814**	Price
EF6J-08R01	8.00	2.00	9	2.50	SM40-143-H0	DS-T15T	**IC523032616**	Price

DIPOS•TETRA 0° Lead End Mill with 4 Indexes

- Uses ANHU1607 insert style



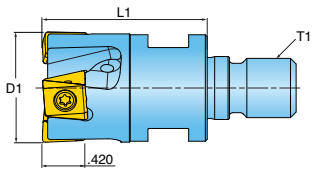


Item No.	Cutter Dia. (in.)	No. of Inserts	Head Length (in.)	OAL (in.)	Shank Dia. (in.)	Locking Screw	Torx Key	Order No.	Price
1TJ1N-1202281R01	1.25	2	2.25	4.5	1.25	SMS40-120-20	DS-T15T	**IC523025660**	Price
1TJ1N-1204281R01	1.25	2	4.25	6.5	1.25	SMS40-120-20	DS-T15T	**IC523025661**	Price
1TJ1N-1206281R01	1.25	2	6.25	8.5	1.25	SMS40-120-20	DS-T15T	**IC523025662**	Price
1TJ1N-1502281R01	1.50	3	2.25	4.5	1.25	SMS40-120-20	DS-T15T	**IC523025663**	Price
1TJ1N-1504281R01	1.50	3	4.25	6.5	1.25	SMS40-120-20	DS-T15T	**IC523025669**	Price
1TJ1N-2002281R01	2.00	4	2.25	4.5	1.25	SMS40-120-20	DS-T15T	**IC523025664**	Price

GOLD•MAX 0° Lead End Mill with 4 Indexes

Top-On Style

- Tangential style insert for faster feed rates
- Hi-shear, highly efficient cutting action
- Insert size: 0.42" DOC
- Uses insert DGE314R or DGM314R

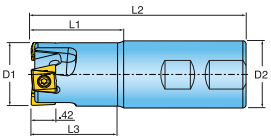




Item No.	Cutter Dia. (in.)	No. of Inserts	Head Length (in.)	OAL (in.)	Shank Dia. (in.)	Locking screw	Torx Key	Order No.	Price
1SJ1F-10015X7R01	1.00	2	1.50	-	M12	-	-	**IC523030468**	Price
1SJ1F-12015X8R01	1.25	3	1.75	2.695	M16	SM35-114-HO	DS-T15T	**IC523028222**	Price
1SJ1F-15015X8R01	1.50	4	1.75	2.695	M16	SM35-114-HO	DS-T15T	**IC523028224**	Price
1SJ1F-15015X8R02	1.50	3	1.75	2.695	M16	SM35-114-HO	DS-T15T	**IC523028225**	Price

GOLD•MAX 0° Lead End Mill with 4 Indexes

- Tangential style insert for faster feed rates
- Hi-shear, highly efficient cutting action
- Insert size: 0.42" DOC
- Uses insert DGE314R or DGM314R





Shank Style - CAT40									
Item No.	Cutter Dia. (in.)	No. of Inserts	Head Length (in.)	OAL (in.)	Shank Dia. (in.)	Locking Screw	Torx Key	Order No.	Price
1SJ1F-1202829R01	1.25	3	1.59	5.562	CAT40	SM35-114-HO	DS-T156B	**IC523030829**	Price
1SJ1F-1502829R01	1.50	3	2.87	5.562	CAT40	SM35-114-HO	DS-T156B	**IC522905395**	Price

Shank Style - Straight Shank									
Item No.	Cutter Dia. (in.)	No. of Inserts	Head Length (in.)	OAL (in.)	Shank Dia. (in.)	Locking Screw	Torx Key	Order No.	Price
1SJ1F-1001780R01	1.00	2	1.59	4	1.00	SM35-114-HO	DS-T156B	**IC523030461**	Price
1SJ1F-1003780R01	1.00	2	3.59	6	1.00	SM35-114-HO	DS-T156B	**IC523030467**	Price
1SJ1F-1201781R01	1.25	3	1.59	4	1.25	SM35-114-HO	DS-T15T	**IC523026892**	Price
1SJ1F-1501781R01	1.50	4	1.75	4	1.25	SM35-114-HO	DS-T15T	**IC523026896**	Price
1SJ1F-1501781R02	1.50	3	1.75	4	1.25	SM35-114-HO	DS-T156B	**IC523030471**	Price
1SJ1F-1503781R01	1.50	3	3.75	6	1.25	SM35-114-HO	DS-T156B	**IC523030640**	Price

PRO•BALL™ Ball Nose End Mill, 2 Effective

Modular Style

- Insert size: 12 or 18mm

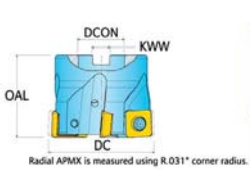


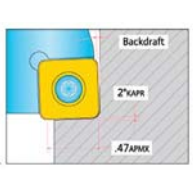
Item No.	Cutting Dia. (in.)	Dmax (in.)	No. of Inserts	Uses Insert	Locking Screw	Order No.	Price
1BW7T-05007T8R01	.500	.250	2	NKET120200R	SM25-052-80	**IC523029090**	Price
1BW7T-05010X5R01	.500	.250	2	NKET120200R	SM25-052-80	**IC523029878**	Price
1BW7V-07010TSR01	.750	.375	2	NKET180300R	SM30-080-10	**IC523029130**	Price
1BW7V-07015X6R01	.750	.375	2	NKET180300R	SM30-080-10	**IC523029879**	Price

GOLD•QUAD Plunge Roughing Cutters

Face Mills • Series QHU

- .45" Max radial depth of cut capability (depending on corner radius)
- Perfect for roughing on small spindle machines
- Takes SDMS/SDES1305 inserts







Model No.	Cutter Dia. (in.)	Bore Dia. (in.)	No. of Inserts	Height (in.)	Screw	Handle	Torx Key Blade	Order No.	Price
QHU-20015D1R01	2.00	.75	5	1.57	SM40-100-R0	DS-A00T	BLD T15/S7	**IC522904788**	Price
QHU-25015D1R01	2.50	.75	5	1.57	SM40-100-R0	DS-A00T	BLD T15/S7	**IC522904790**	Price
QHU-30017D3R01	3.00	1.00	7	1.75	SM40-100-R0	DS-A00T	BLD T15/S7	**IC522904791**	Price
QHU-30017D3R02	3.00	1.00	5	1.75	SM40-100-R0	DS-A00T	BLD T15/S7	**IC522904792**	Price
QHU-40023D5R01	4.00	1.50	9	2.375	SM40-100-R0	DS-A00T	BLD T15/S7	**IC522904793**	Price
QHU-40023D5R02	4.00	1.50	7	2.375	SM40-100-R0	DS-A00T	BLD T15/S7	**IC522904794**	Price

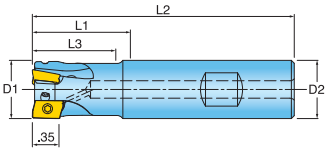
PROBALL™ Ball Nose End Mill, 2 Effective



- Insert size: 12, 18, or 25mm

Item No.	Cutting Dia. (in.)	Dmax (in.)	No. of Inserts	OAL (in.)	Shank Dia. (in.)	Uses Insert(s)	Locking Screw	Torx Key	Order No.	Price
1BW7T-0501778R01	.500	.250	2	3.5	.750	NKET120200R	SM25-052-80	DS-T06F	**IC523029875**	Price
1BW8T-0504584R01	.500	.250	2	6.5	.750	NKET120200R	SM25-052-80	DS-T06F	**IC523029883**	Price
1BW7V-0701584R01	.750	.375	2	3.5	.750	NKET180300R	SM30-080-10	DS-T09W	**IC523029127**	Price
1BW7V-0704084R01	.750	.375	2	6	.750	NKET180300R	SM30-080-10	DS-T09W	**IC523029884**	Price
1BW7W-1001580R01	1.00	.500	2	3.75	1.00	NCET250400R	SM35-110-00	DS-T15T	**IC523028603**	Price
1BW8V-0705780R01	.750	.375	2	8	1.00	NKET180300R	SM30-080-10	DS-T09W	**IC523029885**	Price
1BW7W-10037E1R01	1.00	.500	2	6.75	1.00	NCET250400R	SM35-110-00	DS-T15T	**IC523029094**	Price

HIPOS+™ 0° Lead End Mill





- HiPos, Clean shearing geometry
- Coolant thru
- Full range of insert grades
- Insert size: 9mm IC
- Uses BOCT09, BOMT09 insert styles

Item No.	Cutter Dia. (in.)	No. of Inserts	Head Length (in.)	OAL (in.)	Shank Dia. (in.)	Locking Screw	Torx Key	Order No.	Price
12J1P-0501379R01	.500	2	1.18	3.25	.625	SM25-054-00	DS-T08W	**IC523028196**	Price
12J1P-0601379R01	.625	2	1.18	3.25	.625	SM25-054-00	DS-T08W	**IC523028197**	Price
12J1P-0701784R01	.750	2	1.18	3.25	.750	SM25-064-00	DS-T08W	**IC523028198**	Price
12J1P-0701784R02	.750	3	1.18	3.25	.750	SM25-064-00	DS-T08W	**IC523028199**	Price
12J1P-0702784R01	.750	3	2.75	4.75	.750	SM25-064-00	DS-T08W	**IC523028200**	Price
12J1P-0704084R01	.750	2	2.75	6	.750	SM25-064-00	DS-T08W	**IC523028201**	Price
12J1P-0801784R01	.875	3	1.18	3.75	.750	SM25-064-00	DS-T08W	**IC523028202**	Price
12J1P-1001784R01	1.00	3	1.75	3.75	.750	SM25-064-00	DS-T08W	**IC523028203**	Price
12J1P-1001784R02	1.00	4	1.75	3.75	.750	SM25-064-00	DS-T08W	**IC523028204**	Price
12J1P-1201584R01	1.25	5	1.50	3.75	.750	SM25-064-00	DS-T08W	**IC523028205**	Price
12J1P-1501780R01	1.50	6	1.75	4	1.00	SM40-093-20	DS-T08W	**IC523028206**	Price

HIFEED MINI High Feed End Mill with 4 Indexes



- Top-on style
- Insert size: 6mm
- Uses UNLU06 insert style

Item No.	Cutting Dia. (in.)	Dmax (in.)	No. of Inserts	Head Length (in.)	OAL (in.)	Shank Dia. (in.)	Shank Style	Locking Screw	Order No.	Price
1TG1F-06015S6R01	.625	.270	2	1.17	4	.625	Cylinder	SM25-064-00	**IC523030147**	Price
1TG1F-06015ULR01	.625	.270	2	1.16	4	15.5mm	Cylinder	SM25-064-00	**IC523029336**	Price
1TG1F-07017UMR01	.750	.270	3	1.43	5	18.5mm	Cylinder	SM25-064-00	**IC523029337**	Price
1TG1F-07017UMR02	.750	.270	3	1.43	6.25	18.5mm	Cylinder	SM25-064-00	**IC523029339**	Price
1TG1F-07022S7R01	.750	.270	3	1.94	5	.750	Cylinder	SM25-064-00	**IC523029338**	Price
1TG1F-07032S7R01	.750	.270	3	2.94	6.25	.750	Cylinder	SM25-064-00	**IC523029340**	Price
1TG1F-08019UNR01	.875	.390	3	1.70	7.75	21.5mm	Cylinder	SM25-064-00	**IC523029342**	Price
1TG1F-10022S1R01	1.00	.390	4	1.94	10	1.00	Cylinder	SM25-064-00	**IC523029346**	Price
1TG1F-10022T5R01	1.00	.390	4	1.94	7	25mm	Cylinder	SM25-064-00	**IC523029343**	Price
1TG1F-10022T5R02	1.00	.390	4	1.94	10	25mm	Cylinder	SM25-064-00	**IC523029345**	Price
1TG1F-10032S1R01	1.00	.390	4	2.94	7	1.00	Cylinder	SM25-064-00	**IC523029344**	Price
1TG1F-1203281R01	1.25	.390	5	2.94	5.5	1.25	Weldon	SM25-064-00	**IC523029348**	Price
1TG1F-12050E2R01	1.25	.390	5	4.69	8	1.25	Weldon	SM25-064-00	**IC523029349**	Price
1TG1F-15015E2R01	1.50	.390	6	1.69	6	1.25	Weldon	SM25-064-00	**IC523029351**	Price

HIFEED MINI High Feed End Mill with 4 Indexes

Modular Style

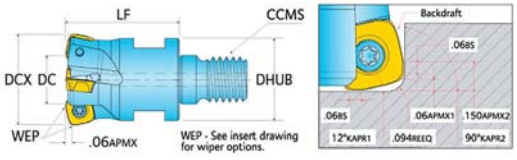


- Insert size: 6mm
- Uses UNLU06 insert style

Item No.	Cutting Dia. (in.)	Dmax (in.)	No. of Inserts	Locking Screw	Order No.	Price
1TG1F-06010X5R01	.625	.270	2	SM25-064-00	**IC523030146**	Price
1TG1F-07011X6R01	.750	.270	3	SM25-064-00	**IC523029341**	Price
1TG1F-10013X7R01	1.00	.390	4	SM25-064-00	**IC523029347**	Price
1TG1F-12015X8R01	1.25	.390	5	SM25-064-00	**IC523029350**	Price

GOLDQUAD High Feed Indexable End Mills - Top-On

Modular • Series 15G1F





- Maximum DOC .060”
- Uses SDXS0904 inserts

Model No.	Cutting Dia. (in.)	No. of Inserts	Connection	Screw	Wrench	Order No.	Price
15G1F-10015X7R01	1.00	3	M12	SM30-075-R0	DS-T09W	**IC522912642**	Price
15G1F-12015X8R02	1.25	4	M16	SM30-075-R0	DS-T09W	**IC522912652**	Price

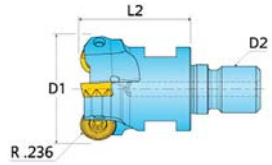
FORMOMASTER SHEAR™

Member IMC Group Ingersoll Cutting Tools

Button Cutter Indexable End Mills

Modular • Series 15B

- Ultra shear high performance mills
- Wide range on insert grades available to address all applications
- Anti-rotating insert clamping





Inch/Metric - Inch												
Model No.	Cutting Dia.	Max. Cutting Depth (in.)	Effective Teeth	Functional Length (in.)	Uses Insert	Connec-tion	Screw	Handle	Torx Key Blade	Order No.	Price
15B1A-10137X7R01	1.00	.20	2	1.38	RJLT 10	M12	SM35-087-70	DS-A00T	BLD T15/S7	**IC522910450**	Price
15B1A-10137X7R02	1.00	.20	3	1.38	RJLT 10	M12	SM35-087-70	DS-A00T	BLD T15/S7	**IC522910449**	Price
15B1A-12169X8R01	1.25	.20	4	1.69	RJLT 10	M16	SM35-087-70	DS-A00T	BLD T15/S7	**IC522910448**	Price
15B1B-10015X7R01	1.00	.24	2	1.50	RJLT 12	M12	SM40-093-20	DS-A00T	BLD T15/S7	**IC523032516**	Price
15B1B-12015X8R01	1.25	.24	3	1.50	RJLT 12	M16	SM40-093-20	DS-A00T	BLD T15/S7	**IC523032517**	Price
15B1B-15015X8R01	1.50	.24	3	1.50	RJLT 12	M16	SM40-093-20	DS-A00T	BLD T15/S7	**IC523032529**	Price

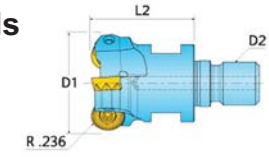
Inch/Metric - Metric											
Model No.	Cutting Dia.	Max. Cutting Depth (in.)	Effective Teeth	Functional Length (in.)	Uses Insert	Connec-tion	Screw	Handle	Torx Key Blade	Order No.	Price
15B1A-02030X6R00	20mm	.20	2	1.18	RJLT 10	M10	SM35-087-70	DS-A00T	BLD T15/S7	**IC523111233**	Price
15B1A-02535X7R00	25mm	.20	3	1.38	RJLT 10	M12	SM35-087-70	DS-A00T	BLD T15/S7	**IC523107273**	Price
15B1B-024044X7R00	24mm	.24	2	1.50	RJLT 12	M12	SM40-093-20	DS-A00T	BLD T15/S7	**IC523032515**	Price
15B1B-02535X7R00	25mm	6mm	2	35mm	RJLT 12	M12	SM40-093-20	DS-A00T	BLD T15/S7	**IC523108187**	Price
15B1B-03243X8R00	32mm	6mm	3	43mm	RJLT 12	M16	SM40-093-20	DS-A00T	BLD T15/S7	**IC523106917**	Price

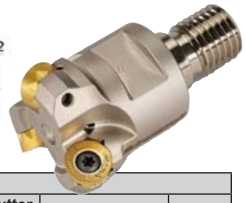
FORMOMASTER SHEAR™

Button Cutter Indexable End Mills

Series 15B

- Ultra shear high performance mills
- Wide range on insert grades available to address all applications
- Anti-rotating insert clamping





Cutter Style - Inch														
Model No.	Cutting Dia.	Max. Cutting Depth (in.)	OAL (in.)	Reach	Shank Dia.	Shank Style	Effective Teeth	Uses Insert	Screw	Handle	Torx Key Blade	Cutter Style	Order No.	Price
15B1B-1001780R01	1.00	.24	4.50	1.75	1.00	Cylindrical	2	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Inch	**IC523032509**	Price
15B1B-10020S1R01	1.25	.24	6.00	2.00	1.00	Cylindrical	2	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Inch	**IC523032510**	Price
15B1B-1202781R01	1.25	.24	5.00	2.75	1.25	Weldon	3	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Inch	**IC523032511**	Price
15B1B-12020S9R01	1.25	.24	6.00	2.00	1.25	Cylindrical	3	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Inch	**IC523032512**	Price
15B1B-1502386R01	1.50	.24	5.00	2.34	1.50	Weldon	4	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Inch	**IC523032513**	Price
15B1B-15020S5R01	1.50	.24	6.00	2.00	1.50	Cylindrical	4	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Inch	**IC523032514**	Price

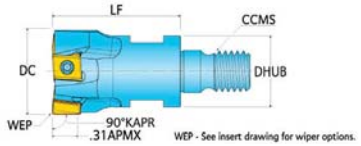
Cutter Style - Metric														
Model No.	Cutting Dia.	Max. Cutting Depth (in.)	OAL (in.)	Reach	Shank Dia.	Shank Style	Effective Teeth	Uses Insert	Screw	Handle	Torx Key Blade	Cutter Style	Order No.	Price
15B1B-02404480R00	24mm	.24	4.00	48mm	1.00	Weldon	2	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Metric	**IC523032508**	Price
15B1B-02560W5R00	25mm	.24	4.00	60mm	25mm	NA	2	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Metric	**IC523108184**	Price
15B1B-03260W6R00	32mm	.24	4.50	60mm	32mm	NA	3	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Metric	**IC523108186**	Price
15B1B-04050W6R00	40mm	.24	4.50	50mm	32mm	NA	3	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Metric	**IC523106020**	Price
15B1B-04035W6R00	40mm	.24	4.50	35mm	32mm	NA	4	RJLT 12	SM40-093-20	DS-A00T	BLD T15/S7	Metric	**IC523106600**	Price

GOLDOMAX

Indexable End Mills

Modular • Series 1SJ1Y

- Maximum depth of cut .31" on all sizes
- 4 Index inserts





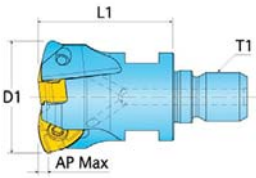
Model No.	No. of Inserts	Cutter Dia. (in.)	Uses Insert	Connection	Screw	Wrench	Order No.	Price
1SJ1Y-07015X6R01	2	.75	DGM212R	T1 10mm	SM30-074-21	DS-T08W	**IC523030110**	Price
1SJ1Y-07015X6R01	2	.75	DGM212R	T1 10mm	SM30-074-21	DS-T08W	**IC523030110**	Price
1SJ1Y-07015X6R02	3	.75	DGM212R	T1 10mm	SM30-074-21	DS-T08W	**IC523030111**	Price
1SJ1Y-07015X6R02	3	.75	DGM212R	T1 10mm	SM30-074-21	DS-T08W	**IC523030111**	Price
1SJ1Y-10015X7R02	4	1.00	DGM212R	T1 12mm	SM30-082-22	DS-T08W	**IC523030113**	Price
1SJ1Y-10015X7R02	4	1.00	DGM212R	T1 12mm	SM30-082-22	DS-T08W	**IC523030113**	Price
1SJ1Y-12017X8R02	5	1.25	DGM212R	T1 16mm	SM30-082-22	DS-T08W	**IC523030115**	Price
1SJ1Y-12017X8R02	5	1.25	DGM212R	T1 16mm	SM30-082-22	DS-T08W	**IC523030115**	Price
1SJ1Y-15017X8R01	4	1.50	DGM212R	T1 16mm	SM30-082-22	DS-T08W	**IC523030116**	Price
1SJ1Y-15017X8R01	4	1.50	DGM212R	T1 16mm	SM30-082-22	DS-T08W	**IC523030116**	Price
1SJ1Y-07010TSR01	3	.75	DGM212R	T12	SM30-074-21	DS-T08W	**IC523030101**	Price
1SJ1Y-07010TSR01	3	.75	DGM212R	T12	SM30-074-21	DS-T08W	**IC523030101**	Price
1SJ1Y-10012TUR01	4	1.00	DGM212R	T15	SM30-074-21	DS-T08W	**IC523030065**	Price
1SJ1Y-10012TUR01	4	1.00	DGM212R	T15	SM30-074-21	DS-T08W	**IC523030065**	Price

POWERFEED13+

High Feed Indexable End Mills

Modular • - 1DG1P

- .078 Maximum depth of cut
- Double-sized insert technology offers 6 cutting edges for great economy
- Unique insert seating design provides excellent stability in the cut
- Through coolant





Model No.	Cutter Dia. (in.)	No. of Flutes	Uses Insert	Ext Length L1 (in.)	Connection	Screw	Wrench	Order No.	Price
1DG1P-12017X8R01	1.25	2	UNEU1307R	1.75	M16	SM50-106-50	DS-0034	**IC522913866**	Price
1DG1P-15017X8R01	1.50	3	UNEU1307R	1.75	M16	SM50-106-50	DS-0034	**IC522912730**	Price

MIlling Inserts

Style - ANHU160704 Thickness (in.) - .436 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ANHU160704FR	IN2505	x	x	x	x		x	IC045615735	Price
ANHU160704FRP	IN10K				x			IC045812773	Price
ANHU160704R	IN2530		x	x		x		IC045813368	Price
Style - ANHU160708 Thickness (in.) - .417 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ANHU160708FR	IN4035		x					IC042904926	Price
ANHU160708FRP	IN10K				x			IC045812774	Price
ANHU160708R	IN2505	x	x	x	x	x	x	IC045840788	Price
ANHU160708R	IN2530		x	x		x		IC045849008	Price
Style - ANHU160716 Thickness (in.) - .413 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ANHU160716R	IN2530		x	x		x		IC045813369	Price
ANHU160716RJ	IN2505	x	x	x	x	x	x	IC045812338	Price
Style - ANHU160724 Thickness (in.) - .436 Radius (in.) - .094									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ANHU160724R	IN2505	x	x	x	x	x	x	IC045615855	Price
Style - AOCT170508 Thickness (in.) - .211 Radius (in.) - .020									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
APKT1705PERAL	IN10K				x			IC045873030	Price
Style - AOMT170508 Thickness (in.) - .211 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
AOMT170508R	IN2505	x	x	x	x	x	x	IC045812725	Price
AOMT170508R	IN2530		x	x		x		IC045813376	Price
AOMT170508RHS	IN2035		x					IC045612365	Price
Style - AOMT170516 Thickness (in.) - .219 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
AOMT170516R	IN2530		x	x		x		IC045813378	Price
Style - AOMT170532 Thickness (in.) - .219 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
AOMT170532R	IN2530		x	x		x		IC045813380	Price
Style - AOMT170548 Thickness (in.) - .219 Radius (in.) - .187									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
AOMT170548R	IN2505	x	x	x	x		x	IC045874499	Price
Style - AOMT170564 Thickness (in.) - .219 Radius (in.) - .250									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
AOMT170564R	IN2505	x	x	x	x		x	IC045874500	Price
AOMT170564R	IN2530		x	x		x		IC045813382	Price
Style - BOCT09T304 Thickness (in.) - .150 Radius (in.) - .008									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOCT09T304FRP	IN10K				x			IC045812702	Price
Style - BOCT09T308 Thickness (in.) - .150 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOCT09T308FRP	IN10K				x			IC045812703	Price
Style - BOCT130404 Thickness (in.) - .190 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOCT130404FRP	IN10K				x			IC045812692	Price
Style - BOCT130404 Thickness (in.) - .190 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOCT130404FRP	IN10K				x			IC045812692	Price
Style - BOCT130408 Thickness (in.) - .190 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOCT130404FRP	IN10K				x			IC045812693	Price
Style - BOMT09T304 Thickness (in.) - .150 Radius (in.) - .008									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOMT09T304R	IN2505	x	x	x	x	x	x	IC045812705	Price
Style - BOMT09T308 Thickness (in.) - .150 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOMT09T308R	IN2035		x					IC045812697	Price
BOMT09T308R	IN2505	x	x	x	x	x	x	IC045812698	Price
BOMT09T308R	IN2530		x	x		x		IC045813387	Price
Style - BOMT09T316 Thickness (in.) - .150 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOMT09T316R	IN2035		x					IC045822575	Price
BOMT09T316R	IN2505	x	x	x	x	x	x	IC045812701	Price
BOMT09T316R	IN2530		x	x		x		IC045813388	Price

Style - BOMT09T331 Thickness (in.) - .148 Radius (in.) - .120									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOMT09T331R	IN2035		x					IC045812899	Price
BOMT09T331R	IN2505	x	x	x	x	x	x	IC045812818	Price
BOMT09T331R	IN2530		x	x		x		IC045813389	Price
Style - BOMT130404 Thickness (in.) - .190 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOMT130404R	IN2035		x					IC045872268	Price
BOMT130404R	IN2505	x	x	x	x	x	x	IC045871961	Price
BOMT130404R	IN2530		x	x		x		IC045813390	Price
Style - BOMT130408 Thickness (in.) - .190 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOMT130408R	IN2035		x					IC045872495	Price
BOMT130408R	IN2505	x	x	x	x	x	x	IC045872509	Price
BOMT130408R	IN2530		x	x		x		IC045813391	Price
Style - BOMT130416 Thickness (in.) - .190 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOMT130416R	IN2505	x	x	x	x	x	x	IC045812683	Price
BOMT130416R	IN2530		x	x		x		IC045813392	Price
Style - BOMT130424 Thickness (in.) - .190 Radius (in.) - .093									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOMT130424R	IN2505	x	x	x	x	x	x	IC045812687	Price
BOMT130424R	IN2530		x	x		x		IC045813395	Price
Style - BOMT130431 Thickness (in.) - .190 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
BOMT130431R	IN2035		x					IC045872525	Price
BOMT130431R	IN2505	x	x	x	x	x	x	IC045872526	Price
BOMT130431R	IN2530		x	x		x		IC045813396	Price
Style - DFH324L001 Thickness (in.) - .315 Radius (in.) - .300 Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DFH324L001	IN2030		x	x		x		IC045831701	Price
DFH324L001	IN2505	x	x	x	x	x	x	IC045832829	Price
DFH324L001	IN2530		x	x		x		IC045832828	Price
DFH324L001	IN4015			x	x			IC042900860	Price
DFH324L001	IN4030	x	x	x				IC042900859	Price
StyleDFH324L205 Thickness (in.) - .315 Radius (in.) - .030 w/.501 Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DFH324L205	IN4015			x	x			IC042906337	Price
Style - DGE314R001 Thickness (in.) - .315 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGE314R001	IN2030		x	x		x		IC045830880	Price
DGE314R001	IN2530		x	x		x		IC042901569	Price
DGE314R001	IN4030	x	x	x				IC042902059	Price
DGE314R001P	IN15K				x			IC045831498	Price
Style - DGE314R002 Thickness (in.) - .315 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGE314R002	IN2030		x	x		x		IC045830879	Price
DGE314R002	IN2530		x	x		x		IC045832785	Price
DGE314R002	IN4030	x	x	x				IC042902058	Price
Style - DGE314R004 Thickness (in.) - .280 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGE314R004	IN2030		x	x		x		IC045831000	Price
DGE314R004	IN2530		x	x		x		IC042901571	Price
DGE314R004	IN4030	x	x	x				IC042902060	Price
Style - DGE324R001 Thickness (in.) - .315 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGE324R001	IN2030		x	x		x		IC045830883	Price
DGE324R001	IN2530		x	x		x		IC042901574	Price
DGE324R001	IN4030	x	x	x				IC042902064	Price
DGE324R001P	IN15K				x			IC045831500	Price
Style - DGE324R002 Thickness (in.) - .315 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGE324R002	IN2030		x	x		x		IC045830884	Price
DGE324R002	IN2530		x	x		x		IC042901575	Price
DGE324R002	IN4030	x	x	x				IC042902066	Price

MIlling Inserts

Style - DGE324R004 Thickness (in.) - .315 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGE324R004	IN2530		x	x		x		IC042901576	Price
DGE324R004	IN4030	x	x	x				IC042902067	Price
Style - DGE324R045 Thickness (in.) - .315 Radius (in.) - .010 w/.062 Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGE324R045	IN2030		x	x		x		IC045831002	Price
DGE324R045	IN2530		x	x		x		IC042901577	Price
DGE324R045	IN4030	x	x	x				IC042902068	Price
Style - DGM212101 Thickness (in.) - .169 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM212101	IN2005	x	x	x	x	x		IC045813528	Price
Style - DGM212R100 Thickness (in.) - .169 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM212R100	IN2004	x		x				IC045812785	Price
DGM212R100	IN2005	x	x	x	x	x		IC045812786	Price
DGM212R100	IN2015	x	x	x				IC045812787	Price
DGM212R100	IN2030		x	x		x		IC045812788	Price
DGM212R100	IN2505	x	x	x	x	x	x	IC042901580	Price
DGM212R100	IN2530		x	x		x		IC042901510	Price
DGM212R100	IN2535		x					IC042907253	Price
DGM212R100	IN4005	x	x	x			x	IC042900655	Price
DGM212R100	IN4015			x	x			IC042900654	Price
DGM212R100	IN4030	x	x	x				IC042900656	Price
DGM212R100	IN4035		x					IC042907254	Price
Style - DGM212R101 Thickness (in.) - .169 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM212R101	IN2005	x	x	x	x	x		IC045850378	Price
DGM212R101	IN2015	x	x	x				IC045850380	Price
DGM212R101	IN2030		x	x		x		IC045850381	Price
DGM212R101	IN2505	x	x	x	x	x	x	IC045831693	Price
Style - DGM212R101 Thickness (in.) - .169 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM212R101	IN2515			x	x			IC042901585	Price
DGM212R101	IN2530		x	x		x		IC042901586	Price
Style - DGM212R101 Thickness (in.) - .169 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM212R101	IN2535		x					IC042907251	Price
DGM212R101	IN4005	x	x	x			x	IC042900658	Price
DGM212R101	IN4015			x	x			IC042900657	Price
DGM212R101	IN4030	x	x	x				IC042900659	Price
DGM212R101	IN4035		x					IC042907252	Price
Style - DGM212R103 Thickness (in.) - .169 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM212R103	IN2005	x	x	x	x	x		IC045831282	Price
DGM212R103	IN2015	x	x	x				IC045831281	Price
DGM212R103	IN2030		x	x		x		IC045831283	Price
DGM212R103	IN2505	x	x	x	x	x	x	IC042901653	Price
DGM212R103	IN2530		x	x		x		IC042901657	Price
DGM212R103	IN2535		x					IC042907249	Price
DGM212R103	IN4005	x	x	x			x	IC042900685	Price
DGM212R103	IN4030	x	x	x				IC042900686	Price
DGM212R103	IN4035		x					IC042907250	Price
Style - DGM314L001 Thickness (in.) - .280 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM314L001	IN2005	x	x	x	x			IC045830732	Price
Style - DGM314R001 Thickness (in.) - .315 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM314R001	IN2005	x	x	x	x	x		IC045812314	Price
DGM314R001	IN2015	x	x	x				IC045812606	Price
DGM314R001	IN2030		x	x		x		IC045812605	Price
DGM314R001	IN2040			x				IC045812607	Price
DGM314R001	IN2515			x	x			IC042901659	Price
DGM314R001	IN2530		x	x		x		IC045832681	Price
DGM314R001	IN2540			x				IC042901662	Price
DGM314R001	IN4005	x	x	x			x	IC042900700	Price
DGM314R001	IN4015			x	x			IC042900687	Price

Style - DGM314R001 Thickness (in.) - .315 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM314R001	IN4030	x	x	x				IC042900688	Price
DGM314R001	IN4040	x	x					IC042900699	Price
DGM314R001P	IN05S				x			IC045812609	Price
DGM314R001R	IN2005	x	x	x	x	x		IC045831483	Price
Style - DGM314R001 Thickness (in.) - .315 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM314R001R	IN2505	x	x	x	x	x	x	IC042901673	Price
DGM314R001R	IN2530		x	x		x		IC042903356	Price
DGM314R001R	IN4005	x	x	x			x	IC042900704	Price
Style - DGM314R002 Thickness (in.) - .315 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM314R002	IN2005	x	x	x	x	x		IC045822429	Price
DGM314R002	IN2015	x	x	x				IC045812611	Price
DGM314R002	IN2030		x	x		x		IC045812610	Price
DGM314R002	IN2040			x				IC045812612	Price
DGM314R002	IN2515			x	x			IC042901674	Price
DGM314R002	IN2530		x	x		x		IC042901716	Price
DGM314R002	IN2540			x				IC042901717	Price
DGM314R002	IN4005	x	x	x			x	IC042900708	Price
DGM314R002	IN4015			x	x			IC042900705	Price
DGM314R002	IN4030	x	x	x				IC042900706	Price
DGM314R002	IN4040	x	x					IC042900707	Price
DGM314R002R	IN2505	x	x	x	x	x	x	IC042901718	Price
DGM314R002R	IN2530		x	x		x		IC042903357	Price
DGM314R002R	IN4005	x	x	x			x	IC042900709	Price
Style - DGM314R003 Thickness (in.) - .315 Radius (in.) - .093									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM314R003	IN2005	x	x	x	x	x		IC045812614	Price
DGM314R003	IN2505	x	x	x	x	x	x	IC042901719	Price
Style - DGM314R004 Thickness (in.) - .315 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM314R004	IN2005	x	x	x	x	x		IC045822434	Price
DGM314R004	IN2015	x	x	x				IC045812616	Price
DGM314R004	IN2030		x	x		x		IC045812615	Price
DGM314R004	IN2505	x	x	x	x	x	x	IC042901720	Price
DGM314R004	IN2530		x	x		x		IC042901722	Price
DGM314R004	IN4005	x	x	x			x	IC042900712	Price
DGM314R004	IN4030	x	x	x				IC042900710	Price
DGM314R004	IN4040	x	x					IC042900711	Price
Style - DGM315001 Thickness (in.) - .315 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM315001	IN2530		x	x		x		IC045832835	Price
DGM315001	IN4005	x	x	x			x	IC042903248	Price
DGM315001	IN4015			x	x			IC042903245	Price
DGM315001	IN4030	x	x	x				IC042903247	Price
Style - DGM315002 Thickness (in.) - .315 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM315002	IN2530		x	x		x		IC045832839	Price
DGM315002	IN4005	x	x	x			x	IC042903251	Price
DGM315002	IN4015			x	x			IC042903249	Price
DGM315002	IN4030	x	x	x				IC042903252	Price
Style - DGM315003 Thickness (in.) - .315 Radius (in.) - .093									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM315003	IN2530		x	x		x		IC042901726	Price
DGM315003	IN4005	x	x	x			x	IC042903255	Price
DGM315003	IN4015			x	x			IC042903253	Price
DGM315003	IN4030	x	x	x				IC042903256	Price
Style - DGM315004 Thickness (in.) - .315 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM315004	IN4030	x	x	x				IC042903260	Price
Style - DGM324R001									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM324R001	IN2005	x	x	x	x	x		IC045830052	Price
DGM324R001	IN2015	x	x	x				IC045873051	Price
DGM324R001	IN2030		x	x		x		IC045873066	Price

MIlling Inserts

Style - DGM324R001 Thickness (in.) -									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM324R001	IN2040			x				IC045873059	Price
DGM324R001	IN2515			x	x			IC042901732	Price
DGM324R001	IN2530		x	x		x		IC042901733	Price
DGM324R001	IN2540			x				IC042901734	Price
DGM324R001	IN4005	x	x	x			x	IC042901990	Price
DGM324R001	IN4015			x	x			IC042901224	Price
Style - DGM324R001 Thickness (in.) -									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM324R001	IN4030	x	x	x				IC042901989	Price
DGM324R001	IN4040	x	x					IC042901988	Price
Style - DGM324R002 Thickness (in.) - .315 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM324R002	IN2005	x	x	x	x	x		IC045830057	Price
DGM324R002	IN2015	x	x	x				IC045873053	Price
DGM324R002	IN2030		x	x		x		IC045873068	Price
DGM324R002	IN2040			x				IC045873063	Price
DGM324R002	IN2530		x	x		x		IC042901736	Price
DGM324R002	IN4005	x	x	x			x	IC042901994	Price
DGM324R002	IN4015			x	x			IC042901991	Price
DGM324R002	IN4030	x	x	x				IC042901993	Price
DGM324R002	IN4040	x	x					IC042901992	Price
Style - DGM324R004 Thickness (in.) - .315 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM324R004	IN2005	x	x	x	x	x		IC045830059	Price
DGM324R004	IN2015	x	x	x				IC045873055	Price
DGM324R004	IN2030		x	x		x		IC045873070	Price
DGM324R004	IN2530		x	x		x		IC042901741	Price
DGM324R004	IN4005	x	x	x			x	IC042902001	Price
DGM324R004	IN4015			x	x			IC042901995	Price
DGM324R004	IN4030	x	x	x				IC042902000	Price
DGM324R004	IN4040	x	x					IC042901996	Price
Style - DGM324R045 Thickness (in.) - .315 Radius (in.) - .010 w/.060 Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM324R045	IN2005	x	x	x	x	x		IC045830693	Price
DGM324R045	IN2015	x	x	x				IC045831049	Price
DGM324R045	IN2040			x				IC045831121	Price
DGM324R045	IN2505	x	x	x	x	x	x	IC042901742	Price
DGM324R045	IN2515			x	x			IC042901743	Price
DGM324R045	IN2530		x	x		x		IC042901744	Price
DGM324R045	IN4005	x	x	x			x	IC042902048	Price
DGM324R045	IN4015			x	x			IC042902002	Price
DGM324R045	IN4030	x	x	x				IC042902047	Price
DGM324R045	IN4040	x	x					IC042902045	Price
Style - DGM324R201 Thickness (in.) - .315 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM324R201	IN2005	x	x	x	x	x		IC045830485	Price
DGM324R201	IN2015	x	x	x				IC045830621	Price
DGM324R201	IN2030		x	x		x		IC045831223	Price
DGM324R201	IN2040			x				IC045831224	Price
DGM324R201	IN4005	x	x	x			x	IC042902049	Price
DGM324R201	IN4015			x	x			IC042901225	Price
DGM324R201	IN4030	x	x	x				IC042902050	Price
DGM324R201	IN4040	x	x					IC042902051	Price
Style - DGM324R202 Thickness (in.) - .315 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM324R202	IN2005	x	x	x	x	x		IC045831226	Price
DGM324R202	IN2015	x	x	x				IC045831227	Price
DGM324R202	IN2030		x	x		x		IC045831228	Price
DGM324R202	IN4005	x	x	x			x	IC042902052	Price
DGM324R202	IN4030	x	x	x				IC042902054	Price
Style - DGM325001 Thickness (in.) - .315 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM325001	IN2530		x	x		x		IC042901751	Price
DGM325001	IN4005	x	x	x			x	IC042903263	Price
DGM325001	IN4015			x	x			IC042903261	Price

Style - DGM325002 Thickness (in.) - .315 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM325002	IN2530		x	x		x		IC042901754	Price
DGM325002	IN4005	x	x	x			x	IC042903267	Price
DGM325002	IN4015			x	x			IC042903265	Price
DGM325002	IN4030	x	x	x				IC042903376	Price
Style - DGM325003 Thickness (in.) - .315 Radius (in.) - .093									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM325003	IN2530		x	x		x		IC042901758	Price
DGM325003	IN4005	x	x	x			x	IC042903379	Price
DGM325003	IN4015			x	x			IC042903377	Price
DGM325003	IN4030	x	x	x				IC042903380	Price
Style - DGM325004 Thickness (in.) - .315 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM325004	IN2530		x	x		x		IC042901762	Price
DGM325004	IN4005	x	x	x			x	IC042903578	Price
DGM325004	IN4030	x	x	x				IC042903588	Price
Style - DGM426001 Thickness (in.) - .375 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM426001	IN2530		x	x		x		IC042901766	Price
DGM426001	IN4015			x	x			IC042903589	Price
DGM426001	IN4030	x	x	x				IC042903592	Price
Style - DGM426002 Thickness (in.) - .375 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM426002	IN2505	x	x	x	x	x	x	IC042901768	Price
DGM426002	IN2530		x	x		x		IC042901770	Price
DGM426002	IN4015			x	x			IC042903593	Price
DGM426002	IN4030	x	x	x				IC042903596	Price
Style - DGM426003 Thickness (in.) - .375 Radius (in.) - .093									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM426003	IN4005	x	x	x			x	IC042903599	Price
DGM426003	IN4015			x	x			IC042903597	Price
DGM426003	IN4030	x	x	x				IC042903600	Price
Style - DGM426004 Thickness (in.) - .375 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DGM426004	IN2530		x	x		x		IC042901773	Price
DGM426004	IN4005	x	x	x			x	IC042903604	Price
DGM426004	IN4015			x	x			IC042903601	Price
DGM426004	IN4030	x	x	x				IC042903605	Price
Style - DNM434L202 Thickness (in.) - .300 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNM434L202	IN2005	x	x	x	x	x		IC045822495	Price
DNM434L202	IN2030		x	x		x		IC045822496	Price
Style - DNM434R201 Thickness (in.) - .300 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNM434R201	IN2005	x	x	x	x	x		IC045822497	Price
DNM434R201	IN2015	x	x	x				IC045822499	Price
DNM434R201	IN2030		x	x		x		IC045822498	Price
Style - DNM434R202 Thickness (in.) -									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNM434R202	IN2005	x	x	x	x	x		IC045812022	Price
DNM434R202	IN2030		x	x		x		IC045822503	Price
Style - DNM434R203 Thickness (in.) - .300 Radius (in.) - .093									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNM434R203	IN2005	x	x	x	x	x		IC045822501	Price
Style - DNM434R204 Thickness (in.) - .300 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNM434R204	IN2005	x	x	x	x	x		IC045822502	Price
Style - DNM434R245 Thickness (in.) - .300 Radius (in.) - .150 Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNM434R245	IN2005	x	x	x	x	x		IC045830720	Price
Style - DPM314001 Thickness (in.) - .250 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM314001	IN2005	x	x	x	x	x		IC045811538	Price
DPM314001	IN2015	x	x	x				IC045811548	Price
DPM314001	IN2530		x	x		x		IC045822585	Price

MIlling Inserts

Style - DPM314002 Thickness (in.) - .250 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM314002	IN2005	x	x	x	x	x		IC045811613	Price
DPM314002	IN2015	x	x	x				IC045811579	Price
DPM314002	IN2530		x	x		x		IC045822581	Price
DPM314002	IN4015			x	x			IC042901230	Price
Style - DPM314003 Thickness (in.) - .250 Radius (in.) - .093									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM314003	IN2005	x	x	x	x	x		IC045811615	Price
Style - DPM314004 Thickness (in.) - .250 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM314004	IN2005	x	x	x	x	x		IC045811617	Price
DPM314004	IN2015	x	x	x				IC045811581	Price
DPM314004	IN2530		x	x		x		IC045822586	Price
Style - DPM314R001 Thickness (in.) - .250 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM314R001	IN2010	x						IC045820703	Price
DPM314R001	IN2015	x	x	x				IC045811550	Price
DPM314R001	IN2530		x	x		x		IC045822582	Price
Style - DPM314R002 Thickness (in.) - .250 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM314R002	IN2005	x	x	x	x	x		IC045811619	Price
Style - DPM324001 Thickness (in.) - .250 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM324001	IN2005	x	x	x	x	x		IC045811541	Price
DPM324001	IN2015	x	x	x				IC045811552	Price
DPM324001	IN2530		x	x		x		IC045822587	Price
Style - DPM324002 Thickness (in.) - .250 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM324002	IN2005	x	x	x	x	x		IC045811625	Price
DPM324002	IN2015	x	x	x				IC045811582	Price
Style - DPM324003 Thickness (in.) - .250 Radius (in.) - .094									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM324003	IN2530		x	x		x		IC045812812	Price
Style - DPM324004 Thickness (in.) - .250 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM324004	IN2005	x	x	x	x	x		IC045811629	Price
DPM324004	IN2015	x	x	x				IC045811584	Price
DPM324004	IN2530		x	x		x		IC045840825	Price
Style - DPM324L050 Thickness (in.) - .250 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM324L050	IN2005	x	x	x	x	x		IC045812149	Price
DPM324L050	IN2530		x	x		x		IC045822604	Price
Style - DPM324L051 Thickness (in.) - .250 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM324L051	IN2005	x	x	x	x	x		IC045821099	Price
DPM324L051	IN2015	x	x	x				IC045821100	Price
DPM324L051	IN2030		x	x		x		IC045831484	Price
DPM324L051	IN2530		x	x		x		IC045822589	Price
DPM324L051	IN2535		x					IC042907261	Price
DPM324L051	IN4035		x					IC042907263	Price
Style - DPM324L101 Thickness (in.) - .256 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM324L101	IN2005	x	x	x	x	x		IC045821180	Price
DPM324L101	IN2030		x	x		x		IC045831485	Price
DPM324L101	IN2530		x	x		x		IC045831523	Price
DPM324L101	IN2535		x					IC042907259	Price
Style - DPM324R001 Thickness (in.) - .250 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM324R001	IN2005	x	x	x	x	x		IC045811542	Price
DPM324R001	IN2015	x	x	x				IC045811554	Price
DPM324R001	IN2530		x	x		x		IC045822583	Price
Style - DPM324R002 Thickness (in.) - .250 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM324R002	IN2005	x	x	x	x	x		IC045811631	Price
DPM324R002	IN2530		x	x		x		IC045822584	Price

Style - DPM324R045 Thickness (in.) - .250 Radius (in.) - .080									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM324R045	IN2005	x	x	x	x	x		IC045821762	Price
Style - DPM424001 Thickness (in.) - .300 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM424001	IN2005	x	x	x	x	x		IC045811539	Price
DPM424001	IN2015	x	x	x				IC045811556	Price
Style - DPM424001 Thickness (in.) - .300 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM424001	IN2040			x				IC045811555	Price
DPM424001	IN4005	x	x	x			x	IC042901440	Price
Style - DPM424002 Thickness (in.) - .300 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM424002	IN2005	x	x	x	x	x		IC045811566	Price
DPM424002	IN2015	x	x	x				IC045811565	Price
DPM424002	IN2040			x				IC045811567	Price
Style - DPM424003 Thickness (in.) - .300 Radius (in.) - .093									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM424003	IN2005	x	x	x	x	x		IC045811569	Price
Style - DPM424004 Thickness (in.) - .300 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM424004	IN2005	x	x	x	x	x		IC045811572	Price
DPM424004	IN2015	x	x	x				IC045811571	Price
DPM424004	IN2040			x				IC045811573	Price
Style - DPM424R001 Thickness (in.) - .375 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM424R001	IN2005	x	x	x	x	x		IC045811544	Price
Style - DPM434001 Thickness (in.) - .300 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM434001	IN2005	x	x	x	x	x		IC045811545	Price
Style - DPM434002 IC Thickness (in.) - .300 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM434002	IN2005	x	x	x	x	x		IC045811575	Price
Style - DPM434L050 Thickness (in.) - .300 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM434L050	IN2005	x	x	x	x	x		IC045812146	Price
DPM434L050	IN2530		x	x		x		IC045813257	Price
Style - DPM434L051 Thickness (in.) - .300 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM434L051	IN2005	x	x	x	x	x		IC045820799	Price
DPM434L051	IN2530		x	x		x		IC045822591	Price
Style - DPM434L101 Thickness (in.) - .306 Radius (in.) - .200									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM434L101	IN2005	x	x	x	x	x		IC045821179	Price
DPM434L101	IN2030		x	x		x		IC045831486	Price
DPM434L101	IN2530		x	x		x		IC045831522	Price
DPM434L101	IN4035		x					IC042907265	Price
Style - DPM434R001 Thickness (in.) - .300 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM434R001	IN2005	x	x	x	x	x		IC045811546	Price
DPM434R001	IN2015	x	x	x				IC045811530	Price
DPM434R001	IN2030		x	x		x		IC045821927	Price
DPM434R001	IN2040			x				IC045811560	Price
DPM434R001	IN2530		x	x		x		IC045812721	Price
Style - DPM434R002 Thickness (in.) - .300 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM434R002	IN2005	x	x	x	x	x		IC045811562	Price
DPM434R002	IN2015	x	x	x				IC045811531	Price
DPM434R002	IN2040			x				IC045811561	Price
DPM434R002	IN2530		x	x		x		IC045822590	Price
DPM434R002	IN4015			x	x			IC042901226	Price
Style - DPM434R004 Thickness (in.) - .300 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM434R004	IN2005	x	x	x	x	x		IC045811649	Price
DPM434R004	IN2530		x	x		x		IC045822588	Price

MIlling Inserts

Style - DPM434R045 Thickness (in.) - .375 Radius (in.) - .150 Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM434R045	IN2005	x	x	x	x	x		IC045820445	Price
DPM434R045	IN2015	x	x	x				IC045811564	Price
DPM434R045	IN2030		x	x		x		IC045830764	Price
DPM434R045	IN2040			x				IC045811563	Price
DPM434R045	IN2530		x	x		x		IC045812762	Price
DPM434R045	IN4030	x	x	x				IC042902070	Price
Style - DPM436L045 Thickness (in.) - .375 Radius (in.) - .010 w/.150 Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM436L045	IN2005	x	x	x	x	x		IC045812045	Price
Style - DPM436R001 Thickness (in.) - .375 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM436R001	IN2015	x	x	x				IC045830596	Price
DPM436R001	IN2030		x	x		x		IC045830593	Price
Style - DPM436R002 Thickness (in.) - .375 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM436R002	IN2005	x	x	x	x	x		IC045830086	Price
DPM436R002	IN2030		x	x		x		IC045830599	Price
Style - DPM436R045 Thickness (in.) - .375 Radius (in.) - .010 w/.150 Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DPM436R045	IN2005	x	x	x	x	x		IC045811936	Price
DPM436R045	IN2015	x	x	x				IC045811902	Price
DPM436R045	IN2030		x	x		x		IC045822080	Price
DPM436R045	IN2040			x				IC045811903	Price
DPM436R045	IN2530		x	x		x		IC045812813	Price
DPM436R045	IN4005	x	x	x			x	IC045803018	Price
Style - DTM324R001 Thickness (in.) - .250 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DTM324R001	IN2015	x	x	x				IC045822567	Price
Style - ENHU050302 IC (in.) - .203 Thickness (in.) - .133 Radius (in.) - .008									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ENHU050302R	IN2505	x	x	x	x		x	IC046182781	Price
ENHU050302R	IN2530		x	x		x		IC046182415	Price
Style - ENHU050304 IC (in.) - .203 Thickness (in.) - .130 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ENHU050304R	IN2505	x	x	x	x	x	x	IC046120540	Price
ENHU050304R	IN2530		x	x		x		IC046142745	Price
ENHU050304R-PH	IN7035		x					IC046142749	Price
Style - ENHU050308 IC (in.) - .203 Thickness (in.) - .130 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ENHU050308R	IN2505	x	x	x	x	x	x	IC046154121	Price
ENHU050308R	IN2530		x	x		x		IC046154120	Price
ENHU050308R-PH	IN7035		x					IC046167059	Price
Style - IXH211-G01 Thickness (in.) - .070 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH211-G01 K	IN4005	x	x	x			x	IC042914399	Price
IXH211-G01 K	IN4030	x	x	x				IC042914400	Price
IXH211-G01 Y	IN2535		x					IC042914398	Price
IXH211-G01-P-S	IN05S				x			IC042914401	Price
Style - IXH311-G01 Thickness (in.) - .085 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH311-G01	IN4015			x	x			IC042914963	Price
IXH311-G01	IN4030	x	x	x				IC042914720	Price
IXH311-G01 K	IN4005	x	x	x			x	IC042914719	Price
IXH311-G01 Y	IN2535		x					IC042914721	Price
IXH311-G01P S	IN05S				x			IC042914718	Price
Style - IXH311-G02 Thickness (in.) - .085 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH311-G02 K	IN4005	x	x	x			x	IC042914724	Price
IXH311-G02 K	IN4030	x	x	x				IC042914723	Price
IXH311-G02 Y	IN2535		x					IC042914725	Price
IXH311-G02-P S	IN05S				x			IC042914722	Price

Style - IXH312-G01 Thickness (in.) - .113 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH312-G01 J	IN4015			x	x			IC042914962	Price
IXH312-G01 K	IN4005	x	x	x			x	IC042914879	Price
IXH312-G01 K	IN4030	x	x	x				IC042914738	Price
IXH312-G01 Y	IN2535		x					IC042914880	Price
IXH312-G01-P S	IN05S				x			IC042914737	Price
Style - IXH312-G02 Thickness (in.) - .113 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH312-G02 K	IN2530		x	x		x		IC042917768	Price
IXH312-G02 K	IN4005	x	x	x			x	IC042914893	Price
IXH312-G02 K	IN4030	x	x	x				IC042914892	Price
IXH312-G02 Y	IN2535		x					IC042914895	Price
IXH312-G02-P S	IN05S				x			IC042914891	Price
Style - IXH412-G01 Thickness (in.) - .153 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH412-G01 J	IN4015			x	x			IC042914977	Price
IXH412-G01 K	IN4005	x	x	x			x	IC042914966	Price
IXH412-G01 K	IN4030	x	x	x				IC042914967	Price
IXH412-G01 Y	IN2535		x					IC042914968	Price
IXH412-G01-P-S	IN05S				x			IC042914965	Price
Style - IXH412-G02 Thickness (in.) - .153 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH412-G02 J	IN4015			x	x			IC042914980	Price
IXH412-G02 K	IN4005	x	x	x			x	IC042914971	Price
IXH412-G02 K	IN4030	x	x	x				IC042914970	Price
IXH412-G02 Y	IN2535		x					IC042914972	Price
IXH412-G02-P-S	IN05S				x			IC042914969	Price
Style - IXH412-G03 Thickness (in.) - .153 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH412-G03 K	IN4005	x	x	x			x	IC042914975	Price
IXH412-G03 K	IN4030	x	x	x				IC042914973	Price
IXH412-G03-P-S	IN05S				x			IC042917282	Price
Style - IXH413-G01 Thickness (in.) - .191 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH413-G01 K	IN4005	x	x	x			x	IC042914984	Price
IXH413-G01 K	IN4030	x	x	x				IC042914983	Price
IXH413-G01 Y	IN2535		x					IC042914985	Price
IXH413-G01-P-S	IN05S				x			IC042914982	Price
Style - IXH413-G02 Thickness (in.) - .191 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH413-G02 K	IN4005	x	x	x			x	IC042914988	Price
IXH413-G02 K	IN4030	x	x	x				IC042914987	Price
IXH413-G02 Y	IN2535		x					IC042914989	Price
IXH413-G02-P-S	IN05S				x			IC042914986	Price
Style - IXH414-G01 Thickness (in.) - .231 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH414-G01 K	IN4005	x	x	x			x	IC042915022	Price
IXH414-G01 K	IN4030	x	x	x				IC042915021	Price
IXH414-G01 Y	IN2535		x					IC042915025	Price
IXH414-G01-P-S	IN05S				x			IC042915020	Price
Style - IXH414-G02 Thickness (in.) - .231 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH414-G02 K	IN4005	x	x	x			x	IC042915028	Price
IXH414-G02 K	IN4030	x	x	x				IC042915027	Price
IXH414-G02 Y	IN2535		x					IC042915507	Price
IXH414-G02-P-S	IN05S				x			IC042915026	Price
Style - IXH414-G03 Thickness (in.) - .231 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH414-G03 K	IN4005	x	x	x			x	IC042915505	Price
IXH414-G03 K	IN4030	x	x	x				IC042915030	Price
IXH414-G03 Y	IN2535		x					IC042915504	Price
IXH414-G03-P-S	IN05S				x			IC042915509	Price
Style - IXH415-604 Thickness (in.) - .298 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH415-604	IN4035		x					IC042915834	Price

MIlling Inserts

Style - IXH415-G01 Thickness (in.) - .298 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH415-G01 A	IN4005	x	x	x			x	IC042915033	Price
IXH415-G01 A	IN4015			x	x			IC042915825	Price
IXH415-G01 K	IN4030	x	x	x				IC042915032	Price
IXH415-G01 K	IN4035		x					IC042915313	Price
IXH415-G01 Y	IN2535		x					IC042915315	Price
IXH415-G01-P S	IN05S				x			IC042915031	Price
Style - IXH415-G02 Thickness (in.) - .298 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH415-G02 A	IN4005	x	x	x			x	IC042915037	Price
IXH415-G02 A	IN4015			x	x			IC042915826	Price
IXH415-G02 K	IN4030	x	x	x				IC042915036	Price
IXH415-G02 K	IN4035		x					IC042915312	Price
IXH415-G02 Y	IN2535		x					IC042915314	Price
IXH415-G02-P S	IN05S				x			IC042915035	Price
Style - IXH415-G03 Thickness (in.) - .298 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH415-G03 A	IN4005	x	x	x			x	IC042915039	Price
IXH415-G03 A	IN4015			x	x			IC042915827	Price
IXH415-G03 K	IN4030	x	x	x				IC042915038	Price
IXH415-G03 K	IN4035		x					IC042915828	Price
IXH415-G03 Y	IN2535		x					IC042915316	Price
IXH415-G03-P S	IN05S				x			IC042915029	Price
Style - IXH415-G04 Thickness (in.) - .298 Radius (in.) - .125									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
IXH415-G04 A	IN4005	x	x	x			x	IC042915831	Price
IXH415-G04 A	IN4015			x	x			IC042915833	Price
IXH415-G04 K	IN2535		x					IC042915832	Price
IXH415-G04 K	IN4030	x	x	x				IC042915830	Price
IXH415-G04 Y	IN05S				x			IC042915829	Price
Style - LSE324R045 Thickness (in.) - .250 Radius (in.) - .038 Chamfer									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
LSE324R045S	IN4030	x	x	x				IC042907286	Price
LSE324R045S	IN4040	x	x					IC042907255	Price
Style - MNCU060304 Thickness (in.) - .184 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
MNCU060304FRP	IN10K				x			IC046166509	Price
Style - MNCU060308 Thickness (in.) - .184 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
MNCU060308FRP	IN10K				x			IC046165462	Price
Style - MNHU060308 Thickness (in.) - .184 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
MNHU060308R	IN2505	x	x	x	x			IC046147613	Price
MNHU060308R	IN2530		x	x		x		IC046147612	Price
MNHU060308RPH	IN2035		x					IC046144199	Price
Style - MNHU060316 Thickness (in.) - .180 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
MNHU060316R	IN2505	x	x	x	x	x	x	IC046153462	Price
MNHU060316R	IN2530		x	x		x		IC046154139	Price
MNHU060316RPH	IN2035		x					IC046157877	Price
Style - NBEU1603R Thickness (in.) - .118									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
NBEU1603R	IN2504			x			x	IC046175906	Price
NBEU1603R	IN2505	x	x	x	x	x	x	IC046128065	Price
NBEU1603R	IN2530		x	x		x		IC046128067	Price
NBEU1603R	IN4005	x	x	x			x	IC042912520	Price
NBEU1603R	IN4030	x	x	x				IC042912519	Price
Style - NBEU1904R Thickness (in.) - .146									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
NBEU1904R	IN2504			x			x	IC046175908	Price
NBEU1904R	IN2505	x	x	x	x	x	x	IC046128070	Price
NBEU1904R	IN2530		x	x		x		IC046128071	Price
NBEU1904R	IN4005	x	x	x			x	IC042912522	Price
NBEU1904R	IN4030	x	x	x				IC042912521	Price

Style - NBEU25T4R Thickness (in.) - .177									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
NBEU25T4R	IN2504			x			x	IC046175910	Price
NBEU25T4R	IN2505	x	x	x	x	x	x	IC046128075	Price
NBEU25T4R	IN2530		x	x		x		IC046128076	Price
NBEU25T4R	IN4005	x	x	x			x	IC042912524	Price
NBEU25T4R	IN4030	x	x	x				IC042912523	Price
Style - NCEU320500									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
NCEU320500RP	IN2505	x	x	x	x	x	x	IC045813261	Price
NCEU320500RP	IN2530		x	x		x		IC045813512	Price
Style - NCEU380600									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
NCEU380600R	IN2505	x	x	x	x	x	x	IC045813448	Price
NCEU380600R	IN2530		x	x		x		IC045813509	Price
NCEU380600R	IN6530	x	x	x		x		IC045813555	Price
NCEU380600RP	IN2505	x	x	x	x	x	x	IC045813449	Price
NCEU380600RP	IN2530		x	x		x		IC045813510	Price
NCEU380600RP	IN6530	x	x	x		x		IC045813556	Price
Style - NCEU500700									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
NCEU500700R	IN2505	x	x	x	x	x	x	IC045813258	Price
NCEU500700R	IN2530		x	x		x		IC045813444	Price
NCEU500700R	IN6530	x	x	x		x		IC045813446	Price
NCEU500700RP	IN2505	x	x	x	x	x	x	IC045813259	Price
NCEU500700RP	IN2530		x	x		x		IC045813445	Price
NCEU500700RP	IN6530	x	x	x		x		IC045813447	Price
Style - ONCU0505 IC (in.) - .520 Thickness (in.) - .230 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ONCU0505ANEN	IN2035		x					IC045812845	Price
ONCU0505ANFNP	IN10K				x			IC045812808	Price
ONCU0505ANN	IN70N				x			IC045812911	Price
ONCU0505ANTNHR	IN2505	x	x	x	x	x	x	IC045812810	Price
ONCU0505ANTNHR	IN4030	x	x	x				IC045856664	Price
ONCU0505ANTNWJ	IN2505	x	x	x	x	x	x	IC045812879	Price
Style - ONCU050520 IC (in.) - .522 Thickness (in.) - .213 Radius (in.) - .078									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ONCU050520TN	IN2505	x	x	x	x	x	x	IC045874521	Price
ONCU050520TN	IN4010			x	x			IC045864532	Price
Style - PNCU0805 IC (in.) - .450 Thickness (in.) - .217 Radius (in.) - .030									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
PNCU0805GNFRHS	IN4035		x					IC045873699	Price
PNCU0805GNFRP	IN05S				x			IC045812006	Price
PNCU0805GNR	IN70N				x			IC045811959	Price
PNCU0805GNTR	IN4005	x	x	x			x	IC045864506	Price
PNCU0805GNTR	IN4015			x	x			IC045853201	Price
PNCU0805GNTR	IN4030	x	x	x				IC045855206	Price
PNCU0805GNTRW	IN2505	x	x	x	x	x	x	IC045869105	Price
Style - RJET1204 IC (in.) - 12mm Thickness (in.) - .189 Radius (in.) - 6mm									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJET1204MOFN	IN10K				x			IC045614108	Price
Style - RJET1605 IC (in.) - 16mm Thickness (in.) - .240 Radius (in.) - 8mm									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJET1605MOFN	IN10K				x			IC045614109	Price
Style - RJLT1004 IC (in.) - 10mm Thickness (in.) - .157 Radius (in.) - 5mm									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLT1004MON	IN2035		x					IC045612710	Price
RJLT1004MON	IN2505	x	x	x	x	x	x	IC045612408	Price
RJLT1004MON	IN2530		x	x		x		IC045614611	Price
RJLT1004MON	IN7035		x					IC045614144	Price
RJLT1004MONLL	IN7035		x					IC045630174	Price
RJLT1004MOTN	IN2035		x					IC045614703	Price

MIlling Inserts

Style - RJLT1004 IC (in.) - 10mm Thickness (in.) - .157 Radius (in.) - 5mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLT1004MOTN	IN2505	x	x	x	x	x	x	IC045612535	Price
RJLT1004MOTN	IN2530		x	x		x		IC045614609	Price
RJLT1004MOTN	IN7035		x					IC046111951	Price

Style - RJLT1204 IC (in.) - 12mm Thickness (in.) - .189 Radius (in.) - 6mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLT1204MON	IN1030	x	x	x	x	x		IC045612514	Price
RJLT1204MON	IN2035		x					IC045612498	Price
RJLT1204MON	IN2505	x	x	x	x	x	x	IC045612374	Price
RJLT1204MON	IN2530		x	x		x		IC045613020	Price
RJLT1204MON	IN6530	x	x	x		x		IC045614311	Price
RJLT1204MON	IN7035		x					IC046111955	Price
RJLT1204MONLL	IN2035		x					IC045630181	Price
RJLT1204MONLL	IN7035		x					IC045630182	Price
RJLT1204MOTN	IN2035		x					IC045616663	Price
RJLT1204MOTN	IN2505	x	x	x	x	x	x	IC045612376	Price
RJLT1204MOTN	IN2530		x	x		x		IC045614614	Price
RJLT1204MOTN	IN2540			x				IC045612375	Price
RJLT1204MOTN	IN6530	x	x	x		x		IC045613318	Price
RJLT1204MOTN	IN7035		x					IC046111954	Price

Style - RJLT1304 IC (in.) - 1/2 Thickness (in.) - .189 Radius (in.) - 1/4

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLT1304MON	IN2505	x	x	x	x		x	IC046173436	Price
RJLT1304MON	IN2530		x	x		x		IC046173437	Price
RJLT1304MON	IN7035		x					IC046193555	Price
RJLT1304MONLL	IN2035		x					IC046173441	Price
RJLT1304MOTN	IN2504			x			x	IC046173433	Price
RJLT1304MOTN	IN2505	x	x	x	x		x	IC046173431	Price
RJLT1304MOTN	IN2530		x	x		x		IC046173432	Price

Style - RJLT1605 IC (in.) - 16mm Thickness (in.) - .240 Radius (in.) - 8mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLT1605MON	IN2035		x					IC045613831	Price
RJLT1605MON	IN2505	x	x	x	x	x	x	IC045612477	Price
RJLT1605MON	IN2530		x	x		x		IC045813535	Price
RJLT1605MON	IN7035		x					IC046121027	Price
RJLT1605MOTN	IN1030	x	x	x	x	x		IC045615378	Price
RJLT1605MOTN	IN2035		x					IC046120971	Price
RJLT1605MOTN	IN2505	x	x	x	x	x	x	IC045612475	Price
RJLT1605MOTN	IN2530		x	x		x		IC045813534	Price
RJLT1605MOTN	IN2540			x				IC045614204	Price
RJLT1605MOTN	IN7035		x					IC045613833	Price

Style - RJLT1907 IC (in.) - 3/4 Thickness (in.) - .275 Radius (in.) - .375

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLT1907MON	IN2505	x	x	x	x		x	IC046173446	Price
RJLT1907MON	IN2530		x	x		x		IC046173447	Price
RJLT1907MONLL	IN2035		x					IC046173451	Price
RJLT1907MONLL	IN2530		x	x		x		IC046173449	Price
RJLT1907MOTN	IN2505	x	x	x	x		x	IC046173442	Price
RJLT1907MOTN	IN2530		x	x		x		IC046173443	Price

Style - RJLT2007 IC (in.) - 10mm Thickness (in.) - 7mm Radius (in.) - 10mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLT2007MON	IN2035		x					IC046126498	Price
RJLT2007MON	IN2530		x	x		x		IC045614621	Price
RJLT2007MON	IN7035		x					IC046126499	Price
RJLT2007MOTN	IN2505	x	x	x	x	x	x	IC045612479	Price
RJLT2007MOTN	IN2530		x	x		x		IC045614620	Price
RJLT2007MOTN	IN2540			x				IC045614619	Price
RJLT2007MOTN	IN7035		x					IC046126497	Price

Style - RJLW1004 IC (in.) - 10mm Thickness (in.) - .157 Radius (in.) - 5mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLW1004MOTN	IN2504			x			x	IC046126863	Price
RJLW1004MOTN	IN2505	x	x	x	x	x	x	IC045613211	Price
RJLW1004MOTN	IN2530		x	x		x		IC045613210	Price

Style - RJLW1204 IC (in.) - 12mm Thickness (in.) - .189 Radius (in.) - 6mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLW1204MOTN	IN2505	x	x	x	x	x	x	IC045613019	Price
RJLW1204MOTN	IN2530		x	x		x		IC045613018	Price
RJLW1204MOTN	IN2540			x				IC045613017	Price

Style - RJLW1304 IC (in.) - 1/2 Thickness (in.) - .189 Radius (in.) - 1/4

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLW1304MOTN	IN2505	x	x	x	x		x	IC046173434	Price

Style - RJLW1605 IC (in.) - 16mm Thickness (in.) - .240 Radius (in.) - 8mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLW1605MOTN	IN2035		x					IC046117500	Price
RJLW1605MOTN	IN2504			x			x	IC046126868	Price
RJLW1605MOTN	IN2505	x	x	x	x	x	x	IC045613214	Price
RJLW1605MOTN	IN2540			x				IC045613212	Price
RJLW1605MOTN	IN6530	x	x	x		x		IC045615011	Price

Style - RJLW1907 IC (in.) - 3/4 Thickness (in.) - .275 Radius (in.) - .375

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLW1907MOTN	IN2505	x	x	x	x		x	IC046173445	Price

Style - RJLW2007 IC (in.) - 20mm Thickness (in.) - 7mm Radius (in.) - 10mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RJLW2007MOTN	IN2505	x	x	x	x	x	x	IC046115461	Price

Style - SDES1305 IC (in.) - 13mm Thickness (in.) - .200

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDES1305MDR	IN2505	x	x	x	x	x	x	IC045832589	Price
SDES1305MDR	IN2530		x	x		x		IC045832591	Price
SDES1305MDR-001	IN2505	x	x	x	x	x	x	IC045832714	Price
SDES1305MPR	IN2505	x	x	x	x	x	x	IC042900515	Price
SDES1305MPR	IN2530		x	x		x		IC042900516	Price
SDES1305MPR	IN4005	x	x	x			x	IC042900517	Price
SDES1305MPR	IN4035		x					IC042901940	Price
SDES1305MPR-001	IN2505	x	x	x	x	x	x	IC042900518	Price
SDES1305MPR-001	IN2530		x	x		x		IC042900519	Price
SDES1305MPR-001	IN4005	x	x	x			x	IC042901943	Price
SDES1305MPR-001	IN4030	x	x	x				IC042901941	Price
SDES1305MPR-001	IN4035		x					IC042901942	Price

Style - SDES130508 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDES130508N	IN4005	x	x	x			x	IC042906889	Price
SDES130508N	IN4015			x	x			IC042906888	Price
SDES130508N	IN4030	x	x	x				IC042906887	Price
SDES130508N-001	IN4030	x	x	x				IC042906890	Price
SDES130508N-001	IN4035		x					IC042906891	Price
SDES130508N-001 K	IN2535		x					IC042916995	Price
SDES130508N-PF	IN4005	x	x	x			x	IC042904240	Price
SDES130508N-PF	IN4015			x	x			IC042904241	Price
SDES130508N-PF	IN4030	x	x	x				IC042904166	Price
SDES130508N-PF1	IN4030	x	x	x				IC042906159	Price
SDES130508N-PF1	IN4035		x					IC042906160	Price

Style - SDES130515 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .060

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDES130515N	IN2505	x	x	x	x	x	x	IC045832593	Price
SDES130515N	IN2530		x	x		x		IC045832594	Price
SDES130515N	IN4005	x	x	x			x	IC042906866	Price
SDES130515N	IN4015			x	x			IC042906864	Price
SDES130515N	IN4030	x	x	x				IC042906863	Price
SDES130515N-001	IN2505	x	x	x	x	x	x	IC045832712	Price

Style - SDES130515 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .060

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDES130515N-001	IN2530		x	x		x		IC045832713	Price
SDES130515N-001	IN4030	x	x	x				IC042906871	Price
SDES130515N-001	IN4035		x					IC042906872	Price
SDES130515N-001 K	IN2535		x					IC042916996	Price

MIlling Inserts

Style - SDES130516 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .062

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDES130516N-PF	IN4005	x	x	x			x	IC042904245	Price
SDES130516N-PF	IN4015			x	x			IC042904246	Price
SDES130516N-PF	IN4030	x	x	x				IC042904242	Price
SDES130516N-PF1	IN4030	x	x	x				IC042906161	Price
SDES130516N-PF1	IN4035		x					IC042906164	Price

Style - SDES130524 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .093

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDES130524N-PF	IN4005	x	x	x			x	IC042904248	Price
SDES130524N-PF	IN4030	x	x	x				IC042904247	Price
SDES130524N-PF1	IN4035		x					IC042906167	Price

Style - SDES130532 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .125

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDES130532N-PF	IN4005	x	x	x			x	IC042904250	Price
SDES130532N-PF	IN4030	x	x	x				IC042904249	Price
SDES130532N-PF1	IN4030	x	x	x				IC042906168	Price
SDES130532N-PF1	IN4035		x					IC042906169	Price
SDES130532R	IN4005	x	x	x			x	IC042906877	Price
SDES130532R	IN4030	x	x	x				IC042906878	Price
SDES130532R-001	IN4030	x	x	x				IC042906862	Price
SDES130532R-001	IN4035		x					IC042906860	Price

Style - SDES130563 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .250

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDES130563R	IN4005	x	x	x			x	IC042906873	Price
SDES130563R	IN4030	x	x	x				IC042906874	Price
SDES130563R-001	IN4030	x	x	x				IC042906870	Price
SDES130563R-001	IN4035		x					IC042905813	Price

Style - SDES1906 IC (in.) - 19mm Thickness (in.) - .250

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDES1906MDR	IN2505	x	x	x	x	x	x	IC045832040	Price
SDES1906MDR	IN2530		x	x		x		IC045832324	Price
SDES1906MPR	IN2505	x	x	x	x	x	x	IC045800021	Price
SDES1906MPR	IN2530		x	x		x		IC045800022	Price
SDES1906MPR	IN4005	x	x	x			x	IC042901945	Price
SDES1906MPR	IN4035		x					IC042901944	Price
SDES1906MPR-001	IN2505	x	x	x	x	x	x	IC045800013	Price
SDES1906MPR-001	IN2530		x	x		x		IC045800015	Price
SDES1906MPR-001	IN4005	x	x	x			x	IC042901948	Price
SDES1906MPR-001	IN4030	x	x	x				IC042901946	Price
SDES1906MPR-001	IN4035		x					IC042901947	Price
SDES1906ZPR-PF	IN4005	x	x	x			x	IC042902029	Price
SDES1906ZPR-PF	IN4030	x	x	x				IC042906106	Price
SDES1906ZPR-PF	IN4035		x					IC042906108	Price

Style - SDES190620 IC (in.) - 19mm Thickness (in.) - .250 Radius (in.) - .178

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDES190620N	IN2505	x	x	x	x	x	x	IC045800003	Price
SDES190620N	IN2530		x	x		x		IC045800008	Price
SDES190620N-001	IN2505	x	x	x	x	x	x	IC045800023	Price

Style - SDMS1305 IC (in.) - 13mm Thickness (in.) - .200

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDMS1305MDR-PH	IN2505	x	x	x	x	x	x	IC045832590	Price
SDMS1305MDR-PH	IN2530		x	x		x		IC045832592	Price
SDMS1305MDR-PH	IN2535		x					IC042916997	Price
SDMS1305MDR-PH	IN4005	x	x	x			x	IC042901939	Price

Style - SDMS1305 IC (in.) - 13mm Thickness (in.) - .200

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDMS1305MDR-PH	IN4030	x	x	x				IC042901937	Price
SDMS1305MDR-PH	IN4035		x					IC042901938	Price

Style - SDMS130508 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDMS130508R-PH K	IN4035		x					IC042913697	Price
SDMS130508R-PP K	IN4035		x					IC042913703	Price

Style - SDMS130512 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .047

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDMS130512R-PP	IN4030	x	x	x				IC045803016	Price

Style - SDMS130515 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .060

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDMS130515R-PH	IN2505	x	x	x	x	x	x	IC045832595	Price
SDMS130515R-PH	IN2530		x	x		x		IC045832596	Price
SDMS130515R-PH	IN4005	x	x	x			x	IC042901936	Price
SDMS130515R-PH	IN4030	x	x	x				IC042901934	Price
SDMS130515R-PH	IN4035		x					IC042901935	Price

Style - SDMS130516 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .062

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDMS130516R-PP	IN2530		x	x		x		IC042905126	Price
SDMS130516R-PP	IN2535		x					IC042905125	Price
SDMS130516R-PP	IN4005	x	x	x			x	IC042904146	Price
SDMS130516R-PP	IN4030	x	x	x				IC042904136	Price
SDMS130516R-PP	IN4035		x					IC042904153	Price

Style - SDMS130608 IC (in.) - 13mm Thickness (in.) - .240 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDMS130608N-FL	IN4035		x					IC042910527	Price
SDMS130608N-FL K	IN4030	x	x	x				IC042912389	Price

Style - SDMS130615 IC (in.) - 13mm Thickness (in.) - .240 Radius (in.) - .060

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDMS130615N-FL	IN4030	x	x	x				IC042910130	Price
SDMS130615N-FL	IN4035		x					IC042910126	Price

Style - SDMS1906 IC (in.) - 19mm Thickness (in.) - .250 Radius (in.) - .178

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDMS1906MDR-PH	IN2505	x	x	x	x	x	x	IC045832072	Price
SDMS1906MDR-PH	IN2530		x	x		x		IC045832325	Price
SDMS1906MDR-PH	IN4005	x	x	x			x	IC042901951	Price
SDMS1906MDR-PH	IN4030	x	x	x				IC042901949	Price
SDMS1906MDR-PH	IN4035		x					IC042901950	Price
SDMS1906ZPR-PP	IN4005	x	x	x			x	IC042906109	Price
SDMS1906ZPR-PP	IN4030	x	x	x				IC042902030	Price
SDMS1906ZPR-PP	IN4035		x					IC042906110	Price

Style - SDMS190620 IC (in.) - 19mm Thickness (in.) - .250 Radius (in.) - .178

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDMS190620R-PH	IN2505	x	x	x	x	x	x	IC045800011	Price
SDMS190620R-PH	IN2530		x	x		x		IC045800012	Price
SDMS190620R-PH	IN4005	x	x	x			x	IC042901954	Price
SDMS190620R-PH	IN4030	x	x	x				IC042901952	Price
SDMS190620R-PH	IN4035		x					IC042901953	Price

Style - SDXS0904 IC (in.) - 9mm Thickness (in.) - .158

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDXS0904MPR-MM	IN4005	x	x	x			x	IC042913616	Price
SDXS0904MPR-MM	IN4030	x	x	x				IC042913660	Price
SDXS0904MPR-MM	IN4035		x					IC042913661	Price
SDXS0904MPR-MR	IN4005	x	x	x			x	IC042912104	Price
SDXS0904MPR-MR	IN4030	x	x	x				IC042912105	Price
SDXS0904MPR-MR	IN4035		x					IC042912106	Price
SDXS0904MPR-MR1 K	IN2535		x					IC042915421	Price
SDXS0904MPR-MR1 K	IN4030	x	x	x				IC042914381	Price

Style - SDXS0904 IC (in.) - 9mm Thickness (in.) - .158

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SDXS0904MPR-MR1 K	IN4035		x					IC042914379	Price
SDXS0904MPR-MR1 K	IN7035		x					IC042915908	Price
SDXS0904MPR-MRH J	IN2504			x			x	IC042916491	Price

Style - SGM-44R001 Thickness (in.) - .236 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SGM-44R001	IN4005	x	x	x			x	IC045854329	Price
SGM-44R001 J	IN2505	x	x	x	x	x	x	IC045856045	Price
SGM-44R001 J	IN2530		x	x		x		IC045856049	Price
SGM-44R001 J	IN4030	x	x	x				IC045856052	Price

MIlling Inserts

Style - SNGS1205 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .275 Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNGS1205ANNW	IN2505	x	x	x	x	x	x	IC045873349	Price

Style - SNGU1205 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .040 Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNGU1205ENN	IN2035		x					IC045872783	Price
SNGU1205ENN	IN2505	x	x	x	x	x	x	IC045840783	Price
SNGU1205ENN	IN2530		x	x		x		IC045849014	Price

Style - THES060404 IC (in.) - .272 Thickness (in.) - .157 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
THES060404FRP	IN10K				x			IC045813483	Price
THES060404R	IN2505	x	x	x	x	x	x	IC045810015	Price

Style - THES060408 IC (in.) - .272 Thickness (in.) - .157 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
THES060408FRP	IN10K				x			IC045813480	Price

Style - THES100504 IC (in.) - .421 Thickness (in.) - .197 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
THES100504FRP	IN10K				x			IC045615737	Price

Style - THES100508 IC (in.) - .421 Thickness (in.) - .197 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
THES100504FRP	IN10K				x			IC045615737	Price

Style - THLS060404 IC (in.) - .272 Thickness (in.) - .157 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
THES100504FRP	IN10K				x			IC045615737	Price

Style - THLS060408 IC (in.) - .272 Thickness (in.) - .157 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
THES100504FRP	IN10K				x			IC045615737	Price
THLS060408R	IN2505	x	x	x	x	x	x	IC045613479	Price
THLS060408R	IN2530		x	x		x		IC045813462	Price
THLS060408RHR	IN2035		x					IC045853564	Price
THLS060408RHR	IN2530		x	x		x		IC045813463	Price

Style - THLS060416 IC (in.) - .272 Thickness (in.) - .157 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
THLS060416R	IN2505	x	x	x	x	x	x	IC045609938	Price

Style - THLS100508 IC (in.) - .421 Thickness (in.) - .197 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
THLS100508R	IN2505	x	x	x	x	x	x	IC045613484	Price
THLS100508R	IN2530		x	x		x		IC045813464	Price
THLS100508RHR	IN2035		x					IC045853565	Price

Style - THLS100516 IC (in.) - .421 Thickness (in.) - .197 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
THLS100516R	IN2505	x	x	x	x	x	x	IC045609939	Price

Style - THLS100524 IC (in.) - .421 Thickness (in.) - .197 Radius (in.) - .094									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
THLS100524R	IN2505	x	x	x	x	x	x	IC045609940	Price

Style - UNEU1307 IC (in.) - 13mm Thickness (in.) - 7mm									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
UNEU1307RM	IN2035		x					IC046126019	Price
UNEU1307RM	IN2504			x			x	IC046126858	Price
UNEU1307RM	IN2505	x	x	x	x	x	x	IC046126013	Price
UNEU1307RM	IN2510			x	x			IC046126018	Price
UNEU1307RM	IN2530		x	x		x		IC046126014	Price
UNEU1307RMM	IN2035		x					IC046139025	Price
UNEU1307RMM	IN2530		x	x		x		IC046139027	Price
UNEU1307RMM	IN7035		x					IC046139026	Price
UNEU1307RMR	IN2505	x	x	x	x		x	IC046139017	Price
UNEU1307RMR	IN7035		x					IC046139014	Price

Style - UNLU0603 Thickness (in.) - .149 Radius (in.) - .078									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
UNLU0603M0TR	IN2030		x	x		x		IC045812829	Price
UNLU0603M0TR	IN2035		x					IC045613828	Price
UNLU0603M0TR	IN2504			x			x	IC046126852	Price
UNLU0603M0TR	IN2505	x	x	x	x	x	x	IC045812830	Price
UNLU0603M0TR	IN6530	x	x	x		x		IC045812828	Price
UNLU0603M0TRML	IN2035		x					IC045616366	Price
UNLU0603M0TRML	IN2530		x	x		x		IC045615931	Price
UNLU0603M0TRML	IN7035		x					IC045616367	Price
UNLU0603M0TRMM	IN2035		x					IC045616542	Price
UNLU0603M0TRMM	IN2505	x	x	x	x	x	x	IC045616539	Price
UNLU0603M0TRMM	IN2530		x	x		x		IC045616540	Price

Style - UNLU0904 Radius (in.) - .094									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
UNLU0904M0TR	IN2504			x			x	IC046126854	Price
UNLU0904M0TR	IN2505	x	x	x	x	x	x	IC045616091	Price
UNLU0904M0TR	IN2530		x	x		x		IC045616092	Price
UNLU0904M0TRML	IN2505	x	x	x	x	x	x	IC045616594	Price
UNLU0904M0TRML	IN2530		x	x		x		IC045616595	Price
UNLU0904M0TRMM	IN2505	x	x	x	x	x	x	IC045616591	Price
UNLU0904M0TRMM	IN2530		x	x		x		IC045616592	Price

Style - ZDES130515 IC (in.) - 13mm Thickness (in.) - .200 Radius (in.) - .060									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZDES130515R	IN4005	x	x	x			x	IC042904475	Price
ZDES130515R	IN4030	x	x	x				IC042906868	Price
ZDES130515R001	IN4035		x					IC042907037	Price

Style - ZGM212R101 Thickness (in.) - .169 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZGM212R101	IN2505	x	x	x	x	x	x	IC042903343	Price
ZGM212R101	IN2530		x	x		x		IC042903344	Price

Style - ZGM314R001 Thickness (in.) - .280 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZGM314R001	IN2030		x	x		x		IC045813020	Price
ZGM314R001	IN2505	x	x	x	x	x	x	IC042903345	Price
ZGM314R001	IN2530		x	x		x		IC045832237	Price

Style - ZGM324R001 Thickness (in.) - .280 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZGM314R001	IN2505	x	x	x	x	x	x	IC042903346	Price

Style - ZGM324R045 Thickness (in.) - .315 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZGM324R045	IN2530		x	x		x		IC042902670	Price

Style - ZGM324R201 Thickness (in.) - .315 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZGM324R201	IN2505	x	x	x	x	x	x	IC042903348	Price
ZGM324R201	IN2530		x	x		x		IC042903349	Price

Style - ZGM324R245 Thickness (in.) - .315 Radius (in.) - .010 w/Wiper									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZGM324R245	IN2505	x	x	x	x		x	IC042905694	Price

Style - ZNHU160708 Thickness (in.) - .417 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZNHU160708R	IN2505	x	x	x	x	x	x	IC045616078	Price
ZNHU160708R	IN2530		x	x		x		IC045616077	Price

Style - ZOMT09T304 Thickness (in.) - .148 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZOMT09T304R	IN2505	x	x	x	x		x	IC045853699	Price
ZOMT09T304R	IN2530		x	x		x		IC045853700	Price

Style - ZOMT130404 Thickness (in.) - .190 Radius (in.) - .015									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZOMT130404R	IN2505	x	x	x	x	x	x	IC045811447	Price

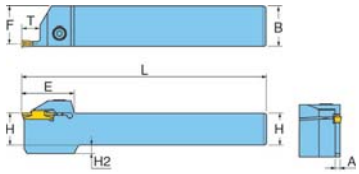
Style - ZOMT130408 Thickness (in.) - .190 Radius (in.) - .032									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZOMT130404R	IN2505	x	x	x	x		x	IC046190439	Price

Style - ZOMT170508 Thickness (in.) - .218 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZOMT170508R	IN2505	x	x	x	x		x	IC045616074	Price

Style (in.) - ZDM5130515 Thickness (in.) - .200 Radius (in.) - .060									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
ZDMS130515R-PH	IN4035		x					IC042904452	Price

TOOLCLAMP ULTRA+ TTER/L

Middle Tmax Holders for External Turning and Grooving

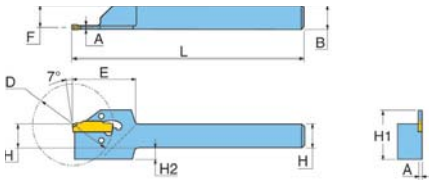




Insert Width	OAL (in.)	Insert Height (in.)	Tmax (in.)	Left			Right		
				Model No.	Order No.	Price	Model No.	Order No.	Price
.063	5.00	.75	.472	TTEL19-2	**IC072830001**	Price	TTER19-2	**IC072830000**	Price
.063	6.00	1.00	.472	TTEL25.4-2	**IC072830011**	Price	TTER25.4-2	**IC072830010**	Price
.083	5.00	.75	.472	-	**-**	-	TTER19-3	**IC072830002**	Price
.083	5.00	1.26	.472	TTEL19-3	**IC072830003**	Price	-	**-**	-
.083	6.00	1.00	.472	TTEL25.4-3	**IC072830013**	Price	TTER25.4-3	**IC072830012**	Price
.114	5.00	.75	.590	-	**-**	-	TTER19-4	**IC072830004**	Price
.114	6.00	1.00	.590	TTEL25.4-4	**IC072830015**	Price	TTER25.4-4	**IC072830014**	Price
.154	5.00	1.46	.787	-	**-**	-	TTER19-5	**IC072830006**	Price
.154	6.00	1.00	.787	-	**-**	-	TTER25.4-5	**IC072830016**	Price
.154	6.00	1.46	.787	TTEL25.4-5	**IC072830017**	Price	-	**-**	-
.193	5.00	.75	.787	-	**-**	-	TTER19-6	**IC072830008**	Price
.193	6.00	1.00	.787	-	**-**	-	TTER25.4-6	**IC072830018**	Price
.193	6.00	1.46	.787	TTEL25.4-6	**IC072830019**	Price	-	**-**	-

TOOLCLAMP ULTRA+ TGER/L

Holders for Parting and Deep Grooving





Model No.	Insert Seat Size	OAL (in.)	H (in.)	Dmax (TDJ) (in.)	Dmax (TSJ) (in.)	Order No.	Price
TGER12.7-2	2	4.5	.50	1.38	1.22	**IC072330019**	Price
TGER12.7-3	3	4.5	.50	1.5	1.57	**IC072330023**	Price
TGEL19-2	2	4.5	.75	1.38	1.22	**IC072330022**	Price
TGER19-2	2	4.5	.75	1.38	1.22	**IC072330021**	Price
TGEL19-3	3	4.5	.75	1.5	1.22	**IC072330026**	Price
TGER19-3	3	4.5	.75	1.5	1.22	**IC072330025**	Price
TGER19-4	4	4.5	.75	1.5	1.3	**IC072300168**	Price
TGER25.4-3	3	6	1.00	1.5	1.22	**IC072330027**	Price
TGER25.4-4	4	6	1.00	1.5	1.3	**IC072330029**	Price

TOOLCLAMP ULTRA+ TGB

Blades for Parting and Deep Grooving



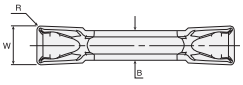
Model No.	Overall Height	Width (Insert)	Seat Size	Insert Height (in.)	Length (in.)	Use Insert(s)	Order No.	Price
TGB26-1.45	1.26	1.45mm	1	.840	5.9	TDC/TSC, TDJ/TSJ, TDXU, TDT	**IC072300211**	Price
TGB26-2S	1.02	2mm	2	.840	5.9	TDC/TSC, TDJ/TSJ, TDXU, TDT	**IC072300132**	Price
TGB26-3S	1.02	3mm	3	.840	5.9	TDC/TSC, TDJ/TSJ, TDXU, TDT	**IC072300111**	Price
TGB26-4S	1.02	4mm	4	.840	5.9	TDC/TSC, TDJ/TSJ, TDXU, TDT	**IC072300133**	Price
TGB32-1.4	1.26	1.4mm	1	.980	5.9	TDC/TSC, TDJ/TSJ, TDXU, TDT	**IC072300212**	Price
TGB32-2	1.02	2mm	2	.980	5.9	TDC/TSC, TDJ/TSJ, TDXU, TDT	**IC072300106**	Price
TGB32-3	1.26	3mm	3	.980	5.9	TDC/TSC, TDJ/TSJ, TDXU, TDT	**IC072300101**	Price
TGB32-4	1.26	4mm	4	.980	5.9	TDC/TSC, TDJ/TSJ, TDXU, TDT	**IC072300107**	Price
TGB32-5	1.26	5mm	5	.980	5.9	TDC/TSC, TDJ/TSJ, TDXU, TDT	**IC072300108**	Price
TGB32-6	1.26	6mm	6	.980	5.9	TDC/TSC, TDJ/TSJ, TDXU, TDT	**IC072300109**	Price

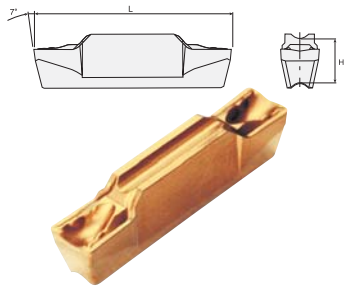


TOOLCLAMP ULTRA+ TDXU-E

Pressed Inserts for External Turning & Grooving, Internal Turning & Grooving, Face Turning & Grooving & Parting

- Double ended insert for parting and grooving





Model No.	W (in.)	R (in.)	Insert Seat Size	Grade	ST	SS	CI	N	S	H	Order No.	Price
TDXU2E-0.3	.079	.012	2	TT9080	-	x	-	-	x	-	**IC046402567**	Price
TDXU3E-0.3	.118	.012	3	TT5100	x	x	-	-	x	-	**IC046400940**	Price
TDXU3E-0.3	.118	.012	3	TT9080	-	x	-	-	x	-	**IC046401279**	Price
TDXU4E-0.4	.157	.016	4	TT5100	x	x	-	-	x	-	**IC046400754**	Price
TDXU4E-0.4	.157	.016	4	TT7220	x	-	-	-	-	-	**IC046400404**	Price
TDXU4E-0.4	.157	.016	4	TT9080	-	x	-	-	x	-	**IC046401280**	Price
TDXU5E-0.4	.197	.016	5	TT5100	x	x	-	-	x	-	**IC046400948**	Price
TDXU5E-0.4	.197	.016	5	TT9080	-	x	-	-	x	-	**IC046402155**	Price
TDXU6E-0.4	.236	.016	6	TT5100	x	x	-	-	x	-	**IC046401108**	Price
TDXU6E-0.4	.236	.016	6	TT9080	-	x	-	-	x	-	**IC046402083**	Price
TDXU6E-0.4	.236	.016	6	TT7220	x	-	-	-	-	-	**IC046401444**	Price
TDXU6E-0.8	.236	.031	6	TT9080	-	x	-	-	x	-	**IC046402084**	Price

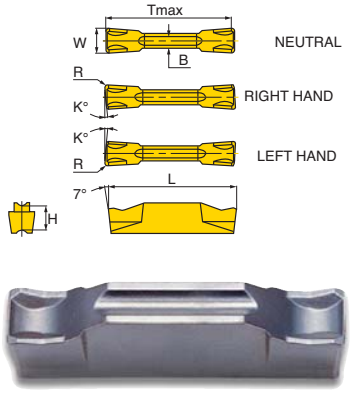
Member IMC Group Ingersoll Cutting Tools

TOCLAMP ULTRA+ TDC

Double Ended Inserts for Parting and Grooving

- Double ended insert for parting and grooving

Model No.	W (in.)	R (in.)	Insert Seat Size	Grade	ST	SS	CI	N	S	H	Order No.	Price
TDC2	.079	.008	2	TT7220	x	-	-	-	-	-	IC046000197	Price
TDC2	.079	.008	2	TT8020	x	x	-	-	x	-	IC046000194	Price
TDC215L	.079	.008	2	TT8020	x	x	-	-	x	-	IC046000378	Price
TDC215R	.079	.008	2	TT8020	x	x	-	-	x	-	IC046000369	Price
TDC26R	.079	.008	2	TT7220	x	-	-	-	-	-	IC046000198	Price
TDC26R	.079	.008	2	TT8020	x	x	-	-	x	-	IC046000195	Price
TDC3	.118	.008	3	TT7220	x	-	-	-	-	-	IC046000203	Price
TDC3	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000200	Price
TDC315R	.118	.008	3	TT7220	x	-	-	-	-	-	IC046000358	Price
TDC315R	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000357	Price
TDC36L	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000202	Price
TDC36R	.118	.008	3	TT7220	x	-	-	-	-	-	IC046000204	Price
TDC36R	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000201	Price
TDC4	.157	.012	4	TT7220	x	-	-	-	-	-	IC046000209	Price
TDC4	.157	.012	4	TT8020	x	x	-	-	x	-	IC046000206	Price
TDC44L	.157	.012	4	TT8020	x	x	-	-	x	-	IC046000208	Price
TDC44R	.157	.012	4	TT7220	x	-	-	-	-	-	IC046000210	Price
TDC44R	.157	.012	4	TT8020	x	x	-	-	x	-	IC046000207	Price
TDC5	.197	.012	5	TT7220	x	-	-	-	-	-	IC046000215	Price
TDC5	.197	.012	5	TT8020	x	x	-	-	x	-	IC046000212	Price
TDC6	.236	.012	6	TT7220	x	-	-	-	-	-	IC046000219	Price
TDC6	.236	.012	6	TT8020	x	x	-	-	x	-	IC046000218	Price
TDC8	.315	.016	8	TT8020	x	x	-	-	x	-	IC046000623	Price

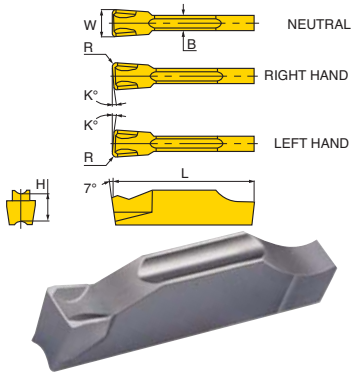


TOCLAMP ULTRA+ TSC

Single Ended Inserts for General Purpose Parting and Deep Grooving

- Single ended inserts for general purpose parting and deep grooving

Model No.	W (in.)	R (in.)	Insert Seat Size	Grade	ST	SS	CI	N	S	H	Order No.	Price
TSC2	.079	.008	2	TT7220	x	-	-	-	-	-	IC046000243	Price
TSC2	.079	.008	2	TT8020	x	x	-	-	x	-	IC046000240	Price
TSC26R	.079	.008	2	TT8020	x	x	-	-	x	-	IC046000241	Price
TSC3	.118	.008	3	TT7220	x	-	-	-	-	-	IC046000249	Price
TSC3	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000246	Price
TSC3	.118	.008	3	TT9080	-	x	-	-	-	-	IC046001120	Price
TSC36L	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000248	Price
TSC36R	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000247	Price
TSC315R	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000401	Price
TSC4	.157	.012	4	TT8020	x	x	-	-	x	-	IC046000252	Price
TSC4	.157	.012	4	TT9080	-	x	-	-	x	-	IC046001121	Price
TSC44L	.157	.012	4	TT8020	x	x	-	-	x	-	IC046000254	Price
TSC5	.197	.012	5	TT8020	x	x	-	-	x	-	IC046000258	Price
TSC5	.197	.012	5	TT9080	-	x	-	-	-	-	IC046001122	Price
TSC6	.236	.012	6	TT8020	x	x	-	-	x	-	IC046000260	Price
TSC6	.236	.012	6	TT9080	-	x	-	-	-	-	IC046001123	Price

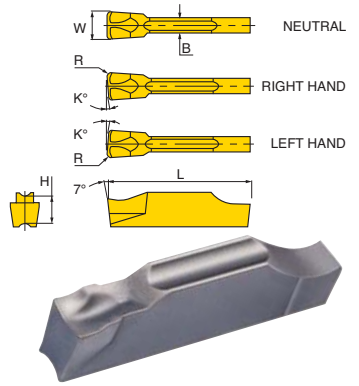


TOCLAMP ULTRA+ TSJ

Single Ended Inserts for Precision Parting and Deep Grooving

- Single ended inserts for precision parting and deep grooving

Model No.	W (in.)	R (in.)	Insert Seat Size	Grade	ST	SS	CI	N	S	H	Order No.	Price
TSJ2	.079	.008	2	K10	-	-	x	x	x	-	IC046000340	Price
TSJ2	.079	.008	2	TT8020	x	x	-	-	x	-	IC046000220	Price
TSJ3	.118	.008	3	K10	-	-	x	x	x	-	IC046000275	Price
TSJ3	.118	.008	3	TT7220	x	-	-	-	-	-	IC046000229	Price
TSJ3	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000226	Price
TSJ3	.118	.008	3	TT9080	-	x	-	-	-	-	IC046001114	Price
TSJ315R	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000434	Price
TSJ36R	.118	.008	3	K10	-	-	x	x	x	-	IC046000342	Price
TSJ36R	.118	.008	3	TT7220	x	-	-	-	-	-	IC046000230	Price
TSJ36R	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000227	Price
TSJ4	.157	.012	4	K10	-	-	x	x	x	-	IC046000345	Price
TSJ4	.157	.012	4	TT7220	x	-	-	-	-	-	IC046000235	Price
TSJ4	.157	.012	4	TT8020	x	x	-	-	x	-	IC046000232	Price
TSJ4	.157	.012	4	TT9080	-	x	-	-	-	-	IC046001115	Price
TSJ5	.197	.012	5	TT7220	x	-	-	-	-	-	IC046000259	Price
TSJ5	.197	.012	5	TT8020	x	x	-	-	x	-	IC046000238	Price
TSJ5	.197	.012	5	TT9080	-	x	-	-	-	-	IC046001116	Price
TSJ6	.236	.012	6	TT8020	x	x	-	-	x	-	IC046000278	Price

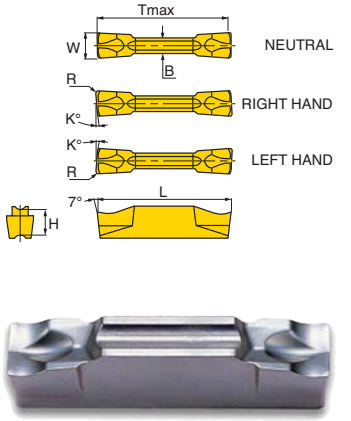


TOCLAMP ULTRA+ TDJ

Double Ended Inserts for Parting and Grooving

- Double ended inserts for parting and grooving

Model No.	W (in.)	R (in.)	Insert Seat Size	Grade	ST	SS	CI	N	S	H	Order No.	Price
TDJ1.4	.055	.006	1	TT8020	x	x	-	-	x	-	IC046000584	Price
TDJ1.4	.055	.006	1	TT9080	-	x	-	-	-	-	IC046000914	Price
TDJ2	.079	.008	2	K10	-	-	x	x	x	-	IC046000318	Price
TDJ2	.079	.008	2	TT7220	x	-	-	-	-	-	IC046000171	Price
TDJ2	.079	.008	2	TT8020	x	x	-	-	x	-	IC046000167	Price
TDJ2	.079	.008	2	TT9080	-	x	-	-	x	-	IC046001109	Price
TDJ215L	.079	.008	2	TT8020	x	x	-	-	x	-	IC046000363	Price
TDJ26R	.079	.008	2	K10	-	-	x	x	x	-	IC046000317	Price
TDJ26R	.079	.008	2	TT7220	x	-	-	-	-	-	IC046000172	Price
TDJ28R	.079	.008	2	TT8020	x	x	-	-	x	-	IC046000408	Price
TDJ26R	.079	.008	2	TT9080	-	x	-	-	-	-	IC046110872	Price
TDJ3	.118	.008	3	K10	-	-	x	x	x	-	IC046000276	Price
TDJ3	.118	.008	3	TT7220	x	-	-	-	-	-	IC046000177	Price
TDJ3	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000174	Price
TDJ3	.118	.008	3	TT9080	-	x	-	-	x	-	IC046000782	Price
TDJ3.18	.125	.008	3	TT8020	-	-	-	-	-	-	IC046125936	Price
TDJ3.18	.125	.008	3	TT9080	-	x	-	-	-	-	IC046125935	Price
TDJ315LS	.118	.008	3	TT8020	x	x	-	-	-	-	IC046000457	Price
TDJ315R	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000365	Price
TDJ36L	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000176	Price
TDJ36R	.118	.008	3	K10	-	-	x	x	x	-	IC046000320	Price
TDJ36R	.118	.008	3	TT7220	x	-	-	-	-	-	IC046000178	Price
TDJ36R	.118	.008	3	TT8020	x	x	-	-	x	-	IC046000175	Price
TDJ4	.157	.012	4	TT7220	x	-	-	-	-	-	IC046000183	Price
TDJ4	.157	.012	4	TT8020	x	x	-	-	x	-	IC046000180	Price
TDJ4	.157	.012	4	TT9080	-	x	-	-	-	-	IC046001110	Price
TDJ5	.197	.012	5	K10	-	-	x	x	x	-	IC046000326	Price
TDJ5	.197	.012	5	TT8020	x	x	-	-	x	-	IC046000186	Price
TDJ5	.197	.012	5	TT9080	-	x	-	-	-	-	IC046001111	Price

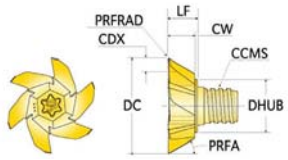


Member IMC Group Ingersoll Cutting Tools

CHIPoSURFER™ End Mill Tips

Dovetail • Series 18V

- Ideal for aerospace fixturing and pocket undercutting
- Solid carbide tips index on the shank in seconds and repeat within +/- .001”



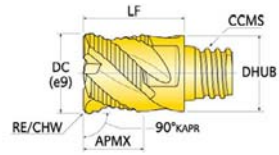


Model No.	Grade	No. of Flutes	Cutter Dia. (in.)	Cutting Width (in.)	Depth of Cut (in.)	Radius (in.)	Connec-tion	Profile Angle	Order No.	Price
18V-02750TRRA45	IN1530	6	1.090	.197	.160	.008	T10	45	**IC046410560**	Price
18V-02778TRRA60	IN1530	6	1.090	.307	.160	.008	T10	30	**IC046410561**	Price
18V-02710TRRA75	IN1530	6	1.090	.398	.090	.008	T10	15	**IC046410562**	Price

CHIPoSURFER™ End Mill Tips- Roughing

45° Helix • Center Cutting

- 45° Helix
- Center cutting

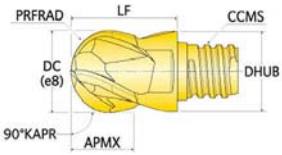




Model No.	Grade	No. of Flutes	Cutting Dia. (in.)	Depth of Cut (in.)	Corner (in.)	Connection	Order No.	Price
47C3120TQRN01	IN2005	4	.312	.200	.010 Chamfer	T05	**IC045840506**	Price
47C3727T6RN01	IN2005	4	.375	.270	.013 Chamfer	T06	**IC045840288**	Price
47C5037T8RN01	IN2005	4	.500	.370	.012 Chamfer	T08	**IC045840289**	Price
47C6247TRRN01	IN2005	5	.625	.470	.014 Chamfer	T10	**IC045840507**	Price
48D7562TSRN06	IN2005	6	.750	.620	SHARP	T12	**IC045840609**	Price
48C7562TSRN01	IN2005	6	.750	.620	.016 Chamfer	T12	**IC045840608**	Price
48C1086TURN01	IN2005	6	1.00	.870	.020 Chamfer	T15	**IC045622631**	Price

CHIPoSURFER™ End Mill Tips for Aluminum

38° Helix





Model No.	Grade	No. of Flutes	Cutting Dia. (in.)	Depth of Cut (in.)	Radius (in.)	Connection	Order No.	Price
46B2520TQRC04P	IN05S	3	.250	.210	.125	T05	**IC042900191**	Price
46B3120TQRC03P	IN05S	3	.312	.210	.156	T05	**IC042900192**	Price
46B3727T6RC05P	IN05S	3	.375	.285	.187	T06	**IC042900194**	Price
46B5037T8RC06P	IN05S	3	.500	.385	.250	T08	**IC042900195**	Price
46B7550TSRC10P	IN05S	3	.750	.500	.375	T12	**IC042905542**	Price

CHIPoSURFER™ End Mill Tip for Hard Steel, Stainless & High Temp Alloys - 47A, 48A

- 90° Cutting angle
- Non center cutting
- Ideal for hard steel, stainless steel & hi-temp alloys



Model Number	Grade	No. of Flutes	Cutting Dia.	Depth of Cut	Radius	Connection	Order No.	Price
47A5004T8RA09	IN2006	4	.500	.023	.100	T08	**IC045812893**	Price
47A7504TSRA16	IN2006	4	.750	.039	.160	T12	**IC043302185**	Price
48A1004TURA21	IN2006	6	1.00	.047	.145	T15	**IC045812897**	Price
47A08001TQRA16	IN2006	4	8mm	0.40mm	1.62mm	T05	**IC045812890**	Price
47A20001TSRA40	IN2006	4	20mm	1.00mm	4.02mm	T12	**IC045812895**	Price
48A12001T8RA121	IN2006	6	12mm	0.65mm	1.2mm	T08	**IC045668260**	Price
47A12001T8RA24	IN2006	4	12mm	0.60mm	2.47mm	T08	**IC045812892**	Price
47A16001TRRA32	IN2006	4	16mm	0.80mm	3.25mm	T10	**IC045812894**	Price
47A10001T6RA20	IN2006	4	10mm	0.50mm	1.0mm	T06	**IC045812891**	Price

CHIPoSURFER™ Ball Nose Tips - 45B

30° Helix



Helix Angle - 30 Degree									
Model No.	Grade	No. of Flutes	Cutting Diameter (in.)	Depth of Cut (in.)	Radius (in.)	Helix Angle	Connection	Order No.	Price
45B6235TRRB08	IN2005	2	.625	.350	.312	30 Degree	T10	**IC045840614**	Price
45B7550TSRB10	IN2005	2	.750	.500	.375	30 Degree	T12	**IC045840710**	Price

Helix Angle - 45 Degree									
Model No.	Grade	No. of Flutes	Cutting Diameter (in.)	Depth of Cut (in.)	Radius (in.)	Helix Angle	Connection	Order No.	Price
45B3120TQRB03P	IN05S	2	.312	.200	.156	45 Degree	T05	**IC045821863**	Price
45B3727T6RB05P	IN05S	2	.375	.270	.187	45 Degree	T06	**IC045821864**	Price
45B5037T8RB06P	IN05S	2	.500	.370	.250	45 Degree	T08	**IC045821826**	Price
45B6247TRRB08P	IN05S	2	.625	.470	.312	45 Degree	T10	**IC045821865**	Price
45B7550TSRB10P	IN05S	2	.750	.500	.375	45 Degree	T12	**IC045821866**	Price
45B1086TURB14P	IN05S	2	1.00	.860	.500	45 Degree	T15	**IC045813620**	Price

CHIPoSURFER™ Flat Bottom Plunge Tip - 45V

3° Back Draft, Center Cutting

- 3° Back draft
- Center cutting



Model No.	Grade	No. of Flutes	Cutting Diameter (in.)	Depth of Cut (in.)	Radius (in.)	Connection	Order No.	Price
45V3738T6RA03	IN2005	2	.375	.380	.031	T06	**IC045821137**	Price
45V5045T8RA03	IN2005	2	.500	.450	.031	T08	**IC045820939**	Price
45V6260TRRA03	IN2005	2	.625	.600	.031	T10	**IC045821140**	Price

CHIPOSURFER™ Solid Carbide Corner Rounding Tip - 45R

Corner .062", .094", .125", .156" and .187"R (OD Radius)



- Corner rounding tip

Model No.	Grade	No. of Flutes	Cutting Diameter (in.)	Depth of Cut (in.)	Radius (in.)	Connection	Order No.	Price
45R08007TQRA10	IN2005	2	.314	.370	.039	T05	**IC045811450**	Price
45R10009T6RA25	IN2005	2	.394	.394	.090	T06	**IC045840421**	Price
45R10009T6RA20	IN2005	2	.394	.413	.078	T06	**IC045820397**	Price
45R10009T6RA16	IN2005	2	.394	.425	.062	T06	**IC045840420**	Price
45R12012T8RA40	IN2005	2	.500	.456	.157	T08	**IC045840422**	Price
45R12012T8RA30	IN2005	2	.500	.494	.120	T08	**IC045840423**	Price
45R20007TSRA60	IN2005	2	.787	.449	.236	T12	**IC045873245**	Price
45R16015TRRA50	IN2005	2	.630	.555	.197	T10	**IC045811451**	Price

CHIPOSURFER™ Solid Carbide Serrated Roughing Tip - 47C

0° Lead, 45° Helix, 4 Flute Center Cutting, 5 & 6 Flute Non-Center Cutting



- Solid carbide serrated roughing tip

Model No.	Grade	No. of Flutes	Cutting Diameter (in.)	Depth of Cut (in.)	Radius (in.)	Connection	Order No.	Price
47C1088TURQ02	IN2005	-	-	-	.024	T15	**IC045812772**	Price
47C3120TQRQ02	IN2005	-	-	-	.012	T05	**IC045822535**	Price
47C3727T6RQ02	IN2005	-	-	-	.016	T06	**IC045822385**	Price
47C5037T8RQ03	IN2005	-	-	-	.020	T08	**IC045822536**	Price
47C6247TRRQ03	IN2005	-	-	-	.024	T10	**IC045822537**	Price
47C7562TSRQ03	IN2005	-	-	-	.024	T12	**IC045822386**	Price

CHIPOSURFER™ Solid Carbide Ultra High Feed Tip - 45A

High Feed Roughing, Center Cutting



- Solid carbide ultra high feed tip

Model No.	Grade	No. of Flutes	Cutting Diameter (in.)	Depth of Cut (in.)	Radius (in.)	Connection	Order No.	Price
45A3703T6RA06	IN2005	2	.375	.020	.080	T06	**IC045821093**	Price
45A10001T6RA20	IN2005	2	.394	.020	.080	T06	**IC045840671**	Price
45A12001T8RA25	IN2005	2	.472	.040	.100	T08	**IC045811427**	Price
45A5004T8RA08	IN2005	2	.500	.040	.100	T08	**IC045820893**	Price
45A16001TRRA301	IN2005	2	.630	.043	.118	T10	**IC045605013**	Price
45A7506TSRA12	IN2005	2	.750	.060	.120	T12	**IC045840751**	Price

CHIPOSURFER™ Precision T-Slot Milling Tip - 18T

Corner .015"R, Chamfer .006" x 45°



- Precision T-slot milling tip

Model No.	Grade	No. of Flutes	Cutting Diameter (in.)	Width (in.)	Depth of Cut (in.)	Radius (in.)	Connection	Order No.	Price
18T5012TQRN00	IN1030	6	.500	.125	.090	.016	T05	**IC045840394**	Price
18T6205T6RN02	IN1030	6	.625	.056	.100	.016	T06	**IC045811074**	Price
18T6206T6RN02	IN1030	6	.680	.062	.130	.016	T06	**IC045811075**	Price
18T6208T6RN01	IN1030	6	.625	.078	.130	.016	T06	**IC045840262**	Price
18T6208T6RN02	IN1030	6	.625	.086	.120	.016	T06	**IC045811076**	Price
18T6210T6RN01	IN1030	6	.625	.125	.130	.016	T06	**IC045820567**	Price
18T6212T6RN01	IN1030	6	.625	.125	.130	.016	T06	**IC045840263**	Price
18T6216T6RN01	IN1030	6	.625	.156	.130	.016	T06	**IC045840264**	Price
18T6216T6RN06	IN1030	6	.625	.156	.130	.050	T06	**IC045840319**	Price
18T7516T8RN01	IN1030	6	.750	.156	.130	.016	T07	**IC045840265**	Price
18T7519T8RN01	IN1030	6	.750	.187	.130	.016	T07	**IC045840266**	Price
18T7525T8RN01	IN1030	6	.750	.250	.130	.016	T07	**IC045840267**	Price
18T8718T8RN01	IN1030	6	.875	.187	.190	.016	T08	**IC045840521**	Price
18T8725T8RN01	IN1030	6	.875	.250	.190	.016	T08	**IC045840522**	Price
18T8731T8RN01	IN1030	6	.875	.312	.190	.016	T08	**IC045840523**	Price
18T10018TRRN02	IN1030	6	1.00	.187	.190	.016	T10	**IC045812117**	Price
18T10025TRRN02	IN1030	6	1.00	.250	.190	.016	T10	**IC045812118**	Price
18T10037TRRN02	IN1030	6	1.00	.375	.190	.016	T10	**IC045820459**	Price

CHIPOSURFER™ High Precision Ball Nose Tip - 45B

Helical Ball Nose



- High precision ball nose tip

Model No.	Grade	No. of Flutes	Cutting Width	Depth of Cut (in.)	Radius (in.)	Connection	Order No.	Price
45B3120TQRB03	IN2005	2	.312	.200	.156	T05	**IC045840613**	Price
47B3120TQRB03	IN2005	4	.312	.200	.156	T05	**IC045840495**	Price
45B3727T6RB05	IN2005	2	.375	.270	.187	T06	**IC045809775**	Price
47B3727T6RB05	IN2005	4	.375	.270	.187	T06	**IC045809776**	Price
45B5037T8RB06	IN2005	2	.500	.370	.250	T08	**IC045809777**	Price
47B5037T8RB06	IN2005	4	.500	.370	.250	T08	**IC045809778**	Price
47B6247TRRB08	IN2005	4	.625	.470	.312	T10	**IC045840508**	Price
47B7562TSRB10	IN2005	4	.750	.620	.374	T12	**IC045840590**	Price
47B7510TSRB13	IN2005	4	.750	1.00	.375	T12	**IC045831923**	Price
47B1086TURB15	IN2005	4	1.00	.860	.500	T15	**IC045813631**	Price
47B1010TURB16	IN2005	4	1.00	1.00	.500	T15	**IC045831925**	Price

CHIPOSURFER™ Spherical Ball Nose Tip - 45X

Straight Ball Nose



- Spherical ball nose tip

Model No.	Grade	No. of Flutes	Cutting Diameter (in.)	Depth of Cut (in.)	Radius (in.)	Connection	Order No.	Price
45X3727TQRA03	IN2005	2	.375	.330	.187	T05	**IC045840513**	Price
45X5037T6RA04	IN2005	2	.500	.400	.250	T06	**IC045840258**	Price
45X6248T8RA06	IN2005	2	.625	.550	.312	T08	**IC045840514**	Price
45X7560TRRA07	IN2005	2	.750	.660	.375	T10	**IC045840515**	Price

CHIPOSURFER™ Chamfer and Spotting Tip - 45N, 45M, 45P

30°, 45°, 60°, 72°, Center Cutting



- Chamfer & spotting tip
- Center cutting

Model No.	Grade	No. of Flutes	Chamfer Angle (deg.)	Cutter Dia. (in.)	Length of Cut (in.)	Connection	Order No.	Price
45N08007TQRA45	IN2005	2	45	.315	.124	T05	**IC045811431**	Price
45M10009T6RA30	IN2005	2	30	.390	.060	T06	**IC045811433**	Price
45P10009T6RA60	IN2005	2	30	.390	.100	T06	**IC045811434**	Price
45N10010T6RA45	IN2005	2	45	.390	.177	T06	**IC045668527**	Price
45N10009T6RA72	IN2005	2	72	.390	.060	T06	**IC045840357**	Price
47N10004T6RA45	IN2005	4	-	.390	.076	T06	**IC045840387**	Price
45M12012T8RA30	IN2005	2	60	.472	.059	T08	**IC045873246**	Price
45N12012T8RA45	IN2005	2	45	.472	.059	T08	**IC045840460**	Price
45P12012T8RA60	IN2005	2	30	.472	.059	T08	**IC045873247**	Price
47N5006T8RA45	IN2005	4	45	.500	.200	T08	**IC045840615**	Price
45M16015TRRA30	IN2005	2	60	.625	.472	T10	**IC045873248**	Price
45N16015TRRA45	IN2005	2	45	.625	.290	T10	**IC045840403**	Price
45P16015TRRA60	IN2005	2	30	.625	.173	T10	**IC045873249**	Price
45M20018TSRA30	IN2005	2	60	.787	.098	T12	**IC045849024**	Price
45N20018TSRA45	IN2005	2	45	.787	.059	T12	**IC045873548**	Price
45P20018TSRA60	IN2005	2	30	.787	.059	T12	**IC045849025**	Price
48N20025TSRA4	IN2005	6	45	.787	.290	T12	**IC045811430**	Price

CHIPSURFER™

Member IMC Group Ingersoll Cutting Tools

End Mill Tip for Aluminum - 46D, 46J

0° Lead, 45° Helix, Center Cutting, Polished, Sharp



- 0° Lead
- 45° Helix
- Center cutting
- Polished

No. of Flutes - 10

Model No.	Grade	Cutting Dia. (in.)	Depth of Cut (in.)	Corner (in.)	Connection	Order No.	Price
49D7562TSRD03	IN2005	.750	.620	.031	T10	**IC045840606**	Price
49D7562TSRD06	IN2005	.750	.620	.062	T10	**IC045840607**	Price
49D7562TSRD12	IN2005	.750	.620	.125	T10	**IC045831014**	Price
49D1086TURB03	IN2005	1.00	.880	.031	T15	**IC045622630**	Price
49D1088TURD13	IN2005	1.00	.880	.125	T15	**IC045831171**	Price

No. of Flutes - 3

Model No.	Grade	Cutting Dia. (in.)	Depth of Cut (in.)	Corner (in.)	Connection	Order No.	Price
46D3727T6RD02P	IN05S	.375	.200	.020	T06	**IC045840743**	Price
46D3727T6RD03P	IN05S	.375	.270	.031	T06	**IC045812669**	Price
46D3727T6RD06P	IN05S	.375	.270	.062	T06	**IC045812670**	Price
46D5037T8RD02P	IN05S	.500	.370	.020	T08	**IC045821014**	Price
46D6239TRRD09P	IN05S	.625	.390	.094	T10	**IC045812676**	Price
46D5037T8RD03P	IN05S	.500	.370	.031	T08	**IC045812671**	Price
46D6239TRRD12P	IN05S	.625	.390	.125	T10	**IC045812677**	Price
46D5037T8RD06P	IN05S	.500	.370	.062	T08	**IC045812672**	Price
46D7550TSRD02P	IN05S	.750	.500	.020	T12	**IC045840605**	Price
46D5037T8RD09P	IN05S	.500	.370	.094	T08	**IC045812673**	Price
46D7550TSRD06P	IN05S	.750	.500	.062	T12	**IC045812678**	Price
46D5037T8RD12P	IN05S	.500	.370	.125	T08	**IC045812674**	Price
46D7550TSRD12P	IN05S	.750	.500	.125	T12	**IC045812680**	Price
46D6239TRRD06P	IN05S	.625	.390	.062	T10	**IC045812675**	Price
46D7550TSRD09P	IN05S	.750	.500	.094	T12	**IC045812679**	Price

No. of Flutes - 4

Model No.	Grade	Cutting Dia. (in.)	Depth of Cut (in.)	Corner (in.)	Connection	Order No.	Price
47R3505T6RA06	IN2505	.234 - .357	.500	.062	T06	**IC042916281**	Price
47R4806T8RA09	IN2505	.295 - .480	.640	.093	T08	**IC042916283**	Price
47R3605T6RA03	IN2505	.298 - .362	.500	.031	T06	**IC042916278**	Price
47J3120TQRQ04	IN2005	.312	.200	SHARP	T05	**IC045812855**	Price
47D3120TQRQ02	IN2005	.312	.200	.016	T05	**IC045812856**	Price
47R7110TRRA18	IN2505	.343 - .715	1.00	.187	T10	**IC042916285**	Price
47R6008TRRA12	IN2505	.351 - .601	.810	.125	T10	**IC042916284**	Price
47J3727T6RQ05	IN2005	.375	.270	SHARP	T06	**IC045812857**	Price
47D3727T6RQ02	IN2005	.375	.270	.016	T06	**IC045812858**	Price
47J5037T8RQ06	IN2005	.500	.370	SHARP	T08	**IC045812859**	Price
47D5037T8RQ01	IN2005	.500	.370	.015	T08	**IC045813605**	Price
47D5037T8RQ03	IN2005	.500	.370	.031	T08	**IC045812860**	Price
47D5037T8RQ06	IN2005	.500	.370	.062	T08	**IC045813606**	Price
47D6247TRRQ03	IN2005	.625	.470	.031	T12	**IC045812861**	Price
47D6247TRRQ07	IN2005	.625	.470	.062	T10	**IC045813607**	Price
47D7562TSRQ03	IN2005	.750	.620	.031	T12	**IC045812862**	Price

No. of Flutes - 4

Model No.	Grade	Cutting Dia. (in.)	Depth of Cut (in.)	Corner (in.)	Connection	Order No.	Price
47D7510TSRQ04	IN2005	.750	1.00	.031	T12	**IC045831922**	Price
47D7562TSRQ07	IN2005	.750	.620	.062	T12	**IC045813608**	Price
47D7562TSRQ13	IN2005	.750	.620	.125	T12	**IC045831169**	Price
47D1088TURQ04	IN2005	1.00	.880	.031	T15	**IC045812863**	Price
47D1010TURQ04	IN2005	1.00	1.00	.031	T15	**IC045831924**	Price
47D1088TURQ06	IN2005	1.00	.880	.062	T15	**IC045813609**	Price

No. of Flutes - 5

Model No.	Grade	Cutting Dia. (in.)	Depth of Cut (in.)	Corner (in.)	Connection	Order No.	Price
47D7581TSRQ03	IN2505	.750	.810	.030	T12	**IC042915973**	Price
47D7581TSRQ06	IN2505	.750	.810	.060	T12	**IC042915974**	Price
47D7581TSRQ09	IN2505	.750	.810	.090	T12	**IC042915975**	Price
47D7581TSRQ12	IN2505	.750	.810	.120	T12	**IC042915976**	Price
47D7581TSRQ19	IN2505	.750	.810	.190	T12	**IC042915977**	Price
47D7581TSRQ25	IN2505	.750	.810	.250	T12	**IC042915978**	Price
47D1088TURQ13	IN2005	1.00	.880	.125	T15	**IC045831170**	Price
47D1088TURQ25	IN2005	1.00	.880	.250	T15	**IC045813610**	Price

No. of Flutes - 6

Model No.	Grade	Cutting Dia. (in.)	Depth of Cut (in.)	Corner (in.)	Connection	Order No.	Price
48J3120TQRD04	IN2005	.312	.200	SHARP	T05	**IC045840520**	Price
48D3120TQRD03	IN2005	.312	.200	.031	T05	**IC045840600**	Price
48J3727T6RD05	IN2005	.375	.270	SHARP	T06	**IC045840349**	Price
48D3727T6RD01	IN2005	.375	.270	.016	T06	**IC045840351**	Price
48D3727T6RD03	IN2005	.375	.270	.031	T06	**IC045840352**	Price
48D3727T6RD06	IN2005	.375	.270	.060	T06	**IC045809780**	Price
48D5037T8RD01	IN2005	.500	.370	.016	T08	**IC045840353**	Price
48D5037T8RD03	IN2005	.500	.370	.031	T08	**IC045840354**	Price
48D5037T8RD06	IN2005	.500	.370	.060	T08	**IC045809782**	Price
48J5037T8RD06	IN2005	.500	.370	.062	T08	**IC045840350**	Price
48N16006TRRA45	IN2005	3mm - 16mm	6.5mm	3mm	T10	**IC045811429**	Price
48N25010TURA45	IN2005	5mm - 25mm	10mm	5mm	T15	**IC045668415**	Price

No. of Flutes - 8

Model No.	Grade	Cutting Dia. (in.)	Depth of Cut (in.)	Corner (in.)	Connection	Order No.	Price
49J6247TRRD08	IN2005	.625	.470	SHARP	T08	**IC045840525**	Price
49D6247TRRD03	IN2005	.625	.470	.031	T10	**IC045840603**	Price
49D6247TRRD06	IN2005	.625	.470	.062	T10	**IC045840604**	Price

CHIPSURFER™

Straight Shanks with No Neck

Steel Shanks



- Straight shank with no neck

Model No.	Diameter (in.)	OAL (in.)	Connection	Order No.	Price
S031T05SA05	.375	2.500	T05	**IC524542793**	Price
S037T06SA06	.375	3.000	T06	**IC524505822**	Price
S050T08SA06	.500	3.54	T08	**IC524505824**	Price
S062T10SA06	.625	4.000	T10	**IC524542796**	Price
S075T12SA08	.750	5.000	T12	**IC524542990**	Price
S100MOD12SA80	1.000	8.000	M12	**IC524506165**	Price

CHIPSURFER™

Straight Shanks with No Neck

Carbide Shanks



- Carbide shank

Model No.	Diameter (in.)	OAL (in.)	Connection	Order No.	Price
S031T05CA19	.312	3.000	T05	**IC524542775**	Price
S037T06CA12	.375	4.000	T06	**IC524540001**	Price
S050T08CA15	.500	4.000	T08	**IC524540002**	Price
S050T08CA25	.500	5.500	T08	**IC524540005**	Price
S062T10CA34	.625	5.500	T10	**IC524542797**	Price
S075MOD10CA80	.750	8.000	M10	**IC524542729**	Price

CHIPSURFER™

Conical Shanks

Steel Shanks



- Steel shank

Item No.	Diameter (in.)	OAL (in.)	Connection	Order No.	Price
WB075MOD10SK50	.625	5.000	M10	**IC524502367**	Price
S125MOD16SK90	1.250	9.000	M16	**IC524502372**	Price

CHIPSURFER™

Conical Shanks

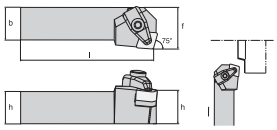
Carbide Shanks



- Carbide shank

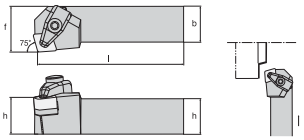
Model No.	Diameter (in.)	OAL (in.)	Connection	Order No.	Price
S100MOD12CK85	1.000	8.500	M12	**IC524542733**	Price
S125MOD16CK90	1.250	9.000	M16	**IC524542734**	Price

T Style Turning Holders





Right Hand





Left Hand

Right/Left Hand - Left					
Model No.	Shank Dia. (in.)	OAL (in.)	Uses Insert(s)	Order No.	Price
TCKNL164D	1	6.00	CN 43	**IC033602967**	Price
TCLNL12-33B	3/4	4.50	CNM 33	**IC036160218**	Price
TCLNL124B	3/4	4.50	CN 43	**IC033602897**	Price
TCLNL16-33D	1	6.00	CNM 33	**IC036160222**	Price
TCLNL164D	1	6.00	CN 43	**IC033602844**	Price
TCLNL165D	1	6.00	CN 54	**IC033603314**	Price
TCLNL20-33D	1-1/4	6.00	CNM 33	**IC036160224**	Price
TCLNL204D	1-1/4	6.00	CN 43	**IC033603169**	Price
TCLNL205D	1-1/4	6.00	CN 54	**IC033603315**	Price
TCLNL206D	1-1/4	6.00	CN 64	**IC033603857**	Price
TCLNL244D	1-1/2	6.00	CN 43	**IC033603851**	Price
TCLNR244D	1-1/2	6.00	CN 43	**IC033603850**	Price
TCLNL245D	1-1/2	6.00	CN 54	**IC033603853**	Price
TCLNL246D	1-1/2	6.00	CN 64	**IC033603859**	Price
TCRNL164D	1	6.00	CN 43	**IC033603861**	Price
TDJNL123B	3/4	4.50	DN 33	**IC033604960**	Price
TDJNL124B	3/4	4.50	DN 43	**IC033602903**	Price
TDJNL164D	1	6.00	DN 43	**IC033602904**	Price
TDQNL164D	1	6.00	DN 43	**IC033603843**	Price
TSKNL164D	1	6.00	SN 43	**IC033603868**	Price
TSRNL164D	1	6.00	SN 43	**IC033603870**	Price
TSSNL164D	1	6.00	SN 43	**IC033603878**	Price
TTJNL163D	1	6.00	TN 33	**IC033603882**	Price
TTJNL204D	1-1/4	6.00	TN 43	**IC033603884**	Price
TVJNL123C	3/4	5.00	VN 33	**IC033602907**	Price
TVJNL163D	1	6.00	VN 33	**IC033602908**	Price
TVQNL163D	1	6.00	VN 33	**IC033603211**	Price
TWLNL12-33B	3/4	4.50	WNMX33	**IC036160226**	Price
TWLNL123B	3/4	4.50	WN 33	**IC033603764**	Price
TWLNL16-33D	1	6.00	WNMX33	**IC036160228**	Price
TWLNL164D	1	6.00	WN 43	**IC033602910**	Price
TWLNL20-33D	1-1/4	6.00	WNMX33	**IC036160230**	Price
TWLNL204D	1-1/4	6.00	WN 43	**IC033603887**	Price

Right/Left Hand - Neutral					
Model No.	Shank Dia. (in.)	OAL (in.)	Uses Insert(s)	Order No.	Price
TCMNN124B	3/4	4.50	CN 43	**IC033603927**	Price
TCMNN164D	1	6.00	CN 43	**IC033603928**	Price
TCMNN206D	1-1/4	6.00	CN 64	**IC033603929**	Price
TDNNN164D	1	6.00	DN 43	**IC033603864**	Price
TSDNN124B	3/4	4.50	SN 43	**IC033602905**	Price
TSDNN164D	1	6.00	SN 43	**IC033602906**	Price
TSDNN204D	1-1/4	6.00	SN 43	**IC033603865**	Price
TSDNN206D	1-1/4	6.00	SN 64	**IC033603866**	Price

Right/Left Hand - Neutral					
Model No.	Shank Dia. (in.)	OAL (in.)	Uses Insert(s)	Order No.	Price
TVVNN123B	3/4	4.50	VN 33	**IC033603890**	Price
TVVNN163D	1	6.00	VN 33	**IC033603885**	Price

Right/Left Hand - Right					
Model No.	Shank Dia. (in.)	OAL (in.)	Uses Insert(s)	Order No.	Price
TCKNR124B	3/4	4.50	CN 43	**IC033603896**	Price
TCKNR164D	1	6.00	CN 43	**IC033602966**	Price
TCKNR204D	1-1/4	6.00	CN 43	**IC033603848**	Price
TCLNR12-33B	3/4	4.50	CNM 33	**IC036160217**	Price
TCLNR124B	3/4	4.50	CN 43	**IC033602896**	Price
TCLNR16-33D	1	6.00	CNM 33	**IC036160220**	Price
TCLNR164D	1	6.00	CN 43	**IC033602736**	Price
TCLNR165D	1	6.00	CN 54	**IC033603313**	Price
TCLNR166D	1	6.00	CN 64	**IC033603854**	Price
TCLNR20-33D	1-1/4	6.00	CNM 33	**IC036160223**	Price
TCLNR204D	1-1/4	6.00	CN 43	**IC033603170**	Price
TCLNR205D	1-1/4	6.00	CN 54	**IC033603226**	Price
TCLNR245D	1-1/2	6.00	CN 54	**IC033603852**	Price
TCLNR246D	1-1/2	6.00	CN 64	**IC033603858**	Price
TCRNR164D	1	6.00	CN 43	**IC033603860**	Price
TCRNR124B	3/4	4.50	CN 43	**IC033603888**	Price
TDJNR123B	3/4	4.50	DN 33	**IC033604961**	Price
TDJNR124B	3/4	4.50	DN 43	**IC033602898**	Price
TDJNR164D	1	6.00	DN 43	**IC033602737**	Price
TDQNR164D	1	6.00	DN 43	**IC033603842**	Price
TSKNR164D	1	6.00	SN 43	**IC033603867**	Price
TSRNR164D	1	6.00	SN 43	**IC033603869**	Price
TSRNR206D	1-1/4	6.00	SN 64	**IC033603875**	Price
TSSNR164D	1	6.00	SN 43	**IC033603877**	Price
TSSNR206D	1-1/4	6.00	SN 64	**IC033603879**	Price
TTJNR123B	3/4	4.50	TN 33	**IC033603603**	Price
TTJNR163D	1	6.00	TN 33	**IC033603881**	Price
TTJNR164D	1	6.00	TN 43	**IC033603156**	Price
TTJNR204D	1-1/4	6.00	TN 43	**IC033603883**	Price
TVJNR123C	3/4	5.00	VN 33	**IC033602899**	Price
TVJNR163D	1	6.00	VN 33	**IC033602738**	Price
TVQNR163D	1	6.00	VN 33	**IC033603210**	Price
TWLNR103A	5/8	4.00	WN 33	**IC033604021**	Price
TWLNR12-33B	3/4	4.50	WNMX33	**IC036160225**	Price
TWLNR124B	3/4	4.50	WN 43	**IC033602901**	Price
TWLNR16-33D	1	6.00	WNMX33	**IC036160227**	Price
TWLNR163D	1	6.00	WN 33	**IC033603422**	Price
TWLNR164D	1	6.00	WN 43	**IC033602846**	Price
TWLNR20-33D	1-1/4	6.00	WNMX33	**IC036160229**	Price
TWLNR204D	1-1/4	6.00	WN 43	**IC033603886**	Price

Boring Bar

Steel Body



- Right hand shown

Model No.	Shank Dia. (in.)	Min. Bore (in.)	F (in.)	OAL (in.)	Insert Screw	Use Insert	Order No.	Price
S06HSCLCR2	3/8	.3940	.2360	4	TS-25.45-6M1	CC_T21.5	**IC033670322**	Price
S06MSCLCL2	3/8	.5000	.2500	6	TS-25.45-6M1	CC_T21.5	**IC033672639**	Price
S06MSCLPR2	3/8	.4800	.2500	6	TS-25.45-6M1	CP_T21.5	**IC033673023**	Price
S06MSTFCR2	3/8	.5000	.2500	6	1425	TC_T21.5	**IC033670188**	Price
S08MSCLCR2	1/2	.6020	.3120	6	TS-25.45-6M1	CC_T21.5	**IC033672640**	Price
S08MSCLCR3	1/2	.6250	.3120	6	TS-4.7-8M1	CC_T32.5	**IC033672643**	Price
S08MSTFCR2	1/2	.6250	.3120	6	1425	TC_T21.5	**IC033670190**	Price
S08RSCLPR2	1/2	.6000	.3120	8	TS-25.45-6M1	CP_T21.5	**IC033673028**	Price
S10RSCLCL3	5/8	.8120	.4060	8	1440	CC_T32.5	**IC033672645**	Price
S10RSCLCR3	5/8	.8120	.4060	8	1440	CC_T32.5	**IC033670323**	Price
S10RSDUCR2	5/8	.8400	.5000	8	TS-25.45-6M1	DC_T21.5	**IC033672658**	Price
S10SSCLPR2	5/8	.7700	.4060	10	TS-25.45-6M1	CP_T21.5	**IC033673033**	Price
S12SSCLCL3	3/4	.9540	.5000	10	TS-4.7-10M1	CC_T32.5	**IC033672646**	Price
S12SSCLCR3	3/4	.9540	.5000	10	TS-4.7-10M1	CC_T32.5	**IC033601580**	Price
S12SSTFCR2	3/4	1.0000	.5000	10	TS-25.45-6M1	TC_T21.5	**IC033670194**	Price
S16TSCLCR3	1	1.2800	.6400	12	1440	CC_T32.5	**IC033601581**	Price
S16TSCLCR4	1	1.2800	.6400	12	1250	CC_T43	**IC033670324**	Price
S16TSDUCR3	1	1.5000	.7500	12	TS-4.7-10M1	DC_T32.5	**IC033670326**	Price
S16TSTUCR3	1	1.2800	.6400	12	TS-4.7-10M1	TC_T32.5	**IC033672704**	Price

TTurn™ TType Boring Bar

Coolant Thru – Steel Body

Left hand shown



Model No.	Shank Dia. (in.)	Min. Bore (in.)	F (in.)	OAL (in.)	Use Insert	Order No.	Price
A12STWLNR3	3/4	1.000	.500	10	WN__3	**IC033603788**	Price
A12STWLNL3	3/4	1.000	.500	10	WN__3	**IC033603787**	Price
A16TTCLNR4	1	1.250	.640	12	CN__4	**IC033603164**	Price
A16TTDUNR3	1	1.500	.750	12	DN__3	**IC033603824**	Price
A16TTDUNL3	1	1.500	.750	12	DN__3	**IC033603823**	Price
A16TTTFNR3	1	1.250	.640	12	TNMG33_	**IC033603688**	Price
A16TTTFNL3	1	1.250	.640	12	TNMG33_	**IC033603614**	Price
A16TTWLNR3	1	1.250	.640	12	WN__3	**IC033603690**	Price
A16TTWLNL3	1	1.250	.640	12	WN__3	**IC033603616**	Price
A16TTWLNR4	1	1.280	.640	12	WN__4	**IC033603691**	Price
A20UTCLNR4	1-1/4	1.500	.770	14	CN__4	**IC033603165**	Price
A20UTTFNR3	1-1/4	1.500	.765	14	TNMG33_	**IC033603689**	Price
A20UTWLNL4	1-1/4	1.500	.770	14	WN__4	**IC033603618**	Price
A24UTCLNR4	1-1/2	1.750	.890	14	CN__4	**IC033603166**	Price
A24UTCLNL4	1-1/2	1.750	.890	14	CN__4	**IC033603161**	Price
A24UTDUNR4	1-1/2	2.000	1.130	14	DN__4	**IC033603178**	Price
A24UTDUNL4	1-1/2	2.000	1.130	14	DN__4	**IC033603175**	Price
A28UTCLNL4	1-3/4	2.000	1.020	14	CN__4	**IC033603162**	Price
A28UTDUNR4	1-3/4	2.250	1.250	14	DN__4	**IC033603179**	Price
A32VTCLNL4	2	2.500	1.280	16	CN__4	**IC033603163**	Price
A32VTCLNR4	2	2.500	1.280	16	CN__4	**IC033603168**	Price
A32VTDUNL4	2	2.750	1.500	16	DN__4	**IC033603177**	Price

TTurn™ Solid Carbide TaeguLine Boring Bar

Coolant Thru

Right hand shown



- Left

Model No.	Shank Dia. (in.)	Min. Bore (in.)	F (in.)	OAL (in.)	Insert Screw	Use Insert	Order No.	Price
E06MSCLCL2	3/8	.500	.250	6	SM25-065-70	CC_T21.5	**IC033604252**	Price
E08RSCLCL3	1/2	.625	.312	8	SM25-065-70	CC_T32.5	**IC033604253**	Price
E08RSTFCL2	1/2	.625	.312	8	SM25-065-70	TC_T21.5	**IC033604244**	Price
E10RSCLCL3	5/8	.780	.438	8	SM25-065-70	CC_T32.5	**IC033604254**	Price
E12SSCLCL3	3/4	.985	.500	10	SM25-065-70	CC_T32.5	**IC033604255**	Price
E12SSTFCL2	3/4	1.000	.500	10	SM25-065-70	TC_T21.5	**IC033604246**	Price

- Right

Model No.	Shank Dia. (in.)	Min. Bore (in.)	F (in.)	OAL (in.)	Insert Screw	Use Insert	Order No.	Price
E06MSCLCR2	3/8	.500	.250	6	SM25-065-70	CC_T21.5	**IC033604256**	Price
E06MSDUCR2	3/8	.625	.375	6	SM25-065-70	DC_T21.5	**IC033604535**	Price
E06MSTFCR2	3/8	.500	.250	6	SM25-065-70	TC_T21.5	**IC033604247**	Price
E08MSCLCR2	1/2	.625	.312	6	SM25-065-70	CC_T21.5	**IC033604257**	Price
E08MSDUCR2	1/2	.755	.437	6	SM25-065-70	DC_T21.5	**IC033604536**	Price
E08RSCLCR3	1/2	.500	.312	8	SM25-065-70	CC_T32.5	**IC033604259**	Price
E08RSTFCR2	1/2	.625	.312	8	SM25-065-70	TC_T21.5	**IC033604248**	Price
E10RSCLCR3	5/8	.780	.438	8	SM25-065-70	CC_T32.5	**IC033604260**	Price
E10RSDUCR2	5/8	.840	.500	8	SM25-065-70	DC_T21.5	**IC033604537**	Price
E10RSTFCR2	5/8	.812	.406	8	SM25-065-70	TC_T21.5	**IC033604249**	Price
E12SSCLCR3	3/4	.985	.500	10	SM25-065-70	CC_T32.5	**IC033604261**	Price
E12SSDUCR3	3/4	1.250	.625	10	SM25-065-70	DC_T32.5	**IC033604538**	Price

Spare Parts - Screws

Description	Order No.	Price
1250	**IC024301077**	Price
1335	**IC024320034**	Price
1425	**IC024301075**	Price
1440	**IC024301076**	Price
1540	**IC024330002**	Price
1750	**IC024320033**	Price
1760	**IC024330001**	Price
DLS5	**IC024351611**	Price
SE0117	**IC027003055**	Price
SE0202	**IC027000084**	Price
SE0263	**IC027050332**	Price
SE0279	**IC027000460**	Price
SE0281	**IC027000461**	Price
SE0282	**IC027000517**	Price
SE02B3	**IC027005993**	Price
SE0370	**IC027001766**	Price
SE0372	**IC027002873**	Price

Description	Order No.	Price
SF06001	**IC027002616**	Price
SF08001	**IC027003206**	Price
SF08002	**IC027003865**	Price
SF5001	**IC027002615**	Price
SHM5X0.8X16	**IC024350812**	Price
SHM5X0.8X20	**IC024350813**	Price
SHM5X0.8X25	**IC024351438**	Price
SHM6X1X20	**IC024350178**	Price
SHM6X1X25	**IC024351073**	Price
SHM6X1X40	**IC024351074**	Price
SM1804100	**IC027041147**	Price
SM2004300	**IC027011241**	Price
SM2204600	**IC027070018**	Price
SM2205200	**IC027061002**	Price
SM2505280	**IC027019506**	Price
SM2505510	**IC027002614**	Price
SM2506400	**IC027010015**	Price

Description	Order No.	Price
SM2506570	**IC024350818**	Price
SM3007421	**IC027019592**	Price
SM3008010	**IC027011723**	Price
SM3008200	**IC027070040**	Price
SM3008221	**IC027019559**	Price
SM3507610	**IC027070049**	Price
SM3508810	**IC027070017**	Price
SM3508860	**IC027041132**	Price
SM3508900	**IC027005191**	Price
SM35114H0	**IC027032313**	Price
SM4007000	**IC027001888**	Price
SM4008420	**IC027006441**	Price
SM4010010	**IC027011251**	Price
SM40100R0	**IC027019041**	Price
SM4012000	**IC027000683**	Price
SM40143H0	**IC027032312**	Price
SM50062S0	**IC024351178**	Price

Description	Order No.	Price
SM5010710	**IC027011738**	Price
SM5012250	**IC027041133**	Price
SM50130R0	**IC027018925**	Price
SM6015000	**IC027011526**	Price
SO25050I	**IC024351403**	Price
SO35080I	**IC024350823**	Price
SO35120I	**IC024351393**	Price
SO35124I	**IC024350824**	Price
SO40050I	**IC024350825**	Price
SO40085I	**IC024351689**	Price
SO40090I	**IC024350826**	Price
SO50090S	**IC024350834**	Price
SO80180I	**IC024351647**	Price
TS4.710M1	**IC024360145**	Price
TS4.78M1	**IC024360144**	Price
TS443M	**IC024301115**	Price
TS5.810M1	**IC024352294**	Price

Spare Parts - Torx Bits & Wrenches

Description	Order No.	Price
5516 Wrench	**IC024310009**	Price
BLD T15/M7 Torx Bit	**IC027011850**	Price
DS-T06F Wrench	**IC027005994**	Price
DS-T07F Wrench	**IC027002250**	Price
DS-T08W Wrench	**IC027000075**	Price
DS-T09W Wrench	**IC027009052**	Price
DS-T155 Wrench	**IC027066695**	Price
DS-T15T Wrench	**IC027000076**	Price
DS-T20T Wrench	**IC027001304**	Price
DS-T25T Wrench	**IC027003260**	Price
DST06QB Torx Bit	**IC027011864**	Price
DST06QB 5PC Torx Bit	**IC027011870**	Price
DST06QB 10PC Torx Bit	**IC027011871**	Price

Description	Order No.	Price
DST07QB 5PC Torx Bit	**IC027011872**	Price
DST07QB 10PC Torx Bit	**IC027011873**	Price
DST08QB Torx Bit	**IC027011866**	Price
DST08QB 5PC Torx Bit	**IC027011874**	Price
DST08QB 10PC Torx Bit	**IC027011875**	Price
DST09QB Torx Bit	**IC027011867**	Price
DST09QB 5PC Torx Bit	**IC027011876**	Price
DST09QB 10PC Torx Bit	**IC027011877**	Price
DST10QB 5PC Torx Bit	**IC027011878**	Price
DST10QB 10PC Torx Bit	**IC027011879**	Price
DST15QB Torx Bit	**IC027011869**	Price
DST15QB 5PC Torx Bit	**IC027011880**	Price
DST15QB 10PC Torx Bit	**IC027011881**	Price

Description	Order No.	Price
DSTP06TB Torx Bit	**IC027011224**	Price
DT-T09S Torx Key	**IC027007031**	Price
L-W2.5 Wrench	**IC024350217**	Price
L-W3 Wrench	**IC024350219**	Price
L-W5 Wrench	**IC024350221**	Price
WS0029 Wrench	**IC027008923**	Price
WS0030 Wrench	**IC027008924**	Price
WS0043 Wrench	**IC027010559**	Price
WS0044 Wrench	**IC027010560**	Price
WS0059 Wrench	**IC027010949**	Price
WS0061 Wrench	**IC024305309**	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - CCET 21.50 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .004									
CCET 21.50R-GF	TT9020	x	x			x		IC065517326	Price
Style - CCET 21.505 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .008									
CCET 21.505R-GF	TT9020	x	x			x		IC065517328	Price
Style - CCET 21.51 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .016									
CCET 21.51L-GF	TT9020	x	x			x		IC065519573	Price
CCET 21.51R-GF	TT9020	x	x			x		IC065517330	Price
Style - CCET 21.52 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .031									
CCET 21.52L-GF	TT9020	x	x			x		IC065519575	Price
Style - CCET 21.5X0 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .001									
CCET 21.5X0-LGW	TT9020	x	x			x		IC065519649	Price
CCET 21.5X0R-GW	TT9020	x	x			x		IC065517250	Price
Style - CCET 32.50 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .004									
CCET 32.50L-GF	TT9020	x	x			x		IC065519678	Price
CCET 32.50R-GF	TT9020	x	x			x		IC065517332	Price
Style - CCET 32.50.5 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .008									
CCET 32.50.5L-GF	TT9020	x	x			x		IC065519679	Price
CCET 32.50.5R-GF	TT9020	x	x			x		IC065517334	Price
Style - CCET 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
CCET 32.51R-GF	TT9020	x	x			x		IC065517419	Price
Style - CCET 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
CCET 32.52L-GF	TT9020	x	x			x		IC065519576	Price
Style - CCET 32.5X0 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .001									
CCET 32.5X0L-GW	TT9020	x	x			x		IC065519936	Price
CCET 32.5X0R-GW	TT9020	x	x			x		IC065517502	Price
Style - CCGT 21.50 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .004									
CCGT 21.50-SA	TT5080		x			x		IC065523201	Price
CCGT 21.50-SA	TT9020	x	x			x		IC065522915	Price
Style - CCGT 21.505 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .008									
CCGT 21.50.5-SA	TT5080		x			x		IC065523202	Price
CCGT 21.50.5-SA	TT9020	x	x			x		IC065519914	Price
Style - CCGT 21.51 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .016									
CCGT 21.51-SA	TT5080		x			x		IC065523203	Price
CCGT 21.51-SA	TT9020	x	x			x		IC065520884	Price
Style - CCGT 32.50 IC (in.) - 1/4 Thickness (in.) - .156 Radius (in.) - .004									
CCGT 32.50-SA	TT5080		x			x		IC065523204	Price
CCGT 32.50-SA	TT9020	x	x			x		IC065522919	Price
Style - CCGT 32.505 IC (in.) - 1/4 Thickness (in.) - .156 Radius (in.) - .008									
CCGT 32.50.5-SA	TT5080		x			x		IC065523205	Price
CCGT 32.50.5-SA	TT9020	x	x			x		IC065519986	Price
Style - CCGT 32.51 IC (in.) - 1/4 Thickness (in.) - .156 Radius (in.) - .016									
CCGT 32.51-SA	TT5080		x			x		IC065523206	Price
CCGT 32.51-SA	TT9020	x	x			x		IC065520886	Price
Style - CCGT 32.52 IC (in.) - 1/4 Thickness (in.) - .156 Radius (in.) - .031									
CCGT 32.52-SA	TT5080		x			x		IC066125640	Price
CCGT 32.52-SA	TT9020	x	x			x		IC066125641	Price
Style - CCMT 21.50.5 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .008									
CCMT 21.50.5-FA	TT5100	x	x			x		IC065516542	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - CCMT 21.51 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .016									
CCMT 21.51-FA	TT8125	x						IC065520238	Price
CCMT 21.51-FG	TT5100	x	x			x		IC065515247	Price
CCMT 21.51-FG	TT8020	x	x			x		IC065515738	Price
CCMT 21.51-FG	TT8125	x						IC065519628	Price
CCMT 21.51-FG	TT9225		x			x		IC065520530	Price
CCMT 21.51-FG	TT9235		x			x		IC065520599	Price
CCMT 21.51-MT	TT5100	x	x			x		IC065514737	Price
CCMT 21.51-MT	TT8020	x	x			x		IC065515703	Price
CCMT 21.51-MT	TT8115	x						IC065518519	Price
CCMT 21.51-MT	TT8125	x						IC065519612	Price
CCMT 21.51-MT	TT9225		x			x		IC065520531	Price
CCMT 21.51-MT	TT9235		x			x		IC065520600	Price
Style - CCMT 21.52 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .031									
CCMT 21.52-MT	TT5100	x	x			x		IC065515098	Price
CCMT 21.52-MT	TT7005	x		x				IC065523769	Price
CCMT 21.52-MT	TT8115	x						IC065518520	Price
CCMT 21.52-MT	TT8125	x						IC065519634	Price
Style - CCMT 32.50.5 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .008									
CCMT 32.50.5-FA	TT5100	x	x			x		IC065516519	Price
Style - CCMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
CCMT 32.51-FA	TT5100	x	x			x		IC065517302	Price
CCMT 32.51-FA	TT8020	x	x			x		IC065517415	Price
CCMT 32.51-FA	TT8125	x						IC065520289	Price
CCMT 32.51-FG	TT5100	x	x			x		IC065514806	Price
CCMT 32.51-FG	TT7005	x		x				IC065523770	Price
CCMT 32.51-FG	TT8020	x	x			x		IC065515726	Price
CCMT 32.51-FG	TT8125	x						IC065519607	Price
CCMT 32.51-FG	TT9225		x			x		IC065520532	Price
CCMT 32.51-FG	TT9235		x			x		IC065520601	Price
CCMT 32.51-MT	TT5100	x	x			x		IC065514738	Price
CCMT 32.51-MT	TT8020	x	x			x		IC065515704	Price
CCMT 32.51-MT	TT8115	x						IC065518521	Price
CCMT 32.51-MT	TT8125	x						IC065519606	Price
CCMT 32.51-MT	TT9225		x			x		IC065520533	Price
CCMT 32.51-MT	TT9235		x			x		IC065520602	Price
CCMT 32.51-PC	TT8125	x						IC065519371	Price
Style - CCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
CCMT 32.52.WT	TT8125	x						IC065520220	Price
CCMT 32.52-FA	TT8125	x						IC065520972	Price
CCMT 32.52-FG	TT5100	x	x			x		IC065515095	Price
CCMT 32.52-FG	TT8115	x						IC065519733	Price
CCMT 32.52-FG	TT8125	x						IC065519608	Price
CCMT 32.52-FG	TT9235		x			x		IC065520603	Price
CCMT 32.52-MT	TT5100	x	x			x		IC065514739	Price
CCMT 32.52-MT	TT7005	x		x				IC065523658	Price
CCMT 32.52-MT	TT8020	x	x			x		IC065515257	Price
CCMT 32.52-MT	TT8115	x						IC065518522	Price
CCMT 32.52-MT	TT8125	x						IC065519598	Price
CCMT 32.52-MT	TT9225		x			x		IC065520535	Price
CCMT 32.52-MT	TT9235		x			x		IC065520604	Price
CCMT 32.52-WT	TT5100	x	x			x		IC065514965	Price
Style - CCMT 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
CCMT 431-MT	TT5100	x	x			x		IC065515099	Price
CCMT 431-MT	TT8115	x						IC065518523	Price
CCMT 431-MT	TT8125	x						IC065519892	Price
Style - CCMT 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
CCMT 432-FG	TT5100	x	x			x		IC065515401	Price
CCMT 432-FG	TT8125	x						IC065519893	Price
CCMT 432-MT	TT5100	x	x			x		IC065514756	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - CCMT 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
CCMT 432-MT	TT7005	x		x				IC065523661	Price
CCMT 432-MT	TT8020	x	x			x		IC065516630	Price
CCMT 432-MT	TT8115	x						IC065518524	Price
CCMT 432-MT	TT8125	x						IC065519603	Price
CCMT 432-MT	TT9225		x			x		IC065520536	Price
CCMT 432-MT	TT9235		x			x		IC065520605	Price
Style - CCMT 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
CCMT 433-MT	TT8115	x						IC065518525	Price
CCMT 433-MT	TT8125	x						IC065520173	Price
Style - CNGG 430 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .004									
CNGG 430-ML	K10	x		x	x	x		IC065519350	Price
CNGG 430-ML	TT5080		x			x		IC065523116	Price
Style - CNGG 430.5 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .008									
CNGG 430.5-ML	K10	x		x	x	x		IC065519351	Price
CNGG 430.5-ML	TT5080		x			x		IC065523121	Price
Style - CNGG 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
CNGG 431-ML	K10	x		x	x	x		IC065518012	Price
CNGG 431-ML	TT5080		x			x		IC065523115	Price
Style - CNGG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
CNGG 432-ML	K10	x		x	x	x		IC065517748	Price
CNGG 432-ML	TT5080		x			x		IC065523097	Price
Style - CNMA 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
CNMA 431	TT7005	x		x				IC065523774	Price
CNMA 431	TT7015	x		x				IC065523642	Price
Style - CNMA 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
CNMA 432	TT7005	x		x				IC065523704	Price
CNMA 432	TT7015	x		x				IC065523571	Price
CNMA 432-WT	TT7005	x		x				IC065523775	Price
Style - CNMA 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
CNMA 433	TT7005	x		x				IC065523662	Price
CNMA 433	TT7015	x		x				IC065523545	Price
CNMA 433	TT8115	x						IC065518558	Price
Style - CNMA 434 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .062									
CNMA 434	TT7015	x		x				IC065523572	Price
CNMA 434	TT8115	x						IC065518639	Price
Style - CNMA 543 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .047									
CNMA 543	TT7005	x		x				IC065523778	Price
CNMA 543	TT7015	x		x				IC065523573	Price
Style - CNMA 642 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .031									
CNMA 642	TT7015	x		x				IC065523643	Price
Style - CNMA 643 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .047									
CNMA 643	TT7015	x		x				IC065523644	Price
Style - CNMA 644 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .063									
CNMA 644	TT7015	x		x				IC065523645	Price
Style - CNMG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
CNMG 331-WA	TT8115	x						IC066140007	Price
Style - CNMG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
CNMG 332-WA	TT8115	x						IC066140008	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - CNMG 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
CNMG 431	TT7015	x		x				IC065523574	Price
CNMG 431	TT8020	x	x			x		IC065515714	Price
CNMG 431	TT8115	x						IC065518533	Price
CNMG 431	TT8125	x						IC065519599	Price
CNMG 431-EA	TT5080		x			x		IC065523131	Price
CNMG 431-EA	TT5100	x	x			x		IC065517589	Price
CNMG 431-EA	TT8020	x	x			x		IC065517848	Price
CNMG 431-EA	TT8115	x						IC065518661	Price
CNMG 431-EA	TT8125	x						IC065521667	Price
CNMG 431-EA	TT9225		x			x		IC065521925	Price
CNMG 431-FA	TT5100	x	x			x		IC065517393	Price
CNMG 431-FA	TT8115	x						IC065518656	Price
CNMG 431-FA	TT8125	x						IC065520107	Price
CNMG 431-FC	TT5100	x	x			x		IC065518883	Price
CNMG 431-FC	TT8115	x						IC065518881	Price
CNMG 431-FC	TT8125	x						IC065520269	Price
CNMG 431-FC	TT9215		x			x		IC065520471	Price
CNMG 431-FC	TT9225		x			x		IC065520537	Price
CNMG 431-FC	TT9235		x			x		IC065520606	Price
CNMG 431-FG	TT5100	x	x			x		IC065515006	Price
CNMG 431-FG	TT8115	x						IC065518448	Price
CNMG 431-FG	TT8125	x						IC065519894	Price
CNMG 431-MC	TT8115	x						IC065518620	Price
CNMG 431-MC	TT8125	x						IC065520108	Price
CNMG 431-ML	TT5080		x			x		IC065523049	Price
CNMG 431-ML	TT5100	x	x			x		IC065514762	Price
CNMG 431-ML	TT8020	x	x			x		IC065515256	Price
CNMG 431-ML	TT8115	x						IC065518460	Price
CNMG 431-ML	TT8125	x						IC065519895	Price
CNMG 431-ML	TT9215		x			x		IC065521714	Price
CNMG 431-ML	TT9225		x			x		IC065521715	Price
CNMG 431-MP	TT5080		x			x		IC065523050	Price
CNMG 431-MP	TT5100	x	x			x		IC065514818	Price
CNMG 431-MP	TT8020	x	x			x		IC065515734	Price
CNMG 431-MP	TT8115	x						IC065518469	Price
CNMG 431-MP	TT8125	x						IC065519896	Price
CNMG 431-MP	TT9215		x			x		IC065520472	Price
CNMG 431-MP	TT9225		x			x		IC065520393	Price
CNMG 431-MP	TT9235		x			x		IC065520394	Price
CNMG 431-MT	TT5080		x			x		IC065523051	Price
CNMG 431-MT	TT5100	x	x			x		IC065514822	Price
CNMG 431-MT	TT7005	x		x				IC065523663	Price
CNMG 431-MT	TT7015	x		x				IC065523646	Price
CNMG 431-MT	TT8020	x	x			x		IC065515731	Price
CNMG 431-MT	TT8115	x						IC065518481	Price
CNMG 431-MT	TT8125	x						IC065519618	Price
CNMG 431-PC	TT5100	x	x			x		IC065518845	Price
CNMG 431-PC	TT8115	x						IC065518843	Price
CNMG 431-PC	TT8125	x						IC065519637	Price
CNMG 431-PC	TT9215		x			x		IC065520473	Price
CNMG 431-PC	TT9225		x			x		IC065520538	Price
CNMG 431-PC	TT9235		x			x		IC065520607	Price
CNMG 431-SF	TT5080		x			x		IC065523048	Price
CNMG 431-WS	TT8115	x						IC065518630	Price
CNMG 431-WS	TT8125	x						IC065520243	Price
Style - CNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
CNMG 432	TT7005	x		x				IC065523563	Price
CNMG 432	TT7015	x		x				IC065523542	Price
CNMG 432	TT8020	x	x			x		IC065515702	Price
CNMG 432	TT8115	x						IC065518534	Price
CNMG 432	TT8125	x						IC065519043	Price
CNMG 432-EA	TT5080		x			x		IC065523127	Price
CNMG 432-EA	TT5100	x	x			x		IC065517482	Price
CNMG 432-EA	TT8020	x	x			x		IC065517580	Price

Style - CNMG 432	IC (in.) - 1/2	Thickness (in.) - .187						Radius (in.) - .031	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 432-EA	TT8115	x						IC065518659	Price
CNMG 432-EM	TT9225		x			x		IC065519842	Price
CNMG 432-ET	TT5080		x			x		IC065523129	Price
CNMG 432-ET	TT5100	x	x			x		IC065517478	Price
CNMG 432-ET	TT9215		x			x		IC065520432	Price
CNMG 432-ET	TT9225		x			x		IC065519801	Price
CNMG 432-ET	TT9235		x			x		IC065519802	Price
CNMG 432-FA	TT8115	x						IC065518651	Price
CNMG 432-FA	TT8125	x						IC065520167	Price
CNMG 432-FC	TT5100	x	x			x		IC065518092	Price
CNMG 432-FC	TT8115	x						IC065518269	Price
CNMG 432-FC	TT8125	x						IC065520239	Price
CNMG 432-FC	TT9215		x			x		IC065520430	Price
CNMG 432-FC	TT9225		x			x		IC065520539	Price
CNMG 432-FC	TT9235		x			x		IC065520608	Price
CNMG 432-FG	TT5100	x	x			x		IC065514858	Price
CNMG 432-FG	TT8115	x						IC065518449	Price
CNMG 432-FG	TT8125	x						IC065519897	Price
CNMG 432-MC	TT5100	x	x			x		IC065514795	Price
CNMG 432-MC	TT7015	x		x				IC065523647	Price
CNMG 432-MC	TT7100	x	x					IC065517185	Price
CNMG 432-MC	TT8020	x	x			x		IC065515701	Price
CNMG 432-MC	TT8115	x						IC065518206	Price
CNMG 432-MC	TT8125	x						IC065519044	Price
CNMG 432-ML	TT5080		x			x		IC065523053	Price
CNMG 432-ML	TT5100	x	x			x		IC065514744	Price
CNMG 432-ML	TT8020	x	x			x		IC065514707	Price
CNMG 432-ML	TT8115	x						IC065518461	Price
CNMG 432-ML	TT8125	x						IC065519624	Price
CNMG 432-ML	TT9215		x			x		IC065521716	Price
CNMG 432-ML	TT9225		x			x		IC065520806	Price
CNMG 432-MP	TT5080		x			x		IC065523006	Price
CNMG 432-MP	TT5100	x	x			x		IC065514743	Price
CNMG 432-MP	TT8020	x	x			x		IC065515664	Price
CNMG 432-MP	TT8115	x						IC065518470	Price
CNMG 432-MP	TT8125	x						IC065519600	Price
CNMG 432-MP	TT9215		x			x		IC065520433	Price
CNMG 432-MP	TT9225		x			x		IC065519799	Price
CNMG 432-MP	TT9235		x			x		IC065519800	Price
CNMG 432-MT	TT5080		x			x		IC065523007	Price
CNMG 432-MT	TT5100	x	x			x		IC065514742	Price
CNMG 432-MT	TT7005	x		x				IC065523664	Price
CNMG 432-MT	TT7015	x		x				IC065523575	Price
CNMG 432-MT	TT7100	x	x					IC065516534	Price
CNMG 432-MT	TT8020	x	x			x		IC065514708	Price
CNMG 432-MT	TT8115	x						IC065518204	Price
CNMG 432-MT	TT8125	x						IC065519046	Price
CNMG 432-MT	TT9215		x			x		IC065520431	Price
CNMG 432-MT	TT9225		x			x		IC065519912	Price
CNMG 432-MT	TT9235		x			x		IC065520609	Price
CNMG 432-PC	TT5100	x	x			x		IC065518846	Price
CNMG 432-PC	TT8115	x						IC065518202	Price
CNMG 432-PC	TT8125	x						IC065519045	Price
CNMG 432-PC	TT9215		x			x		IC065520474	Price
CNMG 432-PC	TT9225		x			x		IC065520540	Price
CNMG 432-PC	TT9235		x			x		IC065520610	Price
CNMG 432-RT	TT5100	x	x			x		IC065515012	Price
CNMG 432-RT	TT7015	x		x				IC065523577	Price
CNMG 432-RT	TT7100	x	x					IC065516780	Price
CNMG 432-RT	TT8115	x						IC065518496	Price
CNMG 432-RT	TT8125	x						IC065519633	Price
CNMG 432-RT	TT9215		x			x		IC065520475	Price
CNMG 432-RT	TT9225		x			x		IC065520541	Price
CNMG 432-RT	TT9235		x			x		IC065520611	Price
CNMG 432-SF	TT5080		x			x		IC065523052	Price

Style - CNMG 432	IC (in.) - 1/2	Thickness (in.) - .187						Radius (in.) - .031	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 432-SF	TT8125	x						IC065520187	Price
CNMG 432-WT	TT5080		x			x		IC065523142	Price
CNMG 432-WT	TT5100	x	x			x		IC065514945	Price
CNMG 432-WT	TT7005	x		x				IC065523784	Price
CNMG 432-WT	TT7015	x		x				IC065523648	Price
CNMG 432-WT	TT8115	x						IC065518615	Price
CNMG 432-WT	TT8125	x						IC065520165	Price
CNMG 432-WT	TT9215		x			x		IC065520989	Price
Style - CNMG 433	**IC (in.) - 1/2**	**Thickness (in.) - .187**						**Radius (in.) - .047**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 433	TT7015	x		x				IC065523616	Price
CNMG 433	TT8115	x						IC065518535	Price
CNMG 433	TT8125	x						IC065520104	Price
CNMG 433-ET	TT5080		x			x		IC065523143	Price
CNMG 433-ET	TT8115	x						IC065518210	Price
CNMG 433-ET	TT9215		x			x		IC065520437	Price
CNMG 433-ET	TT9225		x			x		IC065519805	Price
CNMG 433-ET	TT9235		x			x		IC065519806	Price
CNMG 433-FC	TT8125	x						IC065519669	Price
CNMG 433-FC	TT9215		x			x		IC065520435	Price
CNMG 433-FC	TT9225		x			x		IC065520542	Price
CNMG 433-FC	TT9235		x			x		IC065520612	Price
CNMG 433-MC	TT8115	x						IC065518207	Price
CNMG 433-ML	TT5080		x			x		IC065523082	Price
CNMG 433-ML	TT8115	x						IC065518674	Price
CNMG 433-MP	TT5080		x			x		IC065523018	Price
CNMG 433-MP	TT5100	x	x			x		IC065514887	Price
CNMG 433-MP	TT8115	x						IC065518471	Price
CNMG 433-MP	TT9215		x			x		IC065520436	Price
CNMG 433-MP	TT9225		x			x		IC065519803	Price
CNMG 433-MP	TT9235		x			x		IC065519804	Price
CNMG 433-MT	TT5080		x			x		IC065523008	Price
CNMG 433-MT	TT5100	x	x			x		IC065514886	Price
CNMG 433-MT	TT7005	x		x				IC065523763	Price
CNMG 433-MT	TT7015	x		x				IC065523617	Price
CNMG 433-MT	TT7100	x	x					IC065517269	Price
CNMG 433-MT	TT8020	x	x			x		IC065515532	Price
CNMG 433-MT	TT8115	x						IC065518209	Price
CNMG 433-MT	TT8125	x						IC065519049	Price
CNMG 433-MT	TT9215		x			x		IC065520476	Price
CNMG 433-MT	TT9225		x			x		IC065520543	Price
CNMG 433-MT	TT9235		x			x		IC065520613	Price
CNMG 433-PC	TT5100	x	x			x		IC065518290	Price
CNMG 433-PC	TT8115	x						IC065518262	Price
CNMG 433-PC	TT8125	x						IC065519048	Price
CNMG 433-PC	TT9215		x			x		IC065520434	Price
CNMG 433-PC	TT9225		x			x		IC065520544	Price
CNMG 433-PC	TT9235		x			x		IC065520614	Price
CNMG 433-RT	TT5100	x	x			x		IC065515013	Price
CNMG 433-RT	TT7005	x		x				IC065523709	Price
CNMG 433-RT	TT7015	x		x				IC065523539	Price
CNMG 433-RT	TT7100	x	x					IC065517740	Price
CNMG 433-RT	TT8115	x						IC065518497	Price
CNMG 433-RT	TT8125	x						IC065519622	Price
CNMG 433-RT	TT9215		x			x		IC065520477	Price
CNMG 433-RT	TT9225		x			x		IC065519807	Price
CNMG 433-RT	TT9235		x			x		IC065519808	Price
CNMG 433-WT	TT5100	x	x			x		IC065514951	Price
CNMG 433-WT	TT8115	x						IC065518624	Price
CNMG 433-WT	TT8125	x						IC065520266	Price
Style - CNMG 434	**IC (in.) - 1/2**	**Thickness (in.) - .187**						**Radius (in.) - .062**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 434-PC	TT5100	x	x			x		IC065518915	Price
CNMG 434-PC	TT8115	x						IC065518914	Price
CNMG 434-PC	TT8125	x						IC065519638	Price

Style - CNMG 434	IC (in.) - 1/2	Thickness (in.) - .187						Radius (in.) - .062	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 434-RT	TT7015	x		x				IC065523649	Price
CNMG 434-RT	TT8115	x						IC065518268	Price
CNMG 434-RT	TT8125	x						IC065520933	Price
Style - CNMG 542	**IC (in.) - 5/8**	**Thickness (in.) - .250**						**Radius (in.) - .031**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 542	TT5100	x	x			x		IC065515009	Price
CNMG 542	TT8115	x						IC065518536	Price
CNMG 542	TT8125	x						IC065519898	Price
CNMG 542-MT	TT7005	x		x				IC065523786	Price
CNMG 542-MT	TT8125	x						IC065520106	Price
CNMG 542-PC	TT8125	x						IC065519536	Price
Style - CNMG 543	**IC (in.) - 5/8**	**Thickness (in.) - .250**						**Radius (in.) - .047**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 543	TT8125	x						IC065520255	Price
CNMG 543-ET	TT5080		x			x		IC065523141	Price
CNMG 543-ET	TT5100	x	x			x		IC065517867	Price
CNMG 543-ET	TT9215		x			x		IC065520478	Price
CNMG 543-ET	TT9225		x			x		IC065520545	Price
CNMG 543-ET	TT9235		x			x		IC065520615	Price
CNMG 543-MT	TT5080		x			x		IC065523019	Price
CNMG 543-MT	TT5100	x	x			x		IC065515314	Price
CNMG 543-MT	TT7015	x		x				IC065523650	Price
CNMG 543-MT	TT8020	x	x			x		IC065515896	Price
CNMG 543-MT	TT8115	x						IC065518686	Price
CNMG 543-MT	TT8125	x						IC065519559	Price
CNMG 543-PC	TT8115	x						IC065519508	Price
CNMG 543-PC	TT8125	x						IC065519509	Price
CNMG 543-RT	TT5080		x			x		IC065523479	Price
CNMG 543-RT	TT5100	x	x			x		IC065515015	Price
CNMG 543-RT	TT7015	x		x				IC065523618	Price
CNMG 543-RT	TT7100	x	x					IC065516779	Price
CNMG 543-RT	TT8115	x						IC065518498	Price
CNMG 543-RT	TT8125	x						IC065519560	Price
Style - CNMG 544	**IC (in.) - 5/8**	**Thickness (in.) - .250**						**Radius (in.) - .062**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 544-PC	TT8125	x						IC065519818	Price
CNMG 544-RT	TT7015	x		x				IC065523634	Price
CNMG 544-RT	TT8125	x						IC065520254	Price
Style - CNMG 642	**IC (in.) - 3/4**	**Thickness (in.) - .250**						**Radius (in.) - .031**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 642	TT7015	x		x				IC065523651	Price
CNMG 642	TT7100	x	x					IC065517812	Price
CNMG 642-MT	TT5080		x			x		IC065523123	Price
CNMG 642-MT	TT8115	x						IC065518687	Price
CNMG 642-MT	TT8125	x						IC065519233	Price
CNMG 642-MT	TT9215		x			x		IC065520479	Price
CNMG 642-MT	TT9225		x			x		IC065520546	Price
CNMG 642-MT	TT9235		x			x		IC065520616	Price
CNMG 642-PC	TT8125	x						IC065519513	Price
CNMG 642-RT	TT8125	x						IC065520233	Price
Style - CNMG 643	**IC (in.) - 3/4**	**Thickness (in.) - .250**						**Radius (in.) - .047**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 643	TT8115	x						IC065518538	Price
CNMG 643	TT8125	x						IC065519630	Price
CNMG 643-ET	TT5080		x			x		IC065523138	Price
CNMG 643-ET	TT9215		x			x		IC065520480	Price
CNMG 643-ET	TT9225		x			x		IC065520547	Price
CNMG 643-ET	TT9235		x			x		IC065520617	Price
CNMG 643-ML	TT5080		x			x		IC065523157	Price
CNMG 643-MT	TT5080		x			x		IC065523117	Price
CNMG 643-MT	TT5100	x	x			x		IC065515313	Price
CNMG 643-MT	TT8020	x	x			x		IC065515898	Price
CNMG 643-MT	TT8115	x						IC065518631	Price
CNMG 643-MT	TT8125	x						IC065519631	Price
CNMG 643-MT	TT9225		x			x		IC065520548	Price

Style - CNMG 643	IC (in.) - 3/4	Thickness (in.) - .250						Radius (in.) - .047	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 643-MT	TT9235		x			x		IC065520618	Price
CNMG 643-PC	TT8125	x						IC065519515	Price
CNMG 643-RT	TT5080		x			x		IC065523083	Price
CNMG 643-RT	TT7015	x		x				IC065523619	Price
CNMG 643-RT	TT7100	x	x					IC065517374	Price
CNMG 643-RT	TT8125	x						IC065519899	Price
CNMG 643-RT	TT9225		x			x		IC065520549	Price
CNMG 643-RT	TT9235		x			x		IC065520619	Price
Style - CNMG 644	**IC (in.) - 3/4**	**Thickness (in.) - .250**						**Radius (in.) - .062**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 644	TT8125	x						IC065519729	Price
CNMG 644-ET	TT5080		x			x		IC065523139	Price
CNMG 644-ET	TT9225		x			x		IC065520550	Price
CNMG 644-ET	TT9235		x			x		IC065520620	Price
CNMG 644-MT	TT8125	x						IC065522090	Price
CNMG 644-RT	TT7015	x		x				IC065523679	Price
CNMG 644-RT	TT8125	x						IC065520116	Price
Style - CPMT 21.51	**IC (in.) - 1/4**	**Thickness (in.) - .094**						**Radius (in.) - .016**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CPMT 21.51-PC	TT5080		x			x		IC065523145	Price
CPMT 21.51-PC	TT5100	x	x			x		IC065518158	Price
Style - CPMT 21.52	**IC (in.) - 1/4**	**Thickness (in.) - .094**						**Radius (in.) - .031**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CPMT 21.52-PC	TT5080		x			x		IC065523146	Price
CPMT 21.52-PC	TT5100	x	x			x		IC065518160	Price
Style - CPMT 32.51	**IC (in.) - 3/8**	**Thickness (in.) - .156**						**Radius (in.) - .016**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CPMT 32.51-PC	TT5080		x			x		IC065523147	Price
CPMT 32.51-PC	TT5100	x	x			x		IC065518162	Price
CPMT 32.51-PC	TT7015	x		x				IC066116290	Price
CPMT 32.51-PC	TT8125	x						IC065521208	Price
Style - CPMT 32.52	**IC (in.) - 3/8**	**Thickness (in.) - .156**						**Radius (in.) - .031**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CPMT 32.52-PC	TT5080		x			x		IC065523148	Price
CPMT 32.52-PC	TT5100	x	x			x		IC065518164	Price
CPMT 32.52-PC	TT7005	x		x				IC066116291	Price
CPMT 32.52-PC	TT7015	x		x				IC066116292	Price
CPMT 32.52-PC	TT8125	x						IC065521210	Price
Style - DCET 21.50	**IC (in.) - 1/4**	**Thickness (in.) - .094**						**Radius (in.) - .004**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCET 21.50R-GF	TT9020	x	x			x		IC065517338	Price
Style - DCET 21.50.5	**IC (in.) - 1/4**	**Thickness (in.) - .094**						**Radius (in.) - .008**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCET 21.50.5R-GF	TT9020	x	x			x		IC065517340	Price
Style - DCET 21.51	**IC (in.) - 1/4**	**Thickness (in.) - .094**						**Radius (in.) - .016**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCET 21.51L-GF	TT9020	x	x			x		IC065519574	Price
DCET 21.51R-GF	TT9020	x	x			x		IC065517342	Price
Style - DCET 21.52	**IC (in.) - 1/4**	**Thickness (in.) - .094**						**Radius (in.) - .031**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCET 21.52L-GF	TT9020	x	x			x		IC065519577	Price
Style - DCET 21.5X0	**IC (in.) - 1/4**	**Thickness (in.) - .094**						**Radius (in.) - .001**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCET 21.5X0R-GW	TT9020	x	x			x		IC065517986	Price
Style - DCET 32.50	**IC (in.) - 3/8**	**Thickness (in.) - .156**						**Radius (in.) - .004**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCET 32.50R-GF	TT9020	x	x			x		IC065517344	Price
Style - DCET 32.50.5	**IC (in.) - 3/8**	**Thickness (in.) - .156**						**Radius (in.) - .008**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCET 32.50.5R-GF	TT9020	x	x			x		IC065517346	Price
Style - DCET 32.51	**IC (in.) - 3/8**	**Thickness (in.) - .156**						**Radius (in.) - .016**	
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCET 32.51L-GF	TT9020	x	x			x		IC065517349	Price
DCET 32.51R-GF	TT9020	x	x			x		IC065517348	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - DCET 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
DCET 32.52L-GF	TT9020	x	x			x		IC065519578	Price
Style - DCET 32.5X0 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .001									
DCET 32.5X0R-GW	TT9020	x	x			x		IC065517503	Price
Style - DCGT 21.50.5 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .008									
DCGT 21.50.5-SA	TT9020	x	x			x		IC065519913	Price
Style - DCGT 21.51 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .016									
DCGT 21.51-SA	TT9020	x	x			x		IC065520880	Price
Style - DCGT 32.50 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .004									
DCGT 32.50-SA	TT5080		x			x		IC065523210	Price
DCGT 32.50-SA	TT9020	x	x			x		IC065519889	Price
Style - DCGT 32.50.5 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .008									
DCGT 32.50.5-SA	TT5080		x			x		IC065523211	Price
DCGT 32.50.5-SA	TT9020	x	x			x		IC065519883	Price
DCGT 32.50.5-SA	TT9080		x			x		IC065522297	Price
Style - DCGT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
DCGT 32.51-SA	TT5080		x			x		IC065523212	Price
DCGT 32.51-SA	TT9020	x	x			x		IC065520882	Price
DCGT 32.51-SA	TT9080		x			x		IC065522298	Price
Style - DCMT 21.50.5 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .008									
DCMT 21.50.5-FA	TT5100	x	x			x		IC065516487	Price
Style - DCMT 21.51 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .016									
DCMT 21.51-FG	TT5100	x	x			x		IC065514893	Price
DCMT 21.51-FG	TT8020	x	x			x		IC065515718	Price
DCMT 21.51-FG	TT8115	x						IC065518517	Price
DCMT 21.51-FG	TT8125	x						IC065519625	Price
DCMT 21.51-FG	TT9235		x			x		IC065520622	Price
Style - DCMT 21.52 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .031									
DCMT 21.52-FG	TT5100	x	x			x		IC065517966	Price
DCMT 21.52-FG	TT8125	x						IC065520137	Price
DCMT 21.52-FG	TT9225		x			x		IC065520554	Price
Style - DCMT 32.50.5 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .008									
DCMT 32.50.5-FA	TT5100	x	x			x		IC065515755	Price
DCMT 32.50.5-FA	TT9215		x			x		IC065520465	Price
Style - DCMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
DCMT 32.51-FG	TT5100	x	x			x		IC065515100	Price
DCMT 32.51-FG	TT8115	x						IC065519869	Price
DCMT 32.51-FG	TT8125	x						IC065519626	Price
DCMT 32.51-FG	TT9215		x			x		IC065520466	Price
DCMT 32.51-FG	TT9225		x			x		IC065520555	Price
DCMT 32.51-FG	TT9235		x			x		IC065520623	Price
DCMT 32.51-MT	TT5100	x	x			x		IC065514723	Price
DCMT 32.51-MT	TT8020	x	x			x		IC065515707	Price
DCMT 32.51-MT	TT8115	x						IC065518604	Price
DCMT 32.51-MT	TT8125	x						IC065519604	Price
DCMT 32.51-MT	TT9225		x			x		IC065520556	Price
DCMT 32.51-MT	TT9235		x			x		IC065520624	Price
Style - DCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
DCMT 32.52-FG	TT5100	x	x			x		IC065515101	Price
DCMT 32.52-FG	TT8115	x						IC065518518	Price
DCMT 32.52-FG	TT8125	x						IC065519903	Price
DCMT 32.52-FG	TT9225		x			x		IC065520285	Price
DCMT 32.52-FG	TT9235		x			x		IC065520625	Price
DCMT 32.52-MT	TT8020	x	x			x		IC065515258	Price
DCMT 32.52-MT	TT8115	x						IC065518607	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - DCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
DCMT 32.52-MT	TT8125	x						IC065519615	Price
DCMT 32.52-MT	TT9225		x			x		IC065520557	Price
DCMT 32.52-MT	TT9235		x			x		IC065520626	Price
Style - DCMT 32.53 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .047									
DCMT 32.53-MT	TT5100	x	x			x		IC065515264	Price
Style - DNGG 430 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .004									
DNGG 430-ML	K10	x		x	x	x		IC065522692	Price
DNGG 430-ML	TT5080		x			x		IC065523190	Price
Style - DNGG 430.5 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .008									
DNGG 430.5-ML	TT5080		x			x		IC065523191	Price
Style - DNGG 4305 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .008									
DNGG 430.5-ML	K10	x		x	x	x		IC065522693	Price
Item No.	**Grade**	**ST**	**SS**	**CI**	**N**	**S**	**H**	**Order No.**	**Price**
DNGG 431-ML	K10	x		x	x	x		IC065518013	Price
DNGG 431-ML	TT5080		x			x		IC065523124	Price
Style - DNGG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
DNGG 432-ML	K10	x		x	x	x		IC065518014	Price
DNGG 432-ML	TT5080		x			x		IC065523114	Price
Style - DNMA 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
DNMA 432	TT7005	x		x				IC065523796	Price
DNMA 432	TT7015	x		x				IC065523682	Price
Style - DNMA 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
DNMA 433	TT7015	x		x				IC065523635	Price
Style - DNMG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
DNMG 331-FG	TT5080		x			x		IC065523084	Price
DNMG 331-FG	TT5100	x	x			x		IC065514957	Price
DNMG 331-FG	TT8115	x						IC065518613	Price
DNMG 331-FG	TT8125	x						IC065520142	Price
Style - DNMG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
DNMG 332-FC	TT8115	x						IC065521037	Price
DNMG 332-FC	TT8125	x						IC065521038	Price
DNMG 332-FC	TT9225		x			x		IC065521039	Price
DNMG 332-FG	TT5080		x			x		IC065523077	Price
DNMG 332-FG	TT5100	x	x			x		IC065514958	Price
DNMG 332-FG	TT8115	x						IC065518457	Price
DNMG 332-FG	TT8125	x						IC065520175	Price
DNMG 332-MT	TT5080		x			x		IC065523128	Price
DNMG 332-MT	TT5100	x	x			x		IC065514959	Price
DNMG 332-MT	TT7005	x		x				IC065523799	Price
DNMG 332-MT	TT7015	x		x				IC065523585	Price
DNMG 332-MT	TT8115	x						IC065518627	Price
DNMG 332-MT	TT8125	x						IC065519904	Price
DNMG 332-PC	TT8125	x						IC065519540	Price
Style - DNMG 35.35.1 IC (in.) - .438 Thickness (in.) - .219 Radius (in.) - .016									
Item No.	**Grade**	**ST**	**SS**	**CI**	**N**	**S**	**H**	**Order No.**	**Price**
DNMG3.53.51-WA	TT8115	x						IC066140009	Price
Style - DNMG 35.35.2 IC (in.) - .438 Thickness (in.) - .219 Radius (in.) - .031									
Item No.	**Grade**	**ST**	**SS**	**CI**	**N**	**S**	**H**	**Order No.**	**Price**
DNMG3.53.52-WA	TT8115	x						IC066140010	Price
Style - DNMG 35.35.3 IC (in.) - .438 Thickness (in.) - .219 Radius (in.) - .047									
Item No.	**Grade**	**ST**	**SS**	**CI**	**N**	**S**	**H**	**Order No.**	**Price**
DNMG3.53.53-WA	TT8115	x						IC066161214	Price

Style - DNMG 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 431	TT8125	x						IC065520197	Price
DNMG 431-FC	TT5100	x	x			x		IC065518995	Price
DNMG 431-FC	TT8115	x						IC065518993	Price
DNMG 431-FC	TT8125	x						IC065520275	Price
DNMG 431-FC	TT9225		x			x		IC065520558	Price
DNMG 431-FG	TT5100	x	x			x		IC065514970	Price
DNMG 431-FG	TT8115	x						IC065518734	Price
DNMG 431-FG	TT8125	x						IC065520225	Price
DNMG 431-ML	TT5080		x			x		IC065523080	Price
DNMG 431-ML	TT5100	x	x			x		IC065515236	Price
DNMG 431-ML	TT8115	x						IC065518735	Price
DNMG 431-ML	TT8125	x						IC065520226	Price
DNMG 431-ML	TT9215		x			x		IC065521717	Price
DNMG 431-ML	TT9225		x			x		IC065521718	Price
DNMG 431-MP	TT5080		x			x		IC065523057	Price
DNMG 431-MP	TT5100	x	x			x		IC065514971	Price
DNMG 431-MP	TT8020	x	x			x		IC065516644	Price
DNMG 431-MP	TT8115	x						IC065518737	Price
DNMG 431-MP	TT9215		x			x		IC065520978	Price
DNMG 431-MP	TT9225		x			x		IC065520559	Price
DNMG 431-MT	TT5100	x	x			x		IC065514972	Price
DNMG 431-MT	TT7015	x		x				IC065523686	Price
DNMG 431-MT	TT8115	x						IC065518739	Price
DNMG 431-MT	TT8125	x						IC065520166	Price
DNMG 431-PC	TT5100	x	x			x		IC065518849	Price
DNMG 431-PC	TT8115	x						IC065518847	Price
DNMG 431-PC	TT8125	x						IC065519639	Price
DNMG 431-PC	TT9215		x			x		IC065520979	Price
DNMG 431-PC	TT9225		x			x		IC065520560	Price
DNMG 431-RVF	TT5080		x			x		IC065523155	Price
DNMG 431-RVF	TT5100	x	x			x		IC065517279	Price
DNMG 431-RVF	TT8125	x						IC065520216	Price
Style - DNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 432	TT7015	x		x				IC065523687	Price
DNMG 432	TT8125	x						IC065520205	Price
DNMG 432-FA	TT5100	x	x			x		IC065517720	Price
DNMG 432-FA	TT8115	x						IC065518660	Price
DNMG 432-FC	TT5100	x	x			x		IC065518868	Price
DNMG 432-FC	TT8115	x						IC065518866	Price
DNMG 432-FC	TT8125	x						IC065519940	Price
DNMG 432-FC	TT9215		x			x		IC065520980	Price
DNMG 432-FC	TT9225		x			x		IC065520561	Price
DNMG 432-FG	TT5100	x	x			x		IC065515026	Price
DNMG 432-FG	TT8115	x						IC065518611	Price
DNMG 432-FG	TT8125	x						IC065519905	Price
DNMG 432-LVF	TT5080		x			x		IC065523168	Price
DNMG 432-LVF	TT8115	x						IC065518657	Price
DNMG 432-MC	TT5100	x	x			x		IC065514871	Price
DNMG 432-MC	TT8115	x						IC065518621	Price
DNMG 432-MC	TT8125	x						IC065520211	Price
DNMG 432-ML	TT5080		x			x		IC065523100	Price
DNMG 432-ML	TT5100	x	x			x		IC065514864	Price
DNMG 432-ML	TT8020	x	x			x		IC065516645	Price
DNMG 432-ML	TT8115	x						IC065518736	Price
DNMG 432-ML	TT8125	x						IC065520249	Price
DNMG 432-ML	TT9215		x			x		IC065521719	Price
DNMG 432-ML	TT9225		x			x		IC065521720	Price
DNMG 432-MP	TT5080		x			x		IC065523059	Price
DNMG 432-MP	TT5100	x	x			x		IC065514973	Price
DNMG 432-MP	TT8020	x	x			x		IC065515251	Price
DNMG 432-MP	TT8115	x						IC065518738	Price
DNMG 432-MP	TT9215		x			x		IC065520983	Price
DNMG 432-MP	TT9225		x			x		IC065520984	Price
DNMG 432-MP	TT9235		x			x		IC065520985	Price

Style - DNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 432-MT	TT5080		x			x		IC065523112	Price
DNMG 432-MT	TT5100	x	x			x		IC065515029	Price
DNMG 432-MT	TT7005	x		x				IC065523803	Price
DNMG 432-MT	TT7015	x		x				IC065523586	Price
DNMG 432-MT	TT8020	x	x			x		IC065516647	Price
DNMG 432-MT	TT8115	x						IC065518612	Price
DNMG 432-MT	TT8125	x						IC065519916	Price
DNMG 432-MT	TT9215		x			x		IC065520986	Price
DNMG 432-MT	TT9225		x			x		IC065520987	Price
DNMG 432-MT	TT9235		x			x		IC065520988	Price
DNMG 432-PC	TT5100	x	x			x		IC065518853	Price
DNMG 432-PC	TT8115	x						IC065518851	Price
DNMG 432-PC	TT8125	x						IC065519641	Price
DNMG 432-PC	TT9215		x			x		IC065520981	Price
DNMG 432-PC	TT9225		x			x		IC065520562	Price
DNMG 432-PC	TT9235		x			x		IC065520982	Price
DNMG 432-RT	TT5100	x	x			x		IC065514974	Price
DNMG 432-RT	TT7005	x		x				IC065523804	Price
DNMG 432-RT	TT7015	x		x				IC065523637	Price
DNMG 432-RT	TT8115	x						IC065518742	Price
DNMG 432-RVF	TT5080		x			x		IC065523156	Price
DNMG 432-RVF	TT8115	x						IC065518658	Price
DNMG 432-RVF	TT8125	x						IC065520217	Price
Style - DNMG 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 433-FG	TT8115	x						IC065519204	Price
DNMG 433-FG	TT8125	x						IC065519941	Price
DNMG 433-MC	TT8115	x						IC065519205	Price
DNMG 433-MT	TT5100	x	x			x		IC065514975	Price
DNMG 433-MT	TT8115	x						IC065518740	Price
DNMG 433-PC	TT5100	x	x			x		IC065518857	Price
DNMG 433-PC	TT8115	x						IC065518855	Price
DNMG 433-PC	TT8125	x						IC065519642	Price
DNMG 433-RT	TT7015	x		x				IC065523689	Price
DNMG 433-RT	TT8125	x						IC065520869	Price
DNMG 433-WT	TT8115	x						IC065518755	Price
Style - DNMG 441 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 441-MT	TT5080		x			x		IC065523056	Price
DNMG 441-MT	TT8125	x						IC065519619	Price
Style - DNMG 442 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 442-MT	TT5080		x			x		IC065523010	Price
DNMG 442-MT	TT7015	x		x				IC065523589	Price
DNMG 442-MT	TT8125	x						IC065519052	Price
Style - DNMG 443 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 443-MT	TT5080		x			x		IC065523011	Price
DNMG 443-MT	TT7015	x		x				IC065523692	Price
DNMG 443-MT	TT8125	x						IC065519922	Price
DNMG 443-RT	TT7015	x		x				IC065523620	Price
Style - SCMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SCMT 32.51-FG	TT9225		x			x		IC065520570	Price
SCMT 32.51-MT	TT7015	x		x				IC065523702	Price
SCMT 32.51-MT	TT8020	x	x			x		IC065515736	Price
SCMT 32.51-MT	TT8115	x						IC065518532	Price
SCMT 32.51-MT	TT8125	x						IC065519929	Price
SCMT 32.51-MT	TT9225		x			x		IC065520571	Price
Style - SCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SCMT 32.52-FG	TT5080		x			x		IC065523036	Price
SCMT 32.52-FG	TT5100	x	x			x		IC065515104	Price
SCMT 32.52-FG	TT8125	x						IC065520156	Price
SCMT 32.52-FG	TT9225		x			x		IC065520572	Price

Style - SCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SCMT 32.52-MT	TT5080		x			x		IC065523037	Price
SCMT 32.52-MT	TT5100	x	x			x		IC065514741	Price
SCMT 32.52-MT	TT7015	x		x				IC065523621	Price
SCMT 32.52-MT	TT7100	x	x					IC065517813	Price
SCMT 32.52-MT	TT8020	x	x			x		IC065515729	Price
SCMT 32.52-MT	TT8115	x						IC065518605	Price
SCMT 32.52-MT	TT8125	x						IC065519481	Price
SCMT 32.52-MT	TT9225		x			x		IC065520573	Price
Style - SCMT 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SCMT 431-MT	TT5100	x	x			x		IC065514808	Price
SCMT 431-MT	TT8125	x						IC065520131	Price
Style - SCMT 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SCMT 432-MT	TT5080		x			x		IC065523038	Price
SCMT 432-MT	TT5100	x	x			x		IC065514929	Price
SCMT 432-MT	TT7015	x		x				IC065523639	Price
SCMT 432-MT	TT8020	x	x			x		IC065515712	Price
SCMT 432-MT	TT8115	x						IC065518599	Price
SCMT 432-MT	TT8125	x						IC065519483	Price
SCMT 432-MT	TT9225		x			x		IC065520574	Price
SCMT 432-MT	TT9235		x			x		IC065520874	Price
Style - SCMT 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SCMT 433-MT	TT8125	x						IC065520207	Price
Style - SNMA 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMA 432	TT7005	x		x				IC065523765	Price
SNMA 432	TT7015	x		x				IC065523593	Price
Style - SNMA 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMA 433	TT7005	x		x				IC065523766	Price
SNMA 433	TT7015	x		x				IC065523594	Price
Style - SNMA 434 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .063									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMA 434	TT7015	x		x				IC065523705	Price
Style - SNMA 544 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .063									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMA 544	TT7015	x		x				IC065523706	Price
Style - SNMA 643 IC (in.) - 3/4 Thickness (in.) - .250 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMA 643	TT7005	x		x				IC065523821	Price
SNMA 643	TT7015	x		x				IC065523707	Price
Style - SNMA 644 IC (in.) - 3/4 Thickness (in.) - .250 Radius (in.) - .063									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMA 644	TT7015	x		x				IC065523840	Price
Style - SNMG 322 IC (in.) - 3/8 Thickness (in.) - .125 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 322-FG	TT9215		x			x		IC065520759	Price
Style - SNMG 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 431	TT7015	x		x				IC065523710	Price
SNMG 431	TT8115	x						IC065518544	Price
SNMG 431-MP	TT5100	x	x			x		IC065515048	Price
SNMG 431-MP	TT8125	x						IC065520248	Price
SNMG 431-MT	TT8125	x						IC065520151	Price
SNMG 431-PC	TT8125	x						IC065519542	Price
Style - SNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 432	TT5100	x	x			x		IC065514832	Price
SNMG 432	TT7015	x		x				IC065523595	Price
SNMG 432	TT8125	x						IC065519601	Price
SNMG 432-FG	TT8115	x						IC065518456	Price
SNMG 432-FG	TT8125	x						IC065519932	Price
SNMG 432-MC	TT8125	x						IC065520121	Price
SNMG 432-ML	TT5100	x	x			x		IC065515046	Price

Style - SNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 432-ML	TT8020	x	x			x		IC065515315	Price
SNMG 432-ML	TT8115	x						IC065518466	Price
SNMG 432-MP	TT5080		x			x		IC065523060	Price
SNMG 432-MP	TT8125	x						IC065519231	Price
SNMG 432-MP	TT9215		x			x		IC065520760	Price
SNMG 432-MP	TT9225		x			x		IC065520452	Price
SNMG 432-MP	TT9235		x			x		IC065520462	Price
SNMG 432-MT	TT5080		x			x		IC065523021	Price
SNMG 432-MT	TT5100	x	x			x		IC065514825	Price
SNMG 432-MT	TT7015	x		x				IC065523622	Price
SNMG 432-MT	TT8020	x	x			x		IC065515533	Price
SNMG 432-MT	TT8115	x						IC065518491	Price
SNMG 432-MT	TT8125	x						IC065519054	Price
SNMG 432-MT	TT9225		x			x		IC065520453	Price
SNMG 432-MT	TT9235		x			x		IC065520463	Price
SNMG 432-PC	TT8115	x						IC065518266	Price
SNMG 432-PC	TT8125	x						IC065519643	Price
SNMG 432-PC	TT9225		x			x		IC065520575	Price
SNMG 432-RT	TT7015	x		x				IC065523596	Price
SNMG 432-RT	TT8020	x	x			x		IC065515628	Price
SNMG 432-RT	TT8115	x						IC065518503	Price
Style - SNMG 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 433	TT7015	x		x				IC065523711	Price
SNMG 433-MP	TT5080		x			x		IC065523086	Price
SNMG 433-MP	TT9225		x			x		IC065520576	Price
SNMG 433-MT	TT5080		x			x		IC065523022	Price
SNMG 433-MT	TT5100	x	x			x		IC065515051	Price
SNMG 433-MT	TT7005	x		x				IC065523825	Price
SNMG 433-MT	TT8020	x	x			x		IC065515530	Price
SNMG 433-MT	TT8115	x						IC065518211	Price
SNMG 433-MT	TT8125	x						IC065519623	Price
SNMG 433-MT	TT9215		x			x		IC065521990	Price
SNMG 433-MT	TT9225		x			x		IC065520577	Price
SNMG 433-PC	TT8125	x						IC065519517	Price
SNMG 433-PC	TT9225		x			x		IC065520578	Price
SNMG 433-RT	TT7015	x		x				IC065523540	Price
SNMG 433-RT	TT8115	x						IC065518692	Price
SNMG 433-RT	TT9215		x			x		IC065521991	Price
SNMG 433-RT	TT9235		x			x		IC065520355	Price
Style - SNMG 434 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .063									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 434	TT8125	x						IC065520134	Price
SNMG 434-RT	TT8125	x						IC065521359	Price
Style - SNMG 542 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 542	TT8125	x						IC065520164	Price
SNMG 542-MP	TT8115	x						IC065518726	Price
Style - SNMG 543 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 543	TT8125	x						IC065520204	Price
SNMG 543-RT	TT8020	x	x			x		IC065516941	Price
SNMG 543-RT	TT8125	x						IC065521539	Price
Style - SNMG 544 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .063									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 544	TT5100	x	x			x		IC065516175	Price
Style - SNMG 641 IC (in.) - 3/4 Thickness (in.) - .250 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 641	TT8125	x						IC065520253	Price
Style - SNMG 642 IC (in.) - 3/4 Thickness (in.) - .250 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 642	TT7015	x		x				IC065523712	Price
SNMG 642-MT	TT8125	x						IC065520148	Price
SNMG 642-MT	TT9225		x			x		IC065520579	Price
SNMG 642-MT	TT9235		x			x		IC065520633	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - SNMG 643 IC (in.) - 3/4 Thickness (in.) - .250 Radius (in.) - .047									
SNMG 643	TT7015	x		x				IC065523844	Price
SNMG 643	TT8115	x						IC065518548	Price
SNMG 643	TT8125	x						IC065519935	Price
SNMG 643-MT	TT5100	x	x			x		IC065515861	Price
SNMG 643-MT	TT8020	x	x			x		IC065515862	Price
SNMG 643-MT	TT8125	x						IC065520111	Price
SNMG 643-MT	TT9225		x			x		IC065520580	Price
SNMG 643-MT	TT9235		x			x		IC065520634	Price
SNMG 643-RT	TT5080		x			x		IC065523087	Price
SNMG 643-RT	TT5100	x	x			x		IC065515209	Price
SNMG 643-RT	TT8115	x						IC065518504	Price
SNMG 643-RT	TT8125	x						IC065520179	Price
SNMG 643-RT	TT9215		x			x		IC065522010	Price
SNMG 643-RT	TT9225		x			x		IC065520581	Price
SNMG 643-RT	TT9235		x			x		IC065520635	Price
Style - SNMG 644 IC (in.) - 3/4 Thickness (in.) - .250 Radius (in.) - .063									
SNMG 644-RT	TT5080		x			x		IC065523076	Price
SNMG 644-RT	TT8115	x						IC065518634	Price
SNMG 644-RT	TT9225		x			x		IC065520582	Price
SNMG 644-RT	TT9235		x			x		IC065520636	Price
Style - TCET 220 IC (in.) - 1/4 Thickness (in.) - .187 Radius (in.) - .004									
TCET 220-RGF	TT9020	x	x			x		IC065517350	Price
Style - TCET 220.5 IC (in.) - 1/4 Thickness (in.) - .187 Radius (in.) - .008									
TCET 220.5-RGF	TT9020	x	x			x		IC065517622	Price
Style - TCET 221 IC (in.) - 1/4 Thickness (in.) - .187 Radius (in.) - .016									
TCET 221-RGF	TT9020	x	x			x		IC065517985	Price
Style - TCMT 21.51 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .01									
TCMT 21.51-FG	TT5100	x	x			x		IC065515109	Price
TCMT 21.51-FG	TT8020	x	x			x		IC065515737	Price
TCMT 21.51-FG	TT8125	x						IC065519946	Price
TCMT 21.51-FG	TT9225		x			x		IC065520586	Price
TCMT 21.51-FG	TT9235		x			x		IC065520641	Price
TCMT 21.51-MT	TT5100	x	x			x		IC065514809	Price
TCMT 21.51-MT	TT8115	x						IC065518528	Price
TCMT 21.51-MT	TT8125	x						IC065519627	Price
TCMT 21.51-MT	TT9225		x			x		IC065520587	Price
TCMT 21.51-MT	TT9235		x			x		IC065520642	Price
Style - TCMT 21.52 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .031									
TCMT 21.52-FG	TT8125	x						IC065520113	Price
TCMT 21.52-FG	TT9225		x			x		IC065520588	Price
TCMT 21.52-FG	TT9235		x			x		IC065520643	Price
TCMT 21.52-MT	TT5100	x	x			x		IC065515115	Price
TCMT 21.52-MT	TT8125	x						IC065519947	Price
TCMT 21.52-MT	TT9225		x			x		IC065520589	Price
TCMT 21.52-MT	TT9235		x			x		IC065520644	Price
Style - TCMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
TCMT 32.51-FG	TT5100	x	x			x		IC065515111	Price
TCMT 32.51-FG	TT8125	x						IC065519948	Price
TCMT 32.51-MT	TT7005	x		x				IC065523835	Price
TCMT 32.51-MT	TT8115	x						IC065518530	Price
TCMT 32.51-MT	TT8125	x						IC065519602	Price
TCMT 32.51-MT	TT9225		x			x		IC065520590	Price
TCMT 32.51-MT	TT9235		x			x		IC065520645	Price
Style - TCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
TCMT 32.52-FG	TT5100	x	x			x		IC065515112	Price
TCMT 32.52-FG	TT8115	x						IC065518703	Price
TCMT 32.52-FG	TT8125	x						IC065520136	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - TCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
TCMT 32.52-FG	TT9225		x			x		IC065520591	Price
TCMT 32.52-FG	TT9235		x			x		IC065520646	Price
TCMT 32.52-MT	TT5100	x	x			x		IC065514810	Price
TCMT 32.52-MT	TT7005	x		x				IC065523685	Price
TCMT 32.52-MT	TT8020	x	x			x		IC065515719	Price
TCMT 32.52-MT	TT8115	x						IC065518531	Price
TCMT 32.52-MT	TT8125	x						IC065519611	Price
TCMT 32.52-MT	TT9225		x			x		IC065520592	Price
TCMT 32.52-MT	TT9235		x			x		IC065520647	Price
Style - TCMT 32.53 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .047									
TCMT 32.53-MT	TT8125	x						IC065520124	Price
Style - TCMT 731 IC (in.) - .219 Thickness (in.) - .094 Radius (in.) - .016									
TCMT 731-MT	TT7015	x		x				IC065523714	Price
TCMT 731-MT	TT8125	x						IC065519945	Price
TCMT 731-MT	TT9225		x			x		IC065520585	Price
Style - TCMT 732 IC (in.) - .219 Thickness (in.) - .094 Radius (in.) - .031									
TCMT 732-MT	TT7015	x		x				IC065523715	Price
Style - TNGG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
TNGG 331-L	TT8125	x						IC065520231	Price
TNGG 331-R	TT8125	x						IC065520180	Price
Style - TNGG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
TNGG 332-L	TT8125	x						IC065520272	Price
TNGG 332-R	TT8125	x						IC065520152	Price
Style - TNGG 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
TNGG 431-R	TT8125	x						IC065520245	Price
Style - TNMA 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
TNMA 331	TT7015	x		x				IC065523719	Price
Style - TNMA 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
TNMA 332	TT7015	x		x				IC065523598	Price
Style - TNMA 333 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .047									
TNMA 333	TT7005	x		x				IC065523841	Price
Style - TNMA 334 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .063									
TNMA 334	TT7015	x		x				IC065523720	Price
Style - TNMA 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
TNMA 432	TT7005	x		x				IC065523843	Price
TNMA 432	TT7015	x		x				IC065523721	Price
TNMA 432	TT8115	x						IC065518561	Price
Style - TNMA 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
TNMA 433	TT7005	x		x				IC065523756	Price
TNMA 433	TT7015	x		x				IC065523722	Price
Style - TNMG 221 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .016									
TNMG 221	TT8125	x						IC065520188	Price
TNMG 221-FG	TT5100	x	x			x		IC065514956	Price
Style - TNMG 222 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .031									
TNMG 222	TT8115	x						IC065518749	Price
TNMG 222-MT	TT5100	x	x			x		IC065515414	Price
TNMG 222-MT	TT8125	x						IC065520242	Price
Style - TNMG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
TNMG 331	TT7015	x		x				IC065523600	Price
TNMG 331	TT8020	x	x			x		IC065515720	Price
TNMG 331	TT8125	x						IC065519949	Price

TOTURN™ Carbide Inserts

Style - TNMG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 331-FC	TT5100	x	x			x		IC065518259	Price
TNMG 331-FC	TT8115	x						IC065518874	Price
TNMG 331-FC	TT8125	x						IC065520277	Price
TNMG 331-FC	TT9225		x			x		IC065520593	Price
TNMG 331-FC	TT9235		x			x		IC065520648	Price
TNMG 331-FG	TT8125	x						IC065520127	Price
TNMG 331-ML	TT5080		x			x		IC065523061	Price
TNMG 331-ML	TT8125	x						IC065519951	Price
TNMG 331-MP	TT5080		x			x		IC065523020	Price
TNMG 331-MP	TT8125	x						IC065520135	Price
TNMG 331-MP	TT9215		x			x		IC065520488	Price
TNMG 331-MP	TT9225		x			x		IC065520594	Price
TNMG 331-MP	TT9235		x			x		IC065520649	Price
TNMG 331-MT	TT5080		x			x		IC065523062	Price
TNMG 331-MT	TT7015	x		x				IC065523723	Price
TNMG 331-MT	TT8125	x						IC065519952	Price
TNMG 331-PC	TT8125	x						IC065519528	Price
TNMG 331-PC	TT9225		x			x		IC065520595	Price
TNMG 331-RVF	TT5100	x	x			x		IC065517312	Price
TNMG 331-RVF	TT8115	x						IC065518644	Price
TNMG 331-RVF	TT8125	x						IC065519953	Price
Style - TNMG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 332	TT7015	x		x				IC065523559	Price
TNMG 332	TT8115	x						IC065518551	Price
TNMG 332	TT8125	x						IC065519954	Price
TNMG 332-FC	TT5100	x	x			x		IC065518877	Price
TNMG 332-FC	TT8115	x						IC065518876	Price
TNMG 332-FC	TT8125	x						IC065520122	Price
TNMG 332-FC	TT9215		x			x		IC065520489	Price
TNMG 332-FC	TT9225		x			x		IC065520596	Price
TNMG 332-FC	TT9235		x			x		IC065520650	Price
TNMG 332-FG	TT5100	x	x			x		IC065515071	Price
TNMG 332-FG	TT8115	x						IC065518454	Price
TNMG 332-FG	TT8125	x						IC065520181	Price
TNMG 332-LFS	TT8125	x						IC065519955	Price
TNMG 332-LVF	TT8125	x						IC065520213	Price
TNMG 332-MC	TT8115	x						IC065518619	Price
TNMG 332-MC	TT8125	x						IC065519055	Price
TNMG 332-ML	TT5080		x			x		IC065523064	Price
TNMG 332-ML	TT5100	x	x			x		IC065514817	Price
TNMG 332-ML	TT8115	x						IC065518464	Price
TNMG 332-ML	TT8125	x						IC065519956	Price
TNMG 332-MP	TT5080		x			x		IC065523014	Price
TNMG 332-MP	TT5100	x	x			x		IC065514757	Price
TNMG 332-MP	TT8125	x						IC065519957	Price
TNMG 332-MP	TT9225		x			x		IC065520597	Price
TNMG 332-MP	TT9235		x			x		IC065520651	Price
TNMG 332-MT	TT5080		x			x		IC065523015	Price
TNMG 332-MT	TT5100	x	x			x		IC065514746	Price
TNMG 332-MT	TT7005	x		x				IC065523768	Price
TNMG 332-MT	TT7015	x		x				IC065523601	Price
TNMG 332-MT	TT7100	x	x					IC065516942	Price
TNMG 332-MT	TT8115	x						IC065518487	Price
TNMG 332-MT	TT8125	x						IC065519605	Price
TNMG 332-MT	TT9225		x			x		IC065520598	Price
TNMG 332-MT	TT9235		x			x		IC065520652	Price
TNMG 332-PC	TT5100	x	x			x		IC065518860	Price
TNMG 332-PC	TT8115	x						IC065518859	Price
TNMG 332-PC	TT8125	x						IC065519056	Price
TNMG 332-PC	TT9215		x			x		IC065520490	Price
TNMG 332-PC	TT9225		x			x		IC065520386	Price
TNMG 332-PC	TT9235		x			x		IC065520387	Price
TNMG 332-RT	TT7015	x		x				IC065523603	Price
TNMG 332-RVF	TT8115	x						IC065518648	Price

Style - TNMG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 332-RVF	TT8125	x						IC065519959	Price
TNMG 332-SF	TT5080		x			x		IC065523063	Price
Style - TNMG 333 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 333-FC	TT5100	x	x			x		IC065518298	Price
TNMG 333-FC	TT8115	x						IC065518296	Price
TNMG 333-FC	TT9215		x			x		IC065520491	Price
TNMG 333-FC	TT9225		x			x		IC065520508	Price
TNMG 333-FC	TT9235		x			x		IC065520653	Price
TNMG 333-ML	TT8115	x						IC065518676	Price
TNMG 333-MP	TT5080		x			x		IC065523065	Price
TNMG 333-MP	TT9225		x			x		IC065520509	Price
TNMG 333-MP	TT9235		x			x		IC065520654	Price
TNMG 333-MT	TT5100	x	x			x		IC065515697	Price
TNMG 333-MT	TT7005	x		x				IC065523850	Price
TNMG 333-MT	TT8125	x						IC065520115	Price
TNMG 333-MT	TT9225		x			x		IC065520451	Price
TNMG 333-MT	TT9235		x			x		IC065520655	Price
TNMG 333-PC	TT5100	x	x			x		IC065518861	Price
TNMG 333-PC	TT8115	x						IC065518265	Price
TNMG 333-PC	TT8125	x						IC065519057	Price
TNMG 333-PC	TT9225		x			x		IC065520510	Price
TNMG 333-PC	TT9235		x			x		IC065520656	Price
TNMG 333-RT	TT7015	x		x				IC065523724	Price
TNMG 333-RT	TT8125	x						IC065520103	Price
Style - TNMG 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 431	TT8115	x						IC065518552	Price
TNMG 431	TT8125	x						IC065520154	Price
TNMG 431-ML	TT5100	x	x			x		IC065515073	Price
TNMG 431-ML	TT8115	x						IC065518465	Price
TNMG 431-ML	TT8125	x						IC065520240	Price
TNMG 431-MP	TT5080		x			x		IC065523089	Price
TNMG 431-MP	TT8125	x						IC065520189	Price
TNMG 431-MP	TT9225		x			x		IC065520511	Price
TNMG 431-MT	TT8115	x						IC065518641	Price
TNMG 431-MT	TT8125	x						IC065520118	Price
TNMG 431-RFS	TT8125	x						IC065520262	Price
Style - TNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 432	TT5100	x	x			x		IC065514836	Price
TNMG 432	TT7100	x	x					IC065517820	Price
TNMG 432	TT8115	x						IC065518553	Price
TNMG 432	TT8125	x						IC065519960	Price
TNMG 432-FG	TT8115	x						IC065518672	Price
TNMG 432-ML	TT5100	x	x			x		IC065515074	Price
TNMG 432-ML	TT8020	x	x			x		IC065517391	Price
TNMG 432-ML	TT8115	x						IC065518677	Price
TNMG 432-MP	TT5080		x			x		IC065523090	Price
TNMG 432-MP	TT5100	x	x			x		IC065515077	Price
TNMG 432-MP	TT8020	x	x			x		IC065516432	Price
TNMG 432-MP	TT8115	x						IC065518477	Price
TNMG 432-MP	TT8125	x						IC065520126	Price
TNMG 432-MP	TT9225		x			x		IC065520512	Price
TNMG 432-MT	TT5100	x	x			x		IC065515078	Price
TNMG 432-MT	TT7005	x		x				IC065523855	Price
TNMG 432-MT	TT8115	x						IC065518489	Price
TNMG 432-MT	TT8125	x						IC065519632	Price
TNMG 432-PC	TT8115	x						IC065519529	Price
TNMG 432-PC	TT8125	x						IC065519530	Price
TNMG 432-RT	TT5100	x	x			x		IC065515082	Price
TNMG 432-RT	TT7015	x		x				IC065523725	Price
TNMG 432-RT	TT8115	x						IC065518691	Price
TNMG 432-RT	TT8125	x						IC065519961	Price

Style - TNMG 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 433	TT8115	x						IC065518554	Price
TNMG 433	TT8125	x						IC065520230	Price
TNMG 433-MT	TT5100	x	x			x		IC065517634	Price
TNMG 433-MT	TT8115	x						IC065518490	Price
TNMG 433-MT	TT8125	x						IC065520190	Price
TNMG 433-PC	TT8115	x						IC065519510	Price
TNMG 433-PC	TT8125	x						IC065519511	Price
TNMG 433-RT	TT7015	x		x				IC065523605	Price
TNMG 433-RT	TT8125	x						IC065520236	Price
Style - TNMG 434 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .063									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 434	TT7015	x		x				IC065523606	Price
TNMG 434	TT8115	x						IC065518709	Price
TNMG 434	TT8125	x						IC065520247	Price
Style - TNMG 542 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 542	TT8125	x						IC065520853	Price
Style - TNMG 543 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 543	TT8115	x						IC065518443	Price
TNMG 543	TT8125	x						IC065519962	Price
TNMG 543-MT	TT5080		x			x		IC065523962	Price
TNMG 543-MT	TT5100	x	x			x		IC065515203	Price
Style - TNMG 544 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .063									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 544	TT8125	x						IC065520105	Price
Style - TNMG 654 IC (in.) - 3/4 Thickness (in.) - .313 Radius (in.) - .063									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 654	TT8125	x						IC065520214	Price
Style - TNMG 666 IC (in.) - 3/4 Thickness (in.) - .375 Radius (in.) - .094									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 666-RT	TT8125	x						IC065520265	Price
Style - TPMR 221 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMR 221	TT5100	x	x			x		IC065514758	Price
TPMR 221	TT8115	x						IC065518589	Price
TPMR 221	TT8125	x						IC065519965	Price
Style - TPMR 222 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMR 222	TT8115	x						IC065518590	Price
Style - TPMR 321 IC (in.) - 3/8 Thickness (in.) - .125 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMR 321	TT5080		x			x		IC065523091	Price
TPMR 321	TT5100	x	x			x		IC065514815	Price
TPMR 321	TT7015	x		x				IC065523729	Price
TPMR 321	TT7100	x	x					IC065517815	Price
TPMR 321	TT8020	x	x			x		IC065515710	Price
TPMR 321	TT8115	x						IC065518591	Price
TPMR 321	TT8125	x						IC065519620	Price
Style - TPMR 322 IC (in.) - 3/8 Thickness (in.) - .125 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMR 322	TT5080		x			x		IC065523092	Price
TPMR 322	TT5100	x	x			x		IC065514759	Price
TPMR 322	TT7015	x		x				IC065523852	Price
TPMR 322	TT8020	x	x			x		IC065515705	Price
TPMR 322	TT8115	x						IC065518592	Price
TPMR 322	TT8125	x						IC065519629	Price
Style - TPMR 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMR 431	TT5100	x	x			x		IC065515118	Price
TPMR 431	TT8125	x						IC065520210	Price
Style - TPMR 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMR 432	TT5080		x			x		IC065523945	Price
TPMR 432	TT5100	x	x			x		IC065515119	Price
TPMR 432	TT8125	x						IC065520171	Price

Style - TPMR 732 IC (in.) - .219 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMR 732	TT7015	x		x				IC065523726	Price
Style - TPMT 21.51 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 21.51-PC	TT5080		x			x		IC065523149	Price
TPMT 21.51-PC	TT5100	x	x			x		IC065518324	Price
Style - TPMT 21.52 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 21.52-PC	TT5080		x			x		IC065523150	Price
TPMT 21.52-PC	TT5100	x	x			x		IC065518326	Price
Style - TPMT 221 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 221-FG	TT8020	x	x			x		IC065515727	Price
TPMT 221-FG	TT8125	x						IC065520110	Price
Style - TPMT 222 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 222-PC	TT5100	x	x			x		IC065519699	Price
Style - TPMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 32.51-PC	TT5080		x			x		IC065523152	Price
TPMT 32.51-PC	TT5080		x			x		IC065523151	Price
TPMT 32.51-PC	TT5100	x	x			x		IC065518328	Price
Style - TPMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 32.52-PC	TT5100	x	x			x		IC065518330	Price
Style - TPU 221 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPU 221	TT8125	x						IC065521233	Price
Style - TPU 222 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPU 222	TT8125	x						IC065521004	Price
Style - TPU 321 IC (in.) - 3/8 Thickness (in.) - .125 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPU 321	TT8115	x						IC065518714	Price
TPU 321	TT8125	x						IC065520153	Price
Style - TPU 322 IC (in.) - 3/8 Thickness (in.) - .125 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPU 322	TT8115	x						IC065518566	Price
TPU 322	TT8125	x						IC065520112	Price
Style - TPU 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPU 431	TT8115	x						IC065518567	Price
Style - TPU 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPU 432	TT8125	x						IC065520719	Price
Style - TPUN 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPUN 433	TT8125	x						IC065522115	Price
Style - VBET 220 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .004									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VBET 220R-GF	TT9020	x	x			x		IC065517671	Price
Style - VBET 2205 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .008									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VBET 220.5R-GF	TT9020	x	x			x		IC065517358	Price
Style - VBET 221 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VBET 221-RGF	TT9020	x	x			x		IC065517361	Price
Style - VBET 22X0 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .001									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VBET 22X0R-GW	TT9020	x	x			x		IC065517504	Price
Style - VBGT 220.5 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .008									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VBGT 220.5-SA	TT5080		x			x		IC065523217	Price
VBGT 220.5-SA	TT9020	x	x			x		IC065521938	Price
Style - VBGT 221 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VBGT 221-SA	TT5080		x			x		IC065523218	Price
VBGT 221-SA	TT9020	x	x			x		IC065520890	Price

TOTURN™ Carbide Inserts

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - VBGT 330.5 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .008									
VBGT 330.5-SA	TT5080		x			x		IC065580384	Price
VBGT 330.5-SA	TT9020	x	x			x		IC065580383	Price
Style - VBGT 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
VBGT 331-SA	TT5080		x			x		IC066120568	Price
VBGT 331-SA	TT9020	x	x			x		IC066138031	Price
Style - VBGT220 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .004									
VBGT 220-SA	TT9020	x	x			x		IC065522934	Price
Style - VBMT 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
VBMT 331-FG	TT5080		x			x		IC065523045	Price
VBMT 331-FG	TT5100	x	x			x		IC065516706	Price
VBMT 331-FG	TT8115	x						IC065519547	Price
VBMT 331-FG	TT8125	x						IC065519967	Price
VBMT 331-MT	TT5080		x			x		IC065523046	Price
VBMT 331-MT	TT5100	x	x			x		IC065514811	Price
VBMT 331-MT	TT7015	x		x				IC065523731	Price
VBMT 331-MT	TT8115	x						IC065518600	Price
VBMT 331-MT	TT8125	x						IC065519610	Price
VBMT 331-MT	TT9225		x			x		IC065520514	Price
Style - VBMT 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
VBMT 332-FA	TT5080		x			x		IC065523136	Price
VBMT 332-FA	TT8115	x						IC065518776	Price
VBMT 332-FA	TT8125	x						IC065520800	Price
VBMT 332-FG	TT5080		x			x		IC065523093	Price
VBMT 332-FG	TT5100	x	x			x		IC065515238	Price
VBMT 332-FG	TT8115	x						IC065518642	Price
VBMT 332-FG	TT8125	x						IC065519968	Price
VBMT 332-FG	TT9225		x			x		IC065520515	Price
VBMT 332-MT	TT5080		x			x		IC065523047	Price
VBMT 332-MT	TT5100	x	x			x		IC065514812	Price
VBMT 332-MT	TT7015	x		x				IC065523640	Price
VBMT 332-MT	TT8020	x	x			x		IC065515723	Price
VBMT 332-MT	TT8115	x						IC065518598	Price
VBMT 332-MT	TT8125	x						IC065519616	Price
VBMT 332-MT	TT9225		x			x		IC065520516	Price
Style - VBMT 333 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .047									
VBMT 333-MT	TT5080		x			x		IC065523172	Price
VBMT 333-MT	TT8115	x						IC065518601	Price
VBMT 333-MT	TT8125	x						IC065519969	Price
Style - VNGG 330 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .004									
VNGG 330-ML	K10	x		x	x	x		IC065519356	Price
VNGG 330-ML	TT5080		x			x		IC065523133	Price
Style - VNGG 330.5 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .008									
VNGG 330.5-ML	K10	x		x	x	x		IC065519357	Price
VNGG 330.5-ML	TT5080		x			x		IC065523134	Price
Style - VNGG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
VNGG 331-ML	K10	x		x	x	x		IC065518015	Price
VNGG 331-ML	TT5080		x			x		IC065523135	Price
Style - VNGG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
VNGG 332-ML	K10	x		x	x	x		IC065580255	Price
VNGG 332-ML	TT5080		x			x		IC065523161	Price
Style - VNMG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
VNMG 331	TT7015	x		x				IC065523733	Price
VNMG 331	TT8125	x						IC065520160	Price
VNMG 331-FC	TT5100	x	x			x		IC065520026	Price
VNMG 331-FC	TT8115	x						IC065521034	Price
VNMG 331-FC	TT8125	x						IC065521035	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - VNMG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
VNMG 331-FC	TT9225		x			x		IC065521036	Price
VNMG 331-FG	TT5080		x			x		IC065523118	Price
VNMG 331-FG	TT5100	x	x			x		IC065517039	Price
VNMG 331-FG	TT8115	x						IC065519507	Price
VNMG 331-FG	TT8125	x						IC065520140	Price
VNMG 331-FG	TT9225		x			x		IC065520517	Price
VNMG 331-MT	TT5080		x			x		IC065523012	Price
VNMG 331-MT	TT5100	x	x			x		IC065515088	Price
VNMG 331-MT	TT8115	x						IC065518608	Price
VNMG 331-MT	TT8125	x						IC065519970	Price
VNMG 331-MT	TT9225		x			x		IC065520518	Price
VNMG 331-PC	TT8115	x						IC065519531	Price
VNMG 331-PC	TT8125	x						IC065519532	Price
VNMG 331-PC	TT9225		x			x		IC065521040	Price
Style - VNMG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
VNMG 332	TT5100	x	x			x		IC065514838	Price
VNMG 332	TT7015	x		x				IC065523607	Price
VNMG 332	TT8115	x						IC065518556	Price
VNMG 332	TT8125	x						IC065519229	Price
VNMG 332-FA	TT5080		x			x		IC065523144	Price
VNMG 332-FA	TT8115	x						IC065518662	Price
VNMG 332-FC	TT5100	x	x			x		IC065518258	Price
VNMG 332-FC	TT8115	x						IC065518267	Price
VNMG 332-FC	TT8125	x						IC065519668	Price
VNMG 332-FC	TT9215		x			x		IC065520492	Price
VNMG 332-FC	TT9225		x			x		IC065520519	Price
VNMG 332-FC	TT9235		x			x		IC065520657	Price
VNMG 332-FG	TT5080		x			x		IC065523094	Price
VNMG 332-FG	TT5100	x	x			x		IC065515085	Price
VNMG 332-FG	TT8115	x						IC065518459	Price
VNMG 332-FG	TT8125	x						IC065519228	Price
VNMG 332-MT	TT5080		x			x		IC065523013	Price
VNMG 332-MT	TT5100	x	x			x		IC065515281	Price
VNMG 332-MT	TT7015	x		x				IC065523636	Price
VNMG 332-MT	TT8020	x	x			x		IC065516648	Price
VNMG 332-MT	TT8115	x						IC065518635	Price
VNMG 332-MT	TT8125	x						IC065519058	Price
VNMG 332-MT	TT9215		x			x		IC065520493	Price
VNMG 332-MT	TT9225		x			x		IC065520520	Price
VNMG 332-MT	TT9235		x			x		IC065520658	Price
VNMG 332-PC	TT8125	x						IC065519534	Price
VNMG 332-PC	TT9225		x			x		IC065520901	Price
Style - VNMG 333 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .047									
VNMG 333	TT7015	x		x				IC065523734	Price
VNMG 333	TT8125	x						IC065520268	Price
Style - WNMA 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
WNMA 332	TT7005	x		x				IC065523735	Price
WNMA 332	TT7015	x		x				IC065523856	Price
Style - WNMA 333 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .047									
WNMA 333	TT7005	x		x				IC065523875	Price
Style - WNMA 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
WNMA 432	TT7005	x		x				IC065523552	Price
WNMA 432	TT7015	x		x				IC065523608	Price
Style - WNMA 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
WNMA 433	TT7005	x		x				IC065523551	Price
WNMA 433	TT7015	x		x				IC065523541	Price
Style - WNMG 331 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .063									
WNMA 434	TT7015	x		x				IC065523737	Price
WNMG 331-FG	TT5080		x			x		IC065523095	Price
WNMG 331-FG	TT5100	x	x			x		IC065514954	Price
WNMG 331-FG	TT8115	x						IC065518597	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - WNMG 331 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .063									
WNMG 331-FG	TT8125	x						IC065520185	Price
WNMG 331-MC	TT8115	x						IC065518758	Price
WNMG 331-MT	TT5080		x			x		IC065523067	Price
WNMG 331-MT	TT8115	x						IC065518483	Price
WNMG 331-MT	TT8125	x						IC065520159	Price
WNMG 331-MT	TT9225		x			x		IC065520521	Price
Style - WNMG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
WNMG 332-FG	TT5100	x	x			x		IC065514955	Price
WNMG 332-FG	TT8115	x						IC065518450	Price
WNMG 332-MP	TT5080		x			x		IC065523068	Price
WNMG 332-MP	TT5100	x	x			x		IC065514821	Price
WNMG 332-MP	TT8125	x						IC065520199	Price
WNMG 332-MP	TT9225		x			x		IC065520522	Price
WNMG 332-MT	TT8020	x	x			x		IC065516545	Price
WNMG 332-MT	TT8115	x						IC065518484	Price
WNMG 332-MT	TT8125	x						IC065519971	Price
WNMG 332-MT	TT9225		x			x		IC065520523	Price
WNMG 332-PC	TT8115	x						IC065520349	Price
WNMG 332-PC	TT8125	x						IC065519467	Price
WNMG 332-WT	TT5100	x	x			x		IC065514953	Price
WNMG 332-WT	TT8115	x						IC065518625	Price
WNMG 332-WT	TT8125	x						IC065520172	Price
Style - WNMG 333 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .047									
WNMG 333-MT	TT8115	x						IC065518752	Price
WNMG 333-PC	TT8115	x						IC065520350	Price
WNMG 333-PC	TT8125	x						IC065519468	Price
WNMG 333-WT	TT7015	x		x				IC065523739	Price
WNMG 333-WT	TT8115	x						IC065518929	Price
Style - WNMG 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
WNMG 431-FC	TT8115	x						IC065521348	Price
WNMG 431-FC	TT8125	x						IC065521349	Price
WNMG 431-FC	TT9225		x			x		IC065521350	Price
WNMG 431-FG	TT5080		x			x		IC065523111	Price
WNMG 431-FG	TT5100	x	x			x		IC065515090	Price
WNMG 431-FG	TT8020	x	x			x		IC065516512	Price
WNMG 431-FG	TT8115	x						IC065518451	Price
WNMG 431-FG	TT8125	x						IC065520209	Price
WNMG 431-MP	TT8125	x						IC065520198	Price
WNMG 431-MT	TT5080		x			x		IC065523079	Price
WNMG 431-MT	TT5100	x	x			x		IC065515089	Price
WNMG 431-MT	TT7015	x		x				IC065523623	Price
WNMG 431-MT	TT8115	x						IC065518485	Price
WNMG 431-MT	TT8125	x						IC065519972	Price
WNMG 431-MT	TT9225		x			x		IC065520524	Price
Style - WNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
WNMG 432-ET	TT5080		x			x		IC065523153	Price
WNMG 432-ET	TT9215		x			x		IC065520441	Price
WNMG 432-ET	TT9225		x			x		IC065519908	Price
WNMG 432-ET	TT9235		x			x		IC065520660	Price
WNMG 432-FC	TT8115	x						IC065518953	Price
WNMG 432-FC	TT8125	x						IC065520274	Price
WNMG 432-FC	TT9215		x			x		IC065520438	Price
WNMG 432-FC	TT9225		x			x		IC065520669	Price
WNMG 432-FC	TT9235		x			x		IC065520659	Price
WNMG 432-FG	TT5100	x	x			x		IC065515091	Price
WNMG 432-FG	TT8115	x						IC065518452	Price
WNMG 432-FG	TT8125	x						IC065520250	Price
WNMG 432-MC	TT5100	x	x			x		IC065514896	Price
WNMG 432-MC	TT8115	x						IC065518622	Price
WNMG 432-MC	TT8125	x						IC065519973	Price
WNMG 432-ML	TT5080		x			x		IC065523070	Price
WNMG 432-ML	TT5100	x	x			x		IC065514748	Price
WNMG 432-ML	TT8020	x	x			x		IC065515253	Price
WNMG 432-ML	TT8115	x						IC065518462	Price
WNMG 432-ML	TT8125	x						IC065520169	Price
WNMG 432-ML	TT9215		x			x		IC065521721	Price
WNMG 432-ML	TT9225		x			x		IC065521722	Price
WNMG 432-MP	TT5080		x			x		IC065523071	Price
WNMG 432-MP	TT5100	x	x			x		IC065514760	Price

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
Style - WNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
WNMG 432-MP	TT8020	x	x			x		IC065515620	Price
WNMG 432-MP	TT8115	x						IC065518473	Price
WNMG 432-MP	TT8125	x						IC065519974	Price
WNMG 432-MP	TT9215		x			x		IC065520439	Price
WNMG 432-MP	TT9225		x			x		IC065520526	Price
WNMG 432-MP	TT9235		x			x		IC065520661	Price
WNMG 432-MT	TT5080		x			x		IC065523072	Price
WNMG 432-MT	TT5100	x	x			x		IC065514747	Price
WNMG 432-MT	TT7015	x		x				IC065523610	Price
WNMG 432-MT	TT7100	x	x					IC065517819	Price
WNMG 432-MT	TT8020	x	x			x		IC065515254	Price
WNMG 432-MT	TT8115	x						IC065518203	Price
WNMG 432-MT	TT8125	x						IC065519060	Price
WNMG 432-MT	TT9215		x			x		IC065520494	Price
WNMG 432-MT	TT9225		x			x		IC065519907	Price
WNMG 432-MT	TT9235		x			x		IC065520662	Price
WNMG 432-PC	TT5100	x	x			x		IC065518198	Price
WNMG 432-PC	TT8115	x						IC065518862	Price
WNMG 432-PC	TT8125	x						IC065519059	Price
WNMG 432-PC	TT9215		x			x		IC065520440	Price
WNMG 432-PC	TT9225		x			x		IC065520527	Price
WNMG 432-PC	TT9235		x			x		IC065520663	Price
WNMG 432-RT	TT5080		x			x		IC065523096	Price
WNMG 432-RT	TT5100	x	x			x		IC065515094	Price
WNMG 432-RT	TT7015	x		x				IC065523624	Price
WNMG 432-RT	TT7100	x	x					IC065517821	Price
WNMG 432-RT	TT8115	x						IC065518501	Price
WNMG 432-RT	TT8125	x						IC065519872	Price
WNMG 432-RT	TT9215		x			x		IC065520495	Price
WNMG 432-RT	TT9225		x			x		IC065520528	Price
WNMG 432-RT	TT9235		x			x		IC065520664	Price
WNMG 432-WS	TT8115	x						IC065519702	Price
WNMG 432-WS	TT8125	x						IC065519703	Price
WNMG 432-WT	TT7015	x		x				IC065523741	Price
WNMG 432-WT	TT8115	x						IC065518626	Price
WNMG 432-WT	TT8125	x						IC065520215	Price
Style - WNMG 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
WNMG 433-MC	TT8115	x						IC065520767	Price
WNMG 433-MC	TT8125	x						IC065520768	Price
WNMG 433-ML	TT5080		x			x		IC065523137	Price
WNMG 433-MP	TT8125	x						IC065520273	Price
WNMG 433-MP	TT9215		x			x		IC065520442	Price
WNMG 433-MP	TT9225		x			x		IC065519910	Price
WNMG 433-MP	TT9235		x			x		IC065520665	Price
WNMG 433-MT	TT5080		x			x		IC065523073	Price
WNMG 433-MT	TT5100	x	x			x		IC065514892	Price
WNMG 433-MT	TT7005	x		x				IC065523881	Price
WNMG 433-MT	TT7015	x		x				IC065523613	Price
WNMG 433-MT	TT8020	x	x			x		IC065515621	Price
WNMG 433-MT	TT8115	x						IC065518205	Price
WNMG 433-MT	TT8125	x						IC065519062	Price
WNMG 433-MT	TT9215		x			x		IC065520444	Price
Style - WNMG 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
WNMG 433-MT	TT9225		x			x		IC065519909	Price
WNMG 433-MT	TT9235		x			x		IC065520666	Price
WNMG 433-PC	TT5100	x	x			x		IC065518291	Price
WNMG 433-PC	TT8115	x						IC065518263	Price
WNMG 433-PC	TT8125	x						IC065519061	Price
WNMG 433-PC	TT9215		x			x		IC065520443	Price
WNMG 433-PC	TT9225		x			x		IC065520529	Price
WNMG 433-PC	TT9235		x			x		IC065520667	Price
WNMG 433-RT	TT7005	x		x				IC065523555	Price
WNMG 433-RT	TT7015	x		x				IC065523547	Price
WNMG 433-RT	TT7100	x	x					IC065518321	Price
WNMG 433-RT	TT8115	x						IC065518502	Price
WNMG 433-RT	TT8125	x						IC065519636	Price
WNMG 433-WT	TT7015	x		x				IC065523742	Price
WNMG 433-WT	TT8115	x						IC065518754	Price
Style - WNMG 434 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .063									
WNMG 434-PC	TT8125	x						IC065519504	Price

QUADoTWIST

QR SERIES Indexable Drills

- 4 Cornered economical insert design
- Side coolant port
- Twisted flute for maximum chip evacuation

Member IMC Group Ingersoll Cutting Tools



Type - 2XD Twisted Flute

Item No.	Cutter Dia. (in.)	Depth of Cut (in.)	Insert	Shank Dia. (in.)	Order No.	Price
QR0143029N5R02	.563	1.126	SOMT050204-SK	1.000	**IC523210683**	Price
QR0150030N5R02	.591	1.182	SOMT050204-SK	1.000	**IC523210687**	Price
QR0159032N5R02	.625	1.250	SOMT050204-SK	1.000	**IC523210691**	Price
QR0167033N5R02	.658	1.316	SOMT060204-SK	1.000	**IC523210695**	Price
QR0175035N5R02	.689	1.378	SOMT060204-SK	1.000	**IC523210699**	Price
QR0183037N5R02	.721	1.442	SOMT060204-SK	1.000	**IC523210703**	Price
QR0191038N5R02	.750	1.500	SOMT060204-SK	1.000	**IC523210707**	Price
QR0198040N5R02	.780	1.560	SOMT070306-SK	1.000	**IC523210711**	Price
QR0206041N5R02	.811	1.624	SOMT070306-SK	1.000	**IC523210715**	Price
QR0214042N5R02	.843	1.686	SOMT070306-SK	1.000	**IC523210719**	Price
QR0222044N5R02	.874	1.750	SOMT070306-SK	1.000	**IC523210723**	Price
QR0230046N6R02	.906	1.812	SOMT08T306-SK	1.250	**IC523210727**	Price
QR0238048N6R02	.937	1.875	SOMT08T306-SK	1.250	**IC523210731**	Price
QR0246049N6R02	.969	1.938	SOMT08T306-SK	1.250	**IC523210735**	Price
QR0254051N6R02	1.000	2.000	SOMT08T306-SK	1.250	**IC523210739**	Price
QR0262052N6R02	1.031	2.062	SOMT08T306-SK	1.250	**IC523210743**	Price
QR0270054N6R02	1.063	2.100	SOMT09T308-SK	1.250	**IC523210747**	Price
QR0278056N6R02	1.094	2.200	SOMT09T308-SK	1.250	**IC526100529**	Price
QR0286057N6R02	1.125	2.300	SOMT09T308-SK	1.250	**IC526100533**	Price
QR0302060N6R02	1.187	2.400	SOMT09T308-SK	1.250	**IC526100541**	Price
QR0318063N6R02	1.250	2.500	SOMT11T308-SK	1.250	**IC526108559**	Price
QR0381076N6R02	1.500	3.000	SOMT130408-SK	1.250	**IC526108591**	Price
QR0413083N6R02	1.625	3.300	SOMT130408-SK	1.250	**IC526108607**	Price
QR0445089N7R02	1.750	3.500	SOMT150510-SK	1.500	**IC526108617**	Price
QR0476095N7R02	1.875	3.800	SOMT150510-SK	1.500	**IC526108626**	Price
QR0508102N7R02	2.000	4.000	SOMT150510-SK	1.500	**IC526108635**	Price

Type - 3XD Twisted Flute

Item No.	Cutter Dia. (in.)	Depth of Cut (in.)	Insert	Shank Dia. (in.)	Order No.	Price
QR0143043N5R02	.563	1.689	SOMT050204-SK	1.000	**IC523210684**	Price
QR0150045N5R02	.591	1.773	SOMT050204-SK	1.000	**IC523210688**	Price
QR0159048N5R02	.625	1.875	SOMT050204-SK	1.000	**IC523210692**	Price
QR0167050N5R02	.658	1.974	SOMT060204-SK	1.000	**IC523210696**	Price
QR0175053N5R02	.689	2.067	SOMT060204-SK	1.000	**IC523210700**	Price
QR0183055N5R02	.721	2.163	SOMT060204-SK	1.000	**IC523210704**	Price
QR0191057N5R02	.750	2.250	SOMT060204-SK	1.000	**IC523210708**	Price
QR0198059N5R02	.780	2.340	SOMT070306-SK	1.000	**IC523210712**	Price
QR0206062N5R02	.811	2.436	SOMT070306-SK	1.000	**IC523210716**	Price
QR0214064N5R02	.843	2.529	SOMT070306-SK	1.000	**IC523210720**	Price
QR0222067N5R02	.874	2.625	SOMT070306-SK	1.000	**IC523210724**	Price
QR0230069N6R02	.906	2.718	SOMT08T306-SK	1.250	**IC523210728**	Price
QR0238071N6R02	.937	2.812	SOMT08T306-SK	1.250	**IC523210732**	Price
QR0246074N6R02	.969	2.907	SOMT08T306-SK	1.250	**IC523210736**	Price
QR0254076N6R02	1.000	3.000	SOMT08T306-SK	1.250	**IC523210740**	Price
QR0262079N6R02	1.031	3.093	SOMT08T306-SK	1.250	**IC523210744**	Price
QR0270081N6R02	1.063	3.200	SOMT09T308-SK	1.250	**IC526100526**	Price
QR0278083N6R02	1.094	3.300	SOMT09T308-SK	1.250	**IC526100530**	Price
QR0286086N6R02	1.125	3.400	SOMT09T308-SK	1.250	**IC526100534**	Price
QR0302090N6R02	1.187	3.600	SOMT09T308-SK	1.250	**IC526100542**	Price
QR0318095N6R02	1.250	3.800	SOMT11T308-SK	1.250	**IC526108560**	Price
QR0381114N6R02	1.500	4.500	SOMT130408-SK	1.250	**IC526108592**	Price
QR0413124N6R02	1.625	4.900	SOMT130408-SK	1.250	**IC526108608**	Price
QR0445134N7R02	1.750	5.300	SOMT150510-SK	1.500	**IC526108618**	Price
QR0476143N7R02	1.875	5.600	SOMT150510-SK	1.500	**IC526108627**	Price
QR0508152N7R02	2.000	6.000	SOMT150510-SK	1.500	**IC526108636**	Price

Type - 4XD Twisted Flute

Item No.	Cutter Dia. (in.)	Depth of Cut (in.)	Insert	Shank Dia. (in.)	Order No.	Price
QR0143057N5R02	.563	2.252	SOMT050204-SK	1.000	**IC523210685**	Price
QR0150060N5R02	.591	2.364	SOMT050204-SK	1.000	**IC523210689**	Price
QR0159064N5R02	.625	2.500	SOMT050204-SK	1.000	**IC523210693**	Price
QR0167067N5R02	.658	2.632	SOMT060204-SK	1.000	**IC523210697**	Price
QR0175070N5R02	.689	2.756	SOMT060204-SK	1.000	**IC523210701**	Price
QR0183073N5R02	.721	2.884	SOMT060204-SK	1.000	**IC523210705**	Price
QR0191076N5R02	.750	3.000	SOMT060204-SK	1.000	**IC523210709**	Price
QR0198079N5R02	.780	3.120	SOMT070306-SK	1.000	**IC523210713**	Price
QR0206082N5R02	.811	3.248	SOMT070306-SK	1.000	**IC523210717**	Price
QR0214086N5R02	.843	3.372	SOMT070306-SK	1.000	**IC523210721**	Price
QR0222089N5R02	.874	3.500	SOMT070306-SK	1.000	**IC523210725**	Price
QR0230092N6R02	.906	3.624	SOMT08T306-SK	1.250	**IC523210729**	Price
QR0238095N6R02	.937	3.750	SOMT08T306-SK	1.250	**IC523210733**	Price
QR0246098N6R02	.969	3.876	SOMT08T306-SK	1.250	**IC523210737**	Price
QR0254102N6R02	1.000	4.000	SOMT08T306-SK	1.250	**IC523210741**	Price
QR0262105N6R02	1.031	4.124	SOMT08T306-SK	1.250	**IC523210745**	Price
QR0270108N6R02	1.063	4.300	SOMT09T308-SK	1.250	**IC526100527**	Price
QR0278111N6R02	1.094	4.400	SOMT09T308-SK	1.250	**IC526100531**	Price
QR0286114N6R02	1.125	4.500	SOMT09T308-SK	1.250	**IC526100535**	Price
QR0302120N6R02	1.187	4.700	SOMT09T308-SK	1.250	**IC526100543**	Price
QR0318127N6R02	1.250	5.000	SOMT11T308-SK	1.250	**IC526108561**	Price
QR0381152N6R02	1.500	6.000	SOMT130408-SK	1.250	**IC526108593**	Price
QR0413165N6R02	1.625	6.500	SOMT130408-SK	1.250	**IC526108609**	Price
QR0445178N7R02	1.750	7.000	SOMT150510-SK	1.500	**IC526108619**	Price
QR0476190N7R02	1.875	7.500	SOMT150510-SK	1.500	**IC526108628**	Price
QR0508203N7R02	2.000	8.000	SOMT150510-SK	1.500	**IC526108637**	Price

Type - 5XD Twisted Flute

Item No.	Cutter Dia. (in.)	Depth of Cut (in.)	Insert	Shank Dia. (in.)	Order No.	Price
QR0143072N5R02	.563	2.815	SOMT050204-SK	1.000	**IC523210686**	Price
QR0150075N5R02	.591	2.955	SOMT050204-SK	1.000	**IC523210690**	Price
QR0159080N5R02	.625	3.125	SOMT050204-SK	1.000	**IC523210694**	Price
QR0167084N5R02	.658	3.290	SOMT060204-SK	1.000	**IC523210698**	Price
QR0175088N5R02	.689	3.445	SOMT060204-SK	1.000	**IC523210702**	Price
QR0183092N5R02	.721	3.605	SOMT060204-SK	1.000	**IC523210706**	Price
QR0191095N5R02	.750	3.750	SOMT060204-SK	1.000	**IC523210710**	Price
QR0198099N5R02	.780	3.900	SOMT070306-SK	1.000	**IC523210714**	Price
QR0206103N5R02	.811	4.060	SOMT070306-SK	1.000	**IC523210718**	Price
QR0214107N5R02	.843	4.215	SOMT070306-SK	1.000	**IC523210722**	Price
QR0222111N5R02	.874	4.375	SOMT070306-SK	1.000	**IC523210726**	Price
QR0230115N6R02	.906	4.530	SOMT08T306-SK	1.250	**IC523210730**	Price
QR0238119N6R02	.937	4.688	SOMT08T306-SK	1.250	**IC523210734**	Price
QR0246123N6R02	.969	4.845	SOMT08T306-SK	1.250	**IC523210738**	Price
QR0254127N6R02	1.000	5.000	SOMT08T306-SK	1.250	**IC523210742**	Price
QR0262131N6R02	1.031	5.155	SOMT08T306-SK	1.250	**IC523210746**	Price
QR0270135N6R02	1.063	5.300	SOMT09T308-SK	1.250	**IC526100528**	Price
QR0278139N6R02	1.094	5.500	SOMT09T308-SK	1.250	**IC526100532**	Price
QR0286143N6R02	1.125	5.600	SOMT09T308-SK	1.250	**IC526100536**	Price
QR0302151N6R02	1.187	5.900	SOMT09T308-SK	1.250	**IC526100544**	Price
QR0318159N6R02	1.250	6.300	SOMT11T308-SK	1.250	**IC526108562**	Price
QR0381191N6R02	1.500	7.500	SOMT130408-SK	1.250	**IC526108594**	Price
QR0413206N6R02	1.625	8.100	SOMT130408-SK	1.250	**IC526108610**	Price
QR0445222N7R02	1.750	8.750	SOMT150510-SK	1.500	**IC526143431**	Price
QR0476238N7R02	1.875	9.370	SOMT150510-SK	1.500	**IC526143434**	Price
QR0508254N7R02	2.000	10.000	SOMT150510-SK	1.500	**IC526143437**	Price

Note: Coolant plugs PF0012 & PF0013 are ordered separately.

QUADoTWIST

Member IMC Group Ingersoll Cutting Tools

Iscar QR DRILL INSERTS

- IN1030 (PVD) – tough applications
- Cast iron, aluminum, stainless, titanium applications
- Sub-micron grade with high hardness and toughness
- TiCN coated
- First choice for tough applications
- IN2505 (PVD) – general purpose
- Sub-micron grade with high hardness and toughness
- New multi-layered coating for higher chipping resistance

Type - Drilling Insert						
Item No.	I.C. (in.)	T (in.)	R	Grade	Order No.	Price
SOMT050204HP	.193	.094	.016	IN10K	**IC046140707**	Price
SOMT050204SK	.193	.094	.016	IN1030	**IC045101218**	Price
SOMT050204SK	.193	.094	.016	IN2505	**IC045101175**	Price
SOMT050204SK	.193	.094	.016	IN6505	**IC045101211**	Price
SOMT060204HP	.193	.094	.016	IN10K	**IC046140708**	Price
SOMT060204NG	.224	.094	.016	IN2510	**IC046129988**	Price
SOMT060204SK	.224	.094	.016	IN1030	**IC045101219**	Price
SOMT060204SK	.224	.094	.016	IN2505	**IC045101176**	Price
SOMT060204SK	.224	.094	.016	IN6505	**IC045101212**	Price
SOMT070306HP	.268	.110	.024	IN10K	**IC046116202**	Price
SOMT070306NG	.268	.110	.024	IN2510	**IC046129989**	Price
SOMT070306SK	.268	.110	.024	IN1030	**IC045101291**	Price
SOMT070306SK	.268	.110	.024	IN2505	**IC045101177**	Price
SOMT070306SK	.268	.110	.024	IN6505	**IC045101213**	Price
SOMT08T306HP	.311	.156	.024	IN10K	**IC046116203**	Price
SOMT08T306NG	.311	.156	.024	IN2510	**IC046116196**	Price
SOMT08T306SK	.311	.156	.024	IN1030	**IC045101292**	Price
SOMT08T306SK	.311	.156	.024	IN2505	**IC045101178**	Price
SOMT08T306SK	.311	.156	.024	IN6505	**IC045101214**	Price



- Post-coat surface treatment improves chipping resistance and reduces cutting forces
- First choice for general applications
- Inboard and outboard pockets
- IN6505 (CVD) - steel applications
- Multi-layered CVD coating along with post coat surface treatment provides excellent wear resistance
- Peripheral (outboard) pocket only

Type - Drilling Insert						
Item No.	I.C. (in.)	T (in.)	R	Grade	Order No.	Price
SOMT09T308HP	.311	.156	.031	IN10K	**IC046116204**	Price
SOMT09T308NG	.362	.156	.031	IN2510	**IC046148124**	Price
SOMT09T308SK	.362	.156	.031	IN1030	**IC046104898**	Price
SOMT09T308SK	.362	.156	.031	IN2505	**IC045523915**	Price
SOMT09T308SK	.362	.156	.031	IN6505	**IC046104899**	Price
SOMT11T308HP	.433	.156	.031	IN10K	**IC046116205**	Price
SOMT11T308NG	.433	.156	.031	IN2510	**IC046146661**	Price
SOMT11T308SK	.433	.156	.031	IN1030	**IC046108638**	Price
SOMT11T308SK	.433	.156	.031	IN2505	**IC045524209**	Price
SOMT11T308SK	.433	.156	.031	IN6505	**IC046108639**	Price
SOMT130408HP	.504	.173	.031	IN10K	**IC046116206**	Price
SOMT130408NG	.504	.173	.031	IN2510	**IC046148125**	Price
SOMT130408SK	.504	.173	.031	IN1030	**IC046108642**	Price
SOMT130408SK	.504	.173	.031	IN2505	**IC045524210**	Price
SOMT130408SK	.504	.173	.031	IN6505	**IC046108640**	Price
SOMT150510HP	.590	.189	.039	IN10K	**IC046116207**	Price
SOMT150510NG	.590	.189	.039	IN2510	**IC046148126**	Price
SOMT150510SK	.590	.189	.039	IN1030	**IC046108643**	Price
SOMT150510SK	.590	.189	.039	IN2505	**IC045524211**	Price

Spare Parts - Insert Seats

Description	Order No.	Price
3414	**IC024378001**	Price
3614	**IC024330000**	Price
3718	**IC024301069**	Price
3811	**IC024301078**	Price
3814	**IC024301074**	Price
LSC32	**IC024351442**	Price
LSC42	**IC024300510**	Price
LSC63	**IC024300512**	Price
LSD32	**IC024351402**	Price
LSD43	**IC024300515**	Price
PSW32	**IC024350898**	Price
PSW42	**IC024350899**	Price
SSVN2.522	**IC024300979**	Price
TSC44	**IC024352018**	Price
TSC54	**IC024352019**	Price
TSD43	**IC024352020**	Price
TSD44	**IC024352021**	Price
TSS44	**IC024352022**	Price
TST33	**IC024352023**	Price
TST43	**IC024352104**	Price
TSV33	**IC024352025**	Price
TSW44	**IC024352024**	Price

Spare Parts - Springs

Description	Order No.	Price
DSP3	**IC024351545**	Price
DSP4	**IC024351489**	Price

Spare Parts - Clamps

Description	Order No.	Price
DLM3	**IC024301056**	Price
DLM3V16	**IC024351711**	Price
DLM4	**IC024301057**	Price
DLM5	**IC024352015**	Price
DLM6	**IC024301059**	Price

Spare Parts - Coolant Rings

Description	Order No.	Price
PF0012	**IC027011248**	Price
PF0013	**IC027011249**	Price

TUNGCUT



Tungaloy

Member IMC Group

TUNGREC





TECMILL



TUNGDRILL TWISTED

DOPENT



DOOCTO DOQUAD



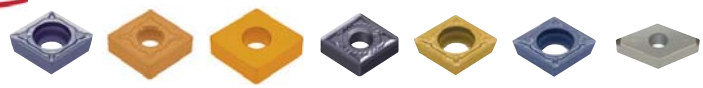
ROUNDSPLIT



End Mills • Cut-Off Systems • Face Mills • A-Style Tool Holders • Indexable Boring Bars • Tungdrill Twisted •
Solid Carbide Boring Bars • Steel Boring Bars •
Threading Tool Holders & Inserts • PremiumTec T9100 Grades

GRADE CHART

Grade	Coating Process	Coating	Material	Steel (P)	Stainless Steel (M)	Cast Iron (K)	Non-Ferrous (N)	Hi-Temp Alloys (S)	Hard Materials (H)
AH110	PVD	TiAlN	Carbide	x		x		x	x
AH120	PVD	TiAlN	Carbide	x		x		x	
AH130	PVD	TiAlN	Carbide	x	x				
AH140	PVD	TiAlN	Carbide		x				
AH3035	PVD	TiAlN	Carbide	x					x
AH3135	PVD	TiAlN	Carbide	x	x			x	x
AH330	PVD	TiAlN	Carbide	x					
AH4035	PVD	TiAlN	Carbide		x				
AH6030	PVD	TiAlN	Carbide		x			x	
AH630	PVD	TiAlN	Carbide		x				
AH645	PVD	TiAlN	Carbide		x				
AH7025	PVD	TiAlN	Carbide	x					
AH725	PVD	TiAlN	Carbide	x	x			x	
AH730	PVD	TiAlN	Carbide	x					
AH740	PVD	TiAlN	Carbide	x					
AH750	PVD	TiAlN	Carbide	x					
AH8005	PVD	TiAlN	Carbide					x	
AH8015	PVD	TiAlN	Carbide					x	
AH9030	PVD	TiAlN	Carbide	x	x				
AH905	PVD	TiAlN	Carbide					x	
BX310		Uncoated	CBN						x
BX330		Uncoated	CBN						x
BX360		Uncoated	CBN						x
BX380		Uncoated	CBN						x
BX470		Uncoated	CBN					x	
BX480		Uncoated	CBN					x	
BX530		Uncoated	CBN						x
BX850		Uncoated	CBN			x			
BX910		Uncoated	CBN			x			
BX930		Uncoated	CBN			x			
BX950		Uncoated	CBN			x			
BXC50	PVD	TiN	CBN						x
BXC90	PVD	TiN	CBN			x			
BXM10	PVD	TiCN	CBN						x
BXM20	PVD	TiCN	CBN						x
DLX2	CVD	CVD	Carbide	x					
DS1100	PVD	DLC	Carbide				x		
DS1200	PVD	DLC	Carbide				x		
DX120		Uncoated	PCD				x		
DX140		Uncoated	PCD				x		
DX160		Uncoated	PCD				x		
FX105		Uncoated	Ceramic			x			
GH110	PVD	TiCNO	Carbide	x		x			
GH130	PVD	TiCNO	Carbide	x	x				
GH330	PVD	TiCNO	Carbide	x					
GH730	PVD	TiCNO	Carbide	x					
GT9530	PVD	TiCNO	Cermet	x					
J740	PVD	TiN	Carbide	x					
J9530	PVD	TiN	Cermet	x					
KS05F		Uncoated	Carbide				x		
KS15F		Uncoated	Carbide			x	x		
KS20		Uncoated	Carbide					x	
LX11	PVD	TiN	Ceramic						x
LX21		Uncoated	Ceramic			x			
M101S		Uncoated	Ceramic					x	
N308		Uncoated	Cermet	x					
NLX	PVD	TiAlN	Carbide	x	x		x	x	
NS520		Uncoated	Cermet	x					
NS740		Uncoated	Cermet	x					
NS9530		Uncoated	Cermet	x					
SH725	PVD	TiAlN	Carbide	x					
SH730	PVD	TiAlN	Carbide	x					
T1115	CVD	CVD	Carbide			x			
T3130	CVD	CVD	Carbide	x					
T313W	CVD	CVD	Carbide	x					
T5105	CVD	CVD	Carbide			x			
T5115	CVD	CVD	Carbide			x			
T5125	CVD	CVD	Carbide			x			
T515	CVD	CVD	Carbide			x			
T6030A	CVD	CVD	Carbide		x				
T6120	CVD	CVD	Carbide		x				
T6130	CVD	CVD	Carbide		x				
T9105	CVD	CVD	Carbide	x					
T9115	CVD	CVD	Carbide	x					
T9125	CVD	CVD	Carbide	x					
T9135	CVD	CVD	Carbide	x					
TH10		Uncoated	Carbide			x		x	
TW43		Uncoated	Ceramic					x	
UC1125	CVD	CVD	Carbide	x					
UC2220	PVD	TiAlN	Carbide	x	x		x	x	
UC3120	PVD	TiAlN	Carbide	x	x			x	
UX30		Uncoated	Carbide	x					
X407		Uncoated	Cermet	x					



Style - CCMT 21.51 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CCMT 21.51-CM	T515	-	-	x	-	-	-	TG556747826	Price
CCMT 21.51-PS	AH725	x	x	x	-	x	-	TG556856761	Price
CCMT 21.51-PS	AH8005	-	x	-	-	x	-	TG556749949	Price
CCMT 21.51-PS	AH8015	-	x	-	-	x	-	TG556749950	Price
CCMT 21.51-PSF	AH8005	-	x	-	-	x	-	TG556718806	Price
CCMT 21.51-PSF	AH8015	-	x	-	-	x	-	TG556749944	Price
CCMT 21.51-PSS	AH8005	-	x	-	-	x	-	TG556749945	Price
CCMT 21.51-PSS	AH8015	-	x	-	-	x	-	TG556749946	Price

Style - CCMT 21.52 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CCMT 21.52-CM	T515	-	-	x	-	-	-	TG556747827	Price
CCMT 21.52-PS	AH725	x	x	x	-	x	-	TG556856762	Price
CCMT 21.52-PS	AH8005	-	x	-	-	x	-	TG556749951	Price
CCMT 21.52-PS	AH8015	-	x	-	-	x	-	TG556749952	Price
CCMT 21.52-PSS	AH8005	-	x	-	-	x	-	TG556749947	Price
CCMT 21.52-PSS	AH8015	-	x	-	-	x	-	TG556749948	Price

Style - CCMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CCMT 32.51-CM	T515	-	-	x	-	-	-	TG556739798	Price
CCMT 32.51-PS	AH725	x	x	x	-	x	-	TG556856764	Price
CCMT 32.51-PS	AH8005	-	x	-	-	x	-	TG556749959	Price
CCMT 32.51-PS	AH8015	-	x	-	-	x	-	TG556749960	Price
CCMT 32.51-PSF	AH8005	-	x	-	-	x	-	TG556749953	Price
CCMT 32.51-PSF	AH8015	-	x	-	-	x	-	TG556749954	Price
CCMT 32.51-PSS	AH8005	-	x	-	-	x	-	TG556749955	Price
CCMT 32.51-PSS	AH8015	-	x	-	-	x	-	TG556749956	Price

Style - CCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CCMT 32.52-CM	T515	-	-	x	-	-	-	TG556739799	Price
CCMT 32.52-PS	AH725	x	x	x	-	x	-	TG556856765	Price
CCMT 32.52-PS	AH8005	-	x	-	-	x	-	TG556749961	Price
CCMT 32.52-PS	AH8015	-	x	-	-	x	-	TG556749962	Price
CCMT 32.52-PSS	AH8005	-	x	-	-	x	-	TG556749957	Price
CCMT 32.52-PSS	AH8015	-	x	-	-	x	-	TG556749958	Price

Style - CCMT 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CCMT 431-PS	AH8005	-	x	-	-	x	-	TG556749963	Price
CCMT 431-PS	AH8015	-	x	-	-	x	-	TG556749964	Price

Style - CCMT 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CCMT 432-PS	AH8005	-	x	-	-	x	-	TG556749965	Price
CCMT 432-PS	AH8015	-	x	-	-	x	-	TG556749966	Price

Style - CNMA 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMA 432	T515	-	-	x	-	-	-	TG556733822	Price

Style - CNMA 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMA 433	T515	-	-	x	-	-	-	TG556733823	Price

Style - CNMG 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 431	T515	-	-	x	-	-	-	TG556733819	Price
CNMG 431-TM	T9115	x	-	x	-	-	-	TG556862419	Price
CNMG 431-TM	T9125	x	-	-	-	-	-	TG556864426	Price
CNMG 431-TSF	T9115	x	-	x	-	-	-	TG556862463	Price
CNMG 431-TSF	T9125	x	-	-	-	-	-	TG556864607	Price

Style - CNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 432-CM15	T515	-	-	x	-	-	-	TG556733824	Price
CNMG 432-TM	T515	-	-	x	-	-	-	TG556733820	Price
CNMG 432-TM	T9115	x	-	x	-	-	-	TG556862420	Price
CNMG 432-TM	T9125	x	-	-	-	-	-	TG556864601	Price
CNMG 432-TSF	T9115	x	-	x	-	-	-	TG556862464	Price
CNMG 432-TSF	T9125	x	-	-	-	-	-	TG556864431	Price

Style - CNMG 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 433	T515	-	-	x	-	-	-	TG556733821	Price
CNMG 433-CM	T515	-	-	x	-	-	-	TG556733825	Price
CNMG 433-TM	T9115	x	-	x	-	-	-	TG556862421	Price
CNMG 433-TM	T9125	x	-	-	-	-	-	TG556864427	Price

Style - CNMG 543 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 543	T515	-	-	x	-	-	-	TG556744299	Price

Style - CNMG 544 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CNMG 544	T515	-	-	x	-	-	-	TG556744296	Price

Style - CPMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CPMT 32.51-CM	T515	-	-	x	-	-	-	TG556747828	Price

Style - CPMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CPMT 32.52-CM	T515	-	-	x	-	-	-	TG556747829	Price

Style - CPMT 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
CPMT 432	AH8005	-	x	-	-	x	-	TG556747765	Price
CPMT 432	AH8015	-	x	-	-	x	-	TG556747766	Price

Style - DCMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCMT 32.51-CM	T515	-	-	x	-	-	-	TG556739800	Price
DCMT 32.51-PS	AH8005	-	x	-	-	x	-	TG556747776	Price
DCMT 32.51-PS	AH8015	-	x	-	-	x	-	TG556747777	Price
DCMT 32.51-PSF	AH8005	-	x	-	-	x	-	TG556747767	Price
DCMT 32.51-PSF	AH8015	-	x	-	-	x	-	TG556746101	Price
DCMT 32.51-PSS	AH8005	-	x	-	-	x	-	TG556747770	Price
DCMT 32.51-PSS	AH8015	-	x	-	-	x	-	TG556747771	Price

Style - DCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCMT 32.52-CM	T515	-	-	x	-	-	-	TG556740251	Price
DCMT 32.52-PS	AH8005	-	x	-	-	x	-	TG556747778	Price
DCMT 32.52-PS	AH8015	-	x	-	-	x	-	TG556747779	Price
DCMT 32.52-PSF	AH8005	-	x	-	-	x	-	TG556747768	Price
DCMT 32.52-PSF	AH8015	-	x	-	-	x	-	TG556747769	Price
DCMT 32.52-PSS	AH8005	-	x	-	-	x	-	TG556747772	Price
DCMT 32.52-PSS	AH8015	-	x	-	-	x	-	TG556747773	Price

Style - DCMT 32.53 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DCMT 32.53-PS	AH8005	-	x	-	-	x	-	TG556747780	Price
DCMT 32.53-PS	AH8015	-	x	-	-	x	-	TG556747781	Price
DCMT 32.53-PSS	AH8005	-	x	-	-	x	-	TG556747774	Price
DCMT 32.53-PSS	AH8015	-	x	-	-	x	-	TG556747775	Price

Style - DNMA 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMA 432	T515	-	-	x	-	-	-	TG556735277	Price

Style - DNMA 442 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMA 442	T515	-	-	x	-	-	-	TG556735278	Price

Style - DNMG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 331-TM	T9115	x	-	x	-	-	-	TG556862426	Price
DNMG 331-TM	T9125	x	-	-	-	-	-	TG556864563	Price

Style - DNMG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 332-TM	T9125	x	-	-	-	-	-	TG556864479	Price

Style - DNMG 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 431-TM	T9115	x	-	x	-	-	-	TG556862428	Price
DNMG 431-TM	T9125	x	-	-	-	-	-	TG556864516	Price
DNMG 431-TSF	T9115	x	-	x	-	-	-	TG556862466	Price
DNMG 431-TSF	T9125	x	-	-	-	-	-	TG556864385	Price

Style - DNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 432	T515	-	-	x	-	-	-	TG556733826	Price
DNMG 432-CM	T515	-	-	x	-	-	-	TG556745200	Price
DNMG 432-TM	T9115	x	-	x	-	-	-	TG556862429	Price
DNMG 432-TM	T9125	x	-	-	-	-	-	TG556864602	Price
DNMG 432-TSF	T9115	x	-	x	-	-	-	TG556862467	Price
DNMG 432-TSF	T9125	x	-	-	-	-	-	TG556864233	Price

Style - DNMG 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 433	T515	-	-	x	-	-	-	TG556733827	Price

MINIFORCETURN Turning Inserts

Style - DNMG 442 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 442	T515	-	-	x	-	-	-	TG556733828	Price

Style - DNMG 443 IC (in.) - 1/2 Thickness (in.) - .250 Radius (in.) - .047

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DNMG 443	T515	-	-	x	-	-	-	TG556733829	Price

Style - DXGU 220 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .004

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DXGU 220MFRE-JRP	SH725	x	x	-	-	-	-	TG556735016	Price
DXGU 220MFRE-JRP	SH725	x	x	-	-	-	-	TG556735017	Price

Style - DXGU 220.5 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .008

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DXGU 220.5L-SS	GT9530	x	-	x	-	-	-	TG556723758	Price
DXGU 220.5L-SS	KS05F	-	-	x	x	x	-	TG556723719	Price
DXGU 220.5L-SS	NS9530	x	-	x	-	-	-	TG556723766	Price
DXGU 220.5L-TS	GT9530	x	-	x	-	-	-	TG556723735	Price
DXGU 220.5L-TS	KS05F	-	-	x	x	x	-	TG556723723	Price
DXGU 220.5L-TS	NS9530	x	-	x	-	-	-	TG556723748	Price
DXGU 220.5MFRE-JRP	SH725	x	x	-	-	-	-	TG556734050	Price
DXGU 220.5MFRE-JRP	SH725	x	x	-	-	-	-	TG556735018	Price
DXGU 220.5R-SS	GT9530	x	-	x	-	-	-	TG556723757	Price
DXGU 220.5R-SS	KS05F	-	-	x	x	x	-	TG556723718	Price
DXGU 220.5R-SS	NS9530	x	-	x	-	-	-	TG556723765	Price
DXGU 220.5R-TS	GT9530	x	-	x	-	-	-	TG556723734	Price
DXGU 220.5R-TS	KS05F	-	-	x	x	x	-	TG556723722	Price
DXGU 220.5R-TS	NS9530	x	-	x	-	-	-	TG556723747	Price

Style - DXGU 221 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .016

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DXGU 221L-SS	GT9530	x	-	x	-	-	-	TG556723760	Price
DXGU 221L-SS	KS05F	-	-	x	x	x	-	TG556723721	Price
DXGU 221L-SS	NS9530	x	-	x	-	-	-	TG556723768	Price
DXGU 221L-TS	GT9530	x	-	x	-	-	-	TG556723737	Price
DXGU 221L-TS	KS05F	-	-	x	x	x	-	TG556723725	Price
DXGU 221L-TS	NS9530	x	-	x	-	-	-	TG556723750	Price
DXGU 221R-SS	GT9530	x	-	x	-	-	-	TG556723759	Price
DXGU 221R-SS	KS05F	-	-	x	x	x	-	TG556723720	Price
DXGU 221R-SS	NS9530	x	-	x	-	-	-	TG556723767	Price
DXGU 221R-TS	GT9530	x	-	x	-	-	-	TG556723736	Price
DXGU 221R-TS	KS05F	-	-	x	x	x	-	TG556723724	Price
DXGU 221R-TS	NS9530	x	-	x	-	-	-	TG556723749	Price

Style - DXGU 222 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
DXGU 222L-TS	GT9530	x	-	x	-	-	-	TG556723740	Price
DXGU 222L-TS	KS05F	-	-	x	x	x	-	TG556723727	Price
DXGU 222L-TS	NS9530	x	-	x	-	-	-	TG556723752	Price
DXGU 222R-TS	GT9530	x	-	x	-	-	-	TG556723739	Price
DXGU 222R-TS	KS05F	-	-	x	x	x	-	TG556723726	Price
DXGU 222R-TS	NS9530	x	-	x	-	-	-	TG556723751	Price

Style - RCMM 1003M0 IC (in.) - 10mm Thickness (in.) - 3.18mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RCMM 1003M0-61	AH8005	-	x	-	-	x	-	TG556747786	Price
RCMM 1003M0-61	AH8015	-	x	-	-	x	-	TG556747787	Price

Style - RCMM 1204M0 IC (in.) - 12mm Thickness (in.) - 4.76mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RCMM 1204M0-61	AH8005	-	x	-	-	x	-	TG556747788	Price
RCMM 1204M0-61	AH8015	-	x	-	-	x	-	TG556747789	Price

Style - RCMT 10T3M0 IC (in.) - 10mm Thickness (in.) - 3.97mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RCMT 10T3M0-RS	AH8005	-	x	-	-	x	-	TG556747782	Price
RCMT 10T3M0-RS	AH8015	-	x	-	-	x	-	TG556747783	Price

Style - RCMT 1204M0 IC (in.) - 12mm Thickness (in.) - 4.76mm

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
RCMT 1204M0-RS	AH8005	-	x	-	-	x	-	TG556747784	Price
RCMT 1204M0-RS	AH8015	-	x	-	-	x	-	TG556747785	Price

Style - SCMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SCMT 32.51-CM	T515	-	-	x	-	-	-	TG556744837	Price

Style - SCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SCMT 32.52-CM	T515	-	-	x	-	-	-	TG556747830	Price

Style - SCMT 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SCMT 431-CM	T515	-	-	x	-	-	-	TG556747831	Price

Style - SCMT 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SCMT 432-CM	T515	-	-	x	-	-	-	TG556741315	Price

Style - SNMA 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMA 432	T515	-	-	x	-	-	-	TG556733832	Price

Style - SNMA 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMA 433	T515	-	-	x	-	-	-	TG556733833	Price

Style - SNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 432	T515	-	-	x	-	-	-	TG556733830	Price

Style - SNMG 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 433	T515	-	-	x	-	-	-	TG556733831	Price

Style - SNMG 543 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .047

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 543	T515	-	-	x	-	-	-	TG556744297	Price

Style - SNMG 544 IC (in.) - 5/8 Thickness (in.) - .250 Radius (in.) - .062

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SNMG 544	T515	-	-	x	-	-	-	TG556744298	Price

Style - SPMT 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SPMT 431-CM	T515	-	-	x	-	-	-	TG556747832	Price

Style - SPMT 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
SPMT 432-CM	T515	-	-	x	-	-	-	TG556742152	Price

Style - TCMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TCMT 32.51-CM	T515	-	-	x	-	-	-	TG556747833	Price

Style - TCMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TCMT 32.52-CM	T515	-	-	x	-	-	-	TG556741316	Price

Style - TCMT 32.53 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .047

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TCMT 32.53-CM	T515	-	-	x	-	-	-	TG556747834	Price

Style - TNMG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 331	T515	-	-	x	-	-	-	TG556733834	Price
TNMG 331-CH	T515	-	-	x	-	-	-	TG556733837	Price

Style - TNMG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 332	T515	-	-	x	-	-	-	TG556733835	Price
TNMG 332-CH	T515	-	-	x	-	-	-	TG556733838	Price

Style - TNMG 333 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .047

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMG 333	T515	-	-	x	-	-	-	TG556733836	Price
TNMG 333-CH	T515	-	-	x	-	-	-	TG556733839	Price

Style - TPMT 2.520.2 IC (in.) - 5/16 Thickness (in.) - .125 Radius (in.) - .008

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 2.520.2-PS	AH725	x	x	x	-	x	-	TG556856680	Price

Style - TPMT 2.521 IC (in.) - 5/16 Thickness (in.) - .125 Radius (in.) - .016

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 2.521-PM	AH725	x	x	x	-	x	-	TG556856728	Price
TPMT 2.521-PS	AH725	x	x	x	-	x	-	TG556856681	Price

Style - TPMT 2.522 IC (in.) - 5/16 Thickness (in.) - .125 Radius (in.) - .031

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 2.522-PM	AH725	x	x	x	-	x	-	TG556856729	Price
TPMT 2.522-PS	AH725	x	x	x	-	x	-	TG556856682	Price

Style - TPMT 21.50.5 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .008

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 21.50.5-PS	AH725	x	x	x	-	x	-	TG556856675	Price

Style - TPMT 21.51 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 21.51-PM	AH725	x	x	x	-	x	-	TG556856724	Price
TPMT 21.51-PS	AH725	x	x	x	-	x	-	TG556856676	Price

Style - TPMT 21.52 IC (in.) - 1/4 Thickness (in.) - .094 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 21.52-PM	AH725	x	x	x	-	x	-	TG556856725	Price
TPMT 21.52-PS	AH725	x	x	x	-	x	-	TG556856677	Price

Style - TPMT 32.51 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 32.51-CM	T515	-	-	x	-	-	-	TG556747835	Price
TPMT 32.51-PM	AH725	x	x	x	-	x	-	TG556856730	Price
TPMT 32.51-PS	AH725	x	x	x	-	x	-	TG556856683	Price

Style - TPMT 32.52 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 32.52-CM	T515	-	-	x	-	-	-	TG556742148	Price
TPMT 32.52-PM	AH725	x	x	x	-	x	-	TG556856731	Price
TPMT 32.52-PS	AH725	x	x	x	-	x	-	TG556856684	Price

Style - TPMT 32.53 IC (in.) - 3/8 Thickness (in.) - .156 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TPMT 32.53-CM	T515	-	-	x	-	-	-	TG556747836	Price

Style - VBMT 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VBMT 331-CM	T515	-	-	x	-	-	-	TG556741554	Price

Style - VBMT 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VBMT 332-CM	T515	-	-	x	-	-	-	TG556741555	Price

Style - VBMT 333 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VBMT 333-CM	T515	-	-	x	-	-	-	TG556747837	Price

Style - VCMT 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VCMT 331	AH8005	-	x	-	-	x	-	TG556747802	Price
VCMT 331	AH8015	-	x	-	-	x	-	TG556747803	Price
VCMT 331-CM	T515	-	-	x	-	-	-	TG556747838	Price
VCMT 331-PS	AH8005	-	x	-	-	x	-	TG556747798	Price
VCMT 331-PS	AH8015	-	x	-	-	x	-	TG556747799	Price
VCMT 331-PSF	AH8005	-	x	-	-	x	-	TG556747790	Price
VCMT 331-PSF	AH8015	-	x	-	-	x	-	TG556747791	Price
VCMT 331-PSS	AH8005	-	x	-	-	x	-	TG556747794	Price
VCMT 331-PSS	AH8015	-	x	-	-	x	-	TG556747795	Price

Style - VCMT 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VCMT 332	AH8005	-	x	-	-	x	-	TG556747804	Price
VCMT 332	AH8015	-	x	-	-	x	-	TG556747805	Price
VCMT 332-CM	T515	-	-	x	-	-	-	TG556747839	Price
VCMT 332-PS	AH8005	-	x	-	-	x	-	TG556747800	Price
VCMT 332-PS	AH8015	-	x	-	-	x	-	TG556747801	Price
VCMT 332-PSF	AH8005	-	x	-	-	x	-	TG556747792	Price
VCMT 332-PSF	AH8015	-	x	-	-	x	-	TG556747793	Price
VCMT 332-PSS	AH8005	-	x	-	-	x	-	TG556747796	Price
VCMT 332-PSS	AH8015	-	x	-	-	x	-	TG556747797	Price

Style - VCMT 333 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VCMT 333	AH8005	-	x	-	-	x	-	TG556747806	Price
VCMT 333	AH8015	-	x	-	-	x	-	TG556747807	Price

Style - VNMG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VNMG 331	T515	-	-	x	-	-	-	TG556733847	Price
VNMG 331-TM	T9115	x	-	x	-	-	-	TG556862454	Price
VNMG 331-TM	T9125	x	-	-	-	-	-	TG556864606	Price
VNMG 331-TSF	T9115	x	-	x	-	-	-	TG556862478	Price
VNMG 331-TSF	T9125	x	-	-	-	-	-	TG556864525	Price

Style - VNMG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VNMG 332	T515	-	-	x	-	-	-	TG556733848	Price
VNMG 332-TM	T9115	x	-	x	-	-	-	TG556862455	Price
VNMG 332-TM	T9125	x	-	-	-	-	-	TG556864232	Price
VNMG 332-TSF	T9115	x	-	x	-	-	-	TG556862479	Price
VNMG 332-TSF	T9125	x	-	-	-	-	-	TG556864526	Price

Style - VXGU 73.50 IC (in.) - .219 Thickness (in.) - .109 Radius (in.) - .004									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VXGU 73.50 MFLE-JRP	SH725	x	x	-	-	-	-	TG556734978	Price
VXGU 73.50 MFRE-JRP	SH725	x	x	-	-	-	-	TG556734979	Price

Style - VXGU 73.50.5 IC (in.) - .219 Thickness (in.) - .109 Radius (in.) - .008									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
VXGU 73.50.5MFLE-JRP	SH725	x	x	-	-	-	-	TG556733386	Price
VXGU 73.50.5MFRE-JRP	SH725	x	x	-	-	-	-	TG556734980	Price

Style - WNMA 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WNMA 432	T515	-	-	x	-	-	-	TG556733843	Price

Style - WNMA 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WNMA 433	T515	-	-	x	-	-	-	TG556733844	Price

Style - WNMG 331 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WNMG 331-TM	T9115	x	-	x	-	-	-	TG556862457	Price
WNMG 331-TM	T9125	x	-	-	-	-	-	TG556864325	Price
WNMG 331-TSF	T9115	x	-	x	-	-	-	TG556862481	Price
WNMG 331-TSF	T9125	x	-	-	-	-	-	TG556864487	Price

Style - WNMG 332 IC (in.) - 3/8 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WNMG 332	T515	-	-	x	-	-	-	TG556750649	Price
WNMG 332-TM	T9115	x	-	x	-	-	-	TG556862458	Price
WNMG 332-TM	T9125	x	-	-	-	-	-	TG556864565	Price
WNMG 332-TSF	T9115	x	-	x	-	-	-	TG556862482	Price
WNMG 332-TSF	T9125	x	-	-	-	-	-	TG556864235	Price

Style - WNMG 431 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WNMG 431-TM	T9115	x	-	x	-	-	-	TG556862459	Price
WNMG 431-TM	T9125	x	-	-	-	-	-	TG556864521	Price
WNMG 431-TSF	T9115	x	-	x	-	-	-	TG556862483	Price
WNMG 431-TSF	T9125	x	-	-	-	-	-	TG556864568	Price

Style - WNMG 432 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WNMG 432	T515	-	-	x	-	-	-	TG556733840	Price
WNMG 432-CM	T515	-	-	x	-	-	-	TG556733845	Price
WNMG 432-TM	T9115	x	-	x	-	-	-	TG556862460	Price
WNMG 432-TM	T9125	x	-	-	-	-	-	TG556864482	Price
WNMG 432-TSF	T9115	x	-	x	-	-	-	TG556862484	Price
WNMG 432-TSF	T9125	x	-	-	-	-	-	TG556864236	Price

Style - WNMG 433 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .047									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WNMG 433	T515	-	-	x	-	-	-	TG556733841	Price
WNMG 433-CM	T515	-	-	x	-	-	-	TG556733846	Price
WNMG 433-TM	T9115	x	-	x	-	-	-	TG556862461	Price
WNMG 433-TM	T9125	x	-	-	-	-	-	TG556864483	Price
WNMG 433-TSF	T9115	x	-	x	-	-	-	TG556862485	Price
WNMG 433-TSF	T9125	x	-	-	-	-	-	TG556864608	Price

Style - WNMG 434 IC (in.) - 1/2 Thickness (in.) - .187 Radius (in.) - .062									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WNMG 434	T515	-	-	x	-	-	-	TG556733842	Price

Style - WWMU 05X205 IC (in.) - .228 Thickness (in.) - .094 Radius (in.) - .020									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WWMU 05X205R-DJ	AH9030	x	-	x	-	-	-	TG556712010	Price
WWMU 05X205R-DS	AH6030	-	x	-	-	x	-	TG556712012	Price

Style - WWMU 060306 IC (in.) - .264 Thickness (in.) - .114 Radius (in.) - .024									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WWMU 060306R-DJ	AH9030	x	-	x	-	-	-	TG556712011	Price
WWMU 060306R-DS	AH6030	-	x	-	-	x	-	TG556712013	Price

Style - WXGU 220 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .008									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WXGU 220L-SS	GT9530	x	-	x	-	-	-	TG556723754	Price
WXGU 220L-SS	KS05F	-	-	x	x	x	-	TG556723709	Price
WXGU 220L-SS	NS9530	x	-	x	-	-	-	TG556723762	Price
WXGU 220L-TS	GT9530	x	-	x	-	-	-	TG556723729	Price
WXGU 220L-TS	KS05F	-	-	x	x	x	-	TG556723713	Price
WXGU 220L-TS	NS9530	x	-	x	-	-	-	TG556723742	Price
WXGU 220R-SS	GT9530	x	-	x	-	-	-	TG556723753	Price
WXGU 220R-SS	KS05F	-	-	x	x	x	-	TG556723708	Price
WXGU 220R-SS	NS9530	x	-	x	-	-	-	TG556723761	Price

Style - WXGU 220 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .008									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WXGU 220R-TS	GT9530	x	-	x	-	-	-	TG556723728	Price
WXGU 220R-TS	KS05F	-	-	x	x	x	-	TG556723712	Price
WXGU 220R-TS	NS9530	x	-	x	-	-	-	TG556723741	Price

Style - WXGU 221 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .016									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WXGU 221L-SS	GT9530	x	-	x	-	-	-	TG556723756	Price
WXGU 221L-SS	KS05F	-	-	x	x	x	-	TG556723711	Price
WXGU 221L-SS	NS9530	x	-	x	-	-	-	TG556723764	Price
WXGU 221L-TS	GT9530	x	-	x	-	-	-	TG556723731	Price
WXGU 221L-TS	KS05F	-	-	x	x	x	-	TG556723715	Price
WXGU 221L-TS	NS9530	x	-	x	-	-	-	TG556723744	Price
WXGU 221L-TSW	AH725	x	x	x	-	x	-	TG556723697	Price
WXGU 221L-TSW	GT9530	x	-	x	-	-	-	TG556723705	Price
WXGU 221L-TSW	NS9530	x	-	x	-	-	-	TG556723701	Price
WXGU 221R-SS	GT9530	x	-	x	-	-	-	TG556723755	Price
WXGU 221R-SS	KS05F	-	-	x	x	x	-	TG556723710	Price
WXGU 221R-SS	NS9530	x	-	x	-	-	-	TG556723763	Price
WXGU 221R-TS	GT9530	x	-	x	-	-	-	TG556723730	Price
WXGU 221R-TS	KS05F	-	-	x	x	x	-	TG556723714	Price
WXGU 221R-TS	NS9530	x	-	x	-	-	-	TG556723743	Price
WXGU 221R-TSW	AH725	x	x	x	-	x	-	TG556723696	Price
WXGU 221R-TSW	GT9530	x	-	x	-	-	-	TG556723704	Price
WXGU 221R-TSW	NS9530	x	-	x	-	-	-	TG556723700	Price

Style - WXGU 222 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WXGU 222L-TS	GT9530	x	-	x	-	-	-	TG556723733	Price
WXGU 222L-TS	KS05F	-	-	x	x	x	-	TG556723717	Price
WXGU 222L-TS	NS9530	x	-	x	-	-	-	TG556723746	Price
WXGU 222L-TSW	AH725	x	x	x	-	x	-	TG556723699	Price
WXGU 222L-TSW	GT9530	x	-	x	-	-	-	TG556723707	Price
WXGU 222L-TSW	NS9530	x	-	x	-	-	-	TG556723703	Price

Style - WXGU 222 IC (in.) - 1/4 Thickness (in.) - .125 Radius (in.) - .031									
Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WXGU 222R-TS	GT9530	x	-	x	-	-	-	TG556723732	Price
WXGU 222R-TS	KS05F	-	-	x	x	x	-	TG556723716	Price
WXGU 222R-TS	NS9530	x	-	x	-	-	-	TG556723745	Price
WXGU 222R-TSW	AH725	x	x	x	-	x	-	TG556723698	Price
WXGU 222R-TSW	GT9530	x	-	x	-	-	-	TG556723706	Price
WXGU 222R-TSW	NS9530	x	-	x	-	-	-	TG556723702	Price

CHIPBREAKER	APPLICATION INFORMATION
TSF	General purpose finishing for steels
TM	Medium cutting general purpose application
TH	Heavy duty cutting including interruption and irregular surface conditions
PS	For general purpose boring applications
PM	General to rough boring applications
SS	For finishing applications in stainless steel
CF	For finishing applications in cast iron
CM	For medium applications in cast iron
CH	For roughing applications in cast iron
SA	For finish cutting in super alloys
HMM	Light to moderate cutting conditions with super alloy applications
AL	For non-ferrous boring applications
PSF	For finish machining processes
PSS	For medium to semi finishing processes
TN28	For general turning of non-ferrous metals

Cut-Off Inserts

External Grooving and Parting

DGM Style



- 2 Corner insert
- Well designed edge with high strength
- Smooth chip evacuation

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
2	DGM2-002-15R	AH725	x	x	x	-	x	-	TG556861530	Price
2	DGM2-002-15L	AH725	x	x	x	-	x	-	TG556861582	Price
2	DGM2-002-15R	GH130	x	x	-	-	-	-	TG556861516	Price
2	DGM2-002-15L	GH130	x	x	-	-	-	-	TG556861515	Price
2	DGM2-020	AH725	x	x	x	-	x	-	TG556860478	Price
2	DGM2-020	AH7025	x	x	x	-	-	-	TG556745863	Price
2	DGM2-020	GH130	x	x	-	-	-	-	TG556860385	Price
2	DGM2-020	NS9530	x	-	x	-	-	-	TG556713925	Price
2	DGM2-020	T9125	x	-	-	-	-	-	TG556993811	Price
2	DGM2-020-6R	AH725	x	x	x	-	x	-	TG556860332	Price
2	DGM2-020-6L	AH725	x	x	x	-	x	-	TG556860549	Price
2	DGM2-020-6R	GH130	x	x	-	-	-	-	TG556860386	Price
2	DGM2-020-6L	GH130	x	x	-	-	-	-	TG556860435	Price
2	DGM2-020-8R	AH725	x	x	x	-	x	-	TG556860733	Price
2	DGM2-020-8L	AH725	x	x	x	-	x	-	TG556860333	Price
2	DGM2-020-8R	GH130	x	x	-	-	-	-	TG556860281	Price
2	DGM2-020-8L	GH130	x	x	-	-	-	-	TG556860591	Price
2	DGM2-020-15R	AH725	x	x	x	-	x	-	TG556860434	Price
2	DGM2-020-15L	AH725	x	x	x	-	x	-	TG556860479	Price
2	DGM2-020-15R	GH130	x	x	-	-	-	-	TG556860548	Price
2	DGM2-020-15L	GH130	x	x	-	-	-	-	TG556860732	Price
3	DGM3-002-6R	AH725	x	x	x	-	x	-	TG556860592	Price
3	DGM3-002-6L	AH725	x	x	x	-	x	-	TG556860387	Price
3	DGM3-002-6R	GH130	x	x	-	-	-	-	TG556860481	Price
3	DGM3-002-6L	GH130	x	x	-	-	-	-	TG556860480	Price
3	DGM3-020	AH725	x	x	x	-	x	-	TG556860388	Price
3	DGM3-020	AH905	-	-	-	-	x	-	TG556993892	Price
3	DGM3-020	AH7025	x	x	x	-	-	-	TG556745864	Price
3	DGM3-020	GH130	x	x	-	-	-	-	TG556860436	Price
3	DGM3-020	NS9530	x	-	x	-	-	-	TG556713926	Price
3	DGM3-020	T9125	x	-	-	-	x	-	TG556993814	Price

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
3	DGM3-020-6R	AH725	x	x	x	-	x	-	TG556860389	Price
3	DGM3-020-6L	AH725	x	x	x	-	x	-	TG556860594	Price
3	DGM3-020-6R	GH130	x	x	-	-	-	-	TG556860335	Price
3	DGM3-020-6L	GH130	x	x	-	-	-	-	TG556860334	Price
3	DGM3-020-15R	AH725	x	x	x	-	x	-	TG556860551	Price
3	DGM3-020-15L	AH725	x	x	x	-	x	-	TG556860437	Price
3	DGM3-020-15R	GH130	x	x	-	-	-	-	TG556860593	Price
3	DGM3-020-15L	GH130	x	x	-	-	-	-	TG556860550	Price
4	DGM4-030	AH725	x	x	x	-	x	-	TG556860438	Price
4	DGM4-030	AH905	-	-	-	-	x	-	TG556993893	Price
4	DGM4-030	AH7025	x	x	x	-	-	-	TG556745865	Price
4	DGM4-030	GH130	x	x	-	-	-	-	TG556860552	Price
4	DGM4-030	NS9530	x	-	x	-	-	-	TG556713927	Price
4	DGM4-030	T9125	x	-	-	-	x	-	TG556993816	Price
4	DGM4-030-4R	AH725	x	x	x	-	x	-	TG556860391	Price
4	DGM4-030-4L	AH725	x	x	x	-	x	-	TG556860595	Price
4	DGM4-030-4R	GH130	x	x	-	-	-	-	TG556860338	Price
4	DGM4-030-4L	GH130	x	x	-	-	-	-	TG556860337	Price
4	DGM4-030-15R	AH725	x	x	x	-	x	-	TG556860336	Price
4	DGM4-030-15L	AH725	x	x	x	-	x	-	TG556860553	Price
4	DGM4-030-15L	GH130	x	x	-	-	-	-	TG556860439	Price
4	DGM4-030-15R	GH130	x	x	-	-	-	-	TG556860390	Price
5	DGM5-030	AH725	x	x	x	-	x	-	TG556860440	Price
5	DGM5-030	AH905	-	-	-	-	x	-	TG556993894	Price
5	DGM5-030	AH7025	x	x	x	-	-	-	TG556745866	Price
5	DGM5-030	GH130	x	x	-	-	-	-	TG556860554	Price
5	DGM5-030	NS9530	x	-	x	-	-	-	TG556713928	Price
5	DGM5-030	T9125	x	-	-	-	-	-	TG556993818	Price
5	DGM5-030-4R	AH725	x	x	x	-	x	-	TG556860555	Price
5	DGM5-030-4R	GH130	x	x	-	-	-	-	TG556860441	Price
6	DGM6-030	AH725	x	x	x	-	x	-	TG556860339	Price
6	DGM6-030	AH905	-	-	-	-	x	-	TG556993895	Price
6	DGM6-030	AH7025	x	x	x	-	-	-	TG556745867	Price
6	DGM6-030	GH130	x	x	-	-	-	-	TG556860392	Price
6	DGM6-030	T9125	x	-	-	-	-	-	TG556993819	Price
8	DGM8-040	AH725	x	x	x	-	x	-	TG556860393	Price
8	DGM8-040	GH130	x	x	-	-	-	-	TG556860482	Price
8	DGM8-040	T9125	x	-	-	-	-	-	TG556993820	Price

Cut-Off Inserts

External Grooving and Parting

SGM Style

- 1 Corner insert
- Well designed edge with high strength
- Smooth chip evacuation

Right/Left Hand - Left

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
2	SGM2-020-6L	AH725	x	x	x	-	x	-	TG556860503	Price
2	SGM2-020-6L	GH130	x	x	-	-	-	-	TG556860615	Price
3	SGM3-020-15L	AH725	x	x	x	-	x	-	TG556860412	Price
3	SGM3-020-15L	GH130	x	x	-	-	-	-	TG556860361	Price
3	SGM3-020-6L	AH725	x	x	x	-	x	-	TG556860461	Price
3	SGM3-020-6L	GH130	x	x	-	-	-	-	TG556860573	Price
4	SGM3-030-4L	AH725	x	x	x	-	x	-	TG556860364	Price
4	SGM3-030-4L	GH130	x	x	-	-	-	-	TG556860307	Price

Right/Left Hand - Right

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
2	SGM2-020-6R	AH725	x	x	x	-	x	-	TG556860305	Price
2	SGM2-020-6R	GH130	x	x	-	-	-	-	TG556860755	Price
3	SGM3-020-15R	AH725	x	x	x	-	x	-	TG556860616	Price
3	SGM3-020-15R	GH130	x	x	-	-	-	-	TG556860362	Price

Right/Left Hand - Right

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
3	SGM3-020-6R	AH725	x	x	x	-	x	-	TG556860574	Price
3	SGM3-020-6R	GH130	x	x	-	-	-	-	TG556860617	Price
4	SGM3-030-4R	AH725	x	x	x	-	x	-	TG556860757	Price
4	SGM3-030-4R	GH130	x	x	-	-	-	-	TG556860308	Price

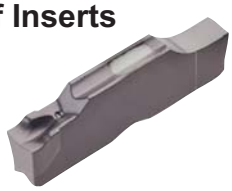
Right/Left Hand - Neutral

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
2	SGM2-020	AH725	x	x	x	-	x	-	TG556860411	Price
2	SGM2-020	GH130	x	x	-	-	-	-	TG556860502	Price
3	SGM3-020	AH725	x	x	x	-	x	-	TG556860306	Price
3	SGM3-020	GH130	x	x	-	-	-	-	TG556860756	Price
4	SGM4-030	AH725	x	x	x	-	x	-	TG556860363	Price
4	SGM4-030	GH130	x	x	-	-	-	-	TG556860413	Price
5	SGM5-030	AH725	x	x	x	-	x	-	TG556860575	Price
5	SGM5-030	GH130	x	x	-	-	-	-	TG556860462	Price
6	SGM6-030	AH725	x	x	x	-	x	-	TG556860504	Price
6	SGM6-030	GH130	x	x	-	-	-	-	TG556860414	Price

TUNGCUT Cut-Off Inserts

External Grooving and Parting

SGS Style



- 1 Corner insert
- Sharper edge and low cutting force
- Unique designed edge and chipbreaker

Style - SGS2020 Radius (in.) - .008

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
2	SGS2-020	AH725	x	x	x	-	x	-	TG556860505	Price
2	SGS2-020	GH130	x	x	-	-	-	-	TG556860618	Price
2	SGS2-020-6L	AH725	x	x	x	-	x	-	TG556860311	Price
2	SGS2-020-6R	AH725	x	x	x	-	x	-	TG556860415	Price
2	SGS2-020-6L	GH130	x	x	-	-	-	-	TG556860760	Price
2	SGS2-020-6R	GH130	x	x	-	-	-	-	TG556860365	Price
2	SGS2-020-15L	AH725	x	x	x	-	x	-	TG556860309	Price
2	SGS2-020-15R	AH725	x	x	x	-	x	-	TG556860310	Price
2	SGS2-020-15L	GH130	x	x	-	-	-	-	TG556860758	Price
2	SGS2-020-15R	GH130	x	x	-	-	-	-	TG556860759	Price

Style - SGS3002 Radius (in.) - .008

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
-	SGS3-002-15L	AH725	x	x	x	-	x	-	TG556860619	Price
3	SGS3-002-6L	AH725	x	x	x	-	x	-	TG556860464	Price
3	SGS3-002-6R	AH725	x	x	x	-	x	-	TG556861804	Price
3	SGS3-002-6L	GH130	x	x	-	-	-	-	TG556860577	Price
3	SGS3-002-6R	GH130	x	x	-	-	-	-	TG556861794	Price
3	SGS3-002-15R	AH725	x	x	x	-	x	-	TG556860576	Price
3	SGS3-002-15L	GH130	x	x	-	-	-	-	TG556860366	Price
3	SGS3-002-15R	GH130	x	x	-	-	-	-	TG556860463	Price

Style - SGS3020 Radius (in.) - .008

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
3	SGS3-020	AH725	x	x	x	-	x	-	TG556860761	Price
3	SGS3-020	GH130	x	x	-	-	-	-	TG556860506	Price
3	SGS3-020-6L	AH725	x	x	x	-	x	-	TG556860466	Price
3	SGS3-020-6R	AH725	x	x	x	-	x	-	TG556860579	Price
3	SGS3-020-6L	GH130	x	x	-	-	-	-	TG556860578	Price
3	SGS3-020-6R	GH130	x	x	-	-	-	-	TG556860621	Price
3	SGS3-020-15L	AH725	x	x	x	-	x	-	TG556860620	Price
3	SGS3-020-15R	AH725	x	x	x	-	x	-	TG556860416	Price
3	SGS3-020-15L	GH130	x	x	-	-	-	-	TG556860507	Price
3	SGS3-020-15R	GH130	x	x	-	-	-	-	TG556860465	Price

Style - SGS4030 Radius (in.) - .012

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
4	SGS4-030	AH725	x	x	x	-	x	-	TG556860622	Price
4	SGS4-030	GH130	x	x	-	-	-	-	TG556860367	Price

Style - SGS5030 Radius (in.) - .012

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
5	SGS5-030	AH725	x	x	x	-	x	-	TG556860417	Price
5	SGS5-030	GH130	x	x	-	-	-	-	TG556860368	Price

Style - SGS6030 Radius (in.) - .012

Insert Seat Size	Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
6	SGS6-030	AH725	x	x	x	-	x	-	TG556860467	Price
6	SGS6-030	GH130	x	x	-	-	-	-	TG556860580	Price

AVGT Milling Inserts

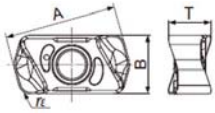


- Fit the EPAV style indexable end mills
- 6mm Length
- 5mm Width

Model No.	Grade	Radius (mm)	ST	SS	CI	N	S	H	Order No.	Price
AVGT060302PBER-MJ	AH120	0.2	x	x	x	-	x	-	TG436743203	Price
AVGT060302PBER-MJ	AH3135	0.2	x	x	-	-	-	-	TG436733155	Price
AVGT060302PBFR-AJ	KS05F	0.2	-	-	x	x	x	-	TG436733157	Price
AVGT060304PBER-MJ	AH120	0.4	x	x	x	-	x	-	TG436743204	Price
AVGT060304PBER-MJ	AH3135	0.4	x	x	-	-	-	-	TG436727544	Price
AVGT060304PBFR-AJ	KS05F	0.4	-	-	x	x	x	-	TG436733158	Price
AVGT060308PBER-MJ	AH120	0.8	x	x	x	-	x	-	TG436743205	Price
AVGT060308PBER-MJ	AH3135	0.8	x	x	-	-	-	-	TG436733156	Price
AVGT060308PBER-AJ	KS05F	0.8	-	-	x	x	x	-	TG436733159	Price

DOFEED Milling Inserts

LNMU Style



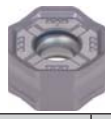


- MJ - for general purpose
- ML - for low cutting force

Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
LNGU06X5ZER-W	AH725	x	x	x	-	x	-	TG436999366	Price
LNMU0303ER-MJ	AH725	x	x	x	-	x	-	TG436864162	Price
LNMU0303ER-ML	AH725	x	x	x	-	x	-	TG436864165	Price
LNMU0303ZER-MJ	AH130	x	x	-	-	-	-	TG436864164	Price
LNMU0303ZER-MJ	AH3035	x	-	-	-	-	x	TG436707135	Price
LNMU0303ZER-MJ	AH8015	-	x	-	-	x	-	TG436754162	Price
LNMU0303ZER-ML	AH130	x	x	-	-	-	-	TG436864163	Price
LNMU0303ZER-ML	AH3035	x	-	-	-	-	x	TG436707136	Price
LNMU0303ZER-ML	AH8015	-	x	-	-	x	-	TG436761978	Price
LNMU06X5ZER-MJ	AH120	x	x	x	-	x	-	TG436881593	Price
LNMU06X5ZER-MJ	AH130	x	x	-	-	-	-	TG436869923	Price
LNMU06X5ZER-MJ	AH3035	x	-	-	-	-	x	TG436995912	Price
LNMU06X5ZER-MJ	AH725	x	x	x	-	x	-	TG436869924	Price
LNMU06X5ZER-MJ	AH8015	-	x	-	-	x	-	TG436756595	Price
LNMU06X5ZER-ML	AH120	x	x	x	-	x	-	TG436881594	Price
LNMU06X5ZER-ML	AH130	x	x	-	-	-	-	TG436885144	Price
LNMU06X5ZER-ML	AH3035	x	-	-	-	-	x	TG436995913	Price
LNMU06X5ZER-ML	AH725	x	x	x	-	x	-	TG436885143	Price
LNMU06X5ZER-ML	AH8015	-	x	-	-	x	-	TG436761979	Price

ONGU Milling Inserts

ONGU-W shown



Model No.	Grade	ST	SS	CI	S	H	Order No.	Price
ONGU 0507ANEN-MJ	AH120	x	x	x	x	-	TG436735446	Price
ONGU 0507ANEN-MJ	AH3135	x	x	-	-	-	TG436735445	Price
ONGU 0507ANEN-MJ	T3225	x	x	-	-	-	TG436749572	Price
ONGU 0507ANEN-W	AH120	x	x	x	x	-	TG436735448	Price
ONGU 0507ANEN-W	AH3135	x	x	-	-	-	TG436735447	Price

DOTMILL RNGU / RNMU Milling Inserts

Model No.	Grade	ST	SS	CI	S	H	Order No.	Price
RNGU1307ZNER-MJ	AH120	x	x	x	x	-	TG436745704	Price
RNGU1307ZNER-MJ	AH3135	x	x	-	-	-	TG436741229	Price
RNMU1307ZNER-MJ	AH120	x	x	x	x	-	TG436758748	Price
RNMU1307ZNER-MJ	AH3135	x	x	-	-	-	TG436758747	Price
RNMU1307ZNER-MJ	T1215	-	-	x	-	-	TG436758750	Price
RNMU1307ZNER-MJ	T3225	x	x	-	-	-	TG436758749	Price

DOTMILL SNGU / SNMU Milling Inserts

Model No.	Grade	ST	SS	CI	S	H	Order No.	Price
SNGU 1307ANEN-MH	T3225	x	x	-	-	-	TG436747499	Price
SNGU 1307ANEN-MJ	AH120	x	x	x	-	-	TG436999370	Price
SNGU 1307ANEN-MJ	AH3135	x	x	-	-	-	TG436999369	Price
SNGU 1307ANEN-MJ	T3225	x	x	-	-	-	TG436749573	Price
SNGU 1307ANEN-W	AH120	x	x	x	-	-	TG436735444	Price
SNGU 1307ANEN-W	AH3135	x	x	-	-	-	TG436735443	Price
SNGU 1307C14ANEN-MJ	AH120	x	x	x	-	-	TG436735438	Price
SNGU 1307C14ANEN-MJ	AH3135	x	x	-	-	-	TG436735437	Price
SNMU 1307ANEN-MJ	AH120	x	x	x	-	-	TG436735440	Price
SNMU 1307ANEN-MJ	AH3135	x	x	-	-	-	TG436735439	Price
SNMU 1307ANEN-MJ	T1215	-	-	x	-	-	TG436758742	Price
SNMU 1307ANEN-MJ	T3225	x	x	-	-	-	TG436758741	Price

Inserts

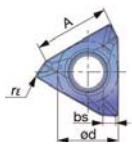
TNGU Style



- AH120 - For steel, cast iron and super alloy applications
- AH3135 - For steel, stainless steel, super alloys and hard material applications

Model No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TNMU120708PER-MJ	AH120	x	x	x	-	x	-	TG436752715	Price
TNMU120708PER-MJ	AH3135	x	x	-	-	-	-	TG436752714	Price
TNMU120708PER-MJ	T1215	-	-	x	-	-	-	TG436753458	Price
TNMU120708PER-MJ	T3225	x	x	-	-	-	-	TG436753456	Price
TNMU120708PER-NMJ	AH120	x	x	x	-	x	-	TG436752717	Price
TNMU120708PER-NMJ	AH3135	x	x	-	-	-	-	TG436752716	Price
TNGU120708PER-MJ	AH120	x	x	x	-	x	-	TG436730265	Price
TNGU120708PER-MJ	AH3135	x	x	-	-	-	-	TG436730264	Price
TNGU120708PER-NMJ	AH120	x	x	x	-	x	-	TG436739566	Price
TNGU120708PER-NMJ	AH3135	x	x	-	-	x	-	TG436739565	Price
TNMU1207R16PER-MJ	AH120	x	x	x	-	x	-	TG436735207	Price
TNMU1207R16PER-MJ	AH3135	x	x	-	-	-	-	TG436735208	Price

TUNG-TRI TOMT Milling Inserts







Model No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
TOMT 060302PDER-MJ	AH120	x	x	x	-	x	-	TG436999330	Price
TOMT 060302PDER-MJ	AH3135	x	x	-	-	-	-	TG436999329	Price
TOMT 060304PDER-MJ	AH120	x	x	x	-	x	-	TG436999332	Price
TOMT 060304PDER-MJ	AH3135	x	x	-	-	-	-	TG436999331	Price
TOMT 060308PDER-MJ	AH120	x	x	x	-	x	-	TG436999334	Price
TOMT 060308PDER-MJ	AH3135	x	x	-	-	-	-	TG436999333	Price
TOMT 060308PDER-MJ	T1215	-	-	x	-	-	-	TG436747250	Price
TOMT 100404PDER-MJ	AH120	x	x	x	-	x	-	TG436999151	Price
TOMT 100404PDER-MJ	AH3135	x	x	-	-	-	-	TG436999150	Price
TOMT 100408PDER-MJ	AH120	x	x	x	-	x	-	TG436999179	Price
TOMT 100408PDER-MJ	AH3135	x	x	-	-	-	-	TG436999178	Price
TOMT 100408PDER-MJ	T1215	-	-	x	-	-	-	TG436747251	Price
TOMT 100416PDER-MJ	AH120	x	x	x	-	x	-	TG436999336	Price
TOMT 100416PDER-MJ	AH3135	x	x	-	-	-	-	TG436999335	Price
TOMT 150604PDER-MJ	AH120	x	x	x	-	x	-	TG436999186	Price
TOMT 150604PDER-MJ	AH3135	x	x	-	-	-	-	TG436999185	Price
TOMT 150608PDER-MJ	AH120	x	x	x	-	x	-	TG436999154	Price
TOMT 150608PDER-MJ	AH3135	x	x	-	-	-	-	TG436999153	Price
TOMT 150608PDER-MJ	T1215	-	-	x	-	-	-	TG436747252	Price
TOMT 150608PDER-NMJ	AH120	x	x	x	-	x	-	TG436999389	Price
TOMT 150608PDER-NMJ	AH3135	x	x	-	-	-	-	TG436999374	Price
TOMT 150616PDER-MJ	AH120	x	x	x	-	x	-	TG436999338	Price
TOMT 150616PDER-MJ	AH3135	x	x	-	-	-	-	TG436999337	Price
TOMT 150620PDER-MJ	AH120	x	x	x	-	x	-	TG436999340	Price
TOMT 150620PDER-MJ	AH3135	x	x	-	-	-	-	TG436999339	Price

Inserts

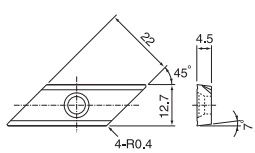
WWCW Style

- For milling applications

Model No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
WWCW13T3AFER-WS	NS740	x	-	-	-	-	-	TG556849026	Price
WWCW13T3AFFR-WS	KS05F	-	-	x	x	x	-	TG556849027	Price

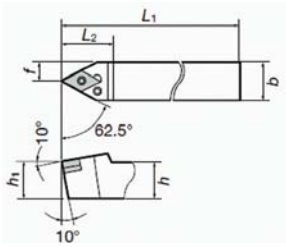
Milling Inserts

XCET Style



Item No.	Grade	ST	SS	CI	N	S	H	Order No.	Price
XCET310404ER	AH120	x	x	x	-	x	-	TG556849641	Price
XCET310404ER	AH330	x	-	-	-	-	-	TG556811536	Price
XCET310404ER	NS740	x	-	-	-	-	-	TG556821581	Price
XCET310404ER	TH10	x	-	x	-	-	-	TG556837464	Price
XCET310404ER	UX30	x	x	-	-	-	-	TG556811538	Price

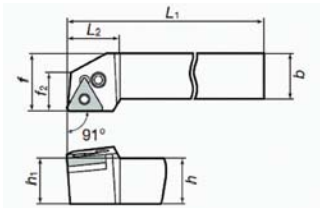
PDJNR/L Holders



A x B (in.)	OAL L1	L2	Center Height f2	Uses Insert	Left			Right		
					Model No.	Order No.	Price	Model No.	Order No.	Price
1 x 1	6.000	.625	1.000	DN..33..	PDJNL164-CHP	**TG206730832**	Price	PDJNR164-CHP	**TG206730831**	Price
20mm x 20mm	125mm	27mm	16mm	DN..1104..	PDJNL2020K1104	**TG206710296**	Price	PDJNR2020K1104	**TG206710295**	Price
25mm x 25mm	150mm	36mm	25mm	DN..33..	PDJNL2525M15-CHP	**TG206718769**	Price	PDJNR2525M15-CHP	**TG206728355**	Price

PTGNR/L Turning Tool Holders

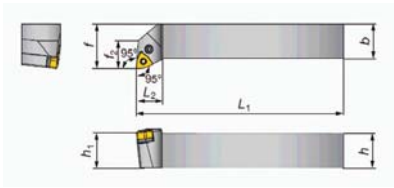
- .031 Standard corner radius
- Negative rake
- Lever lock system



Shank Size	OAL	Head Length	Height	Head Width	Center Height	Uses Insert Style	Right		
							Model No.	Order No.	Price
25mm x 25mm	150mm	20mm	25.0mm	32.0mm	22.5mm	TN..1104..	PTGNR2525M1104	**TG206708732**	Price

PWLNR/L Turning Tool Holders

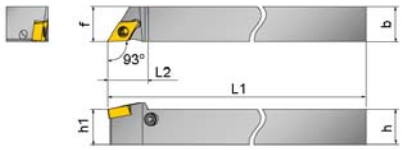
- .031 Standard corner radius
- Negative rake
- Level lock system



Shank Size (in.)	OAL	Head Length	Height	Head Width	Center Height	Uses Insert Style	Left		
							Model No.	Order No.	Price
25mm x 25mm	150mm	19mm	25.0mm	32.0mm	20mm	WN..0604..	PWLNL2525M0604	**TG206710302**	Price

MINIFORACI TURN Style JPDJ Turning & Profiling Tool Holders

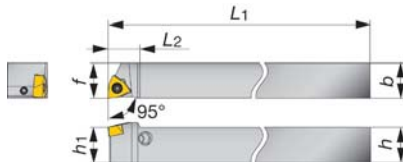
- J-type
- Positive rake, side clamping system
- Right hand shown
- Note: right hand (R) tool holders use left hand inserts and left (L) hand tool holders use right hand inserts



Shank Size A x B (in.)	OAL L1 (in.)	L2	Center Ht. h1 (in.)	f	Lever	Pin	Wrench	Left				Right			
								Model No.	Uses Insert	Order No.	Price	Model No.	Uses Insert	Order No.	Price
1/2 x 1/2	4-3/4	5/8	1/2	1/2	SLLV-2	SL-PI-2	P-2F	JPDJ2XL082	DXGU0703R	**TG206712889**	Price	JPDJ2XR082	DXGU0703L	**TG206712890**	Price
3/8 x 3/8	4-3/4	5/8	3/8	3/8	SLLV-2	SL-PI-2	P-2F	JPDJ2XL062	DXGU0703R	**TG206712887**	Price	JPDJ2XR062	DXGU0703L	**TG206712888**	Price
5/8 x 5/8	4-3/4	5/8	5/8	5/8	SLLV-2	SL-PI-2	P-2F	JPDJ2XL102	DXGU0703R	**TG206712891**	Price	JPDJ2XR102	DXGU0703L	**TG206712892**	Price

MINIFORACI TURN Style JPWL Turning & Facing Tool Holders

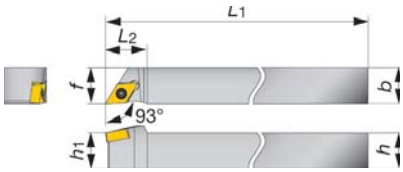
- J-type
- Positive rake, side clamping system
- Right hand shown
- Note: right hand (R) tool holders use left hand inserts and left (L) hand tool holders use right hand inserts



Shank Size A x B	OAL L1 (in.)	L2	Center Ht. h1 (in.)	f	Lever	Pin	Wrench	Left				Right			
								Model No.	Uses Insert	Order No.	Price	Model No.	Uses Insert	Order No.	Price
3/8 x 3/8	4-3/4	1/2	3/8	3/8	SLLV-2	SL-PI-2	P-2F	JPWL2XL062	WXGU0403R	**TG206712859**	Price	JPWL2XR062	WXGU0403L	**TG206712860**	Price
1/2 x 1/2	4-3/4	1/2	1/2	1/2	SLLV-2	SL-PI-2	P-2F	JPWL2XL082	WXGU0403R	**TG206712861**	Price	JPWL2XR082	WXGU0403L	**TG206712862**	Price
5/8 x 5/8	4-3/4	1/2	5/8	5/8	SLLV-2	SL-PI-2	P-2F	JPWL2XL102	WXGU0403R	**TG206712863**	Price	JPWL2XR102	WXGU0403L	**TG206712864**	Price
10 x 10mm	120mm	11mm	10mm	10mm	SLLV-2	SL-PI-2	P-2F	JPWL2XL1010X04	WXGU0403R	**TG206712851**	Price	JPWL2XR1010X04	WXGU0403L	**TG206712852**	Price
12 x 12mm	85mm	11mm	12mm	12mm	SLLV-2	SL-PI-2	P-2F	-	-	**-**	-	JPWL2XR1212F04	WXGU0403L	**TG206712854**	Price
12 x 12mm	120mm	11mm	12mm	12mm	SLLV-2	SL-PI-2	P-2F	JPWL2XL1212X04	WXGU0403R	**TG206712855**	Price	JPWL2XL1212F04	WXGU0403R	**TG206712853**	Price
16 x 16mm	120mm	13mm	16mm	16mm	SLLV-2	SL-PI-2	P-2F	JPWL2XL1616X04	WXGU0403R	**TG206712857**	Price	JPWL2XR1616X04	WXGU0403L	**TG206712858**	Price

MINIFORACI TURN Style JSDJ Turning & Profiling Tool Holders

- J-type
- Positive rake, screw-on system
- Right hand shown
- Note: right hand (R) tool holders use left hand inserts and left (L) hand tool holders use right hand inserts

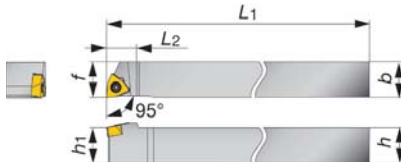


Shank Size A x B (in.)	OAL L1 (in.)	L2	Center Ht. h1 (in.)	f2	Clamp Screw	Wrench	Left				Right			
							Model No.	Uses Insert	Order No.	Price	Model No.	Uses Insert	Order No.	Price
3/8 x 3/8	4-3/4	5/8	3/8	3/8	SR34-514	T-7F	JSDJ2XL062	DXGU0703R	**TG206712873**	Price	JSDJ2XR062	DXGU0703L	**TG206712874**	Price
1/2 x 1/2	4-3/4	5/8	1/2	1/2	SR34-514	T-7F	JSDJ2XL082	DXGU0703R	**TG206712875**	Price	JSDJ2XR082	DXGU0703L	**TG206712876**	Price
5/8 x 5/8	4-3/4	5/8	5/8	5/8	SR34-514	T-7F	JSDJ2XL102	DXGU0703R	**TG206712877**	Price	JSDJ2XR082	DXGU0703L	**TG206712878**	Price

MINIFORCE TURN

Style JSWL Turning & Facing Tool Holders

- J-type
- Positive rake, screw-on system
- Right hand shown
- Note: right hand (R) tool holders use left hand inserts and left (L) hand tool holders use right hand inserts



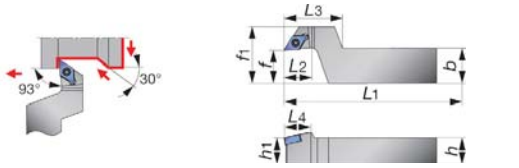
Shank Size A x B (in.)	OAL L1 (in.)	L2	Center Ht. h1 (in.)	f	Clamping Screw	Wrench	Left				Right			
							Model Number	Uses Insert	Order No.	Price	Model Number	Uses Insert	Order No.	Price
3/8 x 3/8	4-3/4	1/2	3/8	3/8	SR34-514	T-7F	JSWL2XL062	WXGU0403R	**TG206712845**	Price	JSWL2XR062	WXGU0403L	**TG206712846**	Price
1/2 x 1/2	4-3/4	1/2	1/2	1/2	SR34-514	T-7F	JSWL2XL082	WXGU0403R	**TG206712847**	Price	JSWL2XR082	WXGU0403L	**TG206712848**	Price
5/8 x 5/8	4-3/4	1/2	5/8	5/8	SR34-514	T-7F	JSWL2XL102	WXGU0403R	**TG206712849**	Price	JSWL2XR102	WXGU0403L	**TG206712850**	Price

MINIFORCE TURN

Turning & Profiling Tool Holders

JSDJXR-F Style

- Screw on stepped head toolholder with 93° approach angle, for DXGU inserts
- Note: Right hand toolholders (R) are used with left hand inserts (L)



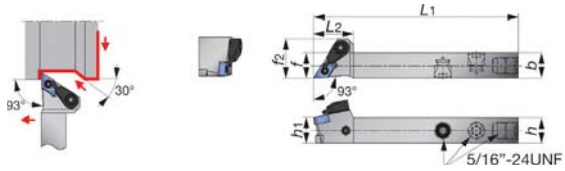
Model No.	Shank Size (in.)	Center Ht. (in.)	OAL (in.)	Uses Insert Style	Clamp Screw	Wrench	Order No.	Price
JSDJXR082-F10	1/2 x 5/8	.500	4.750	DXGU07...L	SR34-514	T-7F	**TG206735023**	Price
JSDJXR102-F10	5/8 x 3/4	.625	4.750	DXGU07...L	SR34-514	T-7F	**TG206735024**	Price

MINIFORCE TURN

Turning & Profiling Tool Holders

JSDJ2XR/L-CHP Style

- Screw on toolholder without offset with 93° approach angle, for DXGU inserts, with channels for high pressure coolant
- Note: Right hand toolholders (R) are used with left hand inserts (L)
- Note: Left hand toolholders (L) are used with right hand inserts (R)



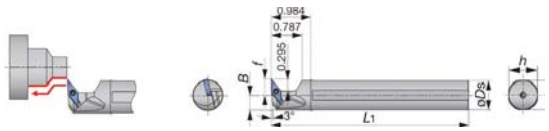
Model No.	Shank Size (in.)	Center Ht. (in.)	OAL (in.)	Head Length (in.)	Uses Insert Style	Clamp Screw	Wrench	Order No.	Price
JSDJ2XL082-CHP	1/2 x 1/2	.500	3.344	.750	DXGU**07*L/R	SR34-514	T-7F	**TG206730844**	Price
JSDJ2XR082-CHP	1/2 x 1/2	.500	3.344	.750	DXGU**07*L/R	SR34-514	T-7F	**TG206730843**	Price

MINIFORCE TURN

Turning & Profiling Tool Holders

JS-SVUXL Style

- Screw on toolholder with 93° approach angle, for VXGU inserts with 4 edges
- Note: Left hand toolholders (L) are used with left hand inserts (L)



Model No.	Shank Size (in.)	Center Ht. (in.)	OAL (in.)	Uses Insert Style	Clamp Screw	Wrench	Order No.	Price
JS159F-SVUXL09	5/8	.394	3.346	VXGU09...L	SR34-508	T-7F	**TG206734981**	Price
JS19G-SVUXL09	3/4	.394	3.543	VXGU09...L	SR34-508	T-7F	**TG206734983**	Price
JS19X-SVUXL09	3/4	.394	4.724	VXGU09...L	SR34-508	T-7F	**TG206734984**	Price
JS254X-SVUXL09	1	.394	4.724	VXGU09...L	SR34-508	T-7F	**TG206734989**	Price

MINIFORCE TURN

Turning & Profiling Tool Holders

JPVJ2XR/L Style

- Side clamp toolholder without offset with 93° approach angle, for VXGU inserts
- Note: Right hand toolholders (R) are used with left hand inserts (L)
- Note: Left hand toolholders (L) are used with right hand inserts (R)

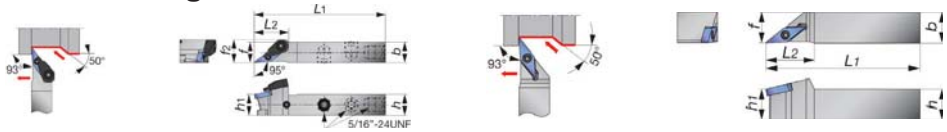


Shank Size (in./mm)	OAL (in./mm)	Head Length (in./mm)	Center Height (in./mm)	Uses Insert Style	Left			Right		
					Model No.	Order No.	Price	Model No.	Order No.	Price
3/8 x 3/8	4.750	.669	.375	VXGU09...L/R	JPVJ2XL067	**TG206735013**	Price	JPVJ2XR067	**TG206735010**	Price
1/2 x 1/2	4.750	.748	.500	VXGU09...L/R	JPVJ2XL087	**TG206735014**	Price	JPVJ2XR087	**TG206735011**	Price
5/8 x 5/8	4.750	.748	.625	VXGU09...L/R	JPVJ2XL107	**TG206735015**	Price	JPVJ2XR107	**TG206735012**	Price
10mm x 10mm	120mm	19mm	10mm	VXGU09...L/R	JPVJ2XL1010X09	**TG206735006**	Price	JPVJ2XR1010X09	**TG206735002**	Price
12mm x 12mm	120mm	19mm	12mm	VXGU09...L/R	JPVJ2XL1212F09	**TG206735007**	Price	JPVJ2XR1212X09	**TG206735004**	Price
12mm x 12mm	85mm	19mm	12mm	VXGU09...L/R	JPVJ2XL1212X09	**TG206735008**	Price	JPVJ2XR1212F09	**TG206735003**	Price
16mm x 16mm	120mm	19mm	16mm	VXGU09...L/R	JPVJ2XL1212X09	**TG206735009**	Price	JPVJ2XR1616X09	**TG206735005**	Price

MINIFORCE TURN

JSVJ2XR/L External Turning Tool Holders

- Screw on toolholder without offset with 93° approach angle, for VXGU inserts

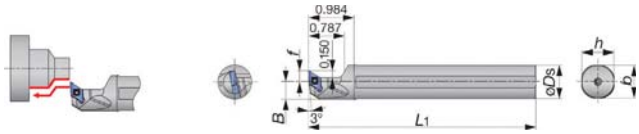


Shank Size (in.)	OAL (in.)	Head Length (in.)	Height (in.)	Head Width (in.)	Uses Insert Style	Clamp Screw	Wrench	Left			Right		
								Model No.	Order No.	Price	Model No.	Order No.	Price
1/2 x 1/2	4.750	.748	.500	.500	VXGU09...L/R	SR34-508	T-7F	JSVJ2XL087	**TG206735000**	Price	JSVJ2XR087	**TG206734997**	Price
3/8 x 3/8	4.750	.669	.375	.375	VXGU09...L/R	SR34-508	T-7F	JSVJ2XL067	**TG206734999**	Price	JSVJ2XR067	**TG206734996**	Price
5/8 x 5/8	4.750	.748	.625	.625	VXGU09...L/R	SR34-508	T-7F	JSVJ2XL107	**TG206735001**	Price	JSVJ2XR107	**TG206734998**	Price

Turning & Profiling Tool Holders

JS-SDUXL Style

- Screw on toolholder with 93° approach angle, for DXGU inserts with 4 edges
- Note: Left hand toolholders (L) are used with left hand inserts (L)

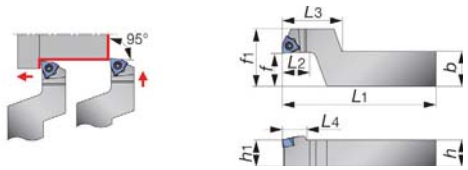


Model No.	Shank Size (in.)	Center Ht. (in.)	OAL (in.)	Uses Insert Style	Clamp Screw	Wrench	Order No.	Price
JS159F-SDUXL07	5/8	.236	3.346	DXGU07...L	SR34-514	T-7F	**TG206728971**	Price
JS19G-SDUXL07	3/4	.236	3.543	DXGU07...L	SR34-514	T-7F	**TG206728973**	Price
JS19X-SDUXL07	3/4	.236	4.724	DXGU07...L	SR34-514	T-7F	**TG206728974**	Price
JS254X-SDUXL07	1	.394	4.724	DXGU07...L	SR34-514	T-7F	**TG206728979**	Price

MINIFORCE TURN Turning & Facing Tool Holders

JSWXR Style

- Screw on stepped head toolholder with 95° approach angle, for WXGU inserts
- Note: Right hand toolholders (R) are used with left hand inserts (L)



Model No.	Shank Size (in.)	OAL (in.)	Center Ht. (in.)	Uses Insert Style	Wrench	Order No.	Price
JSWLXR082-F10	1/2 x 5/8	4-3/4	1/2	WXGU04...L	T-7F	**TG206735027**	Price
JSWLXR102-F10	5/8 x 3/4	4-3/4	5/8	WXGU04...L	T-7F	**TG206735028**	Price

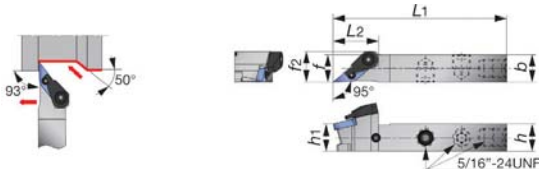
JSVJ2BR/L-CHP External Toolholders



Shank Size (in.)	OAL (in.)	Head Length (in.)	Height (in.)	Head Width (in.)	Center Height (in.)	Uses Insert Style	Left			Right		
							Model No.	Order No.	Price	Model No.	Order No.	Price
1/2 x 1/2	3.344	.930	.500	.500	.610	VB..	JSVJ2BL082-CHP	**TG206730840**	Price	JSVJ2BR082-CHP	**TG206730839**	Price

MINIFORCE TURN JSVJ2XR/L-CHP External Turning Tool Holders

- Screw on toolholder without offset with 93° approach angle, for VXGU inserts, with coolant nozzle for high pressure



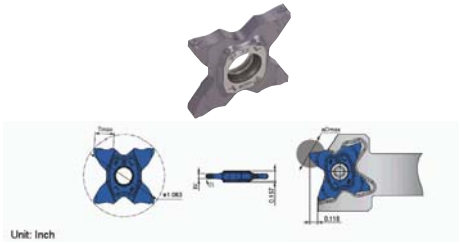
Shank Size (in.)	OAL (in.)	Head Length (in.)	Height (in.)	Head Width (in.)	Center Ht. (in.)	Uses Insert Style	Clamp Screw	Wrench	Left			Right		
									Model No.	Order No.	Price	Model No.	Order No.	Price
1/2 x 1/2	4.750	.748	.500	.500	.020	VXGU09...L/R	SR34-508	T-7F	JSVJ2XL087-CHP	**TG206737426**	Price	JSVJ2XR087-CHP	**TG206737425**	Price

TETRAFORCE CUT Full Radius Inserts - 4 Cornered

For Grooving and Profiling

- For grooving and profiling

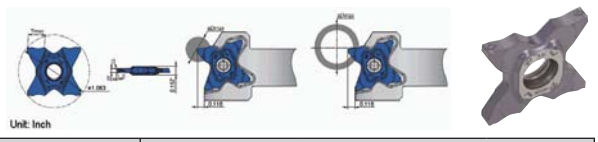
Model No.	W ±.0008	Radius	Max Part-off (Solid Bar)	Order No.	Price
TCS27-157-079	.094	.031	.118	**TG556883393**	Price
TCS27-200-100	.079	.039	.118	**TG556883394**	Price
TCS27-239-120	.118	.047	.224	**TG556883395**	Price
TCS27-300-150	.062	.059	.252	**TG556883396**	Price



TETRAFORCE CUT Grooving Inserts - 4 Cornered

External Grooving and Parting -Off TCS Style

Grade AH725



W ±.0008	Radius	Tmax	Front Edge Angle	Left Hand			Right Hand		
				Model No.	Order No.	Price	Model No.	Order No.	Price
.039	.0024	.138	15°	TCS27-100-15L	**TG556883384**	Price	TCS27-100-15R	**TG556883383**	Price
.079	.004	.252	6°	-	**-**	-	TCS27-200-6R	**TG556883389**	Price
.059	.0024	.224	15°	TCS27-150-15L	**TG556883388**	Price	TCS27-150-15R	**TG556883387**	Price
.059	.0024	.224	6°	TCS27-150-6L	**TG556883386**	Price	TCS27-150-6R	**TG556883385**	Price
.079	.004	.252	15°	TCS27-200-15L	**TG556883392**	Price	TCS27-200-15R	**TG556883391**	Price
.079	.004	.252	6°	TCS27-200-6L	**TG556883390**	Price	-	**-**	-

TETRAMINI CUT Grooving Inserts

TCP18R/L-F Style



- Grade SH725

Width (in.)	Radius (in.)	ar	Thickness (in.)	d	Left			Right		
					Model Number	Order No.	Price	Model Number	Order No.	Price
.013	.002	.031	.157	.709	TCP18L033F	**TG556738932**	Price	TCP18R033	**TG556738936**	Price
.017	.002	.047	.157	.709	TCP18L043F	**TG556738933**	Price	TCP18R043	**TG556738937**	Price
.020	.002	.047	.157	.709	TCP18L050F	**TG556734689**	Price	TCP18R050F	**TG556734686**	Price
.030	.002	.079	.157	.709	TCP18L075F	**TG556734695**	Price	TCP18R075F	**TG556734688**	Price
.037	.002	.079	.157	.709	TCP18L095F	**TG556734701**	Price	TCP18R095F	**TG556734698**	Price
.039	.004	.079	.157	.709	TCP18L100F	**TG556734707**	Price	TCP18R100F	**TG556734692**	Price
.047	.004	.079	.157	.709	TCP18L120F	**TG556738934**	Price	TCP18R120	**TG556738938**	Price
.049	.004	.079	.157	.709	TCP18L125F	**TG556734713**	Price	TCP18R125F	**TG556734694**	Price
.057	.004	.079	.157	.709	TCP18L145F	**TG556738935**	Price	TCP18R145F	**TG556738939**	Price
.059	.004	.079	.157	.709	TCP18L150F	**TG556734719**	Price	TCP18R150F	**TG556734704**	Price
.069	.004	.079	.157	.709	TCP18L175F	**TG556734725**	Price	TCP18R175F	**TG556734706**	Price
.079	.004	.098	.157	.709	TCP18L200F	**TG556734731**	Price	TCP18R200F	**TG556734710**	Price
.098	.004	.098	.157	.709	TCP18L250F	**TG556734737**	Price	TCP18R250F	**TG556734712**	Price
.118	.004	.098	.157	.709	TCP18L300F	**TG556734743**	Price	TCP18R300F	**TG556734716**	Price

TETRAMINI CUT Threading Inserts

TCT Style



- Grade AH725 for low carbon steels, carbon steels, prehardened steels, stainless, grey cast irons, ductile cast irons, titanium alloys, and superalloys

Pitch Range (in.)	S	rε	θ(°)	Thickness (T)	d	Left			Right		
						Model No.	Order No.	Price	Model No.	Order No.	Price
.031 - .118	.105	.004	60°	.157	.709	TCT18L-60N-010	**TG556740386**	Price	TCT18R-60N-010	**TG556740384**	Price
.059 - .118	.101	.008	60°	.157	.709	TCT18L-60N-020	**TG556740387**	Price	TCT18R-60N-020	**TG556740385**	Price

TETRAFORCE CUT Grooving Inserts

TCM27 Style



- Grooving and parting off insert with 4 cutting edges

Model No.	Grade	Width (in.)	Radius (in.)	Tmax (in.)	OD Max	Order No.	Price
TCM27-150-010	AH725	.059	.004	.224	.449	**TG556996668**	Price
TCM27-150-020	AH725	.059	.008	.224	.449	**TG556996669**	Price
TCM27-157-015	AH725	.062	.006	.118	.236	**TG556996670**	Price
TCM27-157-079	AH725	.062	.031	.118	-	**TG556996671**	Price
TCM27-170-010	AH725	.067	.004	.118	.236	**TG556996672**	Price
TCM27-175-010	AH725	.069	.004	.118	.236	**TG556996673**	Price
TCM27-175-020	AH725	.069	.008	.118	.236	**TG556996674**	Price
TCM27-178-018	AH725	.070	.007	.118	.236	**TG556996675**	Price
TCM27-185-020	AH725	.073	.008	.118	.236	**TG556996676**	Price
TCM27-196-015	AH725	.077	.006	.118	.236	**TG556996677**	Price
TCM27-200-010	AH725	.079	.004	.252	.504	**TG556996678**	Price
TCM27-200-020	AH725	.079	.008	.252	.504	**TG556996679**	Price

Model No.	Grade	Width (in.)	Radius (in.)	Tmax (in.)	OD Max	Order No.	Price
TCM27-200-100	AH725	.079	.039	.118	-	**TG556996680**	Price
TCM27-222-015	AH725	.087	.006	.138	.276	**TG556996681**	Price
TCM27-230-020	AH725	.091	.008	.138	.276	**TG556996682**	Price
TCM27-239 120	AH725	.094	.059	.252	-	**TG556996684**	Price
TCM27-239-015	AH725	.094	.006	.224	.449	**TG556996683**	Price
TCM27-247-020	AH725	.097	.008	.224	.449	**TG556996685**	Price
TCM27-250-010	AH725	.098	.004	.224	.449	**TG556996686**	Price
TCM27-250-030	AH725	.098	.012	.224	.449	**TG556996687**	Price
TCM27-270-010	AH725	.106	.004	.244	.488	**TG556996688**	Price
TCM27-287-020	AH725	.113	.008	.244	.488	**TG556996689**	Price
TCM27-300-000	AH725	.118	-	.252	.504	**TG556996690**	Price
TCM27-300-020	AH725	.118	.008	.252	.504	**TG556996691**	Price
TCM27-300-030	AH725	.118	.012	.252	.504	**TG556996692**	Price
TCM27-300-040	AH725	.118	.016	.252	.504	**TG556996693**	Price
TCM27-300-150	AH725	.118	.059	.252	-	**TG556996694**	Price
TCM27-315-015	AH725	.124	.006	.252	.504	**TG556996695**	Price
TCM27-318-020	AH725	.125	.008	.252	.504	**TG556996696**	Price

TETRAFORCE CUT Grooving Inserts - 4 Cornered

External Grooving and Parting

TCS Style



Unit: Inch

Grade AH725

Model No.	W ±.0008	Corner Radius	Tmax	Dmax	Order No.	Price
TCS27-050-000	.020	.000	.039	.079	**TG556883348**	Price
TCS27-050-004	.020	.0016	.098	.197	**TG556883349**	Price
TCS27-075-010	.030	.004	.098	.197	**TG556883350**	Price
TCS27-080-000	.031	.000	.063	.126	**TG556883351**	Price
TCS27-100-006	.039	.0024	.138	.276	**TG556883352**	Price
TCS27-100-010	.039	.004	.138	.276	**TG556883353**	Price
TCS27-104-000	.041	.000	.079	.158	**TG556883354**	Price
TCS27-120-000	.047	.000	.079	.158	**TG556883355**	Price
TCS27-125-010	.049	.004	.138	.276	**TG556883356**	Price
TCS27-125-020	.049	.008	.138	.276	**TG556883357**	Price
TCS27-140-000	.055	.000	.079	.158	**TG556883358**	Price
TCS27-147-000	.058	.000	.098	.197	**TG556883359**	Price
TCS27-150-010	.059	.004	.224	.449	**TG556883360**	Price
TCS27-150-020	.059	.008	.224	.449	**TG556883361**	Price
TCS27-157-015	.062	.006	.118	.236	**TG556883362**	Price
TCS27-170-010	.067	.004	.118	.236	**TG556883363**	Price
TCS27-175-010	.069	.004	.118	.236	**TG556883364**	Price
TCS27-175-020	.069	.008	.118	.236	**TG556883365**	Price
TCS27-178-018	.070	.007	.118	.236	**TG556883366**	Price

Model No.	W ±.0008	Corner Radius	Tmax	Dmax	Order No.	Price
TCS27-185-020	.073	.008	.118	.236	**TG556883367**	Price
TCS27-196-015	.077	.006	.118	.236	**TG556883368**	Price
TCS27-200-010	.079	.004	.252	.504	**TG556883369**	Price
TCS27-200-020	.079	.008	.252	.504	**TG556878136**	Price
TCS27-222-015	.087	.006	.138	.276	**TG556883370**	Price
TCS27-230-020	.091	.008	.138	.276	**TG556883371**	Price
TCS27-239-015	.094	.006	.224	.449	**TG556883372**	Price
TCS27-247-020	.097	.008	.224	.449	**TG556883373**	Price
TCS27-250-010	.098	.004	.224	.449	**TG556883374**	Price
TCS27-250-030	.098	.012	.224	.449	**TG556883375**	Price
TCS27-270-010	.106	.004	.244	.488	**TG556883376**	Price
TCS27-287-020	.113	.008	.244	.488	**TG556883377**	Price
TCS27-300-000	.118	.000	.252	.504	**TG556883378**	Price
TCS27-300-020	.118	.008	.252	.504	**TG556878133**	Price
TCS27-300-030	.118	.012	.252	.504	**TG556883379**	Price
TCS27-300-040	.118	.016	.252	.504	**TG556883380**	Price
TCS27-315-015	.124	.006	.252	.504	**TG556883381**	Price
TCS27-318-020	.125	.008	.252	.504	**TG556883382**	Price

TETRAMCUT

STC R/L 18 Tool Holders for External Grooving

Right hand holders take TC_18R inserts, left hand takes TC_18L inserts



Shank h x b	h1	OAL (in.)	L2	f	Left			Right		
					Model No.	Order No.	Price	Model No.	Order No.	Price
3/8 x 3/8	.375	5.000	.740	.375	STCL06-18	**TG206734565**	Price	STCR06-18	**TG206734564**	Price
1/2 x 1/2	.500	4.750	.740	.500	STCL08-18	**TG206734567**	Price	STCR08-18	**TG206734566**	Price
5/8 x 5/8	.625	4.750	.740	.625	STCL10-18	**TG206734569**	Price	STCR10-18	**TG206734568**	Price
3/4 x 3/4	.750	4.750	.900	.750	STCL12-18	**TG206734571**	Price	STCR12-18	**TG206734570**	Price
1 x 1	1.000	5.500	.900	1.000	STCL16-18	**TG206734573**	Price	STCR16-18	**TG206734572**	Price

TETRAFORCE CUT

STC R/L for External Grooving



- Right hand shown
- Replacement screw for all right hand holders is SR16-212-01397L, left hand holders use replacement screw SR16-212-01397

Shank h x b	h1	OAL (in.)	L2	f	Wrench	Left			Right		
						Model No.	Order No.	Price	Model No.	Order No.	Price
3/8 x 3/8	.375	5.000	.945	.315	T-2010/5	STCL0627	**TG206883406**	Price	STCR0627	**TG206883405**	Price
1/2 x 1/2	.500	5.000	.945	.440	T-2010/5	STCL0827	**TG206883408**	Price	STCR0827	**TG206883407**	Price
5/8 x 5/8	.625	5.000	.945	.570	T-2010/5	STCL1027	**TG206883410**	Price	STCR1027	**TG206883409**	Price
3/4 x 3/4	.750	5.000	.945	.690	T-2010/5	STCL1227	**TG206883412**	Price	STCR1227	**TG206883411**	Price
63/64 x 63/64	1.000	4.922	-	.940	T-2010/5	-	**-**	-	STCR1627CHP	**TG206741051**	Price
1 x 1	1.000	5.500	.945	.940	T-2010/5	STCL1627	**TG206883414**	Price	STCR1627	**TG206883413**	Price
1-1/4 x 1-1/4	1.250	5.500	-	1.125	T-2010/5	STCL20-27	**TG202393704**	Price	STCR20-27	**TG202393703**	Price

DEEPTDRILL

Drill Body for Lathes and Machining Centers

MCTR



- MCTR L/D = 10 tool dia. .687" - 1.000"
- MCTR L/D = 15 tool dia. .687" - 1.000"
- MCTR L/D = 25 tool dia. .687" - 1.062"
- Tool diameter tolerance +0/-0.07
- Applicable tolerance range of hole dia. +0.05 - 0.1

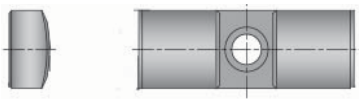
Type - L/D = 10									
Size (in.)	Size (mm)	Flute Length	Shank Length	Max Drill Depth (in.)	OAL	Insert Style	Guide Pad	Order No.	Price
.687	17.45mm	8.661	2.205	7.187	10.866	TOHT08	GP06-075	**TG254846640**	Price
.718	18.24mm	9.134	2.205	7.480	11.339	TOHT09	GP06-085	**TG254820503**	Price
.734	18.64mm	9.134	2.205	7.480	11.339	TOHT09	GP06-085	**TG254820506**	Price
.750	19.05mm	9.567	2.205	7.874	11.772	TOHT09	GP06-085	**TG254819599**	Price
.785	19.94mm	10.039	2.362	12.402	12.401	TOHT09	GP06-085	**TG254819604**	Price
.812	20.62mm	10.039	2.362	8.268	12.401	TOHT10	GP06-085	**TG254820509**	Price
.875	22.23mm	10.945	2.362	9.055	13.307	TOHT11	GP06-100	**TG254829841**	Price
.937	23.80mm	10.945	2.362	9.843	13.307	TOHT11	GP06-100	**TG254820515**	Price
1.000	25.40mm	12.283	2.362	10.236	14.645	TOHT11	GP06-100	**TG254829840**	Price

Type - L/D = 15									
Size (in.)	Size (mm)	Flute Length	Shank Length	Max Drill Depth (in.)	OAL	Insert Style	Guide Pad	Order No.	Price
.687	17.45mm	12.205	1.000	10.630	13.205	TOHT08	GP06-075	**TG254846642**	Price
.718	18.24mm	12.874	2.205	11.220	15.079	TOHT09	GP06-085	**TG254820504**	Price
.734	18.64mm	12.874	2.205	11.220	15.079	TOHT09	GP06-085	**TG254820507**	Price
.750	19.05mm	13.504	2.205	11.811	15.709	TOHT09	GP06-085	**TG254819601**	Price
.785	19.94mm	14.173	2.362	8.268	16.535	TOHT09	GP06-085	**TG254819603**	Price
.812	20.62mm	14.173	2.362	12.402	16.535	TOHT10	GP06-085	**TG254820510**	Price
.875	22.23mm	15.472	2.362	13.583	17.834	TOHT11	GP06-100	**TG254820513**	Price
.937	23.80mm	16.742	2.362	14.764	19.104	TOHT11	GP06-100	**TG254820516**	Price
1.000	25.40mm	17.402	2.362	15.354	19.764	TOHT12	GP06	**TG254820518**	Price

Type - L/D = 25									
Size (in.)	Size (mm)	Flute Length	Shank Length	Max Drill Depth (in.)	OAL	Insert Style	Guide Pad	Order No.	Price
.687	17.45mm	19.291	2.205	17.717	21.496	TOHT08	GP06-075	**TG254846644**	Price
.718	18.24mm	20.354	2.205	18.701	22.559	TOHT09	GP06-085	**TG254820505**	Price
.734	18.64mm	20.354	2.205	18.701	22.559	TOHT09	GP06-085	**TG254820508**	Price
.750	19.05mm	21.378	2.205	19.685	23.583	TOHT09	GP06-085	**TG254819602**	Price
.785	19.94mm	22.441	2.362	20.669	24.803	TOHT09	GP06-085	**TG254819605**	Price
.812	20.62mm	22.441	2.362	20.669	24.803	TOHT09	GP06-085	**TG254820512**	Price
.845	21.46mm	23.465	2.362	21.654	25.827	TOHT10	GP06-085	**TG254819613**	Price
.875	22.23mm	24.528	2.362	22.638	26.890	TOHT11	GP06-100	**TG254820514**	Price
.937	23.80mm	26.614	2.362	24.606	28.976	TOHT11	GP06-100	**TG254820517**	Price
1.000	25.40mm	27.638	2.362	25.591	30.000	TOHT12	GP06	**TG254819616**	Price
1.062	26.97mm	29.724	2.756	27.559	32.480	TOHT12	GP06	**TG254820519**	Price

DEEP TDRILL GP Guide Pads

For MCTR Drills



- Guide pads are subject to wear, like inserts
- Each guide pad has 2 corners
- When the width of wear on the 1st corner reaches 70% of the width of the guide pad, reverse the guide pad and use the 2nd corner
- Replace the guide pad with a new one when the 2nd corner shows the same wear as the 1st corner
- Grade F2122 is the first recommendation, suitable for various workpiece materials, long tool life due to unique substrate and coating
- Grade F1122 is for high wear resistance

Grade - F1122		
Model No.	Order No.	Price
GP06 075	**TG204815126**	Price
GP06 085	**TG204815137**	Price
GP06	**TG204815130**	Price

Grade - F2122		
Model No.	Order No.	Price
GP05 060	**TG204841827**	Price
GP05 075	**TG204844468**	Price
GP06 075	**TG204818299**	Price
GP06 085	**TG204818295**	Price
GP06	**TG204815279**	Price

DEEP TDRILL TOHT Drilling Inserts

For MCTR Drills

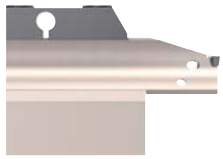


- AH725 grade is TiAlN coated and is good for low carbon steels, carbon steels, alloy steels, prehardened steels, and stainless
- NDJ chipbreaker - low cutting force, for general purpose

Model No.	Cutting Diameter	Order No.	Price
TOHT070304R-NDJ	14.00 - 15.99mm	**TG435568288**	Price
TOHT080305R-NDJ	16.00 - 18.00mm	**TG435567388**	Price
TOHT090305R-NDJ	18.01 - 20.00mm	**TG435567389**	Price
TOHT100305R-NDJ	20.01 - 21.99mm	**TG435509263**	Price
TOHT110405R-NDJ	22.00 - 25.00mm	**TG435509270**	Price
TOHT120405R-NDJ	25.01 - 28.00mm	**TG435567619**	Price

EASY MCUT ULTI Blades for Face Grooving

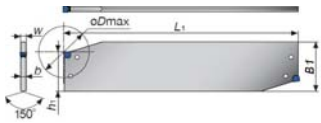
EFPR/L Style



- Adjustable blade for face grooving
- Wrench (sold separately) order number is TG206707339

Model No.	Width (in.)	Right/Left Hand	ØDm (in.)	ØDmax (in.)	f (in.)	L1 (in.)	Min ar (in.)	Max ar (in.)	Uses Insert	Order No.	Price
EFPR-4-030035	.157	Right	1.181	1.378	.535	4.921	.709	1.968	E**4	**TG206734835**	Price
EFPL-4-030035	.157	Left	1.181	1.378	.535	4.921	.709	1.968	E**4	**TG206734836**	Price
EFPR-4-035045	.157	Right	1.378	1.772	.535	4.921	.709	1.968	E**4	**TG206734837**	Price
EFPR-4-045055	.157	Right	1.772	2.165	.535	4.921	.709	1.968	E**4	**TG206734839**	Price
EFPR-4-055075	.157	Right	2.165	2.953	.535	4.921	.709	1.968	E**4	**TG206734841**	Price
EFPR-4-075120	.157	Right	2.953	4.724	.535	5.512	.709	2.559	E**4	**TG206734843**	Price
EFPR-4-120200	.157	Right	4.724	7.784	.535	5.512	.709	2.559	E**4	**TG206734845**	Price
EFPR-4-200500	.157	Right	7.874	19.685	.535	5.512	.709	2.559	E**4	**TG206734848**	Price
EFPR-5-035045	.197	Right	1.378	1.772	.535	4.921	.748	1.968	ETX5	**TG206734850**	Price
EFPR-5-045055	.197	Right	1.772	2.165	.535	4.921	.748	1.968	ETX5	**TG206734852**	Price
EFPR-5-055075	.197	Right	2.165	2.953	.535	4.921	.748	1.968	ETX5	**TG206734854**	Price
EFPR-5-075120	.197	Right	2.953	4.724	.535	5.512	.748	2.559	ETX5	**TG206734856**	Price
EFPR-5-120200	.197	Right	4.724	7.784	.535	5.512	.748	2.559	ETX5	**TG206734858**	Price
EFPR-5-200500	.197	Right	7.874	19.685	.535	5.512	.748	2.559	ETX5	**TG206734860**	Price
EFPR-6-045055	.236	Right	1.772	2.165	.535	4.921	.787	1.968	ETX6	**TG206734862**	Price
EFPR-6-055075	.236	Right	2.165	2.953	.535	4.921	.787	1.968	ETX6	**TG206734864**	Price
EFPR-6-075120	.236	Right	2.953	4.724	.535	5.512	.787	1.968	ETX6	**TG206734866**	Price
EFPR-6-120200	.236	Right	4.724	7.874	.535	5.512	.787	2.559	ETX6	**TG206734868**	Price
EFPR-6-200500	.236	Right	7.874	19.685	.535	4.921	.787	2.559	ETX6	**TG206734870**	Price
EFPL-6-200500	.236	Left	7.874	19.685	.535	5.512	.787	2.559	ETX6	**TG206734871**	Price

EASY MCUT ULTI EGP Parting Off Blades





Model No.	Shank Size (in.)	OAL (in.)	Max. Depth (in.)	Insert Width (in.)	Uses Insert Style	Wrench	Order No.	Price
EGP32-4D-CHP	1.260	5.906	3.937	.157	E..4...	ECW-456EF	**TG206744000**	Price
EGP32-5D-CHP	1.260	5.906	4.724	.197	E..5...	ECW-456EF	**TG206744001**	Price
EGP32-6D-CHP	1.260	5.906	4.724	.236	E..6...	ECW-456EF	**TG206744002**	Price

EASY MCUT ULTI Inserts

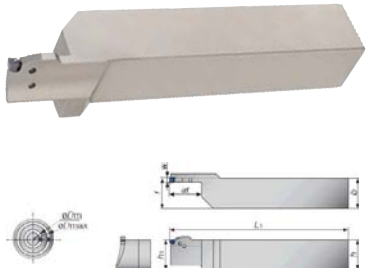
EGM & ETX Style



- Single-ended inserts for external, internal, face grooving and turning
- AH725 grade is good for low carbon steels, carbon steels, alloy steels, prehardened steels, and stainless
- ETX style insert shown

Model No.	Grade	Width (in.)	Length (in.)	Radius	Order No.	Price
EGM4 030	AH725	.157	.315	.012	**TG556991271**	Price
ETX4 040	AH725	.157	.315	.016	**TG556991279**	Price
ETX5 040	AH725	.197	.39	.016	**TG556991282**	Price
ETX6 040	AH725	.236	.472	.016	**TG556991285**	Price

EASY MCUT ULTI ETF - Face Grooving Tool Holders



Model No.	Shank Size (in.)	OAL (in.)	Dimension F (in.)	Min. Dia. (in.)	Max. Dia. (in.)	Max. Depth (in.)	Insert Width (in.)	Uses Insert Style	Wrench	Order No.	Price
ETFR16-4T15-030035-CHP	1 x 1	6.000	1.020	1.181	1.378	.591	.157	ETX4...	ECW-456EF	**TG206733940**	Price
ETFR16-4T22-035045-CHP	1 x 1	6.000	1.020	1.378	1.772	.866	.157	ETX4...	ECW-456EF	**TG206733942**	Price
ETFR16-4T25-045055-CHP	1 x 1	6.000	1.020	1.772	2.165	.984	.157	ETX4...	ECW-456EF	**TG206733944**	Price
ETFR16-4T25-055075-CHP	1 x 1	6.000	1.020	2.165	2.953	.984	.157	ETX4...	ECW-456EF	**TG206733946**	Price
ETFR16-4T25-075120-CHP	1 x 1	6.000	1.020	2.953	4.724	.984	.157	ETX4...	ECW-456EF	**TG206733948**	Price
ETFR16-4T25-120200-CHP	1 x 1	6.000	1.020	4.724	7.874	.984	.157	ETX4...	ECW-456EF	**TG206742866**	Price
ETFR16-4T25-200500-CHP	1 x 1	6.000	1.020	7.874	19.685	.984	.157	ETX4...	ECW-456EF	**TG206742867**	Price

TUNGCUT

Tool Blocks for CGP Blades

- For deep grooving and part-off

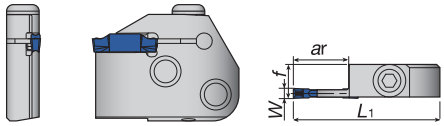


Model No.	Insert Width	Shank Width	Shank Height	OAL	Dm	Clamp	Clamp Screw	Wrench	Order No.	Price
CTBU16-030-4U-CHP	.157	.905	1.00	4.331	1.181	CT-110	CM6x30-S	P-5	**TG206734884**	Price
CTBU16-035-4/5U-CHP	.157, .197	.905	1.00	4.331	1.378	CT-110	CM6x30-S	P-5	**TG206734885**	Price
CTBU16-045-4/5U-CHP	.157, .197	.905	1.00	4.331	1.772	CT-110	CM6x30-S	P-5	**TG206734886**	Price
CTBU16-045-6U-CHP	.236	.905	1.00	4.331	1.772	CT-110	CM6x30-S	P-5	**TG206734891**	Price
CTBU16-055-4/5U-CHP	.157, .197	.905	1.00	4.331	2.165	CT-110	CM6x30-S	P-5	**TG206734887**	Price
CTBU16-055-6U-CHP	.236	.905	1.00	4.331	2.165	CT-110	CM6x30-S	P-5	**TG206734892**	Price
CTBU16-075-4/5U-CHP	.157, .197	.905	1.00	4.331	2.953	CT-110	CM6x30-S	P-5	**TG206734888**	Price
CTBU16-075-6U-CHP	.236	.905	1.00	4.331	2.953	CT-110	CM6x30-S	P-5	**TG206734893**	Price
CTBU16-120-4/5U-CHP	.157, .197	.905	1.00	4.331	4.724	CT-110	CM6x30-S	P-5	**TG206734889**	Price
CTBU16-120-6U-CHP	.236	.905	1.00	4.331	4.724	CT-110	CM6x30-S	P-5	**TG206734894**	Price
CTBU16-200-4/5U-CHP	.157, .197	.905	1.00	4.331	7.874	CT-110	CM6x30-S	P-5	**TG206734890**	Price
CTBU16-200-6U-CHP	.236	.905	1.00	4.331	7.874	CT-110	CM6x30-S	P-5	**TG206734895**	Price
CTBU16-32-U	-	.906	1.00	4.331	-	CT-110	CM6x30-S	P-5	**TG202302500**	Price

Cut-Off Blades

CAEL/R Style

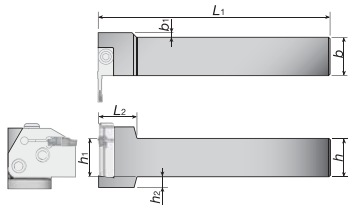
Description	Insert Seat Size	Inserts	Shank	Clamp Screw	Wrench	Order No.	Price
CAER-3T16	3	DGM*_***	CHSR/CHFVR	BHM6-20-A	P-4	**TG206860582**	Price
CAEL-3T16	3	DGM*_***	CHSL/CHFVL	BHM6-20-A	P-4	**TG206860419**	Price
CAER-4T16	4	DGM*_***	CHSR/CHFVR	BHM6-20-A	P-4	**TG206860469**	Price
CAEL-4T16	4	DGM*_***	CHSL/CHFVL	BHM6-20-A	P-4	**TG206860508**	Price
CAER-5T20	5	DGM*_***	CHSR/CHFVR	BHM6-20-A	P-4	**TG206860470**	Price
CAEL-5T20	5	DGM*_***	CHSL/CHFVL	BHM6-20-A	P-4	**TG206860623**	Price
CAER-6T20	6	DGM*_***	CHSR/CHFVR	BHM6-20-A	P-4	**TG206860583**	Price
CAEL-6T20	6	DGM*_***	CHSL/CHFVL	BHM6-20-A	P-4	**TG206860509**	Price



Cut-Off Holders – Vertical Type

CHFVL/R Style

Description	Shank Height (in.)	OAL (in.)	Blade	Clamp Screw	Wrench	Order No.	Price
CHFVR12-U	1.00	6.00	CAER	CSHB-6-A	P-4	**TG206860476**	Price
CHFVL12-U	.75	6.00	CAEL	CSHB-6-A	P-4	**TG206860331**	Price
CHFVR16-U	.75	6.00	CAER	CSHB-6-A	P-4	**TG206860431**	Price
CHFVL16-U	1.00	6.00	CAEL	CSHB-6-A	P-4	**TG206860382**	Price
CHFVR20-U	1.25	7.00	CAER	CSHB-6-A	P-4	**TG206860637**	Price
CHFVL20-U	1.25	7.00	CAEL	CSHB-6-A	P-4	**TG206860383**	Price
CHFVR2525	25mm	150mm	CAER	CSHB-6-A	P-4	**TG206860705**	Price



Cut-Off Holders – Horizontal Type

CHSL/R Style

Description	Shank Height (in.)	OAL (in.)	Blade	Clamp Screw	Wrench	Order No.	Price
CHSR12-U	.75	5.33	CAER	CSHB-6-A	P-4	**TG206860654**	Price
CHSL12-U	.75	5.33	CAER	CSHB-6-A	P-4	**TG206860810**	Price
CHSR16-U	1.00	5.33	CAEL	CSHB-6-A	P-4	**TG206860780**	Price
CHSL16-U	1.00	5.33	CAEL	CSHB-6-A	P-4	**TG206860683**	Price
CHSR20-U	1.25	6.33	CAER	CSHB-6-A	P-4	**TG206860812**	Price
CHSL20-U	1.25	6.33	CAEL	CSHB-6-A	P-4	**TG206860684**	Price
CHSR2020	20mm	133mm	CAER	CSHB-6-A	P-4	**TG206860655**	Price
CHSL2020	20mm	133mm	CAEL	CSHB-6-A	P-4	**TG206860811**	Price
CHSR2525	25mm	133mm	CAER	CSHB-6-A	P-4	**TG206860685**	Price
CHSL2525	25mm	133mm	CAEL	CSHB-6-A	P-4	**TG206860864**	Price

Cut-Off Blades

CGP Style

Insert Seat Size	Height (in.)	Length (in.)	Order No.	Price
1	1.02	5.90	**TG206860635**	Price
1	1.02	5.90	**TG206860776**	Price
2	1.02	5.90	**TG206860328**	Price
2	1.25	5.90	**TG206860523**	Price
3	1.02	5.90	**TG206860777**	Price

Insert Seat Size	Height (in.)	Length (in.)	Order No.	Price
3	1.25	5.90	**TG206860429**	Price
4	1.02	5.90	**TG206860522**	Price
4	1.25	5.90	**TG206860524**	Price
4	1.77	5.90	**TG206860779**	Price
5	1.25	5.90	**TG206860329**	Price
6	1.25	5.90	**TG206860778**	Price
8	3.15	5.90	**TG206860330**	Price



TUNGFREC Indexable End Mills

EPAV Style



- Mini square shoulder 90°

Model Number	Cutter Dia. (in.)	Shank Dia. (in.)	Number of Inserts	Head Length Lf	OAL (in.)	Max ap	Uses Insert	Order No.	Price
EPAV06U0.31C0.37R01	.313	.375	1	.787	3.250	.236	AVGT06__	**TG256733146**	Price
EPAV06U0.37C0.37R01	.375	.375	1	.787	3.250	.236	AVGT06__	**TG256733147**	Price
EPAV06U0.37C0.37R01L	.375	.375	1	1.378	4.000	.236	AVGT06__	**TG256733152**	Price
EPAV06U0.50C0.50R02	.500	.500	2	.787	3.250	.236	AVGT06__	**TG256733148**	Price
EPAV06U0.50C0.50R03	.500	.500	3	.787	3.250	.236	AVGT06__	**TG256733150**	Price
EPAV06U0.50C0.50R02L	.500	.500	2	1.378	4.750	.236	AVGT06__	**TG256733153**	Price
EPAV06U0.62C0.62R03	.625	.625	3	.787	3.500	.236	AVGT06__	**TG256733149**	Price
EPAV06U0.62C0.62R03L	.625	.625	4	.787	3.500	.236	AVGT06__	**TG256733154**	Price
EPAV06U0.62C0.62R04	.625	.625	3	1.378	5.500	.236	AVGT06__	**TG256733151**	Price

DOFTRI Indexable End Mills

EPTN12 Style



- Square shoulder milling cutters for use with double-sided triangular inserts

Model No.	Cutter Dia. (in.)	Shank Dia. (in.)	Depth Max. ap	Head Length (in.)	OAL (in.)	No. of Inserts	Uses Insert	Order No.	Price
EPTN12U1.25C1.25R03N	1.250	1.250	.433	1.500	4.500	3	TN*U12**	**TG256730276**	Price
EPTN12U1.50C1.25R04N	1.500	1.250	.433	1.500	4.500	4	TN*U12**	**TG256730277**	Price

DOFEED Indexable End Mills

EXN Style



- High accuracy
- Economical small diameter end mill
- Carbide and DLC inserts

Model No.	Cutting Dia. (in.)	No. of Inserts	Shank Dia. (in.)	Uses Insert	Order No.	Price
EXN03R062U0062-02	.625	2	.625	LNMU0303ZER-M	**TG256865490**	Price
EXN03R062U0062-02L	.625	2	.625	LNMU0303ZER-M	**TG256864929**	Price
EXN03R068U0062-02	.688	2	.625	LNMU0303ZER-M	**TG256865371**	Price
EXN03R068U0062-02L	.688	2	.625	LNMU0303ZER-M	**TG256865372**	Price
EXN03R075U0075-02	.750	2	.750	LNMU0303ZER-M	**TG256715182**	Price
EXN03R075U0075-03	.750	3	.750	LNMU0303ZER-M	**TG256864898**	Price
EXN03R075U0075-03L	.750	3	.750	LNMU0303ZER-M	**TG256864899**	Price
EXN03R087U0075-02	.875	2	.750	LNMU0303ZER-M	**TG256715183**	Price
EXN03R087U0075-03	.875	3	.750	LNMU0303ZER-M	**TG256864956**	Price
EXN03R087U0075-03L	.875	3	.750	LNMU0303ZER-M	**TG256864957**	Price
EXN03R100U0100-04	1.000	4	1.000	LNMU0303ZER-M	**TG256715184**	Price
EXN03R100U0100-04L	1.000	4	1.000	LNMU0303ZER-M	**TG256864873**	Price
EXN03R100U0100-05	1.000	5	1.000	LNMU0303ZER-M	**TG256864930**	Price
EXN03R112U0100-04	1.125	4	1.000	LNMU0303ZER-M	**TG256715185**	Price
EXN03R112U0100-04L	1.125	4	1.000	LNMU0303ZER-M	**TG256864874**	Price
EXN03R112U0100-05	1.125	5	1.000	LNMU0303ZER-M	**TG256865373**	Price
EXN03R125U0125-05	1.250	5	1.250	LNMU0303ZER-M	**TG256715186**	Price
EXN03R125U0125-05L	1.250	5	1.250	LNMU0303ZER-M	**TG256864900**	Price
EXN03R125U0125-06	1.250	6	1.250	LNMU0303ZER-M	**TG256864901**	Price
EXN06R125U0125-02L	1.250	2	1.250	LNMU06X5ZER-M	**TG256879574**	Price
EXN06R125U0125W02	1.250	2	1.250	LNMU06X5ZER-M	**TG256879573**	Price
EXN06R150U0125-03L	1.500	3	1.250	LNMU06X5ZER-M	**TG256879577**	Price
EXN06R15OU125W03	1.500	3	1.250	LNMU06X5ZER-M	**TG256879576**	Price

TUNGREC Indexable End Mills

EPS Style • 90°



- Versatile cutter
- High accuracy
- No mismatched surfaces

Cutter No.	Cutting Dia. (in.)	Shank Dia. (in.)	No. of Inserts	Uses Insert	Order No.	Price
EPS11050RSU	.500	.625	1	ASMT11T3	**TG256829498**	Price
EPS11050RLU	.500	.625	1	ASMT11T3	**TG256843441**	Price
EPS11062RLU	.625	.625	2	ASMT11T3	**TG256844297**	Price
EPS11062RSU	.625	.625	2	ASMT11T3	**TG256829499**	Price
EPS11075RLU	.750	.750	2	ASMT11T3	**TG256829500**	Price
EPS11075RSBU	.750	.750	3	ASMT11T3	**TG256821734**	Price
EPS11100RLU	1.000	1.000	2	ASMT11T3	**TG256844143**	Price
EPS11100RSBU-3/4	1.000	.750	4	ASMT11T3	**TG256850473**	Price
EPS11100RSBU	1.000	1.000	4	ASMT11T3	**TG256821584**	Price
EPS11125RLU	1.250	1.250	2	ASMT11T3	**TG256843574**	Price
EPS11125RSBU	1.250	1.250	5	ASMT11T3	**TG256829501**	Price

TUNGMILL Chamfering End Mills

ECC Style



- Multi-angle chamfer end mill
- Available in four different sizes

Lead Angle	Max. Dia.	No. of Flutes	Cutter No.	Uses Insert	Order No.	Price
30°	1.338	1	ECC31005RU30	XCET310404ER	**TG256822058**	Price
41°	1.698	2	ECC31005RU41	XCET310404ER	**TG256829415**	Price
45°	1.846	2	ECC31005RU45	XCET310404ER	**TG256811811**	Price
60°	2.204	2	ECC31005RU60	XCET310404ER	**TG256829416**	Price

For insert see page IMC-83

TUNG-TRI Indexable End Mills

EPA Style • Square Shoulder



Model No.	Cutter Dia. (in.)	Shank Dia. (in.)	Height (in.)	OAL (in.)	Max. Cutting Depth (in.)	No. of Inserts	Uses Insert	Order No.	Price
EPA06R050U0050-01N	.500	.500	.750	3.000	.236	1	TOMT0603**PDER-MJ	**TG256996205**	Price
EPA06R063U0063-02N	.625	.625	.937	3.500	.236	2	TOMT0603**PDER-MJ	**TG256996206**	Price
EPA06R075U0075-03N	.750	.750	1.142	4.000	.236	3	TOMT0603**PDER-MJ	**TG256996207**	Price
EPA06R100U0100W-04N	1.000	1.000	1.500	3.780	.236	4	TOMT0603**PDER-MJ	**TG256996208**	Price
EPA10R100U0075W-02N	1.000	.750	1.378	3.740	.394	2	TOMT1004**PDER-MJ	**TG256996209**	Price
EPA10R100U0100W-02L	1.000	1.000	2.752	8.500	.394	2	TOMT1004**PDER-MJ	**TG256996213**	Price
EPA10R100U0100W-02N	1.000	1.000	1.378	3.740	.394	2	TOMT1004**PDER-MJ	**TG256996210**	Price
EPA10R125U0125W-02L	1.250	1.250	10.000	3.000	.394	2	TOMT1004**PDER-MJ	**TG256996214**	Price
EPA10R125U0125W-03ML	1.250	-	-	4.250	.394	3	TOMT1004**PDER-MJ	**TG256761937**	Price
EPA10R125U0125W-03N	1.250	1.250	1.378	3.740	.394	3	TOMT1004**PDER-MJ	**TG256996211**	Price
EPA10R150U0125W-02L	1.500	1.500	2.000	2.000	.394	2	TOMT1004**PDER-MJ	**TG256996215**	Price
EPA10R150U0125W-03ML	1.500	-	-	4.250	.394	3	TOMT1004**PDER-MJ	**TG256761936**	Price
EPA10R150U0125W-04N	1.500	1.250	1.969	5.126	.394	4	TOMT1004**PDER-MJ	**TG256996212**	Price
EPA15R150U0125W-02L	1.500	1.500	4.250	6.500	.590	2	TOMT1506**PDER-MJ	**TG256996218**	Price
EPA15R150U0125W-03N	1.500	1.500	2.250	4.500	.590	3	TOMT1506**PDER-MJ	**TG256996216**	Price
EPA15R200U0125W-04N	2.000	2.000	2.250	4.500	.590	4	TOMT1506**PDER-MJ	**TG256996217**	Price

TUNG-TRI TPA Face Mill Cutters



Model No.	Cutter Dia. (in.)	Mounting Dia. (in.)	Bore Dia. (in.)	Height (in.)	Depth of Cut (in.)	No. of Inserts	Uses Insert	Order No.	Price
TPA06R200U0075A08	2.000	1.693	.750	1.575	.236	8	TOMT0603**PDER-MJ	**TG256996240**	Price
TPA10R200U0075A04	2.000	1.693	.750	1.575	.394	4	TOMT1004**PDER-MJ	**TG256996241**	Price
TPA10R250U0075A06	2.500	1.693	.750	1.575	.394	6	TOMT1004**PDER-MJ	**TG256996242**	Price
TPA10R300U0100A07	3.000	2.283	1.000	1.968	.394	7	TOMT1004**PDER-MJ	**TG256996243**	Price
TPA10R400U0150A08	4.000	3.150	1.500	2.480	.394	8	TOMT1004**PDER-MJ	**TG256996244**	Price
TPA15R200U0075A04	2.000	1.625	.750	1.570	.590	4	TOMT1506**PDER-MJ	**TG256996245**	Price
TPA15R250U0075A05	2.500	2.125	.750	1.570	.590	5	TOMT1506**PDER-MJ	**TG256996246**	Price
TPA15R300U0100A06	3.000	2.250	1.000	1.750	.590	6	TOMT1506**PDER-MJ	**TG256996247**	Price
TPA15R400U0150A07N	4.000	3.000	1.500	2.000	.590	7	TOMT1506**PDER-MJ	**TG256996248**	Price
TPA15R500U0150A08N	5.000	4.000	1.500	2.000	.590	8	TOMT1506**PDER-MJ	**TG256996249**	Price
TPA15R600U0200A10N	-	6.000	2.000	2.000	.590	10	TOMT1506**PDER-MJ	**TG256996250**	Price

TUNG-TRI Roughing Sub Unit for Face Mills



TLA15-S Style

- Sub unit to mount on TLA15-M type for longer Max ap reach

Model No.	Cutter Dia. (in.)	Bore Dia. (in.)	No. of Flutes	No. of Inserts	Height L	Max ap	Uses Insert	Order No.	Price
TLA15R300L110A04SS	3.000	1.024	4	8	1.703	1.102	TOMT15___	**TG256729157**	Price
TLA15R400L110A05SS	4.000	1.299	5	10	1.814	1.102	TOMT15___	**TG256729158**	Price

DOFORCE TRI Face Mills



TPTN12

Model Number	Cutter Dia. (in.)	Bore Dia. (in.)	Number of Inserts	Max ap	Uses Insert	Order No.	Price
TPTN12U2.00B.750R05	2.00	.75	5	.433	TN_U 12___	**TG256730278**	Price
TPTN12U2.50B.750R06	2.50	.75	6	.433	TN_U 12___	**TG256730279**	Price
TPTN12U3.00B1.00R08	3.00	1.00	8	.433	TN_U 12___	**TG256730280**	Price
TPTN12U4.00B1.50R10	4.00	1.50	10	.433	TN_U 12___	**TG256730281**	Price
TPTN12U5.00B1.50R12	5.00	1.50	12	.433	TN_U 12___	**TG256730282**	Price

MILLQFEED UAB Bore Type Milling Cutters



TXSW Style

- Super high feed milling cutter with large depth of cut

Model Number	Cutter Dia. (in.)	Max ap	Number of Inserts	Uses Insert	Height Lf	Order No.	Price
TXSW15U2.00B0.75R03	2.00	.098	3	SWMT15___	1.97	**TG256735328**	Price
TXSW15U2.50B0.75R04	2.50	.098	4	SWMT15___	1.97	**TG256735329**	Price
TXSW15U3.00B1.00R05	3.00	.098	5	SWMT15___	2.48	**TG256735330**	Price
TXSW15U4.00B1.50R06	4.00	.098	6	SWMT15___	2.48	**TG256735331**	Price
TXSW15U5.00B1.50R07	5.00	.098	7	SWMT15___	2.48	**TG256735332**	Price
TXSW15U6.00B2.00R08	2.00	.098	8	SWMT15___	2.48	**TG256735333**	Price

TUNG-TRI Roughing Face Mills



TLA10/TLA15 Style

- Extended flute
- Square shoulder

Model No.	Cutter Dia (in.)	Bore Dia. (in.)	No. of Flutes	No. of Inserts	Height Lf	Max ap	Uses Insert	Order No.	Price
TLA10R200L213U0075A04	2.000	.750	4	24	3.250	2.126	TOMT10___	**TG256729147**	Price
TLA10R250L213U0100A04	2.000	1.000	4	24	3.250	2.126	TOMT10___	**TG256729148**	Price
TLA15R300L275U0125A04M	3.000	1.250	4	20	3.940	2.756	TOMT15___	**TG256729155**	Price
TLA15R400L326U0150A05M	4.000	1.500	5	20	4.375	3.2686	TOMT15___	**TG256729156**	Price

DOTMILL Indexable Milling Cutters



TASN Style

- Face milling cutter to seat double sided square, octagonal, round inserts
- Inserts styles for this cutter are SNGU-MJ, SNGU-W, ONGU-MJ, ONGU-W, RNGU-MJ

Model No.	Cutter Dia. (in.)	No. of Inserts	Outer Dia. (in.)	Height (in.)	Bore Dia. (in.)	Weight	Order No.	Price
TASN13U2.00B0.75R05	2.000	5	1.850	1.575	.750	.90 lbs	**TG256999410**	Price
TASN13U2.50B0.75R06	2.500	6	1.850	1.575	.750	1.32 lbs	**TG256999411**	Price
TASN13U2.50B0.75R08	2.500	8	1.850	1.575	.750	1.54 lbs	**TG256736087**	Price
TASN13U3.00B1.00R08	3.000	8	1.969	1.969	1.000	1.98 lbs	**TG256999416**	Price
TASN13U3.00B1.00R10	3.000	10	1.969	1.969	1.000	2.20 lbs	**TG256999412**	Price
TASN13U4.00B1.50R08	4.000	8	3.150	1.969	1.500	3.75 lbs	**TG256999413**	Price
TASN13U4.00B1.50R12	4.000	12	3.150	1.969	1.500	3.75 lbs	**TG256999417**	Price
TASN13U5.00B1.50R10	5.000	10	3.150	2.480	1.500	5.95 lbs	**TG256999414**	Price
TASN13U5.00B1.50R14	5.000	14	3.150	2.480	1.500	6.72 lbs	**TG256999418**	Price
TASN13U6.00B2.00R12	6.000	12	3.937	2.480	2.000	8.60 lbs	**TG256999415**	Price

DOFEED High Feed Indexable End Mills

HXN Style

- High productivity with excellent chip evacuation and remarkable chip control
- High feed per tooth up to 2mm (.079")
- Economical insert with 4 cutting edges
- Center through coolant
- Low cutting force design
- Wiper insert for excellent surface finish and high feed rate, eliminating semi-finishing operation



Model No.	Cutting Dia.	No. of Inserts	Threaded Shank Size	Insert	OAL (L6)	Order No.	Price
HXN03R016MM08-02	16mm	2	M8	LNMU0303ZER-M	42mm	**TG256990874**	Price
HXN03R018MM08-02	18mm	2	M8	LNMU0303ZER-M	42mm	**TG256990875**	Price
HXN03R020MM10-03	20mm	3	M10	LNMU0303ZER-M	49mm	**TG256995991**	Price
HXN03R020MM10-04	20mm	4	M10	LNMU0303ZER-M	49mm	**TG256992730**	Price
HXN03R022MM10-04	22mm	4	M10	LNMU0303ZER-M	49mm	**TG256990876**	Price
HXN03R025MM12-04	25mm	4	M12	LNMU0303ZER-M	57mm	**TG256995993**	Price
HXN03R025MM12-05	25mm	5	M12	LNMU0303ZER-M	57mm	**TG256990877**	Price
HXN03R028MM12-05	28mm	5	M12	LNMU0303ZER-M	63mm	**TG256990878**	Price
HXN03R032MM16-05	32mm	5	M16	LNMU0303ZER-M	63mm	**TG256995996**	Price
HXN03R032MM16-06	32mm	6	M16	LNMU0303ZER-M	63mm	**TG256990880**	Price

DOTMILL ONMU Milling Inserts



- Double-sided octagonal inserts, M class, with 16 edges and pressed MJ chipbreaker

Model No.	Grade	P	M	K	N	S	H	Order No.	Price
ONMU 0705ANEN-MJ	AH120	x	x	x	-	x	-	**TG436758744**	Price
ONMU 0705ANEN-MJ	AH3135	x	x	-	-	-	-	**TG436758743**	Price
ONMU 0705ANEN-MJ	T1215	-	-	x	-	-	-	**TG436758746**	Price
ONMU 0705ANEN-MJ	T3225	x	x	-	-	-	-	**TG436758745**	Price

TUNG-TRI TOGT Milling Inserts

- High performance inserts with pressed AJ chipbreaker for non-ferrous metal

ISO Number	Grade	ST	SS	CI	N	S	H	Order No.	Price
TOGT100404PDFR-AJ	KS05F	-	-	x	x	x	-	**TG436752948**	Price
TOGT100408PDFR-AJ	KS05F	-	-	x	x	x	-	**TG436752949**	Price
TOGT150604PDFR AJ	KS05F	-	-	x	x	x	-	**TG436752950**	Price
TOGT150608PDFR AJ	KS05F	-	-	x	x	x	-	**TG436752951**	Price

DOFEED Indexable Face Mills

TXN Style

- Indexable face mill - TXN style



Cat. No.	No. of Inserts	Cutter Dia.	Bore Dia.	Insert	Order No.	Price
TXN03R150U0050A05	5	1.50	.50	LNMU03	**TG256743508**	Price
TXN03R150U0050A06	6	1.50	.50	LNMU03	**TG256736729**	Price
TXN03R200U0075A05	5	2.00	.75	LNMU03	**TG256715174**	Price
TXN03R200U0075A08	8	2.00	.75	LNMU03	**TG256988406**	Price
TXN03R200U0075A10	10	2.00	.75	LNMU03	**TG256683960**	Price
TXN06R200U0075A04	4	2.00	.75	LNMU06	**TG256993972**	Price
TXN06R200U0075A05	5	2.00	.75	LNMU06	**TG256879571**	Price
TXN06R250U0075A04	4	2.50	.75	LNMU06	**TG256705804**	Price
TXN06R250U0075A06	6	2.50	.75	LNMU06	**TG256995674**	Price
TXN06R300U0100A05	5	3.00	1.00	LNMU06	**TG256993973**	Price
TXN06R300U0100A07	7	3.00	1.00	LNMU06	**TG256879572**	Price
TXN06R400U0150A06	6	4.00	1.50	LNMU06	**TG256710722**	Price
TXN06R400U0150A10	10	4.00	1.50	LNMU06	**TG256710726**	Price
TXN06R500U0150A08	8	5.00	1.50	LNMU06	**TG256710723**	Price
TXN06R500U0150A12	12	5.00	1.50	LNMU06	**TG256710727**	Price
TXN06R600U0200A10	10	6.00	2.00	LNMU06	**TG256710724**	Price
TXN06R600U0200A14	14	6.00	2.00	LNMU06	**TG256710728**	Price

TUNGREC ASMT style inserts for EPS Cutters

- PVD TiAlN Coating

Chipbreaker - MJ is general purpose.
Grade AH120 - Versatile grade for steel, stainless steel, cast iron and super alloy applications.



Insert No.	Length (in.)	Width (in.)	Thick-ness (in.)	Grade	Order No.	Price
ASMT11T304PDPR-MJ	.457	.264	.146	AH120	**TG556818305**	Price
ASMT11T308PDPR-MJ	.457	.264	.146	AH120	**TG556822078**	Price
ASMT11T316PDPR-MJ	.457	.264	.146	AH120	**TG556822082**	Price
ASMT11T312PDPR-MJ	.457	.264	.146	AH120	**TG556848047**	Price
ASMT170508PDPR-MJ	.665	.386	.220	AH120	**TG556818307**	Price
ASMT170516PDPR-MJ	.665	.386	.220	AH120	**TG556822090**	Price
ASMT170512PDPR-MJ	.665	.386	.220	AH120	**TG556848051**	Price
ASMT170520PDPR-MJ	.665	.386	.220	AH120	**TG556848054**	Price
ASMT11T304PDPR-MJ	.457	.264	.146	AH120	**TG556818305**	Price
ASMT11T308PDPR-MJ	.457	.264	.146	AH120	**TG556822078**	Price
ASMT11T316PDPR-MJ	.457	.264	.146	AH120	**TG556822082**	Price
ASMT11T312PDPR-MJ	.457	.264	.146	AH120	**TG556848047**	Price
ASMT170508PDPR-MJ	.665	.386	.220	AH120	**TG556818307**	Price
ASMT170516PDPR-MJ	.665	.386	.220	AH120	**TG556822090**	Price
ASMT170512PDPR-MJ	.665	.386	.220	AH120	**TG556848051**	Price
ASMT170520PDPR-MJ	.665	.386	.220	AH120	**TG556848054**	Price
ASMT11T304PDPR-MJ	.457	.264	.146	AH120	**TG556818305**	Price
ASMT11T308PDPR-MJ	.457	.264	.146	AH120	**TG556822078**	Price
ASMT11T316PDPR-MJ	.457	.264	.146	AH120	**TG556822082**	Price
ASMT11T312PDPR-MJ	.457	.264	.146	AH120	**TG556848047**	Price
ASMT170508PDPR-MJ	.665	.386	.220	AH120	**TG556818307**	Price
ASMT170516PDPR-MJ	.665	.386	.220	AH120	**TG556822090**	Price
ASMT170512PDPR-MJ	.665	.386	.220	AH120	**TG556848051**	Price
ASMT170520PDPR-MJ	.665	.386	.220	AH120	**TG556848054**	Price
ASMT11T304PDPR-MJ	.457	.264	.146	AH120	**TG556818305**	Price
ASMT11T308PDPR-MJ	.457	.264	.146	AH120	**TG556822078**	Price
ASMT11T312PDPR-MJ	.457	.264	.146	AH120	**TG556848047**	Price
ASMT11T316PDPR-MJ	.457	.264	.146	AH120	**TG556822082**	Price
ASMT170508PDPR-MJ	.665	.386	.220	AH120	**TG556818307**	Price
ASMT170512PDPR-MJ	.665	.386	.220	AH120	**TG556848051**	Price
ASMT170516PDPR-MJ	.665	.386	.220	AH120	**TG556822090**	Price
ASMT170520PDPR-MJ	.665	.386	.220	AH120	**TG556848054**	Price

Abrasive



Belts C87-C94

Bench, Toolroom & Pedestal Grinding Wheels C22-C27

Bore Sizing, Finish C147-C153

Buffing Products C167-C169

Cartridge Rolls C84, C85

Cratex Products C74-C77

Cut-Off Wheels C47-C65

Depressed Center Wheels C55-C65

Diamond & CBN Files, Mandrels C44-C46

Diamond & CBN Wheels C38-C43

Diamond Dressers C34, C35

Discs, PSA, Hook & Loop, Resin Fiber C110-C122

Discs, Quick Change C123-C130

Dressers C32, C33, C36, C37

Flap Discs C98-C104

Flap Wheels C105-C107

Flex-Hone C148-C151

Surface Grinding Wheels C2-C21

Hand Pads C44, C131

Lapping Products C166

Mold Polishing, Stones C71-C73

Mounted Points C79-C84

Non-Woven Abrasives C131-C147

Sharpening Stones C66-C70

Sheets C96, C97

Shop Rolls C94-C96

Spiral Bands C86

Wheel Adapters C7

Wire Brushes & Wheels C151-C165

Abrasive Type Codes:

WA = White Aluminum Oxide
HP = High Performance
SC = Green Silicon Carbide
CG = Ceramic Grain
P = Porous

See below for specific MFG. Codes

Contact Area Guide

Narrow - area of grind less than 25% of wheel width or less than 1/4″ wide.

Medium - area of grind 25%-50% of wheel width or 1/4″ - 1/2″ wide.

Wide - area of grind greater than 50% of wheel width or over 1/2″ wide.

Grit Size

Grit	Requirement	Finish	Minimum Corner Radius
46	General Purpose	32 Ra and rougher	0.020″
60	Commercial Finish	32 Ra and better	0.016″
80	Fine Finish	20 Ra and better	0.0105″
120	Very Fine Finish	10 Ra and better	0.006″
150	Corner-Form Holding		0.005″
180	Corner-Form Holding		0.0035″
220	Corner-Form Holding		0.0026″

Vitrified Wheel Starting Recommendations

Productivity/Performance	Narrow Contact Area			Medium Contact Area			Wide Contact Area		
	Best	Better	Good	Best	Better	Good	Best	Better	Good
Application / Material									
TOOL RESHARPENING									
– Heavy Stock Removal (> .004)									
HSS & Tool Steel RC 50-68	CG/46-K	HP/46-K	WA/46-K	CG/46-J	HP/46-J	WA/46-J			
– Moderate Stock Removal (.002-.004)									
HSS & Tool Steel RC 50-68	CG/60-K	HP/60-K	WA/60-K	CG/60-J	HP/60-J	WA/60-J			
Carbide			SC/60-J			SC/60-J			
SURFACE GRINDING									
– Heavy Stock Removal (> .004)									
HSS & Tool Steel RC 50-68	CG/46-J	HP/46-J	WA/46-J	CG/46-I	HP/46-I	CG,P/46-G	HP, P/46-G	WA, P/46-G	
400 Series Stainless							HP, P/46-G	WA, P/46-G	
Soft Steels RC 30-45	CG/46-K	HP/46-K	WA/46-K	CG/46-J	HP/46-J	WA/46-J	HP, P/46-H	HP, P/46-H	WA, P/46-H
300 Series Stainless								HP, P/46-H	WA, P/46-H
Cast Iron: Ductile & Gray	CG/46-K	HP/46-K	WA/46-K	CG/46-J	HP/46-J	WA/46-J	CG, P/46-H	HP, P/46-H	WA, P/46-H
Nonferrous Alloys			SC/46-J			SC/46-I			
– Moderate Stock Removal (.002-.004)									
HSS & Tool Steel RC 50-68	CG/60-J	HP/60-J	WA/60-J	CG/60-I	HP/60-I	WA/60-I	CG, P/60-G	HP, P/60-G	WA, P/60-G
400 Series Stainless									
Soft Steels RC 30-45	CG/60-K	HP/60-K	WA/60-K	CG/60-J	HP/60-J	WA/60-J	CG, P/60-H	HP, P/60-H	WA, P/60-H
300 Series Stainless								HP, P/60-H	WA, P/60-H
Cast Iron: Ductile & Gray	CG/60-K	HP/60-K	WA/60-K	CG/60-J	HP/60-J	WA/60-J	CG, P/60-H	HP, P/60-H	WA, P/60-H
Nonferrous Alloys			SC/60-J			SC/60-I			
– Light Stock Removal and Finishing (>/.001)									
HSS & Tool Steel RC 50-68		HP/80-J	WA/80-J		HP/80-I	WA/80-I		HP/80-H	WA/80-H
400 Series Stainless									
Soft Steels RC 30-45		HP/80-K	WA/80-K		HP/80-J	WA/80-J		HP/80-I	WA/80-I
300 Series Stainless									
Cast Iron: Ductile & Gray		HP/80-K	WA/80-K		HP/80-J	WA/80-J		HP/80-I	WA/80-I
Nonferrous Alloys			SC/80-J			SC/80-I			SC/80-H

Grinding Wheel Symbols & Markings

Sample Marking: Carborundum AA46-H8V40

AA (1) — Abrasive

Regular Aluminum Oxide

Norton	A
Carborundum	A
Camel	WA

(WA) White Aluminum Oxide

Norton	38A
Carborundum	AA
Camel	WA

(HP) High Performance Aluminum Oxide

Norton	32A
Carborundum	32AR
Camel	AZ, 32A

(SC) Green Silicon Carbide

Norton	39C
Carborundum	GC
Camel	GC

(CG) Ceramic Grain

Norton	5SG
Carborundum	Medalest
Camel	AS3

46 (2) — Grit Size

6	46	220
8	54	240
10	60	320
12	70	400
14	80	500
16	90	600
20	100	700
24	120	800
30	150	1000
36	180	

H (3) — Grade

A Soft
B
C
D
E
F
G
H
I
J
K
L
M
to
Z Hard

8 (4) — Structure

1 Dense
2
3
4
5
6
7
8
9
10
11
12 Open

V (5) — Bond Type

V — Vitrified
B — Resinoid
R — Rubber

40 (6) — Mfrs. Specific Bonds

10
11
20
30
40

The American Standards Association has adopted a uniform system of wheel markings for easy identification of the elements which have been built into a grinding wheel. Each marking consists of six parts in the following sequence.

1. Abrasive Type & Manufacturer's Prefix
2. Grit Size
3. Grade of Hardness
4. Structure
5. Bond Type
6. Manufacturer's Specific Bond

White Aluminum Oxide Precision Grinding Wheels

- 38A Abrasive cool cutting action
- AA Abrasive excellent friability





Size (in.) - 7 x 1/4 x 1-1/4											
			Norton Abrasives			Carborundum			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
46	H	3600	38A46-HVBE	**MH60070039690**	Price	-	-	-	-	-	-
46	I	3600	38A46-I8VBE	**MH60070039691**	Price	-	-	-	WA46-IV	**MG9034600**	Price
46	J	3600	38A46-JVBE	**MH60070009755**	Price	-	-	-	-	-	-
60	H	3600	38A60-HVBE	**MH60070039695**	Price	-	-	-	-	-	-
60	I	3600	38A60-I8VBE	**MH60070039696**	Price	-	-	-	WA60-IV	**MG9034603**	Price
60	J	3600	38A60-J8VBE	**MH60070039698**	Price	AA60-JV40	**MG3709875**	Price	WA60-JV	**MG9034604**	Price
60	K	3600	38A60-KVBE	**MH60070039700**	Price	AA60-KV40	**MG3709874**	Price	WA60-KV	**MG9034605**	Price
80	H	3600	38A80-HVBE	**MH60070039707**	Price	-	-	-	-	-	-
80	I	3600	38A80-IVBE	**MH60070039808**	Price	-	-	-	-	-	-
80	J	3600	38A80-JVBE	**MH60070039809**	Price	-	-	-	WA80-JV	**MG9034606**	Price
80	K	3600	38A80-KVBE	**MH60070039812**	Price	-	-	-	WA80-KV	**MG9034607**	Price
100	H	3600	38A100-HVBE	**MH60070039822**	Price	-	-	-	-	-	-
100	I	3600	38A100-IVBE	**MH60070039823**	Price	AA100-IV40	**MG3709870**	Price	-	-	-
100	J	3600	38A100-JVBE	**MH60070039826**	Price	-	-	-	-	-	-
100	K	3600	38A100-KVBE	**MH60070039827**	Price	AA100-KV40	**MG3727714**	Price	WA100-KV	**MG9034608**	Price
100	L	3600	38A100-LVBE	**MH60070039830**	Price	-	-	-	-	-	-
120	J	3600	38A120-JVBE	**MH60070039833**	Price	-	-	-	-	-	-
120	K	3600	38A120-KVBE	**MH60070039834**	Price	-	-	-	WA120-KV	**MG9034609**	Price
150	K	3600	38A150-KVBE	**MH60070039838**	Price	AA150-KV40	**MG3709866**	Price	WA150KV	**MG9034610**	Price
150	L	3600	38A150-LVBE	**MH60070039839**	Price	-	-	-	-	-	-
220	L	3600	38A220-LVBE	**MH60070039847**	Price	-	-	-	-	-	-

Size (in.) - 7 x 1/2 x 1-1/4											
			Norton Abrasives			Carborundum			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
46	G	3600	38A46-GVBE	**MH60070041022**	Price	-	-	-	WA46-GV	**MG9034614**	Price
46	H	3600	38A46-HVBE	**MH60070041023**	Price	AA46-HV40	**MG3709865**	Price	WA46-HV	**MG9034615**	Price
46	I	3600	38A46-IVBE	**MH60070041024**	Price	AA46-IV40	**MG3709864**	Price	WA46-IV	**MG9034616**	Price
46	J	3600	38A46-JVBE	**MH60070041026**	Price	AA46-JV40	**MG3709863**	Price	WA46-JV	**MG9034617**	Price
46	K	3600	38A46-KVBE	**MH60070041028**	Price	AA46-KV40	**MG3709862**	Price	WA46-KV	**MG9034618**	Price
60	H	3600	38A60-HVBE	**MH60070041035**	Price	-	-	-	WA60-HV	**MG9034619**	Price
60	I	3600	38A60-IVBE	**MH60070041036**	Price	AA60-IV40	**MG3709860**	Price	WA60-IV	**MG9034620**	Price
60	J	3600	38A60-JVBE	**MH60070041038**	Price	AA60-JV40	**MG3709859**	Price	WA60-JV	**MG9034621**	Price
60	K	3600	38A60-KVBE	**MH60070041041**	Price	AA60-KV40	**MG3709858**	Price	WA60-KV	**MG9034622**	Price
60	L	3600	38A60-LVBE	**MH60070011677**	Price	-	-	-	-	-	-
80	H	3600	38A80-HVBE	**MH60070041047**	Price	-	-	-	-	-	-
80	I	3600	38A80-IVBE	**MH60070041048**	Price	AA80-IV40	**MG3709857**	Price	-	-	-
80	J	3600	38A80-JVBE	**MH60070041049**	Price	AA80-JV40	**MG3709856**	Price	-	-	-
80	K	3600	38A80-KVBE	**MH60070041054**	Price	AA80-KV40	**MG3709854**	Price	WA80-KV	**MG9034623**	Price
80	L	3600	38A80-LVBE	**MH60070041056**	Price	-	-	-	-	-	-
100	I	3600	38A100-IVBE	**MH60070041163**	Price	-	-	-	-	-	-
100	J	3600	38A100-JVBE	**MH60070041165**	Price	-	-	-	-	-	-
100	K	3600	38A100-KVBE	**MH60070041168**	Price	-	-	-	WA100-KV	**MG9034624**	Price
120	J	3600	38A120-JVBE	**MH60070041174**	Price	-	-	-	-	-	-
120	K	3600	38A120-KVBE	**MH60070041175**	Price	AA120-KV40	**MG3762180**	Price	WA120-KV	**MG9034625**	Price
150	J	3600	38A150-JVBE	**MH60070041179**	Price	-	-	-	-	-	-

Size (in.) - 7 x 3/4 x 1-1/4					
			Norton Abrasives		
Grit	Hardness	Max. RPM	Spec	Order No.	Price
46	H	3600	38A46-HVBE	**MH60070041950**	Price
46	K	3600	38A46-KVBE	**MH60070041954**	Price
60	I	3600	38A60-IVBE	**MH60070042207**	Price
60	K	3600	38A60-KVBE	**MH60070042060**	Price

White Aluminum Oxide Precision Grinding Wheels (cont.)





Size (in.) - 7 x 3/4 x 1-1/4 (R/1 -- 2-3/4 x 1/4)								
			Norton Abrasives			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price
46	H	3600	-	-	-	WA46-HV	**MG9034636**	Price
46	I	3600	38A46-IVBE	**MH60070042222**	Price	-	-	-
60	I	3600	38A60-IVBE	**MH60070042225**	Price	-	-	-
60	J	3600	-	-	-	WA60-JV	**MG9034642**	Price

Size (in.) - 7 x 1 x 1-1/4 (R/1 -- 3 x 1/2)											
			Norton Abrasives			Carborundum			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
46	H	3600	38A46-HVBE	**MH60070042707**	Price	-	-	-	WA46-HV	**MG9034647**	Price
46	I	3600	38A46-IVBE	**MH60070042809**	Price	AA46-IV40	**MG3709798**	Price	WA46-IV	**MG9034648**	Price
46	J	3600	38A46-J8VBE	**MH60070042810**	Price	-	-	-	WA46-JV	**MG9034649**	Price
46	K	3600	38A46-KVBE	**MH60070042793**	Price	-	-	-	-	-	-
60	I	3600	38A60-IVBE	**MH60070042815**	Price	AA60-IV40	**MG3709796**	Price	-	-	-
60	J	3600	38A60-JVBE	**MH60070042816**	Price	-	-	-	WA46-JV	**MG9034653**	Price
60	K	3600	38A60-KVBE	**MH60070042817**	Price	-	-	-	-	-	-

Size (in.) - 8 x 1/4 x 1-1/4											
			Norton Abrasives			Carborundum			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
60	I	3600	38A60-IVBE	**MH60080043431**	Price	-	-	-	-	-	-
60	J	3600	38A60-JVBE	**MH60080043432**	Price	-	-	-	-	-	-
60	K	3600	38A60-KVBE	**MH60080010825**	Price	-	-	-	-	-	-
80	I	3600	38A80-IVBE	**MH60080043437**	Price	-	-	-	-	-	-
80	J	3600	38A80-JVBE	**MH60080043439**	Price	AA80 -JV40	**MG3709844**	Price	WA80-JV	**MG9034664**	Price
80	K	3600	38A80-KVBE	**MH60080043461**	Price	-	-	-	-	-	-
100	I	3600	38A100-IVBE	**MH60080043445**	Price	-	-	-	-	-	-
100	K	3600	38A100-KVBE	**MH60080043447**	Price	-	-	-	-	-	-
120	K	3600	38A120-KVBE	**MH60080043450**	Price	-	-	-	-	-	-
150	K	3600	38A150-KVBE	**MH60080043451**	Price	-	-	-	-	-	-

Size (in.) - 8 x 1/2 x 1-1/4											
			Norton Abrasives			Carborundum			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
46	H	3600	38A46-HVBE	**MH60080043746**	Price	AA46-HV40	**MG3709841**	Price	WA46-HV	**MG9034671**	Price
46	I	3600	38A46-IVBE	**MH60080043749**	Price	AA46-IV40	**MG3709840**	Price	WA46I	**MG9034672**	Price
46	J	3600	38A46-JVBE	**MH60080043752**	Price	AA46-JV40	**MG3709839**	Price	WA46-JV	**MG9034673**	Price
46	K	3600	38A46-KVBE	**MH60080043762**	Price	-	-	-	WA46-KV	**MG9034674**	Price
60	H	3600	38A60-HVBE	**MH60080043756**	Price	-	-	-	-	-	-
60	I	3600	38A60-IVBE	**MH60080043757**	Price	AA46-IV40	**MG3709836**	Price	-	-	-
60	J	3600	38A60-JVBE	**MH60080043858**	Price	AA60-JV40	**MG3762190**	Price	WA60-JV	**MG9034677**	Price
60	K	3600	38A60-KVBE	**MH60080043861**	Price	-	-	-	-	-	-
80	I	3600	38A80-IVBE	**MH60080043866**	Price	-	-	-	-	-	-
80	J	3600	38A80-JVBE	**MH60080013787**	Price	-	-	-	-	-	-
80	K	3600	38A80-KVBE	**MH60080043869**	Price	AA80-KV40	**MG3709831**	Price	WA80-KV	**MG9034679**	Price
100	K	3600	38A100-KVBE	**MH60080043877**	Price	-	-	-	-	-	-

Size (in.) - 8 x 3/4 x 1-1/4											
			Norton Abrasives			Carborundum			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
46	H	3600	38A46-HVBE	**MH60080044175**	Price	-	-	-	WA46-HV	**MG9034683**	Price
46	I	3600	38A46-IVBE	**MH60080044177**	Price	-	-	-	-	-	-

White Aluminum Oxide Precision Grinding Wheels (cont.)





Size (in.) - 8 x 3/4 x 1-1/4											
			Norton Abrasives			Carborundum			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
46	J	3600	-	-	-	AA46-JV40	**MG3709827**	Price	-	-	-
46	K	3600	38A46-KVBE	**MH60080044180**	Price	-	-	-	-	-	-
60	I	3600	38A60-IVBE	**MH60080044184**	Price	-	-	-	-	-	-
60	J	3600	-	-	-	-	-	-	WA60-JV	**MG9034689**	Price

Size (in.) - 8 x 1 x 1-1/4 (R/1 -- 3-1/8 x 1/2)					
			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price
46	J	3600	WA46-JV	**MG9034696**	Price
46	K	3600	WA46-KV	**MG9034698**	Price
60	K	3600	WA60-KV	**MG9034702**	Price

Size (in.) - 10 x 1/2 x 3								
			Norton Abrasives			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price
60	J	2485	-	-	-	WA60-JV	**MG9034712**	Price
60	K	2485	38A60-KVBE	**MH60100049859**	Price	-	-	-

Size (in.) - 10 x 3/4 x 3								
			Norton Abrasives			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price
60	I	2485	38A60-IVBE	**MH60100060163**	Price	WA60-IV	**MG9034719**	Price

Size (in.) - 10 x 1 x 3								
			Carborundum			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price
46	H	2485	-	-	-	WA46-HV	**MG9034723**	Price
46	J	2485	AA46-JV40	**MG3709814**	Price	WA46-JV	**MG9034725**	Price

Size (in.) - 12 x 1 x 3											
			Norton Abrasives			Carborundum			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
46	H	2070	38A46-HVBE	**MH60120062700**	Price	-	-	-	WA46-HV	**MG9034742**	Price
46	J	2070	38A46-JVBE	**MH60120062704**	Price	AA46-JV40	**MG3709810**	Price	-	-	-

Size (in.) - 12 x 1 x 5								
			Norton Abrasives			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price
46	I	2070	38A46-IVBE	**MH60120062703**	Price	-	-	-
46	J	2070	-	-	-	WA46-JV	**MG9034755**	Price
60	H	2070	-	-	-	WA60-HV	**MG9034759**	Price

Size (in.) - 12 x 1-1/2 x 3 (R/1 -- 7-1/2 x 1/2)					
			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price
46	H	2070	WA46-HV	**MG9034761**	Price
46	J	2070	WA46-JV	**MG9034763**	Price

White Aluminum Oxide Precision Grinding Wheels (cont.)



Size (in.) - 12 x 1-1/2 x 5 (R/1 - 7-1/2 x 1/2)								
			Norton Abrasives			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price
46	H	2070	-	-	-	WA46-HV	**MG9034769**	Price
46	I	2070	38A46-IVBE	**MH60120063175**	Price	WA46-IV	**MG9034770**	Price
46	J	2070	-	-	-	WA46-JV	**MG9034771**	Price
60	I	2070	-	-	-	WA60-IV	**MG9034774**	Price
60	K	2070	-	-	-	WA60-KV	**MG9034776**	Price

Size (in.) - 12 x 2 x 5					
			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price
46	H	2190	AZ46-H8	**MG9034436**	Price

Size (in.) - 12 x 2 x 5 (R/2 -- 7-1/2 x 1/2)					
			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price
46	I	2070	WA46-IV	**MG9034778**	Price
46	J	2070	WA46-JV	**MG9034779**	Price

Size (in.) - 14 x 1 x 5											
			Norton Abrasives			Carborundum			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
46	J	1800	-	-	-	AA46-JV40	**MG3709806**	Price	-	-	-
60	I	1800	38A60-IVBE	**MH60140063947**	Price	-	-	-	WA60-IV	**MG9034790**	Price

Size (in.) - 14 x 1-1/2 x 5								
			Norton Abrasives			Carborundum		
Grit	Hardness	Max. RPM	Spec	Order No.	Price	Spec	Order No.	Price
46	H	1800	38-46-HVBE	**MH60140013968**	Price	-	-	-
46	I	1800	38A46-IVBE	**MH6066253364090**	Price	-	-	-
46	J	1800	38A46-JVBE	**MH60140064240**	Price	AA46-JV40	**MG3709804**	Price
60	I	1800	38A60-IVBE	**MH60140064247**	Price	-	-	-
60	J	1800	-	-	-	AA60-JV40	**MG3709803**	Price

Size (in.) - 14 x 1-1/2 x 5 (R/1 -- 8 x 1/2)					
			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price
46	H	1800	WA46-HV	**MG9034793**	Price
46	I	1800	WA46-IV	**MG9034794**	Price
46	J	1800	WA46-JV	**MG9034795**	Price
60	I	1800	WA60-IV	**MG9034798**	Price

Size (in.) - 14 x 2 x 5 (R/1 -- 8 x 1)					
			CGW		
Grit	Hardness	Max. RPM	Spec	Order No.	Price
46	H	1800	WA46-HV	**MG9034811**	Price
46	I	1800	WA46-IV	**MG9034812**	Price
46	J	1800	WA46-JV	**MG9034813**	Price
60	I	1800	WA60-IV	**MG9034816**	Price

NORTON Toolroom Surface Grinding Wheels

Single Pack

gemini

Features:
- Friable, aluminum oxide abrasive grain
- Versatile, consistent performance
- Aluminum Oxide

Benefits:
- Ideal for applications with light to moderate feed rates
- Works well on high-speed steel and general purpose tool steel
- Cost effective for light production and maintenance operations



Size (in.)	Max. RPM	Specification	Order No.	Price
7 x 1/4 x 1-1/4	3600	Gemini 60-I	**MH60070046722**	Price
7 x 1/4 x 1-1/4	3600	Gemini 60-J	**MH60070046788**	Price
7 x 1/4 x 1-1/4	3600	Gemini 60-K	**MH60070046789**	Price
7 x 1/4 x 1-1/4	3600	Gemini 80-K	**MH60070046792**	Price
7 x 1/2 x 1-1/4	3600	Gemini 46-H	**MH60070046795**	Price
7 x 1/2 x 1-1/4	3600	Gemini 46-I	**MH60070046800**	Price
7 x 1/2 x 1-1/4	3600	Gemini 60-I	**MH60070046818**	Price
7 x 1/2 x 1-1/4	3600	Gemini 46-J	**MH60070046802**	Price
7 x 1/2 x 1-1/4	3600	Gemini 60-J	**MH60070046820**	Price
7 x 1/2 x 1-1/4	3600	Gemini 46-K	**MH60070046812**	Price
7 x 1/2 x 1-1/4	3600	Gemini 60-K	**MH60070046821**	Price
7 x 1/2 x 1-1/4	3600	Gemini 80-K	**MH60070046832**	Price
7 x 1/2 x 1-1/4	3600	Gemini 100-K	**MH60070046838**	Price
7 x 3/4 x 1-1/4	3600	Gemini 46-J	**MH60070046826**	Price
7 x 3/4 x 1-1/4	3600	Gemini 60-J	**MH60070046830**	Price
7 x 1 x 1-1/4	3600	Gemini 46-H	**MH60070046831**	Price
7 x 1 x 1-1/4	3600	Gemini 46-J	**MH60070046835**	Price
7 x 1 x 1-1/4	3600	Gemini 60-J	**MH60070046839**	Price
8 x 1/2 x 1-1/4	3600	Gemini 46-H	**MH60080046841**	Price
8 x 1/2 x 1-1/4	3600	Gemini 46-I	**MH60080046843**	Price
8 x 1/2 x 1-1/4	3600	Gemini 46-J	**MH60080046845**	Price
8 x 1/2 x 1-1/4	3600	Gemini 60-J	**MH60080046857**	Price
8 x 1/2 x 1-1/4	3600	Gemini 46-K	**MH60080046848**	Price
8 x 1 x 1-1/4	3105	Gemini 46-H	**MH60080046849**	Price
8 x 1 x 1-1/4	3600	Gemini 46-J	**MH60080046850**	Price

SOPKO Hex Flange Spindle Nuts for Sopko Spanner Wrench

- 7/8" x 1/2-13 Hex flange spindle nuts are for use with #35135 Sopko combination hex socket spanner wrench



Thread	Order No.	Price
Left Hand	**SP505001L**	Price
Right Hand	**SP505002R**	Price
Socket & Spanner Wrench	**SP5035135**	Price

SOPKO Precision Wheel Adapters



Precision Ground Wheel Adapters for Standard Cutter and Surface Grinders

- All ground wheel adapters will save you time and money in your tool room and tool grinding departments

Type - 2-1/4" Dia. Wheel Adapter for 7" Grinding Wheels						
	For 1" Wide Wheel		For 1/4" to 1/2" Wide Wheel		For 3/4" Wide Wheel	
Thread	Order No.	Price	Order No.	Price	Order No.	Price
Left Hand	**SP503001LH**	Price	**SP502001LH**	Price	**SP501001LH**	Price
Right Hand	**SP503002RH**	Price	**SP502002RH**	Price	**SP501002RH**	Price

Type - 3" Dia. Wheel Adapter for 8" Grinding Wheels						
	For 1" Wide Wheel		For 1/4" to 1/2" Wide Wheel		For 3/4" Wide Wheel	
Thread	Order No.	Price	Order No.	Price	Order No.	Price
Left Hand	**SP503301LH**	Price	**SP502301LH**	Price	**SP501301LH**	Price
Right Hand	**SP503302RH**	Price	**SP502302RH**	Price	**SP501302RH**	Price

Type - Cincinnati Nos. 1 and 2, Covel, Gallmeyer, Livingston Cutter Grinders and all others with a 7/8" opening and 4-1/2" T.P.F.				
	1" Wide Wheel		1/2" Wide Wheel	
Thread	Order No.	Price	Order No.	Price
Left Hand	**SP50C1001LH**	Price	**SP50C2001LH**	Price
Right Hand	**SP50C1002RH**	Price	**SP50C2002RH**	Price

Style No. 2 Long Extended Type for Added Clearance

- For use with 1/2 wide wheel and extends wheel forward 1-5/8"
- Hardened and ground with heat treated nuts



Thread Direction	Order No.	Price
Long Left Hand	**SP502001L**	Price
Long Right Hand	**SP502002R**	Price

Style No. 4.5 Flanged Adapter Complete

- One piece hardened and ground flanged adapter for use with thin cut off wheels
- Mating side flange plate is 5/16" thick and 4-1/2" OD
- Hardened and ground



Thread Direction	Order No.	Price
Flanges Only Order	**SP50045SP**	Price
Left Hand	**SP50451LH**	Price
Right Hand	**SP50452RH**	Price

Puller Bushing and Screw

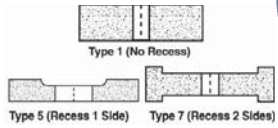
- Consists of a threaded steel bushing which screws into the open end of the adapter
- A 1-1/2" puller bolt screws through the puller bushing pressing against the end of the spindle, gently forcing the adapter assembly off the spindle
- All Sopko Adapters have this puller feature



Order No.	Price
SP50116	Price

32A High Performance Surface Grinding Wheels





- Ideal for grinding all types of tool steel
- Strong and sharp abrasive – good penetration on tough alloy steels
- For moderate to heavy infeed rates, rapid stock removal and precision contouring

8" Type 01 and Type 05 Vitrified Toolroom Wheels Maximum Operating Speeds:

- Stock NorPor VP2 wheels = 3600 RPMs
- All other 46 grit, J grade and harder = 3600 RPMs
- All other 54 grit, I grade and harder = 3600 RPMs
- All other 60 grit and finer, H grade and harder = 3600 RPMs
- All other specifications = 3105 RPMs
- *It is the user's responsibility to refer to and comply with ANSI B7.1

Size - 7 x 1/4 x 1-1/4

Grit	Hardness	Spec	Max. RPM	Order No.	Price
100	K	32A100-KVBE	3600	**MH60070039673**	Price
46	H	32A46-HVBE	3600	**MH60070039543**	Price
46	I	32A46-IVBE	3600	**MH60070039544**	Price
46	J	32A46-JVBE	3600	**MH60070039545**	Price
46	K	32A46-KVBE	3600	**MH60070039862**	Price
60	H	32A60-HVBE	3600	**MH60070039547**	Price
60	I	32A60-IVBE	3600	**MH60070039548**	Price
60	J	32A60-J8VBE	3600	**MH60070039549**	Price
60	K	32A60-K5VBE	3600	**MH60070039552**	Price
80	H	32A80-HVBE	3600	**MH60070039557**	Price
80	I	32A80-IVBE	3600	**MH60070039658**	Price
80	J	32A80-JVBE	3600	**MH60070039660**	Price
80	K	32A80-KVBE	3600	**MH60070039662**	Price
100	I	32A100-IVBE	3600	**MH60070039670**	Price

Size - 7 x 1/2 x 1-1/4

Grit	Hardness	Spec	Max. RPM	Order No.	Price
120	L	32A120-LVBE	3600	**MH60070041018**	Price
46	H	32A46-HVBE	3600	**MH60070040863**	Price
46	I	32A46-IVBE	3600	**MH60070040864**	Price
46	J	32A46-JVBE	3600	**MH60070040865**	Price
46	K	32A46-KVBE	3600	**MH60070040867**	Price
60	H	32A60-HVBE	3600	**MH60070040879**	Price
60	I	32A60-IVBE	3600	**MH60070040880**	Price
60	J	32A60-JVBE	3600	**MH60070040882**	Price
60	K	32A60-KVBE	3600	**MH60070040885**	Price
60	L	32A-60LVBE	3600	**MH60070040888**	Price
80	H	32A80-HVBE	3600	**MH60070040894**	Price
80	I	32A80-IVBE	3600	**MH60070040895**	Price
80	J	32A80-JVBE	3600	**MH60070040897**	Price
80	K	32A80-KVBE	3600	**MH60070040899**	Price
80	L	32A80-LVBE	3600	**MH60070040900**	Price
100	I	32A100-IVBE	3600	**MH60070040907**	Price
100	J	32A100-JVBE	3600	**MH60070041008**	Price

Size - 7 x 3/4 x 1-1/4

Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	3600	**MH60070041930**	Price
46	I	32A46-IVBE	3600	**MH60070041931**	Price
46	K	32A46-KVBE	3600	**MH60070041935**	Price
60	I	32A60-IVBE	3600	**MH60070041938**	Price
60	K	32A60-KVBE	3600	**MH60070041943**	Price

Size - 7 x 3/4 x 1-1/4 (R/1 -- 2-3/4 x 1/4)

Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	3600	**MH60070042209**	Price
46	I	32A46-IVBE	3600	**MH60070042211**	Price
46	J	32A46-JVBE	3600	**MH60070042213**	Price
60	I	32A60-IVBE	3600	**MH60070042217**	Price
60	J	32A60-JVBE	3600	**MH60070042218**	Price
60	K	32A60-KVBE	3600	**MH60070042205**	Price

Size - 7 x 1 x 1-1/4

Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	3600	**MH60070042513**	Price
46	J	32A46-JVBE	3600	**MH60070042268**	Price
60	I	32A60-IVBE	3600	**MH60070042524**	Price
60	K	32A60-KVBE	3600	**MH60070042709**	Price

Size - 7 x 1 x 1-1/4 (R/1 -- 3 x 1/2)

Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	3600	**MH60070042689**	Price
46	I	32A46-IVBE	3600	**MH60070042690**	Price
60	I	32A60-IVBE	3600	**MH60070042686**	Price

Size - 8 x 1/4 x 1-1/4

Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	3600	**MH60080043412**	Price
46	I	32A46-IVBE	3600	**MH60080043310**	Price
46	K	32A46-KVBE	3600	**MH60080043413**	Price
60	I	32A60-IVBE	3600	**MH60080043416**	Price
60	J	32A60-JVBE	3600	**MH60080043417**	Price
60	K	32A60-KVBE	3600	**MH60080043399**	Price
80	I	32A80-IVBE	3600	**MH60080043421**	Price
80	K	32A80-KVBE	3600	**MH60080043458**	Price
100	I	32A100-IVBE	3600	**MH60080043426**	Price
100	K	32A100-KVBE	3600	**MH60080043428**	Price

Size - 8 x 1/2 x 1-1/4

Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	3600	**MH60080043712**	Price
46	I	32A46-IVBE	3600	**MH60080043713**	Price
46	J	32A46-JVBE	3600	**MH60080043715**	Price
46	K	32A46-KVBE	3600	**MH60080043716**	Price
60	H	32A60-HVBE	3600	**MH60080043724**	Price
60	I	32A60-IVBE	3600	**MH60080043725**	Price
60	J	32A60-JVBE	3600	**MH60080043727**	Price
60	K	32A60-KVBE	3600	**MH60080043729**	Price

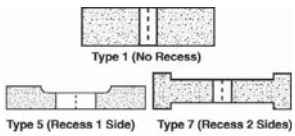
32A High Performance Surface Grinding Wheels (cont.)



- Ideal for grinding all types of tool steel
- Strong and sharp abrasive – good penetration on tough alloy steels
- For moderate to heavy infeed rates, rapid stock removal and precision contouring

8" Type 01 and Type 05 Vitrified Toolroom Wheels Maximum Operating Speeds:

- Stock NorPor VP2 wheels = 3600 RPMs
- All other 46 grit, J grade and harder = 3600 RPMs
- All other 54 grit, I grade and harder = 3600 RPMs
- All other 60 grit and finer, H grade and harder = 3600 RPMs
- All other specifications = 3105 RPMs
- *It is the user's responsibility to refer to and comply with ANSI B7.1



Size - 8 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
80	H	32A80-HVBE	3600	**MH60080043733**	Price
80	I	32A80-IVBE	3600	**MH60080043734**	Price
80	J	32A80-JVBE	3600	**MH60080043736**	Price
80	K	32A80-KVBE	3600	**MH60080043737**	Price
100	I	32A100-IVBE	3600	**MH60080043740**	Price
100	K	32A100-KVBE	3600	**MH60080043742**	Price

Size - 8 x 3/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	3600	**MH60080044159**	Price
46	I	32A46-IVBE	3600	**MH60080044215**	Price
46	J	32A46-JVBE	3600	**MH60080044161**	Price
46	K	32A46-KVBE	3600	**MH60080044165**	Price
60	H	32A60-HVBE	3600	**MH60080044168**	Price
60	I	32A60-IVBE	3600	**MH60080044169**	Price
60	J	32A60-JVBE	3600	**MH60080044171**	Price
60	K	32A60-KVBE	3600	**MH60080044173**	Price
80	K	32A80-KVBE	3600	**MH60080044064**	Price

Size - 8 x 1 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	3600	**MH60080044616**	Price
46	I	32A46-IVBE	3600	**MH60080044617**	Price
46	K	32A46-KVBE	3600	**MH60080044622**	Price
60	I	32A60-IVBE	3600	**MH60080044624**	Price
60	K	32A60-KVBE	3600	**MH60080044629**	Price

Size - 8 x 1 x 1-1/4 (R/1 -- 3-1/4 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	32A46-IVBE	3600	**MH60080044790**	Price
60	I	32A60-IVBE	3600	**MH60080044753**	Price
60	K	32A60-KVBE	3600	**MH60080044810**	Price

Size - 10 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	2485	**MH60100060747**	Price
46	I	32A46-IVBE	2485	**MH60100060750**	Price
46	K	32A46-KVBE	2485	**MH60100060758**	Price
60	I	32A60-IVBE	2485	**MH60100060769**	Price
60	K	32A60-KVBE	2485	**MH60100060777**	Price

Size - 12 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	2070	**MH60120062562**	Price
46	I	32A46-IVBE	2070	**MH60120062564**	Price
46	J	32A46-JVBE	2070	**MH60120062567**	Price
46	K	32A46-KVBE	2070	**MH60120062572**	Price
60	H	32A60-HVBE	2070	**MH60120062580**	Price
60	I	32A60-IVBE	2070	**MH60120062581**	Price
60	K	32A60-KVBE	2070	**MH60120062689**	Price
80	K	32A80-KVBE	2070	**MH60120062532**	Price

Size - 12 x 3/4 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	2070	**MH60120062260**	Price
46	I	32A46-IVBE	2070	**MH60120062261**	Price
60	I	32A60-IVBE	2070	**MH60120062270**	Price
60	K	32A60-KVBE	2070	**MH60120062273**	Price

Size - 12 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	2070	**MH60120062563**	Price
46	I	32A46-IVBE	2070	**MH60120062565**	Price
46	K	32A46-KVBE	2070	**MH60120062573**	Price
60	I	32A60-IVBE	2070	**MH60120062582**	Price
60	J	32A60-JVBE	2070	**MH60120062686**	Price
60	K	32A60-KVBE	2070	**MH60120062691**	Price
80	J	32A80-JVBE	2070	**MH60120062696**	Price
80	K	32A80-KVBE	2070	**MH60120062697**	Price

Size - 12 x 2 x 3 (R/2 -- 7-1/4 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	2070	**MH60120063590**	Price
46	I	32A46-IVBE	2070	**MH60120063588**	Price
46	J	32A46-JVBE	2070	**MH60120063348**	Price

Size - 12 x 2 x 5 (R/2 -- 7-1/2 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	2070	**MH60120063591**	Price
46	I	32A46-IVBE	2070	**MH60120063594**	Price

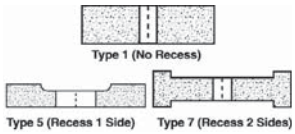
NORTON 32A High Performance Surface Grinding Wheels (cont.)



- Ideal for grinding all types of tool steel
- Strong and sharp abrasive – good penetration on tough alloy steels
- For moderate to heavy infeed rates, rapid stock removal and precision contouring

8" Type 01 and Type 05 Vitrified Toolroom Wheels Maximum Operating Speeds:

- Stock NorPor VP2 wheels = 3600 RPMs
- All other 46 grit, J grade and harder = 3600 RPMs
- All other 54 grit, I grade and harder = 3600 RPMs
- All other 60 grit and finer, H grade and harder = 3600 RPMs
- All other specifications = 3105 RPMs
- *It is the user's responsibility to refer to and comply with ANSI B7.1



Size - 12 x 2 x 5 (R/2 -- 7-1/2 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	32A46-JVBE	2070	**MH60120063483**	Price
46	K	32A46-KVBE	2070	**MH60120063596**	Price

Size - 14 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	1800	**MH60140063912**	Price
46	I	32A46-IVBE	1800	**MH60140063914**	Price
60	I	32A60-IVBE	1800	**MH60140063927**	Price

Size - 14 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	1800	**MH60140063913**	Price
46	I	32A46-IVBE	1800	**MH60140063915**	Price
46	J	32A46-JVBE	1800	**MH60140063919**	Price
46	K	32A46-KVBE	1800	**MH60140063921**	Price
60	H	32A60-HVBE	1800	**MH60140063926**	Price
60	J	32A60-JVBE	1800	**MH60140063930**	Price
60	K	32A60-KVBE	1800	**MH60140063932**	Price
60	L	32A60-LVBE	1800	**MH60140064035**	Price
80	J	32A80-JVBE	1800	**MH60140064038**	Price

Size - 14 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
80	K	32A80-KVBE	1800	**MH60140064039**	Price

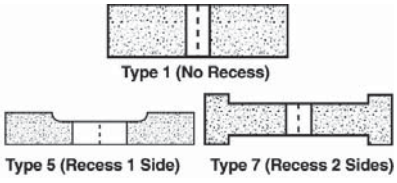
Size - 14 x 1-1/2 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	1800	**MH60140064335**	Price
46	I	32A46-IVBE	1800	**MH60140064336**	Price
46	J	32A46-JVBE	1800	**MH60140064337**	Price
46	K	32A46-KVBE	1800	**MH60140064339**	Price
60	H	32A60-HVBE	1800	**MH60140064340**	Price
60	I	32A60-IVBE	1800	**MH60140064239**	Price
60	J	32A60-JVBE	1800	**MH60140064341**	Price
60	K	32A60-KVBE	1800	**MH60140064342**	Price
80	J	32A80-JVBE	1800	**MH60140064246**	Price

Size - 14 x 1-1/2 x 5 (R/1 -- 8 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32A46-HVBE	1800	**MH60140064359**	Price
46	I	32A46-IVBE	1800	**MH60140064300**	Price
60	J	32A60-JVBE	1800	**MH60140064364**	Price
60	K	32A60-KVBE	1800	**MH60140064365**	Price

CARBORUNDUM 32AR High Performance Oxide Precision Grinding Wheels



- Ideal for grinding all types of tool steel
- Strong and sharp abrasive – good penetration on tough alloy steels
- For moderate to heavy infeed rates, rapid stock removal and precision contouring



GOLD 32AR Abrasive

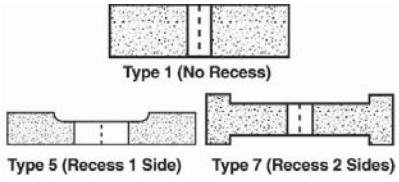
Size (in.) - 7 x 1/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32AR46-HV40	3600	**MG3727686**	Price
46	J	32AR46-JV40	3600	**MG3727688**	Price
60	I	32AR60-IV40	3600	**MG3727689**	Price
60	J	32AR60-JV40	3600	**MG3727311**	Price
60	K	32AR60-KV40	3600	**MG3727312**	Price
80	J	32AR80-JV40	3600	**MG3727314**	Price
80	K	32AR80-KV40	3600	**MG3727315**	Price

Size (in.) - 7 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	G/P	32AR46-GV40P	3600	**MG3727317†**	Price
46	H	32AR46-HV40	3600	**MG3727319**	Price
46	H/P	32AR46-HV40P	3600	**MG3727318†**	Price
46	I	32AR46-IV40	3600	**MG3727321**	Price
46	J	32AR46-JV40	3600	**MG3727322**	Price
46	K	32AR46-KV40	3600	**MG3727323**	Price
60	H	32AR60-HV40	3600	**MG3727326**	Price
60	I	32AR60-IV40	3600	**MG3727327**	Price
60	J	32AR60-JV40	3600	**MG3727328**	Price
60	K	32AR60-KV40	3600	**MG3727329**	Price
80	K	32AR80-KV40	3600	**MG3727331**	Price

CARBORUNDUM

32AR High Performance Oxide Precision Grinding Wheels (cont.)

- Ideal for grinding all types of tool steel
- Strong and sharp abrasive – good penetration on tough alloy steels
- For moderate to heavy infeed rates, rapid stock removal and precision contouring



GOLD 32AR Abrasive



Size (in.) - 7 x 3/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	32AR46-IV40	3600	**MG3727334**	Price
60	K	32AR60-KV40	3600	**MG3727337**	Price

Size (in.) - 7 x 1 x 1-1/4 (R/1 -- 2-3/4 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32AR46-HV40	3600	**MG3727703**	Price
46	I	32AR46-IV40	3600	**MG3727675**	Price
46	K	32AR46-KV40	3600	**MG3762285**	Price
60	I	32AR60-IV40	3600	**MG3727704**	Price

Size (in.) - 8 x 1/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
60	K	32AR60-KV40	3600	**MG3727338**	Price
80	K	32AR80-KV40	3600	**MG3727339**	Price

Size (in.) - 8 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	G/P	32AR46-GV40P	3600	**MG3727340†**	Price
46	H	32AR46-HV40	3600	**MG3727342**	Price
46	H/P	32AR46-HV40P	3600	**MG3727341†**	Price
46	I	32AR46-IV40	3600	**MG3727343**	Price
46	J	32AR46-JV40	3600	**MG3727344**	Price
46	K	32AR46-KV40	3600	**MG3727345**	Price
60	H	32AR60-HV40	3600	**MG3727347**	Price
60	I	32AR60-IV40	3600	**MG3727348**	Price
60	J	32AR60-JV40	3600	**MG3727349**	Price

Size (in.) - 8 x 3/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	32AR46-IV40	3600	**MG3727353**	Price
46	J	32AR46-JV40	3600	**MG3727354**	Price
60	J	32AR46-JV40	3600	**MG3727356**	Price

Size (in.) - 8 x 1 x 1-1/4 (R/1 -- 3 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	32AR46-IV40	3600	**MG3727677**	Price
46	J	32AR46-JV40	3600	**MG3727678**	Price

Size (in.) - 10 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	32AR46-IV40	2485	**MG3727359**	Price
60	I	32AR60-IV40	2485	**MG3727360**	Price
60	K	32AR60-KV40	2485	**MG3762204**	Price

Size (in.) - 12 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	32AR46-IV40	2070	**MG3762216**	Price
46	J	32AR46-JV40	2070	**MG3727362**	Price
60	J	32AR60-JV40	2070	**MG3727364**	Price

Size (in.) - 12 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	32AR46-IV40	2070	**MG3727365**	Price

Size (in.) - 12 x 1-1/2 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32AR46-HV40	2070	**MG3727368**	Price
46	I	32AR46-IV40	2070	**MG3727369**	Price

Size (in.) - 14 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32AR46-HV40	1800	**MG3762230**	Price
46	J	32AR46-JV40	1800	**MG3727370**	Price
60	J	32AR60-JV40	1800	**MG3727371**	Price

Size (in.) - 14 x 1-1/2 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	32AR46-HV40	1800	**MG3727372**	Price
46	I	32AR46-IV40	1800	**MG3727673**	Price
46	J	32AR46-JV40	1800	**MG3727700**	Price
46	K	32AR46-KV40	1800	**MG3762236**	Price

32A Surface Grinding Wheels

Gray Vitrified

- Sharp mono-crystalline aluminum oxide grain with premium CGW bond offers excellent versatility and performance on a wide range of applications and materials
- Outstanding form holding wheel with free cutting grain
- Ideal for medium to heavy stock removal





Size (in.) - 7 x 1/2 x 1-1/4						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8V	10	3600	**MG9037700**	Price
46	I	32A46-I8V	10	3600	**MG9037701**	Price
46	J	32A46-J8V	10	3600	**MG9037702**	Price
46	K	32A46-K8V	10	3600	**MG9037703**	Price
60	I	32A60-I8V	10	3600	**MG9037704**	Price
60	J	32A60-J8V	10	3600	**MG9037705**	Price
60	K	32A60-K8V	10	3600	**MG9037706**	Price
80	K	32A80-K8V	10	3600	**MG9037728**	Price

Size (in.) - 7 x 3/4 x 1-1/4 (R/1 -- 3 x 1/4)						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8V	10	3600	**MG9037729**	Price
60	J	32A60-J8V	10	3600	**MG9037731**	Price

Size (in.) - 7 x 1 x 1-1/4 (R/1 -- 3 x 1/2)						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8V	10	3600	**MG9037732**	Price
46	J	32A46-J8V	10	3600	**MG9037733**	Price
60	J	32A60-J8V	10	3600	**MG9037734**	Price

Size (in.) - 8 x 1/2 x 1-1/4						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8-V	10	3600	**MG9037707**	Price
46	I	32A46-I8-V	10	3600	**MG9037708**	Price
46	J	32A46-J8-V	10	3600	**MG9037709**	Price
60	J	32A60-J8-V	10	3600	**MG9037710**	Price
60	K	32A60K8-V	10	3600	**MG9037711**	Price
80	K	32A80-K8V	10	3600	**MG9037736**	Price

Size (in.) - 10 x 1 x 3						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	J	32A46-J8V	5	2675	**MG9037737**	Price
60	J	32A60-J8V	5	2675	**MG9037738**	Price

Size (in.) - 12 x 1 x 3						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8-V	2	2228	**MG9037712**	Price
46	J	32A46-J8-V	2	2228	**MG9037713**	Price
60	K	32A60-K8V	2	2228	**MG9037739**	Price

Size (in.) - 12 x 1 x 5						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	J	32A46-J8V	2	2228	**MG9037740**	Price
46	K	32A46-K8V	2	2228	**MG9037741**	Price
60	J	32A60-J8V	2	2228	**MG9037742**	Price
80	K	32A80-K8V	2	2228	**MG9037754**	Price

Size (in.) - 12 x 1-1/2 x 5 (R/1 -- 7-1/2 x 1/2)						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8-V	2	2228	**MG9037714**	Price
46	J	32A46-J8-V	2	2228	**MG9037715**	Price
60	J	32A60-J8V	2	2228	**MG9037755**	Price
60	K	32A60-K8V	2	2228	**MG9037744**	Price

Size (in.) - 12 x 2 x 5 (R/2 -- 7-1/2 x 1/2)						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8-V	1	2228	**MG9037716**	Price
46	I	32A46-I8-V	1	2228	**MG9037717**	Price

Size (in.) - 14 x 1 x 5						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8V	2	1910	**MG9037745**	Price
46	I	32A46-I8V	2	1910	**MG9037718**	Price
60	K	32A60-K8V	2	1910	**MG9037746**	Price
80	K	32A80-K8V	2	1910	**MG9037761**	Price

Size (in.) - 14 x 1-1/2 x 5						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8-V	2	1910	**MG9037719**	Price
46	I	32A46-I8V3	2	1910	**MG9037747**	Price
46	J	32A46-J8V	2	1910	**MG9037720**	Price

Size (in.) - 14 x 1-1/2 x 5 (R/1 -- 8 x 1/2)						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8-V	2	1910	**MG9037721**	Price
46	I	32A46-I8-V	2	1910	**MG9037722**	Price
46	K	32A46-K8V	2	1910	**MG9037748**	Price
60	J	32A60-K8V	2	1910	**MG9037749**	Price

Size (in.) - 14 x 2 x 5						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8V	1	1910	**MG9037750**	Price
46	J	32A46-J8V	1	1910	**MG9037723**	Price
60	J	32A60-J8V	1	1910	**MG9037764**	Price

Size (in.) - 14 x 2 x 5 (R/1 -- 8 x 1)						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8-V	1	1910	**MG9037724**	Price
46	J	32A46-J8V	1	1910	**MG9037751**	Price
60	K	32A60-K8-V	1	1910	**MG9037726**	Price

Size (in.) - 14 x 2 x 5 (R/2 -- 8 x 3/8)						
Grit	Hardness	Spec	Box Qty.	Max RPM	Order No.	Price
46	H	32A46-H8V	1	1910	**MG9037752**	Price
60	J	32A60-J8V	1	1910	**MG9037753**	Price

CARBORUNDUM High Porosity Grinding Wheels CARBO COOL



Features:
- Controlled porosity bond
- Durable Bond Post

Benefits:
- Increased chip clearance and maximum coolant flow
- Reduced loading
- Cool cutting-wet or dry-in heat sensitive applications
- Maximum grain retention
- Less dressing, longer wheel life

White (AA) Abrasive
Exceptionally cool cutting action in light pressure grinding applications or where burn is a concern

Ruby (AA) Abrasive
Exceptionally cool cutting and good form holding

Pink (PA) Abrasive
Designed to fit a broad variety of steels at light to moderate feed rates

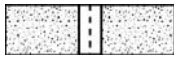
Ruby (Medalist R) CeramicAlumina Abrasive
Maximum Productivity, lowest total grinding cost

Size (in.) - 7 x 1/2 x 1-1/4											
			Pink (PA) Abrasive			Ruby (AR) Abrasive			White (AA) Abrasive		
Grit	Hardness	RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
46	G	3600	PA46-GPP	**MG3764477**	Price	AR46-GPP	**MG3764480**	Price	AA46-GV40	**MG3764479**	Price
46	H	3600	PA46-HPP	**MG3764490**	Price	AR46-HPP	**MG3764484**	Price	AA46-HV40	**MG3764487**	Price
60	G	3600	PA60-GPP	**MG3764491**	Price	-	**-**	-	AA60-GV40	**MG3764488**	Price
60	H	3600	PA60-HPP	**MG3764492**	Price	AR60-HPP	**MG3764486**	Price	AA60-HPP	**MG3764489**	Price

Size (in.) - 8 x 1/2 x 1-1/4														
			Pink (PA) Abrasive			Purple (R) Ceramic Abrasive			Ruby (AR) Abrasive			White (AA) Abrasive		
Grit	Hardness	RPM	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price	Spec	Order No.	Price
46	G	3600	-	**-**	-	-	**-**	-	AR46-GPP	**MG3764523**	Price	-	**-**	-
46	H	3600	PA46-HPP	**MG3764562**	Price	R46-HVPP	**MG3764503**	Price	AR46-HPP	**MG3764530**	Price	AA46-HV40	**MG3764599**	Price
60	G	3600	-	**-**	-	-	**-**	-	AR60-GPP	**MG3764537**	Price	-	**-**	-

NORTON 32A Porous Vitrified Wheels

Ideal for medium to heavy stock removal



Type 1 (No Recess)



Features:
- Sharp monocrystalline aluminum oxide grain – industry's most versatile abrasive
- Proven VBEP bond technology

Benefits:
- Free cutting on a wide range of applications and materials the industry's most versatile abrasive
- Outstanding form holding

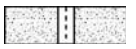
Size (in.)	Spec	Box Qty.	Order No.	Price
7 x 1/2 x 1-1/4	32A46-GVBEP	10	**MH60070041204**	Price
7 x 1/2 x 1-1/4	32A46-HVBEP	10	**MH60070041205**	Price
8 x 1/2 x 1-1/4	32A46-GVBEP	10	**MH60080043882**	Price
8 x 1/2 x 1-1/4	32A46-HVBEP	10	**MH60080043883**	Price

NORTON 5SG Porous Vitrified Wheels

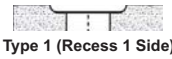
Highest productivity and lowest total per-part grinding cost

Features:
- High-performance proprietary seeded gel ceramic aluminum oxide abrasive
- Self-sharpening abrasive
- High performance VSP bond
- Provide sharp edge on tools & dies

Benefits:
- Fast stock removal, cool superior cutting
- 3X - 5X more life than aluminum oxide wheels
- Double rough stock removal rate versus conventional abrasives
- Less burn, less dressing; most consistent performing wheel
- Versatile; exceptional form holding
- Longer life on tools and dies in production



Type 1 (No Recess)



Type 1 (Recess 1 Side)



Size (in.)	Spec	Type	Box Qty.	Order No.	Price
7 x 1/2 x 1-1/4	5SG46-GVSP	Type 1	10	**MH60070040522**	Price
8 x 1/2 x 1-1/4	5SG46-GVSP	Type 1	10	**MH60080043649**	Price
8 x 1/2 x 1-1/4	5SG46-IVSP	Type 1	10	**MH60080043650**	Price
12 x 1 x 3	5SG60-GVSP	Type 1	1	**MH60120062593**	Price
12 x 1 x 5	5SG46-GVSP	Type 1	1	**MH60120062594**	Price
12 x 1-1/2 x 5 (R/1 -- 7-1/2 x 1/2)	5SG46-GVSP	Type 5	1	**MH60120063127**	Price
12 x 1-1/2 x 5	5SG60-GVSP	Type 1	1	**MH60120062596**	Price
14 x 1 x 5	5SG46-GVSP	Type 1	1	**MH60140064108**	Price
14 x 1-1/2 x 5	5SG46-GVSP	Type 1	1	**MH60140064320**	Price

Pink Grain Surface Grinding Wheels

- Ideal for grinding medium and hard to grind high speed steels and cast alloy steels
- Sharper grain for fast, cool cutting action
- More friable than White Aluminum Oxide grain
- Excellent when rapid stock removal is a must





Size (in.) - 7 x 1/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	PA46-I8V	3760	**MG9058000**	Price
60	J	PA60-J8V	3760	**MG9058001**	Price
80	K	PA80-K8V	3760	**MG9058002**	Price
100	K	PA100-K8V	3760	**MG9058003**	Price

Size (in.) - 7 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	PA46-H8V	3760	**MG9058004**	Price
46	J	PA46-J8V	3760	**MG9058006**	Price
46	K	PA46-K8V	3760	**MG9058007**	Price
60	H	PA60-H8V	3760	**MG9058008**	Price
60	J	PA60-J8V	3760	**MG9058010**	Price
60	K	PA60-K8V	3760	**MG9058011**	Price
80	K	PA80-K8V	3760	**MG9058012**	Price

Size (in.) - 7 x 3/4 x 1-1/4 (R/1 -- 3 x 1/4)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	PA46-I8V	3600	**MG9058013**	Price
60	J	PA60-J8V	3600	**MG9058015**	Price

Size (in.) - 7 x 1 x 1-1/4 (R/1 -- 3 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	PA46-H8V	3760	**MG9058016**	Price
46	J	PA46-J8V	3760	**MG9058017**	Price
60	J	PA60-J8V	3760	**MG9058018**	Price

Size (in.) - 8 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	PA46-H8V	3600	**MG9058019**	Price
46	J	PA46-J8V	3600	**MG9058021**	Price
60	J	PA60-J8V	3600	**MG9058023**	Price
60	K	PA60-K8V	3600	**MG9058024**	Price
80	K	PA80-K8V	3600	**MG9058025**	Price

Size (in.) - 8 x 3/4 x 1-1/4 (R/1 -- 3 x 1/4)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	PA46-H8V	3600	**MG9058026**	Price

Size (in.) - 8 x 1 x 1-1/4 (R/1 -- 3 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	PA46-J8V	3600	**MG9058028**	Price
60	J	PA60-J8V	3600	**MG9058029**	Price

Size (in.) - 10 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	PA46-J8V	2674	**MG9058031**	Price
60	J	PA60-J8V	2674	**MG9058032**	Price

Size (in.) - 12 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	PA46-H8V	2228	**MG9058033**	Price
46	J	PA46-J8V	2228	**MG9058034**	Price

Size (in.) - 12 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	K	PA46-K8V	2228	**MG9058035**	Price
60	K	PA60-K8V	2228	**MG9058036**	Price

Size (in.) - 12 x 1-1/2 x 5 (R/1 -- 7-1/2 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	PA46-H8V	2228	**MG9058037**	Price
46	J	PA46-J8V	2228	**MG9058038**	Price

Size (in.) - 12 x 2 x 5 (R/2 -- 7-1/2 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	PA46-H8V	2228	**MG9058039**	Price
46	I	PA46-I8V	2228	**MG9058040**	Price

Size (in.) - 14 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	PA46-H8V	1910	**MG9058048**	Price
46	I	PA46-I8V	1910	**MG9058049**	Price
60	K	PA60-K8V	1910	**MG9058050**	Price

Size (in.) - 14 x 1-1/2 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	PA46-H8V	1910	**MG9058041**	Price
46	J	PA46-J8V	1910	**MG9058042**	Price

Size (in.) - 14 x 2 x 5 (R/1 -- 8 x 1)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	PA46-H8V	1910	**MG9058043**	Price
46	I	PA46-I8V	1910	**MG9058044**	Price
60	K	PA60-K8V	1910	**MG9058045**	Price

Size (in.) - 14 x 2 x 5 (R/2 -- 8 x 3/8)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	PA46-I8V	1910	**MG9058046**	Price
46	J	PA46-J8V	1910	**MG9058047**	Price

Ruby Surface Grinding Wheels

- Ideal for rough grinding of all tool steels including steel with high levels of chromium
- Engineered for long-lasting wheel form
- Good corner form holding characteristics





Size (in.) - 7 x 1/4 x 1-1/4						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
60	J	RA60-JV	3760	10	**MG9059025**	Price

Size (in.) - 7 x 1/2 x 1-1/4						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	H	RA46-HV	3760	10	**MG9034633**	Price
46	J/K	RA46-J/KV	3760	10	**MG9034634**	Price
60	J/K	RA60-J/K	3760	10	**MG9034635**	Price
80	K	RA80-KV	3760	10	**MG9059000**	Price

Size (in.) - 7 x 3/4 x 1-1/4 (R/1 -- 3 x 1/4)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	J	RA46-JV	3760	10	**MG9059001**	Price
60	K	RA60-KV	3760	10	**MG9059002**	Price

Size (in.) - 7 x 1 x 1-1/4 (R/1 -- 3 x 1/2)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	J	RA46-JV	3760	10	**MG9059003**	Price
60	K	RA60-KV	3760	10	**MG9059004**	Price

Size (in.) - 8 x 1/2 x 1-1/4						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	H	RA46-HV	3600	10	**MG9059005**	Price
46	J/K	RA46-J/KV	3600	10	**MG9059006**	Price
60	K	RA60-KV	3600	10	**MG9059007**	Price
80	K	RA80-KV	3600	10	**MG9059008**	Price

Size (in.) - 8 x 1 x 1-1/4 (R/1 -- 3 x 1/2)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	H	RA46-HV	3600	10	**MG9059034**	Price
46	J/K	RA46-J/KV	3600	10	**MG9059010**	Price
60	J/K	RA60-J/KV	3600	10	**MG9059011**	Price

Size (in.) - 8 x 3/4 x 1-1/4 (R/1 -- 3 x 1/4)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	H	RA46-HV	3600	10	**MG9059009**	Price
60	J	RA06-J/KV	3600	10	**MG9059033**	Price

Size (in.) - 10 x 1 x 3						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	J/K	RA46-J/KV	2630	5	**MG9059012**	Price

Size (in.) - 12 x 1 x 3						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	H	RA46-HV	2190	2	**MG9059013**	Price
46	J/K	RA46-J/KV	2190	2	**MG9059014**	Price

Size (in.) - 12 x 1 x 5						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	J	R46-J/KV	2190	2	**MG9059038**	Price
46	K	RA46-KV	2190	2	**MG9059015**	Price
60	K	RA60-KV	2190	2	**MG9059016**	Price

Size (in.) - 12 x 1-1/2 x 5 (R/1 -- 7-1/2 x 1/2)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	J/K	RA46-J/KV	2190	2	**MG9059018**	Price
46	H	RA46-HV	2190	2	**MG9059017**	Price
60	J	RA60-J/KV	2190	2	**MG9059040**	Price

Size (in.) - 12 x 2 x 5 (R/2 -- 7-1/2 x 1/2)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	H	RA46-H8V	2190	1	**MG9059019**	Price
46	J/K	RA46-J/KV	2190	1	**MG9059020**	Price
60	J	RA60-J/KV	2190	1	**MG9059041**	Price

Size (in.) - 14 x 1 x 5						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	I/J	RA46-I/JV	1880	2	**MG9059021**	Price

Size (in.) - 14 x 1-1/2 x 5						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	H	RA46-HV	1880	2	**MG9059022**	Price
46	J	RA46-J/KV	1880	2	**MG9059045**	Price

Size (in.) - 14 x 1-1/2 x 5 (R/1 -- 8 x 1/2)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	H	RA46-HV	1880	2	**MG9059047**	Price
46	I/J	RA46-I/JV	1880	2	**MG9059023**	Price

Size (in.) - 14 x 2 x 5 (R/1 -- 8 x 1)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price
46	H	RA46-HV	1880	1	**MG9059024**	Price

AZ Surface Grinding Wheels

- Made of premium blue bond aluminum oxide, ideal for grinding high speed steels over 55RC
- Features exceptionally fast and cool cutting characteristic suitable for grinding heat sensitive, heat alloy steels and mold steels. Can also be used on general tool steels
- The bond is designed to cut freely while pulling the heat away from the part and into the matrix of the wheel
- Requires minimum dressing and holds form well
- Great for 32A grinding wheel applications. Recommended 1 grade harder.





Size (in.) - 6 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
60	K	AZ60-K8V32A	4456	**MG9034301**	Price

Size (in.) - 7 x 1/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	AZ46-I8V32A	3600	**MG9034303**	Price
60	I	AZ60-I8V32A	3600	**MG9034308**	Price
60	J	AZ60-J8V32A	3600	**MG9034309**	Price
60	K	AZ60-K8V32A	3600	**MG9034310**	Price
80	J	AZ80-J8V32A	3600	**MG9034312**	Price
80	K	AZ80-K8V32A	3600	**MG9034313**	Price
100	K	AZ100-K8V32A	3600	**MG9034315**	Price
150	K	AZ150-K8V32A	3600	**MG9034317**	Price

Size (in.) - 7 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H128V32A	3600	**MG9034333**	Price
46	H	AZ46-H8V32A	3600	**MG9034318**	Price
46	I	AZ46-I8V32A	3600	**MG9034319**	Price
46	J	AZ46-J8V32A	3600	**MG9034320**	Price
46	K	AZ46-K8V32A	3600	**MG9034321**	Price
60	H	AZ60-H8V32A	3600	**MG9034323**	Price
60	I	AZ60-I8V32A	3600	**MG9034324**	Price
60	J	AZ60-J8V32A	3600	**MG9034325**	Price
60	K	AZ60-K8V32A	3600	**MG9034326**	Price
60	L	AZ60-L8V32A	3600	**MG9034327**	Price
80	H	AZ80-H8V32A	3600	**MG9034328**	Price
80	K	AZ80-K8V32A	3600	**MG9034329**	Price
100	K	AZ100-K8V32A	3600	**MG9034330**	Price
120	K	AZ120-K8V32A	3600	**MG9034331**	Price
150	K	AZ150-K8V32A	3600	**MG9034332**	Price

Size (in.) - 7 x 3/4 x 1-1/4 (R/1 -- 3 x 1/4)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	3760	**MG9034335**	Price
46	I	AZ46-I8V32A	3760	**MG9034336**	Price
46	J	AZ46-J8V32A	3760	**MG9034337**	Price
46	K	AZ46-K8V32A	3760	**MG9034338**	Price
60	J	AZ60-J8V32A	3760	**MG9034341**	Price

Size (in.) - 7 x 1 x 1-1/4 (R/1 -- 3 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	3760	**MG9034342**	Price
46	I	AZ46-I8V32A	3760	**MG9034343**	Price
46	J	AZ46-J8V32A	3760	**MG9034344**	Price
46	K	AZ46-K8V32A	3760	**MG9034345**	Price
60	J	AZ60-J8V32A	3760	**MG9034348**	Price
60	K	AZ60-K8V32A	3760	**MG9034349**	Price

Size (in.) - 8 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	3600	**MG9034350**	Price
46	I	AZ46-I8V32A	3600	**MG9034351**	Price
46	J	AZ46-J8V32A	3600	**MG9034352**	Price
46	K	AZ46-K8V32A	3600	**MG9034353**	Price
60	H	AZ60-H8V32A	3600	**MG9034354**	Price
60	I	AZ60-I8V32A	3600	**MG9034355**	Price
60	J	AZ60-J8V32A	3600	**MG9034356**	Price
60	K	AZ60-K8V32A	3600	**MG9034357**	Price

Size (in.) - 8 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
80	K	AZ80-K8V32A	3600	**MG9034358**	Price

Size (in.) - 8 x 3/4 x 1-1/4 (R/1 -- 3 x 1/4)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	3600	**MG9034359**	Price
46	J	AZ46-J8V32A	3600	**MG9034360**	Price
60	J	AZ60-J8V32A	3600	**MG9034364**	Price

Size (in.) - 8 x 1 x 1-1/4 (R/1 -- 3 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	3600	**MG9034366**	Price
46	J	AZ46-J8V32A	3600	**MG9034367**	Price
60	J	AZ60-J8V32A	3600	**MG9034369**	Price

Size (in.) - 10 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	AZ46-I8V32A	2630	**MG9034390**	Price
46	J	AZ46-J8V32A	2630	**MG9034391**	Price
46	K	AZ46-K8V32A	2630	**MG9034392**	Price
60	J	AZ60-J8V32A	2630	**MG9034395**	Price
60	K	AZ60-K8V32A	2630	**MG9034396**	Price

Size (in.) - 12 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	2190	**MG9034411**	Price
46	J	AZ46-J8V32A	2190	**MG9034413**	Price
46	K	AZ46-K8V32A	2190	**MG9034414**	Price
60	I	AZ60-I8V32A	2190	**MG9034416**	Price

Size (in.) - 12 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	AZ46-J8V32A	2190	**MG9034421**	Price
46	K	AZ46-K8V32A	2190	**MG9034422**	Price
60	J	AZ60-J8V32A	2190	**MG9034425**	Price
60	K	AZ60-K8V32A	2190	**MG9034426**	Price

Size (in.) - 12 x 1-1/2 x 5 (R/1 -- 7-1/2 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	2190	**MG9034427**	Price
46	J	AZ46-J8V32A	2190	**MG9034429**	Price
46	K	AZ46-K8V32A	2190	**MG9034430**	Price
60	J	AZ60-J8V32A	2190	**MG9034433**	Price

Size (in.) - 12 x 2 x 3 (R/2 -- 6-1/2 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	AZ46-I8V32A	2190	**MG9034434**	Price

Size (in.) - 12 x 2 x 5 (R/2 -- 7-1/2 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	AZ46-I8V32A	2190	**MG9034437**	Price

Size (in.) - 14 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	AZ46-I8V32A	1880	**MG9034445**	Price

AZ Surface Grinding Wheels (cont.)

- Made of premium blue bond aluminum oxide, ideal for grinding high speed steels over 55RC
- Features exceptionally fast and cool cutting characteristic suitable for grinding heat sensitive, heat alloy steels and mold steels. Can also be used on general tool steels
- The bond is designed to cut freely while pulling the heat away from the part and into the matrix of the wheel
- Requires minimum dressing and holds form well
- Great for 32A grinding wheel applications. Recommended 1 grade harder.





Size (in.) - 14 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	1880	**MG9034447**	Price
46	I	AZ46-I8V32A	1880	**MG9034448**	Price
46	J	AZ46-J8V32A	1880	**MG9034449**	Price
60	I	AZ60-I8V32A	1880	**MG9034452**	Price
60	K	AZ60-K8V32A	1880	**MG9034454**	Price

Size (in.) - 14 x 1-1/2 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	1880	**MG9034456**	Price
46	J	AZ46-J8V32A	1880	**MG9034458**	Price
60	H	AZ60-H8V32A	1880	**MG9034460**	Price
60	J	AZ60-J8V32A	1880	**MG9034462**	Price

Size (in.) - 14 x 1-1/2 x 5 (R/1 -- 8 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	1880	**MG9034464**	Price
46	I	AZ46-I8V32A	1880	**MG9034465**	Price
46	J	AZ46-J8V32A	1880	**MG9034466**	Price
60	I	AZ60-I8V32A	1880	**MG9034469**	Price
60	J	AZ60-J8V32A	1880	**MG9034470**	Price
60	K	AZ60-K8V32A	1880	**MG9034471**	Price

Size (in.) - 14 x 2 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	1880	**MG9034472**	Price
46	I	AZ46-I8V32A	1880	**MG9034473**	Price
46	J	AZ46-J8V32A	1880	**MG9034474**	Price

Size (in.) - 14 x 2 x 5 (R/1 -- 8 x 1)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	1880	**MG9034480**	Price
46	I	AZ46-I8V32A	1880	**MG9034481**	Price
46	J	AZ46-J8V32A	1880	**MG9034482**	Price
60	J	AZ60-J8V32A	1880	**MG9034486**	Price
60	K	AZ60-K8V32A	1880	**MG9034487**	Price

Size (in.) - 14 x 2 x 5 (R/2 -- 8 x 3/8)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	AZ46-I8V32A	1880	**MG9034488**	Price
46	J	AZ46-J8V32A	1880	**MG9034489**	Price
46	K	AZ46-K8V32A	1880	**MG9034490**	Price

Size (in.) - 16 x 1-1/2 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	H	AZ46-H8V32A	1640	**MG9034491**	Price
60	H	AZ60-H8V32A	1640	**MG9034500**	Price
60	J	AZ60-J8V32A	1640	**MG9034493**	Price

Size (in.) - 16 x 2 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	AZ46-I8V32A	1640	**MG9034495**	Price
46	J	AZ46-J8V32A	1640	**MG9034496**	Price
60	K	AZ60-K8V32A	1640	**MG9034497**	Price

Ruby Grain Porous Surface Grinding Wheels

- Ruby grain porous grinding wheels accelerate grinding processes and are engineered for medium to heavy stock removal and heat sensitive applications
- Strong, innovative bond for tough applications
- Ideal for rough grinding of all tool steels including steel with high levels of chromium



Wheel Size (in.)	Wheel Type	Recess (in.)	Spec	Stnd. Pkg.	RPM	Order No.	Price
7 x 1/2 x 1-1/4	Type 1	-	RA-46-H12-V Porous	10	3760	**MG9059081**	Price
7 x 1/2 x 1-1/4	Type 1	-	RA-60-H12-V Porous	10	3760	**MG9059082**	Price
8 x 1/2 x 1-1/4	Type 1	-	RA-46-H12-V Porous	10	3600	**MG9059084**	Price
8 x 1/2 x 1-1/4	Type 1	-	RA-60-H12-V Porous	10	3600	**MG9059085**	Price
10 x 1 x 1-1/4	Type 1	-	RA-46-H12-V Porous	5	2674	**MG9059091**	Price
12 x 1-1/2 x 5	Type 5	1/2	RA-46-H12-V Porous	2	2228	**MG9059086**	Price
14 x 1-1/2 x 5	Type 1	-	RA-46-H12-V Porous	2	1910	**MG9059087**	Price
14 x 1-1/2 x 5	Type 5	1/2	RA-46-H12-V Porous	2	1910	**MG9059088**	Price
14 x 2 x 5	Type 5	1	RA-46-H12-V Porous	1	1910	**MG9059089**	Price

Surface Grinding Wheels

Surface Grinding Wheels:
- High performance Ceramic Alumina Abrasive (SG)
- 30% Ceramic blend

Ceramic Wheels are:
- Ideal for difficult to grind steel
- Faster stock removal – cooler cutting
- Superior form holding
- Under pressure produces more fresh cutting points
- Dressing frequency reduced
- Improved productivity, lower grinding costs



Size (in.) - 7 x 1/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	Medalist 46-JVL	3600	**MG3762351**	Price
60	I	Medalist 60-IVL	3600	**MG3727241**	Price
60	J	Medalist 60-JVL	3600	**MG3727242**	Price
60	K	Medalist 60-KVL	3600	**MG3727243**	Price
80	J	Medalist 80-JVL	3600	**MG3727244**	Price
80	K	Medalist 80-KVL	3600	**MG3727245**	Price
100	K	Medalist 100-KVL	3600	**MG3727247**	Price

Size (in.) - 7 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	G	Medalist 46-GVLP	3600	**MG3727248**	Price
46	I	Medalist 46-IVL	3600	**MG3727250**	Price
46	I	Medalist 46-IVLP	3600	**MG3727249**	Price
46	J	Medalist 46-JVL	3600	**MG3727251**	Price
46	K	Medalist 46-KVL	3600	**MG3727252**	Price
60	G	Medalist 60-GVLP	3600	**MG3727253**	Price
60	I	Medalist 60-IVL	3600	**MG3727255**	Price
60	I	Medalist 60-IVLP	3600	**MG3727254**	Price
60	J	Medalist 60-JVL	3600	**MG3727256**	Price
60	K	Medalist 60-KVL	3600	**MG3727257**	Price
80	J	Medalist 80-JVL	3600	**MG3727260**	Price
80	K	Medalist 80-KVL	3600	**MG3727261**	Price

Size (in.) - 7 x 3/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	K	Medalist 46-KVL	3600	**MG3727262**	Price

Size (in.) - 7 x 1 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	Medalist 46-JVL	3600	**MG3727264**	Price

Size (in.) - 7 x 1 x 1-1/4 (R/1 -- 2-3/4 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	Medalist 46-JVL	3600	**MG3727300**	Price
60	J	Medalist 60-JVL	3600	**MG3727301**	Price
60	K	Medalist 60-KVL	3600	**MG3762370**	Price

Size (in.) - 8 x 1/2 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	G	Medalist 46-GVLP	3600	**MG3727267**	Price
46	I	Medalist 46-IVL	3600	**MG3727268**	Price
46	J	Medalist 46-JVL	3600	**MG3727269**	Price
46	K	Medalist 46-KVL	3600	**MG3727270**	Price
60	I	Medalist 60-IVL	3600	**MG3727271**	Price
60	J	Medalist 60-JVL	3600	**MG3727272**	Price
60	K	Medalist 60-KVL	3600	**MG3727273**	Price

Size (in.) - 8 x 3/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	Medalist 46-IVL	3600	**MG3727274**	Price
46	J	Medalist 46-JVL	3600	**MG3727275**	Price
46	K	Medalist 46-KVL	3600	**MG3727276**	Price

Size (in.) - 8 x 3/4 x 1-1/4					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
60	J	Medalist 60-JVL	3600	**MG3727277**	Price

Size (in.) - 10 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	Medalist 46-IVL	2485	**MG3727279**	Price
46	J	Medalist 46-JVL	2485	**MG3727280**	Price
60	J	Medalist 60-JVL	2485	**MG3727282**	Price

Size (in.) - 12 x 1 x 3					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	Medalist 46-IVL	2070	**MG3727283**	Price
46	J	Medalist 46-JVL	2070	**MG3727284**	Price

Size (in.) - 12 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	Medalist 46-JVL	2070	**MG3727287**	Price
60	J	Medalist 60-JVL	2070	**MG3727290**	Price

Size (in.) - 14 x 1 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	Medalist 46-JVL	1800	**MG3727292**	Price
60	J	Medalist 60-JVL	1800	**MG3727293**	Price

Size (in.) - 14 x 1-1/2 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	I	Medalist 46-IVL	1800	**MG3727295**	Price
46	J	Medalist 46-JVL	1800	**MG3727296**	Price
60	I	Medalist 60-IVL	1800	**MG3762346**	Price
60	J	Medalist 60-JVL	1800	**MG3727298**	Price

Size (in.) - 14 x 1-1/2 x 5 (R/1 -- 8 x 1/2)					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	Medalist 46-JVL	1800	**MG3762367**	Price

Size (in.) - 14 x 2 x 5					
Grit	Hardness	Spec	Max. RPM	Order No.	Price
46	J	Medalist 46-JVL	1800	**MG3762348**	Price
60	J	Medalist 60-JVL	1800	**MG3762349**	Price

5SG Vitrified Grinding Wheels



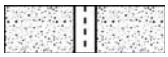
Norton 5SG - Highest productivity and lowest total per-part grinding cost

Features:
- High-performance proprietary seeded gel ceramic aluminum oxide abrasive
- Self-sharpening abrasive
- High performance VS bond
- Provide sharp edge on tools & dies

Benefits:
- Fast stock removal, cool superior cutting
- 3x-5x more life than aluminum oxide wheels
- Double rough stock removal rate versus conventional abrasives
- Less burn, less dressing, most consistent performing wheel
- Versatile exceptional form holding
- Longer life on tools and dies in production

Maximum Operating Speeds:
- Stock NorPor VP2 wheels = 3600 RPMs
- All other 46 grit, J grade and harder = 3600 RPMs
- All other 54 grit, I grade and harder = 3600 RPMs
- All other 60 grit and finer, H grade and harder = 3600 RPMs
- All other specifications = 3105 RPMs
- *It is the user's responsibility to refer to and comply with ANSI B7.1

8" Type 01 and Type 05 Vitrified Toolroom Wheels'



Type 1 (No Recess)



Type 5 (Recess Inside)

Size (in.) - 7 x 1/4 x 1-1/4						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	100	J	5SG-100JVS	3600	**MH60070039467**	Price
10	100	K	5SG-100KVS	3600	**MH60070039468**	Price
10	46	I	5SG46-IVS	3600	**MH60070040207**	Price
10	60	I	5SG60-1VS	3600	**MH60070039459**	Price
10	60	J	5SG60-JVS	3600	**MH60070039460**	Price
10	60	K	5SG60-KVS	3600	**MH60070039461**	Price
10	80	I	5SG80-IVS	3600	**MH60070039462**	Price
10	80	J	5SG-80JVS	3600	**MH60070039463**	Price
10	80	K	5SG-80KVS	3600	**MH60070039464**	Price
10	80	L	5SG-80LVS	3600	**MH60070039465**	Price

Size (in.) - 7 x 1/2 x 1-1/4						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	100	J	5SG100-JVS	3600	**MH60070040204**	Price
10	100	K	5SG100-KVS	3600	**MH60070040205**	Price
10	46	I	5SG46-IVS	3600	**MH60070040193**	Price
10	46	J	5SG46-JVS	3600	**MH60070040194**	Price
10	46	K	5SG46-KVS	3600	**MH60070040195**	Price
10	60	I	5SG60-IVS	3600	**MH60070040196**	Price
10	60	J	5SG60-JVS	3600	**MH60070040197**	Price
10	60	K	5SG60-KVS	3600	**MH60070040198**	Price
10	60	L	5SG60-LVS	3600	**MH60070040199**	Price
10	80	I	5SG80-IVS	3600	**MH60070040200**	Price
10	80	J	5SG80-JVS	3600	**MH60070040201**	Price
10	80	K	5SG80-KVS	3600	**MH60070040202**	Price
10	80	L	5SG80-LVS	3600	**MH60070040203**	Price

Size (in.) - 7 x 3/4 x 1-1/4						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	46	I	5SG46-IVS	3600	**MH60070042304**	Price
10	46	K	5SG46-KVS	3600	**MH60070042305**	Price
10	60	J	5SG60-JVS	3600	**MH60070042307**	Price
10	60	K	5SG60-KVS	3600	**MH60070042308**	Price

Size (in.) - 7 x 3/4 x 1-1/4 (R/1 -- 2-3/4 x 1/4)						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	46	I	5SG46-IVS	1800	**MH60070041976**	Price

Size (in.) - 7 x 1 x 1-1/4						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	60	J	5SG60-JVS	3600	**MH60070042429**	Price
10	60	K	5SG60-KVS	3600	**MH60070042430**	Price

Size (in.) - 8 x 1/4 x 1-1/4						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	60	K	5SG60-KVS	3105	**MH60080043351**	Price
10	60	L	5SG60-LVS	3600	**MH60080043352**	Price
10	80	K	5SG80-KVS	3600	**MH60080043353**	Price

Size (in.) - 8 x 1/2 x 1-1/4						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	46	I	5SG46-IVS	3105	**MH60080044089**	Price
10	46	J	5SG46-JVS	3600	**MH60080044090**	Price
10	46	K	5SG46-KVS	3600	**MH60080044091**	Price
10	60	I	5SG60-IVS	3105	**MH60080044092**	Price
10	60	J	5SG60-JVS	3600	**MH60080044093**	Price
10	60	K	5SG60-KVS	3600	**MH60080044094**	Price
10	80	J	5SG80-JVS	3600	**MH60080044096**	Price
10	80	K	5SG80-KVS	3600	**MH60080044097**	Price

Size (in.) - 8 x 3/4 x 1-1/4						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	46	I	5SG46-IVS	3105	**MH60080044098**	Price
10	46	J	5SGS6-JVS	3600	**MH60080044099**	Price
10	60	I	5SG60-IVS	3600	**MH60080044101**	Price
10	60	J	5SG60-JVS	3600	**MH60080044102**	Price
10	60	K	5SG60-KVS	3600	**MH60080044103**	Price

Size (in.) - 8 x 1 x 1-1/4						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	46	K	5SG46-KVS	3600	**MH60080002588**	Price

Size (in.) - 8 x 1 x 1-1/4 (R/1 -- 3-1/4 x 1/2)						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	46	I	5SG46-IVS	3600	**MH60080013543**	Price
10	46	J	5SG46-JVS	3600	**MH60080003301**	Price

Size (in.) - 10 x 1 x 3						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
10	46	I	5SG46-IVS	2485	**MH60100060400**	Price
10	46	J	5SG46-JVS	2485	**MH60100060401**	Price
10	46	K	5SG46-KVS	2485	**MH60100060402**	Price
10	60	I	5SG60-IVS	2485	**MH60100060403**	Price
10	60	K	5SG60-KVS	2485	**MH60100060405**	Price

Size (in.) - 12 x 1 x 3						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
1	46	I	5SG46-IVS	2070	**MH60120062500**	Price
1	46	J	5SG46-JVS	2070	**MH60120062501**	Price
1	46	K	5SG46-KVS	2070	**MH60120062502**	Price
1	60	I	5SG60-IVS	2070	**MH60120062503**	Price
1	60	J	5SG60-JVS	2070	**MH60120062504**	Price
1	60	K	5SG60-KVS	2070	**MH60120062505**	Price

Size (in.) - 12 x 3/4 x 3						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
1	46	I	5SG46-IVS	2070	**MH60120062204**	Price

Size (in.) - 12 x 1 x 5						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
1	46	I	5SG46-IVS	2070	**MH60120062508**	Price
1	46	J	5SG46-JVS	2070	**MH60120062509**	Price
1	46	K	5SG46-KVS	2070	**MH60120062510**	Price

Size (in.) - 12 x 1-1/2 x 5						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
1	46	I	5SG46-IVS	2070	**MH60120002842**	Price

Size (in.) - 14 x 1 x 3						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
1	46	I	5SG46-1VS	1800	**MH60140063960**	Price

Size (in.) - 14 x 1 x 5						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
1	46	I	5SG46-1VS	1800	**MH60140063970**	Price
1	60	I	5SG60-IVS	1800	**MH60140063974**	Price
1	60	J	5SG60-JVS	1800	**MH60140063975**	Price
1	60	K	5SG60-KVS	1800	**MH60140063976**	Price

Size (in.) - 14 x 1-1/2 x 5						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
1	46	I	5SG46-IVS	1800	**MH60140064097**	Price
1	46	J	5SG46-JVS	1800	**MH60140064098**	Price
1	60	I	5SG60-IVS	1800	**MH60140064100**	Price
1	60	J	5SG60-JVS	1800	**MH60140064101**	Price

Size (in.) - 14 x 1-1/2 x 5 (R/1 -- 8 x 1/2)						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
1	46	J	5SG46-JVS	3600	**MH60140064103**	Price

Size (in.) - 14 x 2 x 5						
Box Qty.	Grit	Hardness	Spec	Max RPM	Order No.	Price Ea.
1	60	J	5SG60-JVS	1800	**MH60140064414**	Price

AS3 Ceramic Surface Grinding Wheels

- Ceramic grain is recommended for heavy stock removal
- Friable grain for cooler cutting action
- Engineered to continually fracture to produce sharp new grinding points





Size (in.) - 7 x 1/4 x 1-1/4						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
60	K	AS3-60-KVCER	3760	10	**MG9034206**	Price
80	K	AS3-80-KVCER	3760	10	**MG9034207**	Price

Size (in.) - 7 x 1/2 x 1-1/4						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	H	AS3-46-H-VCER	3760	10	**MG9034208**	Price
46	I	AS3-46-I-VCER	3760	10	**MG9034210**	Price
46	J	AS3-46-J-VCER	3760	10	**MG9034209**	Price
60	J	AS3-60-J-VCER	3760	10	**MG9034212**	Price
60	K	AS3-60-K-VCER	3760	10	**MG9034213**	Price
80	K	AS3-80-KVCER	3760	10	**MG9037768**	Price

Size (in.) - 8 x 1/4 x 1-1/4						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
60	J	AS3-60-JVCER	3600	10	**MG9034114**	Price

Size (in.) - 8 x 1/2 x 1-1/4						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	J	AS3-46-J-VCER	3600	10	**MG9037771**	Price
46	K	AS3-46-KVCER	3600	10	**MG9034214**	Price
60	J	AS3-60-JVCER	3600	10	**MG9034215**	Price

Size (in.) - 10 x 1 x 3						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	J	AS3-46-J-VCER	2630	5	**MG9037773**	Price
46	K	AS3-46-KVCER	2630	5	**MG9034217**	Price

Size (in.) - 12 x 1 x 3						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	H	AS46H-VCER	2190	2	**MG9034219**	Price
46	J	AS3-46-JVCER	2190	2	**MG9034220**	Price
60	I	AS3-60-IVCER	2190	2	**MG9034221**	Price

Size (in.) - 12 x 1 x 5						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	H	AS3-46-HVCER	2190	2	**MG9034222**	Price
46	J	AS3-46-J-VCER	2190	2	**MG9034223**	Price

Size (in.) - 12 x 1-1/2 x 5 (R/1 -- 7-1/2 x 1/2)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	H	AS3-46-HVCER	2190	2	**MG9034225**	Price
46	J	AS3-46-JVCER	2190	2	**MG9034226**	Price
60	J	AS3-60-J-VCER	2190	2	**MG9034227**	Price

Size (in.) - 14 x 1 x 5						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	H	AS3-46-HVCER	1880	2	**MG9034230**	Price
46	J	AS3-46-JVCER	1880	2	**MG9034232**	Price

Size (in.) - 14 x 1-1/2 x 5						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	H	AS3-46-HVCER	1880	1	**MG9034238**	Price
46	J	AS3-46-JVCER	1880	1	**MG9034239**	Price
60	I	AS3-60-IVCER	1880	1	**MG9034240**	Price

Size (in.) - 14 x 1-1/2 x 5 (R/1 -- 8 x 1/2)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	I	AS3-46-IVCER	1880	2	**MG9034235**	Price
46	J	AS3-46-J-VCER	1880	2	**MG9037782**	Price
60	J	AS3-60-J-VCER	1880	2	**MG9037783**	Price

Size (in.) - 14 x 2 x 5 (R/1 -- 8 x 1)						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	H	AS3-46-HVCER	1880	1	**MG9034241**	Price
60	J	AS3-60-J-VCER	1880	1	**MG9034116**	Price

Size (in.) - 14 x 1 x 3						
Grit	Hardness	Spec	Max RPM	Box Qty.	Order No.	Price Ea.
46	H	AS3-46-HVCER	2190	2	**MG9037779**	Price
46	J	AS3-46-J-VCER	1880	2	**MG9034115**	Price
60	J	AS3-60-JVCER	1880	2	**MG9037780**	Price

Individual Grinding Wheel Reducer Bushings

For use with Aluminum Oxide and Silicon Carbide Bench Grinding Wheels
Two types available:

- TB2 — Telescopic Bushing 1” OD with 3/4’, 5/8” & 1/2” ID.
- PB Type Snap-in on each side of wheel (2 pieces needed, sold each)
- Reducer Bushings are provided at no charge when requested with grinding wheels — one set per wheel.



Size (in.)	Order No.	Price
1 OD to 3/4, 5/8 & 1/2 ID	**MG67TB2**	Price
1-1/4 OD to 1/2 ID	**MG67PB3**	Price
1-1/4 OD to 5/8 ID	**MG67PB4**	Price
1-1/4 OD to 3/4 ID	**MG67PB5**	Price
1-1/4 OD to 7/8 ID	**MG67PB6**	Price
1-1/4 OD to 1 ID	**MG67PB7**	Price
1-1/2 OD to 1-1/4 ID	**MG67PB8**	Price

Resin Bond Snagging Wheels

- Available in straight, cup, and burr bench
- For smoothing weld seams, cleaning castings and surface preparation
- 10% Discount for Std. Pkg. Qty.

Charger Features:
- Fully reinforced
- 4NZ Norzon abrasive has 3 times the life of aluminum oxide wheels

Gemini Features:
- Fully reinforced
- 37C Silicon carbide for non-steel applications
- 57A Aluminum oxide for steel and alloys
- 57AC Aluminum oxide / silicon carbide blend for steel parts with scale or burnt-in sand



Style - Type 11 Flaring Cup					
Size (in.)	Specifications	RPM	Stnd. Pkg.	Order No.	Price Ea.
4/3 x 2 x 5/8-11	Bluefire 4NZ16-Q	9070	10	**MH60040098583**	Price
6/4-3/4 x 2 x 5/8-11	Bluefire 14K	6000	5	**MH60060044371**	Price
6/4-3/4 x 2 x 5/8-11	Gemini 37C16-P	6000	5	**MH60060009609**	Price
6/4-3/4 x 2 x 5/8-11	Gemini 57A16-Q	6000	6	**MH60060025201**	Price
6/4-3/4 x 2 x 5/8-11	Gemini 57AC16-Q	6000	5	**MH60060009608**	Price

Style - Type 11 Flaring Cup with Steel Back					
Size (in.)	Specifications	RPM	Stnd. Pkg.	Order No.	Price Ea.
6/4-13/16 x 2 x 5/8-11	Gemini 57A16-Q	6000	5	**MH60060009599**	Price
6/4-13/16 x 2 x 5/8-11	Gemini 57AC16-Q	6000	5	**MH60060009600**	Price

Style - Type 11 Snagging Cup Wheel					
Size (in.)	Specifications	RPM	Stnd. Pkg.	Order No.	Price Ea.
4/3 x 2 x 5/8-11 Rim 3/4" Back 3/4" (ME48976)	Gemini 57A16-Q	9070	10	**MH60040010512**	Price
5/3 - 3/4 x 2 x 5/8-11 Rim 1" Back 3/4" (ME49857)	Gemini 57A16-Q	7260	10	**MH60050009598**	Price
6/4-3/4 x 2 x 5/8-11 Rim 1-1/2" Back 3/4" (ME24180)	Gemini 57A16-Q	6000	10	**MH60060009618**	Price

Wheels for Tool Post Grinders

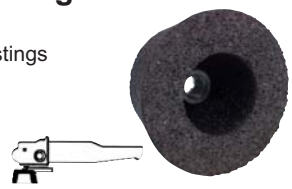
- Aluminum oxide resinoid bond
- Tough and durable, yet cool cutting
- High strength and long life
- Ideal for grinding steel on high speed tool post grinders and universal attachments and cylindrical grinders



Size (in.)	Marking	Order No.	Price
2 x 3/8 x .375	A46-PB	**MG470047**	Price
3 x 3/8 x .375	A46-PB	**MG470073**	Price
3 x 1/2 x .375	A46-PB	**MG470078**	Price
2 x 1/2 x .375	A45-PB	**MG470050**	Price
3 x 1/2 x .500	A46-PB	**MG470213**	Price

Heavy Duty Snagging Grinding Wheels

- Ideal for heavy stock removal
- Ideal for smoothing weld seams and castings
- Cleaning metal surfaces
- Premium aluminum oxide abrasive
- Resinoid bond for heavy duty snagging
- Straight wheels (Type 1)
- Flaring cups (Type 11)



Type	Size (in.)	Marking	Order No.	Price
1	6 x 1 x 5/8	A16PB5	**MG420610**	Price
11	4/3 x 2 x 5/8-11	A16PB5	**MG420430**	Price
11	5/3-3/4 x 2 x 5/8-11	A24PB5	**MG420540**	Price
11	6/4-3/4 x 2 x 5/8-11	A16QB5	**MG420640**	Price

Resin Cup Wheels

Codes:
- A: Aluminum Oxide
- CA: Aluminum Oxide/Silicon Carbide Mix
- C: Silicon Carbide





Feature - No Steel Back			
Size (in.)	Spec.	Order No.	Price
4/3 x 2 x 5/8-11	A16-Q6-B	**MG9049000**	Price
4/3 x 2 x 5/8-11	C16-N-B	**MG9049002**	Price
5/4 x 2 x 5/8-11	A16-Q6-B	**MG9049004**	Price
5/4 x 2 x 5/8-11	A24-Q6-B	**MG9049005**	Price
6/4-3/4 x 2 x 5/8-11	A16-Q6-B	**MG9035900**	Price
6/4-3/4 x 2 x 5/8-11	C16-N-B	**MG9035901**	Price
6/4-3/4 x 2 x 5/8-11	A16-Q6-B	**MG9049008**	Price
6/4-3/4 x 2 x 5/8-11	CA16-Q6-B	**MG9049014**	Price

Feature - Steel Back			
Size (in.)	Spec.	Order No.	Price
6/4-3/4 x 2 x 5/8-11	A16-Q6-B	**MG9049009**	Price
6/4-3/4 x 2 x 5/8-11	CA16-Q6-B	**MG9049015**	Price

Resin Bond Snagging Wheels

Type 1 Burr Bench Wheels



Size (in.)	Specification	RPM	Stnd. Pkg.	Order No.	Price Ea.
4 x 1/4 x 3/8	Charger 4NZ20-TBRA	15280	10	**MH60040044098**	Price
3 x 1/4 x 3/8	Charger 57A24-TBRA	20370	10	**MH60030028831**	Price
4 x 1/4 x 3/8	Charger 57A24-RBRA	12999	10	**MH60040022221**	Price

Resin Cones and Plugs

- Aluminum oxide grain for grinding and finishing metals in hard to reach areas
- Carton Qty: 10



Type - Resin Cone				
Size (in.)	Style	Spec.	Order No.	Price
1-1/2 x 2-1/2 x 3/8-24	T16	A16R	**MG9049016**	Price
1-1/2 x 2-1/2 x 5/8-11	T16	A16R	**MG9049017**	Price
1-1/2 x 2-1/2 x 3/8-24	T17	A16R	**MG9049024**	Price
1-1/2 x 3 x 3/8-24	T16	A16R	**MG9049018**	Price
1-1/2 x 3 x 3/8-24	T17	A16R	**MG9049026**	Price
1-1/2 x 3 x 5/8-11	T16	A16R	**MG9049019**	Price
1-1/2 x 3 x 5/8-11	T17	A16R	**MG9049027**	Price
2 x 3 x 5/8-11	T16	A16R	**MG9049021**	Price
2 x 3 x 5/8-11	T16	A24R	**MG9036238**	Price
2 x 3 x 5/8-11	T17	A16R	**MG9049028**	Price
2-1/2 x 3 x 5/8-11	T17	A16R	**MG9049029**	Price
2-3/4 x 3-1/2 x 5/8-11	T16	A16R	**MG9049022**	Price
3 x 3 x 5/8-11	T16	A16R	**MG9049023**	Price

Type - Resin Plug				
Size (in.)	Style	Spec.	Order No.	Price
1-1/2 x 2-1/2 x 3/8-24	18R	A16R	**MG9049037**	Price
1-1/2 x 2-1/2 x 3/8-24	T18	A16R	**MG9049030**	Price
1-1/2 x 2-1/2 x 5/8-11	18R	A16R	**MG9049038**	Price
1-1/2 x 2-1/2 x 5/8-11	T18	A16R	**MG9049031**	Price
1-1/2 x 3 x 3/8-24	18R	A16R	**MG9049039**	Price
1-1/2 x 3 x 3/8-24	T18	A16R	**MG9049032**	Price
1-1/2 x 3 x 5/8-11	18R	A16R	**MG9049040**	Price
1-1/2 x 3 x 5/8-11	T18	A16R	**MG9049033**	Price
2 x 3 x 5/8-11	18R	A16R	**MG9049042**	Price
2 x 3 x 5/8-11	18R	A24R	**MG9036240**	Price
2 x 3 x 5/8-11	T18	A16R	**MG9049035**	Price
2 x 3 x 5/8-11	T18	A24R	**MG9036239**	Price
2 x 3-1/2 x 5/8-11	T18	A16R	**MG9049036**	Price
3 x 3 x 5/8-11	18R	A16R	**MG9049043**	Price

NORTON Type 11 Flaring Cup Tool Room Wheels

- Save 10% on Box Quantity of Same Order No.



Size (in.)	Recess	Face Z	Specifications	Box Qty.	Order No.	Price Ea.
6"/4"-13/16 x 2 x 5/8-11	Rim 1-1/2 - Back 3/4	ME71438	4NZ16-QBX406	10	**MH60060098586**	Price
6"/4"-3/4 x 2 x 5/8-11	Rim 1-1/2 - Back 3/4	ME24180	NZC16-QBX406	10	**MH60060046922**	Price
3-1/2"/2-3/4" x 1-1/2 x 1	Rim 1/4 - Back 3/8	ME24327	32A60-KVBE	10	**MH60030029358**	Price
3"/2-1/4" x 1-1/4 x 3/4	Rim 1/4 - Back 3/8	ME21560	32A60-KVBE	10	**MH60030029187**	Price
4"/3" x 1-1/2 x 1-1/4	Rim 1/4 - Back 1/2	ME19237	32A46-KVBE	10	**MH60040030246**	Price
4"/3" x 1-1/2 x 1-1/4	Rim 1/4 - Back 1/2	ME19237	32A60-JVBE	10	**MH60040030256**	Price
4"/3" x 1-1/2 x 1-1/4	Rim 1/4 - Back 1/2	ME19237	32A60-KVBE	10	**MH60040030361**	Price
4"/3" x 1-1/2 x 1-1/4	Rim 1/4 - Back 1/2	ME19237	32A80-KVBE	10	**MH60040030368**	Price
5"/3-3/4" x 1-3/4 x 1-1/4	Rim 1/4 - Back 1/2	ME19241	32A46-JVBE	10	**MH60050030858**	Price
5"/3-3/4" x 1-3/4 x 1-1/4	Rim 1/4 - Back 1/2	ME19241	32A46-KVBE	10	**MH60050030859**	Price
5"/3-3/4" x 1-3/4 x 1-1/4	Rim 1/4 - Back 1/2	ME19241	32A60-KVBE	10	**MH60050030964**	Price
6"/4-1/2" x 2 x 1-1/4	Rim 3/8 - Back 1/2	ME19241	32A60-J5VBE	10	**MH60060038492**	Price

CARBORUNDUM White Aluminum Oxide Tool Room Type 11 Flair Cup Wheels

- AA Abrasive (White Aluminum Oxide) is ideal for grinding heat sensitive steels, as well as easy and medium to grind high speed steels
- Carton Qty: 5 Pcs.

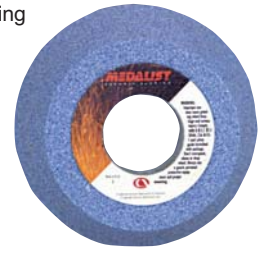


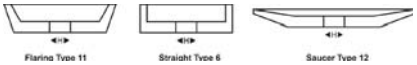
Size	Grit	Hardness	Specification (Marking)	Max. RPM	Order No.	Price
4/3	60	K	AA60 K V40	5730	**MG3709788**	Price
5/3-3/4	60	J	AA60 J V40	4585	**MG3709783**	Price
5/3-3/4	60	K	AA60 K V40	4585	**MG3709782**	Price

CARBORUNDUM Ceramic Alumina Tool Room Cup & Sauce Shape Wheels

- Faster stock removal — Cooler cutting action
- Extended wheel life — Requires less dressing
- Good for easy to difficult to grind steels
- Blue
- Carton Qty: 5 Pcs.

MEDALIST CERAMIC ALUMINA





Size (in.) - 4"/3" x 1-1/2 x 1-1/4						
Grit	Hardness	Specification (Marking)	Type	Max. RPM	Order No.	Price
46	J	46 J VL	Type 11	5730	**MG3727302**	Price
60	J	60 J VL	Type 11	5730	**MG3727303**	Price

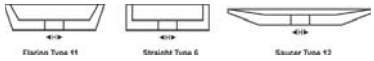
Size (in.) - 5"/3-3/4" x 1-3/4 x 1-1/4						
Grit	Hardness	Specification (Marking)	Type	Max. RPM	Order No.	Price
46	J	46 J VL	Type 11	4585	**MG3727305**	Price
60	K	60 K VL	Type 11	4585	**MG3727306**	Price

Size (in.) - 6 x 1/2 x 1-1/4						
Grit	Hardness	Specification (Marking)	Type	Max. RPM	Order No.	Price
46	J	46 J VL	Type 12	4140	**MG3727308**	Price

CARBORUNDUM Tool Room Cup & Saucer Shape Wheels

- Exceptionally cool, fast cutting action
- Excellent resistance to point wear
- Most versatile aluminum oxide precision grinding wheel
- Gray / purple
- Carton Qty: 5 Pcs.





GOLD 32AR Abrasive

Size (in.) - 4"/3" x 1-1/2 x 1-1/4						
Grit	Hardness	Specification (Marking)	Type	Max. RPM	Order No.	Price
46	K	32AR46 K V40	Type 11	5730	**MG3727679**	Price
60	J	32AR60 J V40	Type 11	5730	**MG3727680**	Price
60	K	32AR60 K V40	Type 11	5730	**MG3727681**	Price

Size (in.) - 5 x 1-1/2 x 1-1/4						
Grit	Hardness	Specification (Marking)	Type	Max. RPM	Order No.	Price
46	K	32AR46 K V40	Type 6	4585	**MG3762288**	Price
60	K	32AR60 K V40	Type 6	4585	**MG3727705**	Price

Size (in.) - 5"/3-3/4" x 1-3/4 x 1-1/4						
Grit	Hardness	Specification (Marking)	Type	Max. RPM	Order No.	Price
46	K	32AR46 K V40	Type 11	4585	**MG3727684**	Price
60	J	32AR60 J V40	Type 11	4585	**MG3727685**	Price
60	K	32AR60 K V40	Type 11	4585	**MG3727683**	Price

CGW AS3 Ceramic Cup Wheels

- AS3 Ceramic aluminum oxide grain for cooler cuts and maximum performance on harder surfaces
- Excels at grinding on 50 Rockwell C and harder
- Continually fractures to produce sharp new grinding points



Size (in.)	Spec	Order No.	Price
4 x 1-1/2 x 1-1/4	AS3-46-I-VCER	**MG9034200**	Price
4 x 1-1/2 x 1-1/4	AS3-60-K-VCER	**MG9034201**	Price
5 x 1-3/4 x 1-1/4	AS3-46-I-VCER	**MG9034203**	Price
5 x 1-3/4 x 1-1/4	AS3-60-K-VCER	**MG9034204**	Price

Type 2 Metal Back Direct Mount Grinding Wheels



Use Codes:
- D (Drills)
- HST (High Speed Tools)
- CR (Carbide Roughing)
- CM (Carbide Medium)
- CF (Carbide Finish)
- Machine Type (MT)
- B (Baldor)
- H (Hamond)
- S (Sellers)

Size (in.)	Specification (Markings)	Additional Information	Use	MT	Order No.	Price
6 x 1 x 4	39C60-I8VK	Rim 1", Plate A47466	CR	B,H	**MH60060038322**	Price
6 x 1 x 4	39C80-I9VK	Rim 1", Plate A47466	CM	B,H	**MH60060038327**	Price
6 x 1 x 4	39C100-18VK	Rim 1", Plate A47466	CM	B,H	**MH60060038330**	Price
6 x 1 x 4	39C120-I8VK	Rim 1", Plate A47466	CF	B,H	**MH60060038193**	Price
7 x 1-1/2 x 5	39C60-I8VK	Rim 1", Plate A39027	CR	H	**MH60070042848**	Price
10 x 2 x 7	39C60-JVK	Rim 1", Plate A83831	D	S	**MH60100061678**	Price
10 x 2 x 7-1/2	32A54-JVG	Rim 1", Plate A110170	D	S	**MH60100061687**	Price
14 x 4 x 11	38A46-KVBE	Rim 1-1/2", Plate A52814, Tape Wound	HST	H	**MH60140064652**	Price

Metal Back/Direct Mount Grinding Wheels

- For direct mounting to grinders for drill pointing, carbide sharpening/roughing and general purpose finishing



Use Codes:
- D (Drills)
- CR (Carbide Roughing)
- CF (Carbide Finish)
- Machine Type (MT):
- B (Baldor)
- H (Hammond)
- O (Oliver)

Size (in.)	Center Plate Hole	Specification	Use	MT	Order No.	Price
6 x 1 x 4	1-1/4	GC120-IV	CF	B,H	**MG3709564**	Price
6 x 1 x 4	1-1/4	GC60IVGC	CR	B,H	**MG3709566**	Price
9 x 2 x 5	2	32AR70-JV40	D	O	**MG3762315**	Price
9 x 2 x 5	2	AA70-JV40	D	O	**MG3703517**	Price

Metal Back/Direct Mount Grinding Wheels

- WA — For grinding high speed steel
- GC — For grinding carbide
- Center plate hole 1-1/4″, 4 holes on 3-1/4″ bolt circle



Size (in.)	Spec	Order No.	Price
6 x 1 x 4	GC60 I V	**MG9034949**	Price
6 x 1 x 4	GC80 I V	**MG9034950**	Price
6 x 1 x 4	GC100 I V	**MG9034951**	Price
6 x 1 x 4	GC120 I V	**MG9034952**	Price
6 x 1 x 4	WA46 K V	**MG9034948**	Price

White Aluminum Oxide Tool Room Cup Wheels

- Fast, cool cutting action
- Ideal for light grinding on tool and die steels
- Carton Qty: 10 Pcs.



Size (in.) - 4"/3" x 1-1/2 x 1-1/4						
Grit	Hardness	Specification	Type	Max. RPM	Order No.	Price
46	J	WA46-JV	Type 11	6685	**MG9034903**	Price
46	K	WA46-KV	Type 11	6685	**MG9034904**	Price
60	J	WA60-JV	Type 11	6685	**MG9034907**	Price
60	K	WA60-KV	Type 11	6685	**MG9034908**	Price
80	K	WA80-KV	Type 11	6685	**MG9034909**	Price

Size (in.) - 5 x 1-1/2 x 1-1/4						
Grit	Hardness	Specification	Type	Max. RPM	Order No.	Price
46	J	WA46-JV	Type 6	5348	**MG9034929**	Price
46	K	WA46-KV	Type 6	5348	**MG9034930**	Price
60	J	WA60-JV	Type 6	5348	**MG9034933**	Price

Size (in.) - 5"/3-3/4" x 1-3/4 x 1-1/4						
Grit	Hardness	Specification	Type	Max. RPM	Order No.	Price
46	H	WA46-HV	Type 11	5348	**MG9034914**	Price
46	I	WA46-IV	Type 11	5348	**MG9034915**	Price
46	J	WA46-JV	Type 11	5348	**MG9034916**	Price
46	K	WA46-KV	Type 11	5348	**MG9034917**	Price
60	I	WA60-IV	Type 11	5348	**MG9034919**	Price
60	J	WA60-JV	Type 11	5348	**MG9034920**	Price
60	K	WA60-KV	Type 11	5348	**MG9034921**	Price
80	K	WA80-KV	Type 11	5348	**MG9034923**	Price

Pink Grain Tool Room Cup Wheels

- Ideal for grinding medium and hard to grind high speed steels and cast alloy steels
- Sharper grain for fast, cool cutting action
- More friable than White Aluminum Oxide grain
- Excellent when rapid stock removal is a must
- Carton Qty: 10 Pcs.



Size (in.) - 4"/3" x 1-1/2 x 1-1/4						
Grit	Hardness	Specification	Type	Max. RPM	Order No.	Price
46	K	PA46-KV	Type 11	6685	**MG9058054**	Price
60	I	PA60-IV	Type 11	6685	**MG9058055**	Price
60	K	PA60-KV	Type 11	6685	**MG9058056**	Price
80	K	PA80-KV	Type 11	6685	**MG9058057**	Price

Size (in.) - 5"/3-3/4" x 1-3/4 x 1-1/4						
Grit	Hardness	Specification	Type	Max. RPM	Order No.	Price
46	I	PA46-I8V32A	Type 11	5348	**MG9058058**	Price
46	K	PA46-K8V32A	Type 11	5348	**MG9058059**	Price
60	K	PA60-K8V32A	Type 11	5348	**MG9058060**	Price

CARBORUNDUM Green Silicon Carbide Abrasive Wheels for Precision Applications

- Ideal for precision grinding of hard cemented carbide tooling
- Fast stock removal — long life
- Cool, free cutting action
- Carton Qty: 5 Pcs.



		GC120-IV		GC60-IV		GC80-IV	
Size (in.)	Max. RPM	Order No.	Price	Order No.	Price	Order No.	Price
6 x 1/2 x 1-1/4	4140	**MG3709582**	Price	**-**	-	**MG3709585**	Price
6 x 3/4 x 1-1/4	4140	**MG3709578**	Price	**MG3709581**	Price	**MG3709580**	Price
7 x 1/2 x 1-1/4	3600	**-**	-	**MG3709576**	Price	**MG3709575**	Price
8 x 1/2 x 1-1/4	3600	**-**	-	**MG3709572**	Price	**-**	-
8 x 3/4 x 1-1/4	3600	**-**	-	**MG3709570**	Price	**-**	-

CGW CAMEL GRINDING WHEELS Green Silicon Carbide Surface Grinding Wheels

- Quickly grinds non-ferrous metals and sharpens tungsten carbide tools
- Fast stock removal — long life
- Cool, free cutting action
- Carton Qty: 10 Pcs.



			GC100-IV		GC60-IV		GC80-IV	
Size (in.)	Wheel Type	Max. RPM	Order No.	Price	Order No.	Price	Order No.	Price
7 x 1/4 x 1-1/4	Type 1	3760	**MG9034613**	Price	**MG9034611**	Price	**MG9034612**	Price
7 x 1/2 x 1-1/4	Type 1	3760	**MG9034629**	Price	**MG9034627**	Price	**MG9034628**	Price
7 x 3/4 x 1-1/4 (R/1 -- 3 x 1/4)	Type 5	3760	**MG9034646**	Price	**MG9034644**	Price	**MG9034645**	Price
7 x 1 x 1-1/4 (R/1 -- 3 x 1/2)	Type 5	3760	**MG9034657**	Price	**MG9034655**	Price	**-**	-
8 x 1/4 x 1-1/4	Type 1	3600	**-**	-	**-**	-	**MG9034669**	Price
8 x 1/2 x 1-1/4	Type 1	3600	**MG9034682**	Price	**MG9034680**	Price	**MG9034681**	Price
8 x 3/4 x 1-1/4 (R/1 -- 3 x 1/4)	Type 5	3600	**-**	-	**MG9034692**	Price	**-**	-
8 x 1 x 1-1/4 (R/1 -- 3 x 1/2)	Type 5	3600	**MG9034705**	Price	**MG9034703**	Price	**-**	-

CGW CAMEL GRINDING WHEELS 32A ID Wheels

Internal Dimension Wheels- Type 5

- For grinding inside surfaces of bearings, rings, cylinders, barrels, and bores
- Premium mono crystalline grain is sharp, tough, and friable
- Designed for concentricity, precision, rigidity, and efficiency



Size (in.)	Spec	Order No.	Price
3/4 x 3/4 x 1/4 (R/1 -- 3/8 x 3/8)	32A60-J8V	**MG9059050**	Price
1 x 1 x 1/4 (R/1 -- 1/2 x 1/2)	32A60-J8V	**MG9059051**	Price
1 x 1 x 3/8 (R/1 -- 1/2 x 1/2)	32A60-J8V	**MG9059052**	Price
1-1/4 x 1 x 3/8 (R/1 -- 5/8 x 1/2)	32A60-J8V	**MG9059053**	Price

Size (in.)	Spec	Order No.	Price
1-1/2 x 1 x 3/8 (R/1 -- 3/4 x 1/2)	32A60-J8V	**MG9059055**	Price
1-1/2 x 1 x 3/8 (R/1 -- 5/8 x 1/2)	32A60-J8V	**MG9059054**	Price
2 x 1 x 3/8 (R/1 -- 3/4 x 1/2)	32A60-J8V	**MG9059056**	Price
2 x 1-1/2 x 5/8 (R/1 -- 1 x 3/4)	32A60-J8V	**MG9059057**	Price

NORTON SAINT-GOBAIN gemini Cones and Plugs

- For consistent, quality performance in foundries, welding shops, fabrication facilities
- Strong performance on all steel, steel alloys and irons
- Typical applications include hard-to-reach areas inside castings, removing flaws and cracks, and removing metal in corners



Style - Type 16 Cone					
Size	Max. RPM	Std. Pkg.	Spec	Order No.	Price
1-1/2 x 2-1/2 x 3/8-24	24190	10	57A24-R	**MH66T1622349**	Price
2 x 3 x 5/8-11	18145	10	57A24-R	**MH66T1622218**	Price

Style - Type 18 Plugs, Square Tip					
Size	Max. RPM	Std. Pkg.	Spec	Order No.	Price
1-1/2 x 3 x 5/8-11	24190	10	57A24-R	**MH66T1822191**	Price
2 x 3 x 5/8-11	18145	10	57A24-R	**MH66T1822219**	Price

Style - Type 18R Plugs, Round Tip					
Size	Max. RPM	Std. Pkg.	Spec	Order No.	Price
2 x 3 x 5/8-11	18145	10	57A24-R	**MH66T1822220**	Price

SURF PRO® Bench & Pedestal Grinding Wheels - Aluminum Oxide

- Aluminum oxide grain
- Used for general purpose grinding and tool sharpening
- For ferrous metals (carbon steel, steel, iron, forgings, etc)
- Convenient single pack



Size (in.)	Grit	Order No.	Price
6 x 3/4 x 1	36	**SP01063041A036O**	Price
6 x 3/4 x 1	60	**SP01063041A060M**	Price
6 x 3/4 x 1	80	**SP01063041A080M**	Price
6 x 1 x 1	36	**SP01064041A036O**	Price
6 x 1 x 1	60	**SP01064041A060M**	Price
6 x 1 x 1	80	**SP01064041A080M**	Price
7 x 1 x 1	36	**SP01074041A036O**	Price
7 x 1 x 1	60	**SP01074041A060M**	Price
8 x 1 x 1	36	**SP01084041A036O**	Price
8 x 1 x 1	60	**SP01084041A060M**	Price
8 x 1 x 1	80	**SP01084041A080M**	Price

SURF PRO® Bench & Pedestal Grinding Wheels - Silicon Carbide

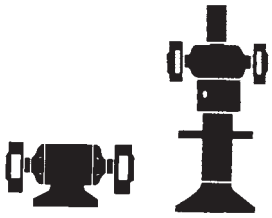
- Silicon carbide grain
- Extremely sharp grain for fast, burr-free cutting
- Use on carbide tipped tool, cast and ferrous or non-ferrous metals
- Convenient single pack



Size (in.)	Grit	Order No.	Price
6 x 3/4 x 1	60	**SP01063041G060I**	Price
6 x 3/4 x 1	80	**SP01063041G080I**	Price
6 x 3/4 x 1	100	**SP01063041G100I**	Price
6 x 1 x 1	60	**SP01064041G060I**	Price
6 x 1 x 1	80	**SP01064041G080I**	Price
6 x 1 x 1	100	**SP01064041G100I**	Price
7 x 1 x 1	60	**SP01074041G060I**	Price
7 x 1 x 1	80	**SP01074041G080I**	Price
8 x 1 x 1-1/4	60	**SP01084041G060I**	Price
8 x 1 x 1-1/4	80	**SP01084041G080I**	Price
8 x 1 x 1-1/4	100	**SP01084041G100I**	Price

CARBORUNDUM Gray Aluminum Oxide & Green Silicon Carbide Abrasive – Vitrified Bond

- Ideal for removing burrs on steel parts
- Fast cutting action – long life
- Good for sharpening high speed steel cutting tools
- Reducer bushings included with each wheel





Material - Brown Aluminum Oxide										
			A100-K		A24-P		A36-M		A60-M	
Size (in.)	Max. RPM	Box Qty.	Order No.	Price Ea.	Order No.	Price Ea.	Order No.	Price Ea.	Order No.	Price Ea.
6 x 3/4 x 1	4140	5	**MG3709974**	Price	**-**	-	**MG3709976**	Price	**MG3709975**	Price
6 x 1 x 1	4140	5	**MG3709971**	Price	**-**	-	**MG3709973**	Price	**MG3709972**	Price
7 x 1 x 1	3600	5	**MG3709964**	Price	**-**	-	**MG3709966**	Price	**MG3709965**	Price
8 x 3/4 x 1	3600	5	**-**	-	**-**	-	**MG3709962**	Price	**MG3709961**	Price
8 x 1 x 1	3600	5	**-**	-	**MG3709960**	Price	**MG3709959**	Price	**MG3709956**	Price
10 x 1 x 1-1/4	2674	2	**-**	-	**MG3709955**	Price	**MG3709953**	Price	**MG3709952**	Price
10 x 1-1/2 x 1-1/4	2674	2	**-**	-	**MG3709948**	Price	**MG3709947**	Price	**-**	-
12 x 1-1/2 x 1-1/2	2228	2	**-**	-	**-**	-	**MG3709941**	Price	**-**	-
12 x 2 x 1-1/2	2220	1	**-**	-	**-**	-	**MG3709938**	Price	**MG3709937**	Price
12 x 2 x 1-1/2	2228	1	**-**	-	**MG3709939**	Price	**-**	-	**-**	-
14 x 2 x 1-1/2	1910	1	**-**	-	**MG3709935**	Price	**MG3709934**	Price	**-**	-

Material - Green Silicon Carbide								
			GC120-IV		GC60-IV		GC80-IV	
Size (in.)	Max. RPM	Box Qty.	Order No.	Price Ea.	Order No.	Price Ea.	Order No.	Price Ea.
6 x 1 x 1	4140	5	**MG3709924**	Price	**MG3709926**	Price	**MG3709925**	Price
6 x 3/4 x 1	4140	5	**MG3709927**	Price	**MG3709929**	Price	**MG3709928**	Price
7 x 1 x 1	3600	5	**MG3709920**	Price	**-**	-	**MG3709922**	Price
8 x 1 x 1	3600	5	**MG3709914**	Price	**MG3709916**	Price	**MG3709915**	Price
10 x 1 x 1-1/4	2674	2	**MG3709911**	Price	**MG3709913**	Price	**MG3709912**	Price

Vitrified Bench Wheels



Features:

- These Bench & Pedestal wheels cover a broad range of general bench grinding jobs, and offer custom quality at off-the-shelf prices
- Use aluminum oxide wheels for all types of steels
- Use silicon carbide green wheels for tungsten carbide and non-ferrous metals such as brass, bronze and aluminum
- Each wheel contains a free nested bushing

Silicon Carbide Grit Range

- Medium–60 grit for roughing of carbide tools
- Fine–80 grit for all-purpose grinding of carbide tools
- Extra Fine–120 grit for fine finishing of carbide tools

Aluminum Oxide Grit Range

- Very coarse–24 grit for fast, free cutting rough grinding jobs
- Coarse–36/46 grit for an extended range of non-precision grinding applications
- Medium–60/80 grit, a mid-range blend for a variety of bench and pedestal grinding jobs
- Fine–100/120 grit, a versatile blend for fine cleanup, small tool reconditioning and deburring jobs

Bushings

- 7” Wheels include 1/2”, 5/8” and 3/4” reducing bushings
- 8” Wheels include 5/8”, 3/4” and 7/8” reducing bushings
- 10” Wheels include 3/4” reducing
- 12” Wheels include 1-1/4” reducing bushings

Material - Aluminum Oxide Size (in.) - 5 x 1/2 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Fine	4965	1	**MH60050088201**	Price
Medium	4965	1	**MH60050088202**	Price

Material - Aluminum Oxide Size (in.) - 5 x 3/4 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	4965	1	**MH60050088215**	Price
Fine	4965	1	**MH60050088205**	Price
Medium	4965	1	**MH60050088210**	Price

Material - Silicon Carbide Size (in.) - 6 x 1/2 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Extra Fine	4140	1	**MH60060036573**	Price
Fine	4140	1	**MH60060036572**	Price
Medium	4140	1	**MH60060036571**	Price

Material - Silicon Carbide Size (in.) - 6 x 3/4 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Extra Fine	4140	1	**MH60060037192**	Price
Fine	4140	1	**MH60060037191**	Price
Medium	4140	1	**MH60060037190**	Price

Material - Silicon Carbide Size (in.) - 6 x 1 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Extra Fine	4140	1	**MH60060037194**	Price
Fine	4140	1	**MH60060037193**	Price
Medium	4140	1	**MH60060037187**	Price

Material - Silicon Carbide Size (in.) - 7 x 1 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Extra Fine	3600	1	**MH60070042302**	Price
Fine	3600	1	**MH60070042301**	Price
Medium	3600	1	**MH60070042300**	Price

Material - Silicon Carbide Size (in.) - 8 x 1 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Extra Fine	3600	1	**MH60080044535**	Price
Fine	3600	1	**MH60080044534**	Price
Medium	3600	1	**MH60080044087**	Price

Material - Silicon Carbide Size (in.) - 10 x 1 x 1-1/4				
Grit	Max RPM	Box Qty.	Order No.	Price
Fine	2485	1	**MH60100060366**	Price
Medium	2485	1	**MH60100044536**	Price

Material - Silicon Carbide Size (in.) - 12 x 2 x 1-1/4				
Grit	Max RPM	Box Qty.	Order No.	Price
Fine	2485	1	**MH60120063360**	Price
Medium	2485	1	**MH60120063359**	Price

Material - Aluminum Oxide Size (in.) - 5 x 1 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	4965	1	**MH60050088230**	Price
Medium	4965	1	**MH60050088225**	Price

Material - Aluminum Oxide Size (in.) - 6 x 1/2 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	4140	1	**MH60060036132**	Price
Fine	4140	1	**MH60060036133**	Price
Medium	4140	1	**MH60060036131**	Price

Material - Aluminum Oxide Size (in.) - 6 x 3/4 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	4140	1	**MH60060088245**	Price
Fine	4140	1	**MH60060088235**	Price
Medium	4140	1	**MH60060088240**	Price

Material - Aluminum Oxide Size (in.) - 6 x 1 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	4140	1	**MH60060088260**	Price
Fine	4140	1	**MH60060088250**	Price
Medium	4140	1	**MH60060088255**	Price

Material - Aluminum Oxide Size (in.) - 7 x 1 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	3600	1	**MH60070088275**	Price
Fine	3600	1	**MH60070088265**	Price
Medium	3600	1	**MH60070088270**	Price

Material - Aluminum Oxide Size (in.) - 8 x 3/4 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	3600	1	**MH60080088278**	Price
Fine	3100	1	**MH60080042317**	Price
Medium	3600	1	**MH60080088277**	Price

Material - Aluminum Oxide Size (in.) - 8 x 1 x 1				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	3600	1	**MH60080088286**	Price
Fine	3600	1	**MH60080088280**	Price
Medium	3600	1	**MH60080088285**	Price
Very Coarse	3600	1	**MH60080044454**	Price

Material - Aluminum Oxide Size (in.) - 10 x 1 x 1-1/4				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	2485	1	**MH60100088295**	Price
Fine	2485	1	**MH60100060350**	Price
Medium	2485	1	**MH60100088290**	Price
Very Coarse	2485	1	**MH60100060788**	Price

Material - Aluminum Oxide Size (in.) - 10 x 1-1/4 x 1-1/4				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	2485	1	**MH60100061250**	Price
Medium	2485	1	**MH60100061251**	Price

Material - Aluminum Oxide Size (in.) - 10 x 1-1/2 x 1-1/4				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	2485	1	**MH60100061393**	Price
Medium	2485	1	**MH60100061395**	Price

Material - Aluminum Oxide Size (in.) - 12 x 1-1/2 x 1-1/2				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	2070	1	**MH60120063052**	Price
Medium	2070	1	**MH60120063053**	Price

Material - Aluminum Oxide Size (in.) - 12 x 2 x 1-1/2				
Grit	Max RPM	Box Qty.	Order No.	Price
Coarse	2485	1	**MH60120063055**	Price
Medium	2485	1	**MH60120063056**	Price
Very Coarse	2485	1	**MH60120063054**	Price

Brown Aluminum Oxide & Green Silicon Carbide Abrasive - Vitrified Bond

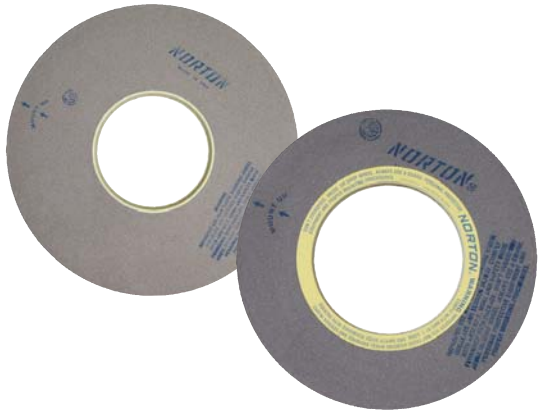


- Ideal for removing burrs on steel parts
- Fast cutting action – long life
- Good for sharpening high speed steel cutting tools
- Reducer bushings included with each wheel
- CGW AO brown bench wheels use premium low fire technology to assure consistent bond
- 10-14″ Bench wheels are packed in single white craft box

Material - Brown Aluminum Oxide												
			A46-MV		A60-MV		A80-MV		A24-QV		A36-OV	
Size (in.)	Max. RPM	Box Qty.	Order No.	Price Ea.	Order No.	Price Ea.	Order No.	Price Ea.	Order No.	Price Ea.	Order No.	Price Ea.
6 x 1/2 x 1	4456	10	**MG9038003**	Price	**MG9038004**	Price	**MG9038005**	Price	-	-	-	-
6 x 3/4 x 1	4456	10	**MG9035010**	Price	**MG9035011**	Price	**MG9035012**	Price	**MG9035008**	Price	**MG9035009**	Price
6 x 1 x 1	4456	10	**MG9035019**	Price	**MG9035020**	Price	**MG9035021**	Price	**MG9035017**	Price	**MG9035018**	Price
7 x 1 x 1	3760	10	**MG9035036**	Price	**MG9035037**	Price	**MG9035038**	Price	**MG9035034**	Price	**MG9035035**	Price
8 x 1 x 1-1/4	3600	10	**MG9035048**	Price	**MG9035049**	Price	**MG9035050**	Price	**MG9035046**	Price	**MG9035047**	Price
10 x 1 x 1-1/4	2483	1	**MG9038028**	Price	**MG9038029**	Price	**MG9038030**	Price	**MG9038026**	Price	**MG9038027**	Price
10 x 1-1/2 x 1-1/4	2483	1	**MG9038033**	Price	**MG9038034**	Price	**MG9038035**	Price	**MG9038031**	Price	**MG9038032**	Price
12 x 2 x 1-1/2	2220	1	**MG9038048**	Price	**MG9038049**	Price	**MG9038050**	Price	**MG9038046**	Price	**MG9038047**	Price
14 x 2 x 1-1/2	1773	1	**MG9038053**	Price	**MG9038054**	Price	**-**	-	**MG9038051**	Price	**MG9038052**	Price

Material - Green Silicon Carbide								
			GC100-IV		GC60-IV		GC80-IV	
Size (in.)	Max. RPM	Box Qty.	Order No.	Price Ea.	Order No.	Price Ea.	Order No.	Price Ea.
6 x 1/2 x 1	4456	10	**MG9035007**	Price	**MG9035005**	Price	**MG9035006**	Price
6 x 3/4 x 1	4456	10	**MG9035015**	Price	**MG9035013**	Price	**MG9035014**	Price
6 x 1 x 1	4456	10	**MG9035024**	Price	**MG9035022**	Price	**MG9035023**	Price
7 x 1 x 1	3760	10	**MG9035041**	Price	**MG9035039**	Price	**MG9035040**	Price
8 x 1 x 1-1/4	3600	10	**MG9035053**	Price	**MG9035051**	Price	**MG9035052**	Price
10 x 1 x 1-1/4	2483	1	**MG9038521**	Price	**MG9038519**	Price	**MG9038520**	Price
10 x 1-1/2 x 1-1/4	2483	1	**MG9038524**	Price	**MG9038522**	Price	**MG9038523**	Price
12 x 2 x 1-1/2	2220	1	**MG9038533**	Price	**MG9038531**	Price	**MG9038532**	Price
14 x 2 x 1-1/2	1773	1	**-**	-	**MG9038534**	Price	**-**	-

Centerless and Cylindrical Wheels



Type 1 Straight Wheel
64A – Versatile performance at an economical price

Features:
- Specially blended aluminum oxide abrasive coupled with superior vitrifed bond
- Versatile

Benefits:
- Will maintain high grinding rates without wheel breakdown
- Engineered to grind a variety of materials

Feature - Centerless			
Size (in.)	Specifications	Order No.	Price
20 x 4 x 12	64A60-KVCE	**MH60200066723**	Price
20 x 4 x 12	64A60-MVCE	**MH60200066725**	Price
20 x 4 x 12	64A80-LVCE	**MH60200066727**	Price
20 x 6 x 12	64A60-KVCE	**MH60200066729**	Price
20 x 6 x 12	64A80-MVCE	**MH60200066734**	Price
20 x 8 x 12	64A60-KVCE	**MH60200066748**	Price
20 x 8 x 12	64A60-LVCE	**MH60200066749**	Price
20 x 8 x 12	64A80-KVCE	**MH60200066751**	Price
20 x 8 x 12	64A80-LVCE	**MH60200066752**	Price
24 x 3 x 12	64A60-K8V127	**MH60240066708**	Price
24 x 6 x 12	64A60-LVCE	**MH60240066765**	Price
24 x 8 x 12	64A60-KVCE	**MH60240066766**	Price
24 x 8 x 12	64A80-KVCE	**MH60240066769**	Price
24 x 10 x 12	64A60-KVCE	**MH60240066791**	Price
24 x 10 x 12	64A80-KVCE	**MH60240066788**	Price

Feature - Cylindrical			
Size (in.)	Specifications	Order No.	Price
16 x 1 x 5	64A60-K8V127	**MH60160066722**	Price
16 x 2 x 5	64A60-K8V127	**MH60160066721**	Price
18 x 2 x 5	64A60-K8V127	**MH60180066719**	Price
20 x 2 x 5	64A60-J8V127	**MH60200066713**	Price
20 x 2 x 8	64A60-K8V127	**MH60200066712**	Price
20 x 3 x 8	64A46-I8V127	**MH60200066447**	Price
20 x 3 x 8	64A60-J8V127	**MH60200008140**	Price
24 x 2 x 12	60A80-KV127	**MH60240066711**	Price
24 x 2 x 12	64A60-KV127	**MH60240066710**	Price

Centerless Grinding Wheels - 20" & 24" Diameter



- Aluminum Oxide
- Vitrified
- Abrasive is recommended for hardened steel 55RC and stainless steel

Spec. - 94A60-K5V18				
Size (in.)	Grit	Hardness	Order No.	Price
20 x 1 x 12	60	K	**MG90273005**	Price
20 x 2 x 12	60	K	**MG90273010**	Price
20 x 4 x 12	60	K	**MG90273025**	Price
20 x 6 x 12	60	K	**MG90273030**	Price
20 x 8 x 12	60	K	**MG90273035**	Price
24 x 2 x 12	60	K	**MG90273040**	Price
24 x 3 x 12	60	K	**MG90273045**	Price
24 x 4 x 12	60	K	**MG90273055**	Price
24 x 6 x 12	60	K	**MG90273060**	Price
24 x 8 x 12	60	K	**MG90273065**	Price
24 x 10 x 12	60	K	**MG90273070**	Price
24 x 20 x 12	60	K	**MG90273075**	Price

Spec. - 94A60-L5V18				
Size (in.)	Grit	Hardness	Order No.	Price
20 x 2 x 12	60	L	**MG90273110**	Price
20 x 3 x 12	60	L	**MG90273115**	Price
20 x 4 x 12	60	L	**MG90273125**	Price
20 x 6 x 12	60	L	**MG90273130**	Price
20 x 8 x 12	60	L	**MG90273135**	Price
24 x 10 x 12	60	L	**MG90273170**	Price
24 x 4 x 12	60	L	**MG90273155**	Price
24 x 6 x 12	60	L	**MG90273160**	Price
24 x 8 x 12	60	L	**MG90273165**	Price

Spec. - 94A60-M6V18				
Size (in.)	Grit	Hardness	Order No.	Price
20 x 1 x 12	60	M	**MG90273205**	Price
20 x 2 x 12	60	M	**MG90273210**	Price
20 x 6 x 12	60	M	**MG90273230**	Price
20 x 8 x 12	60	M	**MG90273235**	Price
24 x 10 x 12	60	M	**MG90273270**	Price
24 x 20 x 12	60	M	**MG90273275**	Price
24 x 6 x 12	60	M	**MG90273260**	Price
24 x 8 x 12	60	M	**MG90273265**	Price

Spec. - 94A80-J5V18				
Size (in.)	Grit	Hardness	Order No.	Price
20 x 6 x 12	80	J	**MG90273330**	Price
20 x 8 x 12	80	J	**MG90273335**	Price
24 x 6 x 12	80	J	**MG90273360**	Price
24 x 8 x 12	80	J	**MG90273365**	Price

Spec. - 94A80-M6V18				
Size (in.)	Grit	Hardness	Order No.	Price
20 x 2 x 12	80	M	**MG90273410**	Price
20 x 4 x 12	80	M	**MG90273425**	Price
20 x 6 x 12	80	M	**MG90273430**	Price
20 x 8 x 12	80	M	**MG90273435**	Price
24 x 4 x 12	80	M	**MG90273455**	Price
24 x 6 x 12	80	M	**MG90273460**	Price

Spec. - 94A80-O6V18				
Size (in.)	Grit	Hardness	Order No.	Price
20 x 1 x 12	80	O	**MG90273505**	Price
20 x 2 x 12	80	O	**MG90273510**	Price
20 x 6 x 12	80	O	**MG90273530**	Price
20 x 8 x 12	80	O	**MG90273535**	Price
24 x 2 x 12	80	O	**MG90273540**	Price
24 x 8 x 12	80	O	**MG90273565**	Price

Spec. - 94A80-P6V18				
Size (in.)	Grit	Hardness	Order No.	Price
20 x 1 x 12	80	P	**MG90273605**	Price
20 x 2 x 12	80	P	**MG90273610**	Price
20 x 4 x 12	80	P	**MG90273625**	Price

F.O.B. NILES, IL

Cylindrical Grinding Wheels - 14" & 16" Diameters



- Aluminum oxide
- Vitrified
- Premium quality
- Ideal for most metal applications

Spec. - 94A54-K5TP5V18				
Size (in.)	Grit Size	Hardness	Order No.	Price
14 x 1-1/2 x 5 REC1/S 8 x 1/2	54	K	**MG90173020**	Price
14 x 2 x 5 REC1/S 8 x 1	54	K	**MG90173025**	Price

Spec. - 94A54-K5V18				
Size (in.)	Grit Size	Hardness	Order No.	Price
14 x 1 x 5	54	K	**MG90173015**	Price
16 x 1-1/2 x 8	54	K	**MG90173050**	Price
16 x 2 x 8	54	K	**MG90173055**	Price

Spec. - 94A54-KV18				
Size (in.)	Grit Size	Hardness	Order No.	Price
16 x 1 x 8	54	K	**MG90173045**	Price

Spec. - 94A60-L5V18				
Size (in.)	Grit Size	Hardness	Order No.	Price
16 x 1 x 5	60	L	**MG90173130**	Price
16 x 1-1/2 x 5	60	L	**MG90173135**	Price
16 x 2 x 5	60	L	**MG90173140**	Price
16 x 4 x 10	60	L	**MG90173160**	Price
14 x 1 x 5	60	L	**MG90173115**	Price
14 x 1-1/2 x 5 REC1/S 8 x 1/2	60	L	**MG90173120**	Price
14 x 2 x 5 REC1/S 8 x 1	60	L	**MG90173125**	Price
16 x 1 x 8	60	L	**MG90173145**	Price
16 x 2 x 8	60	L	**MG90173155**	Price

Spec. - 94A80-L6V18				
Size (in.)	Grit Size	Hardness	Order No.	Price
16 x 4 x 10	80	L	**MG90173260**	Price

Spec. - 94A80-M6V18				
Size (in.)	Grit Size	Hardness	Order No.	Price
14 x 1 x 5	80	M	**MG90173315**	Price
14 x 1-1/2 x 5 REC1/S 8 x 1/2	80	M	**MG90173320**	Price
14 x 2 x 5 REC1/S 8 x 1	80	M	**MG90173325**	Price
16 x 1 x 5	80	M	**MG90173330**	Price
16 x 1 x 8	80	M	**MG90173345**	Price
16 x 1-1/2 x 5	80	M	**MG90173335**	Price
16 x 1-1/2 x 8	80	M	**MG90173350**	Price
16 x 2 x 5	80	M	**MG90173340**	Price

F.O.B Niles, IL

Green Silicon Carbide Cylindrical Wheels

- Manufactured with varying hardness to assure consistent grindability throughout - this features compensates for the diameter and speed changes as the wheel is used



Size (in.)	Spec	Order No.	Price
16 x 1-1/2 x 5	GC-80K7-V	**MG9037806**	Price
16 x 1-1/2 x 8	PASP-60K8-VD	**MG9037807**	Price
16 x 2-1/2 x 5	PASP-60K8-VD	**MG9037812**	Price
20 x 3 x 12	WAG-80H8-VD	**MG9037822**	Price
20 x 4 x 12	WAG-80H8-VD	**MG9037823**	Price
24 x 1 x 8	GC-80K7-V	**MG9037825**	Price
24 x 1 x 8	PASP-60K8-VD	**MG9037824**	Price
24 x 2 x 8	GC-80K7-V	**MG9037827**	Price
24 x 2 x 8	PASP-60K8-VD	**MG9037826**	Price
24 x 3 x 8	WAG-80H8-VD	**MG9037828**	Price

Centerless Grinding Regulating Feed Wheels

- Rubber Bonded
- Standard Marking A80R2R



Size (in.)	Recess	Order No.	Price
8 x 4 x 3	R1/S 4-1/2 x 1/2 O/S 4-1/2 x 1-1/2	**MG650840**	Price
9 x 2 x 4	-	**MG650920**	Price
9 x 4 x 4	R2/S 5-1/2 x 5/8	**MG650940**	Price
12 x 1 x 5	-	**MG651210**	Price
12 x 2 x 5	-	**MG651220**	Price
12 x 2-1/2 x 5	-	**MG651225**	Price
12 x 3 x 5	-	**MG651230**	Price
12 x 4 x 5	R2/S 7-1/2 x 1/2	**MG651240**	Price
12 x 6 x 5	R1/S 7-1/2 x 1/2 O/S 7-1/2 x 1-1/2	**MG651261**	Price
12 x 6 x 5	R2/S 7-1/2 x 1-1/2	**MG651262**	Price
12 x 8 x 5	R1/S 7-1/2 x 1-1/2 O/S 7-1/2 x 2-1/2	**MG651281**	Price
12 x 8 x 5	R1/S 7-1/2 x 1-1/2	**MG651280**	Price
14 x 20 x 5 (SB)	R 2/S 8 x 1-1/2	**MG6514200**	Price
14 x 20 x 6 (SB)	R 2/S 8-1/2 x 1-1/2	**MG6514201**	Price

Mattison-Thompson Type Grinding Wheels – 18" & 20" Diameters

Abrasive Types:
- 83A — Friable, full premium aluminum oxide
- 91A — Semi-Friable, mixed aluminum oxide

Vitrified Bond:
- 83A 46 G+ — Friable aluminum oxide with induced porosity



Type - 83A			
Size (in.)	**Grit**	**Order No.**	**Price**
18 x 2 x 8 REC2/S 11-1/2 x 1/2	46I	**MG92182005**	Price
20 x 1 x 8	46H	**MG9221083**	Price
20 x 1 x 8	60J	**MG9221084**	Price
20 x 1-1/2 x 8 REC1/S 11-1/2 x 1/2	46H	**MG9221583**	Price
20 x 1-1/2 x 8 REC1/S 11-1/2 x 1/2	60J	**MG9221584**	Price
20 x 1-1/2 x 10	46 H	**MG9221503**	Price
20 x 2 x 8 REC2/S 11-1/2 x 1/2	36J	**MG9224081**	Price
20 x 2 x 8 REC2/S 11-1/2 x 1/2	46H	**MG9222083**	Price
20 x 2 x 8 REC2/S 11-1/2 x 1/2	60J	**MG9222084**	Price
20 x 2 x 10	36J	**MG9222001**	Price
20 x 2 x 10	46 H	**MG9222003**	Price
20 x 2 x 10	60J	**MG9222004**	Price
20 x 3 x 8 REC2/S 11-1/2 x 1/2	36J	**MG9223081**	Price
20 x 3 x 8 REC2/S 11-1/2 x 1/2	46D	**MG9223086**	Price
20 x 3 x 8 REC2/S 11-1/2 x 1/2	46G	**MG9223082**	Price
20 x 3 x 8 REC2/S 11-1/2 x 1/2	46H	**MG9223083**	Price
20 x 3 x 8 REC2/S 11-1/2 x 1/2	60J	**MG9234048**	Price
20 x 3 x 10 REC1/S 12-1/2 x 5/8 O/S 12-1/2 x 1	36J	**MG9234044**	Price
20 x 3 x 10 REC1/S 12-1/2 x 5/8 O/S 12-1/2 x 1	46D	**MG9223006**	Price
20 x 3 x 10 REC1/S 12-1/2 x 5/8 O/S 12-1/2 x 1	46G	**MG9234046**	Price
20 x 3 x 10 REC1/S 12-1/2 x 5/8 O/S 12-1/2 x 1	46 H	**MG9223003**	Price
20 x 3 x 10 REC1/S 12-1/2 x 5/8 O/S 12-1/2 x 1	60J	**MG9223004**	Price
20 x 4 x 8 REC2/S 11-1/2 x 1/2	46G	**MG9224082**	Price
20 x 4 x 8 REC2/S 11-1/2 x 1/2	46H	**MG9224083**	Price
20 x 4 x 10 REC1/S 12-1/2 x 7/8 O/S 12-1/2 x 1-1/4	36J	**MG9224001**	Price
20 x 4 x 10 REC1/S 12-1/2 x 7/8 O/S 12-1/2 x 1-1/4	46D	**MG9224006**	Price
20 x 4 x 10 REC1/S 12-1/2 x 7/8 O/S 12-1/2 x 1-1/4	46G	**MG9224002**	Price
20 x 4 x 10 REC1/S 12-1/2 x 7/8 O/S 12-1/2 x 1-1/4	46H	**MG9224003**	Price
20 x 6 x 10 REC1/S 12-1/2 x 1 O/S 12-1/2 x 2	36J	**MG9226001**	Price
20 x 6 x 10 REC1/S 12-1/2 x 1 O/S 12-1/2 x 2	46D	**MG9226006**	Price
20 x 6 x 10 REC1/S 12-1/2 x 1 O/S 12-1/2 x 2	46G	**MG9226002**	Price
20 x 6 x 10 REC1/S 12-1/2 x 1 O/S 12-1/2 x 2	46H	**MG9226003**	Price
20 x 6 x 12 REC2/S 14-1/4 x 1	36J	**MG9226021**	Price
20 x 6 x 12 REC2/S 14-1/4 x 1	46G	**MG9226022**	Price
20 x 6 x 12 REC2/S 14-1/4 x 1	46H	**MG9226023**	Price
20 x 8 x 12 REC2/S 14-1/4 x 1	46H	**MG9228023**	Price

Type - 91A			
Size (in.)	**Grit**	**Order No.**	**Price**
18 x 2 x 8 REC2/S 10-1/2 x 1/2	46H	**MG92182083**	Price
20 x 2 x 8 REC2/S 11-1/2 x 1/2	46I	**MG9222085**	Price
20 x 3 x 8	46I	**MG9223085**	Price
20 x 3 x 10 REC1/S 12-1/2 x 5/8 O/S 12-1/2 x 1	46I	**MG9223005**	Price
20 x 4 x 10 REC1/S 12-1/2 x 7/8 O/S 12-1/2 x 1-1/4	46I	**MG9224005**	Price
20 x 6 x 10 REC1/S 12-1/2 x 1 O/S 12-1/2 x 2	46I	**MG9226005**	Price
20 x 6 x 12 REC2/S 14-1/4 x 1	46I	**MG9226025**	Price

Type - AZ			
Size (in.)	**Grit**	**Order No.**	**Price**
20 x 3 x 8 REC2/S 11-1/2 x 1/2	46I	**MG9234034**	Price
20 x 3 x 10 REC1/S 12-1/2 x 5/8 O/S 12-1/2 x 1	46I	**MG9234043**	Price

F.O.B. Niles, IL

Gemini Surface Grinding Segments

- Expanded versatility to meet various application requirements
- Consistent performance at an economical price
- Excellent general purpose abrasive segments for shops grinding a variety of materials
- **Must be ordered in standard pack quantity**



Size (in.)	Special Feature	Spec	Standard Pack	Order No.	Price Ea.
5 x 1-1/2 x 6	Hanchett, Mattason, Norton/ME20579	Gemini 30-E	8	**MH65S0650295**	Price
5 x 1-1/2 x 6	Hanchett, Mattason, Norton/ME20579	Gemini 30-F	8	**MH65S0650297**	Price
5 x 1-1/2 x 6	Hanchett, Mattason, Norton/ME20579	Gemini 30-G	8	**MH65S0650299**	Price
11-1/4 x 2-1/4 x 6	Cortland/ME30777	Gemini 30-E	5	**MH65S0699706**	Price
11-1/4 x 2-1/4 x 6	Cortland/ME30777	Gemini 30-F	5	**MH65S0699709**	Price
11-1/4 x 2-1/4 x 6	Cortland/ME30777	Gemini 30-G	5	**MH65S0699710**	Price
11-1/4 x 2-1/4 x 6	Cortland/ME30777	Gemini 30-H	5	**MH65S0647588**	Price
11-1/4 x 2-1/4 x 6	Cortland/ME30777	Gemini 30-I	5	**MH65S0647589**	Price
11-1/4 x 2-1/4 x 8	Cortland/ME30777	Gemini 30-E	5	**MH65S0899712**	Price
11-1/4 x 2-1/4 x 8	Cortland/ME30777	Gemini 30-F	5	**MH65S0899716**	Price
11-1/4 x 2-1/4 x 8	Cortland/ME30777	Gemini 30-G	5	**MH65S0899717**	Price
11-1/4 x 2-1/4 x 8	Cortland/ME30777	Gemini 30-H	5	**MH65S0847591**	Price
11-1/4 x 2-1/4 x 8	Cortland/ME30777	Gemini 30-I	5	**MH65S0847592**	Price
11-1/4 x 3 x 8	Cortland Bonus Grind/ME100703B	Gemini 30-E	5	**MH65S0899725**	Price
11-1/4 x 3 x 8	Cortland Bonus Grind/ME100703B	Gemini 30-F	5	**MH65S0899727**	Price
11-1/4 x 3 x 8	Cortland Bonus Grind/ME100703B	Gemini 30-G	5	**MH65S0899728**	Price
11-1/4 x 3 x 8	Cortland Bonus Grind/ME100703B	Gemini 30-H	5	**MH65S0847594**	Price
11-1/4 x 3 x 8	Cortland Bonus Grind/ME100703B	Gemini 30-I	5	**MH65S0847595**	Price

Medalist Ceramic Alumina Abrasive Surface Grinding Segments

- Ideal for high stock removal on flat surfaces
- Best for grinding hard materials
- High performance bond, ceramic alumina abrasive - blue color
- Self-sharpening abrasive
- Induced porosity



Size (in.)	Grit Size	Spec.	Standard Pack	Order No.	Price Ea.
11-1/4 x 2-1/4 x 6	30-EVLP	Type CD	5	**MG3707047**	Price
11-1/4 x 2-1/4 x 61	30-GVLP	Type CD	5	**MG3707048**	Price
11-1/4 x x2-1/4 x 6	30-FVLP	Type CD	5	**MG3762907**	Price
5 x 1-1/2 x 6	30-EVLP	Type NO	8	**MG3707043**	Price
5 x 1-1/2 x 6	30-GVLP	Type NO	8	**MG3707044**	Price

Premier Red Aluminum Oxide Abrasive Surface Grinding Segments

- Engineered for high stock removal on flat surfaces
- Performance, aluminum oxide abrasive - pink color
- Premier vitrified bond
- Induced porosity



Size (in.)	Grit Size (in.)	Spec.	Standard Pack	Order No.	Price Ea.
11-1/4 x 2-1/4 x 6	RA24-EV40P	Type CD	5	**MG3762912**	Price
11-1/4 x 2-1/4 x 6	RA30-EV40P	Type CD	5	**MG3762914**	Price
11-1/4 x 2-1/4 x 6	RA30-GV40P	Type CD	5	**MG3762915**	Price
5 x 1-1/2 x 6	RA30-GV40P	Type NO	8	**MG3762911**	Price

Gold Aluminum Oxide Abrasive Surface Grinding Segments

- For high stock removal on flat surfaces
- Aluminum oxide abrasive blend - gray/pink color
- Advanced vitrified bond
- Induced porosity



Size (in.)	Grit Size	Spec.	Standard Pack	Order No.	Price Ea.
11-1/4 x 2-1/4 x 6	Gold 30-E	Type CD	5	**MG3763010**	Price
11-1/4 x 2-1/4 x 6	Gold 30-F	Type CD	5	**MG3762922**	Price
11-1/4 x 3 x 8	Gold 30-F	Type CD	4	**MG3762924**	Price

LAST WORD™ The Original Wheel Dresser - Model A by Suburban

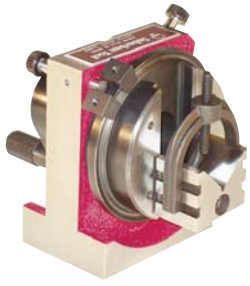


The Last Word in Angle Tangent to Radius Wheel Dressing

- Original Last Word™ dresser works equally well on surface, OD & ID grinders. On OD & ID grinders it is simply clamped vertically on an angle plate.
- Reduces set-up dressing time to a minimum
- Wheel dressing is performed with wheel guard in place for operator safety
- All actuation knobs are at the back of dresser, keeping operator's hands at a safe distance
- Direct setting together with high precision lapped parts makes accurate dressing very simple

Range Convex Radii (in.)	Range Concave Radii (in.)	Tangent Travel (in.)	Centerline Height (in.)	Max. Wheel Size (in.)	Order No.	Price
0 to 2-1/4	0 to 4	1-7/8	3.4	8	**NJ50LWDA**	Price

Suburban Punch Master Grinding Fixture



- 48 Position index plate (for hard index every 7-1/2°)
- Built in sine bar for setting angles between hard index locations
- Spindle runs in two preloaded and sealed ball bearings
- Extra large 1-5/8″ V-block capacity
- Square and parallel within .0002″
- Maximum spindle runout ±.0001″
- Fitted wooden case

Order No.	Price
NJ50PMV2	Price

Duplex Radius Dresser Dress and Thin Both Sides of a Grinding Wheel



- .001 Micrometer adjustment
- 2 Bushings for 1/4″ shank dresser
- Hex key
- Accepts both 1/4″ shank and 3/8″ shank dresser (NOT included)

Specifications:

- Maximum width of wheel: 40mm (1-9/16″)
- Maximum dressing depth: 40mm (1-9/16″)
- Minimum dressing width: .2mm (0.0079″)
- Graduation .02mm: (0.0001″)
- Weight: 5.2kg (11.5 lbs)

Order No.	Price
NP55SDDF30	Price

Punch Former & Radius Dresser

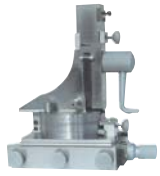


- Use for concave and convex radius
- Hardened tool steel construction
- Radius Dresser standard
- With oscillating Vee Block for tangent dressing
- Complete fitted case

Center Height	Indexing Div.	Tangential Travel Either Side Of Center	Dia. Workpiece of V-Block	V-Block Adjusting System	Max. Size Grinding Wheel	Max. Outside Radius (on wheel)	Max. Inside Radius (on wheel)	Dimension	Order No.	Price
3-1/2 (80mm)	24 every 15°± 10 sec	25/32 (19.8mm)	0.16-1.18 (4-30mm)	Rack and Pinion	200 mm (8")	1.89 (48mm)	3.9 (100mm)	14.2 x 4.6 x 5.7 (360 x 116 x 145mm)	**NP55MCL450**	Price

Universal Wheel Dresser

- Works on surface grinder and universal tool grinder to dress grinding wheels into various cross sections of flat or curved shapes

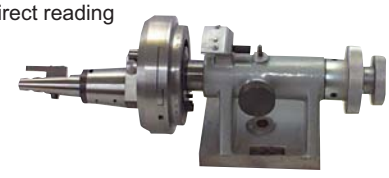


Center Height (in.)	Measuring Quasi-Pin Dia.	Max. Swing Distance of Diamond	Max. Wheel Dia.	Max. Translation of Feed	Feed Per Division of Handle Scale	Weight	Order No.	Price
165mm (6-2/5")	10mm (0.4")	±20mm (±0.8")	200 mm (8")	20mm (0.8")	.02mm	5kg	**NP55NRD4**	Price

NATIONAL Radius Dresser

For Up to 10" Diameter Wheels

- .0005″ Accuracy
- No height gage or set-ups required
- Radius is set on the grinder by measuring over the two pins or by inserting a gage block for direct reading
- Uses 3/8″ shank diamond



Max. Wheel Dia. (in.)	Convex Radii Range (in.)	Concave Radii Range (in.)	Tangent Travel (in.)	Centerline of Tool	Order No.	Price
Up to 10"	0 to 1-5/8	0 to 4	2	3.4	**NP55NRD2**	Price

NORTON Pacesetter Brake Controlled Truing Device

- Ideal for light duty use
- Pre-set speed requires no adjusting
- Includes (1) 3" vitrified wheel





Description (in.)	Order No.	Price
Truing Device with (1) 3 x 1 x 1/2 Wheel	**MH63BT335578**	Price
3 x 1 x 1/2 37C60-MVK Replacement Wheel	**MH60030029166**	Price
3 x 1 x 1/2 37C80-HVK Replacement Wheel	**MH60030029170**	Price
3 x 1 x 1/2 37C80-MVK Replacement Wheel	**MH60030029171**	Price
3 x 1 x 1/2 38A60-M8VBE Replacement Wheel	**MH60030029145**	Price

Hi-Lo Adjustable Dressers

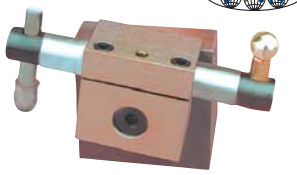
- For all grinding machines
- Dress OD and Face
- Adjustable to 7″ height
- Dress any height
- Rugged construction



Order No.	Price
NE60HL200DM	Price

Lo-Boy Angle Dresser

- Heavy precision ground base plate
- Square on all six sides to .0002″
- Slide block pivots on hardened shoulder screws
- Diamond dresser included



Order No.	Price
NP55LB01	Price

Geiger Wheel Dresser

and Replacement Diamond Tip

- Accommodates most any bench or pedestal type grinder
- Complete with an extremely hard 1/2” carat industrial diamond tip



Description	Order No.	Price
Geiger Wheel Dresser	**MN607575**	Price
Replacement Diamond Tip	**MN6075B**	Price

Magnetic Diamond Dresser

For Dressing Grinding Wheels on Surface Grinders, Lathes and Jig Grinders

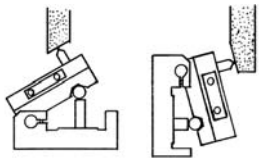
- Diamond NOT Included
- No clamping required
- Permanent magnets allow use on high angle plate or sine plate set-ups
- Quick positive hold with instant release button

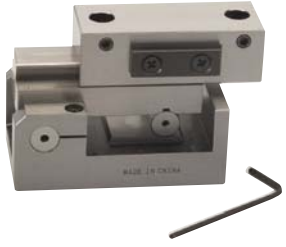


Description	Order No.	Price
Magnetic Wheel Dresser	**MN50MDD1**	Price
Diamond Dresser Only	**MN45ED025A**	Price

Sine Dresser — MATCO Type

- Ultra precision unit dresses grinding wheels to any angle from 0-60° with smoothness and accuracy
- Dimensions: 3-1/2”L x 2”W x 2-1/2”H
- Center Distance: 50mm (2”)
- Accuracy: .01mm (.0004”)





Order No.	Price
NP55AP50	Price

DESMOND®

Diamond Nib Holder

Model DH-15

- Designed for use on surface grinders
- Holds nibs at 15° angle
- Base size 2-1/2″ x 6″
- Attaches to magnetic grinder table
- Sold without diamond dressing tool



Description	Order No.	Price
Diamond Nib Holder	**LG5046500**	Price
1/4 Ct. Diamond Nib - 7/16 x 3"	**MN45ED025B**	Price

Optical Radius Dresser

NIB holders accept 1/8 SK (MN50P01) or 1/4 SK (MN50P02) Diamond NIB.

- Fixed focus lens (3X)
- Wheel form grinding done easily and accurately
- Radius and angle can be done perfectly tangent
- Reduces the chances of using damaged diamonds
- Gage block setting
- Compact design

Specifications:

- Maximum wheel diameter: 8”
- Convex radii: 1/2”
- Concave radii: 1”
- Dressing angle: 90° - 0° - ° (1° INC)
- Tangential Travel: 0.89” (Either side of center)
- Center Height: 2.5”



Dimensions:

- Mounting surface 3.27 x 1.87”
- Overall length: 8.39”
- Overall height: 3.94”
- Center height: 2.5”
- Weight: 7.7 lbs

Order No.	Price
NP55SD1	Price

Diamond NIB not included

SURF PRO®

Brake Controlled Truing Device

For Diamond and CBN Wheels

- Designed for truing diamond and CBN wheels rapidly and with minimum loss of diamond
- Ideal for straight wheels with diamond in the periphery, cut-off wheels, internal grinding wheels and cup wheels with diamond in the rim



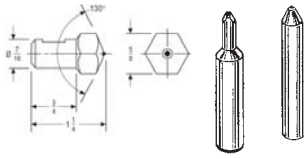
- Easy to operate
- Rotate the truing wheel and make contact with diamond/CBN wheel
- Oscillate the unit and truing wheel across face of wheel being trued using machine cross-slide

Specification	Order No.	Price
Model DT100 Turing Device	**NP55DT100**	Price
Replacement Wheel for Model DT100	**MG753100**	Price

General Purpose Diamond Dressing Tools

Single Point Tools For Truing/Dressing Conventional Abrasives
Features:

- Consistent diamond structure and shape for repeatable dressing performance
- Well defined diamond point



Non-resettable BC Single and Phono Point Tools:

- The best selection when a resetting program is not feasible or low initial cost is the primary consideration

Non-resettable BC Indexable single Point Tools:

- These tools contain specially selected diamonds for durability and maximum cost effectiveness

Specialty Diamond Tools Concave Radii:

- This type of dressing is generally done in toolrooms using dressing mechanisms to form an exact concave or convex radius. Non-resettable



Type - Single Point Diamond Nibs						
Tool No.	Carat Weight (in.)	Shank Dia. (in.)	Shank Length (in.)	For Wheel Dia.	Order No.	Price
BC-2	1/4	3/8	2	Up to 7"	**MH63BC95000**	Price
BC-2	1/4	7/16	2	Up to 7"	**MH63BC95001**	Price
BC-3	1/3	3/8	2	8 to 10"	**MH63BC95002**	Price
BC-3	1/3	7/16	2	8 to 10"	**MH63BC95003**	Price
BC-5	1/2	3/8	2	11 to 14"	**MH63BC95004**	Price
BC-5	1/2	7/16	2	11 to 14"	**MH63BC95005**	Price
BC-7	3/4	3/8	2	15 to 21"	**MH63BC95006**	Price
BC-7	3/4	7/16	2	15 to 21"	**MH63BC95007**	Price
BC-10	1	3/8	2	21" and up	**MH63BC1095008**	Price
BC-10	1	7/16	2	21" and up	**MH63BC1095009**	Price

Type - U-Dex-It Diamond Nib						
Tool No.	Carat Weight (in.)	Shank Dia. (in.)	Shank Length (in.)	For Wheel Dia.	Order No.	Price
BCUD5	1/2	7/16	3/4	11 to 14"	**MH63BCUD95025**	Price

Phono Point Nib BCHD



Tool No.	Description	Order No.	Price
BCHD	10-1/2 long, hollow shaft, for off hand turning/dressing using any tool with shank length from 3/4-9". Collet chuck accepts only 7/16" dia. tool shank.	**MH63BCHD95020**	Price

Phono & Radius Point Nibs



Type - Phono Point Diamond Nibs						
Tool No.	Included Angle	Shank Dia. (in.)	Shank Length (in.)	For Wheel Dia.	Order No.	Price
BCPP-60	60	1/8	1	Up to 7"	**MH63BCPP6095017**	Price
BCPP-75	75	1/8	1	Up to 7"	**MH63BCPP7595018**	Price
BCPP-90	90	1/8	1	Up to 7"	**MH63BCPP9095019**	Price

Type - Radius Point Tool Nibs Concave Radii						
Tool No.	Included Angle	Shank Dia. (in.)	Shank Length (in.)	For Wheel Dia.	Order No.	Price
BCRD	60	3/8	2	Up to 7"	**MH63BCRD95016**	Price

SG Multi-Point Diamond Tools



- These diamonds are selected to withstand faster traverse rates and stand up to the tough SG abrasive

Shank Dia. (in.)	Shank Length (in.)	Diamond Description (in.)	Included Angle	Shape	Order No.	Price
7/16	1-13/16	3/8 Dia. x 1/4L	0	2R	**MH63SG1A95378**	Price
7/16	1-3/16	1/4 Dia. x 1/4L	0	1R	**MH63SG1A95377**	Price
7/16	3/4	1/4 x 1/2 x 3/8	0	2A	**MH63SG1A95375**	Price
7/16	3/4	1/4 x 3/4 x 5/16	0	1A	**MH63SG1A95373**	Price
7/16	3/4	1/4 x 3/4 x 5/16	15	1A	**MH63SG1A95374**	Price

SG Single Point Diamond Tools

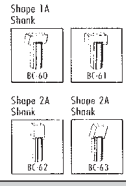


Type - BCSG Disposable Single Point Diamond Tools				
Shank Dia. (in.)	Shank Length (in.)	Carat	Order No.	Price
3/8	2	1/2	**MH63BCSG557009**	Price
3/8	2	1/3	**MH63BCSG357008**	Price
3/8	2	1/4	**MH63BCSG257007**	Price
7/16	2	1	**MH63BCSG1057010**	Price
7/16	2	1/2	**MH63BCSG556907**	Price
7/16	2	1/3	**MH63BCSG356906**	Price
7/16	2	1/4	**MH63BCSG256905**	Price
7/16	2	3/4	**MH63BCSG756908**	Price

Type - SG Resettable Single Point Diamond Tools				
Shank Dia. (in.)	Shank Length (in.)	Carat	Order No.	Price
3/8	2	1/2	**MH63SG595369**	Price
3/8	2	1/3	**MH63SG395367**	Price
3/8	2	1/4	**MH63SG295365**	Price
3/8	2	3/4	**MH63SG795371**	Price
7/16	2	1/2	**MH63SG595370**	Price
7/16	2	1/3	**MH63SG395368**	Price
7/16	2	1/4	**MH63SG295366**	Price
7/16	2	3/4	**MH63SG795372**	Price

Multi-Point Nibs





Tool No.	Diamond Size (in.)	Diamond Shape	Shank Dia. (in.)	Shank Length (in.)	For Wheel Dia.	Order No.	Price
BC-60	1/4 T x 3/4 W	1A	7/16	3/4	21" and up	**MH63BC6095010**	Price
BC-61	1/4 T x 3/4 W	1A	7/16	7/8	21" and up	**MH63BC6195011**	Price
BC-62	1/4 T x 1/2 W	2A	7/16	7/8	15 to 20"	**MH63BC6295012**	Price
BC-63	1/4 T x 1/2 W	2A	7/16	3/4	15 to 20"	**MH63BC6395013**	Price

Multi-Point Nib for Straight Face Dressing and Trueing

- 101 Style - Centerless, Cylindrical and Surface Grinders. For ginding wheels 20" x 3" and larger. Straight traverse trueing
- 112 Style - Centerless, Cylindrical and Surface Grinders. For grinding wheels 12" x over 1" to 20" x 2-1/2". Straight traverse trueing
- 171 Style - For general tool room applications





Shk Dia. x Lgth (in.)	Order No.	Price
7/16 x 3/4	**MN50112AE**	Price
7/16 x 15/16	**MN50101AC**	Price
7/16 x 15/16	**MN50101A1**	Price
7/16 x 1-3/16	**MN50171RJ**	Price
7/16 x 1-3/16	**MN50171RK**	Price
7/16 x 1-1/4	**MN50112AD**	Price

SURF PRO® Economy Diamond Wheel Dressers



	3/8 x 3		7/16 x 3	
Carat Wt. (in.)	Order No.	Price	Order No.	Price
1/4	MN45ED025A	Price	MN45ED025B	Price
1/2	MN45ED050A	Price	MN45ED050B	Price
1	MN45ED100A	Price	MN45ED100B	Price
2	MN45ED200A	Price	MN45ED200B	Price
1-1/2	MN45ED150A	Price	MN45ED150B	Price

SURF PRO® Single Point Toolroom Diamond Dressers

Single Point Diamond Dressers



- For Surface Grinders
- Equal to Diamonds costing twice the price
- 7/16" Shank size shown in chart

	Generic USA		Quality Import	
Carat Wt. (in.)	Order No.	Price	Order No.	Price
1/4	MN50TD025P7†	Price	MN45TD0257†	Price
1/3	MN50TD033P7†	Price	MN45TD0337†	Price
1/2	MN50TD050P7†	Price	MN45TD0507†	Price
3/4	MN50TD075P7†	Price	MN45TD0757†	Price
1	MN50TD100P7†	Price	MN45TD1007†	Price
2	MN50TD200P7†	Price	MN45TD2007†	Price
3	MN50TD300P7†	Price	MN45TD3007†	Price
4	MN50TD400P7†	Price	MN45TD4007†	Price
5	MN50TD500P7†	Price	MN45TD5007†	Price
1-1/2	MN50TD150P7†	Price	MN45TD1507†	Price
2-1/2	MN50TD250P7†	Price	MN45TD2507†	Price

† Specify Shank Size: For 3/8" change last digit to (6), for 1/2" change to (8). all 6" Long

SURF PRO® Diamond Dressers with Knurled Body

1/2" dia. x 8" Long



- Equal to Diamonds costing twice the price

Carat Wt. (in.)	Order No.	Price
1/4	MN45KBD025	Price
1/2	MN45KBD050	Price
3/4	MN45KBD075	Price
1	MN45KBD100	Price

Carat Wt. (in.)	Order No.	Price
2	MN45KBD200	Price
3	MN45KBD300	Price
1-1/2	MN45KBD150	Price

Special Diamond Dressers

Premium Quality Diamond



Large Norton Type:
- Shank - 7/16" x 1-1/2"
- Head - 5/8" x 5/8"

Cincinnati Type:
- Shank - 7/16" x 2"
- Head - 5/8" x 5/8"

	Cincinnati		Norton	
Carat Wt. (in.)	Order No.	Price	Order No.	Price
1/4	MN50C025	Price	MN50N025	Price
1/3	MN50C033	Price	MN50N033	Price
1/2	MN50C050	Price	MN50N050	Price
3/4	MN50C075	Price	MN50N075	Price
1	MN50C100	Price	MN50N100	Price
2	MN50C200	Price	MN50N200	Price
3	MN50C300	Price	MN50N300	Price
1-1/2	MN50C150	Price	MN50N150	Price
3-1/2	MN50C350	Price	MN50N350	Price

Natural & Lapped Chisels For Your Radius Dresses



	Lapped		Natural	
Size (in.)	Order No.	Price	Order No.	Price
3/8 x 2-1/2	MN50LC01	Price	MN50NC01	Price
7/16 x 2-1/2	MN50LC02	Price	MN50NC02	Price

Radius Forming Diamond Tools

3/8 x 2" Shanks Convex Radii



Type - Convex Radii Diamond Tool		
Radius (in.)	Order No.	Price
.020-.125	MN50MR2	Price
.025-.250	MN50MR4	Price
.250 and up	MN50MR6	Price

Type - Radius Forming Diamond Tools		
Radius (in.)	Order No.	Price
.010	MN50FR10	Price
.015	MN50FR15	Price
.020	MN50FR20	Price
.025	MN50FR25	Price
.032	MN50FR32	Price
.062	MN50FR62	Price

Coned Wheel Dressers

90° Standard Angle



- 7/16" Shank shown in chart
- For 3/8" Shank change last digit in part number to (6)

Carat Wt. (in.)	Order No.	Price
1/4	MN50CWD0257	Price
1/3	MN50CWD0337	Price
1/2	MN50CWD0507	Price

Ball Point Plunge Dressers

- Std. Tolerance ±.001
- **Shank size 3/8" x 3"**



Radius (in.)	Order No.	Price
.010	MN50307010	Price
.015	MN50307015	Price
.020	MN50307020	Price
.025	MN50307025	Price
.031	MN50307031	Price
.062	MN50307062	Price

See index for other dressing tools.

Phono Points

90° Standard Angle



Size (in.)	Order No.	Price
1/8 x 1	MN50P01	Price
1/4 x 1-1/2	MN50P02	Price

Thread-Grinding Diamond Tools

60° Standard Angle



Size (in.)	Order No.	Price
1/4 x 1	MN50TG0160	Price
1/4 x 1-1/4	MN50TG0260	Price
1/4 x 1-1/2	MN50TG0360	Price
3/8 x 1-5/8	MN50TG0460	Price

Standard & Special Diamond Dressers Not Shown Quickly Supplied.

Cluster Tools



- 7/16" Shank shown in chart
- For 3/8" Shank change last digit of part number to (6), for 1/2" change to (8)

Carat Wt. (in.)	Order No.	Price
1	MN50CT1007	Price
2	MN50CT2007	Price

Aluminum Oxide Dressing Sticks – Square



Features:
- The best choice for achieving maximum performance from your diamond and CBN wheels
- Selected sticks are used for tuning and dressing vitrified wheels

Aluminum Oxide – (white)

Features:
- Designed for dressing CBN wheels, these sticks also work well for diamond wheels

Width (in.)	Thickness (in.)	Length (in.)	Specifications	Standard Pack	Order No.	Price
1/2	1/2	4	38A220-HVBE	10	**MH64T5410555**	Price
1/2	1/2	6	38A220-HVBE	10	**MH64T5410103**	Price
3/4	3/4	4	38A150-HVBE	10	**MH64T5410291**	Price
3/4	3/4	4	38A150-IVBE	10	**MH64T5410368**	Price
3/4	3/4	4	38A220-HVBE	10	**MH64T5410290**	Price
3/4	3/4	4	38A60-LVBE	10	**MH64T5410440**	Price
3/4	3/4	4	38A80-MVBE	10	**MH64T5410362**	Price
3/4	3/4	8	38A220-HVBE	10	**MH64T5410280**	Price
1	1	6	38A150-HVBE	10	**MH64T5410405**	Price
1	1	6	38A150-IVBE	10	**MH64T5410453**	Price
1	1	6	38A220-HVBE	10	**MH64T5410406**	Price
1	1	8	38A120-IVBE	10	**MH64T5410390**	Price
1	1	8	38A150-IVBE	10	**MH64T5410455**	Price

Silicon Carbide Dressing Sticks – Square & Round

Features:
- Course grit (24 and coarser) and hand-grade (Rand harder) sticks used for dressing conventional vitrified wheels for bench and pedestal offhand grinders
- Finer grit and softer grades are used for dressing diamond wheels
- Color: black





Type - Round Wheel Dressing Stick					
Width (in.)	Length (in.)	Specifications	Standard Pack	Order No.	Price
1/2	6	37C24-SVK	10	**MH64T5410371**	Price

Type - Square Wheel Dressing Stick					
Width (in.)	Length (in.)	Specifications	Standard Pack	Order No.	Price
1/2	6	37C100-LV	10	**MH64T5410201**	Price
1/2	6	37C150-KV	10	**MH64T5410205**	Price
1/2	6	37C150-LV	10	**MH64T5410206**	Price
1/2	6	37C150-MV	10	**MH64T5410207**	Price
1/2	6	37C220-KV	10	**MH64T5410214**	Price
1/2	6	37C24-SVK	10	**MH64T5410285**	Price
3/4	6	37C150-LV	10	**MH64T5410375**	Price
1	6	37C150-KV	10	**MH64T5410438**	Price
1	6	37C20-SVK	10	**MH64T5410459**	Price
1	6	37C220-KV	10	**MH64T5410398**	Price
1	6	37C24-SVK	10	**MH64T5410462**	Price
1	6	37C24-TVK	10	**MH64T5410354**	Price
1	6	37C46-RVK	10	**MH64T5410466**	Price
1	6	37C80-NV	10	**MH64T5410393**	Price
1	8	37C20-SVK	10	**MH64T5410469**	Price
1	8	37C24-SVK	10	**MH64T5410471**	Price
2	8	37C16-TVK	10	**MH64T5410482**	Price
2	8	37C24-SVK	10	**MH64T5410490**	Price
2	8	37C24-TVK	10	**MH64T5410485**	Price

Boron Carbide Dressing Stick

- Molded without bond from Boron carbide
- These sticks are recommended for dressing tool grinding wheels up to 10 inch diameter, grade M or softer
- Boron carbide provides a long lasting dressing tool



Thickness (in.)	Width (in.)	Length (in.)	Order No.	Price
3/16	1/2	3	**MJ55BC1**	Price

Norbide Carbide Stick

Norbide – The hardest stick

Features:
- Made from boron nitride, these sticks work best for offhand truing and dressing of medium grit, medium and soft-grade vitrified grinding wheels



Thickness (in.)	Width (in.)	Length (in.)	Material	Order No.	Price
3/16	1/2	3	Norbide Stick	**MH64T5410148**	Price

Wheel Dresser Sticks

- The most rapid, economical way to dress grinding wheel faces or profiles
- Premium Grit & Bond



Width (in.)	Thickness (in.)	Length (in.)	Order No.	Price
1	1	6	**MJ55116**	Price
1	1	8	**MJ55118**	Price

Abrasive Wheel Dresser

Dressing Sticks for Wheel Dressing Needs

Type - Abrasive Wheel Dressers				
Description	Abrasive Type	Size (in.)	Order No.	Price
Dresser Holder with Dressing Stick	Aluminum Oxide	6 x 1/2 Round	**ML6555**	Price
Replacement Tip for 55 Dresser	Aluminum Oxide	6 x 1/2 Round	**ML6556**	Price

Type - Diamond & CBN Wheel Dressers				
Description	Abrasive Type	Size (in.)	Order No.	Price
Dressing & Truing Stick	Aluminum Oxide	4 x 3/4 x 3/4	**ML65349**	Price
Dressing & Truing Stick	Silicon Carbide	4 x 3/4 x 3/4	**ML65366**	Price

Type - Dressing & Truing Stick for Diamond & CBN Wheels				
Description	Abrasive Type	Size (in.)	Order No.	Price
Dressing & Truing Stick	Aluminum Oxide	3/8 x 3/8 x 4	**ML65AA438**	Price

DESMOND® Huntington Pattern Hooded Grinding Wheel Dressers

- For fast dressing on all types of grinding wheels
- Designed for dressing, truing, sharpening, and removing glaze from solid abrasive wheels
- Cutters have star-shaped teeth that expose new grains and provide a fresh unloaded surface on wheels
- Made of hardened high carbon steel
- Fulfill most general dressing needs where fast dressing is the primary requirement



Wheel Dia. (in.)	Face Width (in.)	Weight (lbs.)	Order No.	Price
Up to 10"	2	2	**LG500**	Price
10 to 16"	3	2-1/2	**LG501**	Price
16 to 36"	3-1/2	5-1/2	**LG502**	Price

DESMOND® Heavy Duty Dressers

- For use on coarse, large, high speed grinding wheels
- New design permits quick cutter change by operator
- Full length foot rest guides dresser evenly over rough edged tool rests
- Cutter unit is fully shielded
- Cutters mounted at an angle to provide a shearing and picking action on the Order No. LG50-58 dresser
- Both cutter units revolve on sealed, dust protected ball bearings enabling them to keep up with high speed wheels





Wheel Size	Type	Order No.	Price
16 to 30"	Heavy Duty Wheel Dresser	**LG5058**	Price
Up to 16"	Heavy Duty Wheel Dresser	**LG5055**	Price
16 to 30"	Heavy Duty Wheel Dresser Replacement Cutter Set	**LG5058X**	Price
Up to 16"	Huntington Dresser Replacement Cutter Set	**LG5055X**	Price

DESMOND® Desmond MP

- Mounted Points can be restored to their original shape or changed in seconds while removing the grinding load with the MP Dresser



Description	Order No.	Price
Complete Unit	**LG50MP**	Price
Set Extra Cutters	**LG50MPX**	Price

DESMOND® Desmond Duplex

- For portable grinders–restores surface of straight-faced wheels from 4″ to 8″ in diameter
- Bolt dresser to your work bench, cradle the revolving wheel between the two cutter heads, and in moments the worn wheel face is clean, sharp, straight and true



Description	Order No.	Price
Complete Unit	**LG50DD**	Price
Sets Extra Cutter (2 Units)	**LG50DDX**	Price

DESMOND® Desmond Snagging Cup Wheel Dressers

- Ideal for squaring cups to original straight face
- Restores cutting action of wheel
- Can be mounted near grinding area
- Available in regular and heavy-duty size cutters



Description	Order No.	Price
Heavy Duty Size	**LG5018310**	Price
Regular Size	**LG5018210**	Price
Replacement Cutters	**LG5018220**	Price
HD Replacement Cutters	**LG5018320**	Price

DESMOND® Ball Bearing Grinding Wheel Dressers

- For precision dressing where extremely accurate finish is required
- May reduce or eliminate need for diamond dressing

Surface Grinder:

- For surface grinders and tables of vertical spindle grinders
- Head is attached to 5” x 3” steel plate





Type	Order No.	Price
Complete cutter unit with 3/4" Shank	**LG50BB1**	Price
Extra cutter unit	**LG50BB10**	Price
Individual loose cutter	**LG50BB14**	Price
Straight shank — For cylindrical, roll, and vertical spindle grinders. Straight shank is 3/4″ diameter x 2-3/4″ long	**LG50BB4**	Price

DESMOND® Extra Cutter Sets for Huntington Dressers



Dia. (in.)	Face Width (in.)	Weight (lbs.)	Order No.	Price
1-1/4	.426	1	**LG500X**	Price
1-1/2	.432	1-1/4	**LG501X**	Price
2-3/8	.830	6-1/2	**LG502X**	Price

DESMOND® Mini Crackerjack Dresser

- Provides a smooth surface on fine to medium grit grinding wheels up to 6″ in diameter



Type	Order No.	Price
Mini Crackerjack Wheel Dresser	**LG5025510**	Price
Mini Crackerjack Wheel Dresser Replacement Cutter Set	**LG5025520**	Price

DESMOND® Diamond Nib Holder

- Holder securely holds any 7/16″ diameter diamond nib
- Hollow steel tube with an adjustable collet holds single or grit diamond nibs
- Precision machine nibs can be further recycled and used
- Diamond nib not included

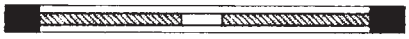


Order No.	Price
LG5022510	Price

Diamond and CBN Toolroom Grinding Wheels

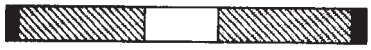


- "99" line of quality stock diamond and CBN grinding wheels are pre-engineered for optimal performance
- Can be used wet or dry on most tool making or resharpening applications



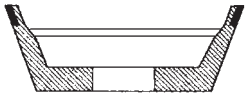
Type - Diamond Cut-Off Wheel (Type 1A1R)

Dia. (in.)	Width (in.)	Hole Size (in.)	Depth (in.)	Spec.	Order No.	Price
4	1/32	1-1/4	1/4	SD100S-R100 B99-1/4	**MH63W0492152**	Price
4	1/32	3/4	1/4	SD100S-R100 B99-1/4	**MH63W0492151**	Price
4	1/32	3/4	1/4	SD120S-R100 B99-1/4	**MH63W0491706**	Price
6	.035	1-1/4	1/4	ASD100S-R100 B99-1/4	**MH63W0692158**	Price
6	.035	1-1/4	1/4	SD 180-R100 B99-1/16	**MH63W0691858**	Price
6	.035	1-1/4	1/4	SD100-R75 B99-1/4	**MH63W0692155**	Price
6	.035	1-1/4	1/4	SD100S-R100 B99-1/4	**MH63W0692156**	Price
6	.035	1-1/4	1/4	SD120-R75 B99-1/4	**MH63W0691707**	Price
6	.035	1-1/4	1/4	SD220-R100 B99-1/4	**MH63W0692157**	Price
6	.035	1-1/4	9/32	ASD100SR100 B99-9/32	**MH63W0692164**	Price
6	.035	1-1/4	9/32	SD120-R100 B99-9/32	**MH63W0692161**	Price
6	.045	1-1/4	1/8	SD100-R50 B99-1/8	**MH63W0692166**	Price
6	1/32	1-1/4	1/8	SD220-R100 B99-1/8	**MH63W0692154**	Price
8	.045	1-1/4	1/4	SD120-R100 B99-1/4	**MH63W0892169**	Price
8	.045	5/8	1/4	SD120-R100 B99-1/4	**MH63W0892167**	Price



Type - Diamond Straight Wheel (Type 1A1)

Dia. (in.)	Width (in.)	Hole Size (in.)	Depth (in.)	Spec.	Order No.	Price
4	1/16	1-1/4	1/8	SD220-R100 B99-1/8	**MH63W0473586**	Price
4	1/4	1-1/4	1/8	SD150-R100 B99-1/8	**MH63W0473589**	Price
4	1/4	3/4	1/4	SD150-R100 B99-1/4	**MH63W0473592**	Price
4	1/8	1-1/4	1/8	SD150-R100 B99-1/8	**MH63W0491677**	Price
6	1/16	1-1/4	1/8	SD100-R100 B99-1/8	**MH63W0673596**	Price
6	1/16	1-1/4	1/8	SD150-R100 B99-1/8	**MH63W0673597**	Price
6	1/2	1-1/4	1/8	SD150-R100 B99-1/8	**MH63W0691699**	Price
6	1/4	1-1/4	1/8	ASD120-R75 B99-1/8	**MH63W0691689**	Price
6	1/4	1-1/4	1/8	SD120-R100 B99-1/8	**MH63W0691691**	Price
6	1/4	1-1/4	1/8	SD150-R100 B99-1/8	**MH63W0691692**	Price
6	1/4	1-1/4	1/8	SD180-R100 B99-1/8	**MH63W0691693**	Price
6	1/4	1-1/4	1/8	SD220-R100 B99-1/8	**MH63W0691694**	Price
6	1/8	1-1/4	1/8	SD180-R100 B99-1/8	**MH63W0673614**	Price
7	1/2	1-1/4	1/8	ASD100-R75 B99-1/8	**MH63W0792211**	Price
7	1/2	1-1/4	1/8	ASD150-R75 B99-1/8	**MH63W0791853**	Price
7	1/2	1-1/4	1/8	SD180-R100 B99-1/8	**MH63W0791856**	Price
7	1/2	1-1/4	1/8	SD220-R100 B99-1/8	**MH63W0791857**	Price
7	1/4	1-1/4	1/8	ASD150-R75 B99-1/8	**MH63W0791701**	Price
7	1/4	1-1/4	1/8	SD100S-R100 B99-1/8	**MH63W0792210**	Price
7	1/4	1-1/4	1/8	SD220-R100 B99-1/8	**MH63W0791705**	Price
7	3/8	1-1/4	1/8	SD120-R100 B99-1/8	**MH63W0791849**	Price
7	3/8	1-1/4	1/8	SD220-R100 B99-1/8	**MH63W0791852**	Price
10	.050	1-1/4	1/4	CD100-R100 B99-1/4	**MH63W1092815**	Price
10	1/2	3	1/8	ASD120-R75 B99-1/8	**MH63W1092305**	Price

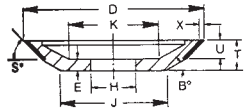


Type - Diamond Flaring Cup Wheel (Type 11V9)

Dia. (in.)	Width (in.)	Hole Size (in.)	Depth (in.)	Spec.	Order No.	Price
3-3/4	1-1/2	1-1/4	1/16	ASD 150-R75 B99-1/16	**MH63W0391725**	Price
3-3/4	1-1/2	1-1/4	1/8	ASD 100-R75 B99-1/8	**MH63W0391653**	Price
3-3/4	1-1/2	1-1/4	1/8	ASD 120-R75 B105-1/8	**MH63W0391909**	Price
3-3/4	1-1/2	1-1/4	1/8	ASD 120-R75 B99-1/8	**MH63W0391660**	Price
3-3/4	1-1/2	1-1/4	1/8	ASD 150-R75 B99-1/8	**MH63W0391651**	Price
3-3/4	1-1/2	1-1/4	1/8	ASD 180-R75 B99-1/8	**MH63W0391650**	Price
3-3/4	1-1/2	1-1/4	1/8	SD220-R100 B99-1/8	**MH63W0391646**	Price
5	1-3/4	1-1/4	1/16	ASD 120-R75 B99-1/16	**MH63W0591644**	Price
5	1-3/4	1-1/4	1/16	SD 180-R100 B99-1/16	**MH63W0591639**	Price

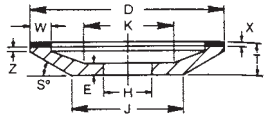
Type - Diamond Flaring Cup Wheel (Type 11V9)

Dia. (in.)	Width (in.)	Hole Size (in.)	Depth (in.)	Spec.	Order No.	Price
5	1-3/4	1-1/4	1/8	ASD 120-R75 B99-1/8	**MH63W0591636**	Price
5	1-3/4	1-1/4	1/8	ASD 150-R75 B105-1/8	**MH63W0591918**	Price
5	1-3/4	1-1/4	1/8	ASD 150-R75 B99-1/8	**MH63W0591635**	Price
5	1-3/4	1-1/4	1/8	ASD 180-R75 B99-1/8	**MH63W0591634**	Price
5	1-3/4	1-1/4	1/8	SD 150-R100 B99-1/8	**MH63W0591632**	Price



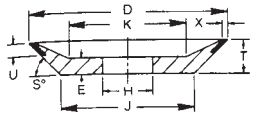
Type - CBN Flaring Cup Wheel (Type 11V9)

Dia. (in.)	Width (in.)	Hole Size (in.)	Depth (in.)	Spec.	Order No.	Price
3-3/4	1-1/2	1-1/4	1/16	CB100-TB99-1/16	**MH63W0391719**	Price
3-3/4	1-1/2	1-1/4	1/8	CB100-TB99-1/8	**MH63W0391722**	Price
3-3/4	1-1/2	1-1/4	1/8	CB150-TB99-1/8	**MH63W0391724**	Price
5	1-3/4	1-1/4	1/16	CB150-TB99-1/16	**MH63W0592300**	Price



Type - Diamond Dish Wheel (Type 12A2)

Dia. (in.)	Width (in.)	Hole Size (in.)	Depth (in.)	Spec.	Order No.	Price
6	1	1-1/4	1/8	ASD120-R75 B99-1/8	**MH63W0691630**	Price



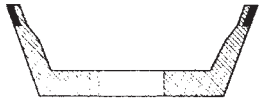
Type - Diamond Dish Wheel (Type12V9)

Dia. (in.)	Width (in.)	Hole Size (in.)	Depth (in.)	Spec.	Order No.	Price
4	1/2	1-1/4	1/8	SD180-R100 B99-1/8	**MH63W0491629**	Price



Type - Diamond Plain Cup Wheel (Type 6A2C)

Dia. (in.)	Width (in.)	Hole Size (in.)	Depth (in.)	Spec.	Order No.	Price
6	3/4	1-1/4	1/16	ASD120-P75B99-1/16	**MH63W0691860**	Price
6	3/4	1-1/4	1/16	SD150-P50V99-1/16	**MH63W0692217**	Price
6	3/4	1-1/4	1/8	ASD120-P75B99-1/8	**MH63W0692786**	Price
6	3/4	1-1/4	1/8	SD220-P50V99-1/8	**MH63W0691623**	Price



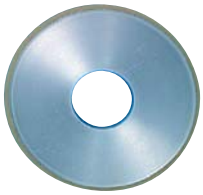
Type - Diamond Dish Wheel (Type 15V9)

Dia. (in.)	Width (in.)	Hole Size (in.)	Depth (in.)	Spec.	Order No.	Price
6	3/4	1-1/4	1/16	SD150-R100 B99-1/16	**MH63W0692230**	Price

SURF PRO® Diamond Straight Wheels - 75 Concentration

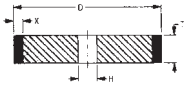
MADE IN THE USA

Resin Bond for Grinding Carbide — Type 1A1 — Straight Wheel



75 Concentration — 1/8" Diamond Depth For Economical Grinding and Long Life

- 100 Grit for chip breaker
- 120 Grit for general purpose
- 150 Grit for semi finish
- For wet or dry application



			120		150	
Dia. (in.)	Width (in.)	Hole Size (in.)	Order No.	Price	Order No.	Price
6	1/2	1-1/4	**MP501204735**	Price	**MP501204745**	Price
6	1/4	1-1/4	**MP501204535**	Price	**MP501204545**	Price
6	1/8	1-1/4	**MP501204435**	Price	**MP501204445**	Price
6	3/8	1-1/4	**MP501204635**	Price	**MP501204645**	Price
7	1/2	1-1/4	**MP501205235**	Price	**-**	-
7	1/4	1-1/4	**MP501205035**	Price	**-**	-
7	3/8	1-1/4	**MP501205135**	Price	**MP501205145**	Price

DESMOND® Angle Dressers



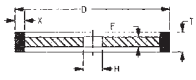
- Economic alternative to the brake truing device
- Conditions & dresses diamond & CBN wheels on surface grinders
- Accuracy provided by sealed ball bearings
- For 100 grit or coarser wheel
- Bolts to table or holds on magnetic chuck

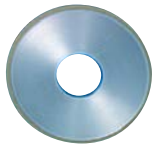
Type	Order No.	Price
Angle Dresser Replacement Wheel	**LG5046220**	Price
Angle Wheel Dresser	**LG5046200**	Price

Diamond Cut-off Wheels

MADE IN THE USA

- Type 1A1R – Relieve center resin bond – 1/4" Diamond depth 100 concentration – Long life





			100		150	
Dia. (in.)	Width (in.)	Hole Size (in.)	Order No.	Price	Order No.	Price
4	.035	1-1/4	**MP501807529**	Price	**MP501807549**	Price
6	.035	1-1/4	**MP501807829**	Price	**MP501807849**	Price
6	.045	1-1/4	**MP501807929**	Price	**MP501807949**	Price

SURF PRO® Diamond Straight Wheels - 100 Concentration

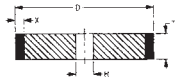
Resin Bond for Grinding Carbide — Type 1A1 — Straight Wheel



100 Concentration — 1/8" Diamond Depth for Aggressive Action — Long Life

- 100 Grit for chip breaker
- 120 Grit for general purpose
- 150 Grit for semi finish
- For wet or dry application

MADE IN THE USA



			100		120		150	
Dia. (in.)	Width (in.)	Hole Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	1/16	1-1/4	**MP501203128**	Price	**MP501203138**	Price	**MP501203148**	Price
4	1/4	1-1/4	**MP501203328**	Price	**MP501203338**	Price	**MP501203348**	Price
4	1/8	1-1/4	**MP501203228**	Price	**MP501203238**	Price	**MP501203248**	Price
5	1/16	1-1/4	**MP501203728**	Price	**-**	-	**MP501203748**	Price
5	1/4	1-1/4	**-**	-	**MP501203938**	Price	**MP501203948**	Price
5	1/8	1-1/4	**MP501203828**	Price	**MP501203838**	Price	**MP501203848**	Price
6	1/16	1-1/4	**MP501204328**	Price	**MP501204338**	Price	**MP501204348**	Price
6	1/2	1-1/4	**MP501204728**	Price	**MP501204738**	Price	**MP501204748**	Price
6	1/4	1-1/4	**MP501204528**	Price	**MP501204538**	Price	**MP501204548**	Price
6	1/8	1-1/4	**-**	-	**MP501204438**	Price	**MP501204448**	Price
6	3/8	1-1/4	**MP501204628**	Price	**MP501204638**	Price	**MP501204648**	Price
7	1/2	1-1/4	**MP501205228**	Price	**MP501205238**	Price	**MP501205248**	Price
7	1/4	1-1/4	**MP501205028**	Price	**MP501205038**	Price	**MP501205048**	Price
7	1/8	1-1/4	**MP501204928**	Price	**-**	-	**MP501204948**	Price
7	3/8	1-1/4	**-**	-	**MP501205138**	Price	**MP501205148**	Price

NORTON Diamond Saw Blades



Segmented:

- Most aggressive cutting action for general purpose and masonry
- Use when cutting speed and productivity are more important
- Best life, best cut rate, good finish

Turbo:

- Aggressive cutting action with a smoother quality of cut
- For use on harder materials, such as granite, marble and stone, to reduce chipping
- Better life, better cut rate, better finish

Continous:

- Provides the smoothest of cuts. Best performance when used wet
- Use on porcelain, tile, marble and other hard materials requiring a high quality cut
- Good life, good cut rate, best finish

Segmented Cup:

- Use segmented rim cup wheels on angle grinders for material removal and resurfacing of concrete

Spec. - Continous Rim for Tile-Wet			
Size (in.)	Note	Order No.	Price
4 x .060 x 20mm	Bushed to 5/8"	**MH63W0402793**	Price
4-1/2 x .060 x 5/8	Bushed to 5/8"	**MH63W4501194**	Price
7 x .090 x DM-5/8	Bushed to 5/8"	**MH63W0702788**	Price
8 x .060 x 5/8	-	**MH63W0802785**	Price

Spec. - Continous Rim Turbo - Dry 300 x Life			
Size (in.)	Note	Order No.	Price
4 x .080 x 7/8 - 5/8	Bushed to 5/8"	**MH63W0405475**	Price
4-1/2 x .080 x 7/8	Bushed to 5/8"	**MH63W4504023**	Price
7 x .080 x DM-5/8	Bushed to 5/8"	**MH63W0704022**	Price

Spec. - Segmented Rim - Dry 300 x Life			
Size (in.)	Note	Order No.	Price
4-1/2 x .080 x 7/8	Bushed to 5/8"	**MH63W4504021**	Price
7 x .080 x DM-5/8	Bushed to 5/8"	**MH63W0704020**	Price
10 x .060 x 5/8	-	**MH63W1004019**	Price
12 x .110 x 20 mm/1	Bushed to 5/8"	**MH63W1264503**	Price
14 x .110 x 20mm/1	Bushed to 5/8"	**MH63W1456267†**	Price
16 x .125 x 20mm/1	Bushed to 5/8"	**MH63W1601230†**	Price

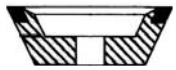
Spec. - Wet Continuous Rim			
Size (in.)	Note	Order No.	Price
10 x .060 x 5/8	-	**MH63W1002784**	Price

† Asphalt, Wet/Dry

SURF PRO® Diamond Flaring Cup — Type 11V9

Resin Bond Diamond on Periphery & Face For Tool & Cutter Grinders

- Any Grit Size, Concentration or Diamond Depth Not Shown — Ask for a Quotation





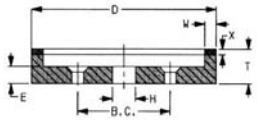
MADE IN THE USA

					100		120		150	
Dia. (in.)	Width (in.)	Hole Size (in.)	Concentration	Depth (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3-3/4	1-1/2	1-1/4	100	1/16	**MP5011500227**	Price	-	-	-	-
3-3/4	1-1/2	1-1/4	100	1/8	-	-	**MP5011500238**	Price	**MP5011500248**	Price
3-3/4	1-1/2	1-1/4	75	1/8	-	-	**MP5011500235**	Price	**MP5011500245**	Price
5	1-3/4	1-1/4	100	1/8	**MP5011500328**	Price	**MP5011500338**	Price	**MP5011500348**	Price
5	1-3/4	1-1/4	75	1/8	-	-	**MP5011500335**	Price	**MP5011500345**	Price

SURF PRO® Diamond Face Wheels — Type 62AC

Resin Bond — Plate Mounted

- Any Grit Size, Concentration or Diamond Depth Not Shown — Ask for a Quotation



MADE IN THE USA

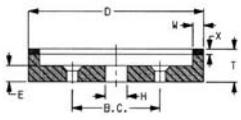


						120		150		220	
Rim (in.)	Dia. (in.)	Width (in.)	Hole Size (in.)	Concentration	Depth (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3/8	6	3/4	1-1/4	100	1/16	**MP506180137**	Price	**MP506180147**	Price	-	-
3/8	6	3/4	1-1/4	100	1/8	**MP506180138**	Price	-	-	-	-
3/8	6	3/4	1-1/4	50	1/8	**MP506180132**	Price	**MP506180142**	Price	-	-
1/2	6	3/4	1-1/4	100	1/16	-	-	**MP506180247**	Price	-	-
1/2	6	3/4	1-1/4	100	1/8	**MP506180238**	Price	-	-	-	-
1/2	6	3/4	1-1/4	50	1/8	**MP506180232**	Price	-	-	-	-
3/4	6	3/4	1-1/4	100	1/16	**MP506180337**	Price	**MP506180347**	Price	**MP506180367**	Price
3/4	6	3/4	1-1/4	100	1/8	**MP506180338**	Price	**MP506180348**	Price	**MP506180368**	Price
3/4	6	3/4	1-1/4	75	1/8	**MP506180335**	Price	**MP506180345**	Price	**MP506180365**	Price

SURF PRO® Type 62AC for Baldor Grinder

- Any Grit Size, Concentration or Diamond Depth Not Shown — Ask for a Quotation

MADE IN THE USA





					120		150	
Dia. (in.)	Width (in.)	Hole Size (in.)	Concentration	Depth (in.)	Order No.	Price	Order No.	Price
6	1	1-1/4	100	1/16	**MP506180537**	Price	**MP506180547**	Price
6	1	1-1/4	100	1/8	**MP506180538**	Price	**MP506180548**	Price

Dressing Sticks for Diamond & CBN Resin Bond Wheels

- Use for achieving maximum performance from diamond and CBN wheels
- Made of premium white aluminum oxide abrasive



Size (in.)	Grit	Order No.	Price
3/8 x 3/8 x 4	-	**ML65AA438**	Price
1/2 x 1/2 x 4	150 Grit	**MP50DS01**	Price
1/2 x 1/2 x 4	220 Grit	**MP50DS02**	Price
3/4 x 3/4 x 4	150 Grit	**MP50DS03**	Price
3/4 x 3/4 x 4	220 Grit	**MP50DS04**	Price
1 x 1 x 6	150 Grit	**MP50DS05**	Price
1 x 1 x 6	220 Grit	**MP50DS06**	Price
1/2 x 1/2 x 4 (12pc)	150 Grit	**MP50DS12**	Price

SURF PRO® Brake Controlled Truing Device

For Diamond and CBN Wheels

- Designed for truing diamond and CBN wheels rapidly and with minimum loss of diamond
- Ideal for straight wheels with diamond in the periphery, cut-off wheels, internal grinding wheels and cup wheels with diamond in the rim
- Easy to operate
- Rotate the truing wheel and make contact with diamond/CBN wheel
- Oscillate the unit and truing wheel across face of wheel being trued using machine cross-slide



Specification	Order No.	Price
Model DT100 Turing Device	**NP55DT100**	Price
Replacement Wheel for Model DT100	**MG753100**	Price

3M Diamond Resin Bond Cut-off Wheels

- Diamond particles in a resin bond matrix offer high cut rates in wet or dry grinding applications on materials such as carbides, ceramics and non-ferrous metals

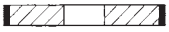


Size (in.)	Spec.	Order No.	Price
4 x 1/32 x 1-1/4	GD120 R100 PS X =1/4	**TM0220732**	Price
6 x .035 x 1-1/4	CGD120 R100 PS X =1/4	**TM0220734**	Price
6 x .035 x 1-1/4	GD220 R100 PS X =1/4	**TM0220733**	Price

3M Diamond Resin Bond Wheels

- Diamond particles in a resin bond matrix offer high cut rates in wet or dry grinding applications on materials such as carbides, ceramics and non-ferrous metals



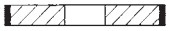


Size (in.)	Spec.	Order No.	Price
4 x 1/16 x 1-1/4	GD150 R100 PS X =1/4	**TM0220713**	Price
6 x 1/4 x 1-1/4	GD150 R100 PS X =1/4	**TM0220720**	Price
6 x 1/8 x 1-1/4	GD150 R100 PS X =1/4	**TM0220717**	Price
7 x 1/2 x 1-1/4	CGD120 R75 PS X =1/8	**TM0220727**	Price
7 x 1/4 x 1-1/4	GD150 R100 PS X =1/4	**TM0220724**	Price

3M Diamond Resin Bond Die Grinding Wheels

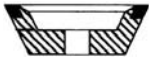
- Diamond particles in a resin bond matrix offer high cut rates and good abrasive life in die grinding applications

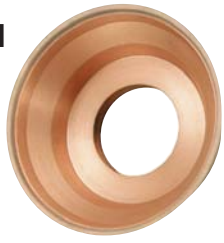




Size (in.)	Spec.	Order No.	Price
4 x 1/4 x 1-1/4	D100 R100B X=1/4	**TM0220814**	Price
5 x 1/2 x 1-1/4	D100 R100B X=1/4	**TM0220810**	Price
5 x 1/4 x 1-1/4	D100 R100B X=1/4	**TM0220811**	Price

3M Diamond Resin Bond Cup Wheels



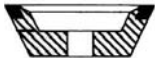


Size (in.)	Spec.	Order No.	Price
3-3/4 x 1-1/2 x 1-1/4	GD100 R100 PS X =1/8	**TM0220738**	Price
5 x 1-3/4 x 1-1/4	CGD100 R75 PS X =1/8	**TM0220744**	Price

3M CBN Resin Bond Cup Wheels

- CBN particles in a resin bond matrix offer high cut rates in wet applications for cup wheels, grinding materials such as hardened steels and super alloys



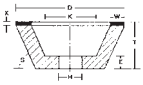


Size (in.)	Spec.	Order No.	Price
3-3/4 x 1-1/2 x 1-1/4	CB100 R75 PS X=1/8	**TM0220747**	Price

SURF PRO Flaring Cup Wheels Resinoid Bond Diamond

- Abrasive in rim
- 150 Grit
- 100 Concentration
- 1/8" Abrasive depth
- Type 11A2

MADE IN THE USA



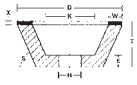


Dia. (in.)	X-Depth (in.)	Thick. (in.)	W Rim (in.)	Hole (in.)	Order No.	Price
3	1/8	7/8	3/8	1-1/4	**MP50111001**	Price
4	1/8	1-1/4	1/2	1-1/4	**MP50111004**	Price
5	1/8	1-3/4	3/8	1-1/4	**MP50111005**	Price

SURF PRO Flaring Cup Wheels Resinoid Bond CBN Wheel

MADE IN THE USA

- Abrasive in rim
- 150 Grit
- 100 Concentration
- 1/8" Abrasive depth
- Type 11A2





Dia. (in.)	X Depth (in.)	Thick. (in.)	W Rim (in.)	Hole (in.)	Order No.	Price
3	1/8	7/8	3/8	1-1/4	**MP55111001**	Price
4	1/8	1-1/4	1/2	1-1/4	**MP55111004**	Price

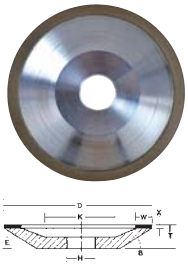
SURF PRO Diamond Dish Wheels Resinoid Bond

- Abrasive in rim
- 150 Grit
- 100 Concentration
- 1/8" Abrasive depth
- Type D12A2

MADE IN THE USA

Wheel Specifications:

- X - Abrasive depth - 1/8"
- D - Diameter - 6"
- T - Thickness - 1"
- B - Dish angle - 30°
- H - Hole - 1-1/4"



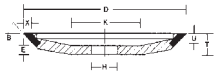
W Rim (in.)	Order No.	Price
1/4	**MP50121004**	Price
3/8	**MP50121005**	Price

SURF PRO Diamond Dish Wheels Resinoid Bond Abrasive in Periphery

Wheel Specifications:

- 150 Grit
- 100 Concentration
- D - Diameter - 6"
- X - Abrasive depth - 1/8"
- T - Wheel thickness - 3/4"
- K - Inside flat dia. - 3-1/8"
- B - 45° Dish angle
- H - Hole size - 1-1/4"
- U - Insert length - 1/4"
- Type 15V9

MADE IN THE USA



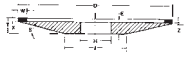


Order No.	Price
MP50155001	Price

SURF PRO Diamond Wheel - Resinoid Bond For Foley-Type Grinder

- 150 Grit
- 100 Concentration
- 1/8" Abrasive depth
- Type 4A2
- Wheel size: 6 x 1/2 x 1-1/4"
- Dimensions: E = 3/8", J = 2-1/2", Z = 1/16", S = 11°

MADE IN THE USA





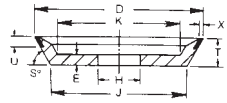
W Rim (in.)	Order No.	Price
1/4	**MP501160**	Price
3/8	**MP501170**	Price

SURF PRO CBN Flaring Cup — Type 11V9

Resin Bond for Tool & Cutter Grinding

MADE IN THE USA

- CBN wheels are ideal for grinding tough ferrous materials, cast iron, nickel and ferrous based alloys- RC50 or higher
- Good for tool and cutter grinding of high speed steels





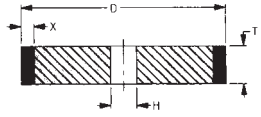
Depth (in.) - 1/16							
				120		150	
Dia. (in.)	Width (in.)	Hole Size (in.)	Concentration	Order No.	Price	Order No.	Price
5	1-3/4	1-1/4	100	**MP5511500337**	Price	**MP5511500347**	Price
3-3/4	1-1/2	1-1/4	100	**MP5511500237**	Price	**MP5511500247**	Price

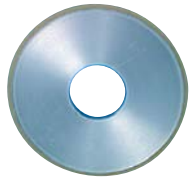
Depth (in.) - 1/8							
				120		150	
Dia. (in.)	Width (in.)	Hole Size (in.)	Concentration	Order No.	Price	Order No.	Price
5	1-3/4	1-1/4	100	**MP5511500338**	Price	**MP5511500348**	Price
3-3/4	1-1/2	1-1/4	100	**MP5511500238**	Price	**MP5511500248**	Price
3-3/4	1-1/2	1-1/4	75	**MP5511500235**	Price	**-**	-

SURF PRO CBN Straight Wheels — Type 1A1

Resin Bond — 100 Concentration

MADE IN THE USA





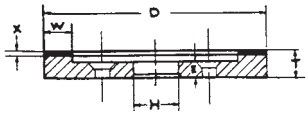
					120		150	
Dia. (in.)	Width (in.)	Hole Size (in.)	Depth (in.)	Concentration	Order No.	Price	Order No.	Price
4	1/16	1-1/4	1/8	100	**MP551203138**	Price	**MP551203148**	Price
4	1/4	1-1/4	1/16	100	**MP551203337**	Price	**-**	-
4	1/4	1-1/4	1/8	100	**MP551203338**	Price	**-**	-
5	1/2	1-1/4	1/8	100	**MP551204038**	Price	**-**	-
6	1/16	1-1/4	1/8	100	**MP551204338**	Price	**MP551204348**	Price
6	1/2	1-1/4	1/16	100	**MP551204737**	Price	**MP551204747**	Price
6	1/4	1-1/4	1/16	100	**MP551204537**	Price	**-**	-
6	1/8	1-1/4	1/8	100	**MP551204438**	Price	**-**	-
7	1/2	1-1/4	1/8	100	**MP551205238**	Price	**MP551205248**	Price
7	1/4	1-1/4	1/16	100	**-**		**MP551205047**	Price
7	1/4	1-1/4	1/8	100	**MP551205038**	Price	**MP551205048**	Price
7	1/8	1-1/4	1/8	100	**MP551204938**	Price	**-**	-
7	3/8	1-1/4	1/8	100	**MP551205138**	Price	**-**	-
8	1/2	1-1/4	1/8	100	**MP551205638**	Price	**MP551205648**	Price
8	1/4	1-1/4	1/8	100	**MP551205538**	Price	**MP551205548**	Price
10	1/2	3	1/8	100	**MP551205938**	Price	**MP551205948**	Price
14	1/2	5	1/8	100	**MP551206338**	Price	**-**	-

SURF PRO CBN Face Wheels

6 x 3/4 x 1-1/4"— Type 6A2C

Resin Bond — Plate Mounted

MADE IN THE USA





			120		150	
Rim (in.)	CBN Depth (in.)	Concentration	Order No.	Price	Order No.	Price
3/8	1/8	100	**MP556180138**	Price	**MP556180148**	Price
3/8	1/8	50	**MP556180132**	Price	**MP556180142**	Price
1/2	1/16	50	**MP556180232**	Price	**-**	-
1/2	1/8	100	**-**	-	**MP556180247**	Price
3/4	1/16	100	**MP556180337**	Price	**-**	-
3/4	1/8	100	**MP556180338**	Price	**MP556180348**	Price

SURF PRO CBN Dish Wheels

Resinoid Bond

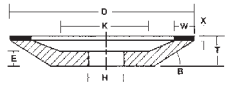
MADE IN THE USA

- Abrasive in rim
- 150 Grit
- 100 Concentration
- 1/8" Abrasive depth
- Type D12A2

Wheel Specifications:

- X - Abrasive depth - 1/8"
- D - Diameter - 6"
- T - Thickness - 1"
- B - Dish angle - 30°
- H - Hole - 1-1/4"





W Rim (in.)	Order No.	Price
1/4	**MP55121004**	Price
3/8	**MP55121005**	Price

Kutzall® Carbide Abrasive Tools

Excellent for Cutting Plastic, Fiberglass, Rubber and Wood

Superior stock removal rate and will not load up “SSG Carbide Teeth” on soft materials



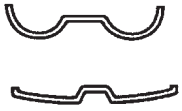
Shank Size (in.) - 1/4				
Dia. (in.)	Length (in.)	Shape	Order No.	Price
1/4	1-3/4	Ball Nose	**MN35BN14S**	Price
1/4	1-3/4	Taper	**MN35T14S**	Price
1/2	1	Flame	**MN35FL12S**	Price
3/4	1	Cylinder	**MN35C34S**	Price
3/4	1/8	Rotor Saw	**MN35RS34S**	Price
3/4	1-1/8	Ball Nose	**MN35BN34S**	Price
1	1	Sphere	**MN35S1S**	Price

Shank Size (in.) - 1/8				
Dia. (in.)	Length (in.)	Shape	Order No.	Price
1/8	3/4	Ball Nose	**MN35BN18ES**	Price
1/8	3/4	Cylinder	**MN35C18ES**	Price
1/8	3/4	Taper	**MN35T18ES**	Price
1/4	1/2	Ball Nose	**MN35BN14ES**	Price
1/4	1/2	Cylinder	**MN35C14ES**	Price
1/4	1/2	Flame	**MN35FL14ES**	Price
1/4	1/2	Taper	**MN35T14ES**	Price
1/4	1/4	Sphere	**MN35S14ES**	Price
3/8	1/2	Dove Tail	**MN35DT38ES**	Price
3/8	3/8	Sphere	**MN35S38ES**	Price
1/2	1/8	Rotor Saw	**MN35RS12ES**	Price
3/4	1/8	Rotor Saw	**MN35RS34ES**	Price

Above stocked in coarse grit only — Fine grit available on request

Kutzall® Dish Wheels and Sanding Discs

For use on angle grinding & sanding machines



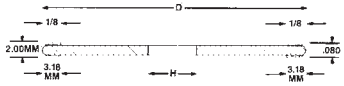


Description	Dia. (in.)	Hole Size (in.)	Grit	Order No.	Price
Dish Wheel	4	5/8	Medium	**MN35716M**	Price
Dish Wheel	4	5/8	Very Coarse	**MN35714VC**	Price
Sanding Disc	7	7/8	Very Coarse	**MN351160VC**	Price

Diamond “Magnicon Bond” Saws

High Cutting Rate • Longer Useful Life
For Use In High Speed Collet Type Grinders

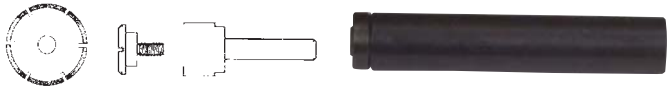
- Designed for cutting highly abrasive materials like Fiberglass, Boron, Graphite, Ceramics





Dia. (in.)	Thickness (in.)	Hole Size (in.)	Order No.	Price
2	.080	1/4	**MN53152010**	Price
3	.080	5/8	**MN53152015**	Price
4	.080	5/8	**MN53152020**	Price

Arbors for Above Wheels



Hole Size (in.)	Shank Size (in.)	Order No.	Price
1/4	1/2	**GK60CSA1**	Price

CGW Diamond X Depressed Center Grinding Wheels - Type 29

- Minimum of 25 times the life of standard resin depressed center grinding wheel
- Extremely aggressive 24 grit diamond is uniquely brazed on extends working life



Size (in.)	Grit	RPM	Carton Qty	Order No.	Price
4-1/2 x 5/8-11	24	13300	1	**MG9070401**	Price
5 x 5/8-11	24	12250	1	**MG9070403**	Price

CGW Diamond X Blades - Type 1

- Can be used on sheet metal up to 3/8” thick or metal bar up to 3/4” thick
- Minimum of 25 times the working lift of standard resin wheels
- Advanced brazing process and high-quality diamonds for higher production rates



Size (in.)	Carton Qty	Order No.	Price
4-1/2 x .050 x 7/8	1	**MG9049714**	Price
5 x .050 x 7/8	1	**MG9049715**	Price
6 x x.050 x 7/8	1	**MG9049716**	Price

Flexable Diamond Hand Pads

- Lightweight and durable conformable backing adapts to a variety of surfaces
- Precision dot pattern allows aggressive consistent cut rate, uniform finish and reduced loading
- Can be used wet or dry, no dressing required
- Color coded for easy identification
- For shaping and rapid stock removal, touchup and repairs on ceramic, stone, marble, glass, composite and hard materials
- Also used for polished dies and molds



Size (in.)	Grit	Color	Spec	Order No.	Price
2-1/8 x 3-1/2	60	Green	HP60	**MH63HP06360**	Price
2-1/8 x 3-1/2	120	Black	HP120	**MH63HP06361**	Price
2-1/8 x 3-1/2	200	Red	HP200	**MH63HP06362**	Price
2-1/8 x 3-1/2	400	Yellow	HP400	**MH63HP05852**	Price
2-1/8 x 3-1/2	800	White	HP800	**MH63HP06363**	Price
2-1/8 x 3-1/2	1800	Blue	HP1800	**MH63HP06364**	Price

Diamond Speed-Lok TR Discs

- Unique abrasive pattern for increased aggressiveness, durability and lower cost versus standard diamond discs
- Speed-Lok TR quick change mount for rapid tool free change and disc stays firmly attaches to back-up pad when in use
- For grinding carbide, ceramic, glass, composites, fiberglass, reinforced plastic and other tough materials



Dia. (in.)	Grit	Color	Spec	Order No.	Price
2	120	Black	FDD2SL120	**MH63D0211779**	Price
2	200	Red	FDD2SL200	**MH63D0211780**	Price
2	400	Yellow	FDD2SL400	**MH63D0211781**	Price
2	60	Green	FDD2SL60	**MH63D0211778**	Price
2	800	White	FDD2SL800	**MH63D0211782**	Price
3	120	Black	FDD2SL120	**MH63D0311784**	Price
3	200	Red	FDD2SL200	**MH63D0311785**	Price
3	400	Yellow	FDD2SL400	**MH63D0311786**	Price
3	60	Green	FDD2SL60	**MH63D0311783**	Price
3	800	White	FDD2SL800	**MH63D0311787**	Price

Diamond Hones

Double End Resin Bond Hones - 100 Concentration

- Hone dimensions - 3/8 x 3/8 x 4”
- Diamond length - 1”
- Depth of Diamond 1/16”



Grit at Each End	Order No.	Price
100/180	**MN50DH1018**	Price
150/220	**MN50DH1522**	Price
180/320	**MN50DH1832**	Price
220/400	**MN50DH2240**	Price

Diamond Hones

Single End Resin Bond Hones - 100 Concentration

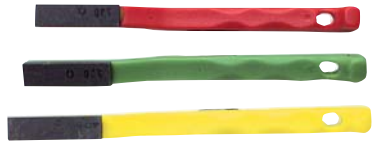
- Hone dimensions - 3/8 x 3/8 x 4”
- Diamond length - 1”
- Depth of Diamond 1/16”



Grit	Order No.	Price
100	**MN50DH100**	Price
150	**MN50DH150**	Price
220	**MN50DH220**	Price
320	**MN50DH320**	Price
400	**MN50DH400**	Price
600	**MN50DH600**	Price

3 Pc. Boron Carbide Hand Lapper Set

- **Red Color Lapper** - 240 Grit
- **Green Color Lapper** - 320 Grit
- **Yellow Color Lapper**- -400 Grit
- Ideal for honing cutting edges
- Can be used to hone surfaces on all types of metals including tungsten carbide
- These lappers are more effective when used with oil
- Long life and economical



Order No.	Price
MN50HL3	Price

Diamond Scribe with Magnet

- Marks: Steel, Glass and Carbide



Order No.	Price
MN50CDS1	Price



NF - Diamond Needle Files



Round Handle

- NF - Needle Files are our most popular files
- Used on hard materials such as: Tungsten Carbide, steels of 40Hrc and harder, ceramic materials, glass, etc.
- Shank has a round shaft of 3mm

				Coarse		Fine		Medium	
Profile	Size	Diamond Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3 Square	3.6mm	2-3/4	5-1/2	**MN51C2132**	Price	**MN51F2132**	Price	**MN51M2132**	Price
Equalling	5.1 × 1.4mm	2-3/4	5-1/2	**MN51C2112**	Price	**MN51F2112**	Price	**MN51M2112**	Price
Half Round	5.4 × 1.8mm	2-3/4	5-1/2	**MN51C2152**	Price	**MN51F2152**	Price	**MN51M2152**	Price
Round	3.1mm	2-3/4	5-1/2	**MN51C2162**	Price	**MN51F2162**	Price	**MN51M2162**	Price
Warding	5.1 × 1.4mm	2-3/4	5-1/2	**MN51C2122**	Price	**MN51F2122**	Price	**MN51M2122**	Price

HB - Heavy Duty Files



Square Handle

- HB - Heavy Duty Files are manufactured in large dimensions for heavy duty purposes and are used on metals as well as hard plastics, fiberglass, graphite and epoxy materials

				Coarse		Fine		Medium	
Profile	Size	Diamond Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3 Square	9.7mm	4	8-1/2	**MN51CHB2607**	Price	**MN51FHB2607**	Price	**MN51MHB2607**	Price
Equalling	10.4 × 2.8mm	4	8-1/2	**MN51CHB2601**	Price	**MN51FHB2601**	Price	**MN51MHB2601**	Price
Half Round	12.6 × 3.9mm	4	8-1/2	**MN51CHB2602**	Price	**MN51FHB2602**	Price	**MN51MHB2602**	Price

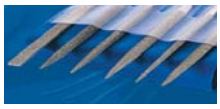
5 Pc. NF File Sets



- Set includes the following five files: Equalling, 1/2 Round, 3-Square, Square and Round

Grit	Order No.	Price
Coarse	**MN51C4205**	Price
Fine	**MN51F4205**	Price
Medium	**MN51M4205**	Price

6 Pc. NF File Sets



- Set includes the following five files: Equalling, 3-Square, Square, 1/2 Round, Round & Crossing

Grit	Order No.	Price
Coarse	**MN51C4206**	Price
Fine	**MN51F4206**	Price
Medium	**MN51M4206**	Price

5 Pc. HB File Sets

- Set includes the following five files: Equalling, 1/2 Round, 3-Square, Square and Round



Grit	Order No.	Price
Coarse	**MN51CHB2627**	Price
Fine	**MN51FHB2627**	Price
Medium	**MN51MHB2627**	Price

MI - Escapement Files

5-1/2" OAL 1-5/8" Diamond Length - Square Handle

- MI Mini Files are used in a variety of applications where fine and accurate work is necessary



Profile	Size	Diamond Length (in.)	OAL (in.)	Order No.	Price
Flat	3.9 × 1.1mm	1-5/8	5-1/2	**MN51FMI8617**	Price
3 Square	3.1mm	1-5/8	5-1/2	**MN51FMI8614**	Price
Half Round	4.1 × 1.8mm	1-5/8	5-1/2	**MN51FMI8608**	Price
Round	1.7mm	1-5/8	5-1/2	**MN51FMI8621**	Price

5 Pc. MI File Set

- Set includes the following five files: ½ Round, 3-Square, Equalling, Square and Round

Grit	Order No.	Price
Fine	**MN51FMI8632**	Price

Individual Diamond Files



			100		150	
Profile	Diamond Length (in.)	OAL (in.)	Order No.	Price	Order No.	Price
Equalling	3	5-1/2	**FT60E100**	Price	**FT60E150**	Price
Half Round	3	5-1/2	**FT60HR100**	Price	**FT60HR150**	Price
Round	3	5-1/2	**FT60R100**	Price	**FT60R150**	Price
Square	3	5-1/2	**FT60S100**	Price	**FT60S150**	Price
3 Square	3	5-1/2	**FT60TS100**	Price	**FT60TS150**	Price

Diamond Needle File Sets

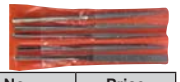


- For precision finishing of carbide, hardened steel and ceramics

No. Pieces	Grit	Diamond Length (in.)	OAL (in.)	Order No.	Price
5 Pc. Set	100	2-3/4	5-1/2	**FT605DF100**	Price
5 Pc. Set	150	2-3/4	5-1/2	**FT605DF150**	Price
5 Pc. Set	Medium	2	5-1/2	**FT605DFS**	Price
5 Pc. Set	Medium	2	5-1/2	**FT605MDF129†**	Price
10 pc. Set	Medium	3	5-1/2	**FT6010DFS**	Price

Set consists of 1 each of the shapes as indicated above

5 Pc. Heavy Duty Style Diamond File Set



Diamond Length (in.)	OAL (in.)	Grit	Order No.	Price
4-1/4	8-1/2	Medium	**FT605HDF129**	Price

†Sets consist of 1 ea. of the shapes as indicated above

5 Pc. CBN Needle File Set†



- For finishing harder materials such as cast iron, nickel, etc. with RC50 or higher
- Available in medium grit only

Diamond Length (in.)	OAL (in.)	Grit Grade	Order No.	Price
3	5-1/2	Medium	**FT605BFM**	Price

†Sets consist of 1 ea. of the shapes as indicated above

5 Pc. 5-1/2" Single Rod Diamond Riffler File Set



- Includes assorted shapes used by tool and die makers to clean odd and difficult places

Order No.	Price
FT605DRS	Price

6 Pc. Double End Diamond Riffler File Set



- Set Includes 1 Each: Square, Rectangular, Triangle, Round, Half Round, and Double Half Round

OAL (in.)	Order No.	Price
6	**FT606DRF150**	Price

STRAUSS & CO. INDUSTRIAL DIAMONDS LTD. Diamond & CBN Mandrels



- Diamond & CBN pins are widely used on jig and internal grinding machines, cylindrical grinding machines and hand tools
- These pins are used for internal grinding operations of dies, special punches, cutting tools as well as numerous parts of stainless steel, exotic super alloys, etc.
- Grinding pin shanks are hardened to 42-55 Hrc and are center-less ground to ensure a rigid, accurate, concentric and parallel pin blank
- Grinding pins are all electro plated by a very precise and environmentally safe process
- Diamond and CBN powders are carefully selected and treated for precision and consistency
- Diamond pins are used for grinding tungsten carbide, ceramics, glass and non-ferrous materials
- CBN pins are used for grinding high-carbon, high-chrome steel, high speed steels such as M2, M3 and die steels such as D2

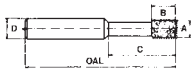
			CBN Mandrels		Diamond Mandrels	
Head Size (in.)	Shank Dia. (in.)	Grit	Order No.	Price	Order No.	Price
.020 x .079	1/8	Fine	MN516900	Price	MN512900	Price
.029 x .079	1/8	Fine	MN516900A	Price	MN512900A	Price
.039 x .079	1/8	Fine	MN516901	Price	MN512901	Price
.049 x .079	1/8	Fine	MN516901B	Price	MN512901B	Price
.059 x .118	1/8	Fine	MN516901A	Price	MN512901A	Price
.069 x .118	1/8	Fine	MN516901C	Price	MN512901C	Price
.079 x .157	1/8	Fine	MN516902	Price	MN512902	Price
.089 x .157	1/8	Fine	-		MN512902A	Price
.099 x .157	1/8	Medium	MN516902B	Price	MN512902B	Price
.109 x .157	1/8	Medium	MN516902C	Price	MN512902C	Price
.118 x .157	1/8	Medium	MN516903	Price	MN512903	Price
.130 x .197	1/8	Medium	MN516903A	Price	MN512903A	Price
.140 x .197	1/8	Medium	MN516903B	Price	MN512903B	Price
.157 x .197	1/8	Medium	MN516904	Price	MN512904	Price
.157 x .197	1/4	Medium	MN516904XL	Price	MN512904XL	Price
.177 x .236	1/8	Medium	MN516904A	Price	MN512904A	Price
.177 x .236	1/4	Medium	MN516904AXL	Price	MN512904AXL	Price
.197 x .236	1/8	Medium	MN516905	Price	MN512905	Price
.197 x .236	1/4	Medium	MN516905XL	Price	MN512905XL	Price
.236 x .275	1/8	Medium	MN516908	Price	MN512908	Price
.236 x .276	1/4	Medium	MN516908XL	Price	MN512908XL	Price
.256 x .275	1/4	Medium	-		MN512908A	Price
.315 x .315	1/4	Medium	MN516909	Price	MN512909	Price
.335 x .315	1/4	Medium	MN516910F	Price	MN512910F	Price
.394 x .197	1/4	Medium	MN516911	Price	MN512911	Price
.394 x .394	1/4	Medium	MN516912	Price	MN512912	Price
.473 x .394	1/4	Medium	MN516913D	Price	MN512913D	Price

Diamond Jig Grinding Mandrels

WORLD CLASS QUALITY

150 Concentration

- **Diamond:** Ceramics, glass, carbides and non-ferrous metals, etc
- **CBN:** Normal material range 50C Rockwell, high carbon, high chrome, HSS some grades beryllium copper. “D”, “T” & “M” type steels





			CBN		Diamond	
Head Size (in.)	Shank Dia. (in.)	Grit	Order No.	Price	Order No.	Price
.029 x .079	1/8	220	MN52215005220	Price	MN52115005220	Price
.029 x .079	1/8	325	-		MN52116005325	Price
.039 x .079	1/8	220	MN52215010220	Price	MN52115010220	Price
.049 x .079	1/8	120	MN52215015150	Price	MN52115015150	Price
.039 x .079	1/8	325	-		MN52116010325	Price
.059 x .118	1/8	120	MN52215020150	Price	MN52115020150	Price
.069 x .118	1/8	120	MN52215025150	Price	MN52115025150	Price
.049 x .079	1/8	220	-		MN52116015220	Price
.079 x .157	1/8	120	MN52215030150	Price	MN52115030150	Price
.089 x .157	1/8	120	MN52215035150	Price	MN52115035150	Price
.059 x .118	1/8	220	-		MN52116020220	Price
.099 x .157	1/8	120	MN52215040150	Price	MN52115040150	Price
.109 x .157	1/8	120	MN52215045120	Price	MN52115045120	Price
.069 x .118	1/8	220	-		MN52116025220	Price
.118 x .157	1/8	120	MN52215050120	Price	MN52115050120	Price
.130 x .197	1/8	120	MN52215055120	Price	MN52115055120	Price
.079 x .157	1/8	220	-		MN52116030220	Price
.140 x .197	1/8	120	MN52215060120	Price	MN52115060120	Price
.157 x .197	1/8	120	MN52215065120	Price	MN52115065120	Price
.089 x .157	1/8	220	-		MN52116035220	Price
.197 x .236	1/4	120	MN52215075120	Price	MN52115075120	Price
.099 x .157	1/8	220	-		MN52116040220	Price
.236 x .275	1/4	120	MN52215080120	Price	MN52115080120	Price
.177 x .236	1/4	120	MN52215070120	Price	MN52115070120	Price
.256 x .275	1/4	120	MN52215085120	Price	MN52115085120	Price
.109 x .157	1/8	220	-		MN52116045220	Price
.315 x .315	1/4	120	MN52215090120	Price	MN52115090120	Price
.335 x .315	1/4	120	MN52215095120	Price	MN52115095120	Price
.118 x .157	1/8	220	-		MN52116050220	Price
.394 x .394	1/4	120	MN52215100120	Price	MN52115100120	Price
.473 x .394	1/4	120	MN52215105120	Price	MN52115105120	Price
.591 x .394	1/4	120	MN52215110120	Price	MN52115110120	Price
.730 x .394	1/4	120	MN52215115120	Price	MN52115115120	Price
.140 x .197	1/8	220	-	-	MN52116060220	Price
.157 x .197	1/8	220	-	-	MN52116065220	Price
.177 x .236	1/4	220	-	-	MN52116070220	Price
.197 x .236	1/4	220	-	-	MN52116075220	Price
.256 x .275	1/4	220	-	-	MN52116085220	Price
.315 x .315	1/4	220	-	-	MN52116090220	Price
.335 x .315	1/4	220	-	-	MN52116095220	Price
.394 x .394	1/4	220	-	-	MN52116100220	Price
.730 x .394	1/4	220	-	-	MN52116115220	Price

DI-COAT Diamond Superabrasive Electroplated Grinding Mandrels

- For ID and Jig Grinding
- 220 Grit Diamond for carbide and non-metallics or CBN for high speed steels and alloys grinding
- Increased cutting action and longer cutting life
- Reduced deflection for greater accuracy
- 1/8″ Shank × 2.15″ OAL up to .236″ Dia. head
- 1/4″ Shank × 3″ OAL up to .315″ and .394″ Dia. head
- .020 thru .236 (60,000 RPM), .315 (50,000 RPM), .394 (40,000 RPM)

MADE IN THE USA





	CBN		Diamond	
Head Size (in.)	Order No.	Price	Order No.	Price
.020 x .080	MN54020C220	Price	MN54020D220	Price
.025 x .080	MN54025C220	Price	MN54025D220	Price
.030 x .080	MN54030C220	Price	MN54030D220	Price
.049 x .080	MN54049C220	Price	MN54049D220	Price
.059 x .120	MN54059C220	Price	MN54059D220	Price
.069 x .120	MN54069C220	Price	MN54069D220	Price
.079 x .160	MN54079C220	Price	MN54079D220	Price
.089 x .160	MN54089C220	Price	MN54089D220	Price
.099 x .160	MN54099C220	Price	MN54099D220	Price

	CBN		Diamond	
Head Size (in.)	Order No.	Price	Order No.	Price
.118 x .160	MN54118C220	Price	MN54118D220	Price
.130 x .200	MN54130C220	Price	MN54130D220	Price
.140 x .200	MN54140C220	Price	MN54140D220	Price
.157 x .200	MN54157C220	Price	MN54157D220	Price
.177 x .235	MN54177C220	Price	MN54177D220	Price
.197 x .235	MN54197C220	Price	MN54197D220	Price
.236 x .275	MN54236C220	Price	MN54236D220	Price
.315 x .315	MN54315C220	Price	MN54315D220	Price
.394 x .200	MN54394C220	Price	MN54394D220	Price

Portable & Stationary Saw Cut-Off Wheels

Gemini
- High performance resin bond
- Provides fast burn free cutting

Charger
- Featuring Charger zirconia alumina abrasive grain
- 2X the life and cut rate of aluminum oxide
- Freer, burn free cutting action – ideal for stainless
- Reinforced
- Standard package – 10 pieces



Style - Portable Chop Saw Blade			
Size (in.)	Spec.	Order No.	Price Ea.
10 x 7/64 x 1	Gemini Long Life	**MH60100006109**	Price
12 x 7/64 x 1	Gemini Long Life	**MH60120007554**	Price
14 x 7/64 x 1	Gemini Free Cut	**MH60140006627**	Price
14 x 7/64 x 1	Gemini Long Life	**MH60140006626**	Price
16 x 7/64 x 1	Gemini Long Life	**MH60160010198**	Price

Style - Stationary Saw Cut-Off Wheel			
Size (in.)	Spec.	Order No.	Price Ea.
10 x 3/32 x 5/8	Charger Long Life	**MH60100006108**	Price
10 x 3/32 x 5/8	Gemini Free Cut	**MH60100006101**	Price

Style - Stationary Saw Cut-Off Wheel			
Size (in.)	Spec.	Order No.	Price Ea.
10 x 3/32 x 5/8	Gemini Long Life	**MH60100006102**	Price
12 x 1/8 x 1	Gemini Long Life	**MH60120007548**	Price
14 x 1/8 x 1	Charger Long Life	**MH60140006623**	Price
14 x 1/8 x 1	Gemini Free Cut	**MH60140006609**	Price
14 x 1/8 x 1	Gemini Long Life	**MH60140006611**	Price
14 x 7/64 x 1	Bluefire	**MH60140043252**	Price
14 x 7/64 x 1	Bluefire	**MH60140043253**	Price
16 x 5/32 x 1	Bluefire	**MH60160043255**	Price
16 x 5/32 x 1	Gemini Free Cut	**MH60160010183**	Price
16 x 5/32 x 1	Gemini Long Life	**MH60160010184**	Price
16 x 7/64 x 1	Bluefire	**MH60160043256**	Price
18 x 5/32 x 1	Gemini Free Cut	**MH60180010185**	Price
20 x 3/16 x 1	Gemini Free Cut	**MH60200009033**	Price
20 x 3/16 x 1	Gemini Long Life	**MH60200009034**	Price
20 x 5/32 x 1	-	**MH60200043258**	Price
20 x 5/32 x 1	Charger Long Life	**MH60200009046**	Price
20 x 5/32 x 1	Gemini Free Cut	**MH60200009031**	Price
20 x 5/32 x 1	Gemini Long Life	**MH60200009032**	Price

Small Diameter Cut-Off Wheels

Bluefire:
- Zirc/AO blend
- For light to heavy applications on gray iron, carbon, stainless steel and alloys

Gemini:
- Aluminum oxide grain
- Best for steel and ferrous metals as well as aluminum and foundries



Spec. - Bluefire		
Size (in.)	Order No.	Price
3 x .035 x 3/8	**MH60030028629**	Price
3 x .035 x 3/8	**MH60030043174**	Price
3 x .060 x 3/8	**MH60030043175**	Price
4 x .035 x 3/8	**MH60040043173**	Price
4 x .060 x 3/8	**MH60040043171**	Price

Spec. - Gemini		
Size (in.)	Order No.	Price
2 x .035 x 1/4	**MH60020011393**	Price
2 x .035 x 1/8	**MH60020011392**	Price
2 x .035 x 3/8	**MH60020011394**	Price

Spec. - Gemini		
Size (in.)	Order No.	Price
2 x 1/16 x 1/4	**MH60020011395**	Price
2 x 1/16 x 3/8	**MH60020011396**	Price
2 x 1/8 x 1/4	**MH60020011402**	Price
2 x 1/8 x 3/8	**MH60020011403**	Price
2-1/2 x 1/16 x 1/4	**MH60020010640**	Price
2-1/2 x 1/16 x 3/8	**MH60020010641**	Price
3 x .035 x 1/4	**MH60030010627**	Price
3 x .035 x 3/8	**MH60030010628**	Price
3 x 1/16 x 1/4	**MH60030010645**	Price
3 x 1/16 x 1/4	**MH60030010649**	Price
3 x .060 x 3/8	**MH60030010647**	Price
3 x 1/16 x 3/8	**MH60030010648**	Price
3 x 1/8 x 1/4	**MH60030010650**	Price
3 x 1/8 x 1/4	**MH60030010652**	Price
3 x 1/8 x 3/8	**MH60030010651**	Price
3 x 1/8 x 3/8	**MH60030010653**	Price
4 x .035 x 1/4	**MH60040010629**	Price
4 x .035 x 3/8	**MH60040010630**	Price
4 x 1/16 x 1/4	**MH60040010654**	Price
4 x .060 x 3/8	**MH60040010655**	Price
4 x 1/8 x 1/4	**MH60040010658**	Price
4 x 1/8 x 3/8	**MH60040010659**	Price
4 x 1/8 x 3/8	**MH60040010661**	Price

Toolroom Cut-Off Wheels - Reinforced

- Layers of fiberglass mesh extending from the wheel's center to its periphery, help these wheels withstand lateral stress and rough usage
- Contains premium aluminum oxide with high temperature resin bonds formulated for long life and fast cutting ability



Size (in.)	Spec.	Order No.	Price
3 x .035 x 1/4	A60-OBNA2	**MH60030028573**	Price
3 x .035 x 3/8	A60-OBNA2	**MH60030028574**	Price
3 x .060 x 1/4	A60-OBNA2	**MH60030028471**	Price
3 x .060 x 3/8	A60-OBNA2	**MH60030028552**	Price
4 x .035 x 3/8	A60-OBNA2	**MH60040029621**	Price
6 x .035 x 1/2	A60-OBNA2	**MH60060035053**	Price
6 x .035 x 5/8	A60-OBNA2	**MH60060035054**	Price
6 x .060 x 1-1/4	A60-OBNA2	**MH60060035165**	Price
6 x .060 x 1/2	A60-OBNA2	**MH60060035164**	Price
7 x .035 x 1-1/4	A60-OBNA2	**MH60070038788**	Price
7 x .035 x 5/8	A60-OBNA2	**MH60070038787**	Price
7 x .060 x 1-1/4	A60-OBNA2	**MH60070038796**	Price

Size (in.)	Spec.	Order No.	Price
7 x .060 x 5/8	A60-OBNA2	**MH60070038811**	Price
7 x 1/16 x 5/8	57A364-TB25N	**MH60070022673**	Price
8 x .035 x 5/8	A60-OBNA2	**MH60080042979**	Price
8 x .060 x 1-1/4	A60-OBNA2	**MH60080042983**	Price
8 x .060 x 5/8	A60-OBNA2	**MH60080042981**	Price

SURF PRO Small Diameter Thin Cut-Off Wheels - Aluminum Oxide - Type 1

- Aluminum oxide grain
- Fiberglass reinforced
- General purpose rapid cutting applications
- Use for thin gauge sheet stock, thin walled tubing and small diameter cross sections
- Economical choice for cutting iron, steel, stainless steel and other materials



Size (in.)	Grit	Order No.	Price
1-1/2 x 1/16 x 1/4	36	**SP010150622136A**	Price
1-1/2 x 1/16 x 1/4	46	**SP010150622146A**	Price
1-1/2 x 1/16 x 3/8	36	**SP010150623136A**	Price
1-1/2 x 1/16 x 3/8	46	**SP010150623146A**	Price
2 x .060 x 1/8	36	**SP010200601136A**	Price
2 x .060 x 1/8	46	**SP010200601146A**	Price
2 x .060 x 1/8	60	**SP010200601160A**	Price
2 x .060 x 1/4	36	**SP010200602136A**	Price
2 x .060 x 1/4	46	**SP010200602146A**	Price
2 x .060 x 1/4	60	**SP010200602160A**	Price
2 x .060 x 3/8	36	**SP010200603136A**	Price
2 x .060 x 3/8	46	**SP010200603146A**	Price
2 x .060 x 3/8	60	**SP010200603160A**	Price
2-1/2 x 1/16 x 1/4	36	**SP010250622136A**	Price
2-1/2 x 1/16 x 1/4	46	**SP010250622146A**	Price
2-1/2 x 1/16 x 3/8	36	**SP010250623136A**	Price
2-1/2 x 1/16 x 3/8	46	**SP010250623146A**	Price
3 x .060 x 1/4	36	**SP010300602136A**	Price
3 x .060 x 1/4	46	**SP010300602146A**	Price
3 x .060 x 1/4	60	**SP010300602160A**	Price
3 x .060 x 3/8	36	**SP010300603136A**	Price
3 x .060 x 3/8	46	**SP010300603146A**	Price
3 x .060 x 3/8	60	**SP010300603160A**	Price
4 x .060 x 3/8	46	**SP010400603146A**	Price
4 x .060 x 3/8	36	**SP010400603136A**	Price
4 x .060 x 3/8	60	**SP010400603160A**	Price
4 x 1/16 x 1/4	36	**SP010400622136A**	Price
4 x 1/16 x 1/4	46	**SP010400622146A**	Price
4 x 1/16 x 3/8	36	**SP010400623136A**	Price
4 x 1/16 x 3/8	46	**SP010400623146A**	Price
4 x 1/16 x 1/2	46	**SP010400624146A**	Price
4 x 1/16 x 5/8	36	**SP010400625136A**	Price
4 x 1/16 x 5/8	46	**SP010400625146A**	Price
4 x 3/32 x 5/8	36	**SP010400935136A**	Price
4 x 3/32 x 5/8	46	**SP010400935146A**	Price

SURF PRO Small Diameter Thin Cut-Off Wheels - Zirconia - Type 1

- Zirconia grain
- High performance for cutting and notching applications
- Use on ferrous metals (iron, steel, welds), stainless steel and high tensile alloys



Size (in.)	Grit	Order No.	Price
2 x .060 x 1/4	46	**SP010200602146Z**	Price
2 x .060 x 1/4	60	**SP010200602160Z**	Price
2 x .060 x 3/8	46	**SP010200603146Z**	Price
2 x .060 x 3/8	60	**SP010200603160Z**	Price
4 x .060 x 3/8	46	**SP010400603146Z**	Price
4 x .060 x 3/8	60	**SP010400603160Z**	Price
4 x 1/16 x 1/4	46	**SP010400622146Z**	Price
4 x 1/16 x 3/8	46	**SP010400623146Z**	Price

SURF PRO Small Diameter Thin Cut-Off Wheels - Ceramic - Type 1

- Ceramic grain
- Fiberglass reinforced
- Durable and self-sharpening for fast, cool cutting and long wheel life
- Use on stainless steel, high tensile alloys and ferrous metals (iron, steel, welds, etc)



Size (in.)	Grit	Order No.	Price
2 x .060 x 1/4	60	**SP010200602160C**	Price
2 x .060 x 3/8	60	**SP010200603160C**	Price
3 x .060 x 1/4	60	**SP010300602160C**	Price
3 x .060 x 3/8	60	**SP010300603160C**	Price
4 x .060 x 3/8	60	**SP010400603160C**	Price

SURF PRO Light Grind & Cut-Off Wheels - Aluminum Oxide-Type 1

- Aluminum oxide grain
- Fiberglass reinforced
- General purpose light grinding and cut-off applications
- Economical choice for cutting iron, steel, stainless steel and other materials



Size (in.)	Grit	Order No.	Price
2 x 1/8 x 1/4	24	**SP010201252124A**	Price
2 x 1/8 x 1/4	36	**SP010201252136A**	Price
2 x 1/8 x 1/4	46	**SP010201252146A**	Price
2 x 1/8 x 3/8	24	**SP010201253124A**	Price
2 x 1/8 x 3/8	36	**SP010201253136A**	Price
2 x 1/8 x 3/8	46	**SP010201253146A**	Price
3 x 1/8 x 1/4	24	**SP010301252124A**	Price
3 x 1/8 x 1/4	36	**SP010301252136A**	Price
3 x 1/8 x 1/4	46	**SP010301252146A**	Price
3 x 1/8 x 3/8	24	**SP010301253124A**	Price
3 x 1/8 x 3/8	36	**SP010301253136A**	Price
3 x 1/8 x 3/8	46	**SP010301253146A**	Price
4 x 1/8 x 1/4	24	**SP010401252124A**	Price
4 x 1/8 x 1/4	36	**SP010401252136A**	Price
4 x 1/8 x 1/4	46	**SP010401252146A**	Price
4 x 1/8 x 3/8	24	**SP010401253124A**	Price
4 x 1/8 x 3/8	36	**SP010401253136A**	Price
4 x 1/8 x 3/8	46	**SP010401253146A**	Price
4 x 1/8 x 5/8	24	**SP010401255124A**	Price
4 x 1/8 x 5/8	36	**SP010401255136A**	Price
4 x 1/8 x 5/8	46	**SP010401255146A**	Price

SURF PRO Light Grind & Cut-Off Wheels-Zirconia - Type 1

- Zirconia grain
- High performance for cutting and notching applications
- Use on ferrous metals (iron, steel, welds), stainless steel and high tensile alloys



Size (in.)	Grit	Order No.	Price
3 x 1/8 x 1/4	46	**SP010301252146Z**	Price
3 x 1/8 x 3/8	46	**SP010301253146Z**	Price
4 x 1/8 x 1/4	36	**SP010401252136Z**	Price
4 x 1/8 x 3/8	36	**SP010401253136Z**	Price

SURF PRO Resin Bond Reinforced Cut-Off Wheels - Type 1



- Aluminum oxide grain
- Fiberglass reinforced
- General purpose grinding applications
- Economical choice for cutting iron, steel, stainless steel and other materials

Size (in.)	Grit	Order No.	Price
3 x 3/16 x 1/4	24	**SP010301872124A**	Price
3 x 3/16 x 1/4	36	**SP010301872136A**	Price
3 x 3/16 x 1/4	46	**SP010301872146A**	Price
3 x 3/16 x 3/8	24	**SP010301873124A**	Price
3 x 3/16 x 3/8	36	**SP010301873136A**	Price
3 x 3/16 x 3/8	46	**SP010301873146A**	Price
3 x 1/4 x 3/8	24	**SP010302503124A**	Price
3 x 1/4 x 3/8	30	**SP010302503136A**	Price
3 x 1/4 x 3/8	46	**SP010302503146A**	Price
3 x 1/4 x 5/8	24	**SP010302505124A**	Price
3 x 1/4 x 5/8	30	**SP010302505136A**	Price
3 x 1/4 x 5/8	46	**SP010302505146A**	Price
3 x 3/8 x 3/8	24	**SP010303753124A**	Price
3 x 3/8 x 3/8	30	**SP010303753136A**	Price
3 x 3/8 x 3/8	46	**SP010303753146A**	Price
3 x 1/2 x 3/8	24	**SP010305003124A**	Price
3 x 1/2 x 3/8	30	**SP010305003136A**	Price
3 x 1/2 x 3/8	46	**SP010305003146A**	Price
4 x 1/4 x 3/8	24	**SP010402503124A**	Price
4 x 1/4 x 3/8	30	**SP010402503136A**	Price
4 x 1/4 x 3/8	46	**SP010402503146A**	Price
4 x 1/4 x 5/8	24	**SP010402505124A**	Price
4 x 1/4 x 5/8	36	**SP010402505136A**	Price
4 x 1/4 x 5/8	46	**SP010402505146A**	Price

CARBORUNDUM Carbo White Aluminum Oxide Reinforced Cut-Off Wheels



- Economical choice for initial-price-conscious customers with general purpose applications
- Extra thin
- Low intial cost per wheel
- Quick cutting action
- Ideal for on-site and small-unit jobs
- Type 01

Style - Type 01					
Size (in.)	Grit	RPM	Carton Qty	Order No.	Price
4-1/2 x .040 x 7/8	A60	13580	25	**MG4661584**	Price
5 x .040 x 7/8	A60	12225	25	**MG4661585**	Price
6 x .040 x 7/8	A60	10185	25	**MG4661586**	Price

Style - Type 27					
Size (in.)	Grit	RPM	Carton Qty	Order No.	Price
4-1/2 x .045 x 7/8	A60	13580	20	**MG4636280**	Price
5 x .045 x 7/8	A60	12225	20	**MG4636281**	Price
6 x .045 x 7/8	A60	10185	20	**MG4636282**	Price

CARBABRASIVE Reinforced Resinoid Bond Aluminum Oxide Abrasive Cut-Off Wheels for Metal



- For tool room application, such as cutting and slotting
- Fiberglass reinforced on both sides for added strength
- Fast cutting — long life
- .040" Thick
- 70 Grit
- 20 Per Carton

	1/2		5/8		1-1/4	
Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price
6	**MG58A6011**	Price	**MG58A6012**	Price	**MG58A6016**	Price
7	**MG58A7011**	Price	**-**	-	**MG58A7016**	Price
8	**MG58A8011**	Price	**MG58A8012**	Price	**-**	-

SURF PRO High Performance Cut-Off Wheels



- High performance aluminum oxide grain
- Thin width for minimal material loss
- Double reinforced
- Quick, clean cuts and longer wheel life
- Less down time for wheel changes
- Reduced cost, increased productivity

New!

Size	Wheel Type	Order No.	Price
3" x .040" x 3/8"	1	**SP010304038HPA**	Price
3" x 1/16" x 3/8"	1	**SP010311638HPA**	Price
4" x .045" x 7/8"	1	**SP014504578HPA**	Price
6" x .045" x 7/8"	1	**SP010604578HPA**	Price

SURF PRO Thin Flex Cut-Off Wheels



- Zirconia grain
- Thin, flexible and fiberglass reinforced
- High performance for cutting and notching applications
- Use on ferrous metals (iron, steel, welds), stainless steel and high tensile alloys

Size (in.)	Grit	Order No.	Price
4-1/2 x .035 x 7/8	60	**SP0104503571160Z**	Price
4-1/2 x .045 x 7/8	60	**SP0104504577160Z**	Price
5 x .040 x 7/8	60	**SP0105004071160Z**	Price
6 x .040 x 7/8	60	**SP0106004071160Z**	Price

CARBORUNDUM GoldCut Reinforced Aluminum Oxide Cut-Off Wheels



- Advanced resin bond
- Unique, high strength, reinforced construction
- Extra thin .045"
- Provides strength for use on right angle grinders
- Flexible, resilient, resists breakage

Style - Tupe 37					
Size (in.)	Grit	RPM	Carton Qty	Order No.	Price
6 x .045 x 5/8-11	A30	10185	20	**MG4644368**	Price

Style - Type 01					
Size (in.)	Grit	RPM	Carton Qty	Order No.	Price
5 x 1/8 x 5/8-11	A46-Q	15280	25	**MG4663951**	Price
4 x 3/32 x 5/8	A36-Q	15280	25	**MG4627224**	Price
4-1/2 x .045 x 7/8	A60-Q	13580	25	**MG4663952**	Price
4-1/2 x 3/32 x 7/8	A60-Q	13580	25	**MG4627225**	Price
6 x .045 x 7/8	A46-Q	10185	25	**MG4663954**	Price
6 x 3/32 x 7/8	A60-Q	10185	25	**MG4627228**	Price
7 x 1/16 x 7/8	A46-Q	8600	25	**MG4632324**	Price
7 x 3/32 x 7/8	A46-Q	8600	25	**MG4627230**	Price

Style - Type 27					
Size (in.)	Grit	RPM	Carton Qty	Order No.	Price
4 x .045 x 5/8	A30	13580	20	**MG4644349**	Price
4-1/2 x .045 x 5/8-11	A30	13580	20	**MG4630584**	Price
4-1/2 x .045 x 7/8	A30	13580	20	**MG4661551**	Price
5 x .045 x 5/8-11	A30	12225	20	**MG4644367**	Price
5 x .045 x 7/8	A30	12225	20	**MG4661553**	Price
6 x .045 x 7/8	A30	10185	20	**MG4661554**	Price
7 x 1/16 x 7/8	A30	8600	20	**MG4661555**	Price
9 x 1/16 x 5/8-11	A30	6600	10	**MG4630585**	Price

CGW CAMEL GRINDING WHEELS Reinforced Cut-Off Wheels for Hand Held Grinders

1-1/2” to 4” Diameter

- Ideal for cutting off ferrous metals, alloy steels and cast iron
- Aluminum oxide abrasive – fast cutting action
- Resinoid bond – long life – burn free cutting
- High strength reinforcement – resists breakage





Material - Aluminum Oxide					
Wheel Size (in.)	Grading	Max. RPM	Carton Qty.	Order No.	Price
1-1/2 x 1/32 x 1/4	A60-RBF	45000	50	**MG9035687**	Price
1-1/2 x 1/16 x 1/4	A60-RBF	45000	50	**MG9035688**	Price
2 x 1/32 x 3/8	A60-RBF	30000	50	**MG9035689**	Price
2 x 1/16 x 1/4	A36-TBF	30000	50	**MG9045066**	Price
2 x 1/16 x 3/8	A36-RBF	30000	50	**MG9035690**	Price
2 x 1/8 x 3/8	A24-RBF	30000	50	**MG9035691**	Price
3 x 1/32 x 1/4	A60-RBF	25000	50	**MG9035500**	Price
3 x 1/32 x 3/8	A60-RBF	25000	50	**MG9035501**	Price
3 x 1/16 x 1/4	A36-RBF	25000	50	**MG9035502**	Price
3 x 1/16 x 1/4	A60-RBF	25000	50	**MG9045085**	Price
3 x 1/16 x 3/8	A36-RBF	25000	50	**MG9035503**	Price
3 x 1/16 x 3/8	A60-RBF	25000	50	**MG9045086**	Price
3 x 1/8 x 1/4	A24-RBF	25000	50	**MG9035504**	Price
3 x 1/8 x 3/8	A24-RBF	25000	50	**MG9035505**	Price
4 x 1/32 x 1/4	A60-RBF	19100	50	**MG9035506**	Price
4 x 1/32 x 3/8	A60-RBF	19100	50	**MG9035507**	Price
4 x 1/16 x 1/4	A36-RBF	19100	50	**MG9035508**	Price
4 x 1/16 x 1/4	A60-RBF	19100	50	**MG9045088**	Price
4 x 1/16 x 3/8	A36-RBF	19100	50	**MG9035509**	Price
4 x 1/16 x 3/8	A60-RBF	19100	50	**MG9045087**	Price
4 x 1/16 x 5/8	A36-RBF	19100	50	**MG9035510**	Price
4 x 1/8 x 1/4	A24-RBF	19100	50	**MG9035511**	Price
4 x 1/8 x 3/8	A24-RBF	19100	50	**MG9035512**	Price

Material - Aluminum Oxide—Fast cut					
Wheel Size (in.)	Grading	Max. RPM	Carton Qty.	Order No.	Price
3 x 1/32 x 1/4	A60-RBF	25000	50	**MG9059102**	Price
3 x 1/32 x 3/8	A60-RBF	25000	50	**MG9059103**	Price
3 x 1/16 x 1/4	A36-RBF	25000	50	**MG9059104**	Price
3 x 1/16 x 3/8	A36-RBF	25000	50	**MG9059105**	Price
4 x 1/32 x 1/4	A60-RBF	19100	50	**MG9059106**	Price
4 x 1/32 x 3/8	A60-RBF	19100	50	**MG9059107**	Price
4 x 1/16 x 3/8	A36-RBF	19100	50	**MG9059108**	Price

CGW CAMEL GRINDING WHEELS Zirconia Premium Cut-Off Wheels - Type 1

- ZA: Zirconia Aluminum Oxide - Metal, steel, and stainless
- Longer lasting life and easy cutting action



Size (in.)	Spec	RPM	Carton Qty.	Order No.	Price
3 x 1/32 x 1/4	ZA60-TBF	23900	50	**MG9036175**	Price
3 x 1/32 x 3/8	ZA60-TBF	23900	50	**MG9036176**	Price
3 x 1/16 x 1/4	ZA36-TBF	23900	50	**MG9036173**	Price
3 x 1/16 x 3/8	ZA36-TBF	23900	50	**MG9036174**	Price
4 x 1/32 x 1/4	ZA60-TBF	19100	50	**MG9036179**	Price
4 x 1/32 x 3/8	ZA60-TBF	19100	50	**MG9036180**	Price
4 x 1/16 x 1/4	ZA36-TBF	19100	50	**MG9036177**	Price
4 x 1/16 x 3/8	ZA36-TBF	19100	50	**MG9036178**	Price

CARBORUNDUM Reinforced Cut-Off Wheels for Hand Held Grinders

1-1/2” to 4” Diameter

- Ideal for cutting off ferrous metals, alloy steels and cast iron
- Aluminum oxide abrasive – fast cutting action
- Resinoid bond – long life – burn free cutting
- High strength reinforcement – resists breakage



GOLD 32AR Abrasive



Size (in.)	Grading	Max. RPM	Carton Qty.	Order No.	Price
2 x .035 x 1/4	A60-OBFTK	30560	25	**MG4609277**	Price
2 x 1/16 x 1/4	A36-TBFW	30560	25	**MG4609275**	Price
3 x .035 x 1/4	A60-OBFTK	25445	25	**MG4609269**	Price
3 x .035 x 3/8	A60-OBFTK	25445	25	**MG4609268**	Price
3 x 1/16 x 1/4	A36-TBFW	25445	25	**MG4609265**	Price
3 x 1/16 x 1/4	A60-TBFW	25445	25	**MG4609264**	Price
3 x 1/16 x 3/8	A36-TBFW	25445	25	**MG4609263**	Price
3 x 1/16 x 3/8	A60-TBFW	25445	25	**MG4609262**	Price
3 x 1/8 x 1/4	A36-TBFW	25445	25	**MG4609261**	Price
3 x 1/8 x 3/8	A36-TBFW	25445	25	**MG4609260**	Price
4 x .035 x 1/4	A60-OBFTK	19085	25	**MG4609258**	Price
4 x .035 x 3/8	A60-OBFTK	19085	25	**MG4609257**	Price
4 x 1/16 x 1/4	A36-TBFW	19085	25	**MG4609255**	Price
4 x 1/16 x 3/8	A36-TBFW	19085	25	**MG4609254**	Price
4 x 1/8 x 3/8	A36-TBFW	19085	25	**MG4609252**	Price

SURF PRO® Wheel Adapters / Cut Off Wheel Mandrels

- Wheel adapter for use with cut off wheels
- Screw head type is slotted for Quick Change - Holds wheel flush
- Nut type includes arbor, hex nut and washers

New!



Description - Cut-Off Wheel Mandrel Adapter - Screw Head					
Fits Hole (in.)	Shank (in.)	Length (in.)	Washer OD (in.)	Order No.	Price
1/4	1/4	2.15	3/4	**SP24001414SH**	Price
1/4 or 3/8	1/4	2.15	3/4	**SP24143814SH**	Price
3/8	1/4	2.15	3/4	**SP24003814SH**	Price

Description - Wheel Arbor Adapter - Nut Type					
Fits Hole (in.)	Shank (in.)	Length (in.)	Washer OD (in.)	Order No.	Price
1/4	1/4	2.50	1	**SP24001414NT**	Price
3/8	1/4	2.50	1	**SP24003814NT**	Price
1/2	1/4	2.50	1-1/2	**SP24001214NT**	Price

Flat Head Wheel Arbors

- Left hand threaded arbor
- "Flat Head" style allows mounting between a single washer and the flat-head
- For mounting wire wheel brushes & other abrasive finishing products
- Rust proof finish



Fits Arbor Hole (in.)	Wheel Width Up to (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
1/2	1/2	1/4	2-5/16	**MM54FHL30**	Price
1/2	3/8	1/4	1-7/8	**MM54FHL25X**	Price
1/2	7/8	1/4	2-5/16	**MM54FHL30X**	Price
1/4	3/4	3/16	1-3/4	**MM54FHL8X**	Price
3/8	3/8	1/4	1-5/8	**MM54FHL10X**	Price
5/8	3/8	1/4	1-7/8	**MM54FHL50X**	Price

Arbor Adapters Small Reinforced Cut-Off Wheels



Shank	Arbor	Order No.	Price
1/4	1/2	**MG581412**	Price
1/4	1/4	**MG581414**	Price
1/4	3/8	**MG581438**	Price

CRATEX® Wheel Mandrel

- Wheel Mandrel No. 1342 has a 1/4" Shank and is designed for 1/4" center hole wheels up to 3" diameter by 1/2" thick or less

Maximum Safe Speeds based on 1/2" overhang are:

- 1-1/1" dia. -15,000 R.P.M.
- 2" dia. - 10,500 R.P.M.
- 2-1/2" dia. - 8,300 R.P.M.
- 3" dia. - 7,000 R.P.M.
- These speeds are based on 5,500 Surface Feet per Minute



Order No.	Price
MG641342	Price

Adapter for Plain Arbor Hole

- Used with reinforced depressed center wheels to adapt for use on right angle head grinders



Order No.	Price
MG40D35	Price

Cartridge Roll Mandrels



Dia. (in.)	Length (in.)	Shank (in.)	Order No.	Price
3/32	1	1/8	**MM60M300**	Price
1/8	3/4	1/4	**MM60M100**	Price
1/8	1	1/4	**MM60CR9**	Price
1/8	1-1/2	1/4	**MM60CR10**	Price
3/16	1	1/4	**MM60CR16**	Price
3/16	1-1/2	1/4	**MM60CR17**	Price
1/4	1	1/4	**MM60M200**	Price
1/4	1-1/2	1/4	**MM60CR22**	Price

CRATEX® Cone Mandrel

- Rubberized Abrasive Cones are designed to fit Cratex Cone Mandrel No. 1341, 1/4" Shank
- Maximum Safe Speed 20,000 R.P.M. with 1/2" overhang (exposed mandrel length) or less
- For each additional 1/4" of overhang the Maximum Safe Speed is decreased by at least 20%



Order No.	Price
MG641341	Price

CRATEX® Point Mandrels

- Mandrels No. 1 and 4 have a 3-48 thread and a hex nut flange
- Mandrel No. 6 has a No, 5-40 thread and a hex nut flange
- Mandrel No. 9 has a No. 5 screw thread and a fixed shoulder flange



Shank (in.)	For Use With	Order No.	Price
1/4	No. 11, 12, 14, 15 Points, 1/8 Hole	**MG64M9**	Price
1/8	No. 11, 12, 14, 15 Points, 1/8 Hole	**MG64M6**	Price
1/8	No. 4, 6, 8, 10 Points, 1/16 Hole	**MG64M4**	Price
3/32	No. 4, 6, 8, 10 Points, 1/16 Hole	**MG64M1**	Price

CRATEX® Small Wheel Mandrels

- Maximum Safe Speed 25,000 R.P.M with 1/2" overhang (exposed mandrel length) or less
- For ech additional 1/4" of overhang Maximum Safe Speed is decreased by at least 20%
- Use a light work pressure



Shank Size (in.)	For Use With	Order No.	Price
3/32	1/16" Hole Small Wheels	**MG642**	Price
1/8	1/16" Hole Small Wheels	**MG643**	Price
1/8	1/8" Hole Small Wheels	**MG645**	Price
1/4	1/8" Hole Small Wheels	**MG648**	Price

CARBORUNDUM Reinforced Cut-Off Wheels for Stationary Machines with Fixed Bases

- Ideal for most metals
- Fast and free cutting action
- Provides straight cuts
- Burn-free — long life
- High strength externally reinforced to resist breakage
- Available in Two Gradings – Fast Cut & Long Life

GOLD *Aluminum Oxide Abrasive*





Style - Fast Cut				
Size (in.)	**Grading**	**Max RPM**	**Order No.**	**Price**
10 x 3/32 x 5/8	A30-RBFW	6110	**MG4609216**	Price
12 x 1/8 x 1	A30-RBFW	5095	**MG4607069**	Price
14 x 1/8 x 1	A30-RBFW	4365	**MG4607070**	Price
16 x 5/32 x 1	A30-RBFW	3820	**MG4607071**	Price
20 x 3/16 x 1	A30-RBFIW+	2710	**MG4609204†**	Price
20 x 5/32 x 1	A30-RBFW	2710	**MG4607072**	Price

Style - Long Life				
Size (in.)	**Grading**	**Max RPM**	**Order No.**	**Price**
10 x 3/32 x 5/8	A24-TBFW	6110	**MG4607063**	Price
14 x 1/8 x 1	A24-TBFW	4365	**MG4607065**	Price
16 x 5/32 x 1	A24-TBFW	3820	**MG4607066**	Price
20 x 3/16 x 1	A24-TBFIW+	2710	**MG4607068†**	Price
20 x 5/32 x 1	AW24-TBFW	2710	**MG4607067**	Price

† These wheels are internally reinforced.

CARBORUNDUM Non-Reinforced Resinoid Bond Aluminum Oxide Abrasive Cut-Off Wheels for Metal

- Ideal for precision slotting and cutting
- Fast cutting action and long life
- Free cutting action - burn free cutting
- Carton Qty: 10 Pcs.



Size (in.)	Grading	Max. RPM	Order No.	Price
6 x 1/16 x 1-1/4	A60-OB5SW	7640	**MG4609188**	Price
7 x 1/32 x 1-1/4	A60-MB5SW	5460	**MG4601923**	Price
7 x 1/32 x 1-1/4	A60-OB5SW	5460	**MG4609187**	Price
7 x 1/32 x 1-1/4	A70-QB5SW	5460	**MG4609186**	Price
7 x 1/16 x 1-1/4	A46-OB5SW	6550	**MG4609185**	Price
7 x 1/16 x 1-1/4	A60-OB5SW	6550	**MG4609184**	Price
8 x 1/16 x 1-1/4	A46-OB5SW	5730	**MG4609183**	Price
8 x 1/16 x 1-1/4	A60-MB5SW	5730	**MG4601926**	Price
10 x 1/16 x 5/8	A46-QB5RW	4585	**MG4662839**	Price
10 x 1/16 x 5/8	A60-OB5SW	4585	**MG4609181**	Price

CARBORUNDUM Reinforced Resinoid Bond Aluminum Oxide Abrasive Cut-Off Wheels for Metal

- Primarily for cutting high speed steel and tool steels
- Double reinforced - resists breakage
- Provides straight cuts
- Decimal thickness for very narrow cuts
- Fast cutting - long life
- Grading A60 0 BFTK
- 60 Grit
- Carton Qty: 10 Pcs



Size (in.)	Max. RPM	Order No.	Price
6 x .060 x 1-1/4	10190	**MG4601910**	Price
7 x .035 x 1-1/4	8730	**MG4609196†**	Price
7 x .035 x 5/8	8730	**MG4609197**	Price
7 x .060 x 1-1/4	8730	**MG4609194†**	Price
7 x .060 x 5/8	8730	**MG4609195**	Price
8 x .060 x 1-1/4	7640	**MG4609192**	Price

† Grading — BA 60 O BFTK

CARBABRASIVE Reinforced Cut-off Wheels for Hand Held Grinders

- Ideal for cutting off ferrous metals, alloy steels and cast iron
- Aluminum Oxide abrasive - fast cutting action
- Resinoid bond - long life - burn free cutting
- High strength reinforcement - resists breakage
- 2" to 4" Diameter

WORLD CLASS QUALITY





				1/4		3/8		1/2	
Dia. (in.)	**Thickness (in.)**	**Grit**	**RPM**	**Order No.**	**Price**	**Order No.**	**Price**	**Order No.**	**Price**
2	1/16	36	31510	**MG58B20200**	Price	**-**	-	**-**	-
3	1/16	36	25100	**MG58B30200**	Price	**MG58B3020**	Price	**-**	-
3	1/32	60	25100	**MG58B30100**	Price	**MG58B3010**	Price	**-**	-
3	1/8	36	25100	**-**	-	**MG58B3040**	Price	**-**	-
4	1/32	60	20140	**MG58B40100**	Price	**MG58B4010**	Price	**MG58B4011**	Price

Chop Saw Blades - Type 1

- A: Aluminum Oxide – Metal & Steel. 14″ available in single and double fiberglass reinforced
- ALU: Aluminum Oxide – Special non-loading formulation for cutting aluminum
- WA: White Aluminum Oxide – Excellent on stainless steel, ferrous metals. Single reinforced
- ZA: Zirconia Aluminum Oxide – Metal & Stainless; High performance cutting, recommended on thicker stock applications such as angle iron, angle bars





Wheel Size (in.)	Gradings	Max RPM	Carton Qty.	Order No.	Price
12 x 3/32 x 1	A36-PBF Double	5100	10	**MG9035575**	Price
14 x 3/32 x 1	A30-N-BF Aluminum	4400	10	**MG9036122**	Price
14 x 3/32 x 1	A30-PBF Single	4400	10	**MG9035670**	Price
14 x 3/32 x 1	A36-PBF Double	4400	10	**MG9035576**	Price
14 x 3/32 x 1	WA30-P Stainless	4400	10	**MG9036123**	Price
14 x 3/32 x 1	ZA24-S Double	4400	10	**MG9036125**	Price
16 x 3/32 x 1	A36-PBF Double	3820	10	**MG9036133**	Price

Fast Cut Chop Saw Wheels

- Aluminum oxide grain for use on metal, steel and general applications





Wheel Size (in.)	Specification	RPM	Carton Qty.	Order No.	Price
10 x 3/32 x 5/8	A24-RBF	6100	10	**MG9070110**	Price
12 x 3/32 x 1	A36-PBF	5100	10	**MG9070112**	Price
14 x 3/32 x 1	A30-PBF	4400	10	**MG9070113**	Price
14 x 7/64 x 1	Q36-P-BF	4400	10	**MG9036234**	Price

Reinforced Cut-Off Wheels for Low Powered Bench Top Chop Saws

- Ideal for cutting light tubing, angle iron, exhaust pipes and steel extrusions
- Aluminum oxide for fast cutting action
- Free cutting action – burn free
- Carton Qty: 10 Pcs.

GOLD *Aluminum Oxide Abrasive*



Size (in.)	Grading	RPM	Order No.	Price
12 x 3/32 x 1	A36-PBFW	5095	**MG4607085**	Price
14 x 3/32 x 1	A36-PBFW	4365	**MG4607086**	Price
14 x 3/32 x 1	A36-NBFW	4365	**MG4607087**	Price
16 x 3/32 x 1	A36-PBFW	3820	**MG4607088**	Price

Reinforced Cut-Off Wheels for Stationary Machines with Fixed Bases

- A: Aluminum Oxide – General purpose, use on most metals and steels
- C: Silicon Carbide – Use on concrete
- WA: White Aluminum Oxide – Use on stainless steel. Contaminate free: iron, sulfer and chlorine ≤ 0.1%
- Z: Zirconia – All applications, premium cutting wheel
- CGW wheels provide fast and free cutting action with straight cuts



Wheel Size (in.)	Spec	RPM	Carton Qty.	Order No.	Price
10 x 1/8 x 1	A24-RBF	6110	10	**MG9035580**	Price
12 x 1/8 x 1	A24-RBF	5100	10	**MG9035581**	Price
14 x 1/8 x 1	A24-RBF	4400	10	**MG9035582**	Price
14 x 1/8 x 1	C24-RBF	4400	10	**MG9037671**	Price
14 x 1/8 x 1	W36-PBF	4400	10	**MG9045089**	Price
16 x 5/32 x 1	A24-RBF	3820	10	**MG9035584**	Price

Fast Cut Stationary Saw Wheels

- Aluminum oxide grain for use on metal, steel and general applications





Wheel Size (in.)	Specification	RPM	Carton Qty.	Order No.	Price
10 x 1/8 x 5/8	A24-RBF	6100	10	**MG9070111**	Price
12 x 1/8 x 1	A24-RBF	5100	10	**MG9070105**	Price
14 x 1/8 x 5/8	A24-QBF	4400	10	**MG9036233**	Price
16 x 5/32 x 1	A24-RBF	3820	10	**MG9070106**	Price
18 x 5/32 x 1	A24-RBF	3400	10	**MG9070107**	Price
20 x 5/32 x 1	A24-RBF	3100	10	**MG9070108**	Price
20 x 5/32 x 1	A24-RBF	3100	10	**MG9070146**	Price
20 x 3/16 x 1	A24-RBF	3100	10	**MG9070109**	Price
20 x 3/16 x 1	A24-RBF	3100	10	**MG9070147**	Price

Super Quickie Cut Reinforced Cut-Off Wheels Type 1 & Type 27

- #1 Wheel choice for steel applications





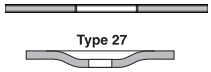


Style - Type 1					
Size	Spec.	Max. RPM	Carton Qty.	Order No.	Price
4-1/2 x .045 x 7/8	A60-TBF	13300	50	**MG9045102**	Price

Style - Type 27					
Size	Spec.	Max. RPM	Carton Qty.	Order No.	Price
4-1/2 x .045 x 7/8	A60-TBF	13300	50	**MG9045103**	Price

Super Quickie Contaminate Free Cut-Off Wheels Type 1 & Type 27

- Contaminate-free wheel #1 wheel choice for stainless steel applications







Style - Type 1					
Size (in.)	Spec.	Max. RPM	Carton Qty.	Order No.	Price
4-1/2 x .035 x 7/8	A60-TBF	13300	50	**MG9045041**	Price
4-1/2 x .045 x 7/8	A60-TBF	13300	50	**MG9045042**	Price
5 x .045 x 7/8	A60-TBF	12250	50	**MG9045104**	Price
6 x .045 x 7/8	A60-TBF	10200	25	**MG9045080**	Price

Style - Type 27					
Size (in.)	Spec.	Max. RPM	Carton Qty.	Order No.	Price
4-1/2 x .045 x 7/8	A60-TBF	13300	50	**MG9045099**	Price

Circular Saw Blades Type 1

Fast Cut

- Aluminum oxide grain for use on metal, steel and general applications

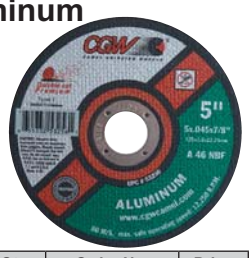




Size (in.)	Grading	Max. RPM	Carton Qty.	Order No.	Price
7 x .045 x 5/8	A60-SBF	8600	25	**MG9037573**	Price
7 x .045 x 5/8	C30-RBF	8600	25	**MG9037574**	Price
7 x 3/32 x 5/8	A24-RBF	8600	25	**MG9035573**	Price
7 x 3/32 x 5/8	A24-RBF	8600	25	**MG9059109**	Price
7 x 3/32 x 5/8	C24-RBF	8600	25	**MG9035574**	Price
7 x 3/32 x 5/8	C24-RBF	8600	25	**MG9059110**	Price

Quickie Cut™ Aluminum Cut-Off Wheels

- Premium aluminum oxide grain and A46-N grade bond engineered for superior non-loading cuttng action
- Suitable for aluminum cutting and non-ferrous metals



Size (in.)	Grit	Max. RPM	Carton Qty.	Order No.	Price
4-1/2 x .045 x 7/8	46NBF	13300	25	**MG9053255**	Price
5 x .045 x 7/8	46NBF	12200	25	**MG9053256**	Price

High Speed Gas & Electric Saw Blades – Type 1

- All 12-14″ wheels are electronically balanced and will cut metal, iron, cast iron
- A24R: Aluminum Oxide – Metal & steel, stainless, general purpose. 14″ are triple reinforced
- AC: Use on ductile iron. 14″ are triple reinforced







Size (in.)	Grading	Max. RPM	Carton Qty.	Order No.	Price
12 x 5/32 x 1	A24-RBF	6400	10	**MG9035589**	Price
12 x 5/32 x 1	AC24-RBF	6400	10	**MG9035592**	Price
12 x 5/32 x 20mm	A24-RBF	6400	10	**MG9035587**	Price
12 x 5/32 x 20mm	AC24-RBF	6400	10	**MG9035590**	Price
14 x 5/32 x 1	A24-RBF	5500	10	**MG9035600**	Price
14 x 5/32 x 1	AC24-RBF	5500	10	**MG9035602**	Price
14 x 5/32 x 20mm	A24-RBF	5500	10	**MG9035599**	Price
14 x 5/32 x 20mm	AC24-RBF	5500	10	**MG9035601**	Price

Aluminum Oxide Large Cutting Chop Saws

- Premium Aluminum oxide grains provide an even, sharp, clean cut and a hard bond extends life and maximizes performance
- Type 1

New!



Dia. (in.)	Thickness (in.)	Spec	RPM	Hole Size (in.)	Std. Pack	Order No.	Price
12	3/32	A46T	5100	1	25	**MK5157090**	Price
14	1/8	A30R	4400	1	10	**MK5157091**	Price
14	3/32	A36N	4400	1	10	**MK5157093**	Price
14	3/32	A46T	4400	1	10	**MK5157092**	Price

Portable Saw Cut-Off Wheels

- Ductile™ - A/O and Silicon Carbide combination for ductile pipe, concrete, cast iron, hard metals



Size (in.)	Max. RPM	Order No.	Price
14 x 1/8 x 1	5400	**MG4123453**	Price
12 x 1/8 x 1	6300	**MG4123415**	Price
12 x 1/8 x 20mm	6300	**MG4123425**	Price
14 x 1/8 x 20mm	5460	**MG4123458**	Price

Zip Plus Aluminum Oxide Cut Off Wheel

- Excellent performance for cutting material 1/8” and thicker
- Type 27 wheels are equipped with a metal hub cladding for extra strength, control and safety
- The preferred wheel for flush cutting in confined spaces

New!



Wheel Type - Type 1						
Dia. (in.)	Grit	Hole Size (in.)	RPm	Std. Pack	Order No.	Price
4-1/2	60	7/8	13000	25	**WS0111T242**	Price
4-1/2	60	7/8	13000	25	**WS0111T453**	Price

Quickie Cut™ Extra Thin Reinforced Cut-Off Wheels — Type 1

- A60-TB-Flex bond wheels are .040 thick, cut fast, last long and flex
- .045 wheels cut fast and offer longer life
- Cuts steel/stainless





Right Angle Grinder

Size (in.)	Grading	Max. RPM	Carton Qty.	Order No.	Price
4 x .040 x 5/8	A60-TB-Flex	19000	25	**MG9045014**	Price
4-1/2 x .035 x 7/8	A60-TB-Flex	13300	25	**MG9045010**	Price
4-1/2 x .045 x 7/8	A36-TBF	13300	25	**MG9035514**	Price
5 x .040 x 7/8	A60-TB-Flex	12250	25	**MG9045011**	Price
5 x .045 x 7/8	A36-TBF	12250	25	**MG9035516**	Price
6 x .040 x 1/2	A60-TB-Flex	10200	25	**MG9045050**	Price
6 x .040 x 3/8	A60-TB-Flex	10200	25	**MG9045051**	Price
6 x .040 x 5/8	A60-TB-Flex	10200	25	**MG9045016**	Price
6 x .040 x 7/8	A60-TB-Flex	10200	25	**MG9045012**	Price
6 x .045 x 7/8	A36-TBF	10200	25	**MG9035517**	Price
7 x .040 x 7/8	A60-TB-Flex	8600	25	**MG9045013**	Price
7 x .045 x 7/8	A36-TBF	8600	25	**MG9035518**	Price

Quickie Cut™ Extra Thin Reinforced Cut-Off Wheels — Type 27

- Zirconia provides faster cutting, longer life
- Great on steel/stainless





Right Angle Grinder

Type 27



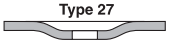
Size (in.)	Grading	Max. RPM	Carton Qty.	Order No.	Price
4 x .045 x 5/8	ZA60-SBF	15300	25	**MG9045001**	Price
4-1/2 x .045 x 7/8	ZA60-SBF	13300	25	**MG9045002**	Price
5 x .045 x 7/8	ZA60-SBF	12250	25	**MG9045005**	Price
6 x .045 x 7/8	ZA60-SBF	10200	25	**MG9045007**	Price
7 x .045 x 7/8	ZA60-SBF	8600	25	**MG9045008**	Price
9 x .060 x 7/8	ZA60-SBF	6600	25	**MG9045047**	Price

Quickie Cut™ Cut/Grind Combo. Cut-Off Wheel - .075 (5/64)

- Extra-thin combination cut-off wheels - cut and grind with ONE wheel
- Breakthrough design for fast cutting and smooth grinding action
- Save production time and cost
- For stainless steel and steel
- Available while supplies last



Type 27





Size (in.)	Spec.	RPM	Order No.	Price
4-1/2 x .075 x 7/8	A46U	13300	**MG9070094**	Price
4-1/2 x .075 x 5/8-11	A46U	13300	**MG9070095**	Price

Reinforced Cut-Off Wheels

Z-Tech High Performance

- High performance special Zirconium grain for ferrous and non-ferrous metals
- A60S – General purpose Aluminum Oxide grain for ferrous metals



Style - Type 1					
		A60S - Aluminum Oxide		Z-Tech Zirconium	
Size (in.)	Max. RPM	Order No.	Price	Order No.	Price
4 x .045 x 5/8	19000	-	-	**MG4123323**	Price
4 x .090 x 5/8	19000	**MG4123803**	Price	-	-
4-1/2 x .045 x 7/8	13300	**MG4123101**	Price	**MG4123324**	Price
4-1/2 x .090 x 7/8	13300	**MG4123804**	Price	-	-
5 x .045 x 7/8	12200	**MG4123103**	Price	-	-
6 x .045 x 5/8	10200	**MG4123105**	Price	**MG4123326**	Price
6 x .045 x 7/8	10200	**MG4123106**	Price	**MG4123327**	Price
6 x .090 x 7/8	10200	**MG4123806**	Price	-	-
7 x .045 x 5/8	8500	**MG4123107**	Price	-	-
7 x .045 x 7/8	8500	-	-	**MG4123328**	Price
7 x .090 x 7/8	8500	**MG4123807**	Price	-	-

Style - Type 27					
		A60S - Aluminum Oxide		Z-Tech Zirconium	
Size (in.)	Max. RPM	Order No.	Price	Order No.	Price
4 x .045 x 5/8	19000	**MG4122011**	Price	**MG4123333**	Price
4-1/2 x .045 x 7/8	13300	**MG4122021**	Price	**MG4123334**	Price
4-1/2 x .090 x 7/8	13300	**MG4120903**	Price	-	-
5 x .045 x 7/8	12200	**MG4122071**	Price	**MG4123335**	Price
5 x .090 x 7/8	12200	**MG4120904**	Price	-	-
6 x .045 x 7/8	10200	**MG4122047**	Price	**MG4123336**	Price
6 x .090 x 7/8	10200	**MG4120905**	Price	-	-
7 x .045 x 7/8	8500	**MG4122053**	Price	**MG4123337**	Price
7 x .090 x 7/8	8500	**MG4120906**	Price	-	-

Contaminate-Free Thin Reinforced Cut-Off Wheels — Type 1 & Type 27

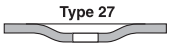
- Iron, Sulfur, and Chlorine ≤ 0.1%
- Cuts steel/stainless





Right Angle Grinder

Type 27



Style - Type 1					
Wheel Size (in.)	Grading	Max.RPM	Carton Qty.	Order No.	Price
4-1/2 x .045 x 7/8	WA36-TBF	13300	25	**MG9035515**	Price
5 x .045 x 7/8	WA36-TBF	12250	25	**MG9036301**	Price
6 x .045 x 7/8	WA36-TBF	12700	25	**MG9036302**	Price

Style - Type 27					
Wheel Size (in.)	Grading	Max.RPM	Carton Qty.	Order No.	Price
4-1/2 x .045 x 7/8	WA36-TBF	13300	25	**MG9045003**	Price
5 x .045 x 7/8	WA36-TBF	12250	25	**MG9045006**	Price
6 x .045 x 7/8	WA36-TBF	10200	25	**MG9045017**	Price
7 x .045 x 7/8	WA36-TBF	8600	25	**MG9045009**	Price

WEILER Premium Aluminum Oxide Cutting Wheels

New!



- Premium aluminum oxide grains provide an even, sharp, clean cut and a hard bond extends life and maximizes performance
- Type 1

TIGER

Dia. (in.)	Thickness (in.)	Spec	RPM	Hole Size (in.)	Std. pack	Order No.	Price
3	.035	A60T	25000	3/8	100	**MK5157001**	Price
3	1/16	A36T	25000	3/8	100	**MK5157060**	Price

WEILER Aluminum Cut-Off Wheels

TIGER

New!



- Tiger Aluminum wheels are specifically designed for high performance cutting on aluminum
- These wheels blend abrasive grains with Weiler's non-loading formula, resulting in a fast and consistent cut rate on aluminum

Style - Type 1			
Size (in.)	Standard Pk.	Order No.	Price
4-1/2 x .045 x 7/8	25	**MK5158200**	Price
5 x .045 x 7/8	25	**MK5158201**	Price
6 x .045 x 7/8	25	**MK5158202**	Price

Style - Type 27			
Size (in.)	Standard Pk.	Order No.	Price
4-1/2 x .045 x 5/8-11	10	**MK5158206**	Price
4-1/2 x .045 x 7/8	25	**MK5158205**	Price
5 x .045 x 5/8-11	10	**MK5158208**	Price
5 x .045 x 7/8	25	**MK5158207**	Price
6 x .045 x 5/8-11	10	**MK5158210**	Price
6 x .045 x 7/8	25	**MK5158209**	Price

WEILER Ultracut True 1MM Cutting Wheels



TIGER

- Delivers lightning fast, super smooth, clean cuts
- Dual reinforcement provides added strength for aggressive cutting
- Contaminant-free INOX wheels provide a worry free solution for stainless steel applications
- Smooth outer layer on performance cutting wheels reduces friction that translates to an effortless cut and less kickback during operation

New!

Dia. (in.)	Thickness	Grit	Spec	RPM	Std. Pack	Order No.	Price
4-1/2	1mm	60	INOX60T	13000	50	**MK5158130**	Price
4-1/2	1mm	60	Z60T	13000	50	**MK5158005**	Price
5	1mm	60	INOX60T	12200	50	**MK5158131**	Price
5	1mm	60	Z60T	12200	50	**MK5158006**	Price

WEILER Zirconia Alumina Cutting Wheels

TIGER



- Cuts faster and last longer so you get proven productivity at an exceptional total cost
- Designed for hard core Welding & Fabrication professionals who need the best soltion for the toughest jobs
- Best on carbon steel, stainless steel, armored steel, structural steel, cast iron and inconel

New!

Dia. (in.)	Spec	RPM	Hole Size (in.)	Std. Pack	Wheel Type	Order No.	Price
4-1/2	Z60T	13000	7/8	25	Type 1	**MK5158000**	Price
4-1/2	Z60T	13000	7/8	25	Type 27	**MK5158020**	Price
5	Z60T	12200	7/8	25	Type 1	**MK5158001**	Price
5	Z60T	12200	7/8	25	Type 27	**MK5158021**	Price
6	Z60T	10200	7/8	25	Type 1	**MK5158002**	Price
6	Z60T	10200	7/8	25	Type 27	**MK5158022**	Price
7	Z60T	8500	7/8	25	Type 1	**MK5158003**	Price
7	Z60T	8500	7/8	25	Type 27	**MK5158023**	Price

WEILER Inox White Aluminum Oxide Cutting Wheels

TIGER

New!



- Specifically designed for high performance on stainless steel
- These wheels incorporate a contaminant-free bond that delivers a worry free solution for stainless steel applications
- 0 - 90° angled

					Type 1			Type 27		
Dia. (in.)	Thickness (in.)	Spec	RPM	Hole Size	Std. Pack	Order No.	Price	Std. Pack	Order No.	Price
4-1/2	.045	INOX60S	13000	5/8-11	-	-	-	10	**MK5158109**	Price
4-1/2	.045	INOX60S	13000	7/8	25	**MK5158100**	Price	25	**MK5158110**	Price
5	.045	INOX60S	12200	7/8	25	**MK5158101**	Price	25	**MK5158111**	Price
6	.045	INOX60S	10200	5/8-11	-	-	-	10	**MK5158113**	Price
6	.045	INOX60S	10200	7/8	25	**MK5158102**	Price	25	**MK5158112**	Price
7	.045	INOX60S	8500	7/8	25	**MK5158103**	Price	-	-	-

WEILER Long Life Premium Aluminum Oxide Cutting Wheels

TIGER

New!



- Delivers the right combination of performance and value
- Versatile line up offers a long life solution for all your general purpose applications
- Best on carbon steel, structural steel, cast iron and general purpose metal use

				Type 1			Type 27					
				7/8			5/8-11			7/8		
Dia. (in.)	Thickness	Grit	RPM	Std. pack	Order No.	Price	Std. pack	Order No.	Price	Std. pack	Order No.	Price
4-1/2	.045	60	13000	25	**MK5157020**	Price	10	**MK5157040**	Price	25	**MK5157041**	Price
4-1/2	.062	60	13000	25	**MK5157061**	Price	-	-	-	-	-	-
4-1/2	.093	60	13000	-	-	-	10	**MK5157080**	Price	25	**MK5157081**	Price
5	.045	60	12200	25	**MK5157021**	Price	10	**MK5157042**	Price	25	**MK5157043**	Price
5	.093	60	12200	-	-	-	10	**MK5157082**	Price	25	**MK5157083**	Price
6	.045	60	10200	25	**MK5157022**	Price	10	**MK5157044**	Price	25	**MK5157045**	Price
7	.060	60	8500	25	**MK5157023**	Price	-	-	-	-	-	-
9	.062	60	6600	-	-	-	-	-	-	25	**MK5157047**	Price

WEILER Max Performance Ceramic Cutting Wheels

- Life and cut rate for maximum productivity
- Self sharpening and cool cutting

New!

- Ceramic grain removes material effortlessly while a hard bond keeps working longer
- Best on tool steel, inconel, high nickel alloy, titanium, armored steel

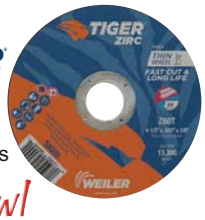
TIGER



				Type 1			Type 27					
				7/8			5/8-11			7/8		
Dia. (in.)	Thickness (in.)	Spec	RPM	Std. Pack	Order No.	Price	Std. Pack	Order No.	Price	Std. Pack	Order No.	Price
4-1/2	.045	CER60S	13000	25	**MK5158300**	Price	10	**MK5158306**	Price	25	**MK5158305**	Price
5	.045	CER60S	12200	25	**MK5158301**	Price	10	**MK5158308**	Price	25	**MK5158307**	Price
6	.045	CER60S	10200	25	**MK5158302**	Price	10	**MK5158310**	Price	25	**MK5158309**	Price
7	.045	CER60S	8500	25	**MK5158303**	Price	-	-	-	-	-	-
7	.060	CER60S	8500	-	-	-	-	-	-	25	**MK5158311**	Price
7	3060	CER60S	8500	-	-	-	10	**MK5158312**	Price	-	-	-

WEILER White Aluminum Oxide Inox Combo Wheels

TIGER



- Long life cut & grind combo wheels deliver true flexibility and efficiency when switching between cutting and grinding for stainless steel applications
- Contaminent-Free for Stainless Steel
- Standard pack for 5/8-11 Hole size: 10
- Standard pack for 7/8" Hole size: 25

New!

				5/8-11		7/8	
Dia. (in.)	Thickness (in.)	Spec	RPM	Order No.	Price	Order No.	Price
4-1/2	1/8	INOX30T	13000	**MK5158114**	Price	**MK5158115**	Price
7-1/8	1/8	INOX30T	8500	**MK5158116**	Price	**MK5158117**	Price
9	1/8	INOX24R	6600	**MK5158118**	Price	**MK5158119**	Price

WEILER Premium Aluminum Oxide Combo Wheels

TIGER



- Long life combo on metal
- Delivers true flexibility and efficiency when switching between cutting and grinding
- Type 27
- Standard pack for 5/8-11 Hole size: 10
- Standard pack for 7/8 Hole size: 25

New!

				5/8-11		7/8	
Dia. (in.)	Thickness (in.)	Spec	RPM	Order No.	Price	Order No.	Price
4-1/2	1/8	A30S	13000	**MK5157100**	Price	**MK5157101**	Price
5	1/8	A30S	12200	**MK5157102**	Price	**MK5157103**	Price
6	1/8	A30S	10200	**MK5157108**	Price	**MK5157109**	Price
7	1/8	A30S	8500	**MK5157104**	Price	**MK5157105**	Price
9	1/8	A30S	6600	**MK5157106**	Price	**MK5157107**	Price

WEILER Zirconia Alumina Combo Wheels

TIGER



- High performance cut & grind combo wheels
- Harder, sharper, faster cutting grains provide a fast, consistent performance on steel and stainless steel
- Type 27
- Standard pack for 5/8-11 Hole size: 10
- Standad pack for 7/8" Hole size: 25

New!

				5/8-11		7/8	
Dia. (in.)	Thickness (in.)	Spec	RPM	Order No.	Price	Order No.	Price
4-1/2	1/8	Z30T	13000	**MK5158050**	Price	**MK5158051**	Price
5	1/8	Z30T	12200	**MK5158052**	Price	**MK5158053**	Price
6	1/8	Z30T	10200	**MK5158054**	Price	**MK5158064**	Price
7	1/8	Z30T	8500	**MK5158055**	Price	**MK5158056**	Price
9	1/8	Z30T	6600	**MK5158057**	Price	**MK5158058**	Price

WEILER Ceramic Alumina Combo Wheels

- Self-sharpening grain deliveres a superior combination of life and cut rate
- Ideal for stainless steel and other hard-to-cut metals
- Type 27

New!

TIGER



			5/8-11		7/8	
Dia. (in.)	Grit	RPM	Order No.	Price	Order No.	Price
4-1/2	30	13000	**MK5158316**	Price	**MK5158315**	Price
5	30	12200	**MK5158318**	Price	**MK5158317**	Price
6	30	10200	**MK5158320**	Price	**MK5158319**	Price
7	30	8500	**MK5158322**	Price	**MK5158321**	Price
9	30	6600	**MK5158324**	Price	**MK5158323**	Price

WEILER Roughneck Zirconia Alumina Combo Wheels

New!

- Ceramic Infused Roughneck combo wheels are thicker than pipeliner and designed to switch between cutting and grinding applications on the pipeline
- Type 27

TIGER



Dia. (in.)	Thickness (in.)	Spec	RPM	Hole Size (in.)	Std. Pack	Order No.	Price
7	1/8	Z30T	8500	5/8-11	10	**MK5158065**	Price
9	1/8	Z30T	6600	5/8-11	10	**MK5158063**	Price

WEILER Zirconia Alumina Roughneck Pipeliner Wheels

TIGER



- Ceramic Infused Roughneck wheels are designed for tough root pass notching and facing applications by combining an 1/8" width for optimized material removal with the right hardness and grain mixture for high demand use on the pipeline
- Type 27

New!

Dia. (in.)	Thickness (in.)	Spec	RPM	Hole Size	Std. Pack	Order No.	Price
4-1/2	1/8	Z30T	13000	5/8-11	10	**MK5158059**	Price
6	1/8	Z30T	10200	5/8-11	10	**MK5158060**	Price
7	1/8	Z30T	8500	5/8-11	10	**MK5158061**	Price
9	1/8	Z30T	6600	5/8-11	10	**MK5158062**	Price

WEILER Aluminum Type 27 Cut & Grind Combo Wheel

TIGER



- Non-loading formula keeps the wheel from gumming up
- Aluminum oxide blend delivers a consistently high cut rate throughout the life of the wheel
- Extended wheel life on aluminum reduces changeovers
- Contaminant-free wheels deliver a worry-free solution for aluminum applications

New!

Size (in.)	Standard Pk.	Order No.	Price
4-1/2 x 1/8 x 5/8-11	10	**MK5158216**	Price
4-1/2 x 1/8 x 7/8	25	**MK5158215**	Price
5 x 1/8 x 5/8-11	10	**MK5158218**	Price
5 x 1/8 x 7/8	25	**MK5158217**	Price
6 x 1/8 x 5/8-11	10	**MK5158220**	Price
6 x 1/8 x 7/8	25	**MK5158219**	Price

WALTER Surface Technologies Aluminum Oxide Type 1 Cut Off Wheels

- Significantly more cuts than the competition
- Less friction and faster cutting

New!



Dia. (in.)	Grit	Hole Size (in.)	RPM	Std. Pack	Order No.	Price
4-1/2	60	7/8	13000	25	**WS0111T042**	Price
5	60	7/8	12200	25	**WS0111T052**	Price
5	60	7/8	12200	25	**WS0111T152**	Price
6	60	7/8	10000	25	**WS0111T162**	Price
7	30	7/8	8600	25	**WS0111T072**	Price

WALTER Surface Technologies Zip Spin-On Aluminum Oxide Type 1 Cut Off Wheels

- Perfectly centered wheel for total operator comfort
- Vibration-free cutting for maximum life, safety and productivity
- Faster, easier wheel change-outs to reduce downtime

New!



Dia. (in.)	Grit	Hole Size (in.)	RPM	Stc. Pack	Order No.	Price
4-1/2	60	5/8-11	13000	25	**WS0111T342**	Price
6	60	5/8-11	10000	25	**WS0111T362**	Price

WALTER Surface Technologies Zip One Aluminum Oxide Type 1 Cut Off Wheel

- Fast, free precision cuts
- Clean cutting for less rework
- Unique mix of abrasive grains ensures cool cutting for less discoloration and warping
- Fe-free formulation-guaranteed not to contaminate stainless steel

New!



Dia. (in.)	Grit	Hole Size (in.)	RPM	Std. Pack	Order No.	Price
4-1/2	60	7/8	13000	25	**WS0111T542**	Price

CGW Depressed Center Mini Grinding Wheels - Type 27

- Compact and lightweight for easy use in hard to reach work areas
- Advanced abrasive grain blend for smooth grinding



Size (in.)	Grit	Max. RPM	Order No.	Price
2-5/16 x 5/32 x 3/8	A40	20000	**MG9049682**	Price
2-5/16 x 5/32 x 3/8	A60	20000	**MG9049683**	Price
2-5/16 x 5/32 x 3/8	A80	20000	**MG9049684**	Price

SURF PRO Depressed Center Wheels - Aluminum Oxide - Type 27

- Aluminum oxide grain
- Fiberglass reinforced
- General purpose grinding applications
- Economical choice for cutting iron, steel, stainless steel and other materials



Size (in.)	Grit	Order No.	Price
4-1/2 x 1/8 x 7/8	24	**SP010451257724A**	Price
4-1/2 x 1/8 x 5/8-11	24	**SP010451255724A**	Price
4-1/2 x 1/4 x 7/8	24	**SP010452507724A**	Price
4-1/2 x 1/4 x 5/8-11	24	**SP010452505724A**	Price
7 x 1/8 x 7/8	24	**SP010701257724A**	Price
7 x 1/8 x 5/8-11	24	**SP010701255724A**	Price
7 x 1/4 x 7/8	24	**SP010702507724A**	Price
7 x 1/4 x 5/8-11	24	**SP010702505724A**	Price

CGW 3-in-1 Cut-Grind-Finish Depressed Center Wheels - Type 27

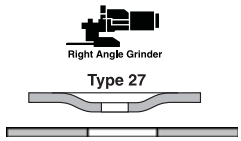
- 3 Jobs, 1 Wheel: Cuts quickly, grinds easily and finishes work surfaces
- Contaminant free: less than 0.1 percent iron, sulfur or chlorine; designed for use on stainless steel
- Fiberglass net reinforcement provides added strength and flexibility
- Ideal for stainless steel and a wide variety of metals and cutting metal profiles and thin pipes, and removing weld slag
- Highly cost effective: eliminate frequent disc changes and stock fewer discs
- Use instead of a flap disc to complete the job with an excellent finish to the workpiece surface



Dia. (in.)	Thickness (in.)	Grit	Arbor Size (in.)	Carton Qty.	RPM	Order No.	Price
4-1/2	3/32 (.094)	36	7/8	25	13300	**MG9045218**	Price
4-1/2	3/32 (.094)	36	5/8-11	10	13300	**MG9045219**	Price
5	3/32 (.094)	36	7/8	25	12250	**MG9045220**	Price
5	3/32 (.094)	36	5/8-11	10	12250	**MG9045221**	Price
6	3/32 (.094)	36	7/8	25	10200	**MG9045222**	Price
6	3/32 (.094)	36	5/8-11	10	10200	**MG9045223**	Price

CGW 3/32 (.094) Thin Reinforced Cut-Off Wheels Type1 & Type 27

- Cuts steel/stainless





Style - Type 1					
Size (in.)	Grading	Max. RPM	Carton Qty.	Order No.	Price
4-1/2 x 3/32 x 7/8	A36-SBF	13300	25	**MG9045028**	Price
6 x 3/32 x 7/8	A36-SBF	12700	25	**MG9045046**	Price
7 x 3/32 x 7/8	A36-SBF	8600	25	**MG9045032**	Price

Style - Type 27					
Size (in.)	Grading	Max. RPM	Carton Qty.	Order No.	Price
4-1/2 x 3/32 x 7/8	A36-SBF	13300	25	**MG9045020**	Price
4-1/2 x 3/32 x 5/8-11	A36-SBF	13300	25	**MG9045021**	Price
5 x 3/32 x 7/8	A36-SBF	12250	25	**MG9045022**	Price
6 x 3/32 x 5/8-11	A36-SBF	12700	25	**MG9045025**	Price
6 x 3/32 x 7/8	A36-SBF	12700	25	**MG9045024**	Price
7 x 3/32 x 5/8-11	A36-SBF	8600	25	**MG9045027**	Price
7 x 3/32 x 7/8	A36-SBF	8600	25	**MG9045026**	Price

WEILER Vortec Pro Bonded Abrasive Wheels

- Vortec Pro bonded abrasive wheels are designed for general purpose grinding and cutting
- Best on steel, iron and other ferrous metals
- Resin-bond formulated for aggressive stock removal and fast cutting, and is fiberglass reinforced for stability
- Applications: Weld Removal, Rough Grinding, Notching, Cutting and Parting



Size (in.)	Hole Size (in.)	Spec	Std. Pkg.	RPM	Order No.	Price
12 x 3/32 x 1	1	A46T	10	5100	**MK5156239**	Price
2 x 1/16 x 1/4	1/4	A60T	50	30000	**MK5156015**	Price
3 x .035 x 3/8	3/8	A60T	100	25000	**MK5156062**	Price
3 x 1/16 x 1/4	1/4	A36T	100	25000	**MK5156065**	Price
3 x 1/16 x 3/8	3/8	A36T	100	25000	**MK5156068**	Price
3 x 1/16 x 3/8	3/8	A60T	50	25000	**MK5156070**	Price
3 x 1/8 x 3/8	3/8	A36T	50	25000	**MK5156076**	Price
4 x 1/4 x 5/8	5/8	A24R	25	15200	**MK5156473**	Price
4 x 1/8 x 3/8	3/8	A365	50	15200	**MK5156099**	Price
4 x 3/32 x 5/8	5/8	A24R	25	15200	**MK5156474**	Price
4-1/2 x .045 x 7/8	7/8	A60T	50	13000	**MK5156281**	Price
4-1/2 x 1/4 x 7/8	7/8	A24N	25	13000	**MK5156457**	Price
5 x .035 x 5/8	5/8	A605	100	12200	**MK5156108**	Price
5 x .045 x 7/8	7/8	A60S	100	12200	**MK5156392**	Price
5 x 1/16 x 7/8	7/8	A36T	100	12200	**MK5156118**	Price
5 x 3/32 x 5/8-11	5/8-11	A24T	10	12200	**MK5156384**	Price
5 x 3/32 x 7/8	7/8	A24T	25	12200	**MK5156476**	Price
6 x .040 x 7/8	7/8	A60T	25	10200	**MK5156282**	Price
6 x .045 x 7/8	7/8	WA60S	25	10200	**MK5156283**	Price
6 x 1/4 x 5/8-11	5/8-11	A24R	10	10200	**MK5156279**	Price
6 x 1/4 x 7/8	7/8	A24R	25	10200	**MK5156280**	Price
6 x 3/32 x 5/8-11	5/8-11	A24R	10	10200	**MK5156278**	Price
6 x 3/32 x 7/8	7/8	A24R	25	10200	**MK5156277**	Price
7 x .045 7/8	7/8	A60T	25	8500	**MK5156275**	Price
7 x .060 x 7/8	7/8	A60S	25	8500	**MK5156391**	Price
9 x 1/4 x 5/8-11	5/8-11	A24R	10	6600	**MK5156470**	Price
9 x 1/8 x 5/8-11	5/8-11	A24R	10	6600	**MK5156423**	Price
2 x .035 x 1/4	1/4	A60T	100	30000	**MK5156013**	Price
3 x .035 x 1/4	1/4	A60T	100	25000	**MK5156061**	Price
4 x .035 x 3/8	1/4	A60T	50	19000	**MK5156080**	Price
4 x 1/16 x 3/8	1/4	A60T	50	15200	**MK5156086**	Price
4-1/2 x 1/16 x 7/8	7/8	A60T	50	13500	**MK5156103**	Price
4-1/2 x 1/4	5/8-11	A24R	10	13300	**MK5156454**	Price
4-1/2 x 1/4	7/8	A24R	25	13300	**MK5156464**	Price
4-1/2 x 1/8	5/8-11	A24R	10	13300	**MK5156429**	Price
6 x .045 x 7/8	7/8	A60T	25	10200	**MK5156273**	Price
7 x 1/4	5/8-11	A24R	10	8500	**MK5156468**	Price
7 x 1/8	5/8-11	A24T	10	8500	**MK5156425**	Price
14 x 1/8	1	A30R	10	4400	**MK5156230**	Price

3M™ Silver Type 1 Cut Off Wheels

- Engineered precision-shaped grain designed to deliver an unbeatable combination of performance and value

New!



Dia. (in.)	Thickness (in.)	Hole Size (in.)	RPM	Order No.	Price
3	.035	1/4	25465	**TM0187457**	Price
3	.035	3/8	25465	**TM0187458**	Price
3	.060	3/8	25465	**TM0187459**	Price
4	.035	1/4	19100	**TM0187460**	Price
4	.035	3/8	19100	**TM0187461**	Price
4	.060	3/8	19100	**TM0187462**	Price
4-1/2	.040	7/8	13300	**TM0187464**	Price
4-1/2	.045	7/8	13300	**TM0187465**	Price
4-1/2	.045	7/8	13300	**TM0187466**	Price
5	.045	7/8	12250	**TM0187467**	Price
5	.045	7/8	12250	**TM0187468**	Price
6	.045	7/8	10200	**TM0187469**	Price
6	.045	7/8	10200	**TM0187470**	Price

Green Corps™ Flexible Grinding Wheels

- Type 27
- Bonded abrasive wheel
- Offers a high rate of stock removal in a smoother running wheel



Size (in.)	RPM	Grit	Standard Pack	Order No.	Price
4-1/2 x 1/8 x 5/8-11	13300	36	10	**TM0151164**	Price
4-1/2 x 1/8 x 7/8	13300	36	20	**TM0150440**	Price
4-1/2 x 1/8 x 7/8	13300	46	20	**TM0150442**	Price
4-1/2 x 1/8 x 7/8	13300	60	20	**TM0150443**	Price
7 x 1/8 x 5/8-11	8500	36	10	**TM0151163**	Price
7 x 1/8 x 7/8	8500	36	20	**TM0150445**	Price
7 x 1/8 x 7/8	8500	46	20	**TM0150446**	Price

Green Corps™ Depressed Center Wheels

- Type 27
- Bonded abrasive wheel
- Provides a high rate of stock removal and long life
- **10 Pc. Standard pack**



Size (in.)	RPM	Grit	Order No.	Price
4-1/2 x 1/4 x 7/8	13300	24	**TM0155991**	Price
4-1/2 x 1/4 x 7/8	13300	36	**TM0155992**	Price
4-1/2 x 1/4 x 5/8-11	13300	24	**TM0155960**	Price
4-1/2 x 1/4 x 5/8-11	13300	36	**TM0155961**	Price
7 x 1/4 x 7/8	8500	24	**TM0155989**	Price
7 x 1/4 x 7/8	8500	36	**TM0155990**	Price
7 x 1/4 x 5/8-11	8500	24	**TM0155958**	Price
7 x 1/4 x 5/8-11	8500	36	**TM0155959**	Price

Cutting & Grinding Wheels

- Aluminum Oxide
- Type 1 and Type 27
- Bonded abrasive wheel
- Provides a high rate of stock removal and long life
- Do not use on tools without guards
- **10 Pc. Standard pack**



Size (in.)	Type	RPM	Order No.	Price
4 x 1/32 x 3/8	Cut-Off Wheel	21000	**TM0120448**	Price
4 x 1/16 x 3/8	Cut-Off Wheel	21000	**TM0120449**	Price
4-1/2 x 1/4 x 7/8	Depressed Center Grinding Wheel	13300	**TM0192312**	Price
4-1/2 x 1/4 x 5/8-11	Depressed Center Grinding Wheel	13300	**TM0192314**	Price
6 x .045 x 7/8	Cut-Off Wheel	10200	**TM0120447**	Price
7 x 1/4 x 7/8	Depressed Center Grinding Wheel	8500	**TM0192313**	Price

Green Corps™ Cutting and Grinding Wheels

- Type 27
- Grind and cut with one wheel
- Contains 3M™ Cubitron™ Abrasive Grain for added durability
- **Do not use on tools without guards**



Size (in.)	RPM	Grit	Std. Pkg. Qty.	Order No.	Price
4-1/2 x 1/8 x 7/8	13300	36	40	**TM0192316**	Price
7 x 1/8 x 7/8	8500	36	20	**TM0192317**	Price
7 x 1/8 x 5/8-11	8500	36	20	**TM0192319**	Price

Green Corps™ Cut-Off Wheels

- 3M™ Ceramic Abrasive Grain
- Provides high cut rates and long life on most material, including fiberglass, stainless steel and mild steel
- Must be used with ANSI-approved flanges for Type 1 cut-off wheels
- **Do not use on tools without guards**



Size (in.)	RPM	Std. Pkg. Qty.	Order No.	Price
3 x 1/32 x 3/8	35000	50	**TM0101985**	Price
3 x 1/16 x 3/8	28000	50	**TM0101986**	Price
4 x 1/32 x 3/8	26250	50	**TM0101994**	Price
4 x 1/32 x 1/4	26250	50	**TM0188755**	Price
4-1/2 x 3/64 x 7/8	13300	200	**TM0120275**	Price
5 x 3/64 x 7/8	12200	200	**TM0120276**	Price
6 x .045 x 7/8	10200	100	**TM0120349**	Price

High Performance Cut Off Wheels

- For the ideal combination of value and performance, choose these 3M High Performance cut-off wheels for the job
- They feature 3M ceramic abrasive grain for fast cut and long life, and are specially formulated to be used on stainless and mild steel



Wheel Type - Type 1						
Dia. (in.)	Thickness (in.)	Hole Size (in.)	Max. RPM	Std. Pkg. Qty.	Order No.	Price Ea.
3	.035	3/8	25465	25	**TM0166557**	Price
3	.060	1/4	25465	25	**TM0166558**	Price
3	.060	3/8	25465	25	**TM0166559**	Price
4	.035	3/8	19100	25	**TM0166561**	Price
4	.035	5/8	15300	25	**TM0166562**	Price
4	.060	3/8	19100	25	**TM0166563**	Price
4	.090	5/8	15300	25	**TM0166564**	Price
4	1/8	3/8	19100	25	**TM0166567**	Price
4-1/2	.045	7/8	13300	25	**TM0166568**	Price
5	.045	7/8	12250	25	**TM0166569**	Price
6	.045	7/8	10200	25	**TM0166570**	Price
7	.045	7/8	8500	25	**TM0166571**	Price

Wheel Type - Type 27						
Dia. (in.)	Thickness (in.)	Hole Size (in.)	Max. RPM	Std. Pkg. Qty.	Order No.	Price Ea.
4-1/2	.045	7/8	13300	25	**TM0166574**	Price
4-1/2	.090	7/8	13300	25	**TM0166576**	Price
5	.045	7/8	12250	25	**TM0166580**	Price
5	.090	7/8	12250	25	**TM0166582**	Price
6	.045	7/8	10200	25	**TM0166584**	Price
7	.090	7/8	8500	25	**TM0166586**	Price

Wheel Type - Type 27 Quick Change						
Dia. (in.)	Thickness (in.)	Hole Size (in.)	Max. RPM	Std. Pkg. Qty.	Order No.	Price Ea.
4-1/2	.045	5/8-11	13300	25	**TM0166573**	Price
4-1/2	1/8	5/8-11	13300	25	**TM0166577**	Price
6	.045	5/8-11	10200	25	**TM0166583**	Price
7	.090	5/8-11	8500	25	**TM0166585**	Price

3M Cubitron II Depressed Center Grinding Wheels

- Cubitron II cut-off wheels are designed to provide high cut rates and long life on all types of ferrous metals, stainless steels, alloy steels and cast iron



Wheel Type - Type 27						
Dia. (in.)	Thickness (in.)	Hole Size (in.)	Max. RPM	Std. Pkg. Qty.	Order No.	Price Ea.
4	1/4	3/8	15300	10	**TM0166598**	Price
4	1/4	5/8	15300	10	**TM0166597**	Price
6	1/4	7/8	10200	10	**TM0166589**	Price
7	1/4	7/8	8500	10	**TM0166590**	Price
9	1/4	7/8	6650	10	**TM0166591**	Price

Wheel Type - Type 27 Quick Change						
Dia. (in.)	Thickness (in.)	Hole Size (in.)	Max. RPM	Std. Pkg. Qty.	Order No.	Price Ea.
4-1/2	1/4	5/8-11	13300	10	**TM0166596**	Price
6	1/4	5/8-11	10200	10	**TM0166593**	Price

3M High Performance Depressed Center Grinding Wheels

- For the ideal combination of value and performance, choose these 3M High Performance cut-off wheels for the job
- They feature 3M ceramic abrasive grain for fast cut and long life, and are specially formulated to be used on stainless and mild steel



Wheel Type - Type 27						
Dia. (in.)	Thickness (in.)	Hole Size (in.)	Max. RPM	Std. Pkg. Qty.	Order No.	Price Ea.
4	1/4	3/8	15300	10	**TM0166555**	Price
4	1/4	5/8	15300	10	**TM0166554**	Price
4-1/2	1/4	7/8	13300	10	**TM0166544**	Price
5	1/4	7/8	12250	10	**TM0166545**	Price
7	1/4	7/8	8500	10	**TM0166547**	Price
9	1/4	7/8	6650	10	**TM0166548**	Price

Wheel Type - Type 27 Quick Change						
Dia. (in.)	Thickness (in.)	Hole Size (in.)	Max. RPM	Std. Pkg. Qty.	Order No.	Price Ea.
4-1/2	1/4	5/8-11	13300	10	**TM0166553**	Price
5	1/4	5/8-11	12250	10	**TM0166549**	Price
7	1/4	5/8-11	8500	10	**TM0166550**	Price
7	1/4	5/8-11	8500	10	**TM0166551**	Price
9	1/4	5/8-11	6650	10	**TM0166552**	Price

3M Cubitron II Cut Off Wheels

- Cubitron II cut-off wheels are designed to provide high cut rates and long life on all types of ferrous metal, stainless steels, alloy steels and cast iron



Wheel Type - Type 1						
Dia. (in.)	Thickness (in.)	Hole Size (in.)	Max. RPM	Std. Pkg. Qty.	Order No.	Price
3	.035	1/4	25465	25	**TM0166513**	Price
3	.035	3/8	25465	25	**TM0166514**	Price
3	.060	3/8	25465	25	**TM0166516**	Price
4	.035	3/8	19100	25	**TM0166518**	Price
4	.045	5/8	15300	25	**TM0166522**	Price
4	.060	3/8	19100	25	**TM0166520**	Price
4	.090	5/8	15300	25	**TM0166521**	Price
4	1/8	3/8	19100	25	**TM0166524**	Price
4-1/2	.045	7/8	13300	25	**TM0166525**	Price
5	.045	7/8	12250	25	**TM0166526**	Price
6	.045	7/8	10200	25	**TM0166527**	Price
7	.045	7/8n	8500	25	**TM0166528**	Price

Wheel Type - Type 27						
Dia. (in.)	Thickness (in.)	Hole Size (in.)	Max. RPM	Std. Pkg. Qty.	Order No.	Price
4-1/2	.045	5/8-11	13300	25	**TM0166530**	Price
4-1/2	.045	7/8	13300	25	**TM0166531**	Price
4-1/2	.090	5/8-11	13300	25	**TM0166532**	Price
4-1/2	1/8	5/8-11	13300	25	**TM0166534**	Price
4-1/2	1/8	7/8	12250	-	**TM0182279**	Price
4-1/2	1/8	7/8	13300	25	**TM0166535**	Price
5	.045	7/8	12250	25	**TM0166537**	Price
5	.090	7/8	12250	25	**TM0166539**	Price
5	1/8	7/8	13300	-	**TM0182278**	Price
6	.045	5/8-11	10200	25	**TM0166540**	Price
6	.045	7/8	10200	25	**TM0166541**	Price
6	1/8	7/8	10200	-	**TM0128758**	Price
7	.090	5/8-11	8500	25	**TM0166542**	Price
7	.090	7/8	8500	25	**TM0166543**	Price

3M Cubitron II Type Q Depressed Center Grinding Wheels

- 3M Cubitron II Type-Q depressed center grinding wheel uses ceramic aluminum oxide as the abrasive material
- Can be run at a maximum speed of 8,500 RPMs



Wheel Type - Type 27					
Dia. (in.)	Thickness (in.)	Hole Size (in.)	Max. RPM	Order No.	Price
4	1/4	3/8	15300	**TM0178469**	Price
4	1/4	5/8	15300	**TM0178468**	Price
4-1/2	1/4	5/8	13300	**TM0164320**	Price
4-1/2	1/4	5/8-11	13300	**TM0187397**	Price
4-1/2	1/4	5/8-11	13300	**TM0187453**	Price
4-1/2	1/4	7/8	13300	**TM0178466**	Price
5	1/4	5/8	12250	**TM0164317**	Price
5	1/4	5/8-11	12250	**TM0187446**	Price
5	1/4	7/8	12250	**TM0178467**	Price
5	1/4	7/8	12250	**TM0187454**	Price
6	1/4	5/8	10200	**TM0164318**	Price
7	1/4	5/8	8500	**TM0164319**	Price
7	1/4	5/8-11	8500	**TM0187448**	Price
7	1/4	5/8-11	8500	**TM0187451**	Price
7	1/4	7/8	10200	**TM0164314**	Price
7	1/4	7/8	8500	**TM0164315**	Price
9	1/4	5/8	6650	**TM0187153**	Price
9	1/4	5/8-11	6650	**TM0187449**	Price
9	1/4	5/8-11	6650	**TM0187452**	Price
9	1/4	7/8	6650	**TM0164316**	Price

Depressed Center Wheels

Aluminum Oxide A24 Grade
- Soft bond for fast stock removal
- Ideal on metal and low grade stainless

Aluminum Oxide A24 R Grade
- Engineered for longer life and excellent stock removal
- Ideal on metal

Zirconia Alumina
- High performance grinding and very long life
- Zirconia cuts 50% faster, smoother and provides longer life
- Excellent on steel, cast iron and stainless steel



					Aluminum Oxide				Zirconia	
					A24N		A24R		24 Coarse	
Dia. (in.)	Thickness (in.)	Hole Size (in.)	RPM	Carton Qty	Order No.	Price	Order No.	Price	Order No.	Price
3	1/8	3/8	18000	25	-	-	MG9045052	Price	-	-
3	1/4	3/8	18000	25	-	-	MG9045053	Price	-	-
4	1/8	3/8	13500	25	-	-	MG9035671	Price	-	-
4	1/8	5/8	13500	25	-	-	MG9035609	Price	-	-
4	1/4	3/8	13500	25	-	-	MG9035672	Price	MG9045036	Price
4	1/4	5/8	13500	25	MG9035699	Price	MG9035610	Price	-	-
4-1/2	1/8	7/8	13300	25	MG9059100	Price	MG9035612	Price	MG9035614	Price
4-1/2	1/8	5/8-11	13300	10	-	-	MG9035613	Price	-	-
4-1/2	1/8	5/8-11	13300	25	MG9059101	Price	-	-	-	-
4-1/2	1/4	7/8	13300	25	MG9035622	Price	MG9035620	Price	MG9035624	Price
4-1/2	1/4	5/8-11	13300	10	MG9035623	Price	MG9035621	Price	MG9035625	Price
5	1/4	7/8	12200	25	MG9035627	Price	MG9035626	Price	MG9037535	Price
5	1/4	5/8-11	12200	10	MG9035629	Price	MG9035628	Price	MG9037530	Price
6	1/4	7/8	10200	25	MG9036231	Price	MG9035632	Price	-	-
6	1/4	5/8-11	10200	10	MG9036232	Price	MG9035633	Price	-	-
7	1/8	7/8	8500	25	MG9036225	Price	MG9035634	Price	-	-
7	1/8	5/8-11	8500	10	MG9036226	Price	MG9035635	Price	-	-
7	1/4	7/8	8500	25	MG9035642	Price	MG9035640	Price	MG9035644	Price
7	1/4	5/8-11	8500	10	MG9035643	Price	MG9035641	Price	MG9035645	Price
7	1/8	7/8	6600	25	MG9036227	Price	-	-	-	-
9	1/8	5/8-11	6600	10	MG9036228	Price	MG9035649	Price	-	-
9	1/4	7/8	6600	25	MG9035656	Price	MG9035654	Price	MG9035658	Price
9	1/4	5/8-11	6600	10	MG9035657	Price	MG9035655	Price	MG9035659	Price
9	1/8	7/8	6600	25	-	-	MG9035648	Price	-	-

Depressed Center Wheels Type 27 – Contaminate-Free

- Fast stock removal and excellent G-ratio on stainless steel or ferrous metals
- Excellent for food grade and nuclear plant applications
- White Aluminum Oxide grain

CF

Right Angle Grinder

Type 27



Dia. (in.)	Thickness (in.)	Hole Size (in.)	Grit	RPM	Carton Qty.	Order No.	Price
4-1/2	1/4	7/8	WA24-SBF	13300	25	MG9035673	Price
4-1/2	1/4	5/8-11	WA24-SBF	13300	10	MG9035674	Price
4-1/2	1/8	7/8	WA24-SBF	13300	25	MG9035616	Price
4-1/2	1/8	5/8-11	WA24-SBF	13300	10	MG9035617	Price
5	1/4	7/8	WA24-SBF	10200	25	MG9037543	Price
5	1/4	5/8-11	WA24-SBF	10200	10	MG9037531	Price
7	1/4	7/8	WA24-SBF	8600	25	MG9035677	Price
7	1/4	5/8-11	WA24-SBF	8600	10	MG9035678	Price
7	1/8	7/8	WA24-SBF	8600	25	MG9035638	Price
7	1/8	5/8-11	WA24-SBF	8600	10	MG9035639	Price

Depressed Center Wheels Type 28 – A24R

- Aluminum Oxide, R bond
- Fast cuts on steel, cast iron, and welds



Right Angle Grinder

Dia. (in.)	Thickness (in.)	Hole Size (in.)	RPM	Spec	Carton Qty.	Order No.	Price
7	1/4	7/8	8600	A24-R	25	MG9035646	Price
7	1/4	5/8-11	8600	A24-R	10	MG9035647	Price
9	1/4	7/8	6600	A24-R	25	MG9035660	Price
9	1/4	5/8-11	6600	A24-R	10	MG9035661	Price

Depressed Center Wheels Type 27 – Aluminum

- Special non-loading formulation, with soft bond, for grinding on aluminum and non-ferrous metals

Right Angle Grinder

Type 27



Dia. (in.)	Thickness (in.)	Hole Size (in.)	RPM	Spec	Carton Qty.	Order No.	Price
4	1/4	5/8	13300	A30-N-ALU	25	MG9036106	Price
4-1/2	1/4	7/8	13300	A30-N-ALU	25	MG9036107	Price
4-1/2	1/4	5/8-11	13300	A30-N-ALU	10	MG9036108	Price
5	1/4	7/8	10200	A30-N-ALU	25	MG9036109	Price
7	1/4	7/8	8600	A30-N-ALU	25	MG9036111	Price
7	1/4	5/8-11	8600	A30-N-ALU	10	MG9036112	Price
9	1/4	7/8	6600	A30-N-ALU	25	MG9036156	Price

Flexible Grind and Finish Depressed Center Wheels - Type 27

- Flexible wheel structure
- Waffle pattern on wheel face for cooler grinding and longer working life
- Suitable for grinding/deburring applications
- For use on metal, non-ferrous metals, stainless steel, steel



Dia. (in.)	Thick-ness (in.)	Arbor Size (in.)	Grit	Material	Carton Qty.	RPM	Order No.	Price
4-1/2	1/8	7/8	46	Zirconia	25	13300	MG9036265	Price
5	1/8	7/8	46	Aluminum Oxide	25	12250	MG9036267	Price
7	1/8	5/8-11	46	Aluminum Oxide	10	8600	MG9036270	Price

UNITED ABRASIVES, INC. SAIT

Depressed Center Wheels

Use with Right Angle Air/Electric Grinders Aluminum Oxide Type 27

Z24 R Grade
- High performance grinding for the toughest applications
- Ideal for ferrous metals and stainless

Saitech Ultimate Performance™
- Combines fast stock removal with long life
- Ideal for general purpose grinding of ferrous metals

A24 T Grade
- Hard bond designed for edge and bevel grinding and other applications where a harder wheel if preferred
- Long life and ideal for ferrous metals

A24 N Grade
- Soft bond for fast stock removal
- Ideal for ferrous metals and low grade stainless

A24 R Grade
- Medium bond for longer life
- Ideal for general purpose grinding of ferrous metals









		A24N		A24R		A24T		Saitech UP		Z24R	
Size (in.)	Max. RPM	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3 x 1/4 x 3/8	18000	**MG4120002**	Price	-	-	-	-	-	-	-	-
4 x 1/8 x 3/8	13500	-	-	**MG4120007**	Price	-	-	-	-	-	-
4 x 1/8 x 5/8	13500	-	-	**MG4122015**	Price	-	-	-	-	**MG4122619**	Price
4 x 1/4 x 3/8	13500	**MG4120012**	Price	-	-	-	-	**MG4120112**	Price	-	-
4 x 1/4 x 5/8	13500	**MG4120015**	Price	**MG4120013**	Price	-	-	**MG4120014**	Price	**MG4122599**	Price
4-1/2 x 1/8 x 7/8	13300	-	-	**MG4122030**	Price	-	-	**MG4122064**	Price	**MG4122620**	Price
4-1/2 x 1/8 x 5/8-11	13300	**MG4122130**	Price	-	-	-	-	-	-	**MG4122630**	Price
4-1/2 x 1/4 x 7/8	13300	**MG4120060**	Price	**MG4120063**	Price	**MG4120065**	Price	**MG4120064**	Price	**MG4122600**	Price
4-1/2 x 1/4 x 5/8-11	13300	**MG4120160**	Price	**MG4120163**	Price	**MG4120165**	Price	**MG4120164**	Price	**MG4122610**	Price
5 x 1/4 x 7/8	12200	**MG4120070**	Price	**MG4120073**	Price	**MG4120075**	Price	**MG4120074**	Price	**MG4122602**	Price
5 x 1/4 x 5/8-11	12200	**MG4120170**	Price	**MG4120173**	Price	**MG4120175**	Price	**MG4120174**	Price	**MG4122612**	Price
6 x 1/4 x 7/8	10200	**MG4120078**	Price	**MG4120079**	Price	**MG4120280**	Price	-	-	**MG4122603**	Price
6 x 1/4 x 5/8-11	10200	**MG4120076**	Price	-	-	-	-	-	-	**MG4122613**	Price
7 x 1/4 x 7/8	8500	**MG4120081**	Price	**MG4120080**	Price	**MG4120285**	Price	**MG4120084**	Price	**MG4122604**	Price
7 x 1/4 x 5/8-11	8500	**MG4120085**	Price	**MG4120086**	Price	**MG4120185**	Price	**MG4120089**	Price	**MG4122614**	Price
7 x 1/8 x 7/8	8500	-	-	**MG4122055**	Price	-	-	**MG4122284**	Price	**MG4122624**	Price
7 x 1/8 x 5/8-11	8500	-	-	**MG4122052**	Price	-	-	**MG4122289**	Price	**MG4122634**	Price
9 x 1/8 x 7/8	6600	-	-	**MG4122065**	Price	-	-	**MG4122294**	Price	**MG4122626**	Price
9 x 1/8 x 5/8-11	6600	-	-	**MG4122062**	Price	-	-	**MG4122299**	Price	**MG4122636**	Price
9 x 1/4 x 7/8	6600	**MG4120091**	Price	**MG4120090**	Price	**MG4120295**	Price	**MG4120094**	Price	**MG4122606**	Price
9 x 1/4 x 5/8-11	6600	**MG4120095**	Price	**MG4120096**	Price	**MG4120195**	Price	**MG4120099**	Price	**MG4122616**	Price

1/8" = 0.125" Thick **Safest 5/8-11 Hub design**

NORTON SAINT-GOBAIN

Quantum 3 Depressed Center Wheels - Type 27

- Operator Comfort: with reduced hand fatigue from less cutting vibration
- Less Grinding Time: with a sharper wheel for highest metal removal and reduced pressure from faster cutting action
- Less Downtime & Waste: with longer wheel life sing fewer wheels

Size (in.)	RPM	Order No.	Price
4-1/2 x 1/4 x 5/8-11	13580	**MH60D045070793**	Price
4-1/2 x 1/4 x 7/8	13580	**MH60D045070794**	Price
5 x 1/4 x 5/8-11	12225	**MH60D050070795**	Price
5 x 1/4 x 7/8	12225	**MH60D050070796**	Price
6 x 1/4 x 5/8-11	10185	**MH60D060070797**	Price



Size (in.)	RPM	Order No.	Price
6 x 1/4 x 7/8	10185	**MH60D060070798**	Price
7 x 1/4 x 5/8-11	8600	**MH60D070070799**	Price
7 x 1/4 x 7/8	8600	**MH60D070070800**	Price

Depressed Center Wheels — Raised Hub-Type 27

Gemini - Quality aluminum oxide
- Good choice for steel and ferrous metals
- Consistent performance at a competitive price

BlueFire - New zirconia alumina and aluminum oxide blend
- Up to 20% improvement over previous zirconia products
- 3 times the life of aluminum oxide wheels
- Ideal for stainless steel and carbon steel applications
- Excellent performance to price ratio lowers total cutting costs

Norzon Plus-Ceramic and zirconia alumina blend
- Up to 20x performance over aluminum oxide wheels
- Excellent on materials from gray iron to exotic alloys and stainless steel









Type - BlueFire				
Size (in.)	Pkg. Qty.	RPM	Order No.	Price
4 x 1/4 x 3/8	20	15280	**MH60040029899**	Price
4 x 1/4 x 5/8	25	15280	**MH60040043177**	Price
4-1/2 x .045 x 5/8-11	20	13580	**MH60045043223**	Price
4-1/2 x .045 x 7/8	20	13580	**MH60045043219**	Price
4 x 1/8 x 5/8	25	15280	**MH60040043176**	Price
4-1/2 x 1/8 x 5/8-11	20	13580	**MH60040029853**	Price
4-1/2 x 1/8 x 7/8	25	13580	**MH60040043212**	Price
4-1/2 x 1/4 x 5/8-11	20	13580	**MH60045043213**	Price
4-1/2 x 1/4 x 7/8	25	13580	**MH60040043205**	Price
4-1/2 x 1/4 x 7/8	20	13580	**MH60045043214**	Price
5 x 1/8 x 5/8-11	10	12225	**MH60050043215**	Price
5 x 1/8 x 7/8	25	12225	**MH60050043216**	Price
5 x 1/4 x 5/8-11	20	12225	**MH60050043217**	Price
5 x 1/4 x 7/8	20	12225	**MH60050043218**	Price
6 x 1/4 x 5/8-11	10	10185	**MH60060043224**	Price
6 x 1/4 x 7/8	20	10185	**MH60060043203**	Price
7 x 1/8 x 5/8-11	10	8600	**MH60070043233**	Price
7 x 1/8 x 5/8-11	10	8600	**MH60070029862**	Price
7 x 1/8 x 7/8	20	8600	**MH60070029863**	Price
7 x 1/4 x 5/8-11	10	8600	**MH60070043235**	Price
7 x 1/4 x 5/8-11	10	8600	**MH60070043231**	Price
7 x 1/4 x 7/8	20	8600	**MH60070043236**	Price
12 x 7/64 x 1	10	5095	**MH60120043250**	Price

Type - Gemini				
Size (in.)	Pkg. Qty.	RPM	Order No.	Price
3 x 1/4 x 3/8	25	18000	**MH60030042179**	Price
4 x 1/8 x 3/8	25	15280	**MH60040042016**	Price
4 x 1/4 x 3/8	20	15280	**MH60040029748**	Price
4 x 1/4 x 3/8	25	15280	**MH60040042018**	Price
4 x 1/4 x 5/8	25	15280	**MH60040042019**	Price
4 x 1/4 x 5/8	25	15280	**MH60040042183**	Price
4 x 1/8 x 5/8	25	15280	**MH60040042017**	Price
4-1/2 x 1/8 x 5/8-11	25	13580	**MH60040043590**	Price
4-1/2 x 1/8 x 5/8-11	20	13580	**MH60040030435**	Price
4-1/2 x 1/8 x 7/8	25	13580	**MH60040043591**	Price
4-1/2 x 3/16 x 7/8	25	13580	**MH60040043592**	Price
4-1/2 x 1/4 x 5/8-11	10	13580	**MH60040043593**	Price
4-1/2 x 1/4 x 7/8	25	13580	**MH60040042034**	Price
4-1/2 x 1/4 x 7/8	25	13580	**MH60040043594**	Price
4-1/2 x 1/4 x 7/8	25	13580	**MH60040043584**	Price
4-1/2 x .045 x 5/8-11	20	13580	**MH60040019549**	Price
5 x 1/8 x 7/8	25	12225	**MH60050043596**	Price

Type - Gemini				
Size (in.)	Pkg. Qty.	RPM	Order No.	Price
5 x 1/4 x 5/8-11	10	12225	**MH60050043597**	Price
5 x 1/4 x 7/8	25	12225	**MH60050043598**	Price
6 x 1/4 x 5/8-11	10	10185	**MH60060032390**	Price
6 x 1/4 x 7/8	20	10185	**MH60060001865**	Price
7 x 1/8 x 5/8-11	10	8600	**MH60070039259**	Price
7 x 1/4 x 5/8-11	10	8600	**MH60070040147**	Price
7 x 1/4 x 5/8-11	10	8600	**MH60070040148**	Price
7 x 1/8 x 7/8	20	8600	**MH60070039207**	Price
7 x 1/4 x 7/8	20	8600	**MH60070040098**	Price

Type - Norzon Plus				
Size (in.)	Pkg. Qty.	RPM	Order No.	Price
3 x 1/8 x 3/8	20	18000	**MH60030028697**	Price
3 x 1/8 x 3/8	25	18000	**MH60030042177**	Price
3 x 1/4 x 3/8	25	18000	**MH60030042178**	Price
4 x 1/8 x 3/8	20	15280	**MH60040029883**	Price
4 x 1/8 x 5/8	20	15280	**MH60040029885**	Price
4 x 1/4 x 3/8	20	15280	**MH60040029886**	Price
4 x 1/4 x 5/8	25	15280	**MH60040042003**	Price
4-1/2 x 1/8 x 3/8	25	15280	**MH60040042004**	Price
4-1/2 x 1/8 x 5/8-11	10	13580	**MH60040043323**	Price
4-1/2 x 1/8 x 7/8	25	13580	**MH60040043324**	Price
4-1/2 x 1/4 x 7/8	25	13580	**MH60040043328**	Price
5 x 1/8 x 7/8	20	12225	**MH60050030789**	Price
5 x 1/4 x 7/8	20	12225	**MH60050043334**	Price
7 x 1/8 x 5/8-11	10	8600	**MH60070039184**	Price
7 x 1/8 x 7/8	20	8600	**MH60070038854**	Price

Reinforced Cut-Off Wheels

BlueFire- New zirconia alumina and aluminum
- Up to 20% improvement over previous zirconia products oxide grain blend
- 3 times the life of aluminum oxide wheels
- Ideal for stainless steel and carbon steel applications
- Excellent performance to price ratio lowers total cutting costs

Gemini- Quality aluminum oxide
- Good choice for steel and ferrous metals
- Consistent performance at a competitive price





				Bluefire		Gemini	
Size (in.)	Type	Max RPM	Std. Pkg.	Order No.	Price	Order No.	Price
4-1/2 x .045 x 7/8	T01	13580	25	**MH60045043208**	Price	**MH60040023602**	Price
4-1/2 x .045 x 5/8-11	T27	13580	20	**MH60045043223**	Price	**MH60040019549**	Price
4-1/2 x .045 x 7/8	T27	13580	20	**MH60045043219**	Price	**MH60040042026**	Price
5 x .045 x 7/8	T01	12225	25	**MH60050043209**	Price	**MH60050023603**	Price
6 x .045 x 7/8	T01	10185	20	**-**	-	**MH60060023604**	Price
6 x .045 x 7/8	T01	10185	25	**MH60060043210**	Price	**-**	-

Premier Redcut Zirconia Alumina Depressed Center Wheels

- Engineered for cutting pipe, plate and all types of carbon and stainless steel and various hard alloys
- Advanced resin bond
- Extra thin
- Specially reinforced
- Burn-free cutting, fast cut rate
- Type 27/42



Size (in.)	Grit	RPM	Carton Qty	Order No.	Price
4-1/2 x .045 x 7/8	Z30	13580	25	**MG4644369**	Price
5 x .045 x 7/8	Z30	12225	25	**MG4644370**	Price
6 x .045 x 7/8	Z30	10185	25	**MG4644371**	Price

Carbo White Aluminum Oxide Abrasive Depressed Center Wheels

- Standard choice for steel/metal applications
- Engineered for all steel/ferrous metals
- 5”, 7” & 9” also available



Size (in.)	Grit	RPM	Carton Qty	Order No.	Price
4-1/2 x .045 x 7/8	A60	13580	20	**MG4636280**	Price
5 x .045 x 7/8	A60	12225	20	**MG4636281**	Price
6 x .045 x 7/8	A60	10185	20	**MG4636282**	Price
4-1/2 x 1/4 x 5/8-11	A24	13300	20	**MG4661568**	Price
4-1/2 x 1/4 x 7/8	A24	13300	20	**MG4661567**	Price
7 x 1/4 x 5/8-11	A24	8500	10	**MG4661576**	Price
7 x 1/4 x 7/8	A24	8500	20	**MG4661575**	Price
9 x 1/4 x 5/8-11	A24	6600	20	**MG4661580**	Price

Depressed Center Wheels

Carbo Metal general purpose aluminum oxide wheels
- Economical choice for general purpose applications
- Good choice for on-site and small unit jobs

Carbo Gold quality aluminum oxide wheels
- Aluminum oxide abrasive and an advanced resin bond
- Fast stock removal
- No burning or vibration
- Great choice for grinding all types of ferrous metals



Gold MaXX for free cutting, premium performance
- Zirconia abrasive blend with a free cutting bond
- High performance level; low price
- 30% Longer life than standard aluminum oxide wheels
- Performs well on all ferrous metals from carbon steel to stainless

Premier Red for highest performance and productivity
- Highest productivity; lowest total grinding costs
- Lasts three times as long as aluminum oxide wheels
- Outstanding results grinding stainless and high alloy steels

			Carbo Gold A24 Grit		Carbo Gold Maxx ZA24R		Premier Red Z24 Grit	
Size (in.)	Max. RPM	Pkg. Qty.	Order No.	Price	Order No.	Price	Order No.	Price
4 x 1/8 x 5/8	13500	25	**MG4602834**	Price	**-**	-	**-**	-
4 x 1/4 x 3/8	13500	25	**MG4602836**	Price	**-**	-	**MG4602867**	Price
4 x 1/4 x 5/8	13500	25	**MG4602837**	Price	**-**	-	**MG4602868**	Price
4-1/2 x 1/8 x 7/8	13300	25	**MG4602838**	Price	**-**	-	**MG4602870**	Price
4-1/2 x 1/4 x 5/8-11	13300	10	**MG4602843**	Price	**MG4670192**	Price	**MG4602873**	Price
4-1/2 x 1/4 x 7/8	13300	25	**MG4602842**	Price	**MG4670191**	Price	**MG4602872**	Price
5 x 1/4 x 5/8-11	12200	10	**-**	-	**-**	-	**MG4602877**	Price
5 x 1/4 x 7/8	12200	25	**MG4602846**	Price	**MG4670193**	Price	**MG4602876**	Price
6 x 1/4 x 7/8	10200	10	**MG4602849**	Price	**-**	-	**-**	-
7 x 1/8 x 5/8-11	8500	10	**-**	-	**-**	-	**MG4602879**	Price
7 x 1/8 x 7/8	8500	10	**-**	-	**-**	-	**MG4602878**	Price
7 x 1/4 x 5/8-11	8500	10	**MG4602854**	Price	**MG4670195**	Price	**MG4602883**	Price
7 x 1/4 x 7/8	8500	10	**MG4602853**	Price	**MG4670194**	Price	**MG4602881**	Price
9 x 1/8 x 5/8-11	6600	10	**-**	-	**-**	-	**MG4602886**	Price
9 x 1/8 x 7/8	6600	10	**-**	-	**-**	-	**MG4602885**	Price
9 x 1/4 x 5/8-11	6600	10	**-**	-	**MG4670197**	Price	**MG4602889**	Price
9 x 1/4 x 7/8	6600	10	**MG4602857**	Price	**MG4670196**	Price	**MG4602887**	Price

WEILER Aluminum Type 27 Grinding Wheels

TIGER New!



- Non-Loading Tiger Aluminum wheels are specifically designed for high performance grinding and extended wheel life on aluminum
- These wheels blend abrasive grains with Weiler's non-loading formula, resulting in a fast and consistent cut rate on aluminum
- TYPE 27 7/8" Arbor TYPE 27 5/8"-11 Hub Diameter

Size (in.)	Standard Pk.	Order No.	Price
4-1/2 x 1/4 x 5/8-11	10	**MK5158226**	Price
4-1/2 x 1/4 x 7/8	10	**MK5158225**	Price
5 x 1/4 x 5/8-11	10	**MK5158228**	Price
5 x 1/4 x 7/8	10	**MK5158227**	Price
6 x 1/4 x 5/8-11	10	**MK5158230**	Price
6 x 1/4 x 7/8	10	**MK5158229**	Price

WEILER Premium Aluminum Oxide Grinding Wheels

New!



- Allows for aggressive grinding at lower angles with reduced interference
- Premium Aluminum Oxide grains provide an even, sharp, clean cut and a hard bond extends life and maximizes performance
- Type 28

TIGER

					5/8-11		7/8	
Dia. (in.)	Thickness (in.)	Spec	RPM	Std. Pack	Order No.	Price	Order No.	Price
7	1/4	A24R	8500	10	**MK5157134**	Price	**MK5157135**	Price
9	1/4	A24R	6600	10	**MK5157136**	Price	**MK5157137**	Price

WEILER Inox White Aluminum Oxide Grinding Wheels

TIGER New!



- Specifically designed for high performance on stainless steel
- These wheels incorporate a contaminant-free bond that delivers a worry free solution for stainless steel applications
- 0 - 45° angled
- Type 27 grinding wheels are designed with fiberglass cut back from the edge to provide instant aggressive grinding on new wheels

					5/8-11		7/8	
Dia. (in.)	Thick-ness (in.)	Spec	RPM	Std. Pack	Order No.	Price	Order No.	Price
4-1/2	1/4	INOX24R	13000	10	**MK5158120**	Price	**MK5158121**	Price
5	1/4	INOX24R	12200	10	**MK5158122**	Price	**MK5158123**	Price
7	1/4	INOX24R	8500	10	**MK5158124**	Price	**MK5158125**	Price
9	1/4	INOX24R	6600	10	**MK5158126**	Price	**MK5158127**	Price

WEILER Zirconia Alumina Grinding Wheels

- Ceramic infused for faster, longer grinding
- High performance wheels leverage a self-sharpening zirconia alumina grain that delivers fast, consistent grinding on steel and stainless



TIGER New!

					5/8-11		7/8	
Dia. (in.)	Thickness (in.)	Spec	RPM	Std. Pack	Order No.	Price	Order No.	Price
4-1/2	1/4	Z24T	13000	10	**MK5158070**	Price	**MK5158071**	Price
5	1/4	Z24T	12200	10	**MK5158072**	Price	**MK5158073**	Price
6	1/4	Z224T	10200	10	**MK5158078**	Price	**MK5158079**	Price
7	1/4	Z24T	8500	10	**MK5158074**	Price	**MK5158075**	Price
9	1/4	Z224T	6600	10	**MK5158076**	Price	**MK5158077**	Price

WEILER Zirconia Alumina Grinding Wheels

TIGER New!



- High performance wheels allow for aggressive grinding at lower angles with reduced interference
- All wheels leverage a self-sharping Zirconia Alumina grain and are Ceramic Infused for that extra surge in performance
- Type 28

					5/8-11		7/8	
Dia. (in.)	Thickness (in.)	Spec	RPM	Std. pack	Order No.	Price	Order No.	Price
7	1/4	Z224T	8500	10	**MK5158080**	Price	**MK5158081**	Price
9	1/4	Z224T	6600	10	**MK5158082**	Price	**MK5158083**	Price

WEILER Aluminum Oxide Snagging Wheels

- Fast cut rate and consistent performance as a good value for everyday, general purpose use on metal
- Type 1

New!



Dia. (in.)	Thickness (in.)	Spec	RPM	Hole Size	Std. Pack	Order No.	Price
2	1/4	A36T	30000	3/8	25	**MK5156131**	Price
4	1/4	A36T	19000	3/8	25	**MK5156163**	Price

WEILER Ceramic Alumina Grinding Wheels

- Self-sharpening Ceramic Alumina grain delivers a superior combination of life and cut rate
- Ideal for stainless steel and other hard-to-grind metals
- Type 27



TIGER New!

					5/8-11		7/8	
Dia. (in.)	Thickness (in.)	Spec	RPM	Std. Pack	Order No.	Price	Order No.	Price
4-1/2	1/4	CER24R	13000	10	**MK5158326**	Price	**MK5158325**	Price
5	1/4	CER24R	12200	10	**MK5158328**	Price	**MK5158327**	Price
6	1/4	CER24R	10200	10	**MK5158330**	Price	**MK5158329**	Price
7	1/4	CER24R	8500	10	**MK5158332**	Price	**MK5158331**	Price
9	1/4	CER24R	6600	10	**MK5158334**	Price	**MK5158333**	Price

WEILER Premium Aluminum Oxide Grinding Wheels

TIGER New!



- Delivers the right combination of performance and value
- Premium aluminum oxide grains provide an even, sharp, clean cut and a hard bond extends life and maximizes performances
- Type 27 designed with fiberglass cut back from the edge to provide instant aggressive grinding on new wheels

					5/8-11		7/8	
Dia. (in.)	Thickness (in.)	Spec	RPM	Std. Pack	Order No.	Price	Order No.	Price
4-1/2	1/4	A24R	13000	10	**MK5157120**	Price	**MK5157121**	Price
5	1/4	A24R	12200	10	**MK5157122**	Price	**MK5157123**	Price
6	1/4	A24R	10200	10	**MK5157128**	Price	**MK5157129**	Price
7	1/4	A24R	8500	10	**MK5157124**	Price	**MK5157125**	Price
9	1/4	A24R	6600	10	**MK5157126**	Price	**MK5157127**	Price

Whetstones & Machinists Stones

DMT Provides and Edge like no other:

- Fast - sharpens in a fraction of the time required by other methods
- Easy - Just a few stokes with light pressure is needed
- Clean - No messy oils or clean up
- Durable - Longest lasting sharpeners on the marker - will not hollow or groove over the life of the tool

Double Sided Diafold® Diamond Whetstone™ Sharpener

- Dual purpose with compact convenience, the Double Sided Diafold® Sharpener offers two Diamond Whetstone in one
- Portable, lightweight with convenient fold & go handles to enclose and protects the Diamond Whetstone when not in use



Grit	Size (in.)	Model	Order No.	Price
Coarse/X-Coarse	4 x 1	FWCX	**MJ6501163**	Price
Fine/X-Fine	4 x 1	FWEF	**MJ6501161**	Price
Fine/Coarse	4 x 1	FWFC	**MJ6501162**	Price

Diafold® Diamond Whetstone™ Sharpener



- Portable, lightweight with convenient fold & go handles that enclose and protects the Diamond Whetstone™ when not in use

Grit	Size (in.)	Model	Order No.	Price
Coarse	4 x 7/8	FWC	**MJ6501112**	Price
Fine	4 x 7/8	FWF	**MJ6501111**	Price
X-Coarse	4 x 7/8	FWX	**MJ6501113**	Price
X-Fine	4 x 7/8	FWE	**MJ6501110**	Price

Diamond Mini-Sharp® Sharpener



- Light and compact, handle folds easily for protected storage
- Swivel ring for keychain

Grit	Size (in.)	Model	Order No.	Price
Coarse	2-3/4 x 1	F70C	**MJ6501122**	Price
Fine	2-3/4 x 1	F70F	**MJ6501121**	Price
X-Coarse	2-3/4 x 1	F70X	**MJ6501123**	Price
X-Fine	2-3/4 x 1	F70E	**MJ6501120**	Price

Diamond Whetstone™ Regular Pocket Models with Leather Sheath



- Portable with 4” of aggressive interrupted diamond pattern
- Leather sheath

Grit	Size (in.)	Model	Order No.	Price
Coarse	4 x 7/8	W4C	**MJ6500212**	Price
Fine	4 x 7/8	W4F	**MJ6500211**	Price
X-Coarse	4 x 7/8	W4X	**MJ6500213**	Price

Dia-Sharp® Credit Card Sized Sharpener



- Dia-Sharp® credit card sized diamond sharpener fits easily in pocket or wallet
- Pocket-sized convenience with in an vinyl color-coded carry case

Grit	Size (in.)	Model	Order No.	Price
Coarse	3 x 2	D3C	**MJ6500753**	Price
Fine	3 x 2	D3F	**MJ6500752**	Price
X-Fine	3 x 2	D3E	**MJ6500751**	Price

DMT Diamond Sharpeners are Color Coded for Easy Identification:

- Black - extra coarse for restoring damaged edges
- Blue - coarse for sharpening neglected edges
- Red - fine to put a keen edge on a maintained tool
- Green - extra fine to polish and refine to a razor edge
- Sharpens knives faster than conventional stones with DMT®’s mono-crystalline diamond surface

Diamond Honing Cones



Tapered Diamond Slip Stones

- Designed for specialty honing with diamond slip stone

Size (in.)	Shape	Model	Order No.	Price
3/8 to 1/8 x 4" Handle	Tapered	DCSFH	**MJ6501311**	Price
3/4 to 3/8 x 6" Long	Half Round Tapered	DCMF	**MJ6501315**	Price
1-1/4 to 3/4 x 8" Long	Half Round Tapered	DCLF	**MJ6501320**	Price
3 pc Kit 1 ea above sizes	Tapered	DCKF	**MJ6501325**	Price

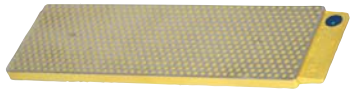
Dia-Sharp® Diamond Mini-Hone®



- Comfortable and easy access to edge care in confined areas
- Ergonomically designed handle provides comfortable sharpening, deburring and honing in tight spaces

Grit	Size (in.)	Model	Order No.	Price
Coarse	2-1/2 x 3/4	D2C	**MJ6500748**	Price
Coarse/Fine/X-Fine	2-1/2 x 3/4	D2K	**MJ6500749**	Price
Fine	2-1/2 x 3/4	D2F	**MJ6500747**	Price
X-Fine	2-1/2 x 3/4	D2E	**MJ6500746**	Price

Duosharp® Bench Stones

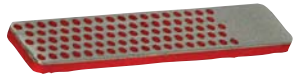


- Easy counter or bench use
- Larger, wider diamond surface for sharpening a variety of knives and edges
- Non-skid mat included

Type - Duosharp Bench Model Diamond Whetstone				
Grit Combination	**Size (in.)**	**Model**	**Order No.**	**Price**
Coarse/X-Coarse	8 x 2-5/8 x 3/8	W8CXNB	**MJ6500368**	Price
Fine/Coarse	8 x 2-5/8 x 3/8	W8FCNB	**MJ6500367**	Price
X-Fine/Coarse	8 x 2-5/8 x 3/8	W8ECNB	**MJ6500366**	Price
X-Fine/Fine	8 x 2-5/8 x 3/8	W8EFNB	**MJ6500365**	Price

Type - Duosharp Bench Model Diamond Whetstone Holder			
Size (in.)	**Model**	**Order No.**	**Price**
8 x 2-5/8 x 3/8	B8250	**MJ6501199**	Price

Machinist Diamond Whetstone™ with Leather Sheath



- 3” of interrupted diamond pattern, combined with 1″ of continuous diamond for sharpening pointed carbide & tool steel bits, with leather sheath

Grit	Size (in.)	Model	Order No.	Price
Coarse	4 x 7/8	WMC	**MJ6500272**	Price
Fine	4 x 7/8	WMF	**MJ6500271**	Price

Double Sided Bench Model Diamond Whetstone

- For bench stone applications when versatility is important, but storage is limited
- Two grit options in one stone
- For knives, blades and fine tools



Grit	Size (in.)	Model	Order No.	Price
Coarse/X-Coarse	6 x 2	D6CX	**MJ6500770**	Price
Fine/Coarse	6 x 2	D6FC	**MJ6500764**	Price
X-Fine/Fine	6 x 2	D6EF	**MJ6500765**	Price
X-Fine/X-Coarse	6 x 2	D6FX	**MJ6500775**	Price

DuoSharp®plus™ Bench Stone

- Easy counter or bench use
- Precision flat, two grit diamond sharpener featuring both interrupted and continuous diamond sharpening



Grit	Size (in.)	Model	Order No.	Price
Coarse	8 x 2-5/8 x 3/8	WM8FCWB	**MJ6500369**	Price
X-Fine	8 x 2-5/8 x 3/9	WM8EFWB	**MJ6500370**	Price

Stackable Diamond Benchstones

- Unique stackable non-skid rubber feet designed to keep the diamond plate steady while you sharpen, and efficiently stacked for space-saving storage
- Simple grit size color coding makes them easy to differentiate



Size (in.)	Color	Grit	Order No.	Price
6 x 2 x 1/4	Blue	325	**MH6468081**	Price
6 x 2 x 1/4	Green	600	**MH6468080**	Price
6 x 2 x 1/4	Red	220	**MH6468082**	Price
8 x 2 x 1/4	Blue	325	**MH6468086**	Price
8 x 2 x 1/4	Green	600	**MH6468083**	Price
8 x 2 x 1/4	Red	220	**MH6468087**	Price

Multi-Oilstone Sharpening Systems

- Designed for general sharpening, the IM100 is a mini version of the Multi-Oilstone System, containing coarse Crystolon, medium Crystolon, and fine India stones
- Comes complete with instructions and a 4 ounce container of Norton oil



Size (in.)	Description	Order No.	Price
6 x 2 x 1/2	Coarse/Medium/Fine	**MH6485356**	Price
11-1/2 x 2-1/2 x 1/2	Coarse/Medium/Fine	**MH6485960**	Price

Speedy Sharp Knife Sharpener

- Space-age carbide edge "Peels the Steel" to renew your blade's keen edge
- Easily fits in pocket or tool box



Order No.	Price
GE45KS1	Price

Diamond Hones

- Order Nos. FT65EZE have plastic handles
- Exclusive patented Eze-Lap manufacturing process embeds an engineered blend of poly-crystalline industrial diamonds in a stainless steel matrix on steel bases
- Products are heat treated, producing ideal hardness in the matrix for surface durability and diamond retention–yielding an abrasive surface that is harder than any metal or knife blade



Grit	Abrasive Section (in.)	Order No.	Price
Coarse	2 x 3/4	**FT65EZELC**	Price
Fine	2 x 3/4	**FT65EZELF**	Price
Medium	2 x 3/4	**FT65EZELM**	Price

Diamond Flat Stones

Paddle Style



- Available as stone only, on a pedestal, on a paddle or in a leather pouch

Size (in.)	Grit	Style	Order No.	Price
1 x 3	Fine	Flat Paddle	**FT6521F**	Price
1 x 3	Fine	Flat Paddle	**FT6524F**	Price
1 x 3	Fine	Flat Paddle with Pedestal	**FT6522F**	Price
1 x 3	Fine	Flat Paddle with Pouch	**FT6526F**	Price
2 x 6	Fine	Flat Paddle	**FT6561F**	Price
2 x 6	Fine	Flat Paddle with Pedestal	**FT6562F**	Price
2 x 6	Medium	Flat Paddle	**FT6561M**	Price
2 x 6	Medium	Flat Paddle with Pedestal	**FT6562M**	Price

Diamond Sharpeners

Diamond Sharpening Stones

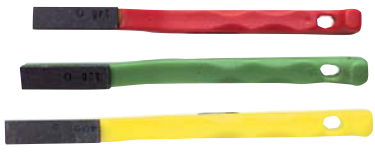
- 1/4″ Dia. shaft 3-3/4″ Shaft length 8-1/2″ OAL, Brass handle in pouch
- 3/16″ Dia. shaft 2-1/4″ Shaft length 5-1/2″ OAL with pocket clip
- Exclusive patented Eze-Lap manufacturing process embeds an engineered blend of poly-crystalline industrial diamonds in a stainless steel matrix on steel bases
- Products are heat treated, producing ideal hardness in the matrix for surface durability and diamond retention–yielding an abrasive surface that is harder than any metal or knife blade



Size (in.)	Description	Order No.	Price
3/16 x 2-1/4 x 5-1/2 OAL	Pocket Diamond Sharpeners w/ Pocket Clip	**FT65EZES**	Price
1/4 x 3-3/4 x 8-1/2 OAL	Pocket Diamond Sharpeners w/ Brass handle in Pouch	**FT65EZEM**	Price

3 Pc. Boron Carbide Hand Lapper Set

- **Red Color Lapper** - 240 Grit
- **Green Color Lapper** - 320 Grit
- **Yellow Color Lapper**- -400 Grit
- Ideal for honing cutting edges
- Can be used to hone surfaces on all types of metals including tungsten carbide
- These lappers are more effective when used with oil
- Long life and economical



Order No.	Price
MN50HL3	Price

Crystolon Abrasive Files

- Abrasive files are unrivalled for holding their shape while imparting the finest, most uniform finish on precision machine parts and in tool and die making
- Available in square, triangular, round, half round and a wide variety of special shapes
- Ideal for any deburring, chamfering or radiusing job, or for fitting delicate parts
- Select the file shape that matches the contour of the surface being stoned.
- The broad offering of abrasives, grits and sizes ensures availability of an abrasive file specification for every conceivable application

CRYSTOLON FILES

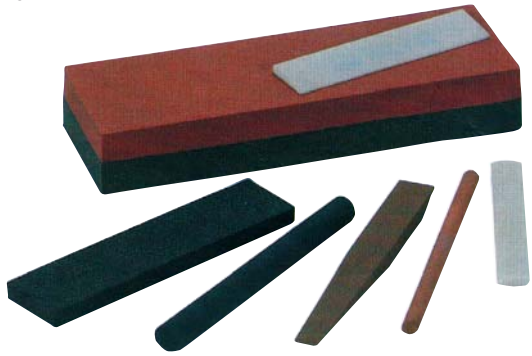
Features:

- A fast-acting silicon carbide product, Crystolon files are designed for use where moderate tolerances are acceptable
- Available in square, triangular and round shapes

INDIA FILES

Features:

- Available in square, triangular, round, half round, diamond, point and knife
- Arkansas files produce the finest edge possible while maintaining tolerances unequalized by any other abrasive file
- Available in square, triangular, round, diamond, bevel, flat, oval, point and knife



Type - Crystolon Files Shape - Round

Size (in.)	Grit	Std Pkg.	Order No.	Price Ea.
1/4 x 4	Fine	20	**MH6486425**	Price
1/4 x 4	Medium	20	**MH6486430**	Price
1/2 x 4	Medium	20	**MH6486450**	Price

Type - Crystolon Files Shape - Square

Size (in.)	Grit	Std Pkg.	Order No.	Price Ea.
1/2 x 1/2 x 4	Fine	20	**MH6486040**	Price
1/2 x 1/2 x 4	Medium	20	**MH6486045**	Price

Type - Crystolon Files Shape - Triangular

Size (in.)	Grit	Std Pkg.	Order No.	Price Ea.
1/4 x 4	Fine	20	**MH6486185**	Price
1/2 x 4	Fine	20	**MH6486205**	Price

Type - India Files Shape - Diamond

Size (in.)	Grit	Std Pkg.	Order No.	Price Ea.
3/16 x 9/16 x 4	Coarse	20	**MH6486720**	Price
3/16 x 9/16 x 4	Fine	20	**MH6486710**	Price
3/16 x 9/16 x 4	Medium	20	**MH6486715**	Price

Type - India Files Shape - Half Round

Size (in.)	Grit	Std Pkg.	Order No.	Price Ea.
1/4 x 4	Fine	20	**MH6486350**	Price
1/4 x 4	Medium	20	**MH6486355**	Price
3/8 x 4	Fine	20	**MH6486380**	Price
3/8 x 4	Medium	20	**MH6486385**	Price
1/2 x 4	Coarse	20	**MH6486405**	Price
1/2 x 4	Fine	20	**MH6486395**	Price
1/2 x 4	Medium	20	**MH6486400**	Price

Type - India Files Shape - Knife

Size (in.)	Grit	Std Pkg.	Order No.	Price Ea.
1/8 Back x 1 x 4	Coarse	20	**MH6486780**	Price
1/8 Back x 1 x 4	Fine	20	**MH6486770**	Price
1/8 Back x 1 x 4	Medium	20	**MH6486775**	Price

Type - India Files Shape - Point

Size (in.)	Grit	Std Pkg.	Order No.	Price Ea.
5/16 Base x 3	Coarse	20	**MH6486750**	Price
5/16 Base x 3	Fine	20	**MH6486740**	Price
5/16 Base x 3	Medium	20	**MH6486745**	Price

Type - India Files Shape - Round

Size (in.)	Grit	Std Pkg.	Order No.	Price Ea.
1/4 x 4	Coarse	20	**MH6486480**	Price
1/4 x 4	Fine	20	**MH6486470**	Price
1/4 x 4	Medium	20	**MH6486475**	Price
3/8 x 4	Coarse	20	**MH6486495**	Price
3/8 x 4	Fine	20	**MH6486485**	Price
3/8 x 4	Medium	20	**MH6486490**	Price
1/2 x 4	Coarse	20	**MH6486510**	Price
1/2 x 4	Fine	20	**MH6486500**	Price
1/2 x 4	Medium	20	**MH6486505**	Price
1/2 x 6	Coarse	20	**MH6486525**	Price
1/2 x 6	Fine	20	**MH6486515**	Price
1/2 x 6	Medium	20	**MH6486520**	Price
5/8 x 6	Medium	20	**MH6486535**	Price
3/4 x 6	Medium	20	**MH6486550**	Price
1 x 6	Medium	20	**MH6486565**	Price

Type - India Files Shape - Square

Size (in.)	Grit	Std Pkg.	Order No.	Price Ea.
1/4 x 1/4 x 4	Coarse	20	**MH6486075**	Price
1/4 x 1/4 x 4	Fine	20	**MH6486065**	Price
1/4 x 1/4 x 4	Medium	20	**MH6486070**	Price
3/8 x 3/8 x 4	Coarse	20	**MH6486090**	Price
3/8 x 3/8 x 4	Fine	20	**MH6486080**	Price
3/8 x 3/8 x 4	Medium	20	**MH6486085**	Price
1/2 x 1/2 x 4	Coarse	20	**MH6486105**	Price
1/2 x 1/2 x 4	Fine	20	**MH6486095**	Price
1/2 x 1/2 x 4	Medium	20	**MH6486100**	Price
1/2 x 1/2 x 6	Coarse	20	**MH6486120**	Price
1/2 x 1/2 x 6	Fine	20	**MH6486110**	Price
1/2 x 1/2 x 6	Medium	20	**MH6486115**	Price
5/8 x 5/8 x 6	Fine	20	**MH6486125**	Price
5/8 x 5/8 x 6	Medium	20	**MH6486130**	Price
3/4 x 3/4 x 6	Coarse	20	**MH6486150**	Price
3/4 x 3/4 x 6	Fine	20	**MH6486140**	Price
3/4 x 3/4 x 6	Medium	20	**MH6486145**	Price
1 x 1 x 6	Coarse	20	**MH6486165**	Price
1 x 1 x 6	Fine	20	**MH6486155**	Price
1 x 1 x 6	Medium	20	**MH6486160**	Price

Type - India Files Shape - Triangular

Size (in.)	Grit	Std Pkg.	Order No.	Price Ea.
1/4 x 4	Coarse	20	**MH6486240**	Price
1/4 x 4	Fine	20	**MH6486230**	Price
1/4 x 4	Medium	20	**MH6486235**	Price
3/8 x 4	Coarse	20	**MH6486255**	Price
3/8 x 4	Fine	20	**MH6486245**	Price
3/8 x 4	Medium	20	**MH6486250**	Price
1/2 x 4	Coarse	20	**MH6486270**	Price
1/2 x 4	Fine	20	**MH6486260**	Price
1/2 x 4	Medium	20	**MH6486265**	Price
1/2 x 6	Coarse	20	**MH6486285**	Price
1/2 x 6	Fine	20	**MH6486275**	Price
1/2 x 6	Medium	20	**MH6486280**	Price
5/8 x 6	Fine	20	**MH6486290**	Price
3/4 x 6	Fine	20	**MH6486305**	Price
3/4 x 6	Medium	20	**MH6486310**	Price
1 x 6	Fine	20	**MH6486320**	Price
1 x 6	Medium	20	**MH6486325**	Price

Bench Stones

Single & Combination Grit - Arkansas & India Bench Stones

Single Grit:
- Choose one stone or a sequence of stones to quickly restore the cutting edge on all straight-edged tools such as chisels, plane blades, gouges, precision tools and delicate instruments
- Available in India and Arkansas type

Combination Grit:
- Provides the convenience of two different grit surfaces in a single stone
- Ideal for restoring the cutting edge on all straight-edged tools such as chisels, plane blades, gouges, precision tools and delicate instruments
- Available in India type only



India Bench Stones:
- Manufactured with Aluminum Oxide abrasive
- Most popular for producing a strong, keen, long-lasting edge on high quality tools
- The frequent choice of artisans, craftsmen and mechanics
- Orange/Brown in color

Arkansas Bench Stones:
- Ultra fine grit unsurpassed for honing and maintaining the extremely fine, super smooth edges required on precision tools and delicate instruments
- White in color

Type - Arkansas Bench-Single Grit					
Size (in.)	Grit	Shape	Std. Pkg.	Order No.	Price Ea.
3/4 x 2 x 4	Ultra Fine	Rectangular	5	**MH6485655**	Price
3/4 x 2 x 6	Ultra Fine	Rectangular	5	**MH6485660**	Price
3/4 x 2 x 8	Ultra Fine	Rectangular	5	**MH6485665**	Price

Type - India Bench-Comb Grit					
Size (in.)	Grit	Shape	Std. Pkg.	Order No.	Price Ea.
5/8 x 1-3/4 x 4	Coarse/Fine	Rectangular	5	**MH6485550**	Price
3/4 x 2 x 5	Coarse/Fine	Rectangular	5	**MH6485555**	Price
1 x 4	Coarse/Fine	Round	5	**MH6485545**	Price
1 x 2 x 6	Coarse/Fine	Rectangular	5	**MH6485560**	Price
1 x 2 x 8	Coarse/Fine	Rectangular	5	**MH6485565**	Price

Type - India Bench-Single Grit					
Size (in.)	Grit	Shape	Std. Pkg.	Order No.	Price Ea.
1/4 x 1 x 4	Coarse	Rectangular	5	**MH6485580**	Price
1/4 x 1 x 4	Fine	Rectangular	5	**MH6485570**	Price
1/4 x 1 x 4	Medium	Rectangular	5	**MH6485575**	Price
1/2 x 1 x 4	Coarse	Rectangular	5	**MH6485595**	Price
1/2 x 1 x 4	Fine	Rectangular	5	**MH6485585**	Price
1/2 x 1 x 4	Medium	Rectangular	5	**MH6485590**	Price
5/8 x 2 x 5	Fine	Rectangular	5	**MH6485600**	Price
5/8 x 2 x 5	Medium	Rectangular	5	**MH6485605**	Price
1 x 2 x 6	Coarse	Rectangular	5	**MH6485620**	Price
1 x 2 x 6	Fine	Rectangular	5	**MH6485610**	Price
1 x 2 x 6	Medium	Rectangular	5	**MH6485615**	Price
1 x 2 x 8	Coarse	Rectangular	5	**MH6485635**	Price
1 x 2 x 8	Fine	Rectangular	5	**MH6485625**	Price
1 x 2 x 8	Medium	Rectangular	5	**MH6485630**	Price

Hard Arkansas Files

Square, Triangular, Round, Diamond, Flat, Knife

Arkansas Files:
- Arkansas files produce the finest edge possible while maintaining tolerances unequalled by any other abrasive file
- Available in square, triangular, round, diamond, bevel, flat, oval, point, and knife



Type - Hard Arkansas Files Shape - Diamond			
Size (in.)	Grit	Order No.	Price
3/16 x 1/2 x 3	Ultra Fine	**MH6486815**	Price



Type - Hard Arkansas Files Shape - Square			
Size (in.)	Grit	Order No.	Price
1/4 x 1/4 x 3	Ultra Fine	**MH6486590**	Price
3/8 x 3/8 x 3	Ultra Fine	**MH6486595**	Price
1/2 x 1/2 x 3	Ultra Fine	**MH6486600**	Price



Type - Hard Arkansas Files Shape - Flat			
Size (in.)	Grit	Order No.	Price
1/8 x 3/8 x 3	Ultra Fine	**MH6486805**	Price



Type - Hard Arkansas Files Shape - Knife			
Size (in.)	Grit	Order No.	Price
1/8 x 3/4 x 3	Ultra Fine	**MH6486830**	Price



Type - Hard Arkansas Files Shape - Triangular			
Size (in.)	Grit	Order No.	Price
1/4 x 3	Ultra Fine	**MH6486620**	Price
3/8 x 3	Ultra Fine	**MH6486625**	Price
1/2 x 3	Ultra Fine	**MH6486630**	Price



Type - Hard Arkansas Files Shape - Round			
Size (in.)	Grit	Order No.	Price
1/4 x 3	Ultra Fine	**MH6486800**	Price

Sharpening Stone Roll Kit

- Thirty-five stone items in a variety of abrasives, grits, shapes and sizes designed to provide a configuration suitable for every need
- Housed in a durable, vinyl roll that offers protection, easy portability and full stone display
- Stones are fastened by an elastic strap which permits easy removal and replacement of all items



Order No.	Price
MH6486841	Price

Pocket Stones

- Convenient and easily transported
- Ideal for outdoor enthusiasts for sharpening scissors, knives, axes, etc.
- Available in a protective case



Size (in.)	Description	Order No.	Price
1/4 x 3/4 x 4	Fine	**MH6424153**	Price
1/2 x 1-1/2 x 3	Coarse/Fine	**MH6490705**	Price

Sharpening Stones



- Ideal for generating keen edges on cutting tools and knives
- A/O = Aluminum Oxide
- S/C = Silicon Carbide

Size (in.)	Shape	Grit	Abr. Type	Description	Order No.	Price
1/4 - 1/16 x 1-3/4 x 4-1/2	Rectangular	320	S/C	Slip Stone	**MJ62177**	Price
1/4 x 1 x 4	Rectangular	180	A/O	Sharpening Stone	**MJ62146A**	Price
1/4 x 1 x 4	Rectangular	180	S/C	Sharpening Stone	**MJ62146**	Price
1/4 x 1 x 4	Rectangular	320	A/O	Sharpening Stone	**MJ62145A**	Price
1/4 x 1 x 4	Rectangular	320	S/C	Sharpening Stone	**MJ62145**	Price
3/8 x 3/4 x 4-1/4	Rectangular	220	S/C	Cemented Carbide Hone	**MJ6239**	Price
3/8 x 3/4 x 4-1/4	Rectangular	280	S/C	Cemented Carbide Hone	**MJ6238**	Price
3/8 x 3/4 x 4-1/4	Rectangular	400	S/C	Cemented Carbide Hone	**MJ6237**	Price
3/8 x 3/4 x 4-1/4	Rectangular	Set	A/O	Cemented Carbide Hone	**MJ6233**	Price
1/2 x 1 x 4	Rectangular	120	S/C	Machinists Stone	**MJ62292C**	Price
1/2 x 1 x 4	Rectangular	180	A/O	Machinists Stone	**MJ62292AM**	Price
1/2 x 1 x 4	Rectangular	180	S/C	Machinists Stone	**MJ62292M**	Price
1/2 x 1 x 4	Rectangular	320	A/O	Machinists Stone	**MJ62292AF**	Price
1/2 x 1 x 4	Rectangular	320	S/C	Machinists Stone	**MJ62292F**	Price
5/8 x 1-3/4 x 4	Rectangular	120/320	S/C	Combination Stone	**MJ62112**	Price
5/8 x 2 x 6	Rectangular	400	S/C	Extra Hard – Extra Fine Stone	**MJ62159**	Price
3/4 x 2 x 5	Rectangular	120/320	S/C	Combination Stone	**MJ62111**	Price
1 x 2 x 6	Rectangular	120/320	S/C	Combination Stone	**MJ62109**	Price
1 x 2 x 6	Rectangular	120/280	A/O	Combination Stone Oil Treated	**MJ62433**	Price
1 x 2 x 8	Rectangular	120/320	S/C	Combination Stone	**MJ62108**	Price
1 x 2 x 8	Rectangular	120/280	A/O	Combination Stone Oil Treated	**MJ62431**	Price
1 x 4	Round	120/320	S/C	Combination Stone	**MJ62107**	Price
1-1/2 x 4	Round	120/320	S/C	Combination Knife Stone	**MJ62289**	Price

A/O - Aluminum Oxide, S/C - Silicon Carbide

Tool Room Sticks

Aluminum Oxide (India type) Sticks are Oil Treated



- Ideal for deburring, lapping and honing
- Polishing ground machined parts
- Polishing molds and dies
- Removing tool marks

Shape - Half Round					
		Aluminum Oxide		Silicon Carbide	
Size (in.)	Grit	Order No.	Price	Order No.	Price
1/4 x 4	120	**MJ62C18**	Price	**MJ62C17**	Price
1/4 x 4	220	**MJ62M18**	Price	**MJ62M17**	Price
1/4 x 4	320	**MJ62F18**	Price	**MJ62F17**	Price
3/8 x 6	120	**MJ62C54**	Price	**MJ62C53**	Price
3/8 x 6	220	**MJ62M54**	Price	**MJ62M53**	Price
3/8 x 6	320	**MJ62F54**	Price	**MJ62F53**	Price
1/2 x 6	120	**MJ62C56**	Price	**MJ62C55**	Price
1/2 x 6	220	**MJ62M56**	Price	**MJ62M55**	Price
1/2 x 6	320	**MJ62F56**	Price	**MJ62F55**	Price
3/4 x 6	120	**MJ62C60**	Price	**MJ62C59**	Price
3/4 x 6	220	**MJ62M60**	Price	**MJ62M59**	Price
3/4 x 6	320	**MJ62F60**	Price	**MJ62F59**	Price

Shape - Round					
		Aluminum Oxide		Silicon Carbide	
Size (in.)	Grit	Order No.	Price	Order No.	Price
1/4 x 4	120	**MJ62C26**	Price	**MJ62C25**	Price
1/4 x 4	220	**MJ62M26**	Price	**MJ62M25**	Price
1/4 x 4	320	**MJ62F26**	Price	**MJ62F25**	Price
3/8 x 4	120	**MJ62C30**	Price	**MJ62C29**	Price
3/8 x 4	220	**MJ62M30**	Price	**MJ62M29**	Price
3/8 x 4	320	**MJ62F30**	Price	**MJ62F29**	Price
3/8 x 6	120	**MJ62C64**	Price	**MJ62C63**	Price
3/8 x 6	220	**MJ62M64**	Price	**MJ62M63**	Price
3/8 x 6	320	**MJ62F64**	Price	**MJ62F63**	Price
1/2 x 4	120	**MJ62C32**	Price	**MJ62C31**	Price
1/2 x 4	220	**MJ62M32**	Price	**MJ62M31**	Price
1/2 x 4	320	**MJ62F32**	Price	**MJ62F31**	Price
1/2 x 6	120	**MJ62C66**	Price	**MJ62C65**	Price
1/2 x 6	220	**MJ62M66**	Price	**MJ62M65**	Price
1/2 x 6	320	**MJ62F66**	Price	**MJ62F65**	Price
3/4 x 6	120	**MJ62C70**	Price	**MJ62C69**	Price
3/4 x 6	220	**MJ62M70**	Price	**MJ62M69**	Price
3/4 x 6	320	**MJ62F70**	Price	**MJ62F69**	Price
1 x 6	120	**MJ62C72**	Price	**MJ62C71**	Price
1 x 6	220	**MJ62M72**	Price	**MJ62M71**	Price
1 x 6	320	**MJ62F72**	Price	**MJ62F71**	Price

Shape - Square					
		Aluminum Oxide		Silicon Carbide	
Size (in.)	Grit	Order No.	Price	Order No.	Price
1/4 x 1/4 x 4	120	**MJ62C2**	Price	**MJ62C1**	Price
1/4 x 1/4 x 4	220	**MJ62M2**	Price	**MJ62M1**	Price
1/4 x 1/4 x 4	320	**MJ62F2**	Price	**MJ62F1**	Price
3/8 x 3/8 x 4	120	**MJ62C6**	Price	**MJ62C5**	Price
3/8 x 3/8 x 4	220	**MJ62M6**	Price	**MJ62M5**	Price
3/8 x 3/8 x 4	320	**MJ62F6**	Price	**MJ62F5**	Price
3/8 x 3/8 x 6	120	**MJ62C34**	Price	**MJ62C33**	Price
3/8 x 3/8 x 6	220	**MJ62M34**	Price	**MJ62M33**	Price
3/8 x 3/8 x 6	320	**MJ62F34**	Price	**MJ62F33**	Price
1/2 x 1/2 x 4	120	**MJ62C8**	Price	**MJ62C7**	Price
1/2 x 1/2 x 4	220	**MJ62M8**	Price	**MJ62M7**	Price
1/2 x 1/2 x 4	320	**MJ62F8**	Price	**MJ62F7**	Price
1/2 x 1/2 x 6	120	**MJ62C36**	Price	**MJ62C35**	Price
1/2 x 1/2 x 6	220	**MJ62M36**	Price	**MJ62M35**	Price
1/2 x 1/2 x 6	320	**MJ62F36**	Price	**MJ62F35**	Price
3/4 x 3/4 x 6	120	**MJ62C40**	Price	**MJ62C39**	Price
3/4 x 3/4 x 6	220	**MJ62M40**	Price	**MJ62M39**	Price
3/4 x 3/4 x 6	320	**MJ62F40**	Price	**MJ62F39**	Price
1 x 1 x 6	120	**MJ62C42**	Price	**MJ62C41**	Price
1 x 1 x 6	220	**MJ62M42**	Price	**MJ62M41**	Price
1 x 1 x 6	320	**MJ62F42**	Price	**MJ62F41**	Price

Shape - Triangular					
		Aluminum Oxide		Silicon Carbide	
Size (in.)	Grit	Order No.	Price	Order No.	Price
1/4 x 4	120	**MJ62C10**	Price	**MJ62C9**	Price
1/4 x 4	220	**MJ62M10**	Price	**MJ62M9**	Price
1/4 x 4	320	**MJ62F10**	Price	**MJ62F9**	Price
3/8 x 4	120	**MJ62C14**	Price	**MJ62C13**	Price
3/8 x 4	220	**MJ62M14**	Price	**MJ62M13**	Price
3/8 x 4	320	**MJ62F14**	Price	**MJ62F13**	Price
3/8 x 6	120	**MJ62C44**	Price	**MJ62C43**	Price
3/8 x 6	220	**MJ62M44**	Price	**MJ62M43**	Price
3/8 x 6	320	**MJ62F44**	Price	**MJ62F43**	Price
1/2 x 4	120	**MJ62C16**	Price	**MJ62C15**	Price
1/2 x 4	220	**MJ62M16**	Price	**MJ62M15**	Price
1/2 x 4	320	**MJ62F16**	Price	**MJ62F15**	Price
1/2 x 6	120	**MJ62C46**	Price	**MJ62C45**	Price
1/2 x 6	220	**MJ62M46**	Price	**MJ62M45**	Price
1/2 x 6	320	**MJ62F46**	Price	**MJ62F45**	Price
3/4 x 6	120	**MJ62C50**	Price	**MJ62C49**	Price
3/4 x 6	220	**MJ62M50**	Price	**MJ62M49**	Price
3/4 x 6	320	**MJ62F50**	Price	**MJ62F49**	Price

General Purpose Combination Sharpening Stones

120/240 Grit - Rectangular Shape



Size (in.)	Abr. Type	Order No.	Price
1 x 2 x 6	S/C	**MJ63109E**	Price
1 x 2 x 8	A/O	**MJ63108A**	Price
1 x 2 x 8	S/C	**MJ63108E**	Price

Abrasive Belt Finishing Sticks

Spring Loaded Tension Belt Holder

- Good for hard to reach areas
- Can be used with water and solvents
- Deburring • Semi Finishing • Polishing
- Metal Finishing • Pattern Making • Mold Finishing • Welding Cleanup



Size (in.)	Belt Grit	Order No.	Price
6	320	**MJ642503**	Price

Starter Belt Kits

Deburring • Semi-Finishing • Polishing



Description	Order No.	Price
Deburring - 10 Pcs ea. Grits 80 & 120	**MJ642801**	Price
Polishing - 10 Pcs ea. Grits 400 - 600	**MJ642803**	Price
Semi-Finish - 10 Pcs ea. Grits 180, 240, 320	**MJ642802**	Price

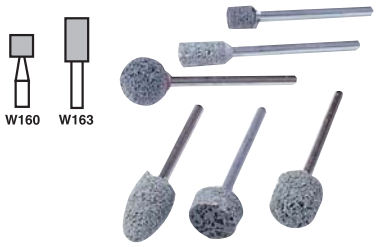
Replacement Belts for Starter Belt Kits

Sold per Pack of 10 Belts

Grit	Order No.	Price
80	**MJ642805**	Price
120	**MJ642806**	Price
180	**MJ642811**	Price
240	**MJ642807**	Price
320	**MJ642808**	Price
400	**MJ642809**	Price
500	**MJ642810**	Price

STANDARD ABRASIVES Unitized Mounted Points

- Made from the high durability Unitized material
- Deburring and blending requires high RPM
- Decorative finishing requires low RPM
- The aggressiveness increases with the hardness
- Polishing requires high speeds and low pressure

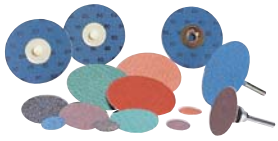


Shape	Dia. (in.)	Length (in.)	Series	Order No.	Price
W160	1/4	1/4	732	**MM75877040**	Price
W160	1/4	1/4	811	**MM75877020**	Price
W160	1/4	1/4	821	**MM75877019**	Price
W163	1/4	1/2	731	**MM75877041**	Price
W163	1/4	1/2	732	**MM75877045**	Price
W163	1/4	1/2	811	**MM75877022**	Price
W163	1/4	1/2	821	**MM75877021**	Price

Additional sizes available upon request.

STANDARD ABRASIVES 1" Quick Change 2 Ply Discs

- For general purpose and specialized grinding, deburring and blending
- Best product for stock removal on most types of ferrous and non-ferrous metals, composites and fiberglass



		Rol-On		Turn-On	
Grit	Material	Order No.	Price	Order No.	Price
24	Aluminum Oxide	**MM30592201**	Price	**MM30522201**	Price
36	Aluminum Oxide	**MM30592202**	Price	**MM30522202**	Price
40	Aluminum Oxide	**MM30592203**	Price	**MM30522203**	Price
50	Aluminum Oxide	**MM30592204**	Price	**MM30522204**	Price
60	Aluminum Oxide	**MM30592205**	Price	**MM30522205**	Price
80	Aluminum Oxide	**MM30592206**	Price	**MM30522206**	Price
100	Aluminum Oxide	**MM30592207**	Price	**MM30522207**	Price
120	Aluminum Oxide	**MM30592208**	Price	**MM30522208**	Price
180	Aluminum Oxide	**MM30592210**	Price	**MM30522210**	Price
240	Aluminum Oxide	**MM30592211**	Price	**MM30522211**	Price
320	Aluminum Oxide	**MM30592212**	Price	**MM30522212**	Price

STANDARD ABRASIVES 1" Quick Change FE Surface Conditioning Discs

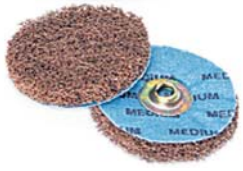
- The FE material exhibits a high initial and extended rate of cut
- Very flexible with high edge durability and is effective on both flat and contoured surfaces



		Rol-On		Turn-On	
Grit	Material	Order No.	Price	Order No.	Price
Coarse	FE	**MM30840181**	Price	**MM30840131**	Price
Medium	FE	**MM30840182**	Price	**MM30840132**	Price
Very Fine	FE	**MM30840183**	Price	**MM30840133**	Price

STANDARD ABRASIVES 1" Quick Change GP Buff & Blend Discs

- Flexible and comfortable
- GP Buff & Blend discs provide a high rate of cut while producing consistent finishes



Grit	Material	Order No.	Price
Coarse	GP	**MM30840111**	Price
Fine	GP	**MM30840113**	Price
Medium	GP	**MM30840112**	Price
Very Fine	GP	**MM30840115**	Price

WHAT THE NUMBERS REPRESENT IN "SERIES" DESCRIPTIONS:

Density	Grade	Grain
500 = 5 Soft 600 = 6 Soft/Medium 700 = 7 Medium/Hard 800 = 8 Hard 900 = 9 Extra Hard	1 = Coarse 2 = Medium 3 = Fine	1 = A/O = Aluminum Oxide 2 = S/C = Silicon Carbide 4 = S/C Firm = Silicon Carbide Firm* *Available only as a Type 524

Example: 521 Series = 5 Soft Density, 2 Medium Grade, 1 A/O Grain

STANDARD ABRASIVES Unitized Wheels

- Excellent for deburring, cleaning, blending, polishing and finishing applications on ferrous and non-ferrous materials
- The aggressiveness increases with the density
- 900 Series is the hardest and 500 is the softest



Size (in.) - 1 x 1/8 x 1/8			
Series	Maximum RPM	Order No.	Price
731	35,000	**MM75873100**	Price
732	35,000	**MM75873200**	Price
821	35,000	**MM75882100**	Price

Size (in.) - 2 x 1/8 x 1/4			
Series	Maximum RPM	Order No.	Price
732	22,000	**MM75873208**	Price
821	22,000	**MM75882108**	Price
911	18,000	**MM75891108**	Price
921	18,000	**MM75892108**	Price

STANDARD ABRASIVES Mandrels for Unitized Wheels



For Use With	Shank Size (in.)	Order No.	Price
1/8" Hole Small Wheels	1/8	**MG645**	Price
1/8" Hole Small Wheels	1/4	**MG648**	Price
1-1/4" to 4"	1/4	**MM75850029**	Price

STANDARD ABRASIVES Quick Change Felt Polishing Discs

- Final finishing on Aluminum, Brass and Chrome, when used with a metal polish
- Polishing small or tight areas, using small diameter discs
- Polishing large, open areas, using large diameter discs



		Rol-On		Turn-On	
Dia. (in.)	Material	Order No.	Price	Order No.	Price
1	Felt	-	-	**MM30840100**	Price
2	Felt	**MM30840380**	Price	**MM30840300**	Price
3	Felt	**MM30840480**	Price	**MM30840400**	Price

Holder Pads



	Rol-On		Turn-On	
Dia. (in.)	Order No.	Price	Order No.	Price
1	**MM5964037**	Price	**MM5964651**	Price
2	**MM5964922**	Price	**MM5964198**	Price
3	**MM5964949**	Price	**MM5964113**	Price

Moldmaker-Plus Mold Polishing Abrasive Stones



- Faster cutting action – leaves a very smooth finish
- Applications include most medium grades of steel
- More suitable for shaping
- Color may vary depending on grit size

	120		150		180		220		320		400		600	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16 x 1/4 x 6	-	-	MJ53MP114	Price	MJ53MP115	Price	-	-	MJ53MP117	Price	MJ53MP118	Price	-	-
1/8 x 1/4 x 6	-	-	MJ53MP134	Price	-	-	-	-	MJ53MP137	Price	MJ53MP138	Price	MJ53MP139	Price
1/8 x 1/2 x 6	MJ53MP143	Price	MJ53MP144	Price	-	-	MJ53MP146	Price	-	-	-	-	-	-
1/4 x 1/4 x 6	MJ53MP173	Price	-	-	-	-	MJ53MP176	Price	-	-	MJ53MP178	Price	-	-
1/4 x 1/2 x 6	-	-	MJ53MP184	Price	-	-	MJ53MP186	Price	MJ53MP187	Price	-	-	MJ53MP199	Price
1/4 x 1 x 6	MJ53MP193	Price	MJ53MP194	Price	-	-	-	-	MJ53MP197	Price	MJ53MP198	Price	-	-
1/4 x 6	-	-	-	-	-	-	-	-	MJ53MP200	Price	-	-	-	-
1/2 x 1/2 x 6	-	-	-	-	-	-	-	-	MJ53MP227	Price	MJ53MP228	Price	-	-
1/2 x 1 x 6	MJ53MP203	Price	-	-	-	-	-	-	MJ53MP207	Price	-	-	-	-
1 x 1 x 6	MJ53MP213	Price	MJ53MP214	Price	-	-	-	-	-	-	-	-	-	-

Moldmaker Mold Polishing Abrasive Stones



- Provides a smooth finish
- Suitable for finishing softer grades of steel
- Harder than Ruby stones but softer than Diemaker
- Color may vary depending on grit size

	120		150		180		220		320		400		600	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16 x 1/2 x 6	-	-	-	-	MJ53M125	Price	MJ53M126	Price	-	-	-	-	-	-
1/8 x 1/2 x 6	MJ53M143	Price	MJ53M144	Price	-	-	MJ53M146	Price	-	-	MJ53M148	Price	-	-
1/4 x 1/2 x 6	MJ53M183	Price	-	-	-	-	MJ53M186	Price	MJ53M187	Price	MJ53M188	Price	MJ53M199	Price
1/2 x 1/2 x 6	-	-	-	-	-	-	MJ53M226	Price	-	-	MJ53M228	Price	-	-
1/2 x 1 x 6	MJ53M203	Price	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	MJ53M135	Price	-	-	-	-	-	-	-	-

Diemaker Mold Polishing Abrasive Stones



- Ideal finishing stone
- Fast cutting action
- Suitable for general purpose stoning on most steels
- Will not load on hard steels
- Color may vary depending on grit size

	120		150		180		220		320		400	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8 x 1/4 x 6	MJ53DM133	Price	MJ53DM134	Price	MJ53DM135	Price	MJ53DM136	Price	MJ53DM137	Price	MJ53DM138	Price
1/8 x 1/2 x 6	MJ53DM143	Price	MJ53DM144	Price	MJ53DM145	Price	MJ53DM146	Price	MJ53DM147	Price	MJ53DM148	Price
1/8 x 1 x 6	-	-	MJ53DM154	Price	MJ53DM155	Price	-	-	-	-	-	-
1/4 x 1/4 x 6	MJ53DM173	Price	MJ53DM174	Price	MJ53DM175	Price	MJ53DM176	Price	MJ53DM177	Price	MJ53DM178	Price
1/4 x 1/2 x 6	MJ53DM183	Price	MJ53DM184	Price	MJ53DM185	Price	MJ53DM186	Price	MJ53DM187	Price	MJ53DM188	Price
1/4 x 1 x 6	MJ53DM193	Price	MJ53DM194	Price	MJ53DM195	Price	MJ53DM196	Price	MJ53DM197	Price	MJ53DM198	Price
1/2 x 1/2 x 6	-	-	MJ53DM224	Price	MJ53DM225	Price	MJ53DM226	Price	MJ53DM227	Price	MJ53DM228	Price
1/2 x 1 x 6	MJ53DM203	Price	MJ53DM204	Price	MJ53DM205	Price	MJ53DM206	Price	MJ53DM207	Price	MJ53DM208	Price
1 x 1 x 6	MJ53DM213	Price	MJ53DM214	Price	MJ53DM215	Price	MJ53DM216	Price	MJ53DM217	Price	MJ53DM218	Price

Ruby Mold Polishing Abrasive Stones



- Very soft non-loading stones for polishing soft metals
- Applications include aluminum, stainless, copper, brass, & kirkalte
- Color may vary depending on grit size

	100		150		60		80		220	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8 x 1/4 x 6	-	-	MJ53R134	Price	MJ53R130	Price	MJ53R131	Price	MJ53R136	Price
1/8 x 1/2 x 6	MJ53R142	Price	-	-	MJ53R140	Price	MJ53R141	Price	MJ53R146	Price
1/4 x 1/4 x 6	MJ53R172	Price	MJ53R174	Price	-	-	-	-	MJ53R176	Price
1/4 x 1/2 x 6	MJ53R182	Price	MJ53R184	Price	MJ53R180	Price	MJ53R181	Price	MJ53R186	Price
1/4 x 1 x 6	MJ53R192	Price	MJ53R194	Price	-	-	MJ53R191	Price	-	-
1/2 x 1/2 x 6	-	-	MJ53R224	Price	-	-	MJ53R221	Price	MJ53R226	Price
1/2 x 1 x 6	MJ53R202	Price	MJ53R204	Price	MJ53R200	Price	MJ53R201	Price	MJ53R206	Price
1 x 2 x 8	-	-	-	-	-	-	-	-	MJ53R236	Price

Oil-Filled Mold Polishing Abrasive Stones



- Treated to resist loading
- Provides fast stock removal and a very smooth finish on most steels
- Color may vary depending on grit size

	200		600		120		220		320		400	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8 x 1/4 x 6	-	-	-	-	MJ53F133	Price	MJ53F136	Price	MJ53F137	Price	MJ53F138	Price
1/8 x 1/2 x 6	MJ53F146	Price	MJ53F149	Price	-	-	-	-	-	-	-	-
1/4 x 1/4 x 6	-	-	-	-	-	-	MJ53F176	Price	-	-	MJ53F178	Price
1/4 x 1/2 x 6	-	-	-	-	MJ53F183	Price	-	-	MJ53F187	Price	MJ53F188	Price
1/4 x 1 x 6	-	-	-	-	MJ53F193	Price	-	-	-	-	-	-
1/2 x 1/2 x 6	-	-	-	-	-	-	-	-	-	-	MJ53F228	Price

Super Fine Mold Polishing Abrasive Stones

- Used to prepare surfaces for final mirror finish



Size (in.)	Grit	Order No.	Price
1/8 x 1/4 x 6	900	MJ53S1310	Price
1/8 x 1/2 x 6	900	MJ53S1410	Price
1/4 x 1/4 x 6	900	MJ53S1710	Price
1/4 x 1/2 x 6	900	MJ53S1810	Price
1/2 x 1/2 x 6	900	MJ53S2210	Price

EDM Mold Polishing Abrasive Stones



- Ideal for removing EDM scale quickly
- Color may vary depending on grit size

	120		150		180		220		320		400		600	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16 x 1/2 x 6	-	-	MJ53EDM124	Price	-	-	-	-	-	-	MJ53EDM128	Price	-	-
1/8 x 1/4 x 6	MJ53EDM133	Price	MJ53EDM134	Price	MJ53EDM135	Price	MJ53EDM136	Price	MJ53EDM137	Price	MJ53EDM138	Price	MJ53EDM139	Price
1/8 x 1/2 x 6	MJ53EDM143	Price	MJ53EDM144	Price	MJ53EDM145	Price	MJ53EDM146	Price	MJ53EDM147	Price	MJ53EDM148	Price	MJ53EDM149	Price
1/4 x 1/4 x 6	-	-	-	-	-	-	MJ53EDM176	Price	-	-	MJ53EDM178	Price	MJ53EDM179	Price
1/4 x 1/2 x 6	MJ53EDM183	Price	-	-	-	-	-	-	MJ53EDM187	Price	MJ53EDM188	Price	-	-
1/4 x 1 x 6	-	-	-	-	MJ53EDM195	Price	MJ53EDM196	Price	-	-	-	-	-	-

EDM-Plus Mold Polishing Abrasive Stones



- Treated for super fast EDM scale removal
- Color may vary depending on grit size

	100		120		150		180		220		320		400	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/8 x 1/4 x 6	-	-	MJ53EDMP133	Price	-	-	MJ53EDMP135	Price	MJ53EDMP136	Price	MJ53EDMP137	Price	MJ53EDMP138	Price
1/8 x 1/2 x 6	MJ53EDMP142	Price	MJ53EDMP143	Price	MJ53EDMP144	Price	-	-	MJ53EDMP146	Price	MJ53EDMP147	Price	MJ53EDMP148	Price
1/4 x 1/4 x 6	-	-	MJ53EDMP173	Price	MJ53EDMP174	Price	MJ53EDMP175	Price	MJ53EDMP176	Price	MJ53EDMP177	Price	-	-
1/4 x 1/2 x 6	-	-	-	-	-	-	-	-	-	-	-	-	MJ53EDMP188	Price
1/4 x 1 x 6	-	-	MJ53EDMP193	Price	-	-	-	-	-	-	-	-	-	-

Rough Out Mold Polishing Abrasive Stones



- Ideal for removing deep scratches & tool marks prior to finishing
- Fast Cutting action
- Color may vary depending on grit size

	100 Grit		120 Grit		180 Grit		80 Grit	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4 x 1 x 8	MJ53RT242	Price	MJ53RT243	Price	MJ53RT245	Price	MJ53RT241	Price
1/2 x 1 x 8	MJ53RT252	Price	MJ53RT253	Price	MJ53RT255	Price	MJ53RT251	Price
1 x 1 x 8	-	-	MJ53RT263	Price	-	-	MJ53RT261	Price

General Purpose Mold Polishing Abrasive Stones



- Break down allows for saping and contours
- Color may vary depending on grit size

	120 Grit		150 Grit		180 Grit		220 Grit		320 Grit		400 Grit	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16 x 1/2 x 6	-	-	-	-	-	-	-	-	MJ53G127	Price	-	-
1/8 x 1/4 x 6	-	-	-	-	MJ53G135	Price	MJ53G136	Price	MJ53G137	Price	MJ53G138	Price
1/8 x 1/2 x 6	MJ53G143	Price	MJ53G144	Price	-	-	MJ53G146	Price	MJ53G147	Price	MJ53G148	Price
1/4 x 1/4 x 6	MJ53G173	Price	MJ53G174	Price	MJ53G175	Price	MJ53G176	Price	MJ53G177	Price	MJ53G178	Price
1/4 x 1/2 x 6	MJ53G183	Price	MJ53G184	Price	MJ53G185	Price	MJ53G186	Price	MJ53G187	Price	MJ53G188	Price
1/4 x 1 x 6	MJ53G193	Price	MJ53G194	Price	MJ53G195	Price	MJ53G196	Price	-	-	-	-
1/2 x 1/2 x 6	MJ53G223	Price	MJ53G224	Price	MJ53G225	Price	-	-	MJ53G227	Price	MJ53G228	Price
1/2 x 1 x 6	MJ53G203	Price	-	-	MJ53G205	Price	-	-	-	-	-	-
1 x 1 x 6	MJ53G213	Price	-	-	MJ53G215	Price	-	-	-	-	MJ53G218	Price

SURF PRO® Boat Bricks



Die Finishing Stones

- Used in Tool & Die Shops and the Mold Making Industry
- Dimensions: 1-1/2 x 2-1/2 x 9" - 7 Grits available

Color	Grit	Application	Abrasive	Order No.	Price
Buff Course	60	Rough and Finish	Aluminum Oxide	MJ50115	Price
Buff Fine	120	Fine Finishing	Aluminum Oxide	MJ50120	Price
Gray	46	Roughing	Silicon Carbide	MJ50100	Price
Green	80	Finishing	Silicon Carbide	MJ50125	Price
Porous Green	80	Semi Finishing	Silicon Carbide	MJ50130	Price
Red	60	Rough and Finish	Aluminum Oxide	MJ50105	Price
White	60	Rough and Finish	Aluminum Oxide	MJ50110	Price

NORTON SAINT-GOBAIN Boat Stones



- Excellent for deburring and breaking sharp edges on dies, fixtures and machined parts
- Stone dimensions: 1-1/2 x 2-1/2 x 9"

Grain	Grit	Hardness	Std. Pkg.	Order No.	Price
37C	80	H	10	MH64T5410369	Price
38A	60	I	10	MH64T5410503	Price

CRATEX® Blocks & Sticks



- Excellent for cleaning and polishing metal surfaces, for breaking edges, smoothing away high spots, removing rust, heat marks, tarnish and stain
- Designed for either manual or mechanical application
- Can be mounted in tool holding fixutres, chucks or cradles
- Used for polishing commutators, damaskeening, cleaning and dressing diamond wheels, highlighting steel rules, calibrations and reference points, and for removing feather edges and “toughing up” cutting tools, dies, chisels and other edged tools

Shape - Oblong								
	Coarse		Extra Fine		Fine		Medium	
Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3 x 1 x 1/4	**MG643802C**	Price	**MG643802XF**	Price	**MG643802F**	Price	**MG643802M**	Price
4 x 2 x 3/8	**MG644163C**	Price	**MG644163XF**	Price	**MG644163F**	Price	**MG644163M**	Price
6 x 1 x 1/4	**MG646802C**	Price	**MG646802XF**	Price	**MG646802F**	Price	**MG646802M**	Price
6 x 1 x 1/8	**MG646801C**	Price	**MG646801XF**	Price	**MG646801F**	Price	**MG646801M**	Price
6 x 1 x 3/8	**MG646803C**	Price	**MG646803XF**	Price	**MG646803F**	Price	**MG646803M**	Price
6 x 2 x 1	**MG646168C**	Price	**MG646168XF**	Price	**MG646168F**	Price	**MG646168M**	Price
6 x 2 x 1/4	**MG646162C**	Price	**MG646162XF**	Price	**MG646162F**	Price	**MG646162M**	Price
8 x 1 x 1/2	**MG648804C**	Price	**MG648804XF**	Price	**MG648804F**	Price	**MG648804M**	Price

Shape - Round								
	Coarse		Extra Fine		Fine		Medium	
Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
6 x 1	**MG640166C**	Price	**MG640166XF**	Price	**MG640166F**	Price	**MG640166M**	Price
6 x 1/2	**MG64086C**	Price	**MG64086XF**	Price	**MG64086F**	Price	**MG64086M**	Price
6 x 1/4	**MG64046C**	Price	**MG64046XF**	Price	**MG64046F**	Price	**MG64046M**	Price
6 x 3/16	**MG64036C**	Price	**MG64036XF**	Price	**MG64036F**	Price	**MG64036M**	Price
6 x 3/4	**MG640126C**	Price	**MG640126XF**	Price	**MG640126F**	Price	**MG640126M**	Price
6 x 3/8	**MG64066C**	Price	**MG64066XF**	Price	**MG64066F**	Price	**MG64066M**	Price
6 x 5/16	**MG64056C**	Price	**MG64056XF**	Price	**MG64056F**	Price	**MG64056M**	Price
6 x 5/8	**MG640106C**	Price	**MG640106XF**	Price	**MG640106F**	Price	**MG640106M**	Price
6 x 7/8	**MG640146C**	Price	**MG640146XF**	Price	**MG640146F**	Price	**MG640146M**	Price

Shape - Square								
	Coarse		Extra Fine		Fine		Medium	
Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
6 x 1 x 1	**MG646808C**	Price	**MG646808XF**	Price	**MG646808F**	Price	**MG646808M**	Price
6 x 1/2 x 1/2	**MG646404C**	Price	**MG646404XF**	Price	**MG646404F**	Price	**MG646404M**	Price
6 x 1/4 x 1/4	**MG646202C**	Price	**MG646202XF**	Price	**MG646202F**	Price	**MG646202M**	Price
6 x 3/4 x 3/4	**MG646606C**	Price	**MG646606XF**	Price	**MG646606F**	Price	**MG646606M**	Price

CRATEX® Wheel Mandrel

- Wheel Mandrel No. 1342 has a 1/4” Shank and is designed for 1/4” center hole wheels up to 3” diameter by 1/2” thick or less

Maximum Safe Speeds based on 1/2” overhang are:

- 1-1/1” dia. -15,000 R.P.M.
- 2” dia. - 10,500 R.P.M.
- 2-1/2” dia. - 8,300 R.P.M.
- 3” dia. - 7,000 R.P.M.
- These speeds are based on 5,500 Surface Feet per Minute



Order No.	Price
MG641342	Price

CRATEX® Small Wheel Mandrels



- Maximum Safe Speed 25,000 R.P.M with 1/2” overhang (exposed mandrel length) or less
- For ech additional 1/4” of overhang Maximum Safe Speed is decreased by at least 20%
- Use a light work pressure

Shank Size (in.)	For Use With	Order No.	Price
3/32	1/16" Hole Small Wheels	**MG642**	Price
1/8	1/16" Hole Small Wheels	**MG643**	Price
1/8	1/8" Hole Small Wheels	**MG645**	Price
1/4	1/8" Hole Small Wheels	**MG648**	Price

CRATEX® Wheels



- Small straight wheels can be mounted on conventional portable motor tools and used on a broad list of deburring, smoothing and polishing applications
- Large wheels have found wide application for removing rust, heat marks, tarnish, excess solder, scratches, corrosion, blending in and polishing welded seams after rough grinding, polishing bearing surfaces and raceways

COLOR CODE:

- Coarse - Dark Green
- Medium - Brown
- Fine - Red
- Extra Fine - Light Green

			Coarse		Extra Fine		Fine		Medium	
Dia. (in.)	Thickness (in.)	Arbor Hole (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
5/8	1/4	1/16	MG6459C	Price	MG6459XF	Price	MG6459F	Price	MG6459M	Price
5/8	1/8	1/16	MG6454C	Price	MG6454XF	Price	MG6454F	Price	MG6454M	Price
5/8	3/32	1/16	MG6453C	Price	MG6453XF	Price	MG6453F	Price	MG6453M	Price
7/8	1/4	1/16	MG6479C	Price	MG6479XF	Price	MG6479F	Price	MG6479M	Price
7/8	1/4	1/8	MG64792C	Price	MG64792XF	Price	MG64792F	Price	MG64792M	Price
7/8	1/8	1/16	MG6474C	Price	MG6474XF	Price	MG6474F	Price	MG6474M	Price
7/8	1/8	1/8	MG64742C	Price	MG64742XF	Price	MG64742F	Price	MG64742M	Price
7/8	3/16	1/16	MG6476C	Price	MG6476XF	Price	MG6476F	Price	MG6476M	Price
7/8	3/16	1/8	MG64762C	Price	MG64762XF	Price	MG64762F	Price	MG64762M	Price
1	1/4	1/16	MG6488C	Price	MG6488XF	Price	MG6488F	Price	MG6488M	Price
1	1/4	1/8	MG64882C	Price	MG64882XF	Price	MG64882F	Price	MG64882M	Price
1	1/8	1/16	MG6480C	Price	MG6480XF	Price	MG6480F	Price	MG6480M	Price
1	1/8	1/8	MG64802C	Price	MG64802XF	Price	MG64802F	Price	MG64802M	Price
1	3/16	1/16	MG6486C	Price	MG6486XF	Price	MG6486F	Price	MG6486M	Price
1	3/16	1/8	MG64862C	Price	MG64862XF	Price	MG64862F	Price	MG64862M	Price
1	3/32	1/16	MG6483C	Price	MG6483XF	Price	MG6483F	Price	MG6483M	Price
1	3/32	1/8	MG64832C	Price	MG64832XF	Price	MG64832F	Price	MG64832M	Price
1-1/2	1/2	1/4	MG64158C	Price	MG64158XF	Price	MG64158F	Price	MG64158M	Price
1-1/2	1/4	1/4	MG64154C	Price	MG64154XF	Price	MG64154F	Price	MG64154M	Price
1-1/2	1/8	1/8	MG64152C	Price	MG64152XF	Price	MG64152F	Price	MG64152M	Price
1-1/2	3/16	1/4	MG64153C	Price	MG64153XF	Price	MG64153F	Price	MG64153M	Price
1-1/2	3/8	1/4	MG64156C	Price	MG64156XF	Price	MG64156F	Price	MG64156M	Price
2	1/2	1/4	MG64208C	Price	MG64208XF	Price	MG64208F	Price	MG64208M	Price
2	1/4	1/4	MG64204C	Price	MG64204XF	Price	MG64204F	Price	MG64204M	Price
2	1/8	1/4	MG64202C	Price	MG64202XF	Price	MG64202F	Price	MG64202M	Price
2	3/16	1/4	MG64203C	Price	MG64203XF	Price	MG64203F	Price	MG64203M	Price
2	3/8	1/4	MG64206C	Price	MG64206XF	Price	MG64206F	Price	MG64206M	Price
2-1/2	1/2	1/4	MG64258C	Price	MG64258XF	Price	MG64258F	Price	MG64258M	Price
2-1/2	1/4	1/4	MG64254C	Price	MG64254XF	Price	MG64254F	Price	MG64254M	Price
2-1/2	3/8	1/4	MG64256C	Price	MG64256XF	Price	MG64256F	Price	MG64256M	Price
3	1/2	1/4	MG64308C	Price	MG64308XF	Price	MG64308F	Price	MG64308M	Price
3	1/4	1/4	MG64304C	Price	MG64304XF	Price	MG64304F	Price	MG64304M	Price
3	1/8	1/4	MG64302C	Price	MG64302XF	Price	MG64302F	Price	MG64302M	Price
3	1	1/2	MG64316C	Price	MG64316XF	Price	MG64316F	Price	MG64316M	Price
3	3/4	1/2	MG64312C	Price	MG64312XF	Price	MG64312F	Price	MG64312M	Price
3	3/8	1/4	MG64306C	Price	MG64306XF	Price	MG64306F	Price	MG64306M	Price
4	1/2	1/2	MG64408C	Price	MG64408XF	Price	MG64408F	Price	MG64408M	Price
4	1/4	1/2	MG64404C	Price	MG64404XF	Price	MG64404F	Price	MG64404M	Price
4	1/8	1/2	MG64402C	Price	MG64402XF	Price	MG64402F	Price	MG64402M	Price
4	1	1/2	MG64416C	Price	MG64416XF	Price	MG64416F	Price	MG64416M	Price
4	3/4	1/2	MG64412C	Price	MG64412XF	Price	MG64412F	Price	MG64412M	Price
4	3/8	1/2	MG64406C	Price	MG64406XF	Price	MG64406F	Price	MG64406M	Price
5	1/2	1/2	MG64508C	Price	MG64508XF	Price	MG64508F	Price	MG64508M	Price
5	1/4	1/2	MG64504C	Price	MG64504XF	Price	MG64504F	Price	MG64504M	Price
5	1/8	1/2	MG64502C	Price	MG64502XF	Price	MG64502F	Price	MG64502M	Price
5	1	1/2	MG64516C	Price	MG64516XF	Price	MG64516F	Price	MG64516M	Price
5	3/4	1/2	MG64512C	Price	MG64512XF	Price	MG64512F	Price	MG64512M	Price
5	3/8	1/2	MG64506C	Price	MG64506XF	Price	MG64506F	Price	MG64506M	Price
6	1/2	1/2	MG64608C	Price	MG64608XF	Price	MG64608F	Price	MG64608M	Price
6	1/4	1/2	MG64604C	Price	MG64604XF	Price	MG64604F	Price	MG64604M	Price
6	1/8	1/2	MG64602C	Price	MG64602XF	Price	MG64602F	Price	MG64602M	Price
6	1	1/2	MG64616C	Price	MG64616XF	Price	MG64616F	Price	MG64616M	Price
6	1-1/2	1/2	MG64624C	Price	MG64624XF	Price	MG64624F	Price	MG64624M	Price
6	3/4	1/2	MG64612C	Price	MG64612XF	Price	MG64612F	Price	MG64612M	Price
6	3/8	1/2	MG64606C	Price	MG64606XF	Price	MG64606F	Price	MG64606M	Price
6	5/8	1/2	MG64610C	Price	MG64610XF	Price	MG64610F	Price	MG64610M	Price
7	1/2	1/2	MG64708C	Price	MG64708XF	Price	MG64708F	Price	MG64708M	Price
7	1/4	1/2	MG64704C	Price	MG64704XF	Price	MG64704F	Price	MG64704M	Price
7	1	1/2	MG64716C	Price	MG64716XF	Price	MG64716F	Price	MG64716M	Price
7	3/4	1/2	MG64712C	Price	MG64712XF	Price	MG64712F	Price	MG64712M	Price
7	3/8	1/2	MG64706C	Price	MG64706XF	Price	MG64706F	Price	MG64706M	Price
8	1/2	1/2	MG64808C	Price	MG64808XF	Price	MG64808F	Price	MG64808M	Price
8	1/4	1/2	MG64804C	Price	MG64804XF	Price	MG64804F	Price	MG64804M	Price
8	1	1/2	MG64816C	Price	MG64816XF	Price	MG64816F	Price	MG64816M	Price
8	1-1/2	5/8	MG64824C	Price	MG64824XF	Price	MG64824F	Price	MG64824M	Price
8	3/4	1/2	MG64812C	Price	MG64812XF	Price	MG64812F	Price	MG64812M	Price
8	3/8	1/2	MG64806C	Price	MG64806XF	Price	MG64806F	Price	MG64806M	Price
8	5/8	1/2	MG64810C	Price	MG64810XF	Price	MG64810F	Price	MG64810M	Price

CRATEX® Cones



- Best answer to many difficult deburring, smoothing and polishing problems
- Easily shaped to contour in operation or by using Cratex coventional dressing tool
- Ideal for cleaning and polishing grooves, ball corners, flares, angles and other hard-to-reach surfaces
- For use on molds, dies, castings, combustion chambers and ports, stainles steel tanks, shafts, turbine blades, etc.

Shape - Bullet										
			Coarse		Extra Fine		Fine		Medium	
Length	Dia.	Arbor Hole	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1-3/4	7/8	1/4	**MG644707C**	Price	**MG644707XF**	Price	**MG644707F**	Price	**MG644707M**	Price

Shape - Cylinder										
			Coarse		Extra Fine		Fine		Medium	
Length	Dia.	Arbor Hole	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	7/8	1/4	**MG641350C**	Price	**MG641350XF**	Price	**MG641350F**	Price	**MG641350M**	Price
1-1/2	1	1/4	**MG641351C**	Price	**MG641351XF**	Price	**MG641351F**	Price	**MG641351M**	Price

Shape - Pointed										
			Coarse		Extra Fine		Fine		Medium	
Length	Dia.	Arbor Hole	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1-1/4	7/8	1/4	**MG641357C**	Price	**MG641357XF**	Price	**MG641357F**	Price	**MG641357M**	Price
1-3/4	1	1/4	**MG641358C**	Price	**MG641358XF**	Price	**MG641358F**	Price	**MG641358M**	Price

Shape - Tapered										
			Coarse		Extra Fine		Fine		Medium	
Length	Dia.	Arbor Hole	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	5/8 to 1/4	1/4	**MG641340C**	Price	**MG641340XF**	Price	**MG641340F**	Price	**MG641340M**	Price
1-1/4	1 to 1/4	1/4	**MG641349C**	Price	**MG641349XF**	Price	**MG641349F**	Price	**MG641349M**	Price
1-1/4	7/8 to 1/4	1/4	**MG641345C**	Price	**MG641345XF**	Price	**MG641345F**	Price	**MG641345M**	Price
2	1 to 1/2	1/4	**MG641848C**	Price	**MG641848XF**	Price	**MG641848F**	Price	**MG641848M**	Price

CRATEX® Points



- Made in both cylinder and bullet shapes for smoothing and polishing hard to reach surfaces
- Grooves, ball corners, hole, clasps, spirals, flutes and edges
- Widely used for polishing molds, dies, patterns and light castings, for cleaning contact points, solder spots and for relieving stress and micro-deburring
- **Use only with Cratex Point Mandrels to No. 6 & No. 9**
- **Maximum Safe Speed 25,000 Revolutions Per Minute**
- **Best results are usually obtained at 30% to 80% of maximum Safe Speed**

Shape - Bullet										
			Coarse		Extra Fine		Fine		Medium	
Length (in.)	Dia. (in.)	Arbor Hole (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	3/8	1/8	**MG6411C**	Price	**MG6411XF**	Price	**MG6411F**	Price	**MG6411M**	Price
1	9/32	1/16	**MG648C**	Price	**MG648XF**	Price	**MG648F**	Price	**MG648M**	Price
5/8	3/8	1/16	**MG6410C**	Price	**MG6410XF**	Price	**MG6410F**	Price	**MG6410M**	Price
7/8	1/2	1/8	**MG6415C**	Price	**MG6415XF**	Price	**MG6415F**	Price	**MG6415M**	Price

Shape - Cylinder										
			Coarse		Extra Fine		Fine		Medium	
Length (in.)	Dia. (in.)	Arbor Hole (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
7/8	1/4	1/16	**MG646C**	Price	**MG646XF**	Price	**MG646F**	Price	**MG646M**	Price

Shape - Tapered										
			Coarse		Extra Fine		Fine		Medium	
Length (in.)	Dia. (in.)	Arbor Hole (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
7/8	3/8 to 5/16	1/8	**MG6412C**	Price	**MG6412XF**	Price	**MG6412F**	Price	**MG6412M**	Price
7/8	5/8 to 1/8	1/8	**MG6414C**	Price	**MG6414XF**	Price	**MG6414F**	Price	**MG6414M**	Price

CRATEX® Cone Mandrel

- Rubberized Abrasive Cones are designed to fit Cratex Cone Mandrel No. 1341, 1/4" Shank
- Maximum Safe Speed 20,000 R.P.M. with 1/2" overhang (exposed mandrel length) or less
- For each additional 1/4" of overhang the Maximum Safe Speed is decreased by at least 20%



Order No.	Price
MG641341	Price

CRATEX® Point Mandrels



- Mandrels No. 1 and 4 have a 3-48 thread and a hex nut flange
- Mandrel No. 6 has a No, 5-40 thread and a hex nut flange
- Mandrel No. 9 has a No. 5 screw thread and a fixed shoulder flange

Shank (in.)	For Use With	Order No.	Price
1/4	No. 11, 12, 14, 15 Points, 1/8 Hole	**MG64M9**	Price
1/8	No. 11, 12, 14, 15 Points, 1/8 Hole	**MG64M6**	Price
1/8	No. 4, 6, 8, 10 Points, 1/16 Hole	**MG64M4**	Price
3/32	No. 4, 6, 8, 10 Points, 1/16 Hole	**MG64M1**	Price

CRATEX® Cratex Introductory Kit

- Contains 80 wheels and points plus mandrels
- Ideal for use in a wide range of polishing, smoothing and deburring applications

Contents of Kit 777

(8) Tapered Edge Wheels No. 2
(8) Straight Wheels No. 44
(16) Straight Wheels No. 74
(8)Straight Wheels No. 86
(16) Cylinder Points No. 6
(16) Bullet Points No. 8
(8) Bullet Points No. 10
(2) Wheel Mandrels No. 3
(2) Point Mandrels No. 4



Equally assorted in the four Cratex Grit Textures—
C (Coarse) • M (Medium) • F (Fine) • XF (Extra Fine)

Order No.	Price
MG64777	Price

CRATEX® Cratex Point Test Kit

- Contains all eight point shapes — a total of 64 points plus four mandrels
- Ideal for deburring, smoothing and polishing hard-to-reach surfaces

Contents of Kit 778:

(8) Cylinder Points No. 4
(8) Cylinder Points No. 6
(8) Bullet Points No. 8
(8) Bullet Points No. 10
(8) Bullet Points No. 11
(8) Tapered Points No. 12
(8) Tapered Points No. 14
(8) Bullet Points No. 15
(2) Point Mandrels No. 4
(2) Point Mandrels No. 6



Equally assorted in the four Cratex Grit Textures —
C (Coarse) • M (Medium) • F (Fine) • XF (Extra Fine)

Order No.	Price
MG64778	Price

CRATEX® Cratex Small Wheel and Mandrel Kit

- Contains 44 popular small wheels plus two mandrels which have a multitude of industrial applications

Contents of Kit 707:

(8) Straight Wheels No. 86
(8) Straight Wheels No. 80
(8) Straight Wheels No. 74
(8) Straight Wheels No. 54
(8) Straight Wheels No. 44
(4) Tapered Edge Wheels No. 5
(2) Wheel Mandrels No. 3



Equally assorted in the four Cratex Grit Textures—
C (Coarse) • M (Medium) • F (Fine) • XF (Extra Fine)

Order No.	Price
MG64707	Price

CRATEX® Cratex Cone Test Kit

- Contains 18 cones plus two mandrels
- Ideal for smoothing, cleaning and polishing grooves, ball corners, flares, angles, holes and other hard-to-reach surfaces

Contents of Kit 227:

(2) Tapered Cones No. 1340
(2) Tapered Cones No. 1345
(2) Tapered Cones No. 1349
(2) Tapered Cones No. 1848
(2) Cylinder Cones No. 1350
(2) Cylinder Cones No. 1351
(2) Pointed Cones No. 1357
(2) Pointed Cones No. 1358
(2) Cone Mandrels No. 1341
(2) Bullet Cones No. 4707



Equally divided between C (Coarse) and F (Fine) Grit Textures

Order No.	Price
MG64227	Price

CRATEX® Cratex Combination Kit

- A comprehensive introductory assortment of blocks and sticks, cones and wheels used in a broad range of industrial and metalcraft applications involving light deburring, smoothing, cleaning and polishing

Contents of Kit 226:

(4) Oblong Blocks No. 6803
(4) Round Sticks No. 086
(4) Tapered Cones No. 1345
(4) Cylinder Cones No. 1350
(4) Straight Wheels No. 204
(1) Cone Mandrel No. 1341
(1) Wheel Mandrel No. 1342



Equally assorted in the four Cratex Grit Textures —
C (Coarse) • M (Medium) • F (Fine) • XF (Extra Fine)

Order No.	Price
MG64226	Price

CRATEX® Cratex Point and Mandrel Kit

- Contains 40 popular small points plus four mandrels

Contents of Kit 767:

(8) Bullet Points No. 8
(8) Bullet Points No. 10
(8) Bullet Points No. 11
(8) Tapered Points No. 14
(8) Bullet Points No. 15
(2) Point Mandrels No. 4
(2) Point Mandrels No. 6



Equally assorted in the four Cratex Grit Textures—
C (Coarse) • M (Medium) • F (Fine) • XF (Extra Fine)

Order No.	Price
MG64767	Price

Rex Cut® Mounted Points - Aluminum Oxide

- Abrasive grain impregnated into laminations of cotton fabric
- Versatile abrasive tool for grinding and finishing in one operation
- Ideal for stainless steel and aluminum







Grit Grade - GFX						
Shape	Dia. (in.)	Length (in.)	Shank Size (in.)	Specification	Order No.	Price
B121	1/2	1/2	1/8 x 1-1/2	A80GFX	**RX4112102**	Price
B52	3/8	3/4	1/8 x 1-1/2	A120GFX	**RX4105203**	Price
B52	3/8	3/8	1/8 x 1-1/2	A80GFX	**RX4105202**	Price
W153	3/16	3/8	1/8 x 1-1/2	A120GFX	**RX4115303**	Price
W153	3/16	3/8	1/8 x 1-1/2	A80GFX	**RX4115302**	Price
W154	3/16	1/2	1/8 x 1-1/2	A80GFX	**RX4115402**	Price
W163	1/4	1/2	1/8 x 1-1/2	A120GFX	**RX4116303**	Price
W163	1/4	1/2	1/8 x 1-1/2	A80GFX	**RX4116302**	Price
W175	3/8	3/8	1/8 x 1-1/2	A80GFX	**RX4117502**	Price
W176	3/8	1/2	1/8 x 1-1/2	A120GFX	**RX4117603**	Price
W176	3/8	1/2	1/8 x 1-1/2	A80GFX	**RX4117602**	Price
W177	3/8	3/4	1/8 x 1-1/2	A120GFX	**RX4117703**	Price
W177	3/8	3/4	1/8 x 1-1/2	A80GFX	**RX4117702**	Price
W185	1/2	1/2	1/8 x 1-1/2	A120GFX	**RX4118503**	Price
W185	1/2	1/2	1/8 x 1-1/2	A80GFX	**RX4118502**	Price
W220	1	1	1/4 x 1-1/2	A120GFX	**RX4122003**	Price
W220	1	1	1/4 x 1-1/2	A80GFX	**RX4122002**	Price

Grit Grade - MTX						
Shape	Dia. (in.)	Length (in.)	Shank Size (in.)	Specification	Order No.	Price
W153	3/16	3/8	1/8 x 1-1/2	A120MTX	**RX4115309**	Price
W153	3/16	3/8	1/8 x 1-1/2	A80MTX	**RX4115308**	Price
W154	3/16	1/2	1/8 x 1-1/2	A120MTX	**RX4115409**	Price
W160	1/4	1/4	1/8 x 1-1/2	A120MTX	**RX4116003**	Price
W160	1/4	1/4	1/8 x 1-1/2	A80MTX	**RX4116002**	Price
W163	1/4	1/2	1/8 x 1-1/2	A120MTX	**RX4116309**	Price
W163	1/4	1/2	1/8 x 1-1/2	A80MTX	**RX4116308**	Price
W176	3/8	1/2	1/8 x 1-1/2	A120MTX	**RX4117609**	Price
W176	3/8	1/2	1/8 x 1-1/2	A80MTX	**RX4117608**	Price
W177	3/8	3/4	1/8 x 1-1/2	A120MTX	**RX4117709**	Price
W177	3/8	3/4	1/8 x 1-1/2	A80MTX	**RX4117708**	Price
W185	1/2	1/2	1/8 x 1-1/2	A120MTX	**RX4118509**	Price
W185	1/2	1/2	1/8 x 1-1/2	A80MTX	**RX4118508**	Price

Rex Cut® Type 27 Depressed Center Wheel

- Aluminum Oxide
- A24 MTX for removing welds on aluminum — non-loading
- A36 GFX for blending welds on stainless steel and aluminum



Size (in.)	Specification	Order No.	Price
4-1/2 x 1/4 x 7/8	A24-MTX	**RX4145401**	Price
4-1/2 x 1/4 x 7/8	A36-GFX	**RX4145403**	Price
7 x 1/4 x 7/8	A24-MTX	**RX4107401**	Price
7 x 1/4 x 7/8	A36-GFX	**RX4107403**	Price

Rex Cut® Type 1 Straight Sided Wheels

- MTX for Grinding, deburring gears, edges, etc
- GFX for Blending and Finishing
- NTX Wheels available for heavier deburring



Size (in.)	Specification	Order No.	Price
2 x 1/16 x 1/4	A54-MTX	**RX4120202**	Price
2 x 1/16 x 1/4	A80-MTX	**RX4120203**	Price
2 x 1/8 x 1/4	A54-GFX	**RX4120404**	Price
2 x 1/8 x 1/4	A54-MTX	**RX4120402**	Price
2 x 1/8 x 1/4	A80-GFX	**RX4120405**	Price
2 x 1/8 x 1/4	A80-MTX	**RX4120403**	Price
3 x 1/16 x 3/8	A36-MTX	**RX41302121**	Price
3 x 1/16 x 3/8	A54-MTX	**RX41302122**	Price
3 x 1/16 x 3/8	A80-MTX	**RX41302123**	Price
3 x 1/8 x 3/8	A36-MTX	**RX41304121**	Price
3 x 1/8 x 3/8	A54-GFX	**RX41304124**	Price
3 x 1/8 x 3/8	A54-MTX	**RX41304122**	Price
3 x 1/8 x 3/8	A80-GFX	**RX41304125**	Price
3 x 1/8 x 3/8	A80-MTX	**RX41304123**	Price
4 x 1/16 x 3/8	A54-MTX	**RX41402122**	Price
4 x 1/16 x 3/8	A80-MTX	**RX41402123**	Price
4 x 1/8 x 3/8	A54-GFX	**RX41404124**	Price
4 x 1/8 x 3/8	A80-GFX	**RX41404125**	Price
4 x 1/8 x 3/8	A80-MTX	**RX41404123**	Price

Cut-N-Finish™ Flexible Abrasive Discs

- Ideal for blending welds on stainless steel, aluminum and other non-ferrous metals



Dia. (in.)	Hole Size (in.)	Grit	Order No.	Price
4-1/2	7/8	A24	**RX4145204**	Price
7	7/8	A54	**RX4107203**	Price

Rex Cut® Rol-On Quick Change Disc

- Grinds and finishes in one step
- Non-loading on aluminum
- Longer life — outlasts coated discs 10 to 1
- 80 Grit — For polishing and light deburring
- 54 Grit — For medium deburring and finishing
- 36 Grit — For heavy deburring and blending



Dia. (in.)	Grit	Order No.	Price
1-1/2	A36	**RX411536**	Price
1-1/2	A54	**RX411554**	Price
1-1/2	A80	**RX411580**	Price
2	A36	**RX412036**	Price
2	A54	**RX412054**	Price
2	A80	**RX412080**	Price
3	A36	**RX413036**	Price
3	A54	**RX413054**	Price
3	A80	**RX413080**	Price

Rol-On Disc Holders



Dia. (in.)	Order No.	Price
1-1/2	**MM5961174**	Price
2	**MM5964922**	Price
3	**MM5964949**	Price

50 Pc. Mounted Point Kits

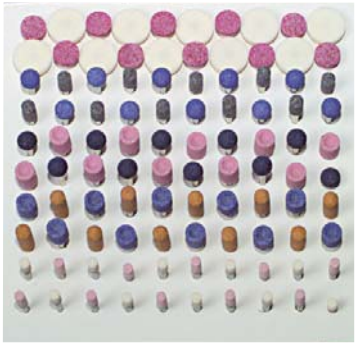
- Each kit contains 5 each of 10 of our best selling mounted point shapes and specifications
- The 1/4" spindle, "A" shaped points are ideal for general maintenance, metalworking applications
- The 1/8" spindle kits contain "B" shaped points for light deburring machine parts and for finishing/polishing dies
- The "W" shaped points in both these kits work well for precision grinding of medium to heavy stock



Shank Size (in.)	Set Contains	Order No.	Price
1/8	5 Each of: B42, B52, B97, B122, B131, W154, W164, W185, W215 Pacesetter & W163 A80-HBF3	**MH67MPK47669**	Price
1/4	5 Each of: A1, A5, A11, A21, A23, A26, A36, A39, W242 Pacesetter and 5 W220 A80-HBF3	**MH67MPK47789**	Price

Mounted Point Tool Room Assortment - Common Sizes and Shapes

- All common sizes and shapes in a convenient storage box
- Use on die or in-line/straight shaft grinders
- Blending contours, deburring molded parts and mold finishing
- ID grinding, offhand bench grinding, tool and die

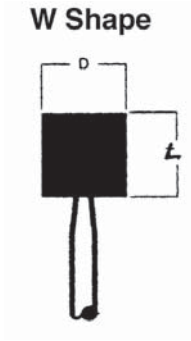


Shank Size (in.)	Description	Order No.	Price
1/8 x 1-1/2	100 Piece Assortment	**ML50MP100**	Price
1/4 x 1-1/2	50 Piece Assortment	**ML50MP50**	Price

Industrial Quality Mounted Wheel/Points

Hard-to-Find Shank Sizes

- Aluminum oxide vitrified
- Random colors
- Norton, Carborundum and Bay State brands



Shape	Dia. (in.)	Length (in.)	Shank Size (in.)	Order No.	Price
W154	3/16	1/2	3/32 x 1-1/2	**ML61003A**	Price
W181	1/2	1/16	1/4 x 1-1/2	**ML61009A**	Price

Center Lap Mounted Points

- Specially formulated wheel treatment (#5 wood resin)
- Larger diameter spindle
- Precise dimensional tolerances
- Adds lubricity to the wheel, minimizing risk of metallurgical damage
- Minimum deflection, rigid support
- Ensure accurate location of part centers

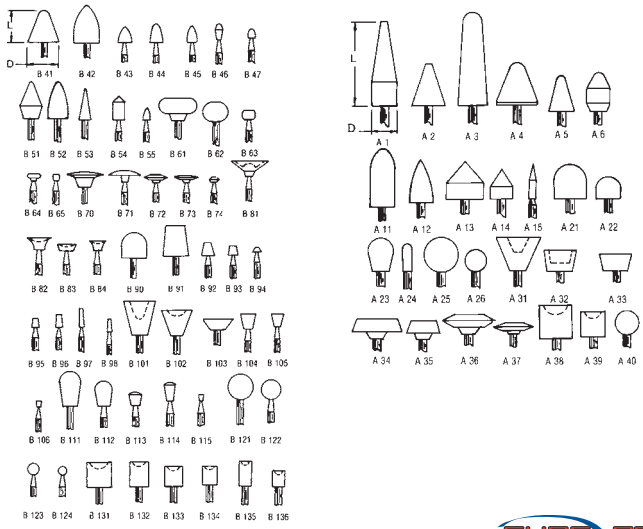


Dia. (in.)	Thickness (in.)	Spindle Dia. (in.)	Maximum RPM	Spec	Standard Package	Order No.	Price
1	2	1/2	15,900	A80-VVM	5	**MH67CL10222926**	Price
1/2	1	1/2	65000	A80-VVM	5	**MH67CL05221421**	Price

Vitrified Bond Mounted Points

SurfPro:
- Medium Grit - Semi-friable Aluminum Oxide
- Vitrified bond-long life
- Provides madium to heavy duty stock removal
- Gray/Blue color

Standard Quality:
- Medium Grit - Aluminum Oxide - Vitrified Bond
- Light to medium stock removal
- Random colors



SURF PRO

Shank (in.) - 1/4 x 1-1/2							
				Standard Quality		Surf-Pro	
Shape	Dia. (in.)	Length (in.)	Max. RPM	Order No.	Price	Order No.	Price
A1	3/4	2-1/2	19,800	**ML50A1**	Price	-	-
A2	1	1-1/4	38,200	**ML50A2**	Price	**ML40A2G**	Price
A3	1	2-3/4	16,100	**ML50A3**	Price	**ML40A3G**	Price
A4	1-1/4	1-1/4	30,560	**ML50A4**	Price	**ML40A4G**	Price
A5	3/4	1-1/8	45,000	**ML50A5**	Price	**ML40A5G**	Price
A6	3/4	1-1/8	39,000	**ML50A6**	Price	**ML40A6G**	Price
A11	7/8	2	19,860	**ML50A11**	Price	**ML40A11G**	Price
A12	11/16	1-1/4	48,000	**ML50A12**	Price	**ML40A12G**	Price
A13	1-1/8	1-1/8	33,950	**ML50A13**	Price	**ML40A13G**	Price
A14	11/16	7/8	55,560	**ML50A14**	Price	**ML40A14G**	Price
A15	1/4	1-1/16	72,750	**ML50A15**	Price	**ML40A15G**	Price
A21	1	1	34,500	**ML50A21**	Price	**ML40A21G**	Price
A22	3/4	5/8	50,930	**ML50A22**	Price	-	-
A23	3/4	1	39,370	**ML50A23**	Price	**ML40A23G**	Price
A24	1/4	3/4	76,500	**ML50A24**	Price	**ML40A24G**	Price
A25	1	1	35,620	**ML50A25**	Price	**ML40A25G**	Price
A26	5/8	5/8	61,120	**ML50A26**	Price	**ML40A26G**	Price
A31	1-3/8	1	27,780	**ML50A31**	Price	**ML40A31G**	Price
A32	1	5/8	38,200	**ML50A32**	Price	**ML40A32G**	Price
A33	1	1/2	38,200	**ML50A33**	Price	**ML40A33G**	Price
A34	1-1/2	3/8	25,470	**ML50A34**	Price	**ML40A34G**	Price
A35	1	3/8	38,200	**ML50A35**	Price	**ML40A35G**	Price
A36	1-5/8	3/8	23,520	**ML50A36**	Price	**ML40A36G**	Price
A37	1-1/4	1/4	30,560	**ML50A37**	Price	**ML40A37G**	Price
A38	1	1	34,500	**ML50A38**	Price	**ML40A38G**	Price
A39	3/4	3/4	47,250	**ML50A39**	Price	**ML40A39G**	Price
A40	3/4	3/4	47,250	**ML50A40**	Price	**ML40A40G**	Price

SURF PRO

Shank (in.) - 1/8 x 1-1/2							
				Standard Quality		Surf-Pro	
Shape	Dia. (in.)	Length (in.)	Max. RPM	Order No.	Price	Order No.	Price
B41	5/8	5/8	33,750	**ML50B41**	Price	**ML40B41G**	Price
B42	1/2	3/4	33,750	**ML50B42**	Price	**ML40B42G**	Price
B43	1/4	5/16	81,370	**ML50B43**	Price	**ML40B43G**	Price
B44	7/32	3/8	68,400	**ML50B44**	Price	**ML40B44G**	Price
B45	3/16	5/16	104,250	**ML50B45**	Price	**ML40B45G**	Price
B46	1/8	5/16	105,000	**ML50B46**	Price	**ML40B46G**	Price
B47	1/8	5/32	105,000	**ML50B47**	Price	**ML40B47G**	Price
B51	7/16	3/4	45,370	**ML50B51**	Price	**ML40B51G**	Price
B52	3/8	3/4	45,370	**ML50B52**	Price	**ML40B52G**	Price
B53	1/4	5/8	60,000	**ML50B53**	Price	**ML40B53G**	Price
B54	1/4	1/2	60,000	**ML50B54**	Price	**ML40B54G**	Price
B55	1/8	1/4	105,000	**ML50B55**	Price	**ML40B55G**	Price
B61	3/4	5/16	38,250	**ML50B61**	Price	**ML40B61G**	Price
B62	1/2	3/8	41,020	**ML50B62**	Price	-	-
B63	1/4	3/16	92,400	**ML50B63**	Price	-	-
B64	1/4	1/16	105,000	**ML50B64**	Price	-	-

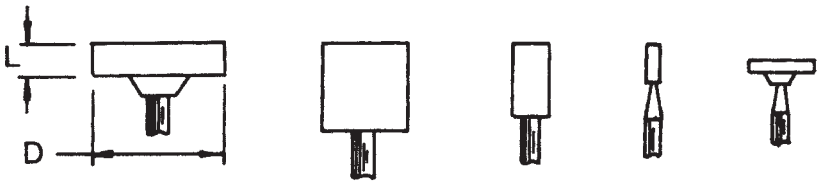
SURF PRO

Shank (in.) - 1/8 x 1-1/2							
				Standard Quality		Surf-Pro	
Shape	Dia. (in.)	Length (in.)	Max. RPM	Order No.	Price	Order No.	Price
B65	1/8	1/8	105,000	**ML50B65**	Price	-	-
B70	3/4	1/8	50,930	**ML50B70**	Price	**ML40B70G**	Price
B71	5/8	3/32	61,120	**ML50B71**	Price	**ML40B71G**	Price
B72	1/2	1/8	73,500	**ML50B72**	Price	**ML40B72G**	Price
B73	1/2	3/32	73,500	**ML50B73**	Price	**ML40B73G**	Price
B74	7/32	3/32	105,000	**ML50B74**	Price	**ML40B74G**	Price
B81	3/4	3/16	50,930	**ML50B81**	Price	**ML40B81G**	Price
B82	1/2	1/4	76,390	**ML50B82**	Price	-	-
B83	3/8	1/8	87,600	**ML50B83**	Price	-	-
B84	5/16	3/16	105,000	**ML50B84**	Price	-	-
B90	1/2	1/2	34,500	**ML50B90**	Price	-	-
B91	1/2	5/8	34,500	**ML50B91**	Price	**ML40B91G**	Price
B92	1/4	1/4	81,370	**ML50B92**	Price	**ML40B92G**	Price
B93	3/16	3/16	105,000	**ML50B93**	Price	-	-
B94	11/64	3/32	105,000	**ML50B94**	Price	-	-
B95	1/8	3/16	105,000	**ML50B95**	Price	**ML40B95G**	Price
B96	1/8	1/4	105,000	**ML50B96**	Price	**ML40B96G**	Price
B97	1/8	3/8	105,000	**ML50B97**	Price	**ML40B97G**	Price
B98	3/32	1/4	105,000	**ML50B98**	Price	**ML40B98G**	Price
B101	5/8	11/16	33,750	**ML50B101**	Price	-	-
B102	5/8	1/2	45,370	**ML50B102**	Price	-	-
B103	5/8	3/16	61,120	**ML50B103**	Price	-	-
B104	5/16	3/8	68,400	**ML50B104**	Price	**ML40B104G**	Price
B105	1/4	1/4	104,250	**ML50B105**	Price	-	-
B106	1/8	7/64	105,000	**ML50B106**	Price	-	-
B111	7/16	11/16	33,750	**ML50B111**	Price	**ML40B111G**	Price
B112	3/8	1/2	45,370	**ML50B112**	Price	**ML40B112G**	Price
B113	1/4	1/4	81,370	**ML50B113**	Price	-	-
B114	2/32	3/8	68,400	**ML50B114**	Price	-	-
B115	3/32	1/8	105,000	**ML50B115**	Price	-	-
B121	1/2	1/2	45,370	**ML50B121**	Price	**ML40B121G**	Price
B122	3/8	3/8	61,650	**ML50B122**	Price	**ML40B122G**	Price
B123	3/16	3/16	104,250	**ML50B123**	Price	**ML40B123G**	Price
B124	1/8	1/8	105,000	**ML50B124**	Price	**ML40B124G**	Price
B131	1/2	1/2	34,500	**ML50B131**	Price	**ML40B131G**	Price
B132	3/8	1/2	45,370	**ML50B132**	Price	**ML40B132G**	Price
B133	3/8	3/8	54,000	**ML50B133**	Price	**ML40B133G**	Price
B134	5/16	3/8	61,650	**ML50B134**	Price	**ML40B134G**	Price
B135	1/4	1/2	60,000	**ML50B135**	Price	**ML40B135G**	Price
B136	1/4	5/16	77,250	**ML50B136**	Price	**ML40B136G**	Price

Group W - Cylindrical Shapes

SurfPro:
- Medium Grit - Semi-friable Aluminum Oxide
- Vitrified bond-long life
- Provides medium to heavy duty stock removal
- Gray/Blue color

Standard Quality:
- Medium Grit - Aluminum Oxide - Vitrified Bond
- Light to medium stock removal
- Random colors



Shank (in.) - 1/8 x 1-1/2							
				Standard Quality		Surf-Pro	
Shape	Dia. (in.)	Length (in.)	Max. RPM	Order No.	Price	Order No.	Price
W141	3/32	5/32	105,000	**ML50W141**	Price	-	-
W142	3/32	1/4	105,000	**ML50W142**	Price	**ML40W142G**	Price
W143	1/8	1/8	105,000	**ML50W143**	Price	-	-
W144	1/8	1/4	105,000	**ML50W144**	Price	**ML40W144G**	Price
W145	1/8	3/8	105,000	**ML50W145**	Price	**ML40W145G**	Price
W146	1/8	1/2	105,000	**ML50W146**	Price	**ML40W146G**	Price
W148	5/32	1/16	105,000	**ML50W148**	Price	-	-
W149	5/32	1/4	105,000	**ML50W149**	Price	**ML40W149G**	Price
W150	3/16	1/16	105,000	**ML50W150**	Price	-	-
W151	3/16	1/8	105,000	**ML50W151**	Price	-	-
W152	3/16	1/4	105,000	**ML50W152**	Price	**ML40W152G**	Price
W153	3/16	3/8	80,850	**ML50W153**	Price	**ML40W153G**	Price
W154	3/16	1/2	70,500	**ML50W154**	Price	**ML40W154G**	Price
W155	13/64	1/4	123,000	**ML50W155**	Price	-	-
W157	1/4	1/16	123,000	**ML50W157**	Price	**ML40W157G**	Price
W158	1/4	1/8	105,000	**ML50W158**	Price	-	-
W159	1/4	3/16	123,000	**ML50W159**	Price	-	-
W160	1/4	1/4	81,370	**ML50W160**	Price	**ML40W160G**	Price
W161	1/4	5/16	77,250	**ML50W161**	Price	-	-
W162	1/4	3/8	68,400	**ML50W162**	Price	**ML40W162G**	Price
W163	1/4	1/2	60,000	**ML50W163**	Price	**ML40W163G**	Price
W164	1/4	3/4	45,900	**ML50W164**	Price	**ML40W164G**	Price
W165	5/16	1/16	107,400	**ML50W165**	Price	-	-
W166	5/16	1/8	96,970	**ML50W166**	Price	-	-
W167	5/16	1/4	75,000	**ML50W167**	Price	-	-
W168	5/16	5/16	68,400	**ML50W168**	Price	-	-
W169	5/16	3/8	61,650	**ML50W169**	Price	**ML40W169G**	Price
W170	5/16	1/2	52,500	**ML50W170**	Price	**ML40W170G**	Price
W171	5/16	3/4	37,120	**ML50W171**	Price	-	-
W172	3/8	1/16	99,370	**ML50W172**	Price	-	-
W173	3/8	1/8	87,600	**ML50W173**	Price	-	-
W174	3/8	1/4	69,000	**ML50W174**	Price	-	-
W175	3/8	3/8	54,000	**ML50W175**	Price	**ML40W175G**	Price
W176	3/8	1/2	45,370	**ML50W176**	Price	**ML40W176G**	Price
W177	3/8	3/4	33,750	**ML50W177**	Price	**ML40W177G**	Price
W178	3/8	1	26,250	**ML50W178**	Price	**ML40W178G**	Price
W180	1/2	1/32	76,390	**ML50W180**	Price	-	-
W181	1/2	1/16	76,390	**ML50W181**	Price	-	-
W182	1/2	1/8	73,500	**ML50W182**	Price	**ML40W182G**	Price
W183	1/2	1/4	51,750	**ML50W183**	Price	**ML40W183G**	Price
W184	1/2	3/8	41,020	**ML50W184**	Price	-	-
W185	1/2	1/2	34,500	**ML50W185**	Price	**ML40W185G**	Price
W186	1/2	3/4	26,250	**ML50W186**	Price	**ML40W186G**	Price
W187	1/2	1	20,620	**ML50W187**	Price	**ML40W187G**	Price
W190	5/8	1/16	61,120	**ML50W190**	Price	-	-
W191	5/8	1/8	58,870	**ML50W191**	Price	**ML40W191G**	Price
W193	5/8	3/8	32,250	**ML50W193**	Price	-	-
W194	5/8	1/2	29,400	**ML50W194**	Price	-	-
W195	5/8	3/4	22,120	**ML50W195**	Price	**ML40W195G**	Price
W199	3/4	1/16	50,930	**ML50W199**	Price	-	-
W200	3/4	1/8	50,930	**ML50W200**	Price	**ML40W200G**	Price
W201	3/4	1/4	38,250	**ML50W201**	Price	-	-

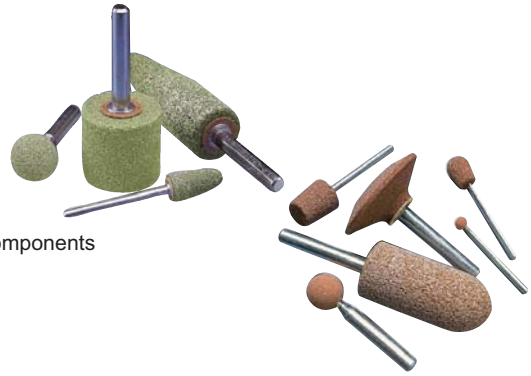
Shank (in.) - 1/8 x 1-1/2							
				Standard Quality		Surf-Pro	
Shape	Dia. (in.)	Length (in.)	Max. RPM	Order No.	Price	Order No.	Price
W202	3/4	3/8	30,600	**ML50W202**	Price	-	-
W203	3/4	1/2	25,500	**ML50W203**	Price	-	-
W210	7/8	1/16	43,650	**ML50W210**	Price	-	-
W211	7/8	1/8	43,650	**ML50W211**	Price	-	-
W212	7/8	1/4	33,750	**ML50W212**	Price	-	-
W213	7/8	3/8	27,000	**ML50W213**	Price	-	-
W215	1	1/8	38,200	**ML50W215**	Price	**ML40W215G**	Price
W216	1	1/4	30,520	**ML50W216**	Price	**ML40W216G**	Price

Shank (in.) - 1/4 x 1-1/2							
				Standard Quality		Surf-Pro	
Shape	Dia. (in.)	Length (in.)	Max. RPM	Order No.	Price	Order No.	Price
W188	1/2	1-1/2	30,370	**ML50W188**	Price	**ML40W188G**	Price
W189	1/2	2	24,000	**ML50W189**	Price	**ML40W189G**	Price
W196	5/8	1	17,620	**ML50W196**	Price	**ML40W196G**	Price
W197	5/8	2	21,000	**ML50W197**	Price	**ML40W197G**	Price
W198	5/8	2-1/2	16,500	**ML50W198**	Price	-	-
W204	3/4	3/4	18,900	**ML50W204**	Price	**ML40W204G**	Price
W205	3/4	1	34,500	**ML50W205**	Price	**ML40W205G**	Price
W206	3/4	1-1/4	28,720	**ML50W206**	Price	-	-
W207	3/4	1-1/2	24,000	**ML50W207**	Price	**ML40W207G**	Price
W208	3/4	2	18,750	**ML50W208**	Price	**ML40W208G**	Price
W209	3/4	2-1/2	15,000	**ML50W209**	Price	-	-
W217	1	3/8	38,200	**ML50W217**	Price	**ML40W217G**	Price
W218	1	1/2	38,200	**ML50W218**	Price	**ML40W218G**	Price
W219	1	3/4	35,100	**ML50W219**	Price	-	-
W220	1	1	25,500	**ML50W220**	Price	**ML40W220G**	Price
W221	1	1-1/2	19,120	**ML50W221**	Price	**ML40W221G**	Price
W222	1	2	15,900	**ML50W222**	Price	**ML40W222G**	Price
W223	1	2-1/2	12,370	**ML50W223**	Price	-	-
W225	1-1/4	1/4	30,560	**ML50W225**	Price	**ML40W225G**	Price
W226	1-1/4	3/8	30,560	**ML50W226**	Price	-	-
W227	1-1/4	1/2	30,560	**ML50W227**	Price	-	-
W228	1-1/4	3/4	30,520	**ML50W228**	Price	-	-
W229	1-1/4	1	24,000	**ML50W229**	Price	**ML40W229G**	Price
W230	1-1/4	1-1/4	20,400	**ML50W230**	Price	-	-
W231	1-1/4	1-1/2	17,620	**ML50W231**	Price	-	-
W232	1-1/4	2	14,250	**ML50W232**	Price	-	-
W235	1-1/2	1/4	25,470	**ML50W235**	Price	**ML40W235G**	Price
W236	1-1/2	1/2	25,470	**ML50W236**	Price	**ML40W236G**	Price
W237	1-1/2	1	22,500	**ML50W237**	Price	**ML40W237G**	Price
W238	1-1/2	1-1/2	15,600	**ML50W238**	Price	**ML40W238G**	Price

Shank (in.) - 3/8 x 1-1/2					
				Standard Quality	
Shape	Dia. (in.)	Length (in.)	Max. RPM	Order No.	Price
W224	1	3	7,000	**ML50W224†**	Price
W233	1-1/4	2-1/2	18,335	**ML50W233†**	Price
W234	1-1/4	3	18,335	**ML50W234†**	Price

† Denotes 3/8" shank - recommended for safety requirements.

Premium Vitrified Bond Mounted Points



Gemini
- 38A Abrasive
- Diverse shapes and sizes
- Cool cutting, less burn
- Ideal when initial price is the main purchasing consideration

Quantum
- Unique, engineered ceramic grain shape and chemistry with proven bond technology
- Ideal for high volume foundry operatioons - grinding Inconel and similar alloy turbine blade components
- Minimal loading and heat build up
- 33% + Longer live vs. competitive ceramic products
- 30% + Higher metal removal rates
- Versatile, optimized for all low, medium and high force applications
- Exceptional productivity and life

						38A		Ceramic Alumina	
						Gemini		Quantum	
Shape	Dia. (in.)	Thickness (in.)	Spindle Dia.	Max. RPM	Std. Pk.	Order No.	Price	Order No.	Price
A1	3/4	2-1/2	1/4	19,800	5	MH67A1P24375	Price	MH67A1P49139	Price
A3	1	2-3/4	1/4	16,100	5	MH67A3P24378	Price	-	-
A4	1-1/4	1-1/4	1/4	30,560	5	MH67A4P24380	Price	-	-
A5	3/4	1-1/8	1/4	45,000	5	MH67A5P24382	Price	-	-
A11	7/8	2-1/4	1/4	19,860	5	MH67A11P24385	Price	-	-
A11	7/8	2	1/4	19,860	5	-	-	MH67A11P49141	Price
A12	11/16	1-1/4	1/4	48,000	5	MH67A12P24388	Price	MH67A12P77679	Price
A13	1-1/8	1-1/8	1/4	33,950	5	MH67A13P24389	Price	-	-
A14	11/16	7/8	1/4	55,560	5	MH67A14P24390	Price	-	-
A15	1/4	1-1/16	1/4	72,750	5	MH67A15P24391	Price	-	-
A21	1	1-1/4	1/4	34,500	5	MH67A21P24392	Price	-	-
A21	1	1	1/4	35,500	5	-	-	MH67A21P49144	Price
A23	3/4	1	1/4	39,370	5	-	-	MH67A23P49143	Price
A23	3/4	1-1/4	1/4	39,370	5	MH67A23P24394	Price	-	-
A24	1/4	3/4	1/4	76,500	5	MH67A24P24395	Price	-	-
A25	1 Ball	1	1/4	35,620	5	MH67A25P24396	Price	-	-
A25	1 Ball	1	1/4	36,620	5	-	-	MH67A25P77680	Price
A26	5/8 Ball	5/8	1/4	61,120	5	MH67A26P24397	Price	MH67A26P49145	Price
A31	1-3/8	1-1/4	1/4	27,780	5	MH67A31P24399	Price	-	-
A32	1	5/8	1/4	38,200	5	MH67A32P24400	Price	-	-
A34	1-1/2	3/8	1/4	25,470	5	MH67A34P24402	Price	-	-
A36	1-5/8	3/8	1/4	23,520	5	MH67A36P24404	Price	MH67A36P49146	Price
A37	1-1/4	1/4	1/4	30,560	5	MH67A37P24405	Price	-	-
A38	1	1	1/4	34,500	5	-	-	MH67A38P77682	Price
A38	1	1-1/4	1/4	34,500	5	MH67A38P24406	Price	-	-
A39	3/4	3/4	1/4	47,250	5	MH67A39P24407	Price	MH67A39P49147	Price
A40	3/4 Ball	3/4	1/4	47,250	5	MH67A40P24408	Price	-	-
B41	5/8	5/8	1/8	33,570	5	MH67B41P24410	Price	-	-
B42	1/2	3/4	1/8	33,570	5	MH67B41P24412	Price	MH67B42P49045	Price
B43	1/4	5/16	1/8	81,370	5	MH67B43P24413	Price	-	-
B44	7/32	3/8	1/8	68,400	5	MH67B44P24414	Price	-	-
B45	3/16	5/16	1/8	104,250	5	MH67B45P24415	Price	-	-
B46	1/8	5/16	1/8	105,000	5	MH67B46P24416	Price	-	-
B51	7/16	3/4	1/8	45,370	5	MH67B51P24418	Price	-	-
B52	3/8	3/4	1/8	45,370	5	MH67B52P24422	Price	MH67B52P49046	Price
B53	5/16	5/8	1/8	60,000	5	MH67B53P24423	Price	-	-
B54	1/4	1/2	1/8	60,000	5	MH67B54P24424	Price	-	-
B55	1/8	1/4	1/8	105,000	5	MH67B55P24425	Price	-	-
B73	1/2	3/32	1/8	73,500	5	MH67B73P24435	Price	-	-
B81	3/4	3/16	1/8	50,930	5	MH67B81P24437	Price	-	-
B91	1/2	5/8	1/8	34,500	5	MH67B91P24443	Price	-	-
B96	1/8	1/4	1/8	105,000	5	MH67B96P24449	Price	-	-
B97	1/8	3/8	1/8	105,000	5	MH67B97P24451	Price	MH67B97P49048	Price
B98	3/32	1/4	1/8	105,000	5	MH67B98P24452	Price	-	-
B121	1/2 Ball	1/2	1/8	45,370	5	MH67B121P24466	Price	-	-
B122	3/8 Ball	3/8	1/8	61,650	5	MH67B122P24470	Price	MH67B122P49050	Price
B123	3/16 Ball	3/16	1/8	104,250	5	MH67B123P24472	Price	-	-
B131	1/2	1/2	1/8	34,500	5	MH67B131P24475	Price	MH67B131P49049	Price
B133	3/8	3/8	1/8	54,000	5	MH67B133P24481	Price	-	-
B134	5/16	3/8	1/8	61,650	5	MH67B134P24482	Price	-	-
B135	1/4	1/2	1/2	60,000	5	MH67B135P24484	Price	-	-
B136	1/4	5/16	1/8	77,250	5	MH67B136P24485	Price	-	-
B132	3/8	1/2	1/8	45,370	5	MH67B132P24479	Price	-	-
W144	1/8	1/4	1/8	105,000	5	MH67W144P24488	Price	-	-
W145	1/8	3/8	1/8	105,000	5	MH67W145P24489	Price	-	-
W146	1/8	1/2	1/8	105,000	5	MH67W146P24491	Price	-	-
W149	5/32	1/4	5/32	105,000	5	MH67W149P24493	Price	-	-
W152	3/16	1/4	1/8	105,000	5	MH67W152P24495	Price	-	-

Premium Vitrified Bond Mounted Points (cont.)

						38A		Ceramic Alumina	
						Gemini		Quantum	
Shape	Dia. (in.)	Thickness (in.)	Spindle Dia.	Max. RPM	Std. Pk.	Order No.	Price	Order No.	Price
W153	3/16	3/8	1/8	80,850	5	**MH67W153P24496**	Price	-	-
W154	3/16	1/2	1/8	70,500	5	**MH67W154P24497**	Price	**MH67W154P49133**	Price
W158	1/4	1/8	1/8	105,000	5	**MH67W158P24499**	Price	-	-
W160	1/4	1/4	1/8	81,370	5	**MH67W160P24501**	Price	-	-
W162	1/4	3/8	1/8	64,800	5	**MH67W162P24503**	Price	-	-
W163	1/4	1/2	1/8	60,000	5	**MH67W163P24504**	Price	-	-
W164	1/4	3/4	1/8	45,900	5	**MH67W164P24505**	Price	**MH67W164P49135**	Price
W170	5/16	1/2	1/8	52,500	5	**MH67W170P24511**	Price	-	-
W175	3/8	3/8	1/8	54,000	5	**MH67W175P24516**	Price	-	-
W176	3/8	1/2	1/8	45,370	5	**MH67W176P24517**	Price	-	-
W177	3/8	3/4	1/8	33,750	5	**MH67W177P24518**	Price	-	-
W178	3/8	1	1/8	26,250	5	**MH67W178P24519**	Price	-	-
W182	1/2	1/8	1/8	73,500	5	**MH67W182P24522**	Price	-	-
W184	1/2	3/8	1/8	41,020	5	**MH67W184P24524**	Price	-	-
W185	1/2	1/2	1/4	61,500	5	**MH67W185P24526**	Price	-	-
W185	1/2	1/2	1/8	34,500	5	**MH67W185P24525**	Price	**MH67W185P49137**	Price
W186	1/2	3/4	1/4	51,000	5	**MH67W186P24528**	Price	-	-
W187	1/2	1	1/8	20,620	5	**MH67W187P24529**	Price	-	-
W188	1/2	1-1/2	1/4	30,370	5	**MH67W188P24530**	Price	-	-
W189	1/2	2	1/4	24,000	5	**MH67W189P24531**	Price	**MH67W189P77683**	Price
W196	5/8	1	1/4	35,250	5	**MH67W196P24539**	Price	-	-
W200	3/4	1/8	1/8	50,930	5	**MH67W200P24544**	Price	-	-
W204	3/4	3/4	1/4	42,750	5	**MH67W204P24549**	Price	-	-
W205	3/4	1	1/4	34,500	5	**MH67W205P24550**	Price	-	-
W207	3/4	1-1/2	1/4	24,000	5	**MH67W207P24552**	Price	-	-
W208	3/4	2	1/4	18,750	5	**MH67W208P24553**	Price	**MH67W208P77684**	Price
W210	7/8	1/16	1/4	43,650	5	**MH67W210P24555**	Price	-	-
W215	1	1/8	1/8	38,200	5	**MH67W215P24560**	Price	**MH67W215P49138**	Price
W216	1	1/4	1/4	38,200	5	**MH67W216P24562**	Price	-	-
W217	1	3/8	1/4	38,200	5	**MH67W217P24563**	Price	-	-
W218	1	1/2	1/4	38,200	5	**MH67W218P24564**	Price	-	-
W220	1	1	1/4	25,500	5	**MH67W220P24566**	Price	**MH67W220P77685**	Price
W221	1	1-1/2	1/4	19,120	5	**MH67W221P24567**	Price	-	-
W222	1	2	1/4	15,900	5	**MH67W222P24569**	Price	-	-
W225	1-1/4	1/4	1-1/4	30,560	5	**MH67W225P24573**	Price	-	-
W230	1-1/4	1-1/4	1/4	20,400	5	**MH67W230P24578**	Price	-	-
W235	1-1/2	1/4	1/4	25,470	5	**MH67W235P24583**	Price	-	-
W236	1-1/2	1/2	1/4	25,470	5	**MH67W236P24585**	Price	**MH67W236P77686**	Price
W237	1-1/2	1	1/4	22,500	5	**MH67W237P24587**	Price	-	-
W238	1-1/2	1-1/2	1/4	15,600	5	**MH67W238P24588**	Price	-	-
W242	2	1	1/4	19,100	5	**MH67W242P24592**	Price	-	-

Resin Bond Mounted Points



Norzon:
- NZ (NorZon) zirconia alumina self-sharpening abrasive and durable organic bond
- 2X faster stock removal than competitive aluminum oxide products
- Last 4X longer

Charger:
- Zirconia alumina / aluminum oxide abrasive blend
- Specially formulated organic bond
- 35% Faster cut rate than standard aluminum oxide
- An aggressive, free cut
- More parts cleaned in less time to substantially increase productivity
- 2X Greater life than ordinary aluminum oxide
- Reduces vibration and wheel chatter

					Zirconia Alumina		Zirconia Alumina/Aluminum Oxide	
					Norzon		Charger	
Shape	Dia. (in.)	Thickness (in.)	Max. RPM	Std. Pk.	Order No.	Price	Order No.	Price
A1	3/4	2-1/2	19,800	5	**MH67A1P16457**	Price	**MH67A1P16458**	Price
A11	1-7/8	2-1/4	19,860	5	**MH67A1116463**	Price	**MH67A11P16464**	Price
A3	1	2-3/4	16,100	5	**MH67A3P16459**	Price	**MH67A3P16460**	Price
A5	3/4	1-1/8	45,000	5	-	-	**MH67A5P16462**	Price
W189	1/2	2-1/4	24,000	5	**MH67W189P16465**	Price	**MH67W189P16466**	Price
W197	5/8	2-1/4	21,000	5	**MH67W197P16467**	Price	-	-
W207	3/4	1-1/2	24,000	5	-	-	**MH67W207P16470**	Price
W208	3/4	2-1/4	18,750	5	**MH67W208P16471**	Price	**MH67W208P16472**	Price
W220	1	1-1/4	25,500	5	**MH67W220P17520**	Price	**MH67W220P17521**	Price
W221	1	1-1/2	19,120	5	**MH67W221P16473**	Price	**MH67W221P16474**	Price
W222	1	2-1/4	15,900	5	**MH67W222P16475**	Price	**MH67W222P16476**	Price

Cartridge Rolls - Aluminum Oxide Resin Bond



- Ideal for finishing operations on inside diameters, dead end holes, and lapping operations
- Self-renewing features of wearing through one layer to uncover the next layer makes them an excellent tool for blending where high finishes are required
- **Sold per 100 Pack Only**

MADE IN THE USA MERIT

Style - Full Taper							
				Generic USA		Merit	
Dia. (in.)	Length (in.)	Hole (in.)	Grit	Order No.	Price	Order No.	Price
3/8	1	1/8	120	**MM6033075**	Price	**MM5981717**	Price
3/8	1	1/8	240	**MM6033078**	Price	**MM5981322**	Price
3/8	1	1/8	60	**MM6033072**	Price	**MM5981714**	Price
3/8	1	1/8	80	**MM6033073**	Price	**MM5981715**	Price
3/8	1-1/2	1/8	120	**MM6033135**	Price	**MM5981727**	Price
3/8	1-1/2	1/8	240	**MM6033138**	Price	**MM5981730**	Price
3/8	1-1/2	1/8	60	**MM6033132**	Price	**MM5981724**	Price
3/8	1-1/2	1/8	80	**MM6033133**	Price	**MM5981708**	Price
1/2	1-1/2	1/8	120	**MM6033147**	Price	**MM5981747**	Price
1/2	1-1/2	1/8	240	**MM6033150**	Price	**MM5981750**	Price
1/2	1-1/2	1/8	60	**MM6033144**	Price	**MM5981744**	Price
1/2	1-1/2	1/8	80	**MM6033145**	Price	**MM5981745**	Price
5/8	1-1/2	3/16	120	**MM6060356**	Price	**MM5981777**	Price
5/8	1-1/2	1/8	240	-	-	**MM5983313**	Price
5/8	1-1/2	1/8	60	**MM6060354**	Price	**MM5981774**	Price
5/8	1-1/2	1/8	80	**MM6060355**	Price	**MM5981775**	Price
1	1-1/2	1/4	120	**MM6033243**	Price	**MM5980795**	Price
1	1-1/2	1/4	240	**MM6033246**	Price	-	-
1	1-1/2	1/4	60	**MM6033240**	Price	**MM5981623**	Price
1	1-1/2	1/4	80	**MM6033241**	Price	**MM5980910**	Price

MADE IN THE USA MERIT

Style - Straight							
				Generic USA		Merit	
Dia. (in.)	Length (in.)	Hole (in.)	Grit	Order No.	Price	Order No.	Price
3/16	1	3/32	120	**MM6029451**	Price	-	-
3/16	1	3/32	240	**MM6029454**	Price	-	-
3/16	1	3/32	60	**MM6029448**	Price	-	-
3/16	1	3/32	80	**MM6029449**	Price	-	-
3/16	1	3/33	60	-	-	**MM5980023**	Price
3/16	1	3/34	80	-	-	**MM5980024**	Price
3/16	1	3/36	120	-	-	**MM5980026**	Price
3/16	1	3/39	240	-	-	**MM5980030**	Price
1/4	1	1/8	120	**MM6029487**	Price	**MM5980064**	Price
1/4	1	1/8	240	**MM6029490**	Price	**MM5980068**	Price
1/4	1	1/8	60	**MM6029484**	Price	**MM5980061**	Price
1/4	1	1/8	80	**MM6029485**	Price	**MM5980062**	Price
1/4	1-1/2	1/8	120	**MM6029499**	Price	**MM5980083**	Price
1/4	1-1/2	1/8	240	**MM6029052**	Price	-	-
1/4	1-1/2	1/8	60	**MM6029496**	Price	**MM5980080**	Price
1/4	1-1/2	1/8	80	**MM6029497**	Price	**MM5980081**	Price
3/8	1	1/8	120	**MM6029607**	Price	**MM5980216**	Price
3/8	1	1/8	240	**MM6029610**	Price	**MM5980220**	Price
3/8	1	1/8	60	**MM6029604**	Price	**MM5980213**	Price
3/8	1	1/8	80	**MM6029605**	Price	**MM5980214**	Price
3/8	1-1/2	1/8	120	**MM6029619**	Price	**MM5980234**	Price
3/8	1-1/2	1/8	240	**MM6029622**	Price	**MM5980238**	Price
3/8	1-1/2	1/8	60	**MM6029616**	Price	**MM5980231**	Price
3/8	1-1/2	1/8	80	**MM6029617**	Price	**MM5908232**	Price
1/2	1	1/8	120	**MM6029667**	Price	**MM5980291**	Price
1/2	1	1/8	240	**MM6029670**	Price	**MM5980295**	Price
1/2	1	1/8	60	**MM6029664**	Price	**MM5980288**	Price
1/2	1	1/8	80	**MM6029665**	Price	**MM5980289**	Price
1/2	1-1/2	1/4	120	**MM6060352**	Price	**MM5981360**	Price
1/2	1-1/2	1/4	240	**MM6060353**	Price	-	-
1/2	1-1/2	1/4	60	**MM6060350**	Price	**MM5981333**	Price
1/2	1-1/2	1/4	80	**MM6060351**	Price	-	-
1/2	1-1/2	1/8	120	**MM6029679**	Price	**MM5980310**	Price
1/2	1-1/2	1/8	240	**MM6029682**	Price	**MM5980314**	Price
1/2	1-1/2	1/8	60	**MM6029676**	Price	**MM5980307**	Price
1/2	1-1/2	1/8	80	**MM6029677**	Price	**MM5980308**	Price
3/4	1-1/2	1/4	120	**MM6029847**	Price	**MM5980488**	Price
3/4	1-1/2	1/4	240	**MM6029850**	Price	**MM5980248**	Price
3/4	1-1/2	1/4	60	**MM6029844**	Price	**MM5980489**	Price
3/4	1-1/2	1/4	80	**MM6029845**	Price	**MM5980358**	Price

CRATEX® Brightboy®

- Brightboy Rubber Resin Bonded Abrasive Mounted Wheels and Points are constructed of the perfect blend of rubber, resin and aluminum oxide abrasive
- Cushioned action provides a soft smooth acting abrasive tool
- The most popular shapes and sizes are listed, available in the two most popular grades, Medium and Fine
- Medium: Removal of scratches, burrs, pits, tools marks, residue
- Fine: Achieve brilliant finishes with low stock removal
- **All products shown come with a 1/8" Dia. X 1-1/2" long shank**



Shape Style - B					
Shape	Grit	Dia. (in.)	Thickness (in.)	Order No.	Price
B121	Fine	1/2	1/2	**MG6475387**	Price
B121	Medium	1/2	1/2	**MG6475379**	Price
B42	Fine	1/2	3/4	**MG6475326**	Price
B42	Medium	1/2	3/4	**MG6475320**	Price
B52	Fine	3/8	3/4	**MG6475331**	Price
B52	Medium	3/8	3/4	**MG6475340**	Price

Shape Style - W					
Shape	Grit	Dia. (in.)	Thickness (in.)	Order No.	Price
W145	Fine	1/8	3/8	**MG6475414**	Price
W145	Medium	1/8	3/8	**MG6475413**	Price
W154	Fine	3/16	1/2	**MG6475426**	Price
W154	Medium	3/16	1/2	**MG6475425**	Price
W160	Fine	1/4	1/4	**MG6475430**	Price
W160	Medium	1/4	1/4	**MG6475429**	Price
W163	Fine	1/4	1/2	**MG6475442**	Price
W163	Medium	1/4	1/2	**MG6475441**	Price
W185	Fine	1/2	1/2	**MG6475503**	Price
W185	Medium	1/2	1/2	**MG6475502**	Price

Cartridge Roll Mandrels



Dia. (in.)	Length (in.)	Shank (in.)	Order No.	Price
3/32	1	1/8	**MM60M300**	Price
1/8	3/4	1/4	**MM60M100**	Price
1/8	1	1/4	**MM60CR9**	Price
1/8	1-1/2	1/4	**MM60CR10**	Price
3/16	1	1/4	**MM60CR16**	Price
3/16	1-1/2	1/4	**MM60CR17**	Price
1/4	1	1/4	**MM60M200**	Price
1/4	1-1/2	1/4	**MM60CR22**	Price

STANDARD ABRASIVES Premium Grain Cartridge Rolls

- **Cartridge rolls are ideal for fast cutting on irregular contours and hard to reach areas on all ferrous materials**
- **Multi-layered design exposes new abrasive grain as it wears**
- **Use for flash removal, polishing, edge breaking and tool mark removal**

Best-Ceramic Aluminum Oxide
- Ceramic grain for longest life
- Grinding aid for coolest cut
- Lowest grinding cost over Zirconia and Aluminum oxide

Better-Zirconia Alumina
- Fast effortless cut rate
- Higher cut rate over Aluminum oxide

Good-Silicon Carbide
- Best gain for use on titanium due to reduced sparks
- The grain of choice at most aero-space facilities



			Ceramic Aluminum Oxide		Silicon Carbide		Zirconia Alumina	
Taper	Size (in.)	Grit	Order No.	Price	Order No.	Price	Order No.	Price
Full Taper	1/2 x 1-1/2 x 1/8	60	**MM30730099**	Price	-	-	-	-
Full Taper	1/2 x 1-1/2 x 1/8	80	**MM30730101**	Price	-	-	**MM30727337**	Price
Full Taper	1/2 x 1-1/2 x 1/8	120	**MM30730102**	Price	-	-	**MM30727345**	Price
Straight	1/4 x 1-1/2 x 1/8	60	**MM30730076**	Price	-	-	**MM30727338**	Price
Straight	3/8 x 1-1/2 x 1/8	60	**MM30730082**	Price	**MM30701080**	Price	**MM30727340**	Price
Straight	1/2 x 1-1/2 x 1/8	60	**MM30730088**	Price	**MM30706551**	Price	-	-
Straight	1/4 x 1-1/2 x 1/8	80	-	-	**MM30703055**	Price	**MM30727339**	Price
Straight	3/8 x 1-1/2 x 1/8	80	**MM30730083**	Price	**MM30702427**	Price	**MM30727341**	Price
Straight	1/2 x 1-1/2 x 1/8	80	**MM30730089**	Price	**MM30707845**	Price	**MM30727343**	Price
Straight	1/4 x 1-1/2 x 1/8	120	**MM30730078**	Price	-	-	**MM30727349**	Price
Straight	3/8 x 1-1/2 x 1/8	120	-	-	-	-	**MM30727347**	Price
Straight	1/2 x 1-1/2 x 1/8	120	**MM30730090**	Price	-	-	**MM30727348**	Price

MERIT Ceramic Grain Cartridge Rolls

- Exclusive Blaze ceramic grain technology, grinding aid and X-weight cotton backing mean Blaze products outperform all competitive ceramic, zirconia and aluminum oxide specialty products in today's market
- Blaze products cut cooler and last longer on stainless steel, cobalt, inconel, titanium, and other hard-to-grind materials
- Kit comes with 2 mandrels, an assortment of all sizes and grits shown below and handy plastic organizer case





Size (in.)	Grit	Style	Order No.	Price
1/4 x 1-1/2 x 1/8	240X	Straight	**MM5980087**	Price
3/8 x 1-1/2 x 1/8	60	Straight	**MM5994392**	Price
3/8 x 1-1/2 x 1/8	80	Straight	**MM5994395**	Price
3/8 x 1-1/2 x 1/8	120	Straight	**MM5994398**	Price
1/2 x 1-1/2 x 1/8	60	Full Taper	**MM5994484**	Price
1/2 x 1-1/2 x 1/8	60	Straight	**MM5994393**	Price
1/2 x 1-1/2 x 1/8	80	Full Taper	**MM5994492**	Price
1/2 x 1-1/2 x 1/8	80	Straight	**MM5994396**	Price
1/2 x 1-1/2 x 1/8	120	Straight	**MM5994399**	Price
80 Piece Cartridge Rolls Test Kit	Assorted	Test Kit	**MM5966726**	Price

Cartridge Roll Test Kits

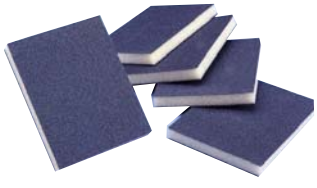
- Each kit contains over 120 pieces
- Full range of grits and sizes included
- Comes with two mandrels with 1/4" shank
- Ideal for deburring, finishing, and polishing



Item	Order No.	Price
SUPERIOR Abrasives	**MM6028802**	Price
MERIT	**MM5981061**	Price

CARBORUNDUM Flexible Silicon Carbide Sanding Sponges

- Ideal for sanding sealer and wash coats in wood furniture and cabinets, and for touch-up or repair of primer. touch-up or repair of primer
- Size: 4-3/4 x 3-3/4 x 1/2"
- 250/box



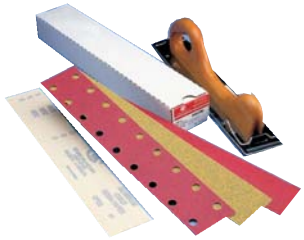
Grit	Order No.	Price
Coarse	**MM4213710**	Price
Fine	**MM4213712**	Price
Medium	**MM4213711**	Price

STANDARD ABRASIVES Mandrel for Cartridge Rolls

Description (in.)	Order No.	Price
1/8 x 1 Pilot 1/4 Dia Shank 2-3/4 OAL	**MM30710190**	Price

CARBORUNDUM Zirconia Alumina Resin Paper Open Stick On Marine File Strips

- The best choice for blending and shaping all types of marine fillers
- Size: 2-3/4 x 16-1/2"
- E weight latex paper backing
- PSA (Pressure sensitive backing)
- 250/box
- Fast removal rates
- Maximum durability plus flexibility
- Easy application and removal
- For best results use MM4212013 holder



PREMIER RED

Grit	Order No.	Price
36	**MM4221338**	Price
40	**MM4221337**	Price
80	**MM4221336**	Price

5-1/2" x 9" Wet/Dry Silicon Carbide Finishing Paper

- Minimum Order Quantity 10 Pcs. Per Grit



Grit	Order No.	Price
1000	**MM711000**	Price
1200	**MM711200**	Price

NORTON SAINT-GOBAIN Four Sided Abrasive Sponges

- Good for a wide variety of materials and sanding applications where moderate flexibility is needed
- Medium to firm density open cell polyurethane foam provides uniform support and moderately aggressive cutting action while generating a smooth surface
- Coated 4 sides



Size (in.)	Grit	Std. Pkg.	Order No.	Price
4 x 2-3/4 x 1	120/120 Fine/Fine	24	**MH6149506**	Price
4 x 2-3/4 x 1	80/80 Med/Med	24	**MH6149507**	Price

Spiral Bands

- Cloth spiral bands to be used with sanding drms, for deburring and polishing
- MM52 series sold in packages of 50 except where noted
- Merit sold in packages of 100
- † Indicates packages of 25



			Merit		Surf-Pro	
Dia. (in.)	Length (in.)	Grit	Order No.	Price	Order No.	Price
1/2	1/2	50	**MM5996228**	Price	**MM521950950**	Price
1/2	1/2	80	**MM5996179**	Price	**MM521951050**	Price
1/2	1/2	120	**MM5996069**	Price	**MM521977750**	Price
1/2	3/4	80	**MM5996573**	Price	**MM521982650**	Price
1/2	3/4	120	**MM5996812**	Price	**MM521951350**	Price
1/2	1	80	**MM5996215**	Price	**MM521951550**	Price
1/2	1	120	**MM5996210**	Price	**MM521951650**	Price
1/2	1-1/2	50	**MM5997111**	Price	**MM521023350**	Price
1/2	1-1/2	80	**-**	-	**MM521025350**	Price
1/2	1-1/2	120	**MM5996324**	Price	**MM521027350**	Price
1/2	2	80	**MM5996669**	Price	**MM521951850**	Price
1/2	2	120	**MM5996736**	Price	**MM521951950**	Price
3/4	1/2	80	**MM5996255**	Price	**MM521958050**	Price
3/4	1/2	120	**MM5996579**	Price	**MM521952450**	Price
3/4	3/4	50	**MM5996183**	Price	**MM521952550**	Price
3/4	3/4	80	**MM5996161**	Price	**MM521952680**	Price
3/4	3/4	120	**MM5996226**	Price	**MM521952750**	Price
3/4	1	80	**MM5996071**	Price	**MM521952950**	Price
3/4	1	120	**MM5996219**	Price	**MM521953050**	Price
3/4	1-1/2	50	**MM5996500**	Price	**MM521043350**	Price
3/4	1-1/2	80	**MM5996249**	Price	**MM521046350**	Price
3/4	1-1/2	120	**MM5996057**	Price	**MM521047350**	Price
3/4	2	80	**MM5996756**	Price	**MM521953250**	Price
3/4	2	120	**MM5996746**	Price	**MM521953350**	Price
1	1/2	50	**MM5990210**	Price	**MM521053050**	Price
1	1/2	80	**MM5996647**	Price	**MM521055050**	Price
1	1/2	120	**MM5997592**	Price	**MM521057050**	Price
1	3/4	50	**MM5990211**	Price	**MM521053150**	Price
1	3/4	80	**MM5990213**	Price	**MM521087550**	Price
1	3/4	120	**MM5990214**	Price	**MM521057150**	Price
1	1	50	**MM5996184**	Price	**MM521953550**	Price
1	1	80	**MM5996074**	Price	**MM521953650**	Price
1	1	120	**MM5996177**	Price	**MM521953750**	Price
1	1-1/2	80	**MM5996162**	Price	**MM521953950**	Price

			Merit		Surf-Pro	
Dia. (in.)	Length (in.)	Grit	Order No.	Price	Order No.	Price
1	1-1/2	120	**MM5996677**	Price	**MM521954050**	Price
1	2	80	**MM5996268**	Price	**MM521954250**	Price
1	2	120	**MM5996507**	Price	**MM521954350**	Price
1	3	50	**MM5997688**	Price	**MM521053550**	Price
1	3	80	**MM5996195**	Price	**MM521055650**	Price
1	3	120	**MM5996197**	Price	**MM521057550**	Price
1-1/4	1	50	**MM5990215**	Price	**MM521063050**	Price
1-1/4	1	80	**MM5993829**	Price	**MM521065050**	Price
1-1/4	1	120	**MM5990216**	Price	**MM521067250**	Price
1-1/4	2	50	**MM5995570**	Price	**MM521063450**	Price
1-1/4	2	80	**-**	-	**MM521065350**	Price
1-1/4	2	120	**MM5990217**	Price	**MM521067450**	Price
1-1/2	1	50	**MM5996185**	Price	**MM521954450**	Price
1-1/2	1	80	**MM5996254**	Price	**MM521954550**	Price
1-1/2	1	120	**MM5996707**	Price	**MM521954750**	Price
1-1/2	1-1/2	50	**MM5996176**	Price	**MM521954850**	Price
1-1/2	1-1/2	80	**MM5996165**	Price	**MM521954950**	Price
1-1/2	1-1/2	120	**MM5996066**	Price	**MM521955050**	Price
1-1/2	2	80	**MM5996533**	Price	**MM521955250**	Price
1-1/2	2	120	**MM5996079**	Price	**MM521955350**	Price
2	1	80	**MM5996166**	Price	**MM521955650**	Price
2	1	120	**-**	-	**MM521955750**	Price
2	1-1/2	50	**MM5996527**	Price	**MM521955850**	Price
2	1-1/2	80	**MM5996259**	Price	**MM521955950**	Price
2	1-1/2	120	**MM5996586**	Price	**MM521956050**	Price
2	2	50	**MM5996187**	Price	**MM521956125†**	Price
2	2	80	**MM5996181**	Price	**MM521956225†**	Price
2	2	120	**MM5996585**	Price	**MM521956325†**	Price
3	1	80	**MM5996524**	Price	**MM521956925†**	Price
3	1	120	**MM5996089**	Price	**MM521957025†**	Price
3	2	80	**MM5996265**	Price	**MM521957225†**	Price
3	2	120	**MM5996531**	Price	**MM521958725†**	Price
3	3	80	**MM5996159**	Price	**MM521957425†**	Price
3	3	120	**MM5996572**	Price	**MM521957525†**	Price

Expanding Sanding Drums



- Self-expanding, rubber cushioned sanding drums
- Abrasive band is held in position by expansion of the rubber as the adjusting nut is tightened
- Drums are 1/4″ shank except where noted

Dia. (in.)	Length (in.)	Order No.	Price
1/2	1	**MM54D8162**	Price
1/2	1/2	**MM54D8081†**	Price
1/2	1-1/2	**MM54D8242**	Price
1/2	2	**MM54D8322**	Price
1/2	3/4	**MM54D8121†**	Price
3/4	1	**MM54D12162**	Price
3/4	1/2	**MM54D12081†**	Price
3/4	1-1/2	**MM54D12242**	Price
3/4	2	**MM54D12322**	Price
3/4	3/4	**MM54D12121†**	Price
1	1	**MM54D16162**	Price
1	1/2	**MM54D16082**	Price
1	1-1/2	**MM54D16242**	Price
1	2	**MM54D16322**	Price
1	3	**MM54D16482**	Price
1	3/4	**MM54D16122**	Price
2	1	**MM54D32162**	Price
2	1-1/2	**MM54D32242**	Price
2	2	**MM54D32322**	Price
3	1	**MM54D48163‡**	Price
3	2	**MM54D48323‡**	Price
3	3	**MM54D48483‡**	Price
1-1/2	1	**MM54D24162**	Price
1-1/2	1-1/2	**MM54D24242**	Price
1-1/2	2	**MM54D24322**	Price
1-1/4	1	**MM54D20162**	Price
1-1/4	2	**MM54D20322**	Price

† Indicates drums with 1/8” shank. ‡ Indicates drums with 3/8” shank.

Rubber Sanding Drum Set

- 1/2 x 1/2, 3/4 x 1, 1 x 1, 1-1/2 x 1-1/2, 2 x 1-1/2 Rubber Mandrels
- 20 Bands — 10 Coarse Grit & 10 Fine Grit
- Fitted Plastic Case



Order No.	Price
MM54SDK25	Price

SURF PRO® Aluminum Oxide Abrasive Belts



Benchstand and File Belts

- Aluminum oxide resin cloth abrasive belts for bench and standing grinders
- Butt splice bi-directional for stronger belt life
- Closed coat for metals working
- Full resin bond coating on “X” weight - heavy duty cloth backing

Type - Benchstand Belt			
Belt Size	Grit	Order No.	Price
1 x 42	40	SP10B01042040A	Price
1 x 42	50	SP10B01042050A	Price
1 x 42	60	SP10B01042060A	Price
1 x 42	80	SP10B01042080A	Price
1 x 42	100	SP10B01042100A	Price
1 x 42	120	SP10B01042120A	Price
1 x 42	150	SP10B01042150A	Price
1 x 42	180	SP10B01042180A	Price
1 x 42	220	SP10B01042220A	Price
1 x 42	240	SP10B01042240A	Price
1 x 42	320	SP10B01042320A	Price
1-1/2 x 60	40	SP10B15060040A	Price
1-1/2 x 60	60	SP10B15060060A	Price
1-1/2 x 60	80	SP10B15060080A	Price
1-1/2 x 60	100	SP10B15060100A	Price
1-1/2 x 60	120	SP10B15060120A	Price
1-1/2 x 60	150	SP10B15060150A	Price
1-1/2 x 60	180	SP10B15060180A	Price
1-1/2 x 60	220	SP10B15060220A	Price
1-1/2 x 60	240	SP10B15060240A	Price
1-1/2 x 60	320	SP10B15060320A	Price
2 x 42	40	SP10B02042040A	Price
2 x 42	60	SP10B02042060A	Price
2 x 42	80	SP10B02042080A	Price
2 x 42	120	SP10B02042120A	Price
2 x 48	36	SP10B02048036A	Price
2 x 48	40	SP10B02048040A	Price
2 x 48	50	SP10B02048050A	Price
2 x 48	60	SP10B02048060A	Price
2 x 48	80	SP10B02048080A	Price
2 x 48	100	SP10B02048100A	Price
2 x 48	120	SP10B02048120A	Price
2 x 48	150	SP10B02048150A	Price
2 x 48	180	SP10B02048180A	Price
2 x 48	220	SP10B02048220A	Price
2 x 48	240	SP10B02048240A	Price
2 x 48	320	SP10B02048320A	Price
2 x 60	40	SP10B02060040A	Price
2 x 60	50	SP10B02060050A	Price
2 x 60	60	SP10B02060060A	Price
2 x 60	80	SP10B02060080A	Price
2 x 60	100	SP10B02060100A	Price
2 x 60	120	SP10B02060120A	Price
2 x 60	150	SP10B02060150A	Price
2 x 60	180	SP10B02060180A	Price
2 x 60	220	SP10B02060220A	Price
2 x 60	240	SP10B02060240A	Price
2 x 60	320	SP10B02060320A	Price

Type - Benchstand Belt			
Belt Size	Grit	Order No.	Price
2-1/2 x 60	36	SP10B25060036A	Price
2-1/2 x 60	40	SP10B25060040A	Price
2-1/2 x 60	50	SP10B25060050A	Price
2-1/2 x 60	60	SP10B25060060A	Price
2-1/2 x 60	80	SP10B25060080A	Price
2-1/2 x 60	100	SP10B25060100A	Price
2-1/2 x 60	120	SP10B25060120A	Price
2-1/2 x 60	180	SP10B25060180A	Price
4 x 36	36	SP10B04036036A	Price
4 x 36	40	SP10B04036040A	Price
4 x 36	50	SP10B04036050A	Price
4 x 36	60	SP10B04036060A	Price
4 x 36	100	SP10B04036100A	Price
4 x 36	80	SP10B04036080A	Price
4 x 36	120	SP10B04036120A	Price
4 x 36	150	SP10B04036150A	Price
4 x 36	180	SP10B04036180A	Price
4 x 36	220	SP10B04036220A	Price
4 x 36	240	SP10B04036240A	Price
4 x 36	320	SP10B04036320A	Price
4 x 54	40	SP10B04054040A	Price
4 x 54	50	SP10B04054050A	Price
4 x 54	60	SP10B04054060A	Price
4 x 54	80	SP10B04054080A	Price
4 x 54	100	SP10B04054100A	Price
4 x 54	120	SP10B04054120A	Price
4 x 60	40	SP10B04060040A	Price
4 x 60	50	SP10B04060050A	Price
4 x 60	60	SP10B04060060A	Price
4 x 60	80	SP10B04060080A	Price
4 x 60	100	SP10B04060100A	Price
4 x 60	120	SP10B04060120A	Price
4 x 60	150	SP10B04060150A	Price
4 x 60	180	SP10B04060180A	Price
4 x 60	220	SP10B04060220A	Price
6 x 48	36	SP10B06048036A	Price
6 x 48	40	SP10B06048040A	Price
6 x 48	50	SP10B06048050A	Price
6 x 48	60	SP10B06048060A	Price
6 x 48	80	SP10B06048080A	Price
6 x 48	100	SP10B06048100A	Price
6 x 48	120	SP10B06048120A	Price
6 x 48	150	SP10B06048150A	Price
6 x 48	180	SP10B06048180A	Price
6 x 48	220	SP10B06048220A	Price
6 x 48	240	SP10B06048240A	Price
6 x 48	320	SP10B06048320A	Price

Type - File Belt			
Belt Size	Grit	Order No.	Price
1/4 x 18	60	SP10B14018060A	Price
1/4 x 18	80	SP10B14018080A	Price
1/4 x 18	120	SP10B14018120A	Price
1/4 x 18	220	SP10B14018220A	Price
1/4 x 24	60	SP10B14024060A	Price
1/4 x 24	80	SP10B14024080A	Price
1/4 x 24	120	SP10B14024120A	Price
1/4 x 24	220	SP10B14024220A	Price
3/8 x 13	40	SP10B38013040A	Price
3/8 x 13	60	SP10B38013060A	Price
3/8 x 13	80	SP10B38013080A	Price
3/8 x 13	120	SP10B38013120A	Price
3/8 x 13	180	SP10B38013180A	Price
3/8 x 13	220	SP10B38013220A	Price
1/2 x 12	40	SP10B12012040A	Price
1/2 x 12	60	SP10B12012060A	Price
1/2 x 12	80	SP10B12012080A	Price
1/2 x 12	120	SP10B12012120A	Price
1/2 x 12	180	SP10B12012180A	Price
1/2 x 18	40	SP10B12018040A	Price
1/2 x 18	60	SP10B12018060A	Price
1/2 x 18	80	SP10B12018080A	Price
1/2 x 18	120	SP10B12018120A	Price
1/2 x 18	180	SP10B12018180A	Price
1/2 x 18	220	SP10B12018220A	Price
1/2 x 24	40	SP10B12024040A	Price
1/2 x 24	60	SP10B12024060A	Price
1/2 x 24	80	SP10B12024080A	Price
1/2 x 24	120	SP10B12024120A	Price
1/2 x 24	180	SP10B12024180A	Price
1/2 x 24	220	SP10B12024220A	Price
3/4 x 18	220	SP10B34018220A	Price
3/4 x 18	40	SP10B34018040A	Price
3/4 x 18	60	SP10B34018060A	Price
3/4 x 18	80	SP10B34018080A	Price
3/4 x 18	120	SP10B34018120A	Price
3/4 x 18	180	SP10B34018180A	Price
3/4 x 20-1/2	40	SP10B35205040A	Price
3/4 x 20-1/2	60	SP10B35205060A	Price
3/4 x 20-1/2	80	SP10B35205080A	Price
3/4 x 20-1/2	120	SP10B35205120A	Price
3/4 x 20-1/2	220	SP10B35205220A	Price
1 x 30	60	SP10B01030060A	Price
1 x 30	80	SP10B01030080A	Price
1 x 30	120	SP10B01030120A	Price
1 x 30	180	SP10B01030180A	Price
1 x 30	220	SP10B01030220A	Price

SURF PRO® Aluminum Oxide Abrasive Belts

Backstand and Portable



- Aluminum oxide resin cloth abrasive
- Belts for bench and standing grinders
- Butt splice bi-directional for stronger belt life
- Closed coat for metal working
- Full resin bond coating on “X” weight - heavy duty cloth backing





Type - Backstand Belt			
Belt Size	**Grit**	**Order No.**	**Price**
2 x 132	40	**SP10B02132040A**	Price
2 x 132	60	**SP10B02132060A**	Price
2 x 132	80	**SP10B02132080A**	Price
2 x 132	100	**SP10B02132100A**	Price
2 x 132	120	**SP10B02132120A**	Price
2 x 132	150	**SP10B02132150A**	Price
2 x 132	180	**SP10B02132180A**	Price
2 x 132	240	**SP10B02132240A**	Price
2 x 132	320	**SP10B02132320A**	Price
3 x 132	36	**SP10B03132036A**	Price
3 x 132	80	**SP10B03132080A**	Price
3 x 132	100	**SP10B03132100A**	Price
3 x 132	120	**SP10B03132120A**	Price
3 x 132	220	**SP10B03132220A**	Price
3 x 132	240	**SP10B03132240A**	Price
4 x 132	36	**SP10B04132036A**	Price
4 x 132	60	**SP10B04132060A**	Price
4 x 132	80	**SP10B04132080A**	Price
4 x 132	100	**SP10B04132100A**	Price
4 x 132	120	**SP10B04132120A**	Price
8 x 107	40	**SP10B08107040A**	Price
8 x 107	60	**SP10B08107060A**	Price
8 x 107	80	**SP10B08107080A**	Price

Type - Portable Belt			
Belt Size	**Grit**	**Order No.**	**Price**
3 x 21	40	**SP10B03021040A**	Price
3 x 21	50	**SP10B03021050A**	Price
3 x 21	60	**SP10B03021060A**	Price
3 x 21	80	**SP10B03021080A**	Price
3 x 21	100	**SP10B03021100A**	Price
3 x 21	120	**SP10B03021120A**	Price
3 x 24	40	**SP10B03024040A**	Price
3 x 24	50	**SP10B03024050A**	Price
3 x 24	60	**SP10B03024060A**	Price
3 x 24	120	**SP10B03024120A**	Price

SUPERIOR Abrasives Midget Mounted Flap Wheel Test Kit

- Contains 10 of the most popular wheels
- Mounted on 1/4” hardened steel shank
- Provides consistent finishing on a wide range of metals

Contents of kit:

- 1ea of 3 x 1” in 60, 80 and 120 Grit
- 1ea of 2 x 1” in 60, 80, 120 and 180 Grit
- 1ea of 1 x 1” in 60, 80 and 120 Grit



Order No.	Price
MH5028799	Price

Closeout - Abrasive Belts

- Tough and durable
- Heavy duty cloth backing
- Closed coated for most metals and hardwood



Size (in.)	Grit	Material	Order No.	Price
1/8 x 24	40	Aluminum Oxide	**MM9002140**	Price
2 x 132	220	Aluminum Oxide	**MM902132220**	Price
2-1/2 x 60	150	Aluminum Oxide	**MM902560150**	Price
4 x 60	240	Aluminum Oxide	**MM90460240**	Price
4 x 132	40	Aluminum Oxide	**MM90413240**	Price
4 x 132	50	Aluminum Oxide	**MM90413250**	Price

CARBORUNDUM Aluminum Oxide Resin Cloth Back Belts – XC0877

- Versatile abrasive for general purpose application
- X Weight durable cloth back
- Butt splice for bi-directional bump free use



Size (in.)	Grit	Order No.	Price
2 x 48	36	**MM4212867**	Price
2 x 48	50	**MM4200976**	Price
2 x 48	60	**MM4201964**	Price
2-1/2 x 60	60	**MM4299802**	Price

CARBO PREMIER RED Zirconia Alumina Polyester Back Belts – XC11860

- Zirconia alumina abrasive provides a fast, free, cool cut for high stock removal applications
- X Weight polyester backing increases strength
- More aggressive, longer lasting belt



Belt Size (in.)	Grit	Order No.	Price
2 x 48	40	**MM4228759**	Price
2-1/2 x 60	40	**MM4299749**	Price
3 x 132	50	**MM4299681**	Price
4 x 132	50	**MM4299666**	Price
4 x 132	60	**MM4299667**	Price

SURF PRO® Zirconia Abrasive Belts

- Alumina zirconia grain provides added life over aluminum oxide cloth belts
- Premium material for superior performance in severe grinding applications on stainless steel, alloys and aluminum
- Full resin bond coating on Y weight - extra heavy duty cloth backing

Type - Backstand and Benchtop Belts			
Size (in.)	Grit	Order No.	Price
1 x 42	40	**SP10B01042040Z**	Price
1 x 42	60	**SP10B01042060Z**	Price
1 x 42	80	**SP10B01042080Z**	Price
1 x 42	120	**SP10B01042120Z**	Price
2 x 48	36	**SP10B02048036Z**	Price
2 x 48	60	**SP10B02048060Z**	Price
2 x 48	80	**SP10B02048080Z**	Price
2 x 48	100	**SP10B02048100Z**	Price
2 x 48	120	**SP10B02048120Z**	Price
2 x 60	40	**SP10B02060040Z**	Price
2 x 60	60	**SP10B02060060Z**	Price
2 x 60	80	**SP10B02060080Z**	Price
2 x 60	120	**SP10B02060120Z**	Price
2 x 72	40	**SP10B02072040Z**	Price
2 x 72	60	**SP10B02072060Z**	Price
2 x 72	80	**SP10B02072080Z**	Price
2-1/2 x 60	36	**SP10B25060036Z**	Price
2-1/2 x 60	60	**SP10B25060060Z**	Price
2-1/2 x 60	80	**SP10B25060080Z**	Price
4 x 36	40	**SP10B04036040Z**	Price
4 x 36	50	**SP10B04036050Z**	Price
4 x 36	60	**SP10B04036060Z**	Price
4 x 36	80	**SP10B04036080Z**	Price
4 x 36	120	**SP10B04036120Z**	Price
4 x 54	40	**SP10B04054040Z**	Price
4 x 54	50	**SP10B04054050Z**	Price
4 x 54	60	**SP10B04054060Z**	Price
4 x 54	80	**SP10B04054080Z**	Price
4 x 54	120	**SP10B04054120Z**	Price
6 x 48	36	**SP10B06048036Z**	Price
6 x 48	40	**SP10B06048040Z**	Price
6 x 48	50	**SP10B06048050Z**	Price
6 x 48	60	**SP10B06048060Z**	Price
6 x 48	80	**SP10B06048080Z**	Price
6 x 48	120	**SP10B06048120Z**	Price

Type - Portable Files			
Size (in.)	Grit	Order No.	Price
1/4 x 18	60	**SP10B14018060Z**	Price
1/4 x 18	80	**SP10B14018080Z**	Price
1/4 x 18	120	**SP10B14018120Z**	Price
1/2 x 18	40	**SP10B12018040Z**	Price
1/2 x 18	60	**SP10B12018060Z**	Price
1/2 x 18	80	**SP10B12018080Z**	Price
1/2 x 18	120	**SP10B12018120Z**	Price
1/4 x 24	40	**SP10B12024040Z**	Price



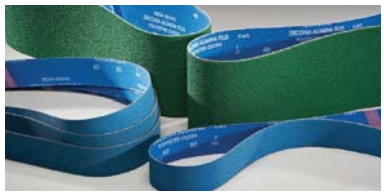
Type - Portable Files			
Size (in.)	Grit	Order No.	Price
1/2 x 24	60	**SP10B12024060Z**	Price
1/2 x 24	80	**SP10B12024080Z**	Price
1/2 x 24	120	**SP10B12024120Z**	Price
3/4 x 18	40	**SP10B34018040Z**	Price
3/4 x 18	60	**SP10B34018060Z**	Price
3/4 x 18	80	**SP10B34018080Z**	Price
3/4 x 18	120	**SP10B34018120Z**	Price
3/4 x 20-1/2	40	**SP10B35205040Z**	Price
3/4 x 20-1/2	60	**SP10B35205060Z**	Price
3/4 x 20-1/2	80	**SP10B35205080Z**	Price
3/4 x 20-1/2	120	**SP10B35205120Z**	Price
1 x 30	40	**SP10B01030040Z**	Price
1 x 30	60	**SP10B01030060Z**	Price
1 x 30	80	**SP10B01030080Z**	Price
1 x 30	120	**SP10B01030120Z**	Price

Type - Portable Sanders			
Size (in.)	Grit	Order No.	Price
3 x 21	40	**SP10B03021040Z**	Price
3 x 21	60	**SP10B03021060Z**	Price
3 x 21	80	**SP10B03021080Z**	Price
3 x 21	120	**SP10B03021120Z**	Price
3 x 24	60	**SP10B03024060Z**	Price
3 x 24	80	**SP10B03024080Z**	Price
3 x 24	120	**SP10B03024120Z**	Price
4 x 24	50	**SP10B04024050Z**	Price
4 x 24	60	**SP10B04024060Z**	Price
4 x 24	80	**SP10B04024080Z**	Price
4 x 24	100	**SP10B04024100Z**	Price
4 x 24	120	**SP10B04024120Z**	Price

Special made belts available in a variety of materials, grits and sizes. Call with details for a quote.

CARBORUNDUM Premier Red Zirconia Alumina Resin Cloth Narrow Belts

- Premier Red Zirconia Alumina Resin Cloth Narrow Belts



	P100		P120		P36		P40		P50		P60		P80	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
2 x 48	-	-	-	-	-	-	**MM4254740**	Price	**MM4254741**	Price	**MM4254742**	Price	**MM4254743**	Price
6 x 48	**MM4254855**	Price	**MM4254856**	Price	**MM4254850**	Price	**MM4254851**	Price	**MM4254852**	Price	**MM4254853**	Price	**MM4254854**	Price

Aluminum Oxide Resin Waterproof Cloth Belts

- Ideal for operations requiring a belt specification that does not generate heat, but is capable of sanding a variety of materials
- Closed coat for fast metal removal
- Full resin bond system
- X and Y-weight polyester backing
- Butt tape joint



Belt Size (in.) - 1 x 42		
Grit Size	Order No.	Price
P60	MM4210112	Price
P40	MM4254716	Price
P50	MM4254717	Price
P80	MM4254719	Price
P100	MM4254720	Price
P120	MM4254721	Price

Belt Size (in.) - 1-1/2 x 60		
Grit Size	Order No.	Price
P40	MM4254722	Price
P50	MM4254723	Price
P60	MM4254724	Price
P80	MM4254725	Price
P100	MM4254726	Price
P120	MM4254727	Price

Belt Size (in.) - 2 x 48		
Grit Size	Order No.	Price
P36	MM4254728	Price
P40	MM4254729	Price
P50	MM4254730	Price
P60	MM4254731	Price
P80	MM4254732	Price
P120	MM4254734	Price
P100	MM4254733	Price
P150	MM4254735	Price
P180	MM4254736	Price
P220	MM4254737	Price
P320	MM4254738	Price

Belt Size (in.) - 2 x 60		
Grit Size	Order No.	Price
P36	MM4254744	Price
P40	MM4254745	Price
P50	MM4254746	Price

Belt Size (in.) - 2 x 60		
Grit Size	Order No.	Price
P60	MM4254747	Price
P80	MM4254748	Price
P120	MM4254749	Price
P150	MM4254750	Price
P180	MM4254751	Price
P220	MM4254752	Price
P320	MM4254753	Price
P400	MM4254754	Price

Belt Size (in.) - 2 x 72		
Grit Size	Order No.	Price
P36	MM4254755	Price
P40	MM4254756	Price
P50	MM4254757	Price
P60	MM4254758	Price
P80	MM4254759	Price
P120	MM4254760	Price

Belt Size (in.) - 2 x 132		
Grit Size	Order No.	Price
P36	MM4254761	Price
P40	MM4254762	Price
P50	MM4254763	Price
P60	MM4254764	Price
P80	MM4254765	Price
P120	MM4254766	Price

Belt Size (in.) - 2-1/2 x 48		
Grit Size	Order No.	Price
P36	MM4254772	Price
P40	MM4254773	Price
P50	MM4254774	Price
P60	MM4254775	Price
P80	MM4254776	Price
P120	MM4254777	Price

Belt Size (in.) - 2-1/2 x 60		
Grit Size	Order No.	Price
P36	MM4254778	Price
P40	MM4254779	Price
P50	MM4254780	Price
P60	MM4254781	Price
P80	MM4254782	Price
P120	MM4254783	Price

Belt Size (in.) - 3 x 132		
Grit Size	Order No.	Price
P36	MM4254784	Price
P40	MM4254785	Price
P50	MM4254786	Price
P60	MM4254787	Price
P80	MM4254788	Price
P120	MM4254789	Price

Belt Size (in.) - 4 x 132		
Grit Size	Order No.	Price
P36	MM4254838	Price
P40	MM4254839	Price
P60	MM4254840	Price
P80	MM4254841	Price
P100	MM4254842	Price

Belt Size (in.) - 4 x 36		
Grit Size	Order No.	Price
P36	MM4254832	Price
P40	MM4254833	Price
P50	MM4254834	Price
P60	MM4254835	Price
P80	MM4254836	Price
P120	MM4254837	Price

Belt Size (in.) - 6 x 48		
Grit Size	Order No.	Price
P36	MM4254843	Price
P40	MM4254844	Price
P50	MM4254845	Price
P60	MM4254846	Price
P80	MM4254847	Price
P100	MM4254848	Price
P120	MM4254849	Price

Medalist Ceramic Alumina Resin Waterproof Cloth File Belts with Grinding Aid

- For hard-to-grind alloys and heat-sensitive applications
- Durable Y-weight polyester waterproof cloth backing
- Maximum grain adhesion, reduced edge-fray and strong body retention result in longer life and product consistency
- Cooler cut, burn-free grinding of heat-sensitive materials



	P36		P40		P50		P60		P80	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8 x 12	MM4254610	Price	MM4254611	Price	-	-	MM4254612	Price	MM4254613	Price
1/8 x 18	MM4254618	Price	MM4254619	Price	-	-	MM4254620	Price	MM4254621	Price
1/4 x 12	MM4254626	Price	MM4254627	Price	-	-	MM4254628	Price	MM4254629	Price
1/4 x 18	MM4254634	Price	MM4254635	Price	-	-	MM4254636	Price	MM4254637	Price
1/4 x 24	MM4254642	Price	MM4254643	Price	-	-	MM4254644	Price	MM4254645	Price
1/2 x 12	MM4254655	Price	MM4254656	Price	-	-	MM4254658	Price	-	-
1/2 x 18	MM4254665	Price	MM4254666	Price	MM4254667	Price	MM4254668	Price	MM4254669	Price
1/2 x 24	MM4254676	Price	MM4254677	Price	MM4254678	Price	MM4254679	Price	MM4254680	Price
3/4 x 18	MM4254686	Price	MM4254687	Price	MM4254688	Price	MM4254689	Price	MM4254690	Price
3/4 x 20-1/2	MM4254696	Price	MM4254697	Price	MM4254698	Price	MM4254699	Price	MM4254700	Price

(PG S-Flex) Belts - R980 Y Weight Back

- Resists wear - cooler, faster cut rate
- Longer belt life lowers cost per unit
- Better grain adhesion - edge fray resistance
- More consistent grind throughout extended belt life

Size (in.)	Grit	Vendor Pack	Order No.	Price
1/2 x 12	40	200	MH61B0098018	Price
1/2 x 12	60	200	MH61B0098019	Price
1/2 x 12	80	200	MH61B0098020	Price
1/2 x 18	40	200	MH61B0098021	Price
1/2 x 18	60	200	MH61B0098022	Price
1/2 x 18	80	200	MH61B0098023	Price
1/2 x 24	40	200	MH61B0098024	Price
1/2 x 24	60	200	MH61B0098025	Price

- Lasts 50% to 200% longer on mild and carbon steel, stainless, cobalt, chrome, inconel, and titanium.
- Cuts cooler and 20% faster than current generation belts
- Lowers total grinding cost



Size (in.)	Grit	Vendor Pack	Order No.	Price
1/2 x 24	80	200	MH61B0098026	Price
3/4 x 18	40	200	MH61B0098027	Price
3/4 x 18	60	200	MH61B0098028	Price
3/4 x 18	80	200	MH61B0098029	Price
3/4 x 20-1/2	40	200	MH61B0098030	Price
3/4 x 20-1/2	60	200	MH61B0098031	Price
3/4 x 20-1/2	80	200	MH61B0098032	Price

Abrasive Belts



Abrasive Belts for Portable Files & Sanders

- Premier belts for production metal finishing
- Aluminum Oxide - Versatile abrasive for general purpose application, X weight cloth back
- Zirconia Alumina - Recommended for removal and finish on ferrous and non-ferrous metals, X weight polyester back
- Ceramic Alumina - Recommended for finishing exotic alloys, Y Weight polyester back

Used On - Backstand and Benchtop Belts					
		Aluminum Oxide		Zirconia Alumina	
Size (in.)	Grit	Order No.	Price	Order No.	Price
1 x 42	40	MH61B0120910	Price	MH61B0126905	Price
1 x 42	50	MH61B0120905	Price	MH61B0126904	Price
1 x 42	60	MH61B0120900	Price	MH61B0128596	Price
1 x 42	80	MH61B0120895	Price	MH61B0128594	Price
1 x 42	100	MH61B0120890	Price	MH61B0128592	Price
1 x 42	120	MH61B0120885	Price	MH61B0128590	Price
1 x 42	150	MH61B0120880	Price	-	-
1 x 42	180	-	-	MH61B0128586	Price
1 x 42	240	MH61B0120870	Price	-	-
1 x 42	320	MH61B0120865	Price	-	-
2 x 48	36	MH61B0221255	Price	MH61B0227103	Price
2 x 48	40	MH61B0221250	Price	MH61B0227102	Price
2 x 48	50	-	-	MH61B0227101	Price
2 x 48	60	MH61B0221240	Price	MH61B0228621	Price
2 x 48	80	MH61B0221235	Price	MH61B0227099	Price
2 x 48	100	MH61B0221230	Price	MH61B0228617	Price
2 x 48	120	MH61B0221225	Price	MH61B0228615	Price
2 x 48	150	-	-	MH61B0228613	Price
2 x 48	180	-	-	MH61B0228611	Price
2 x 60	40	MH61B0221300	Price	MH61B0227124	Price
2 x 60	60	MH61B0221290	Price	MH61B0227122	Price
2 x 60	80	MH61B0221285	Price	MH61B0227121	Price
2 x 60	100	MH61B0221280	Price	-	-
2 x 60	120	MH61B0221275	Price	-	-
2 x 60	320	MH61B0202825	Price	-	-
2-1/2 x 60	36	MH61B0221610	Price	-	-
2-1/2 x 60	50	MH61B0221600	Price	-	-
2-1/2 x 60	60	MH61B0221595	Price	-	-
2-1/2 x 60	80	MH61B0221590	Price	-	-
2-1/2 x 60	100	MH61B0221585	Price	-	-
2-1/2 x 60	120	MH61B0221580	Price	-	-
3 x 132	36	MH61B0321900	Price	-	-
3 x 132	50	MH61B0321890	Price	-	-
3 x 132	60	MH61B0321885	Price	-	-
3 x 132	80	MH61B0321880	Price	-	-
3 x 132	100	MH61B0321875	Price	-	-
3 x 132	120	MH61B0321870	Price	-	-
3 x 24	100	MH61B0321745	Price	-	-
3 x 132	150	MH61B0321865	Price	-	-
3 x 132	180	MH61B0321860	Price	-	-
4 x 36	40	MH61B0422105	Price	MH61B0422400	Price
4 x 36	50	MH61B0422100	Price	-	-
4 x 36	60	MH61B0422095	Price	-	-
4 x 36	80	MH61B0422090	Price	-	-
4 x 36	100	MH61B0427958	Price	-	-
4 x 36	120	MH61B0422080	Price	-	-
4 x 36	150	MH61B0422079	Price	-	-
4 x 36	180	MH61B0422075	Price	-	-
4 x 36	320	MH61B0422071	Price	-	-
4 x 54	36	MH61B0422185	Price	-	-
4 x 54	50	MH61B0422175	Price	-	-
4 x 24	60	MH61B0427518	Price	-	-
4 x 54	60	MH61B0422170	Price	-	-
4 x 54	80	MH61B0422165	Price	-	-
4 x 54	100	MH61B0422160	Price	-	-
4 x 132	80	MH61B0422385	Price	-	-

Used On - Backstand and Benchtop Belts					
		Aluminum Oxide		Zirconia Alumina	
Size (in.)	Grit	Order No.	Price	Order No.	Price
6 x 48	36	MH61B0622590	Price	MH61B0627698	Price
6 x 48	40	MH61B0622585	Price	MH61B0627697	Price
6 x 48	50	MH61B0622580	Price	-	-
6 x 48	60	MH61B0622575	Price	MH61B0628937	Price
6 x 48	80	MH61B0622570	Price	-	-
6 x 48	100	MH61B0627982	Price	-	-
6 x 48	120	MH61B0622560	Price	MH61B0628931	Price
6 x 48	150	MH61B0622555	Price	-	-
6 x 48	180	MH61B0622550	Price	-	-
6 x 48	220	MH61B0622546	Price	-	-
6 x 48	320	MH61B0622543	Price	-	-
1-1/2 x 60	36	-	-	MH61B0126993	Price

Used On - Portable Files							
		Aluminum Oxide		Zirconia Alumina		Ceramic Alumina	
Size (in.)	Grit	Order No.	Price	Order No.	Price	Order No.	Price
1/2 x 12	40	MH61B0027557	Price	-	-	-	-
1/2 x 12	60	MH61B0027555	Price	MH61B0028745	Price	-	-
1/2 x 12	80	MH61B0027554	Price	MH61B0028744	Price	-	-
1/2 x 12	100	MH61B0027553	Price	-	-	-	-
1/2 x 12	120	MH61B0027552	Price	MH61B0028742	Price	-	-
1/2 x 18	60	MH61B0027560	Price	-	-	MH61B0028569	Price
1/2 x 18	80	MH61B0027559	Price	-	-	MH61B0028568	Price
1/2 x 18	120	MH61B0027558	Price	-	-	MH61B0028567	Price
1/2 x 24	40	MH61B0027568	Price	-	-	-	-
1/2 x 24	50	MH61B0027567	Price	-	-	-	-
1/2 x 24	60	MH61B0027566	Price	MH61B0028564	Price	-	-
1/2 x 24	80	MH61B0027565	Price	MH61B0028566	Price	-	-
1/2 x 24	120	MH61B0027564	Price	MH61B0028565	Price	-	-
3/4 x 20-1/2	40	MH61B0027573	Price	-	-	-	-
3/4 x 20-1/2	60	MH61B0027571	Price	MH61B0028560	Price	-	-
3/4 x 20-1/2	80	MH61B0027570	Price	-	-	-	-
3/4 x 20-1/2	100	MH61B0027569	Price	-	-	-	-
3/4 x 20-1/2	120	MH61B0027575	Price	MH61B0028557	Price	-	-
1 x 30	60	-	-	MH61B0128583	Price	-	-
1 x 30	80	MH61B0127579	Price	MH61B0128582	Price	-	-
1 x 30	120	MH61B0127577	Price	-	-	-	-
3-1/2 x 15-1/2	36	MH61B0321997	Price	-	-	-	-
3-1/2 x 15-1/2	60	MH61B0322000	Price	-	-	-	-
3-1/2 x 15-1/2	80	MH61B0321995	Price	-	-	-	-
4 x 24	50	MH61B0427946	Price	-	-	-	-
4 x 24	100	MH61B0427943	Price	-	-	-	-

Used On - Portable Sanders			
		Aluminum Oxide	
Size (in.)	Grit	Order No.	Price
3 x 21	50	MH61B0327926	Price
3 x 21	80	MH61B0327924	Price
3 x 21	100	MH61B0327923	Price
3 x 24	36	MH61B0321770	Price
3 x 24	40	MH61B0327937	Price
3 x 24	60	MH61B0321755	Price
3 x 24	180	MH61B0321736	Price
3 x 31	120	MH61B0327922	Price
4 x 24	80	MH61B0422050	Price
4 x 24	120	MH61B0422044	Price
1/2 x 18	40	MH61B0027561	Price
6 x 48	80	MH61B0627983	Price

3M Portable Tools Belts



341D/241E

- Aluminum Oxide – XE weight cloth
- 341D: Excellent all-around abrasive belt for blending and finishing
- 241E: High strength backing for tougher applications

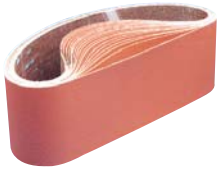


Belt Size (in.)	Grade	Grit	Std. Pkg.	Order No.	Price Ea.
1/2 x 12	80	80	200	**TM1026894**	Price
1/2 x 12	120	120	200	**TM1026892**	Price
1/2 x 18	60	60	200	**TM1072227**	Price
1/2 x 18	80	80	200	**TM1072228**	Price
1/2 x 18	120	120	200	**TM1072229**	Price
1/2 x 24	80	80	200	**TM1026720**	Price
3/4 x 18	60	60	200	**TM1014756**	Price
3/4 x 18	120	120	200	**TM1014667**	Price
3/4 x 20-1/2	120	120	200	**TM1026778**	Price
3-1/2 x 15-1/2	80	80	50	**TM1026856**	Price
3-1/2 x 15-1/2	60	60	50	**TM1026857**	Price
3-1/2 x 15-1/2	P120	P120	50	**TM1002663**	Price

3M Backstand and Benchtop Belts

241D

- Aluminum Oxide – X weight cloth
- Excellent all-around abrasive belt for blending and finishing





Belt Size (in.)	Grit	Std. Pkg.	Order No.	Price Ea.
1 x 42	36	200	**TM1026614**	Price
1 x 42	50	200	**TM1031823**	Price
1 x 42	60	200	**TM1001450**	Price
1 x 42	80	200	**TM1001451**	Price
1 x 42	P100	200	**TM1001452**	Price
1 x 42	P120	200	**TM1001453**	Price
1 x 42	P150	200	**TM1026602**	Price
1 x 42	P180	200	**TM1026601**	Price
1 x 42	P240	200	**TM1026599**	Price
1 x 42	P320	200	**TM1026597**	Price
1-1/2 x 60	36	50	**TM1026443**	Price
1-1/2 x 60	40	50	**TM1026441**	Price
1-1/2 x 60	60	50	**TM1026438**	Price
1-1/2 x 60	80	50	**TM1026436**	Price
2 x 48	36	50	**TM1026571**	Price
2 x 48	50	50	**TM1026568**	Price
2 x 48	60	25	**TM1026564**	Price
2 x 48	80	25	**TM1026562**	Price
2 x 48	P100	50	**TM1026561**	Price
2 x 48	P120	25	**TM1026560**	Price
2 x 60	50	50	**TM1026424**	Price
2 x 60	60	25	**TM1033640**	Price
2 x 60	80	25	**TM1033639**	Price
2 x 60	P120	25	**TM1033667**	Price
2 x 72	36	50	**TM1026320**	Price
2 x 72	60	25	**TM1026316**	Price
2 x 72	80	25	**TM1033067**	Price
2 x 72	P180	50	**TM1026309**	Price
2 x 72	P240	50	**TM1081752**	Price
2-1/2 x 60	36	50	**TM1026408**	Price
2-1/2 x 60	60	25	**TM1026400**	Price
2-1/2 x 60	80	25	**TM1026396**	Price
2-1/2 x 60	P120	25	**TM1026388**	Price
6 x 48	36	20	**TM1001454**	Price
6 x 48	40	20	**TM1001455**	Price
6 x 48	50	20	**TM1001456**	Price
6 x 48	60	20	**TM1001457**	Price
6 x 48	80	20	**TM1010454**	Price
6 x 48	P100	20	**TM1010455**	Price
6 x 48	P120	20	**TM1010456**	Price
6 x 48	P150	20	**TM1026517**	Price
6 x 48	P180	20	**TM1026515**	Price
6 x 48	P240	20	**TM1026513**	Price

3M Portable Tools Belts



777F

- 3M™ Cubitron™ Abrasive Grain Blend – YF weight cloth
- Contains grinding aid which enhances performance on stainless steel and other exotic alloys
- Can be run wet or dry

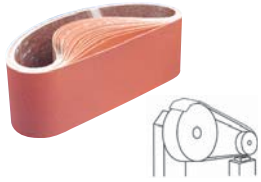


Belt Size (in.)	Grit	Std. Pkg.	Order No.	Price Ea.
1/4 x 24	40	200	**TM1084412**	Price
1/4 x 24	60	200	**TM1080253**	Price
1/4 x 24	80	200	**TM1077642**	Price
1/4 x 24	P120	200	**TM1082229**	Price
1/2 x 18	40	200	**TM1084409**	Price
1/2 x 18	60	200	**TM1080551**	Price
1/2 x 18	80	200	**TM1080232**	Price
1/2 x 18	P120	200	**TM1084304**	Price
1/2 x 24	36	200	**TM1077643**	Price
1/2 x 24	40	200	**TM1082342**	Price
1/2 x 24	50	200	**TM1077408**	Price
1/2 x 24	60	200	**TM1077065**	Price
1/2 x 24	80	200	**TM1077491**	Price
1/2 x 24	P120	200	**TM1081064**	Price
3/4 x 18	36	200	**TM1084302**	Price
3/4 x 18	60	200	**TM1084404**	Price
3/4 x 18	80	200	**TM1077992**	Price
3/4 x 18	P120	200	**TM1084303**	Price
3/4 x 20-1/2	60	200	**TM1080486**	Price
3/4 x 20-1/2	80	200	**TM1080686**	Price
3-1/2 x 15-1/2	36	50	**TM1077336**	Price
3-1/2 x 15-1/2	50	50	**TM1077334**	Price
3-1/2 x 15-1/2	60	50	**TM1077476**	Price
3-1/2 x 15-1/2	80	50	**TM1077333**	Price
3-1/2 x 15-1/2	P100	50	**TM1084306**	Price
3-1/2 x 15-1/2	P120	50	**TM1084307**	Price
3-1/2 x 15-1/2	P180	50	**TM1085320**	Price

3M Backstand and Benchtop Belts

777F

- 3M™ Cubitron™ Abrasive Grain Blend – YF weight cloth
- Contains grinding aid which enhances performance on stainless steel and other exotic alloys
- Can be run wet or dry



Belt Size (in.)	Grit	Std. Pkg.	Order No.	Price Ea.
1 x 42	40	200	**TM1076527**	Price
1 x 42	60	200	**TM1077512**	Price
1 x 42	80	200	**TM1014895**	Price
1-1/2 x 60	60	50	**TM1084416**	Price
1-1/2 x 60	80	50	**TM1076731**	Price
1-1/2 x 60	P120	50	**TM1082022**	Price
2 x 48	36	50	**TM1076738**	Price
2 x 48	60	25	**TM1076519**	Price
2 x 48	80	25	**TM1014896**	Price
2 x 60	36	50	**TM1077663**	Price
2 x 60	60	25	**TM1077152**	Price
2 x 60	80	25	**TM1084296**	Price
2 x 60	P120	25	**TM1085377**	Price
2 x 72	60	25	**TM1080286**	Price
2 x 72	80	25	**TM1014884**	Price
2 x 72	P120	25	**TM1081767**	Price
2 x 132	60	25	**TM1082231**	Price
2 x 132	80	25	**TM1014534**	Price
2 x 132	P120	25	**TM1081687**	Price
2 x 132	180	25	**TM1084315**	Price
2-1/2 x 60	60	25	**TM1076680**	Price
2-1/2 x 60	80	25	**TM1076686**	Price
3 x 132	60	25	**TM1076520**	Price
3 x 132	80	25	**TM1076514**	Price
3 x 132	P120	25	**TM1080028**	Price
3 x 132	180	25	**TM1085762**	Price
4 x 132	80	25	**TM1076515**	Price
4 x 132	120	25	**TM1081443**	Price
6 x 48	36	10	**TM1082313**	Price
6 x 48	50	10	**TM1080176**	Price
6 x 48	60	20	**TM1076679**	Price
6 x 48	80	20	**TM1076733**	Price
6 x 48	P120	20	**TM1082153**	Price

Stick-Kut™ Lubrication Stick Wax



- Safe and effective lubricant for grinding wheels, sanding belts and saw blades
- Eliminates heat build up and belt loading
- Extends wheel life
- Provides smooth, cool cutting
- Reduces loading, stop binding, and prevents burring

Size	Hazard Code	Order No.	Price
15 oz	HAZ57	**LJ5515SK**	Price

Edge Lube



- White, solid, waxy bar, biodegradable
- Excellent for belt, wheel or disc grinding, and sawing applications
- Eliminates heat build-up and belt loading
- Does not contain any hazardous chemicals
- Extends grinding wheel life
- Low toxicity, safe on all metals

Size	Order No.	Price
13 oz	**LJ6043200**	Price

Belt-Magic™ for Coated Abrasive Belts



- Special high-temperature formulation clings to abrasive belts, discs, and grinders with minimal throw-off
- Won't build up behind the wheel
- Provides smoother finish to workpiece and can increase belt life by 30%
- Apply 1 lb stick directly to abrasive surface
- Excellent for ferrous and non-ferrous applications
- Size: 1/2"D x 4-3/8"L

MADE IN THE USA

Size	Hazard Code	Order No.	Price
1 lb Stick	HAZ57	**LK40BT16**	Price

Saw Blade Wax Stick



- Prevents burning, clogging, chatter and tearing
- Works well on all cutting operations of non-ferrous or ferrous metals
- F-168 is soluble in water, non-toxic, non-irritating and biodegradable
- Cleans easily by wiping or hot water flushing
- F-168's fiber tube is made with an extended hollow end **"Safety-Grip"** hand applicator allowing the operator to hold and push the F-168 wax stick safely against the saw or cutting tool
- Uses: Band saws, circular saws, carpenter saws, hack saws
- Other uses: Drilling, tapping grinding, filing, cutting metal spinning, polishing with coated abrasives

Order No.	Price
MJ61F168	Price

Granlund Abrasive Cleaning Sanding Insurance™

Works like a giant eraser to remove wood, metal & plastic from your sanding belts, discs, drums or sheets



- Increases belt life
- Improves finish by reducing burning and chatter
- Made of a long-lasting, clean, safe, non-toxic material

Size (in.)	Description	Order No.	Price
1 x 1 x 6	Stick	**MJ51116W**	Price
1-1/2 x 1-1/2 x 8	Stick	**MJ51158**	Price
2 x 2 x 12	Stick	**MJ512212**	Price
3 x 3 x 1-1/2	Bench Mount	**MJ513315**	Price

Grease Sticks

For Coated Abrasive Belts and Discs

MJ61F26 All Purpose Lubricant for Belts & Discs - A lightbodied grease — that spreads out thinly —remains "wet" on the belt — and provides lubrication by penetrating the coated abrasive surface. Prevents clogging and leaves the abrasive grit free to cut clean and smooth. Recommended for all belt polishing operations — on all metals, plastic and glass

MJ61F90 White Tallow Base Lubricant with High Melting Point - Serves as a lubricant and, at the same time, fills and closes the belt with a heavy bodied grease film. When applied to fine grit size coated abrasive belts it permits a glazing or burnishing action. When applied to coarse grit belt operations the grease film is heavy enough to stay on the belt under severe conditions

MJ61F122 Mixture of Belt Grease & Aluminum Oxide Buffing Flour - Recommended for Belt Polishing Operations on Stainless and Carbon Steel. A mixture of belt grease and unfused, aluminum oxide buffing flour. The grease base serves as a lubricant, and the abrasive flour functions the same as a buffing compound "Coloring Agent" to impart luster to the polished work. Particularly recommended for belt polishing operations on stainless or carbon steel when a high quality, bright finish is desirable

MJ61F115 Mixture of Belt Grease & Tripoli Abrasive - Recommended for Belt Polishing Operations on Non-Ferrous Metals. Coated abrasive belts, used for polishing such non-ferrous metals as zinc or aluminum die casting are too often discarded long before their useful life is expended simply because they become loaded with metal particles. The Tripoli abrasive blended with the grease base of Order. No. MJ65-F115 serves to fill between the abrasive grains on the belt, and minimizes this metal loading condition. In addition, the Tripoli abrasive itself functions as a buffing compound "coloring agent" in bringing out a brighter luster than is obtainable with a straight grease lubricant

MJ61F200 Wheel Wax - A new crystalline wax formulation combined with a unique, dry, inorganic, lubricating additive. Permits super-fine grinding, polishing and finishing



Description	Order No.	Price
All Purpose Lubricant for Belts & Discs	**MJ61F26**	Price
F200 Wheel Wax	**MJ61F200**	Price
Mixture of Belt Grease & Aluminum Oxide Buffing Flour	**MJ61F122**	Price
Mixture of Belt Grease & Tripoli Abrasive	**MJ61F115**	Price
White Tallow Base Lubricant with High Melting Point	**MJ61F90**	Price

Portable File Belts - Aluminum Oxide & Zirconia



Aluminum Oxide CS310:
- X-flex for conformability to work piece
- Suitable for most metals, alloys, hardwoods, aluminum, brass, bronze and stainless steel
- Butt splice for bi-directional

Zirconia CS411:
- Ideal for heavy stock removal
- Polyester cloth backing — can be used wet or dry
- Longer life — Less down time — greater productivity



Material - Aluminum Oxide CS310												
	40		60		80		120		180		220	
Size (W x L) (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8 x 24	**MM4402140**	Price	**MM4402160**	Price	**MM4402180**	Price	**MM44021120**	Price	**MM44021180**	Price	**MM44021220**	Price
1/4 x 18	**MM4402240**	Price	**MM4402260**	Price	**MM4402280**	Price	**MM44022120**	Price	**MM44022180**	Price	**MM44022220**	Price
1/4 x 24	**MM4402340**	Price	**MM4402360**	Price	**MM4402380**	Price	**MM44023120**	Price	**MM44023180**	Price	**MM44023220**	Price
3/8 x 13	**MM4401940**	Price	**MM4401960**	Price	**MM4401980**	Price	**MM44019120**	Price	**MM44019180**	Price	**MM44019220**	Price
1/2 x 12	**MM4402440**	Price	**MM4402460**	Price	**MM4402480**	Price	**MM44024120**	Price	**MM44024180**	Price	**MM44024220**	Price
1/2 x 18	**MM4402540**	Price	**MM4402560**	Price	**MM4402580**	Price	**MM44025120**	Price	**MM44025180**	Price	**MM44025220**	Price
1/2 x 24	**MM4402640**	Price	**MM4402660**	Price	**MM4402680**	Price	**MM44026120**	Price	**MM44026180**	Price	**MM44026220**	Price
1/2 x 30	**MM4402740**	Price	**MM4402760**	Price	**MM4402780**	Price	**MM44027120**	Price	**MM44027180**	Price	**MM44027220**	Price
3/4 x 18	**MM4402840**	Price	**MM4402860**	Price	**MM4402880**	Price	**MM44028120**	Price	**MM44028180**	Price	**MM44028220**	Price
3/4 x 20-1/2	**MM4402040**	Price	**MM4402060**	Price	**MM4402080**	Price	**MM44020120**	Price	**MM44020180**	Price	**MM44020220**	Price
1 x 30	**MM4402940**	Price	**MM4402960**	Price	**MM4402980**	Price	**MM44029120**	Price	**MM44029180**	Price	**MM44029220**	Price

Material - Zirconia Alumina CS411								
	40		60		80		120	
Size (W x L) (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8 x 24	**MM44B2140**	Price	**MM44B2160**	Price	**MM44B2180**	Price	**MM44B21120**	Price
1/4 x 24	**MM44B2340**	Price	**MM44B2360**	Price	**MM44B2380**	Price	**MM44B23120**	Price
3/8 x 13	**MM44B1940**	Price	**MM44B1960**	Price	**MM44B1980**	Price	**MM44B19120**	Price
1/2 x 18	**MM44B2540**	Price	**MM44B2560**	Price	**MM44B2580**	Price	**-**	-
1/2 x 24	**MM44B2640**	Price	**MM44B2660**	Price	**MM44B2680**	Price	**MM44B26120**	Price
3/4 x 20-1/2	**MM44B2040**	Price	**MM44B2060**	Price	**MM44B2080**	Price	**MM44B20120**	Price

Abrasives Portable Belts



CS310 Aluminum Oxide:
- Premium components offer extended life and consistency in all applications
- Aluminum Oxide, resin-resin bond, “X” cotton backing, butt spliced

CS411 Aluminum Zirconia:
- Perfect for heavy stock removal
- Premium components for those tough jobs
- Alumina Zirconia, resin-resin bond, “Y” polyester backing, butt spliced

Material - Aluminum Oxide CS310														
	40		50		60		80		100		120		150	
Size (W x L) (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1-1/8 x 21	**MM4403740A**	Price	**MM4403750A**	Price	**MM4403760A**	Price	**MM4403780A**	Price	**MM44037100A**	Price	**MM44037120A**	Price	**MM44037150A**	Price
3 x 21	**MM4401740A**	Price	**MM4401750A**	Price	**MM4401760A**	Price	**MM4401780A**	Price	**MM44017100A**	Price	**MM44017120A**	Price	**MM44017150A**	Price
3 x 24	**MM44018040A**	Price	**MM44018050A**	Price	**MM44018060A**	Price	**MM44018080A**	Price	**MM440180100A**	Price	**MM440180120A**	Price	**MM440180150A**	Price
3-1/2 x 15-1/2	**MM4403940A**	Price	**MM4403950A**	Price	**MM4403960A**	Price	**MM4403980A**	Price	**MM44039100A**	Price	**MM44039120A**	Price	**MM44039150A**	Price
4 x 24	**MM4403840A**	Price	**MM4403850A**	Price	**MM4403860A**	Price	**MM4403880A**	Price	**MM44038100A**	Price	**MM44038120A**	Price	**MM44038150A**	Price

Material - Zirconia Alumina CS411								
	40		50		60		80	
Size (W x L) (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1-1/8 x 21	**MM4403740Z**	Price	**MM4403750Z**	Price	**MM4403760Z**	Price	**MM4403780Z**	Price
3 x 21	**MM4401740Z**	Price	**MM4401750Z**	Price	**MM4401760Z**	Price	**MM4401780Z**	Price
3 x 24	**MM44018040Z**	Price	**MM44018050Z**	Price	**MM44018060Z**	Price	**MM44018080Z**	Price
3-1/2 x 15-1/2	**MM4403940Z**	Price	**MM4403950Z**	Price	**MM4403960Z**	Price	**MM4403980Z**	Price
4 x 24	**MM4403840Z**	Price	**MM4403850Z**	Price	**MM4403860Z**	Price	**MM4403880Z**	Price

Priced per belt/10 belts per package

CGW Aluminum Oxide Shop Rolls



- Premium flexible backing for longer working life
- High quality friable grain
- 50 Yard rolls
- Also available in 24, 320 and 400 grit

		1		1-1/2		2	
Grit	Standard pack	Order No.	Price	Order No.	Price	Order No.	Price
40	1	**MG9063092**	Price	**-**	-	**MG9063098**	Price
50	1	**-**	-	**MG9063095**	Price	**-**	-
60	1	**MG9063062**	Price	**MG9063072**	Price	**MG9063082**	Price
80	1	**MG9063063**	Price	**MG9063073**	Price	**MG9063083**	Price
100	1	**MG9063064**	Price	**MG9063074**	Price	**MG9063084**	Price
120	1	**MG9063065**	Price	**MG9063075**	Price	**MG9063085**	Price
150	1	**MG9063066**	Price	**MG9063076**	Price	**MG9063086**	Price
180	1	**MG9063067**	Price	**MG9063077**	Price	**MG9063087**	Price
220	1	**MG9063068**	Price	**MG9063078**	Price	**MG9063088**	Price

SURF PRO® 50 Yard Aluminum Oxide Shop Rolls

- Ideal for cleaning and deburring metal surfaces
- Convenient packaging
- Flexible cloth backing
- Cut or tear to required length



	1		1-1/2		2	
Grit	Order No.	Price	Order No.	Price	Order No.	Price
40	SP12SR10040A	Price	SP12SR15040A	Price	SP12SR20040A	Price
50	SP12SR10050A	Price	SP12SR15050A	Price	SP12SR20050A	Price
60	SP12SR10060A	Price	SP12SR15060A	Price	SP12SR20060A	Price
80	SP12SR10080A	Price	SP12SR15080A	Price	SP12SR20080A	Price
100	SP12SR10100A	Price	SP12SR15100A	Price	SP12SR20100A	Price
120	SP12SR10120A	Price	SP12SR15120A	Price	SP12SR20120A	Price
150	SP12SR10150A	Price	SP12SR15150A	Price	SP12SR20150A	Price
180	SP12SR10180A	Price	SP12SR15180A	Price	SP12SR20180A	Price
220	SP12SR10220A	Price	SP12SR15220A	Price	SP12SR20220A	Price
240	SP12SR10240A	Price	SP12SR15240A	Price	SP12SR20240A	Price
320	SP12SR10320A	Price	SP12SR15320A	Price	SP12SR20320A	Price
400	SP12SR10400A	Price	SP12SR15400A	Price	SP12SR20400A	Price
Crocus	-	-	-	-	SP12SR20CRO	Price

CARBORUNDUM Aluminum Oxide Abrasive Shop Rolls

- Can be used dry or with oil
- Tough & durable P-graded brown aluminum oxide abrasive
- Easily dispensed from package
- Cut or tear to desired length
- 50 Yard rolls



		1		1-1/2		2	
Length	Grit	Order No.	Price	Order No.	Price	Order No.	Price
50 Yds	60	MM4210060	Price	MM4215060	Price	MM4220060	Price
50 Yds	80	MM4210080	Price	MM4215080	Price	MM4220080	Price
50 Yds	100	MM42100100	Price	MM42150100	Price	MM42200100	Price
50 Yds	120	MM42100120	Price	MM42150120	Price	MM42200120	Price
50 Yds	150	MM42100150	Price	MM42150150	Price	MM42200150	Price
50 Yds	180	MM42100180	Price	MM42150180	Price	MM42200180	Price
50 Yds	220	MM42100220	Price	MM42150220	Price	MM42200220	Price

NORTON Aluminum Oxide Shop Rolls Metalite K224 & K225

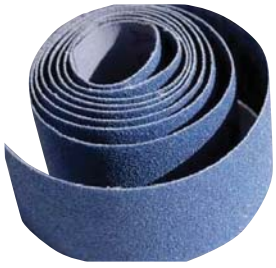
- For fast aggressive cut and long life
- Strong, durable backing conforms to various shapes
- Added strength for course grit applications
- Tough durable aluminum oxide abrasive
- K224 - 50 & 60 Grit
- K225 - All other grits
- 50 Yard rolls



			1		1-1/2		2	
Length	Grit	Std. Pkg.	Order No.	Price	Order No.	Price	Order No.	Price
50 Yds	50	5	MH61R0127728	Price	MH61R0127730	Price	MH61R0227732	Price
50 Yds	60	5	MH61R0127729	Price	MH61R0127731	Price	MH61R0227733	Price
50 Yds	80	5	MH61R0126276	Price	MH61R0126288	Price	MH61R0226299	Price
50 Yds	100	5	MH61R0126275	Price	MH61R0126287	Price	MH61R0226298	Price
50 Yds	120	5	MH61R0126274	Price	MH61R0126286	Price	MH61R0226297	Price
50 Yds	150	5	MH61R0126273	Price	MH61R0126285	Price	MH61R0226296	Price
50 Yds	180	5	MH61R0126272	Price	MH61R0126284	Price	MH61R0226295	Price
50 Yds	220	5	MH61R0126271	Price	MH61R0126283	Price	MH61R0226294	Price
50 Yds	240	5	MH61R0126270	Price	MH61R0126282	Price	MH61R0226293	Price
50 Yds	280	5	MH61R0126269	Price	MH61R0126281	Price	MH61R0226292	Price
50 Yds	320	5	MH61R0126268	Price	MH61R0126280	Price	MH61R0226291	Price
50 Yds	400	5	MH61R0126267	Price	MH61R0126279	Price	MH61R0226290	Price

SUPERIOR Abrasives Shur-Blue Utility Cloth Rolls

- Made from premium SHUR-KUT aluminum oxide mineral bonded to “J” weight backing
- For all ferrous and non-ferrous metals
- Works great on wood and fiberglass
- Compare to 3M® Blue Shop Rolls



		1		1-1/2		2	
Length	Grit	Order No.	Price	Order No.	Price	Order No.	Price
50 Yds	100	MM6444953	Price	MM6444961	Price	MM6444969	Price
50 Yds	120	MM6444954	Price	MM6444962	Price	MM6444970	Price
50 Yds	150	MM6444955	Price	MM6444963	Price	MM6444971	Price
50 Yds	180	MM6444956	Price	MM6444964	Price	MM6444972	Price
50 Yds	240	MM6444958	Price	MM6444966	Price	MM6444974	Price
50 Yds	60	MM6444951	Price	MM6444959	Price	MM6444967	Price
50 Yds	80	MM6444952	Price	MM6444960	Price	MM6444968	Price

Available up to 6” wide

3M Utility Cloth Rolls



- Aluminum Oxide – X and J weight cloth
- Constructed on a durable cloth backing
- Ideal for all utility jobs
- Can be torn into strips and rolled without shelling

Width (in.)	Length	Backing	Grit	Pack Qty.	Order No.	Price Ea.
1	50	X Weight	P50	5	**TM1219794**	Price
1	50	X Weight	P60	5	**TM1219793**	Price
1	50	J Weight	P80	5	**TM1219792**	Price
1	50	J Weight	P120	5	**TM1219790**	Price
1	50	J Weight	P150	5	**TM1219789**	Price
1	50	J Weight	P180	5	**TM1219788**	Price
1	50	J Weight	P220	5	**TM1219787**	Price
1	50	J Weight	P240	5	**TM1219786**	Price
1	50	J Weight	P280	5	**TM1219785**	Price
1	50	J Weight	P400	5	**TM1219783**	Price
1.5	50	X Weight	P50	5	**TM1219813**	Price
1.5	50	J Weight	P80	5	**TM1219811**	Price
1.5	50	J Weight	P120	5	**TM1219809**	Price
1.5	50	J Weight	P150	5	**TM1219808**	Price
1.5	50	J Weight	P180	5	**TM1219807**	Price
1.5	50	J Weight	P220	5	**TM1219806**	Price
1.5	50	J Weight	P240	5	**TM1219805**	Price
1.5	50	J Weight	P280	5	**TM1219804**	Price
1.5	50	J Weight	P400	5	**TM1219802**	Price
2	50	X Weight	P50	5	**TM1219825**	Price
2	50	X Weight	P60	5	**TM1219824**	Price
2	50	J Weight	P80	5	**TM1219823**	Price
2	50	J Weight	P100	5	**TM1219822**	Price
2	50	J Weight	P120	5	**TM1219821**	Price
2	50	J Weight	P150	5	**TM1219820**	Price
2	50	J Weight	P180	5	**TM1219819**	Price
2	50	J Weight	P220	5	**TM1219818**	Price
2	50	J Weight	P240	5	**TM1219817**	Price
2	50	J Weight	P280	5	**TM1219816**	Price
2	50	J Weight	P320	5	**TM1219815**	Price
2	50	J Weight	P400	5	**TM1219814**	Price

3M Utility Cloth Sheets

314D

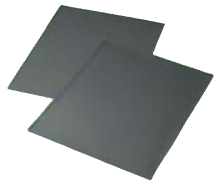


- Aluminum Oxide – X and J weight cloth
- Constructed on a durable cloth backing
- Ideal for all utility jobs
- Can be torn into strips and rolled without shelling

Size (in.) - 9 x 11				
Backing	Grit	Pack Qty.	Order No.	Price Ea.
X Weight	P40	5	**TM1219775**	Price
X Weight	P50	5	**TM1219774**	Price
X Weight	P60	5	**TM1219773**	Price
J Weight	P80	50	**TM1219772**	Price
J Weight	P100	5	**TM1219771**	Price
J Weight	P120	50	**TM1219770**	Price
J Weight	P150	5	**TM1219769**	Price
J Weight	P180	5	**TM1219768**	Price
J Weight	P220	50	**TM1219767**	Price
J Weight	P240	5	**TM1219766**	Price
J Weight	P280	5	**TM1219765**	Price
J Weight	P320	5	**TM1219764**	Price

3M 9" x 11" Wetordry™ Sheets

431Q



- Construction reduces clogging, helps eliminate dust, extends abrasive life and improves finish
- Silicon Carbide – C weight paper
- Heavyweight paper backing for increased durability

Grit	Pack Qty.	Order No.	Price Ea.
80	5	**TM1202018**	Price
100	5	**TM1202017**	Price
120	5	**TM1202016**	Price
150	5	**TM1202015**	Price
180	5	**TM1202014**	Price

3M 9" x 11" Wetordry™ Sheets

413Q



- Silicon Carbide – A weight paper
- Excellent conformability

Grit	Pack Qty.	Order No.	Price Ea.
220A	5	**TM1202007**	Price
240A	5	**TM1202006**	Price
280A	5	**TM1202005**	Price
320A	5	**TM1202004**	Price
360A	5	**TM1202003**	Price
400A	5	**TM1202002**	Price

3M Scotch-Brite™ Hand Pads



- Excellent products for hand finishing and cleaning of woods, metals and composites
- Ideal for wood finishing, paint prep and general cleaning
- 7447 & 7448 PRO: Cuts faster and produces more consistant scratch
- Sold In Standard Pack Only

Width (in.)	Length (in.)	Cat. No.	Color	Grade	Pack Qty.	Order No.	Price Ea.
6	9	7447 PRO	Maroon	A VFN	20	**TM2204029**	Price
6	9	7448 PRO	Light Gray	S ULF	20	**TM2204028**	Price

3M Scotch-Brite™ Cut & Polish Rolls



- A unique and aggressive material for cleaning and finishing
- Sturdy, long lasting web material is great for heavy industrial cleaning and light deburring applications
- Works well for stropping and other bench applications

Width (in.)	Length	Grade	Std. Pkg.	Order No.	Price Ea.
1	30'	A MED	12	**TM2204085**	Price
2	30'	A MED	6	**TM2205206**	Price
4	30'	A MED	3	**TM2205207**	Price

3M Scotch-Brite™ Clean & Finish Rolls



- Highly conformable Scotch-Brite™ web can be cut to desired length for hand sanding or oscillating sanders

Width (in.)	Length	Grade	Pack Qty.	Order No.	Price Ea.
4	30'	A MED	3	**TM2200264**	Price
4	30'	A VFN	3	**TM2200266**	Price
4	30'	S VFN	3	**TM2200270**	Price
6	30'	A MED	2	**TM2200274**	Price
6	30'	A VFN	2	**TM2200276**	Price

SURF PRO® 9" x 11" Aluminum Oxide Abrasive Cloth Sheets



- Aluminum oxide abrasive on durable X weight cloth backing
- Ideal for all utility jobs
- Can be torn into strips and rolled without shelling

Grit	Order No.	Price
40	**SP12S911040A**	Price
50	**SP12S911050A**	Price
60	**SP12S911060A**	Price
80	**SP12S911080A**	Price
100	**SP12S911100A**	Price
120	**SP12S911120A**	Price

Grit	Order No.	Price
150	**SP12S911150A**	Price
180	**SP12S911180A**	Price
220	**SP12S911220A**	Price
240	**SP12S911240A**	Price
320	**SP12S911320A**	Price
400	**SP12S911400A**	Price

SURF PRO® 9" x 11" Wet or Dry Silicon Carbide Finishing Paper Sheets



- Can be used wet or dry
- 60 grit thru 180 grit C weight
- 220 grit and finer A weight

Grit	Order No.	Price
60	**SP12S911060S**	Price
80	**SP12S911080S**	Price
120	**SP12S911120S**	Price
150	**SP12S911150S**	Price
180	**SP12S911180S**	Price
220	**SP12S911220S**	Price
240	**SP12S911240S**	Price

Grit	Order No.	Price
280	**SP12S911280S**	Price
320	**SP12S911320S**	Price
360	**SP12S911360S**	Price
400	**SP12S911400S**	Price
500	**SP12S911500S**	Price
600	**SP12S911600S**	Price
1000	**SP12S91111000S**	Price

SURF PRO® 9" x 11" Crocus Cloth Sheets



- Used to smooth and polish metal surfaces on shafts, bushings, etc

Order No.	Price
SP12S911CRO	Price

NORTON 9" x 11" Abrasive Sheets

Aluminum Oxide - Cloth Sheets Metalworking
- Aluminum oxide with high temperature resin bond
- Long life and sharp, fast, cutting action
- Use on carbon and alloy steels, all metals and hard wood

Silicon Carbide -- Wetproof Paper Metalworking & Woodworking
- Ideal for all materials, and prepaint applications
- Waterproof
- Silicon carbide grain

Emery Cloth - K622 & K624
- Preferred for metal finishing where more stress is placed on polish then cut

Garnet Paper Sheets A511
- Used for all hand and jitterbug sanding for all types of wood

Silicon Carbide Screen - Cloth Sheets Q421
- Coated on both sides of a strong open mesh, waterproof nylon fabric
- More aggressive than standard shop sheet
- For dry or wet sanding on any material where loading may occur

Style - Abrasive Cloth				
Grit	Material	Pack Qty.	Order No.	Price
60	Aluminum Oxide	25	**MH61S91101861**	Price
80	Aluminum Oxide	25	**MH61S91126340**	Price
100	Aluminum Oxide	50	**MH61S91126339**	Price
120	Aluminum Oxide	50	**MH61S91126338**	Price
150	Aluminum Oxide	50	**MH61S91126337**	Price
180	Aluminum Oxide	50	**MH61S91126336**	Price
240	Aluminum Oxide	50	**MH61S91126334**	Price
320	Aluminum Oxide	50	**MH61S91126332**	Price

Style - Abrasive Paper				
Grit	Material	Pack Qty.	Order No.	Price
80	Garnet	50	**MH61S91101505**	Price
100	Garnet	100	**MH61S91101500**	Price
120	Garnet	100	**MH61S91101495**	Price
150	Garnet	100	**MH61S91101490**	Price
180	Garnet	100	**MH61S91101489**	Price
220	Garnet	100	**MH61S91101488**	Price

SURF PRO® 9" x 11" Emery Cloth Sheets



- Natural emery abrasive with flexible cloth backing
- Removes burrs, cleans and polishes metal
- Can be used dry or with oil

Grit	Order No.	Price
Fine	**SP12S911FINEE**	Price
Medium	**SP12S911MEDE**	Price
Coarse	**SP12S911CRSE**	Price
Extra Coarse	**SP12S911ECSE**	Price

9" x 11" Sand Screen Sheets

- Sharp silicon carbide coated on both sides
- Open mesh – waterproof nylon fabric
- Non-loading – out performs cloth

Grit	Order No.	Price
60	**MM92SS60**	Price
80	**MM92SS80**	Price
100	**MM92SS100**	Price
120	**MM92SS120**	Price
180	**MM92SS180**	Price
220	**MM92SS220**	Price



30 Pc. Aluminum Oxide Abrasive Cloth 9" x 11" Sheets



- Flexible cloth backing
- Tough and durable aluminum oxide
- Ideal for removing cutting tool marks and deburring on all metal parts by hand
- Consists of 10 each - 60, 120 and 180 Grit

Order No.	Price
MM40CAS30	Price



Style - Emery Cloth				
Grit	Material	Pack Qty.	Order No.	Price
100	Emery	50	**MH61S91101309**	Price
150	Emery	50	**MH61S91101308**	Price
50	Emery	25	**MH61S91101255**	Price

Style - Sand Screen Cloth				
Grit	Material	Pack Qty.	Order No.	Price
80	Silicon Carbide	25	**MH61S91100960**	Price
100	Silicon Carbide	25	**MH61S91100955**	Price
120	Silicon Carbide	25	**MH61S91100950**	Price
150	Silicon Carbide	25	**MH61S91100945**	Price
180	Silicon Carbide	25	**MH61S91100940**	Price
220	Silicon Carbide	25	**MH61S91100935**	Price
320	Silicon Carbide	25	**MH61S91100920**	Price
400	Silicon Carbide	25	**MH61S91100915**	Price

Style - Wet/Dry Finishing Paper				
Grit	Material	Pack Qty.	Order No.	Price
180	Silicon Carbide	50	**MH61S91101150**	Price
220	Silicon Carbide	50	**MH61S91139367**	Price
240	Silicon Carbide	50	**MH61S91139366**	Price
320	Silicon Carbide	50	**MH61S91139364**	Price
400	Silicon Carbide	50	**MH61S91139362**	Price
500	Silicon Carbide	50	**MH61S91139361**	Price
600	Silicon Carbide	50	**MH61S91139360**	Price

SURF PRO® Flap Discs



Zirconia Alumina with poly-cotton back
- Poly-cotton heat treated backing for added flexibility
- Resin bond offers maximum cutting capacity, strong edge stability and long life
- Active grinding agent provides cool cutting with light pressure
- Recommended for aggressive use and heavy duty applications
- Excellent on carbon and stainless steel

Zirconium Alumina Plus
- Excellent on carbon and stainless steels
- Provides fast stock removal and excellent life

Ceramic Grain
- Best choice for grinding stainless steel, titanium, inconel, and other hard metals
- Self-sharpening grain creates a "cool grinding surface" for longer disc life and reduced production cost
- 13,300 Maximum RPM

T-27 APPLICATIONS: Use when working on flat grinding surface

				Type 27						Type 29			
				Ceramic		Zirconia		Zirconia Plus		Zirconia		Zirconia Plus	
Size (in.)	Hole Size (in.)	RPM	Grit	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
4-1/2	5/8-11	13300	36	**SP11FD45H27036C**	Price	**SP11FD45H27036Z**	Price	**SP11FD45H27036P**	Price	**SP11FD45H29036Z**	Price	**SP11FD45H29036P**	Price
4-1/2	5/8-11	13300	40	**SP11FD45H27040C**	Price	**SP11FD45H27040Z**	Price	**SP11FD45H27040P**	Price	**SP11FD45H29040Z**	Price	**SP11FD45H29040P**	Price
4-1/2	5/8-11	13300	60	**SP11FD45H27060C**	Price	**SP11FD45H27060Z**	Price	**SP11FD45H27060P**	Price	**SP11FD45H29060Z**	Price	**SP11FD45H29060P**	Price
4-1/2	5/8-11	13300	80	**SP11FD45H27080C**	Price	**SP11FD45H27080Z**	Price	**SP11FD45H27080P**	Price	**SP11FD45H29080Z**	Price	**SP11FD45H29080P**	Price
4-1/2	5/8-11	13300	120	-	-	-	-	**SP11FD45H27120P**	Price	-	-	**SP11FD45H29120P**	Price
4-1/2	7/8	13300	36	**SP11FD45A27036C**	Price	**SP11FD45A27036Z**	Price	**SP11FD45A27036P**	Price	**SP11FD45A29036Z**	Price	**SP11FD45A29036P**	Price
4-1/2	7/8	13300	40	**SP11FD45A27040C**	Price	**SP11FD45A27040Z**	Price	**SP11FD45A27040P**	Price	**SP11FD45A29040Z**	Price	**SP11FD45A29040P**	Price
4-1/2	7/8	13300	60	**SP11FD45A27060C**	Price	**SP11FD45A27060Z**	Price	**SP11FD45A27060P**	Price	**SP11FD45A29060Z**	Price	**SP11FD45A29060P**	Price
4-1/2	7/8	13300	80	**SP11FD45A27080C**	Price	**SP11FD45A27080Z**	Price	**SP11FD45A27080P**	Price	**SP11FD45A29080Z**	Price	**SP11FD45A29080P**	Price
4-1/2	7/8	13300	120	-	-	-	-	**SP11FD45A27120P**	Price	**SP11FD45A29120P**	Price	-	-

SURF PRO® Trimmable Premium Zirconia Flap Discs

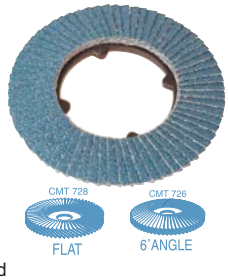


- Trimmable backing allows for longer production cycle, less down time
- Hybrid compact design - flaps are compressed and compacted at a 4 degree angle for strength
- 20% more material than regular flap disc
- Premium poly/cotton material and high concentration of Zirconia grain for aggressive fast grinding and longer working life

Size	Grit	Arbor	Order No.	Price
4-1/2	120	5/8-11	**SP11FT45H27120Z**	Price
4-1/2	40	5/8-11	**SP11FT45H27040Z**	Price
4-1/2	40	7/8	**SP11FT45A27040Z**	Price
4-1/2	60	5/8-11	**SP11FT45H27060Z**	Price
4-1/2	60	7/8	**SP11FT45A27060Z**	Price
4-1/2	80	5/8-11	**SP11FT45H27080Z**	Price
4-1/2	80	7/8	**SP11FT45A27080Z**	Price
6	120	5/8-11	**SP11FT60H27120Z**	Price
6	40	5/8-11	**SP11FT60H27040Z**	Price
6	60	5/8-11	**SP11FT60H27060Z**	Price
6	80	5/8-11	**SP11FT60H27080Z**	Price

CMT Series Quick Change Flap Discs

CMT 726 - Type 29 - 6° Angle • CMT 728 - Type 29 - Flat



- Simply affix the disc backing plate to your angle grinder using a standard locking nut and leave it there
- Flap discs are locked into place with a quick turn of the wrist - No tools are necessary
- When a new grinding surface is needed or when grits need to be changed twist the old disc off and put a new one on
- The fibre-reinforced plastic on the back guarantees maximum stability
- Discover the ease of use that the CMT has to offer and gain the advantages that this system can bring to your manufacturing process
- **Sold in boxes of 10**

	CMT726 Type 29-6° Angle		CMT728 Type 29-Flat	
Grit	Order No.	Price	Order No.	Price
40	**MM4445CMT726040**	Price	**MM4445CMT728040**	Price
60	**MM4445CMT726060**	Price	**MM4445CMT728060**	Price
80	**MM4445CMT726080**	Price	**MM4445CMT728080**	Price
120	**MM4445CMT726120**	Price	**MM4445CMT728120**	Price

Backing Plate for CMT726 & CMT728 Quick Change Flap Discs



Order No.	Price
MM4445CMTBP	Price

SURF PRO® 4-1/2" x 7/8" Arbor Economy Zirconia Flap Discs



- Zirconia abrasive for high cut rate and fast / cool cutting
- Best for welds and blending, rust removal and light deburring on ferrous and non-ferrous metals
- Heavy X-weight cloth and fiberglass
- Type 29 shape for maximum aggression
  (Recommended to be used at an angle of 15° to 25° for maximum aggression and high cut rate)

		Type 27		Type 29	
Grit	RPM	Order No.	Price	Order No.	Price
36	13300	**SP11FD457A7036Z**	Price	**SP11FD457A9036Z**	Price
40	13300	**SP11FD457A7040Z**	Price	**SP11FD457A9040Z**	Price
60	13300	**SP11FD457A7060Z**	Price	**SP11FD457A9060Z**	Price
80	13300	**SP11FD457A7080Z**	Price	**SP11FD457A9080Z**	Price

Also available in trimmable back and zirc plus.

SURF PRO® Trimmable Premium Ceramic Flap Discs



- Built in hub allows for easy off/on and closer disc placement to the tool
- C3 Ceramic for aggressive cutting action
- Self sharpening ceramic grain and cool grinding aid
- Ideal for hard to grind materials including steel and other heat sensitive materials

Size (in.)	Grit	Hole Size	Order No.	Price
4-1/2	40	5/8-11	**SP11FT45H27040C**	Price
4-1/2	60	5/8-11	**SP11FT45H27060C**	Price
4-1/2	80	5/8-11	**SP11FT45H27080C**	Price
6	40	5/8-11	**SP11FT60H27040C**	Price
6	60	5/8-11	**SP11FT60H27060C**	Price
6	80	5/8-11	**SP11FT60H27080C**	Price

3M Flap Discs

Engineered to Keep on Going - long after other discs have called it quits!

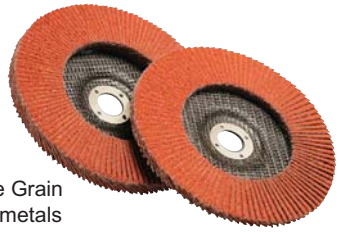


- Alumina zirconia provides extended life and more cutting power than aluminum oxide - across all metal types
- 566A Material: Versatile disc, performs well on multiple applications
- Y wt. poly-cotton backing
- Other sizes and materials available

					T27		T29	
Size (in.)	Grit	Max RPM	Std. Pkg.	Hole Size	Order No.	Price	Order No.	Price
4-1/2	40	13300	10	7/8	**TM1155366**	Price	**TM1155406**	Price
4-1/2	60	13300	10	7/8	**TM1155367**	Price	**TM1155407**	Price
4-1/2	80	13300	10	7/8	**TM1155368**	Price	**TM1155408**	Price
4-1/2	40	13300	10	5/8-11	**TM1155362**	Price	**TM1155402**	Price
4-1/2	60	13300	10	5/8-11	**TM1155363**	Price	**TM1155403**	Price
4-1/2	80	13300	10	5/8-11	**TM1155364**	Price	**TM1155404**	Price

3M Flap Discs

947D



- Type 27
- Excellent option for stainless steel finishing
- Premium 3M™ Cubitron™ Abrasive Grain for exceptional cut and life on hard metals
- Available in convenient "Quick Change" option
- **Sold in Standard Pack only**

Dia. (in.)	Hole Size (in.)	Grit	Max. RPM	Std. Pkg. Qty.	Order No.	Price
4-1/2	7/8	40	13300	10	**TM1161187**	Price
4-1/2	7/8	60	13300	10	**TM1161188**	Price
4-1/2	7/8	80	13300	10	**TM1161189**	Price
4-1/2	7/8	120	13300	10	**TM1161190**	Price
4-1/2	5/8-11	40	13300	10	**TM1161191**	Price
4-1/2	5/8-11	120	13300	10	**TM1161194**	Price

3M Giant Flap Discs 566A

Take a giant step toward greater productivity!



3M™ Giant Flap Discs are extra thick, and packed with more abrasive muscle.

- 25% More abrasive material than standard flap discs
- Delivers longer life and fewer changes
- Y Wt. poly-cotton backing
- Other sizes and materials available

					T27		T29	
Size (in.)	Grit	Max RPM	Std. Pkg.	Hole Size	Order No.	Price Ea.	Order No.	Price Ea.
4-1/2	40	13300	10	7/8	**TM1155382**	Price	**TM1155422**	Price
4-1/2	60	13300	10	7/8	**TM1155383**	Price	**TM1155423**	Price
4-1/2	80	13300	10	7/8	**TM1155384**	Price	**TM1155424**	Price
4-1/2	40	13300	10	5/8-11	**TM1155378**	Price	**TM1155418**	Price
4-1/2	60	13300	10	5/8-11	**TM1155379**	Price	**TM1155419**	Price
4-1/2	80	13300	10	5/8-11	**TM1155380**	Price	**TM1155420**	Price

WALTER Surface Technologies Enduro-Flex Turbo Type 29 Ceramic Flap Discs



New!

- Exclusive flap configuration and Cyclone™ Technology for ultra fast metal removal
- Turbofan™ Cooling keeps the work piece cooler for longer disc life
- Guaranteed cost savings

Dia. (in.)	Grit	Hole Size (in.)	RPM	Std. Pack	Order No.	Price
4-1/2	36/60	5/8-11	13300	10	**WS0106A452**	Price
5	36/60	5/8-11	12200	10	**WS0106A502**	Price
6	36/60	5/8-11	10200	10	**WS0106A602**	Price

3M Flap Discs

747D



- Type 27
- Premium 3M™ Cubitron™ Abrasive Grain provides extended cut and life on hard metals
- **Sold in Standard Pack Only**

Dia. (in.)	Hole Size (in.)	Grit	Max. RPM	Std. Pkg.	Order No.	Price
4-1/2	7/8	36	13300	10	**TM1149613**	Price
4-1/2	7/8	50	13300	10	**TM1149614**	Price
4-1/2	7/8	60	13300	10	**TM1149615**	Price
4-1/2	7/8	80	13300	10	**TM1149616**	Price
4-1/2	7/8	P120	13300	10	**TM1149617**	Price

3M Cubitron II Flap Discs - 967A



- 3M Precision Shaped Grain maintains super-sharp points that cut exceptionally fast with less pressure
- Engineered to run cooler, reducing metal discoloration/oxidation and the chance of heat related stress cracks
- Flaps grind and blend in a single step ~ Durable Y-weight poly-cotton backing delivers controlled, even wear for full use of the disc on low to medium-high pressure applications
- A grinding aid incorporated on the disc minimizes grinding temperatures for heat-sensitive alloys like stainless steel, titanium, and nickel alloys

Type - Type 27						
Dia. (in.)	Hole Size (in.)	Grit	Max. RPM	Std. Pkg.	Order No.	Price
4-1/2	5/8-11	40+	13300	10	**TM1155632**	Price
4-1/2	5/8-11	60+	13300	10	**TM1155603**	Price
4-1/2	5/8-11	60+	13300	10	**TM1155633**	Price
4-1/2	5/8-11	80+	13300	10	**TM1155604**	Price
4-1/2	5/8-11	80+	13300	10	**TM1155634**	Price
4-1/2	7/8	40+	13300	10	**TM1155605**	Price
4-1/2	7/8	40+	13300	10	**TM1155635**	Price
4-1/2	7/8	60+	13300	10	**TM1155606**	Price
4-1/2	7/8	60+	13300	10	**TM1155636**	Price
4-1/2	7/8	80+	13300	10	**TM1155607**	Price
4-1/2	7/8	80+	13300	10	**TM1155637**	Price

Type - Type 29						
Dia. (in.)	Hole Size (in.)	Grit	Max. RPM	Std. Pkg.	Order No.	Price
4-1/2	5/8-11	40+	13300	10	**TM1155644**	Price
4-1/2	5/8-11	60+	13300	10	**TM1155621**	Price
4-1/2	5/8-11	60+	13300	10	**TM1155645**	Price
4-1/2	5/8-11	80+	13300	10	**TM1155622**	Price
4-1/2	5/8-11	80+	13300	10	**TM1155646**	Price
4-1/2	7/8	40+	13300	10	**TM1155623**	Price
4-1/2	7/8	40+	13300	10	**TM1155647**	Price
4-1/2	7/8	60+	13300	10	**TM1155624**	Price
4-1/2	7/8	60+	13300	10	**TM1155648**	Price
4-1/2	7/8	80+	13300	10	**TM1155625**	Price

WALTER Surface Technologies Enduro-Flex Zirconia Alumina Type 29 Flap Discs



New!

- Longest lasting flap disc on the market
- Highest overall material removal in the industry
- New Eco-Trim backing is easier to trim and environmentally friendly

Dia. (in.)	Grit	Hole Size (in.)	RPM	Std. Pack	Order No.	Price
4-1/2	40	5/8-11	13300	10	**WS0106B454**	Price
4-1/2	60	5/8-11	13300	10	**WS0106B456**	Price
4-1/2	80	5/8-11	13300	10	**WS0106B458**	Price
4-1/2	120	5/8-11	13300	10	**WS0106B462**	Price
5	40	5/8-11	12200	10	**WS0106B504**	Price
5	60	5/8-11	12200	10	**WS0106B506**	Price
5	80	5/8-11	12200	10	**WS0106B508**	Price
5	120	5/8-11	12200	10	**WS0106B512**	Price
6	40	5/8-11	10200	10	**WS0106B604**	Price
6	60	5/8-11	10200	10	**WS0106B606**	Price
6	80	5/8-11	10200	10	**WS0106B608**	Price
6	120	5/8-11	10200	10	**WS0106B612**	Price

Merit Powerflex® Type 27
Norton Red Heat Type 27



- Powerflex® Zirconia Alumina Abrasive grinds cooler, saves time and money
- Last up to 15 times longer than resin fiber discs
- High quality consistent finish on steel and exotic metals

Red Heat (Type 27):



- Type 27 Flap Discs designed for optimum efficiency when operating at angles from 0 to 15°
- Premium Ceramic and Zirconia Alumina blend provides excellent performance on stainless and carbon steel application
- Less pressure for aggressive stock removal
- Longer disc life

				Ceramic & Zirconia Alumina		Zirconia Alumina	
				Norton Abrasives		Merit	
Dia. (in.)	Hole (in.)	Grit	Std. Qty.	Order No.	Price	Order No.	Price
4	5/8	40	10	**MH6136153**	Price	-	-
4-1/2	7/8	36	10	**MH6104876**	Price	**MM5990789**	Price
4-1/2	7/8	24	10	-	-	**MM5990785**	Price
4-1/2	7/8	60	10	**MH6104878**	Price	**MM5990750**	Price
4-1/2	7/8	40	10	**MH6104877**	Price	-	-
4-1/2	7/8	80	10	**MH6104879**	Price	**MM5990751**	Price
4-1/2	7/8	120	10	**MH6105279**	Price	**MM5990825**	Price
4-1/2	5/8-11	36	10	-	-	**MM5993319**	Price
4-1/2	5/8-11	36	5	**MH6199163**	Price	-	-
4-1/2	5/8-11	60	10	**MH6136148**	Price	-	-
4-1/2	5/8-11	80	10	**MH6136149**	Price	-	-
4-1/2	5/8-11	120	5	**MH6199164**	Price	-	-

Note: Merit Powerflex in Type 27 have a fiberglass backing. Norton Red Heat Type 27 has a plastic backing that wears away with the abrasive for longer life and smoother finish.

R884P & R766 Flap Discs



BLUEFIRE:

- High performance zirconia alumina abrasive with grinding aid for aggressive cut and long life providing up to 30% improved performance over competitive zirconia alumina products
- Type 27 have a flatter angle and are best used on flat surfaces for blending and smooth finishing
- Plastic backing plates add some conformability and are trimmable
- Coarse 36 grit for stock removal, beveling and edge chamfering
- Polyester/cotton backing combination for good cut rate and finishing

NEON:

- Blend of ceramic alumina and aluminum oxide provides higher performance than aluminum oxide while retaining an economical price
- Type 27 have a flatter angle and are best used on flat surfaces for blending and smooth finishing
- Plastic backing plates add some conformability and are trimmable
- Fine/120 grit for final finishing
- Poly/cotton backing combination for good cut rate and finishing
- Good choice for soft metals to hard to grind stainless and carbon steel

Trade Name - BlueFire Wheel Type - T27 Flat							
Dia. (in.)	Grit	Hole Size (in.)	RPM	Std. Pack	Material	Order No.	Price
4-1/2	36	7/8	13300	10	Zirconia Alumina	**MH61FD0499140**	Price
4-1/2	40	7/8	13300	10	Zirconia Alumina	**MH61FD0499141**	Price
4-1/2	60	7/8	13300	10	Zirconia Alumina	**MH61FD0499142**	Price
4-1/2	80	7/8	13300	10	Zirconia Alumina	**MH61FD0499143**	Price
4-1/2	36	5/8-11	13300	10	Zirconia Alumina	**MH61FD0499136**	Price
4-1/2	60	5/8-11	13300	10	Zirconia Alumina	**MH61FD0499138**	Price
7	36	5/8-11	8600	10	Zirconia Alumina	**MH61FD0799155**	Price

Trade Name - Neon Wheel Type - T27							
Dia. (in.)	Grit	Hole Size (in.)	RPM	Std. Pack	Material	Order No.	Price
4-1/2	120	5/8-11	13300	10	Ceramic Alumina	**MH61FD0499003**	Price

Trade Name - Neon Wheel Type - T29							
Dia. (in.)	Grit	Hole Size (in.)	RPM	Std. Pack	Material	Order No.	Price
4-1/2	80	5/8-11	13300	10	Ceramic Alumina	**MH61FD0499173**	Price
4-1/2	120	5/8-11	13300	10	Ceramic Alumina	**MH61FD0499174**	Price

Mini Flap Discs

BLAZE:

- Food processing equiment and machinery
- Pressure vessels, ship containers
- Surgical/medical/distilling equipment
- Aerospace
- Latest-generation ceramic alumina abrasive provides 50-200% longer life vs any flap disc on stainless, titanium and super alloys
- Supersize grinding aid provides a cool, noticeably faster cut rate



BLUEFIRE:

- Plate steel/structural steel
- Civil/construction/military equpment
- Propane tanks
- Farm equipment
- Strong zirconia alumina plus abrasive delivers aggressive cut rate and up to 30% longer life on mild carbon steel welds
- Semi-open coat retards loading on aluminum



NEON:

- Job shops and small one-off runs in larger shops; anywhere a good-performing, general purpose disc is needed
- Aluminum oxide abrasive blend flaps stand up to light-to-moderately-demanding soft metal, carbon, and stainless steel applications
- Ideal when purchasing criteria is a good-performing, low-intiial price, general purpose disc



Trade Name - Blaze						
			TR		TS	
Size (in.)	Grit	Std. Pkg.	Order No.	Price	Order No.	Price
2	120	10	**MH61D0290149**	Price	**MH61D0290159**	Price
2	36	10	**MH61D0290145**	Price	**MH61D0290155**	Price
2	40	10	**MH61D0290146**	Price	**MH61D0290156**	Price
2	60	10	**MH61D0290147**	Price	**MH61D0290157**	Price
2	80	10	**MH61D0290148**	Price	**MH61D0290158**	Price

Trade Name - Bluefire						
			TR		TS	
Size (in.)	Grit	Std. Pkg.	Order No.	Price	Order No.	Price
2	120	10	**MH61D0290169**	Price	**MH61D0290179**	Price
2	36	10	**MH61D0290165**	Price	**MH61D0290175**	Price
2	40	10	**MH61D0290166**	Price	**MH61D0290176**	Price

Trade Name - Bluefire						
			TR		TS	
Size (in.)	Grit	Std. Pkg.	Order No.	Price	Order No.	Price
2	60	10	**MH61D0290167**	Price	**MH61D0290177**	Price
2	80	10	**MH61D0290168**	Price	**MH61D0290178**	Price

Trade Name - Neon						
			TR		TS	
Size (in.)	Grit	Std. Pkg.	Order No.	Price	Order No.	Price
2	120	10	**MH61D0232106**	Price	**MH61D0232116**	Price
2	36	10	**MH61D0232101**	Price	**MH61D0232112**	Price
2	40	10	**MH61D0232102**	Price	**MH61D0232113**	Price
2	60	10	**MH61D0232104**	Price	**MH61D0232114**	Price
2	80	10	**MH61D0232105**	Price	**MH61D0232115**	Price

Also available in 3" diameter

NORTON R980 Flap Discs

The Next Generation Ceramic Grain Flap Disc



- R980 SG Blaze ceramic grain, for noticeably faster cut rate
- Improved Y-Wt. polyester cloth finish and resin system for significantly better grain retention, edge fray resistance = longer disc life, lower grind cost

Trade Name - Blaze R980P Wheel Type - T27 Flat					
Dia. (in.)	Hole (in.)	Grit	Std. Qty.	Order No.	Price Ea.
4-1/2	7/8	40	10	**MH61FD0400253**	Price
4-1/2	7/8	60	10	**MH61FD0400254**	Price
4-1/2	7/8	80	10	**MH61FD0400255**	Price
4-1/2	7/8	120	10	**MH61FD0400256**	Price
4-1/2	5/8-11	40	10	**MH61FD0400257**	Price
4-1/2	5/8-11	60	10	**MH61FD0400258**	Price
4-1/2	5/8-11	80	10	**MH61FD0400259**	Price
4-1/2	5/8-11	120	10	**MH61FD0400261**	Price

Trade Name - Blaze R980P Wheel Type - T29 Conical					
Dia. (in.)	Hole (in.)	Grit	Std. Qty.	Order No.	Price Ea.
4-1/2	7/8	40	10	**MH61FD0483487**	Price
4-1/2	5/8-11	36	10	**MH61FD0483490**	Price
4-1/2	5/8-11	40	10	**MH61FD0483491**	Price
4-1/2	5/8-11	60	10	**MH61FD0483492**	Price
4-1/2	5/8-11	80	10	**MH61FD0483493**	Price

Available in 5” and 7” diameters

MERIT Metal Zirc Flap Wheels - Cotton/Poly Flaps



Features / Benefits:

- High performance zirconia alumina abrasive
- Maximum cut rate and life
- Engineered blend of cotton and polyester flaps for longer life and wear resistance
- Durable, fiberglass back
- High strength, lightweight, absorbs vibration

Size (in.)	Grit	RPM	Std. Pkg.	Order No.	Price
4-1/2 x 5/8-11	36	13300	10	**MM5919991**	Price
4-1/2 x 5/8-11	40	13300	10	**MM5919994**	Price
4-1/2 x 5/8-11	60	13300	10	**MM5919996**	Price
4-1/2 x 5/8-11	80	13300	10	**MM5919997**	Price
4-1/2 x 7/8	36	13300	10	**MM5919963**	Price
4-1/2 x 7/8	40	13300	10	**MM5919978**	Price
4-1/2 x 7/8	60	13300	10	**MM5919984**	Price
4-1/2 x 7/8	80	13300	10	**MM5919987**	Price

Available up to 7” diameter in Type 27 & Type 29

CARBORUNDUM Carbo White Zirconia Alumina Resin Cloth Flap Discs



- Type 27 - Plastic - Flat face, plastic back
- Fits same type grinder as resin fiber disc and depressed center wheel
- 5 & 7” Also Available

Size	Grit	RPM	Std. Pkg.	Order No.	Price Ea.
4-1/2 x 5/8-11	120	13300	10	**MM4202064**	Price
4-1/2 x 5/8-11	40	13300	10	**MM4202060**	Price
4-1/2 x 5/8-11	60	13300	10	**MM4202062**	Price
4-1/2 x 5/8-11	80	13300	10	**MM4202063**	Price
4-1/2 x 7/8	120	13300	10	**MM4202080**	Price
4-1/2 x 7/8	40	13300	10	**MM4202077**	Price
4-1/2 x 7/8	60	13300	10	**MM4202078**	Price
4-1/2 x 7/8	80	13300	10	**MM4202079**	Price

CARBORUNDUM Medalist Ceramic Alumina Resin Cloth Flap Discs



- Ideal for aggressive cutting action, cool cut and longer life on harder-to-grind materials
- High Performance blend of ceramic and zirconia abrasives
- Type 27 Plastic - flat face, plastic back
- YP 2079 W grading
- Requires less pressure to work at maximum performance
- 5” & 7” Also available

Size (in.)	Grit	RPM	Std. Pkg.	Order No.	Price Ea.
4-1/2 x 5/8-11	40	13300	10	**MM4226212**	Price
4-1/2 x 5/8-11	60	13300	10	**MM4226217**	Price
4-1/2 x 5/8-11	80	13300	10	**MM4226218**	Price
4-1/2 x 7/8	40	13300	10	**MM4267811**	Price
4-1/2 x 7/8	60	13300	10	**MM4267812**	Price
4-1/2 x 7/8	80	13300	10	**MM4267813**	Price

CARBORUNDUM Premier Red Zirconia Alumina Resin Cloth Flap Discs



- Ideal for metal grinding and polishing, especially for weld bead grinding on fine carbon an stainless steel
- Type 29 - Angled flaps, conical, slightly concaved design
- Type 27 - Flat Face
- Fat Boy - Thicker with more flaps
- Type 27 - 7” Also Available
- Type 29 - 5 & 7” Also Available

Wheel Type - T27					
Size (in.)	Grit	RPM	Std. Pkg.	Order No.	Price Ea.
4-1/2 x 5/8-11	36	13300	5	**MM4264060**	Price
4-1/2 x 5/8-11	40	13300	5	**MM4264061**	Price
4-1/2 x 5/8-11	60	13300	5	**MM4264062**	Price
4-1/2 x 5/8-11	80	13300	5	**MM4264063**	Price
4-1/2 x 7/8	120	13000	5	**MM4263745**	Price
4-1/2 x 7/8	36	13000	5	**MM4263741**	Price
4-1/2 x 7/8	40	13000	5	**MM426374**	Price
4-1/2 x 7/8	60	13000	5	**MM4263743**	Price
4-1/2 x 7/8	80	13000	5	**MM4263744**	Price

Wheel Type - T27 - Fat Boy					
Size (in.)	Grit	RPM	Std. Pkg.	Order No.	Price Ea.
4-1/2 x 5/8-11	40	13300	5	**MM4268838**	Price
4-1/2 x 5/8-11	60	13300	5	**MM4268846**	Price
4-1/2 x 5/8-11	80	13300	5	**MM4268848**	Price
4-1/2 x 7/8	40	13300	5	**MM4263929**	Price
4-1/2 x 7/8	60	13300	5	**MM4263930**	Price
4-1/2 x 7/8	80	13300	5	**MM4263931**	Price

Wheel Type - T29					
Size (in.)	Grit	RPM	Std. Pkg.	Order No.	Price Ea.
4-1/2 x 5/8-11	36	13300	5	**MM4220348**	Price
4-1/2 x 5/8-11	40	13300	5	**MM4220347**	Price
4-1/2 x 5/8-11	60	13300	5	**MM4220346**	Price
4-1/2 x 5/8-11	80	13300	5	**MM4220345**	Price
4-1/2 x 7/8	120	13300	5	**MM4218619**	Price
4-1/2 x 7/8	24	13300	5	**MM4218624**	Price
4-1/2 x 7/8	36	13300	5	**MM4218623**	Price
4-1/2 x 7/8	40	13300	5	**MM4218622**	Price
4-1/2 x 7/8	60	13300	5	**MM4218621**	Price
4-1/2 x 7/8	80	13300	5	**MM4218620**	Price

Wheel Type - T29 - Fat Boy					
Size (in.)	Grit	RPM	Std. Pkg.	Order No.	Price Ea.
4-1/2 x 5/8-11	40	13300	5	**MM4270539**	Price
4-1/2 x 5/8-11	60	13300	5	**MM4270540**	Price
4-1/2 x 5/8-11	80	13300	5	**MM4270541**	Price

Z3 Premium Zirconia Flap Discs



Z3:

- Fastest grain removal in the marketplace for carbon based steels and second best after CGW Z-Stainless discs on stainless steels, while offering excellent life
- Recommended for aggressive use and heavy duty applications
- Active grinding agent provides cool cutting with light pressure
- Special optimized resin bond offers maximum cutting capacity, strong edge stability and long life
- Premium Zirconia alumina grain with a poly/cotton heat treated backing
- The poly/cotton combination provides low stretch and strength for the high zirocnia concentration that Z3 contains

T-27 APPLICATIONS: Use when working on flat grinding surfaces

T-29 APPLICATIONS: Conical Type has an angle excellent for contour and edge work

Right Angle Grinder

				T27		T29		T27 XL		T29 XL	
				Z3		Z3		Z3 XL		Z3 XL	
Dia. (in.)	Hole (in.)	Grit	RPM	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
4	5/8	24	15300	-	-	MG9042120	Price	-	-	-	-
4	5/8	36	15300	MG9042102	Price	MG9042121	Price	-	-	-	-
4	3/8	40	15300	-	-	-	-	-	-	MG9042132	Price
4	5/8	40	15300	MG9042103	Price	MG9042122	Price	MG9042142	Price	-	-
4	5/8	60	15300	MG9042104	Price	MG9042124	Price	MG9042144	Price	MG9042164	Price
4	5/8	80	15300	MG9042105	Price	MG9042125	Price	MG9042145	Price	MG9042165	Price
4	5/8	120	15300	MG9042106	Price	MG9042126	Price	MG9042146	Price	-	-
4-1/2	7/8	24	13300	MG9042300	Price	MG9042320	Price	-	-	-	-
4-1/2	7/8	36	13300	MG9042301	Price	MG9042321	Price	MG9042341	Price	MG9042361	Price
4-1/2	7/8	40	13300	MG9042302	Price	MG9042322	Price	MG9042342	Price	MG9042362	Price
4-1/2	7/8	60	13300	MG9042304	Price	MG9042324	Price	MG9042344	Price	MG9042364	Price
4-1/2	7/8	80	13300	MG9042305	Price	MG9042325	Price	MG9042345	Price	MG9042365	Price
4-1/2	7/8	120	13300	MG9042306	Price	MG9042326	Price	-	-	MG9042366	Price
4-1/2	5/8-11	36	13300	MG9042311	Price	MG9042331	Price	MG9042351	Price	MG9042371	Price
4-1/2	5/8-11	40	13300	MG9042312	Price	MG9042332	Price	MG9042352	Price	MG9042372	Price
4-1/2	5/8-11	60	13300	MG9042314	Price	MG9042334	Price	MG9042354	Price	MG9042374	Price
4-1/2	5/8-11	80	13300	MG9042315	Price	MG9042335	Price	MG9042355	Price	MG9042375	Price
4-1/2	5/8-11	120	13300	MG9042316	Price	MG9042336	Price	MG9042356	Price	MG9042376	Price
4- 1/2	7/8	120	13300	-	-	-	-	MG9042346	Price	-	-

Z-Stainless Premium Zirconia Flap Discs



Z-Stainless:

- Quickest stainless steel material removal rate on the market - plus good carbon based steel material removal for versatile working
- Premium blend of Zirconia and Aluminum Oxide grains with a heat treated polyester backing and active grinding aid
- Polyester backing is tough and has minimal stretch
- Additional layer containing a resin grinding aid and active grinding agents lubricates the grains for break down with light pressure
- Designed for heat sensitive applications and all but eliminates heat generation
- Pigment added to the grain to maintain blue coloring

T-27 APPLICATIONS: Use when working on flat grinding surfaces

T-29 APPLICATIONS: Conical Type has an angle excellent for contour and edge work

Right Angle Grinder

				T27		T27 XL		T29		T29 XL	
				Z3 Stainless		Z3 Stainless XL		Z3 Stainless		Z3 Stainless XL	
Dia. (in.)	Hole (in.)	Grit	RPM	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
4-1/2	7/8	40	13300	MG9031012	Price	MG9031092	Price	MG9031052	Price	MG9031132	Price
4-1/2	7/8	60	13300	MG9031014	Price	MG9031094	Price	MG9031054	Price	MG9031134	Price
4-1/2	7/8	80	13300	MG9031015	Price	MG9031095	Price	MG9031055	Price	MG9031135	Price
4-1/2	5/8-11	40	13300	MG9031172	Price	MG9031232	Price	MG9031202	Price	MG9031262	Price
4-1/2	5/8-11	60	13300	MG9031174	Price	MG9031234	Price	MG9031204	Price	MG9031264	Price
4-1/2	5/8-11	80	13300	MG9031175	Price	MG9031235	Price	MG9031205	Price	MG9031265	Price
7	7/8	40	8600	MG9031032	Price	MG9031112	Price	-	-	-	-
7	7/8	60	8600	MG9031034	Price	MG9031114	Price	-	-	-	-
7	7/8	80	8600	MG9031035	Price	MG9031115	Price	-	-	-	-

Z3 Zirconia Made Flap Discs



- Premium Z3 (Zirconia alumina grain) on a heavy duty poly/cotton backing
- Material for long life and faster grinding results
- Active grinding aid agent provides cool cutting with only light pressure

			T27 - Rol-On		T27 - Turn-On	
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price	Order No.	Price
2	120	10	MG9030006	Price	MG9030026	Price
2	36	10	MG9030001	Price	-	-
2	40	10	MG9030002	Price	MG9030022	Price
2	60	10	MG9030004	Price	MG9030024	Price
2	80	10	MG9030005	Price	MG9030025	Price
3	120	10	MG9030016	Price	MG9030036	Price

			T27 - Rol-On		T27 - Turn-On	
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price	Order No.	Price
3	36	10	MG9030011	Price	-	-
3	40	10	MG9030012	Price	MG9030032	Price
3	60	10	MG9030014	Price	MG9030034	Price
3	80	10	MG9030015	Price	MG9030035	Price

Z3 Ultimate Blue Zirconia Flap Discs

Z3 Ultimate – Excellent on steel and stainless

- Extra wide material width for extra long life. This creates extra spacing to allow zirconia to break down
- Special design flap structure provides cushion-like impact, thus making stock removal easier to control and offering best finishing results
- 30% longer life than regular density flap discs
- Premium 100% Zirconia Alumina grain with a poly/cotton heat treated backing



CF

Right Angle Grinder

				T27		T29	
Dia. (in.)	Hole (in.)	RPM	Grit	Order No.	Price	Order No.	Price
4-1/2	7/8	13300	36	**MG9054001**	Price	**MG9054021**	Price
4-1/2	7/8	13300	40	**MG9054002**	Price	**MG9054022**	Price
4-1/2	7/8	13300	60	**MG9054004**	Price	**MG9054024**	Price
4-1/2	7/8	13300	80	**MG9054005**	Price	**MG9054025**	Price
4-1/2	5/8-11	13300	36	**MG9054011**	Price	**MG9054031**	Price
4-1/2	5/8-11	13300	40	**MG9054012**	Price	**MG9054032**	Price
4-1/2	5/8-11	13300	60	**MG9054014**	Price	**MG9054034**	Price
4-1/2	5/8-11	13300	80	**MG9054015**	Price	**MG9054035**	Price

Z3 Double/XXL Flap Discs

- 20% more material than XL flap discs
- Designed for easy working on angled surfaces
- Extra wide flaps for longer working life



CF

Right Angle Grinder

				T27	
Dia. (in.)	Hole (in.)	Grit	RPM	Order No.	Price
4-1/2	7/8	40	13300	**MG9036316**	Price
4-1/2	7/8	60	13300	**MG9036317**	Price
4-1/2	7/8	80	13300	**MG9036318**	Price
4-1/2	5/8-11	40	13300	**MG9036319**	Price
4-1/2	5/8-11	60	13300	**MG9036320**	Price
4-1/2	5/8-11	80	13300	**MG9036321**	Price

Compact Zirconia Flap Discs - Trimmable Back

- Trimmable backing allows for longer production cycle, less downtime
- Hybrid compact design - flaps are compressed and compacted at a 4° for edge strength - 20% more material than regular Z3 flap discs
- Z3 Premium Zirconia Alumina grain for aggressive, heavy duty applications
- Poly/cotton backing provides low stretch and strength
- Active grinding agent provides cool cutting with light pressure
- Standard pack – 10 Pc



Dia. (in.)	Arbor Size (in.)	Grit	RPM	Order No.	Price
4-1/2	7/8	40	13300	**MG9039722**	Price
4-1/2	7/8	60	13300	**MG9039724**	Price
4-1/2	7/8	80	13300	**MG9039725**	Price
5	7/8	40	12200	**MG9039742**	Price
5	7/8	60	12200	**MG9039744**	Price
5	7/8	80	12200	**MG9039745**	Price
4-1/2	5/8-11	40	13300	**MG9039714**	Price
4-1/2	5/8-11	60	13300	**MG9039715**	Price
4-1/2	5/8-11	80	13300	**MG9039716**	Price

C3 Ceramic Compact Trimmable Flap Discs with Hub

- Build in hub allows for easy off/on and closer disc placement to the tool
- C3 Ceramic for aggressive cutting action
- Self sharpening ceramic grain and cool grinding aid
- Ideal for hard to grind materials including steel and other heat sensitive materials



Dia. (in.)	Hole (in.)	Grit	RPM	Order No.	Price
4-1/2	5/8-11	40	13300	**MG9030202**	Price
4-1/2	5/8-11	60	13300	**MG9030204**	Price
4-1/2	5/8-11	80	13300	**MG9030205**	Price
5	5/8-11	40	12000	**MG9030212**	Price
5	5/8-11	60	12000	**MG9030214**	Price
5	5/8-11	80	12000	**MG9030215**	Price
6	5/8-11	40	10200	**MG9030222**	Price
6	5/8-11	60	10200	**MG9030224**	Price
6	5/8-11	80	10200	**MG9030225**	Price

Z3 XL Zirconia Compact Trimmable Flap Discs with Built in Hub

- Built in hub allows for easy off/on and closer disc placement to the tool
- Z3 (Zirconia) for fast, long-lasting grinding
- Ideal for heavy duty applications



Dia. (in.)	Hole (in.)	Grit	RPM	Order No.	Price
4-1/2	5/8-11	40	13300	**MG9030142**	Price
4-1/2	5/8-11	60	13300	**MG9030144**	Price
4-1/2	5/8-11	80	13300	**MG9030145**	Price
4-1/2	5/8-11	12	13300	**MG9030146**	Price
5	5/8-11	40	12200	**MG9030152**	Price
5	5/8-11	60	12200	**MG9030154**	Price
5	5/8-11	80	12200	**MG9030155**	Price
5	5/8-11	120	12200	**MG9030156**	Price
6	5/8-11	40	10200	**MG9030162**	Price
6	5/8-11	60	10200	**MG9030164**	Price
6	5/8-11	80	10200	**MG9030165**	Price
6	5/8-11	120	10200	**MG9030166**	Price

TIGER Zirc Tiger Flap Disc - Aluminum Back



- Durable, self-sharpening zirconia alumina
- Type 29 angled style for weld blending, deburring, deflashing, edge chamfering, stock removal, and grinding and finishing in one step
- Aluminum backing for rigid support

Arbor Size (in.) - 5/8-11			
Dia. (in.)	Grit	Order No.	Price
4-1/2	36	**MK5150517**	Price
4-1/2	40	**MK5150518**	Price
4-1/2	60	**MK5150519**	Price
4-1/2	80	**MK5150520**	Price
4-1/2	120	**MK5150509**	Price

Arbor Size (in.) - 7/8			
Dia. (in.)	Grit	Order No.	Price
4-1/2	36	**MK5150512**	Price
4-1/2	40	**MK5150513**	Price
4-1/2	60	**MK5150514**	Price
4-1/2	80	**MK5150515**	Price
4-1/2	120	**MK5150516**	Price

TIGER BobCat® Quick Change 2 & 3" Abrasive Flap Discs - Zirconia



- BobCat flap discs outperform conventional quick change discs at least 19 to 1
- Ideal for grinding, deburring and blending steel and stainless metal fabrication
- Applications include aggressive and rapid stock removal
- Angled style for maximum contact
- Flat sytle for smoother grinding and enhanced conformability

Mount - R Dia. (in.) - 2					
		Type 27		Type 29	
Grit	RPM	Order No.	Price	Order No.	Price
36	30000	**MK5150956**	Price	**MK5150946**	Price
40	30000	**MK5150957**	Price	**MK5150947**	Price
60	30000	**MK5150958**	Price	**MK5150948**	Price
80	30000	**MK5150959**	Price	**MK5150949**	Price
120	30000	**MK5150960**	Price	**MK5150950**	Price

Mount - R Dia. (in.) - 3					
		Type 27		Type 29	
Grit	RPM	Order No.	Price	Order No.	Price
36	20000	**MK5150961**	Price	**MK5150951**	Price
40	20000	**MK5150962**	Price	**MK5150952**	Price
60	20000	**MK5150963**	Price	**MK5150953**	Price
80	20000	**MK5150964**	Price	**MK5150954**	Price
120	20000	**MK5150965**	Price	**MK5150955**	Price

Mount - S Dia. (in.) - 2					
		Type 27		Type 29	
Grit	RPM	Order No.	Price	Order No.	Price
36	30000	**MK5150932**	Price	**MK5150922**	Price
40	30000	**MK5150933**	Price	**MK5150923**	Price
60	30000	**MK5150934**	Price	**MK5150924**	Price
80	30000	**MK5150935**	Price	**MK5150925**	Price
120	30000	**MK5150936**	Price	-	-

Mount - S Dia. (in.) - 3							
		Type 27		Type 29		Type 29, S Mount	
Grit	RPM	Order No.	Price	Order No.	Price	Order No.	Price
36	20000	**MK5150912**	4.80	**MK5150902**	Price	-	-
40	20000	**MK5150913**	4.80	**MK5150903**	Price	-	-
60	20000	**MK5150914**	4.80	-	-	**MK5150904**	Price
80	20000	**MK5150915**	4.80	-	-	**MK5150905**	Price
120	20000	**MK5150916**	4.80	-	-	**MK5150906**	Price

Drive Mandrel MK5107766

WEILER 4-1/2" Flap Discs TIGER



Faster Grinding and Longer Life for Steel and Stainless Steel Metalworking

				Angled		Flat	
Dia. (in.)	Arbor Hole (in.)	Grit	RPM	Order No.	Price	Order No.	Price
4-1/2	5/8-11	36	13,000	**MK5151204**	Price	-	-
4-1/2	5/8-11	40	13,000	**MK5151205**	Price	**MK5151226**	Price
4-1/2	5/8-11	60	13,000	**MK5151206**	Price	**MK5151227**	Price
4-1/2	5/8-11	80	13,000	**MK5151207**	Price	**MK5151228**	Price
4-1/2	7/8	36	13,000	**MK5151200**	Price	-	-
4-1/2	7/8	40	13,000	**MK5151201**	Price	**MK5151223**	Price
4-1/2	7/8	60	13,000	**MK5151202**	Price	**MK5151224**	Price
4-1/2	7/8	80	13,000	**MK5151203**	Price	**MK5151225**	Price

TIGER PAW Tiger Paw Zirc Flap Discs - Phenolic Back



- High performance zirconium grain – tough and fast cutting, for heavy duty applications such as edge-grinding
- Engineered poly/cotton cloth – specifically designed for superior grain retention to eliminate premature shedding and maximize disc life
- Contaminant-free – Tiger Paw flap disc cloth contains 0.1% of iron, sulfur and chlorine
- Grind and finish in ONE STEP – Tiger Paw eliminates the need to switch from a grinding wheel to resin fiber disc
- 13,000 RPM
- Standard pack: 10 Pc.

Style - High Density				
Dia. (in.)	Hole Size (in.)	Grit	Order No.	Price
4-1/2	7/8	36	**MK5151160**	Price
4-1/2	7/8	40	**MK5151161**	Price
4-1/2	7/8	60	**MK5151162**	Price
4-1/2	7/8	80	**MK5151163**	Price
4-1/2	5/8-11	36	**MK5151164**	Price
4-1/2	5/8-11	40	**MK5151165**	Price
4-1/2	5/8-11	60	**MK5151166**	Price
4-1/2	5/8-11	80	**MK5151167**	Price

Style - Standard Density				
Dia. (in.)	Hole Size (in.)	Grit	Order No.	Price
4-1/2	7/8	36	**MK5151107**	Price
4-1/2	7/8	40	**MK5151108**	Price
4-1/2	7/8	60	**MK5151109**	Price
4-1/2	7/8	80	**MK5151110**	Price
4-1/2	5/8-11	36	**MK5151112**	Price
4-1/2	5/8-11	40	**MK5151113**	Price
4-1/2	5/8-11	60	**MK5151114**	Price
4-1/2	5/8-11	80	**MK5151115**	Price

Available in other sizes and grits. Also available in type 29.

TIGER SABER TOOTH 4-1/2" Saber Tooth™ Ceramic Flap Discs

Type 29 Trimmable Back



- Fast cut and long life
- Grinding aid prevents dulling and glazing
- Designed to work with heat sensitive materials such as aluminum, stainless steel, inconel, titanium and other hard-to-grind metals
- Maximum RPM 13,000
- Standard pack 10 Pc.

Abor Hole (in.)	Grit	Order No.	Price
7/8	40	**MK5150117**	Price
7/8	60	**MK5150118**	Price
7/8	80	**MK5150119**	Price
5/8-11	40	**MK5150121**	Price
5/8-11	60	**MK5150122**	Price
5/8-11	80	**MK5150123**	Price

WEILER 4-1/2" Zirconium Wolverine Flap Discs



- Ideal for a working angle of 15° - 25°
- Phenolic Backings
- High cut rate
- Type 29

Hole Size - 5/8-11				
Grit	RPM	Standard Pk.	Order No.	Price
40	12000	10	**MK5131390**	Price
60	12000	10	**MK5131409**	Price
80	12000	10	**MK5131410**	Price

Hole Size - 7/8				
Grit	RPM	Standard Pk.	Order No.	Price
36	13000	10	**MK5131343**	Price
40	13000	10	**MK5131387**	Price
60	13000	10	**MK5131345**	Price
60	13000	10	**MK5131388**	Price
80	13000	10	**MK5131389**	Price

Quick Change Flap Wheel



WSM 617

- This useful and versatile flapwheel makes metal finishing easier
- The WSM 617 has a solid center with a built-in 5/8-11 threaded hole for use on most angle grinders
- With this type of flapwheel, the larger surface area of the face is used, making it a quicker way to apply finishing touches or a unique decorative finish to your metal workpiece
- 13,300 Max RPM
- 4-1/2" x 3/4" x 5/8-11

Grit	Order No.	Price
40	**MM4445WSM617040**	Price
60	**MM4445WSM617060**	Price
80	**MM4445WSM617080**	Price
120	**MM4445WSM617120**	Price

Mandrel Mount Small Ceramic Flap Bands

New!



- Small diameter flap bands provide aggressive stock removal in confined spaces
- Ceramic grain for added durability
- More aggressive on stainless steel

Size (in.)	Grit	Order No.	Price
1-3/4 x 1-3/16	40	**MJ69152162**	Price
1-3/4 x 1-3/16	60	**MJ69152164**	Price
1-3/4 x 1-3/16	80	**MJ69152165**	Price
2-1/2 x 1-3/16	40	**MJ69152262**	Price
2-1/2 x 1-3/16	60	**MJ69152264**	Price
2-1/2 x 1-3/16	80	**MJ69152265**	Price
3 x 1-3/16	40	**MJ69152342**	Price
3 x 1-3/16	60	**MJ69152344**	Price
3 x 1-3/16	80	**MJ69152345**	Price
3-1/2 x 1-3/16	40	**MJ69152442**	Price
3-1/2 x 1-3/16	60	**MJ69152444**	Price
3-1/2 x 1-3/16	80	**MJ69152445**	Price

Aluminum Oxide Threaded Flap Wheels



- Quick mounting on 4-1/2" and 5" angle grinders
- Recommended for weld dressing, removing rust, paint, coatings and heat discoloration
- Works well for general purpose grinding on a wide variety of workpiece contours

New!

Dia. (in.)	Face Width (in.)	Grit	RPM	Order No.	Price
4-1/2	3/4	A40	13300	**MJ69325350**	Price
4-1/2	3/4	A60	13300	**MJ69325351**	Price
4-1/2	3/4	A80	13300	**MJ69325352**	Price
4-1/2	3/4	A120	13300	**MJ69325353**	Price

Mandrels for Flap Bands

New!



Dia. (in.)	Width (in.)	Order No.	Price
1-1/4	3/4	**MJ69150950**	Price
1-3/4	1-3/16	**MJ69150954**	Price
2-1/2	1-3/16	**MJ69150956**	Price
3	1-3/16	**MJ69150958**	Price
3-1/2	1-3/16	**MJ69150961**	Price

Zirconia Flap Bands



- Flap Bands act more aggressively than a flap wheel which reduces labor costs by removing material faster
- Requires less pressure than a flap wheel
- Easier to control than a carbide burr, virtually eliminating vibration, helping to relieve operator fatigue

Size (in.)	Grit	Std. Pack	Order No.	Price
1-1/4 x 3/4	40	10	**MJ69151022**	Price
1-1/4 x 3/4	60	10	**MJ69151024**	Price
1-1/4 x 3/4	80	10	**MJ69151025**	Price
1-1/4 x 3/4	120	10	**MJ69151027**	Price
1-3/4 x 1-3/16	40	10	**MJ69151162**	Price
1-3/4 x 1-3/16	60	10	**MJ69151164**	Price
1-3/4 x 1-3/16	80	10	**MJ69151165**	Price
1-3/4 x 1-3/16	120	10	**MJ69151167**	Price
2-1/2 x 1-3/16	40	10	**MJ69151262**	Price
2-1/2 x 1-3/16	60	10	**MJ69151264**	Price
2-1/2 x 1-3/16	80	10	**MJ69151265**	Price
2-1/2 x 1-3/16	120	10	**MJ69151267**	Price
3 x 1-3/16	40	10	**MJ69151342**	Price
3 x 1-3/16	60	10	**MJ69151344**	Price
3 x 1-3/16	80	10	**MJ69151345**	Price
3 x 1-3/16	120	10	**MJ69151347**	Price
3-1/2 x 1-3/16	40	10	**MJ69151442**	Price
3-1/2 x 1-3/16	60	10	**MJ69151444**	Price
3-1/2 x 1-3/16	80	10	**MJ69151445**	Price
3-1/2 x 1-3/16	120	10	**MJ69151447**	Price

Aluminum Oxide Flexible Flap Wheels

New!



Dia. (in.)	Face Width (in.)	Shank (in.)	Grit	RPM	Standard Pkg.	Order No.	Price
5/8	5/8	1/4	60	30000	10	**SP11FW1390604A**	Price
5/8	5/8	1/4	80	30000	10	**SP11FW1390804A**	Price
3/4	3/4	1/4	60	30000	10	**SP11FW1400604A**	Price
3/4	3/4	1/4	80	30000	10	**SP11FW1400804A**	Price
3/4	3/4	1/4	120	30000	10	**SP11FW1401204A**	Price
1	1	1/4	40	30000	10	**SP11FW1430404A**	Price
1	1	1/4	60	30000	10	**SP11FW1430604A**	Price
1	1	1/4	80	30000	10	**SP11FW1430804A**	Price
1	1	1/4	120	30000	10	**SP11FW1431204A**	Price
1-1/2	1	1/4	40	30000	10	**SP11FW1550404A**	Price
1-1/2	1	1/4	60	30000	10	**SP11FW1550604A**	Price
1-1/2	1	1/4	80	30000	10	**SP11FW1550804A**	Price
1-1/2	1	1/4	120	30000	10	**SP11FW1551204A**	Price
2	1	1/4	40	30000	10	**SP11FW1630404A**	Price
2	1	1/4	60	30000	10	**SP11FW1630604A**	Price
2	1	1/4	80	30000	10	**SP11FW1630804A**	Price
2	1	1/4	120	30000	10	**SP11FW1631204A**	Price
2-1/2	1	1/4	60	30000	10	**SP11FW1700604A**	Price
2-1/2	1	1/4	80	30000	10	**SP11FW1700804A**	Price
2-1/2	1	1/4	120	30000	10	**SP11FW1701204A**	Price
3	1	1/4	40	30000	10	**SP11FW1790404A**	Price
3	1	1/4	60	30000	10	**SP11FW1790604A**	Price
3	1	1/4	80	30000	10	**SP11FW1790804A**	Price
3	1	1/4	120	30000	10	**SP11FW1791204A**	Price

Ceramic Mounted Flap Wheels

New!



- Ceramic grain with a grinding aid to reduce heat on hard materials like stainless steel, titanium, nickel and alloys
- Self sharpening grain is aggressive, while the cotton backing also helps dissipate the heat
- Applications include food processing equipment, turbines and castings

					SX120		SX60		SX80	
Dia. (in.)	Face Width (in.)	Shank Size (in.)	RPM	Std. Pack	Order No.	Price	Order No.	Price	Order No.	Price
1-1/2	1	1/4	30000	10	**MJ69112487**	Price	**MJ69112484**	Price	**MJ69112485**	Price
2	1	1/4	25000	10	**MJ69112547**	Price	**MJ69112544**	Price	**MJ69112545**	Price
3	1	1/4	20000	10	**MJ69112647**	Price	**MJ69112644**	Price	**MJ69112645**	Price

Flap Wheels

1/4" & 1/4"-20 Shank



- 1/4" and 1/4-20 shank mounted flap wheels featuring quality aluminum oxide coated abrasive material. The flaps, arranged like a fan around the shaft of the tool, provide for consistent cutting action, maximum performance and long life
- Applications: all ferrous and non-ferrous materials, stainless steel, iron, brass, aluminum, plastic, fiberglass, wood and glass. Excellent for working in small, difficult to reach places
- 10 Per carton

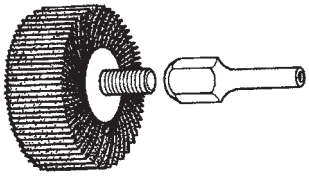
Shank Size - 1/4							
				CGW		Merit	
Dia. (in.)	Face Width (in.)	Grit	RPM	Order No.	Price	Order No.	Price
3/4	3/4	60	30000	MH5014060	Price	MM5937865	Price
3/4	3/4	80	30000	MH5014080	Price	MM5937841	Price
3/4	3/4	120	30000	MH50140120	Price	MM5937842	Price
3/4	3/4	180	30000	MH50140180	Price	MM5937868	Price
3/4	3/4	240	30000	MH50140240	Price	MM5937844	Price
3/4	3/4	320	30000	MH50140320	Price	MM5937870	Price
1	5/8	60	30000	MH5014160	Price	-	-
1	5/8	80	30000	MH5014180	Price	-	-
1	5/8	120	30000	MH50141120	Price	-	-
1	1	40	30000	MH5014340	Price	-	-
1	1	60	30000	MH5014360	Price	MM5937310	Price
1	1	80	30000	MH5014380	Price	MM5937311	Price
1	1	120	30000	MH50143120	Price	MM5937312	Price
1	1	180	30000	MH50143180	Price	MM5937313	Price
1	1	240	30000	MH50143240	Price	MM5937114	Price
1	1	320	30000	MH50143320	Price	MM5937315	Price
1-1/2	1/2	60	25000	MH5014960	Price	MM5937130	Price
1-1/2	1/2	80	25000	MH5014980	Price	MM5937131	Price
1-1/2	1/2	120	25000	MH50149120	Price	MM5937132	Price
1-1/2	1/2	180	25000	MH50149180	Price	MM5937133	Price
1-1/2	1/2	240	25000	MH50149240	Price	MM5937134	Price
1-1/2	1	60	25000	MH5015560	Price	MM5937340	Price
1-1/2	1/2	320	25000	MH50149320	Price	-	-
1-1/2	1	80	25000	MH5015580	Price	MM5937141	Price
1-1/2	1	120	25000	MH50155120	Price	MM5937142	Price
1-1/2	1	40	25000	MH5015540	Price	-	-
2	1	60	25000	MH5016360	Price	MM5937370	Price
2	1	80	25000	MH5016380	Price	MM5937371	Price
2	1	120	25000	MH50163120	Price	MM5937372	Price
2-1/2	1	60	20000	MH5017160	Price	MM5937410	Price
2-1/2	1	80	20000	MH5017180	Price	MM5937411	Price
2-1/2	1	120	20000	MH50171120	Price	MM5937412	Price
1-1/2	1	180	25000	MH50155180	Price	MM5937343	Price
3	1	60	20000	MH5017960	Price	MM5937450	Price
1-1/2	1	240	25000	MH50155240	Price	MM5932101	Price
2-1/2	1	180	20000	-	-	MM5937413	Price
3	1	80	20000	MH5017980	Price	MM5937451	Price
1-1/2	1	320	25000	MH50155320	Price	MM5937145	Price
3	1	120	20000	MH50179120	Price	MM5937252	Price
2	1/2	60	25000	MH5015960	Price	MM5937350	Price
2	1/2	80	25000	MH5015980	Price	MM5937151	Price
2	1/2	120	25000	MH50159120	Price	MM5937152	Price
2	1/2	180	25000	MH50159180	Price	MM5937353	Price

Shank Size - 1/4							
				CGW		Merit	
Dia. (in.)	Face Width (in.)	Grit	RPM	Order No.	Price	Order No.	Price
2	1/2	240	25000	MH50159240	Price	MM5937354	9.30
2	1/2	320	25000	MH50159320	Price	MM5937355	Price
2	1	40	25000	MH5016340	Price	-	-
2	1	180	25000	MH50163180	Price	MM5937373	Price
2	1	240	25000	MH50163240	Price	MM5937374	Price
2	1	320	25000	MH50163320	Price	MM5937375	Price
2	1-1/2	40	25000	MH5016540	Price	-	-
2	1-1/2	60	25000	MH5016560	Price	-	-
2	1-1/2	80	25000	MH5016580	Price	-	-
2	1-1/2	120	25000	MH50165120	Price	-	-
2-1/2	1/2	60	20000	MH5016760	Price	MM5937400	Price
2-1/2	1/2	120	20000	MH50167120	Price	MM5937202	Price
2-1/2	1	240	20000	MH50171240	Price	MM5937633	Price
2-1/2	1	320	20000	MH50171320	Price	MM5937415	Price
2-1/2	1-1/2	80	20000	MH5017380	Price	-	-
2-1/2	1-1/2	60	20000	MH5017360	Price	-	-
3	1/2	60	20000	MH5017560	Price	MM5937230	Price
3	1/2	80	20000	MH5017580	Price	MM5937231	Price
3	1/2	120	20000	MH50175120	Price	-	-
3	1/2	180	20000	MH50175180	Price	MM5937433	Price
3	1/2	240	20000	MH50175240	Price	MM5937235	Price
3	1/2	320	20000	MH50175320	Price	MM5937287	Price
3	1	40	20000	MH5017940	Price	-	-
3	1	180	20000	MH50179180	Price	MM5937253	Price
3	1	240	20000	MH50179240	Price	MM5935339	Price
3	1	320	20000	MH50179320	Price	MM5935341	Price
3	1-1/2	60	20000	MH5018160	Price	MM5930686	Price
3	1-1/2	80	20000	MH5018180	Price	-	-
3	1-1/2	180	20000	MH50181180	Price	MM5930683	Price
3	1-1/2	240	20000	MH50181240	Price	MM5930684	Price
3	1-1/2	320	20000	MH50181320	Price	MM5943880	Price
3	2	40	20000	MH5018540	Price	-	-
3	2	60	20000	MH5018560	Price	-	-
3	2	80	20000	MH5018580	Price	-	-
3	2	120	20000	MH50185120	Price	-	-
2-1/2	1-1/2	120	20000	MH50173120	Price	-	-
3	1-1/2	120	20000	MH50181120	Price	-	-

Shank Size - 1/4-20					
				CGW	
Dia. (in.)	Face Width (in.)	Grit	RPM	Order No.	Price
1	1	40	30000	MH5014240	Price
1	1	60	30000	MH5014260	Price
1	1	80	30000	MH5014280	Price
1	1	120	30000	MH50142120	Price
1-1/2	1	60	25000	MH5015460	Price
1-1/2	1	80	25000	MH5015480	Price
1-1/2	1	120	25000	MH50154120	Price
2	1	40	25000	MH5016240	Price
2	1	60	25000	MH5016260	Price
2	1	80	25000	MH5016280	Price
2	1	120	25000	MH50162120	Price
2-1/2	1	60	20000	MH5017060	Price
2-1/2	1	80	20000	MH5017080	Price
2-1/2	1	120	20000	MH50170120	Price
3	1	60	20000	MH5017860	Price
3	1	80	20000	MH5017880	Price
3	1	120	20000	MH50178120	Price

Adaptors for Small Diameter Flap Wheels

- For converting 1/4-20 threaded shank to 1/4" straight shank



Shank Size (in.)	Order No.	Price
1/4 x 1	MH61A43318	Price
1/4 x 4	MH61A43319	Price

Unmounted Flap Wheels



- Long wearing
- Aluminum oxide
- Resin bond cloth
- Designed for finishing, smoothing and polishing metal surfaces

				Merit		Value Priced	
Dia. (in.)	Face Width (in.)	Hole Size (in.)	Grit	Order No.	Price	Order No.	Price
4	1	5/8	120	-	-	MH5041120	Price
4	1	5/8	60	-	-	MH504160	Price
4	1	5/8	80	-	-	MH504180	Price
6	1	1	120	MM5921560	Price	MH5061120	Price
6	1	1	60	MM5921558	Price	MH506160	Price
6	1	1	80	MM5921559	Price	MH506180	Price
-	-	1	-	-	-	MH5062120	Price
6	2	1	60	-	-	MH506260	Price
6	2	1	80	-	-	MH506280	Price

Aluminum Oxide Flap Wheels Metalite R265 - Large and Small Diameter

Small Diameter Flap Wheels





- New Metalite R265 material
- Designed to deliver a consistent finish with a uniform rate of cut
- As the flap wheel wears fresh abrasive is continously exposed
- Provides excellent balance and a smooth, chatter-free finish
- Excellent conformability
- Small diameter flap wheels supplied in either 1/4" shank or 1/4-20 threaded shank (see chart below)
- **10% Discount for Standard Pack Quantity**

					1/4		1/4-20	
Dia. (in.)	Face Width (in.)	Grit Size	RPM	Std. Pkg.	Order No.	Price	Order No.	Price
1	5/8	60	30000	20	**MH61FW0102576**	Price	**MH61FW0102624**	Price
1	5/8	80	30000	20	**MH61FW0102577**	Price	**MH61FW0102625**	Price
1	5/8	120	30000	20	**MH61FW0102578**	Price	**MH61FW0102626**	Price
1	1	60	30000	20	**MH61FW0102580**	Price	**MH61FW0102628**	Price
1	1	80	30000	20	**MH61FW0102581**	Price	**MH61FW0102629**	Price
1	1	120	30000	20	**MH61FW0102582**	Price	**MH61FW0102630**	Price
1	1	180	30000	20	**MH61FW0102583**	Price	-	-
1-3/8	5/8	60	30000	20	**MH61FW0102584**	Price	**MH61FW0102632**	Price
1-3/8	5/8	80	30000	20	**MH61FW0102585**	Price	**MH61FW0102633**	Price
1-3/8	5/8	120	30000	20	-	-	**MH61FW0102634**	Price
1-5/8	1/2	60	23000	20	-	-	**MH61FW0102635**	Price
1-5/8	1	80	23000	20	-	-	**MH61FW0102639**	Price
1-5/8	1	120	23000	20	-	-	**MH61FW0102640**	Price
2	1/2	60	23000	20	**MH61FW0202596**	Price	**MH61FW0202642**	Price
2	1/2	80	23000	20	**MH61FW0202597**	Price	**MH61FW0202643**	Price
2	1/2	120	23000	20	-	-	**MH61FW0202644**	Price
2	1/2	180	23000	20	-	-	**MH61FW0202645**	Price
2	1	60	23000	20	**MH61FW0202600**	Price	**MH61FW0202646**	Price
2	1	80	23000	20	**MH61FW0202601**	Price	**MH61FW0202647**	Price
2	1	120	23000	20	**MH61FW0202602**	Price	**MH61FW0202648**	Price
2	1	180	23000	20	**MH61FW0202603**	Price	-	-
2-1/2	1/2	60	23000	20	**MH61FW0202604**	Price	-	-
2-1/2	1/2	80	23000	20	**MH61FW0202605**	Price	**MH61FW0202651**	Price
2-1/2	1/2	180	23000	20	**MH61FW0202607**	Price	-	-
2-1/2	1	60	23000	20	**MH61FW0202608**	Price	**MH61FW0202654**	Price
2-1/2	1	80	23000	20	**MH61FW0202609**	Price	**MH61FW0202655**	Price
2-1/2	1	120	23000	20	**MH61FW0202610**	Price	**MH61FW0202656**	Price
3	1/2	60	20000	20	**MH61FW0302612**	Price	**MH61FW0302658**	Price
3	1/2	80	20000	20	**MH61FW0302613**	Price	**MH61FW0302659**	Price
3	1/2	120	20000	20	**MH61FW0302614**	Price	**MH61FW0302660**	Price
3	3/4	120	20000	20	-	-	**MH61FW0302663**	Price
3	1	60	20000	20	**MH61FW0302620**	Price	**MH61FW0302664**	Price
3	1	80	20000	20	**MH61FW0302621**	Price	**MH61FW0302665**	Price
3	1	120	20000	20	**MH61FW0302622**	Price	**MH61FW0302666**	Price

Mini Flap Wheels

- All Mini Wheels have 1/8" shank
- 10 Wheels per box



SHUR-KUT MERIT

			Generic USA		Merit	
Dia. (in.)	Face Width (in.)	Grit	Order No.	Price	Order No.	Price
3/8	3/8	80	**MH5024791**	Price	**MM5937471**	Price
3/8	3/8	120	**MH5024802**	Price	**MM5937472**	Price
3/8	3/8	180	**MH5024803**	Price	**MM5937473**	Price
3/8	3/8	240	**MH5024804**	Price	**MM5937474**	Price
5/8	5/8	80	**MH5024806**	Price	**MM5937481**	Price
5/8	5/8	120	**MH5024807**	Price	**MM5937482**	Price
5/8	5/8	180	**MH5024808**	Price	**MM5937483**	Price
5/8	5/8	240	**MH5024809**	Price	**MM5937484**	Price
3/4	3/4	80	**MH5024821**	Price	**MM5937591**	Price

Large Diameter Flap Wheels





Dia. (in.)	Face Width (in.)	Hole Size (in.)	Grit	RPM	Std. Pkg. Qty.	Order No.	Price
3-1/2	1	5/8	120	12000	10	**MH61FW0302670**	Price
3-1/2	1	5/8	60	12000	10	**MH61FW0302668**	Price
3-1/2	1	5/8	80	12000	10	**MH61FW0302669**	Price
3-1/2	2	5/8	80	12000	10	**MH61FW0302672**	Price
4	1	5/8	120	12000	10	**MH61FW0402675**	Price
4	1	5/8	60	12000	10	**MH61FW0402673**	Price
4	1	5/8	80	12000	10	**MH61FW0402674**	Price
4	2	5/8	60	12000	10	**MH61FW0402677**	Price
5	1	5/8	80	6200	5	**MH61FW0502678**	Price
6	1	1	120	6200	5	**MH61FW0602682**	Price
6	1	1	60	6200	5	**MH61FW0602680**	Price
6	1	1	80	6200	5	**MH61FW0602681**	Price
6	1-1/2	1	120	6200	5	**MH61FW0602688**	Price
6	1-1/2	1	60	6200	5	**MH61FW0602686**	Price
6	1-1/2	1	80	6200	5	**MH61FW0602687**	Price
6	2	1	120	6200	5	**MH61FW0602694**	Price
6	2	1	60	6200	5	**MH61FW0602691**	Price
6	2	1	80	6200	5	**MH61FW0602692**	Price
6	3	1	80	6200	5	**MH61FW0602696**	Price
8	1	1	120	4700	3	**MH61FW0802699**	Price
8	1	1	60	4700	3	**MH61FW0802697**	Price
8	1	1	80	4700	3	**MH61FW0802698**	Price
8	2	1	60	4700	3	**MH61FW0802700**	Price
8	2	1	80	4700	3	**MH61FW0802701**	Price

Reducing Bushing for 3-1/2" - 8" Flap Wheels

(Reduces 1" Center Hole)



Reduces Arbor Size To (in.)	Order No.	Price
1/2	**MH61A59437**	Price
5/8	**MH61A59438**	Price
3/4	**MH61A59439**	Price
7/8	**MH61A59440**	Price

SHUR-KUT MERIT

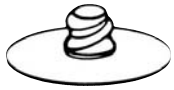
			Generic USA		Merit	
Dia. (in.)	Face Width (in.)	Grit	Order No.	Price	Order No.	Price
3/4	3/4	120	**MH5024822**	Price	**MM5937592**	Price
3/4	3/4	180	**MH5024823**	Price	**MM5937593**	Price
3/4	3/4	240	**MH5024824**	Price	**MM5937594**	Price
1-3/16	1/8	80	**MH5024826**	Price	**MM5937491**	Price
1-3/16	1/8	120	**MH5024827**	Price	**MM5937492**	Price
1-3/16	1/8	180	**MH5024828**	Price	**MM5937493**	Price
1-3/16	1/8	240	**MH5024829**	Price	**MM5937494**	Price
1-3/16	3/16	80	**MH5024832**	Price	**MM5937501**	Price
1-3/16	3/16	120	**MH5024833**	Price	**MM5937502**	Price
1-3/16	3/16	180	**MH5024834**	Price	**MM5937503**	Price
1-3/16	3/16	240	**MH5024835**	Price	**MM5937504**	Price

Quick Change Discs/Holder Mounting Types

Quick Change TS System: Metal-to-Metal quick change system. Disc has a female screw type button and holder has a male socket. Also known as SocAtt, Type II, Type S, Turn-on, TS, Speedlok TS, Roloc TS/TSM



Quick Change TR System: Features a common nylon threaded (screw type) male hub and holder has a metal female socket. Also known as Lockit, Type III, Type R, Rol-on, TR, Speedlok TR, Roloc TR.



Quick Change TP System: Features a snap-on/ snap-off nylon fastening hub and holder. Also known as ClickOn, Type I, Type TP, Snap-on, TP, Speedlok TP, Roloc TP.



Quick Change Disc Holder Pads



	Turn-On		Rol-On		Snap-On	
Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1	**MM5964651**	Price	**MM5964037**	Price	**MM5964002**	Price
2	**MM5964198**	Price	**MM5964922**	Price	**MM5964004**	Price
3	**MM5964113**	Price	**MM5964949**	Price	**MM5964005**	Price
1-1/2	**MM5964146**	Price	**MM5961174**	Price	**MM5964003**	Price

SURF PRO Air Cooled Quick Change Holder Pads


Type S


Type R

- Serated pad air cools disc for reduced loading and longer disc life
- Multiple mounting option available

Dia. (in.)	Style	Maximum RPM	Order No.	Price
1-1/2	Type R Air Cooled QC Holder Pad Mandrel	30000	**SP24QCH15TR14SC**	Price
1-1/2	Type S Air Cooled QC Holder Pad Mandrel	30000	**SP24QCH15TS14SC**	Price
2	Type R Air Cooled QC Holder Pad Mandrel	30000	**SP24QCH20TR14SC**	Price
2	Type S Air Cooled QC Holder Pad Mandrel	30000	**SP24QCH20TS14SC**	Price
3	Type R Air Cooled QC Holder Pad Kit †	20000	**SP24HK3TR14M58A**	Price
3	Type R Air Cooled QC Holder Pad Mandrel	20000	**SP24QCH30TR14SC**	Price
4	Type R Air Cooled QC Holder Pad Mandrel	15000	**SP24QCH40TR14SC**	Price
4	Type S Air Cooled QC Holder Pad Mandrel	15000	**SP24QCH40TS14SC**	Price
3	Type S Air Cooled QC Holder Pad Mandrel	20000	**SP24QCH30TS14SC**	Price
3/8-24	Arbor Adapter	30000	**SP24A3824F1420M**	Price
5/8-11	Arbor Adapter	30000	**SP24A5811F1420M**	Price



† Kit Contains: 3" Typre R Holder, 1/4-20 x 2" Mandrel, 5/8-11 F to 1/4-20 M Arbor Adaptor

NORTON Air Cooled Standard Back Up Pads

- Slotted hub design and curved ribs draw heat away from the grinding zone, reducing disc loading and increasing life
- All pads have a 5/8-11 threaded female hub for mounting
- Also offer a no-nose for shorter shafted angle grinders
- Standard Pack 5



Style - Standard Type - Backup Pad				
Dia. (in.)	Hardness	RPM	Order No.	Price
4	Medium	12,000	**MH62A04918**	Price
4-1/2	Medium	11,000	**MH62A02122**	Price
5	Medium	10,000	**MH61A43421**	Price
7	Hard	8,600	**MH61A43425**	Price
7	Medium	8,600	**MH61A43422**	Price
9	Hard	6,600	**MH62A43426**	Price
9	Medium	6,600	**MH62A43423**	Price

Style - 66NS Short Retainer Nut Type - Tools	
Order No.	Price
MH61A43461	Price

Style - No Nose Type - Backup Pad				
Dia. (in.)	Hardness	RPM	Order No.	Price
4-1/2	Medium	11,000	**MH62A04872**	Price
5	Medium	10,000	**MH62A03000**	Price

Style - No. 103 Retainer Nut Type - Tools	
Order No.	Price
MH61A43463	Price

Polypropylene Back-up Pads

- Polypropylene back-up pads for use with medium to fine grits
- Spiral ribs provide contact points and form channels for air flow, extending disc life



Dia. (in.)	Hole Size (in.)	RPM	Order No.	Price
4-1/2	5/8	11,000	**MM6645009**	Price
5	7/8	10,000	**MM6650019**	Price
7	7/8	7,000	**MM6670006**	Price

Air Cooled Backing Pads

For Resin Fiber Discs



- Rubberized backing pads are ideal for all sanding operations on metal, plastic, fiberglass etc
- Raised ridge design allows for cooler cutting and extended disc life

Dia. (in.)	Arbor Mount	Order No.	Price
4-1/2	5/8	**MM9244003**	Price
5	5/8-11	**MM9244006**	Price
7	5/8-11	**MM9244009**	Price

Rubber Back-Up Pads



- Rubber back-up pads for use with coarse grits
- Spiral ribs provide contact points and form channels for air flow, extending disc life 30% to 50%
- Larger air holes provide cooler operating and longer abrasive disc life
- Pad size meets ANIS B186.1 standards
- Smooth face pads are excellent for general purpose aplications
- Nut not included

Description - Rol-On			
Size (in.)	**Type**	**Order No.**	**Price**
2 x 1/4	Medium	**MG9059732**	Price
3 x 1/4	Medium	**MG9059734**	Price

Description - Rubber with Smooth Bore & Spiral Pattern			
Size (in.)	**Type**	**Order No.**	**Price**
4-1/2	Medium	**MG9049521**	Price

Description - Rubber with Smooth Face			
Size (in.)	**Type**	**Order No.**	**Price**
4-1/2 x 5/8-11	Medium	**MG9049508**	Price
7 x 5/8-11	Medium	**MG9049506**	Price

Description - Rubber with Standard Spiral Pattern			
Size (in.)	**Type**	**Order No.**	**Price**
4-1/2 x 5/8-11	Medium	**MG9048220**	Price
5 x 5/8-11	Medium	**MG9048221**	Price
7 x 5/8-11	Flexible	**MG9049510**	Price
7 x 5/8-11	Medium	**MG9048222**	Price
7 x 5/8-11	Ridgid	**MG9049511**	Price
9 x 5/8-11	Medium	**MG9048239**	Price

Description - Turn-On			
Size (in.)	**Type**	**Order No.**	**Price**
2 x 1/4	Medium	**MG9059733**	Price
3 x 1/4	Medium	**MG9059735**	Price

Polypropylene Back-Up Pad



- Polypropylene back-up pads for use with medium to fine grits
- Spiral ribs provide contact points and form channels for air flow, extending disc life 30% to 50%

Size (in.)	Type	Order No.	Price
4-1/2	Medium	**MG9036204**	Price
5	Medium	**MG9036205**	Price
7	Medium	**MG9036206**	Price

Back-Up Pad Accesories

Description	Order No.	Price
5/8"-11 Locking Pad Nut and 1-1/2" Flange Nut w/ Hole	**MG9048223**	Price
5/8"-11 Locking Pad Nut and 2" Flange Nut w/ Hole	**MG9049530**	Price

Disc Holders

For adhesive back discs
Used on Hi-Speed portable disc sanders



Dia. (in.)	Shank Size (in.)	Order No.	Price
1	1/4	**MM58001**	Price
2	1/4	**MM58002**	Price
3	1/4	**MM58003**	Price

Fibre Disc Back-Up Pads

Disc Pad Hub:



- Plastic hub with 5/8-11 metal insert for use with 3M disc pad face plates
- Hubs shown are 2-1/2” for use with all 3M disc pad plates
- TM1188743 is for use on tools with shaft length 1/2” or less

Disc Pad Plate:



- Back-up plates for fibre discs. For use with 3M disc pad hubs
- Ribbed plates provide cooler running of the disc
- Plates shown are hard (black) for heavier stock removal applications

Description	Order No.	Price
2-1/2" Dia. for use with all size face plates, tool shaft length 1/2" or less	**TM1188743**	Price
2-1/2" Dia. for use with all size face plates.	**TM1145205**	Price
4/1/2" Smooth Face Plate, max RPM 13,000	**TM1114270**	Price
5" Ribbed Plate. max RPM 12,000	**TM1181733**	Price
7" Ribbed Plate, max RPM 8,600	**TM1180515**	Price

AVOS Edger Speed-Lok Back-Up Pads



Disc Size (in.)	Hole Size	Order No.	Price
5	5/8-11	**MH61A02517**	Price
7	5/8-11	**MH61A04874**	Price
4-1/2	5/8-11	**MH61A02985**	Price

Flat Head Wheel Arbors

- Left hand threaded arbor
- “Flat Head” style allows mounting between a single washer and the flat-head
- For mounting wire wheel brushes & other abrasive finishing products
- Rust proof finish



Fits Arbor Hole (in.)	Wheel Width Up to (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
1/2	1/2	1/4	2-5/16	**MM54FHL30**	Price
1/2	3/8	1/4	1-7/8	**MM54FHL25X**	Price
1/2	7/8	1/4	2-5/16	**MM54FHL30X**	Price
1/4	3/4	3/16	1-3/4	**MM54FHL8X**	Price
3/8	3/8	1/4	1-5/8	**MM54FHL10X**	Price
5/8	3/8	1/4	1-7/8	**MM54FHL50X**	Price

SURF PRO® Resin Fibre Discs



- Excellent economical discs for all shop applications
- Long lasting aluminum oxide and zirconia alumina grains
- These fibre discs feature a full resin bond system with a heavy duty fibre backing for increased strength, durability and tear resistance
- Aluminum oxide versatile abrasive for general purpose applications, X weight cloth back
- Zirconia alumina recommended for removal and finish on ferrous and non-ferrous metals, X weight polyester back

		Aluminum Oxide		Zirconia	
Dia. (in.)	Grit	Order No.	Price	Order No.	Price
4-1/2	16	**SP11RF45A45016A**	Price	**SP11RF45A45016Z**	Price
4-1/2	24	**SP11RF45A45024A**	Price	**SP11RF45A45024Z**	Price
4-1/2	36	**SP11RF45A45036A**	Price	**SP11RF45A45036Z**	Price
4-1/2	50	**SP11RF45A45050A**	Price	**SP11RF45A45050Z**	Price
4-1/2	60	**SP11RF45A45060A**	Price	**SP11RF45A45060Z**	Price
4-1/2	80	**SP11RF45A45080A**	Price	**SP11RF45A45080Z**	Price
4-1/2	100	**SP11RF45A45100A**	Price	-	-
4-1/2	120	**SP11RF45A45120A**	Price	-	-
5	16	**SP11RF50A50016A**	Price	**SP11RF50A50016Z**	Price
5	24	**SP11RF50A50024A**	Price	**SP11RF50A50024Z**	Price
5	36	**SP11RF50A50036A**	Price	**SP11RF50A50036Z**	Price
5	50	**SP11RF50A50050A**	Price	**SP11RF50A50050Z**	Price
5	60	**SP11RF50A50060A**	Price	**SP11RF50A50060Z**	Price
5	80	**SP11RF50A50080A**	Price	**SP11RF50A50080Z**	Price
5	100	**SP11RF50A50100A**	Price	-	-
5	120	**SP11RF50A50120A**	Price	-	-
7	16	**SP11RF70A70016A**	Price	**SP11RF70A70016Z**	Price
7	24	**SP11RF70A70024A**	Price	**SP11RF70A70024Z**	Price
7	36	**SP11RF70A70036A**	Price	**SP11RF70A70036Z**	Price
7	50	**SP11RF70A70050A**	Price	**SP11RF70A70050Z**	Price
7	60	**SP11RF70A70060A**	Price	**SP11RF70A70060Z**	Price
7	80	**SP11RF70A70080A**	Price	**SP11RF70A70080Z**	Price
7	100	**SP11RF70A70100A**	Price	-	-
7	120	**SP11RF70A70120A**	Price	-	-

NORTON GreenLyte Plus SG F986 Fibre Discs



Features:
- Premium, dense, self-sharpening SG ceramic abrasive grain with a unique coating design
- F986 has a self-lubricating, supersizing treatment
- 7″ & 9-1/8″ discs have doming design

Benefits:
- Faster initial cut rate, longer life & improved finishes versus competitive ceramic
- Greatest productivity vs. any fibre & lowest total cost
- Greatest Chip clearance; minimal loading
- Superb on stainless steel & steel alloys
- Ideal for edges & corners
- Better shape control; resists curling

Dia. (in.)	Hole (in.)	Grit	Std. Pkg.	Order No.	Price
4-1/2	7/8	60	25	**MH61D0408467**	Price
9	7/8	80	25	**MH61D0908452**	Price
4-1/2	7/8	36	25	**MH61D0441305**	Price
4-1/2	7/8	50	25	**MH61D0441304**	Price
7	7/8	24	25	**MH61D0710006**	Price
7	7/8	50	25	**MH61D0741294**	Price
7	7/8	60	25	**MH61D0741293**	Price
7	7/8	80	25	**MH61D0741292**	Price

Quick Change Resin Fiber Discs

Aluminum Oxide Zirconia (Blue in Color)



- 5/8-11 Arbor fits most grinders
- Eliminates excessive hardware
- Increases productivity – reduces downtime
- 25 Pcs. per carton

Dia. (in.) - 5				
	Aluminum Oxide		Zirconia	
Grit	Order No.	Price	Order No.	Price
24	**MM65524**	Price	**MM65B524**	Price
36	**MM65536**	Price	**MM65B536**	Price
50	**MM65550**	Price	**MM65B550**	Price
60	**MM65560**	Price	**MM65B560**	Price
80	**MM65580**	Price	**MM65B580**	Price

Dia. (in.) - 7				
	Aluminum Oxide		Zirconia	
Grit	Order No.	Price	Order No.	Price
24	**MM65724**	Price	**MM65B724**	Price
36	**MM65736**	Price	**MM65B736**	Price
50	**MM65750**	Price	**MM65B750**	Price
60	**MM65760**	Price	**MM65B760**	Price
80	**MM65780**	Price	**MM65B780**	Price

NORTON Ceramic Grain Resin Fiber Disc

- Cool cutting next generation SG Blaze F980 Ceramic Grain with “supersize” grinding aid provides fast cut rate and better part finish
- Y weight polyester backing for longer disc life, durability and added aggressiveness



Dia. (in.)	Hole (in.)	Material	Grit	Std. Pkg.	Order No.	Price
4-1/2	7/8	Ceramic Alumina	24	25	**MH61D0498000**	Price
4-1/2	7/8	Ceramic Alumina	36	25	**MH61D0498001**	Price
4-1/2	7/8	Ceramic Alumina	50	25	**MH61D0498002**	Price
4-1/2	7/8	Ceramic Alumina	60	25	**MH61D0498003**	Price
4-1/2	7/8	Ceramic Alumina	80	25	**MH61D0498004**	Price
4-1/2	7/8	Ceramic Alumina	120	25	**MH61D0425332**	Price

NORTON MERIT Abrasive Fibre Discs

The industry's most complete fibre disc offering: long lasting aluminum oxide and zirconia alumina grains. These fibre discs feature a full resin bond system with a heavy duty fibre backing for increased strength, durability and tear resistance.

- **Merit Abrasive Fibre Discs:** Excellent economical discs for all shop applications
- **Norton Abrasive Fibre Discs:** Premier Discs for production metal finishing
- **Aluminum Oxide:** Versatile abrasive for general purpose applications, X Weight cloth back
- **Zirconia Alumina:** Recommended for removal and finish on ferrous and non-ferrous metals, X weight polyester back
- 7/8 Arbor hole
- Standard package 25 pc.



Aluminum Oxide



Zirconia Alumina

Material - Aluminum Oxide Trade Name - Metal			
Dia. (in.)	Grit	Order No.	Price Ea.
4-1/2	24	**MM5953309**	Price
4-1/2	36	**MM5953306**	Price
4-1/2	50	**MM5953310**	Price
4-1/2	60	**MM5953311**	Price
4-1/2	80	**MM5953312**	Price
4-1/2	100	**MM5953313**	Price
4-1/2	120	**MM5953314**	Price
5	36	**MM5957277**	Price
5	50	**MM5957278**	Price
5	60	**MM5957279**	Price
5	80	**MM5957280**	Price
5	100	**MM5957281**	Price
5	120	**MM5957282**	Price
7	36	**MM5957284**	Price
7	60	**MM5957286**	Price
7	80	**MM5957287**	Price
7	120	**MM5957289**	Price

Material - Aluminum Oxide Trade Name - Metallite			
Dia. (in.)	Grit	Order No.	Price Ea.
4-1/2	24	**MH61D0433519**	Price
5	16	**MH61D0533617**	Price
5	24	**MH61D0533615**	Price
5	50	**MH61D0533605**	Price
5	60	**MH61D0533600**	Price
5	80	**MH61D0533595**	Price
5	100	**MH61D0533590**	Price
5	120	**MH61D0533585**	Price
7	16	**MH61D0733760**	Price
7	36	**MH61D0733750**	Price
7	80	**MH61D0733735**	Price
7	100	**MH61D0733730**	Price

Material - Aluminum Oxide Trade Name - Neon			
Dia. (in.)	Grit	Order No.	Price Ea.
4-1/2	36	**MH61D0495008**	Price
4-1/2	60	**MH61D0495010**	Price
4-1/2	80	**MH61D0495011**	Price
4-1/2	100	**MH61D04095012**	Price
4-1/2	120	**MH61D0495013**	Price
5	36	**MH61D0595017**	Price
5	60	**MH61D0595019**	Price
7	24	**MH61D0795029**	Price

Material - Aluminum Oxide Trade Name - Neon			
Dia. (in.)	Grit	Order No.	Price Ea.
7	36	**MH61D0795030**	Price
7	50	**MH61D0795031**	Price
7	60	**MH61D0795032**	Price
7	80	**MH61D0795033**	Price

Material - Ceramic Alumina Trade Name - Bluefire			
Dia. (in.)	Grit	Order No.	Price Ea.
4-1/2	24	**MH61D0438457**	Price
4-1/2	36	**MH61D0438456**	Price
4-1/2	40	**MH61D040099137**	Price
4-1/2	50	**MH61D0438454**	Price
4-1/2	60	**MH61D0438453**	Price
4-1/2	80	**MH61D040099139**	Price
5	24	**MH61D0538563**	Price
5	36	**MH61D0538562**	Price
5	50	**MH61D0538561**	Price
5	60	**MH61D0538601**	Price
5	80	**MH61D0538600**	Price
7	24	**MH61D0738594**	Price
7	36	**MH61D0738593**	Price
7	50	**MH61D0738592**	Price
7	60	**MH61D0738591**	Price
7	80	**MH61D0738590**	Price

Material - Ceramic Alumina Trade Name - Red Heat			
Dia. (in.)	Grit	Order No.	Price Ea.
4-1/2	24	**MH61D0408454**	Price
4-1/2	36	**MH61D0408465**	Price

Material - Zirconia Alumina Trade Name - Merit			
Dia. (in.)	Grit	Order No.	Price Ea.
4-1/2	36	**MM5953316**	Price
4-1/2	50	**MM5953318**	Price
4-1/2	60	**MM5953319**	Price
4-1/2	80	**MM5953320**	Price
5	24	**MM5957276**	Price
5	36	**MM5957291**	Price
5	50	**MM5957292**	Price
5	60	**MM5957293**	Price
5	80	**MM5957294**	Price
7	36	**MM5957296**	Price
7	50	**MM5957297**	Price
7	60	**MM5957298**	Price
7	80	**MM5957299**	Price

CGW Resin Fiber Discs



Features:

- Premium AO designed for long life, high stock removal and cool cutting action on metal and welds. 7″ has depressed center
- High concentration of Zirconia and heat-treated AO grain provides twice the cutting action of premium AO discs and is extremely heat resistant

High Performance Zirconia Resin Fiber Discs:

- Made in Canada
- Zirconium abrasive alloy sharpens itself in use
- Cool grinding action reduces glazing and loading
- Sharp cutting action lasts longer - maximizing life

			Aluminum Oxide		Zirconia Alumina	
Dia. (in.)	Hole (in.)	Grit	Order No.	Price	Order No.	Price
4	5/8	24	**MG9048001**	Price	**MG9048231**	Price
4	5/8	36	**MG9048002**	Price	**MG9048232**	Price
4	5/8	50	**MG9048004**	Price	**MG9048234**	Price
4	5/8	60	**MG9048005**	Price	**-**	-
4	5/8	80	**MG9048006**	Price	**-**	-
4-1/2	7/8	16	**MG9048010**	Price	**-**	-
4-1/2	7/8	24	**MG9048011**	Price	**MG9048101**	Price
4-1/2	7/8	30	**MG9048013**	Price	**MG9048103**	Price
4-1/2	7/8	36	**MG9048012**	Price	**MG9048102**	Price
4-1/2	7/8	50	**MG9048014**	Price	**MG9048104**	Price
4-1/2	7/8	60	**MG9048015**	Price	**MG9048105**	Price
4-1/2	7/8	80	**MG9048016**	Price	**MG9048106**	Price
4-1/2	7/8	100	**MG9048017**	Price	**-**	-
4-1/2	7/8	120	**MG9048018**	Price	**-**	-
5	7/8	16	**MG9048020**	Price	**-**	-
5	7/8	24	**MG9048021**	Price	**MG9048111**	Price
5	7/8	30	**-**	-	**MG9048113**	Price
5	7/8	36	**MG9048022**	Price	**MG9048112**	Price
5	7/8	50	**MG9048024**	Price	**MG9048114**	Price
5	7/8	60	**MG9048025**	Price	**MG9048115**	Price
5	7/8	80	**MG9048026**	Price	**MG9048116**	Price
5	7/8	100	**MG9048027**	Price	**-**	-
5	7/8	120	**MG9048028**	Price	**-**	-
7	7/8	16	**MG9048030**	Price	**MG9048120**	Price
7	7/8	24	**MG9048031**	Price	**MG9048121**	Price
7	7/8	30	**MG9049233**	Price	**MG9048123**	Price
7	7/8	36	**MG9048032**	Price	**MG9048122**	Price
7	7/8	50	**MG9048034**	Price	**MG9048124**	Price
7	7/8	60	**MG9048035**	Price	**MG9048125**	Price
7	7/8	80	**MG9048036**	Price	**MG9048126**	Price
7	7/8	100	**MG9048037**	Price	**-**	-
7	7/8	120	**MG9048038**	Price	**-**	-
9	7/8	16	**MG9048040**	Price	**-**	-
9	7/8	24	**MG9048041**	Price	**-**	-
9	7/8	36	**MG9048042**	Price	**-**	-
9	7/8	50	**MG9048044**	Price	**-**	-

CGW Resin Fiber Discs

- Packed on spindle spools to prevent curling
- Premium AO designed for long life, high stock removal and cool cutting action on metal and welds. 7” has depressed center
- High concentration of Zirconia and heat treated AO grain provides twice the cutting action of premium AO discs and is extremely heat resistant
- Sold in spindle quantity only

				Aluminum Oxide - Spindle		Zirconia Alumina - Spindle	
Dia. (in.)	Hole (in.)	Grit	Spindle Qty.	Order No.	Price	Order No.	Price
4-1/2	7/8	24	50	**MG9048501**	Price	**MG9048528**	Price
4-1/2	7/8	36	100	**MG9048502**	Price	**MG9048529**	Price
4-1/2	7/8	50	100	**MG9048503**	Price	**MG9048530**	Price
4-1/2	7/8	60	100	**MG9048504**	Price	**MG9048531**	Price
4-1/2	7/8	80	100	**MG9048505**	Price	**MG9048532**	Price
5	7/8	24	50	**MG9048508**	Price	**MG9048533**	Price
5	7/8	36	100	**MG9048509**	Price	**MG9048534**	Price
5	7/8	50	100	**MG9048510**	Price	**MG9048535**	Price
5	7/8	60	100	**MG9048511**	Price	**MG9048536**	Price
5	7/8	80	100	**MG9048512**	Price	**MG9048537**	Price
7	7/8	24	50	**MG9048515**	Price	**MG9048538**	Price
7	7/8	36	100	**MG9048516**	Price	**MG9048539**	Price
7	7/8	50	100	**MG9048517**	Price	**MG9048540**	Price
7	7/8	60	100	**MG9048518**	Price	**MG9048541**	Price
7	7/8	80	100	**MG9048519**	Price	**MG9048542**	Price



CARBORUNDUM Resin Fiber Discs



Features:

- Aggressive yet cool cutting with long life
- Special - treated aluminum oxide

Premier Red Zirconia Alumina Resin Fiber Features:

- Ultra tough, aggressive yet cool cutting & self sharpening
- Best choice for stainless steel
- Increased durabillity - longer life
- Ideal for heavy duty grinding of welds, gates, risers and parting lines on castings and carbon steels

			Aluminum Oxide Carbo - V0947		Zirconia Alumina Carbo Premier Red - V1247	
Dia. (in.)	Hole (in.)	Grit	Order No.	Price	Order No.	Price
4-1/2	7/8	24	**MM4210603**	Price	**MM4220088**	Price
4-1/2	7/8	36	**-**	-	**MM4220087**	Price
4-1/2	7/8	50	**-**	-	**MM4220086**	Price
4-1/2	7/8	60	**MM4210600**	Price	**MM4220034**	Price
4-1/2	7/8	80	**-**	-	**MM4220019**	Price
5	7/8	16	**MM4210684**	Price	**-**	-
5	7/8	24	**MM4210683**	Price	**MM4210713**	Price
5	7/8	36	**-**	-	**MM4210712**	Price
5	7/8	50	**-**	-	**MM4210711**	Price
5	7/8	60	**-**	-	**MM4220069**	Price
5	7/8	80	**-**	-	**MM4220055**	Price
7	7/8	16	**MM4210693**	Price	**-**	-
7	7/8	24	**-**	-	**MM4210722**	Price
7	7/8	36	**-**	-	**MM4210721**	Price
7	7/8	50	**-**	-	**MM4210720**	Price
7	7/8	60	**-**	-	**MM4220077**	Price
7	7/8	80	**-**	-	**MM4220076**	Price
7	7/8	120	**MM4210685**	Price	**-**	-
9	7/8	24	**MM4210702**	Price	**-**	-
9	7/8	36	**MM4210701**	Price	**-**	-
9	7/8	50	**MM4210700**	Price	**-**	-
9	7/8	60	**MM4210699**	Price	**-**	-

Resin Fiber Discs



High Performance Zirconia Resin Fiber Discs:

- Made in Canada
- Zirconium abrasive alloy sharpens itself in use
- Cool grinding action reduces glazing and loading
- Sharp cutting action lasts longer - maximizing life

			Zirconia Alumina	
Dia. (in.)	Hole (in.)	Grit	Order No.	Price
4-1/2	7/8	16	**MM66416**	Price
4-1/2	7/8	24	**MM66424**	Price
4-1/2	7/8	36	**MM66436**	Price
4-1/2	7/8	50	**MM66450**	Price
4-1/2	7/8	60	**MM66460**	Price
4-1/2	7/8	80	**MM66480**	Price
5	7/8	16	**MM66516**	Price
5	7/8	24	**MM66524**	Price
5	7/8	36	**MM66536**	Price
5	7/8	50	**MM66550**	Price
5	7/8	60	**MM66560**	Price
5	7/8	80	**MM66580**	Price
7	7/8	16	**MM66716**	Price
7	7/8	24	**MM66724**	Price
7	7/8	36	**MM66736**	Price
7	7/8	50	**MM66750**	Price
7	7/8	60	**MM66760**	Price
7	7/8	80	**MM66780**	Price

SA STANDARD ABRASIVES Ceramic Resin Fiber Discs

Cool, rapid stock removal on all heat-sensitive metals, including Stainless Steel and High Nickel Alloys. Highest edge durability in the industry

- Edge deburring and blending
- Heavy flash and parting line removal on castings
- Grinding heavy machine tool marks



	4-1/2"				5"				7"			
	7/8		Quick Change		7/8		Quick Change		7/8		Quick Change	
Grit	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
24	**MM30530032**	Price	**MM30531032**	Price	-	-	-	-	**MM30530232**	Price	**MM30531321**	Price
36	**MM30530033**	Price	**MM30531033**	Price	**MM30530133**	Price	-		**MM30530233**	Price	**MM30531322**	Price
50	**MM30530035**	Price	**MM30531035**	Price	**MM30530135**	Price	**MM30531314**	Price	**MM30530235**	Price	**MM30531324**	Price
60	**MM30530036**	Price	**MM30531036**	Price	**MM30530136**	Price	**MM30531315**	Price	-	-	**MM30531325**	Price

3M Cubitron II Fibre Disc 982C

- Lasts longer and requires less grinding pressure than conventional abrasives
- Ideal for applications including weld grinding, beveling, flame-cut edge cleanup and deburring
- Optimized for: carbon steel



Dia. (in.)	Hole Size (in.)	Grit	Max RPM	Std. Pkg.	Order No.	Price
4-1/2	7/8	36+	13300	100	**TM1127400**	Price
4-1/2	7/8	36+	13300	100	**TM1127425**	Price
4-1/2	7/8	36+	13300	50	**TM1128177**	Price
4-1/2	7/8	60+	13300	100	**TM1127631**	Price
4-1/2	7/8	80+	13300	100	**TM1127635**	Price
4-1/2	TN	60+	13300	100	**TM1127639**	Price
4-1/2	TN	80+	13300	100	**TM1127642**	Price
5	7/8	36+	12000	100	**TM1127401**	Price
5	7/8	60+	12000	100	**TM1127632**	Price
5	7/8	80+	12000	100	**TM1127636**	Price
5	TN	36	12000	100	**TM1127404**	Price
5	TN	36	12000	100	**TM1127406**	Price
5	TN	60	12000	100	**TM1127640**	Price
5	TN	80	12000	100	**TM1127643**	Price
7	7/8	36+	8600	100	**TM1127402**	Price
7	7/8	60+	8600	100	**TM1127633**	Price
7	7/8	80+	8600	100	**TM1127637**	Price
7	TN	36	8600	100	**TM1127405**	Price
7	TN	36	8600	100	**TM1127407**	Price
7	TN	60	8600	100	**TM1127641**	Price
7	TN	80	8600	100	**TM1127644**	Price

3M Fibre Discs

785C

- An excellent starting point for stainless steel
- Includes a grinding aid for cooler running



Dia. (in.)	Hole Size (in.)	Grit	Max RPM	Order No.	Price
4-1/2	7/8	36	13300	**TM1180660**	Price
4-1/2	7/8	50	13300	**TM1180661**	Price
4-1/2	7/8	60	13300	**TM1180662**	Price
4-1/2	7/8	80	13300	**TM1180663**	Price
4-1/2	7/8	120	13300	**TM1180665**	Price
5	7/8	24	12000	**TM1113931**	Price
5	7/8	36	12000	**TM1113930**	Price
5	7/8	50	12000	**TM1113928**	Price
5	7/8	60	12000	**TM1113977**	Price
5	7/8	100	12000	**TM1180654**	Price
5	7/8	120	12000	**TM1180655**	Price
7	7/8	24	8600	**TM1113937**	Price
7	7/8	36	8600	**TM1113936**	Price
7	7/8	50	8600	**TM1113934**	Price
7	7/8	60	8600	**TM1113933**	Price
7	7/8	80	8600	**TM1113932**	Price
7	7/8	100	8600	**TM1180656**	Price

3M Fibre Discs

281C

- General purpose disc for weld removal, grinding and blending



Dia. (in.)	Hole Size (in.)	Grit	Max RPM	Order No.	Price
4-1/2	7/8	24	13300	**TM1185959**	Price

3M Fibre Discs

988C

- 3M's best premium disc for long-lasting performance for mild steel grinding



Dia. (in.)	Hole Size (in.)	Grit	Max RPM	Order No.	Price
5	7/8	50	12000	**TM1155742**	Price
5	7/8	80	12000	**TM1155740**	Price
5	7/8	100	12000	**TM1155752**	Price
7	7/8	24	8600	**TM1155964**	Price
7	7/8	50	8600	**TM1155967**	Price
7	7/8	60	8600	**TM1155739**	Price
7	7/8	80	8600	**TM1155968**	Price
9-1/8	7/8	24	6600	**TM1155744**	Price
9-1/8	7/8	36	6600	**TM1155735**	Price
9-1/8	7/8	50	6600	**TM1155733**	Price

3M Cubitron II Fibre Disc 987C

- Works with heat-sensitive materials like stainless steel
- Lasts longer and requires less grinding pressure than conventional abrasives
- Try 987C for yourself and you'll see improvement over your existing fibre dis
- Applications including edge chamfering, beveling, weld removal
- Optimized for: stainless steel, high nickel alloys, superalloys & carbon steel



Arbor Size (in.) - 7/8					
Dia. (in.)	Grit	Max RPM	Std. Pkg.	Order No.	Price
4-1/2	36+	13300	100	**TM1127447**	Price
4-1/2	60+	13300	100	**TM1127653**	Price
4-1/2	80+	13300	100	**TM1127657**	Price
5	36+	12000	100	**TM1127448**	Price
5	60+	12000	100	**TM1127654**	Price
5	80+	12000	100	**TM1127658**	Price
7	36+	8600	100	**TM1127449**	Price
7	60+	8600	100	**TM1127655**	Price
7	80+	8600	100	**TM1127659**	Price

Arbor Size (in.) - TN					
Dia. (in.)	Grit	Max RPM	Std. Pkg.	Order No.	Price
4-1/2	36+	13300	100	**TM1127469**	Price
4-1/2	80	13300	100	**TM1127664**	Price
5	36+	12000	100	**TM1127467**	Price
5	60	12000	100	**TM1127662**	Price
5	80	12000	100	**TM1127665**	Price
7	36	8600	100	**TM1127468**	Price
7	60	8600	100	**TM1127663**	Price
7	80	8600	100	**TM1127666**	Price

TRIMKUT Resin Fiber Discs

New!



Aluminum Oxide:
- "A" Type represents superior grinding performance in a premium aluminum oxide resin fibre disc
- A blend of advanced abrasive alloys and bonding agents delivers superior cutting rates and longer useful life
- "A" Type provides optimal value when used in high stock removal applications and where a cool cutting action is required

Zirconia:
- Zee Type represents ultimate grinding performance in a premium Zirconium resin fiber disc
- The extremely hard Zirconium abrasive alloy sharpens itself in use, delivering outstanding cutting rates and maximum useful life
- The advanced bond extends disc life by minimizing grain shedding, while promoting a cool grinding action whice reduce glazing and loading.
- "Z" type is most cost effective when used in high production application where cuttng rates are monitored

		Aluminum Oxide		Zirconia	
Dia. (in.)	Grit	Order No.	Price	Order No.	Price
3	24	MM301300	Price	MM98Z324	Price
3	36	MM301303	Price	MM98Z336	Price
3	50	MM98350	Price	MM98Z350	Price
3	60	MM301305	Price	MM98Z360	Price
3	80	MM98380	Price	MM98Z380	Price
3	100	MM983100	Price	MM98Z3100	Price
3	120	MM301308	Price	MM98Z3120	Price
4-1/2	24	MM9841224	Price	MM98Z41224	Price
4-1/2	36	MM9841236	Price	MM98Z41236	Price
4-1/2	50	MM9841250	Price	MM98Z41250	Price
4-1/2	60	MM9841260	Price	MM98Z41260	Price
4-1/2	80	MM9841280	Price	MM98Z41280	Price
4-1/2	100	MM98412100	Price	MM98Z412100	Price
4-1/2	120	MM98412120	Price	MM98Z412120	Price
5	24	MM98524	Price	MM98Z524	Price
5	36	MM98536	Price	MM98Z536	Price
5	50	MM98550	Price	MM98Z550	Price
5	60	MM98560	Price	MM98Z560	Price
5	100	MM985100	Price	MM98Z5100	Price
5	80	MM98580	Price	MM98Z580	Price
5	120	MM985120	Price	MM98Z5120	Price

Note: 3" Disc uses MM98021 Mandrel; 4-1/2" and 5" Discs uses 7/8 Arbor Hole

Mandrel for 3" Trim-Kut Discs

New!



Order No.	Price
MM98021	Price

TRIMKUT CZ45 Grinding Wheel

- CZ45 Formula: Unique blend of SG Ceramic and Zirconia grain
- Designed for light heavy pressure grinding requirements **ON ALL METALS**
- Ergonomic vibration free performance
- Tough super copolymer backing

New!



Dia. (in.)	Standard Pkg.	Order No.	Price
4-1/2	1	MM9840645201	Price
4-1/2	10	MM9840645210	Price
4-1/2	25	MM9840645200	Price
4-1/2	5	MM9840645205	Price

Mini Grind-R Discs

New!



- Innovative ceramic resin fibre discs for industrial metal applications
- ZEE Supreme provides ultimate grinding performance in new 100% Zirconia with top coat
- Developed especially for use on stainless steel and other alloys for maximum performance

Material - Aluminum Oxide			
Dia. (in.)	Grit	Order No.	Price
2	24	MM65224	Price
2	36	MM65236	Price
2	50	MM65250	Price
2	60	MM65260	Price
2	80	MM65280	Price
2	100	MM652100	Price
2	120	MM652120	Price
3	24	MM65324	Price
3	36	MM65336	Price
3	50	MM65350	Price
3	60	MM65360	Price
3	80	MM65380	Price
3	100	MM653100	Price
3	120	MM653120	Price

Material - Zirconia			
Dia. (in.)	Grit	Order No.	Price
2	24	MM66224	Price
2	36	MM66236	Price
2	50	MM66250	Price
2	60	MM66260	Price
2	80	MM66280	Price
2	100	MM662100	Price
2	120	MM662120	Price
3	24	MM66324	Price
3	36	MM66336	Price
3	50	MM66350	Price
3	60	MM66360	Price
3	80	MM66380	Price
3	100	MM663100	Price
3	120	MM663120	Price

Aluminum Oxide Resin Fiber Discs

- Specifically designed for high performance grinding on aluminum and other non-ferrous metals
- Top coated, Tiger Aluminum releases lubrication while grinding, reducing heat buildup
- Lower grinding temperatures delay melting, allowing metal to shed, which results in higher cut rates, long life and a superior finish
- Best on aluminum and non-ferrous metals

New!



			5/8-11		7/8	
Dia. (in.)	Grit	Std. Pack	Order No.	Price	Order No.	Price
4-1/2	24G	25	MK5160600	Price	MK5160400	Price
4-1/2	36G	25	MK5160601	Price	MK5160401	Price
4-1/2	50G	25	MK5160602	Price	MK5160402	Price
4-1/2	60G	25	MK5160603	Price	MK5160403	Price
4-1/2	80G	25	MK5160604	Price	MK5160404	Price
4-1/2	120G	25	-	-	MK5160406	Price
5	120G	25	MK5160606	Price	-	-

Zirconia Resin Fiber Discs

New!

- Leverages a unique blend of self sharping Zirconia and Ceramic Alumina grains to deliver a fast cut rate and exceptional consistency
- Superior design exteds disc life by minimizing grain shedding and promotes cool grinding on steel and stainless
- Best on steel, stainless steel, structural steel, cast iron and inconel



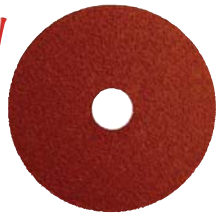
			5/8-11		7/8	
Dia. (in.)	Grit	Std. Pack	Order No.	Price	Order No.	Price
4-1/2	24G	25	MK5159931	Price	MK5159731	Price
4-1/2	36G	25	MK5159932	Price	MK5159732	Price
4-1/2	50G	25	MK5159933	Price	MK5159733	Price
4-1/2	60G	25	MK5159934	Price	MK5159734	Price
4-1/2	80G	25	MK5159935	Price	MK5159735	Price
4-1/2	100G	25	MK5159936	Price	MK5159736	Price
4-1/2	120G	25	MK5159937	Price	MK5159737	Price

WEILER Ceramic Resin Fiber Discs

- Advanced Ceramic grain delivers greater stock removal with a finer scratch pattern
- Top coat grinds cool, reducing metal discoloration, minimizing heat related stress cracks, and eliminates loading, heat & buildup
- Less pressure required to achieve consistent material removal rate, reducing operator fatigue
- Wide range of grit options professionals need to get a desired finish

TIGER

New!



			5/8-11		7/8	
Dia. (in.)	Grit	Std. pack	Order No.	Price	Order No.	Price
4-1/2	24G	25	**MK5169880**	Price	**MK5169850**	Price
4-1/2	36G	25	**MK5169881**	Price	**MK5169851**	Price
4-1/2	50G	25	**MK5169882**	Price	**MK5169852**	Price
4-1/2	60G	25	**MK5169883**	Price	**MK5169853**	Price
4-1/2	80G	25	**MK5169884**	Price	**MK5169854**	Price

WEILER Wolverine Aluminum Oxide Resin Fiber Discs

- Premium aluminum oxide grains provide an even, sharp, clean cut rate and consistent performance
- Best on carbon steel, iron, and general purpose metal use

New!



Dia. (in.)	Grit	Std. Pack	Hole Size (9in.)	Order No.	Price
4-1/2	100G	25	5/8-11	**MK5159978**	Price
4-1/2	100G	25	7/8	**MK5159578**	Price
4-1/2	120G	25	5/8-11	**MK5159979**	Price
4-1/2	120G	25	7/8	**MK5159579**	Price
4-1/2	24G	25	5/8-11	**MK5159971**	Price
4-1/2	24G	25	7/8	**MK5159571**	Price
4-1/2	36G	25	5/8-11	**MK5159973**	Price
4-1/2	36G	25	7/8	**MK5159573**	Price
4-1/2	50G	25	5/8-11	**MK5159975**	Price
4-1/2	50G	25	7/8	**MK5159575**	Price
4-1/2	60G	25	5/8-11	**MK5159976**	Price
4-1/2	60G	25	7/8	**MK5159576**	Price
4-1/2	80G	25	5/8-11	**MK5159977**	Price
4-1/2	80G	25	7/8	**MK5159577**	Price

WEILER Wolverine Zirc Resin Fiber Discs

- Self-sharping Zirconia Alumina grain delivers a fast cut rate and consistent performance over the life of the disc, resulting in a great value when grinding on steel and stainless
- Best on carbon steel, stainless steel, iron, and general purpose metal use

New!



			5/8-11		7/8	
Dia. (in.)	Grit	Std. Pack	Order No.	Price	Order No.	Price
4-1/2	24G	25	**MK5162052**	Price	**MK5162002**	Price
4-1/2	36G	25	**MK5162053**	Price	**MK5162003**	Price
4-1/2	50G	25	**MK5162054**	Price	**MK5162004**	Price
4-1/2	60G	25	**MK5162055**	Price	**MK5162005**	Price
4-1/2	80G	25	**MK5162056**	Price	**MK5162006**	Price
4-1/2	100G	25	**MK5162057**	Price	**MK5162007**	Price
4-1/2	120G	25	**MK5162058**	Price	**MK5162008**	Price

3M PSA Discs 348D

- Aluminum Oxide – X weight cloth
- Heavy-duty, cloth-backed discs for more aggressive applications
- Provides excellent adhesion while removing easily
- **Sold in Standard Pack Only**



Dia. (in.)	Grit	Std. Pkg.	Order No.	Price Ea.
2	50	200	**TM1120911**	Price
2	60	200	**TM1120910**	Price
2	80	200	**TM1120909**	Price
2	120	200	**TM1120907**	Price
3	40	200	**TM1101335**	Price
3	50	200	**TM1101334**	Price
3	60	200	**TM1101333**	Price
3	80	200	**TM1101332**	Price
3	100	200	**TM1101331**	Price
3	120	200	**TM1101330**	Price
5	36	250	**TM1120891**	Price
5	40	250	**TM1120890**	Price
5	50	250	**TM1120889**	Price
5	60	250	**TM1120888**	Price
5	80	250	**TM1120887**	Price
5	100	250	**TM1120886**	Price
5	120	250	**TM1120885**	Price
5	150	250	**TM1120884**	Price
5	180	250	**TM1120883**	Price
5	240	250	**TM1120881**	Price
6	50	250	**TM1120879**	Price
6	60	250	**TM1120878**	Price
6	80	250	**TM1120877**	Price
6	100	250	**TM1120876**	Price
6	120	250	**TM1121497**	Price
8	36	250	**TM1120874**	Price
8	40	250	**TM1120873**	Price
8	60	250	**TM1120871**	Price
8	80	250	**TM1120870**	Price
8	120	250	**TM1120868**	Price
12	36	10	**TM1188906**	Price
12	40	10	**TM1188905**	Price
12	50	10	**TM1188904**	Price
12	60	10	**TM1188903**	Price
12	80	10	**TM1188902**	Price
12	100	10	**TM1188901**	Price
16	36	10	**TM1188890**	Price
16	60	10	**TM1188887**	Price
16	80	10	**TM1188886**	Price
18	36	10	**TM1188882**	Price
18	60	10	**TM1188880**	Price
20	36	10	**TM1188878**	Price
20	40	10	**TM1188877**	Price
20	50	10	**TM1188876**	Price
20	60	10	**TM1188875**	Price
20	80	10	**TM1188874**	Price
24	36	10	**TM1120802**	Price
24	40	10	**TM1120801**	Price
24	80	10	**TM1120798**	Price

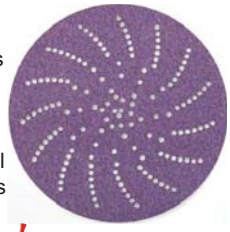
3M Stikit™ Disc Rolls 236U



- Aluminum Oxide – C weight paper backing
- Discs for paint, primer, wood, metal, plastic and fiberglass
- Strong paper backing provides durability and increased cut rates
- Open coat and stearate coating minimizes loading
- **100 Discs per roll, 4 rolls per case**

Dia. (in.)	Grit	Order No.	Price
5	P150	**TM1155543**	Price
6	P120	**TM1155562**	Price
6	P320	**TM1155567**	Price
6	P80	**TM1155560**	Price
5	P120	**TM1186490**	Price
5	P180	**TM1186492**	Price
5	P320	**TM1186495**	Price
5	P500	**TM1186497**	Price
6	P400	**TM1186476**	Price

3M Cubintron™ II Hookit™ Clean Sanding Film Discs 775L



- Cuts up to 2x as fast as conventional abrasives
- Lasts up to 4x as long as conventional abrasives
- Ideal for a wide variety of substrates and applications focused primarily on stock removal
- Hook and loop attachment makes disc changes fast and easy
- Precise multi-hole pattern provides superior dust extraction
- Sold per Standard Pack

New!

			5" x NH		6" x NH	
Grit	Std. Pack	Case Qty	Order No.	Price	Order No.	Price
80+	50	250	**TM1186822**	Price	**TM1186824**	Price
120+	50	250	**TM1186823**	Price	**TM1186825**	Price
150+	50	250	**TM1164258**	Price	**TM1164259**	Price
180+	50	250	**TM1164264**	Price	**TM1164265**	Price
220+	50	250	**TM1164270**	Price	**TM1164271**	Price
240+	50	250	**TM1147097**	Price	**TM1147098**	Price
320+	50	250	**TM1147081**	Price	**TM1147082**	Price
400+	50	250	**TM1105058**	Price	**TM1105059**	Price

3M Cubitron™ II Stickit™ Tab Lined Film Discs 775L



New!

- Cuts up to 2x as fast as conventional abrasives
- Lasts up to 6x as long as conventional abrasives
- Film backing for greater tear resistance and edge retention
- Ideal for a wide variety of substrates and applications focused primarily on stock removal
- 3M™ Stikit™ attachment makes changing discs fast and easy
- Sold per Standard Pack

			5" x NH		6" x NH	
Grit	Std. Pack	Case Qty	Order No.	Price	Order No.	Price
80+	50	250	**TM1186802**	Price	**TM1186804**	Price
120+	50	250	**TM1186803**	Price	**TM1186805**	Price
150+	50	250	**TM1164275**	Price	**TM1187053**	Price
180+	50	250	**TM1164279**	Price	**TM1187052**	Price
220+	50	250	**TM1164283**	Price	**TM1187105**	Price
240+	50	250	**TM1147087**	Price	**TM1147088**	Price
320+	50	250	**TM1147083**	Price	**TM1147105**	Price
400+	50	250	**TM1105068**	Price	**TM1105067**	Price

3M Stikit™ 214U & Hookit™ 216U White/Gold Discs



- Aluminum Oxide – A weight paper backing
- Discs for paint, primer, metal, wood and fiberglass
- Special 3M™ Fre-cut™ coating resists loading
- Sold per Roll / Box

Description - Hookit Dust Free					
Dia. (in.)	Grit	Discs per roll/Box	Std. Pkg.	Order No.	Price Ea.
5	P320	1	500	**TM1186249**	Price
5	P400	1	500	**TM1186250**	Price
5	P400	1	500	**TM1186271**	Price
5	P600	1	500	**TM1186299**	Price

Description - Stikit White Gold					
Dia. (in.)	Grit	Discs per roll/Box	Std. Pkg.	Order No.	Price Ea.
5	150A	175	6	**TM1181806**	Price
6	320	175	6	**TM1186387**	Price

3M Cubitron ™ II Hookit™ Film Discs 775L

New!



- Cuts up to 2x as fast as conventional abrasives
- Lasts up to 6x as long as conventional abrasives
- Film backing for greater tear resistance and edge retention
- Ideal for a wide variety of substrates and applications focused primarily on stock removal
- Hook and loop attachment makes disc changes fast and easy
- Sold per Standard Pack

Size (in.) - 3" x NH				
Grit	Std. Pack	Case Qty	Order No.	Price
80+	50	250	**TM1187266**	Price
80+ Dust Free	50	250	**TM1187270**	Price
120+	50	250	**TM1187267**	Price
120+ Dust Free	50	250	**TM1187271**	Price
150+	50	250	**TM1187268**	Price
150+ Dust Free	50	250	**TM1187272**	Price
180+	50	250	**TM1187274**	Price
220+	50	250	**TM1187269**	Price
220+ Dust Free	50	250	**TM1187273**	Price
240+	50	250	**TM1147108**	Price
240+ Dust Free	50	250	**TM1147110**	Price
320+	50	250	**TM1147109**	Price
320+ Fust Free	50	250	**TM1147111**	Price
400+	50	250	**TM1105057**	Price
400+ Dust Free	50	250	**TM1105060**	Price

Size (in.) - 5" x NH				
Grit	Std. Pack	Case Qty	Order No.	Price
80+	50	250	**TM1186818**	Price
120+	50	250	**TM1186819**	Price
150+	50	250	**TM1187026**	Price
180+	50	250	**TM1147080**	Price
180+	50	250	**TM1164263**	Price
220+	50	250	**TM1164269**	Price
240+	50	250	**TM1147095**	Price

Size (in.) - 6" x NH				
Grit	Std. Pack	Case Qty	Order No.	Price
320+	50	250	**TM1147099**	Price
80+	50	250	**TM1186820**	Price
120+	50	250	**TM1186821**	Price
150+	50	250	**TM1187041**	Price
180+	50	250	**TM1187040**	Price
220+	50	250	**TM1187089**	Price
240+	50	250	**TM1147096**	Price
400+ Dust Free	50	250	**TM1105056**	Price

SURF PRO® Velcro Backed Resin Paper Abrasive Discs



- Aluminum oxide resin free cut treated for metal, wood and plastic
- Easy press-on/peel-off - saves time
- Hook and loop backing adds strength, reducing tearing and run cooler for longer life
- Holding power not affected by dirt, dust, heat, humidity
- We also offer the vacuum hole paper disc and conversion hardware for the clean air vacuum sanders

Style - C Weight Paper Back-8 Hole						
	5			6		
Grit	No. of Holes	Order No.	Price	No. of Holes	Order No.	Price
80	8	SP11VBD500808AC	Price	8	SP11VBD600808AC	Price
100	8	SP11VBD501008AC	Price	8	SP11VBD601008AC	Price
120	8	SP11VBD501208AC	Price	8	SP11VBD601208AC	Price
150	8	SP11VBD501508AC	Price	8	SP11VBD601508AC	Price
180	8	SP11VBD501808AC	Price	8	SP11VBD601808AC	Price
220	8	SP11VBD502208AC	Price	8	SP11VBD602208AC	Price
240	8	SP11VBD502408AC	Price	8	SP11VBD602408AC	Price
280	8	SP11VBD502808AC	Price	8	SP11VBD602808AC	Price
320	8	SP11VBD503208AC	Price	8	SP11VBD603208AC	Price
400	8	SP11VBD504008AC	Price	8	SP11VBD604008AC	Price

Style - C Weight Paper Back-No Hole						
	5			6		
Grit	No. of Holes	Order No.	Price	No. of Holes	Order No.	Price
80	0	SP11VBD500800AC	Price	0	SP11VBD600800AC	Price
100	0	SP11VBD501000AC	Price	0	SP11VBD601000AC	Price
120	0	SP11VBD501200AC	Price	0	SP11VBD601200AC	Price
150	0	SP11VBD501500AC	Price	0	SP11VBD601500AC	Price
180	0	SP11VBD501800AC	Price	0	SP11VBD601800AC	Price
220	0	SP11VBD502200AC	Price	0	SP11VBD602200AC	Price
240	0	SP11VBD502400AC	Price	0	SP11VBD602400AC	Price
280	0	SP11VBD502800AC	Price	0	SP11VBD602800AC	Price
320	0	SP11VBD503200AC	Price	0	SP11VBD603200AC	Price
400	0	SP11VBD504000AC	Price	0	SP11VBD604000AC	Price

Style - E Weight Paper Back-No Hole						
	5			6		
Grit	No. of Holes	Order No.	Price	No. of Holes	Order No.	Price
40	0	SP11VBD500400AE	Price	0	SP11VBD600400AE	Price
50	0	SP11VBD500500AE	Price	0	SP11VBD600500AE	Price
60	0	SP11VBD500600AE	Price	0	SP11VBD600600AE	Price
80	0	SP11VBD500800AE	Price	0	SP11VBD600800AE	Price

SURF PRO® PSA Aluminum Oxide Abrasive Strips and Sheets

- Tough aluminum oxide for long life
- Heavy duty "X" weight resin bond cloth
- Advanced PSA coating



	1 x 11		9 x 11	
Grit	Order No.	Price	Order No.	Price
60	SP12PSA111060A	Price	SP12PSA911060A	Price
80	SP12PSA111080A	Price	SP12PSA911080A	Price
100	SP12PSA111100A	Price	SP12PSA911100A	Price
120	SP12PSA111120A	Price	SP12PSA911120A	Price
150	SP12PSA111150A	Price	SP12PSA911150A	Price
180	SP12PSA111180A	Price	SP12PSA911180A	Price
240	SP12PSA111240A	Price	SP12PSA911240A	Price
320	SP12PSA111320A	Price	SP12PSA911320A	Price

5" Backup Pads for Plain and Vacuum Paper



Description	Thread/Type	Order No.	Price
Neoprene for Plain Paper	5/16-24 Male	MM9555	Price
Urethane for Vacuum Paper	-	MM9595	Price

Hook & Loop Conversion Backup Discs

With Adhesive Back for Quick Installation



	5		6	
Description	Order No.	Price	Order No.	Price
Hook & Loop Plain	MM9553P	Price	MM9563P	Price
Hook & Loop/5-Hole	MM95535	Price	MM95635	Price
Hook & Loop/8-Hole	MM95538	Price	MM95638	Price

SURF PRO® PSA Gold Paper Discs with Tabs

- Made in the USA! Edge tear resistant! Made with strong .00050 Mylar film for superior edge tear resistance.
- Stearated paper with heat treated aluminum oxide grain and a full phenolic bond system for uniform scratch pattern
- Open coat disc design for fast cutting and exceptionally long life





No. of Holes - 0				
Size (in.)	Grit	Std. Pkg.	Order No.	Price
5	40	50	SP11DT50040GAC0	Price
5	60	50	SP11DT50060GAC0	Price
5	80	100	SP11DT50080GAC0	Price
5	100	100	SP11DT50100GAC0	Price
5	120	100	SP11DT50120GAC0	Price
5	150	100	SP11DT50150GAC0	Price
5	180	100	SP11DT50180GAC0	Price
5	220	100	SP11DT50220GAC0	Price
5	240	100	SP11DT50240GAC0	Price
5	320	100	SP11DT50320GAC0	Price
5	400	100	SP11DT50400GAC0	Price
5	600	100	SP11DT50600GAC0	Price
5	800	100	SP11DT50800GAC0	Price
5	1000	100	SP11DT51000GAC0	Price
6	40	50	SP11DT60040GAC0	Price
6	60	50	SP11DT60060GAC0	Price
6	80	100	SP11DT60080GAC0	Price
6	100	100	SP11DT00100GAC0	Price

No. of Holes - 0				
Size (in.)	Grit	Std. Pkg.	Order No.	Price
6	120	100	SP11DT60120GAC0	Price
6	150	100	SP11DT60150GAC0	Price
6	220	100	SP11DT60240GAC0	Price
6	320	100	SP11DT60320GAC0	Price
6	400	100	SP11DT60400GAC0	Price

No. of Holes - 5				
Size (in.)	Grit	Std. Pkg.	Order No.	Price
5	80	100	SP11DT50080GAC5	Price
5	100	100	SP11DT50100GAC5	Price
5	120	100	SP11DT50120GAC5	Price
5	150	100	SP11DT50150GAC5	Price
5	180	100	SP11DT50180GAC5	Price
5	220	100	SP11DT50220GAC5	Price

NORTON SAINT-GOBAIN Paper Discs-100 Disc Packs



A275
- Premium P=graded, heat treated aluminum oxide abrasive
- Unique fiber reinforced, flexible B-wt. latex-saturated backing
- Water based stearate, non-pigmented, No-Fil coating
- Superior life, fast cut rate, consistent finish
- 50-60% Improvement to tear strength
- Flexible; can be used wet
- Provides maximum load resistance and extended life; no color transfer to work

A475
- P-graded, hard, silicon carbide abrasive
- Water based stearate, non-pigmented, No-Fil coating
- Durable, fiber-reinforced, B-wt. latex paper
- Easy penetration of the hardest surfaces
- Resists loading for the longest usable product life; no color transfer to work
- Provides flexibility and resistance to tearing

A290
- P-graded aluminum oxide abrasive
- Heavy-duty C-wt. backing
- Stearated (No-Fil), open coat
- Increased life, fast cut rate, consistent finish
- Edge-tear resistance, durable
- Reduced loading

		Hook & Loop				PSA Disc Roll					
		A275		A290		A275		A290		A475	
Size	Grit	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
5	80	MH61D0531549	Price	MH61D0549907	Price	MH61D0531464	Price	MH61D0549830	Price	MH61D0587415	Price
5	100	MH61D0531548	Price	MH61D0549906	Price	MH62D0531463	Price	MH61D0549829	Price	MH61D0587417	Price
5	120	MH61D0531547	Price	MH61D0549905	Price	MH61DR0531462	Price	MH61D0549828	Price	MH61D0587418	Price
5	150	MH61D0531546	Price	MH61D0549904	Price	MH61D0531461	Price	MH61D0549827	Price	MH61D0587440	Price
5	180	MH61D0531545	Price	MH61D0549903	Price	MH62D0531460	Price	MH61D0549826	Price	MH61D0587441	Price
5	220	-	-	-	-	MH62D0531459	Price	MH61DR0549825	Price	MH61D0587442	Price
5	240	-	-	-	-	MH62D0531458	Price	MH61D0549824	Price	-	-
5	280	-	-	-	-	MH61D0531457	Price	MH61D0549823	Price	-	-
5	320	MH61D0531541	Price	MH61D0549900	Price	MH62D0531456	Price	MH61D0549822	Price	-	-
5	400	-	-	-	-	MH61D0531454	Price	MH61DR0549821	Price	-	-
6	80	MH61D0631566	Price	MH61D0649916	Price	MH61DR0631481	Price	MH61D0649842	Price	MH61D0687446	Price
6	100	MH61D0631565	Price	MH61D0649915	Price	MH61D0631480	Price	MH61D0649841	Price	-	-
6	120	MH61D0631564	Price	MH61D0649914	Price	MH61D0631479	Price	MH61DR0649840	Price	MH61D0687447	Price
6	150	MH61D0631563	Price	MH61D0649913	Price	MH61D0631478	Price	MH61D0649839	Price	-	-
6	180	MH61D0631562	Price	MH61D0649912	Price	MH61DR0631477	Price	MH61D0649838	Price	MH61D0687448	Price
6	220	MH61D0631561	Price	MH61D0649911	Price	MH61D0631476	Price	MH61D0649837	Price	MH61D0687449	Price
6	240	-	-	-	-	MH61D0631475	Price	MH61D0649836	Price	-	-
6	280	-	-	-	-	MH61D0631474	Price	MH61D0649835	Price	-	-
6	320	MH61D0631558	Price	MH61D0649909	Price	MH61DR0631473	Price	MH61D0649834	Price	MH61D0687450	Price
6	400	-	-	-	-	MH61D0631471	Price	MH61D0649833	Price	-	-

AutoQuip, Inc. Backup Pads



- 5/16-24 Male thread 10,000 RPM
- 5/8-11 Female thread 3,200-10,000 RPM
- Backup pads — the missing link
- Provide excellent finishes
- Extends disc life
- Pads specific design along with correct combination of flexibility and disc support help prevent “edge cutting”
- 5/16-24 Male thread for Pneumatic & Oscillating Sanders
- 5/8-11 Female thread for Milwaukee, Black & Decker, Skil and Bosch Power Tools

			5/16-24 Male		5/8-11 Female	
Dia. (in.)	For	RPM	Order No.	Price	Order No.	Price
4-1/2	Non-Woven Nylon Abra.	3,200-10,000	-	-	MM85840042	Price
5	Non-Woven Nylon Abra.	3,200-10,000	-	-	MM85840050	Price
7	Non-Woven Nylon Abra.	3,200-10,000	-	-	MM85840070	Price
5	Non-Woven Nylon Abra.	3,600	MM85EHU14MV5	Price	-	-
5	PSA Disc	10,000	MM85ELSM5	Price	-	-
5	PSA Disc	3,200-10,000	-	-	MM85IL14FN5	Price
5	Velcro Disc	10,000	MM85EHSM5	Price	-	-
5	Velcro Disc	3,200-10,000	-	-	MM85IH14FN5	Price
6	Non-Woven Nylon Abra.	3,600	MM85EHU14MV6	Price	-	-
6	PSA Disc	10,000	MM85ELSM6	Price	-	-
6	PSA Disc	3,200-10,000	-	-	MM85IL14FN6	Price
6	Velcro Disc	10,000	MM85EHSM6	Price	-	-
6	Velcro Disc	3,200-10,000	-	-	MM85IH14FN6	Price
7	PSA Disc	3,200-10,000	-	-	MM85IL14FN7	Price
7	Velcro Disc	3,200-10,000	-	-	MM85IH14FN7	Price
8	PSA Disc	3,200-10,000	-	-	MM85IL14FN8	Price

Metalite R228 Cloth Back PSA Discs



- Premium aluminum oxide abrasive
- Heavy X-weight cotton backing
- Designed for durability and long life
- Ideal for aggressive stock removal applications
- Resistant to heat

Size (in.) - 5			
Grit	Std. Pkg.	Order No.	Price
36	50	**MH61D0536589**	Price
40	50	**MH61D0536588**	Price
50	50	**MH61D0536587**	Price
60	50	**MH61D0536586**	Price
80	50	**MH61D0536585**	Price
100	50	**MH61D0536584**	Price
120	50	**MH61D0536583**	Price

Size (in.) - 6			
Grit	Std. Pkg.	Order No.	Price
60	50	**MH61D0636596**	Price
80	50	**MH61D0636595**	Price
100	50	**MH61D0636594**	Price
120	50	**MH61D0636593**	Price

Size (in.) - 8			
Grit	Std. Pkg.	Order No.	Price
36	50	**MH61D0836350**	Price

Size (in.) - 8			
Grit	Std. Pkg.	Order No.	Price
40	50	**MH61D0836351**	Price
50	50	**MH61D0836352**	Price
60	50	**MH61D0836576**	Price
80	50	**MH61D0836354**	Price
120	50	**MH61D0836355**	Price

Size (in.) - 10			
Grit	Std. Pkg.	Order No.	Price
36	25	**MH61D1036602**	Price
40	25	**MH61D1036606**	Price
50	25	**MH61D1036607**	Price
60	25	**MH61D1036604**	Price
80	25	**MH61D1036601**	Price
100	25	**MH61D1036600**	Price

Size (in.) - 12			
Grit	Std. Pkg.	Order No.	Price
36	25	**MH61D1236635**	Price

Size (in.) - 12			
Grit	Std. Pkg.	Order No.	Price
40	25	**MH61D1236630**	Price
50	25	**MH61D1236625**	Price
60	25	**MH61D1236620**	Price
80	25	**MH61D1236615**	Price
100	25	**MH61D1236614**	Price
120	25	**MH61D1236613**	Price

Size (in.) - 15			
Grit	Std. Pkg.	Order No.	Price
40	25	**MH61D1536665**	Price
50	25	**MH61D1536714**	Price
80	-	**MH61D1536662**	Price

Size (in.) - 16			
Grit	Std. Pkg.	Order No.	Price
40	25	**MH61D1636685**	Price
50	25	**MH61D1636684**	Price
60	25	**MH61D1636683**	Price
80	25	**MH61D1636701**	Price

Size (in.) - 20			
Grit	Std. Pkg.	Order No.	Price
36	25	**MH61D2036710**	Price
40	25	**MH61D2036709**	Price
50	25	**MH61D2036711**	Price
60	25	**MH61D2036712**	Price
80	25	**MH61D2036706**	Price

Aluminum Oxide DriLube Resin Paper Open Stick-On Discs

Carbo Gold Aluminum Oxide - Premier Red Alminum Oxide

- Ideal for sanding paints, primers, plastics and fiber glass
- No Pigment transfer
- Each roll individually protected in poly bags
- 100 Discs per roll
- Carton Qty: 4 Rolls

Carbo Gold Aluminum Oxide:
- Premium P-graded aluminum oxide
- Durable C-weight
- Fast cut, long life
- Excellent load resistance

Premier Red Aluminum Oxide:
- Heat treated P-grade aluminum oxide
- Superior load resistance
- 30% faster cut & longer life
- Superior resistance to delamination & tearing
- Uniform scratch pattern



	5				6			
	Carbo Premier Red		Carbo-Gold		Carbo Premier Red		Carbo-Gold	
Grit	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
80	**MM4218114**	Price	**MM4210555**	Price	**MM4218173**	Price	**MM4210567**	Price
100	**MM4218113**	Price	**MM4210554**	Price	**MM4218172**	Price	**MM4210566**	Price
120	**MM4218112**	Price	**MM4210553**	Price	**MM4218171**	Price	**MM4210565**	Price
150	**MM4218111**	Price	**MM4210552**	Price	**MM4218170**	Price	**MM4210563**	Price
180	**MM4218110**	Price	**MM4210550**	Price	**MM4218169**	Price	**MM4210562**	Price
220	**MM4218109**	Price	**MM4210549**	Price	**MM4218168**	Price	**MM4210561**	Price
240	**MM4218108**	Price	**MM4210548**	Price	**MM4218167**	Price	**MM4210560**	Price
280	**MM4218107**	Price	**-**	-	**MM4218166**	Price	**-**	-
320	**MM4218106**	Price	**MM4210546**	Price	**MM4218165**	Price	**MM4210558**	Price
400	**MM4218105**	Price	**MM4210545**	Price	**MM4218164**	Price	**MM4210557**	Price

Carbo Cleanair Medalist Ceramic Alumina Dri-Lube Resin Paper Open Vacuum Grip-On Paper Discs



- Full resin bond system
- Unique fiber reinforced, flexible B- and C- weight latex saturated backing
- Special undyed stearate oversize
- Unique multi-hole pattern and matching hook and loop back-up pad
- Standard pack - 50 pc.

Size (in.)	Grit	Order No.	Price
6 x 11/16	P80	**MM4250000**	Price
6 x 11/16	P120	**MM4250001**	Price
6 x 11/16	P150	**MM4250002**	Price
6 x 11/16	P180	**MM4250003**	Price
6 x 11/16	P220	**MM4250004**	Price
6 x 11/16	P240	**MM4250005**	Price
6 x 11/16	P320	**MM4250006**	Price
6 x 11/16	P400	**MM4250007**	Price
6 x 11/16	P500	**MM4250008**	Price
6 x 11/16	P600	**MM4250009**	Price
6 x 11/16	P800	**MM4250010**	Price

PASCO Paper Aluminum Oxide Sanding Discs - Gold "C" Weight



- Made with a strong .0005 Mylar film for superior edge tear resistance
- PASCO Advantage outperforms other "C" weight gold discs
- Stearated paper with heat treated aluminum oxide grain and a full phenolic bond system provides uniform scratch pattern
- Open coat disc delivers fast cut and exceptionally long life

Type - Disc on Roll				
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price Box
5	60	50	MG9449761	Price
5	80	100	MG9449762	Price
5	100	100	MG9449763	Price
5	120	100	MG9449764	Price
5	150	100	MG9449765	Price
5	180	100	MG9449766	Price
5	220	100	MG9449767	Price
6	80	100	MG9449777	Price
6	100	100	MG9449778	Price
6	120	100	MG9449779	Price
6	150	100	MG9449780	Price
6	180	100	MG9449781	Price
6	220	100	MG9449782	Price

Type - Disc with Tab				
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price Box
5	80	100	MG9449822	Price
5	100	100	MG9449823	Price
5	120	100	MG9449824	Price
5	180	100	MG9449826	Price
5	220	100	MG9449827	Price
5	150	100	MG9449825	Price

PASCO Metallurgical Silicon Carbide Sanding Discs

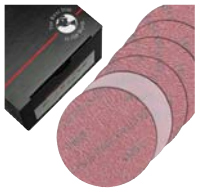


- Pasco Metallurgical Silicon Carbide Sanding Discs

Style - Plain Back				
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price Box
8	60/P60	25	MG9452931	Price
8	120/P120	100	MG9452932	Price
8	180/P180	100	MG9452933	Price
8	240/P240	100	MG9452934	Price
8	320/P400	100	MG9452935	Price
8	400/P800	100	MG9452936	Price
8	600/P1200	100	MG9452937	Price
12	60/P60	100	MG9452938	Price
12	120/P120	100	MG9452939	Price
12	180/P180	100	MG9452940	Price
12	240/P240	100	MG9452941	Price
12	320/P400	100	MG9452942	Price
12	400/P800	100	MG9452943	Price
12	600/P1200	100	MG9452944	Price

Style - PSA				
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price Box
8	60/P60	100	MG9452945	Price
8	120/P120	100	MG9452946	Price
8	180/P180	100	MG9452947	Price
8	240/P240	100	MG9452948	Price
8	320/P400	100	MG9452949	Price
8	400/P800	100	MG9452950	Price
8	600/P1200	100	MG9452951	Price
12	60/P60	100	MG9452952	Price
12	120/P120	100	MG9452953	Price
12	180/P180	100	MG9452954	Price
12	240/P240	100	MG9452955	Price
12	320/P400	100	MG9452956	Price
12	400/P800	100	MG9452957	Price
12	600/P1200	100	MG9452958	Price

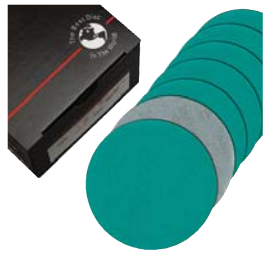
PASCO Hook & Loop Film-Backed Long Life Aluminum Oxide Sanding Discs



- Velcro
- Heat treated aluminum oxide grain on a strong .003" mylar backing with full phenolic resin bond for better grain adhesion and longer life
- Outperforms paper discs by up to 300%
- Non-loading zinc stereate treatment
- Strong yet pliable film for a superior finish

Dia. (in.)	Grit	Std. Pkg.	Order No.	Price Box
5	120	100	MG9452527	Price
5	150	100	MG9452528	Price
5	180	100	MG9452529	Price

PASCO Q711T Film-Backed Aluminum Oxide Sanding Discs



- Film backing - Strong, yet pliable .003" Mylar backing
- Film offers up to 4X the life vs. paper discs
- Longest lasting disc available by up to 300% over paper discs
- Uniform film backing with "P" graded abrasive for uniform finish
- Faster rate of cut, more consistent finish and longer life

Type - Disc on Roll				
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price Box
5	80	100	MG9451015	Price
5	100	100	MG9451016	Price
5	120	100	MG9451017	Price
5	150	100	MG9451018	Price
5	180	100	MG9451019	Price
5	220	100	MG9451020	Price

Type - Disc with Tab				
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price Box
5	80	100	MG9451051	Price
5	100	100	MG9451052	Price
5	120	100	MG9451053	Price
5	150	100	MG9451054	Price
5	180	100	MG9451055	Price
5	220	100	MG9451056	Price
5	240	100	MG9451057	Price
5	400	100	MG9451060	Price
5	600	100	MG9451062	Price
5	800	100	MG9451063	Price
5	1000	100	MG9451064	Price
6	120	100	MG9451071	Price
6	150	100	MG9451072	Price
6	180	100	MG9451073	Price
6	220	100	MG9451074	Price

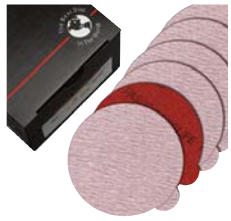
PASCO Q711T Hook & Loop Aluminum Oxide Discs



- Velcro
- Film backing - Strong, yet pliable .003 Mylar backing
- Film offers up to 4X the life vs. paper discs
- Longest lasting disc available by up to 300% over paper discs
- Uniform film backing with "P" graded abrasive for uniform finish
- Faster rate of cut, more consistent finish and longer life
- Sold in packs of 100

Dia. (in.)	Grit	Order No.	Price
5	80	MG9451231	Price
5	100	MG9451232	Price
5	120	MG9451233	Price
5	150	MG9451234	Price
5	180	MG9451235	Price
5	220	MG9451236	Price
5	320	MG9451239	Price
5	80	MG9451303	Price
5	100	MG9451304	Price
5	120	MG9451305	Price
5	150	MG9451306	Price
5	180	MG9451307	Price
5	220	MG9451308	Price

PASCO Film-Backed Long Life Aluminum Oxide Sanding Discs



- Heat treated aluminum oxide grain on a strong .003" Mylar backing with full phenolic resin bond for better grain adhesion and longer life
- Outperforms paper discs by up to 300%
- Non-loading zinc stereate treatment
- Strong yet pliable film for a superior finish

Dia. (in.)	Grit	Std. Pkg.	Order No.	Price Box
5	80	100	MG9452405	Price
5	100	100	MG9452406	Price
5	120	100	MG9452407	Price
5	150	100	MG9452408	Price
5	180	100	MG9452409	Price
5	220	100	MG9452410	Price

SURF PRO® Aluminum Oxide Cloth PSA Discs-No Hole Type

- For use on disc grinders and sanders
- Long wearing, fast cutting abrasive
- Heavy duty "X" weight resin cloth
- Easily removed without leaving residue on holders or backing plates



	100		120		36		40		60		80	
Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
2	SP11PSAD02100A	Price	SP11PSAD02120A	Price	-	-	SP11PSAD02040A	Price	SP11PSAD02060A	Price	SP11PSAD02080A	Price
3	SP11PSAD03100A	Price	SP11PSAD03120A	Price	-	-	SP11PSAD03040A	Price	SP11PSAD03060A	Price	SP11PSAD03080A	Price
5	SP11PSAD05100A	Price	SP11PSAD05120A	Price	SP11PSAD05036A	Price	SP11PSAD05040A	Price	SP11PSAD05060A	Price	SP11PSAD05080A	Price
6	SP11PSAD06100A	Price	SP11PSAD06120A	Price	SP11PSAD06036A	Price	SP11PSAD06040A	Price	SP11PSAD06060A	Price	SP11PSAD06080A	Price
8	SP11PSAD08100A	Price	SP11PSAD08120A	Price	SP11PSAD08036A	Price	SP11PSAD08040A	Price	SP11PSAD08060A	Price	SP11PSAD08080A	Price
9	SP11PSAD09100A	Price	SP11PSAD09120A	Price	SP11PSAD09036A	Price	SP11PSAD09040A	Price	SP11PSAD09060A	Price	SP11PSAD09080A	Price
10	SP11PSAD10100A	Price	SP11PSAD10120A	Price	SP11PSAD10036A	Price	SP11PSAD10040A	Price	SP11PSAD10060A	Price	SP11PSAD10080A	Price
12	SP11PSAD12100A	Price	SP11PSAD12120A	Price	SP11PSAD12036A	Price	SP11PSAD12040A	Price	SP11PSAD12060A	Price	SP11PSAD12080A	Price
15	SP11PSAD15100A	Price	-	-	SP11PSAD15036A	Price	SP11PSAD15040A	Price	SP11PSAD15060A	Price	SP11PSAD15080A	Price
16	SP11PSAD16100A	Price	SP11PSAD16120A	Price	SP11PSAD16036A	Price	SP11PSAD16040A	Price	SP11PSAD16060A	Price	SP11PSAD16080A	Price
20	SP11PSAD20100A	Price	SP11PSAD20120A	Price	SP11PSAD20036A	Price	SP11PSAD20040A	Price	SP11PSAD20060A	Price	SP11PSAD20080A	Price
24	SP11PSAD24100A	Price	SP11PSAD24120A	Price	SP11PSAD24036A	Price	SP11PSAD24040A	Price	SP11PSAD24060A	Price	SP11PSAD24080A	Price

SUPERIOR Abrasives PSA Discs - Blue Zirconium Abrasive

- Grind high nickel alloys and titanium
- Good for heavy pressure applications
- Remove welds and grind through inclusions like nodular cast iron

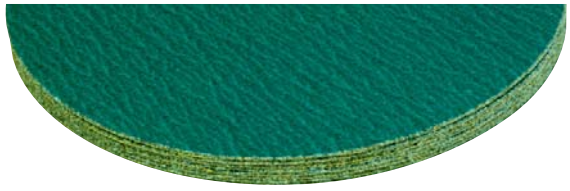


		36		40		50		60		80		120	
Dia.	Std. Pkg.	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
12	25	MM6417458	Price	MM6417459	Price	MM6417460	Price	MM6417461	Price	MM6417462	Price	MM6440497	Price
15	25	MM6417468	Price	MM6417469	Price	MM6417470	Price	MM6417471	Price	MM6417472	Price	-	-
16	25	MM6417473	Price	MM6417474	Price	MM6417475	Price	MM6417476	Price	MM6417477	Price	-	-
20	10	MM6417483	Price	MM6417484	Price	MM6417485	Price	MM6417486	Price	MM6417487	Price	MM6446648	Price
24	10	MM6417488	Price	MM6417489	Price	-	-	-	-	-	-	-	-

SUPERIOR Abrasives Zirconia with Grinding Aid Adhesive Cloth Backed Disc - No Hole

Zirconia Alumina Resin Bond Cloth

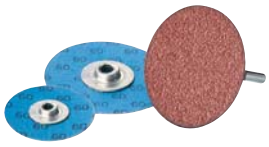
- Great stock removal on stainless
- Enhanced performance in high heat and pressure applications over standard zinc
- Grinding aid increases life and decreases the risk of discoloring the work piece



		36		40		50		60		80	
Dia. (in.)	Std. Pkg.	Order No.	Price Ea.	Order No.	Price Ea.	Order No.	Price Ea.	Order No.	Price Ea.	Order No.	Price Ea.
12	25	MM6416728	Price	MM6416919	Price	MM6419277	Price	MM6416729	Price	MM6418943	Price
15	25	MM6422385	Price	MM6421932	Price	MM6426010	Price	MM6425372	Price	MM6424915	Price
16	25	MM6421300	Price	MM6424693	Price	MM6422244	Price	MM6416057	Price	MM6421208	Price
20	10	MM6421012	Price	MM6421013	Price	MM6417152	Price	MM6424686	Price	MM6417154	Price
24	10	MM6421486	Price	MM6424036	Price	-	-	-	-	-	-

SURF PRO® Quick Change Abrasive Discs

Aluminum Oxide Grain Quick Change Discs:
- Best used for general purpose deburring and blending on ferrous and nonferrous metals
- Ideal for useon mild contours or flat surfaces
- Blends light welds, machine marks & parting lines



Zirconia Alumina Grain Quick Change Discs:
- Ideal for rapid stock removal on stainless steel and aluminum
- Best performance when medium to heavy pressure applied
- Cool running for extended stock removal and surface blending
- Significantly longer life, faster cutting action, increased productivity

Ceramic Grain Quick Change Discs:
- Outlasts aluminum oxide and zironia in many applications
- Cool, rapid stock removal on heat-sensitive metals, including stainless steel and high nickel alloys
- Edge deburring and blending, heavy flash and parting line removal on castings removal of heavy machine tool marks

*** See page 816 for Quick Change Disc Holders.**



Turn-On



Rol-On

SURF PRO® Aluminum Oxide Grain Quick Change Abrasive Discs

Dia. (in.) - 1-1/2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	SP11QCR15024A	Price	SP11QCT15024A	Price
36	SP11QCR15036A	Price	SP11QCT15036A	Price
40	SP11QCR15040A	Price	SP11QCT15040A	Price
50	SP11QCR15050A	Price	SP11QCT15050A	Price
60	SP11QCR15060A	Price	SP11QCT15060A	Price
80	SP11QCR15080A	Price	SP11QCT15080A	Price
100	SP11QCR15100A	Price	SP11QCT15100A	Price
120	SP11QCR15120A	Price	SP11QCT15120A	Price

Dia. (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	SP11QCR20024A	Price	SP11QCT20024A	Price
36	SP11QCR20036A	Price	SP11QCT20036A	Price
40	SP11QCR20040A	Price	SP11QCT20040A	Price
50	SP11QCR20050A	Price	SP11QCT20050A	Price
60	SP11QCR20060A	Price	SP11QCT20060A	Price
80	SP11QCR20080A	Price	SP11QCT20080A	Price
100	SP11QCR20100A	Price	SP11QCT20100A	Price
120	SP11QCR20120A	Price	SP11QCT20120A	Price

Dia. (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	SP11QCR30024A	Price	SP11QCT30024A	Price
36	SP11QCR30036A	Price	SP11QCT30036A	Price
40	SP11QCR30040A	Price	SP11QCT30040A	Price
50	SP11QCR30050A	Price	SP11QCT30050A	Price
60	SP11QCR30060A	Price	SP11QCT30060A	Price
80	SP11QCR30080A	Price	SP11QCT30080A	Price
100	SP11QCR30100A	Price	SP11QCT30100A	Price
120	SP11QCR30120A	Price	SP11QCT30120A	Price

SURF PRO® Zirc Plus Grain Quick Change Abrasive Discs

Dia. (in.) - 1-1/2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	SP11QCR15024ZP	Price	SP11QCT15024ZP	Price
36	SP11QCR15036ZP	Price	SP11QCT15036ZP	Price
40	SP11QCR15040ZP	Price	SP11QCT15040ZP	Price
50	SP11QCR15050ZP	Price	SP11QCT15050ZP	Price
60	SP11QCR15060ZP	Price	SP11QCT15060ZP	Price
80	SP11QCR15080ZP	Price	SP11QCT15080ZP	Price

Dia. (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	SP11QCR20024ZP	Price	SP11QCT20024ZP	Price
36	SP11QCR20036ZP	Price	SP11QCT20036ZP	Price
40	SP11QCR20040ZP	Price	SP11QCT20040ZP	Price
50	SP11QCR20050ZP	Price	SP11QCT20050ZP	Price
60	SP11QCR20060ZP	Price	SP11QCT20060ZP	Price
80	SP11QCR20080ZP	Price	SP11QCT20080ZP	Price

Dia. (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	SP11QCR30024ZP	Price	SP11QCT30024ZP	Price
36	SP11QCR30036ZP	Price	SP11QCT30036ZP	Price
40	SP11QCR30040ZP	Price	SP11QCT30040ZP	Price
50	SP11QCR30050ZP	Price	SP11QCT30050ZP	Price
60	SP11QCR30060ZP	Price	SP11QCT30060ZP	Price
80	SP11QCR30080ZP	Price	SP11QCT30080ZP	Price

SURF PRO® Ceramic Grain Quick Change Abrasive Discs

Diameter (in.) - 1-1/2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	SP11QCR15024C	Price	SP11QCT15024C	Price
36	SP11QCR15036C	Price	SP11QCT15036C	Price
40	SP11QCR15040C	Price	SP11QCT15040C	Price
50	SP11QCR15050C	Price	SP11QCT15050C	Price
60	SP11QCR15060C	Price	SP11QCT15060C	Price
80	SP11QCR15080C	Price	SP11QCT15080C	Price
100	SP11QCR15100C	Price	SP11QCT15100C	Price
120	SP11QCR15120C	Price	SP11QCT15120C	Price

Diameter (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	SP11QCR20024C	Price	SP11QCT20024C	Price
36	SP11QCR20036C	Price	SP11QCT20036C	Price
40	SP11QCR20040C	Price	SP11QCT20040C	Price
50	SP11QCR20050C	Price	SP11QCT20050C	Price
60	SP11QCR20060C	Price	SP11QCT20060C	Price
80	SP11QCR20080C	Price	SP11QCT20080C	Price
100	SP11QCR20100C	Price	SP11QCT20100C	Price
120	SP11QCR20120C	Price	SP11QCT20120C	Price

NORTON SAINT-GOBAIN Norton AVOS The See Thru System

Norton AVOS Edger Speed-Lok Fibre Discs



- Patented hole design allows interupted cut which reduces heat up to 30% over standard round discs
- Cool cutting results in longer disc life
- Provides complete vision into the grinding zone
- NorZon Plus- Premium, self-sharpening zirconia alumina abrasive
- SG F986 - Premium, dense, self-sharpening SG ceramic grain with unique coating design. F986 has a self-lubricating, supersizing treatment

	Type - Norzon Plus						Type - SG F986			
	4-1/2		5		7		4-1/2		5	
Grit	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
24	MH61D0429718	Price	MH61D0526556	Price	-	-	-	-	MH61D0544046	Price
36	MH61D0429719	Price	-	-	MH61D0737455	Price	-	-	MH61D0544047	Price
50	MH61D0429720	Price	-	-	-	-	MH61D0429713	Price	-	-
60	MH61D0429721	Price	-	-	MH61D0737457	Price	-	-	MH61D0544049	Price
80	MH61D0429722	Price	-	-	-	-	-	-	-	-

QDC (Quick Disc Connect) Discs



- QDCs are staple items in many production shops
- Offers instant disc changes, assurance that the disc is centered and smooth running
- Works well on flat surfaces and most will perform well on contoured surfaces, too
- **Sold in boxes of 100 pcs only**

Size (in.) - 1-1/2						
	Alumina Zirconia		Alumina Zirconia - Lubricated		Aluminum Oxide	
Grit	Order No.	Price	Order No.	Price	Order No.	Price
24	**MM44QD024ZR150**	Price	-	-	**MM44QD024AO150**	Price
36	**MM44QD036ZR150**	Price	**MM44QD036ZRL150**	Price	**MM44QD036AO150**	Price
40	**MM44QD040ZR150**	Price	**MM44QD040ZRL150**	Price	**MM44QD040AO150**	Price
50	**MM44QD050ZR150**	Price	**MM44QD050ZRL150**	Price	**MM44QD050AO150**	Price
60	**MM44QD060ZR150**	Price	**MM44QD060ZRL150**	Price	**MM44QD060AO150**	Price
80	**MM44QD080ZR150**	Price	**MM44QD080ZRL150**	Price	**MM44QD080AO150**	Price
100	-	-	-	-	**MM44QD100AO150**	Price
120	**MM44QD120ZR150**	Price	**MM44QD120ZRL150**	Price	**MM44QD120AO150**	Price

Size (in.) - 2						
	Alumina Zirconia		Alumina Zirconia - Lubricated		Aluminum Oxide	
Grit	Order No.	Price	Order No.	Price	Order No.	Price
24	**MM44QD024ZR200**	Price	-	-	**MM44QD024AO200**	Price
36	**MM44QD036ZR200**	Price	**MM44QD036ZRL200**	Price	**MM44QD036AO200**	Price
40	**MM44QD040ZR200**	Price	**MM44QD040ZRL200**	Price	**MM44QD040AO200**	Price
50	**MM44QD050ZR200**	Price	**MM44QD050ZRL200**	Price	**MM44QD050AO200**	Price
60	**MM44QD060ZR200**	Price	**MM44QD060ZRL200**	Price	**MM44QD060AO200**	Price
80	**MM44QD080ZR200**	Price	**MM44QD080ZRL200**	Price	**MM44QD080AO200**	Price
100	-	-	-	-	**MM44QD100AO200**	Price
120	**MM44QD120ZR200**	Price	**MM44QD120ZRL200**	Price	**MM44QD120AO200**	Price

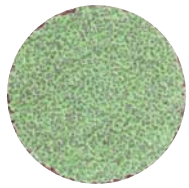
Steel Mandrels for QDC Discs



- Observe appropriate safety regulations
- Use eye, face, hearing, respiratory, hand and body protection when using abrasive products

Use with Disc Size (in.)	Order No.	Price
1-1/2	**MM44SL100**	Price
2 & 3	**MM44SL101**	Price

Neon Cloth Discs



- Our unique premium abrasive and aluminum oxide blend provides aggressive cut and longer life than competitive aluminum oxide materials
- The new resin system improves base adhesion and reduces grain shedding
- Durable, Y -wt. 2-ply polyester backing stands up to demanding applications
- New grain coating ensures life and faster cut rate

Note: 1-1/2" Holder - TS: MH61A43200 TR: MH61A47500
2" Holder - TS: MH61A43210 TR: MH61A55103
3" Holder - TS: MH61A43225 TR: MH6155105


TR


TS

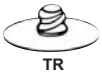
			TR		TS	
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price	Order No.	Price
1-1/2	36	100	**MH61D0118977**	Price	**MH61D0118972**	Price
1-1/2	40	100	**MH61D0118978**	Price	**MH61D0118973**	Price
1-1/2	50	100	**MH61D0118979**	Price	**MH61D0118974**	Price
1-1/2	60	100	**MH61D0118980**	Price	**MH61D0118975**	Price
1-1/2	80	100	**MH61D0118981**	Price	**MH61D0118976**	Price
2	24	100	**MH61D0219013**	Price	**MH61D0219011**	Price
2	36	100	**MH61D0219005**	Price	**MH61D0218999**	Price
2	40	100	**MH61D0219006**	Price	**MH61D0219000**	Price
2	50	100	**MH61D0219007**	Price	**MH61D0219001**	Price
2	60	100	**MH61D0219008**	Price	**MH61D0219003**	Price
2	80	100	**MH61D0219009**	Price	**MH61D0219004**	Price
3	24	50	**MH61D0319026**	Price	**MH61D0319020**	Price
3	36	50	**MH61D0319027**	Price	**MH61D0319021**	Price
3	40	50	**MH61D0319028**	Price	**MH61D0319022**	Price
3	50	50	**MH61D0319029**	Price	**MH61D0319023**	Price
3	60	50	**MH61D0319030**	Price	**MH61D0319024**	Price
3	80	50	**MH61D0319031**	Price	**MH61D0319025**	Price

Cloth Discs

Blaze R980P:



- Next generation, Norton SG ceramic alumina grain with self lubricating, supersize treatment provides coolest cut; significantly faster cut rates
- Heaviest Y-wt. polyester cloth backing, for greatest durability, longest life, and edge-fray resistance on tough applications and stainless steel
- 3-ply heavy duty laminate discs (yellow backing) are ideal when durability and long life are required.


TR


TS

Bluefire R884P:

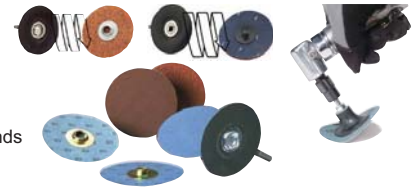


- Premium, versatile, self-sharpening zirconia alumina plus grain provides aggressive cut and up to 15% longer life than competitive zirconia alumina products
- Upgraded resin bond improves base adhesion and reduces grain shedding
- New grain coating results in longer life and faster cut rate
- Semi open coat retards loading on soft metals (aluminum, brass, and bronze) and wood, as well as stainless steel and carbon steel
- Durable, Y-wt., 2-ply polyester backing stands up to demanding applications; high pressure and hard-to-grind exotic alloys

			Blaze Ceramic Alumina				Bluefire Zirconia Alumina			
			TR		TS		TR		TS	
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1-1/2	120	100	**MH61D0143380**	Price	**MH61D0143379**	Price	-	-	-	-
1-1/2	36	100	**MH61D0162308**	Price	**MH61D0162307**	Price	**MH61D0121041**	Price	**MH61D0138624**	Price
1-1/2	50	100	**MH61D0162310**	Price	**MH61D0162309**	Price	-	-	**MH61D0138622**	Price
1-1/2	60	100	**MH61D0162312**	Price	**MH61D0162311**	Price	**MH61D0121043**	Price	**MH61D0138621**	Price
1-1/2	80	100	**MH61D0162314**	Price	**MH61D0162313**	Price	**MH61D0121044**	Price	**MH61D0138620**	Price
2	100	25	**MH61D0243383**	Price	**MH61D0243382**	Price	-	-	-	-
2	120	25	**MH61D0243386**	Price	**MH61D0243384**	Price	-	-	-	-
2	24	25	-	-	-	-	**MH61D0238672**	Price	**MH61D0238638**	Price
2	36	25	**MH61D0262318**	Price	**MH61D0262317**	Price	**MH61D0238671**	Price	**MH61D0238637**	Price
2	50	25	**MH61D0262320**	Price	**MH61D0262319**	Price	**MH61D0238670**	Price	**MH61D0238635**	Price
2	60	25	**MH61D0262322**	Price	**MH61D0262321**	Price	**MH61D0221048**	Price	**MH61D0238634**	Price
2	80	25	**MH61D0262324**	Price	**MH61D0262323**	Price	**MH61D0221049**	Price	**MH61D0238633**	Price
3	100	25	**MH61D0343390**	Price	**MH61D0343389**	Price	-	-	-	-
3	120	25	**MH61D0343392**	Price	**MH61D0343391**	Price	-	-	-	-
3	24	25	-	-	-	-	**MH61D0338675**	Price	**MH61D0338665**	Price
3	36	25	**MH61D0362328**	Price	**MH61D0362327**	Price	**MH61D0338674**	Price	**MH61D0338664**	Price
3	50	25	**MH61D0362330**	Price	**MH61D0362329**	Price	**MH61D0338673**	Price	**MH61D0338662**	Price
3	60	25	**MH61D0362332**	Price	**MH61D0362331**	Price	**MH61D0321053**	Price	**MH61D0338661**	Price
3	80	25	**MH61D0362334**	Price	**MH61D0362333**	Price	**MH61D0321054**	Price	**MH61D0338660**	Price

MERIT Aluminum Oxide Quick Change Discs

PowerLock fx



Turn-On and Rol-On Type

- Flexible all-purpose alternative to traditional quick-change discs is ideal for contoured or flat surfaces
- For weld removal, the most common grits used are 36-50, while 60-120 grits are used for removal of imperfections and blending
- Discs have added flexibility and are used on a wide range of applications
- Won't gouge your work piece
- Rolls easily into contours
- Removes machine marks & blends light welds

Dia. (in.) - 1				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	MM5961886	Price	MM5968881	Price
36	MM5961887	Price	MM5968479	Price
40	-	-	MM5968480	Price
50	MM5961889	Price	-	-
60	MM5961890	Price	MM5968431	Price
80	MM5961891	Price	MM5968432	Price
100	MM5961892	Price	-	-
120	MM5961893	Price	MM5968434	Price

Dia. (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	MM5961914	Price	MM5968883	Price
36	MM5961915	Price	MM5968495	Price
40	MM5961916	Price	MM5968496	Price
50	MM5961917	Price	MM5968497	Price
60	MM5961918	Price	MM5968438	Price
-	-	-	MM5968439	Price
100	MM5961920	Price	MM5968498	Price
120	-	-	MM5968440	Price

Dia. (in.) - 1-1/2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	-	-	MM5968882	Price
36	MM5961900	Price	MM5968487	Price
40	MM5961901	Price	MM5968488	Price
50	MM5961903	Price	MM5968489	Price
60	-	-	MM5968435	Price
80	MM5961905	Price	MM5968436	Price
100	MM5961906	Price	MM5968490	Price
120	MM5961907	Price	MM5968437	Price

Dia. (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	MM5961926	Price	MM5968884	Price
36	MM5961929	Price	MM5968503	Price
40	MM5961930	Price	MM5968504	Price
50	MM5961931	Price	MM5968505	Price
60	MM5961933	Price	MM5968441	Price
80	MM5961935	Price	MM5968442	Price
100	MM5961936	Price	MM5968506	Price
120	MM5961938	Price	MM5968443	Price

MERIT Zirc Plus Quick Change Discs

PowerLock fx


Rol-On


Turn-On



Turn-On and Rol-On Type

- Improved zirconia alumina with a grinding aid
- Faster cutting action
- Increased productivity
- Significantly longer life

Dia. (in.) - 1				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM5962460	Price	MM5961443	Price
60	MM5962461	Price	MM5961444	Price
80	MM5962462	Price	MM5961448	Price
120	MM5962463	Price	-	-

Dia. (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM5962468	Price	MM5961462	Price
60	MM5962459	Price	MM5961463	Price
80	MM5962456	Price	MM5961464	Price
120	MM5962457	Price	MM5961465	Price

Dia. (in.) - 1-1/2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM5962464	Price	MM5961450	Price
60	MM5962465	Price	MM5961454	Price
80	-	-	MM5961456	Price

Dia. (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM5962467	Price	MM5961467	Price
60	-	-	MM5961468	Price
80	MM5962388	Price	MM5961469	Price
120	MM5962470	Price	MM5961472	Price

MERIT Ceramic Blend Quick Change Discs

PowerLock



Turn-On, Rol-On Types

- A ceramic blend that cuts faster, reduces heat build up and outlasts alulminum oxide and zirconia in many applications

Dia. (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
40	MM5961359	Price	MM5961353	Price
-	MM5963607	Price	-	-
60	MM5961360	Price	MM5961354	Price
80	MM5961361	Price	MM5961356	Price
120	MM5968657	Price	MM5968654	Price

Dia. (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
-	MM5961316	Price	MM5961303	Price
40	MM5961318	Price	MM5961304	Price
-	-	-	MM5968469	Price
60	MM5961322	Price	MM5961300	Price
80	MM5961323	Price	MM5961301	Price
-	MM5961324	Price	MM5961302	Price
120	MM5968658	Price	MM5968655	Price

Quick Change Discs/Holder Mounting Types

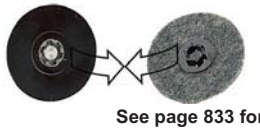
Quick Change TS System: Metal-to-Metal quick change system. Disc has a female screw type button and holder has a male socket. Also known as SocAtt, Type II, Type S, Turn-on, TS, Speedlok TS, Roloc TS/TSM



Quick Change TR System: Features a common nylon threaded (screw type) male hub and holder has a metal female socket. Also known as Lockit, Type III, Type R, Rol-on, TR, Speedlok TR, Roloc TR.



Quick Change TP System: Features a snap-on/snap-off nylon fastening hub and holder. Also known as ClickOn, Type I, Type TP, Snap-on, TP, Speedlok TP, Roloc TP.



See page 833 for holders

MERIT Aluminum Oxide Quick Change Discs

PowerLock

Turn-On, Snap-On, Rol-On

- Used for general purpose deburring and blending on ferrous and nonferrous metals where greater edge durability is required
- Stiff orange laminated backing
- Most aggressive disc in the industry
- Ideal for use on mild contours or flat surfaces
- Eliminiates snagging & Shredding
- Blends light welds, machine marks & parting lines





Dia. (in.) - 1						
	Rol-On		Snap-On		Turn-On	
Grit	Order No.	Price	Order No.	Price	Order No.	Price
24	-	-	MM5961014	Price	MM5999613	Price
36	MM5999682	Price	MM5961015	Price	MM5999614	Price
40	-	-	MM5961016	Price	-	-
50	MM5999684	Price	MM5961017	Price	-	-
60	-	-	MM5999753	Price	MM5965119	Price
80	MM5966185	Price	MM5999754	Price	-	-
100	MM5961364	Price	MM5999755	Price	-	-
120	MM5999688	Price	MM5961021	Price	-	-

Dia. (in.) - 1-1/2						
	Rol-On		Snap-On		Turn-On	
Grit	Order No.	Price	Order No.	Price	Order No.	Price
24	MM5964969	Price	-	-	MM5965130	Price
36	MM5999694	Price	MM5961028	Price	MM5999626	Price
40	MM5999695	Price	MM5961029	Price	-	-
60	-	-	MM5999765	Price	MM5999629	Price
80	MM5999698	Price	MM5961032	Price	MM5999630	Price
100	MM5999699	Price	MM5961033	Price	MM5999631	Price
120	MM5999700	Price	MM5999768	Price	MM5999632	Price

Dia. (in.) - 2						
	Rol-On		Snap-On		Turn-On	
Grit	Order No.	Price	Order No.	Price	Order No.	Price
24	-	-	-	-	MM5965145	Price
36	MM5999706	Price	MM5999774	Price	MM5965146	Price
40	MM5966353	Price	MM5961043	Price	MM5999639	Price
50	MM5999708	Price	MM5999776	Price	MM5999640	Price
60	MM5999709	Price	MM5999777	Price	MM5965149	Price
80	MM5999710	Price	MM5999778	Price	MM5965150	Price
100	MM5999711	Price	MM5999779	Price	MM5999643	Price
120	MM5999712	Price	MM5999780	Price	MM5999644	Price

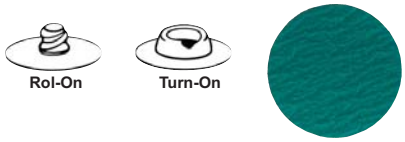
Dia. (in.) - 3						
	Rol-On		Snap-On		Turn-On	
Grit	Order No.	Price	Order No.	Price	Order No.	Price
24	MM5961214	Price	-	-	MM5999649	Price
36	MM5999718	Price	MM5999786	Price	MM5999650	Price
40	MM5964939	Price	MM5961057	Price	MM5999651	Price
50	-	-	-	-	MM5965163	Price
60	MM5999721	Price	MM5999789	Price	MM5999653	Price
80	MM5999722	Price	MM5999790	Price	MM5999654	Price
100	MM5966189	Price	MM5999791	Price	MM5999655	Price
120	MM5999724	Price	MM5999792	Price	MM5999656	Price

MERIT Ceramic Blend Quick Change Discs

Turn-On, Rol-On Types

- A ceramic blend that cuts faster, reduces heat build up and outlasts alulminum oxide and zirconia in many applications

PowerLock



Dia. (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
40	MM5961359	Price	MM5961353	Price
50	MM5963607	Price	-	-
60	MM5961360	Price	MM5961354	Price
80	MM5961361	Price	MM5961356	Price
120	MM5968657	Price	MM5968654	Price

Dia. (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM5961316	Price	MM5961303	Price
40	MM5961318	Price	MM5961304	Price
50	-	-	MM5968469	Price
60	MM5961322	Price	MM5961300	Price
80	MM5961323	Price	MM5961301	Price
100	MM5961324	Price	MM5961302	Price
120	MM5968658	Price	MM5968655	Price

MERIT Zirc Plus Quick Change Discs

Improved Zirconia Alumina with a Grinding Aid
Turn-On, Snap-On, Rol-On

- Faster cutting action
- Increased productivity
- Significantly longer life





PowerLock

Dia. (in.) - 2						
	Rol-On		Snap-On		Turn-On	
Grit	Order No.	Price	Order No.	Price	Order No.	Price
36	MM5967107	Price	MM5967023	Price	MM5967065	Price
40	MM5967108	Price	MM5967024	Price	MM5967066	Price
50	MM5967109	Price	MM5967025	Price	MM5965583	Price
60	MM5967110	Price	MM5967026	Price	MM5967068	Price
80	MM5967111	Price	MM5967027	Price	MM5967069	Price
120	MM5967113	Price	MM5967029	Price	MM5967071	Price

Dia. (in.) - 3						
	Rol-On		Snap-On		Turn-On	
Grit	Order No.	Price	Order No.	Price	Order No.	Price
36	MM5967114	Price	MM5967030	Price	MM5967072	Price
40	MM5967115	Price	MM5967031	Price	MM5967073	Price
50	MM5967116	Price	MM5967032	Price	MM5967074	Price
60	MM5967117	Price	MM5967033	Price	MM5967075	Price
80	MM5967118	Price	MM5967034	Price	MM5967076	Price
120	MM5967120	Price	MM5967036	Price	MM5967078	Price

Quick Change Disc Holder Pads

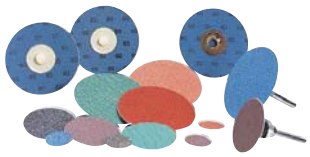




	Rol-On		Turn-On		Snap-On	
Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1	MM5964037	Price	MM5964651	Price	MM5964002	Price
2	MM5964922	Price	MM5964198	Price	MM5964004	Price
3	MM5964949	Price	MM5964113	Price	MM5964005	Price
1-1/2	MM5961174	Price	MM5964146	Price	MM5964003	Price

STANDARD ABRASIVES Aluminum Oxide 2 Ply Discs

- Available in TS (SocAtt®) Turn-On and TR (Lockit®) Rol-On attachment styles
- SocAtt®/Turn-On features an all metal attachment on the holder pad and disc
- Lockit®/Rol-On features a common nylon threaded screw-type hub
- Best disc for general purpose grinding, deburring and blending on ferrous metals
- Ideal for flat or contour surface
- Our most popular disc
- Color: brown



Dia. (in.) - 1				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	MM30592201	Price	MM30522201	Price
36	MM30592202	Price	MM30522202	Price
40	MM30592203	Price	MM30522203	Price
50	MM30592204	Price	MM30522204	Price
60	MM30592205	Price	MM30522205	Price
80	MM30592206	Price	MM30522206	Price
100	MM30592207	Price	MM30522207	Price
120	MM30592208	Price	MM30522208	Price

Dia. (in.) - 1-1/2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	MM30592301	Price	MM30522301	Price
36	MM30592302	Price	MM30522302	Price
40	MM30592303	Price	MM30522303	Price
50	MM30592304	Price	MM30522304	Price
60	MM30592305	Price	MM30522305	Price
80	MM30592306	Price	MM30522306	Price
100	MM30592307	Price	MM30522307	Price
120	MM30592308	Price	MM30522308	Price

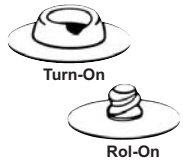
Dia. (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	MM30592401	Price	MM30522401	Price
36	MM30592402	Price	MM30522402	Price
40	MM30592403	Price	MM30522403	Price
50	MM30592404	Price	MM30522404	Price
60	MM30592405	Price	MM30522405	Price
80	MM30592406	Price	MM30522406	Price
100	MM30592407	Price	MM30522407	Price
120	MM30592408	Price	MM30522408	Price
150	-	-	MM30522409	Price
180	MM30592410	Price	-	-
240	-	-	MM30522411	Price
320	MM30592412	Price	MM30522412	Price

Dia. (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	MM30592501	Price	MM30522501	Price
36	MM30592502	Price	MM30522502	Price
40	-	-	MM30522503	Price
50	MM30592504	Price	MM30522504	Price
60	MM30592505	Price	MM30522505	Price
80	MM30592506	Price	MM30522506	Price
100	MM30592507	Price	MM30522507	Price
120	MM30592508	Price	MM30522508	Price
150	-	-	MM30522509	Price
180	MM30592510	Price	-	-
240	MM30592511	Price	-	-
320	MM30592512	Price	-	-

4" & 5" sizes available. Call for price and delivery.

STANDARD ABRASIVES Zirconia Pro 2 Ply Discs

- Available in SocAtt®/Turn-On and Lockit®/Rol-On attachment styles
- SocAtt®/Turn-On features an all metal attachment on the holder pad and disc
- Lockit®/Rol-On features a common nylon threaded screw-type hub
- Ideal for rapid stock removal on stainless steel and aluminum
- Best performance when medium to heavy pressure applied
- Cool running for extended stock removal and surface blending
- Grinding aid
- Fused Zirconium grain with lubricated super-size coating
- Color: green



Dia. (in.) - 1-1/2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM30598322	Price	MM30528322	Price
40	MM30598323	Price	MM30528323	Price
50	MM30598324	Price	MM30528324	Price
60	MM30598325	Price	MM30528325	Price
80	MM30598326	Price	MM30528326	Price

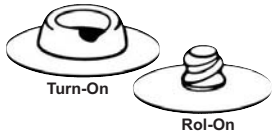
Dia. (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM30598422	Price	MM30528422	Price
40	MM30598423	Price	MM30528423	Price
50	MM30598424	Price	MM30528424	Price
60	MM30598425	Price	MM30528425	Price
80	MM30598426	Price	MM30528426	Price
120	MM30598428	Price	MM30528428	Price

Dia. (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM30598522	Price	MM30528522	Price
40	MM30598523	Price	MM30528523	Price
50	MM30598524	Price	MM30528524	Price
60	MM30598525	Price	MM30528525	Price
80	MM30598526	Price	MM30528526	Price
120	MM30598528	Price	MM30528528	Price

4" & 5" sizes available. Call for price and delivery.

STANDARD ABRASIVES Aluminum Oxide Pro™ 2 Ply Discs

- Available in SocAtt®/Turn-On and Lockit®/Rol-On attachment styles
- SocAtt®/Turn-On features an all metal attachment on the holder pad and disc
- Lockit®/Rol-On features a common nylon threaded screw-type hub
- Best disc for general purpose, grinding and deburring, when greater edge durability is required
- For use of ferrous and non-ferrous metals
- Highest initial rate of cut of all A/O discs
- Longest sustained rate of cut of all A/O discs
- Ideal for prolonged edge work
- Color: brown



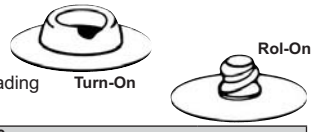
Dia. (in.) - 2				
	Turn-On		Rol-On	
Grit	Order No.	Price	Order No.	Price
36	MM30529402	Price	MM30599402	Price
40	MM30528223	Price	MM30599403	Price
50	-	-	MM30599404	Price
60	MM30529405	Price	-	-
100	MM30529407	Price	MM30599407	Price
120	MM30528228	Price	MM30599408	Price
80	MM30528226	Price	-	-

Dia. (in.) - 3				
	Turn-On		Rol-On	
Grit	Order No.	Price	Order No.	Price
24	MM30529501	Price	MM30599501	Price
36	MM30529502	Price	-	-
40	MM30529503	Price	MM30599503	Price
50	-	-	MM30599504	Price
60	MM30529505	Price	-	-
80	MM30529506	Price	MM30599506	Price
100	MM30529507	Price	MM30599507	Price
120	MM30529508	Price	MM30599508	Price

4" & 5" sizes available. Call for price and delivery.

STANDARD ABRASIVES Aluminum Oxide Xtra™ 2 Ply Discs

- Available in SocAtt®/Turn-On and Lockit®/Rol-On attachment styles
- SocAtt®/Turn-On features an all metal attachment on the holder pad and disc
- Lockit®/Rol-On features a common nylon threaded screw-type hub
- Best disc for difficult to grind metals
- Ideal for flat or contour surfaces
- Grinding aid reduces heat generation and loading
- Color: light brown



Dia. (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM30592452	Price	MM30522452	Price
40	MM30592453	Price	MM30522453	Price
50	MM30592454	Price	MM30522454	Price
60	MM30592455	Price	MM30522455	Price
80	MM30592456	Price	MM30522456	Price
100	MM30592457	Price	MM30522457	Price
120	MM30592458	Price	MM30522458	Price

Dia. (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM30592552	Price	MM30522552	Price
40	MM30592553	Price	MM30522553	Price
50	MM30592554	Price	MM30522554	Price
60	MM30592555	Price	MM30522555	Price
80	MM30592556	Price	MM30522556	Price
100	MM30592557	Price	MM30522557	Price
120	MM30592558	Price	MM30522558	Price

1", 1-1/2, 4" & 5" sizes available. Call for price and delivery.

STANDARD ABRASIVES 3" Edge Pro Surface Conditioning Disc



- These discs fill the void where grinding and stock removal leave off and finishing, graining and blending start
- With EdgePro's unique bottle-cap shape and versatility and SoftEdge's flexibility, these discs adapt easily to the contour of any part being finished
- Pre-formed shape provides easy blending of irregular shapes, corners and inside radii
- Blending mill and tool marks on machined surfaces
- Removing micro-burrs caused by coated abrasives
- Reducing surface roughness for paint preparation
- TS (SocAtt®) mount


Turn-On

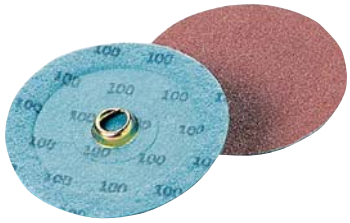
Grade	Order No.	Price
Very Fine	**MM30840453**	Price

Also available in Lockit style attachment system.

STANDARD ABRASIVES Flexible Edge Aluminum Oxide 2 Ply Discs

- These discs fill the void where grinding and stock removal leave off and finishing, graining and blending start
- With EdgePro's unique bottle-cap shape and versatility and SoftEdge's flexibility, these discs adapt easily to the contour of any part being finished
- Best disc where greater edge flexibility is required
- Ideal for contour and difficult to reach surfaces
- Maximum cut rate and stock removal without damaging the radius or surface transition
- Best performance in reducing heavy mill marks in step areas, corners and transitional surfaces
- TS (SocAtt®) mount


Turn-On



Dia. (in.) - 1		
Grit	Order No.	Price
50	**MM30523204**	Price
100	**MM30523207**	Price

Dia. (in.) - 1-1/2		
Grit	Order No.	Price
50	**MM30523304**	Price
60	**MM30523305**	Price
80	**MM30523306**	Price
100	**MM30523307**	Price
180	**MM30523310**	Price

Dia. (in.) - 2		
Grit	Order No.	Price
50	**MM30523404**	Price
180	**MM30523410**	Price

Dia. (in.) - 3		
Grit	Order No.	Price
50	**MM30523504**	Price

STANDARD ABRASIVES TS (SocAtt®) Holder Pads


Turn-On



Style - Edge Pro		
Size (in.)	Order No.	Price
For 3" Discs	**MM30541360**	Price

Style - Flexible Edge		
Size (in.)	Order No.	Price
For 3/4" Discs	**MM30541051**	Price
For 1" Discs	**MM30541052**	Price
For 1-1/2" Discs	**MM30541054**	Price

STANDARD ABRASIVES Ceramic Quick Change Discs



- Best disc for: Cool, rapid stock removal on all heat-sensitive metals, including Stainless Steel and High Nickel Alloys. Highest edge durability in the industry
- Highest rate of cut of all Quick Change discs
- Ideal for prolonged edge work
- Highest stock removal on flat surfaces
- Stiffness equal to Resin Fiber disc


Rol-On


Turn-On

Dia. (in.) - 1-1/2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
40	-	-	**MM30527313**	Price
60	**MM30597315**	Price	**MM30527315**	Price
80	**MM30597316**	Price	**MM30527316**	Price
120	**MM30597318**	Price	**MM30527318**	Price

Dia. (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	**MM30594480**	Price	**MM30524480**	Price
40	**MM30597413**	Price	**MM30527413**	Price
60	**MM30597415**	Price	**MM30527415**	Price
80	**MM30597416**	Price	**MM30527416**	Price
120	**MM30597418**	Price	**MM30527418**	Price

Dia. (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	**MM30594580**	Price	**MM30524580**	Price
36	-	-	**MM30524581**	Price
50	**MM30594583**	Price	**MM30524583**	Price
40	**MM30597513**	Price	**MM30527513**	Price
60	**MM30597515**	Price	**MM30527515**	Price
80	**MM30597516**	Price	**MM30527516**	Price
120	**MM30597518**	Price	**MM30527518**	Price

Dia. (in.) - 4				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	**MM30594680**	Price	-	-
36	-	-	**MM30524681**	Price
40	**MM30597613**	Price	-	-
60	-	-	**MM30527615**	Price
80	**MM30597616**	Price	**MM30527616**	Price
120	**MM30597618**	Price	**MM30527618**	Price

STANDARD ABRASIVES Quick Change Holder Pads

- For coated and surface conditioning discs




Rol-On


Turn-On

	Turn-On		Rol-On	
Dia. (in.)	Order No.	Price	Order No.	Price
1-1/2	**MM5964146**	Price	**MM5961174**	Price
1	**MM5964651**	Price	**MM5964037**	Price
3 Firm	**MM30541061**	Price	-	-
3 Soft	**MM30541059**	Price	-	-

STANDARD ABRASIVES Quick Change Zirconia Resin Fibre Discs

- Alumina Zirconia disc constructed on a fiber backing
- Provides a good option for both stainless and mild steel applications
- General purpose




Rol-On


Turn-On

Diameter (in.) - 2				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	**MM30595492**	Price	**MM30525492**	Price
50	**MM30595494**	Price	**MM30525494**	Price
60	**MM30595495**	Price	**MM30525495**	Price
80	**MM30595496**	Price	**MM30525496**	Price

Diameter (in.) - 3				
	Rol-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	**MM30595592**	Price	**MM30525592**	Price
50	**MM30595594**	Price	**MM30525594**	Price
60	**MM30595595**	Price	**MM30525595**	Price
80	-	-	**MM30525596**	Price

SUPERIOR Abrasives Aluminum Oxide Quick Change Discs



- General purpose grinding and deburring
- Great for aggressive stock removal and blending
- Ideal for surface leveling, pit, and gouge removal


Roll-On


Turn-On

Diameter - 1				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6435361	Price	-	-
40	MM6442716	Price	MM6411088	Price
50	MM6434998	Price	MM6411089	Price
60	MM6411193	Price	MM6411090	Price
80	MM6411194	Price	MM6411091	Price
100	MM6438037	Price	MM6411092	Price
120	MM6411196	Price	MM6411093	Price

Diameter - 1-1/2				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6411202	Price	MM6411099	Price
40	MM6411203	Price	MM6411100	Price
50	MM6411204	Price	MM6411101	Price
60	MM6411205	Price	MM6411102	Price
80	MM6411206	Price	MM6411103	Price
100	MM6411207	Price	MM6411104	Price
120	MM6411208	Price	MM6411105	Price

Diameter - 2				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	MM6411213	Price	MM6411110	Price
36	MM6411214	Price	MM6411111	Price
40	MM6411215	Price	MM6411112	Price
50	MM6411216	Price	MM6411113	Price
60	MM6411217	Price	MM6411114	Price
80	MM6411218	Price	MM6411115	Price
100	MM6411219	Price	MM6411116	Price
120	MM6411220	Price	MM6411117	Price

Diameter - 3				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
24	MM6411225	Price	MM6411122	Price
36	MM6411226	Price	MM6411123	Price
40	MM6411227	Price	MM6411124	Price
50	MM6411228	Price	MM6411125	Price
60	MM6411229	Price	MM6411126	Price
80	MM6411230	Price	MM6411127	Price
100	MM6411231	Price	MM6411128	Price
120	MM6411232	Price	MM6411129	Price

See page 810 for Quick-Change Disc Holdes

SUPERIOR Abrasives Rigid Kut® - Aluminum Oxide Quick Change Discs

- Our most firm disc, as stiff as a fiber disc with better grain retention
- Excels at aggressive deburring applications where other discs fail
- Deburr interrupted cuts without snagging or disc fly-off


Roll-On


Turn-On





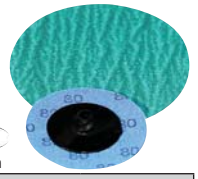
Diameter - 2				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6446871	Price	MM6446853	Price
50	MM6446872	Price	MM6446854	Price
60	MM6446873	Price	MM6446855	Price
80	MM6446874	Price	MM6446856	Price
120	-	-	MM6446858	Price

Diameter - 3				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6446877	Price	MM6446859	Price
50	MM6446878	Price	MM6446860	Price
60	MM6446879	Price	MM6446861	Price
80	MM6446880	Price	MM6446862	Price
120	MM6446882	Price	MM6446864	Price

See page 816 for Quick-Change Disc Holders

SUPERIOR Abrasives Zirconia Alumina with Grinding Aid Quick Change Discs





- Aggressive stock removal on all metals including stainless steel
- Ideal for moderate to heavy pressure applications
- The grinding aid reduces heat buildup and extends life


Roll-On


Turn-On

Diameter - 1-1/2				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6436671	Price	MM6436665	Price
50	MM6436673	Price	MM6436667	Price
60	MM6436674	Price	MM6436668	Price
80	MM6436675	Price	MM6436669	Price
120	MM6436676	Price	MM6436670	Price

Diameter - 2				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6436683	Price	MM6436677	Price
50	MM6436685	Price	MM6436679	Price
60	MM6436686	Price	MM6436680	Price
80	MM6436687	Price	MM6436681	Price
120	MM6436688	Price	MM6436682	Price

Diameter - 3				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6436695	Price	MM6436689	Price
50	MM6436697	Price	MM6436691	Price
60	MM6436698	Price	MM6436692	Price
80	MM6436699	Price	MM6436693	Price
120	MM6436700	Price	MM6436694	Price

See page 816 for Quick-Change Disc Holders

SUPERIOR Abrasives Kushion Kut® - Aluminum Oxide Quick Change Discs



- Highly flexible disc, ideal for contour sanding with finessed control
- Great for transition grinding, reducing work piece gouging
- Must use Kushion Kut holders


Roll-On

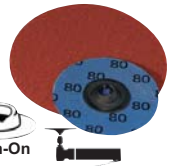

Turn-On

Diameter - 2				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
60	MM6449457	Price	MM6449430	Price
80	MM6449458	Price	MM6449431	Price
120	MM6449460	Price	MM6449433	Price

Diameter - 3				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
60	MM6449466	Price	MM6449439	Price
80	MM6449467	Price	MM6449440	Price
120	MM6449469	Price	MM6449442	Price

See page 816 for Quick-Change Disc Holders

SUPERIOR Abrasives Ceramic with Grinding Aid Quick Change Discs



- Ideal for nickel alloys and heat sensitive metals
- Continuous, aggressive cutting action with self-sharpening grain
- Longest life with maximum grain retention of all quick change products


Roll-On


Turn-On

Diameter - 2				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6440329	Price	MM6440311	Price
50	MM6440331	Price	MM6440313	Price
60	MM6440332	Price	MM6440314	Price
80	MM6440333	Price	MM6440315	Price
120	MM6440334	Price	MM6440316	Price

Diameter - 3				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6440335	Price	MM6440317	Price
50	MM6440337	Price	MM6440319	Price
60	MM6440338	Price	MM6440320	Price
80	MM6440339	Price	MM6440321	Price
120	MM6440340	Price	MM6440322	Price

See page 816 for Quick-Change Disc Holders

Cubitron II Roloc Fibre Discs 982C

- Cubitron II technology requires less grinding pressure than conventional abrasives - so you can remove more material with less "push"
- Rigid fibre backing is tough and durable, enabling faster, more aggressive cuts
- Optimized for: carbon steel

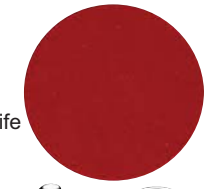




				Roloc TR		Roloc TSM	
Dia. (in.)	Grit	Max RPM	Std. Pkg.	Order No.	Price Ea.	Order No.	Price Ea.
2	36	25000	50	**TM1166778**	Price	**TM1166781**	Price
2	60	25000	50	**TM1166783**	Price	**TM1166786**	Price
2	80	25000	50	**TM1166788**	Price	**TM1166791**	Price
3	36	20000	50	**TM1166779**	Price	**TM1166782**	Price
3	60	20000	50	**TM1166784**	Price	**TM1166787**	Price
3	80	20000	50	**TM1166789**	Price	**TM1166792**	Price
4	36	12000	25	**TM1166780**	Price	-	-
4	60	12000	25	**TM1166785**	Price	-	-
4	80	12000	25	**TM1166790**	Price	-	-

Cubitron II Roloc Durable Edge Disc 984F

- Featuring durable edge backing - for longer edge retention
- With the 984F disc, these edges actually help the precision-shaped grains fracture, extending disc life
- Features a flexible, durable cloth backing that stands up to aggressive grinding applications
- Optimized for: stainless steel, high nickel alloys, superalloys & carbon steel





				TR		TSM	
Dia. (in.)	Grit	Max RPM	Std. Pkg.	Order No.	Price	Order No.	Price
1-1/2	36	30000	25	**TM1127700**	Price	**TM1127704**	Price
1-1/2	60	30000	25	**TM1127708**	Price	**TM1127712**	Price
1-1/2	80	30000	25	**TM1127716**	Price	**TM1127720**	Price
2	36	25000	25	**TM1127701**	Price	**TM1127705**	Price
2	60	25000	25	**TM1127709**	Price	**TM1127713**	Price
2	80	25000	25	**TM1127717**	Price	**TM1127721**	Price
3	36	20000	25	**TM1127702**	Price	**TM1127706**	Price
3	60	20000	25	**TM1127710**	Price	**TM1127714**	Price
3	80	20000	25	**TM1127718**	Price	**TM1127722**	Price
4	36	12000	25	**TM1127703**	Price	**TM1127707**	Price
4	60	12000	25	**TM1127711**	Price	**TM1127715**	Price
4	80	12000	25	**TM1127719**	Price	**TM1127723**	Price

Cubitron™ II Roloc™ Durable Edge D/F Discs 984F

- Precision shaped ceramic grain on a reinforced cloth backing
- Designed for heavy-duty metalworking applications such as weld grinding, beveling and flame-out edge clean-up
- Super-fast cut, long life on stainless steel and carbon steel
- D/F construction for dust control
- Convenient Quick Change Roloc™ attachment





			TR		TSM	
Dia. (in.)	Grit	Std. Pkg.	Order No.	Price	Order No.	Price
1	36	200	**TM1128123**	Price	-	-
1	60	200	**TM1128124**	Price	-	-
1	80	200	**TM1128125**	Price	-	-
2	36	200	**TM1128073**	Price	**TM1128074**	Price
2	60	200	**TM1128077**	Price	**TM1128078**	Price
2	80	200	**TM1128080**	Price	**TM1128079**	Price
2	P120	50	**TM1122403**	Price	-	-
3	36	200	**TM1128076**	Price	**TM1128075**	Price
3	60	200	**TM1128084**	Price	**TM1128083**	Price
3	80	200	**TM1128082**	Price	**TM1128081**	Price

Roloc™ Fibre Discs 501C

- Aluminum Ziconia – Fibre
- Versatile disc for use on a wide variety of metals
- Roloc TSM Metal button



Dia. (in.)	Grit	Max RPM	Order No.	Price
2	36	25000	**TM1150755**	Price
2	50	25000	**TM1150756**	Price
2	60	25000	**TM1150757**	Price
2	80	25000	**TM1150758**	Price
3	36	20000	**TM1150751**	Price
3	50	20000	**TM1150752**	Price
3	60	20000	**TM1150753**	Price
3	80	20000	**TM1150754**	Price

See Page 816 for Roloc TR (Rol-On) and Roloc TSM (Turn-On) Holders

Roloc™ Fibre Discs 361F

- Aluminum Oxide – YF weight cloth
- General purpose grinding, blending and finishing on all metals
- Roloc TR Plastic button



Dia. (in.)	Grit	Max RPM	Order No.	Price
1	50	30000	**TM1111411**	Price
1	80	30000	**TM1111416**	Price
1	P100	30000	**TM1111415**	Price
1	P120	30000	**TM1111414**	Price
1-1/2	36	30000	**TM1122396**	Price
1-1/2	60	30000	**TM1122397**	Price
1-1/2	80	30000	**TM1122407**	Price
1-1/2	P120	30000	**TM1122409**	Price
2	24	25000	**TM1111000**	Price
2	36	25000	**TM1122398**	Price
2	50	25000	**TM1122399**	Price
2	60	25000	**TM1122400**	Price
2	80	25000	**TM1122401**	Price
2	P100	25000	**TM1122402**	Price
2	P120	25000	**TM1122403**	Price
2	P150	25000	**TM1114559**	Price
2	P180	25000	**TM1113873**	Price
2	P240	25000	**TM1111419**	Price
3	24	20000	**TM1122392**	Price
3	36	20000	**TM1122393**	Price
3	50	20000	**TM1122394**	Price
3	60	20000	**TM1122395**	Price
3	80	20000	**TM1122404**	Price
3	P100	20000	**TM1122405**	Price
3	P120	20000	**TM1122406**	Price
3	P150	20000	**TM1182244**	Price
3	P240	20000	**TM1111418**	Price

See Page 816 for Roloc TR (Rol-On) and Roloc TSM (Turn-On) Holders.

Roloc™ Fibre Discs 777F

- 3M™ Cubitron™ Abrasive Grain
- Cloth backing
- Grinding aid
- Roloc TR Plastic button



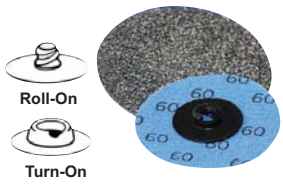


Dia. (in.)	Grit	Max RPM	Order No.	Price
1-1/2	36	30000	**TM1176626**	Price
1-1/2	50	30000	**TM1176627**	Price
1-1/2	60	30000	**TM1176628**	Price
1-1/2	P120	30000	**TM1180511**	Price
2	36	25000	**TM1176629**	Price
2	50	25000	**TM1176630**	Price
2	60	25000	**TM1176433**	Price
2	P100	25000	**TM1180508**	Price
2	P120	25000	**TM1180512**	Price
3	36	20000	**TM1176631**	Price
3	50	20000	**TM1176632**	Price
3	60	20000	**TM1176633**	Price
3	80	20000	**TM1176634**	Price
3	P100	20000	**TM1180509**	Price
3	P120	20000	**TM1180513**	Price

See Page 816 for Roloc TR (Rol-On) and Roloc TSM (Turn-On) Holders.

Silicon Carbide Quick Change Discs

- Ideal for the Aerospace industry where a/o contamination is a concern
- Great for titanium and stainless grinding and polishing
- Designed to remove stock, debur, polish, and general purpose grinding



Diameter - 2				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6432036	Price	MM6418151	Price
50	MM6444586	Price	MM6436954	Price
60	MM6418216	Price	MM6418154	Price
80	MM6418217	Price	MM6416980	Price
120	MM6432035	Price	MM6418157	Price
180	MM6449033	Price	MM6418159	Price

Diameter - 3				
	Roll-On		Turn-On	
Grit	Order No.	Price	Order No.	Price
36	MM6432034	Price	MM6432031	Price
50	MM6443069	Price	MM6440937	Price
60	MM6449393	Price	MM6418059	Price
80	MM6432033	Price	MM6418166	Price
120	MM6418232	Price	MM6449395	Price
180	MM6449306	Price	MM6449396	Price

Shur-Kut® Flap Mops

- The maximum in flap wheel flexibility
- Manufactured with premium aluminum oxide grain on J weight cloth
- Ideal for conforming to difficult contours for sanding and polishing



Face Width (in.)	Dia. (in.)	Grit	Order No.	Price
1	2	120	MM6428967	Price
1	2	180	MM6428968	Price
1	2	240	MM6428969	Price
1	2	320	MM6428970	Price
1-1/2	2-1/2	120	MM6428971	Price
1-1/2	2-1/2	180	MM6428973	Price
1-1/2	2-1/2	240	MM6428974	Price
1-1/2	2-1/2	320	MM6428953	Price
2	3	120	MM6428954	Price
2	3	180	MM6428955	Price
2	3	240	MM6428145	Price
2	3	320	MM6428956	Price

XE Mini Disc Wheels

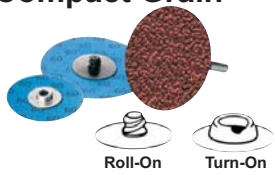
- Designed to clean, finish, and polish intricate forms and shapes
- Wheels will not alter part geometry while producing uniform high luster
- Manufactured with high strength material for excellent durability



			A/O Fine		A/O Medium	
Dia. (in.)	Shank (in.)	Ply	Order No.	Price	Order No.	Price
1	1/8	1	MM6440435	Price	MM6440433	Price
1	1/8	2	MM6440436	Price	MM6440434	Price
1-1/2	1/8	2	MM6440439	Price	MM6440437	Price
1-1/2	1/8	3	MM6440440	Price	MM6440438	Price

Aluminum Oxide Compact Grain Quick Change Discs

- Compacted layers of aluminum oxide grain greatly extend life and provide a very uniform finish throughout its life
- Premium performance in a fine grit not previously available

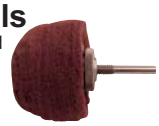


			Roll-On		Turn-On	
Size (in.)	Std. Pkg.	Grit	Order No.	Price	Order No.	Price
2	100	120	MM6440292	Price	MM6440271	Price
2	100	180	MM6440293	Price	MM6440272	Price
2	100	240	MM6440294	Price	MM6440273	Price
2	100	320	MM6440295	Price	MM6440274	Price
2	100	400	MM6440296	Price	MM6440275	Price
2	100	600	MM6440297	Price	MM6440276	Price
2	100	80	MM6440291	Price	MM6440270	Price
3	50	120	MM6440299	Price	MM6440278	Price
3	50	180	MM6440300	Price	MM6440279	Price
3	50	240	MM6440301	Price	MM6440280	Price
3	50	320	MM6440302	Price	MM6440281	Price
3	50	400	MM6440303	Price	MM6440282	Price
3	50	600	MM6440304	Price	MM6440283	Price
3	50	80	MM6440298	Price	MM6440277	Price

See page 816 for quick change disc holders See page 816 for quick change disc holders

Shur-Brite® Goblet Wheels

- Designed for finishing round corners such as sinks, tanks, and vats
- Ideal for food service where sanitation and cleanup are critical
- Great for food, dairy, brewery, and assorted industries



Type - Goblet Wheel Refills						
			A/O Fine		A/O Medium	
Dia. (in.)	Length (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price
2	2	1/4	MM6430611	Price	MM6430612	Price
3	2	1/4	MM6430613	Price	MM6430614	Price

Type - Goblet Wheels						
			A/O Fine		A/O Medium	
Dia. (in.)	Length (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price
2	2	1/4	MM6430607	Price	MM6430608	Price
3	2	1/4	MM6430609	Price	MM6430610	Price

Surface Conditioning Belts with Premium X-Flex or Low Stretch Backings

- XFlex is highly flexible with outstanding edge durability
- Low Stretch material is ideal for robotic cells or applications where stretching is a concern
- Both materials are made with premium aluminum oxide grain great for grinding, blending, and polishing



Material - Low Stretch / Aluminum Oxide								
			Coarse (Brown)		Medium (Maroon)		Very Fine (Blue)	
Width (in.)	Length (in.)	Std. Pkg.	Order No.	Price	Order No.	Price	Order No.	Price
1	42	12	MM6410625	Price	MM6410626	Price	MM6410627	Price
2	60	6	MM6410631	Price	MM6410632	Price	MM6410633	Price
2-1/2	60	5	MM6410643	Price	MM6410644	Price	MM6410645	Price
3	132	4	MM6410649	Price	MM6410650	Price	MM6410651	Price
4	132	3	MM6410661	Price	MM6410662	Price	MM6410663	Price
6	48	4	MM6410664	Price	MM6410665	Price	MM6410666	Price

Material - X-Flex / Aluminum Oxide								
			Coarse (Brown)		Medium (Maroon)		Very Fine (Blue)	
Width (in.)	Length (in.)	Std. Pkg.	Order No.	Price	Order No.	Price	Order No.	Price
1/2	18	20	MM6410607	Price	MM6410608	Price	MM6410609	Price
1/2	24	20	MM6410610	Price	MM6410611	Price	MM6410612	Price
3/4	18	20	MM6410613	Price	MM6410614	Price	MM6410615	Price
3/4	20-1/2	20	MM6410616	Price	MM6410617	Price	MM6410618	Price
3	24	8	MM6410646	Price	MM6410647	Price	MM6410648	Price
4	24	6	MM6410652	Price	MM6410653	Price	-	-
3-1/2	15-1/2	10	MM6410622	Price	MM6410623	Price	MM6410624	Price

SURF PRO® 6" x 9" Non-Woven Hand Pads



- Excellent for hand finishing and cleaning of woods, metals and composites
- Ideal for wood finishing, paint prep and general cleaning
- Priced Each / Sold In Standard Pack Only

Color	Description	Material	Grade	Order No.	Price
Maroon	General Purpose	Aluminum Oxide	Very Fine	**SP22HP69MAVFNA**	Price
Light Gray	Clean & Finish	Silicon Carbide	Ultra Fine	**SP22HP69GYUFNS**	Price
Green	Scouring Industrial	Aluminum Oxide	Very Fine	**SP22HP69GNVFNA**	Price
Tan	Heavy Duty	Aluminum Oxide	Medium	**SP22HP69TNMEDA**	Price

STANDARD ABRASIVES 6" x 9" Hand Pads

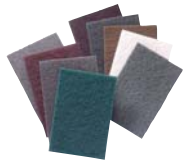


- Heavy non-woven material impregnated with abrasive and bonded with resin
- Ideal for deburring, cleaning, blending and surface preparation
- MM75-827600, MM75-827605, MM75-827620, MM75-827630 Sold in Case Only

Description	Std. Pkg.	Color	Order No.	Price Ea.
General Purpose	60	Maroon	**MM75827505**	Price
Cleaning	60	White	**MM75827525**	Price
Ultra Fine	60	Gray	**MM75827500**	Price
Scouring Industrial	60	Green	**MM75827520**	Price
Heavy Duty	40	Tan	**MM75827510**	Price
General Purpose	50	Maroon	**MM75827600**	Price
Ultra Fine	50	Gray	**MM75827605**	Price
High Strength	50	Pink	**MM75827630**	Price
High Strength	50	Red	**MM75827620**	Price

NORTON Bear-Tex® 6" x 9" Hand Pads





- Bear-Tex products are non-metallic, won't rust and are an ideal replacement for steel wool
- It is the user's responsibility to refer to and comply with ANSI B7.1
- **Save 10% on Standard Case Quantity of Same Order No.**

Product Number	Width (in.)	Length (in.)	Color	Name	Abrasive	Grit Size	Std. Pkg.	Order No.	Price Ea.
456	6	9	White	Light Duty Cleaning Pad	Non-Abrasive	Non-Abrasive	10	**MH62HP456**	Price
635	6	9	Gray	Clean & Finish Pad	Silicon Carbide	Ultra Fine	20	**MH62HP635**	Price
740	6	9	Dark Tan	Heavy Duty	Aluminum Oxide	Medium	20	**MH62HP740**	Price
746	6	9	Gray	Metal Blend Pad	Silicon Carbide	Medium	20	**MH62HP746**	Price
747	6	9	Maroon	General Purpose Pad	Aluminum Oxide	Very Fine	20	**MH62HP747**	Price
748	6	9	Gray	Final Shine Pad	Silicon Carbide	Micro Fine	20	**MH62HP748**	Price
777	6	9	Maroon	Long Life Pad	Aluminum Oxide	Very Fine	20	**MH62HP777**	Price
796	6	9	Green	Scouring Pad	Aluminum Oxide	Very Fine	20	**MH62HP796**	Price
851	6	9	Gray	General Purpose Pad	Silicon Carbide	Very Fine	20	**MH62HP851**	Price

NORTON Bear-Tex® Roll Assortment

- 1 Each A/O fine, A/O very fine and SC ultra fine



Order No.	Price
MH62R0208108	Price

NORTON Bear-Tex® Clean & Blend Rolls

Features:

- For general purpose use
- High quality aluminum oxide or silicon carbide grain
- Uniform web construction
- Can be cut to exact sizes needed

Benefits:

- Long product life
- Controlled aggressiveness
- Economical; minimal waste



Width (in.)	Length	Material	Grit	Color	Order No.	Price
4	30'	Aluminum Oxide	Fine	Maroon	**MH62R0458364**	Price
4	30'	Aluminum Oxide	Very Fine	Maroon	**MH62R0458361**	Price
4	30'	Silicon Carbide	Ultra Fine	Gray	**MH62R0458357**	Price
4	30'	Silicon Carbide	Very Fine	Gray	**MH62R0458360**	Price
6	30'	Aluminum Oxide	Very Fine	Maroon	**MH62R0658376**	Price
6	30'	Silicon Carbide	Very Fine	Gray	**MH62R0658377**	Price

3M Scotch-Brite™ Hand Pads



- Excellent products for hand finishing and cleaning of woods, metals and composites
- Ideal for wood finishing, paint prep and general cleaning
- 7447 & 7448 PRO: Cuts faster and produces more consistant scratch
- Sold In Standard Pack Only

Width (in.)	Length (in.)	Cat. No.	Color	Grade	Pack Qty.	Order No.	Price
3-2/3	9-1/4	7447 PRO	Maroon	AVFN	-	**TM2264958**	Price
6	9	7440	Gray	Coarse	20	**TM2265055**	Price
6	9	7440B	Tan	Medium	40	**TM2218451**	Price
6	9	7446	Gray	S MED	20	**TM2265056**	Price
6	9	7447 & 7448 PRO	Maroon	ULF	20	**TM2264933**	Price
6	9	7447 PRO	Maroon	A VFN	20	**TM2264926**	Price
6	9	7448 PRO	Gray	S ULF	3	**TM2264935**	Price
6	9	7447 PRO	Maroon	A VFN	20	**TM2204029**	Price
6	9	7448 PRO	Light Gray	S ULF	20	**TM2204028**	Price

3M Scotch-Brite™ Cut & Polish Rolls

- A unique and aggressive material for cleaning and finishing
- Sturdy, long lasting web material is great for heavy industrial cleaning and light deburring applications
- Works well for stropping and other bench applications



Width (in.)	Length	Grade	Std. Pkg.	Order No.	Price
1	30'	A MED	12	**TM2204085**	Price
2	30'	A MED	6	**TM2205206**	Price
4	30'	A MED	3	**TM2205207**	Price

STANDARD ABRASIVES Surface Conditioning Belts

- Unique formula
- Resists loading
- Low stretch
- Edge durability



Width (in.)	Length (in.)	Grit	Color	Std. Pkg.	Order No.	Price
1/2	24	Coarse	Tan	20	**MM75888053**	Price
1/2	24	Medium	Red	20	**MM75888052**	Price
1/2	24	Very Fine	Blue	20	**MM75888051**	Price
3/4	18	Coarse	Tan	20	**MM75888056**	Price
3/4	18	Very Fine	Blue	20	**MM75888054**	Price
3/4	20-1/2	Coarse	Tan	20	**MM75888059**	Price
3/4	20-1/2	Medium	Red	20	**MM75888058**	Price
1	42	Coarse	Tan	10	**MM75888011**	Price
1	42	Medium	Red	10	**MM75888010**	Price
1	42	Very Fine	Blue	10	**MM75888009**	Price
3	10-11/16	Coarse	Tan	10	**MM75888005**	Price
3	10-11/16	Medium	Red	10	**MM75888004**	Price
3	10-11/16	Very Fine	Blue	10	**MM75888003**	Price
3-1/2	15-1/2	Coarse	Tan	10	**MM75888008**	Price
3-1/2	15-1/2	Medium	Red	10	**MM75888007**	Price
3-1/2	15-1/2	Very Fine	Blue	10	**MM75888006**	Price

STANDARD ABRASIVES Non-Woven Abrasive Flap Brushes

- Ideal for producing uniform finishes on Aluminum, Brass and Stainless Steel
- They produce long line brushed finishes
- Density, pressure and angle determine the ability of the Flap Brush to remove burrs, oxidation and handling marks
- The finish produced will be a direct result of the density and grade

FINISHING:

- Grain finish on brass strike plates for door hardware
- Antique finish on builders hardware (cabinet handles, door knobs and more)
- Satin finishes on soft metals
- Highlighting and finishing Aluminum extrusion. (Used as a quality control tool to identify defects)
- Inline brushed finish on Aluminum and Stainless cookware (pots and pans)
- Produce fine scratch pattern on utensils and cutlery prior to cotton buff and compound polishing



CLEANING:

- Remove oxide from precious metals

BLENDING:

- Blending flash and parting lines on Aluminum die cast

TOOLS:

- Straight Shaft Portable Grinder
- Bench Motor
- Backstand
- Floor Lathe
- Rotary
- Straight Line
- Robotic

CHARACTERISTICS:

- Flexible face, capable of conforming to concave, convex, flat and irregular surfaces
- Consistent face, capable of creating matte and satin finishes, leaving no lines on work piece
- Cool running
- Smooth running

Size (in.)	Density	Grade	Order No.	Price
6 x 1 x 2	Hard	Medium	**MM75875139**	Price
6 x 1 x 2	Medium	Medium	**MM75875143**	Price
6 x 1 x 2	Hard	Medium	**MM75875009**	Price
6 x 1 x 2	Medium	Medium	**MM75875001**	Price
6 x 1 x 2	Hard	Very Fine	**MM75875008**	Price
6 x 1 x 2	Medium	Very Fine	**MM75875000**	Price
8 x 1 x 3	Hard	Medium	**MM75875011**	Price
8 x 1 x 3	Medium	Medium	**MM75875176**	Price
8 x 1 x 3	Medium	Medium	**MM75875003**	Price
8 x 1 x 3	Hard	Very Fine	**MM75875010**	Price
8 x 1 x 3	Medium	Very Fine	**MM75875002**	Price
12 x 1 x 5	Hard	Medium	**MM75875013**	Price
12 x 1 x 5	Hard	Medium	**MM75875205**	Price
12 x 1 x 5	Medium	Medium	**MM75875005**	Price
12 x 1 x 5	Hard	Very Fine	**MM75875012**	Price
12 x 1 x 5	Medium	Very Fine	**MM75875004**	Price
12 x 2 x 5	Hard	Medium	**MM75875015**	Price
12 x 2 x 5	Hard	Medium	**MM75875140**	Price
12 x 2 x 5	Medium	Medium	**MM75875007**	Price
12 x 2 x 5	Hard	Very Fine	**MM75875014**	Price
12 x 2 x 5	Medium	Very Fine	**MM75875006**	Price

STANDARD ABRASIVES Buff & Blend™ Rolls

- Used with vibratory orbital and straight line sanders, to produce matte and satin finishes
- Rolls are also cut to size and used by hand or to finish a part turning on a lathe or spindle



HP Buff & Blend™ Rolls:

- Durable and aggressive
- Recommended starting point for deburring applications

GP Buff & Blend™ Rolls:

- Flexible and conformable
- Recommended starting point for most applications

High Strength Buff & Blend™ Rolls:

- Very conformable and durable
- Best for light deburring and finishing

Type - GP Buff & Blend Abrasive Rolls				
Roll Width (in.)	Grain	Grade	Order No.	Price
4	Fine	Aluminum Oxide	**MM75830015**	Price
4	Medium	Aluminum Oxide	**MM75830010**	Price
4	Very Fine	Silicon Carbide	**MM75830025**	Price
6	Fine	Aluminum Oxide	**MM75830016**	Price
6	Medium	Aluminum Oxide	**MM75830011**	Price
6	Very Fine	Silicon Carbide	**MM75830026**	Price

Type - High Strength Buff & Blend Abrasive Rolls				
Roll Width (in.)	Grain	Grade	Order No.	Price
6	Very Fine	Aluminum Oxide	**MM75830171**	Price

Type - HP Buff & Blend Abrasive Rolls				
Roll Width (in.)	Grain	Grade	Order No.	Price
4	Very Fine	Aluminum Oxide	**MM75830070**	Price

STANDARD ABRASIVES Mini Brushes

- Fast, easy way to restore finishes to their original condition
- Delivers high-quality finish
- Long-lasting
- Easy to control
- Conforms to most surface geometries



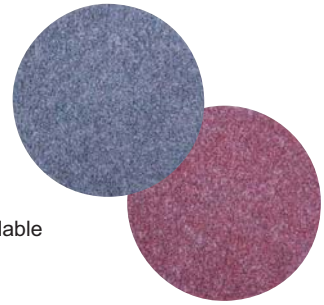
Style - High Strength Mini Brush			
Size (in.)	Grade	Order No.	Price
4-1/2 x 2 x 5/8-11	Coarse	**MM75875709**	Price
4-1/2 x 2 x 5/8-11	Medium	**MM75875710**	Price
4-1/2 x 4 x 5/8-11	Coarse	**MM75875700**	Price
4-1/2 x 4 x 5/8-11	Medium	**MM75875701**	Price

Style - Mini Brush			
Size (in.)	Grade	Order No.	Price
4-1/2 x 2 x 5/8-11	Extra Coarse	**MM75875711**	Price
4-1/2 x 2 x 5/8-11	Medium	**MM75875712**	Price
4-1/2 x 2 x 5/8-11	Medium	**MM75875714**	Price
4-1/2 x 2 x 5/8-11	Very Fine	**MM75875713**	Price
4-1/2 x 4 x 5/8-11	Coarse	**MM75875700**	Price
4-1/2 x 4 x 5/8-11	Extra Coarse	**MM75875702**	Price
4-1/2 x 4 x 5/8-11	Medium	**MM75875701**	Price
4-1/2 x 4 x 5/8-11	Medium	**MM75875703**	Price
4-1/2 x 4 x 5/8-11	Medium	**MM75875705**	Price
4-1/2 x 4 x 5/8-11	Very Fine	**MM75875704**	Price

Style - Mini Brush Interleaf			
Size (in.)	Grade	Order No.	Price
4-1/2 x 2 x 5/8-11	100	**MM75875716**	Price
4-1/2 x 2 x 5/8-11	150	**MM75875717**	Price
4-1/2 x 4 x 5/8-11	100	**MM75875707**	Price
4-1/2 x 4 x 5/8-11	150	**MM75875708**	Price
4-1/2 x 4 x 5/8-11	60	**MM75875706**	Price

3M Scotch-Brite™ Light Grinding and Blending Discs

- Durable non-woven 3M abrasive product used for light grinding and blending applications providing a Scotch-Brite™ burr-free finish
- Grinding and blending can be done with one disc
- Lasts longer, cuts and blends faster that any other Scotch-Brite disc available
- 7" Available



Dia. (in.)	Mount Type	Grit	Color	Max. RPM	Order No.	Price Ea.
2	Roloc TR	CRS	Maroon	25000	**TM2160354**	Price
2	Roloc TR	CRS	Blue	25000	**TM2160355**	Price
3	Roloc TR	CRS	Maroon	18000	**TM2160356**	Price
3	Roloc TR	CRS	Blue	18000	**TM2160357**	Price
5	7/8 Arbor	CRS	Maroon	10000	**TM2160336**	Price
5	7/8 Arbor	CRS	Blue	10000	**TM2160341**	Price
5	Hook & Loop	CRS	Maroon	10000	**TM2160342**	Price
5	Hook & Loop	CRS	Blue	10000	**TM2160343**	Price

3M Scotch-Brite™ Surface Conditioning Discs - Hook-and-Loop

- Aluminum Oxide
- Great general purpose surface conditioning disc
- For finishing, cleaning and light deburring
- Attach and remove easily to 3M™ Hook-and-Loop Backup Pads
- Use with right angle and random orbital tools
- 7" Available



Dia. (in.)	Max. RPM	Grade	Color	Std. Pkg.	Order No.	Price Ea.
4.5	13000	CRS	Brown	50	**TM2114101**	Price
4.5	13000	MED	Maroon	50	**TM2114100**	Price
4.5	13000	VFN	Blue	50	**TM2114099**	Price
5	10000	CRS	Brown	50	**TM2100750**	Price
5	10000	MED	Maroon	50	**TM2100643**	Price
5	10000	VFN	Blue	50	**TM2104303**	Price

3M Scotch-Brite™ Roloc™ Surface Conditioning Discs

- Non-woven web provides a burr-free decorative finish
- Removes grind marks, rust and coatings
- Roloc TR plastic button



Dia. (in.)	Max. RPM	Grade	Color	Std. Pkg.	Order No.	Price Ea.
1.5	30000	CRS	Brown	50	**TM2108764**	Price
1.5	30000	MED	Maroon	50	**TM2108765**	Price
1.5	30000	VFN	Blue	50	**TM2108766**	Price
2	25000	CRS	Brown	50	**TM2105528**	Price
2	25000	MED	Maroon	50	**TM2105527**	Price
2	25000	VFN	Blue	50	**TM2105523**	Price
3	18000	CRS	Brown	25	**TM2105532**	Price
3	18000	MED	Maroon	25	**TM2105531**	Price
3	18000	VFN	Blue	25	**TM2105530**	Price

3M Scotch-Brite™ High Strength Discs

- Aluminum Oxide
- Very conformable discs, ideal for light deburring, cleaning and finishing
- 8" Available



Dia. (in.)	Ctr. Hole (in.)	Grade	Color	Std. Pkg.	Order No.	Price Ea.
6	1/2	MED	Maroon	100	**TM2104188**	Price
6	1/2	VFN	Maroon	100	**TM2100665**	Price
6	1/4	VFN	Maroon	100	**TM2100666**	Price

3M Scotch-Brite™ Surface Conditioning Belts

- Premium Scotch-Brite™ surface conditioning non-woven web
- Designed for cleaning, finishing and light deburring



Width (in.)	Length (in.)	Grade	Color	Std. Pkg.	Order No.	Price Ea.
1/2	18	A CRS	Brown	20	**TM2008858**	Price
1/2	18	A MED	Maroon	20	**TM2008857**	Price
1/2	18	A VFN	Blue	50	**TM2008856**	Price
1/2	24	A CRS	Brown	20	**TM2005741**	Price
1/2	24	A MED	Maroon	20	**TM2003998**	Price
1/2	24	A VFN	Blue	20	**TM2004299**	Price
3/4	18	A CRS	Brown	20	**TM2013639**	Price
3/4	18	A MED	Maroon	20	**TM2015899**	Price
3/4	18	A VFN	Blue	20	**TM2014543**	Price
1	42	A MED	Maroon	10	**TM2004189**	Price
1	42	A VFN	Blue	10	**TM2004190**	Price
2	48	A MED	Maroon	10	**TM2008915**	Price
2	48	A VFN	Blue	10	**TM2004295**	Price
2	72	A MED	Maroon	10	**TM2000580**	Price
2	72	A VFN	Blue	10	**TM2000579**	Price
3	10-11/16	A CRS	Brown	10	**TM2005820**	Price
3	10-11/16	A MED	Maroon	10	**TM2005783**	Price
3	132	A CRS	Brown	5	**TM2005023**	Price
3	132	A MED	Maroon	5	**TM2000568**	Price
3	132	A VFN	Blue	5	**TM2004289**	Price
3	24	A CRS	Brown	10	**TM2008880**	Price
3	24	A MED	Maroon	10	**TM2000583**	Price
3	24	A VFN	Blue	10	**TM2004298**	Price
3-1/2	15-1/2	A CRS	Brown	10	**TM2005016**	Price
3-1/2	15-1/2	A MED	Maroon	10	**TM2005228**	Price
3-1/2	15-1/2	A VFN	Blue	10	**TM2005643**	Price
6	48	A CRS	Brown	50	**TM2005019**	Price
6	48	A MED	Maroon	5	**TM2000590**	Price
6	48	A VFN	Blue	5	**TM2004283**	Price

STANDARD ABRASIVES Buff and Blend™ Discs

With Center Hole - Aluminum Oxide Abrasive



- Aluminum oxide discs
- GP type: good rate of cut while providing enhanced durability when used for general duty applications
- HP type: produces an aggressive rate of cut, designed for use on applications where precise metal removal is required
- HS regular type: provides an excellent finish and flexibility along with greater tear resistance - a perfect choice when imparting the final finish on irregular shaped parts that increase the tendency for materials to tear
- HS type F: thickest of all buff & blend materials - combines good flexibility with excellent finish and is useful when finishing contoured parts with critical dimensions that must be held
- Available in A/O medium only

Grit Application:

- Medium - heavy deburring and blending
- Fine - medium deburring and blending
- Very fine - light deburring and blending

Dia. (in.)	Hole Size (in.)	Grit	Color	Material Type	Order No.	Price
6	1/2	Coarse	Green	High Strength	**MM75860706**	Price
6	1/2	Fine	Maroon	GP	**MM75840709**	Price
6	1/2	Medium	Dark Blue	F	**MM75860710**	Price
6	1/2	Medium	Dark Blue	High Strength	**MM75810710**	Price
6	1/2	Medium	Maroon	GP	**MM75840710**	Price
6	1/2	Medium	Tan	AP	**MM75870710**	Price
6	1/2	Very Fine	Maroon	GP	**MM75840708**	Price
6	1/2	Very Fine	Pink	High Strength	**MM75860708**	Price
6	1/2	Very Fine	Red	HP	**MM75850708**	Price
7	1/2	Medium	Maroon	GP	**MM75840810**	Price
8	1/2	Coarse	Green	High Strength	**MM75860906**	Price
8	1/2	Fine	Maroon	GP	**MM75840909**	Price
8	1/2	Medium	Dark Blue	F	**MM75860910**	Price
8	1/2	Medium	Dark Blue	High Strength	**MM75810910**	Price
8	1/2	Medium	Maroon	GP	**MM75840910**	Price
8	1/2	Medium	Tan	AP	**MM75870910**	Price
8	1/2	Very Fine	Maroon	GP	**MM75840908**	Price
8	1/2	Very Fine	Pink	High Strength	**MM75860908**	Price
8	1/2	Very Fine	Red	HP	**MM75850908**	Price
10	1/2	Very Fine	Pink	High Strength	**MM75860108**	Price
12	1-1/4	Coarse	Green	HS	**MM75869126**	Price
12	1-1/4	Very Fine	Pink	HS	**MM75869128**	Price

STANDARD ABRASIVES Buff and Blend™ Discs

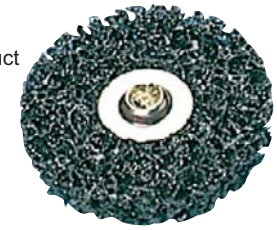
Hook & Loop Aluminum Oxide Abrasives



Dia. (in.)	Grit	Color	Material Type	Order No.	Price
5	Medium	Maroon	GP	**MM75831610**	Price
5	Very Fine	Maroon	GP	**MM75831608**	Price
6	Medium	Maroon	GP	**MM75831710**	Price
6	Very Fine	Maroon	GP	**MM75831708**	Price

STANDARD ABRASIVES Cleaning and Coating Removal System

- Cleaning welds, removing corrosion, rust and scaling
- Removing paints, varnishes and sealants from difficult to reach surfaces
- Blending
- Rapid removal of surface contaminants
- Compares with 3M® Clean & Strip product





Roll-On



Turn-On

	Roll-On		Turn-On	
Size (in.)	Order No.	Price	Order No.	Price
2	**MM75840398**	Price	**MM75840397**	Price
3	**MM75840498**	Price	**MM75840497**	Price

See page 816 for roll-on and turn-on holders

STANDARD ABRASIVES Cleaning and Coating Removal 1/4" Shank Spindle Mounted Wheels



Dia. (in.)	Ply	Order No.	Price
3	1	**MM75880493**	Price
3	2	**MM75880495**	Price

STANDARD ABRASIVES Cleaning and Coating Removal Arbor Hole & Type 27 Discs





Type - Arbor Hole			
Dia. (in.)	Hole Size (in.)	Order No.	Price
6	1/2	**MM75840701**	Price
8	1/2	**MM75840901**	Price
4-1/2	1/4	**MM75843401**	Price

Type - Type 27			
Dia. (in.)	Hole Size (in.)	Order No.	Price
4-1/2	7/8	**MM75811027**	Price

STANDARD ABRASIVES Quick Change Surface Conditioning Discs - Type RC



Roll-On



Turn-On

- The "free-cutting" Rapid Cut material is designed to provide increased stock removal and faster blending
- Rapid Cut resists loading on "softer" metals for increased life and production

Style - Roll-On								
	Coarse-Brown		Extra Coarse- Dk. Brown		Medium-Maroon		Very Fine-Blue	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
2	MM75840384	Price	MM75840354	Price	MM75840385	Price	MM75840386	Price
3	MM75840484	Price	MM75840454	Price	MM75840485	Price	MM75840486	Price

Style - Turn-On								
	Coarse-Brown		Extra Coarse - Dk. Brown		Medium-Maroon		Very Fine-Blue	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
2	MM75840334	Price	MM75840370	Price	MM75840335	Price	MM75840336	Price
3	MM75840434	Price	MM75840470	Price	MM75840435	Price	MM75840436	Price

Style - Velcro						
	Coarse-Brown		Medium-Maroon		Very Fine-Blue	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
7	MM75845813	Price	MM75845815	Price	MM75845816	Price

Type FE

- High initial and extended rate of cut
- Very flexible with high edge durability
- Effective on both flat and contoured surfaces
- Works well for heavy rust removal and blending machine tool marks
- Resists loading on all metals

Style - Roll-On						
	Coarse-Brown		Medium-Maroon		Very Fine-Blue	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
2	MM75840381	Price	MM75840382	Price	MM75840383	Price
3	MM75840481	Price	MM75840482	Price	MM75840483	Price

Style - Turn-On						
	Coarse-Brown		Medium-Maroon		Very Fine-Blue	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
2	MM75840331	Price	MM75840332	Price	MM75840333	Price
3	MM75840431	Price	MM75840432	Price	MM75840433	Price

Style - Velcro						
	Coarse-Brown		Medium-Maroon		Very Fine-Blue	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4-1/2	MM75845511	Price	MM75845512	Price	MM75845514	Price
5	MM75845611	Price	MM75845612	Price	MM75845614	Price
7	MM75845811	Price	MM75845812	Price	MM75845814	Price

Type GP

- Consistent rate of cut
- Very durable, allowing greater edge durability.
- Not as flexible as FE
- Works especially well on flat surfaces
- Recommended starting point for most applications

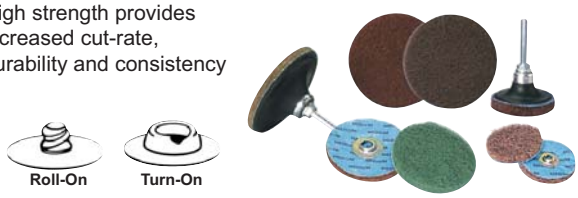
Style - Roll-On						
	Coarse-Brown		Medium-Maroon		Very Fine-Blue	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
2	MM75840387	Price	MM75840388	Price	MM75840389	Price
3	MM75840487	Price	MM75840488	Price	MM75840489	Price

Style - Turn-On						
	Coarse-Brown		Medium-Maroon		Very Fine-Blue	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
2	MM75840337	Price	MM75840338	Price	MM75840339	Price
3	MM75840437	Price	MM75840438	Price	MM75840439	Price

Style - Velcro						
	Coarse-Brown		Medium-Maroon		Very Fine-Blue	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4-1/2	MM75845417	Price	MM75845418	Price	MM75845419	Price
5	MM75845617	Price	MM75845618	Price	MM75845619	Price
7	MM75845817	Price	MM75845818	Price	MM75845819	Price

STANDARD ABRASIVES High Strength Quick Change Buff & Blend™ Discs

- High strength provides increased cut-rate, durability and consistency



Roll-On

Turn-On

Style - Roll-On			
Description	Size (in.)	Order No.	Price
H/S Coarse	2	MM75840319	Price
H/S Medium	2	MM75840358	Price
H/S Medium	3	MM75840458	Price
H/S Coarse	3	MM75840419	Price

Style - Turn-On			
Description	Size (in.)	Order No.	Price
H/S Medium	2	MM75840357	Price
H/S Very Fine	2	MM75840322	Price
H/S Coarse	2	MM75840314	Price
H/S Coarse	3	MM75840414	Price
H/S Medium	3	MM75840457	Price

Velcro Back Up Pads with 5/8-11 Holes



Dia. (in.)	Order No.	Price
4-1/2	MM85840042	Price
5	MM85840050	Price
7	MM85840070	Price

Type XD

- Fastest cutting, most durable surface conditioning disc
- Long lasting, while providing excellent results on flat surfaces and edges

Style - TR				
	Coarse		Medium	
Size (in.)	Order No.	Price	Order No.	Price
2	MM75848381	Price	MM75848382	Price
3	MM75848481	Price	MM75848482	Price

Style - TS				
	Coarse		Medium	
Size (in.)	Order No.	Price	Order No.	Price
2	MM75848331	Price	MM75848332	Price
3	MM75848431	Price	MM75848432	Price

STANDARD ABRASIVES Quick Change Buff & Blend™ Discs

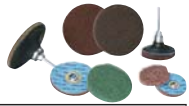
- High Strength provides incresed cut-rate, durability and consistency
- Fast removal of light oxidation
- Blending minor imperfections
- Prepping surfaces for painting



Roll-On



Turn-On



Style - Roll-On								
	Fine		Medium		Very Fine		Coarse	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1-1/2	MM75810213	Price	MM75810212	Price	MM75810215	Price	MM75810211	Price
2	MM75810313	Price	MM75810312	Price	MM75810315	Price	MM75810311	Price
3	MM75810413	Price	MM75810412	Price	MM75810415	Price	MM75810411	Price

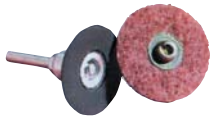
Style - Turn-On								
	Fine		Medium		Very Fine		Coarse	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1-1/2	MM75840213	Price	MM75840212	Price	MM75840215	Price	MM75840211	Price
2	MM75840313	Price	MM75840312	Price	MM75840315	Price	MM75840311	Price
3	MM75840413	Price	MM75840412	Price	MM75840415	Price	MM75840411	Price

See page 816 for Roloc TR (Rol-On) and Roloc TSM (Turn-On) Holders

NORTON Quick Change Bear-Tex® Surface Blending Discs



For use on a variety of electric and air powered tools including right angle grinders and belt grinders for deburring, cleaning, blending and finishing.





- Tough, reinforced nylon web - Eleminates edge fraying and grain shedding
- Uniform, thorough abrasive coating
- Open construction - resists loading

Aluminum Oxide Abrasive - available in three standard grits:

- 320 (Very Fine) - Used for scratch blending, light scuffing and fine finishing
- 120 (Medium) - Perfect for surface preparation before coatings
- 80 (Coarse) - Often used for blending heavy grind lines, removing coatings and gasket residue

Speed Grip surface blending STE discs feature a Hook and Loop fastening system.
Speed-Lok TS surface blending STE discs are compatible with the cap standard Speed-Lok attachment system.
Speed-Lok TR surface blending STE discs are compatible with 3M Roloc® attachment system.


TR


TS

Wheel Type - Roll-On								
			Coarse		Medium		Very Fine	
Size (in.)	Std. Pkg.	Max. RPM	Order No.	Price	Order No.	Price	Order No.	Price
2	25	30,000	-	-	MH62D0209190	Price	MH62D0204457	Price
3	25	20,000	MH62D0309194	Price	MH61D0317522	Price	MH62D0309192	Price

Wheel Type - Turn-On								
			Coarse		Medium		Very Fine	
Size (in.)	Std. Pkg.	Max. RPM	Order No.	Price	Order No.	Price	Order No.	Price
2	25	30,000	-	-	MH62D0209182	Price	MH62D0282337	Price
3	25	20,000	MH62D0309186	Price	MH62D0309185	Price	MH62D0309184	Price
4	25	15,000	MH62D0455349	Price	MH62D0455350	Price	-	-

Wheel Type - Velcro								
			Coarse		Medium		Very Fine	
Size (in.)	Std. Pkg.	Max. RPM	Order No.	Price	Order No.	Price	Order No.	Price
2	25	23,000	MH62D0204431	Price	MH62D0204441	Price	-	-
3	25	20,000	-	-	MH62D0304442	Price	-	-
-	-	-	MH62D0404433	Price	-	-	-	-
4-1/2	25	10,000	-	-	MH62D0404444	Price	MH62D0425936	Price
5	25	10,000	MH62D0504435	Price	-	-	MH62D0525941	Price
6	25	8,000	MH62D0606910	Price	MH62D0606911	Price	MH62D0606912	Price
7	20	6000	MH62D0755027	Price	-	-	-	-
7	25	6,000	-	-	MH62D0717813	Price	MH62D0719990	Price
8	50	6000	-	-	MH62D0817815	Price	-	-
8	25	4,500	MH62D0806913	Price	-	-	MH62D0825972	Price

MERIT Surface Preparation Discs

Type GD Discs:

- Our GD discs provide consistent cut and finish
- Product of choice for most blending, cleaning and light deburring operations

Type AG Discs:

- AG material is more aggressive, which makes it perfect for heavier deburring and finishing applications




TS


TR

Description - Non-Woven Disc						
			Roll-On		Turn-On	
Size (in.)	Grit	Max. RPM	Order No.	Price	Order No.	Price
2	Coarse	30000	-	-	MM5966287	Price
2	Medium	30000	MM5966290	Price	-	-
2	Very Fine	20000	-	-	MM5966321	Price
2	Very Fine	30000	-	-	MM5966317	Price
3	Coarse	20000	MM5966322	Price	-	-
3	Medium	20000	MM5966291	Price	-	-

Description - Type AG Surface Prep Disc						
			Roll-On		Turn-On	
Size (in.)	Grit	Max. RPM	Order No.	Price	Order No.	Price
2	Coarse	30000	MM5967825	Price	MM5967821	Price
2	Medium	30000	MM5940028	Price	MM5940037	Price
2	Very Fine	30000	MM5940049	Price	-	-
3	Extra Coarse	20000	MM5967827	Price	MM5967823	Price
3	Very Fine	20000	MM5941300	Price	-	-

Description - Type GD Surface Prep Disc				
			Turn-On	
Size (in.)	Grit	Max. RPM	Order No.	Price
3	Medium	20000	MM5962910	Price

NORTON Back-Up Pads for Quick Change Bear-Tex® Discs



For Use With - Hook and Loop (Velcro® Type) Discs			
Size (in.)	Std. Pkg. Qty.	Order No.	Price
2	5	MH62A59352	Price
3	5	MH62A59354	Price
5	5	MH62A59360	Price
6	5	MH62A59364	Price
7	10	MH62A59368	Price

For Use With - Speed-Lok TR			
Size (in.)	Std. Pkg. Qty.	Order No.	Price
2	10	MH62A55103	Price
3	10	MH62A55105	Price

For Use With - Speed-Lok TR Discs			
Size (in.)	Std. Pkg. Qty.	Order No.	Price
4	10	MH62A47581	Price
1-1/2	10	MH62A47580	Price

For Use With - Speed-Lok TS Discs			
Size (in.)	Std. Pkg. Qty.	Order No.	Price
2	10	MH62A43210	Price
3	10	MH62A43225	Price

SURF PRO® Non Woven Surface Conditioning Quick Change Discs

- Cleaning, deburring and finishing on stainless, ferrous and non-ferrous metal
- Used for blending welds remove rust/burrs



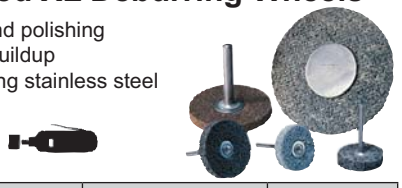

Roll-On


Turn-On

			Quick Change Roll On		Quick Change Turn On	
Dia. (in.)	Grit	Color	Order No.	Price	Order No.	Price
2	Course	Brown	**SP21QCR20SCDCRS**	Price	**SP21QCT20SCDCRS**	Price
2	Medium	Maroon	**SP21QCR20SCDMED**	Price	**SP21QCT20SCDMED**	Price
2	Very Fine	Blue	**SP21QCR20SCDVFN**	Price	**SP21QCT20SCDVFN**	Price
3	Course	Brown	**SP21QCR30SCDCRS**	Price	**SP21QCT30SCDCRS**	Price
3	Medium	Maroon	**SP21QCR30SCDMED**	Price	**SP21QCT30SCDMED**	Price
3	Very Fine	Blue	**SP21QCR30SCDVFN**	Price	**SP21QCT30SCDVFN**	Price

SUPERIOR Abrasives Shur-Brite® Mounted XL Deburring Wheels

- General purpose cleaning and polishing
- Designed to minimize heat buildup
- Ideal for blending and finishing stainless steel



Size (in.)	Grit	Order No.	Price
1 x 1/4 x 1/8	2S Fine	**MM6440530**	Price
1 x 1/4 x 1/8	6A Medium	**MM6440531**	Price
1 x 1/4 x 1/8	8A Coarse	**MM6440532**	Price
2 x 1/4 x 1/4	2S Fine	**MM6440536**	Price
2 x 1/4 x 1/4	6A Medium	**MM6440537**	Price
2 x 1/4 x 1/4	8A Coarse	**MM6440538**	Price
3 x 1/4 x 1/4	2S Fine	**MM6440539**	Price
3 x 1/4 x 1/4	6A Medium	**MM6440540**	Price
3 x 1/4 x 1/4	8A Coarse	**MM6440541**	Price

Wheel Density: 2=Soft 6=Medium 8=Hard

SUPERIOR Abrasives XE High Strength Satin Discs With Arbor Hole

- Make short work of cleaning, finishing and light deburring applications
- Can be ganged on a shaft to form a wheel



Dia. (in.)	Hole Size (in.)	Grit	Order No.	Price
6	1/2	Fine	**MM6440610**	Price
6	1/2	Medium	**MM6434470**	Price
6	1/2	Very Fine	**MM6440611**	Price
8	1/2	Fine	**MM6440612**	Price
8	1/2	Medium	**MM6421554**	Price
8	1/2	Very Fine	**MM6440613**	Price

CGW CAMEL GRINDING WHEELS Aluminum Oxide Rol-On Surface Grinding Discs - Maroon

- Non-woven material for bleding scratches and discoloration removal (stainless sheet burn



Dia. (in.)	RPM	Order No.	Price
2	25000	**MG9053251**	Price
3	25000	**MG9053252**	Price

SUPERIOR Abrasives Hook and Loop Surface Conditioning Discs

- Greatly extends life over traditional surface conditioning discs
- Firm cutting action for weld blending and splatter removal
- Heavy debur, oxidation, and flash removal
- Standard Pack- 20 Pcs
- 7” Available



Dia.	Grit	Order No.	Price
4-1/2	Coarse	**MM6440404**	Price
4-1/2	Medium	**MM6440405**	Price
5	Coarse	**MM6440406**	Price
5	Medium	**MM6440407**	Price

Standard Package - Discs = 20/pk Holders = 1/pk

SUPERIOR Abrasives Quick Change Surface Conditioning Discs

- Deburring and surface preparation of all kinds of metals
- Stock removal and surface leveling
- Weld spatter and corrosion removal
- 1-1/2” Available








Roll-On


Turn-On

Style - Roll-On			
Dia. (in.)	Grit	Order No.	Price
1-1/2	Coarse	**MM6410550**	Price
2	Coarse	**MM6410553**	Price
2	Medium	**MM6410554**	Price
2	Very Fine	**MM6410555**	Price
3	Coarse	**MM6410556**	Price
3	Medium	**MM6410557**	Price
3	Very Fine	**MM6410558**	Price

Style - Turn-On			
Dia. (in.)	Grit	Order No.	Price
2	Coarse	**MM6410544**	Price
2	Medium	**MM6410545**	Price
2	Very Fine	**MM6410546**	Price
3	Coarse	**MM6410547**	Price
3	Medium	**MM6410548**	Price
3	Very Fine	**MM6410549**	Price

SUPERIOR Abrasives Quick Change Unitized Discs

- General purpose cleaning and polishing
- Designed to minimize heat buildup
- Ideal for blending and finishing stainless steel
- 3” Available





Dia. (in.)	Grit	Order No.	Price
2	2 S Fine	**MM6437505**	Price
2	6 A Medium	**MM6437504**	Price
2	8 A Coarse	**MM6437503**	Price

CGW CAMEL GRINDING WHEELS Aluminum Oxide Surface Grinding Wheels - Type 27 - Maroon

- Non-woven material for blending scratches and discoloration removal (stainless sheet burn)
- Compact backing minimizes work piece scratches, allows for full use of disc material and softer/buffing-like finishing



Dia. (in.)	Hole (in.)	Std. Pkg.	Order No.	Price
4-1/2	5/8-11	10	**MG9053243**	Price
4-1/2	7/8	10	**MG9053242**	Price
7	5/8-11	10	**MG9053245**	Price
7	7/8	10	**MG9053244**	Price

Non-Woven Abrasive Buff & Blend Mounted Wheels



- High luster finish
- Will not alter workpiece shape
- Quieter — smoother than wire brushes
- 1/4" Shank
- Aluminum oxide

		Medium		Very Fine	
Dia. (in.)	Ply	Order No.	Price	Order No.	Price
2	2	**MM75880215**	Price	**MM75880315**	Price
2	3	**MM75880216**	Price	**MM75880316**	Price
3	1	**MM75880413**	Price	**MM75880513**	Price
3	2	**MM75880415**	Price	**MM75880515**	Price
3	3	**MM75880416**	Price	**MM75880516**	Price

Surface Conditioning Flap Disc



- Best disc for Deburring, edge breaking, blending, cleaning, finishing, and polishing after traditional grinding is done with a Resin Fibre or Flap Disc on Aluminum, Steel, and Titanium Inconel

Dia. (in.)	Arbor Hole (in.)	Max. RPM	Grade	Order No.	Price
4-1/2	7/8	10,000	Coarse	**MM75821110**	Price
4-1/2	7/8	10,000	Medium	**MM75821210**	Price
4-1/2	7/8	10,000	Very Fine	**MM75821310**	Price

Buff & Blend Cross Buffs - 2 Ply Aluminum Oxide



- Removing surface oxidation and rust
- Surface preparation prior to coating
- Remove surface coatings for part inspection
- Corrosion removal on steel rule and Kirksite dies
- Mold and die polishing
- Polishing valve spools, and round and square tubing
- Polish inside diameters of lifter bores, valve bodies and brake cylinders

Size (in.)	Width (in.)	Eyelet	Grade	Std. Pkg.	Order No.	Price Ea.
3/4	3/8	8-32	Medium	50	**MM75725019**	Price
3/4	3/8	8-32	Very Fine	50	**MM75725011**	Price
1-1/2	1/2	8-32	Medium	50	**MM75725012**	Price
1-1/2	1/2	8-32	Very Fine	50	**MM75725013**	Price
1	3/8	8-32	Coarse	50	**MM75727334**	Price
1	3/8	8-32	Medium	50	**MM75725007**	Price
1	3/8	8-32	Very Fine	50	**MM75725008**	Price
2	1/2	8-32	Coarse	25	**MM75727395**	Price
2	1/2	8-32	Medium	25	**MM75727396**	Price
2	1/2	8-32	Very Fine	25	**MM75727397**	Price
2	3/4	1/4-20	Coarse	25	**MM75727398**	Price
2	3/4	1/4-20	Medium	25	**MM75727399**	Price
2	3/4	1/4-20	Very Fine	25	**MM75727400**	Price
3	3/4	1/4-20	Coarse	25	**MM75727401**	Price
3	3/4	1/4-20	Medium	25	**MM75727402**	Price
3	3/4	1/4-20	Very Fine	25	**MM75727403**	Price

Buff & Blend Combi Cross Buff - 2 Ply Aluminum Oxide



- Uses both buff & blend and coated abrasive materials
- Very flexible and provides clean burr-free finishes

Size (in.)	Width (in.)	Eyelet	Grade	Std. Pkg.	Order No.	Price
2	1/2	8-32	GP Medium 60	25	**MM75727404**	Price
2	1/2	8-32	GP Medium 80	25	**MM75727405**	Price
2	1/2	8-32	HP Very Fine 120	25	**MM75727406**	Price
3	3/4	1/4-20	GP Medium 60	25	**MM75727408**	Price
3	3/4	1/4-20	GP Medium 80	25	**MM75727409**	Price
3	3/4	1/4-20	HP Very Fine 120	25	**MM75727410**	Price
3	3/4	1/4-20	HP Very Fine 240	25	**MM75727411**	Price

Mandrels for Threaded Eyelet Mount Abrasives

Thread	Shank Dia. (in.)	OAL (in.)	Order No.	Price
3-48	1/4	2-1/2	**MM54PM3482**	Price
1/4-20	1/4	3	**MM54PM1420**	Price
3-48	1/8	2-1/2	**MM54PM3481**	Price
8-32	1/4	3	**MM54PM832**	Price

Non-Woven Abrasives Buff & Blend™ Mandrel Mounted Flap Brushes with 1/4" Shank



- Blending, cleaning, and finishing
- Satin and matte finishing on stainless steel, brass and aluminum
- Removal of rust, grease and oils

Dia. (in.)	Face Width (in.)	Shank Dia. (in.)	Grade	Material	Order No.	Price
2	2	1/4	Medium	A/O	**MM75875500**	Price
3	2	1/4	Medium	A/O	**MM75875501**	Price

Surface Conditioning - Type RC Bands



- Applying grain finish on aluminum and stainless steel
- Reducing uneven edges between adjoining surfaces
- Reducing surface roughness
- Applying cosmetic grain finish

Dia. (in.)	Length (in.)	Grit	Std. Pkg.	Order No.	Price Ea.
1	1	Coarse	10	**MM75727086**	Price
1	1	Medium	10	**MM75727087**	Price
1	1	Very Fine	10	**MM75727088**	Price
2	1	Coarse	10	**MM75727095**	Price
2	1	Medium	10	**MM75727096**	Price
2	1	Very Fine	10	**MM75727097**	Price
2	2	Coarse	10	**MM75727098**	Price
2	2	Medium	10	**MM75727099**	Price
2	2	Very Fine	10	**MM75727100**	Price

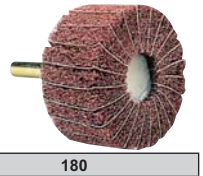
Expanding Rubber Drums



- Designed for use with abrasive and non-woven bands
- Fabricated from rubber for controlled expansion

Dia. (in.)	Length (in.)	Standard Shank (in.)	Order No.	Price
1	1	1/4	**MM54D16162**	Price
2	1	1/4	**MM54D32162**	Price
2	2	1/4	**MM54D32322**	Price

Non-Woven Abrasive Buff & Blend™ Combi-Wheels



- Wheels are constructed with alternating flaps of Buff & Blend and coated abrasive material
- High rate of cut, while providing a uniform scratch pattern
- Designed for use on small straight pneumatic and electric grinders

			60		80		120		180	
Dia. (in.)	Face Width (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
2	1	1/4	**MM75898000**	Price	**MM75898001**	Price	**MM75898002**	Price	**MM75898003**	Price
3	1	1/4	**MM75898004**	Price	**MM75898005**	Price	**MM75898006**	Price	**MM75898007**	Price
3	2	1/4	**MM75898008**	Price	**MM75898009**	Price	**MM75898010**	Price	**MM75898011**	Price

3M Scotch-Brite™ Bristle Discs for Angle Grinders



- 4-1/2" Diameter with 5/8" trim length and 5/8-11 arbor hole
- Flexible yet durable bristles conform the workpiece without damaging base material
- Continuous supply of mineral in abrasive-filled bristles provides a high cut rate and more uniform finish
- Discs are designed to resist loading, extending service life
- Available in 3 grades: 50 (green), 80 (yellow) and 120 (white)
- Use with angle grinders with 5/8-11 spindle

Size (in.)	Grit	Color	Max. RPM	Std. Pkg.	Order No.	Price Ea.
4.5	120	White	12000	2	**TM3124243**	Price
4.5	50	Green	12000	2	**TM3124241**	Price
4.5	80	Yellow	12000	2	**TM3124242**	Price

3M Scotch-Brite™ Roloc Bristle Discs



- Flexible yet durable bristles conform the workpiece without damaging base material
- Continuous supply of mineral in abrasive-filled bristles provides a high cut rate and more uniform finish
- Discs are designed to resist loading, extending service life
- Available in 3 grades: 50 (green), 80 (yellow) and 120 (white)
- Use with Roloc TR Disc Pads (available separately)

Dia. (in.)	Grit	Max. RPM	Std. Pkg.	Order No.	Price Ea.
2	120	25000	4	**TM3118733**	Price
2	50	25000	4	**TM3118730**	Price
2	80	25000	4	**TM3118732**	Price
3	120	15000	4	**TM3118737**	Price
3	50	15000	4	**TM3118734**	Price
3	80	15000	4	**TM3118736**	Price

MERIT PowerStrip Type 27 Wheels



- Material provides a unique combination of aggressive performance, long life and improved finish
- Ideal for removing coatings on a variety of substrates, such as wood, metal and plastics
- 7" Available

Size (in.)	Hole Size	Grit	Std. Pkg.	Order No.	Price
4-1/2	5/8-11	Extra Coarse	25	**MM5997038**	Price
4-1/2	7/8	Extra Coarse	25	**MM5992122**	Price

3M Scotch-Brite™ Clean & Strip Discs



- Silicon carbide – extra coarse
- Tough open web, ideal for weld cleaning and removing paint and coatings
- Use with mandrel 934

Dia. (in.)	Crt. Hole (in.)	Max. RPM	Std. Pkg.	Order No.	Price Ea.
4	1/2	6000	25	**TM2100941**	Price
6	1/2	4000	15	**TM2100948**	Price
8	1/2	3000	15	**TM2100957**	Price

3M Scotch-Brite™ Coating Removal Discs Hook and Loop



- Silicon Carbide – extra coarse
- Made for right-angle tools from aggressive clean & strip web
- Non-loading design ideal for removing rust and coatings
- Mount on hook-and-loop disc pad holders

Dia. (in.)	Max. RPM	Grade	Std. Pkg.	Order No.	Price Ea.
4.5	12000	XCS	4	**TM2118424**	Price
5	10000	XCS	4	**TM2118355**	Price
7	6000	XCS	5	**TM2118358**	Price

3M Scotch-Brite™ Radial Bristle Brushes for Bench Grinders



- Flexible yet durable bristles conform the workpiece without damaging base material
- Continuous supply of mineral in abrasive-filled bristles provides a high cut rate and more uniform finish
- Discs are designed to resist loading, extending service life
- Use on bench grinders

Size (in.)	Grit	Color	Max. RPM	Order No.	Price
6	36	Dark Brown	6000	**TM3027603**	Price
6	50	Green	6000	**TM3027605**	Price
6	80	Yellow	6000	**TM3027606**	Price
6	1 Micron	Light Green	6000	**TM3033217**	Price
6	120	White	6000	**TM3033212**	Price
6	220	Red	6000	**TM3033213**	Price
6	400	Blue	6000	**TM3033214**	Price
6	6 Micron	Peach	6000	**TM3033216**	Price
6	80	Yellow	6000	**TM3033215**	Price

WENDT USA Non Woven Aluminum Oxide Finishing Flap Wheels

New!



- Non aggressive nylon material provides a smooth surface finish
- Reorient scratch patterns for grain matching on stainless steel
- Remove burrs and micro burrs on threaded parts

			ACRS		AFINE		AMED		AVFN	
Dia. (in.)	Face Width (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	1	1/4	**MJ69120090**	Price	**MJ69120092**	Price	**MJ69120091**	Price	**MJ69120093**	Price
2	1	1/4	**MJ69120260**	Price	**MJ69120262**	Price	**MJ69120261**	Price	**MJ69120263**	Price
2	2	1/4	**MJ69120290**	Price	**MJ69120292**	Price	**MJ69120291**	Price	**MJ69120293**	Price
3	1	1/4	**MJ69120400**	Price	**MJ69120402**	Price	**MJ69120401**	Price	**MJ69120403**	Price
3	2	1/4	**MJ69120430**	Price	**MJ69120432**	Price	**MJ69120431**	Price	**MJ69120433**	Price

WENDT USA Interleaf Aluminum Oxide Finishing Flap Wheels

New!



- Alternating flaps of abrasive cloth and nonwoven finishing material, provides some stock removal while leaving a brushed finish
- Good for deburring and finishing in one step

			A120/Med		A180/Fine		A60/Crs		A80/Med	
Dia. (in.)	Face Width (in.)	Shank Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	1	1/4	**MJ69117187**	Price	**MJ69117189**	Price	**MJ69117184**	Price	**MJ69117185**	Price
2	1	1/4	**MJ69117527**	Price	**MJ69117529**	Price	**MJ69117524**	Price	**MJ69117525**	Price
2	2	1/4	**MJ69117587**	Price	**MJ69117589**	Price	**MJ69117584**	Price	**MJ69117585**	Price
3	1	1/4	**MJ69117807**	Price	**MJ69117809**	Price	**MJ69117804**	Price	**MJ69117805**	Price
3	2	1/4	**MJ69117867**	Price	**MJ69117869**	Price	**MJ69117864**	Price	**MJ69117865**	Price

Interleaf Flap Discs - Type 29

- Offers blending and finish required to get #4 scratch finish and used for stainless finishing
- Grind and finish with one disc
- Alternating flaps of non-woven and coated abrasive materials for uniform, consistent finishes with very little heat
- Light grinding and deburring



Dia. (in.)	Hole (in.)	Grit	RPM	Order No.	Price
4-1/2	7/8	Coarse	13300	**MG9049686**	Price
4-1/2	7/8	Medium	13300	**MG9049687**	Price
4-1/2	7/8	Very Fine	13300	**MG9049688**	Price
5	7/8	Coarse	12200	**MG9049692**	Price
5	7/8	Medium	12200	**MG9049693**	Price
5	7/8	Very Fine	12200	**MG9049694**	Price

Semi-Flex Discs

- Type 27 discs engineered for aggressive grinding applications

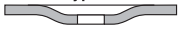
Silicon carbide grain for working on non-ferrous materials including:

- Removing epoxy, glue or urethane coatings, mastics
- Fiberglass
- Quartz, terrazzo, concrete
- Marble
- Enamels, porcelain, china clay

Carton quantity 25



Type 27





Right Angle Grinder

Size (in.)	Grit	RPM	Order No.	Price
4-1/2 x 7/8	16	13300	**MG9035833**	Price
4-1/2 x 7/8	24	13300	**MG9035834**	Price
4-1/2 x 7/8	36	13300	**MG9035835**	Price
7 x 7/8	16	8600	**MG9035842**	Price
7 x 7/8	24	8600	**MG9035843**	Price
7 x 7/8	36	8600	**MG9035844**	Price

Shur-Brite® Stripping Wheels - 1/4" Shank

- Tough open construction will not load, removing paint and rust
- Aggressive stripping and cleaning on metal surfaces
- Safer than a wire brush, ideal tool for maintenance departments



Size (in.)	Face Width (in.)	Grit	Order No.	Price
2	1	Extra Coarse	**MM6435806**	Price
2	1/2	Extra Coarse	**MM6435805**	Price
3	1	Extra Coarse	**MM6434360**	Price
3	1/2	Extra Coarse	**MM6434359**	Price
4	1	Extra Coarse	**MM6438447**	Price
4	1/2	Extra Coarse	**MM6438446**	Price

EZ Red Heavy Duty Strip Wheels

- Non-woven material for cleaning welds and fast removal of rust, scaling, oxidation, paints, sealants, and other clogging materials
- Can be used on stainless steel, steel, aluminum, titanium, non-ferrous metals, fibre glass, stone and wood
- Red rigid wheels for faster working on angled and irregular surfaces
- Black wheels clean surfaces and can provide a satin finish



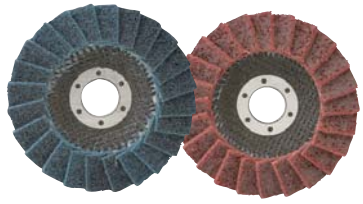
Size (in.)	Spec.	RPM	Std. Pkg.	Order No.	Price Ea.
4-1/2 x 7/8	Black	11000	10	**MG9059200**	Price
4-1/2 x 7/8	Red	11000	10	**MG9059204**	Price
4-1/2 x 5/8-11	Black	11000	10	**MG9059201**	Price
4-1/2 x 5/8-11	Red	11000	10	**MG9059205**	Price
7 x 7/8	Black	7000	10	**MG9059202**	Price
7 x 7/8	Red	7000	10	**MG9059206**	Price
7 x 5/8-11	Black	7000	10	**MG9059203**	Price
7 x 5/8-11	Red	7000	10	**MG9059207**	Price

Surface Conditioning Flap Discs

- Premier non-woven material for surface preparation
- Three different grits for blending, deburring and cleaning
- For steel and stainless steel
- Max RPM 13,000

Type 27





Size (in.)	Grit	Max RPM	Std. Pkg.	Order No.	Price
4-1/2	Coarse	13,000	10	**MG9070120**	Price
4-1/2	Coarse	13,000	10	**MG9070121**	Price
4-1/2	Medium	13,000	10	**MG9070122**	Price
4-1/2	Medium	13,000	10	**MG9070123**	Price
4-1/2	Very Fine	13,000	10	**MG9070124**	Price
4-1/2	Very Fine	13,000	10	**MG9070125**	Price

Shur-Brite® Stripping Discs

With Arbor Hole

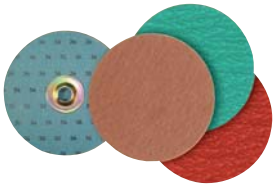
- Tough open construction will not load, removing paint and rust
- Aggressive stripping and cleaning on metal surfaces
- Safer than a wire brush, ideal tool for maintenance departments





Dia. (in.)	Hole Size (in.)	Grit	Style	Feature	Order No.	Price
2	-	Extra Coarse	Roll-On	Cleaning	**MM6434364**	Price
3	-	Extra Coarse	Roll-On	Cleaning	**MM6434365**	Price
4	1/2	Extra Coarse	Type 1	Surface Conditioning	**MM6434361**	Price
4-1/2	7/8	Extra Coarse	Type 27	Surface Conditioning	**MM6434366**	Price
6	1/2	Extra Coarse	Type 1	Surface Conditioning	**MM6434362**	Price
8	1/2	Extra Coarse	Type 1	Surface Conditioning	**MM6434363**	Price

STANDARD ABRASIVES 4-1/2" & 5" Coated Abrasives Discs



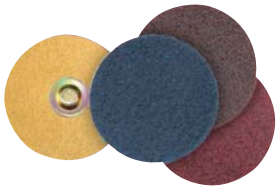
Aluminum Oxide Discs:
- Used for general purpose grinding and blending on ferrous metals
- Ideal for flat and contoured surfaces

Zirconia Pro Discs:
- Ideal for rapid stock removal on stainless steel
- Utilizes a Y weight cloth backing with a fused Zirconium grain and lubricated super-size coating
- Cool running for extended stock removal and surface blending

Ceramic Pro Discs:
- Cool, rapid stock removal on all heat-sensitive metals, including stainless steel and high nickel alloys
- Offers the highest edge durability in the industry, plus the highest stock removal on flat surfaces. Ideal for prolonged edge work
- 5/8-11 Hub size
- Max RPM 10,000

Dia. (in.)	Grit	Material	Order No.	Price
4-1/2	36	Ceramic Pro	**MM30524881**	Price
4-1/2	36	Zirconia Pro	**MM30528822**	Price
4-1/2	60	Aluminum Oxide	**MM30522805**	Price
4-1/2	60	Ceramic Pro	**MM30524884**	Price
4-1/2	60	Zirconia Pro	**MM30528825**	Price
4-1/2	80	Aluminum Oxide	**MM30522806**	Price
4-1/2	80	Ceramic Pro	**MM30524885**	Price
4-1/2	80	Zirconia Pro	**MM30528826**	Price
5	36	Aluminum Oxide	**MM30522902**	Price
5	36	Ceramic Pro	**MM30524981**	Price
5	36	Zirconia Pro	**MM30528922**	Price
5	60	Aluminum Oxide	**MM30522905**	Price
5	60	Ceramic Pro	**MM30524984**	Price
5	60	Zirconia Pro	**MM30528925**	Price
5	80	Aluminum Oxide	**MM30522906**	Price
5	80	Ceramic Pro	**MM30524985**	Price
5	80	Zirconia Pro	**MM30528926**	Price

STANDARD ABRASIVES 4-1/2" & 5" Surface Conditioning Discs



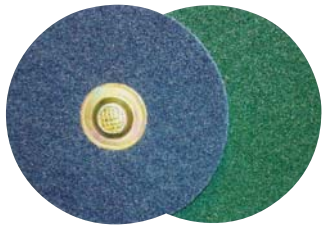
FE Discs:
- Most durable with highest edge durability
- Best when high contact pressure and stock removal are required on ferrous metals

GP Discs:
- Provides high initial and extended rate of cut on flat surfaces and edges, with light pressure
- Most efficient on aluminum and other soft metals where final finish is important
- Resists loading

RL Discs:
- Highest initial rate of cut with light pressure
- Best material for flat surface finishing on ferrous metals
- 5/8-11 Hub size
- Max RPM 10,000

Dia. (in.)	Grade	Material	Order No.	Price
4-1/2	Coarse	FE	**MM30843531**	Price
4-1/2	Coarse	GP	**MM30843537**	Price
4-1/2	Coarse	RC	**MM30843533**	Price
4-1/2	Medium	FE	**MM30843532**	Price
4-1/2	Medium	RC	**MM30843535**	Price
4-1/2	Very Fine	FE	**MM30843534**	Price
4-1/2	Very Fine	GP	**MM30843539**	Price
4-1/2	Very Fine	RC	**MM30843536**	Price
5	Coarse	FE	**MM30843731**	Price
5	Coarse	GP	**MM30843737**	Price
5	Coarse	RC	**MM30843733**	Price
5	Medium	FE	**MM30843732**	Price
5	Medium	GP	**MM30843738**	Price
5	Medium	RC	**MM30843735**	Price
5	Very Fine	FE	**MM30843734**	Price
5	Very Fine	GP	**MM30843739**	Price
5	Very Fine	RC	**MM30843736**	Price

STANDARD ABRASIVES 4-1/2" & 5" High Strength Buff & Blend® Discs



- Very durable material for flat and edge surface blending, finishing and cleaning
- Consistent finishing rate and non-loading
- Coarse Grade: Provides heavy stock removal without undercutting or gouging the work piece
- Medium Grade: Recommended as a starting point for surface preparation prior to surface coatings
- 5/8-11 Quick Change Hub size
- Max RPM 10,000

Dia. (in.)	Grade	Material	Order No.	Price
4-1/2	Medium	Aluminum Oxide	**MM30846822**	Price
4-1/2	Coarse	Aluminum Oxide	**MM30846821**	Price
5	Coarse	Aluminum Oxide	**MM30846921**	Price
5	Medium	Aluminum Oxide	**MM30846922**	Price

STANDARD ABRASIVES 4-1/2" and 5" Coating Removal Discs

- Very aggressive non-woven material used for cleaning welds, removing corrosion, rust, scale, paint and other surface contaminants
- Self dressing and non-loading
- 5/8-11 Hub size
- Max RPM 6,000



Dia. (in.)	Grade	Material	Order No.	Price
4-1/2	Extra Coarse	Cleaning	**MM30843890**	Price
5	Extra Coarse	Cleaning	**MM30843990**	Price

STANDARD ABRASIVES Holder Pads for 4-1/2" & 5" Quick Change Discs

- The 4-1/2″ disc system should be used on the 5″ Standard Abrasives holder pad
- Proper pad set-up is required
- SM45F works with Bosch, Dynabrade and Metabo and all other 5″ disc sanders
- BD45F works with Black & Decker disc sanders only

Standard Abrasive 5" quick change discs are used with these brands and model 5" disc sanders:
- Bosch: 1803EVS
- Dynabrade: 50320,52562,50304 & 50345
- Metabo: WE4-125
- They will also fit any 5" disc sander with Max RPM of 10,000 and 5/8-11 mount for holder pad



Dia. (in.)	Hub Size	Style	Max. RPM	Order No.	Price
4-1/2	5/8-11 Hub	BD45F	10,000	**MM30543629**	Price
4-1/2	5/8-11 Hub	SM45F	10,000	**MM30543630**	Price
5	5/8-11 Hub	BD55F	10,000	**MM30543628**	Price
5	5/8-11 Hub	SM55F	10,000	**MM30543632**	Price

Bear-Tex® Series 1000 Convolute Wheels

General Deburring, Blending & Finishing

Bear-Tex Series 1000:

- Wheels are unmatched in maintenance operations
- Use on power tools, lathes and hand machines for deburring, blending, cleaning, finishing and polishing

Features:

- Smear and heat resistant
- Polishing of stainless steel parts
- Deburring and finishing intricate or flat shapes
- Removes coated abrasive scratch patterns
- Edge Radiusing





Series 1000 Marking System:

- Bond System: 1 = Series 1000 Bond
- Abrasive: S = Silicon Carbide, A = Aluminum Oxide
- Density: 6-8 = Open/Conformable, 9 = Dense/Durable
- Grit Size: VF = Very Fine, F = Fine, M = Medium

Size (in.)	Spec	Std. Pkg.	Max. RPM	Order No.	Price
6 x 1/2 x 1	7SF	25	6,000	**MH62W18628**	Price
6 x 1/2 x 1	8SF	25	6,000	**MH62W0618773**	Price
6 x 1/2 x 1	9SF	25	6,000	**MH62W0655272**	Price
6 x 1 x 1	6AF	25	6,000	**MH62W0655204**	Price
6 x 1 x 1	6AM	25	6,000	**MH62W0655205**	Price
6 x 1 x 1	6SF	25	6,000	**MH62W0655201**	Price
6 x 1 x 1	6SM	25	6,000	**MH62W0655202**	Price
6 x 1 x 1	6SVF	25	6,000	**MH62W0655200**	Price
6 x 1 x 1	7AF	25	6,000	**MH62W0655225**	Price
6 x 1 x 1	7SF	25	6,000	**MH62W0655223**	Price
6 x 1 x 1	9SF	25	6,000	**MH62W0618632**	Price
6 x 1 x 1	8SF	25	4,500	**MH62W0655249**	Price
6 x 1 x 1	8SM	25	6,000	**MH62W0655250**	Price
6 x 1 x 1	9SM	25	6,000	**MH62W0655371**	Price
6 x 2 x 1	7AM	25	6,000	**MH62W0655229**	Price
6 x 2 x 1	7SF	25	6,000	**MH62W0655227**	Price
6 x 2 x 1	7SM	25	6,000	**MH62W0655228**	Price
6 x 2 x 1	9SF	25	6,000	**MH62W0655274**	Price
8 x 1 x 3	6AM	25	4,500	**MH62W0855209**	Price
8 x 1 x 3	6SF	25	3,600	**MH62W0855207**	Price
8 x 1 x 3	6SM	25	4,500	**MH62W0855208**	Price
8 x 1 x 3	7SF	25	4,500	**MH62W18639**	Price
8 x 1 x 3	8SM	25	4,500	**MH62W0818673**	Price
8 x 1 x 3	7AM	25	4,500	**MH62W97885**	Price
8 x 1 x 3	8AF	25	4,500	**MH62W0855257**	Price
8 x 2 x 3	7AM	25	4,500	**MH62W0855235**	Price
8 x 2 x 3	7SF	25	3,600	**MH62W0855233**	Price
8 x 2 x 3	7SM	25	4,500	**MH62W0855234**	Price
8 x 2 x 3	8AM	25	3,600	**MH62W0855259**	Price
8 x 2 x 3	8SF	25	4,500	**MH62W0855258**	Price
8 x 2 x 3	9SF	25	4,500	**MH62W0855276**	Price
10 x 1 x 5	7AM	25	3,600	**MH62W1001813**	Price
10 x 1 x 5	8SF	25	3,000	**MH62W1055260**	Price
10 x 1 x 5	9SF	25	3,600	**MH62W1055277**	Price
12 x 1 x 5	7SF	25	3,000	**MH62W1255237**	Price
12 x 1 x 5	8SF	25	2,550	**MH62W1255262**	Price
12 x 2 x 5	7SF	71	3,000	**MH62W1255240**	Price
12 x 2 x 5	8SF	71	3,000	**MH62W1255265**	Price
12 x 2 x 5	9SF	71	3,000	**MH62W1255279**	Price
12 x 2 x 5	9SM	71	3,000	**MH62W1255374**	Price
14 x 1 x 8	6SM	25	2,550	**MH62W1408722**	Price
14 x 1 x 8	9SM	25	2,550	**MH62W1402114**	Price
14 x 2 x 8	8SM	71	2,550	**MH62W1455270**	Price
14 x 2 x 8	9SF	71	2,550	**MH62W1455281**	Price

Bear-Tex® General Duty Unified Wheels

- Designed for maintenance operations needing an efficient and cost-effective method of deburring, polishing, cleaning or finishing of metals or composites

Features:

- Easily preformed
- Holds shape well
- Non-metallic
- Uniform construction



Benefits:

- Usable on a wide variety of shapes/ contours
- Less wheel dressing
- No contamination of workpiece
- Maintains part tolerance; prevents cutting or gouging

Size (in.)	Spec.	Density	Max. RPM	Order No.	Price
1 x 1 x 3/16	Coarse	Hard	15,000	**MH62UW0100938**	Price
2 x 1/2 x 1/4	Fine	Medium	11,000	**MH62UW0258764**	Price
2 x 1/4 x 1/4	Coarse	Hard	11,000	**MH62UW0252275**	Price
3 x 1/2 x 1/4	Fine	Medium	8,000	**MH62UW0354046**	Price
3 x 1/2 x 1/4	Fine	Medium	8,000	**MH62UW0354048**	Price
3 x 1/4 x 1/4	Fine	Medium	8,000	**MH62UW0358816**	Price
3 x 1/4 x 1/4	Fine	Medium	8,000	**MH62UW0300745**	Price
3 x 1/4 x 1/4	Coarse	Hard	8,000	**MH62UW0352276**	Price
3 x 3/4 x 1/4	Medium	Medium	8,000	**MH62UW0358773**	Price
3 x 3/4 x 1/4	Fine	Medium	8,000	**MH62UW0358769**	Price
3 x 3/4 x 1/4	Fine	Medium	8,000	**MH62UW0358771**	Price
6 x 1/2 x 1/2	Medium	Medium	4,800	**MH62UW0658779**	Price
6 x 1 x 1	220	Medium	4,800	**MH62UW0658814**	Price
6 x 1 x 1	Fine	Medium	4,800	**MH62UW0658797**	Price
6 x 1 x 1/2	Medium	Medium	4,800	**MH62UW0658792**	Price
6 x 1 x 1/2	Fine	Medium	4,800	**MH62UW0658790**	Price

Non-Woven Depressed Center & Quick Change Discs - SG Blaze Rapid Strip

- Heavy coating of ceramic alumina long-lasting grain and advanced resin bond
- Extremely versatile; use one disc for multiple operations



Style - Quick Change Disc		
Size (in.)	Order No.	Price
2 x 1/2	**MH62RS0203912**	Price
3 x 1/2	**MH62RS0396557**	Price
4 x 1/2	**MH62RS0403921**	Price

Style - Depressed Center Disc		
Size (in.)	Order No.	Price
4-1/2 x 5/8-11	**MH62RS0498101**	Price
4-1/2 x 7/8	**MH62RS0403783**	Price
5 x 5/8-11	**MH62RS0503915**	Price
5 x 7/8	**MH62RS0503916**	Price
7 x 5/8-11	**MH62RS0703919**	Price
7 x 7/8	**MH62RS0703920**	Price

Scotch-Brite™ Convolute Wheels

Scotch-Brite™ EXL Deburring Wheels

- Use to clean, finish, blend, deburr or polish all types of metals, composites and glass



Size (in.)	Width (in.)	Arbor Hole (in.)	Max RPM	Grit	Std. Pkg.	Order No.	Price
6	1/2	1	6,000	8AMED	4	**TM2313616**	Price
6	1/2	1	6,000	8SFIN	4	**TM2309548**	Price
6	1/2	1	6,000	9SFIN	4	**TM2305790**	Price
6	1	1	6,000	8AMED	3	**TM2313617**	Price
6	1	1	6,000	8SFIN	3	**TM2309549**	Price
6	1	1	6,000	9SFIN	3	**TM2305132**	Price
8	1/2	3	4,500	8AMED	4	**TM2317459**	Price
8	1/2	3	4,500	8SFIN	4	**TM2314629**	Price
8	1/2	3	4,500	9SFIN	4	**TM2305791**	Price
8	1	3	4,500	8AMED	3	**TM2313619**	Price
8	1	3	4,500	8SFIN	3	**TM2309551**	Price
8	1	3	4,500	9SFIN	3	**TM2305135**	Price
8	2	3	4,500	8AMED	2	**TM2313620**	Price
8	2	3	4,500	8SFIN	2	**TM2309552**	Price
8	2	3	4,500	9SFIN	2	**TM2305136**	Price

Scotch-Brite™ Unitized Wheels

Scotch-Brite™ EXL Unitized Deburring Wheels

- Excellent for deburring and polishing a wide range of metals, plastics and composites
- Cool running allows more pressure to be applies
- Cleaner than buffs and compounds



Size (in.)	Width (in.)	Arbor Hole (in.)	Max RPM	Grit	Std. Pkg.	Order No.	Price
1	1	3/16	35,100	2AMED	50	**TM2314063**	Price
1	1	3/16	30,100	2SFIN	50	**TM2313713**	Price
1	1	3/16	25,100	7AMED	50	**TM2315527**	Price
1	1	3/16	35,100	8ACRS	50	**TM2313752**	Price
1	1	3/16	35,100	8AMED	50	**TM2313753**	Price
2	1/4	1/4	22,100	6CMED+	60	**TM2365018**	Price
2	3/4	1/4	22,100	6CMED+	60	**TM2365020**	Price
2	1/8	1/4	22,100	6CMED+	60	**TM2365057**	Price
2	1	1/4	22,100	6CMED+	60	**TM2365058**	Price
2	1/2	1/4	22,100	6CMED+	60	**TM2365019**	Price
3	1/4	3/8	12,100	2AMED	40	**TM2316054**	Price
3	1/4	3/8	12,100	2SFIN	40	**TM2314750**	Price
3	1/4	3/8	18,100	6AMED	40	**TM2315118**	Price
3	1/4	1/4	18,100	6CMED+	40	**TM2365004**	Price
3	1/2	1/4	15,100	6CMED+	40	**TM2365007**	Price
3	1	1/4	15,100	6CMED+	40	**TM2365005**	Price
3	1/8	1/4	18,100	6CMED+	40	**TM2365021**	Price
3	3/4	1/4	15,100	6CMED+	40	**TM2365022**	Price
3	1/4	3/8	18,100	8ACRS	40	**TM2313766**	Price
3	1/4	3/8	18,100	8AMED	40	**TM2314753**	Price
6	1	1	4,500	2AMED	2	**TM2316544**	Price
6	1	1	5,000	2SFIN	2	**TM2313743**	Price
6	1/2	1	5,000	2SFIN	4	**TM2314379**	Price
6	1/2	1	4,500	6AMED	4	**TM2316545**	Price

For 1" use arbor Order No. MM75-850024, For 3" use arbor Order No. MM75-850034. 6" Does not require an arbor.

Scotch-Brite™ Roloc™ EXL Unitized Wheels

- Strong, efficient products for edge deburring and finishing
- Used with 3M™ Roloc™ or 3M™ Roloc™ + holder pads on a straight shaft or right-angle tool



Dia. (in.)	Max RPM	Grit	Std. Pkg.	Order No.	Price Ea.
2	22,100	2AMED	4	**TM2317185**	Price
2	22,100	2SFIN	4	**TM2317183**	Price
2	22,100	6AMED	4	**TM2317190**	Price
3	15,100	2AMED	4	**TM2317186**	Price
3	15,100	2SFIN	4	**TM2317184**	Price
3	15,100	6AMED	4	**TM2317191**	Price

Scotch-Brite™ SF Finishing & Deburring Wheels

- Use to finish and deburr all types of metals, composites and glass
- Fast, consistent and easy on operators



Size (in.)	Width (in.)	Arbor Hole (in.)	Std. Pkg.	Grit	Max RPM	Order No.	Price
6	1	1	3	10SFIN	6,000	**TM2394917**	Price
6	1	1	3	9SFIN	6,000	**TM2394905**	Price
6	1	1	5	9SFIN	6,000	**TM2364900**	Price
6	1/2	1	4	10SFIN	6,000	**TM2394926**	Price
6	1/2	1	4	9SFIN	6,000	**TM2394904**	Price
6	1/2	1	5	9SFIN	6,000	**TM2364899**	Price
8	1	3	3	9SFIN	4,500	**TM2394908**	Price
8	1	3	5	9SFIN	4,500	**TM2364902**	Price
8	1/2	3	4	10SFIN	4,500	**TM2394927**	Price
8	1/2	3	5	9SFIN	4,500	**TM2364901**	Price
6	1/2	1	4	8SFIN	6,000	**TM2333174**	Price
6	1/2	1	4	8SMED	6,000	**TM2333184**	Price
6	1	1	3	8SMED	6,000	**TM2333185**	Price
8	1/2	3	4	9SFIN	4,500	**TM2394907**	Price

Scotch-Brite™ Cut & Polish Wheels

- Heavy-duty wheels for aggressive blending and finishing
- Produce uniform results quickly and easily replace rubber bonded wheels, set-up wheels and flap wheels



Size (in.)	Width (in.)	Arbor Hole (in.)	Max RPM	Grit	Std. Pkg.	Order No.	Price
6	1	1	6,000	7AFIN	3	**TM2303270**	Price
6	1	1	6,000	7AMED	3	**TM2303262**	Price

Scotch-Brite™ Multi-Finishing Wheels

- Produces uniform grain finishes on stainless steel and other metals
- Highly conformable



Size (in.)	Face Width (in.)	Arbor Hole (in.)	Max RPM	Grit	Std. Pkg.	Order No.	Price
6	1	1	6,000	2SCRS	3	**TM2313170**	Price
6	1	1	6,000	2SFIN	3	**TM2313172**	Price
6	1	1	6,000	2SMED	3	**TM2313171**	Price
6	2	1	6,000	2SCRS	2	**TM2313176**	Price
6	2	1	6,000	2SFIN	2	**TM2313178**	Price
6	2	1	6,000	2SMED	2	**TM2313177**	Price
8	1	3	4,500	2SFIN	3	**TM2313184**	Price
8	2	3	4,500	2SCRS	2	**TM2313185**	Price
8	2	3	4,500	2SMED	2	**TM2313186**	Price

STANDARD ABRASIVES GP Plus™ Wheels

- Removes burrs and breaks edges faster and with less effort than competitive wheels
- Great for small parts – the fast cut rate reduces dwell time and eliminates severe heat generation
- Reduction in heat contributes to a perfect surface finish
- These wheels have lower attrition rates under normal and heavy loads



Size (in.)	Abrasive Type	Grade	Spec	Order No.	Price
6 x 1/2 x 1	Silicon Carbide	Fine	9	**MM75850373**	Price
6 x 1/2 x 1	Aluminum Oxide	Fine	10SF	**MM75855053**	Price
6 x 1/2 x 1	Aluminum Oxide	Medium	8AM	**MM75853042**	Price
6 x 1/2 x 1	GP Plus	Fine	11	**MM75850345**	Price
6 x 1/2 x 1	GP Plus	Medium	8	**MM75853052**	Price
6 x 1/2 x 1	Silcon Carbide	Fine	8SF	**MM75853053**	Price
6 x 1/2 x 1	Silcon Carbide	Fine	9SF	**MM75854053**	Price
6 x 1 x 1	Silicon Carbide	Fine	9	**MM75850374**	Price
6 x 1 x 1	Aluminum Oxide	Fine	10SF	**MM75855153**	Price
6 x 1 x 1	Aluminum Oxide	Medium	8AM	**MM75853142**	Price
6 x 1 x 1	GP Plus	Fine	11	**MM75850153**	Price
6 x 1 x 1	GP Plus	Medium	8	**MM75853152**	Price
6 x 1 x 1	S/O	Fine	8SF	**MM75853153**	Price
6 x 1 x 1	S/O	Fine	9SF	**MM75854153**	Price
6 x 2 x 1	GP Plus	Medium	8	**MM75853252**	Price
6 x 2 x 1	Silcon Carbide	Fine	9SF	**MM75854253**	Price
8 x 1/2 x 3	Aluminum Oxide	Fine	10SF	**MM75855753**	Price
8 x 1/2 x 3	Aluminum Oxide	Medium	8AM	**MM75853742**	Price
8 x 1 x 3	Silicon Carbide	Fine	9	**MM75850376**	Price
8 x 1/2 x 3	Silicon Carbide	Fine	9	**MM75850375**	Price
8 x 1/2 x 3	Silcon Carbide	Fine	8SF	**MM75853753**	Price
8 x 1/2 x 3	Silcon Carbide	Fine	9SF	**MM75854753**	Price
8 x 1 x 3	GP Plus	Fine	11	**MM75850353**	Price
8 x 1 x 3	Aluminum Oxide	Fine	10SF	**MM75855353**	Price
8 x 1 x 3	Aluminum Oxide	Medium	8SF	**MM75853342**	Price
8 x 1 x 3	GP Plus	Medium	8	**MM75853352**	Price
8 x 1 x 3	Silcon Carbide	Fine	8AM	**MM75853353**	Price
8 x 1 x 3	Silcon Carbide	9SF Fine	9SF	**MM75854353**	Price
8 x 2 x 3	GP Plus	Fine	9	**MM75854453**	Price
8 x 2 x 3	GP Plus	Medium	8	**MM75853452**	Price
8 x 2 x 3	S/O	Fine	8SF	**MM75853453**	Price
10 x 1/2	GP Plus	Fine	-	**MM75840109**	Price
10 x 1/2	GP Plus	Very Fine	-	**MM75840108**	Price
10 x 1/2	GP Plus	Medium	-	**MM75840110**	Price
12 x 1/2 x 5	Aluminum Oxide	Fine	10SF	**MM75850284**	Price
12 x 1/2 x 5	Aluminum Oxide	Medium	8AM	**MM75850286**	Price
12 x 1/2 x 5	Silcon Carbide	Fine	8SF	**MM75850256**	Price
12 x 1 x 5	Aluminum Oxide	Fine	10SF	**MM75855953**	Price
12 x 1 x 5	Aluminum Oxide	Medium	8AM	**MM75853942**	Price
12 x 1 x 5	GP Plus	Medium	8	**MM75853952**	Price
12 x 1 x 5	Silcon Carbide	Fine	8SF	**MM75853953**	Price
12 x 1 x 5	Silcon Carbide	Fine	9SF	**MM75854953**	Price
12 x 1-1/4	GP Plus	Very Fine	-	**MM75849128**	Price
12 x 1-1/4	GP Plus	Fine	-	**MM75849129**	Price
12 x 1-1/4	GP Plus	Medium	-	**MM75849130**	Price
12 x 2 x 5	Silcon Carbide	Fine	8SF	**MM75853853**	Price
12 x 2 x 5	Silcon Carbide	Fine	9SF	**MM75854853**	Price

14" Diameter Convolute Wheels are also available.

STANDARD ABRASIVES Multi-Finishing Wheels

- Blending coated abrasive scratches
- Blending surfaces to match #4 mil finishes
- Applying grain finish prior to anodizing
- Applying burr free satin finish to architectural hardware



Size (in.)	Abrasive Type	Grade	Spec	Order No.	Price
6 x 1 x 1	Silcon Carbide	Coarse	2SC	**MM75856191**	Price
6 x 1 x 1	Silcon Carbide	Medium	2SM	**MM75856192**	Price
6 x 2 x 1	Silcon Carbide	Coarse	2SC	**MM75856291**	Price
6 x 2 x 1	Silcon Carbide	Medium	2SM	**MM75856292**	Price
6 x 3 x 1	Silcon Carbide	Coarse	2SC	**MM75850307**	Price
6 x 3 x 1	Silcon Carbide	Medium	2SM	**MM75850306**	Price
8 x 1 x 3	Silcon Carbide	Coarse	2SC	**MM75856391**	Price
8 x 1 x 3	Silcon Carbide	Medium	2SM	**MM75856392**	Price
8 x 2 x 3	Silcon Carbide	Coarse	2SC	**MM75856491**	Price
8 x 2 x 3	Silcon Carbide	Medium	2SM	**MM75856492**	Price
12 x 1 x 5	Silcon Carbide	Coarse	2SC	**MM75856991**	Price
12 x 1 x 5	Silcon Carbide	Medium	2SM	**MM75856992**	Price
12 x 2 x 5	Silcon Carbide	Coarse	2SC	**MM75856891**	Price
12 x 2 x 5	Silcon Carbide	Medium	2SM	**MM75856892**	Price

STANDARD ABRASIVES Light Deburring Wheel (LDW)

- The LDW is used for light deburring, blending and finishing of small parts
- Conformability and feel of the softer wheel provides the customer with greater flexibility than competitive wheels



Size (in.)	Grit	Spec	Order No.	Price
6 x 1/2 x 1	Fine	6SF	**MM75851033**	Price
6 x 1/2 x 1	Fine	7SF	**MM75852033**	Price
6 x 1/2 x 1	Fine	8SF	**MM75853033**	Price
6 x 1 x 1	Fine	6SF	**MM75851133**	Price
6 x 1 x 1	Fine	7SF	**MM75852133**	Price
6 x 1 x 1	Fine	8SF	**MM75853133**	Price
8 x 1 x 3	Fine	6SF	**MM75851333**	Price
8 x 1 x 3	Fine	7SF	**MM75852333**	Price
8 x 1 x 3	Fine	8SF	**MM75853333**	Price
12 x 1 x 5	Fine	6SF	**MM75851933**	Price
12 x 1 x 5	Fine	7SF	**MM75852933**	Price
12 x 1 x 5	Fine	8SF	**MM75853933**	Price

Additional densities and sizes available upon request.

STANDARD ABRASIVES Metal Finishing Wheels

- Designed for final finishing on all types of metal and provide greater productivity, measurably longer life and consistent finishes
- Additional densities and sizes available upon request (Coarse discontinued)



Size (in.)	Grit	Spec	Order No.	Price
6 x 1/2 x 1	Medium	5AM	**MM75858082**	Price
6 x 1/2 x 1	Medium	6AM	**MM75859082**	Price
6 x 1 x 1	Medium	5AM	**MM75858182**	Price
6 x 1 x 1	Medium	6AM	**MM75859182**	Price
8 x 1 x 3	Medium	5AM	**MM75858382**	Price
8 x 1 x 3	Medium	6AM	**MM75859382**	Price
8 x 2 x 3	Medium	5AM	**MM75858482**	Price
8 x 2 x 3	Medium	6AM	**MM75859482**	Price
12 x 1 x 5	Medium	5AM	**MM75858982**	Price
12 x 2 x 5	Medium	5AM	**MM75858882**	Price

- For stock removal, Unitized Wheels are the “metal-eating” performers
- Unitized Wheels require only light to medium contact pressures
- For polishing and deburring, A/O emphasizes stock removal (deburring) and S/C emphasizes finishing
- The aggressiveness increases with the density
- 900 series is the hardest and 500 is the softest
- User friendly
- General purpose cleaning
- Removing rust
- Polishing soft metals
- Coating removal
- Cleaning prior to painting



STANDARD ABRASIVES BriteRite® Unitized Wheels - 500 Series

Light Deburring and Cleaning • Soft Density

Size (in.)	Order No.	Price
2 x 1/4 x 1/4	**MM75852110**	Price
2 x 1/4 x 1/4	**MM75853210**	Price
3 x 1/4 x 1/4	**MM75852135**	Price
3 x 1/4 x 1/4	**MM75853235**	Price
3 x 1/2 x 1/4	**MM75852140**	Price
3 x 1/2 x 1/4	**MM75853240**	Price
6 x 1 x 1	**MM75852178**	Price
6 x 1 x 1	**MM75853278**	Price

STANDARD ABRASIVES Unitized Wheels - 600 Series

Medium Cleaning, Blending and Finishing Medium Density • Fine Grade

Size (in.)	Order No.	Price
2 x 1/2 x 1/4	**MM75863115**	Price
2 x 1/2 x 1/4	**MM75863215**	Price
3 x 1/4 x 1/4	**MM75863135**	Price
3 x 1/4 x 1/4	**MM75863235**	Price
3 x 1/2 x 1/4	**MM75863140**	Price
3 x 1/2 x 1/4	**MM75863240**	Price
6 x 1/2 x 1	**MM75863175**	Price
6 x 1/2 x 1	**MM75863275**	Price
6 x 1 x 1	**MM75863178**	Price
6 x 1 x 1	**MM75863278**	Price

STANDARD ABRASIVES BriteRite® Unitized Wheels - 700 Series

Medium Deburring • Heavy Cleaning • Hard/Medium Density Aluminum Oxide • Fine Grade

Size (in.)	Order No.	Price
1 x 1 x 3/16	**MM75873105**	Price
3 x 1/4 x 1/4	**MM75873135**	Price
3 x 1/4 x 1/4	**MM75873235**	Price
6 x 1 x 1	**MM75873178**	Price
6 x 1 x 1	**MM75873278**	Price

STANDARD ABRASIVES BriteRite® Unitized Wheels - 800 Series

Heavy Deburring • Medium Polish • Hard Density Aluminum Oxide • Medium Grade

Size (in.)	Order No.	Price
1 x 1 x 3/16	**MM75882105**	Price
2 x 1/4 x 1/4	**MM75882110**	Price
2 x 1/2 x 1/4	**MM75882115**	Price
3 x 1/8 x 1/4	**MM75882133**	Price
3 x 1/4 x 1/4	**MM75882135**	Price
3 x 1/2 x 1/4	**MM75882140**	Price
6 x 1/2 x 1	**MM75882175**	Price
6 x 1 x 1	**MM75882178**	Price

Additional densities and sizes available upon request.

STANDARD ABRASIVES Unitized Discs, Quick Change

Best wheel for: Deburring, finishing, blending, and fast stock removal on ferrous and non-ferrous materials

- 500 Series: For tough cleaning, finishing and polishing jobs
- 600 Series: For tough blending and polishing applications
- 700 Series: For tough deburring and cleaning applications
- 800 Series: For tough deburring and polishing applications
- 900 Series: For tough deburring and polishing “harder” metals

Series - 500 Series - Rol-On					
Size (in.)	Density	Type	Grain	Order No.	Price
2 x 1/4	Soft	521	A/O	**MM30852199**	Price
2 x 1/4	Soft	524	S/C	**MM30852499**	Price
2 x 1/4	Soft	532	S/C	**MM30853299**	Price
3 x 1/4	Soft	521	A/O	**MM30852198**	Price
3 x 1/4	Soft	532	S/C	**MM30853298**	Price

Series - 600 Series - Rol-On					
Size (in.)	Density	Type	Grain	Order No.	Price
2 x 1/4	Soft / Medium	631	A/O	**MM30863199**	Price
2 x 1/4	Soft / Medium	632	S/C	**MM30863299**	Price
3 x 1/4	Soft / Medium	631	A/O	**MM30863198**	Price
3 x 1/4	Soft / Medium	632	S/C	**MM30863298**	Price

Series - 700 Series - Rol-On					
Size (in.)	Density	Type	Grain	Order No.	Price
3 x 1/4	Medium/Hard	731	A/O	**MM30873198**	Price

Series - 800 Series - Rol-On					
Size (in.)	Density	Type	Grain	Order No.	Price
3 x 1/8	Hard	811	A/O	**MM30881197**	Price
3 x 1/8	Hard	821	A/O	**MM30882197**	Price
3 x 1/4	Hard	821	A/O	**MM30882198**	Price

Series - 900 Series - Rol-On					
Size (in.)	Density	Type	Grain	Order No.	Price
3 x 1/4	Extra Hard	911	A/O	**MM30891198**	Price
3 x 1/4	Extra Hard	921	A/O	**MM30892198**	Price
3 x 1/8	Extra Hard	921	A/O	**MM30892197**	Price

Mandrels for Unitized Wheels





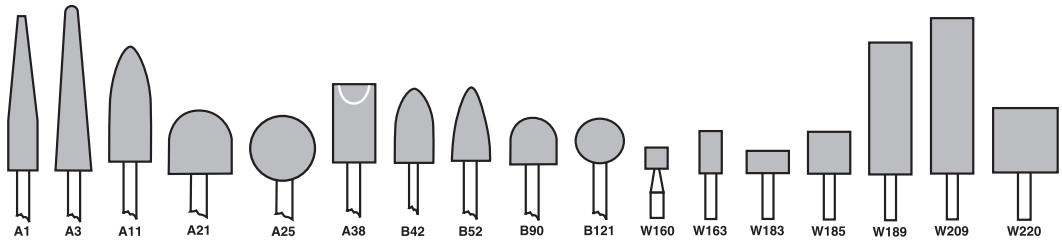


Style	Shank Length (in.)	Shank Dia. (in.)	Use With Wheel Dia.	Use With Wheel Thick	Order No.	Price
A	7/8	1/4	1"	1	**MM75850034**	Price
B	1-1/4	1/4	6"	1/2-1	**MM75850030**	Price
C	Various	1/4	1-1/4" to 4"	1/8-1	**MM75850029**	Price

STANDARD ABRASIVES Non-Woven Abrasives Unitized Mounted Points

- Made from the high durability Unitized material and are available in standard ANSI shapes for varying work piece dimensions and applications
- Deburring and blending requires high RPM
- Decorative finishing requires low RPM
- Polishing requires high speeds and low pressure
- 900 series is the hardest and 600 is the softest
- The aggressiveness increases with the hardness





Shape	Dia. (in.)	Length (in.)	Shank (in.)	Series	Order No.	Price
A1	3/4	2-1/2	1/4	732	**MM75877057**	Price
A1	3/4	2-1/2	1/4	821	**MM75877058**	Price
A11	7/8	2	1/4	732	**MM75877061**	Price
A11	7/8	2	1/4	821	**MM75877062**	Price
A21	1	1	1/4	632	**MM75877015**	Price
A21	1	1	1/4	731	**MM75877012**	Price
A21	1	1	1/4	732	**MM75877016**	Price
A21	1	1	1/4	811	**MM75877014**	Price
A21	1	1	1/4	821	**MM75877013**	Price
A25	1	1	1/4	811	**MM75877018**	Price
A25	1	1	1/4	821	**MM75877017**	Price
A3	1	2-3/4	1/4	732	**MM75877059**	Price
A38	1	1	1/8	732	**MM75877063**	Price
A38	1	1	1/8	821	**MM75877064**	Price
B121	1/2	1/2	1/8	632	**MM75877039**	Price
B121	1/2	1/2	1/8	731	**MM75877008**	Price
B121	1/2	1/2	1/8	811	**MM75877010**	Price
B121	1/2	1/2	1/8	821	**MM75877009**	Price
B42	1/2	3/4	1/8	732	**MM75877065**	Price
B42	1/2	3/4	1/8	821	**MM75877066**	Price
B52	3/8	3/4	1/8	631	**MM75877036**	Price
B52	3/8	3/4	1/8	731	**MM75877000**	Price
B52	3/8	3/4	1/8	732	**MM75877003**	Price
B52	3/8	3/4	1/8	811	**MM75877002**	Price
B52	3/8	3/4	1/8	821	**MM75877001**	Price
B90	1/2	1/2	1/8	631	**MM75877038**	Price
B90	1/2	1/2	1/8	731	**MM75877004**	Price
B90	1/2	1/2	1/8	732	**MM75877007**	Price
B90	1/2	1/2	1/8	811	**MM75877006**	Price
B90	1/2	1/2	1/8	821	**MM75877005**	Price
W160	1/4	1/4	1/8	732	**MM75877040**	Price
W160	1/4	1/4	1/8	811	**MM75877020**	Price
W160	1/4	1/4	1/8	821	**MM75877019**	Price
W163	1/4	1/2	1/8	731	**MM75877041**	Price
W163	1/4	1/2	1/8	732	**MM75877045**	Price
W163	1/4	1/2	1/8	811	**MM75877022**	Price
W163	1/4	1/2	1/8	821	**MM75877021**	Price
W183	1/2	1/4	1/8	632	**MM75877026**	Price
W183	1/2	1/4	1/8	731	**MM75877023**	Price
W183	1/2	1/4	1/8	732	**MM75877027**	Price
W183	1/2	1/4	1/8	811	**MM75877025**	Price
W183	1/2	1/4	1/8	821	**MM75877024**	Price
W185	1/2	1/2	1/8	631	**MM75877028**	Price
W185	1/2	1/2	1/8	632	**MM75877032**	Price
W185	1/2	1/2	1/8	731	**MM75877029**	Price
W185	1/2	1/2	1/8	732	**MM75877033**	Price
W185	1/2	1/2	1/8	811	**MM75877031**	Price
W185	1/2	1/2	1/8	821	**MM75877030**	Price
W189	1/2	2	1/4	732	**MM75877067**	Price
W189	1/2	2	1/4	821	**MM75877068**	Price
W209	3/4	2-1/2	1/4	821	**MM75877070**	Price
W220	1	1	1/4	811	**MM75877035**	Price
W220	1	1	1/4	821	**MM75877034**	Price

Additional sizes available upon request.

STANDARD ABRASIVES Non-Woven Abrasives Type 27 Unitized Discs

- Deburring, edge breaking, cleaning, blending, final finishing and polishing
- 800 series is the hardest and 500 is the softest
- The aggressiveness increases with the density
- User friendly



Size (in.)	Series	Grain	Density	Grade	Order No.	Price
4-1/2	532	Silicon Carbide	Soft	Fine	**MM75811532**	Price
4-1/2	632	Silicon Carbide	Medium	Fine	**MM75811632**	Price
4-1/2	732	Silicon Carbide	Medium	Fine	**MM75811732**	Price
4-1/2	811	Aluminum Oxide	Hard	Coarse	**MM75811811**	Price
4-1/2	821	Silicon Carbide	Hard	Medium	**MM75811821**	Price

Discs have 7/8" arbor hole.

STANDARD ABRASIVES Non-Woven Abrasives Unitized Mounted Points Kit

- A sampling of popular Unitized Mounted Points is available in this mini kit



Order No.	Price
MM75800031	Price

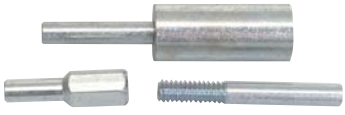
MERIT Aluminum Oxide Bore Polishers

- Fast — versatile polishing
- Aluminum oxide resin bond
- Smooth — vibration-free
- Spring action provides – self centering and consistent cutting as it wears
- Cleans, deburrs and polishes ID's of cylinders, deep tubes and hydraulic fittings



			60		80		120		180		240		320	
Model No.	Max. RPM	Size I.D. To Be Polished	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
B-305	25,000	-	**MM4554190**	Price	**MM4554191**	Price	**MM4554193**	Price	**MM4554195**	Price	**MM4554197**	Price	**-**	-
B-405	22,000	1 to 1-1/2	**MM4554091**	Price	**MM4554092**	Price	**MM4554093**	Price	**MM4554094**	Price	**MM4554095**	Price	**-**	-
B-410	20,000	1-1/2 to 2	**MM4554100**	Price	**MM4554101**	Price	**MM4554102**	Price	**MM4554103**	Price	**MM4554104**	Price	**-**	-
B-415	16,000	2-1/8 to 2-1/2	**MM4554109**	Price	**MM4554110**	Price	**MM4554111**	Price	**MM4554112**	Price	**MM4554113**	Price	**-**	-
B-420	15,000	2-1/2 to 3	**MM4554118**	Price	**MM4554119**	Price	**MM4554120**	Price	**MM4554121**	Price	**MM4554122**	Price	**-**	-
B-425	10,000	3-1/8 to 4	**MM4554127**	Price	**MM4554128**	Price	**MM4554129**	Price	**MM4554130**	Price	**MM4554131**	Price	**MM4554132**	Price
B-810	16,000	2 to 2-1/2	**MM4554136**	Price	**MM4554137**	Price	**MM4554138**	Price	**MM4554139**	Price	**MM4554140**	Price	**MM4554141**	Price
B-815	15,000	2-5/8 to 3	**MM4554145**	Price	**MM4554146**	Price	**MM4554147**	Price	**MM4554148**	Price	**MM4554149**	Price	**-**	-
B-820	10,000	3-1/8 to 4	**MM4554154**	Price	**MM4554155**	Price	**MM4554156**	Price	**MM4554157**	Price	**MM4554158**	Price	**MM4554159**	Price
B-825	8,000	4-1/4 to 5-1/4	**MM4554163**	Price	**MM4554164**	Price	**MM4554165**	Price	**MM4554166**	Price	**MM4554167**	Price	**-**	-
B-830	8,000	5-1/4 to 5-7/8	**MM4554172**	Price	**MM4554173**	Price	**MM4554174**	Price	**MM4554175**	Price	**MM4554176**	Price	**MM4554177**	Price

MERIT Mandrels for Bore Polishers



Size (in.)	Model No.	Order No.	Price
For B-3 Series	QC-5-5/16-18 THD	**MM4554182**	Price
For B-4 Series	BPM-4-1/2-13 THD	**MM4554183**	Price
For B-8 Series	BPM-8-1/4-20 THD	**MM4554184**	Price

MERIT Extension Mandrels for Bore Polishers—1/4-20 THD



Size (in.)	Model No.	Order No.	Price
1/4 x 4	EM-144	**MM4554185**	Price
1/4 x 6	EM-146	**MM4554186**	Price
1/4 x 8	EM-148	**MM4554187**	Price

SUPERIOR Abrasives Rigid Kut® Ceramic Quick Change Discs

- Our most firm disc, as stiff as a fiber disc with better grain retention
- Grind high temp alloys such as cobalt chrome, hastalloy and inconel
- Extended life over all other quick change discs with tremendous edge wear



Diameter (in.) - 2				
	Roll-On		Turn-On	
Size	Order No.	Price	Order No.	Price
36	**MM6447813**	Price	**MM6447801**	Price
50	**MM6447814**	Price	**MM6447802**	Price
60	**MM6447815**	Price	**MM6447803**	Price
80	**MM6447816**	Price	**MM6447804**	Price
120	**MM6447818**	Price	**MM6447806**	Price

Diameter (in.) - 3				
	Roll-On		Turn-On	
Size	Order No.	Price	Order No.	Price
36	**MM6447819**	Price	**MM6447807**	Price
50	**MM6447820**	Price	**MM6447808**	Price
60	**MM6447821**	Price	**MM6447809**	Price
80	**MM6447822**	Price	**MM6447810**	Price
120	**MM6447824**	Price	**MM6447812**	Price

Standard package - 2"=100 pack / 3"=50/pack
2˝ Holder: Roll-On – MM59-64922 Turn-On – MM59-64198
3˝ Holder: Roll-On – MM59-64949 Turn-On – MM59-64113

SUPERIOR Abrasives Shur-Brite® Stars

- Reinforced non-woven abrasive surface conditioning material
- Designed for cleaning and polishing the ID of tubing
- Provides a smooth, consistent finish
- Ideal for heavy rust and oxidation removal
- Blending machine tool marks and other surface imperfections



		Coarse		Medium		Very Fine	
Size (in.)	Stars per Box	Order No.	Price	Order No.	Price	Order No.	Price
2	100	**MM7528835**	Price	**MM7528836**	Price	**MM7528837**	Price
3	50	**MM7528838**	Price	**MM7528839**	Price	**MM7528840**	Price
4	50	**MM7528841**	Price	**MM7528842**	Price	**MM7528843**	Price
1-1/2	100	**MM7528832**	Price	**MM7528833**	Price	**MM7528834**	Price

Mandrel EM-4 (fits all sizes) 1/4" Shank Order No. MM75-12219

Standard Duty Brush Research Flex-Hone®

Resilient, Flexible Honing Tool For Small Internal Honing • 8” Overall Length

Features:
- Soft cutting action
- Self-centering aligning
- Self compensating for wear
- Silicon carbide abrasive

Applications:
- Hydraulic ram cylinders
- Pneumatic cylinders
- Hydraulic valve bodies & guides
- Brake and clutch cylinders
- Compressed air tool bodies
- Fine surface finishing of stainless tubing



		120		180		240		320	
Specification	Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
BC 1	25.4mm	**MJ731120**	Price	**MJ731180**	Price	**MJ731240**	Price	**MJ731320**	Price
BC 1/2	12.7mm	**MJ7350120**	Price	**MJ7350180**	Price	**MJ7350240**	Price	**MJ7350320**	Price
BC 10mm	.394	**MJ7310120**	Price	**MJ7310180**	Price	**MJ7310240**	Price	**MJ7310320**	Price
BC 1-1/2	38mm	**MJ73150120**	Price	**MJ73150180**	Price	**MJ73150240**	Price	**MJ73150320**	Price
BC 1-1/4	31.8mm	**MJ73125120**	Price	**MJ73125180**	Price	**MJ73125240**	Price	**MJ73125320**	Price
BC 11mm	.433	**MJ7311120**	Price	**MJ7311180**	Price	**MJ7311240**	Price	**MJ7311320**	Price
BC 1-3/4	45mm	**MJ73175120**	Price	**MJ73175180**	Price	**MJ73175240**	Price	**MJ73175320**	Price
BC 2	51mm	**MJ732120**	Price	**MJ732180**	Price	**MJ732240**	Price	**MJ732320**	Price
BC 2-1/2	64mm	**MJ73250120**	Price	**MJ73250180**	Price	**MJ73250240**	Price	**MJ73250320**	Price
BC 2-1/4	57mm	**MJ73225120**	Price	**MJ73225180**	Price	**MJ73225240**	Price	**MJ73225320**	Price
BC 2-3/4	70mm	**MJ73275120**	Price	**MJ73275180**	Price	**MJ73275240**	Price	**MJ73275320**	Price
BC 3	76mm	**MJ733120**	Price	**MJ733180**	Price	**MJ733240**	Price	**MJ733320**	Price
BC 3/4	19mm	**MJ7375120**	Price	**MJ7375180**	Price	**MJ7375240**	Price	**MJ7375320**	Price
BC 5/8	15.9mm	**MJ73625120**	Price	**MJ73625180**	Price	**MJ73625240**	Price	**MJ73625320**	Price
BC 7mm	.276	**MJ737120**	Price	**MJ737180**	Price	**MJ737240**	Price	**MJ737320**	Price
BC 8mm	.315	**MJ738120**	Price	**MJ738180**	Price	**MJ738240**	Price	**MJ738320**	Price
BC 9mm	.354	**MJ739120**	Price	**MJ739180**	Price	**MJ739240**	Price	**MJ739320**	Price

Heavy Duty Brush Research Flex-Hone®

3” – 4-1/2” Dia. = 13-1/2” Overall Length • 5” and Over = 17-1/2” Overall Length
For Large Internal Honing • Block Cylinders or Liners

		120		180		240	
Specification (in./mm)	For Bore Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
GBD 3 / 76	3 to 2-3/4	**MJ73300120**	Price	**MJ73300180**	Price	**MJ73300240**	Price
GBD 3-1/2 / 89	3-1/2 to 3	**MJ73350120**	Price	**MJ73350180**	Price	**MJ73350240**	Price
GBD 3-1/4 / 83	3-1/4 to 3	**MJ73325120**	Price	**MJ73325180**	Price	**MJ73325240**	Price
GBD 3-3/4 / 95	3-3/4 to 3-1/4	**MJ73375120**	Price	**MJ73375180**	Price	**MJ73375240**	Price
GBD 4 / 101	4 to 3-1/2	**MJ73400120**	Price	**MJ73400180**	Price	**MJ73400240**	Price
GBD 4-1/2 / 114	4-1/2 to 4	**MJ73450120**	Price	**MJ73450180**	Price	**MJ73450240**	Price
GBD 4-1/4 / 108	4-1/4 to 4	**MJ73425120**	Price	**MJ73425180**	Price	**MJ73425240**	Price
GBD 5 / 127	5 to 4-1/2	**MJ73500120**	Price	**MJ73500180**	Price	**MJ73500240**	Price
GBD 5-1/2 / 140	5-1/2 to 5	**MJ73550120**	Price	**MJ73550180**	Price	**MJ73550240**	Price
GBD 6 / 152	6 to 5-1/2	**MJ73600120**	Price	**MJ73600180**	Price	**MJ73600240**	Price
GBD 6-1/2 / 165	6-1/2 to 6	**MJ73650120**	Price	**MJ73650180**	Price	**MJ73650240**	Price
GBD 7 / 178	7 to 6-1/2	**MJ73700120**	Price	**MJ73700180**	Price	**MJ73700240**	Price
GBD 7-1/2 / 190	7-1/2 to 7	**MJ73750120**	Price	**MJ73750180**	Price	**MJ73750240**	Price
GBD 8 / 203	8 to 7-1/2	**MJ73800120**	Price	**MJ73800180**	Price	**MJ73800240**	Price

Brush Research Flex-Honing® Oil

1/2 Pint

- For use with all metal honing applications except hydraulic cylinders – use hydraulic brake fluid
- Hazard Code: 58



Order No.	Price
MJ7308	Price

Suggested RPM

The Flex-Hone tool is a low RPM tool. Specific RPM is dependent on the diameter of the tool and the application. General speed ranges are given but, again, machine trials are required to verify the parameters. Hone Dia. RPM

19“ to 36“ 60-120 RPM
12“ to 18“ 80 to 350 RPM
8“ to 12“ 300 to 500 RPM
4“ to 8“ 400 to 600 RPM
2“ to 4“ 600 to 800 RPM
1/2“ to 2“ 700 to 900 RPM
4mm to 1/2“ 800-1200 RPM

Remember:
The Smaller the hone, the faster the speed.
The larger the hone, the slower the speed

Also availible in Diamond from 4mm (0.157“) to 20mm (0.787“)

Nylon Diamond Abrasive Deburring Brushes - Thru Hole Type

- Constructed with 800 grit diamond impregnated nylon filaments for extra cutting and cleaning action in a variety of applications
- Used for cross hole deburring, micro burr removal, internal cleaning, removal of small imperfections and surface preparation
- Specifically designed for thru-hole applications

Dia. (in./mm)	Brush Length	Shank Dia.	Order No.	Price
.032	.035	.016	**MJ73MBT032800D**	Price
.047	.052	.026	**MJ73MBT047800D**	Price
.054	.059	.026	**MJ73MBT054800D**	Price
.063	.069	.034	**MJ73MBT063800D**	Price
.079	.087	.034	**MJ73MBT079800D**	Price
.094	.103	.043	**MJ73MBT094800D**	Price
.109	.120	.055	**MJ73MBT109800D**	Price
.125	.138	.055	**MJ73MBT125800D**	Price
.142	.142	.072	**MJ73MBT142800D**	Price
.156	.172	.072	**MJ73MBT156800D**	Price
.172	.189	.083	**MJ73MBT172800D**	Price
.189	.208	.083	**MJ73MBT189800D**	Price
.219	.241	.097	**MJ73MBT219800D**	Price

Dia. (in./mm)	Brush Length	Shank Dia.	Order No.	Price
.250	.271	.110	**MJ73MBT250800D**	Price
1mm	.043	.016	**MJ73MBT1P00800D**	Price
1.5mm	.065	.026	**MJ73MBT1P50800D**	Price
2mm	.087	.034	**MJ73MBT2P00800D**	Price
2.5mm	.108	.043	**MJ73MBT2P50800D**	Price
3mm	.130	.055	**MJ73MBT3P00800D**	Price
3.5mm	.152	.055	**MJ73MBT3P50800D**	Price
4mm	.173	.072	**MJ73MBT04P0800D**	Price
4.5mm	.195	.072	**MJ73MBT4P50800D**	Price
5mm	.217	.072	**MJ73MBT5P00800D**	Price
5.5mm	.024	.110	**MJ73MBT5P50800D**	Price
6mm	.260	.110	**MJ73MBT6P00800D**	Price
6.5mm	.281	.110	**MJ73MBT6P50800D**	Price

Bottoming Type Available

Nylon Abrasive Deburring Brushes - Bottoming Type

- Constructed with abrasive filled nylon filaments for extra cutting and cleaning action in a variety of applications
- Used for cross hole deburring, micro burr removal, internal cleaning, removal of small imperfections and surface preparation
- Available abrasives include silicon carbide and aluminum oxide in grits from 80 to 800
- Specifically designed for thru-hole applications



					Aluminum Oxide		Diamond		Silicon Carbide	
Dia.	Brush Length	Grit	OAL	Shank Dia.	Order No.	Price	Order No.	Price	Order No.	Price
.125	1	120	4	.073	-	-	-	-	**MJ73MBB125120S**	Price
.125	1	180	4	.073	-	-	-	-	**MJ73MBB125180S**	Price
.125	1	320	4	.073	**MJ73MBB125320AC**	Price	-	-	**MJ73MBB125320S**	Price
.125	1	500	4	.073	**MJ73MBB125500AC**	Price	-	-	**MJ73MBB125500S**	Price
.125	1	600	4	.073	**MJ73MBB125600AO**	Price	-	-	-	-
.125	1	800	4	.073	-	-	**MJ73MBB125800D**	Price	-	-
.156	1	80	4	.097	-	-	-	-	**MJ73MBB156080S**	Price
.156	1	120	4	.097	-	-	-	-	**MJ73MBB156120S**	Price
.156	1	180	4	.097	**MJ73MBB156180AO**	Price	-	-	**MJ73MBB156180S**	Price
.156	1	320	4	.097	**MJ73MBB156320AO**	Price	-	-	**MJ73MBB156320S**	Price
.156	1	500	4	.097	**MJ73MBB156500AO**	Price	-	-	**MJ73MBB156500S**	Price
.156	1	600	4	.097	**MJ73MBB156600AO**	Price	-	-	-	-
.156	1	800	4	.097	-	-	**MJ73MBB156800D**	Price	-	-
.187	1	120	4	.097	**MJ73MBB187120AO**	Price	-	-	**MJ73MBB187120S**	Price
.187	1	180	4	.097	**MJ73MBB187180AO**	Price	-	-	**MJ73MBB187180S**	Price
.187	1	320	4	.097	**MJ73MBB187320AO**	Price	-	-	**MJ73MBB187320S**	Price
.187	1	500	4	.097	**MJ73MBB187500AO**	Price	-	-	**MJ73MBB187500S**	Price
.187	1	600	4	.097	-	-	-	-	**MJ73MBB187600S**	Price
.187	1	800	4	.097	-	-	**MJ73MBB187800D**	Price	-	-
.219	1-1/4	80	4-1/2	.112	-	-	-	-	**MJ73MBB219500S**	Price
.219	1-1/4	120	4-1/2	.112	-	-	-	-	**MJ73MBB219120S**	Price
.219	1-1/4	180	4-1/2	.112	**MJ73MBB219180AO**	Price	-	-	**MJ73MBB219180S**	Price
.219	1-1/4	320	4-1/2	.112	**MJ73MBB219320AO**	Price	-	-	**MJ73MBB219320S**	Price
.219	1-1/4	500	4-1/2	.112	**MJ73MBB219500AO**	Price	-	-	-	-
.219	1-1/4	800	4-1/2	.112	-	-	**MJ73MBB219800D**	Price	-	-
.250	1-1/4	80	4-1/2	.112	**MJ73MBB250080AO**	Price	-	-	**MJ73MBB250080S**	Price
.250	1-1/4	120	4-1/2	.112	-	-	-	-	**MJ73MBB250120S**	Price
.250	1-1/4	180	4-1/2	.112	**MJ73MBB250180AO**	Price	-	-	**MJ73MBB250180S**	Price
.250	1-1/4	320	4-1/2	.112	**MJ73MBB250320AO**	Price	-	-	**MJ73MBB250320S**	Price
.250	1-1/4	500	4-1/2	.112	**MJ73MBB250500AO**	Price	-	-	**MJ73MBB250500S**	Price
.250	1-1/4	600	4-1/2	.112	**MJ73MBB250600AO**	Price	-	-	-	-
.250	1-1/4	800	4-1/2	.112	-	-	**MJ73MBB250800D**	Price	-	-
.281	1-1/4	80	4-1/2	.125	**MJ73MBB281080AO**	Price	-	-	**MJ73MBB281080S**	Price
.281	1-1/4	120	4-1/2	.125	**MJ73MBB281120AO**	Price	-	-	**MJ73MBB281120S**	Price
.281	1-1/4	180	4-1/2	.125	**MJ73MBB281180AO**	Price	-	-	**MJ73MBB281180S**	Price
.281	1-1/4	320	4-1/2	.125	**MJ73MBB281320AO**	Price	-	-	**MJ73MBB281320S**	Price
.281	1-1/4	500	4-1/2	.125	**MJ73MBB281500AO**	Price	-	-	**MJ73MBB281500S**	Price
.281	1-1/4	600	4-1/2	.125	**MJ73MBB281600AO**	Price	-	-	-	-
.281	1-1/4	800	4-1/2	.125	-	-	**MJ73MBB281800D**	Price	-	-
.312	1-1/4	80	4-1/2	.140	-	-	-	-	**MJ73MBB312080S**	Price
.312	1-1/4	120	4-1/2	.140	-	-	-	-	**MJ73MBB312120S**	Price
.312	1-1/4	180	4-1/2	.140	**MJ73MBB312180AO**	Price	-	-	**MJ73MBB312180S**	Price
.312	1-1/4	320	4-1/2	.140	**MJ73MBB312320AO**	Price	-	-	**MJ73MBB312321S**	Price
.312	1-1/4	500	4-1/2	.140	**MJ73MBB312500AO**	Price	-	-	**MJ73MBB312500S**	Price
.312	1-1/4	600	4-1/2	.140	**MJ73MBB312600AO**	Price	-	-	-	-
.312	1-1/4	800	4-1/2	.140	-	-	**MJ73MBB312800D**	Price	-	-
.344	1-1/4	80	4-1/2	.140	-	-	-	-	**MJ73MBB344080S**	Price
.344	1-1/4	120	4-1/2	.140	-	-	-	-	**MJ73MBB344120S**	Price
.344	1-1/4	180	4-1/2	.140	**MJ73MBB344180AO**	Price	-	-	**MJ73MBB344180S**	Price
.344	1-1/4	320	4-1/2	.140	**MJ73MBB344320AO**	Price	-	-	**MJ73MBB344320S**	Price
.344	1-1/4	500	4-1/2	.140	**MJ73MBB344500AO**	Price	-	-	**MJ73MBB344501S**	Price
.344	1-1/4	600	4-1/2	.140	**MJ73MBB344600AO**	Price	-	-	-	-
.344	1-1/4	800	4-1/2	.140	-	-	**MJ73MBB344800D**	Price	-	-
.375	1-1/4	80	4-1/2	.140	**MJ73MBB375080AO**	Price	-	-	**MJ73MBB375080S**	Price
.375	1-1/4	120	4-1/2	.140	**MJ73MBB375120AO**	Price	-	-	**MJ73MBB375120S**	Price
.375	1-1/4	180	4-1/2	.140	**MJ73MBB375180AO**	Price	-	-	**MJ73MBB375180S**	Price
.375	1-1/4	320	4-1/2	.140	**MJ73MBB375320AO**	Price	-	-	**MJ73MBB375320S**	Price
.375	1-1/4	500	4-1/2	.140	**MJ73MBB375500AO**	Price	-	-	**MJ73MBB375500S**	Price
.375	1-1/4	600	4-1/2	.140	**MJ73MBB375600AO**	Price	-	-	-	-
.375	1-1/4	800	4-1/2	.140	-	-	**MJ73MBB375800D**	Price	-	-
.437	1-1/4	800	4-1/2	.140	-	-	**MJ73MBB437800D**	Price	-	-
.469	1-1/4	800	4-1/2	.140	-	-	**MJ73MBB469800D**	Price	-	-
.500	1-1/4	800	4-1/2	.140	-	-	**MJ73MBB500800D**	Price	-	-

Nylon Abrasive Deburring Brushes - Thru Hole Type



- Constructed with abrasive filled nylon filaments for extra cutting and cleaning action in a variety of applications
- Used for cross hole deburring, micro burr removal, internal cleaning, removal of small imperfections and surface preparation
- Available abrasives include silicon carbide, aluminum oxide in grits from 80 to 600, silicate and stainless steel wire
- Specifically designed for thru-hole applications
- 3" Overall length

Material - Aluminum Oxide					
Dia. (in./mm)	Brush Length	Shank Dia.	Grit	Order No.	Price
.032	1/4	.016	600	**MJ73MBC032600AO**	Price
.047	3/4	.026	500	**MJ73MBC047500AO**	Price
.047	3/4	.026	600	**MJ73MBC047600AO**	Price
.054	3/4	.026	500	**MJ73MBC054500AO**	Price
.054	3/4	.028	600	**MJ73MBC054600AO**	Price
.063	3/4	.034	320	**MJ73MBC063320AO**	Price
.063	3/4	.034	500	**MJ73MBC063500AO**	Price
.063	3/4	.034	600	**MJ73MBC063600AO**	Price
.079	3/4	.034	320	**MJ73MBC079320AO**	Price
.079	3/4	.034	500	**MJ73MBC079500AO**	Price
.079	3/4	.034	600	**MJ73MBC079600AO**	Price
.094	3/4	.043	320	**MJ73MBC094320AO**	Price
.094	3/4	.043	500	**MJ73MBC094500AO**	Price
.094	3/4	.043	600	**MJ73MBC094600AO**	Price
.109	3/4	.055	180	**MJ73MBC109180AO**	Price
.109	3/4	.055	320	**MJ73MBC109320AO**	Price
.109	3/4	.055	500	**MJ73MBC109500AO**	Price
.109	3/4	.055	600	**MJ73MBC109600AO**	Price
.125	1	.055	180	**MJ73MBC125180AO**	Price
.125	1	.055	320	**MJ73MBC125320AO**	Price
.125	1	.055	500	**MJ73MBC125500AO**	Price
.125	1	.055	600	**MJ73MBC125600AO**	Price
.142	1	.072	180	**MJ73MBC142180AO**	Price
.142	1	.072	320	**MJ73MBC142320AO**	Price
.142	1	.072	500	**MJ73MBC142500AO**	Price
.142	1	.072	600	**MJ73MBC142600AO**	Price
.156	1	.072	180	**MJ73MBC156180AO**	Price
.156	1	.072	320	**MJ73MBC156320AO**	Price
.156	1	.072	500	**MJ73MBC156500AO**	Price
.156	1	.072	600	**MJ73MBC156600AO**	Price
.172	1	.083	180	**MJ73MBC172180AO**	Price
.172	1	.083	320	**MJ73MBC172320AO**	Price
.172	1	.083	500	**MJ73MBC172500AO**	Price
.172	1	.083	600	**MJ73MBC172600AO**	Price
.189	1	.083	120	**MJ73MBC189120AO**	Price
.189	1	.083	180	**MJ73MBC189180AO**	Price
.189	1	.083	320	**MJ73MBC189320AO**	Price
.189	1	.083	500	**MJ73MBC189500AO**	Price
.189	1	.083	600	**MJ73MBC189600AO**	Price
.189	1	.083	80	**MJ73MBC189080AO**	Price
7/32	1-1/2	.097	120	**MJ73MBC218120AO**	Price
7/32	1-1/2	.097	180	**MJ73MBC218180AO**	Price
7/32	1-1/2	.097	320	**MJ73MBC218320AO**	Price
7/32	1-1/2	.097	500	**MJ73MBC218500AO**	Price
7/32	1-1/2	.097	600	**MJ73MBC218600AO**	Price
7/32	1-1/2	.097	80	**MJ73MBC218080AO**	Price
1/4	1-1/2	.097	120	**MJ73MBC250120AO**	Price
1/4	1-1/2	.097	180	**MJ73MBC250180AO**	Price
1/4	1-1/2	.097	320	**MJ73MBC250320AO**	Price
1/4	1-1/2	.097	500	**MJ73MBC250500AO**	Price
1/4	1-1/2	.097	600	**MJ73MBC250600AO**	Price
1/4	1-1/2	.097	80	**MJ73MBC250080AO**	Price
5/16	1-1/2	.125	120	**MJ73MBC312120AO**	Price
5/16	1-1/2	.125	180	**MJ73MBC312180AO**	Price
5/16	1-1/2	.125	320	**MJ73MBC312320AO**	Price
5/16	1-1/2	.125	500	**MJ73MBC312500AO**	Price
5/16	1-1/2	.125	600	**MJ73MBC312600AO**	Price
5/16	1-1/2	.125	80	**MJ73MBC312080AO**	Price
3/8	1-1/2	.140	120	**MJ73MBC375120AO**	Price
3/8	1-1/2	.140	180	**MJ73MBC375180AO**	Price
3/8	1-1/2	.140	320	**MJ73MBC375320AO**	Price
3/8	1-1/2	.140	500	**MJ73MBC375500AO**	Price
3/8	1-1/2	.140	600	**MJ73MBC375600AO**	Price
3/8	1-1/2	.140	80	**MJ73MBC375080AO**	Price
7/16	1-1/2	.140	120	**MJ73MBC437120AO**	Price
7/16	1-1/2	.140	180	**MJ73MBC437180AO**	Price
7/16	1-1/2	.140	320	**MJ73MBC437320AO**	Price
7/16	1-1/2	.140	500	**MJ73MBC437500AO**	Price
7/16	1-1/2	.140	600	**MJ73MBC437600AO**	Price
7/16	1-1/2	.140	80	**MJ73MBC437080AO**	Price
1/2	1-1/2	.168	120	**MJ73MBC500120AO**	Price
1/2	1-1/2	.168	180	**MJ73MBC500180AO**	Price

Material - Aluminum Oxide					
Dia. (in./mm)	Brush Length	Shank Dia.	Grit	Order No.	Price
1/2	1-1/2	.168	320	**MJ73MBC500320AO**	Price
1/2	1-1/2	.168	500	**MJ73MBC500500AO**	Price
1/2	1-1/2	.168	600	**MJ73MBC500600AO**	Price
1/2	1-1/2	.168	80	**MJ73MBC500080AO**	Price

Material - Silicate					
Dia. (in./mm)	Brush Length	Shank Dia.	Grit	Order No.	Price
.032	1/4	.016	Silicate	**MJ73MBC032SILIC**	Price
.047	3/4	.026	Silicate	**MJ73MBC047SILIC**	Price
.054	3/4	.026	Silicate	**MJ73MBC054SILIC**	Price
.063	3/4	.034	Silicate	**MJ73MBC063SILIC**	Price
.079	3/4	.034	Silicate	**MJ73MBC079SILIC**	Price
.094	3/4	.043	Silicate	**MJ73MBC094SILIC**	Price
.109	3/4	.055	Silicate	**MJ73MBC109SILIC**	Price
.125	1	.055	Silicate	**MJ73MBC125SILIC**	Price
.156	1	.072	Silicate	**MJ73MBC156SILIC**	Price
1mm	5/8	.016	Silicate	**MJ73MBC1P0SILIC**	Price
1.5mm	5/8	.026	Silicate	**MJ73MBC1P5SILIC**	Price
2mm	3/4	.034	Silicate	**MJ73MBC2P0SILIC**	Price
2.5mm	3/4	.043	Silicate	**MJ73MBC2P5SILIC**	Price
3mm	1	.055	Silicate	**MJ73MBC3P0SILIC**	Price
4mm	1	.072	Silicate	**MJ73MBC4P0SILIC**	Price

Material - Silicon Carbide					
Dia. (in./mm)	Brush Length	Shank Dia.	Grit	Order No.	Price
.047	3/4	.026	500	**MJ73MBC047500S**	Price
.054	3/4	.026	500	**MJ73MBC054500S**	Price
.063	3/4	.034	320	**MJ73MBC063320S**	Price
.063	3/4	.034	500	**MJ73MBC063500S**	Price
.079	3/4	.034	320	**MJ73MBC079320S**	Price
.079	3/4	.034	500	**MJ73MBC079500S**	Price
.094	3/4	.043	320	**MJ73MBC094320S**	Price
.094	3/4	.043	500	**MJ73MBC094500S**	Price
.109	3/4	.055	180	**MJ73MBC109180S**	Price
.109	3/4	.055	320	**MJ73MBC109320S**	Price
.109	3/4	.055	500	**MJ73MBC109500S**	Price
.125	1	.055	180	**MJ73MBC125180S**	Price
.125	1	.055	320	**MJ73MBC125320S**	Price
.125	1	.055	500	**MJ73MBC125500S**	Price
.142	1	.072	180	**MJ73MBC142180S**	Price
.142	1	.072	320	**MJ73MBC142320S**	Price
.142	1	.072	500	**MJ73MBC142500S**	Price
.156	1	.072	180	**MJ73MBC156180S**	Price
.156	1	.072	320	**MJ73MBC156320S**	Price
.156	1	.072	500	**MJ73MBC156500S**	Price
.172	1	.083	180	**MJ73MBC172180S**	Price
.172	1	.083	320	**MJ73MBC172320S**	Price
.172	1	.083	500	**MJ73MBC172500S**	Price
.189	1	.083	120	**MJ73MBC189120S**	Price
.189	1	.083	180	**MJ73MBC189180S**	Price
.189	1	.083	320	**MJ73MBC189320S**	Price
.189	1	.083	500	**MJ73MBC189500S**	Price
.189	1	.083	80	**MJ73MBC189080S**	Price
7/32	1-1/2	.097	120	**MJ73MBC218120S**	Price
7/32	1-1/2	.097	180	**MJ73MBC218180S**	Price
7/32	1-1/2	.097	320	**MJ73MBC218320S**	Price
7/32	1-1/2	.097	500	**MJ73MBC218500S**	Price
7/32	1-1/2	.097	80	**MJ73MBC218080S**	Price
1/4	1-1/2	.097	120	**MJ73MBC250120S**	Price
1/4	1-1/2	.097	180	**MJ73MBC250180S**	Price
1/4	1-1/2	.097	320	**MJ73MBC250320S**	Price
1/4	1-1/2	.097	500	**MJ73MBC250500S**	Price
1/4	1-1/2	.097	80	**MJ73MBC250080S**	Price
5/16	1-1/2	.125	120	**MJ73MBC312120S**	Price
5/16	1-1/2	.125	180	**MJ73MBC312180S**	Price
5/16	1-1/2	.125	320	**MJ73MBC312320S**	Price
5/16	1-1/2	.125	500	**MJ73MBC312500S**	Price
5/16	1-1/2	.125	80	**MJ73MBC312080S**	Price
3/8	1-1/2	.140	120	**MJ73MBC375120S**	Price
3/8	1-1/2	.140	180	**MJ73MBC375180S**	Price
3/8	1-1/2	.140	320	**MJ73MBC375320S**	Price
3/8	1-1/2	.140	500	**MJ73MBC375500S**	Price
3/8	1-1/2	.140	80	**MJ73MBC375080S**	Price

Nylon Abrasive Deburring Brushes - Thru Hole Type (cont.)

Material - Silicon Carbide					
Dia. (in./mm)	Brush Length	Shank Dia.	Grit	Order No.	Price
7/16	1-1/2	.140	120	**MJ73MBC437120S**	Price
7/16	1-1/2	.140	180	**MJ73MBC437180S**	Price
7/16	1-1/2	.140	320	**MJ73MBC437320S**	Price
7/16	1-1/2	.140	500	**MJ73MBC437500S**	Price
7/16	1-1/2	.140	80	**MJ73MBC437080S**	Price
1/2	1-1/2	.168	120	**MJ73MBC500120S**	Price
1/2	1-1/2	.168	180	**MJ73MBC500180S**	Price
1/2	1-1/2	.168	320	**MJ73MBC500320S**	Price
1/2	1-1/2	.168	500	**MJ73MBC500500S**	Price
1/2	1-1/2	.168	80	**MJ73MBC500080S**	Price
1.5mm	5/8	.026	500	**MJ73MBC1P5500S**	Price
2mm	3/4	.034	320	**MJ73MBC2P0320S**	Price
2mm	3/4	.034	500	**MJ73MBC2P0500S**	Price
2.5mm	3/4	.043	320	**MJ73MBC2P5320S**	Price
2.5mm	3/4	.043	500	**MJ73MBC2P5500S**	Price
3mm	1	.055	180	**MJ73MBC3P0180S**	Price
3mm	1	.055	320	**MJ73MBC3P0320S**	Price
3mm	1	.055	500	**MJ73MBC3P0500S**	Price
3.5mm	1	.055	180	**MJ73MBC3P5180S**	Price
3.5mm	1	.055	320	**MJ73MBC3P5320S**	Price
3.5mm	1	.055	500	**MJ73MBC3P5500S**	Price
4mm	1	.072	180	**MJ73MBC4P0180S**	Price
4mm	1	.072	320	**MJ73MBC4P0320S**	Price
4mm	1	.072	500	**MJ73MBC4P0500S**	Price
4.5mm	1	.072	120	**MJ73MBC4P5120S**	Price
4.5mm	1	.072	180	**MJ73MBC4P5180S**	Price
4.5mm	1	.072	320	**MJ73MBC4P5320S**	Price
4.5mm	1	.072	500	**MJ73MBC4P5500S**	Price
4.5mm	1	.072	80	**MJ73MBC4P5080S**	Price
5mm	1	.072	120	**MJ73MBC5P0120S**	Price
5mm	1	.072	180	**MJ73MBC5P0180S**	Price
5mm	1	.072	320	**MJ73MBC5P0320S**	Price
5mm	1	.072	500	**MJ73MBC5P0500S**	Price
5mm	1	.072	80	**MJ73MBC5P0080S**	Price
5.5mm	1	.110	120	**MJ73MBC5P5120S**	Price
5.5mm	1	.110	180	**MJ73MBC5P5180S**	Price
5.5mm	1	.110	320	**MJ73MBC5P5320S**	Price
5.5mm	1	.110	500	**MJ73MBC5P5500S**	Price
5.5mm	1	.110	80	**MJ73MBC5P5080S**	Price
6mm	1	.110	120	**MJ73MBC6P0120S**	Price
6mm	1	.110	180	**MJ73MBC6P0180S**	Price

Material - Silicon Carbide					
Dia. (in./mm)	Brush Length	Shank Dia.	Grit	Order No.	Price
6mm	1	.110	320	**MJ73MBC6P0320S**	Price
6mm	1	.110	500	**MJ73MBC6P0500S**	Price
6mm	1	.110	80	**MJ73MBC6P0080S**	Price
6.5mm	1	.110	120	**MJ73MBC6P5120S**	Price
6.5mm	1	.110	180	**MJ73MBC6P5180S**	Price
6.5mm	1	.110	320	**MJ73MBC6P5320S**	Price
6.5mm	1	.110	500	**MJ73MBC6P5500S**	Price
6.5mm	1	.110	80	**MJ73MBC6P5080S**	Price

Material - Stainless Wire					
Dia. (in./mm)	Brush Length	Shank Dia.	Grit	Order No.	Price
.024	1/4	.015	.003SS	**MJ73MBC024003S**	Price
.032	1/4	.016	.002SS	**MJ73MBC032002S**	Price
.047	3/4	.026	.002SS	**MJ73MBC047002S**	Price
.054	3/4	.026	.002SS	**MJ73MBC054002S**	Price
.063	3/4	.034	.003SS	**MJ73MBC063003S**	Price
.079	3/4	.034	.003SS	**MJ73MBC079003S**	Price
.094	3/4	.043	.003SS	**MJ73MBC094003S**	Price
.109	3/4	.055	.003SS	**MJ73MBC109003S**	Price
.125	1	.055	.003SS	**MJ73MBC125003S**	Price
.142	1	.072	.003SS	**MJ73MBC142003S**	Price
.156	1	.072	.003SS	**MJ73MBC156003S**	Price
.172	1	.083	.003SS	**MJ73MBC172003S**	Price
.189	1	.083	.003SS	**MJ73MBC189003S**	Price
7/32	1-1/2	.097	.003SS	**MJ73MBC218003S**	Price
1/4	1-1/2	.097	.003SS	**MJ73MBC250003S**	Price
5/16	1-1/2	.125	.004SS	**MJ73MBC312004S**	Price
3/8	1-1/2	.140	.004SS	**MJ73MBC375004S**	Price
7/16	1-1/2	.140	.004SS	**MJ73MBC437004S**	Price
1/2	1-1/2	.168	.005SS	**MJ73MBC500005S**	Price
1mm	5/8	.016	.002SS	**MJ73MBC1P00002S**	Price
1.5mm	5/8	.026	.002SS	**MJ73MBC1P50003S**	Price
2mm	3/4	.034	.003SS	**MJ73MBC2P00003S**	Price
2.5mm	3/4	.043	.003SS	**MJ73MBC2P50003S**	Price
3mm	1	.055	.003SS	**MJ73MBC3P00003S**	Price
3.5mm	1	.055	.003SS	**MJ73MBC3P50003S**	Price
4mm	1	.072	.003SS	**MJ73MBC04P0003S**	Price
4.5mm	1	.072	.003SS	**MJ73MBC4P50003S**	Price
5mm	1	.072	.003SS	**MJ73MBC5P00003S**	Price
5.5mm	1	.110	.003SS	**MJ73MBC5P50003S**	Price
6mm	1	.110	.003SS	**MJ73MBC6P00003S**	Price
6.5mm	1	.110	.003SS	**MJ73MBC6P50003S**	Price

Metric sizes and other material types available - call for pricing

SURF PRO® Radial & Cup Wire Wheels

- Easily reaches into narrow or recessed areas for quick material removal
- For scale removal, deburring, weld cleaning and flat surfaces
- For general use including cleaning and rust removal





Type - Cup Brush						
Size (in.)	Wire Size (in.)	Style	RPM	Material	Order No.	Price
2-3/4 x 5/8-11	.014	Crimped	12,500	Carbon Steel	**SP25CB2345114CC**	Price
2-3/4 x 5/8-11	.014	Knot	12,500	Carbon Steel	**SP25CB2345114CK**	Price
2-3/4 x 5/8-11	.020	Knot	12,500	Carbon Steel	**SP25CB2345120CK**	Price
4 x 5/8-11	.020	Knot	8,500	Carbon Steel	**SP25CB4005120CK**	Price

Type - Knotted Wheel						
Size (in.)	Wire Size (in.)	Style	RPM	Material	Order No.	Price
4 x 5/8-11	.014	Radial	20,000	Carbon Steel	**SP25RK401451CCR**	Price
4 x 5/8-11	.020	Standard	20,000	Carbon Steel	**SP25RK402051CCT**	Price
4 x 5/8-11	.020	Standard	20,000	Carbon Steel	**SP25RK402051CST**	Price
4 x 5/8-11	.020	Standard	20,000	Stainless Steel	**SP25RK402051SCT**	Price
4 x 5/8-11	.020	Standard	20,000	Stainless Steel	**SP25RK402051SST**	Price
4 x 5/8-11	.020	Stringer Bead	20,000	Carbons Steel	**SP25RK402051CSB**	Price
4 x 5/8-11	.020	Stringer Bead	20,000	Stainless Steel	**SP25RK402051SSB**	Price
6 x 5/8-11	.020	Stringer Bead	12,000	Carbon Steel	**SP25RK602051CSB**	Price

SURF PRO® Stem Mount End Brushes & Wheels

- Carbon steel wire
- Uniform brush design for use on drill presses or offhand for internal and external cleaning and deburring
- Can be used at higher brushing speeds
- For general use including blending, cleaning and polishing



Dia. (in.)	Shank Dia. (in.)	Wire Size (in.)	Material	RPM	Order No.	Price
3/4	1/4	.014	Carbon Steel	20,000	**SP25EB3406S14CK**	Price
3/4	1/4	.010	Carbon Steel	22,000	**SP25EB3410S14SC**	Price
1	1/4	.006	Carbon Steel	22,000	**SP25EB1006S14CK**	Price
1	1/4	.020	Carbon Steel	20,000	**SP25EB1020S14CK**	Price
2	1/4	.014	Carbon Steel	25,000	**SP25CW2014S14C**	Price
3	1/4	.014	Carbon Steel	25,000	**SP25CW3014S14C**	Price

WEILER Double Stem, Double Spiral Power Tube Brushes



- Most effectively used with power tools, drills and drill presses for heavy duty cleaning and deburring
- Some sizes availabe in stainless steel – P.O.A.

Dia. (in.)	Wire Size (in.)	Brush Length (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
3/8	.003	2	1/8	6	**MK5521342**	Price
3/8	.006	2	5/32	6	**MK5521232**	Price
1/2	.004	2	5/32	5	**MK5521106**	Price
1/2	.006	2	5/32	5	**MK5521107**	Price
5/8	.005	2	7/32	5	**MK5521108**	Price
5/8	.008	2	7/32	5	**MK5521109**	Price
3/4	.006	2-1/2	1/4	5-1/2	**MK5521110**	Price
3/4	.008	2-1/2	1/4	5-1/2	**MK5521247**	Price
7/8	.006	2-1/2	1/4	5-1/2	**MK5521112**	Price
7/8	.008	1	7/32	3-1/2	**MK5521267**	Price
7/8	.0104	2-1/2	1/4	5-1/2	**MK5521113**	Price
1	.006	2-1/2	1/4	5-1/2	**MK5521114**	Price
1	.0104	2-1/2	1/4	5-1/2	**MK5521115**	Price
1-1/4	.006	2-1/2	1/4	5-1/2	**MK5521164**	Price

Some sizes availabe in stainless steel – P.O.A.

WEILER High Tensile Steel Single Stem Wire Tube Brushes



- Loop handle
- Some sizes available in stainless steel – P.O.A.

Dia. (in.)	Wire Size (in.)	Brush Length (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price
1/8	.003	1	3/32	6	**MK5521246**	Price
3/16	.003	1-1/2	3/32	7	**MK5521090**	Price
3/16	.005	1-1/2	3/32	7	**MK5521091**	Price
1/4	.003	1-1/2	3/32	7	**MK5521092**	Price
1/4	.005	1-1/2	3/32	7	**MK5521093**	Price
3/8	.004	2	1/8	8	**MK5521094**	Price
3/8	.006	2	1/8	8	**MK5521095**	Price
1/2	.004	2	1/8	8	**MK5521096**	Price
1/2	.006	2	1/8	8	**MK5521097**	Price
1/2	.008	2	1/8	8	**MK5521162**	Price
9/16	.005	2-1/2	5/32	9	**MK5521233**	Price

Some sizes available in stainless steel – P.O.A.

WEILER Round Type Power Tube Brushes

- Most effectively used fully chucked on smooth or threaded blind holes



					Stainless		Steel Wire	
Dia. (in.)	Wire Size (in.)	Brush Length (in.)	Shank Dia. (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/4	.004	1	1/8	3-1/2	**MK5521081**	Price	**MK5521072**	Price
5/16	.005	1	1/8	3-1/2	-	-	**MK5521175**	Price
3/8	.004	1	1/8	3-1/2	**MK5521082**	Price	**MK5521073**	Price
3/8	.006	1	1/8	3-1/2	-	-	**MK5521282**	Price
3/8	.008	1	1/8	3-1/2	-	-	**MK5521264**	Price
7/16	.005	1	1/8	3-1/2	-	-	**MK5521142**	Price
1/2	.005	1	3/16	3-1/2	**MK5521083**	Price	**MK5521074**	Price
9/16	.005	1	3/16	3-1/2	-	-	**MK5521143**	Price
5/8	.005	1	3/16	3-1/2	**MK5521084**	Price	**MK5521075**	Price
5/8	.008	1	3/16	3-1/2	-	-	**MK5521265**	Price
11/16	.005	1	3/16	3-1/2	-	-	**MK5521144**	Price
3/4	.006	1	7/32	3-1/2	**MK5521085**	Price	**MK5521076**	Price
3/4	.008	1	7/32	3-1/2	-	-	**MK5521266**	Price
13/16	.005	1	7/32	3-1/2	-	-	**MK5521146**	Price
7/8	.006	1	7/32	3-1/2	**MK5521086**	Price	**MK5521077**	Price
7/8	.008	1	7/32	3-1/2	-	-	**MK5521267**	Price
15/16	.005	1	7/32	3-1/2	-	-	**MK5521148**	Price
1	.005	1	1/4	3-1/2	-	-	**MK5521149**	Price
1	.008	1	1/4	3-1/2	**MK5521087**	Price	**MK5521078**	Price
1-1/2	.008	1	1/4	3-1/2	-	-	**MK5521203**	Price
1-1/4	.008	1	1/4	3-1/2	-	-	**MK5521080**	Price
1-1/8	.005	1	1/4	3-1/2	-	-	**MK5521150**	Price
1-1/8	.008	1	1/4	3-1/2	-	-	**MK5521079**	Price
2-1/4	.008	1	1/4	3-1/2	-	-	**MK5521322**	Price

WEILER Nylon Tube Brushes

- Black nylon fill
- Loop handle



Dia. (in.)	Fill Dia. (in.)	Brush Length (in.)	OAL (in.)	Order No.	Price
1/4	.005	2	6-1/4	**MK5544110**	Price
3/8	.005	2	6-1/4	**MK5544213**	Price
1/2	.010	3	8-1/2	**MK5544111**	Price
3/4	.012	3	8-1/2	**MK5544112**	Price
1	.014	4	12-1/4	**MK5544113**	Price
2	.014	5	16-3/4	**MK5544115**	Price
1-1/4	.014	4	13	**MK5544114**	Price

WEILER Miniature Brushes

For use with Electronic Miniature Instruments
High RPM Electric and Pneumatic Tools

- Light deburring
- Blending of surface junctures
- Wide usage in tool and die work



Brush Material - Brass Wire							
Dia. (in.)	Wire Size (in.)	Shank Dia. (in.)	Trim Length (in.)	RPM	Type	Order No.	Price
5/8	.005	1/8	1/4	37,000	Cup Brush	**MK5526075**	Price

Brush Material - Soft Hair							
Dia. (in.)	Wire Size (in.)	Shank Dia. (in.)	Trim Length (in.)	RPM	Type	Order No.	Price
9/16	-	1/8	1/4	37,000	Cup Brush	**MK5526094**	Price
3/4	-	3/32	3/16	37,000	Wheel	**MK5526042**	Price

Brush Material - Stainless							
Dia. (in.)	Wire Size (in.)	Shank Dia. (in.)	Trim Length (in.)	RPM	Type	Order No.	Price
5/8	.005	1/8	1/4	37,000	Cup Brush	**MK5526076**	Price

Brush Material - Steel Wire							
Dia. (in.)	Wire Size (in.)	Shank Dia. (in.)	Trim Length (in.)	RPM	Type	Order No.	Price
3/16	.003	1/8	1/4	37,000	End Brush	**MK5526098**	Price
1/4	.005	1/8	7/16	37,000	End Brush	**MK5526107**	Price
5/16	.005	1/8	9/16	25,000	End Brush	**MK5526113**	Price
5/8	.005	1/8	1/4	37,000	Cup Brush	**MK5526074**	Price
3/4	.003	1/8	3/16	37,000	Wheel	**MK5526000**	Price
3/4	.005	1/8	3/16	37,000	Wheel	**MK5526003**	Price
1	.005	1/8	5/16	37,000	Wheel	**MK5526015**	Price
1-1/4	.005	1/8	3/8	37,000	Wheel	**MK5526021**	Price

Brush Material - Stiff Hair							
Dia. (in.)	Wire Size (in.)	Shank Dia. (in.)	Trim Length (in.)	RPM	Type	Order No.	Price
3/16	-	1/8	1/4	37,000	End Brush	**MK5526115**	Price
3/16	-	1/8	1/4	37,000	End Brush	**MK5526128†**	Price
1/4	-	1/8	3/8	37,000	End Brush	**MK5526119**	Price
1/4	-	1/8	3/8	37,000	End Brush	**MK5526131†**	Price
5/16	-	1/8	9/16	25,000	End Brush	**MK5526133†**	Price
5/16	-	1/8	9/16	37,000	End Brush	**MK5526121**	Price
9/16	-	1/8	1/4	37,000	Cup Brush	**MK5526093**	Price
3/4	-	1/8	3/16	37,000	Wheel	**MK5526059**	Price
3/4	-	3/32	3/16	37,000	Wheel	**MK5526041**	Price

Scuf-Gard® End Brushes

Stainless Steel Wire



- Made with a rugged, durable elastomer layer on the cup to help prevent accidental scratches or marring on the work surface during operation

Brush Dia. (in.)	Brush Length (in.)	OAL (in.)	Wire Size	Order No.	Price
1/2	1-1/8	2-3/4	.006SV	**MK6030026**	Price
1/2	1-1/8	2-3/4	.0104SV	**MK6030028**	Price
1/2	1-1/8	2-3/4	.014SV	**MK6030029**	Price
3/4	1-1/8	2-3/4	.006SV	**MK6030032**	Price
3/4	1-1/8	2-3/4	.0104SV	**MK6030034**	Price
3/4	1-1/8	2-3/4	.014SV	**MK6030035**	Price
1	1	2-5/8	.006SV	**MK6030038**	Price
1	1	2-5/8	.0104SV	**MK6030040**	Price
1	1	2-5/8	.014SV	**MK6030041**	Price

***SV denotes Stainless Steel**

Circular End Brushes



- Made in four brush diameters, in both steel and stainless steel wire

Brush Dia. (in.)	O.D. Shank (in.)	Wire Size (in.)	Order No.	Price
1-1/2	1/4	.020	**MK6030255**	Price
1-1/4	1/4	.005	**MK6030250**	Price
1-1/4	1/4	.006	**MK6030251**	Price
2	1/4	.010	**MK6030276**	Price
2	1/4	.010SV	**MK6030277**	Price
3	1/4	.005SV	**MK6030278**	Price
3	1/4	.006	**MK6030279**	Price
3	1/4	.010SV	**MK6030280**	Price
3	1/4	.020	**MK6030258**	Price

***SV denotes Stainless Steel**

Ruftuf® End Brushes

- Rugged, knot-type brushing tools
- Excellent for cleaning pipe ID, and removing rust, weld scale and spatter from external surfaces

Applications:



- Rubber and plastic mold cleaning
- Removing rust and paint
- Weld cleaning
- Cleaning castings
- Burr removal
- Removing rubber flash
- ID pipe cleaning
- Cleaning and finishing recessed areas
- Carbon removal
- Spot facing

Brush Dia. (in.)	Brush Length (in.)	OAL (in.)	Wire Size (in.)	Order No.	Price
1/2	1-1/8	2-3/4	.006	**MK6030002**	Price
1/2	1-1/8	2-3/4	.0104	**MK6030004**	Price
1/2	1-1/8	2-3/4	.014	**MK6030005**	Price
3/4	1-1/8	2-3/4	.006	**MK6030008**	Price
3/4	1-1/8	2-3/4	.0104	**MK6030010**	Price
3/4	1-1/8	2-3/4	.014	**MK6030011**	Price
3/4	1-1/8	2-3/4	.020	**MK6030012**	Price
1	1	2-3/4	.006	**MK6030014**	Price
1	1	2-3/4	.0104	**MK6030016**	Price
1	1	2-3/4	.014	**MK6030017**	Price
1	1	2-3/4	.020	**MK6030018**	Price

General Purpose End Brushes



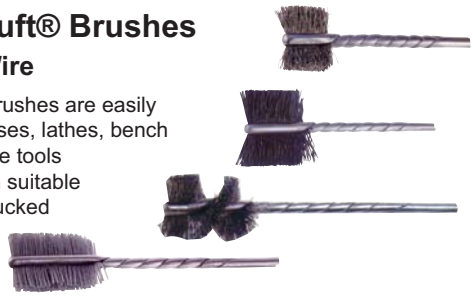
- Ideal for a variety of general uses, including surface blending, cleaning and polishing
- Can be used on CNC equipment
- Available with 3 types of wire - steel, stainless steel and brass
- Engineered to operate at high speeds

Brush Dia. (in.)	Brush Length (in.)	OAL (in.)	Wire Size (in.)	Order No.	Price
1/2	1	2-3/4	.006	**MK6030051†**	Price
1/2	1	2-3/4	.0104	**MK6030053**	Price
1/2	1	2-3/4	.020	**MK6030055**	Price
3/4	1	2-3/4	.006	**MK6030057**	Price
3/4	1	2-3/4	.0104	**MK6030059†**	Price
3/4	1	2-3/4	.020	**MK6030061**	Price
1	1	2-7/8	.006	**MK6030063†**	Price
1	1	2-7/8	.0104	**MK6030065†**	Price
1	1	2-7/8	.020	**MK6030067**	Price

†Also Available in Stainless Steel

Situft® Brushes

Crimped Steel Wire



- These side-action brushes are easily adapted to drill presses, lathes, bench grinders and portable tools
- Should be used with suitable holders and fully chucked

Brush Dia. (in.)	Brush Length (in.)	Stem Dia. (in.)	OAL (in.)	Wire Size (in.)	Order No.	Price
1/4	9/16	3/32	2-1/8	.004	**MK6035022**	Price
1/4	9/16	3/32	2-1/8	.005	**MK6035023**	Price
5/16	9/16	3/32	2-1/8	.005	**MK6035032**	Price
3/8	9/16	3/32	2-1/8	.008	**MK6035043**	Price
1/2	5/8	1/8	2-1/4	.005	**MK6035077**	Price
1/2	9/16	3/32	2-1/8	.005	**MK6035062**	Price
1/2	9/16	3/32	2-1/8	.008	**MK6035063**	Price
9/16	5/8	1/8	2-1/4	.005	**MK6035082**	Price
5/8	5/8	1/8	2-1/4	.005	**MK6035087**	Price
3/4	5/8	1/8	2-1/4	.005	**MK6035097**	Price
1	5/8	1/8	2-1/4	.005	**MK6035117**	Price
1-1/4	5/8	1/8	2-1/4	.005	**MK6035137**	Price
1-1/8	5/8	1/8	2-1/4	.005	**MK6035127**	Price

Helituf® Crimped Wire Internal Brushes



- Heavily filled, rugged brushing tools suitable for use by hand or in power tools
- Used only with suitable holders and fully chucked

Brush Working Dia. (in.)	Wire Size (in.)	Brush Length (in.)	Stem Dia. (in.)	OAL (in.)	Order No.	Price
1/4	.005	1	1/8	3-1/2	**MK6036012**	Price
3/8	.005	1	1/8	3-1/2	**MK6036022**	Price
3/8	.008	1	1/8	3-1/2	**MK6036023**	Price
1/2	.005	1	1/8	3-1/2	**MK6036032**	Price
1/2	.008	1	1/8	3-1/2	**MK6036033**	Price
9/16	.005	1	1/8	3-1/2	**MK6036037**	Price
5/8	.005	1	1/8	3-1/2	**MK6036042**	Price
5/8	.008	1	1/8	3-1/2	**MK6036043**	Price
11/16	.005	1	1/8	3-1/2	**MK6036047**	Price
3/4	.005	1	1/8	3-1/2	**MK6036052**	Price
3/4	.008	1	1/8	3-1/2	**MK6036053**	Price
13/16	.005	1	1/8	3-1/2	**MK6036057**	Price
7/8	.005	1	1/8	3-1/2	**MK6036062**	Price
7/8	.008	1	1/8	3-1/2	**MK6036063**	Price
1	.005	1	1/8	3-1/2	**MK6036072**	Price
1-1/4	.008	1	1/8	3-1/2	**MK6036093**	Price
1-1/8	.005	1	1/8	3-1/2	**MK6036082**	Price

General Purpose Crimped Wire Wheel Brushes



					.008		.0118	
Dia. (in.)	Face Width (in.)	Trim Length (in.)	Max. RPM	Arbor Hole (in.)	Order No.	Price	Order No.	Price
3	3/8	5/8	4,500	1/2-3/8	**MK5036477**	Price	**MK5036478**	Price
4	7/16	7/8	4,500	1/2-3/8	-	-	**MK5036480**	Price
6	5/8	1-1/4	3,750	5/8-1/2	**MK5036483**	Price	**MK5036484**	Price
8	3/4	1-1/2	3,750	5/8	**MK5036486**	Price	**MK5036487**	Price

WEILER Conflex Brushes

Narrow Face Crimped Wire Wheels



- Small diameter copper center wheels mounted onto a 1/4” stem

Material - Crimped Stainless						
Dia. (in.)	Wire Size (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
2	.0118	1/2	3/8	20,000	**MK5117611**	Price
3	.014	3/8	3/8	20,000	**MK5117618**	Price

Material - Crimped Steel Wire						
Dia. (in.)	Wire Size (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
2	.006	1/2	3/8	20,000	**MK5117609**	Price
2	.0118	1/2	3/8	20,000	**MK5117610**	Price
3	.008	1/2	1/2	20,000	**MK5117615**	Price
3	.0118	1/2	1/2	20,000	**MK5117616**	Price
3	.014	1/2	1/2	20,000	**MK5117617**	Price

General Purpose Crimped Wire Cup Brushes

1/4” Stem

- For use on portable drills

Brush Dia. (in.)	Wire Size (in.)	Order No.	Price
1-3/4	.008	**MK5036494**	Price
1-3/4	.014	**MK5036495**	Price
2-3/4	.008	**MK5036496**	Price
2-3/4	.014	**MK5036497**	Price



General Purpose 1/4" Stem-Mounted Crimped Wire Wheel Brushes

Dia. (in.)	Wire Size (in.)	Order No.	Price
2-1/2	.014	**MK5036476**	Price
3	.008	**MK5036490**	Price
3	.014	**MK5036491**	Price
4	.008	**MK5036492**	Price
4	.014	**MK5036493**	Price



WEILER 1/4" Stem-Mounted End Brushes

Solid End • Carbon Cleaning



- ID pipe cleaning
- Flash removal

				Stainless		Steel Wire	
Dia. (in.)	Wire Size (in.)	Trim Length (in.)	Max. Safe Free Speed (RPM)	Order No.	Price	Order No.	Price
1/2	.006	7/8	25,000	**MK5110013**	Price	**MK5110001**	Price
1/2	.0104	7/8	25,000	**MK5110014**	Price	**MK5110002**	Price
1/2	.014	7/8	25,000	**MK5110015**	Price	**MK5110003**	Price
1/2	.020	7/8	25,000	**MK5110016**	Price	**MK5110004**	Price
3/4	.006	7/8	22,000	**MK5110017**	Price	**MK5110005**	Price
3/4	.0104	7/8	22,000	**MK5110018**	Price	**MK5110006**	Price
3/4	.014	7/8	22,000	**MK5110019**	Price	**MK5110007**	Price
3/4	.020	7/8	22,000	**MK5110020**	Price	**MK5110008**	Price
1	.006	7/8	22,000	**MK5110021**	Price	**MK5110009**	Price
1	.0104	7/8	22,000	**MK5110022**	Price	**MK5110010**	Price
1	.014	7/8	22,000	**MK5110023**	Price	**MK5110011**	Price
1	.020	7/8	22,000	**MK5110024**	Price	**MK5110012**	Price

WEILER 1/4" Stem-Mounted End Brushes

Hollow Center — Polyflex® Encapsulated Orange Elastomer Heavy Duty



Dia. (in.)	Wire Size (in.)	Trim Length (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
3/4	.0104	7/8	16,000	**MK5135540**	Price
1	.0104	7/8	14,000	**MK5135545**	Price

WEILER Circular Flared End Brushes

Die, Mold, Tool Cleaning and Polishing

Dia. (in.)	Wire Size (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
1-1/2	.008	20,000	**MK5110037**	Price
1-1/2	.020	20,000	**MK5110038**	Price
1-1/4	.006	20,000	**MK5110076**	Price
1-1/4	.008	20,000	**MK5110035**	Price
2-3/4	.008	16,000	**MK5110039**	Price
2-3/4	.020	16,000	**MK5110040**	Price
3	.008	16,000	**MK5110041**	Price
3	.020	16,000	**MK5110073**	Price



WEILER Encapsulated Conflex Brushes

Burgundy Elastomer Standard



Dia. (in.)	Wire Size (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
3	.008	1/4	1/4	20,000	**MK5135310**	Price
2	.0118	1/2	1/4	20,000	**MK5135305**	Price
3	.0118	1/4	1/4	20,000	**MK5135315**	Price

WEILER Controlled Flare End Brushes

- Increased durability when cleaning right angles, corners and fillet welds



Dia. (in.)	Wire Size (in.)	Trim Length (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
3/4	.014	7/8	22,000	**MK5110306**	Price
3/4	.020	7/8	22,000	**MK5110307**	Price
1	.014	1	22,000	**MK5110310**	Price
1	.020	1-1/8	22,000	**MK5110311**	Price

WEILER 1/4" Stem-Mounted End Brushes

Knot Type • ID Pipe Cleaning



- Deburring
- Cleaning recessed areas
- Spot facing
- Weld cleaning

				Knot Type Stainless		Knot Type Steel Wire		Stainless	
Dia. (in.)	Size (in.)	Length (in.)	Max Safe Free Speed (RPM)	Order No.	Price	Order No.	Price	Order No.	Price
1/2	.014	1-1/8	20,000	**MK5110218**	Price	**MK5110217**	Price	-	-
3/4	.0104	1-1/8	22,000	**MK5110211**	Price	**MK5110210**	Price	-	-
3/4	.014	7/8	22,000	**MK5110029**	Price	**MK5110025**	Price	-	-
3/4	.020	7/8	22,000	**MK5110030**	Price	**MK5110026**	Price	**MK5110020**	Price
1-1/8	.0104	1-1/8	20,000	**MK5110213**	Price	**MK5110212**	Price	-	-
1-1/8	.014	7/8	22,000	**MK5110031**	Price	**MK5110027**	Price	-	-
1-1/8	.020	7/8	22,000	**MK5110032**	Price	**MK5110028**	Price	-	-

WEILER Single Row Knot Cup Brushes

- For heavy duty cleaning of large metal surfaces
- Knotted type is an aggressive cleaning tool
- Weld scale and corrosion removal



					Knot Stainless		Knot Steel Wire	
Dia. (in.)	Wire Size (in.)	Threaded Arbor Hole (in.)	Trim Length (in.)	Max. Safe Free Speed (RPM)	Order No.	Price	Order No.	Price
2-3/4	.014	3/8-24	1	14,000	-	-	**MK5113021**	Price
2-3/4	.014	5/8-11	1	14,000	-	-	**MK5113025**	Price
2-3/4	.014	M10 x 1.25	1	14,000	-	-	**MK5113015**	Price
2-3/4	.014	M10 x 1.50	1	14,000	-	-	**MK5113016**	Price
2-3/4	.020	5/8-11	1	14,000	**MK5113258**	Price	-	-
3-1/2	.014	5/8-11	1-1/4	9,000	-	-	**MK5112736**	Price
3-1/2	.020	5/8-11	1-1/4	9,000	-	-	**MK5112746**	Price
3-1/2	.023	1/2-13	7/8	13,000	-	-	**MK5113155**	Price
3-1/2	.023	3/8-24	7/8	13,000	-	-	**MK5113153**	Price
3-1/2	.023	5/8-11	7/8	13,000	**MK5113163**	Price	**MK5113156**	Price
3-1/2	.023	M10 x 1.25	7/8	13,000	-	-	**MK5113150**	Price
3-1/2	.023	M10 x 1.50	7/8	13,000	-	-	**MK5113151**	Price
4	.014	5/8-11	1-1/4	9,000	**MK5112406**	Price	**MK5112306**	Price
4	.023	5/8-11	1-1/4	9,000	**MK5112416**	Price	**MK5112316**	Price
6	.014	5/8-11	1-3/8	6,600	**MK5112456**	Price	**MK5112356**	Price
6	.023	5/8-11	1-3/8	6,600	**MK5112476**	Price	**MK5112376**	Price

WEILER Crimped Wire Cup Brushes

- Light to medium duty, general purpose applications



					Crimped Stainless		Crimped Steel Wire	
Dia. (in.)	Wire Size (in.)	Threaded Arbor Hole (in.)	Trim Length (in.)	Max. Safe Free Speed (RPM)	Order No.	Price	Order No.	Price
3	.014	1/2-13	1	14,000	-	-	**MK5113244**	Price
3	.014	5/8-11	1	14,000	-	-	**MK5113245**	Price
3	.014	M10 x 1.25	1	14,000	-	-	**MK5113240**	Price
3	.014	M10 x 1.50	1	14,000	-	-	**MK5113241**	Price
3-1/2	.014	5/8-11	7/8	12,000	**MK5113188**	Price	-	-
4	.0118	5/8-11	1-3/8	9,000	-	-	**MK5114016**	Price
4	.014	5/8-11	1-3/8	9,000	-	-	**MK5114026**	Price
4	.020	5/8-11	1-3/8	9,000	**MK5114126**	Price	**MK5114036**	Price
5	.014	5/8-11	1-1/4	8,000	-	-	**MK5114206**	Price
5	.020	5/8-11	1-1/4	8,000	**MK5114256**	Price	**MK5114216**	Price
6	.014	5/8-11†	1-1/4	6,600	-	-	**MK5114066**	Price
6	.020	5/8-11†	1-1/4	6,600	**MK5114166**	Price	**MK5114076**	Price

† Internal nut

WEILER Banded Knot Wire Cup Brushes

- For heavy-duty applications requiring maximum aggression
- Steel band design controls flaring
- Steel band can be removed to expose more wire and extending brush life



				Banded Knot Stainless		Banded Knot Steel Wire	
Dia. (in.)	Wire Size (in.)	Arbor Hole (in.)	Max. (RPM)	Order No.	Price	Order No.	Price
2-3/4	.014	5/8-11	12,500	-	-	**MK5113300**	Price
2-3/4	.020	5/8-11	12,500	**MK5113302**	Price	**MK5113301**	Price
4	.023	5/8-11	9,000	-	-	**MK5112301**	Price

WEILER Encapsulated Cup Brushes

- Elastomer gradually wears exposing consistent short trim for maximum aggression and long life



Dia. (in.)	Wire Size (in.)	Threaded Arbor Hole (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
3-1/2	.014	5/8-11	12,000	**MK5135406**	Price

WEILER Cable Twist Knot Wheel Brushes

- Maximum impact for extremely severe applications



Material - Knot Cable Twist Stainless							
Dia. (in.)	Wire Size (in.)	Threaded Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
4	.020	5/8-11	7/8	1/4	20,000	**MK5113276**	Price

Material - Knot Cable Twist Steel Wire							
Dia. (in.)	Wire Size (in.)	Threaded Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
4	.020	5/8-11	7/8	1/4	20,000	**MK5113266**	Price
4	.020	M10 x 1.25	7/8	1/4	20,000	**MK5113261**	Price
4	.020	M10 x 1.50	7/8	1/4	20,000	**MK5113262**	Price

WEILER Standard Twist Knot Wheel Brushes

- Rugged knot-type construction provides aggressive, high-impact action for severe applications



Material - Knot Twist Stainless							
Dia. (in.)	Wire Size (in.)	Threaded Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
4	.014	5/8-11	7/8	1/2	20,000	**MK5113113**	Price

Material - Knot Twist Steel Wire							
Dia. (in.)	Wire Size (in.)	Threaded Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
4	.014	1/2-13	7/8	1/2	20,000	**MK5113105**	Price
4	.014	5/8-11	7/8	1/2	20,000	**MK5113106**	Price
4	.014	M10 x 1.25	7/8	1/2	20,000	**MK5113100**	Price
4	.014	M10 x 1.50	7/8	1/2	20,000	**MK5113101**	Price
4	.020	1/2-13	7/8	1/2	20,000	**MK5113119**	Price
4	.020	5/8-11	7/8	1/2	20,000	**MK5113120**	Price
4	.020	M10 x 1.25	7/8	1/2	20,000	**MK5113114**	Price
4	.020	M10 x 1.50	7/8	1/2	20,000	**MK5113115**	Price

WEILER Crimped Wire Wheel Brushes

- Narrow face
- Flexible brushing action



Dia. (in.)	Wire Size (in.)	Threaded Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Freed Speed (RPM)	Order No.	Price
4	.014	5/8-11	7/8	1/2	14,000	**MK5113081**	Price

WEILER Angle Grinder Adapters

- Reusable adapters convert brush thread to fit your grinder



Adapter Size	Order No.	Price
5/8-11 to M10 x 1.25	**MK5107771**	Price
5/8-11 to M10 x 1.50	**MK5107772**	Price

WEILER Wire Wheels



- Designed to operate at 20,000 RPM
- Deburring
- Rust scale & carbon removal
- Clean and polish ID & OD surfaces
- Cleaning internal surfaces and hard to reach areas
- Fast aggressive cutting with minimum pressure

						Copper Center Stainless		Copper Center Steel Wire	
Dia. (in.)	Wire Size (in.)	Std. Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price	Order No.	Price
1-1/2	.0104	3/8	7/16	1/4	20,000	-	-	**MK5115322**	Price
1-1/2	.014	3/8	7/16	1/4	20,000	-	-	**MK5115762**	Price
1-3/8	.008	1/4	3/8	1/4	20,000	-	-	**MK5115141**	Price
2	.008	1/2	1/2	3/8	20,000	**MK5116843**	Price	**MK5115443**	Price
2	.0104	1/2	1/2	3/8	20,000	**MK5116853**	Price	**MK5115453**	Price
2	.014	1/2-3/8	1/2	3/8	20,000	**MK5116873**	Price	**MK5115473**	Price
3	.008	1/2	1	5/8	20,000	**MK5116943**	Price	**MK5115543**	Price
3	.0118	1/2-3/8	1	5/8	20,000	**MK5116963**	Price	**MK5115563**	Price
3	.014	1/2-3/8	1	5/8	20,000	-	-	**MK5115573**	Price

WEILER Narrow Face Crimped Wire Wheels



- Cleaning of rust, scale & dirt
- Light deburring
- Edge blending
- Finishing for appearance
- Finish preparation prior to painting or plating

							Crimped Stainless		Crimped Steel Wire	
Dia. (in.)	Wire Size (in.)	Std. Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Thickness at Face Plates (±1/32) (in.)	Max. Safe Free Speed (RPM)	Order No.	Price	Order No.	Price
3	.006	3/8-1/2	1/2	7/16	7/16	12,500	-	-	**MK5100204**	Price
3	.0118	3/8-1/2	1/2	7/16	7/16	12,500	-	-	**MK5100234**	Price
3	.014	3/8-1/2	1/2	7/16	7/16	12,500	-	-	**MK5100274**	Price
4	.006	3/8-1/2	7/8	1/2	7/16	12,500	**MK5100154**	Price	**MK5100104**	Price
4	.0118	3/8-1/2	7/8	1/2	7/16	12,500	**MK5100184**	Price	**MK5100134**	Price
4	.014	3/8-1/2	7/8	1/2	7/16	12,500	-	-	**MK5100144**	Price
6	.006	1/2-5/8	1-7/16	3/4	7/16	6,000	**MK5101675**	Price	**MK5101035**	Price
6	.0118	1/2-5/8	1-7/16	3/4	7/16	6,000	**MK5101705**	Price	**MK5101065**	Price
6	.014	1/2-5/8	1-7/16	3/4	7/16	6,000	-	-	**MK5101075**	Price
8	.006	5/8	2-1/16	3/4	1/2	6,000	**MK5101775**	Price	**MK5101135**	Price
8	.0118	5/8	2-1/16	3/4	1/2	6,000	**MK5101805**	Price	**MK5101165**	Price
8	.014	5/8	2-1/16	3/4	1/2	6,000	-	-	**MK5101175**	Price
10	.006	3/4	2-1/2	3/4	5/8	4,000	-	-	**MK5101228**	Price
10	.0118	3/4	2-1/2	3/4	5/8	4,000	-	-	**MK5101248**	Price
10	.014	3/4	2-1/2	3/4	5/8	4,000	-	-	**MK5101258**	Price
12	.006	1-1/4	2-15/16	3/4	1/2	3,000	-	-	**MK5101299†**	Price
12	.0118	1-1/4	2-15/16	3/4	1/2	3,000	-	-	**MK5101319†**	Price
12	.014	1-1/4	2-15/16	3/4	1/2	3,000	-	-	**MK5101329†**	Price

† 5/16" x 5/32" Double Keyway

WEILER Heavy Duty Medium Face Crimped Wire Wheels



- Flash removal, plastic and rubber parts
- Edge blending
- Deburring
- Surface preparation
- Cleaning of paint, rust, dirt and scale
- Wider face wheels minimize brush changeover due to wear

Dia. (in.)	Wire Size (in.)	Std. Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Thickness at Face Plates (±1/32) (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
4-1/2	.0118	2	3/4	15/16	7/8	6,000	**MK5106020**	Price
6	.006	2	1-1/8	1	15/16	6,000	**MK5106040**	Price
6	.0118	2	1-1/8	1	15/16	6,000	**MK5106070**	Price
6	.014	2	1-1/8	1	15/16	6,000	**MK5106080**	Price
8	.006	2	1-3/8	1	1	4,500	**MK5106090**	Price
8	.0118	2	1-3/8	1	1	4,500	**MK5106110**	Price
8	.014	2	1-3/8	1	1	4,500	**MK5106120**	Price
10	.0118	2	2	1-1/8	1	3,600	**MK5106150†**	Price
10	.014	2	2	1-1/8	1	3,600	**MK5106160†**	Price
12	.0118	2	3	1-1/4	1	3,600	**MK5106180†**	Price
12	.014	2	3	1-1/4	1	3,600	**MK5106190†**	Price
12	.020	2	3	1-1/4	1	3,600	**MK5106200†**	Price

† 1/2" x 1/4" Double Keyway

WEILER Heavy Duty Wide Face Crimped Wire Wheels



- Flash removal, plastic and rubber parts
- Edge blending
- Deburring
- Surface preparation
- Cleaning of paint, rust, dirt and scale
- Wider face wheels minimize brush change over due to wear

Dia. (in.)	Wire Size (in.)	Std. Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Thickness at Face Plates (±1/32) (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
4-1/2	.0118	2	3/4	1-1/4	7/8	6,000	**MK5103010**	Price
6	.0118	2	1-1/8	1-1/4	1	6,000	**MK5103060**	Price
6	.014	2	1-1/8	1-1/4	1	6,000	**MK5103070**	Price
7	.0118	2	1-5/8	1-1/4	1	6,000	**MK5103090**	Price
7	.014	2	1-5/8	1-1/4	1	6,000	**MK5103100**	Price
8	.0118	2	1-3/8	1-1/2	1-3/8	4,500	**MK5103140**	Price
8	.014	2	1-3/8	1-1/2	1-3/8	4,500	**MK5103150**	Price
10	.0118	2	1-7/8	1-5/8	1-5/8	4,000	**MK5103190**	Price
10	.014	2	1-7/8	1-5/8	1-5/8	4,000	**MK5103200**	Price
12	.0118	2	2-7/8	1-5/8	1-9/16	3,000	**MK5103220**	Price
12	.014	2	2-7/8	1-5/8	1-9/16	3,000	**MK5103230**	Price

Wheel adapters must be purchased separately.

WEILER Adapters for Narrow Face Wheels



Adapter for Arbor Hole Size (in.)	Order No.	Price
2 to 1	**MK5103812**	Price
2 to 1/2	**MK5103809**	Price
2 to 1-1/2	**MK5103814**	Price
2 to 1-1/4	**MK5103813**	Price

Adapter for Arbor Hole Size (in.)	Order No.	Price
2 to 3/4	**MK5103811**	Price
2 to 5/8	**MK5103810**	Price
2 to 7/8	**MK5103824**	Price

WEILER Knot Type Wire Wheel Brushes Standard Twist



- Removal of rust scale, weld splatter and oxidation
- Heavy burr removal
- Weld cleaning
- High impact action
- Aggressive, high-impact action for severe applications
- For removing rust, scale, weld spatter and oxidation
- Heavy burr removal, weld cleaning & surface conditioning

						Knot Twist Stainless		Knot Twist Steel Wire	
Dia. (in.)	Wire Size (in.)	Std. Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price	Order No.	Price
3	.0118	1/2-3/8	5/8	3/8	25,000	**MK5108254**	Price	**MK5108004**	Price
3	.014	1/2-3/8	5/8	3/8	25,000	**MK5108264**	Price	**MK5108014**	Price
4	.0118	1/2-3/8	7/8	1/2	20,000	**MK5108284**	Price	**MK5108034**	Price
4	.020	1/2-3/8	7/8	1/2	20,000	**MK5108314**	Price	-	-
6	.0118	1/2-5/8	1-3/8	1/2	9,000	**MK5108325**	Price	**MK5108075**	Price
6	.016	1/2-5/8	1-3/8	1/2	9,000	**MK5108345**	Price	**MK5108095**	Price
8	.014	5/8	1-5/8	5/8	6,000	-	-	**MK5108135**	Price
8	.016	5/8	1-5/8	5/8	6,000	**MK5108395**	Price	**MK5108145**	Price
10	.014	1-1/4 † w/keyway	1-3/4	3/4	4,500	-	-	**MK5108179**	Price
10	.016	1-1/4 † w/keyway	1-3/4	3/4	4,500	-	-	**MK5108189**	Price
12	.014	1-1/4 † w/keyway	2-3/4	3/4	3,600	-	-	**MK5108209**	Price
12	.016	1-1/4 † w/keyway	2-3/4	3/4	3,600	-	-	**MK5108219**	Price

† 5/16" x 5/32" Double Keyway

WEILER Knot Type Wire Wheel Brushes Cable Twist



- Removal of rust scale, weld splatter and oxidation
- Heavy burr removal
- Weld cleaning
- High impact action
- Maximum impact for extremely severe applications
- For removing rust, scale, weld spatter and oxidation
- Heavy burr removal, weld cleaning & surface conditioning

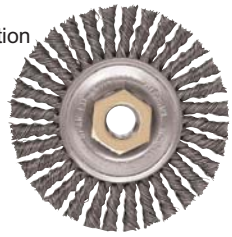
Dia. (in.)	Wire Size (in.)	Std. Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
4	.020	1/2-3/8	7/8	1/4	20,000	**MK5108534**	Price
6	.023	5/8-1/2	1-3/8	3/8	9,000	**MK5108565**	Price
8	.023	5/8	1-5/8	1/2	6,000	**MK5108615**	Price
10	.023	1-1/4 †	1-3/4	1/2	4,500	**MK5108879†**	Price

† 5/16" x 5/32" Double Keyway

WEILER Roughneck Max Wire Wheels

MADE IN THE USA

- Stronger, sharper wire lessens wire breakage
- Removal of rust scale, weld splatter and oxidation
- Heavy burr removal
- Weld cleaning
- High impact action
- Max. safe free speed (RPM): 20,000



New!

					Stainless		Steel	
Dia. (in.)	Wire Size (in.)	Arbor Hole	Face Width (in.)	Trim Length (in.)	Order No.	Price	Order No.	Price
4	.020	5/8-11	3/16	7/8	**MK5113138**	Price	**MK5113131**	Price

18 Pc. Mounted Cup & Wheel Wire Brush Assortment

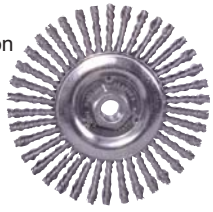
Made with Oil-Treated Steel Wire Bristles

- Ideal for removing surface contamination
- Most sizes available in coarse grade – .012″ wire, & fine – .008″ wire
- Coarse grade, 1/4" shank,, Max. RPM 4,500
- Assortment consists of: (9) 1-1/2" Cups, (2) 3" Cups, (7) 4" Wheels



Order No.	Price
MK504580	Price

WEILER Roughneck Knot Type Wire Wheel Brushes Stringer Bead Twist



- Removal of rust scale, weld splatter and oxidation
- Heavy burr removal
- Weld cleaning
- High impact action
- Very narrow face
- For hard-to-reach areas
- Primarily used for weld cleaning

Dia. (in.)	Wire Size (in.)	Std. Arbor Hole (in.)	Trim Length (in.)	Face Width (in.)	Max. Safe Free Speed (RPM)	Order No.	Price
4	.020	M10 x 1.25	7/8	3/16	20,000	**MK5113125**	Price
4	.020	M10 x 1.50	7/8	3/16	20,000	**MK5113126**	Price
5	.020	5/8-11	7/8	3/16	12,500	**MK5108756**	Price
6	.020	5/8-11	1-1/8	3/16	12,500	**MK5109400**	Price
6	.020	5/8-11	1-3/8	3/16	12,500	**MK5108766**	Price
6	.023	5/8-11	1-1/4	1/2	12,500	**MK5108916**	Price
6	.023	5/8-11	1-3/8	1/2	12,500	**MK5108776**	Price
6-7/8	.020	5/8-11	1-1/8	3/16	9,000	**MK5109000**	Price

Adapters for MI0 x 1.25 & MI0 x 1.5 are available

Unmounted Wire Wheel Brushes



Dia. (in.)	Arbor Hole (in.)	Grade	Max. RPM	Order No.	Price
8	5/8	Coarse	4,500	**MK508267**	Price

Encapsulated Stringer Bead Twist



- Extra heavy-duty elastomer gradually wears exposing consistent short trim for maximum aggression and long life
- For hot pass through cap pass weld cleaning
- Removal of rust scale, weld splatter and oxidation
- Heavy burr removal
- Weld cleaning
- High impact action

Dia. (in.)	Wire Size (in.)	Std. Arbor Hole	Trim Length (in.)	Face Width (in.)	Order No.	Price
4	.020	5/8-11	7/8	3/16	**MK5135800**	Price
7	.014	5/8-11	1-15/16	3/16	**MK5135216†**	Price

† Crimped Wire

osborn Knot-Type Cup Brushes

- Heavy Duty
- †Stainless Steel Wire
- For removal of weld scale, rust, old paint and corrosion, cleaning and surface prep of metals



Material - Knot Type Steel Wire					
Brush Dia. (in.)	Arbor Hole (in.)	Trim Length (in.)	Wire Size (in.)	Order No.	Price
3-1/2	5/8-11	1-3/8	.014SV	**MK6033045•†**	Price
3-1/2	5/8-11	1-3/8	.020	**MK6033005•**	Price
3-1/2	5/8-11	1-3/8	.020	**MK6033126**	Price
4	5/8-11	1-1/4	.025	**MK6033138**	Price
6	5/8-11	1-3/4	.014	**MK6033011**	Price
6	5/8-11	1-3/4	.014	**MK6033026**	Price
6	5/8-11	1-3/4	.020	**MK6033015**	Price
6	5/8-11	1-3/4	.020	**MK6033028•**	Price
6	5/8-11	1-3/4	.020	**MK6033030•**	Price
6	5/8-11	1-3/4	.020	**MK6033127**	Price
6	5/8-11	1-3/4	.020SV	**MK6033134†**	Price
6	5/8-11	1-3/4	.035	**MK6033021**	Price
6	5/8-11	1-3/4	.035	**MK6033032•**	Price
6	5/8-11	1-3/4	.035	**MK6033034•**	Price

Material - Staggered Knot Type Steel Wire					
Brush Dia. (in.)	Arbor Hole (in.)	Trim Length (in.)	Wire Size (in.)	Order No.	Price
5-3/4	5/8-11	1-3/4	.035	**MK6033204**	Price

osborn Small Diameter Wire Wheel Brush

- Ringlock Brushes are effectively doing hundreds of brushing operations on jobs where burrs, scale, carbon, rust and corrosion must be removed from internal surfaces and other hard to reach areas



Brush Dia. (in.)	Arbor Hole (in.)	Trim Length (in.)	Wire Size (in.)	Order No.	Price
2	1/2	9/16	.005	**MK6016119**	Price
3	1/2	1	.005	**MK6016139**	Price
1-1/2	3/8	3/8	.008	**MK6011017**	Price
1-1/2	3/8	3/8	.0104	**MK6011018**	Price
1-1/2	3/8	3/8	.014	**MK6011019**	Price
1-3/8	1/4	25/64	.006	**MK6011013**	Price
1-3/8	1/4	25/64	.008	**MK6011014**	Price
1-3/8	1/4	25/64	.0104	**MK6011015**	Price
2	1/2	1/2	.008	**MK6011032**	Price
2	1/2	1/2	.0118	**MK6011033**	Price
2	1/2	1/2	.014	**MK6011034**	Price
2	1/2	9/16	.006	**MK6011031**	Price
2	3/8	7/16	.014	**MK6011028**	Price
2-1/2	1/2	3/4	.008	**MK6011046**	Price
2-1/2	5/8	11/16	.0118	**MK6011051**	Price
2-1/2	5/8	11/16	.014	**MK6011052**	Price
3	1/2	1	.008	**MK6011058**	Price
3	1/2	1	.014	**MK6011060**	Price
3	5/8	15/16	.006	**MK6011061**	Price
3	5/8	15/16	.014	**MK6011063**	Price
4	5/8	1-1/2	.014	**MK6011066**	Price

osborn Ultra-Grit Abrasive Nylon Wheel Brushes Wide Face

- Wide-face construction which is highly effective on both metallic and non-metallic materials
- Used singly or mounted in multiple for a wider face



Brush Dia. (in.)	Grit Size	Arbor Hole (in.)	Face Width (in.)	Trim Length (in.)	MSFS RPM	Order No.	Price
3	180 SC	5/8	1/2	5/8	20,000	**MK6022250**	Price
4	80 SC	5/8	7/8	1-1/8	18,000	**MK6022244**	Price
6	120 SC	2	7/8	1-1/16	6,000	**MK6022286**	Price
6	180 SC	2	7/8	1-1/16	6,000	**MK6022287**	Price
6	500 SC	2	7/8	1-1/16	6,000	**MK6022289**	Price
8	120 SC	2	7/8	1-1/2	4,500	**MK6022297**	Price
8	320 SC	2	7/8	1-1/2	4,500	**MK6022299**	Price
10	80 SC	2	1	2-1/16	3,600	**MK6022312**	Price
12	80 SC	2	1	2-1/8	3,000	**MK6022325**	Price
14	320 SC	2	1	2-1/8	2,400	**MK6022336**	Price

osborn Brush Drive Arbors

- For brushes up to 3" diameter only
- Designed for use with a single brush only
- Not for use with grinding wheels, abrasive discs, buffs, buffing pads, or other non-brush perishable tools



Arbor Size (in.)	Shank Size (in.)	OAL (in.)	Order No.	Price
1/4	3/16	1-1/2	**MK6075007**	Price
3/8	1/4	1-3/4	**MK6075008**	Price
1/2	1/4	1-3/4	**MK6075009**	Price
5/8	1/4	1-3/4	**MK6075010**	Price

osborn Adapters/Centering Bushings

- Use only one

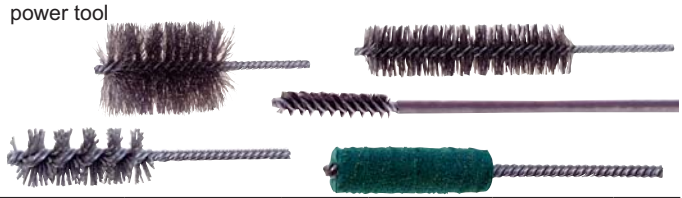


Adapter for Arbor Hole Size (in.)	Order No.	Price
1/2 to 1/4	**MK6075059**	Price
1/2 to 3/8	**MK6075060**	Price
5/8 to 1/2	**MK6075061**	Price
5/8 to 3/8	**MK6075062**	Price

osborn Tube Brushes

Double Stem, Double Spiral

- Can be used as a hand tool, mounted in a drill press, or on a portable power tool



Brush Dia. (in.)	Brush Length (in.)	OAL (in.)	Wire Size (in.)	Order No.	Price
1/2	2	5	.004	**MK6051020**	Price
1/2	2	5	.006	**MK6051021**	Price
5/8	2	5	.006	**MK6051022**	Price
5/8	2	5	.008	**MK6051023**	Price
5/8	2	5	.0104	**MK6051024**	Price
3/4	2-1/2	5	.006	**MK6051025**	Price
3/4	2-1/2	5	.0104	**MK6051027**	Price
7/8	2-1/2	5	.0104	**MK6051030**	Price
1	2-1/2	5	.006	**MK6051031**	Price
1	2-1/2	5	.0104	**MK6051033**	Price
1-1/2	2-1/2	5	.0104	**MK6051038**	Price

osborn Crimped Wire Wideface Wheel Brush



- Filled with the highest quality steel wire
- Provides fast, efficient brushing on production work and general maintenance jobs
- Fits directly onto 2" diameter arbors, without adapters

Brush Dia. (in.)	Wire Size (in.)	Arbor Hole (in.)	Width Thru Face Width (in.)	Trim Length (in.)	MSFS RPM	Order No.	Price
4-1/4	.0118	2	1	3/4	6,000	**MK6022003**	Price
6	.008	2	1-1/4	1	6,000	**MK6022006**	Price
6	.0118	2	1-1/4	1	6,000	**MK6022007**	Price
6	.014	2	1-1/4	1	6,000	**MK6022008**	Price
8	.006	2	1-1/2	1-1/2	4,500	**MK6022010**	Price
8	.010	2	1-1/2	1-1/2	4,500	**MK6022080**	Price
8	.0118	2	1-1/2	1-1/2	4,500	**MK6022026**	Price
8	.014	2	1-1/2	1-1/2	4,500	**MK6022012**	Price
8	.020	2	1-1/2	1-1/2	4,500	**MK6022013**	Price
10	.010	2	2	2-1/8	3,600	**MK6022014**	Price
10	.020	2	2	2-1/8	3,600	**MK6022015**	Price
12	.0118	2	2	3-1/4	3,600	**MK6022016**	Price
12	.020	2	2	1-7/8	3,000	**MK6022225**	Price

osborn Crimped Wire Narrow Face Wheel Brush



- For wider surfaces where flexibility is required
- More flexible than the wide and medium duty styles

Material - Stainless Steel								
Brush Dia. (in.)	Wire Size (in.)	Arbor Hole (in.)	Face Width (in.)	Width at Face Plates (in.)	Trim Length (in.)	MSFS RPM	Order No.	Price
6	.005	1-1/4	5/8	13/32	1-1/8	6,000	**MK6021056**	Price
6	.0104	1/2-5/8	5/8	13/32	1-1/8	6,000	**MK6021588**	Price
6	.0104	1-1/4	5/8	13/32	1-1/8	6,000	**MK6021059**	Price
8	.005	1-1/4	3/4	1/2	1-1/2	4,500	**MK6021195**	Price
12	.0104	2	1	17/32	3	3,000	**MK6021063**	Price

Material - Steel								
Brush Dia. (in.)	Wire Size (in.)	Arbor Hole (in.)	Face Width (in.)	Width at Face Plates (in.)	Trim Length (in.)	MSFS RPM	Order No.	Price
4	.0104	1/2-5/8	3/8	3/8	13/16	6,000	**MK6021597**	Price
4	.0104	1/2-5/8	5/8	13/32	13/16	6,000	**MK6021592**	Price
6	.006	1/2-5/8	5/8	13/32	1-1/8	6,000	**MK6021583**	Price
6	.006	1-1/4	5/8	13/32	1-1/8	6,000	**MK6021009**	Price
6	.008	1/2-5/8	5/8	13/32	1-1/8	6,000	**MK6021584**	Price
6	.0104	1/2-5/8	5/8	13/32	1-1/8	6,000	**MK6021585**	Price
6	.0104	1-1/4	5/8	13/32	1-1/8	6,000	**MK6021016**	Price
6	.0118	1/2-5/8	5/8	13/32	1-1/8	6,000	**MK6021586**	Price
6	.014	1/2-5/8	5/8	13/32	1-1/8	6,000	**MK6021587**	Price
6	.014	1-1/4	5/8	13/32	1-1/8	6,000	**MK6021020**	Price
8	.006	1-1/4	5/8	35/64	1-1/2	4,500	**MK6021182**	Price
10	.0104	1-1/4	5/8	15/32	2-1/2	3,600	**MK6021201**	Price
12	.005	1-1/4	1	9/16	3	3,000	**MK6021047**	Price
12	.0104	1-1/4	1/2	29/64	3	3,000	**MK6021044**	Price
12	.0104	2	1	9/16	3	3,000	**MK6021052**	Price

osborn Crimped Wire Cup Brushes



- Designed for light and medium duty applications on a variety of highspeed air and electric tools

Brush Dia. (in.)	Arbor Hole (in.)	Trim Length (in.)	Wire Size (in.)	MSFS RPM	Order No.	Price
3-1/2	5/8-11NC	1	.0118	7,500	**MK6032048**	Price
3-1/2	5/8-11NC	1	.020	7,500	**MK6032056**	Price
4	5/8-11NC	1-1/8	.020	9,000	**MK6032134**	Price
5	5/8-11NC	1-1/2	.020	8,000	**MK6032135**	Price
6	5/8-11NC	1-1/2	.020	7,000	**MK6032136**	Price

osborn Crimped Wire Medium Face Wheel Brush



- Adaptable to a wide range of equipment and multiple mounting for brushing wide areas
- Combine excellent brushing characteristics with exceptionally long life

Brush Dia. (in.)	Wire Size (in.)	Arbor Hole (in.)	Face Width (in.)	Width at Face Plates (in.)	Trim Length (in.)	MSFS RPM	Order No.	Price
6	.006	2	7/8	.670	1	6,000	**MK6022061**	Price
6	.0104	2	7/8	.670	1	6,000	**MK6022064**	Price
6	.0118	2	7/8	.670	1	6,000	**MK6022065**	Price
6	.014	2	7/8	.670	1	6,000	**MK6022066**	Price
7	.0104	2	3/4	.650	1-1/2	6,000	**MK6022074**	Price
7	.014	2	3/4	.650	1-1/2	6,000	**MK6022076**	Price
8	.006	2	5/8	.635	1-1/2	4,500	**MK6022081**	Price
8	.008	2	5/8	.635	1-1/2	4,500	**MK6022082**	Price
8	.0118	1-1/4	5/8	.635	1-1/2	4,500	**MK6022094**	Price
8	.0118	2	5/8	.635	1-1/2	4,500	**MK6022085**	Price
8	.014	1-1/4	5/8	.635	1-1/2	4,500	**MK6022095**	Price
8	.014	2	5/8	.635	1-1/2	4,500	**MK6022086**	Price

osborn Knot Wire Wheel Brushes



- Provides high brush flexibility, maximum safety and efficient operation at high speeds
- Brushes larger than 6" should be mounted on stationary tables
- Brushes smaller than 6" can be mounted to stationary installations or attached to portable tools

Material - Knot Type Stainless								
Brush Dia. (in.)	Wire Size (in.)	Arbor Hole (in.)	Face Width (in.)	Width at Face Plates (in.)	Trim Length (in.)	MSFS RPM	Order No.	Price
3	.014	3/8	3/8	7/16	5/8	25,000	**MK6026206**	Price
4	.014	3/8	5/16	3/8	7/8	20,000	**MK6026209**	Price
6	.016	1/2-5/8	1/2	9/16	1-1/2	9,000	**MK6026225**	Price
6	.016	5/8-11	1/2	9/16	1-1/2	9,000	**MK6026038**	Price
6-1/2	.020	5/8-11	1/4	9/16	1-7/32	12,000	**MK6026226**	Price

Material - Knot Type Steel Wire								
Brush Dia. (in.)	Wire Size (in.)	Arbor Hole (in.)	Face Width (in.)	Width at Face Plates (in.)	Trim Length (in.)	MSFS RPM	Order No.	Price
3	.020	3/8	3/8	7/16	5/8	20,000	**MK6026928**	Price
4	.0118	1/2-5/8	5/16	3/8	7/8	20,000	**MK6026028**	Price
4	.014	1/2-5/8	5/16	3/8	7/8	20,000	**MK6026029**	Price
4	.014	3/8	5/16	3/8	7/8	20,000	**MK6026017**	Price
4	.020	1/2-5/8	5/16	3/8	7/8	20,000	**MK6026030**	Price
6	.0118	1/2-5/8	1/2	9/16	1-1/2	9,000	**MK6026041**	Price
6	.014	1/2-5/8	1/2	9/16	1-1/2	9,000	**MK6026042**	Price
6	.016	1/2-5/8	1/2	9/16	1-1/2	9,000	**MK6026043**	Price
6	.025	1/2-5/8	1/2	9/16	1-1/2	9,000	**MK6026046**	Price
6	.025	5/8-11	1/2	9/16	1-1/2	9,000	**MK6026047**	Price
6-1/2	.020	5/8-11	1/4	9/16	1-7/32	12,000	**MK6026048**	Price
8	.0118	1-1/4	5/8	9/16	1-11/16	8,500	**MK6026064**	Price
8	.0118	5/8	5/8	9/16	1-11/16	8,500	**MK6026058**	Price
8	.014	1-1/4†	5/8	9/16	1-11/16	8,500	**MK6026065**	Price
8	.014	5/8	5/8	9/16	2-7/16	8,500	**MK6026059**	Price
8	.016	5/8	5/8	9/16	1-11/16	8,500	**MK6026060**	Price
8	.025	5/8	5/8	9/16	1-11/16	8,500	**MK6026061**	Price
8	.025	5/8-11	5/8	9/16	1-11/16	8,500	**MK6026062**	Price
10	.0118	1-1/4†	5/8	5/8	2-1/4	4,500	**MK6026070**	Price

†The 1-1/4" arbor hole brushes have two 1/4" x 1/8" keyways

Weiler Dually Stringer Bead Wheels - "Flip 'N Fast" Dual-Hex Nut Design



- Simplifies periodic flipping of the wheels for maximum cutting, long life, and safer use
- Featuring a knot twist with the most aggressive cutting action, the new dual-hex nut makes it easier for the user to regularly switch mounting position and keep the brush running at peak performance
- Highest quality heat-treated steel wire and construction that delivers smooth operation and long life
- Hex nut design provides adequate tool clearance
- No need to remove the guard from the right-angle grinder

Dia. (in.)	Wire Size	Trim Length	RPM	Order No.	Price
4	.020	13/16	12,500	**MK5179801**	Price
5	.020	7/8	12,500	**MK5179802**	Price
5	.023	7/8	12,500	**MK5179803**	Price
6	.020	1-1/8	12,500	**MK5179805**	Price
6	.023	1-1/4	12,500	**MK5179804**	Price
7	.020	1-1/8	12,500	**MK5179800**	Price

Weiler 4-1/2" Stringer Bead Weld Cleaning Brush



- Up to 20% less wire loss than comparable 4" stringer bead wheels and 50% longer brush life
- Superior cleaning action and longer product life than other currently available 4-1/2" stringer bead wheels

				Carbon Steel		Stainless Steel	
Dia. (in.)	Wire Size	Arbor Hole	RPM	Order No.	Price	Order No.	Price
4-1/2	.020	5/8-11	12,500	**MK5113232**	Price	**MK5113238**	Price
4-1/2	.020	7/8	12,500	**MK5113234**	Price	**MK5113249**	Price
4-1/2	.020	M14 x 2.0	12,500	**MK5113233**	Price	**MK5113239**	Price

CGW Aluminum Oxide Flap Wheel Drums with Keyhole Arbor



- Flexible, quality flaps easily conform to work pieces
- Cool finishing for ferrous and non-ferrous metals
- Standard Package – 5 Pc.

Face Width (in.)	Dia. (in.)	Grit Size	Hole Size (in.)	Order No.	Price
4	4	120	3/4	**MG9072103**	Price
4	4	40	3/4	**MG9072100**	Price
4	4	60	3/4	**MG9072101**	Price
4	4	80	3/4	**MG9072102**	Price

CGW Brass Wire Flap Wheel Drums with 3/4" Keyhole Arbor



- For use on parts machined from soft non-ferrous metals
- Perfect for blending or decorative finishing

Dia. (in.)	Wire Size	Order No.	Price
4 x 2-3/4	.020	**MG9072134**	Price
4 x 2-3/4	.030	**MG9072133**	Price

CGW Non-Woven Flap Wheel Drums with 3/4" Keyhole Arbor



- Quality, non-woven material impregnated with aluminum oxide grain for consistent finishes
- Designed for polishing, blending, deburring, cleaning and brightening on stainless steel, aluminum, brass, copper and other alloys

Face Width (in.)	Dia. (in.)	Grade	Hole Size (in.)	Order No.	Price
4	4	A/O Coarse	3/4	**MG9072116**	Price
4	4	A/O Fine	3/4	**MG9072118**	Price
4	4	A/O Medium	3/4	**MG9072117**	Price
4	4	A/O Very Fine	3/4	**MG9072119**	Price

CGW Interleaf Flap Wheel Drums with 3/4" Keyhole Arbor



- Alternating flaps of non-woven and aluminum oxide coated abrasive materials for fast, uniform finishes
- Medium grade drums provide consistent satin finishes

Face Width (in.)	Dia. (in.)	Grade	Hole Size (in.)	Order No.	Price
4	4	A/O 120G + S-Medium	3/4	**MG9072113**	Price
4	4	A/O 180G + S-Medium	3/4	**MG9072114**	Price
4	4	A/O 240G + S-Medium	3/4	**MG9072115**	Price
4	4	A/O 40G + S-Medium	3/4	**MG9072110**	Price
4	4	A/O 60G + S-Medium	3/4	**MG9072111**	Price
4	4	A/O 80G + S-Medium	3/4	**MG9072112**	Price

CGW Nylon Brush Flap Wheel Drums with 3/4" Keyhole Arbor



- Abrasive Grit is impregnated throughout each bristle
- Removing paints, corrosion, weld scale, surface rust & burns from metals.
- Use on steel, aluminum, copper, brass, stainless steel, super alloys, plastics, composites, ceramics, wood, leather

Face Width (in.)	Dia. (in.)	Grit	Order No.	Price
2-3/4	4	46	**MG9072131**	Price
2-3/4	4	80	**MG9072132**	Price

Non-sparking bushes are made with high quality brass or bronze wire for non-sparking and metal finishing applications.
- Cleaning molds and dies for extrusion and injection-molding equipment
- Maintenance and fabrication in areas where flammable substances are present
- Deburring component parts machined from soft non-ferrous metals
- Used in petroleum production and refining: chemical production and processing; manufacturing of plastics, synthetics and rubber
- Decorative finishing

WEILER 6" Narrow Face Wheels - Crimped Brass Wire



Wire Size	Face Width	Arbor Hole	RPM	Order No.	Price
.005	1/2	5/8-1/2	6,000	**MK5101415**	Price
.0118	1/2	5/8-1/2	6,000	**MK5101475**	Price

WEILER Small Diameter Wheels - Brass Wire



Dia. (in.)	Wire Size	Face Width	Arbor Hole	RPM	Order No.	Price
1-1/2	.005	7/16	3/8	20,000	**MK5129178**	Price
2	.005	1/2	1/2	20,000	**MK5129059**	Price
2	.0118	1/2	1/2	20,000	**MK5129086**	Price
3	.014	1	1/2	20,000	**MK5129078**	Price

WEILER Standard Knot Twist Wheel - Bronze Wire



Dia. (in.)	Face Width	Wire Size	Arbor Hole	RPM	Order No.	Price
3	3/8	.020	1/2-3/8	25,000	**MK5108271**	Price
4	1/2	.020	5/8-11	20,000	**MK5113121**	Price

WEILER 3" Stem Mounted Wire Wheel



Dia. (in.)	Wire Size	Face Width	Arbor Hole	RPM	Order No.	Price
3	.0118	1	1/4 Stem	20,000	**MK5117641**	Price

WEILER Cup Wheels, 5/8-11 Mount - Crimped Bronze & Brass Brushes



Dia. (in.)	Brush Length	Wire Size	Order No.	Price
3	7/8	.020	**MK5113231**	Price
4	1-3/8	.020	**MK5114616**	Price
5	1-1/4	.014	**MK5114606**	Price
6	1-1/4	.020	**MK5114316**	Price

WEILER Single Row Knot Cup Brushes - Bronze Wire



Dia. (in.)	Wire Size	Brush Length	RPM	Order No.	Price
2-3/4	.020	1	14,000	**MK5113299**	Price
4	.020	1-1/4	9,000	**MK5112776**	Price

WEILER 1/4" Stem Cup Brushes - Crimped Brass Wire



Dia. (in.)	Wire Size	Order No.	Price
1-3/4	.006	**MK5114310**	Price
1-3/4	.0118	**MK5114314**	Price
2-3/4	.0118	**MK5114311**	Price

WEILER 1/4" Stem Wire End Brush - Crimped Brass Wire



Dia. (in.)	Wire Size	Order No.	Price
1/2	.005	**MK5110158**	Price
1	.005	**MK5110128**	Price
1	.0118	**MK5110091**	Price

WEILER 1/4" Stem Knot End Brush - Bronze Wire



Dia. (in.)	Wire Size	Order No.	Price
1-1/8	.020	**MK5110067**	Price

WEILER Round Power Tube Brush - Stainless Steel Stem - Brass Wire



Dia. (in.)	Wire Size	Brush Length	Overall Length	Shank Diameter	RPM	Order No.	Price
1/4	.004	1	3-1/2	1/8	2,000	**MK5121332**	Price
1/2	.005	1	3-1/2	3/16	2,000	**MK5121182**	Price
1-1/2	.008	1	3-1/2	1/4	2,000	**MK5121152**	Price

WEILER Double Stem, Double Spiral Power Tube Brush - Brass Wire



Dia. (in.)	Wire Size	Brush Length	Shank Diameter	Overall Length	Order No.	Price
1/2	.006	2	5/32	5	**MK5121178**	Price
3/4	.006	2-1/2	1/4	5-1/2	**MK5121179**	Price
5/8	.0008	2	7/32	5	**MK5121219**	Price
1	.006	2-1/2	1/4	5-1/2	**MK5121218**	Price

WEILER Single Stem, Single Spiral Hand Tube Brush - Brass Wire



OAL	Wire Size	Brush Dia.	Brush Length	Shank Dia.	Order No.	Price
7	.003	1/4	1-1/2	3/32	**MK5121270**	Price
7	.003	3/16	1-1/2	3/32	**MK5121221**	Price
7	.005	1/4	1-1/2	3/32	**MK5121139**	Price
8	.004	1/2	2	1/8	**MK5121165**	Price
8	.004	3/8	2	1/8	**MK5121191**	Price

Composite Hub Nylon Abrasive Wheels



- Composite hub radial wheels offer a safe, durable alternative to wire and non-woven abrasive wheels
- Their construction and flexibility provide a long lasting wheel, less filament breakage and superior performance
- Maximum recommended RPM 3600

Dia.	Face Width	Trim Length	Filament Dia./Grit	Order No.	Price
6	1/2	1-1/2	.040/80	**MJ73GD6524080SN**	Price
6	1	1-1/2	.040/80	**MJ73GD6124080SN**	Price
6	1/2	1-1/2	.040/120	**MJ73GD6124120SN**	Price
6	1/2	1-1/2	.040/120	**MJ73GD6524120SN**	Price
6	1/2	1-1/2	.035/180	**MJ73GD6523180SN**	Price
6	1	1-1/2	.035/180	**MJ73GD6123180SN**	Price
6	1/2	1-1/2	.022/120	**MJ73GD6522120SN**	Price
6	1	1-1/2	.022/120	**MJ73GD6122120SN**	Price
6	1/2	1-1/2	.022/320	**MJ73GD6522320SN**	Price
6	1	1-1/2	.022/320	**MJ73GD6122320SN**	Price
6	1/2	1-1/2	.018/500	**MJ73GD6521500SN**	Price
6	1	1-1/2	.018/500	**MJ73GD6121500SN**	Price
8	1/2	2-1/2	.040/80	**MJ73GD8524080SN**	Price
8	1	2-1/2	.040/80	**MJ73GD8124080SN**	Price
8	1/2	2-1/2	.022/120	**MJ73GD8522120SN**	Price
8	1	2-1/2	.022/120	**MJ73GD8122120SN**	Price
8	1/2	2-1/2	.040/120	**MJ73GD8524120SN**	Price
8	1	2-1/2	.040/120	**MJ73GD8124120SN**	Price
8	1/2	2-1/2	.035/180	**MJ73GD8523180SN**	Price
8	1/2	2-1/2	.035/180	**MJ73GD8123180SN**	Price
8	1/2	2-1/2	.022/320	**MJ73GD8522320SN**	Price
8	1	2-1/2	.022/320	**MJ73GD8122320SN**	Price
8	1/2	2-1/2	.018/500	**MJ73GD8521500SN**	Price
8	1	2-1/2	.018/500	**MJ73GD8121500SN**	Price

Hex-Drive Abrasive Disc Brushes



- Designed for use in semi and fully automatic machinery, including NC, CNC and robotic machine tools
- Unique Hex-Drive™ system allows the tools to be turned in both directions for 360 finishing
- Applications include deburring, edge radiusing and general surface finishing

Dia.	Trim Length	Filament Dia./Grit	Max. RPM	Order No.	Price
2	1	.028/120	10,000	**MJ73GD21120SN**	Price
2	1	.035/180	10,000	**MJ73GD21180SN**	Price
2	1	.040/80	10,000	**MJ73GD21080SN**	Price
2	1	.045/60	10,000	**MJ73GD21060SN**	Price
2	3/4	.060/46	10,000	**MJ73GD21046SN**	Price
3	1	.028/120	10,000	**MJ73GD31120SN**	Price
3	1	.035/180	10,000	**MJ73GD31180SN**	Price
3	1	.040/80	10,000	**MJ73GD3180SN**	Price
3	1	.045/60	10,000	**MJ73GD3160SN**	Price
3	3/4	.060/46	10,000	**MJ73GD375046SN**	Price
4	1	.028/120	10,000	**MJ73GD41120SN**	Price
4	1	.035/180	10,000	**MJ73GD41180SN**	Price
4	1	.040/80	10,000	**MJ73GD41080SN**	Price
4	1	.045/60	10,000	**MJ73GD41060SN**	Price
5	1	.028/120	6,000	**MJ73GD51120SN**	Price
5	1	.035/180	6,000	**MJ73GD51180SN**	Price
5	1	.040/80	6,000	**MJ73GD51080SN**	Price
5	1	.045/60	6,000	**MJ73GD51060SN**	Price

Holders for Dot and Turbine Nampower™ Brushes



- This reusable holder allows coolant to flow through from the brush center resulting in better lubricant dispersion
- Holders are heat treated and precision ground and have a PVD coating for improved corrosion resistance

Shank Dia.	Holder Type	Order No.	Price
25mm	Standard Collet	**MJ73ADHSMP**	Price
25mm	Standard Side Lock	**MJ73ADHSMSL**	Price

Nampower™ Nylon Abrasive Turbine Style Brushes



- Ideal for medium and heavy deburring applications
- Unique combination of Silicon Carbide and Ceramic filaments cut faster and last longer
- Turbine style filament is a high density fill that is ideal for short cycle times and long tool life

Dia. (mm)	Trim Length (mm)	Grit	MSFS	Order No.	Price
100	18	80	2,200	**MJ73HD1018080SN**	Price
100	38	80	2,200	**MJ73HD1038080SN**	Price
100	18	120	2,200	**MJ73HD1018120SN**	Price
100	38	120	2,200	**MJ73HD1038120SN**	Price
100	18	180	2,200	**MJ73HD1018180SN**	Price
100	38	180	2,200	**MJ73HD1038180SN**	Price
100	18	320	2,200	**MJ73HD1018320SN**	Price
100	38	320	2,200	**MJ73HD1038320SN**	Price
125	18	80	2,200	**MJ73HD1218080SN**	Price
125	38	80	2,200	**MJ73HD1238080SN**	Price
125	18	120	2,200	**MJ73HD1218120SN**	Price
125	38	120	2,200	**MJ73HD1238120SN**	Price
125	18	180	2,200	**MJ73HD1218180SN**	Price
125	38	180	2,200	**MJ73HD1238180SN**	Price
125	18	320	2,200	**MJ73HD1218320SN**	Price
125	38	320	2,200	**MJ73HD1238320SN**	Price
150	18	80	1,800	**MJ73HD1518080SN**	Price
150	38	80	1,800	**MJ73HD1538080SN**	Price
150	18	120	1,800	**MJ73HD1518120SN**	Price
150	38	120	1,800	**MJ73HD1538120SN**	Price
150	18	180	1,800	**MJ73HD1518180SN**	Price
150	38	180	1,800	**MJ73HD1538180SN**	Price
150	18	320	1,800	**MJ73HD1518320SN**	Price
150	38	320	1,800	**MJ73HD1538320SN**	Price

Nampower™ Nylon Abrasive Dot Style Brushes



- Used for general purpose edge deburring and surface finishing applications
- The Dot style is an economical choice for light deburring applications when short cycle times are important

Dia. (mm)	Trim Length (mm)	Grit	Order No.	Price
100	18	80	**MJ73ED1018080SN**	Price
100	38	80	**MJ73ED1038080SN**	Price
100	18	120	**MJ73ED1018120SN**	Price
100	38	120	**MJ73ED1038120SN**	Price
100	18	180	**MJ73ED1018180SN**	Price
100	38	180	**MJ73ED1038180SN**	Price
100	18	320	**MJ73ED1018320SN**	Price
100	38	320	**MJ73ED1038320SN**	Price
125	18	80	**MJ73ED1218080SN**	Price
125	38	80	**MJ73ED1238080SN**	Price
125	18	120	**MJ73ED1218120SN**	Price
125	38	120	**MJ73ED1238120SN**	Price
125	18	180	**MJ73ED1218180SN**	Price
125	38	180	**MJ73ED1238180SN**	Price
125	18	320	**MJ73ED1218320SN**	Price
125	38	320	**MJ73ED1238320SN**	Price
150	18	80	**MJ73ED1518080SN**	Price
150	38	80	**MJ73ED1538080SN**	Price
150	18	120	**MJ73ED1518120SN**	Price
150	38	120	**MJ73ED1538120SN**	Price
150	18	180	**MJ73ED1518180SN**	Price
150	38	180	**MJ73ED1538180SN**	Price
150	18	320	**MJ73ED1518320SN**	Price
150	38	320	**MJ73ED1538320SN**	Price

WEILER Nylox® Abrasive Nylon Filament Brushes

Wheel Brushes



- Nylon filament is uniformly impregnated with silicon carbide thoughout
- As filament wears, new, sharp abrasive grain is constantly exposed to the work surface, providing a consistent brushing action and longer brush life
- Deburr edges on aluminum extrusions, machined and powdered metal components
- Edge blending of ferrous and non-ferrous parts
- Decorative finishing on stainless steel, aluminum and brass
- Use off-hand or in automated deburring processes
- †1/2" x 1/4" Double Keyway

O.D. (in.)	I.D. (in.)	Filament Dia. (in.)	Grit	Face Width (in.)	Trim Length (in.)	Thickness Through Arbor (in.)	Max. RPM	Order No.	Price
6	2	.022	120	1	1-1/4	1-1/16	3,600	**MK5183011**	Price
6	2	.022	320	1	1-1/4	1-1/16	3,600	**MK5183010**	Price
6	2	.035	180	1	1-1/4	1-1/4	3,600	**MK5183030**	Price
6	2	.040	120	1	1-1/4	1-1/4	3,600	**MK5183040**	Price
6	2	.040	80	1	1-1/4	1-1/16	3,600	**MK5183050**	Price
8	2	.022	120	1	2-1/4	3/4	3,600	**MK5183111**	Price
8	2	.022	320	1	2-1/4	3/4	3,600	**MK5183110**	Price
8	2	.035	180	1	2-1/4	3/4	3,600	**MK5183130**	Price
8	2	.040	120	1	2-1/4	3/4	3,600	**MK5183140**	Price
8	2	.040	80	1	2-1/4	3/4	3,600	**MK5183150**	Price
10	2	.035	120	1-1/8	2	7/8	1,800	**MK5183515†**	Price
10	2	.040	80	1-1/8	2	7/8	1,800	**MK5183516†**	Price
10	2	.035	180	1-1/8	2	7/8	1,800	**MK5183514†**	Price
12	2	.040	120	1-1/4	3	7/8	1,800	**MK5183717†**	Price
12	2	.040	80	1-1/4	3	7/8	1,800	**MK5183718†**	Price
12	2	.035	180	1-1/4	3	7/8	1,800	**MK5183716†**	Price

WEILER Nylox® Small Diameter Wheels

Silicon Carbide



- 10,000 RPM

Dia. (in.)	Filament Dia. (in.)	Grit	Arbor Hole (in.)	Face Width (in.)	Order No.	Price
1-1/2	.035	180	1/2	3/8	**MK5129353**	Price
1-3/8	.018	500†	1/4	5/16	**MK5116310**	Price
2	.018	500	1/2	3/8	**MK5117533**	Price
2	.022	320	1/2	3/8	**MK5117543**	Price
2	.040	120	1/2	3/8	**MK5117633**	Price
2-1/2	.022	320	5/8	1/2	**MK5129356**	Price
3	.035	180	1/2	1/2	**MK5129088**	Price
3	.040	120	1/2	1/2	**MK5116263**	Price

WEILER Nylox® Narrow Face Wheels

Silicon Carbide - Steel Hub



Dia. (in.)	Filament Dia. (in.)	Grit	Arbor Hole (in.)	Trim Length (in.)	Max. RPM	Thickness Through Arbor	Order No.	Price
3	.040	120	1/2-3/8	1/2	6,000	7/16	**MK5131094**	Price
4	.040	120	1/2-3/8	7/8	6,000	7/16	**MK5131124**	Price

WEILER End Brushes

Silicon Carbide-1/4" Stem



Dia. (in.)	Wire Size (in.)	Grit	Trim Length (in.)	Max. RPM	Order No.	Price
3/4	.022	320	7/8	10,000	**MK5110152**	Price
3/4	.035	180	7/8	10,000	**MK5110153**	Price
3/4	.040	120	7/8	10,000	**MK5110154**	Price
1	.022	320	7/8	10,000	**MK5110155**	Price
1	.035	180	7/8	10,000	**MK5110156**	Price
1	.040	120	7/8	10,000	**MK5110157**	Price

WEILER Nylox® Disc Brushes



- Tufted construction offers increased aggression due to added filament density
- Specially designed for automated equipment and CNC Milling Machines
- Deburring and surface finishing gears, and transmissions, aluminum extrusions
- Silicon carbide composite hub

Dia. (in.)	Grit	Filament Dia. (in.)	Arbor Hole (in.)	Trim Length (in.)	Max. RPM	Order No.	Price
6	180	.035	7/8	1-1/2	2,000	**MK5185850**	Price
6	80	.040	7/8	1-1/2	2,000	**MK5185854**	Price
6	120	.040	7/8	1-1/2	2,000	**MK5185852**	Price

WEILER Nylox® Flow-Through Drive Arbor



- Mounts disc brushes to any type of milling or CNC machine
- For 6" diameter disc brushes with 3" diameter bolt circle

Order No.	Price
MK5107701	Price

WEILER Nylox® Tube Brushes

Silicon Carbide, Double Stem, Single Spiral



Dia. (in.)	Wire Size (in.)	Grit	Length of Brush Part	Stem Dia. (in.)	OAL (in.)	Order No.	Price
1/4	.022	320	2	5/32	5	**MK5121126**	Price
3/8	.022	320	2	5/32	5	**MK5121128**	Price
1/2	.022	320	2	3/16	5	**MK5121130**	Price
5/8	.022	320	2	7/32	5	**MK5121132**	Price
11/16	.022	320	2	7/32	5	**MK5121133**	Price
3/4	.022	320	2-1/2	1/4	5-1/2	**MK5121134**	Price
7/8	.022	320	2-1/2	1/4	5-1/2	**MK5121136**	Price
1	.022	320	2-1/2	1/4	5-1/2	**MK5121138**	Price
1-1/2	.022	320	2-1/2	1/4	5-1/2	**MK5121309**	Price
1-1/2	.035	180	2-1/2	1/4	5-1/2	**MK5121308**	Price
1-1/2	.040	80	2-1/2	1/4	5-1/2	**MK5121330**	Price
1-1/4	.022	120	2-1/2	1/4	5-1/2	**MK5121304**	Price
1-1/4	.022	320	2-1/2	1/4	5-1/2	**MK5121306**	Price
1-1/4	.035	180	2-1/2	1/4	5-1/2	**MK5121305**	Price
1-3/4	.035	180	2-1/2	1/4	5-1/2	**MK5121312**	Price
1-3/4	.040	80	2-1/2	1/4	5-1/2	**MK5121311**	Price
1-3/4	.060	46	2-1/2	1/4	5-1/2	**MK5121348**	Price
2	.022	320	2-1/2	1/4	5-1/2	**MK5121473**	Price
2	.040	80	2-1/2	1/4	5-1/2	**MK5121345**	Price

WEILER Burr-Rx Tube Brushes - 1/4" Cadmium Plated Stem - Crimped Round Black Ceramic Filiment

Advantage of Burr-Rx Brushes Over Traditional NAF Brushes



- 400% Faster Cut Rate
- Benefits of Burr-Rx Aggression
- Reduce Cycle Time
- Reduce Deburring Cost- Per-Part
- Remove heavy burrs
- Deburr tough materials

Size (in.)	Dia. (in.)	Grit	Arbor Dia. (in.)	Trim Length (in.)	OAL (in.)	Order No.	Price
1	.026	120	1/4	1	3-1/2	**MK5121764**	Price
1/2	.026	120	1/4	1	3-1/2	**MK5121759**	Price
3/4	.026	120	1/4	1	3-1/2	**MK5121763**	Price
3/8	.026	120	1/4	1	3-1/2	**MK5121758**	Price
7/8	.026	120	1/4	1	3-1/2	**MK5121762**	Price

WEILER Burr-Rx Small Diameter Wheels - Metal Hub - Crimped Round Black Ceramic Filaments



Advantage of Burr-Rx Brushes Over Traditional NAF Brushes

- 400% Faster Cut Rate
- Benefits of Burr-Rx Aggression
- Reduce Cycle Time
- Reduce Deburring Cost-Per-Part
- Remove heavy burrs
- Deburr tough materials

Size (in.)	Dia. (in.)	Face Width (in.)	Grit	Arbor Dia. (in.)	Trim Length (in.)	RPM	Order No.	Price
1-1/2	.026	3/8	120	1/2	1/4	10,000	**MK5117541**	Price
1-1/4	.026	5/16	120	1/4	5/16	10,000	**MK5117551**	Price
2	.026	3/8	120	1/2	1/2	10,000	**MK5117548**	Price
2	.035	3/8	80	1/2	1/2	10,000	**MK5117555**	Price
2	.055	3/8	80	1/2	1/2	10,000	**MK5117542**	Price
2-1/2	.035	1/2	80	5/8	11/16	10,000	**MK5117557**	Price
3	.026	1/2	120	1/2	1	10,000	**MK5117565**	Price
3	.035	1/2	80	1/2	1	10,000	**MK5117567**	Price
3	.043	1/2	120	1/2	1	10,000	**MK5117568**	Price

WEILER Burr-Rx Heavy-Duty Narrow Face Wheels - Metal Hub - Crimped Round Black Ceramic Filament



Advantage of Burr-Rx Brushes Over Traditional NAF Brushes

- 400% Faster cut rate
- Benefits of Burr-Rx aggression
- Reduce cycle time
- Reduce deburring cost-per-part
- Remove heavy burrs
- Deburr tough materials

Size (in.)	Dia. (in.)	Face Width (in.)	Grit	Arbor Dia. (in.)	Trim Length (in.)	RPM	Order No.	Price
3	.026	9/16	120	5/8-1/2	1/2	6,000	**MK5131240**	Price
3	.035	9/16	80	5/8-1/2	1/2	6,000	**MK5131241**	Price
4	.026	5/8	120	5/8-1/2	1	6,000	**MK5131110**	Price
4	.035	5/8	80	5/8-1/2	1	6,000	**MK5131270**	Price
4	.043	5/8	120	5/8-1/2	1	6,000	**MK5131280**	Price
4	.055	5/8	80	5/8-1/2	1	6,000	**MK5131290**	Price

WEILER Burr-Rx Narrow Face Wheels - Metal Hub - Crimped Round Black Ceramic Filiment



Advantage of Burr-Rx Brushes Over Traditional NAF Brushes

- 400% Faster Cut Rate
- Benefits of Burr-Rx Aggression
- Reduce Cycle Time
- Reduce Deburring Cost-Per-Part
- Remove heavy burrs
- Deburr tough materials

Size (in.)	Dia. (in.)	Face Width (in.)	Grit	Arbor Hole (in.)	Trim Length (in.)	RPM	Order No.	Price
3	.035	3/8	80	1/2-3/8	1/2	6,000	**MK5131102**	Price
3	.043	3/8	120	1/2-3/8	1/2	6,000	**MK5131101**	Price
4	.026	1/2	120	1/2-3/8	7/8	6,000	**MK5186165**	Price
4	.035	1/2	80	1/2-3/8	7/8	6,000	**MK5131103**	Price
4	.043	1/2	120	1/2-3/8	7/8	6,000	**MK5131100**	Price
4	.055	1/2	80	1/2-3/8	7/8	6,000	**MK5131105**	Price
6	.026	5/8	120	5/8-1/2	7/8	4,500	**MK5131134**	Price
6	.035	5/8	80	5/8-1/2	7/8	4,500	**MK5131136**	Price
6	.043	5/8	120	5/8-1/2	7/8	4,500	**MK5131135**	Price
6	.055	5/8	80	5/8-1/2	7/8	4,500	**MK5131137**	Price

WEILER Composite Metal Hub Wheels



- 50% Higher filament density than traditional metal hub brushes - the highest in the marketplace
- Constructed with a steel shell,
- Brushes provide increased accuracy and dimensional stability to ensure consistent, efficient performance with minimal vibration during use.
- Produced with a 2" arbor hole, which allows for direct mounting on various equipment without any need for adapters

Size (in.)	Dia. (in.)	Grit	Face Width (in.)	Arbor Hole (in.)	Trim Length (in.)	RPM	Order No.	Price
6	.035	80	3/4	2	1	4,500	**MK5186181**	Price
6	.055	80	3/4	1-1/4	1-1/2	4,000	**MK5186120**	Price
6	.026	120	3/4	2	1	4,000	**MK5186123**	Price
6	.043	120	3/4	2	1	4,000	**MK5186124**	Price
8	.026	120	7/8	2	2	4,000	**MK5186126**	Price
8	.043	120	7/8	2	2	4,000	**MK5186127**	Price
8	.055	120	7/8	2	2	4,000	**MK5186128**	Price
10	.035	80	1-1/8	2 w/ 1/2x1/4 double key	2	1,800	**MK5186182**	Price
10	.055	80	1-1/8	2	2	4,000	**MK5186131**	Price
10	.026	120	1-1/8	2	2	4,000	**MK5186129**	Price
10	.043	120	1-1/8	2	2	4,000	**MK5186130**	Price

WEILER Mini Disc Brushes



- Maximum density
- Crimped rectangular black ceramic filiment

Size (in.)	Grit	Trim Length (in.)	RPM	Order No.	Price
2	80	1-1/4	4,500	**MK5185736**	Price
2	80	1-1/4	4,500	**MK5185738**	Price
3	80	1-1/4	4,500	**MK5186013**	Price
3	80	1-1/4	4,500	**MK5186014**	Price
2	80	1-1/4	4,500	**MK5185733**	Price
2	120	1-1/4	4,500	**MK5186106**	Price
2	120	1-1/4	4,500	**MK5186107**	Price
3	120	1-1/4	4,500	**MK5186109**	Price
3	120	1-1/4	4,500	**MK5186110**	Price
3	120	1-1/4	4,500	**MK5186111**	Price

WEILER Shell Mill Holder Disc Brushes



- Maxinum density
- Crimped rectangular black ceramic filiment
- Brushes are designed with a 1-1/4" arbor hole and 1/2" wide keyways which should be compatible with most 3" dia. shell mill holders

Size (in.)	Dia. (in.)	Grit	Arbor Dia. (in.)	Trim Length (in.)	RPM	Order No.	Price
4	0	80	1-1/4	1-1/2	2,500	**MK5186167**	Price
6	0	80	1-1/4	1-1/2	2,500	**MK5186198**	Price
8	0	80	1-1/4	1-1/2	2,000	**MK5186199**	Price
4	.055	80	1-1/4	1-1/2	1,800	**MK5186114**	Price
4	.026	120	1-1/4	1-1/2	2,500	**MK5186112**	Price
4	.043	120	1-1/4	1-1/2	2,500	**MK5186113**	Price
6	.055	80	1-1/4	1-1/2	1,800	**MK5186117**	Price
6	.026	120	1-1/4	1-1/2	1,800	**MK5186115**	Price
6	.043	120	1-1/4	1-1/2	1,800	**MK5186116**	Price
8	.055	80	1-1/4	1-1/2	2,000	**MK5186143**	Price
8	.026	120	1-1/4	1-1/2	1,800	**MK5186141**	Price
8	.043	120	1-1/4	1-1/2	1,800	**MK5186142**	Price

WEILER Miniature Disc Brush Drive Arbor

- Supplied with set screw and wrench for mounting
- Recommended for operations in which brush rotation alternates between forward and reverse



89033



89029

Type	Stem Dia. (in.)	Stem Length (in.)	RPM	Order No.	Price
Mandrel	1/2	1-3/4	6,000	**MK5189029**	Price
Drive Arbor	1/2	1-3/4	6,000	**MK5189033**	Price

ATB™ Composite Wheel Brush — Flexible



- These brushes, with a long trim and moderate density, are ideal for applications requiring a high degree of conformability
- Applications: turbine blades, indexable cutting tool inserts, cam shafts, gears, machined parts, edge radiusing

Brush Dia. (in.)	Grit	Filament Dia. (in.)	Arbor Hole (in.)	Face Width (in.)	Trim Length (in.)	Max. RPM	Order No.	Price
6	80	.040	2	1	1-1/4	3,600	**MK6040621**	Price
6	120	.028	2	1	1-1/4	3,600	**MK6040622**	Price
6	120	.040	2	1	1-1/4	3,600	**MK6040623**	Price
6	320	.022	2	1	1-1/4	3,600	**MK6040625**	Price
8	80	.040	1-1/4	1	2-1/4	3,600	**MK6040594**	Price
8	120	.040	1-1/4	1	2-1/4	3,600	**MK6040595**	Price
8	180	.035	1-1/4	1	2-1/4	3,600	**MK6040596**	Price
8	320	.022	1-1/4	1	2-1/4	3,600	**MK6040597**	Price
10	80	.040	2	1	2-1/16	3,600	**MK6040540**	Price
10	120	.040	2	1	2-1/16	3,600	**MK6040541**	Price
10	180	.035	2	1	2-1/16	3,600	**MK6040542**	Price
10	320	.022	2	1	2-1/16	3,600	**MK6040543**	Price
12	80	.040	4-1/4	1	3	1,800	**MK6040651**	Price
12	120	.040	4-1/4	1	3	1,800	**MK6040652**	Price
12	180	.035	4-1/4	1	3	1,800	**MK6040653**	Price
12	320	.022	4-1/4	1	3	1,800	**MK6040654**	Price
14	80	.040	5-1/4	1	3-5/8	1,800	**MK6040195**	Price
14	120	.040	5-1/4	1	3-5/8	1,800	**MK6040192**	Price
14	180	.035	5-1/4	1	3-5/8	1,800	**MK6040197**	Price
14	320	.022	5-1/4	1	3-5/8	1,800	**MK6040194**	Price

ATB™ Wheel Brush — Small Diameter



- For cleaning and polishing both ID and OD surfaces
- Can be used with portable tools and drill presses
- Applications: cleaning and polishing ID and OD surfaces

Brush Dia. (in.)	Grit	Arbor Hole (in.)	Face Width (in.)	Trim Length (in.)	RPM	Order No.	Price
1-1/2	120	1/2	1/4	1/4	20,000	**MK6011146**	Price
1-1/2	180	1/2	1/4	1/4	20,000	**MK6011147**	Price
1-1/2	320	1/2	1/4	1/4	20,000	**MK6011148**	Price
2	120	5/8	3/8	7/16	15,000	**MK6011149**	Price
2	180	5/8	3/8	7/16	15,000	**MK6011150**	Price
2	320	5/8	3/8	7/16	15,000	**MK6011151**	Price
2-1/2	120	5/8	3/8	11/16	15,000	**MK6011153**	Price
2-1/2	180	5/8	3/8	11/16	15,000	**MK6011154**	Price
2-1/2	320	5/8	3/8	11/16	15,000	**MK6011155**	Price
4	80	5/8	5/8	3/4	12,000	**MK6022256**	Price

Adapters

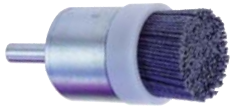
Center Plates



- Used in Pairs
- †† Double Keyway 1/2" x 1/4"

Arbor Hole (in.)	Order No.	Price
4-1/4 to 2	**MK6075344**	Price
4-1/4 to 3/4	**MK6075339**	Price
5-1/4 to 1-1/4	**MK6075347**	Price
5-1/4 to 2	**MK6075350††**	Price

ATB™ End Brush With Bridle



- Removable plastic bridle keeps filaments from flaring
- Applications: cleaning & finishing ID, spot facing, brushing recessed areas

Brush Dia. (in.)	Grit	Brush Area Length (in.)	OAL (in.)	Trim Length (in.)	Shank Dia. (in.)	Max. RPM	Order No.	Price
3/4	120	1	2-3/4	1	1/4	9,000	**MK6030300**	Price
1	80	1	2-3/4	1	1/4	9,000	**MK6030298**	Price
1	120	1	2-3/4	1	1/4	9,000	**MK6030301**	Price

Note: As a safety precaution, shank must be fully inserted into the chuck or collet and tightened securely.

ATB™ End Brushes



- Ideal for cleaning and finshing inside diameters, spot facing and recessed areas
- Electric Tools

Brush Dia. (in.)	Grit	Brush Length (in.)	OAL (in.)	Trim Length (in.)	Shank Dia. (in.)	Max. RPM	Order No.	Price
1/2	120	1	2-3/4	1	1/4	19,000	**MK6030285**	Price
1	120	1	2-3/4	1	1/4	19,000	**MK6030293**	Price

ATB™ Cup Brush — Round Trim



- Applications: engine blocks, cylinder heads, exhaust manifolds, transmission housings, water pumps & intake manifolds, bulk heads, wing spars, engine housings and components, hydraulic valve bodies, machine components, housings, gears and castings

Brush Dia. (in.)	Grit	Thread	Face Width (in.)	RPM	Order No.	Price
4	120	5/8-11	1-1/2	6,000	**MK6032125**	Price
6	120	5/8-11	1-1/2	6,000	**MK6032131**	Price

ATB™ Uni-Lok Disc Brush – Max Density



- Maximum density design delivers maximum aggression for the most demanding applications
- These tools are capable of processing large burrs and generating significant edge radii on stainless steel and hardened alloys without altering the part's dimension
- Maximum density allows for minimal cycle time and longer brush life

Brush Dia. (in.)	Grit	Filament Dia. (in.)	Trim Length (in.)	Max RPM	Order No.	Price
3	80	.040	1-1/2	4,500	**MK6047021**	Price
3	120	.040	1-1/2	4,500	**MK6047023**	Price
4	80	.040	1-1/2	3,500	**MK6047027**	Price
4	120	.040	1-1/2	3,500	**MK6047029**	Price
6	80	.040	1-1/2	2,500	**MK6047039**	Price
6	120	.040	1-1/2	2,500	**MK6047041**	Price

Uni-Lok Disc Brush Adapters



For Brush Dia. (in.)	Shank Dia. (in.)	Order No.	Price
3, 4, 5	3/4	**MK6047200**	Price
6, 7	3/4	**MK6047201**	Price
8	3/4	**MK6047202**	Price

Loctite® Clover® Silicon Carbide Abrasive Compounds

- Clover lapping and grinding compounds are perfectly suited for the cutting, smoothing and finishing of metal surfaces and for the precision mating of metal parts

Applications Include:

- Cleaning corroded threads
- Tool & die machining
- Lapping for surface finish & flatness
- Cleaning mold cavities
- Valve rebuilding
- Die hole lapping
- Smoothing gears fro correct tooth profile
- Removing tool marks

Grease Mix Carrier - Retains its texture and lubrication properties during extended use

Water Soluble Gel Carrier - Cleans up with water, is biodegradable.

Hazard Code: 57



				Clover® Silicon Carbide Abrasive Grease Mix		Clover® Silicon Carbide Pat Gel® Abrasive Water Soluble Gel Mix	
Grade	Grit	Description	Microns (0.001 mm)	Order No.	Price	Order No.	Price
1A	320	Fine - Finishing Valve Lapping, Bearings, Dies and Gauges	33	**MJ4039510**	Price	**MJ4039515**	Price
2A	400	Very Fine - Fine Polishing and Lapping	23	**MJ4039523**	Price	**MJ4039528**	Price
4A	600	Very Fine - Fine Polishing and Lapping	14	**MJ4039549**	Price	**MJ4039554**	Price
5A	800	Extremely Fine - Polishing High Precision Lapping	9	**MJ4039561**	Price	**MJ4039566**	Price
6A	1000	Extremely Fine - Polishing High Precision Lapping	5	**-**	-	**MJ4039579**	Price
7A	1200	Extremely Fine - Polishing High Precision Lapping	3	**MJ4039587**	Price	**MJ4039592**	Price
A	280	Fine - Finishing Valve Lapping, Bearings, Dies and Gauges	44	**MJ4039401**	Price	**MJ4039406**	Price
B	240	Medium Fine - Cylinder Lapping	63	**MJ4039413**	Price	**-**	-
C	220	Medium Fine - Cylinder Lapping	66	**MJ4039426**	Price	**-**	-
D	180	Medium - General purpose for controlled metal removal	86	**MJ4039439**	Price	**-**	-
E	120	Coarse -The initial "cut" fast removal of metal	142	**MJ4039452**	Price	**-**	-
F	100	Coarse -The initial "cut" fast removal of metal	173	**-**	-	**MJ4039468**	Price
G	80	Coarse -The initial "cut" fast removal of metal	267	**MJ4039473**	Price	**MJ4039478**	Price

Diamond Polishing and Lapping Compounds

All Compounds are Uniformly and Permanently Blended

- For heavy stock removal and precision finishing
- **Compounds are oil soluble**
- **Disposable plastic syringe to protect against impurities and for convenience**

Applications Include:

- Striking dies, heading dies
- Carbide drawing dies, injection molds
- Ceramic, steel and carbide tools



Final Finishing for most applications							
				18 Gram		5 Gram	
Color	Grade	Micron Size	Concentration	Order No.	Price	Order No.	Price
Green	9	8 - 12	Heavy	**MJ569H18**	Price	**MJ569H5**	Price
Green	9	8 - 12	Medium	**MJ569M18**	Price	**MJ569M5**	Price
Orange	6	4 - 8	Heavy	**MJ566H18**	Price	**MJ566H5**	Price
Orange	6	4 - 8	Medium	**MJ566M18**	Price	**MJ566M5**	Price
Yellow	3	2 - 4	Heavy	**MJ563H18**	Price	**MJ563H5**	Price
Yellow	3	2 - 4	Medium	**MJ563M18**	Price	**MJ563M5**	Price

Preparatory finishing for Carbide, hardened steel, sapphire, beryillium, copper etc.							
				18 Gram		5 Gram	
Color	Grade	Micron Size	Concentration	Order No.	Price	Order No.	Price
Blue	15	10 - 20	Heavy	**MJ5615H18**	Price	**MJ5615H5**	Price
Blue	15	10 - 20	Medium	**MJ5615M18**	Price	**MJ5615M5**	Price
Brown	45	30 - 60	Heavy	**MJ5645H18**	Price	**MJ5645H5**	Price
Brown	45	30 - 60	Medium	**MJ5645M18**	Price	**MJ5645M5**	Price
Red	30	20 - 40	Heavy	**MJ5630H18**	Price	**MJ5630H5**	Price
Red	30	20 - 40	Medium	**MJ5630M18**	Price	**MJ5630M5**	Price

Also available in other Micro sizes, concentrations & 5 gram jars. P.O.A.

Abrasive Finishing Compounds

- For lapping gages, dies, molds, gears, glass, etc.
- 1 lb plastic squeeze bottle, pre-mixed
- Soluble with water or kerosene
- Aluminum Oxide Fused Type -for soft metals, low stock removal and polishing
- Silicon Carbide Type - for hard metals, and high stock removal
- Garnet Type - for glass finishing and difficult cleaning jobs
- Aluminum Oxide Unfused Type for soft metals, minimal stock removal and fine finish
- Hazard Code:58



Abrasive Type	Grit	Order No.	Price
Fused Aluminum Oxide Brown	800	**MJ57AXF**	Price
Fused Aluminum Oxide Brown	400	**MJ57AF**	Price
Fused Aluminum Oxide Brown	240	**MJ57AM**	Price
Fused Aluminum Oxide Brown	120	**MJ57AC**	Price
Silicon Carbide	800	**MJ57CXF**	Price
Unfused Aluminum Oxide White	1200	**MJ57UAXXF**	Price
Unfused Aluminum Oxide White	800	**MJ57UAXF**	Price
Unfused Aluminum Oxide White	400	**MJ57UAF**	Price
Silicon Carbide	400	**MJ57CF**	Price
Silicon Carbide	240	**MJ57CM**	Price
Silicon Carbide	120	**MJ57CC**	Price

5-Lb., 25-Lb. and 100-Lb. containers are available • P.O.A.

NORTON Diamond Polishing and Lapping Compounds



- Performs on all materials - hard and soft
- Excellent for mold, die and tool polishing, polishing to final tolerance of ceramic parts, initial charging of lapping plates and discs, and other processes that require mirror finish and close tolerance performance
- Use oil soluble when solvent is used for clean-up and water soluble when soap/water is used for clean-up
- Diamond powders uniformly distributed in a liquid vehicle
- Easy to use plastic syring

New!

Size - 18 Gram				
Color	Grade	Micron Size	Order No.	Price
Auburn	20	15 - 25	**MH63DLC00407**	Price
Auburn	20	15 - 25	**MH63DLC00408**	Price
Black	90	80 - 100	**MH63DLC00415**	Price
Blue	15	12 - 22	**MH63DLC00406**	Price
Blue	15	12 - 22	**MH63DLC91154**	Price
Brown	45	36 - 45	**MH63DLC91164**	Price
Gray	1/4	0 - 1/2	**MH63DLC00391**	Price
Gray	1/4	0 - 1/2	**MH63DLC00392**	Price
Green	9	8 - 12	**MH63DLC00402**	Price
Green	9	8 - 12	**MH63DLC91149**	Price
Ivory	1	0 - 2	**MH63DLC00396**	Price
Ivory	1	0 - 2	**MH63DLC91134**	Price
Light Gray	1/2	0 - 1	**MH63DLC00394**	Price
Orange	6	4 - 8	**MH63DLC00399**	Price
Orange	6	4 - 8	**MH63DLC00400**	Price
Purple	60	54 - 80	**MH63DLC00413**	Price
Red	30	22 - 36	**MH63DLC00409**	Price
Yellow	3	2 - 4	**MH63DLC00398**	Price
Yellow	3	2 - 4	**MH63DLC91139**	Price

Size - 5 Gram				
Color	Grade	Micron Size	Order No.	Price
Aqua	12	9 - 15	**MH63DLC00376**	Price
Black	90	80 - 100	**MH63DLC00389**	Price
Black	90	80 - 100	**MH63DLC00390**	Price
Blue	15	12 - 22	**MH63DLC00379**	Price
Blue	15	12 - 22	**MH63DLC91153**	Price
Brown	45	36 - 45	**MH63DLC00384**	Price
Brown	45	36 - 45	**MH63DLC91163**	Price
Gray	1/4	0 - 1/2	**MH63DLC00362**	Price
Gray	1/4	0 - 1/2	**MH63DLC91123**	Price
Green	9	8 - 12	**MH63DLC00375**	Price
Green	9	8 - 12	**MH63DLC91148**	Price
Ivory	1	0 - 2	**MH63DLC00368**	Price
Ivory	1	0 - 2	**MH63DLC91133**	Price
Light Gray	1/2	0 - 1	**MH63DLC00363**	Price
Light Gray	1/2	0 - 1	**MH63DLC00417**	Price
Orange	6	4 - 8	**MH63DLC00372**	Price
Orange	6	4 - 8	**MH63DLC91143**	Price
Purple	60	54 - 80	**MH63DLC00386**	Price
Purple	60	54 - 80	**MH63DLC00388**	Price
Red	30	22 - 36	**MH63DLC00383**	Price
RED	30	22 - 36	**MH63DLC91158**	Price
Yellow	3	2 - 4	**MH63DLC00667**	Price
Yellow	3	2 - 4	**MH63DLC91138**	Price

Goblet Buffs



- Used for cutting or coloring with Red Lion Greaseless for Satin Finishing or a mirror finish
- Used on two surfaces–the top and sides
- For any inside surface where the sides and bottom must be finished

	Cylinder End		Round End		Square End		Tapered	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1-1/2	-	-	MG95599R112GB	Price	MG95599S112GB	Price	MG95599T112GB	Price
2	MG95599C200GB	Price	MG95599R200GB	Price	MG95599S200GB	Price	MG95599T200GB	Price
2-1/2	MG95599C212GB	Price	MG95599R212GB	Price	MG95599S212GB	Price	MG95599T212GB	Price
3	MG95599C300GB	Price	MG95599R300GB	Price	MG95599S300GB	Price	MG95599T300GB	Price
3-1/2	MG95599C312GB	Price	MG95599R312GB	Price	MG95599S312GB	Price	MG95599T312GB	Price
4	-	-	MG95599R400GB	Price	MG95599S400GB	Price	-	-
5	-	-	MG95599R500GB	Price	MG95599S500GB	Price	-	-
6	-	-	MG95599R600GB	Price	MG95599S600GB	Price	-	-

1/4" Shank Mandrel for Goblet Buff: MG95-505TM

Premium Polishing Bonnets

Durable, High Quality Compound / Polishing-buffing Bonnets



- Heavy drawstring ties adjust to all backing pads
- Wool Blend – Completely uniform pile and density
- Withstands multiple cleanings and machine washings

Dia. (in.)	Order No.	Price
6	MG95PB5WB	Price
7	MG95PB7WB	Price

Durable Denim Buffing Wheels



- Longer lasting for higher production
- Heavy duty cut–good color
- Good all-a-round buffing wheels
- 3/8" Spiral sewn
- 1/2" Arbor hole

Dia. (in.)	Order No.	Price
6	MG95DB0638	Price
8	MG95DB0838	Price
10	MG95DB1038	Price

CGW Felt / Cotton Buffing Flap Discs - Type 27



- Flexible felt/wool disc easily works with contoured surfaces for consistent polishing action
- Fast mirror finishes
- Use on stainelss steel, aluminun, sheet metal mild steel and brass
- CGW White (1200 Grit) Compound for aluminum, steel, and stainless steel
- **MUST USE WITH BUFFING COMPOUND**

Dia. (in.)	Hole (in.)	RPM	Order No.	Price
4-1/2	7/8	13300	MG9049698	Price
5	7/8	12200	MG9049699	Price

CGW Polishing Compound



- Compound will not discolor metals
- White SS51 (1200 Grit) compound hels buff aluminum, steel, stainless and natural stone to the desired finish without adding scratches
- High gloss

Grit	Order No.	Price
1200	MG9049652	Price

Felt Bobs

Made in four densities: **S** (Soft), **M** (Medium), **H** (Hard), and **RH** (Rock Hard).

Please specify Order No. and Density when ordering.

Standard Shaped Felt Bobs



Order No. MJ59MS1 1/2 × 1 × 1/8" Price Price

Order No. MJ59MS3 1/2 × 1 × 1/8" Price Price

Order No. MJ59MS4 1/2 × 3/4 × 1/8" Price Price

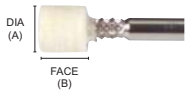
Order No. MJ59MS6 1/2" Dia. Price Price

Other shaped sizes available upon request.

Standard Plain Felt Bobs

Other sizes available upon request.

Dia. (A)	Face (B)	Mandrel (C)	Order No.	Price
1/4"	1/4"	1/8"	MJ59MP1	Price
3/8"	1/2"	1/8"	MJ59MP4	Price
1/2"	1/2"	1/8"	MJ59MP5	Price
3/4"	3/4"	1/8"	MJ59MP8	Price
1"	1"	1/4"	MJ59MP11	Price



WENDT USA Wheel Arbor for Quad-Keyway

New!



Shank Dia. (in.)	RPM	For Use With	Order No.	Price
3/4	5000	4" Wide x 3/4 Keway arbor	MJ69999930	Price

WENDT USA Felt Polishing Flap Rolls



- Felt Rolls are used in combination with a bufing or polishing comound to produce up to a mirror finish
- The individual flaps are flexible and allow a cool air flow
- Made from 70% wool and a designed to tackle large surface areas

New!

Size (in.)	Grit	Order No.	Price
4-1/4 x 2 x 5/8-11	Soft	MJ69323811	Price
4-1/4 x 4 x 5/8-11	Soft	MJ69323831	Price
4 x 2 x 3/4 keyway	Soft	MJ69323801	Price
4 x 4 x 3/4 keyway	Soft	MJ69323821	Price

Superior Abrasives Quick Change Buffing Discs



- Non-abrasive material to carry abrasive media
- Absorbent fibers allow for cushioned control in final finishing
- Ideal flat surfaces such as stainless, brass, and aluminum
- 2" Holder MM59-64922, 3" Holder MM59-64949

Size (in.)	Order No.	Price
2	MM6440547	Price
3	MM6440548	Price

Felt Polishing Flap Discs

Type 27 (Flat)



- Flap discs of 100% wool felt affixed to a fiberglass backing plate to create a thick polishing pad
- The individual flaps are flexible, and allow a cool air flow
- Felt discs are used with polishing compounds or pastes to provide up to a mirror finish. Ideal for work on irregular or contoured surfaces
- Felt products should always be run at lower speeds than coated abrasives this will extend disc life and improve the finish
- Minimum ordering quantities would apply



Available in other densities:

- D=Flap Thickness, H=Felt Density
- Custom products also available in less dense (H18) and more dense (H52) grades of felt

				Extra Flexible		Std Flexibility	
Dia. (in.)	Hole Size (in.)	Max RPM	Std. Pkg.	Order No.	Price	Order No.	Price
4-1/2	5/8-11	10,000	5	**MJ6945626**	Price	**MJ6945621**	Price
4-1/2	7/8	10,000	5	**MJ6945616**	Price	**MJ6945611**	Price

Optimum RPM for best results: 1,650 - 2,500

Felt Polishing Mni Flap Discs

New!



- Mini Felt Polishing Flap Discs are made from 70% wool felt affixed to a plastic backing plate to create a thick polishing pad
- The individual flaps are flexible and allow a cool air flow
- Used with polishing compounds or pastes to provide up to a mirror finish

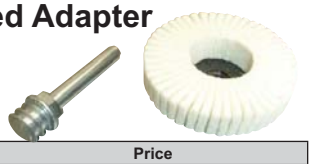
Style - Internal Thread					
		Medium		Soft	
Dia. (in.)	RPM	Order No.	Price	Order No.	Price
2	19100	**MJ69245682**	Price	**MJ69245681**	Price
3	12700	**MJ69245692**	Price	**MJ69245691**	Price

Style - Type R					
		Medium		Soft	
Dia. (in.)	RPM	Order No.	Price	Order No.	Price
2	19100	**MJ69245683**	Price	**MJ69245680**	Price
3	12700	**MJ69245693**	Price	**MJ69245690**	Price

1/4" Shank Threaded Adapter

- Fits both 2" and 3" Wendt Mini Flap Discs with internal thread

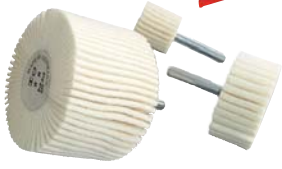
New!



Order No.	Price
MJ69230999	Price

Mini Felt Polishing Flap Wheels

New!



- Mounted Felt Flap Wheels replace cotton bobs, buffs, and solid points in polishing applications
- Made from 70% wool felt and will not burn or smear the workpiece
- Used with polishing compounds or pastes to provide up to a mirror finish

Dia. (in.)	Face Width (in.)	Shank Size (in.)	Grit Size	RPM	Std. Pack	Order No.	Price
3/4	3/4	1/8	MEDIUM	15000	10	**MJ69122602**	Price
1	1	1/8	MEDIUM	15000	10	**MJ69122622**	Price

Unmounted Felt Polishing Flap Wheels

- Made from 70% wool felt and will not burn or smear the workpiece
- Unique flap construction is flexible and runs cooler
- Used with polishing compounds or pastes to provide up to a mirror finish

New!



Dia. (in.)	Face Width (in.)	Hole Size (in.)	RPM	Order No.	Price
6	1	1	3700	**MJ69346051**	Price
6	2	1	3200	**MJ69346111**	Price

Felt Straight Cartridge Rolls & Mandrels

New!

- Coiled construction gives you the advantage of always using clean felt only by peeling off the top felt layer & cutting it back
- Made from 70% wool felt affixed to a plastic backing plate to create a thick polishing pad
- Used with polishing compounds or pastes to provide up to a mirror finish

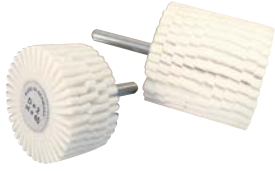


Type - Polishing Cartridge Roll			
Size	Grit	Order No.	Price
5/16 x 1 x 1/8	Medium	**MJ69159651**	Price
1/2 x 1 x 1/8	Medium	**MJ69159661**	Price
1/2 x 1 x 1/8	Medium	**MJ69160801**	Price
1/2 x 1-1/2 x 1/8	Medium	**MJ69159671**	Price

Type - Polishing Cartridge Roll Mandrel		
Size	Order No.	Price
1/8 x 3/4 x 1/8	**MJ69161811**	Price
3/4 x 1/8 x 1	**MJ69161821**	Price
1 x 1/8 x 1	**MJ69161813**	Price
1 x 1/8 x 1/4	**MJ69161827**	Price

Felt Polishing Mounted Flap Wheel Brushes

New!

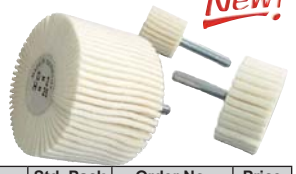


- Mounted Felt Flap Wheels replace cotton bobs, buffs, and solid points in polishing applications
- Made from 70% wool felt and will not burn or smear the workpiece
- Used with polishing compounds or pastes to provide up to a mirror finish

Dia. (in.)	Face Width (in.)	Shank Size (in.)	Grit Size	RPM	Std. Pack	Order No.	Price
2	1	1/4	Medium	13700	10	**MJ69120762**	Price
2	2	1/4	Medium	13700	10	**MJ69120772**	Price
3	1	1/4	Medium	8600	10	**MJ69120782**	Price
3	2	1/4	Medium	8600	10	**MJ69120792**	Price

Felt Polishing Mounted Flap Wheels

New!



- Mounted Felt Flap Wheels replace cotton bobs, buffs, and solid points in polishing applications
- Made from 70% wool felt and will not burn or smear the workpiece
- Used with polishing compounds or pastes to provide up to a mirror finish

Dia. (in.)	Face Width (in.)	Shank Size (in.)	Grit	Std. Pack	Order No.	Price
1	1	1/4	MEDIUM	10	**MJ69120622**	Price
2	1	1/4	MEDIUM	10	**MJ69120662**	Price
2	2	1/4	MEDIUM	10	**MJ69120672**	Price
3	1	1/4	MEDIUM	10	**MJ69120682**	Price
3	2	1/4	MEDIUM	10	**MJ69120702**	Price

Cotton Buffing Wheels - Mounted, Sewed, Loose and Bias

Types available: Mounted, Sewed, Loose, Bias

- Polish and buff metals or plastics
- Remove scratches, burn marks; improve finish
- Wheels are faced, giving true running and long life
- Ready for compound
- Mounted - Used for Off-Hand Polishing
- Sewed - For Firmness in Buffing and Cutting
- Loose - For High Lustre and Satin Finish
- Bias - For Faster Results and Long Life



Style - Bias Type					
Dia. (in.)	Ply	Hole (in.)	Thickness (in.)	Order No.	Price
6	15	1/2	1/2	**MG95603**	Price
8	15	1/2	1/2	**MG95803**	Price

Style - Loose Type						
Dia. (in.)	Ply	Hole (in.)	Thickness (in.)	Shank Size (in.)	Order No.	Price
6	20	1/2	1/2	-	**MG95601**	Price
8	20	1/2	1/2	-	**MG95801**	Price
10	20	1-1/4	1/4	1	**MG951001**	Price

Style - Mounted Type				
Dia. (in.)	Thickness (in.)	Shank Size (in.)	Order No.	Price
2	1	1/4	**MG9520M**	Price
3	1	1/4	**MG9530M**	Price

Style - Sewed Type					
Dia. (in.)	Ply	Hole (in.)	Thickness (in.)	Order No.	Price
6	20	1/2	1/2	**MG95602**	Price
8	20	1/2	1/2	**MG95802**	Price
10	20	1-1/4	1/4	**MG951002**	Price

Reducer bushings are available with 1", 3'4" and 5/8" holes.
See Index for reducer bushings.

Ventilated Bias Type

- More aggressive with 16 ply ruffle construction
- Longer life, cooler with ventilated center
- Grade 86/82 sheeting - untreated and treated
- **Untreated:** General purpose use - color buffing on light metals, cutting plastics and soft metals
- **Treated:** Stiff yellow sheeting for all purpose cutting non ferrous metals



				Treated - Stiff Yellow Sheeting for Non-Ferrous Metals		Untreated - General Purpose Use	
Dia. (in.)	Center Dia. (in.)	Flange Size † (in.)	Arbor Hole (in.)	Order No.	Price	Order No.	Price
8	3	4	3/4	**MG95180**	Price	**MG95140**	Price
10	3	4	3/4	**MG95157**	Price	**MG95150**	Price
12	5	6	1-1/4	**MG95158**	Price	**MG95151**	Price
14	5	6	1-1/4	**MG95159**	Price	**MG95152**	Price
16	7	8	1-1/4	**MG95160**	Price	**MG95153**	Price

† Note: OSHA regulations require use of flanges for safety.

1" Thick Buffing Wheels

With Telescopic Reducer Bushings to fit 1", 3/4", 5/8" & 1/2" Shafts



Dia. (in.)	Ply	Style	Order No.	Price
6	80	Loose Type	**MG95604**	Price
6	80	Sewed Type	**MG95605**	Price

Industrial Size Buffing Compound — Blister Packed

- White Rouge - For polishing chrome and stainless steel; 20 oz
- Emery - Black; For buffing steel, stainless and other ferrous metals (coarser than White Rouge); 16 oz
- Red Rouge - Jewelers Rouge; For brass, copper and other soft non-ferrous metals; 20 oz
- Tripoli - Brown; For non-ferrous metals (coarser than Red Rouge); 16 oz



Color	Description	Order No.	Price
Emery	For Steel/Other Ferrous Metals	**MG9562512**	Price
Red Rouge	For Brass/Copper	**MG9562515**	Price
Tripoli	For Non-Ferrous Metals	**MG9562513**	Price
White Rouge	For Chrome/Stainless Steel	**MG9562514**	Price

Cake size buffing compound also available.
Price on Request. - Ideal for do-it yourselfer and industrial user!

Greaseless Abrasive Compound

- Turn your buff into a flexible grinding wheel
- Ideal for aggressive removal of material prior to buffing
- Provides a satin or semi-bright finish. Various uses include polishing, burr removal, scratch finish, etc
- Tubes approx. 2-1/2 lbs (poly bag)
- Greaseless Compound Set - 10 lbs



Grit	Color	Order No.	Price
80	Blue	**MG9521118080B**	Price
120	Yellow	**MG9521118120Y**	Price
220	Green	**MG9521118220G**	Price
320	Red	**MG9521118320R**	Price
1ea. 80, 120, 220, 320	1 ea. Blue, Yellow, Green, Red	**MG95211180SET**	Price

STANDARD ABRASIVES Quick Change Felt Polishing Discs

- Final finishing on Aluminum, Brass and Chrome, when used with a metal polish
- Polishing small or tight areas, using small diameter discs
- Polishing large, open areas, using large diameter discs



		Rol-On		Turn-On	
Dia. (in.)	Material	Order No.	Price	Order No.	Price
1	Felt	-	-	**MM30840100**	Price
2	Felt	**MM30840380**	Price	**MM30840300**	Price
3	Felt	**MM30840480**	Price	**MM30840400**	Price

Measuring Tools



Bore and Hole Gages.....D87-D91, D181, D182
Calipers and Accessories.....D20-D32, D183, D184
Chamfer Gages.....D93, D94
Data Collection.....D79, D80
Depth Micrometers, Gages.....D14-D19
Drill, Tap Gages.....D179, D180
Edge Finder, Wigglers.....D195-D197
Electrical Test.....D131, D132
Enviroment Testing.....D128-D130
Force Gages.....D98-D103
Gage Blocks, & Gage Pins, Balls.....D108-D114, D117, D118
Hardness Testers.....D101-D104
Height Gages and Transfer Stands.....D81-D86
Indicators AGD, Test and Accessories.....D33-D58
Inside Micrometers.....D12, D13
Magnetic Bases and Indicator Holders, Stands.....D60-D70
Micrometers and Accessories.....D2-D11
Optical Inspection.....D121-D127, D155-D166
Radius Gages.....D185, D186
Reference Books.....D199-D202
Roughness Gages.....D105-D107
Scales (Count and Weight).....D97
Snap Gages.....D92
Squares and Levels.....D137-D145, D147-D149, D156-D159
Surface Plates.....D115, D116
Tachometers.....D129
Tapes and Rules.....D134-D136, D150-D155
Thickness Gages.....D95, D187
Thread Gaging.....D188-D194
Tool Sets.....D71-D78
V-Blocks, Set-up Tools.....D167-D178

PRECHECK Premium Outside Micrometers & Sets

- Balanced frame and thimble design to ensure easy handling and better readability
- Ratchet thimble for precise application of pressure
- Laser etched graduations and satin chrome carbide anvils
- Accuracy: .0001”
- Graduation .0001”
- Ball attachment included
- Standard included with all sizes over 1”
- 1 Year Warranty



Description - Outside Micrometer		
Range (in.)	Order No.	Price
0 - 1	**PC21OSM0101**	Price
1 - 2	**PC21OSM1201**	Price
2 - 3	**PC21OSM2301**	Price
3 - 4	**PC21OSM3401**	Price
4 - 5	**PC21OSM4501**	Price
5 - 6	**PC21OSM5601**	Price

Description - Outside Micrometer Set		
Range (in.)	Order No.	Price
0 - 3	**PC21OSMS0301**	Price
0 - 4	**PC21OSMS0401**	Price
0 - 6	**PC21OSMS0601**	Price

PRECHECK Outside Micrometer Sets

- Ratchet thimble
- Carbide tipped faces
- Spindle lock
- Insulated grip
- Satin chrome finish
- Case and wrench



Graduation - .0001		
Range (in.)	Order No.	Price
0 - 3	**NB603CRMS**	Price
0 - 4	**NB604CRMS**	Price
0 - 6	**NB606CRMS**	Price

Graduation - .001		
Range (in.)	Order No.	Price
0 - 3	**NB603CMSX**	Price

Mitutoyo Ratchet Thimble Micrometers

- Improved repeatability for both “expert” and novice users
- Constant force device allows easy one hand operation
- Clearly audible ratchet
- 102 Series features full wrap heat insulation cover
- Certificate of Inspection provided
- Speeder sleeve for quick thimble rotation
- Carbide measuring faces



Range (in./mm)	Graduation	Accuracy	Order No.	Price
0 - 1	.0001	±.0001	**MT80101-717**	Price
0 - 1	.0001	±.0001	**MT80102-717**	Price
0 - 1	.001	±.0001	**MT80101-711**	Price
0 - 1	.001	±.0001	**MT80102-711**	Price
0 - 25mm	0.001mm	±0.002mm	**MT80102-707**	Price
0 - 25mm	0.01mm	±0.002mm	**MT80102-701**	Price

Fowler Decimal Equivalent Outside Micrometers

- Includes Case and Standards, Spanner Wrench
- Parallelism .00005”
- Flatness .00003”
- Diameter of measuring faces .256”
- Smooth action ratchet style thimble for exact and repetitive settings
- Sleeve and thimble have microfine black graduations contrasted with satin chrome
- Satin chrome finish forged steel frame is tapered for hard to get locations
- Decimal Equivalents on frame



Range (in.)	Resolution	Accuracy	Order No.	Price
1 - 2	.0001	.00016	**NA55522350022**	Price
2 - 3	.0001	.00016	**NA55522350032**	Price

PRECHECK Outside Micrometers

- Carbide tipped
- Lock nut
- Supplied with fitted case and adjusting wrench
- Satin chrome finish
- Heat-insulated grip plate
- Ratchet thimble
- 2” and larger supplied with standards



Graduation - .0001		
Range (in.)	Order No.	Price
0 - 1	**NB60CRM1**	Price
1 - 2	**NB60CRM2**	Price
2 - 3	**NB60CRM3**	Price
3 - 4	**NB60CRM4**	Price
4 - 5	**NB60CRM5**	Price
5 - 6	**NB60CRM6**	Price
6 - 7	**NB60CRM7**	Price
7 - 8	**NB60CRM8**	Price
8 - 9	**NB60CRM9**	Price
9 - 10	**NB60CRM10**	Price
10 - 11	**NB60CRM11**	Price
11 - 12	**NB60CRM12**	Price

Graduation - .001		
Range (in.)	Order No.	Price
0 - 1	**NB60CM001**	Price

Fowler 0-1/2" Outside Micrometer

- 0-1/2” Range
- .001” Graduation
- 2.825” Overall length
- Forged steel frame
- Anvil and spindle are hardened and precision ground with micro-lapped ends
- Satin chrome finish with clear, crisp graduations on barrel and thimble
- Diameter of measuring faces: .197”
- Includes fitted case



Order No.	Price
NA5552230000	Price

Fowler 0-1" Outside Micrometer

- Black decimal equivalents on satin chrome finished forged steel frame
- Graduations: .0001”
- Ratchet thimble and locking nut
- Complete in case



Order No.	Price
NA55522350011	Price

Fowler Outside Micrometers

- Hammertone blue baked-enamel finish
- Microfine graduations on satin-chrome finish
- Carbide-tipped .256” measuring faces
- Spindle lock
- Ratchet stop thimble
- Includes standard on sizes over 1”
- 6” to 12” sizes available
- Supplied with fitted case and wrench



Range (in.)	Graduation (in.)	Order No.	Price
0 - 1	.0001	**NA5552240101**	Price
1 - 2	.0001	**NA5552240102**	Price
3 - 4	.0001	**NA5552240004**	Price
5 - 6	.0001	**NA5552240006**	Price
12 - 13	.0001	**NA5552240013**	Price

Mitutoyo Outside Micrometers

- Hammertone, baked-enameled-finished frame
- Spindle lock
- Supplied with fitted carrying case
- Satin-chrome finished sleeve and ratchet thimble
- Carbide tipped measuring faces
- Meets or exceeds Federal Specifications
- Micrometers over 1” supplied with standard



Graduation (in./mm) - .0001		
Range (in./mm)	Order No.	Price
0 - 1	**MT80103-260**	Price
1 - 2	**MT80103-262**	Price
2 - 3	**MT80103-217**	Price
3 - 4	**MT80103-218**	Price
4 - 5	**MT80103-219**	Price
5 - 6	**MT80103-220**	Price
6 - 7	**MT80103-221**	Price
7 - 8	**MT80103-222**	Price
8 - 9	**MT80103-223**	Price
9 - 10	**MT80103-224**	Price
10 - 11	**MT80103-225**	Price
11 - 12	**MT80103-226**	Price

Graduation (in./mm) - .001		
Range (in./mm)	Order No.	Price
0 - 1	**MT80103-177**	Price
1 - 2	**MT80103-178**	Price
2 - 3	**MT80103-179**	Price
3 - 4	**MT80103-180**	Price
4 - 5	**MT80103-181**	Price
5 - 6	**MT80103-182**	Price
6 - 7	**MT80103-183**	Price
7 - 8	**MT80103-184**	Price
8 - 9	**MT80103-185**	Price
9 - 10	**MT80103-186**	Price
10 - 11	**MT80103-187**	Price
11 - 12	**MT80103-188**	Price

Graduation (in./mm) - 0.01mm		
Range (in./mm)	Order No.	Price
0 - 25mm	**MT80103-137**	Price
25 - 50mm	**MT80103-138**	Price
50 - 75mm	**MT80103-139-10**	Price
75 - 100mm	**MT80103-140-10**	Price
100 - 125mm	**MT80103-141-10**	Price

INSIZE Outside Micrometers

- Carbide measuring faces
- .0001 Graduation
- Ratchet stop
- Lock nut
- All sizes larger than 1” supplied with standard
- Supplied with certification
- Includes case



Range	Model No.	Order No.	Price
0 - 1	3203-1A	**SZ2032031A**	Price
1 - 2	3203-2A	**SZ2032032A**	Price
2 - 3	3203-3A	**SZ2032033A**	Price
0 - 3 Set	3203-33A	**SZ20320333A**	Price
0 - 6 Set	3203-66A	**SZ20320366A**	Price

Mitutoyo Micrometer Sets

- Hammertone-finished frame
- Spindle lock
- Supplied with fitted carrying case
- Carbide-tipped faces
- Meets or exceeds Federal Specifications
- Setting standards

†1” and 2” micrometer have friction thimbles



Thimble Type - Ratchet			
Range (in.)	Graduation (in.)	Order No.	Price
0 - 3	.001	**MT80103-929**	Price

Thimble Type - Ratchet/Friction			
Range (in.)	Graduation (in.)	Order No.	Price
0 - 3	.0001	**MT80103-922†**	Price

Mitutoyo Enamel Finish Micrometers

- Carbide faces
- Clear graduations on satin-chrome finish
- Complete with fitted carrying case
- Hammertone baked-enamel-finished frame
- Micrometers over 1” supplied with standard
- Friction thimble



Range (in.)	Graduation (in.)	Order No.	Price
0 - 1	.0001	**MT80103-135**	Price
1 - 2	.0001	**MT80103-136**	Price

Starrett Series 230 Micrometers

MADE IN THE USA

Satin Chrome Finish

- Lapped finish on anvil and spindle faces
- Quick reading figures every thousandth numbered
- Spindle lock (except for plain model - 230P)
- 0-1” Range
- Convenient decimal equivalents

†With standard letter of certification



Graduation (in.) - .0001				
Starrett No.	Thimble Type	Face	Order No.	Price
T230RL	Ratchet	Steel	**MV7050943**	Price
T230XFL	Friction	Carbide	**MV7050947**	Price
T230XFL	Friction	Carbide	**MV7066916†**	Price
T230XRL	Ratchet	Carbide	**MV7050944**	Price
T230XRL	Ratchet	Carbide	**MV7064401†**	Price

Graduation (in.) - .001				
Starrett No.	Thimble Type	Face	Order No.	Price
230P	Plain	Steel	**MV7050932**	Price
230RL	Ratchet	Steel	**MV7050935**	Price

Starrett Outside Micrometers

Series T444

- Satin chrome finish
- Balanced frame
- Insulated frame
- Ratchet thimble
- Carbide faces
- Reading in .0001" with a vernier scale on the sleeve



Range (in.)	Starrett No.	Order No.	Price
0 - 1	T444.1XRL-1	**MV7052083**	Price
1 - 2	T444.1XRL-2	**MV7052084**	Price
2 - 3	T444.1XRL-3	**MV7052085**	Price
3 - 4	T444.1XRL-4	**MV7052086**	Price
4 - 5	T444.1XRL-5	**MV7052087**	Price
5 - 6	T444.1XRL-6	**MV7052088**	Price

Starrett 0 - 6" (0 - 150mm) Outside Micrometer Set

Model No. ST444.1CXRLZ

- Measuring range 0 - 6" (0 - 150mm)
- Standard included with sizes over 1" (25mm)
- Graduation 0001"
- Carbide tipped faces
- Ratchet stop
- Lock nut
- Satin chrome finish on spindle



Order No.	Price
MV7072532	Price

Starrett Series 436 Micrometers Sets

- Staggered lines and distinct, quick reading figures on sleeve
- Every thousandth numbered
- Black enamel finished frames
- Satin chrome finish on sleeve and thimble
- Spindle lock
- Standards provided for sizes over 1"
- Carbide faces

MADE IN THE USA



Graduation (in.) - .0001				
Range (in.)	Starrett No.	Thimble	Order No.	Price
0 - 3	ST436.1AXRLZ	Ratchet	**MV7068037**	Price
0 - 4	ST436.1BXRLZ	Ratchet	**MV7068041**	Price
0 - 6	ST436.1CXRLZ	Ratchet	**MV7068045**	Price

Graduation (in.) - .001				
Range (in.)	Starrett No.	Thimble	Order No.	Price
0 - 3	S436.1AXRLZ	Ratchet	**MV7068036**	Price
0 - 6	S436.1CXRLZ	Ratchet	**MV7068044**	Price
0 - 12	S436EXRLZ	Ratchet	**MV7052012**	Price

Starrett Series 436 Outside Micrometers

- Staggered lines and distinct, quick reading figures on sleeve
- Every thousandth numbered
- Black enamel finished frames
- Satin chrome finish on sleeve and thimble
- Standards provided for sizes over 1"
- Spindle lock
- Carbide faces



MADE IN THE USA

Graduation (in.) - .0001						
			Non-Certified		Standard Letter of Certification	
Range (in.)	Starrett No.	Thimble	Order No.	Price	Order No.	Price
0 - 1	T436.1XFL-1	Friction	**MV7067999**	Price	**MV7068000**	Price
0 - 1	T436.1XRL-1	Ratchet	**MV7067997**	Price	**MV7067998**	Price
1 - 2	T436.1XFL-2	Friction	**MV7068007**	Price	**MV7068008**	Price
1 - 2	T436.1XRL-2	Ratchet	**MV7068005**	Price	**MV7068006**	Price
2 - 3	T436.1XFL-3	Friction	**MV7068015**	Price	**MV7068016**	Price
2 - 3	T436.1XRL-3	Ratchet	**MV7068013**	Price	**MV7068014**	Price
3 - 4	T436.1XFL-4	Friction	**MV7068021**	Price	**MV7068022**	Price
3 - 4	T436.1XRL-4	Ratchet	**MV7068019**	Price	**MV7068020**	Price
4 - 5	T436.1XFL-5	Friction	**MV7068027**	Price	**MV7068028**	Price
4 - 5	T436.1XRL-5	Ratchet	**MV7068025**	Price	**MV7068026**	Price
5 - 6	T436.1XFL-6	Friction	**MV7068033**	Price	**MV7068034**	Price
5 - 6	T436.1XRL-6	Ratchet	**MV7068031**	Price	**MV7068032**	Price

Graduation (in.) - .001						
			Non-Certified		Standard Letter of Certification	
Range (in.)	Starrett No.	Thimble	Order No.	Price	Order No.	Price
0 - 1	436.1XRL-1	Ratchet	**MV7067994**	Price	**MV7067995**	Price
1 - 2	436.1XRL-2	Ratchet	**MV7068003**	Price	**-**	-

TESA / brown & sharpe Valueline Micrometers

- Satin-chrome thimble
- Straight-line graduations
- Black enamel frame
- Spindle lock
- Carbide-tipped anvils
- Fixed/friction thimble
- Meets Federal Specifications



Range (in.)	Graduation (in.)	Order No.	Price
0 - 1	.0001	**MV4525943**	Price
1 - 2	.0001	**MV4525944**	Price
2 - 3	.0001	**MV4525945**	Price
3 - 4	.0001	**MV4525946**	Price
4 - 5	.0001	**MV4525947**	Price
5 - 6	.0001	**MV4525948**	Price

TESA / brown & sharpe Valueline Micrometer Sets

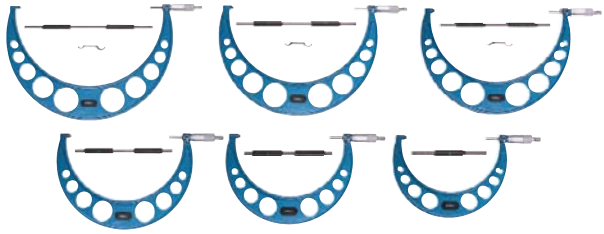


Range (in.)	Description	Order No.	Price
0 - 3	With Standards	**MV4525984**	Price
0 - 6	Without Standards	**MV4525987**	Price

Fowler Micrometer Sets

0-6", 6-12", 0-12"

- Hammertone blue baked enamel finish
- Microfine graduations on satin chrome finish
- Carbide-tipped measuring faces (.256" dia.)
- Graduation .0001"
- Flatness .00003"
- Quick, easy zero adjustment on sleeve
- Positive lever locking clamp
- Spindle thread hardened, ground and lapped for ultimate accuracy
- Anvil & spindle hardened and precision ground with microlap finish on tips
- Meets or exceeds federal accuracy specs
- Includes standards for all sizes over 1", wrenches, and wooden case



Measuring Range	Fowler No.	Order No.	Price
0 - 6	52-215-006-1	**NA5552215006**	Price
0 - 12	52-215-012-1	**NA5552215012**	Price
6 - 12	52-215-612-1	**NA5552215612**	Price

PRO CHECK Premium Outside Micrometers

Mechanical Digital



- Ball attachment included
- Carbide tipped anvils
- Satin chrome spindle with ratchet thimble and spindle lock
- Hammertone finish with heat insulated grip plate
- Standards included on all sizes over 1"
- Includes fitted case and adjusting wrench
- 1 Year Warranty

Range (in.)	Order No.	Price
0 - 1	**PC21MDM0101**	Price
1 - 2	**PC21MDM1201**	Price
2 - 3	**PC21MDM2301**	Price
0 - 3 Set	**PC21MDMS0301**	Price

PRO CHECK Digital Micrometers



- Carbide tipped with ratchet thimble and spindle lock
- In fitted case with adjusting wrench
- Satin chrome finish with heat insulated grip plate
- Sizes over 1" are supplied with standard
- Meets or exceeds Federal specifications

- Digital Outside Micrometer			
Range (in.)	Graduation (in.)	Order No.	Price
0 - 1	.0001	**NB60CDM1**	Price
1 - 2	.0001	**NB60CDM2**	Price
2 - 3	.0001	**NB60CDM3**	Price
3 - 4	.0001	**NB60CDM4**	Price

- Digital Outside Micrometer Set			
Range (in.)	Graduation (in.)	Order No.	Price
0 - 3 Set	.0001	**NB603CDMS**	Price

Fowler Economy Outside Micrometers

- Carbide tipped measuring faces
- Ratchet thimble and locking nut
- Microfine graduations
- Standards provided for sizes over 1"
- Meets or exceeds federal accuracy specifications
- Complete in case





- Economy Outside Micrometer			
Range (in./mm)	Graduation (in./mm)	Order No.	Price
0 - 1	.0001	**NA5552229201**	Price
1 - 2	.0001	**NA5552229202**	Price
2 - 3	.0001	**NA5552229203**	Price

- Economy Outside Micrometer Set			
Range (in./mm)	Graduation (in./mm)	Order No.	Price
0 - 3 Set	.0001	**NA5552229213**	Price
0 - 100mm Set	0.01mm	**NA5552229220**	Price

Fowler Digit Counter Micrometers

- Carbide tipped measuring faces
- Insulated frames
- Positive locking nut on spindle
- Sizes over 1" supplied with standards
- Complete in case



- Digital Outside Micrometers			
Range (in.)	Graduation (in.)	Order No.	Price
0 - 1	.0001	**NA5552224001**	Price
1 - 2	.0001	**NA5552224002**	Price
2 - 3	.0001	**NA5552224003**	Price

- Digital Outside Micrometer Sets			
Range (in.)	Graduation (in.)	Order No.	Price
0 - 3 (Set)	.0001	**NA5552224103**	Price
0 - 75mm	0.01mm	**NA5552224220**	Price

Fowler EZ Read Digit Micrometers

- Graduation: .0001"
- Insulated steel frames
- Carbide tipped measuring faces
- Includes wrench and fitted case
- Includes standards on sizes over 1"



- Digital Outside Micrometers		
Range (in./mm)	Order No.	Price
0 - 1	**NA5552222201**	Price
1 - 2	**NA5552222202**	Price
2 - 3	**NA5552222203**	Price

- Digital Outside Micrometer Sets		
Range (in./mm)	Order No.	Price
0 - 3	**NA5552222233**	Price

Mitutoyo Digital Micrometers

- Spindle lock
- Microfine graduation on thimble
- Reads .001” on digital display and reads .0001” on thimble
- Satin-chrome finished sleeve and thimble
- Standards provided for sizes over 1”



Graduation - .0001			
Range (in./mm)	**Thimble Type**	**Order No.**	**Price**
0 - 1	Friction	**MT80193-211**	Price
1 - 2	Friction	**MT80193-212**	Price
2 - 3	Ratchet	**MT80193-213**	Price
3 - 4	Ratchet	**MT80193-214**	Price
10 - 11	Ratchet	**MT80193-421**	Price

Graduation - 0.001mm			
Range (in./mm)	**Thimble Type**	**Order No.**	**Price**
0 - 25mm	Ratchet	**MT80193-111**	Price
25 - 50mm	Ratchet	**MT80193-112**	Price
75 - 100mm	Ratchet	**MT80193-114**	Price

Graduation - 0.01mm			
Range (in./mm)	**Thimble Type**	**Order No.**	**Price**
50 - 75mm	Ratchet	**MT80193-103**	Price
75 - 100mm	Ratchet	**MT80193-104**	Price
125 - 150mm	Ratchet	**MT80193-106**	Price
200 - 225mm	Ratchet	**MT80193-109**	Price
225 - 250mm	Ratchet	**MT80193-110**	Price
275 - 300mm	Ratchet	**MT80193-132**	Price

Mitutoyo Digital Micrometer Sets

- Spindle lock
- Microfine graduation on thimble
- Reads .001” on digital display and reads .0001” on thimble
- Satin-chrome finished sleeve and thimble
- Standards provided for sizes over 1”

†1” and 2” micrometer have friction thimbles



Graduation - .0001			
Range (in./mm)	**Thimble Type**	**Order No.**	**Price**
0 - 3	Ratchet/Friction	**MT80193-923†**	650.00

Graduation - 0.001mm			
Range (in./mm)	**Thimble Type**	**Order No.**	**Price**
0 - 75mm	Ratchet	**MT80193-915**	Price

Graduation - 0.01mm			
Range (in./mm)	**Thimble Type**	**Order No.**	**Price**
0 - 75mm	Ratchet	**MT80193-901**	Price

Starrett 0-1" Digital Micrometers

MADE IN THE USA

- Reads .001” on digital display and reads .0001” on sleeve
- Spindle lock
- Also available with standard letter of certification



Starrett No.	Graduation	Thimble	Face	Order No.	Price
216FL-1	.001	Friction	Steel	**MV7055954**	Price
216RL-1	.001	Ratchet	Steel	**MV7055953**	Price
T216XFL-1	.0001	Friction	Carbide	**MV7055960**	Price

Fowler 0 - 1" Micrometer with Bluetooth Kit

- Transmitter acts as a keyboard wedge
- Rechargeable battery (transmitter) with automatic off switch
- Accuracy: ± .00016” / 0.004mm
- Resolution: .00005” / 0.001mm
- Carbide measuring faces
- Absolute & incremental modes
- Haz Code 05

New!



Range (in/mm)	Order No.	Price
0 - 1 / 0 - 25mm	**NA5554860001BT**	Price

INSIZE Digital Outside Micrometer

- Range 0 - 1 / 0 - 25mm
- Resolution .00005” / 0.001mm
- Ratchet thimble
- Carbide faces
- No data output
- Uses SR44 battery
- Supplied with certification



Model No.	Order No.	Price
3109-25E	**SZ20310925E**	Price

TESA TECHNOLOGY | brown & sharpe Micromaster Digital Micrometers

- Sleek, ergonomic design
- Large, easy-to-read 1/4” digital display
- Preset absolute and differential modes
- Battery life of 1 to 2 years of normal usage
- Automatic shut-off after 10 minutes
- Meets or exceeds applicable federal and DIN standards
- Complete with shop hardened, fitted case



B&S No.	Range (in./mm)	Accuracy (in./mm)	Order No.	Price
599-100	0 - 1.2 / 0 - 30mm	.00016	**MV4527266**	Price
599-125	0 - 1.2 / 0 - 30mm	.00016	**MV4527271**	Price
599-126	1 - 2 / 25 - 50mm	.0002	**MV4527272**	Price
599-127	2 - 3 / 50 - 75mm	.0002	**MV4527273**	Price

Note: 599-125, 126 and 127 are EP54 Compliant

PROCHECK Electronic Digital Micrometers

- Resolution: .00005”/0.001mm
- Absolute and incremental mode
- Ratchet thimble and spindle lock
- Carbide measuring faces
- Ball attachment included
- Supplied with storage case
- Replacement battery: KA56ECR2032
- 1 Year Warranty

IP40



Measuring Range	Order No.	Price
0 - 1 / 0 - 25.4mm	**PC20EM01255IP4**	Price
0 - 3 / 0 - 76.2mm	**PC20EM03755IP4**	Price
1 - 2 / 25.4 - 50.8mm	**PC20EM12505IP4**	Price
2 - 3 / 50.8 - 76.2mm	**PC20EM23755IP4**	Price

PROCHECK PREMIUM IP54 Electronic Digital Micrometers

- Resolution: .00005”/0.001mm
- Absolute and incremental mode
- Ratchet thimble and spindle lock
- IP54 protection against water drops and dust
- Carbide measuring faces
- Ball attachment included
- Supplied with storage case
- Replacement battery: KA56ECR2032
- 1 Year Warranty

IP54



Measuring Range	Order No.	Price
0 - 1 / 0 - 25.4mm	**PC20EM01255IP5**	Price
0 - 3 / 0 - 76.2mm	**PC20EM03755IP5**	Price
1 - 2 / 25.4 - 50.8mm	**PC20EM12505IP5**	Price
2 - 3 / 50.8 - 76.2mm	**PC20EM23755IP5**	Price

PROCHECK PREMIUM 0-3" IP54 SmartMic Micrometer Set

New!

WIRELESS CAPABLE

SMART CONNECT

IP54

- Inch / metric measuring modes
- Easy-to-read extra large LCD display
- Metal thimble with ratchet for consistent applications of measuring force
- Carbide anvil
- SPC Data Port
- Compatible with 3 Procheck data output options: USB or Bluetooth wireless and hardwire connect (Not included)



Order No.	Price
PC20EM03SMLI5	Price

PROCHECK PREMIUM IP54 SmartMic Micrometers

New!

WIRELESS CAPABLE

SMART CONNECT

IP54

- Inch / metric measuring modes
- Easy-to-read extra large LCD display
- Metal thimble with ratchet for consistent applications of measuring force
- Carbide anvil
- SPC Data Port
- Compatible with 3 Procheck data output options: USB or Bluetooth wireless and hardwire connect (Not included)
- Haz Code: HAZ05

Range (in.)	Order No.	Price
0 - 1	**PC20EM01SMLI5**	Price
1 - 2	**PC20EM12SMLI5**	Price
2 - 3	**PC20EM23SMLI5**	Price
3 - 4	**PC20EM34SMLI5**	Price
4 - 5	**PC20EM45SMLI5**	Price
5 - 6	**PC20EM56SMLI5**	Price



PROCHECK PREMIUM IP65 Electronic Digital Micrometer with Output

USB CONNECT

IP65

- 0-1” / 0-25.5mm Range
- .00005”/0.001mm Resolution
- Absolute and incremental mode
- Ratchet thimble and spindle lock
- Data output port (PC26DCBS4PIN USB/SPC kit optional)
- IP65 protection against water spray and dust
- Carbide measuring face
- Ball attachment included
- Supplied with storage case
- Replacement battery: KA56ECR2032
- 1 Year Warranty



Order No.	Price
PC20EM01255IP6	Price

PROCHECK ABSOLUTE IP65 Electronic Quick Reading Micrometer with Output

IP65

ABSOLUTE CONNECT

WIRELESS CAPABLE

- Lever actuated for quick measurement reading
- Accuracy: ±.00016”/0.004 mm
- Absolute and incremental mode
- Ratchet thimble, spindle lock and automatic shutoff
- Data output port (PC26DCBS5PIN USB/SPC kit optional)
- IP65 protection against water spray and dust
- Carbide non rotating measuring face
- Ball attachment included
- Supplied with storage case
- Replacement battery: KA56ECR2032
- 1 Year Warranty



Measuring Range	Resolution	Order No.	Price
0 - 1 / 0 - 25.4mm	.00005 / .001mm	**PC20EM015IP6ABR**	Price

PROCHECK Output Cables, USB with Data Send Control

- Connect tools via USB port and send data to spreadsheets or SPC program (program supplied separately)

Size	Order No.	Price
Absolute/Smart Connect Large 5 Pin L5 Connector/ USB	**PC26DCBL5PIN**	Price
USB Connet Small 4 Pin S4 Connector/USB	**PC26DCBS4PIN**	Price



Mitutoyo Coolant Proof Micrometers

Series 293 — with Dust/Water Protection Conforming to IP65 Level

- IP65 protection level, enabling use in environments exposed to cutting oil, etc
  -note: anti-corrosion treatment is required after use
- .00005”/0.001mm Resolution
- Carbide tipped measuring faces
- Uses SR44 battery (included)
- Auto power ON/OFF function
- Standard included on sizes over 1”/25mm
- Supplied in fitted case
- Replacement battery order number is KA56357BP3



Type - Data Output					
Range (in.)	Resolution	Thimble	Accuracy	Order No.	Price
0 - 1 / 0 - 25.4mm	.00005 / 0.001mm	Friction Thimble	±.00005	**MT80293-335-30**	Price
0 - 1 / 0 - 25.4mm	.00005 / 0.001mm	Ratchet Thimble	±.00005	**MT80293-334-30**	Price
0 - 1 / 0 - 25.4mm	.00005 / 0.001mm	Ratchet Thimble	±.00005	**MT80293-180-30**	Price
0 - 1 / 0 - 25.4mm	.00005 / 0.001mm	Ratchet Stop	±.00005	**MT80293-330-30**	Price
1 - 2 / 25.4 - 50.8mm	.00005 / 0.001mm	Ratchet Stop	±.00005	**MT80293-331-30**	Price
1 - 2 / 25.4 - 50.8mm	.00005 / 0.001mm	Friction Thimble	±.00005	**MT80293-336-30**	Price
2 - 3 / 50.8 - 76.2mm	.00005 / 0.001mm	Ratchet Stop	±.00005	**MT80293-332-30**	Price
3 - 4 / 76.2 - 101.6mm	.00005 / 0.001mm	Ratchet Thimble	±.00005	**MT80293-183-30**	Price
3 - 4 / 76.2 - 101.6mm	.00005 / 0.001mm	Ratchet Stop	±.0001	**MT80293-333-30**	Price

Type - Non-Data Output					
Range (in.)	Resolution	Thimble	Accuracy	Order No.	Price
0 - 1 / 0 - 25.4mm	.00005 / 0.001mm	Ratchet Thimble	±.00005	**MT80293-185-30**	Price
0 - 1 / 0 - 25.4mm	.00005 / 0.001mm	Ratchet Thimble	±.0001	**MT80293-349-30**	Price
0 - 1 / 0 - 25.4mm	.00005 / 0.001mm	Ratchet Stop	±.00005	**MT80293-340-30**	Price
0 - 1 / 0 - 25.4mm	.00005 / 0.001mm	Ratchet Thimble	±.00005	**MT80293-344-30**	Price
0 - 1 / 0 - 25.4mm	.00005 / 0.001mm	Friction Thimble	±.00005	**MT80293-348-30**	Price
1 - 2 / 25.4 - 50.8mm	.00005 / 0.001mm	Ratchet Thimble	±.00005	**MT80293-186-30**	Price
1 - 2 / 25.4 - 50.8mm	.00005 / 0.001mm	Ratchet Stop	±.00005	**MT80293-341-30**	Price
3 - 4 / 76.2 - 101.6mm	.00005 / 0.001mm	Ratchet Thimble	±.0001	**MT80293-347-30**	Price
1 - 2 / 25.4 - 50.8mm	.00005 / 0.001mm	Ratchet Thimble	±.00005	**MT80293-345-30**	Price
2 - 3 / 50.8 - 76.2mm	.00005 / 0.001mm	Ratchet Stop	±.00005	**MT80293-342-30**	Price
2 - 3 / 50.8 - 76.2mm	.00005 / 0.001mm	Ratchet Thimble	±.00005	**MT80293-346-30**	Price
2 - 3 / 50.8 - 76.2mm	.00005 / 0.001mm	Ratchet Thimble	±.00005	**MT80293-187-30**	Price
3 - 4 / 76.2 - 101.6mm	.00005 / 0.001mm	Ratchet Stop	±.0001	**MT80293-343-30**	Price
3 - 4 / 76.2 - 101.6mm	.00005 / 0.001mm	Ratchet Thimble	±.00005	**MT80293-188-30**	Price

Mitutoyo Digimatic Micrometers

SERIES 293 MDC- Lite

- Carbide tipped measuring faces
- Uses (1) SR44 battery (included)
- Large LCD screen
- Resolution .00005” / 0.001mm
- No data output
- Supplied in fitted case
- Replacement battery order number is KA56357BP3



Measuring Range	Thimble Type	Order No.	Price
0 - 1 / 0 - 25.4mm	Friction Thimble	**MT80293-832-30**	Price
0 - 1 / 0 - 25.4mm	Ratchet Stop	**MT80293-831-30**	Price

Mitutoyo Quickmike

with Absolute Encoder



- Quick non-rotating spindle
- Absolute Encoder
- IP-54 protection resists water splash & shop floor contaminants
- SPC data output

Range (in./mm)	Resolution (in./mm)	Order No.	Price
0 - 1.2 / 0 - 30mm	.00005 / 0.001mm	**MT80293-676**	Price
1 - 2.2 / 25 - 55mm	.00005 / 0.001mm	**MT80293-677**	Price
2 - 3.2 / 50 - 80mm	.00005 / 0.001mm	**MT80293-678**	Price
3 - 4.2 / 75 - 105mm	.00005 / 0.001mm	**MT80293-679**	Price

Quickmike available up to 4.2”

Mitutoyo Coolant Proof Micrometer Sets

SERIES 293 — with Dust/Water Protection Conforming to IP65 Level



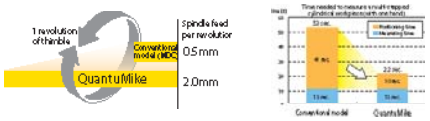
- SPC output
- Ratchet stop
- Carbide tipped measuring faces
- Resolution .00005” / 0.001mm
- SR44 batteries (included)
- Standards included for sizes over 1”
- Replacement battery order number is KA56357BP3

Measuring Range	Description	Order No.	Price
0 - 3 / 0 - 76.2mm	3 Pc. Set	**MT80293-960-30**	Price
0 - 4 / 0 - 101.6mm	4 Pc. Set	**MT80293-961-30**	Price

Mitutoyo QuantuMike Digital Outside Micrometers

- Resolution: 00005” / 0.001mm
- IP65 waterproof rated
- Quick acting spindle- 2X speed of standard spindle micrometers
- Ratchet thimble
- Carbide measuring
- Supplied with fitted plastic case and certificate of inspection







Measuring Range	Order No.	Price
0 - 1 / 0 - 25.4mm	**MT80293-185-30**	Price
1 - 2 / 25.4 - 50.8mm	**MT80293-186-30**	Price
2 - 3 / 50.8 - 76.2mm	**MT80293-187-30**	Price
3 - 4 / 76.2 - 101.6mm	**MT80293-188-30**	Price

Starrett Electronic Outside Micrometers

795 Series • SPC Output

- .00005" / 0.001mm Resolution
- Large LCD display
- Inch/mm conversion
- Carbide faces
- Satin chrome finish
- Balanced frame design
- Friction thimble shown



Starrett No.	Range	Thimble Type	Order No.	Price
S795.1BXFLZ	0 - 4 / 0 - 100mm	Friction	**MV7072535**	Price
795.1XFL-1	0 - 1 / 0 - 25mm	Friction	**MV7001100**	Price
795.1XFL-2	1 - 2 / 25 - 50mm	Friction	**MV7001101**	Price
795.1XFL-3	2 - 3 / 50 - 75mm	Friction	**MV7001102**	Price
795.1XFL-4	3 - 4 / 75 - 100mm	Friction	**MV7001103**	Price
795.1XRL-2	1 - 2 / 25 - 50mm	Ratchet	**MV7001109**	Price
795.1XRL-3	2 - 3 / 50 - 75mm	Ratchet	**MV7001110**	Price
795.1XRL-4	3 - 4 / 75 - 100mm	Ratchet	**MV7001111**	Price

Starrett Electronic Outside Micrometers

796 Series • No Output

- .00005" / 0.001mm Resolution
- Large LCD display
- Inch/mm conversion
- Carbide faces
- Satin chrome finish
- Balanced frame design
- Friction thimble shown



Starrett No.	Thimble Type	Range	Order No.	Price
796.1XFL-1	Friction	0 - 1 / 0 - 25mm	**MV7001104**	Price
796.1XFL-2	Friction	1 - 2 / 25 - 50mm	**MV7001105**	Price
796.1XFL-3	Friction	2 - 3 / 50 - 75mm	**MV7001106**	Price
796.1XFL-4	Friction	3 - 4 / 75 - 100mm	**MV7001107**	Price
796.1XRL-1	Ratchet	0 - 1 / 0 - 25mm	**MV7001116**	Price
796.1XRL-2	Ratchet	1 - 2 / 25 - 50mm	**MV7001117**	Price
796.1XRL-3	Ratchet	2 - 3 / 50 - 75mm	**MV7001118**	Price
796.1XRL-4	Ratchet	3 - 4 / 75 - 100mm	**MV7001119**	Price

Starrett 0 - 1" Electronic Micrometer

Model No. 3732XFL-1

New!

- Extra large digital display
- Automatic off after 30 minutes of non-use
- Smooth friction thimble for uniform pressure
- Micro-lapped carbide faced spindle and anvil
- Balanced frame for comfortable and accurate measuring
- Ring-type knurled lock nut for quick and sure locking
- Uses a single CR2032 3V battery
- Fitted plastic case



Measuring Range	Resolution	Accuracy	Order No.	Price
0 - 1 / 0 - 25.4mm	.00005 / 0.001mm	.0001 / .002mm	**MV7012268**	Price

Fowler Electronic Micrometers

Xtra Value II

XTRA-VALUE II

Dust, Water & Oil Resistant

- Jet black, gray enamel finish
- Large LCD display
- Resolution: .00005"/0.001mm
- Direct RS 232 output
- Carbide measuring faces
- Absolute and incremental modes
- Ratchet thimble
- Includes shop hardened case



Range (in./mm)	Order No.	Price
0 - 1 / 0 - 25mm	**NA5554870001**	Price
0 - 3 / 0 - 75mm	**NA5554870103**	Price
1 - 2 / 25 - 50mm	**NA5554870002**	Price
2 - 3 / 50 - 75mm	**NA5554870003**	Price
3 - 4 / 75 - 100mm	**NA5554870004**	Price

Fowler Electronic Micrometers

- Direct RS232 output
- Carbide measuring faces
- Includes case and wrench
- Large LCD display, 8.5mm
- Absolute and incremental modes
- Standards included on sets and sizes over 1"



Range (in./mm)	Resolution (in./mm)	Order No.	Price
0 - 1 / 0 - 25mm	.00005 / 0.001mm	**NA5554860001**	Price
1 - 2 / 25 - 50mm	.00005 / 0.001mm	**NA5554860002**	Price
2 - 3 / 50 - 75mm	.00005 / 0.001mm	**NA5554860003**	Price
0 - 3 / 0 - 75mm Set	.00005 / 0.001mm	**NA5554860103**	Price

Fowler Fluid Resistant IP54 Micrometer

- Protected to IP54 specifications
- Range: 0-1"/0-25mm
- Rugged steel design
- Large LCD Display
- Absolute and incremental modes
- Automatic switch off
- Resolution: .00005"/0.001mm
- Direct RS232 output
- Carbide measuring faces
- Includes ball attachment



Also features .0001" graduations on sleeve



Order No.	Price
NA5554815001	Price

PRECHECK PREMIUM Indicating Micrometers

- Insulated frame, and satin chrome finish
- Micro-fine graduations
- Carbide anvil & spindle
- Plain thimble
- Retracting button conveniently located to operators hand
- Includes case
- 1 Year Warranty



Measuring Range	Graduation	Order No.	Price
0 - 1	.00005	**PC21IDM01005**	Price
1 - 2	.00005	**PC21IDM12005**	Price

PROCHECK Multi-Anvil Micrometers

- Friction thimble
- Carbide tipped spindle face
- Two interchangeable anvils — flat and rod anvil are furnished



Range (in.)	Graduation (in.)	Order No.	Price
0 - 1	.0001	**NB60MAM1**	Price
1 - 2	.0001	**NB60MAM2**	Price

Mitutoyo Multi-Anvil Micrometers

- Carbide tipped spindle face
- Furnished with 2 anvils — flat anvil (MT80201216) rod anvil (MT80201217)
- Sizes over 1" and 0-25mm supplied with standards
- Can be used as a height gage



Range (in./mm)	Graduation (in./mm)	Order No.	Price
0 - 1	.0001	**MT80117-107**	Price
1 - 2	.0001	**MT80117-108**	Price

Starrett Multi-Anvil Micrometer

MADE IN THE USA

0-1" Range

- Furnished with 2 anvils
- Can be used as a height gage
- Interchangeable anvils for measuring tube or cylindrical walls
- Satin chrome finish, no glare and resists rust



Starrett No.	Graduation (in.)	Thimble	Face	Order No.	Price
220XFL-1	.001	Friction	Carbide	**MV7050746**	Price

Packed one in a box.

Fowler EZ-Read Digit Counter Micrometer

- Friction thimble
- Anvil rod: .120" dia. × 1" long
- Carbide tipped spindle face
- Includes rod, flat anvil, allen key & wrench



Range (in.)	Graduation (in.)	Order No.	Price
0 - 1	.0001	**NA5552252211**	Price

PROCHECK Tubing Micrometers

- .0001" Graduation
- Ratchet stop
- Carbide tipped spindle
- Laser engraved graduations
- Enamel frame



Range (in.)	Dia. of Anvil (in.)	Order No.	Price
0 - 1	.07	**NB60CTM107**	Price
0 - 1	.19	**NB60CTM119**	Price
1 - 2	.19	**NB60CTM219**	Price

Mitutoyo Tubing Micrometers

- Ratchet thimble
- Spindle lock



Range	Graduation	Anvil	Order No.	Price
0 - 1	.0001	.187	**MT80115-313**	Price
0 - 1	.0001	.315	**MT80115-314**	Price
0 - 25mm	0.01mm	3.5mm	**MT80115-308**	Price

Starrett Tubing Micrometer

MADE IN THE USA

- Plain thimble
- Black enamel frame
- Satin chrome finish on sleeve and thimble
- Convenient decimal equivalents



Starrett No.	Range (in.)	Graduation (in.)	Order No.	Price
569AXP	0 - 1	.001	**MV7066437**	Price

Special anvils can also be furnished — Prices on application
Case Only - MV7055397 Call for pricing

PROCHECK Ball Micrometer

- .0001" Graduation
- Enamel frame
- Carbide tipped spherical anvils
- Ratchet stop
- Range: 0-1"



Order No.	Price
NB60C2BM1	Price

Mitutoyo Ball Anvil Micrometers

- Spherical anvil contacts the inside curved surface providing a single point contact and permitting accurate gaging of the wall thickness to .0001"
- Carbide tipped measuring faces (anvil and spindle)
- Ratchet thimble
- Spindle lock
- Meets or exceeds federal specifications



Range	Graduation	Anvil	Order No.	Price
0 - 1	.0001	Ball Anvil	**MT80115-153**	Price
0 - 1	.0001	Ball Anvil	**MT80295-153†**	Price
0 - 1	.0001	Ball Anvil and Spindle	**MT80115-253**	Price
0 - 1	.0001	Ball Anvil and Spindle	**MT80295-253†**	Price
0 - 25mm	0.01mm	Ball Anvil	**MT80115-115**	Price
0 - 25mm	0.01mm	Ball Anvil and Spindle	**MT80295-215†**	Price

† With digital counter

Fowler EZ-Read Digit Counter Ball Micrometer

- Anvil and spindle are hardened, ground and micro-lapped
- Single ball anvil
- Meets federal accuracy specifications
- Includes fitted case



Range (in.)	Graduation (in.)	Order No.	Price
0 - 1	.0001	**NA5552244601**	Price

Fowler Electronic Ball Spindle/Anvil Micrometers

- Water resistant to IP54 specifications
- Carbide anvil/spherical anvil .175" radius
- True inch/metric conversion
- Resolution: .00005"/0.001mm
- Large LCD display
- Direct RS232 output
- Supplied in fitted case



Range (in./mm)	Order No.	Price
0 - 1 / 0 - 25mm	**NA5554860211**	Price
1 - 2 / 25 - 50 mm	**NA5554860212**	Price

Mitutoyo Tubing Micrometers

IP65

Spherical Anvil Type

- SPC output
- Resolution .00005"/0.001
- Accuracy ±.0001"
- Instant in/mm conversion
- Preset capability
- Ratchet thimble
- Spindle lock
- Carbide tipped measuring faces
- Measurement hold – zero-set key
- Automatic power-off
- Complete with a battery, key spanner, fitted carrying case



Range (in./mm)	Remarks	Order No.	Price
0 - 1 / 0 - 25.4mm	Spherical anvil / flat spindle	**MT80395-351-30**	Price

PRECHECK PREMIUM Electronic IP54 Ball Anvil Micrometers

- Ball anvil/flat spindle for measuring tubes or the insides of holes to outer edges
- Protected to IP54 specifications
- Large LCD display, 8.5mm
- Automatic switch off
- Resolution: .00005" / .001mm
- Accuracy: .00016" / .004mm
- Hardened steel measuring face
- Absolute & incremental modes
- 1 Year Warranty



Measuring Range	Order No.	Price
0 - 1 / 0 - 25mm	**PC20EMSB01SMLI5**	Price
1 - 2 / 25.4 - 50.8mm	**PC20EMSB12SMLI5**	Price

PRECHECK V-Anvil Micrometers

- .001" Graduation
- Ratchet stop
- Laser engraved graduations
- Enamel frame



- 3 Flute		
Range (in.)	**Order No.**	**Price**
.2 - .8	**NB60CVM13**	Price
.8 - 1.4	**NB60CVM23**	Price
1.4 - 2	**NB60CVM33**	Price

- 5 Flute		
Range (in.)	**Order No.**	**Price**
.2 - 1	**NB60CVM15**	Price
1 - 1.8	**NB60CVM25**	Price
1.8 - 2.6	**NB60CVM35**	Price

PRECHECK PREMIUM Electronic IP54 Ball Anvil Micrometers with Ball Spindle

- Carbide measuring faces
- Water Resistant to IP54 specifications
- Resolution: .00005" / .001mm
- Accuracy: .0015" / .004mm
- True inch/metric conversion
- Direct RS232 output
- Large easy-to-read LCD display
- Includes case
- 1 Year Warranty



Measuring Range	Order No.	Price
0 - 1 / 0 - 25mm	**PC20EMDB01SMLI5**	Price
1 - 2 / 25.4 - 50.8mm	**PC20EMDB12SMLI5**	Price

Mitutoyo V-Anvil Micrometer

- Spindle lock
- Ratchet thimble
- Satin chrome frame and thimble
- Complete with fitted carrying case
- Measuring faces, spindle tip and V-anvil, are carbide faced
- Supplied with setting standard



Range (in.)	Graduation	No. of Flutes	Order No.	Price
.093 - 1	.0001	3	**MT80114-202**	Price

TESA TECHNOLOGY / brown & sharpe Ball Anvil Micrometers

- Measures wall thickness of tubing
- Resolution .00005"/0.001mm
- Preset absolute and differential models
- Automatic shut-off after 10 minutes



Range (in./mm)	Anvil	Order No.	Price
0 - 1.2 / 0 - 30mm	Ball Anvil Only	**MV4027433**	Price
0 - 1.2 / 0 - 30mm	Ball, Spindle and Anvil	**MV4027435**	Price

PROCHECK Blade Micrometers

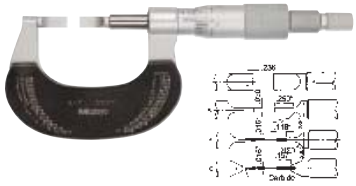
- .0001” Graduation
- Non-rotating spindle
- Laser engraved graduations
- Ratchet thimble
- Enamel frame



Range (in.)	Order No.	Price
0 - 1	**NB60CBM1**	Price
1 - 2	**NB60CBM2**	Price
2 - 3	**NB60CBM3**	Price

Mitutoyo Blade Type Micrometers

- Ratchet thimble
- Non-rotating spindle
- Sizes over 1” (25mm) supplied with standard
- Quick zero adjustment on sleeve
- Decimal equivalents marked on 1” models



Graduation - .0001			
Range (in.)	**Dimension**	**Order No.**	**Price**
0 - 1	A	**MT80122-125**	Price
0 - 1	B	**MT80122-135**	Price
0 - 1	C	**MT80122-151**	Price
1 - 2	A	**MT80122-126**	Price
2 - 3	A	**MT80122-127**	Price
3 - 4	A	**MT80122-128**	Price

Graduation - 0.01mm			
Range (in.)	**Dimension**	**Order No.**	**Price**
0 - 25mm	A	**MT80122-101**	Price

Starrett Blade Type Micrometers

MADE IN THE USA

- Non-rotating spindle prevents blade turning
- Blades .030” thick measure to 5/16” depth
- Speeder on thimble
- Used to measure diameter and depth of grooves, slots, keyways, recesses, etc.
- .001” Graduation



Range (in.)	Starrett No.	Order No.	Price
0 - 1	486P-1	**MV7052499**	Price
1 - 2	486P-2	**MV7052501**	Price
2 - 3	486P-3	**MV7052503**	Price
3 - 4	486P-4	**MV7052505**	Price
4 - 5	486P-5	**MV7052507**	Price
5 - 6	486P-6	**MV7052509**	Price

Case sold separately

Starrett Micrometer Cases Only

Size (in./mm)	Order No.	Price
2”/50mm(Series 436) 1”/25mm(486)	**MV7055400**	Price
3”/75mm(Series 436) 2”/50mm(486)	**MV7055222**	Price
4”/100mm(Series 436) 3”/75mm(486)	**MV7055223**	Price
5”/125mm(Series 436) 4”/100mm(486)	**MV7055224**	Price
6”/150mm(Series 436) 5”/125mm(486)	**MV7055225**	Price
7”/175mm(Series 436) 6”/150mm(486)	**MV7055276**	Price

Fowler Electronic Blade Micrometer

- Water resistant to IP54 specifications
- True inch/metric conversion
- Range: 0-1”/25mm
- Resolution: .00005”/0.001mm
- Large LCD display
- Direct RS232 output
- Supplied in fitted case



Order No.	Price
NA5554860241	Price

PROCHECK Disc Micrometers

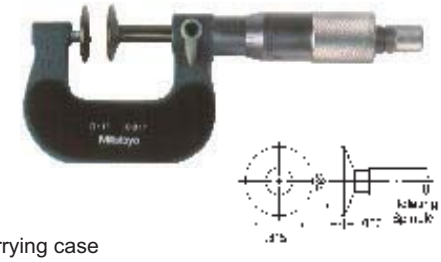
- .0001” Graduation
- Rotating spindle
- Disc for measuring gears and thickness of paper
- Ratchet stop



Range (in.)	Order No.	Price
0 - 1	**NB60CRDM1**	Price
1 - 2	**NB60CRDM2**	Price
2 - 3	**NB60CRDM3**	Price

Mitutoyo Disc Micrometers

- .030” Edge thickness
- Ratchet thimble
- Heat insulate grip
- Measuring discs are hardened and ground
- Disc .787” diameter
- Supplied with fitted carrying case



Range (in.)	Order No.	Price
0 - 1	**MT80123-125**	Price
1 - 2	**MT80123-126**	Price
2 - 3	**MT80123-127**	Price

Starrett Disc Micrometers

MADE IN THE USA

- Ratchet thimble
- Spindle lock
- Disc - 1/2” diameter, 1/16” thick, and .015” edge thickness
- Satin-chrome finish on reading surface
- 0-1” Size useful to measure thickness of paper, rubber, plastic, etc.
- To take measurements on work sections such as ribs, lands, fins, cutting edge on forming tool and cordial thickness on gear teeth



Graduation - .001			
Range (in.)	**Starrett No.**	**Order No.**	**Price**
0 - 1	256RL-1	**MV7051236**	Price
1 - 2	256RL-2	**MV7055940**	Price
2 - 3	256RL-3	**MV7055941**	Price

Graduation - 0.01mm			
Range (in.)	**Starrett No.**	**Order No.**	**Price**
0 - 25mm	256MRL-25	**MV7051238**	Price
25 - 50mm	256MRL-50	**MV7055942**	Price
50 - 75mm	256MRL-75	**MV7055943**	Price

Case sold separately

Mitutoyo Electronic Rotating Spindle Disc Micrometer





- Range 0-1" / 0-25mm
- SPC output
- Ratchet thimble, spindle lock
- Resolution .00005" / 0.001mm
- Preset capability
- Instant in/mm conversion
- Measurement hold key
- Zero-set key
- Comes with a battery, spanner, case, manual and one year warranty
- Automatic power-off after two hours idle time

Order No.	Price
MT80323-350-30	Price

Fowler EZ Read Point Micrometers

Direct Reading to .0001"

- Anvil and spindle are hardened, ground and micro-lapped
- Accuracy: .00016"
- Graduation .0001"
- Complete with case



Range (in.)	Degree	Order No.	Price
0 - 1	15	**NA5552226661**	Price
0 - 1	60	**NA5552226641**	Price

Fowler Electronic Disc Micrometer

- Range 0-1"/0-25mm
- Protected to IP54 specifications
- Extra large disc .79" diameter with .035" edge thickness
- Non-rotating spindle
- True inch/metric conversion
- Resolution: .00005"/0.001mm
- Large LCD display
- Direct RS232 output
- Supplied in fitted case



Order No.	Price
NA5554860301	Price

PRECHECK Point Micrometers

- .0001" Graduation
- 30° Points
- Designed to measure the small recess
- Enamel frame
- Positive lever locking clamp



Range (in.)	Order No.	Price
0 - 1	**NB60CPM130**	Price
1 - 2	**NB60CPM230**	Price
2 - 3	**NB60CPM330**	Price

PRECHECK PREMIUM Point Anvil & Spindle Micrometers

- 30° pointed anvil and spindle for measuring small grooves, keyways, small flutes and hard to reach dimension
- Protected to IP54 specifications
- Large LCD Display, 8.5mm
- Automatic switch off
- Resolution: .00005" / .001mm
- Accuracy: .00016" / .004mm
- Carbide measuring faces
- Absolute & incremental mode
- 1 Year Warranty



Measuring Range	Order No.	Price
0 - 1 / 0 - 25mm	**PC20EMDP01SMLI5**	Price
1 - 2 / 25.4 - 50.8mm	**PC20EMDP12SMLI5**	Price

Fowler 0-1" EZ Read Digit Disc Micrometer

- Anvil and spindle are hardened, ground and micro-lapped
- Non-rotating spindle
- Meets or exceeds Federal accuracy specifications
- Disc diameter: .790"
- Flatness: .00004"
- Includes fitted case



Order No.	Price
NA5552250021	Price

Mitutoyo Digimatic Point Micrometers

- Ratchet thimble
- LCD display .00005"/0.001mm
- SPC output
- Measurement hold key and zero set key
- Instant in/mm conversion
- Carbide-tipped measuring faces
- Automatic power-off after 2 hours of idle time
- Comes complete with a battery, key spanner, fitted carrying case, manual, and one year warranty



Range (in.)	Degree	Order No.	Price
0 - 1 / 0 - 25mm	15	**MT80342-351-30**	Price
0 - 1 / 0 - 25mm	30	**MT80342-361-30**	Price

FLEXBAR Electronic Digital Deep Throat Micrometer

- Measurement range: 0-2.400"
- Maximum measuring depth: 3.3
- Resolution: .0005"/0.01mm
- Accuracy: .001"/0.02mm
- Inch/metric conversion
- Zero setting
- On/off buttons
- Fast sliding scale for quick measurements
- Easy to read large digital display
- Easy to hold - ergonomic finger grip
- Cast aluminum frame - rugged and lightweight
- Includes heavy duty molded plastic case



Order No.	Price
GG4515785	Price

Mitutoyo Point Micrometers

- For measurement of small grooves, key-ways and other hard-to-reach diameters
- Measuring points have approximately .012" radius
- Ratchet thimble
- Spindle lock
- Available with or without carbide tips



- With Carbide Measuring Points					
Range (in./mm)	Graduation	Deg	L (in.)	Order No.	Price
0 - 1	.001	15	.394	**MT80112-189**	Price
0 - 1	.001	30	.430	**MT80112-237**	Price
1 - 2	.001	30	.430	**MT80112-238**	Price

- Without Carbide Measuring Points					
Range (in./mm)	Graduation	Deg	L (in.)	Order No.	Price
0 - 1	.001	15	.394	**MT80112-177**	Price
0 - 1	.001	30	.430	**MT80142-225†**	Price
0 - 1	.001	30	.430	**MT80112-225**	Price
1 - 2	.001	15	.394	**MT80112-178**	Price
0 - 25mm	0.01mm	15	10mm	**MT80112-153**	Price
0 - 25mm	0.01mm	30	11mm	**MT80112-201**	Price

† With digital counter

PRECHECK Spline Micrometers

- .0001" Graduation
- .079" dia. × .197" long contact
- Enamel frame
- Carbide faces
- Ratchet stop



Range (in.)	Order No.	Price
0 - 1	**NB60CSM125**	Price
1 - 2	**NB60CSM225**	Price
2 - 3	**NB60CSM325**	Price

Fowler EZ Read Spline (Pin) Micrometers

Digit Counter Type

- Direct reading to .0001"
- Measure recesses, grooves and splines
- Precision ground measuring faces
- Pin size of .118" x 394" length
- Accuracy: .00016"
- Sizes over 1"/25mm include standards



Range (in.)	Order No.	Price
0 - 1	**NA5552218721**	Price
1 - 2	**NA5552218722**	Price

TESA brown & sharpe Spline Micrometer

- For measuring grooves, feather grooves, splines and other difficult to reach measuring points
- Particularly suited for measuring small parts
- Resolution .00005" / 0.001mm



Range (in./mm)	Order No.	Price
0 - 1.2 / 0 - 30mm	**MV4027441**	Price

Mitutoyo Digimatic Spline Type Micrometers

- Resoultion .00005"/0.001mm
- SPC output
- Ratchet thimble
- Spindle lock
- Instant in/mm conversion
- Carbide tipped measuring faces
- Measurement hold key and zero-set key
- Automatic power-off after 2 hours idle time
- Each digimatic micrometer comes complete with a battery, key spanner, fitted carrying case, manual and one year warranty
- Connecting cable not included



Range (in./mm)	Spline Diameter	Order No.	Price
0 - 1 / 0 - 25.4mm	3mm (.120)	**MT80331-351-30**	Price
3 - 4 / 76.2 - 100.6mm	3mm (.120)	**MT80331-354**	Price

Starrett Electronic Screw Thread Comparator Micrometer

SPC Plus

- 60° conical anvil and spindle faces with 1/64" flats on the ends of the points (Will not measure pitch diameter)
- LCD readout
- Resolution .00005" / 0.001mm
- Satin chrome finish on thimble and sleeve, black wrinkle finish on frame
- Shift, hold and preset button
- Instant in/mm conversion
- Automatic off after 30 minutes of non-use



Range (in./mm)	Starrett No.	Order No.	Price
0 - 1 / 0 - 25mm	760FL	**MV7064051**	Price

PROCHECK PREMIUM Point Spindle & Blade Anvil Micrometer

- 60° pointed spindle with blade anvil for grooves and hard to reach dimension
- Protected to IP54 specifications
- Large LCD dsiplay, 8.5mm
- Automatic switch off
- Resolution: .00005" / .001mm
- Accuracy: .000016" / .004mm
- Hardened steel measuring face
- Absolute & incremental modes
- 1 Year Warranty



Measuring Range	Order No.	Price
0 - 0.8	**PC20EMPB01SMLI5**	Price

Starrett Screw Thread Comparator Micrometer

- Ideal for quick comparisons of thread accuracy in screw cutting operations, measuring in small grooves or recesses where regular micrometers cannot be used (does not measure pitch diameter)
- Satin chrome finish
- Convenient decimal equivalents
- Conical anvil and spindle faces with 1/64" flats on points
- Case (MV7055397) sold separately



Range (in.)	Graduation	Starrett No.	Order No.	Price
0 - 7/8	.001	210AP	**MV7050731**	Price

.

Starrett Tool & Instrument Oil

- Maximum protection and lubrication of measuring tools, precision instruments and light machinery
- Guard highly finished tools, parts, machine surfaces against rust



Order No.	Price
MV7053216	Price

Fowler EZ-Read Screw Thread Micrometers

- For measuring pitch diameters of 60° unified (UNF) threads from 64 to 3.5 TPI or .4 to 7MM
- Non-rotating spindle
- V-anvil and conical spindle made from high grade steel hardened and ground
- Complete set of thread anvils
- Available in metric for measurement of 60° metric unified thread



Range (in.)	Accuracy	Order No.	Price
0 - 1	.0001	**NA5552219091**	Price
1 - 2	.0001	**NA5552219092**	Price

Mitutoyo Screw Thread Micrometers

- For measuring pitch diameter
- Each anvil can be used for both metric and unified external threads
- 60° V-anvil and conical spindle
- Furnished complete with fitted carrying case
- Ratchet thimble
- Spindle lock





Anvil - Not Included- See note			
Range (in.)	Graduation	Order No.	Price
0 - 1	.001	**MT80126-137†**	Price
1 - 2	.001	**MT80126-138†**	Price
2 - 3	.001	**MT80126-139†**	Price

Anvil - Set included anvil MT80126-800			
Range (in.)	Graduation	Order No.	Price
0 - 1	.001	**MT80126-901**	Price
1 - 2	.001	**MT80126-902**	Price
2 - 3	.001	**MT80126-903**	Price
3 - 4	.001	**MT80126-904**	Price
4 - 5	.001	**MT80126-905**	Price
5 - 6	.001	**MT80126-906**	Price

†Must select at least one pair of anvils for micrometers without anvils (see below)

Mitutoyo Individual 60° Anvils

- Individual Micrometer Anvil Attachments			
TPI	Pitch (in./mm)	Order No.	Price
4.5 - 3.5	.217 - .275 / 5.5 - 7mm	**MT80126-806**	Price
8 - 5	.138 - .196 / 3.5 - 5mm	**MT80126-805**	Price
13 - 9	.079 - .118 / 2 - 3mm	**MT80126-804**	Price
24 - 14	.04 - .068 / 1 - 1.75mm	**MT80126-803**	Price
44 - 28	.024 - .035 / .6 - .9mm	**MT80126-802**	Price
64 - 48	.016 - .019 / .4 - .5mm	**MT80126-801**	Price

- Set of Micrometer Anvil Attachments			
TPI	Pitch (in./mm)	Order No.	Price
64 - 3.5	.016 - .275 / 0.4 - 7.0mm	**MT80126-800**	Price

PROCHECK Deep Throat Micrometers

- .0001” Graduation
- Deep throat frame for measuring thickness of sheet metal, paper and sheet plastic
- 8” Throat depth
- Ratchet stop



Range (in.)	Order No.	Price
0 - 1	**NB60CDTM18**	Price
1 - 2	**NB60CDTM28**	Price

Mitutoyo Sheet Metal Micrometers

- Ratchet thimble
- Spindle lock
- Carbide measuring face
- Complete with fitted carrying case
- Clear graduations on satin-chrome finish
- Hammertone green, baked-enamel finished frame



Graduation - .0001			
Range (in.)	Throat Depth	Order No.	Price
0 - 1	6	**MT80118-129**	Price

Graduation - .001			
Range (in.)	Throat Depth	Order No.	Price
0 - 1	12	**MT80118-107**	Price

Mitutoyo Outside Micrometer with Interchangeable Anvils

- IP65 Water/dust protection
- Wide measuring range
- Ratchet stop for constant force
- Supplied with zero-setting standards bar for each range
- With SPC output
- Supplied in fitted wooden case



Range	Gratuation (in.)	Resolution (in./mm)	Order No.	Price
12 - 18 / 304.8 - 457.2mm	.001	.0001 / 0.001mm	**MT80340-720**	Price

Fowler Deep Throat Micrometers

- Hammertone blue baked enamel frame
- Microfine .0001” graduations on satin chrome finish
- Ratchet thimble
- Spindle thread is hardened, ground and lapped
- Anvil and spindle are hardened and precision ground
- Carbide-tipped .256” diameter measuring faces
- Flatness .00003”
- Parallelism: .00005”
- Includes case

New!



Range (in.)	Anvil	Throat Depth (in.)	Accuracy	Order No.	Price
0 - 1	Flat	6	.00016	**NA5552517611**	Price
0 - 1	Flat	11.875	.0002	**NA5552517612**	Price

PROCHECK Interchangeable Anvil Outside Micrometers

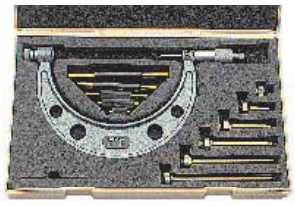
- .001” Graduation
- Ratchet stop and lock nut
- High accuracy interchangeable anvils
- Carbide measuring faces
- Enamel frame
- With standard fitted case



Range (in.)	Order No.	Price
0 - 6	**NB60CIAM6**	Price
6 - 12	**NB60CIAM12**	Price
12 - 16	**NB60CIAM16**	Price
16 - 20	**NB60CIAM20**	Price

Mitutoyo Interchangeable Anvil Micrometers

- .315” Anvil diameter
- .250” (up to 12”) and .315” (over 12”) spindle diameter
- Carbide-tipped spindles
- Ratchet thimble
- Spindle lock
- Available up to 36 - 42” Range and in metric sizes



Graduation - .001		
Range (in./mm)	Order No.	Price
0 - 6	**MT80104-137**	Price
6 - 12	**MT80104-138**	Price
12 - 16	**MT80104-152**	Price
12 - 18	**MT80104-201**	Price
16 - 20	**MT80104-153**	Price
18 - 24	**MT80104-202**	Price
20 - 24	**MT80104-154**	Price
24 - 28	**MT80104-155**	Price
24 - 30	**MT80104-203**	Price

Fowler Interchangeable Anvil Micrometers

- Adjustable collar fitted on each anvil to set overall dimensions
- Spindle and thread are hard-ened and ground
- Supplied with 6 anvils
- Includes case, standards and wrench



Range (in.)	Accuracy	Order No.	Price
0 - 6	.00024	**NA5552401206**	Price
6 - 12	.00024	**NA5552401207**	Price

Fowler 7 Pc. Inside Micrometer Set

- Range:2” to 12”
- Graduations: .001”
- Tubular design
- Includes inside micrometer head with spindle lock and a series of coil spring pressure contact rods
- Satin chrome finish for easy reading
- Comes complete in case



Order No.	Price
NA5552243212	Price

PRECHECK 0-1" Universal Micrometer

- .0001” Graduation
- Non-rotating spindle
- Enamel frame
- Positive lever locking clamp
- Laser engraved graduations
- Ratchet friction thimble
- 7 Pairs of interchangeable anvils (flat, spherical, spline, disc, blade, point and knife-edge) for a wide range of applications



Order No.	Price
NB60CUM1	Price

PRECHECK Inside Micrometers

- Accuracy .0002”
- Satin chrome finish
- Hardened and ground faces
- Ratchet thimble, spindle lock
- Easily adjusted for side movement of jaw
- .0001” Graduation



Range (in.)	Order No.	Price
.2 - 1	**NB60ISM1**	Price
1 - 2	**NB60ISM2**	Price

Mitutoyo Inside Micrometers

- Satin-chrome finish
- Ratchet thimble
- Spindle lock
- Carbide measuring faces
- .001” Graduation



Range (in.)	Order No.	Price
.2 - 1.2	**MT80145-193**	Price
1 - 2	**MT80145-194**	Price

Fowler Inside Micrometer

- Satin chrome finish on barrel and thimble
- Microfine graduations (.001” or 0.01mm) on a satin chrome finish permit easy reading
- Accuracy: ±.0002” (0.005mm)
- Ratchet stop thimble
- Easy zero adjustment on the sleeve
- Meets or exceeds Federal accuracy specifications
- Includes a setting ring
- Includes a spanner wrench and a fitted case



Standard Range

Range (in.)	Order No.	Price
.2 - 1 Standard	**NA55522750011**	Price
.2 - 2.2 Xtra Range	**NA5552275005**	Price

Fowler EZ Read Digital Inside Micrometers

- Threads and spindle are hardened and precision ground
- Measuring jaws and faces fully hardened and micro-lapped for accuracy
- Graduation: .0001”
- Includes fitted case



Range (in.)	Accuracy	Order No.	Price
.2 - 1.2	.00025	**NA5552275401**	Price
1 - 2	.00025	**NA5552275402**	Price

Mitutoyo Inside Caliper Type Digimatic Micrometers

- Resolution .00005”/0.001mm
- Preset, zero/ABS, data/hold, inch/mm, and SPC output
- Ratchet thimble and spindle lock
- Satin-chrome finish
- Supplied with spanner wrench and fitted carrying case
- .001” Graduation



Range (in.)	Order No.	Price
.2 - 1.2	**MT80345-350-30**	Price
1 - 2	**MT80345-351-30**	Price

Mitutoyo Hub Micrometer

- Shallow specially designed frame to clear through 3/4” diameter hole (1” model)
- Carbide measuring faces
- Ratchet thimble
- Satin chrome sleeve and thimble
- Fitted carrying case
- .001” Graduation



Range (in.)	Clearance	Order No.	Price
0 - 1	3/4	**MT80147-351**	Price
1 - 2	1	**MT80147-352**	Price
2 - 3	1	**MT80147-353**	Price

Fowler Electronic Inside Micrometer

- Water resistant to IP54 specifications
- True inch/metric conversion
- Resolution: .00005” / 0.001mm
- Measuring jaws and faces fully hardened and micro-lapped for accuracy
- Each gage includes appropriate setting ring
- Direct RS232 output
- Supplied in fitted case



Range (in.)	Order No.	Price
.2 - 1.2	**NA5554860275**	Price
1 - 2	**NA5554860276**	Price

Starrett Ball Attachments for Outside Micrometers



- Snaps on anvil of regular micrometers
- Hardened ball
- NOTE: the diameter (.200" English – 5mm metric) of each ball used must be subtracted from micrometer readings

Anvil Diameter (in./mm)	Starrett No.	Order No.	Price
.200	247C	**MV7051176**	Price
.235	247A	**MV7051174**	Price
.250	247D	**MV7051177**	Price
.270	247B	**MV7051175**	Price
.300	247E	**MV7051178**	Price
6mm	247MA	**MV7051179**	Price
6.8mm	247MB	**MV7051180**	Price

Mitutoyo Anvil Attachments for Outside Micrometers

- Use these attachments to convert regular micrometers to measure things such as cylindrical wall thickness, but .200" or .250" must be subtracted from the readings
- Other attachments shown here are .500" in length— the added amount must be subtracted from the reading
- Attaches to anvil with rubber caps



MT80101468 MT80208098 MT80208099 MT80208101 MT80208102

Anvil Dia. - .250			
Description	**Dimensions**	**Order No.**	**Price**
Ball Attachment	.200 diameter	**MT80101468**	Price
Blade Type	.029 thickness	**MT80208100**	Price
Comparator Type	.039 tip x 30 degrees	**MT80208099**	Price
Disc Type	.500 diameter	**MT80208102**	Price
Spline Type	.078 diameter	**MT80208098**	Price

Anvil Dia. - .315			
Description	**Dimensions**	**Order No.**	**Price**
Ball Attachment	.250 diameter	**MT80101469**	Price

PRECHECK Individual Micrometer Anvil Attachments



- Each anvil is 1/2" long, ground and lapped on the measuring surface
- Comes with reinforced holding boot, and will fit on any 1 - 12" micrometer
- Fits .235", .250", and .270" spindles
- All anvils are hardened steel with black oxide plating
- Can also be used on 4", 6" & 8" calipers with use of NB75Z9050 caliper attachment
- Micrometer NOT included

Anvil Type	Dimensions	Order No.	Price
7-Pc Anvil Attachment Kit	-	**NB75Z9012**	Price
Ball Attachment	.200 diameter	**NB75Z9300**	Price
Blade Type	.300 thick	**NB75Z9306**	Price
Comparator	30 degrees	**NB75Z9302**	Price
Disc Type	.500 diameter face	**NB75Z9305**	Price
Knife	30 degrees	**NB75Z9301**	Price
Spline Type	.100 diameter face	**NB75Z9304**	Price
Super Spline	.050 diameter face	**NB75Z9303**	Price

Mitutoyo Micrometer Stand



- Enhances closer reading and more accuracy from hand-held measuring instruments
- Shown with optional micrometer

Order No.	Price
MT80156-101-10	Price

Fowler Magnetic Base Micrometer Stand

- Holds standard 0 - 12" micrometers firmly to metal surfaces
- V-bottom for mounting on cylindrical surfaces
- On/off magnet switch
- Blue enamel finish
- Base is 2.30" L x 1.20" W x 3.50" H
- Micrometer NOT included



Order No.	Price
NA5552247010	Price

PRECHECK Micrometer Stands

- Provides a desirable measuring position and angle for inside and outside micrometers and many other instruments
- Micrometer NOT included



NB60CMS4 NB64156101 NB64247000

Description	Order No.	Price
Compact-Folds Flat 3-1/8 W x 4-3/4 L x 1-3/4"	**NB60CMS4**	Price
Oblong Base	**NB64156101**	Price
Round Base	**NB64247000**	Price

TESA TECHNOLOGY | brown & sharpe Micrometer Stand

Model Number 01.60201



- Clamp aperture is 16mm
- Lacquered cast iron base
- Tilt can be locked using a single bolt
- For micrometers up to 300mm as well as other hand-held tools

Order No.	Price
MV4539547	Price

PROCHECK Micrometer and Caliper Calibration Sets

- Caliper and micrometer checking set with stand, clamps and socket head wrench plus gage blocks for accurately calipers and micrometers
- Inch set includes 9 pc. grade 0 gage blocks plus (1) optical flat
- Metric set includes 10 pc. grade 0 gage blocks plus (1) optical flat



Description	Order No.	Price
Inch	**PC24CMCSI**	Price
Metric	**PC24CMCSM**	Price

PROCHECK Stand

- Stand only for micrometer and caliper setting kit



Order No.	Price
PC24CMCSD	Price

PROCHECK Clamp Block for Stand

- Clamp block only for micrometer and caliper setting kit





Order No.	Price
PC24CMCB	Price

Fowler 9 Pc. Micrometer Calibration Set

- Grade Ø steel gage blocks
- Assists in meeting both Federal specification GGG-C-105c and ISO 9000 requirements
- Contains one block of each of the following sizes: .0625, .100, .125, .200, .250, .300, .500, 1.000, & 2.000″
- Two optical flats that vary in size by .0125″
- Certification to NIST on each block and supplied with fitted wooden case
- Meets grade Ø specifications.



Material	Grade	Order No.	Price
Steel	0	**NA5553670002**	Price

MIKEMASTER 1" to 6" Range Micrometer Calibration Standard, 1" & 1/2" Step

- Hardened, stabilized, ground and lapped
- Calibrated, marked and accurate to ±.0001”
- Heavy gage polyethylene cover is included





Type	Order No.	Price
Mikemaster with 1 inch Steps	**MS81M1**	Price
Mikemaster with 1/2 inch Steps	**MS81M12**	Price

Available with certification. Call for price.

MIKEMASTER Micrometer Calibration Standard 1" to 12" Range, 1" Steps

- Accurate to ±.0001”
- Can be used for checking and setting both solid and mandrel-type outside micrometers
- Ground and lapped between centers
- Heavy gage polyethylene cover is included



Order No.	Price
MS81M12A	Price

Available with certification. Call for price.

MIKEMASTER 6" Depth Gage Master

- Check accuracy of dial depth gages and depth micrometers and proper seating of the rods
- Decimal steps are accurate to ±.0001”
- Range .500 to 5.500” in 1” increments



Order No.	Price
MS81D1	Price

12” Depth Gage Master Available
Available with certification. Call for price.

Mitutoyo 0-1/2" Plain Micrometer Head



Graduation (in.)	Stem Size (in.)	Order No.	Price
.001	3/8 x .37	**MT80148-112**	Price

Mitutoyo 0-1" Digital Micrometer Head

- Ratchet thimble
- Carbide face
- Spindle lock



Graduation (in.)	Stem Size (in.)	Order No.	Price
.0001	3/8 x .59	**MT80250-312**	Price

Starrett 0-2" Micrometer Head

- Spindle lock



Graduation (in.)	Stem Size (in.)	Order No.	Price
.001	1/2 x 3/4	**MV7050306**	Price

Mitutoyo Interchangeable Rod Inside Micrometers

- Each interchangeable rod is marked with its measuring range
- Satin chrome finish throughout
- Positive locking clamp attached on MT80-141-101 and MT80-141-102 only
- Supplied with fitted carrying case
- Each set supplied with micrometer head



Graduation - .001						
Range (in.)	Head Travel (in.)	No. of Ext. Rods	Dia. of Rods (in.)	Spacing Collar (in.)	Order No.	Price
1 - 2	.250	2	.248	.250	**MT80141-102**	Price
2 - 8	.500	3	.248	.500	**MT80141-208**	Price
2 - 12	.500	5	.248	1	**MT80141-233**	Price
8 - 20	1	3	.355	1	**MT80141-121**	Price
8 - 40	1	8	.355	1	**MT80141-122**	Price

Graduation - .01mm						
Range (in.)	Head Travel (in.)	No. of Ext. Rods	Dia. of Rods (in.)	Spacing Collar (in.)	Order No.	Price
25 - 50mm	7mm	2	6.3mm	7mm	**MT80141-101**	Price
50 - 300mm	13mm	5	6.3mm	12mm	**MT80141-206**	Price

Mitutoyo Replacement Micrometer Heads



Head Travel (in.)	Used with Set No.	Order No.	Price
.250	141-102	**MT80141-002**	Price
.500	141-208 & 141-233	**MT80141-026**	Price

Starrett Inside Micrometers

- Solid measuring rods
- Hardened and ground anvils
- Complete with carrying case
- .001" Graduation

MADE IN THE USA



Range (in.)	Starrett No.	Order No.	Price
2 - 8	124AZ	**MV7050542**	Price
2 - 12	124BZ	**MV7050546**	Price
2 - 32	124DZ	**MV7050554**	Price
8 - 32	124CZ	**MV7050550**	Price

TESA TECHNOLOGY | brown & sharpe

Tubular Inside Micrometers

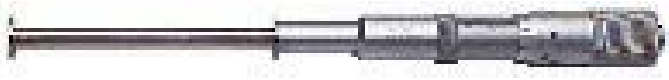
- Spindle lock
- Sizes marked on interchangeable extension rods
- Handle include
- Comes with fitt
- Satin-chrome f
- .001" Graduati



Range (in.)	Head Travel (in.)	No. of Ext. Rods	Spacing Collar Length (in.)	Order No.	Price
1-1/2 - 12-1/2	.500	10	.500	**MV4526004**	Price

Mitutoyo Groove Micrometers

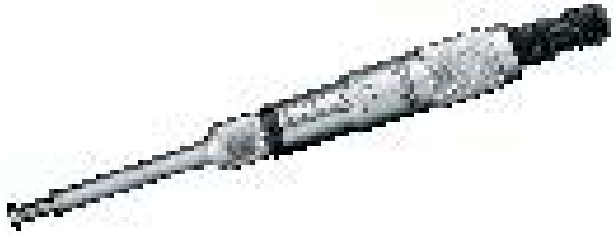
- Measures grooves, recesses and shoulders located inside the bore
- Measure from an edge to a land, or from shoulder to groove
- Discs are hardened and lapped
- Satin chrome finish



Graduation - .001				
Outside Range	Inside Range	Dia. of Meas. Face	Order No.	Price
0-1	0 - 1	.250	**MT80146-131**	Price
0-1	.055 - 1.05	.500	**MT80146-132**	Price

Starrett Groove Micrometer

- Graduated in .001" with reach of 1-5/8" max. hole depth
- Satin chrome finish with quick reading, staggered graduations
- Discs have 9/32" OD, .025" thick-hardened, ground and lapped
- For measuring either internal or external groove and lands
- .001" Graduation



Range Groove Widths (in.)	Land Width (in.)	Starrett No.	Order No.	Price
.050 - 1.05	0 - 1	260Z	**MV7067987**	Price

Mitutoyo Electronic Tubular Inside Micrometers

Friction Type

- SPC output
- LCD display
- Hold Zero/ABS
- Inch/metric conversion
- Preset push-button
- Metal extension rods with their own internal standards
- Head travel 1”
- .0001”/0.001mm Resolution



Range (in.)	No. of Mics.	Order No.	Price
8-40 / 200-1000mm	1, 2, 4" (2pc), 8, 12"	**MT80337-303**	Price
8-40 / 200-1000mm	1, 2, 4, 8, 16"	**MT80339-303**	Price
8-80 / 200-2000mm	1, 2, 4, 8" (2pc) , 16" (3pc)	**MT80339-304**	Price

Mitutoyo Tubular Inside Micrometer Heavy Duty Type

- Accuracy .0007” up to 20” .001” up to 40” and .0014” up to 52”
- Head travel 1”
- Head graduation .001”
- Micrometer head 139-002 included in set



Range (in.)	Ext. Rods (Dia. 67)	Order No.	Price
4 - 52	1, 2, 4, 8, (2)16"	**MT80139-180**	Price

Mitutoyo Micrometer Head 139-002

Replacement Micrometer Head for Set No. MT80139-180



Order No.	Price
MT80139-002	Price

Starrett Tubular Inside Micrometers

- 3/8” Diameter rods
- Interchangeable anvils
- Hardened and ground anvils
- Handle
- Complete with carrying case
- .001” Graduation

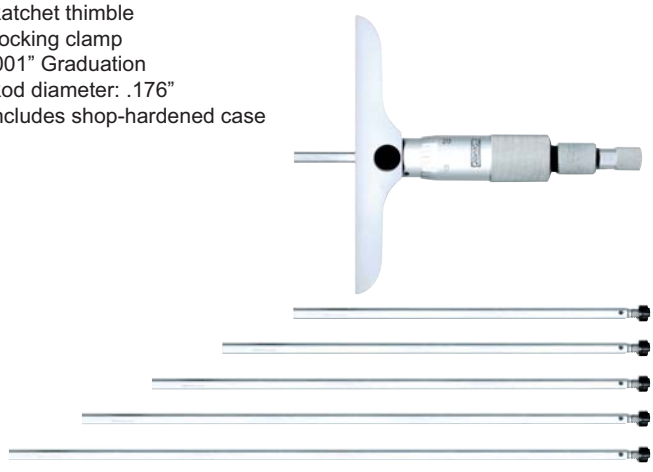
MADE IN THE USA



Range (in.)	Movement of Screws (in.)	Starrett No.	Order No.	Price
1-1/2 - 8	1/2	823AZ	**MV7053050**	Price
1-1/2 - 12	1/2	823BZ	**MV7053052**	Price
1-1/2 - 32	1/2 & 1	823FZ	**MV7053058**	Price
4 - 24	1	823CZ	**MV7053054**	Price
4 - 32	1	823DZ	**MV7053055**	Price
4 - 40	1	823EZ	**MV7053056**	Price

Fowler Economy Depth Micrometers

- Satin chrome finish
- Base surface hardened, ground and lapped
- Ratchet thimble
- Locking clamp
- .001” Graduation
- Rod diameter: .176”
- Includes shop-hardened case



Range (in.)	Base Length (in.)	Order No.	Price
0 - 4	2-1/2	**NA5552225110**	Price
0 - 4	4	**NA5552225114**	Price
0 - 6	2-1/2	**NA5552225112**	Price
0 - 6	4	**NA5552225116**	Price

PROCHECK Depth Micrometers

- Precision ground base
- Satin-chrome finish
- Ratchet thimble
- Fitted case and adjusting wrench
- .001” Graduation
- Bottom change rod



Range (in.)	Base Size (in.)	Order No.	Price
0 - 4	2-1/2	**NB60DM042**	Price
0 - 6	4	**NB60DM064**	Price

PROCHECK Premium Depth Micrometers

- Precision ground base
- Satin-chrome finish
- Ratchet thimble
- Fitted case and adjusting wrench
- .001” Graduation
- Top load interchangable rods



Range (in.)	No. of Rods	Base Length (in.)	Order No.	Price
0 - 4	4	2-1/2	**NB60DMT042**	Price
0 - 6	6	4	**NB60DMT064**	Price

PROCHECK ABSOLUTE 6" ABS Digital Caliper - Depth Type

- Absolute encoding technology - memorize
- Origin zero position
- Single frame depth base
- Data output port
- IP54 Protective rating
- Fitted case
- 1 Year Warranty

WIRELESS CAPABLE

ABSOLUTE CONNECT

IP54



Order No.	Price
PC20EC065DTAB	Price

PROCHECK 0-6" Mechanical Digit Depth Micrometer

- Easy-to-read digit counter and micro-fine .001” graduations
- Base constructed of tool steel, hard-ened and ground
- Satin chrome finish
- Ratchet thimble and locking clamp
- Rod diameter: .176”
- Includes wrench and fitted case
- 1 Year Warranty

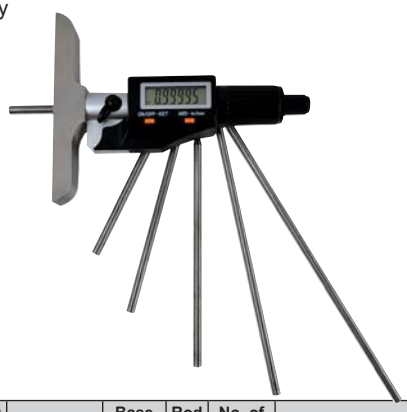


Measuring Range	Base Length	Rod Diameter	No. of Rods	Order No.	Price
0 - 6	4	1/8	6	**PC21MDDM060401**	Price

PROCHECK PREMIUM Electronic Depth Micrometers

- 4” Base: hardened tool steel, precision ground & micro lapped
- Ratchet thimble, spindle lock and automatic shutoff
- IP54 protection against water drop and dust
- IP65 protection against water spray and dust
- Supplied with storage case
- Replacement battery: KA56ECR2032
- 1 Year Warranty

IP54



Thimble Type	Measuring Range	Resolution	Base Length	Rod Dia.	No. of Rods	Order No.	Price
Ratchet	0 - 6 / 0 - 150mm	.00005 / 0.001mm	4	.176	6	**PC20EDM06405IP5**	Price

Mitutoyo Electronic Depth Micrometer

- SPC Output
- 0 - 6” / 0 - 152.4mm
- 4” Base
- .00005” / 0.001mm Resolution
- Preset capability
- Inch/metric conversion
- Measurement hold key
- Zero-Set key
- Locking clamp
- Auto power off after two hours idle time
- 40”/1m SPC cable MT8005CZA662, 80”/2m cable MT8005CZA663
- Complete with battery, key spanner, adjusting wrenches and manual
- Fitted carrying case



New!

Order No.	Price
MT80329-350-30	Price

Mitutoyo Depth Micrometers

- Ratchet thimble
- Satin chrome finish
- Fitted carrying case
- Two wrenches supplied
- Spindle clamp on rear side of base
- .001” Graduation



Range (in.)	Base Length (in.)	Order No.	Price
0 - 4	2-1/2	**MT80129-127**	Price
0 - 4	4	**MT80129-131**	Price
0 - 6	2-1/2	**MT80129-128**	Price
0 - 6	4	**MT80129-132**	Price
0 - 12	4	**MT80129-150**	Price

Mitutoyo Half-Base Depth Micrometers

- Ratchet thimble
- Satin-chrome finish
- Fitted carrying case
- Spindle lock on rear side of base
- .001” Graduation



Range (in.)	Base Length (in.)	Order No.	Price
0 - 4	2	**MT80129-331**	Price
0 - 6	2	**MT80129-332**	Price

Fowler Light-Line Digital Depth Gages

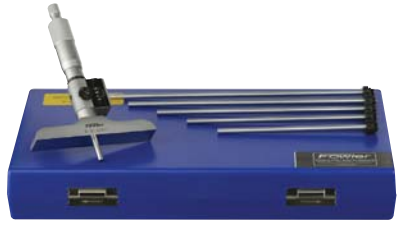
- Light weight beam made of oxide coated aluminum with double inner prismatic guide ways
- Bases made of hard anodized aluminum
- Includes three base attachments: 150/300/450mm
- Includes two contact points
- Electronics feature on/off, floating zero and direct in/mm conversion
- 0.0005”/0.01mm resolution and repeatability
- Includes a fitted case, instructions, 2 spare base screws, 2 hex wrenches and test certifiate



Range (in/mm)	Order No.	Price
0 - 12 / 0 - 300mm	**NA55541360120**	Price
0 - 31 / 0 - 800mm	**NA55541360300**	Price

Fowler Economy Digit Counter Depth Micrometers

- Easy-to-read digit counter
- Microfine .001” graduations
- Base constructed of tool steel, hardened and ground
- Satin chrome finish
- Ratchet thimble
- Locking clamp
- Rod diameter: .176”
- Includes wrench and fitted case



Range (in.)	Base Length (in.)	Order No.	Price
0 - 6	2-1/2	**NA5552225176**	Price
0 - 6	4	**NA5552225226**	Price

Starrett Digital Micrometer Depth Gages

- Ratchet thimble
- Spindle lock
- Satin-chrome finish
- Supplied with carrying case and wrench

MADE IN THE USA



Graduation - .001				
Range (in./mm)	Starrett No.	Base Length (in.)	Order No.	Price
0 - 3	446AZ3RL	3	**MV7056288**	Price
0 - 6	446AZ6RL	3	**MV7056289**	Price

Graduation - .01mm				
Range (in./mm)	Starrett No.	Base Length (in.)	Order No.	Price
0 - 75mm	446MAZ75RL	3	**MV7056294**	Price
0 - 150mm	446MAZ150RL	3	**MV7056295**	Price

Fowler Light-Line Digital Depth Gages with Adjustable Base

- Light weight beam made of oxide coated aluminum
- Bases made of hard anodized aluminum
- Includes 1 base attachment 350mm (14")
- Includes two contact points (1 ball and 1 disk)
- Electronics feature on/off, floating zero and direct in/mm conversion
- 0.0005"/0.01mm resolution and repeatability
- Includes a fitted case, instructions, 2 base screws, 2 hex wrenches and test certifiate



Range (in/mm)	Order No.	Price
0 - 12 / 0 - 300mm	**NA55541365350**	Price
21 / 550mm Base	**NA55541366210**	Price
29.5 / 750mm Base	**NA55541366370**	Price

Starrett® Depth Micrometers

MADE IN THE USA

- Satin-chrome finish on sleeve and thimble
- Lock nut and ratchet thimble
- Carrying Case
- .001” Graduation



Thimble Type - Plain					
Range (in.)	Starrett No.	Base Length (in.)	Rod Dia. (in.)	Order No.	Price
0 - 3	440Z3L	2-1/2	1/8	**MV7052113**	Price
0 - 6	440Z6L	2-1/2	1/8	**MV7052117**	Price

Thimble Type - Ratchet					
Range (in.)	Starrett No.	Base Length (in.)	Rod Dia. (in.)	Order No.	Price
0 - 3	440Z3RL	2-1/2	1/8	**MV7052115**	Price
0 - 3	445AZ3RL	3	5/32	**MV7052208**	Price
0 - 3	445BZ3RL	4	5/32	**MV7052220**	Price
0 - 6	440Z6RL	2-1/2	1/8	**MV7052119**	Price
0 - 6	445AZ6RL	3	5/32	**MV7052212**	Price
0 - 6	445BZ6RL	4	5/32	**MV7052224**	Price
0 - 6	445DZ6RL	6	5/32	**MV7052248**	Price
0 - 9	445AZ9RL	3	5/32	**MV7052216**	Price
0 - 9	445BZ9RL	4	5/32	**MV7052228**	Price
0 - 9	445DZ9RL	6	5/32	**MV7052252**	Price

Starrett® Electronic Depth Gages

No. 3753B Series

- IP67 level of proctection
- Fine adjustment thumb roll for precision measurements
- Hardened stainless steel bar
- Lock to hold in slide position
- Induction type encoder system
- RS232 output
- Inch/mm conversion
- Zero at any position
- Automatic shutoff after 30 minutes of non-use
- Uses CR2032 battery
- .0005” / 0.01mm Resolution

New!



Range	Starrett No.	Order No.	Price
0 - 6 / 0 - 150mm	3753B-6/150	**MV7012690**	Price
0 - 8 / 0 - 200mm	3753B-8/200	**MV7012692**	Price
0 - 12 / 0 - 300mm	3753B-12/300	**MV7012694**	Price

Starrett® Depth Micrometers with 2" Half Base

- Ratchet thimble
- Satin-chrome finish

MADE IN THE USA

- Lock nut
- Carrying case
- .001” Graduation



Range (in.)	Starrett No.	Order No.	Price
0 - 6	443Z6RL	**MV7052173**	Price
0 - 9	443Z9RL	**MV7052175**	Price

TESA TECHNOLOGY | brown & sharpe Depth Micrometers

- 1/8 Measuring rods
- Friction thimble
- Ring lock
- .001” Graduation



Range (in.)	Base Length (in.)	Order No.	Price
0 - 6	2-1/2	**MV4525625**	Price
0 - 6	4	**MV4525628**	Price
0 - 12	4	**MV4525629**	Price

Metric sizes available.

Starrett® Depth Micrometers with Non-Rotating Blades

- Satin-chrome finish on sleeve and thimble
- Lock nut
- Carrying case
- Combination ratchet and speeder
- Blade dimension .045 thick x 1/8” wide
- .001” Graduation

MADE IN THE USA

Range (in.)	Starrett No.	Base Size (in.)	Order No.	Price
0 - 3	449AZ3R	2-1/2	**MV7052318**	Price
0 - 6	449AZ6R	2-1/2	**MV7052320**	Price
0 - 6	449BZ6R	4	**MV7052324**	Price



Mitutoyo Electronic Depth Gages

- SPC output
- .0005”/0.01mm Resolution
- Linear scale is safely embedded in the hardened stainless steel blade
- Sliding LCD unit offers push button control for in/mm selection, absolute zero setting and turning on the display
- Automatic power-off after two hours idle time
- 40”/1m SPC cable MT80959149, 80”/2m MT80949150



Range (in./mm)	Order No.	Price
0 - 6 / 0-150mm	**MT80571-211-30**	Price
0 - 8 / 0-200mm	**MT80571-212-30**	Price
0 - 12 / 0 - 300mm	**MT80571-213-10**	Price

Mitutoyo Electronic Depth Micrometer

- SPC Output
- 0 - 6” / 0 - 152.4mm
- 4” Base
- .00005” / 0.001mm Resolution
- Preset capability
- Inch/metric conversion
- Measurement hold key
- Zero-Set key
- Locking clamp
- Auto power off after two hours idle time
- 40”/1m SPC cable MT8005CZA662, 80”/2m cable MT8005CZA663
- Complete with battery, key spanner, adjusting wrenches and manual
- Fitted carrying case



Order No.	Price
MT80329-350-30	Price

Fowler EZ-Read Digit Depth Micrometer

- Base construction: Hardened tool steel, precision ground and microlapped
- Spindles and threads are hardened, ground and microlapped
- Insulated steel frame
- Rods screw into head for positive hold
- Meets or exceeds Federal accuracy specifications
- Accuracy 0-6” set: ±.0002”
- Includes case



Range (in.)	Base Size (in.)	Graduation	Order No.	Price
0 - 4	2-1/2	.0001	**NA5552225264**	Price
0 - 6	4	.0001	**NA5552225278**	Price

Fowler IP54 Depth Micrometer

Coolant, Water & Oil Resistant

- Range:0-6”/150mm
- 4” Base: hardened tool steel, precision ground & microlapped
- Protected to IP54 standards
- Resolution:.00005”/0.001mm
- Direct RS232 output
- Automatic switch off
- Large LCD display



Order No.	Price
NA5554225456	Price

Fowler 0 - 1" Pocket Depth Gage

- Same features as above except 1”/25mm range

X-TREAD



Order No.	Price
NA5554225500	Price

Fowler 0-6" Depth Gage - Inch/Metric/Fraction

XTRA-VALUE

- Spring loaded and hold measurement button for ease-of-use
- Super large display
- Range: 0-6”/150mm
- Resolution: .0005”/0.01mm (fractions in 1/64” increments)
- Supplied in shop hardened case



Order No.	Price
NA5554225555	Price

PROCHECK PREMIUM 0-16" IP54 Origin Mini Depth Gage

SMART CONNECT

WIRELESS CAPABLE

- Absolute encoding technology - memorize
- Origin zero position
- Includes 5 interchangeable depth rods, 1, 2, 3, 4 and 5”, to extend the measuring depth to 16”
- 3-Reading functions: inch, metric & fractional
- Use as an indicator or depth gage
- Resolution: 0.0005” / .01mm / 1/128” indicator
- Travel: 1” Resolution: 0.0005” / .01mm / 1/128”
- Indicator travel: 1”
- 1 Year Warranty

IP54



Order No.	Price
PC20EDG016IMFAB	Price

Mitutoyo Vernier Depth Gages

- Clear graduation on satin-chrome finish
- Hardened stainless steel
- 4” Standard base
- Complete with fitted carrying case



Graduation - .001		
Range	Order No.	Price
0 - 6	**MT80527-111**	Price
0 - 12	**MT80527-113**	Price

Graduation - .02mm		
Range	Order No.	Price
0 - 300mm	**MT80527-103**	Price

Mitutoyo Dial Depth Gages

- Dial reading in .001” or 0.05mm
- Made of hardened stainless steel
- Base surfaces are microlapped
- 4” Standard base size
- Fine-adjustment feature
- Complete with carrying case
- .001” Graduation



Range	Order No.	Price
0 - 6	**MT80527-311-50**	Price
0 - 12	**MT80527-313-50**	Price

Mitutoyo Dial Depth Gages

- Dial range 0-1”/0-10mm
- Inch complete with 1, 2 and 4” rods
- Metric complete with 10mm, 20mm, (2 pc) 30mm, 100mm rods
- Dial indicator included
- Complete with fitted carrying case



Graduation - 0-100			
Total Range	Base Length	Order No.	Price
0 - 8	4	**MT807218S**	Price

Graduation - .01mm			
Total Range	Base Length	Order No.	Price
0 - 200mm	100mm	**MT807212**	Price

BAKER Dial Depth Gage

- 0 - 100 Reading
- .001” Graduation
- Range 0 - 10”
- Rapid measurement of bore depths
- Supplied with extension rods
- Complete with case



Order No.	Price
NB73K1581B	Price

Dial Depth Gage

- Range: 0-22”
- Indicator resolution: .0005”
- Base length: 4”
- Includes 10 attachments (6 extension rods and 4 feeler points)
- Protective case included
- Procheck 1 Year Warranty



Item	Order No.	Price
PROCHECK	**PC21DG0221BDF†**	Price
Fowler	**NA5552125006**	Price

Electronic Depth Gage

- Range: 0 - 22”
- Base length: 4”
- Includes 10 attachments (6 extension rods and 4 feeler points)
- Resolution: .0005” / 0.01mm / 1/128”
- Accuracy of indicator: +/- .0001”
- Protective case and battery included
- Procheck 1 Year Warranty



Item	Order No.	Price
PROCHECK	**PC20DG0225EI**	Price
Fowler	**NA5554125777**	Price

Fowler 0 - 22" Dial Depth Gage IP54

- Sealed bezel, top cap with dial bellows on stem
- Sealed back plate
- .001” Graduations
- 4” Base is ground and lapped for flatness
- Rods connect for 22” capacity
- Includes 2 extra points (spline & needle)
- Tolerance markers
- Shop-hardened case

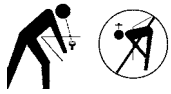


Order No.	Price
NA5552125007	Price

GEM Easy-Check Dial Depth Gages

- 0-6” Range
- .001” Graduation
- .200 Dial travel
- 2-1/2” Base
- Top reading
- Ideal instrument for measuring hole depths from zero to six inches
- Checks flatness, depth, counterbores and grooves
- Both depth gages come with 2-.200 extensions, 1-.600 extensions, 1-2” extension and 1-3” extension







Style	Dial Reading	Order No.	Price
Quick Check Model	0-50-0	**ND50425†**	Price
Standard Reading Model	0-100	**ND50420**	Price

† For ± Readings, 0-50-0 Dial with ± .005 & ± .015 Quick Check Lines

PROCHECK 8" Vernier Depth Gage

- Range 8”
- .001” Graduation
- Hardened stainless steel
- Overall accuracy .001”
- 4” Base



Order No.	Price
NB60DC8	Price

GENERAL Depth/Angle Gage

- 32nds and 64th Graduation
- Hardened base 2-1/2” long and 1/8” wide
- Doubles as a protractor
- Etched in angles of 30°, 45° and 60°
- Fine adjustment and lockbolt



Order No.	Price
NE50444	Price

PEC Depth/Angle Gage

MADE IN THE USA

- 32nds and 64th Graduation
- Hardened base 2-1/2″ long and 1/8″ wide
- Etched in angles of 30°, 45° and 60°
- Fine adjustment and lockbolt

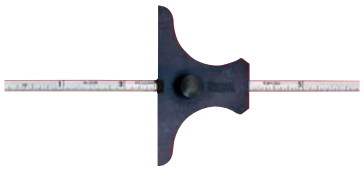


Order No.	Price
NB407004006	Price

Starrett 6" Rule Depth Gages

MADE IN THE USA

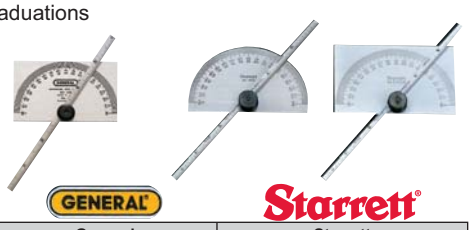
- Hardened base 1-1/2” long by 1/8” thick
- 6”/150mm tempered steel rule
- Graduated 32nds, 64ths and mm, 1/2mm



Range (.in/mm)	Order No.	Price
6	**MV7051080**	Price
150mm	**MV7051081**	Price

Protractors & Depth Gages

- 0 to 180° Graduation on head
- 6″ Rule with 1/64″ graduations
- Locknut



	General		Starrett	
Style	Order No.	Price	Order No.	Price
Rectangular Head	**NE5019**	Price	**MV7052534**	Price
Semi Circular Head	**-**	-	**MV7052532**	Price

PROCHECK Steel Protractor

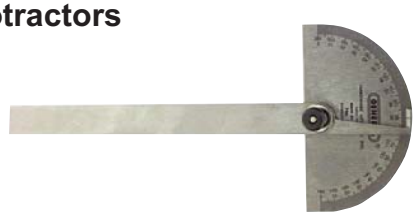
- 0 to 180° Graduation on head
- Adjustable 6″ blade and locknut



Order No.	Price
NE6017T	Price

GENERAL Steel Protractors

MADE IN THE USA



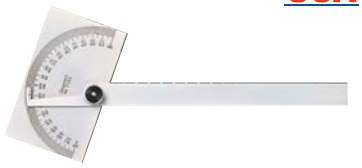
Style	Order No.	Price
Round Head	**NE5018**	Price
Square Head	**NE5017**	Price

†Satin chrome finish.

Starrett Steel Protractors

MADE IN THE USA

- 0 to 180° Graduation on head
- Rectangular head
- Adjustable 6” blade with lock nut



Description	Order No.	Price
Protractor Only	**MV7050672**	Price
Protractor with Letter of Certification	**MV7066930**	Price

PEC Steel Protractors

MADE IN THE USA

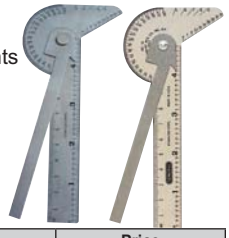
- 0 to 180° Graduation on head
- Adjustable 6″ blade and locknut



Style	Description	Order No.	Price
Rectangular Head	Supplied with 6" Arm	**NB405170**	Price
Rectangular Head	Supplied with 6" Graduated Rule	**NB405190**	Price
Semi Circular Head	Supplied with 6" Arm	**NB405180**	Price

Multi-Use Rule & Gages

- Drill point gage for checking 59° angle drill points
- Bevel protractor
- Center finder for shafts or circles
- Circle divider (up to nine equal parts)
- Tap and drill table
- Made of stainless steel
- 4″ Rule graduated in 64ths & millimeters



Item	Order No.	Price
PROCHECK	**NE60DPG1**	Price
GENERAL	**NE5016ME**	Price

PROCHECK Electronic Calipers

- Inch / metric reading with direct conversion
- Resolution: .0005”/0.01mm
- Hardened stainless steel with precision lapped finish
- 4-Way measuring inside & outside measures
- Supplied with storage case
- Replacement battery: KA56ECR2032
- 1 Year Warranty

IP54



Measuring Range	Resolution	Jaw Depth	Order No.	Price
0 - 6 / 0 - 150mm	.0005" / 0.01mm	1-9/16	**PC20EC061505**	Price
0 - 6 / 0 - 150mm	.0005" / 0.01mm, 64ths	1-9/16	**PC20EC06150F**	Price
0 - 8 / 0 - 200mm	.0005" / 0.01mm	1-15/16	**PC20EC082005**	Price
0 - 12 / 0 - 300mm	.0005" / 0.01mm	2-1/2	**PC20EC123005**	Price

PROCHECK ABSOLUTE Electronic Calipers with Output

IP54

- Absolute encoding technology memorize origin zero
- .0005”/0.01mm Resolution
- Data output port (PC26DCBL5PIN USB/SPC kit optional)
- IP54 protection against water drops and dust
- Inside & outside measures
- Hardened stainless steel with precision lapped finish
- Replacement battery: KA56ECR2032
- 1 Year Warranty

WIRELESS CAPABLE

ABSOLUTE CONNECT



Measuring Range	Resolution	Jaw Depth	Order No.	Price
0 - 6 / 0 - 150mm	.0005" / 0.01mm	1-9/16	**PC20EC061505AB**	Price
0 - 8 / 0 - 200mm	.0005" / 0.01mm	1-15/16	**PC20EC082005AB**	Price
0 - 12 / 0 - 300mm	.0005" / 0.01mm	2-1/2	**PC20EC123005AB**	Price

PROCHECK PREMIUM 0 - 6" Electronic Caliper

IP67 Protection

- Inside & outside measures
- Hardened stainless steel with precision lapped finish
- Measuring Range: 0 - 6 / 0 - 150mm
- Resolution: .0005” / 0.01mm
- Replacement battery: KA56ECR2032
- 1 Year Warranty

IP67



Comments	Order No.	Price
IP67	**PC20EC061505I67**	Price
IP67 w/Bluetooth	**PC20EC061505I6W**	Price

PROCHECK ABSOLUTE 0 - 6" Digital Caliper & Depth Attachment

ABSOLUTE CONNECT

IP54

With Absolute Encoding Technology

- IP54 protection
- Resolution: .0005”/0.01mm
- Accuracy: .001”/0.02mm
- Caliper depth base attachment included
- 1 Year Warranty

USB CONNECT



Order No.	Price
PC20EC061505ABD	Price

PROCHECK Economy Electronic Calipers

- .0005”/0.01mm Resolution
- 3-Way measurement
- Inch/metric conversion
- Hardened stainless steel jaws and depth rod
- Floating zero for comparative measurements
- No SPC output

IP54



Range	Order No.	Price
0 - 6 / 0 - 150mm	**NB60EDC6**	Price
0 - 8 / 0 - 200mm	**NB60EDC8**	Price
0 - 12 / 0 - 300mm	**NB60EDC12**	Price

PROCHECK 6" Lite-Cal Electronic Caliper

- Range: 6” / 150mm
- Polycarbonate frame
- Large easy-to-read display
- Resolution: .0005” / .01mm (Fractions by 1/64” increments)
- Absolute / Incremental Measurement
- Direct inch / metric / fraction conversion
- 4-way measuring
- Accuracy: +/-.008”
- Supplied with clip-on vinyl pouch
- 1 Year Warranty

IP54



Order No.	Price
PC20EC06150FP	Price

PROCHECK PREMIUM Digital Calipers, X-Large LCD Display

- Easy read super large display 2-3/8 x 7/8”
- IP54 Splash water, oil and dust resistant
- Hardened stainless steel body with smooth travel
- Precision lapping finish
- 1 Year Warranty

IP54



Range (in.)	Order No.	Price
0 - 6	**PC20EC06150FI5L**	Price
0 - 8	**PC20EC08150FI5L**	Price
0 - 12	**PC20EC12150FI5L**	Price

Fowler Flip-Plus Electronic Calipers

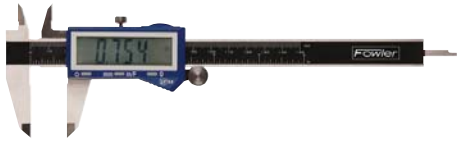
- Display flips 180° with display rotation function for true left handed operation
- Can also be positioned for top viewing
- 4-way measuring - OD, ID, depth and step
- Stainless steel frame
- Thumbroll for smooth measuring
- Heavy duty frame is .140"/3.5mm thick
- Ddirect inch/metric conversion
- Floating zero
- Includes fitted case



Range	Resolution	Accuracy	Order No.	Price
0 - 12"/300mm	.00016" / 0.04mm	± 0.0012"/0.03mm	**NA5554200512**	Price
0 - 6"/150mm	.0005" / 0.01mm	± 0.0012"/0.03mm	**NA5554200506**	Price
0 - 8"/200mm	.0005" / 0.01mm	± 0.0012"/0.03mm	**NA5554200508**	Price

Fowler Electronic Caliper

- Direct inch/metric/fraction conversion
- .0005" / 0.01mm / 1/128" Resolution
- Dust, water and oil resistant to IP54 standards making it great for shop environments
- Heavy-duty frame
- Floating zero
- 14 x 52mm Display
- Combined thumbrest and thumbroll for fine adjustment
- Includes spare battery and fitted case



Order No.	Price
NA5554103006	Price

INSIZE Digital IP67 Caliper

- Measuring range 0 - 6 / 0- 150mm
- Resolution: .0005 / 0.01mm
- IP67 dust/waterproof
- Uses standard CR2032 battery
- Stainless steel construction
- Supplied with certification



Model No.	Order No.	Price
1118-150B	**SZ201118150B**	Price
1118-200B	**SZ201118200B**	Price
1118-300B	**SZ201118300B**	Price

INSIZE Digital Outside Calipers

- Battery CR2032
- Data output
- Made of stainless steel
- Supplied with certification



Range	Resolution	Model No.	Order No.	Price
0 - 6 / 0 - 150mm	.0005 / 0.01mm	1108-150	**SZ201108150**	Price
0 - 8 / 0 - 200mm	.0005 / 0.01mm	1108-200	**SZ201108200**	Price
0 - 12 / 0 - 300mm	.0005 / 0.01mm	1108-300	**SZ201108300**	Price

Fowler Euro-Cal IV Electronic Caliper

- Reads in inch, metric & fractions
- Resolution: .0005"/0.01mm (fractions in 1/64th increments)
- Direct inch/metric/fraction conversion
- Absolute incremental measurement
- Water resistant to IP54 standards
- Stainless steel frame
- 4-way measuring
- RS232 output
- Includes molded plastic case



Range	Order No.	Price
0 - 6 / 0- 150mm	**NA55541003301**	Price
0 - 8 / 0 - 200mm	**NA5554100331**	Price
0 - 12 / 0 - 300mm	**NA5554100332**	Price

INSIZE Digital Calipers

- Absolute and incremental measurement
- Take CR2032 battery
- Automatic power off
- Data output
- Stainless steel
- Fraction reading
- Supplied with certification



Range	Resolution	Model No.	Order No.	Price
0 - 6 / 0 - 150mm	.0005 / 0.01mm / 1/128th	1102-150	**SZ201102150**	Price
0 - 12 / 0 - 300mm	.0005 / 0.01mm / 1/128th	1102-300	**SZ201102300**	Price

Fowler IP67 Ultra-Cal V Electronic Calipers

- IP-67 rating coolant proof
- Hardened stainless steel construction
- 4 way measuring: ID, OD, depth and step (6 and 8" models)
- Resolution and repeatability: .0005"/0.01mm
- Accuracy: .001"/0.02mm
- Direct inch/metric conversion
- Absolute/relative and hold functions
- Direct RS-232 output
- Includes case
- Lifetime Warranty



- IP67 Coolant Proof				
Range	Accuracy	Fowler No.	Order No.	Price
0 - 6 / 0 - 150mm	.001"/0.02mm	54-100-067-1	**NA5554100067**	Price
0 - 8 / 0 - 200mm	.0012"	54-100-068-0	**NA5554100068**	Price
0 - 12 / 0 - 300mm	.0012"	54-100-069-0	**NA5554100069**	Price

- IP67 Coolant Proof-Bluetooth				
Range	Accuracy	Fowler No.	Order No.	Price
0 - 6 / 0 - 150mm	.0008"	54-100-167-0	**NA5554100167**	Price
0 - 8 / 0 - 200mm	.0012"	54-100-168-0	**NA5554100168**	Price
0 - 12 / 0 - 300mm	.0012"	54-100-169-0	**NA5554100169**	Price

Mitutoyo IP67 Digimatic Calipers

Coolant Proof

- ABS coolant-proof caliper with dust/water protection conforming to IP67 level
- Auto power off after 20 minutes of inactivity, but the ABS scale is unaffected and power is restored to the display when slider is moved
- Can be integrated into statistical process control and measurement systems
- Large LCD display

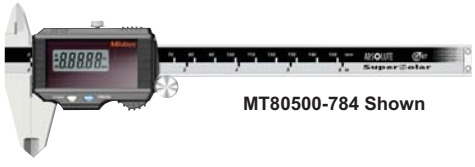


Resolution - .0005" / 0.01mm			
Measuring Range	**Comments**	**Order No.**	**Price**
0 - 6 / 0 - 150mm	without SPC	**MT80500-752-20**	Price
0 - 8 / 0 - 200mm	without SPC	**MT80500-753-20**	Price
0 - 12 / 0 - 300mm	without SPC	**MT80500-754-10**	Price
0 - 6 / 0 - 150mm	with SPC Output	**MT80500-762-20**	Price
0 - 8 / 0 - 200mm	with SPC Output	**MT80500-763-20**	Price
0 - 12 / 0 - 300mm	with SPC Output	**MT80500-764-10**	Price
0 - 6 / 0 - 150mm	without SPCw/ Depth Bar at 1.9mm	**MT80500-768-20**	Price
0 - 6 / 0 - 150mm	without SPCw/ Depth Bar at 1.9mm	**MT80500-769-20**	Price
0 - 6 / 0 - 150mm	without SPC w/CT jaws OD	**MT80500-731-20**	Price
0 - 8 / 0 - 200mm	without SPC w/CT jaws OD	**MT80500-732-20**	Price
0 - 6 / 0 - 150mm	without SPC w/CT jaws OD	**MT80500-733-20**	Price
0 - 8 / 0 - 200mm	without SPC w/CT jaws OD	**MT80500-734-20**	Price
0 - 6 / 0 - 150mm	with SPC and CT Jaws OD	**MT80500-735-20**	Price
0 - 8 / 0 - 200mm	with SPC and CT Jaws OD	**MT80500-736-20**	Price
0 - 6 / 0 - 150mm	with SPC and CT Jaws OD	**MT80500-737-20**	Price
0 - 8 / 0 - 200mm	with SPC and CT Jaws OD/ID	**MT80500-738-20**	Price

Resolution - 0.01mm			
Measuring Range	**Comments**	**Order No.**	**Price**
0 - 150mm	without SPC	**MT80500-702-20**	Price
0 - 200mm	without SPC	**MT80500-703-20**	Price
0 - 150mm	with SPC	**MT80500-712-20**	Price
0 - 200mm	with SPC	**MT80500-713-20**	Price
0 - 150mm	with SPC & Round depth bar	**MT80500-719-20**	Price
0 - 200mm	with SPC and CT Jaws for OD	**MT80500-722-20**	Price
0 - 150mm	with SPC and CT Jaws for OD/ID	**MT80500-723-20**	Price
0 - 200mm	with SPC and CT Jaws for OD/ID	**MT80500-724-20**	Price

Mitutoyo Solar Calipers

- Absolute encoder technology
- No battery needed
- Works in low lighting conditions above 60 luxes
- .0005" / 0.01mm resolution
- Certificate of inspection provided



MT80500-784 Shown

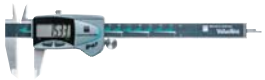
Range (in./mm)	**Remarks**	**Order No.**	**Price**
0 - 6 / 0 - 150mm	with SPC	**MT80500-786**	Price
0 - 6 / 0 - 150mm	without SPC	**MT80500-784**	Price
0 - 8 / 0 - 200mm	with SPC	**MT80500-787**	Price
0 - 8 / 0 - 200mm	without SPC	**MT80500-785**	Price

Mitutoyo Mitutoyo SPC Connecting Cables with Data Out Switch

Length	**Order No.**	**Price**
40" / 1m	**MT8005CZA624**	Price
80" / 2m	**MT8005CZA625**	Price

TESA TECHNOLOGY | brown & sharpe IP67 Electronic Calipers

- Perform inside, outside, depth and step measurements
- Instant inch/metric conversion
- Square shaped depth measuring rod
- Thumbwheel
- Absolute and differential measuring system
- Durable stainless steel frame
- Auto shut-off
- Battery life: approx. 2 years
- Power supply: 3V lithium-battery, type CR 2032



Range	**Resolution**	**Order No.**	**Price**
0 - 6 / 0 - 150mm	.0005" / 0.01mm	**MV4545601**	Price
0 - 8 / 0 - 200mm	.0005" / 0.01mm	**MV4545602**	Price
0 - 12 / 0 - 300mm	.0005" / 0.01mm	**MV4545603**	Price

TESA TECHNOLOGY | brown & sharpe Twin-Cal Electronic Calipers

IP40 Level Protection



- Resolution .0005" / 0.01mm
- Swiss made quality and design
- Built-in TWIN-TLC wireless functionality (additional components required)
- Absolute and differential measuring system
- Stainless steel frame
- Large 7/16" LCD
- Auto shut-off
- Instant inch/metric conversion
- Depth rod is square (except MV4547473 which is round)
- Uses 3V lithium battery type CR2032 (included)

Model No.	**Range (in.)**	**Order No.**	**Price**
00590092	0 - 6 / 0 - 150mm	**MV4547473**	Price
00590093	0 - 6 / 0 - 150mm	**MV4547474**	Price
00590094	0 - 8 / 0 - 200mm	**MV4547475**	Price
00590095	0 - 12 / 0 - 300mm	**MV4547476**	Price

TESA TECHNOLOGY | brown & sharpe Twin-Cal IP67 Electronic Caliper

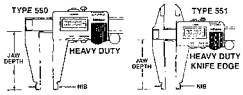
- Resolution .0005" / 0.01mm
- More than 12,000 hours battery life (3 years)
- ABS measuring mode
- Unique TWIN & LINK wireless connectivity built into every TWIN-CAL caliper
- Stainless steel plate cover with PVD deposit ensuring an optimal protection of the housing



Measuring Range	**Order No.**	**Price**
0 - 6 / 0 - 150mm	**MV4547236**	Price
0 - 6 / 0 - 150mm	**MV4547237**	Price
0 - 8 / 0 - 200mm	**MV4547238**	Price
0 - 12 / 0 - 300mm	**MV4547239**	Price

Mitutoyo Digimatic Calipers

- Both an LCD display and an imprinted line scale
- Smaller models offer a convenient thumb wheel
- Stainless steel construction
- Linear scale embedded in epoxy
- Inside, outside, depth and step measurements
- Absolute scale
- Repeatability: .0005”
- LCD 5-digit display
- Response speed: unlimited
- Control switch: on/zero off, inch/metric, data/hold on 4”, 6”, 8” & 12” models





Comments - With Output				
Jaw Range (in./mm)	Remarks	Accuracy (in.)	Order No.	Price
0 - 24 / 0 - 600mm	-	+/-.002"	**MT80500-506-10**	Price
0 - 4 / 0 - 100mm	.075" Round depth bar	±.001"	**MT80500-170-30**	Price
0 - 6 / 0 - 150mm	-	±.001"	**MT80500-171-30**	Price
0 - 6 / 0 - 150mm	With OD Carbide Jaw	±.001"	**MT80500-174-30**	Price
0 - 6 / 0 - 150mm	OD, ID Carbide Jaw	±.001"	**MT80500-175-30**	Price
0 - 8 / 0 - 200mm	With OD Carbide Jaw	±.001"	**MT80500-176-30**	Price
0 - 8 / 0 - 200mm	OD, ID Carbide Jaw	±.001"	**MT80500-177-30**	Price
0 - 8 / 0 - 200mm	Standard	±.001"	**MT80500-172-30**	Price
0 - 12 / 0 - 300mm	Standard	±.0015"	**MT80500-173**	Price
0 - 40 / 0 - 1000mm	Without Thumb Roller	+/-.003"	**MT80500-507-10**	Price

Comments - Without Output				
Jaw Range (in./mm)	Remarks	Accuracy (in.)	Order No.	Price
0 - 4 / 0 - 100mm	Standard, Round .075" Depth Bar	±.001"	**MT80500-195-30**	Price
0 - 6 / 0 - 150mm	OD, ID Carbide Tipped Jaw	±.001"	**MT80500-160-30**	Price
0 - 6 / 0 - 150mm	Standard	±.001"	**MT80500-196-30**	Price
0 - 8 / 0 - 200mm	Standard	±.001"	**MT80500-197-30**	Price
0 - 12 / 0 - 300mm	Standard	±.0015"	**MT80500-193**	Price

Mitutoyo Heavy Duty Digimatic Calipers with SPC Output



Range (in./mm)	Jaw Depth (in.)	Nib Width (in.)	Accuracy	Order No.	Price
0 - 8 / 0 - 200mm	60mm	-	±.001"	**MT80550-311-10**	Price
0 - 18 / 0 - 450mm	3.94	.500	±.002"	**MT80550-223-10**	Price
0 - 18 / 0 - 500mm	5.90	.500	±.0025"	**MT80551-224-10**	Price
0 - 24 / 0 - 600mm	3.94	.500	±.002"	**MT80550-225-10**	Price
0 - 40 / 0 - 1000mm	5.51	1	+/-.003"	**MT80550-227-10**	Price
0 - 40 / 0 - 1000mm	5.90	1	+/-.003"	**MT80551-227-10**	Price

Mitutoyo Mitutoyo SPC Connecting Cables with Data Out Switch

Length	Order No.	Price
40" / 1m	**MT8005CZA624**	Price
80" / 2m	**MT8005CZA625**	Price

PROCHECK PREMIUM Heavy Duty Electronic Long Range Calipers

- Resolution:.0005”/0.01mm
- Preset mode for outside and offset for inside jaws
- Inch / metric conversion and hold feature
- Data output port (USB/SPC kit optional)
- Supplied with storage case
- Replacement battery: KA56ECR2032
- 1 Year Warranty



Measuring Range	Resolution	Jaw Depth	Order No.	Price
0 - 24 / 0 - 600mm	.0005" / 0.01mm	4	**PC20EC246005HD**	Price
0 - 40 / 0 - 1000mm	.0005" / 0.01mm	6	**PC20EC4010005HD**	Price

Fowler Electronic Calipers

- RS232C Direct output
- Hold feature
- Preset mode now includes offset for inside jaws
- All sizes feature fine adjustment screw
- Resolution: .0005”/0.01mm
- Inch/metric conversion
- Includes wooden case



Range	Jaw Depth (in.)	Order No.	Price
0 - 12 / 0 - 300mm	3.5	**NA5554100312**	Price
0 - 24 / 0 - 600mm	4	**NA5554100024**	Price
0 - 40 / 0 - 1000mm	6	**NA5554100042**	Price

Fowler Ultralight IV Electronic Calipers

- Resolution .0005” / 0.01mm
- Built in bluetooth
- XXL display .79” in height
- Lengthened jaws 7.9” / 200mm
- Protected to IP67
- Moveable left jaw
- Stainless steel titanium coated jaws
- Hold feature
- Preset functions
- Min/max functions
- Tolerance mode
- Internal and external measurement indicator
- Twin guided main beam



Measuring Range	Fowler No.	Order No.	Price
0 -15 / 0 - 400mm	54-110-512-0	**NA5554110512**	Price
0 - 24 / 0 - 600mm	54-110-524-0	**NA5554110524**	Price
0 - 40 / 0 - 1000mm	54-110-540-0	**NA5554110540**	Price
0 - 60 / 0 - 1500mm	54-110-560-0	**NA5554110560**	Price
0 - 80 / 0 - 2000mm	54-110-580-0	**NA5554110580**	Price
Proximity USB Cable	54-115-526-0	**NA5554115526**	Price
Proximity Serial Cable	54-115-527-0	**NA5554115527**	Price

TESA brown & sharpe Twin-Cal IP67 Caliper with Rotary Stop Plate

- Protects against dust and liquids, even when the cable is connected
- Unique TWIN connectivity concept, offering upgradeable performance across the Twin-Cal range



Range (in./mm)	Resolution	Order No.	Price
0 - 10 / 0 - 250mm	.0005" / 0.01mm	**MV4545632**	Price

TESA brown & sharpe Twin-Cal IP67 Electronic Caliper with Short Cut Measuring Face

- Protects against dust and liquids, even when the cable is connected
- Unique TWIN connectivity concept, offering upgradeable performance across the Twin-Cal range



Range (in./mm)	Resolution	Order No.	Price
0 - 12 / 0 - 300mm	.0005" / 0.01mm	**MV4545617**	Price

TESA brown & sharpe Twin-Cal IP67 Electronic Calipers with Rounded Measuring Faces

- Protects against dust and liquids, even when the cable is connected
- Unique TWIN connectivity concept, offering upgradeable performance across the Twin-Cal range



Range (in./mm)	Resolution	Comments	Order No.	Price
0 - 12 / 0 - 300mm	.0005" / 0.01mm	Rounded Measuring Face for Internal Dimensions	**MV4545642**	Price
0 - 12 / 0 - 300mm	.0005" / 0.01mm	Rounded Measuring Face with Knife Edge Jaws	**MV4545620**	Price

TESA brown & sharpe IP67 Electronic Calipers

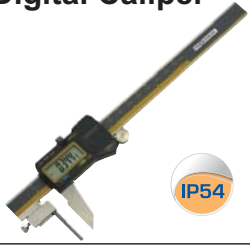
- Perform inside, outside, depth and step measurements
- Instant inch/metric conversion
- Square shaped depth measuring rod
- Thumbwheel
- Absolute and differential measuring system
- Durable stainless steel frame
- Auto shut-off
- Battery life: approx. 2 years
- Power supply: 3V lithium-battery, type CR 2032



Range	Resolution	Order No.	Price
0 - 6 / 0 - 150mm	.0005" / 0.01mm	**MV4545601**	Price
0 - 8 / 0 - 200mm	.0005" / 0.01mm	**MV4545602**	Price
0 - 12 / 0 - 300mm	.0005" / 0.01mm	**MV4545603**	Price

PROCHECK ABSOLUTE 6" ABS Digital Caliper - Tube Type

- Absolute encoding technology - memorize
- Origin zero position
- Single frame depth base
- Data output port
- IP54 Protective rating
- Fitted case
- 1 Year Warranty



Order No.	Price
PC20EC065TTAB	Price

PROCHECK ABSOLUTE 6" ABS Digital Caliper - Outside Slot

- Absolute encoding technology - memorize
- Origin zero position
- Outside measuring jaws
- Data output port
- IP54 Protective rating
- Fitted case
- 1 Year Warranty



Order No.	Price
PC20EC065OSTAB	Price

PROCHECK ABSOLUTE 6" ABS Digital Caliper - Inside Slot

- Absolute encoding technology - memorize
- Origin zero position
- Resolution: 0.0005" / 0.01mm
- Inside measuring jaws
- Data output port
- IP54 Protective rating
- Fitted case
- 1 Year Warranty



Order No.	Price
PC20EC065ISTAB	Price

Mitutoyo Digimatic Inside Caliper with SPC

- Specially designed for inside measurements in hard-to reach places
- With SPC data oupt
- Supplied in fitted plastic case



Range (in./mm)	Accuracy (in.)	Comments	Order No.	Price
.8 - 6 / 20 - 150	.0015	Point jaw type	**MT80573-746**	Price

Mitutoyo Electronic Special Jaw Calipers

- SPC output
- On/Zero/Off button
- Inch/metric conversion
- Data hold



Range (in./mm)	Type	Measurements	Order No.	Price
0 - 6 / 0 - 150mm	Blade Type	Narrow ID and OD, Depth, Step	**MT80573-734**	Price
0 - 6 / 0 - 150mm	Low Force	Grooves and recesses	**MT80573-752-20**	Price
0 - 6 / 0 - 150mm	Neck Type	Grooves and recesses	**MT80573-751**	Price
0 - 7 / 0 - 180mm	Low Force	Elastic or resilient workpieces such as plastic or rubber parts	**MT80573-291-20**	Price

†IP67 Rated

Fowler Light-Line Vernier Calipers

- Light weight beam made of oxide coated aluminum
- Stainless steel jaws, hardened and finely ground with knife edge top jaws 3.5"/90mm length
- Spare jaws can be modified and exchanged with statndard jaws for special applications
- Parallax free vernier scale for ease of reading
- High contrast white numbering on black anodized frame
- Inch and metric graduations 0.001"/0.05mm



Range (in/mm)	Comments	Order No.	Price
0 - 19 / 500mm	Accuracy .001"/0.03mm	**NA55520750180**	Price
0 - 35 / 900mm	Accuracy .0015"/.04mm	**NA55520750350**	Price
-	6" Replacement jaws	**NA55520751500**	Price

Fowler Poly-Cal™ 6"/150mm Electronic Caliper

Inch/Metric/Fraction



- Range 6”/150mm
- Polycarbonate Frame
- Large easy-to-read display
- Resolution .0005”/0.01mm, fractions by 1/64 increments
- Absolute/Incremental Measurement
- Direct inch/metric/fraction conversion
- 4 way measuring
- Accuracy +/-.008”
- Supplied with vinyl pouch

Order No.	Price
NA5554101175	Price

Fowler Electronic Calipers XTRA-VALUE CAL



- Stainless steel frame
- Large easy-to-read display
- Resolution: .0005”/0.01mm
- Direct inch/metric conversion
- Absolute/incremental measurement
- 4 way measuring
- Complete in case

Description (in./mm)	Order No.	Price
0 - 6 / 0 - 150mm	**NA55541011501**	Price
0 - 6 / 0 - 150mm w/Super Large Display	**NA55541016001**	Price
0 - 8 / 0 - 200mm	**NA5554101200**	Price
0 - 8 / 0 - 200mm w/Super Large Display	**NA5554101800**	Price
0 - 12 / 0 - 300mm	**NA55541013001**	Price
0 - 12 / 0 - 300mm w/Super Large Display	**NA55541019001**	Price

Fowler Electronic Calipers



- Patented ceramic capacitive sensor
- Direct inch/metric conversion
- Resolution: .0005”/0.01mm
- Accuracy: .001”/0.02mm
- Large easy-to-read display
- Includes shop-hardened case

Range (in./mm)	Order No.	Price
0 - 4 / 0 - 100mm	**NA5554100004**	Price
0 - 6 / 0 - 150mm	**NA5554100000**	Price
0 - 8 / 0 - 200mm	**NA5554100008**	Price
0 - 12 / 0 - 300mm	**NA5554100112**	Price

Fowler Ultra-Cal Mark IV Water Resistant Electronic Calipers



- Water resistant
- 4 way measuring
- Resolution: .0005”/0.01mm
- Repeatability: .0005”/0.01mm
- Direct inch/metric conversion
- Accuracy for 6” model: .001”/0.02mm
- Accuracy for 8 & 12” models: .0015”/0.03mm
- Large easy to read LCD display
- Direct RS232 output
- Includes shop-hardened case

Range (in./mm)	Order No.	Price
0 - 6 / 0 - 150mm	**NA5554100444**	Price
0 - 8 / 0 - 200mm	**NA5554100448**	Price
0 - 12 / 0 - 300mm	**NA5554100412**	Price

Fowler Water Resistant IP54 Electronic Caliper

Large Easy-To-Read LCD Display Patented Ceramic Chip

- Water resistant to IP54 specifications
- Patented ceramic capacitive sensor
- Stainless steel frame
- Direct inch/metric conversion
- Accuracy: .001”/0.02mm
- Resolution: .0005”/0.01mm
- Large easy to read LCD display
- 4-way measurement
- Includes molded case





Range (in./mm)	Order No.	Price
0 - 6 / 0 - 150mm	**NA5554100777**	Price
0 - 12 / 0 - 300mm	**NA5554100712**	Price

Starrett No. 798B IP67 Electronic Digital Calipers

- Fine adjustment and slide lock
- Hardened stainless steel measuring surfaces
- .310” LCD display with .0005” / 0.01mm resolution
- Zero at any position
- Auto-off after 30 minutes
- Linear accuracy meets DIN862
- CR2032 3V battery



Range (in./mm)	Order No.	Price
0 - 6 / 0 - 150mm	**MV7012521**	Price
0 - 8 / 0 - 200mm	**MV7012523**	Price
0 - 12 / 0 - 300mm	**MV7012525**	Price

Starrett No. EC799A & EC799B Basic Electronic Calipers

No SPC Output



- Resolution .0005” / 0.01mm
- Lightweight, ergonomic design
- Zero at any position
- Automatic shut-off after 30 minutes of non-use
- Last measuring position retained when shut off
- Hardened stainless steel body
- Integrated depth rod on all sizes
- Lock screw and fine adjustment thumb wheel
- With case

Measuring Range (in./mm)	Order No.	Price
0 - 12 / 0 - 300mm	**MV7000148**	Price
0 - 12 / 0 - 300mm	**MV7000149**	Price
0 - 12 / 0 - 300mm	**MV7000150†**	Price
0 - 6 / 0 - 150mm	**MV7000142**	Price
0 - 6 / 0 - 150mm	**MV7000143**	Price
0 - 6 / 0 - 150mm	**MV7000144†**	Price
0 - 6 / 0 - 150mm	**MV7072665†**	Price
0 - 8 / 0 - 200mm	**MV7000145**	Price
0 - 8 / 0 - 200mm	**MV7000146**	Price
0 - 8 / 0 - 200mm	**MV7000147†**	Price
0 - 8 / 0 - 200mm	**MV7072685†**	Price

† With standard letter of certification

PROCHECK Premier Shockproof Dial Calipers



- Tough, shockproof design
- .100" per revolution
- Covered rack
- Inside, outside, step & depth measurement
- Hardened stainless steel rack
- Supplied with storage case
- 1 Year Warranty

Measuring Range	Gradua-tion	Jaw Depth	Range Per Revolution	Dial Face Color	Order No.	Price
0 - 4	.001	1-9/16	0-100	White	**PC21DC04SP**	Price
0 - 6	.001	1-9/16	0-100	White	**PC21DC06SP**	Price
0 - 8	.001	1-15/16	0-100	White	**PC21DC08SP**	Price
0 - 12	.001	2-1/2	0-100	White	**PC21DC12SP**	Price

PROCHECK Stainless Steel Dial Calipers

- Covered rack for longer caliper life, keeps chips out
- Measuring face hardened stainless, ground and lapped
- Satin-chrome finish
- Complete with fitted case


NB60CDC6M2


NB60CDC6M1

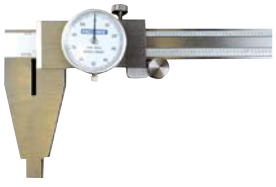

NB60CDC6B


NB60CDC6

Range (in.)	Graduation	Remarks	Order No.	Price
0 - 4	.001	-	**NB60CDC4**	Price
0 - 6	.001	-	**NB60CDC6**	Price
0 - 6	.001	Carbide jaws	**NB60CDC6CJ**	Price
0 - 6	.001	Black Dial Face	**NB60CDC6B**	Price
0 - 6	.001	Inch dial with inch/ metric scale on rack	**NB60CDC6EM†**	Price
0 - 6 / 0 - 150mm	.001 / 0.02mm	Dual reading in/mm dial	**NB60CDC6M2**	Price
0 - 150mm	0.02mm	Metric only	**NB60CDC6M1**	Price
0 - 8	.001	-	**NB60CDC8**	Price
0 - 12	.001	-	**NB60CDC12**	Price

†Metric on scale only

PROCHECK Heavy Duty Dial Calipers



- Long range measurement of both outside and inside dimensions
- Covered rack
- Hardened stainless steel rack
- 1 Year Warranty

Measuring Range	Graduation	Jaw Depth	Range Per Revolution	Dial Face Color	Order No.	Price
18	.001	3-1/8	0-100	White	**PC21DC18HD**	Price
24	.001	4	0-100	White	**PC21DC24HD**	Price

PROCHECK 18" Heavy Duty Dial Caliper



- .001" Graduation
- 0-100 Dial reading
- 3-1/8" Deep jaws
- Inside and outside measurement on one set of jaws
- Covered rack
- Depth measuring rod

Order No.	Price
NB60CDC18	Price

Mitutoyo Dial Calipers



- Smooth sliding
- Shock protection
- Lock screw on bezel
- 6" and 8" main beam coated with titanium nitride
- +/- .002" Accuracy

Measuring Range	Gradua-tion	Range Per Revolution	Dial Face Color	Comments	Order No.	Price
0 - 6	.001	0.1	White	Carbide Jaw, OD	**MT80505-736**	Price
0 - 6	.001	0.1	White	Carbide Jaw, ID, OD	**MT80505-738**	Price
0 - 6	.001	0.2	White	-	**MT80505-740**	Price
0 - 6	.001	0.1	White	-	**MT80505-742**	Price
0 - 6	.001	0.1	Blue	-	**MT80505-742-51**	Price
0 - 6	.001	0.1	Purple	-	**MT80505-742-52**	Price
0 - 6	.001	0.1	Green	-	**MT80505-742-53**	Price
0 - 6	.001	0.1	Red	-	**MT80505-742-54**	Price
0 - 6	.001	0.1	Oran-ge	-	**MT80505-742-55**	Price
0 - 6	.001	0.1	Black	-	**MT80505-742-56**	Price
0 - 6	.001	0.2	White	Carbide Jaw, OD	**MT80505-744**	Price
0 - 8	.001	0.1	White	Carbide Jaw, OD	**MT80505-737**	Price
0 - 8	.001	0.1	White	Carbide Jaw, ID, OD	**MT80505-739**	Price
0 - 8	.001	0.2	White	-	**MT80505-741**	Price
0 - 8	.001	0.1	White	-	**MT80505-743**	Price
0 - 12	.001	0.1	White	-	**MT80505-746**	Price
0 - 12	.001	0.1	White	Carbide Jaw, OD	**MT80505-747**	Price
0 - 12	.001	0.1	White	Carbide Jaw, ID, OD	**MT80505-748**	Price
0 - 12	.001	0.2	White	-	**MT80505-749**	Price
0 - 12	.001	0.2	White	Carbide Jaw, OD	**MT80505-750**	Price
0 - 150mm	0.01mm	1mm	White	-	**MT80505-732**	Price
0 - 150mm	0.02mm	2mm	White	-	**MT80505-730**	Price
0 - 150mm	0.02mm	2mm	White	Carbide Jaw, OD	**MT80505-734**	Price
0 - 150mm	0.02mm	2mm	White	Carbide Jaw, ID, OD	**MT80505-735**	Price
0 - 200mm	0.01mm	1mm	White	-	**MT80505-733**	Price
0 - 200mm	0.02mm	2mm	White	-	**MT80505-731**	Price
0 - 300mm	0.02mm	2mm	White	-	**MT80505-745**	Price

Mitutoyo Quick Mini Snap Calipers

- Convenient snap-action pocket thickness gage
- LCD digital readout



Range (in.)	Order No.	Price
0 - 1/2	**MT80700-118-20**	Price

Fowler Snap Cal

- Ideal for measuring a wide range of materials from metal, plastics and glass to small wires, fibers and paper
- Range: 0-1.25" (31.5mm)
- Resolution: .0005" / .01mm / 1/64"
- Spring-loaded travel
- Wide faced flat jaw for easy positioning
- Dimension of fixed jaw: .470" x .900"
- Accuracy: .001" (0.02mm)
- Hardened stainless steel construction
- Large, high contrast LCD display
- Hanging loop included



Description	Order No.	Price
Snap Cal with Case	**NA5554550300**	Price

Starrett 3202 Series Dial Calipers

- Provides quick, accurate measurement of OD, ID and depth
- Graduation: .001”
- 100” per revolution
- White face
- Thumb operated fine adjustment roll
- Hardened stainless construction
- Includes plastic case



Range (in.)	Starrett No.	Order No.	Price
0 - 6	3202-6	**MV7061467**	Price
0 - 8	3202-8	**MV7061468**	Price
0 - 12	3202-12	**MV7061466**	Price

Starrett Premium Dial Calipers

MADE IN THE USA

- .100” Per revolution
- 5-Way measurement
- Thumb wheel
- Lock screw
- Adjustable dial
- Available in metric
- .001” Graduation
- 6” and 9” Models have covered rack depth rod
- Detachable depth rod available for 12” models, see chart below



- Caliper Depth Rod				
Range (in.)	Description	Starrett No.	Order No.	Price
12	-	PT26091	**MV7065100**	Price

- Dial Caliper				
Range (in.)	Description	Starrett No.	Order No.	Price
0 - 6	Black with Case	B120A-6	**MV7064515**	Price
0 - 6	Red with Case	R120A-6	**MV7064516**	Price
0 - 6	White with Case	120A-6	**MV7064514**	Price
0 - 9	White with Case	120AZ-9	**MV7064520**	Price
0 - 9	White without Case	120A-9	**MV7064517**	Price
0 - 12	White with 3" Jaws	120B-12	**MV7065067**	Price
0 - 12	White with Case	120Z-12	**MV7056693**	Price
0 - 12	White without Case	120-12	**MV7056694**	Price

- Dial Caliper With Standard Letter of Certification				
Range (in.)	Description	Starrett No.	Order No.	Price
0 - 6	Black with Case	B120A-6	**MV7066917**	Price
0 - 6	Red with Case	R120A-6	**MV7066918**	Price
0 - 6	White with Case	120A-6	**MV7066568**	Price
0 - 12	White with Case	120Z-12	**MV7066569**	Price
0 - 12	White without Case	120-12	**MV7066919**	Price

Fowler Dial Calipers

- .100” Per revolution
- .001” Dial graduations
- Covered rack
- 4-Way measurement, ID, OD, depth and step
- Hardened stainless steel rack
- Supplied in shop-hardened case



Range (in.)	Dial Face	Order No.	Price
0 - 6	Black	**NA5552008005**	Price
0 - 6	White	**NA5552008007**	Price
0 - 8	White	**NA5552008008**	Price
0 - 12	White	**NA5552008012**	Price
0 - 12	Black	**NA5552008013**	Price

Fowler Inch/Metric Dial Calipers

- Hardened stainless steel
- Measure inside, outside and depth
- Complete with fitted case
- Dial face reads in both inch and metric



Range (in./mm)	Order No.	Price
0 - 6 / 0 - 150mm	**NA5552030006**	Price
0 - 8 / 0 - 200mm	**NA5552030008**	Price
0 - 12 / 0 - 300mm	**NA5552030012**	Price

Fowler Shockproof Dial Calipers

- Tough, shockproof design
- .100” per revolution
- .001” dial graduations
- Covered rack
- 4-way measurement, ID, OD, depth and step
- Hardened stainless steel rack
- Supplied in shop-hardened case



Range (in.)	Dial Face	Order No.	Price
0 - 4	White	**NA5552008704**	Price
0 - 4	Black	**NA5552008714**	Price
0 - 6	White	**NA5552008706**	Price
0 - 6	Black	**NA5552008707**	Price
0 - 8	White	**NA5552008708**	Price
0 - 12	White	**NA5552008712**	Price

Fowler Dial Cal Plus

Protected to IP54 DUST & FLUID RESISTANT

XTRA-VALUE Plus

- IP54 rated against fluid and debris
- Measuring range 0 - 6” / 0-150mm
- 4-Way measurement
- .100” Per revolution
- Thumbroll for fine adjustment
- Carriage lock screw
- 4mm Thick stainless steel frame
- Adjustable bezel with lock
- Includes fitted case



Range	Dial Face Color	Model No.	Order No.	Price
0 - 6	White	52-008-050	**NA5552008050**	Price
0 - 6	Black	52-008-051	**NA5552008051**	Price
0 - 150mm	White	52-008-052	**NA5552008052**	Price

TESA TECHNOLOGY | brown & sharpe Dial-Cal Calipers

- Range per revolution .100”
- Adjustable zero set
- 1.25” Diameter rotating dial with lock
- Anti-backlash, shockproof design
- Measure four ways: inside, outside, depth and step
- .001” Graduation



Construction - Light Alloy Frame, Stainless Steel Jaws					
Range (in.)	Face Color	Jaw Length Ext. (in.)	Tool No.	Order No.	Price
0 - 12	Silver	2-1/2	599-579-12-1	**MV4527592**	Price

Construction - Satin Chrome Finish Stainless Steel					
Range (in.)	Face Color	Jaw Length Ext. (in.)	Tool No.	Order No.	Price
0 - 6	Black	1-1/2	599-579-5	**MV4551879**	Price
0 - 6	White	1-1/2	599-579-4	**MV4551774**	Price

Construction - Stainless Steel -Accurate to .00008 up to 100					
Range (in.)	Face Color	Jaw Length Ext. (in.)	Tool No.	Order No.	Price
0 - 6	White	1-1/2	00589020	**MV4547434**	Price
0 - 6	Black	1-1/2	00589021	**MV4547436**	Price
0 - 8	White	1.90	00589045	**MV4547437**	Price
0 - 12	White	2-1/2	00589046	**MV4547438**	Price

Construction - Stainless Steel Construction					
Range (in.)	Face Color	Jaw Length Ext. (in.)	Tool No.	Order No.	Price
0 - 8	Black	1.90	599-579-8-5-1	**MV4527593**	Price
0 - 8	White	1.90	599-579-8-1	**MV4527594**	Price

Fowler Heavy Duty Dial Calipers

- Graduations: .001”
- Large one-rev dial
- Depth rod
- Cross-jaws for direct internal measurement
- 4-way measurement
- Stainless steel, satin chrome finish
- Includes wood case



Range (in.)	Order No.	Price
0 - 8	**NA5552025108**	Price
0 - 12	**NA5552025112**	Price

Fowler Long Range Dial Calipers

- .100” Per revolution
- .001” Dial graduations
- Covered rack
- Depth rod
- Hardened stainless steel rack
- Supplied in shop-hardened case



Range (in.)	Dial Face	Order No.	Price
0 - 18	Black	**NA5552008018**	Price
0 - 24	Black	**NA5552008024**	Price

Fowler 4" Pocket-Cal Vernier Caliper

- Satin chrome finished stainless steel
- Dial graduation .001”
- Includes handy case
- Three-way measurement – inside, outside and depth



Order No.	Price
NA5552057004	Price

Mahr Federal 6" Dial Caliper

- .001” Graduation
- Large, easy-to-read dial face
- Shockproof movement
- Set zero with rotating dial and locking screw
- Hardened stainless steel slide and beam



Order No.	Price
NA654107900	Price

INSIZE Dial Calipers

- Graduation .001”
- Shockproof dial
- Stainless steel
- Supplied with certification



Range (in.)	Model No.	Order No.	Price
0 - 6	1311-6	**SZ2013116**	Price

Fowler Master Vernier Calipers

- Machine engraved from master
- Slide type fine adjust thumbwheel
- Nib design measures both inside & outside dimensions
- Satin chrome finish for glare free reading
- Graduation: .001” / 0.02mm
- Price includes fitted case



Range (in./mm)	Graduation	Order No.	Price
0 - 12 / 0 - 300mm	.001 / 0.02mm	**NA5552085012**	Price
0 - 24 / 0 - 600mm	.001 / 0.02mm	**NA5552085024**	Price
0 - 40 / 0 - 1000mm	.001 / 0.02mm	**NA5552085040**	Price
0 - 60 / 0 - 1500mm	.001 / 0.02mm	**NA5552085060**	Price

Mitutoyo Heavy Duty Vernier Calipers

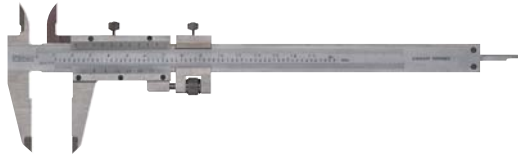
- Hardened stainless steel
- Ground and lapped for accuracy
- Satin chrome finished scale surface
- Easy wear adjustment of vernier scales
- Nib style jaws and fine adjustment



Range (in./mm)	Graduation	Depth of Jaw	Order No.	Price
0 - 12	.001	3-1/2	**MT80160-124**	Price
0 - 12 / 0 - 300mm	.001 / 0.02mm	3	**MT80160-125**	Price
0 - 18	.001	4	**MT80160-116**	Price
0 - 18 / 0 - 450mm	.001 / 0.02mm	4	**MT80160-119**	Price
0 - 24	.001	4	**MT80160-102**	Price
0 - 24 / 0 - 600mm	.001 / 0.02mm	4	**MT80160-103**	Price
0 - 40	.001	5-1/2	**MT80160-105**	Price
0 - 60	.001	7	**MT80160-111**	Price
0 - 1500mm	0.02mm	180mm	**MT80160-110**	Price
0 - 80	.001	7	**MT80160-114**	Price

Fowler Vernier Calipers

- Stainless steel with microfine black graduations
- .001”/0.02mm Graduations
- Satin chrome finish
- Depth rod on all models
- 4-Way jaws for outside, inside, depth and step measurements
- All sliding surfaces are raised to prevent defacement and wear of graduations
- Meets or exceeds US federal specifications for accuracy
- Includes case



Range	Jaw Depth	Comments	Fowler No.	Order No.	Price
0 - 6 / 0 - 150mm	1.6"	With Fine Adjustment	52-058-016-0	**NA5552058016**	Price
0 - 6 / 0 - 150mm	1.6"	With Thumb Lock	58-059-016-0	**NA5552059016**	Price
0 - 8 / 0 - 200mm	1.9"	With Fine Adjustment	52-058-008-0	**NA5552058008**	Price
0 - 12 / 0 - 300mm	1.9"	With Fine Adjustment	52-058-012	**NA5552058012**	Price

PROCHECK Precision Vernier Calipers

- Hardened stainless steel
- Ground and lapped
- Satin chrome finish
- Jaws designed for outside, inside and thread measurement
- Micro-fine black graduation



Range (in.)	Upper Scale / Lower Scale	Order No.	Price
0 - 6 / 0 - 150mm	128ths / 0.05mm	**NB60HK6A**	Price
0 - 6 / 0 - 150mm	.001 / 0.02mm	**NB60HK6B**	Price
0 - 8 / 0 - 200mm	.001 / 0.02mm	**NB60HK8B**	Price

PROCHECK Heavy Duty Vernier Calipers

- Open face design
- Ground and lapped
- Easy-to-read vernier scales
- Long jaws and fine adjustment
- Meets all Federal specifications



Range (in.)	Graduation	Depth of Jaw	Order No.	Price
0 - 12	.001 / 0.02mm	2.9	**NB60HK12C**	Price
0 - 18	.001 / 0.02mm	3-1/2	**NB60HK18C**	Price
0 - 24	.001 / 0.02mm	3.2	**NB60HK24C**	Price
0 - 40	.001 / 0.02mm	4-3/4	**NB60HK40C**	Price
0 - 60	.001 / 0.02mm	7-3/4	**NB60HK60C**	Price

Mitutoyo Precision Vernier Calipers

- Graduations photo engraved
- Hardened stainless steel throughout
- Satin-chrome finish
- Raised sliding surfaces with clear black engraving
- All measuring surfaces are ground and lapped

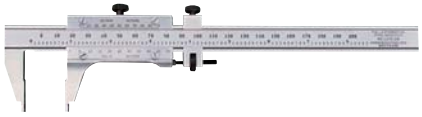


Features - Plain Type - Locking Screw			
Range (in./mm)	**Vernier Reading Upper Scale / Lower Scale**	**Order No.**	**Price**
0 - 6	128ths / .001	**MT80530-105**	Price
0 - 6 / 0 - 150mm	.001 / 0.02mm	**MT80530-312**	Price

Starrett Master Vernier Calipers

MADE IN THE USA

- Satin chrome finish
- Wide space graduation
- Lock nut
- Screw-type adjusting nut
- Complete with fitted case



Range (in.)	Graduation	Bar Width (in.)	Specification	Starrett No.	Order No.	Price
0 - 6	.001	11/16	Non Certified	123Z-6	**MV7050524**	Price
0 - 6	.001	11/16	Standard Letter of Certification	123Z-6	**MV7066925**	Price
0 - 12	.001	15/16	Non Certified	123Z-12	**MV7050526**	Price
0 - 12	.001	15/16	Standard Letter of Certification	123Z-12	**MV7066927**	Price
0 - 24	.001	15/16	Non Certified	123Z-24	**MV7050528**	Price

Starrett 125 Series Vernier Calipers

- High quality basic vernier caliper
- English and metric measurement
- Hardened stainless steel depth rod
- Lock screw for sliding jaw
- Graduation: .002" /0.02mm
- Sharp, black graduations on the satin finished bar

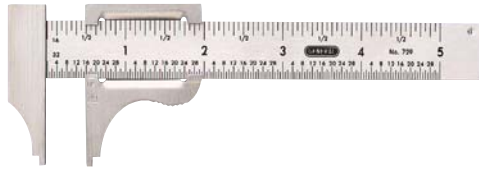
Global Series



Starrett No.	Description English/Metric	Order No.	Price
125MEA-6/150	0 - 6 / 0 - 150mm	**MV7061660**	Price
125MEA-8/200	0 - 8 / 0 - 200mm	**MV7061882**	Price
125MEA-12/300	0 - 12 / 0 - 300mm	**MV7061886**	Price

GENERAL 4" Slide Caliper

- Stainless steel caliper with inside and outside readings in 16ths and 32nds
- Decimal equivalents table on back
- 4" Capacity



Order No.	Price
NE50729	Price

GENERAL Pocket Caliper

- Stainless steel slide caliper with inside and outside readings in metric and inches
- Decimal equivalents
- 3" Capacity



Order No.	Price
NE50132ME	Price

GENERAL Plastic Dial Caliper

- Fractional conversion table
- 4-Way measuring
- Friction roller
- Reinforced plastic gives precision capabilities at an economical price
- Graduated in .01 and 64ths with inch and mm on bar scale



Range	Order No.	Price
0 - 6	**NE50142**	Price

PROCHECK Micrometer and Caliper Calibration Sets

Caliper and micrometer cehcking set with stand, clamps and socket head wrench plus gage blocks for accurately calipers and micrometers.

- Inch set includes 9 pc. grade 0 gage blocks plus (1) optical flat
- Metric set includes 10 pc. grade 0 gage blocks plus (1) optical flat



Description	Order No.	Price
Inch	**PC24CMCSI**	Price
Metric	**PC24CMCSM**	Price

PROCHECK Stand

- Stand only for micrometer and caliper setting kit



Order No.	Price
PC24CMCSD	Price

PROCHECK Clamp Block for Stand

- Clamp block only for micrometer and caliper setting kit





Order No.	Price
PC24CMCB	Price

PROCHECK Caliper Extender Attachment

- An economical attachment to extend the range of your 6” caliper
- Caliper NOT included



Extension Kit Size	Order No.	Price
26"	**NB75Z2526**	Price
36"	**NB75Z2536**	Price
51"	**NB75Z2551**	Price
71"	**NB75Z2571**	Price
91"	**NB75Z2591**	Price

PROCHECK Caliper Extender Accessories

Type	Order No.	Price
Centerline Gage Pins (Pair) for Calipers	**NB75Z2526CG**	Price

PROCHECK Caliper Anvil Attachment

- Converts micrometer anvil attachments for use on 4”, 6” or 8” calipers



Order No.	Price
NB75Z9050	Price

PROCHECK Individual Micrometer Anvil Attachments

- Each anvil is 1/2” long, ground and lapped on the measuring surface
- Comes with reinforced holding boot, and will fit on any 1 - 12” micrometer
- Fits .235”, .250”, and .270” spindles
- All anvils are hardended steel with black oxide plating
- Can also be used on 4”, 6” & 8” calipers with use of NB75Z9050 caliper attachment
- Micrometer NOT included

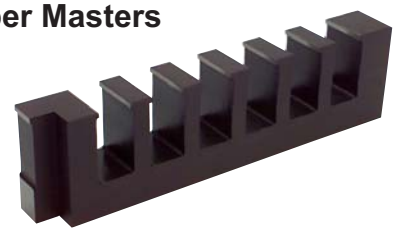


Anvil Type	Dimensions	Order No.	Price
Ball Attachment	.200 diameter	**NB75Z9300**	Price
Blade Type	.300 thick	**NB75Z9306**	Price
Comparator	30 degrees	**NB75Z9302**	Price
Disc Type	.500 diameter face	**NB75Z9305**	Price
Knife	30 degrees	**NB75Z9301**	Price
Spline Type	.100 diameter face	**NB75Z9304**	Price
Super Spline	.050 diameter face	**NB75Z9303**	Price
7-Pc Anvil Attachment Kit	-	**NB75Z9012**	Price

KALMASTER Caliper Masters

6” Caliper Master

- 12 Settings for checking inside and outside jaws and jaw frames
- All calibrations are accurate to ±.0001”
- Durable wood storage case included

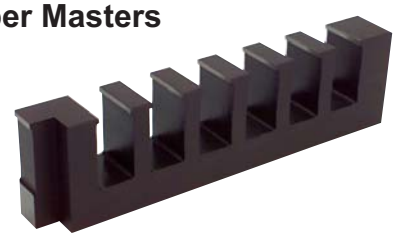


Order No.	Price
MS81K1	Price

KALMASTER Caliper Masters

12” Caliper Master

- 24 Settings for checking over a 12” range
- 0.6” range accurate to ±.0001”
- 7-12” range accurate to ±.0002”
- Durable wood storage case included



Order No.	Price
MS81K2	Price

PROCHECK Depth Base Attachment

- Turns any dial, vernier or electronic caliper into a depth measuring device
- Available in 2 sizes, to fit 4-6-8" and 12" calipers
- Screw locking clamp and ground base
- Caliper NOT included



Base Size	For Use With	Order No.	Price
3"	4, 6, & 8" Calipers	**NB75Z9225**	Price
4"	4, 6, & 8" Calipers	**NB75Z9226**	Price
5"	12" Calipers	**NB75Z9227**	Price

PROCHECK Caliper Depth Attachment

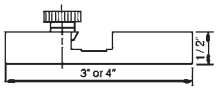
- Stainless steel
- Easy attachment with screw knob
- Fits caliper with upto 5/8" wide body
- Total span 2.93"

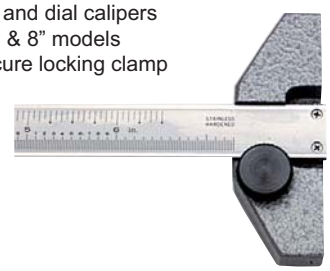


Order No.	Price
PC21CDA	Price

Mitutoyo Depth Base Attachment

- For 4", 6", 8" & 12" Mitutoyo vernier and dial calipers
- Choice of 3" or 4" base length for 6" & 8" models
- Finely ground base surface and secure locking clamp

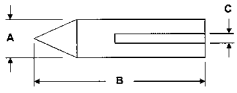




Size	For Use With	Order No.	Price
3"	4, 6, 8" / 100mm, 150mm, 200mm Calipers	**MT80050083-10**	Price
4"	4, 6, 8" / 100mm, 150mm, 200mm Calipers	**MT80050084-10**	Price
5"	12" / 300mm Calipers	**MT80050085-10**	Price

Mitutoyo Center Line Gage

- Pairs of conical probes are specially designed for dial and vernier calipers to quickly measure centerline distances
- Caliper NOT included





For Use With	Order No.	Price
12" Calipers	**MT80050018**	Price
4, 6, & 8" Calipers	**MT80050001**	Price

PROCHECK Caliper Clamp On Jaw Accessory Kit

- Turn your caliper into a versatile and accurate depth measurement device
- Attaches to any caliper jaw in seconds
- Thin probes in differing lengths can be used individually or in pairs to measure depths of grooves, blind holes, etc.
- Caliper NOT included





Description	For Use With	Order No.	Price
.1330 Max. Jaw Width (one)	6" Calipers	**NB75Z6958**	Price
.1860 Max. Jaw Width (one)	12" Calipers	**NB75Z6959**	Price
.1330 Max. Jaw Width (one)	18" Calipers	**NB75Z6983**	Price
Depth Probe, 3/4" Overall Length, .062 Shaft Diameter	All Jaw Clamps	**NB75Z6989**	Price
Depth Probe, 1" Overall Length, .062 Shaft Diameter	All Jaw Clamps	**NB75Z6985**	Price
Depth Probe, 1-1/2" Overall Length, .062 Shaft Diameter	All Jaw Clamps	**NB75Z6986**	Price
Depth Probe, 2" Overall Length, .062 Shaft Diameter	All Jaw Clamps	**NB75Z6987**	Price

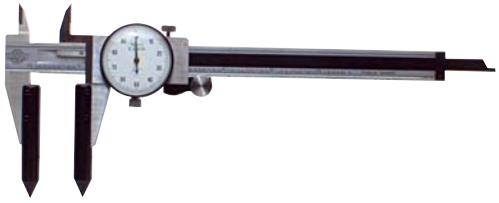
Gage Ball Tips For Caliper Clamp on Jaw Accessories



Description	Order No.	Price
.0310 Steel ball tip on 4-48 stem	**NB75Z6931**	Price
.0460 Steel ball tip on 4-48 stem	**NB75Z6932**	Price
.0625 Steel ball tip on 4-48 stem	**NB75Z6933**	Price
.0780 Steel ball tip on 4-48 stem	**NB75Z6934**	Price
.0938 Steel ball tip on 4-48 stem	**NB75Z6935**	Price
.1250 Steel ball tip on 4-48 stem	**NB75Z6936**	Price
.1562 Steel ball tip on 4-48 stem	**NB75Z6937**	Price
.1875 Steel ball tip on 4-48 stem	**NB75Z6938**	Price
.2188 Steel ball tip on 4-48 stem	**NB75Z6939**	Price
.2500 Steel ball tip on 4-48 stem	**NB75Z6940**	Price
.2812 Steel ball tip on 4-48 stem	**NB75Z6941**	Price
.3125 Steel ball tip on 4-48 stem	**NB75Z6942**	Price
.3438 Steel ball tip on 4-48 stem	**NB75Z6943**	Price
.3750 Steel ball tip on 4-48 stem	**NB75Z6944**	Price
.4060 Steel ball tip on 4-48 stem	**NB75Z6945**	Price
.4370 Steel ball tip on 4-48 stem	**NB75Z6946**	Price
.4680 Steel ball tip on 4-48 stem	**NB75Z6947**	Price
.5000 Steel ball tip on 4-48 stem	**NB75Z6948**	Price
.5310 Steel ball tip on 4-48 stem	**NB75Z6950**	Price
.5625 Steel ball tip on 4-48 stem	**NB75Z6951**	Price
.5937 Steel ball tip on 4-48 stem	**NB75Z6952**	Price
.6250 Steel ball tip on 4-48 stem	**NB75Z6953**	Price
.6560 Steel ball tip on 4-48 stem	**NB75Z6954**	Price
.6870 Steel ball tip on 4-48 stem	**NB75Z6955**	Price
.7180 Steel ball tip on 4-48 stem	**NB75Z6956**	Price
.7500 Steel ball tip on 4-48 stem	**NB75Z6957**	Price
.7812 Steel ball gage tip 4-48 stem	**NB75Z7100**	Price
.8125 Steel ball gage tip 4-48 stem	**NB75Z7101**	Price
.8750 Steel ball gage tip 4-48 stem	**NB75Z7102**	Price
.9375 Steel ball gage tip 4-48 stem	**NB75Z7103**	Price
1.000 Steel ball gage tip 4-48 stem	**NB75Z7104**	Price
1.0625 Steel ball gage tip 4-48 stem	**NB75Z7105**	Price
1.1250 Steel ball gage tip 4-48 stem	**NB75Z7106**	Price
1.1875 Steel ball gage tip 4-48 stem	**NB75Z7107**	Price
1.2500 Steel ball gage tip 4-48 stem	**NB75Z7108**	Price

PROCHECK Centerline Gages

- Measures hole to hole centers quickly and easily
- Attaches to most 4-6-8” calipers
- 60° Conical points, hardened steel, black oxide plated
- Comes with all mounting hardware and instructions
- **Caliper NOT included**



Order No.	Price
NB75Z9009	Price

PROCHECK Universal Caliper Accessory Kit

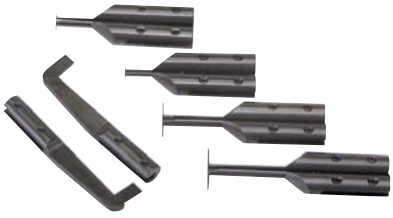
- Outfits any 4-6-8” caliper, and measures places otherwise impossible to reach
- Thousands of applications, installs in seconds
- Kit contains 2 caliper bodies, 1 pair contact points each in flat, conical, stem and ball end styles, set screws, wrench, and complete instructions
- Caliper NOT included



Order No.	Price
NB75Z9020	Price

PROCHECK Groove Measurement Caliper Jaws

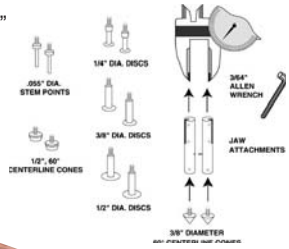
- Complete set of accessory jaws that fit on any 6” caliper
- Many applications, including undercuts, and grooves of all types
- Works with dial, vernier, and electronic calipers
- Measuring capacity from .200” to 6” in diameter
- Manufactured in the USA of cold rolled steel
- Black oxide finished for protection
- Sets come in fitted case
- Priced and sold per pair



Min. Measurement Dia.	Thickness of Measuring Tip	Max. Depth	Clearance from End of Tip to Jaw	Description	Order No.	Price
.200	.015	.400	.050	Groove Measurement	**NB75Z9510**	Price
.300	.015	.625	.070	Groove Measurement	**NB75Z9511**	Price
.600	.025	1.00	.200	Groove Measurement	**NB75Z9512**	Price
.725	.040	1.25	.255	Groove Measurement	**NB75Z9513**	Price
-	.024	3.00	.375	External Measurement	**NB75Z9514**	Price
Set of 3 Pairs-Max depth .400, .625, &1					**NB75Z9500**	Price
Set of 5 Pairs-Max depth .400, .625, 1, 1.25, & 3					**NB75Z9505**	Price

Centerline Plus Accessory Kit

Fits all Brown & Sharpe and competitive 6” dial, digital, and vernier calipers — jaw attachment slots are manufactured to .140”.



Features:

- Exclusive interchangeable centerline cones
- Measure places otherwise impossible to reach with a regular caliper — undercuts, grooves, webs, and shoulders
- Exclusive 4-48 threaded holes in accessory jaws allow the use of any AGD Standard point equipped with 4-48 threads — has virtually unlimited uses
- Long life — corrosion protection
- Permanent alignment



Item	Brand	Order No.	Price
TESA / brown & sharpe	Brown & Sharpe	**MV4526908**	Price
Fowler	Fowler	**NA5552010100**	Price

Fowler Centerline Accessory Kit

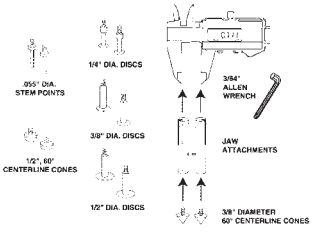
Xtra Value Electronic Caliper:

XTRA-VALUE CAL

- Range: 6”/150mm
- Resolution: .0005”/0.01mm
- Accuracy: .001”/0.02mm
- Absolute / incremental measurement
- True inch / metric conversion
- 4-Way measuring

Accessory Set:

- 6 Sets of interchangeable anvils
- Allows measurement of hard to reach places, including undercuts, grooves, webs and shoulders
- Corrosion resistant black oxide plating
- Includes fitted wooden case





Order No.	Price
NA5552010025	Price

Starrett® Miniature Dial Indicators

MADE IN THE USA

- 7/32” Diameter stem
- Low friction movement
- Adjustable bezel
- Balanced dial
- 1-17/64” Diameter dial face



Range (in.)	Stem Reading (in.)	Graduation	Order No.	Price
.050	.0005	0-10-0	**MV7055892**	Price
.100	.001	0-20-0	**MV7055893**	Price

Mahr Federal Dial Indicator ANSI Group 0 Series A

- Where available space prohibits the use of a larger dial indicator
- Dial approximately 1-7/32” diameter
- Lug back
- 7/32” Diameter stem



Measuring Range	Graduation	Dial Style	Order No.	Price
.010	.0001	0-2-0	**NA65A12Q**	Price
.050	.0005	0-10-0	**NA65A3Q**	Price
.100	.001	0-20-0	**NA65A6Q**	Price

Mitutoyo Series 1 Dial Indicators

- 1-5/8” Diameter face
- Vertically mounted lug on center back
- Ball type contact point



Total Range (in./mm)	Graduation (in./mm)	Range per/Rev. (in./mm)	Dial Face	Order No.	Price
.025	.0001	.010	0-5-0	**MT801803S-10**	Price
.050	.00025	.010	0-10-0	**MT801471S**	Price
.050	.00025	.010	0-20	**MT801470S**	Price
.100	.0005	.040	0-20-0	**MT801671S**	Price
.100	.0005	.040	0-40	**MT801670S**	Price
.125	.0005	.050	0-25-0	**MT801507S**	Price
.125	.0005	.050	0-50	**MT801506S**	Price
.125	.001	.050	0-25-0	**MT801781S**	Price
.125	.001	.050	0-50	**MT801780S**	Price
.250	.001	.100	0-100	**MT801410S**	Price
.250	.001	.100	0-50-0	**MT801411S**	Price
2.5mm	0.01mm	1mm	0-100	**MT801230S-01**	Price
2.5mm	0.01mm	1mm	0-50-0	**MT801231S-01**	Price
5mm	0.01mm	1mm	0-50-0	**MT801045S-01**	Price

PROCHECK Dial Indicator

- 1/4” Range
- .001” Graduation
- 0-100 Reading
- Lug back
- Revolution counter
- AGD 1 style



Order No.	Price
NB70NDI6	Price

Starrett® AGD 1 Dial Indicators

- 1-5/8” Diameter dial face
- Shockless hardened steel gear train
- Lug-on-center back
- Jewel bearing

MADE IN THE USA



Total Range (in.)	Graduation (in.)	Range One Rev. (in.)	Dial Reading	Order No.	Price
.025	.0001	.010	0-50-0	**MV7053378**	Price
.125	.001	.050	0-25-0	**MV7053410**	Price
.250	.001	.100	0-100	**MV7053428**	Price
.250	.001	.100	0-50-0	**MV7053400**	Price

Mahr Federal Small Shockproof Dial Indicators

- 0.01mm/.0005” Readings
- 3mm/.120” Measuring range
- 8mm Shank diameter
- 1-3/8” Dial diameter



Total Range (in./mm)	Order No.	Price
.120	**NA654324911**	Price
3mm	**NA654324100**	Price

CDI Chicago AGD 1 Dial Indicators with Certification

- Made in America since 1932
- One piece brass forged and chrome plated case
- Heat treated 416 stainless steel rack & gears

Included with each indicator:

- 4-position lug & flat back
- Long form cert., traceable to NIST



Total Range (in.)	Graduation (in.)	Range Per/Rev. (in.)	Dial Style	Order No.	Price
.025	.0001	.010	0-5-0	**MV6510251BJ**	Price
.075	.0005	.030	0-15-0	**MV6510753B**	Price
.125	.001	.050	0-25-0	**MV6511254B**	Price
.250	.001	.100	0-100	**MV6512504B**	Price

Mahr Federal Dial Indicators ANSI/AGD Group 1, Series B

- Best suited for multiple unit fixtures or smaller gages
- Dial approximately 1-3/4” diameter with soft-green tint
- Lug back
- 3/8” Diameter stem
- 4-48 Thread contact point



Measuring Range	Graduation	Dial Style	Order No.	Price
.025	.0001	0-5-0	**NA6512I**	Price
.050	.0005	0-10-0	**NA65B3QRC**	Price
.050	.001	0-10-0	**NA65B3WRC**	Price
.075	.0005	0-15-0	**NA65B5MRC**	Price
.100	.0005	0-20-0	**NA65B6KRC**	Price
.125	.0005	0-25-0	**NA65B7IRC**	Price

PROCHECK AGD 2 Dial Indicators

- 2-1/4" Dial diameter
- Lug back
- Revolution counter
- Easy to read



Range (in.)	Dial Reading	Graduation (in.)	Face	Order No.	Price
.250	0-100	.001	White	**NB70NDI4**	Price
.500	0-100	.001	White	**NB70NDI2**	Price
1.0	0-100	.001	Black	**NB70NDIB**	Price
1.0	0-100	.001	White	**NB70NDI**	Price
1.0	0-50	.0005	White	**NB70NDI5**	Price
2.0	0-100	.001	White	**NB70NDI3**	Price

Tesa Tech AGD 2 Dial Indicators

- 2-1/4" Diameter dial
- .001" Graduation
- 0-100 Dial reading
- Hard satin-chrome finish
- Easy read crisp graduations
- Hard chrome plated stem, precision ground and lapped
- Interchangeable hardened chrome point
- On center lug back
- Made In Japan



Range (in.)	Rev. Counter	Face	Order No.	Price
.250	No	White	**NB90AI905**	Price
.500	Yes	White	**NB90AI911**	Price
1.0	Yes	Black	**NB90AI921B**	Price
1.0	Yes	White	**NB90AI921**	Price
2.0	Yes	Black	**NB90AI951B**	Price
2.0	Yes	White	**NB90AI951**	Price

BAKER AGD Dial Indicators

- 2-1/4" Dial diameter (Except NB73JB76: 3-1/2" Dial Dia.)
- Fitted with brass bushing
- Tolerance pointers
- Forged brass case with satin chrome finish
- Lug back

ISO 9001



Range	Type	Graduation	Reading	Order No.	Price
.050	AGD 2	.0001	0-50-0	**NB73KB59**	Price
.250	AGD 2	.001	0-100	**NB73KB46**	Price
.500	AGD 2	.0005	0-25-0	**NB73KB53**	Price
.500	AGD 2	.0005	0-50	**NB73KB54**	Price
1.000	AGD 2	.001	0-100	**NB73KB50**	Price
2.000	AGD 3	.001	0-100	**NB73JB76**	Price

PROCHECK Premier 1" Travel Dial Indicators

- Range: 0 - 1"
- Indicator graduation .001 per line .100 per revolution
- 1/4" Lug back and 3/8" stem
- Flat back and carbide tip included
- 1 Year Warranty



Dial Face	Order No.	Price
Black	**PC21DI211BCT**	Price
White	**PC21DI211WCT**	Price

TESA TECHNOLOGY / brown & sharpe AGD 2 Indicators

- 2-1/4" Diameter dial
- Lug back
- Balanced dial
- 3/8" Diameter stem



Total Travel (in.)	Dial Graduations	Travel per Rev. (in.)	Reading (in.)	Dial / Hand Color	Order No.	Price
.200	0-5-0	.010	.0001	Black / Orange	**MV4526859**	Price
1.0	0-100	.100	.001	Black	**MV4526863**	Price
1.0	0-100	.100	.001	White	**MV4526862**	Price

CDI CHICAGO AGD 2 Dial Indicators with Certification

- Made in America since 1932
- One piece brass forged and chrome plated case
- Heat treated 416 stainless steel rack & gears

Included with each indicator:

- 4 Position lug & flat back
- Long form cert., traceable to NIST



Total Range	Graduation	Range Per Rev.	Dial Style	Order No.	Price
.025	.0001	.010	0-5-0	**MV65201251BJ**	Price
.200	.0001	.010	0-10	**MV6522001CJ**	Price
.250	.001	.100	0-100	**MV6522504C**	Price
1.0	.001	.100	0-100	**MV6526104C†**	104.40
2.0	.001	.100	0-100	**MV6526204CJ†**	201.30

†Supplied with revolution counter.
J in order number signifies indicator supplied with jewel bearings.

TESA TECHNOLOGY / brown & sharpe Valueline AGD2 Dial Indicators

- Face diameter 2-1/4"
- Graduations .001"
- Dial reading 0 - 100
- Total range is 1"
- Carbide ball point
- Adjustable bezel



Model No.	Face Color	Order No.	Price
1489022	White	**MV4547442**	Price
1489023	Black	**MV4547443**	Price

Mitutoyo AGD 2 Dial Indicators

2-1/4" Dial Diameter

- Lug back
- Revolution counter
- 3/8" Diameter stem
- No. 2 Series



Total Range (in./mm)	Graduation (in./mm)	Dial Reading	Range One Rev. (in./mm)	Order No.	Price
.500	.001	0-100	.100	**MT802414S**	Price
.500	.001	0-50-0	.100	**MT802415S**	Price
10mm	0.01mm	0-100	1mm	**MT802046S-01**	Price
10mm	0.01mm	0-100	1mm	**MT802046S-11**	Price
10mm	0.01mm	0-50-0	1mm	**MT802047S-01**	Price
2.5mm	0.01mm	0-100	1mm	**MT802230S-01**	Price
2.5mm	0.01mm	0-50-0	1mm	**MT802231S-01**	Price
20mm	0.01mm	0-100	1mm	**MT802050S-01**	Price

Mitutoyo AGD 2 Long Range Dial Indicators

2-1/4" Dial Diameter

- Lug back
- Revolution counter
- 3/8" Diameter stem
- No. 2 Series



Total Range (in.)	Dial Reading	Graduation (in.)	Range per Rev. (in.)	Dial Face	Note	Order No.	Price
1.0	0-50	.0005	.050	2-1/4	Lug Back	**MT802776S**	Price
1.0	0-50-0	.001	.100	2-1/4	Lug Back	**MT802417S**	Price
1.0	0-100	.001	.100	2-1/4	Lug Back	**MT802416S**	Price
1.0	0-100	.001	.100	2-1/4	Lug Back	**MT802416S-10**	Price
1.0	0-100	.001	.100	2-1/4	Flat Back	**MT802416SB-10**	Price
1.0	100-0	.001	.100	2-1/4	Lug Back	**MT802904S**	Price
2.0	0-100	.001	1.00	2-1/4	Lug Back	**MT802424S-19**	Price

Starrett Long Range Dial Indicators

Shockless Hardened Steel Gear Train

MADE IN THE USA

- .001" Dial graduation
- .100" Dial reading
- Conforms to AGD specifications except for range
- Stem cap supplied as standard
- Furnished with continuous reading double dial with direct reading count hands
- Furnished with jewel bearings and lug-on-center back

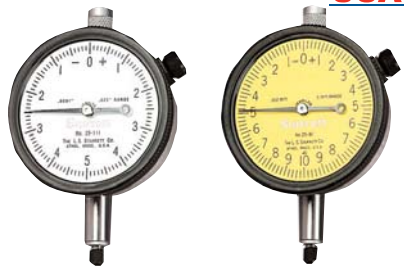


Range (in.)	AGD Group	Diameter (in.)	Order No.	Price
2.0	AGD 2	2-1/4	**MV7053309**	Price
2.0	AGD 3	2-3/4	**MV7053619**	Price
3.0	AGD 2	2-1/4	**MV7053310**	Price
4.0	AGD 2	2-1/4	**MV7053311**	Price
5.0	AGD 2	2-1/4	**MV7053312**	Price
5.0	AGD 3	2-3/4	**MV7053622**	Price

Starrett AGD 2 Dial Indicators

MADE IN THE USA

- Lug back
- Revolution counter
- 3/8" Diameter stem
- No. 2 Series



Total Range (in./mm)	Graduation (in./mm)	Dial Reading	Dial Face Dia.	Range One Rev. (in./mm)	Order No.	Price
.500	.0005	0-50	2-1/4	.050	**MV7053292**	Price
.500	.001	0-100	2-1/4	.100	**MV7053293**	Price
.500	.001	0-100	2-1/4	.100	**MV7066863**	Price
1.0	.0005	0-50	2-1/4	.050	**MV7053304**	Price
1.0	.001	0-100	2-1/4	.100	**MV7053295**	Price
1.0	.001	0-100	2-1/4	.100	**MV7066864**	Price
1.0	.001	0-50-0	2-1/4	.100	**MV7053287**	Price
25mm	0.01mm	0-100	57mm	1mm	**MV7053307**	Price
25mm	0.01mm	0-50-0	57mm	1mm	**MV7053305**	Price

Starrett AGD 3 Dial Indicators

- Lug back
- Revolution counter
- 3/8" Diameter stem
- No. 3 Series

MADE IN THE USA



Total Range (in./mm)	Graduation (in./mm)	Dial Reading	Dial Face Dia.	Range One Rev. (in./mm)	Order No.	Price
1.000	.001	0-100	2-3/4	.100	**MV7053613**	Price

Starrett AGD 4 Dial Indicators

- Lug back
- Revolution counter
- 3/8" Diameter stem
- No. 4 Series

MADE IN THE USA



Total Range (in.)	Graduation (in.)	Dial Reading	Dial Face Dia.	Range One Rev. (in.)	Order No.	Price
.400	.0001	0-10-0	3-5/8	.020	**MV7053793**	Price
.400	.0001	0-20	3-5/8	.020	**MV7053797**	Price
.500	.001	0-100	3-5/8	.100	**MV7053787**	Price
.500	.001	0-50-0	3-5/8	.100	**MV7053783**	Price
1.0	.001	0-100	3-5/8	.100	**MV7053789**	Price
1.0	.001	0-50-0	3-5/8	.100	**MV7053785**	Price
25mm	0.01mm	0-100	92mm	1mm	**MV7056234**	Price

INSIZE Dial Indicators

- Lug back
- Limit pointers and bezel clamp provided
- Supplied with certification
- Meets ASME B89.1.10M-2001



Range (in.)	Model No.	Order No.	Price
1.0	2307-1	**SZ2023071**	Price
2.0	2307-2	**SZ2023072**	Price

Mitutoyo Series 2 One Revolution Dial Gage

- One-revolution dial indicators are nearly fool-proof in their operation, since the indicator needle travels around the dial face only once per the full stroke of the spindle
- Strengthened against shop contaminants with a stronger seal, and more robust gear mechanisms make this tool more resistant to rapid spindle motions and shock



Total Range	Dial Reading	Graduation	Order No.	Price
.020	10-0-10	.0005	**MT802976TB**	Price
.040	20-0-20	.0005	**MT802977TB**	Price
.060	30-0-30	.001	**MT802978TB**	Price
.5mm	25-0-25	0.01mm	**MT802971**	Price
1mm	50-0-50	0.01mm	**MT802972TB**	Price
1.6mm	25-0-25	0.02mm	**MT802973TB**	Price

Mitutoyo AGD 2 One Revolution Dial Indicators

- 2-1/4” Dial Diameter
- 3/8” Diameter stem
- No. 2 Series



Total Range (in./mm)	Graduation (in./mm)	Dial Reading	Range One Rev. (in./mm)	Note	Order No.	Price
.008	.0001	4-0-4	.008	Lug Back, White Face	**MT802910S-10**	Price
0.08mm	0.001mm	40-0-40	0.1mm	Flat Back, Yellow Face	**MT802900SB-73**	Price

Mitutoyo AGD 2 Dial Indicators

- Lug back
- Revolution counter
- 3/8” Diameter stem
- No. 2 Series



Total Range (in./mm)	Graduation (in./mm)	Dial Reading	Dial Face Dia. (in./mm)	Range One Rev. (in./ mm)	Order No.	Price
.100	.0005	0-40	2-1/4	.040	**MT802670S**	Price
.125	.0005	0-25-0	2-1/4	.050	**MT802507S**	Price
.125	.0005	0-50	2-1/4	.050	**MT802506S**	Price

Mitutoyo AGD 2 Adjustable Face Dial Indicator

A twist of the knob brings the dial hand to zero,or any other desired position, without losing the original contact.

- 2-1/4” Dial diameter
- Graduation .001”
- 0-100 Dial reading
- Lug back
- 3/8” Diameter stem



Total Range (in.)	Dial Face	Note	Order No.	Price
.500	0-50-0	Rev. Counter: Jeweled	**MT802918S-10**	Price
.500	0-100	Rev. Counter: Jeweled	**MT802915S-10**	Price

Mitutoyo AGD 2 Dial Indicators

- Shock proof, jeweled bearing
- Lug back
- Revolution counter
- 3/8” Diameter stem
- No. 2 Series
- MT80-2802SB-10 With Flat Back



Total Range (in.)	Graduation (in.)	Dial Reading	Dial Face Dia. (in.)	Range One Rev. (in.)	Order No.	Price
.025	.0001	0-10	2-1/4	.010	**MT802802SB-10**	Price
.050	.0001	0-10	2-1/4	.010	**MT802804S-10**	Price
.025	.0001	0-5-0	2-1/4	.010	**MT802803S-10**	Price
.050	.0001	0-5-0	2-1/4	.010	**MT802805S-10**	Price
.050	.0001	0-5-0	2-1/4	.010	**MT802923S-10**	Price
1mm	0.001mm	0-100-0	2-1/4	.2mm	**MT802109S-11**	Price
5mm	0.001mm	0-100-0	2-1/4	.2mm	**MT802119S-11**	Price

Mitutoyo Long Range Dial Indicators

AGD 3 & 4

- 3” and 3-5/8” Dial diameter
- Lug back
- 3/8” Diameter stem
- .001” Graduation
- .100” Range per revolution



Total Range (in.)	Dial Reading	Dial Face (in.)	Note	Order No.	Price
1.0	0-100	3	-	**MT803416S**	Price
1.0	0-50-0	3	Flat Back	**MT803417SB**	Price
2.0	0-100	3	-	**MT803424S-19**	Price
3.0	0-100	3-5/8	-	**MT804887S-19**	Price

Fowler Premium Dial Indicators



- AGD 2 series, 2-1/4" face diameter
- Solid brass housing
- Carbide contact point
- Includes certificate of calibration

Range	Graduation	Continuous Reading	Balanced Reading	Face Color	Order No.	Price
.0500	.0001	0-10	0-5-0	White	**NA5552520135**	Price
.200	.001	0-100	0-50-0	White	**NA5552520120**	Price
.250	.0005	0-50	0-25-0	White	**NA5552520125**	Price
.250	.0005	-	0-25-0	White	**NA5552520127**	Price
.500	.001	0-100	0-50-0	White	**NA5552520105**	Price
1.000	.001	0-100	-	Black	**NA55525201101**	Price
1.000	.001	0-100	-	White	**NA55525201102**	Price
1.000	.0005	0-50	-	White	**NA5552520128**	Price
1.000	.0005	0-50	0-25-0	White	**NA5552520129**	Price
5mm	0.002mm	-	0-10-0	White	**NA5552520400**	Price
10mm	0.01mm	0-100	0-50-0	White	**NA5552520300**	Price
25mm	0.01mm	0-100	0-50-0	White	**NA5552520500**	Price

Fowler Dial Indicators

- AGD 2, 2-1/4" Dial diameter
- Lug back
- Revolution counter

NA5552530110 Special Features:

- Dial face reads in inch (black) or metric (red)
- Separated dial for inch and metric



NA5552520110 NA5552530110

Range (in.)	Graduation (in.)	Continuous Reading	Balanced Reading	Order No.	Price
.500	.0001	0-10	-	**NA5552520140**	Price
1.000	.001	0-100	-	**NA5552520110**	Price
1.000	.0005	0-50	-	**NA5552520128**	Price
1.000 / 25mm	.001 / 0.01mm	0-100	0-100-0	**NA5552530110**	Price

Fowler Indicators

Protection Includes:

- Rubber bellows on stem
- O-Ring seal on safety cap
- Redesigned bezel with double o-ring protection for bezel and rotating dial
- Form-fitted back plate
- Corrosion resistant
- 8mm stem
- M2.5 contact point

General Specifications Include:

- Lug back
- Robust, shockproof design
- Coolant proof, shockproof and affordable

NA5552520444 Shown



NA55525204444

Range (in.)	Graduation (in.)	AGD Group	Reading	Order No.	Price
.125	.0005	AGD 1	0-20-0	**NA5552520020**	Price
.400	.0005	AGD 2	0-50-0	**NA5552520250**	Price
.400	.001	AGD 2	0-100	**NA5552520444**	Price

Fowler Shockproof Dial Indicators

X-PROOF®

- Rubber bellows on stem
- O-ring seal on safety cap
- O-ring protection for bezel and rotating dial
- Sealed back plate
- 1" Travel
- .001" Reading
- 0-100 Continuous reading
- Tolerance markers
- AGD Group 2, 2-1/4" diameter dial
- Lugback
- Carbide point



Dial Face Color	Order No.	Price
Black	**NA5552520455**	Price
White	**NA5552520450**	Price

PROCHECK IP54 Dial Indicator - 1" Travel, .001" Graduation



- IP54 protection, shockproof design
- Rubber bellow on stem and o-ring seal safety cap
- O-ring protection for bezel and dial
- Sealed back plate (lug back)
- Tolerance markers
- AGD Group 2
- Lug back and carbide point
- 1 Year Warranty

Range per Revolution	Dial Reading	Dial Face Diameter	Face Color	Order No.	Price
.100	0-100	2-1/4	White	**PC21DI211IP5SP**	Price

Mahr Federal Dial Indicators ANSI/AGD

Group 2 Mahr Federal Series C



- Most widely used for all dial indicator applications
- Dial approximately 2-1/4" diameter with soft-green tint
- Furnished with continuous dial, lug back, revolution counter and tolerance hands
- Stem diameter: 3/8"

Measuring Range	Graduation	Dial Style	Range Per Rev. (in.)	Order No.	Price
.050	.001	0-20	.020	**NA652014809**	Price
.100	.0005	0-40	.040	**NA652014812**	Price
.125	.0005	0-50	.050	**NA652014814**	Price

Fowler Premium IP54 Shockproof Dial Indicators



- Includes N.I.S.T. Certification
- Includes both center lug back and flat back
- 1" range
- 0.001" graduation
- Steel housing
- Sealed plunger, dustcap, bezel lock and back plate
- Carbide contact point
- 0 - 100 dial reading with rev. counter
- 4 - 48 (3/8" stem) contact point

Face Color	Order No.	Price
Black	**NA55525204650**	Price
White	**NA55525204600**	Price

PROCHECK PREMIUM Electronic Indicators with Output



- Absolute/incremental reading and floating zero
- Direct inch/metric conversion and auto-off feature
- Lug and, flat back, 3/8” stem diameter and carbide tipped point
- Tolerance indicators
- Optional USB data kit (PC26DCBS4PIN) available
- 1 Year Warranty

Total Range	Resolution	Indicator Style	Order No.	Price
0 - .5" / 0 - 12.5mm	.0005" / 0.01mm	Drop Indicator	**PC20EI0512505EM**	Price
0 - 1" / 0 - 25mm	.0005" / 0.01mm	Drop Indicator	**PC20EI1025005EM**	Price

PROCHECK ABSOLUTE Electronic Indicators with Output

WIRELESS CAPABLE

ABSOLUTE CONNECT



- Direct inch/metric conversion and auto shut off
- Absolute/incremental reading, tolerance indicators
- Lug and flat back, 3/8” stem (4-48 thread), carbide point
- Data output port (USB/SPC kit optional)
- Replacement battery: KA56ECR2032
- Optional USB data kit (PC26DCBL5PIN) available
- Compatible with optional wireless adaptor (PC26WTD1ABS)
- 1 Year Warranty

Total Range	Resolution	Indicator Style	Comments	Order No.	Price
0 - .5" / 0 - 12.5mm	.00005" / 0.001mm	Drop Indicator	Supplied with lug and flat back	**PC20EI05005ABEM**	Price
0 - 1" / 0 - 25mm	.00005" / 0.001mm	Drop Indicator	Supplied with flat back	**PC20EI10005ABEM**	Price

PROCHECK Electronic Digital Indicators

- .0005”/0.01mm Resolution
- Inch/metric, zero setting
- Battery included
- Lugback



EDI1



32731

Range	Order No.	Price
0 - .4" / 0 - 10mm	**NB70EDI1**	Price
0 - .5" / 0 - 13mm	**NB605DI7**	Price
0 - 1" / 0 - 25mm	**NB7032731**	Price

PROCHECK ABSOLUTE Digital Mini Indicators

ABSOLUTE CONNECT



- Absolute technology that memorize origin zero
- IP54 Protection, origin set, preset value
- Optional USB data kit (PC26DCBL5PIN) available
- Compatible with optional wireless adaptor (PC26WTD1ABS)
- Resolution: .00005”/0.001mm
- Accuracy: .0016”
- Carbide tip
- Connect and interactive with Procheck absolute digital height gages
- 1 Year Warranty

WIRELESS CAPABLE

IP54

Range	Order No.	Price
0-1 / 0.254	**PC20EIM015ABEM**	Price
0-2 / 0.50	**PC20EIM025ABEM**	Price

PROCHECK Output Cables, USB with Data Send Control



- Connect tools via USB port and send data to spreadsheets or SPC program (program supplied separately)
- 1 Year Warranty

Size	Order No.	Price
LARGE 5 PIN L5 CONNECTOR/USB	**PC26DCBL5PIN**	Price
SMALL 4 PIN S4 CONNECTOR/USB	**PC26DCBS4PIN**	Price

Starrett Electronic Indicators

No. 3600 Series



Features:

- Power On/Off button
- Reverse travel (±control indicates direction)
- Zero setting at any position
- Lug-on-center back plus additional flat back
- Dust cap

Total Range	Resolution	Indicator Style	Order No.	Price
0 - .5" / 0 - 12.7mm	.0005" / 0.01mm	AGD 2	**MV7068813**	Price
0 - 12.7mm	0.01mm	-	**MV7068918**	Price

Starrett Electronic Indicators

2900 Series

- Origin set, zero set
- Counting direction switching
- Lug-on center
- Uses (2) CR2032 batteries
- Data output on all models
- IP67 and CE compliant
- Compatible with Starrett 25 indicator backs



Range	Resolution	Accuracy	Starrett No.	Order No.	Price
0 - .5" / 0 - 12.7mm	.0005" / .0001" / .00005" / 0.01mm / 0.001mm	+/- .0012" (0.003mm)	2900-4ME	**MV7009976**	Price
0 - .5" / 0 - 12.7mm	.0005" / .0001" / .00005" / 0.01mm / 0.001mm	+/- .0012" (0.003mm)	2900-6ME	**MV7009979**	Price
0 - 1" / 0 - 25mm	.00005" / 0.001mm	+/- .0012" (0.003mm)	2900-1-1	**MV7009960**	Price
0 - 1" / 0 - 25mm	.00005" / 0.001mm	+/- .0012" (0.003mm)	2900-1ME-25	**MV7009972**	Price
0 - 1" / 0 - 25mm	.0001" / 0.002mm	+/- .0012" (0.003mm)	2900-2-1	**MV7009962**	Price
0 - 1" / 0 - 25mm	.0005" / .0001" / .00005" / 0.01mm / 0.001mm	+/- .0012" (0.003mm)	2900-6-1	**MV7009969**	Price
0 - 1" / 0 - 25mm	.0005" / .0001" / .00005" / 0.01mm / 0.001mm	+/- .0012" (0.003mm)	2900-6ME-25	**MV7009991**	Price
0 - 1" / 0 - 25mm	.0005" / 0.01mm	+/- .001" (0.03mm)	2900-5-1	**MV7009967**	Price
0 - 1" / 0 - 25mm	.0005" / 0.01mm	+/- .001" (0.03mm)	2900-5ME-25	**MV7009978**	Price
0 - 25mm	0.001mm	+/- .0012" (0.003mm)	2900-1M-25	**MV7009961**	Price

Mitutoyo IDC Type Digimatic Indicators with Absolute Encoder



- Absolute linear encoder
- GO/NG judgement function
- Preset, zero-set, inch/mm, ± direction
- Face rotates 330°
- SPC output
- For SPC order cable MT80905338 (1m) or MT80905409 (2m)

Range (in./mm)	Comments	Resolution (in./mm)	Type	Order No.	Price
0 - .5" / 0 - 12.7mm	With Absolute Encoder/Flat Back	.00005" / 0.001mm	Flat Back	**MT80543-392B**	Price
0 - .5" / 0 - 12.7mm	Bore Gage Type Indicator	.00005/.0001/.0005" / 0.001/0.01mm	Flat Back	**MT80543-312B**	Price
0 - .5" / 0 - 12.7mm	Calculation Type Indicator	12 Step Selectable	Flat Back	**MT80543-341B**	Price
0 - .5" / 0 - 12.7mm	Calculation Type Indicator	12 Step Selectable	Flat Back	**MT80543-342B**	Price
0 - 1" / 0 - 25.4mm	Calculation Type Indicator	12 Step Selectable	Flat Back	**MT80543-591B**	Price
0 - 1" / 0 - 25.4mm	Calculation Type Indicator	12 Step Selectable	Flat Back	**MT80543-592B**	Price
0 - 2" / 0 - 50.8mm	Calculation Type Indicator	12 Step Selectable	Flat Back	**MT80543-596B**	Price
0 - 2" / 0 - 50.8mm	Calculation Type Indicator	12 Step Selectable	Flat Back	**MT80543-597B**	Price
0 - .5" / 0 - 12.7mm	Peak Hold Indicator	.00005/.0001/.0005" / 0.001/0.01mm	Flat Back	**MT80543-301B**	Price
0 - .5" / 0 - 12.7mm	Peak Hold Indicator	.00005/.0001/.0005" / 0.001/0.01mm	Flat Back	**MT80543-302B**	Price
0 - .5" / 0 - 12.7mm	Peak Hold Indicator	.00005/.0001/.0005" / 0.001/0.01mm	Lug Back	**MT80543-301**	Price
0 - .5" / 0 - 12.7mm	Peak Hold Indicator	.00005/.0001/.0005" / 0.001/0.01mm	Lug Back	**MT80543-302**	Price
0 - .5" / 0 - 12.7mm	With Absolute Encoder	.00005" / 0.001mm	Lug Back	**MT80543-392**	Price
0 - 1" / 0 - 25.4mm	With Absolute Encoder/Flat Back	.00005" / 0.001mm	Flat Back	**MT80543-472B**	Price
0 - 2" / 0 - 50.8mm	With Absolute Encoder/Flat Back	.00005" / 0.001mm	Flat Back	**MT80543-492B**	Price
0 - .5" / 0 - 12.7mm	With Absolute Encoder/Flat Back	.0005" / 0.01mm	Flat Back	**MT80543-402B**	Price
0 - 1" / 0 - 25.4mm	With Absolute Encoder/Flat Back	.0005" / 0.01mm	Flat Back	**MT80543-476B**	Price
0 - 2" / 0 - 50.8mm	With Absolute Encoder/Flat Back	.0005" / 0.01mm	Flat Back	**MT80543-496B**	Price
0 - .5" / 0 - 12.7mm	With Absolute Encoder/Flat Back	.0005" / 0.01mm	Flat Back	**MT80543-402B**	Price

Available in full metric and bore gage type

Mitutoyo IDS Digimatic Indicators
With Absolute Encoder



- Absolute Encoder Technology maintaineds all settings for the life of the battery
- Conforms generally to Group 2 dial indicator dimensions
- Measuring range: 0-5"/0-12.7mm
- Functions: origin, on/off, in/mm +/–
- Data output: SPC digimatic output
- Stem diameter: .375" -.0012"
- Contact point .16" (dia.) steel ball (4-48 UNF)
- For SPC output order connecting cable MT80905338 (1m) or MT80905409 (2m)
- "B" Indicates flat back

Range (in./mm)	Resolution (in./mm)	Stem Dia.	Contact Point Thread Size	Order No.	Price
0 - .5" / 0 - 12.7mm	.0005" / 0.01mm	-	4-48	**MT80543-782**	Price
0 - .5" / 0 - 12.7mm	.0005" / 0.01mm	-	4-48	**MT80543-782B**	Price
0 - .5" / 0 - 12.7mm	.0005" / 0.01mm	.375	4-48	**MT80543-783**	Price
0 - .5" / 0 - 12.7mm	.0005" / 0.01mm	.375	4-48	**MT80543-783B**	Price
0 - .5" / 0 - 12.7mm	.00005" / 0.001mm	.375	M2.5x0.45	**MT80543-791**	Price
0 - .5" / 0 - 12.7mm	.00005" / 0.001mm	8mm	M2.5x0.45	**MT80543-791B**	Price
0 - .5" / 0 - 12.7mm	.00005" / 0.001mm	.375	4-48	**MT80543-792**	Price
0 - .5" / 0 - 12.7mm	.00005" / 0.001mm	.375	4-48	**MT80543-792B**	Price
0 - .5" / 0 - 12.7mm	.0001" / 0.001mm	.375	4-48	**MT80543-793**	Price
0 - .5" / 0 - 12.7mm	.0001" / 0.001mm	.375	4-48	**MT80543-793B**	Price
0 - .5" / 0 - 12.7mm	.0001" / 0.003mm	-	4-48	**MT80543-795**	Price
0 - .5" / 0 - 12.7mm	.0001" / 0.003mm	-	4-48	**MT80543-795B**	Price
0 - .5" / 0 - 12.7mm	.00005" / 0.001mm	.375	4-48	**MT80543-796**	Price
0 - .5" / 0 - 12.7mm	.00005" / 0.001mm	.375	4-48	**MT80543-796B**	Price

Mitutoyo ID-B Absolute Digimatic Indicators



- Small 1.38" (35mm) width
- Reversible LCD display
- For SPC, order cable 21EAA194 – 40" (1m) or 21EAA190 – 80" (2m)
- 2 Indicators shown

ABSOLUTE IP66

Range (in./mm)	Resolution (in./mm)	Accuracy (in./mm)	Order No.	Price
0 - 2" / 0 - 50.8mm	.0005" / 0.01mm	.0008" / 0.02mm	**MT80543-581**	Price

Mitutoyo IDU Digimatic Indicators



- 0-1"/0-25mm Measuring range
- Easy to read LCD
- SPC output
- Slim design fits into tight spaces
- Battery powered for portability
- Functions include: in/mm conversion, zero-set and on/off
- Supplied with lifting lever 137693
- Flat back only
- Display: .0005"/0.01mm
- For SPC order connecting cable MT80905338 (1m) or MT80905049 (2m)

Order No.	Price
MT80575-123	Price

Optional Release Cable for all Digimatic Indicators



- Stroke .4" / 10mm
- Cable length 300mm

Order No.	Price
MT80540774	Price

Mitutoyo SPC Connecting Cables 10 Pin Type, Rectangular



Range	Order No.	Price
40" / 1m	**MT80936937**	Price
80" / 2m	**MT80965014**	Price

Fowler Electronic Indicator



- Direct inch / metric conversion
- 2-1/2” Dial face
- Lug back with 3/8” stem diameter
- Resolution .0005” /0.01mm
- 1” Travel
- Tolerance indicators
- Min/max measurement
- Floating zero

INDI-X

Order No.	Price
NA55545200251	Price

Fowler Mark VI Electronic Indicators



- Robust construction
- Water and coolant resistant
- Protection class IP-67*Requires rubber boot accessory
- Battery life: 10,000 hours of operation
- New technology with customizable menus
- Wide range of functions (MIN/MAX/DELTA, TOL, Factor, Preset, Auto Off, etc)
- Aluminum housing
- Bezel rotated 270°
- Large display with LED indicators
- Lug back
- Lifetime warranty

IP67 | Fowler PROXIMITY INTERFACE | Fowler POWER INTERFACE | sylvac | Fowler SPC

- Analog Display				
Range	Accuracy	Resolution	Order No.	Price
0 - .5" / 0 - 12.5mm	.00012" / 0.003mm	.00005" / 0.001mm	NA5554530535	Price
0 - 1" / 0 - 25mm	.00016" / 0.004mm	.00005" / 0.001mm	NA5554530555	Price

- Bluetooth				
Range	Accuracy	Resolution	Order No.	Price
0 - 1" / 0 - 25mm	.00016" / 0.004mm	.00005" / 0.001mm	NA5554530355	Price
0 - .5" / 0 - 12.5mm	.00012" / 0.003mm	.00005" / 0.001mm	NA5554530335	Price

- Standard				
Range	Accuracy	Resolution	Order No.	Price
0 - .5" / 0 - 12.5mm	.0004" / 0.01mm	.0005" / 0.01mm	NA5554530125	Price
0 - .5" / 0 - 12.5mm	.00012" / 0.003mm	.00005" / 0.001mm	NA5554530135	Price
0 - 1" / 0 - 25.4mm	.0004" / 0.01mm	.0005" / 0.01mm	NA5554530145	Price
0 - 1" / 0 - 25mm	.00016" / 0.004mm	.00005" / 0.001mm	NA5554530155	Price
0 - 2" / 0 - 50mm	.00019" / 0.005mm	.00005" / 0.001mm	NA5554530175	Price

TESA | brown & sharpe DIGICO™ 12 Electronic Mini-Dial Gages



- 1.73 in./44mm diameter dial
- IP65 compliant
- RS-232 data output combined with external power supply
- Absolute and relative measuring modes
- Preset function
- Switchable measuring direction
- Direct inch/metric conversion

Range	Resolution	Output	Order No.	Price
0 - .5" / 0 - 12.5mm	.00005" or .0005/.001" or 0.01mm	with SPC	MV4029018†	533.00
0 - .5" / 0 - 12.5mm	.0005" / 0.01mm	without SPC	MV4028885‡	435.00

†With electronic module protected against the penetration of liquids
‡With both mechanics and electronics protected against the penetration of liquids

Fowler Electronic Indicators



- Direct inch/metric conversion
- 1”/25mm travel
- Auto off feature
- 2-1/4” dial face
- Lug back and 3/8” stem diameter
- Resolution .0005”/0.01mm
- Tolerance indicators
- Absolute/incremental reading
- Floating zero
- Carbide tipped point

INDI-X blue

Range (in./mm)	Comments	Order No.	Price
0 - 1" / 0 - 25mm	Inch/Metric Only	NA5554520250	Price
0 - 1" / 0 - 25mm	Inch/Metric/Fraction	NA5554520260	Price
0 - .5" / 0 - 12.5mm	Inch/Metric Only	NA5554520255	Price

Fowler Electronic Indicators

Inch • Metric • Fraction



- Direct inch/metric conversion
- IP54 Coolant and fluid resistant
- Auto off feature
- 2-1/4” Dial face
- 3/8” Stem - 4-48 thread
- Resolution .00005”/0.001mm
- Accuracy: 0.004mm
- Tolerance indicators
- Absolute/ incremental reading
- Lug back on 1/2” model
- Floating zero
- Carbide tipped point

X-SERIES | Protected to: IP54 COOLANT & FLUID RESISTANT

Description	Order No.	Price
.5"/12.5mm Indi-Max Electronic Indicator with point set	NA5554520305	Price
1"/25mm Indi-Max Electronic Indicator with point set	NA5554520310	Price
2"/50mm Indi-X Blue Elecrontic Indicator with point set	NA5554520320	Price
Absolute data cable†	NA5554520399	Price

†Works with 06ADV380C MIT cable. Replacement battery : KA56ERC2032

INSIZE Electronic Indicator



- Meet ASME B89.1.10M-2001
- Button function: on/off, inch/mm, zero
- CR2032 battery, automatic power off
- Data output
- Optional accessory: data output system (part no. 7306-40, 7302-SPC3A 7305-SP-C1A), backs, contact points

Order No.	Price
SZ20211210E	Price

Fowler Two Dimensional Co-Axial Indicator Set

The 2D Coaxial Set for accurate component centering and positioning in most machining applications. The 2D Coaxial Indicator can be used at any angle and the dial remains stationary during the rotation of the machine spindle.



Features:
- Indicator assembly with 1.6”/42.5mm diameter dial
- Graduations and revolution counter .0005”/0.01mm
- 3 Internal and external feelers
- Center point feeler
- Restraining arm
- Complete in a fitted case

Specifications:
- Length: 6.875”
- Shank: 3/8” dia. x 7/8”
- Feeler ball: 1/8” dia.
- Dial readings: 0-50
- Measuring range: .250” axis offset
- Speed — recommended not to exceed approx. 800 RPM
- Locating accuracy to within .0002:/0.005mm of true center
- Capacity depends on feelers installed, but overall range is 5/32-12” internal diameter; 0-12” external diameter

Model No.	Total Range	Order No.	Price
52-710-025	0-12"	**NA5552710025**	Price
52-710-030	0-107.9mm	**NA5552710030**	Price

Co-Axial Centering Indicators

MADE IN THE USA

For Quick Centering on Milling and Boring Set-UP

Using the Table X and Y Controls, move the workpiece until the indicator needle is stationary. Use in vertical or horizontal milling operations. Quickly changes from internal to external.



Features:
- Operates at any angle
- Dial remains stationary while spindle rotates
- Internal or external diameters
- Set includes internal feeler, external feeler, retaining arm and case
- Capacity: ID 5/32 to 4-1/4” Dia.; OD - 0 to 4-1/4” Dia.

Order No.	Price
NB72801	Price

Blake Co-Ax Indicator Accessories

- Not interchangeable with other brands

Feeler Description	Order No.	Price
I.D.Range: 8"Diameter	**NB728514**	Price
I.D.Range: 12" Diameter	**NB728516**	Price
I.D.Carbide-Range: 4.25" Diameter	**NB72851C2**	Price
O.D.Range: 8" Diameter	**NB728524**	Price
O.D.Range: 12" Diameter	**NB728526**	Price
O.D.Carbide-Range: 4.25" Diameter	**NB72852C2**	Price

PROCHECK Co-Axial Dial Indicators



- Designed for centering a work piece of fixture
- Operates at any angle, use vertical or horizontal
- While spindle rotates, the centering indicator always faces the operator with use of restraining rod (included)
- Center point feeler plus straight and curved feelers 4”, 8” and, 12”
- Fitted plastic case
- 1 Year Warranty

Total Range	Range per Revolution	Graduation	Dial Reading	Dial Face Diameter	Face Color	Order No.	Price
.240	.040	.0005	0 - 50	1-1/2	White	**PC21CI250I**	Price
6mm	1mm	0.01mm	0 - 50	1-1/2	White	**PC21CI250M**	Price

PROCHECK 3-D Alignment Indicator



- With ruby contact point
- Convenient, rapid, accurate measurement on three axis – X, Y and Z
- Physical characters of ruby contact point features: resistance against wear and negligible thermal expansion
- 3/4”/20mm Shaft
- Accuracy: .0004”/0.01mm
- Complete with fitted case

Order No.	Price
NB603DA1	Price

Fowler Universal 3-D Sensors



- 3-D sensors are easily clamped into the milling spindle for exact positioning of the spindle axis on the edges of the workpiece or jig
- Versatile and precise measuring instrument for milling and spark erosion machines (EDM)
- You may approach it in any direction (X-, Y- or Z-axis)
- Large digital display is easily read even from a distance
- Includes a 3/4” clamping shaft, has a resolution of .00005”/0.001mm and an accuracy of .0002”/0.005mm using short sensor
- True inch/metric conversion

Type	Order No.	Price
Inch Analog	**NA5553710175**	Price
Electronic	**NA5554710000**	Price

Fowler UltraMess Comparator Gages



- Shockproof movement
- Self-contained movement
- Lockable, fine-adjustment screw
- Jewelled movement and precision gears
- Hardened stainless steel mounting shank and spindle
- Measuring force: 1N
- Shank diameter: 8mm

Range	Description	Reading	Overtravel	Order No.	Price
±25µm	UltraMess II-Metric	.5µm	.11"/2.8mm Overtravel	**NA5553520105**	Price
±50µm	UltraMess I-Metric	.1µm	.11"/2.8mm Overtravel	**NA5553520005**	Price

PROCHECK Economy Test Indicators

.0001" Test Indicators Features:
- Available in vertical or horizontal models
- .0001" Graduation
- .008" Travel
- Dovetail mounts

.0005" Test Indicators Features:
- .030 Travel
- .0005" Graduation
- 0-15-0 Dial reading
- Jeweled movement
- 3-Way dovetail mounting
- Satin chrome finish
- Low measuring pressure
- Easy-to-read dial
- 1/2" Long indicator point
- .080" Ball diameter
- 5/16" and 3/8" Stem



Total Range (in.)	Dial Reading	Graduation (in.)	Type	Dial Color	Order No.	Price
.008	0-4-0	.0001	Horizontal	White	**NB7023111**	Price
.008	0-4-0	.0001	Vertical	White	**NB7023112**	Price
.030	0-15-0	.0005	Horizontal	Black	**NB70TI030B**	Price
.030	0-15-0	.0005	Horizontal	White	**NB70TI030**	Price
.030	0-15-0	.0005	Vertical	White	**NB70TIV030**	Price

PROCHECK PREMIUM Long Range Dial Test Indicators - .060" Range

- .060" Long range travel
- Jeweled movement and easy-to-read, tilted dial
- Automatic reversal and revolution counter
- Tungsten carbide point capable of 210° Swivel arc
- Supplied with (1) each 5/32" and 3/8" dovetail stems and 3 carbide tip contact points, .040, .080, .120 diameter tip x 11/16" long
- Storage case supplied
- 1 Year Warranty



Graduations	Dial Face Diameter	Face Color	Order No.	Price
.001	1	White	**PC21TI0601021W**	Price
.0005	1	White	**PC21TI0601035W**	Price
.0005	1-1/2	White	**PC21TI0601535W**	Price
.0005	1-1/2	White	**PC21TIV0601535W†**	126.75

† Vertical model

PROCHECK PREMIUM Dial Test Indicators - .030" Range, .0005" Graduation

- Bi-directional constant clockwise rotation with automatic reversal
- Jeweled movement and easy-to-read dial face
- Supplied with (1) each 5/32" and 3/8" dovetail stems and 3 carbide tip contact points, .040, .080, .120 diameter tip x 1/2" long,
- Storage case supplied
- 1 Year Warranty



Dial Face Diameter	Face Color	Order No.	Price
1-1/4	White	**PC21TI0301035W**	Price
1-1/4	Black	**PC21TI0301035B**	Price
1-1/2	White	**PC21TI0301535W**	Price
1-1/2	Black	**PC21TI0301505B**	Price

PROCHECK PREMIUM Dial Test Indicators - .008" Range, .0001" Graduation

- Bi-directional constant clockwise rotation with automatic reversal
- Jeweled movement and easy-to-read dial face
- Supplied with (1ea) 5/32" and 3/8" dovetail stems and 3 carbide tip contact points, .040, .080, .120 diameter tip x 1/2" long
- Storage case supplied
- 1 Year Warranty



Dial Face Diameter	Face Color	Order No.	Price
1-1/4	Black	**PC21TI0081031B**	Price
1-1/4	White	**PC21TI0081031W**	Price
1-1/2	Black	**PC21TI0081531B**	Price
1-1/2	White	**PC21TI0081531W**	Price

PROCHECK Test Indicator Contact Points

New!

For Series PC21TI008 Indicators		
Size (in.)	Order No.	Price
.040	**PC21TICP08004**	Price
.080	**PC21TICP08008**	Price
.120	**PC21TICP08012**	Price

For Series PC21TI020 Indicators		
Size (in.)	Order No.	Price
.040	**PC21TICP02004**	Price
.080	**PC21TICP02008**	Price
.120	**PC21TICP02012**	Price

For Series PC21TI030 Indicators		
Size (in.)	Order No.	Price
.040	**PC21TICP03004**	Price
.080	**PC21TICP03008**	Price
.120	**PC21TICP03012**	Price

For Series PC21TI060 Indicators		
Size (in.)	Order No.	Price
.020	**PC21TICP06020**	Price
.080	**PC21TICP06008**	Price
.120	**PC21TICP06012**	Price

PROCHECK PREMIUM Long Point Dial Test Indicators - .020" Range, .0005" Graduation

- Bi-directional constant clockwise rotation with automatic reversal
- Jeweled movement and easy-to-read dial face
- Supplied with (1) each 5/32" and 3/8" dovetail stems and 3 carbide tip contact points, .040, .080, .120 diameter tip x 1-7/16" long
- Storage case supplied
- 1 Year Warranty



Total Range	Graduation	Indicator Style	Contact Length	Point Diameter	Dial Face Diameter	Face Color	Comments	Order No.	Price
.020	.0005	Test	1-7/16	.080	1-1/4	Black	Supplied with 5/32" and 3/8" dovetail stems and 3 contact points, .040, .080, .120	**PC21TI0201035BL**	Price
.020	.0005	Test	1-7/16	.080	1-1/4	White	Supplied with 5/32" and 3/8" dovetail stems and 3 contact points, .040, .080, .120	**PC21TI0201035WL**	Price
.020	.0005	Test	1-7/16	.080	1-1/2	Black	Supplied with 5/32" and 3/8" dovetail stems and 3 contact points, .040, .080, .120	**PC21TI0201535BL**	Price
.020	.0005	Test	1-7/16	.080	1-1/2	White	Supplied with 5/32" and 3/8" dovetail stems and 3 contact points, .040, .080, .120	**PC21TI0201535WL**	Price

PROCHECK Test Indicator's with Accessories

- Includes: Height Gage Bar with Universal Dovetail; 3/8” clamp, Universal Dovetail Holder with 1/4” Shank; Axial support with 3/8” shank; 3/8 to 5/32” bushing and 5/32” Dovetail stem
- Supplied in convenient case
- 1 Year Warranty



Description	Order No.	Price
.030 Range, .0005" Graduation Test Indicator Kit with: Height Gage Bar with Universal Dovetail; 3/8" clamp, Universal Dovetail Holder with 1/4" Shank; Axial support with 3/8" shank; 3/8 to 5/32" busing and 5/32 Dovetail stem. Supplied in convenient case with slot for test indicator	**PC21TIK3135W**	Price
.060 Range, .0005" Graduation Test Indicator Kit with: Height Gage Bar with Universal Dovetail; 3/8" clamp, Universal Dovetail Holder with 1/4" Shank; Axial support with 3/8" shank; 3/8 to 5/32" busing and 5/32 Dovetail stem. Supplied in convenient case with Accessory Kit	**PC21TIK6135W**	Price

PROCHECK IP65 Test Indicators with Center Lock Quill Kit

- IP65 water and dust protective rating
- Jeweled movement
- Satin chrome finish body
- Anodized center lock arm with strong lock
- Fitted tool set case for easy storage
- 1 Year Warranty



Range (in.)	Graduation (in.)	Dial Reading (in.)	Dial Face Dia. (in.)	Order No.	Price
.030	.0005	0-15-0	1-1/2	**PC21TIK0305IP6Q**	Price
.060	.0005	0-30-0	1-1/2	**PC21TIK0605IP6Q**	Price

PROCHECK IP65 Test Indicators

- IP65 water and dust protective rating
- Jeweled movement
- Satin chrome finish body
- Range: 0.060”
- Graduation: .0005”
- Reading: 0-30-0
- Face Diameter: 1-1/2”
- 0.040, 0.080, 0.120” carbide contact points
- 1/2” point length
- 3 contact points included
- 3 dovetail mountings (front, top and rear)
- 2 dovetail clamps 3/8 & 5/32”
- Wrench included
- Complete in molded case
- 1 Year Warranty



Range (in.)	Graduation (in.)	Dial Reading	Dial Face Dia. (in.)	Order No.	Price
.030	.0001	0-15-0	1-1/2	**PC21TI0301IP6W**	Price
.030	.0005	0-15-0	1-1/2	**PC21TI0305IP6W**	Price
.060	.0005	0-30-0	1-1/2	**PC21TI0605IP6W**	Price

INSIZE Dial Test Indicators

- Jeweled bearing
- Carbide contact points
- 5/32 and 3/8” clamps included
- Supplied with certification



Total Range (in.)	Graduation	Dial Face Dia. (in.)	Model No.	Order No.	Price
.030	.0005	1.25	2380-31	**SZ20238031**	Price
.030	.0005	1.18	2380-35	**SZ20238035**	Price
.030	.0005	1.58	2381-35	**SZ20238135**	Price

Mitutoyo Dial Test Indicator Precision Tool Kit

- Graduation: .0005”
- Range: .030”
- Dial reading: 0-15-0
- Jeweled bearings, anti-magnetic
- 3/8” Stem
- Accepts 3/8” or 5/32” holding stems, plus dovetail groove
- 150N Magnetic force



Order No.	Price
MT80513-907-10E	Price

BAKER Dial Test Indicator

- .0005” Graduation
- .030” Range
- 0-15-0 Dial
- 1-1/8” Diameter dial
- Auto reversal
- Fitted with jewels & Swiss miniature ball bearings for smoother movement
- Supplied with certificate of calibration
- Includes: .08” & .04” hardened chrome contact point, universal clamp, height gauge adapter, 3/8” and 1/4” dovetail shank and wrench



Order No.	Price
NB73B301	Price

PROCHECK Digital Test Indicator

- Range: .02” / ±0.5mm
- Resolution: .0005” / 0.01mm
- Power on/off key
- Zero setting key
- Metric/inch key
- Tolerance key
- Contact point dia.2.5mm
- Accuracy: ±0.02mm



Order No.	Price
NB60DTI1	Price

Mitutoyo Stem Mount Dial Test Indicators

- Jeweled bearings
- Reversible contact point
- Two holding bars are supplied. One (1/2" x 1/4") is used with lathe tool posts and height gages, the other (.315" dia.) with drill chucks
- Fully adjustable bezel/dial face
- Contact point is adjustable within 240°
- Complete with accessories and compact carrying case



Range (in.)	Graduation (in.)	Dial Reading	Order No.	Price
.010	.0001	0-50-0	**MT80513-504T**	Price
.040	.001	0-20-0	**MT80513-518T**	Price

Set includes: Stems (102036,102081) and Point (103007) already installed. Plus Bar (900306) and (900211); Clamp (900291); Stem (102081) and Wrench (102037).

Mitutoyo Parallel Dial Test Indicators

- Scale can be read from the front, with the contact point pivoting in a plane parallel to that of the dial face
- Graduation .0005"
- White Face
- Measuring Range: ±0.0005"



Total Range (in.)	Dial Reading	Commetns	Order No.	Price
.030	0-15-0	Full Set	**MT80513-482-10T**	Price
.030	0-15-0	Plus Set	**MT80513-482-10A**	Price

Mitutoyo Pocket Test Indicators

- .001" Graduation
- .040" Range
- Balanced dial



Included Items	Order No.	Price
Individual Unit: with 103011 Point & 102081 3/8" dia. Stem,Spanner: 301336 Included	**MT80513-528**	Price
Point: 131314, 103011 (installed), 131315.; Stem: 102036 5/32" dia. (installed), 102081;3/8" dia. Spanner: 301336. Clamp: 900322;Holder: 900211, 900306, Wrench: 102037-Included	**MT80513-528T**	Price

Mitutoyo Test Indicator with Ruby Stylus

- Wear characteristic improved by 50%
- Non magnetic and non conductive material enables use in EDM operations

Specifications:

- Graduation: .0005"
- Measuring range: .03"
- Accuracy: ±.0005"
- Measuring force: .07165" or less
- Contact point diameter: .79"
- Stem diameter: 3/8"



Order No.	Price
MT80513-472-10E	Price

Mitutoyo Contact Points for Quick-Set

Steel or Carbide Ball

Size	Ball	Order No.	Price
.040	Steel	**MT80102824**	Price
.080	Steel	**MT80102832**	Price
.080	Carbide	**MT80102825**	Price
.120	Steel	**MT80102826**	Price

Mitutoyo 'Quick-Set' Test Indicators with Dovetail Mount

- Jeweled bearings
- Automatic reverse
- **Basic unit** includes: (1) .078" Dia. carbide point installed, (1) stem – 3/8" Dia. (8mm dia. for metric indicators)
- **Complete unit** consists of basic unit as listed above, plus clamp with dovetail, holding bar and .039" and .118" carbide ball contact points and fitted plastic case

Type	Range (in.)	Graduation (in.)	Dial Reading	Description	Order No.	Price
Dial Test Indicator	.008	.0001	-	Basic Set	**MT80513-403-10E**	Price
Dial Test Indicator	.008	.0001	-	Full Set	**MT80513-403-10T**	Price
Dial Test Indicator	.030	.0001	-	Full Set	**MT80513-452-10T**	Price
Dial Test Indicator	.030	.0005	-	Basic Set	**MT80513-402-10E**	Price
Dial Test Indicator	.030	.0005	-	Basic Set	**MT80513-452-10E**	Price
Dial Test Indicator	.030	.0005	-	Full Set	**MT80513-402-10T**	Price
Dial Test Indicator	.030	.0005	-	Full Set	**MT80513-412-10E**	Price
Dial Test Indicator	.030	.0005	-	Full Set	**MT80513-412-10T**	Price
Dial Test Indicator	.030"/0.7mm	.0005"/0.01mm	-	Combo Dial	**MT80513-406-10E**	Price
Dial Test Indicator	.030"/0.7mm	.0005"/0.01mm	-	Combo Dial	**MT80513-406-10T**	Price
Dial Test Indicator	0.2mm	0.002mm	-	Full Set	**MT80513-405-10T**	Price
Dial Test Indicator	0.2mm	0.002mm	-	Full Set	**MT80513-455-10T**	Price
Dial Test Indicator	0.8mm	0.01mm	-	Full Set	**MT80513-404-10T**	Price
Dial Test Indicator	0.8mm	0.01mm	-	Full Set	**MT80513-454-10T**	Price
Parallel	.030	.0005	0-15-0	Basic Unit	**MT80513-282G**	Price
Combitest	.030"/0.7mm	.0005"/0.01mm	0-15-0 / 0-35-0	Basic Unit	**MT80513-406**	Price
Parallel	.030	.0005	0-15-0	Complete Unit	**MT80513-282GT**	Price
Vertical	.030	.0005	0-15-0	Basic Unit	**MT80513-452**	Price
Vertical	0.2mm	0.002mm	0-100-0	Complete Unit	**MT80513-455T**	Price
Vertical	0.8mm	0.01mm	0-40-0	Complete Unit	**MT80513-454T**	Price



Parallel Type



Extra Long Point Type



Horizontal Type



Inch/Metric Combitest



Vertical Type

Starrett® Last Word® Test Indicators

- A favorite of machinists, toolmakers and inspectors
- Supplied in case
- Available in metrric

MADE IN THE USA



Range (in./mm)	Graduation (in./mm)	Dial Reading	Starrett No.	Order No.	Price
.030	.0005	0-15-0	711LCSZ	**MV7052957**	Price
.030	.0005	0-15-0	711LPSZ	**MV7052958**	Price
.030	.001	0-15-0	711GCSZ	**MV7052943**	Price
.030	.001	0-15-0	711GPSZ	**MV7052944**	Price

Starrett® Last Word® Test Indicators

No. 711

- Smooth, jeweled lever action
- 15/16" Diameter face
- Easy to read shaded white dial
- Available in metric



MADE IN THE USA

Range (in./mm)	Graduation (in./mm)	Dial Reading	Description	Starrett No.	Order No.	Price
.030	.001	0-15-0	Indicator with body clamp only	711FSZ	**MV7052929**	Price
.030	.0005	0-15-0	Indicator with body clamp only	711HSZ	**MV7052953**	Price
.030	.001	0-15-0	Indicator with goo-seneck shank	711FSBZ	**MV7052927**	Price
.030	.001	0-15-0	Indicator with universal shank complete with long and short arm, body clamp	711FSAZ	**MV7052925**	Price
.030	.0005	0-15-0	Indicator with universal shank complete with long and short arm, body clamp	711HSAZ	**MV7052951**	Price

Starrett® Last Word® Test Indicator Accessories

MADE IN THE USA

Starrett No.	Description	Order No.	Price
7107A	Gooseneck Shank	**MV7052937**	Price

Starrett® Dial Test Indicators with Dovetail Mounts

- 708 Series reads to .0001"
- 709 Series reads to .0005"
- Smooth jeweled movement
- Large 1-3/8" dial diameter
- 13/16" Long contact
- Carbide contact point is frictionally adjustable and reverses automatically
- Satin chrome finish for durability
- Heads angle and indicator has 3 dovetail mounts to provide versatility beyond the range of ordinary types
- Furnished in a case with attachments listed

MADE IN THE USA



Series - 708						
Range (in.)	Graduation (in.)	Dial Reading	Model No.	Dial Color	Order No.	Price
.010	.0001	0-5-0	708ACZ	White	**MV7064217**	Price
.010	.0001	0-5-0	B708ACZ	Black	**MV7064608**	Price
.010	.0001	0-5-0	R708ACZ	Red	**MV7064604**	Price
.020	.0001	0-5-0	708BCZ	White	**MV7064218**	Price

Series - 708 with Standard Letter of Certification						
Range (in.)	Graduation (in.)	Dial Reading	Model No.	Dial Color	Order No.	Price
.010	.0001	0-5-0	708ACZ	White	**MV7066869**	Price
.010	.0001	0-5-0	B708ACZ	Black	**MV7066871**	Price
.010	.0001	0-5-0	R708ACZ	Red	**MV7066870**	Price
.020	.0001	0-5-0	708BCZ	White	**MV7066875**	Price

Series - 709						
Range (in.)	Graduation (in.)	Dial Rea-ding	Model No.	Dial Color	Order No.	Price
.030	.0005	0-15-0	709ACZ	White	**MV7064219**	Price
.030	.0005	0-15-0	B709ACZ	Black	**MV7064610**	Price
.030	.0005	0-15-0	R709ACZ	Red	**MV7064606**	Price
.060	.0005	0-15-0	709BCZ	White	**MV7064220**	Price

Starrett® Dial Test Indicators

3808, 3809, 3908 and 3909 Series

- Three dovetail postioning mounts work with most existing test indicator accessories
- Smooth jeweled movement
- Contact point reverses automatically, always maintaining clockwise hand rotation
- High contrast, easy to read dials with white background for inch models and yellow for metric models
- Satin chrome finish



Total Range	Graduation	Dial Reading	Dial Diameter	Starrett Number	Includes	Order No.	Price
.008	.0001	0-4-0	1-1/4	3808A	Indicator, .156" point, 3/8 & 5/32 dovetail clamps, case	**MV7012331**	Price
.008	.0001	0-4-0	1-1/4	3808AC	Indicator, .078" & .156" point, 3/8 & 5/32 dovetail clamps, .156" swivel post holder, tool post holder, contact wrench and case	**MV7012303**	Price
.008	.0001	0-4-0	1-9/16	3908A	Indicator, .156" point, 3/8 & 5/32 dovetail clamps, case	**MV7012488**	Price
.008	.0001	0-4-0	1-9/16	3908AC	Indicator, .078" & .156" point, 3/8 & 5/32 dovetail clamps, .156" swivel post holder, tool post holder, contact wrench and case	**MV7012636**	Price
.030	.0005	0-15-0	1-1/4	3809A	Indicator, .156" point, 3/8 & 5/32 dovetail clamps and case	**MV7012333**	Price
.030	.0005	0-15-0	1-1/4	3809AC	Indicator, .078" & .156" point, 3/8 & 5/32 dovetail clamps, .156" swivel post holder, tool post holder, contact wrench and case	**MV7012305**	Price
.030	.0005	0-40-0	1-9/16	3909A	Indicator, .156" point, 3/8 & 5/32 dovetail clamps and case	**MV7012527**	Price
.030	.0005	0-15-0	1-9/16	3909AC	Indicator, .078" & .156" point, 3/8 & 5/32 dovetail clamps, .156" swivel post holder, tool post holder, contact wrench and case	**MV7012669**	Price
0.8mm	0.01mm	0-40-0	32mm	3809MA	Indicator, 4mm contact point, 9.5mm & 4mm dovetail clamps, case	**MV7012334**	Price
0.8mm	0.01mm	0-40-0	32mm	3809MAC	Indicator, 2mm & 4mm contact pts, 9.5mm and 4mm dovetail clamps, 4mm swivel post tool holder, contact wrench and case	**MV7012307**	Price

Mitutoyo Test Indicator with Ruby Stylus

- Wear characteristic improved by 50%
- Non magnetic and non conductive material enables use in EDM operations

Specifications:

- Graduation: .0005”
- Measuring range: .03”
- Accuracy: ±.0005”
- Measuring force: .07165” or less
- Contact point diameter: .79”
- Stem diameter: 3/8”



Order No.	Price
MT80513-472-10E	Price

Fowler Test Indicators - .030 Range

- Bi-directional constant clockwise rotation
- Automatic reversal
- Three dovetail mountings
- 3 Contact points with diameters of .040”, .080” and .120”
- Jewelled movement
- Two dovetail extensions
- Molded case







Total Range (in.)	Dial Reading	Graduation (in.)	Dial Dia. (in.)	Dial Color	Point Length (in.)	Order No.	Price
.030	0-15-0	.0005	1	Black	1/2	NA5552562778	Price
.030	0-15-0	.0005	1	White	1/2	NA5552562775	Price
.030	0-15-0	.0005	1-1/2	Black	1/2	NA5552562780	Price
.030	0-15-0	.0005	1-1/2	White	1/2	NA5552562776	Price
.030	0-15-0	.001	1	White	1/2	NA5552562774	Price

Fowler Test Indicators - .008 Range

- Bi-directional constant clockwise rotation
- Automatic reversal
- Three dovetail mountings
- 3 Contact points with diameters of .040”, .080” and .120”
- Jewelled movement
- Two dovetail extensions
- Molded case







Total Range (in.)	Dial Reading	Graduation (in.)	Dial Dia. (in.)	Dial Color	Point Length (in.)	Order No.	Price
.008	0-4-0	.0001	1	Black	1/2	NA5552563771	Price
.008	0-4-0	.0001	1	White	1/2	NA5552563770	Price
.008	0-4-0	.0001	1-1/2	Black	1/2	NA5552563772	Price
.008	0-4-0	.0001	1-1/2	White	1/2	NA5552563777	Price

Fowler Test Indicators - Long Point

- Bi-directional constant clockwise rotation
- Automatic reversal
- Three dovetail mountings
- 3 Contact points with diameters of .040”, .080” and .120”
- Jewelled movement
- Two dovetail extensions
- Molded case





Total Range (in.)	Dial Reading	Graduation (in.)	Dial Dia. (in.)	Dial Color	Point Length (in.)	Order No.	Price
.020	0-10-0	.0005	1	Black	1-7/16	NA5552562782	Price
.020	0-10-0	.0005	1-1/2	Black	1-7/16	NA5552562784	Price
.020	0-10-0	.0005	1-1/2	White	1-7/16	NA5552562783	Price
.020	0-10-0	.0005	1-1/4	White	1-7/16	NA5552562781	Price

Fowler Test Indicators - Metric Reading

- Bi-directional constant clockwise rotation
- Automatic reversal
- Three dovetail mountings
- Jewelled movement
- Two dovetail extensions
- Molded case





Total Range	Dial Reading	Graduation	Dial Dia. (in.)	Dial Color	Point Length (in.)	Order No.	Price
.020 / 0.05mm	0-10-0/0-.25-0	.0005/ 0.01mm	1-1/2	White/ Red	.600	NA5552560060	Price
0.08mm	0-40-0	0.01mm	1-1/4	White	.600	NA5552563677	Price

Fowler Test Indicator Set

with Certificate of Calibration

- Auto-reverse
- Jewelled movement
- Includes .080” and .040” carbide contact points, universal clamp, height gage attachment, 3/8” and 1/4” dovetail extensions in a fitted molded case.
- Total range: ±.030”
- Dial reading: 0-15-0
- Graduation: .0005”
- Dial diameter: 1.125”
- Point length: .400”



Order No.	Price
NA5552562999	Price

TESA TECHNOLOGY | brown & sharpe

BesTest® Dial Test Indicators

BesTest -3 and -13 Series:

- BesTest -3 and -13 sets are furnished with .080” carbide contact points, a rectangular bar, swivel clamp, point wrench and a certificate of accuracy and traceability in a fitted wooden case.
- The -3 sets with end mounted dials are furnished with a universal dovetail mounting attachment (7054) in place of the rectangular bar and swivel clamp



BesTest -5 Series (Black Face):

- BesTest -5 sets are furnished with an .080” carbide contact point, a .250” diameter extension with dovetail, point wrench and a certificate of accuracy and traceability in a durable molded case



BesTest -6 & -14 Series (White Face):

- BesTest -6 & -14 sets are furnished with 3 carbide contact points. .040”, .080”, and .120”, 2 extensions with dovetail, point wrench and a certificate of accuracy and traceability in a durable molded case

BesTest Indicator Features:

- All Bestest® indicators meet or exceed federal or DIN specifications
- Furnished with a certificate of accuracy and traceability
- Bestest® indicators provide high quality features to ensure fast, accurate and continuously reliable measurement
- Constant clockwise rotation
- Automatic reversal
- Swiveling point
- Carbide tip point
- Universal mounting
- Monoblock (precision watch) body design
- Anti-magnetic & corrosion resistant

Face Color - Black Dial Face								
Range (in.)	Dial Reading	Graduation (in.)	Dial Dia. (in.)	Tip Length (in.)	Tip Dia. (in.)	Brown & Sharpe No.	Order No.	Price
.030	0-15-0	.001	1	1/2	.080	599-7029-5	**MV4551732**	Price
.030	0-15-0	.0005	1	1/2	.080	599-7030-5	**MV4551733**	Price
.030	0-15-0	.0005	1-1/2	1/2	.080	599-7031-5	**MV4551734**	Price
.008	0-4-0	.0001	1	1/2	.080	599-7032-5	**MV4551737**	Price
.008	0-4-0	.00005	1-1/2	1/2	.080	599-7033-5	**MV4551738**	Price
.020	0-10-0	.0005	1	1-7/16	.080	599-7034-5	**MV4551735**	Price
.020	0-10-0	.0005	1-1/2	1-7/16	.080	599-7035-5	**MV4551736**	Price

Face Color - Metric Reading White Dial Face								
Range (in.)	Dial Reading	Graduation (in.)	Dial Dia. (in.)	Tip Length (in.)	Tip Dia. (in.)	Brown & Sharpe No.	Order No.	Price
0.8mm	0-0.4-0	0.01mm	0.28mm	12.5mm	2mm	599-7030-13	**MV4545984**	Price
0.8mm	0-0.4-0	0.01mm	0.38mm	12.5mm	2mm	599-7031-13	**MV4545985**	Price
0.2mm	0-100-0	0.002mm	0.28mm	12.5mm	2mm	599-7032-13	**MV4545986**	Price
0.2mm	0-100-0	0.002mm	0.38mm	12.5mm	2mm	599-7033-13	**MV4545987**	Price

Face Color - Metric Reading White Dial Face Multi-Tip Set								
Range (in.)	Dial Reading	Graduation (in.)	Dial Dia. (in.)	Tip Length (in.)	Tip Dia. (in.)	Brown & Sharpe No.	Order No.	Price
0.8mm	0-0.4-0	0.01mm	0.28mm	12.5mm	2mm	599-7030-14	**MV4525927**	Price
0.7mm	0-0.4-0	0.01mm	0.38mm	12.5mm	2mm	599-7031-14	**MV4525928**	Price
0.2mm	0-100-0	0.002mm	0.28mm	12.5mm	2mm	599-7032-14	**MV4525930**	Price

Face Color - White Dial Face								
Range (in.)	Dial Reading	Graduation (in.)	Dial Dia. (in.)	Tip Length (in.)	Tip Dia. (in.)	Brown & Sharpe No.	Order No.	Price
.008	0-4-0	.0001	1-1/2	1/2	.080	599-7023-3	**MV4546400**	Price
.008	0-4-0	.0001	1-1/2	1/2	.080	599-7024-3	**MV4546406†**	Price
.030	0-15-0	.001	1	1/2	.080	599-7029-3	**MV4545977**	Price
.030	0-15-0	.0005	1	1/2	.080	599-7030-3	**MV4545978**	Price
.030	0-15-0	.0005	1-1/2	1/2	.080	599-7031-3	**MV4545979**	Price
.008	0-4-0	.0001	1	1/2	.080	599-7032-3	**MV4545980**	Price
.008	0-4-0	.00005	1-1/2	1/2	.080	599-7033-3	**MV4545981**	Price
.030	0-15-0	.0005	1	1/2	.080	599-7037-3	**MV4550437†**	Price
.008	0-4-0	.00005	1-1/2	1/2	.080	599-7038-3	**MV4550436†**	Price

Face Color - White Dial Face Multi-Tip Set								
Range (in.)	Dial Reading	Graduation (in.)	Dial Dia. (in.)	Tip Length (in.)	Tip Dia. (in.)	Brown & Sharpe No.	Order No.	Price
.008	0-4-0	.0001	1-1/2	1/2	.080	599-7023-6	**MV4525923**	Price
.030	0-15-0	.0005	1	1/2	.080	599-7030-6	**MV4525925**	Price
.030	0-15-0	.0005	1-1/2	1/2	.080	599-7031-6	**MV4525926**	Price
.008	0-4-0	.0001	1	1/2	.080	599-7032-6	**MV4525929**	Price

†End mount style

TESA TECHNOLOGY | brown & sharpe

Valueline Test Indicators

.030” Total Range

- Dial reading .0005”
- Graduations .0005”
- Black dial face



MV4547440

MV4547439

Face Dia. (in.)	Model No.	Order No.	Price
1.26	01889018	**MV4547439**	Price
1.54	01889023	**MV4547440**	Price

TESA TECHNOLOGY | brown & sharpe

Compac Series Test Indicators

- DIN 2270 and factory standard
- Contact points with tungsten carbide ball tips
- Friction lever system to prevent overload
- Inspection report with a declaration of conformity
- Rotating dial
- Supplied in a plastic storage case
- .00015” Repeatability



MV35223GLA



MV35213GLA



MV35214A

Series - 210					
Range (in.)	Dial Reading	Graduation (in.)	Dial Dia. (in.)	Order No.	Price
.024	0-20-40	.0001	1.063	**MV35215A**	Price
.024	0-20-40	.0001	1.575	**MV3527712**	Price
.060	0-10-20	.0005	1.063	**MV35214A**	Price
.120	0-20-40	.0005	1.575	**MV35213GLA**	Price

Series - 220					
Range (in.)	Dial Reading	Graduation (in.)	Dial Dia. (in.)	Order No.	Price
.120	0-20-40	.0005	1.575	**MV35223GLA**	Price

Fowler Test Indicators and Sets

- Range: .060” (1.6mm metric)
- Dial reading: 0-15-0 (0-40-0 metric)
- Jeweled movement
- Revolution counter
- Easy-to-read tilted dial
- Automatic reversal
- 210° Swivel arc
- Tungsten carbide point .080”,diameter

Set Includes:

- Dial test indicator
- Axial support
- Height gage bar with clamp
- Contact point case, contact point wrench
- Adaptor sleeve
- Complete in shop hardened case

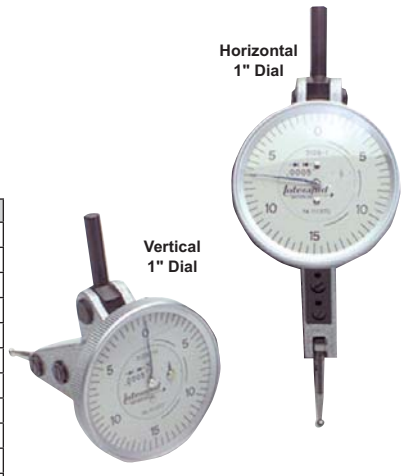


Type - Dial Test Indicator					
Graduation (in.)	Dial Dia. (in.)	Description	Indicator Style	Order No.	Price
.0005	1-1/2	Indicator Only	Horizontal	**NA5552562001**	Price
.0005	1	Indicator Only	Horizontal	**NA5552562002**	Price
.0005	1-1/2	Indicator Only	Vertical	**NA5552562004**	Price
.001	1	Indicator Only	Horizontal	**NA5552562003**	Price
.0005	1-1/2	Indicator Only	Vertical	**NA5552562005**	Price
.001	1	Indicator Only	Vertical	**NA5552562006**	Price
0.01mm	25mm	Indicator Only	Horizontal	**NA5552562007**	Price
0.01mm	38mm	Indicator Only	Horizontal	**NA5552562008**	Price

Type - Dial Test Indicator w/Accessories					
Graduation (in.)	Dial Dia. (in.)	Description	Indicator Style	Order No.	Price
.0005	1-1/2	Indicator 52-562-001 with Accessories	Horizontal	**NA5552562100**	Price
.0005	1	Indicator 52-562-002 with Accessories	Horizontal	**NA5552562110**	Price
.001	1	Indicator 52-562-003 with Accessories	Horizontal	**NA5552562120**	Price

Interapid SWITZERLAND Dial Test Indicators

- Two-way action – no reversing lever
- Carbide contact point
- Ball bearings and jeweled movement
- Extremely low measuring pressure
- Precise repetitive readings
- Easy-to-read tilted dial
- Points are interchangeable between .0005” and .001” indicators
- Contact point swivels 210°
- Shank diameter – 5/32” .080” diameter ball



Indicator Type	Graduation (in.)	Travel (in.)	Contact Length (in.)	Dial Dia. (in.)	Ref No.	Order No.	Price
Horizontal	.0005	.060	11/16	1-1/4	312	**MV4041710**	Price
Horizontal, Long Range	.0005	.060	11/16	1-1/2	312B-1	**MV4042775**	Price
Horizontal, Long Range	.0005	.060	11/16	1	312B-2	**MV4086150**	Price
Horizontal, Short Range	.0001	.016	11/16	1-1/2	312B-3	**MV4041680**	Price
Horizontal, Short Range	.0001	.016	11/16	1	312B-4	**MV4041681**	Price
Horizontal, Long Range	.001	.060	11/16	1	312B-20	**MV4041682**	Price
Vertical, Long Range	.0005	.060	11/16	1-1/2	312B-1V	**MV4041685**	Price
Vertical, Long Range	.0005	.060	11/16	1	312B-2V	**MV4041686**	Price
Vertical, Short Range	.0001	.016	11/16	1-1/2	312B-3V	**MV4041714**	Price
Vertical, Long Range	.001	.060	11/16	1	312B-20V	**MV4041687**	Price
Vertical, Metric	0.01mm	1.6mm	16.5 mm	1-1/2	312-1V	**MV4041683**	Price

Mitutoyo TrueTest™ Test Indicators

Each indicator Features:

- Smooth spindle movement
- Water and dust resistant one-piece black bezel and hard coated crystal
- 20° tilted dial face
- Anti-magnetic characteristics

Basic Indicator Contains:

- .078” Carbide contact point
- .039” Contact point
- .118” Contact point
- 3/8” Stem
- 5/32” Stem
- Nut

Indicator Set Contains:

- All that comes with the Basic Indicator PLUS:
- Swivel clamp for 5/32” stem and 3/8” stem
- Square arm



						Dial Test Indicator		Dial Test Indicator Set	
Graduation (in.)	Range per Revolution (in.)	Range (in.)	Dial Reading	Face Color	Indicator Style	Order No.	Price	Order No.	Price
.0005	.030	.060	0-15-0	Black	Long Point	**MT80513-446-16A**	Price	**MT80513-446T-06**	Price
.0005	.030	.060	0-15-0	White	Long Point	**-**	-	**MT80513-446T**	Price
.0001	.008	.016	0-4-0	Black	Horizontal	**MT80513-443-16A**	Price	**MT80513-443-16T**	Price
.0001	.008	.016	0-4-0	White	Horizontal	**-**	-	**MT80513-443-10T**	Price
.0005	.020	.060	0-15-0	White	Horizontal	**MT80513-446-10A**	Price	**-**	-
.0005	.030	.060	0-15-0	Black	Horizontal	**MT80513-442-16A**	Price	**MT80513-442-16T**	Price
.0005	.030	.060	0-15-0	White	Horizontal	**MT80513-442-10A**	Price	**-**	-

Dial Indicator Sets

MADE IN THE USA

3 Piece Indicator Sets – Complete with .109 diameter contact point, body clamp and ball shank in case

9 Piece Indicator Set – Complete with .032", .045" and .109" contact points, body clamp, ball shank, universal shank slide adapter, indicator holder, surface gage adapter and case



Single Dial Large Face Inch



Twin Dial Inch/Metric



Single Dial Metric



Single Dial Inch

				3 Piece Set		9 Piece Set	
Travel (in.)	Graduation (in.)	Dial Dia. (in.)	Indicator Type	Order No.	Price	Order No.	Price
.030	.001	15/16	Single Dial, Inch	**ND50222**	Price	**ND50225**	Price
.030	.0005	1-3/8	Single Dial, Large Face, Inch	**ND5033430**	Price	**ND5033530**	Price
1mm	0.02mm	1-1/16	Single Dial, Metric	**ND50222M**	Price	-	-

Back Plunger Indicators

ISO 9001

- 1/4" Shank
- .001" Graduation
- .100" Range



Reading	Order No.	Price
0-50-0	**NB73A51**	Price
0-100	**NB73A52**	Price

Starrett Back Plunger Dial Test Indicator

Model 196B-1

MADE IN THE USA



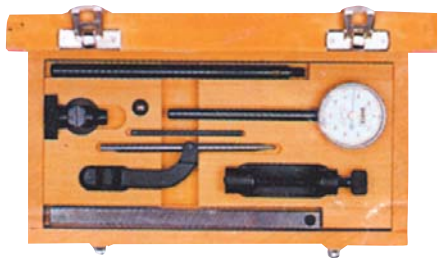
- .001" Graduation
- 0-100 Dial reading
- 0-.200" Range
- MV7050697 supplied with indicator, 3 contact points, clamp, tool post holder, snug and hole attachment
- MV7050699 supplied with indicator, 3 contact points and adapter only
- MV7066865 supplied with indicator, 3 contact points and adapter only - with letter of certification

Range (in.)	Graduation (in.)	Dial Reading	Description	Order No.	Price
.200	.001	0-100	Non Certified	**MV7050697**	Price
.200	.001	0-100	Non Certified	**MV7050699**	Price
.200	.001	0-100	Standard Letter of Certification	**MV7066865**	Price

Back Plunger Indicator Sets

- .001" Graduation
- 1-1/2" Dial diameter
- 0.1" Range

ISO 9001



Range	Graduation	Reading	Order No.	Price
.100	.001	0-100	**NB73U52**	Price
.100	.001	0-50-0	**NB73U51**	Price

Back Plunger Dial Indicator Set

Set Includes:

- Dependable, easy-to-use
- Indicator is fully jewelled
- Dial diameter: 1.5"
- Graduation: .001"
- Dial reading:0-100, Range: .200"
- Includes G-clamp, tool post base, vertical rod, swinging arm, ball anvil, 1/2" anvil, thumb clamp and 11/32" standard anvil



Order No.	Price
NA5552570010	Price

Back Plunger Dial Indicators

- Mounting post and hole attachment are on common axis for quick, accurate centering
- Accepts direct reading hole attachment
- Screws directly into base - no supporting arms needed
- Reaches into deeper holes
- Jeweled bearings
- Range in two revolutions

MADE IN THE USA



Range	Dial Reading	Graduation	Comments	Order No.	Price
.200	Continuous: 0-.100	.001	Indicator Only	**ND50299B**	Price
.200	Continuous: 0-.100	.001	Order No. 299 plus accessories	**ND50299A**	Price

Contact Points

Diameter (in.)	Order No.	Price
3/16	**ND50299C**	Price
1/2	**ND50299E**	Price

Fowler Multimode Electronic Test Indicator

QuadraTest

- 4 Measuring modes- min, max, TIR and direct
- True inch/metric conversion
- Water, oil and coolant resistant to IP65
- 1-1/2" diameter dial face rotates a full 360°
- Bar graph and numeric digital display
- Meets or exceeds Din/ISO standards maximum error on .00005" scale at full range: .0004"
- .080" contact ball diameter



Contact Point Length	Dial Reading	Resolution	Order No.	Price
1/2	0-40-0	.00005/0.001mm	**NA5554562777**	Price

PROCHECK Premium Quill Clamp Indicator Holder

- Heavy duty construction
- CNC machined body
- Red anodized finish



Order No.	Price
PC21QC1	Price

PROCHECK All Position Indicator Holder

- 1-7/8" Capacity
- Reach from 0 - 12" diameter
- Adapts immediately for fast and positive indication
- Indicator not included



Order No.	Price
MV60MQA178	Price

CDI Angle & Hole Attachments

MADE IN THE USA

- Used for testing and checking internal surfaces or those not easily reached by regular dial spindles



Description	Order No.	Price
Internal Hole, Long	**MV65CDI286**	Price
Internal Hole, Short	**MV65CDI29**	Price
Right Angle Attachment	**MV65CDI30**	Price

PROCHECK Universal Clamp Axial Support

- Central lock



Order No.	Price
PC21UC1	Price

CDI Accessories for AGD Indicators Holding Rods

MADE IN THE USA

Fits all brands of AGD style indicators - ISO 9001/2000



Description	Order No.	Price
5/16 x 6 Long	**MV65CDI60**	Price
3/8 x 7-1/2 Long	**MV65CDI61**	Price
1/2 x 8 Long	**MV65CDI62**	Price
3/4 x 8 Long	**MV65CDI63**	Price

CDI Mounting Collets

MADE IN THE USA

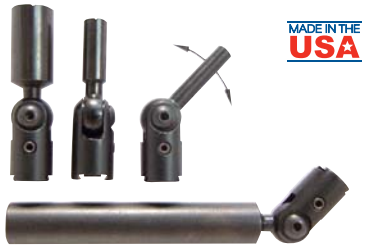
- Five models available for various fixturing positions
- All are compatible with CDI electronic indicators



Description	Order No.	Price
Split Collet 1/2 OD x 3/8 ID	**MV65CDI90**	Price
5/16-40 Internal Thread, 3/8 Hole	**MV65CDI92**	Price
1/2-32 External Thread, 3/8 Hole	**MV65CDI94**	Price
9/16-18 External Thread, 3/8 Hole	**MV65CDI96**	Price
3/8-32 External Thread, 3/8 Hole	**MV65CDI98**	Price

NOVA ENGINEERING Indicator Swivel

- Swivel tension and clamping mechanism adjust independently
- Smooth swivel action using high-strength engineered polymer bearings
- Fits standard dovetail-style test indicators
- Hardened stem and dove-tail pin
- Black oxide finish for corrosion resistance



MADE IN THE USA



Description (in.)	Order No.	Price
5/32 x 1.4 Long	**MV6153S**	Price
7/32 x 1.4 Long	**MV6173S**	Price
3/8 x 1.4 Long	**MV6138S**	Price
3/8 x 2.2 Long	**MV6138L**	Price
8mm x 1.4 Long	**MV618MMS**	Price

INDICOL Standard Indicol Holders



- To check concentricity alignment and perpendicularity all without removing tools from spindle
- Any popular indicator with a 5/32" shank or dovetail mounting may be used
- Designed for use on Bridgeports, jig bores, vertical mills, etc
- Does not disturb the working tool
- Mounts with single pressure screw directly on machine quill
- Adapts immediately for fast and positive indicating
- MV60178 shown

MADE IN THE USA

Type - Style M Indicol		
Diameter (in.)	Order No.	Price
2-1/4	**MV60225**	Price
2-1/2	**MV60250**	Price
2-3/4	**MV60275**	Price
3	**MV60300**	Price

Type - Style S Indicol		
Diameter (in.)	Order No.	Price
1-3/8	**MV60138**	Price
1-7/8	**MV60178†**	Price
2	**MV60200**	Price

†For Bridgeport "J" Head

INDICOL Adjustol Indicol with Fine Adjustment

MADE IN THE USA



- To check concentricity alignment and perpendicularity all without removing tools from spindle
- Any popular indicator with a 5/32" shank or dovetail mounting may be used
- Designed for use on Bridgeports, jig bores, vertical mills, etc
- Does not disturb the working tool
- Mounts with single pressure screw directly on machine quill
- Adapts immediately for fast and positive indicating

Style - Style M Indicol		
Diameter (in.)	Order No.	Price
2-1/4	**MV60225II**	Price
2-1/2	**MV60250II**	Price
2-3/4	**MV60275II**	Price

Style - Style S Indicol		
Diameter (in.)	Order No.	Price
1-3/8	**MV60138II**	Price
1-7/8	**MV60178II†**	Price
2	**MV60200II**	Price

†For Bridgeport "J" Head

INDICOL Adjustol Rods



- Fine adjustment

Fits	Order No.	Price
For Holders 138 thru 200	**MV60100**	Price
For Holders 225 thru 300	**MV60150**	Price

INDICOL Minindicol Holder



- Simplified version of Indicol holder with 3 point adjustment
- Shank is 1/4"
- For dovetail and 5/32" stem indicators

Type	Order No.	Price
Standard	**MV60400**	Price
Fine Adjustment	**MV60400II**	Price

INDICOL Half Round Combination Holder



- With two point adjustment
- 1/4" Diameter shank
- For dovetail and 5/32" stem indicator

Order No.	Price
MV60HRH	Price

INDICOL Cylindrical Holder



- For dovetail and 5/32" stem indicators

Fits (in.)	Order No.	Price
For 3/16 Shank	**MV60CH3**	Price
For 1/4 Shank	**MV60CH4**	Price

INDICOL Double Jointed Holder



- 3-Link rod is 3/8" diameter
- 2-1/4" Long extension

Order No.	Price
MV60DJH	Price

INDICOL Extra Grip



- To hold from 3/16 - 1/4" diameter shanks

Order No.	Price
MV60EG	Price

INDICOL Universal Swivel Holder



- Three diameters in one holder 1/4", 3/16", and 5/32
- Fits 1/4" dovetail

Order No.	Price
MV60MDSH	Price

INDICOL Indicator Tree



- Multi purpose step indicator holder consists of 15 diameters from 1/4" to 1-1/8" (in 1/16" increments) for time saving indicating

Fits (in.)	Order No.	Price
For 5/32 Shank	**MV60T156**	Price
For 1/4 Shank	**MV60T250**	Price

INDICOL Rectangular Holder



- Shank measures 1/4" x 1/2"
- For dovetail and 5/32" stem indicators

Order No.	Price
MV60RH	Price

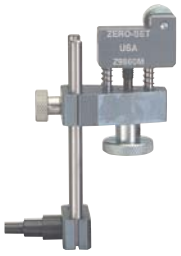
INDICOL Dovetail Adapters



- 5/32" or 3/16" Diameter

Size (in.)	Order No.	Price
5/32	**MV60DA532**	Price
3/16	**MV60DA316**	Price

PROCHECK Zero Set



- Perfect for milling machines, magnetic bases and all measuring set ups
- Fits all dovetail equipped indicators
- Equipped with a spindle post with 1/4" , 3/8" , and 1/2" diameter
- Checks the alignment of the centers of round materials
- Effective measuring range of 3/8" thru 9"

Order No.	Price
NB75Z9860	Price

PROCHECK Monorail Indicator Holder



- Use in milling machines or holders
- 5/32" hole in shaft accepts dovetail holder with 5/32" stem
- Excellent device for set ups and measure-ments
- Aluminum body, 5-1/2" reach
- Locking shaft for secure mounting

Order No.	Price
NB75Z9861	Price

FLEXBAR Indicator Pin Vise Accessory

MADE IN THE USA

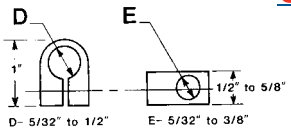
- Allows any AGD dial indicator to hold any diameter probe, needle etc.
- 0 to .040" Capacity
- Uses standard 4-48 thread for easy mounting to indicator spindle



Order No.	Price
GG4518560	31.50

Adjustable Swivel Clamps Medium Duty & Medium Duty T-Handles

Special sizes available on request call for pricing.



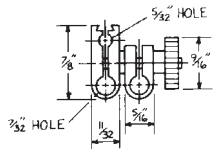
MADE IN THE USA



GEM

Size	Procheck		Gem			
	Adj. Swivel Clamp-Medium Duty-Stainless		Adjustable Swivel Clamp-Medium Duty		Medium Duty T-Handle Swivel Clamp	
	Order No.	Price	Order No.	Price	Order No.	Price
5/32 x 5/16	NB75Z7000SS	Price	ND50S1	Price	ND50ST1	Price
1/4 x 5/16	NB75Z7002SS	Price	ND50S2	Price	ND50ST2	Price
1/4 x 3/8	NB75Z7004SS	Price	ND50S3	Price	ND50ST3	Price
1/4 x 1/4	NB75Z7006SS	Price	ND50S4	Price	ND50ST4	Price
5/16 x 5/16	NB75Z7008SS	Price	ND50S5	Price	ND50ST5	Price
5/16 x 3/8	NB75Z7010SS	Price	ND50S6	Price	ND50ST6	Price
3/8 x 3/8	NB75Z7012SS	Price	ND50S7	Price	ND50ST7	Price
3/8 x 1/2	NB75Z7014SS	Price	ND50S8	Price	ND50ST8	Price

GEM Medium Duty Swivel Clamps



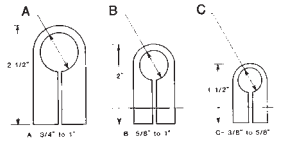
MADE IN THE USA



Style - Dovetail		
Size	Order No.	Price
7/32 x 7/32	ND50DTS01	Price
7/32 x 1/4	ND50DTS02	Price
1/4 x 1/4	ND50DTS03	Price

Style - Plain		
Size	Order No.	Price
1/4 x 1/4	ND50MS01	Price
3/16 x 1/4	ND50MS02	Price
1/4 x 1/8	ND50MS03	Price
1/4 x 5/32	ND50MS04	Price

GEM Heavy Duty Clamps





Size	Order No.	Price
3/8 x 3/8	ND50SH9	Price
3/8 x 1/2	ND50SH10	Price
1/2 x 1/2	ND50SH11	Price
1/2 x 5/8	ND50SH12	Price
5/8 x 5/8	ND50SH13	Price
5/8 x 3/4	ND50SH14	Price
3/4 x 3/4	ND50SH15	Price
3/4 x 1	ND50SH16	Price
1 x 1	ND50SH17	Price

GEM Positive-Locking Clamps

- Insert allows 24 different clamping positions
- Settings adjust in 15° increments
- More economical than custom-made clamps
- For OEM production lines, MRO applications, and more
- Available in 3/8" to 1" diameter

MADE IN THE USA



Size	Order No.	Price
3/8 x 3/8	ND50SHPL9	Price
3/8 x 1/2	ND50SHPL10	Price
1/2 x 1/2	ND50SHPL11	Price
1/2 x 5/8	ND50SHPL12	Price
5/8 x 5/8	ND50SHPL13	Price
5/8 x 3/4	ND50SHPL14	Price
3/4 x 3/4	ND50SHPL15	Price
3/4 x 1	ND50SHPL16	Price
1 x 1	ND50SHPL17	Price

PROCHECK Economy Select-A-Point Kit

- A complete set of 22 different points, increasing the versatility of your indicators
- Fits all AGD 1, 2, 3, 4 drop style indicators



Order No.	Price
NB75VP22SP	Price

PROCHECK Indicator Point Kit for all AGD Style Indicators

MADE IN THE USA

- For all AGD style indicators
- The most useful accessory for all dial indicators - a complete set of 22 different points, increasing the versatility of your indicators



Order No.	Price
NB75Z9000	Price

PROCHECK Holding Bar for Height Gages

MADE IN THE USA

- Holding bar with pin

NB75Z9611



Size	Type	Order No.	Price
3/16 x 5/16	Height Gage Bar With Pin	NB75Z9611	Price
1/4 x 1/2 x 3	Swivel Joint & Height Gage Bar	NB75Z9627SETSS	Price
1/4 x 3	Universal Dovetail Indicator Holder	NB75Z9008SS	Price
3/8 x 4-1/2	Double Jointed Holder	NB75Z9665SS	Price

PROCHECK Indicator Accessories

New!

- 1 Year Warranty

Item	Description	Order No.	Price
	1/4" Shank Universal Test Indicator Mount with Dovetail Mount	PC21UDIH143	Price
	1/4" x 1/2" Height Gage Bar with Dovetail Clamp with 3/8" Hole and Dovetail Mount	PC21RH1412DTC5	Price
	Bushing adapts 5/32" test indicator stems to 3/8" diameter	PC21B38532	Price
	Triple Joints allow for multiple test indicator positions. Dovetail or 5/32" Stem Mount	PC21AS38DT	Price
	Universal 5/32" stem fits most test indicators with dovetail mounts	PC21DTS532	Price

PROCHECK Test Indicator Accessory Kit

New!

- Includes: Height Gage Bar with Universal Dovetail; 3/8" clamp, Universal Dovetail Holder with 1/4" Shank; Axial support with 3/8" shank; 3/8 to 5/32" bushing and 5/32" Dovetail stem
- Supplied in convenient case with slot for test indicator
- 1 Year Warranty



Order No.	Price
PC21TIAKT1	Price

GEM Indicator Accessories

MADE IN THE USA

Item	Type	Order No.	Price
	Cap	ND50299N†	3.50
	Indicator Holder with 3/8 Shank	ND5045	Price
	Slide Adaptor(for use with No. 35 on 18" & 24" Height Gages)	ND5036	Price
	Surface Gage Adaptor	ND50515	Price
	Swivel Clamp 1/4 & 5/16 Holes	ND50299K	Price

†Accessories for 299A and 399B

Interapid Accessories

Item	Description	Order No.	Price
	Axial Support	MV4041656	Price
	Holding Bar with Pins	MV4041689	Price
	Swivel Joint	MV4041663	Price
	Swivel Joint & Height Gage Bar	MV4041651	Price

Interapid Contact Points



	Carbide Ball Indicator Point									Chrome Ball Indicator Point								
	.031			.060			.080			.031			.060			.080		
Length (in.)	Ref No.	Order No.	Price	Ref No.	Order No.	Price	Ref No.	Order No.	Price	Ref No.	Order No.	Price	Ref No.	Order No.	Price	Ref No.	Order No.	Price
11/16	T-485	MV4041649	Price	T-483	MV4041648	Price	T-481	MV4041647	Price	T-491	MV4041662	Price	T-489	MV4041661	Price	T-487	MV4041660	Price
13/16	T-486	MV4041694	Price	T-484	MV4041693	Price	T-482	MV4042776	Price	T-492	MV4041697	Price	T-490	MV4041696	Price	T-488	MV4041695	Price
1.750	T-495	MV4041699†	37.00	-	-	-	T-493	MV4041698†	37.00	-	-	-	-	-	-	-	-	-

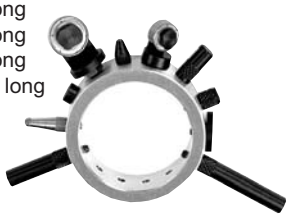
†Actual reading x 2 = real measurement
Other size ball diameters available

PROCHECK Contact Point Ring

Kit Contains:

- (1) 3/8” CNC qualified roller bearing
- (1) 1/2” CNC qualified roller bearing
- (1) 3mm Ruby tip 1/2” long
- (1) Flat steel point 7/32” diameter 1/4” long
- (1) Flat steel point 7/32” diameter 1/2” long
- (1) Flat steel point 7/32” diameter 3/4” long
- (1) Flat steel point 7/32” diameter 1-1/4” long
- (1) Flat contact 1/4” wide
- (1) Flat contact 1/2” wide
- (1) .060” Steel ball tip, 5/16” long

MADE IN THE USA



Order No.	Price
NB75Z9013	Price

PROCHECK Magnetic Base System For Dial Indicators

MADE IN THE USA

- A versatile and time saving system for mounting any dial indicator to any metal surface
- Applications include mounting on machine tools for use in process gaging applications, set ups, and many other uses
- System consists of our standard magnetic mounting base, with interchangeable backs to fit most AGD 1 and 2 dial indicators



Indicator not included

Description	Order No.	Price
2" Aluminum Flat Back - No Holes	NB75Z2691†	8.95
AGD 1 - Fits Peacock, MTi, Enco	NB75Z2700	Price
AGD 2 - Fits Ames	NB75Z2705	Price
AGD 2 - Fits Brown & Sharpe	NB75Z2710	Price
AGD 2 - Fits Brown & Sharpe black face	NB75Z2760	Price
AGD 2 - Fits Federal	NB75Z2715	Price
AGD 2 - Fits Helios	NB75Z2720	Price
AGD 2 - Fits Kaefer	NB75Z2725	Price
AGD 2 - Fits MTI, Peacock, Enco	NB75Z2730	Price
AGD 2 - Fits Scherr Tumico (S-T) & Sears	NB75Z2745	Price
AGD 2 - Fits SPI 24-300 series	NB75Z2750	Price
AGD 2 - Fits SPI Amtos Chinese Indicators	NB75Z2755	Price
AGD 2 - Fits Starrett	NB75Z2735	Price
Magnetic Base ONLY-with 8-36 Mounting Stud	NB75Z2690	Price
Universal Back-4 elongated holes for non standard indicator backs	NB75Z2692	Price

†You drill to fit your indicator-use with NB75Z2690 for magnetic back set†You drill to fit your indicator-use with NB75Z2690 for magnetic back set

PROCHECK Metric Indicator Stem Bushing

- Accepts 8mm indicator stem — converts to 3/8” diameter stem
- Split on one side for entire length
- 5/8” head OD x .065” thick
- 9/16” Overall length

MADE IN THE USA



Order No.	Price
NB75Z2105	Price

PROCHECK Indicator Accessories

MADE IN THE USA

Item	Description	Order No.	Price
	Angle Attachment-3/8 Shank & Hole	NB75Z9640	Price
	Axial Support 3 -3/8 Dia.-Stainless Steel	NB75Z9610SS	Price
	Dial Indicator Depth Base - 2-1/2 Long	NB75Z9228	Price
	Dial Indicator Depth Base - 4" Long	NB75Z9229	Price
	Dovetail Stem-1/4 Diameter	NB75Z7502	Price
	Dovetail Stem-5/16 Diameter	NB75Z7503	Price
	Dovetail Stem-5/32 Diameter	NB75Z7500	Price
	Dovetail Stem-7/32 Diameter	NB75Z7501	Price
	Half Round Holder with Dovetail & 5/32 Mount	NB75Z7800	Price
	Rectangular Bar-3/16 x 5/16	NB75Z9625	Price
	Round Bar-7/32" Diameter	NB75Z9630	Price
	Single Joint Holder-1/4 Shank Dovetail Mount	NB75Z9660	Price
	Swivel Clamp 3/8 & 7/32 Hole	NB75Z9600	Price
	Swivel Clamp 3/8 & 1/4 Hole	NB75Z9601	Price
	Swivel Clamp Holding Bar Set	NB75Z9600SET	Price
	Swivel Support 3/8 Dia. x 1" Long Shank	NB75Z9635	Price
	Swivel Support 3/8 Dia. x 3-5/8 Long Shank	NB75Z9636	Price
	Universal Dovetail Clamp-1/8 to 1/4 & Dovetail	NB75Z9618	Price

PROCHECK Magnetic Indicator Back

- Fits most AGD2 dial indicators
- Magnet screws on/off
- Strong magnet
- 1 Year Warranty



Order No.	Price
PC21MIB2	Price

Fowler Extension Points for Dial Indicators

- Stackable with other inch/metric extensions



Description	Order No.	Price
1" Extension Point for Dial Indicator 4-48 Thread	**NA55525260010**	Price
1" Extension Point for Dial Indicator M2.5 Thread	**NA55525260110**	Price
1.5" Extension Point for Dial Indicator M2.5 Thread	**NA55525260120**	Price
2" Extension Point for Dial Indicator 4-48 Thread	**NA55525260030**	Price
2" Extension Point for Dial Indicator M2.5 Thread	**NA55525260130**	Price
2.5" Extension Point for Dial Indicator M2.5 Thread	**NA55525260140**	Price
3" Extension Point for Dial Indicator M2.5 Thread	**NA55525260150**	Price
4" Extension Point for Dial Indicator 4-48 Thread	**NA55525260060**	Price
4" Extension Point for Dial Indicator M2.5 Thread	**NA55525260160**	Price
6" Extension Point for Dial Indicator 4-48 Thread	**NA55525260070**	Price
6" Extension Point for Dial Indicator M2.5 Thread	**NA55525260170**	Price

Mitutoyo Magnetic Indicator Backs

- Two magnetic backs are available for Mitutoyo series 2 and 3 AGD dial indicators and fit on inch or metric indicators
- The magnet is designed to avoid direct contact with work surfaces, resulting in a longer lasting magnet, and stronger gripping power



Type	Order No.	Price
AGD 2	**MT80900928**	Price
AGD 3	**MT80900929**	Price

Mitutoyo Accessories

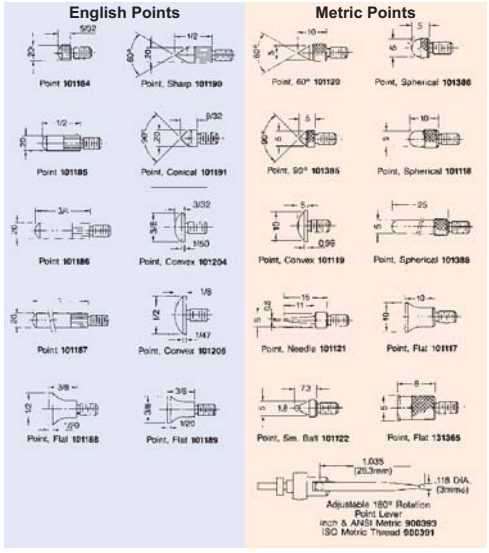


Description	Order No.	Price
Universal Holder 1/4 Dia.	**MT8121CZA231**	Price
Clamp with Dovetail 5/32 x 5/16 Dia	**MT80900321**	Price
Holding Bar .35 x .35	**MT80900209**	Price
Holding Bar 1/2 x 1/4	**MT80900306**	Price
Holding Bar 5/16 Dia	**MT80900211**	Price

Mitutoyo Accessories for Dial Indicators Type 1, 2, & 3















Style - English			
Description	**Type**	**Order No.**	**Price**
Point, Carbide Tipped	AGD 1, 2, & 3	**MT8021BZB005**	Price
Back, Flat	AGD 1	**MT80101211**	Price
Back, Flat	AGD 2	**MT80101039**	Price
Back, Post	AGD 2	**MT80101169**	Price
Back, Post	AGD 3	**MT80100839**	Price
Conical Point, 60°	AGD 1, 2, & 3	**MT80101190**	Price
Conical Point, 90°	AGD 1, 2, & 3	**MT80101191**	Price

Style - English			
Description	**Type**	**Order No.**	**Price**
Dovetail Rack Back	AGD 2	**MT80129902**	Price
Point, Carbide Tipped	AGD 1, 2, & 3	**MT80901312**	Price
Point, Flat dia 3/8	AGD 1, 2, & 3	**MT80101189**	Price
Point, Flat dia. 1/2	AGD 1, 2, & 3	**MT80101188**	Price
Point, Length 1	AGD 1, 2, & 3	**MT80101187**	Price
Point, Length 1/2	AGD 1, 2, & 3	**MT80101185**	Price
Point, Length 3/4	AGD 1, 2, & 3	**MT80101186**	Price
Point, Length 5/32	AGD 1, 2, & 3	**MT80101184**	Price
Point, Lever	AGD 1, 2, & 3	**MT80900393**	Price
Screw for lever	AGD 1, 2, & 3	**MT80101047**	Price
Spherical Point, 1/2"	AGD 1, 2, & 3	**MT80101205**	Price
Spherical Point, 3/8"	AGD 1, 2, & 3	**MT80101204**	Price

Style - Metric			
Description	**Type**	**Order No.**	**Price**
Back, Adjustable	AGD 2	**MT80136026**	Price
Back, Adjustable	AGD 3	**MT80100838**	Price
Back, Flat	AGD 3	**MT80100836**	Price
Back, Lug on center	AGD 1	**MT80101210**	Price
Back, Lug on center	AGD 1	**MT80101307**	Price
Back, Lug on center	AGD 2	**MT80101040**	Price
Back, Lug on center	AGD 2	**MT80101306**	Price
Back, Lug on center	AGD 3	**MT80100797**	Price
Back, Offset Lug	AGD 2	**MT80101167**	Price
Back, Offset Lug	AGD 3	**MT80100837**	Price
Back, Screw Mount	AGD 2	**MT80101170**	Price
Back, Screw Mount	AGD 2	**MT80136023**	Price
Back, Screw Mount	AGD 3	**MT80100840**	Price
Back, Screw Mount	AGD 3	**MT80136024**	Price
Point, 60°	AGD 1, 2, & 3	**MT80101120**	Price
Point, 90°	AGD 1, 2, & 3	**MT80101385**	Price
Point, Adjust Arm; Arm Length 26.3mm:Ball dia. 3mm	AGD 1, 2, & 3	**MT80900391**	Price
Point, Flat 10mm dia & length	AGD 1, 2, & 3	**MT80101117**	Price
Point, Small Ball 2mm dia	AGD 1, 2, & 3	**MT80101122**	Price
Point, Spherical	AGD 1, 2, & 3	**MT80101118**	Price
Point, Spherical .5mm dia & length	AGD 1, 2, & 3	**MT80101386**	Price
Point, Spherical .5mm dia & length 25mm	AGD 1, 2, & 3	**MT80101388**	Price
Point, Spherical 10mm dia	AGD 1, 2, & 3	**MT80101119**	Price

Starrett® Extra Length Contact Points

- Used in place of the 1/4" long contact point furnished on Starrett AGD dial indicators
- Standard lengths from 1/2" to 3" in 1/4" increments
- Diameter 13/64"
- 4-48 Screw thread
- Made from high grade steel, hardened, ground and chrome plated



	Flat End Contact Point			Rounded End Contact Point		
Length (in.)	Starrett No.	Order No.	Price	Starrett No.	Order No.	Price
1/4	PT10453	**MV7072048**	Price	PT07215	**MV7070965**	Price
1/2	PT09560	**MV7071260**	Price	PT06677	**MV7070823**	Price
3/4	PT09560A	**MV7071261**	Price	PT06677A	**MV7070824**	Price
1	PT09560B	**MV7071262**	Price	PT06677B	**MV7070825**	Price
2	PT09560F	**MV7071266**	Price	PT06677F	**MV7070829**	Price
3	PT09560K	**MV7071270**	Price	PT06677K	**MV7070833**	Price
1-1/2	PT09560D	**MV7071264**	Price	PT06677D	**MV7070827**	Price
1-1/4	PT09560C	**MV7071263**	Price	PT06677C	**MV7070826**	Price
1-3/4	PT09560E	**MV7071265**	Price	PT06677E	**MV7070828**	Price
2-1/2	PT09560H	**MV7071268**	Price	PT06677H	**MV7070831**	Price
2-1/4	PT09560G	**MV7071267**	Price	PT06677G	**MV7070830**	Price
2-3/4	PT09560J	**MV7071269**	Price	PT06677J	**MV7070832**	Price

Starrett® Contact Points and Accessories

MADE IN THE USA

Type - Steel Contact Point			
Starrett No.	Ball Dia. (in.)	Order No.	Price
PT07087	.120 Ball Diameter	**MV7070912**	Price
PT07136	.062 Ball Diameter	**MV7070944**	Price
PT07137	.035 Ball Diameter	**MV7070945**	Price

Type - Tungsten Carbide Contact Point			
Starrett No.	Ball Dia. (in.)	Order No.	Price
PT07087X	.120 Ball Diameter	**MV7052966**	Price
PT07136X	.062 Ball Diameter	**MV7052965**	Price
PT07137X	.035 Ball Diameter	**MV7052964**	Price



Starrett® Contact Point Set

MADE IN THE USA

- 14 points with 4-48 screw thread to fit AGD dial indicators
- Includes: (1) regular 1/2" long point; (9) special form points; (1) No. 28 shock absorbing anvil; and (3) extra long points 1/2", 3/4" and 1" long
- All are mounted on a convenient aluminum ring for safe keeping and ready selection



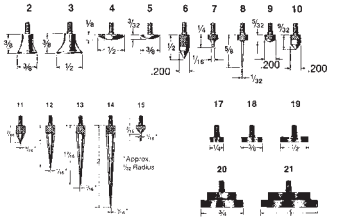
Order No.	Price
MV7050153	Price

Starrett® Special Form Contact Points

MADE IN THE USA

All furnished with #4-48 Screw Threads

Special Form No.	Order No.	Price
2	**MV7070790**	Price
3	**MV7070791**	Price
4	**MV7070792**	Price
7	**MV7070795**	Price
8	**MV7070796**	Price
9	**MV7070797**	Price
10	**MV7070798**	Price
11	**MV7070799**	Price
12	**MV7070800**	Price
13	**MV7070801**	Price
14	**MV7070802**	Price
15	**MV7070803**	Price
17	**MV7070804**	Price



Special Form No.	Order No.	Price
18	**MV7070805**	Price
19	**MV7070806**	Price
20	**MV7070808**	Price
21	**MV7070807**	Price
Contact Point	**MV7070793**	Price
Contact Point	**MV7070794**	Price

Starrett® Type 196/650 Attachments

MADE IN THE USA

Item	Starrett No.	Description	Order No.	Price
	196F	Hole Attachment F/196	**MV7050706**	Price
	196R	Adapter for contact points w/#4-48 thread, as used on AGD Dial Indicators (196G)	**MV7050711**	Price
	PT05471	Contact Point F/196	**MV7070617**	Price
	PT05472	Contact Point F/196	**MV7070618**	Price
	PT05473	Contact Point F/196	**MV7070619**	Price
	PT06632-5	Contact point F/650	**MV7070793**	Price
	PT06632-6	Contact point F/650	**MV7070794**	Price
	PT07215	Rounded End Contact Point	**MV7070965**	Price
	PT18718	Sleeve complete, 1/4 & 5/16 holes (196K)	**MV7050709**	Price
	PT18724	Sleeve complete, 1/4 & 3/8 holes (196L)	**MV7050710**	Price
	PT99437	Clamp	**MV7064492**	Price
	PT99438	Tool post holder with upright spindle (196H)	**MV7064493**	Price

Starrett® Dial Indicator Backs

MADE IN THE USA

For AGD Style Indicators

Item	Type	Fits Indicator Series No.	Starrett No.	Order No.	Price
	Adjustable Bracket Indicator Back	Series No. 25	PT06608M	**MV7070776††**	Price
		Series No. 655	PT06878M	**MV7070874††**	Price
		Series No. 656	PT06903M	**MV7070882††**	Price
		Series No. 81	PT06836M	**MV7070859††**	Price
	Flat Indicator Back	Series No. 25	PT06608J	**MV7070774**	Price
		Series No. 655	PT06878J	**MV7070873**	Price
		Series No. 656	PT06903J	**MV7071995**	Price
		Series No. 81	PT06836J	**MV7070858**	Price
	Lug-Off Center Indicator Back	Series No. 25	PT06608-1	**MV7070770**	Price
		Series No. 655	PT06966A	**MV7071996**	Price
		Series No. 656	PT07317A	**MV7071997**	Price
		Series No. 81	PT06836	**MV7070855**	Price
		Series No. 25	PT07206-1	**MV7070960**	Price
		Series No. 655	PT06966-1	**MV7070888**	Price
		Series No. 656	PT07317-1	**MV7070980**	Price
		Series No. 81	PT06836-1	**MV7070856**	Price
	Screw Type Lug Indicator Back	Series No. 25	PT06608E	**MV7070772†**	Price
		Series No. 655	PT06878E	**MV7072224†**	Price
		Series No. 656	PT06903E	**MV7072225†**	Price
		Series No. 81	PT06836S	**MV7072223†**	Price

† 3/8-24 thread 3/8" lug dia. x 1/8" long
†† 1/2" slot 1/4-20 thread

Starrett® Accessories

MADE IN THE USA

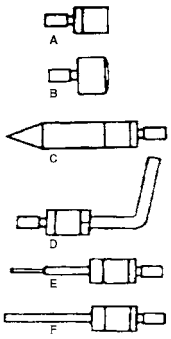
Item	Starrett No.	Order No.	Price
	PT05116	**MV7070556**	Price
	PT05119	**MV7070557**	Price
	PT07101F	**MV7070924**	Price
	PT07104F	**MV7070929**	Price
	PT13175	**MV7052924**	Price
	PT13301	**MV7071441**	Price
	PT24706	**MV7065064**	Price

PROCHECK Individual Indicator Points

Fits all AGD Group 1, 2, 3, 4 Indicators with 4-48 threads.

MADE IN THE USA

Code	Type	Size (in.)	Order No.	Price
A	Flat Indicator Point	.175	NB75Z9310	Price
		.250	NB75Z9311	Price
		.380	NB75Z9312	Price
		.500	NB75Z9313	Price
		.625	NB75Z9314	Price
		.750	NB75Z9315	Price
		.875	NB75Z9316	Price
		.895	NB75Z9317	Price
		1.250	NB75Z9318	Price
B	Ball Indicator Point	.225	NB75Z9320	Price
		.395	NB75Z9321	Price
		.625	NB75Z9322	Price
		.875	NB75Z9323	Price
		.825	NB75Z9324	Price
C	Cone Indicator Point	.500	NB75Z9332	Price
		.875	NB75Z9327	Price
		.625	NB75Z9329	Price
		.750	NB75Z9328	Price
D	Bent Stem Indicator Point	.312	NB75Z9333	Price
E	Stem Indicator Point	.12 Tip x 1.025	NB75Z9336	Price
E		.25 Tip x 1.025	NB75Z9337	Price
F	Stem Indicator Point	1/16 Tip x 1.157	NB75Z9338LSS	Price



PROCHECK Individual Extension Points

Stainless Steel

- 4-48 Internal and external thread

MADE IN THE USA



Size (in.)	Order No.	Price
.500" Long 4-48 internal & external threads	NB75Z9391SS	Price
.750" Long 4-48 internal & external threads	NB75Z9392SS	Price
1" Long 4-48 internal & external threads	NB75Z9339SS	Price
1.25" Long 4-48 internal & external threads	NB75Z9393SS	Price
1.50" Long 4-48 internal & external threads	NB75Z9343SS	Price
1.75" Long 4-48 internal & external threads	NB75Z9394SS	Price
2" Long 4-48 internal & external threads	NB75Z9340SS	Price
2.50" Long 4-48 internal & external threads	NB75Z9351SS	Price
3" Long 4-48 internal & external threads	NB75Z9341SS	Price
4" Long 4-48 internal & external threads	NB75Z9352SS	Price
6" Long 4-48 internal & external threads	NB75Z9353SS	Price
3 Pc. set-includes 1", 2" & 3" extensions	NB75Z9350SS	Price

PROCHECK Dial Depth Gage Extension Rods



MADE IN THE USA

- 4-48 Internal and external thread
- 3/16" Diameter points
- Knurling at the internally tapped end
- Fits all depth gages with AGD 4-48 threads
- Steel

Length (in.)	Order No.	Price
1	NB75Z9590	Price
1-1/2	NB75Z9591	Price
2	NB75Z9592	Price
3	NB75Z9593	Price

Length (in.)	Order No.	Price
4	NB75Z9594	Price
5	NB75Z9595	Price
6	NB75Z9596	Price

PROCHECK Special CNC Qualified Series Roller Bearing Points

MADE IN THE USA



- Specially manufactured roller bearing points in 3/8" and 1/2" bearing sizes
- Points are constructed to allow the changing of the roller bearings, for unlimited life
- 4-48 threads to fit all AGD standard indicators

Description	Order No.	Price
1/2 Bearing Size	NB75Z9390	Price
3/8 Bearing Size	NB75Z9389	Price

PROCHECK Drop Dial Indicator Contact Tips

MADE IN THE USA





Size (mm/in.)	Ball Material	Order No.	Price
3mm Tip x 1/4 Long with 4-48 Thread	Carbide	NB75Z6960	Price
3mm Tip x 1/4 Long with 4-48 Thread	Ruby	NB75Z6972	Price
3mm Tip x 1/4 Long with M2.5 Thread	Carbide	NB75Z6961	Price
3mm Tip x 1/4 Long with M2.5 Thread	Ruby	NB75Z6973	Price
3mm Tip x 1/2 Long with 4-48 Thread	Carbide	NB75Z6962	Price
3mm Tip x 1/2 Long with 4-48 Thread	Ruby	NB75Z6974	Price
3mm Tip x 3/4 Long with 4-48 Thread	Carbide	NB75Z6964	Price
3mm Tip x 3/4 Long with 4-48 Thread	Ruby	NB75Z6976	Price
4mm Tip x 1/4 Long with 4-48 Thread	Carbide	NB75Z6966	Price
4mm Tip x 1/4 Long with 4-48 Thread	Ruby	NB75Z6978	Price
4mm Tip x 1/4 Long with M2.5 Thread	Carbide	NB75Z6967	Price
4mm Tip x 1/4 Long with M2.5 Thread	Ruby	NB75Z6979	Price
4mm Tip x 1/2 Long with 4-48 Thread	Carbide	NB75Z6968	Price
4mm Tip x 1/2 Long with 4-48 Thread	Ruby	NB75Z6980	Price
4mm Tip x 3/4 Long with 4-48 Thread	Carbide	NB75Z6970	Price
4mm Tip x 3/4 Long with 4-48 Thread	Ruby	NB75Z6982	Price

PROCHECK Replacement Tip For Test Indicators

MADE IN THE USA



PROCHECK Steel Tips	Order No.	Price
.080 x 1/2, M2 Threads	NB75Z6220	Price

Adapt-A-Tip

MADE IN THE USA



- Converts your test indicator tip for use on your dial indicator
- Allows the use of your test indicator tips on your drop style dial indicator
- Use for extended reach applications, measuring small grooves and pockets, or other hard to reach places
- Fits any standard 4-48 threaded AGD dial indicator

Fits Test Indicator Tips	Dia. x Length, Internal Thread	Order No.	Price
Brown & Sharpe	.177 x .33, M1.4 x .35 Threads	NB75Z6995	Price
Interapid, Fowler, Gilrod, Compac, Peacock, Etc.	.177 x .33, M1.7 x .35 Threads	NB75Z6996	Price

GEM Contact Points



Used On: 222, 225, 250, 255, 300-30 & 325-30, 334-30 & 335-30

	Carbide Contact Point		Steel Contact Point	
Diameter	Order No.	Price	Order No.	Price
.032 Diameter	ND50C10	Price	-	-
.045 Diameter	-	-	ND5030	Price
.062 Diameter	ND50C10A	Price	-	-
.109 Diameter	-	-	ND509	Price

PROCHECK Replacement Tips for Interapid Test Indicators

MADE IN THE USA



Type - Carbide Contact Point		
Size (in.)	Order No.	Price
.031 x 11/16	**NB75Z6520**	Price
.031 x 13/16	**NB75Z6525**	Price
.031 x 1.450	**NB75Z6524**	Price
.031 x 1-3/4	**NB75Z6522**	Price
.060 x 11/16	**NB75Z6690**	Price
.060 x 13/16	**NB75Z6692**	Price
.080 x 11/16	**NB75Z6738**	Price
.080 x 13/16	**NB75Z6739**	Price
.080 x 1.450	**NB75Z6809**	Price
.080 x 1-3/4	**NB75Z6742**	Price
.080 x 2-3/4	**NB75Z6879**	Price
.093 x 11/16	**NB75Z6206**	Price
.100 x 2-3/4	**NB75Z6884**	Price

Type - Ruby Contact Point		
Size (in.)	Order No.	Price
2mm x 11/16	**NB75Z6305**	Price
2mm x 13/16	**NB75Z6306**	Price
2mm x 1-3/4	**NB75Z6307**	Price

Type - Steel Contact Point		
Size (in.)	Order No.	Price
.031 x 11/16	**NB75Z6105**	Price
.031 x 13/16	**NB75Z6106**	Price
.060 x 11/16	**NB75Z6200**	Price
.060 x 13/16	**NB75Z6201**	Price
.080 x 11/16	**NB75Z6204**	Price
.080 x 13/16	**NB75Z6225**	Price

PROCHECK Replacement Tips for Tesa Test Indicators

MADE IN THE USA



Type - Carbide Contact Point		
Size (in.)	Order No.	Price
.040 x 1/2	**NB75Z6532**	Price
.040 x 1-1/2	**NB75Z6540**	Price
.080 x 1/2	**NB75Z6534**	Price
.080 x 1-1/2	**NB75Z6542**	Price
.120 x 1/2	**NB75Z6536**	Price
.120 x 1-1/2	**NB75Z6544**	Price

Type - Ruby Contact Point		
Size (in.)	Order No.	Price
2mm x 1/2	**NB75Z6312**	Price
2mm x 1-1/2	**NB75Z6313**	Price

Type - Steel Contact Point		
Size (in.)	Order No.	Price
.031 x 1/2	**NB75Z6032**	Price
.031 x 1-1/2	**NB75Z6044**	Price
.040 x 1/2	**NB75Z6033**	Price
.040 x 1-1/2	**NB75Z6045**	Price
.060 x 1/2	**NB75Z6034**	Price
.060 x 1-1/2	**NB75Z6046**	Price
.080 x 1/2	**NB75Z6035**	Price
.080 x 1-1/2	**NB75Z6047**	Price
.090 x 1/2	**NB75Z6036**	Price
.090 x 1-1/2	**NB75Z6048**	Price
.120 x 1/2	**NB75Z6042**	Price
.120 x 1-1/2	**NB75Z6050**	Price

Note: Lengths are approximate. Tips are manufactured to fit the specific indicator.

PROCHECK Special Contact Points for AGD 1, 2, 3 & 4 Indicators with 4-48 Threads

MADE IN THE USA

Item	Description	Order No.	Price
	MM/Inch Conversion Tip Point (4-48 Internal/2.5mm External)	**NB75Z9344SS**	Price
	3/8" Diameter Button Contact Point	**NB75Z9355**	Price
	1/2" Diameter Button Contact Point	**NB75Z9356**	Price
	3/4" Diameter Button Contact Point	**NB75Z9357**	Price
	1/4" Diameter Flat Contact Point	**NB75Z9365**	Price
	3/8" Diameter Flat Contact Point	**NB75Z9366**	Price
	1/2" Diameter Flat Contact Point	**NB75Z9367**	Price
	5/8" Diameter Flat Contact Point	**NB75Z9368**	Price
	3/4" Diameter Flat Contact Point	**NB75Z9370**	Price
	1" Diameter Flat Contact Point	**NB75Z9369**	Price
	1-1/2" Diameter Flat Contact Point	**NB75Z9371**	Price
	13/32" Long Tapered Contact Point	**NB75Z9375**	Price
	1" Long Tapered Contact Point	**NB75Z9376**	Price
	1-1/2" Long Tapered Contact Point	**NB75Z9377**	Price
	Radius Contact Point	**NB75Z9380**	Price
	Chisel Contact Point	**NB75Z9381**	Price
	Offset Chisel Contact Point	**NB75Z9382**	Price
	1/8" Steel Ball Point	**NB75Z9383**	Price
	1/8" Carbide Ball Point	**NB75Z9384**	Price
	1/4" Steel Ball Point	**NB75Z9385**	Price
	5/16" Cone Point Point	**NB75Z9386**	Price
	1/16" Needle Stud Point	**NB75Z9387**	Price
	Roller Anvil Point	**NB75Z9388**	Price
	Standard Ball Point (4-48 Thread)	**NB75Z9396**	Price

PROCHECK CMM Contact Styli M2 Threads, Stainless Steel Body with Grade 10 Ruby Ball



MADE IN THE USA

Ball Size	Length	Renishaw Equiv.	Carbide Probes Equiv.	Fowler Equiv.	Q Mark Equiv.	Order No.	Price
1.5mm Ruby	10mm	PS24R(A/5000/7802)	-	-	TM2-1510	**NB75Z3001**	Price
1.5mm Ruby	40mm	-	-	-	-	**NB75Z3407**	Price
1mm Ruby	10mm	-	265-1R	54-772-300	TM2-1010	**NB75Z3000**	Price
1mm Ruby	20mm	PS23R(A/5000/7808)	266-1R	54-772-301	TM2-1020-07	**NB75Z3010**	Price
2mm Ruby	10mm	PS8R(A/5000/7807)	-	54-772-309	TM2-2010	**NB75Z3090**	Price
2mm Ruby	20mm	PS2R(A/5000/3603)	266-2R	54-772-310	TM2-2020	**NB75Z3100**	Price
3mm Ruby	10mm	PS1R(A/5000/3604)	-	54-772-329	TM2-3010	**NB75Z3290**	Price
3mm Ruby	20mm	PS16R(A/5000/4160)	266-3R	54-772-330	TM2-3020	**NB75Z3300**	Price
3mm Ruby	40mm	-	-	-	-	**NB75Z3410**	Price
4mm Ruby	20mm	PS17R(A/5000/4161)	266-4R	54-772-340	TM2-4020	**NB75Z3400**	Price
5mm Ruby	21mm	-	-	-	-	**NB75Z3405**	Price
6mm Ruby	10mm	PS14R(A/5000/4156)	265-6R	54-772-350	TM2-6010	**NB75Z3500**	Price
8mm Ruby	12mm	PS15R(A/5000/4158)	265-8R	54-772-360	TM2-8015	**NB75Z3600**	Price

PROCHECK Replacement Tips for Brown & Sharpe Test Indicators

MADE IN THE USA

High Quality American Made



Type - Carbide Contact Point		
Size (in.)	Order No.	Price
.040 x 1/2	**NB75Z6595**	Price
.040 x 1-7/16	**NB75Z6645**	Price
.080 x 1/2	**NB75Z6730**	Price
.080 x 11/16	**NB75Z6830**	Price
.080 x 1-7/16	**NB75Z6802**	Price
.120 x 1-7/16	**NB75Z6918**	Price
.120 x 1/2	**NB75Z6905**	Price

Type - Ruby Contact Point		
Size (in.)	Order No.	Price
2mm x 1/2	**NB75Z6300**	Price
2mm x 1-7/16	**NB75Z6301**	Price

Type - Steel Contact Point		
Size (in.)	Order No.	Price
.040 x 1/2	**NB75Z6149**	Price
.080 x 1/2	**NB75Z6205**	Price
.080 x 1-7/16	**NB75Z6230**	Price
.120 x 1/2	**NB75Z6295**	Price

PROCHECK CMM Star Styli - Stainless Steel Body, with Grade 10 Ruby Ball

MADE IN THE USA



Ball Size	Horiz Lgth.	Vert Lgth.	Thread	Renishaw Equiv.	Fowler Equiv.	Order No.	Price
2mm Ruby	20mm	20mm	M2	PS6R(A/5000/7629)	54-772-862	**NB75Z3862**	Price
2mm Ruby	30mm	20mm	M2	PS7R(A/5000/3626)	-	**NB75Z3863**	Price

PROCHECK CMM Cylinder Styli

MADE IN THE USA



Cylinder Dia.	Length	Shaft Dia.	Thread	Renishaw Equiv.	Fowler Equiv.	Q Mark Equiv.	Order No.	Price
3mm	13mm	1.5mm	M2 x .4	PS19R(M/5000/4153)	54-772-999	TM2-3013-CYL	**NB75Z3999**	Price
3mm	13mm	1.5mm	M3 x .5	-	-	-	**NB75Z3999M3**	Price
3mm	13mm	1.5mm	M4 x .7	-	-	-	**NB75Z3999M4**	Price

PROCHECK CMM M2 Thread Styli Extensions - Stainless Steel

MADE IN THE USA



Diameter	Length	Renishaw Equiv.	Carbide Probes Equiv.	Fowler Equiv.	Q Mark Equiv.	Order No.	Price
3mm	10mm	SE4(M/5000/3647)	265-E10	54-772-810	VM2-10	**NB75Z3810**	Price
3mm	20mm	SE5(M/5000/3648)	265-E20	54-772-820	VM2-20	**NB75Z3820**	Price
3mm	30mm	SE6(M/5000/4162)	265-E30	54-772-830	VM2-30	**NB75Z3830**	Price
3mm	35mm	-	-	-	-	**NB75Z3835**	Price
3mm	40mm	SE18(M/5000/7779)	265E40	54-772-840	VM2-40	**NB75Z3840**	Price
3mm	50mm	-	-	-	-	**NB75Z3849**	Price

PROCHECK Adaptor Tips - Stainless Steel

MADE IN THE USA



Male Thread	Female Thread	Body Dia.	Body Length	Renishaw Equiv.	Carbide Probes Equiv.	Fowler Equiv.	Q Mark Equiv.	Order No.	Price
M2 x .4	M3 x .5	4mm	10mm	SA2(M/5000/4164)	265-AD7	54-772-851	RM2-M3	**NB75Z3851**	Price
M2 x .4	M4 x .7	6.3mm	15mm	-	-	54-772-853	RM4-M2	**NB75Z3853**	Price
M3 x .5	M2 x .4	4mm	5mm	SA3(M/5000/4163)	264-AD5	54-772-850	RM3-M2	**NB75Z3850**	Price
M4 x .7	M2 x .4	6.3mm	5mm	SA5(M/5000/6622)	399	54-772-852	-	**NB75Z3852**	Price
M4 x .7	M3 x .5	6.3mm	10mm	SA6(M/5000/6714)	-	54-772-854	-	**NB75Z3854**	Price

PROCHECK CMM Styli Universal Wrench - Fits all Styli

MADE IN THE USA



Wrench Dia.	Order No.	Price
1.27mm & 1.73mm	**NB75Z2999**	Price

PROCHECK Granite-Check Stand

With Fine Adjustment



NB60G3 - Granite-Check Stand Only
- Microscrew fingertip control
- .00005” Flatness
- Extreme stability
- Full 6” square
- 8” Column
- 2” Thick base
- Accepts all AGD indicators
- Maintenance free

NB65G3N - Granite-Check with Indicator
- Includes 1” travel indicator with .001” graduation, 0-100 reading, revolution counter

Type	Order No.	Price
Granite Check Only (Without Indicator)	**NB60G3**	Price
Granite Check With Indicator	**NB65G3N**	Price

PROCHECK Steel Check Stand



NB60SS1 Steel Check Stand Only (No Indicator)
- 4-1/4” x 5-1/2” Steel table
- .0002” Flatness
- Fine adjustment (range .118)
- Column diameter 1”
- 8” Column
- Accepts all AGD indicators

NB65SS1N- Steel Check Stand with Indicator
- Includes 1” travel indicator with .001” graduation, 0-100 reading, revolution counter

Description	Order No.	Price
Steel Base Indicator Holder	**NB60SS1**	Price
Steel Base Indicator Holder With Indicator	**NB65SS1N**	Price

PROCHECK Steel Check Stand

With Serrated Anvil



NB60SS2 Stand Only:
- Fine adjustment knob
- Serrated anvil for better repeatability
- Working distance is a full 5”
- Heavy duty column
- Indicators can be mounted by lug back or 3/8 stem
- Knuckle rotates 360° for use on platen or surface plate
- Sturdy enameled cast iron base
- Chrome plated column

NB65SS2N Stand with Indicator:
- 1” Travel indicator, .001” graduation, 0-100 reading

	Order No.	Price
Steel Check Serrated Anvil Holder Only	**NB60SS2**	Price
Steel Check Serrated Anvil Holder W/Indicator	**NB65SS2N**	Price

FLEXBAR The Granite Quick Check Dial Indicator Stand

Provides Rapid Height Positioning and Fine Adjustment with the Turn of a Knob

Features:



- Ultra-smooth rack & pinion indicator positioner offers 2” of vertical travel
- Rapid adjustment for checking multiple height features on parts
- Twin knobs for left or right hand positioning
- Stem mount indicator holding arm accommodates both 3/8” and 8mm diameter stems
- Granite base: 8” x 6” x 2” high, .00005” flatness
- Stainless steel column
- Column height: 12”
- Column diameter: 9/16”
- Can be used with any AGD indicator (not included)

Order No.	Price
GG4515825	Price

Fowler Indicator & Stand Combos

INDI-X INDI-X blue

Stand Features:
- 6” x 6” x 2” granite base
- Positive lock screw
- Fine adjustment knob for zero setting
- Column height is 8”
- Microscrew fingertip control



Black Face Indicator Features:
- Reading: .001”
- 1” Travel
- AGD 2
- Dial diameter: 2.25”
- Continuous reading: 0-100

Indi-X Blue Electronic Indicator Features:
- Direct inch/metric conversion
- 1”/25mm travel
- Lug back and 3/8” stem diameter
- Resolution .0005”/0.01mm
- Tolerance indicators
- Absolute/incremental reading
- Floating zero
- Carbide tipped point



Indi-X Electronic Indicator Features:
- Direct inch/metric conversion
- 2-1/2” dial face
- Lug back with 3/8” stem diameter
- Resolution .0005”/0.01mm
- Tolerance indicators
- Min/max measurement
- Floating zero
- Carbide-tipped point
- Includes 2 extra points for small hole applications: one .078” dia. x 1” long and one needle point x 1” long



Description	Order No.	Price
Granite Stand With Black Face Dial Indicator	**NA5552580109**	Price
Granite Stand With Indi-X Blue Electronic Indicator	**NA5554580250**	Price
Granite Stand With Indi-X Electronic Indicator	**NA5552580025**	Price

Mitutoyo Dial Gage Stands



7002-10 (with Serrated Anvil)
7001-10 (with Flat Anvil)

- 4” Maximum height capacity
- Fine-adjusting range for zero-setting gage heads
- Designed for AGD type probes with 3/8” diameter stems and all AGD type dial indicators

Description	Order No.	Price
Flat anvil, 3/8" stem hole	**MT807001-10**	Price
Serrated anvil, 3/8" stem hole	**MT807002-10**	Price

Mitutoyo Dovetail Attachment for Test Indicators

Description	Order No.	Price
Fits transfer stand 519-109-10	**MT80390070**	Price

Mitutoyo Transfer Stand



Features:

- Can be used with any AGD dial test indicator or AGD dial indicator
- Big, sturdy, enameled cast-iron base; stain-less steel, ground post mounted at perfect right angles to the base
- Rapid preliminary positioning with the coarse adjustment knob
- Fine adjustment knob on the stand head for “0” settings
- Universal adjustment in horizontal planes
- Arm is easily rotated to position the gage head over a surface plate or the anvil
- Base is precision ground and micro-lapped
- Supplied with serrated anvil 101462 which can be interchanged with flat 101461 and domed 101463 anvils

Type - Transfer Stand		
Description	**Order No.**	**Price**
Transfer Stand with Serrated Anvil	**MT80519-109-10**	Price

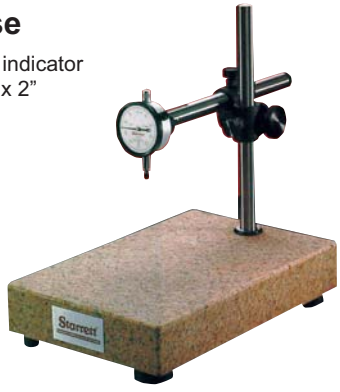
Type - Transfer Stand Accessories		
Description	**Order No.**	**Price**
Domed Anvil Only	**MT80101463**	Price
Flat Anvil Only	**MT80101461**	Price
Serrated Anvil Only	**MT80101462**	Price

Indicator not included.

Starrett Dial Test Indicator with Pink Granite Base

- .0005”, 0-25-0, .125” Range dial indicator
- Large pink granite base 8” x 12” x 2”
- 3/4” x 9-7/8” Gage holding rod

MADE IN THE USA



Order No.	Price
MV7055964	Price

Starrett Pink Granite Base with Indicator

- .001”, 0-50-0, .250” Range dial indicator
- 8” x 12” x 2” Granite base
- 5” Throat depth

MADE IN THE USA



Order No.	Price
MV7055966	Price

Starrett Dial Comparator with Indicator

- .001”, 0-50-0, .250” Range dial indicator
- Cast iron base 8” x 9”
- 9-1/4” Vertical capacity
- 5” Throat depth
- 1-1/2” Column diameter
- 1/2” Vertical adjustment of indicator

MADE IN THE USA



Order No.	Price
MV7052737	Price

Starrett Steel Check Stands

Series 3670

Series 3670

- Designed for comparison measurements using a dial or digital indicator
- Vertical fine adjustment is standard
- Rugged bracket holds indicator firmly in place
- Can be used with any AGD indicator
- Furnished with serrated or flat anvil which is ground, lapped, and removable



3671



3672



3673

Starrett No.	Description	Order No.	Price
3671	With round flat anvil	**MV7069901**	Price
3672	With round serrarated anvil	**MV7069902**	Price
3673	With square serrarated anvil	**MV7069903**	Price

PROCHECK Universal Articulating Arm Magnetic Base

- Articulating arm adjusts to multiple configurations
- 85 lbs pull magnetic base
- V-slot base for rounded work
- 1 Year Warranty



Order No.	Price
PC21MBAA85LB	Price

PROCHECK Economy Magnetic Bases

- Accepts all AGD dial indicators
- Permanent magnet (110 lb pull)
- On/off lever releases magnet
- Horizontal and vertical positioning capability
- Chrome rods and column
- V-Grooved base for mounting on cylindrical parts
- Accepts lug back groups 1, 2, 3 and 4
- Base size 2.36"L x 1.90"W x 2.00"H



Description	Order No.	Price
Standard	**NL80300**	Price
Fine Adjustment	**NL80340**	Price

PROCHECK Economy Magnetic Vee Base Only

- 110 lb pull
- On/off switch



Order No.	Price
NL80TMBA	Price

PROCHECK

Description	Order No.	Price
Replacement Clamp 10mm x 6.4mm-with AGD Adaptor	**ND50STMSP7**	Price
Replacement Clamp 12mm x 10mm	**ND50ST8M**	Price



INSIZE Magnetic Base Indicator Holders

- For electronic or dial indicators / test indicators
- Magnetic force: 132 lbf



Model No.	Description	Order No.	Price
6200-60	Without Fine Adjustment	**SZ20620060**	Price
6201-60	With Fine Adjustment	**SZ20620160**	Price

Mitutoyo Magnetic Bases

- 132 lb Pull magnet
- Accepts all AGD-type dial indicators with 3/8" diameter shank and lug back with 1/4" mounting hole
- Indicator NOT included



Indicator not included

Description	Order No.	Price
Standard	**MT807010S**	Price
Fine Adjustment	**MT807011BN**	Price

Replacement Base Only for 7010S & 7011BN

Order No.	Price
MT807013B	Price

Mitutoyo Flexible-Stand Magnetic Base

- Accepts all AGD 3/8" stems
- Dial indicator held by the lug-on-center back
- Test indicator held by the stem
- Permanent magnet with on-off switch
- Overall length: 15"
- Indicator NOT included



Indicator not included

Order No.	Price
MT807012-10	Price

PROCHECK Heavy Duty Magnetic Bases

Base with Arms:

- Attach to flat or round surfaces
- Reach as far as 12" with easy-adjusting posts
- Swivel snug, gauge rod, and indicator clamp
- 1 Year Warranty



Mag Base Only:

- 130 lb. pull
- M8 Thread
- On/Off switch
- 1 Year Warranty



Description	Clamping Force	Order No.	Price
Fine adjustment arm	80 lbf	**PC21MBFA130**	Price
Solid arm	130 lbf	**PC21MBSA130**	Price
V Base Only	130 lbs	**PC21MBO130**	Price

GEM Magnetic Bases and Sets

- Overall height: 9-1/2"
- Base: 1-7/8" x 1-7/8" x 1-5/8"
- Cross bar: 1/4" x 7"
- 3/8" Center post
- 1/4" Cross bar and swivel
- On/off switch
- Four ground surfaces to grip including V slot for round surfaces

MADE IN THE USA



- Magnetic Base Only		
Type	Order No.	Price
Magnetic Base Indicator Holder	**ND50500**	Price
Magnetic Base Indicator Holder	**ND50500FA**	Price

- Magnetic Base with Indicator		
Type	Order No.	Price
Fine Adjustment On/Off Magnetic Base With Dial Indicator	**ND50500FA222**	Price

PROCHECK Central Lock Universal Magnetic Base



- Magnetic base indicator holder with triple-jointed arm
- Three adjustable joints controlled by a single knob
- Powerful compact magnetic base
- Positive On/Off switch
- 1 Year Warranty

Order No.	Price
PC21CLMB7FA	Price

PROCHECK Magnetic Dial Indicator Base with Center Lock

New!



Fine Adjustment:
- Sealed system
- 3/8" stem, Lug back and dovetail mount
- One knob to release and position joints
- 130 lbs holding power
- V-groove base
- 1 Year Warranty

Description	Clamp Force	Order No.	Price
With (1) Knob Center Lock, Fine adjustment	130 lbf	**PC21MBCL130**	Price

PROCHECK Magnetic Base Flexible Arm



New!

Flexible Arm:
- With lever lock
- Accepts all AGD indicators
- Offers easy cam lever locking
- Total arm length 12"
- Magnet has 130 lbs holding power
- Case included

Chrome Plated Flex Arm:
- Corrosion resistant chrome plated flex arm
- 130 lbs pull magnet
- Holds rigidly in almost any position
- V-base for mounting on rounded surfaces
- 1 Year Warranty

Description	Clamping Force	Order No.	Price
12" Flexible arm	130 lbf	**PC21MBFL130**	Price
Chrome, Flexible arm	85 lbf	**PC21MBCF130**	Price

Magnetic Base Push Button Release



Post Type
- Designed for use with AGD dial indicators
- Base size 2" x 1-3/4" x 11-5/16"

Flex-Shaft Type
- Universal clamp (accepts 1/8" to 1/2" dia.)
- Easy cam lever locking
- "A" Micro-screw fine adjustor block 5/8" range (smooth)**Post Type**
- Designed for use with AGD dial indicators
- Base size 2" x 1-3/4" x 11-5/16"
- Powerful magnetic base

Description	Order No.	Price
Power On/Off - Standard	**NE60PBMB1**	Price
Power On/Off with Fine Adjustment	**NE60PBMB2**	Price
Power On/Off Flex Holder-Standard	**GG4518028**	Price

INSIZE Universal Magnetic Base Indicator Holder



- With fine adjustment and dovetail groove
- Magnetic force: 176 lbf

Model No.	Order No.	Price
6208-80E	**SZ20620880E**	Price

TESA | brown & sharpe Valueline Magnetic Bases

- Base size 2-1/2" W x 2" D x 2" H



Model No.	Arm (in.)	Description	Order No.	Price
01699117	11" Max	Articulated Magnetic Base Indicator Holder	**MV4547435**	Price
01699123	7 x 6.5	Magnetic Base Indicator Holder	**MV4547441**	Price

Starrett Magnetic Base Universal Holder with Triple-Jointed Arm



- 70 lbs. (320 N) holding force
- Positive on/off switch
- Base dimensions: 1-3/16" x1-9/16" x1-3/8" (9.5mm) stem or standard dovetail mount
- Articulating arm with powerful central locking knob
- Maximum horizontal reach: 4.750" (120mm)
- Maximum vertical reach: 7.500" (190mm)
- Fine-adjustment thumb screw

Order No.	Price
MV7068621	Price

Starrett Magnetic Base Indicator Holder



- Large 1-15/16" x 1-5/8" x 1-7/8" base
- 3 Precision ground magnetic contact surfaces
- V-Step holds base to arbors, shafts, & chucks
- Push button on/off switch
- Extra 1/4-20 tapped hole in one side of base for mounting post

Order No.	Price
MV7052743	Price

Starrett Magnetic Base Flex-O-Post Indicator Holder



- 3/8 x 3" Gage rod
- Snug has 3/8" diameter hole for gripping AGD indicators and 5/32" hole for scribers
- Push button on/off switch

Description	Order No.	Price
Fine Adjustment	**MV7052761**	Price
Standard	**MV7052760**	Price

Flex Dial Gage Holder

With Always-On Magnetic Base 360° Fine Adjustment at the Base

- Unique, 5 axis, 3-dimensional holder (2.2” x 2.0” arms)
- Powerful 61LBF magnetic base
- Holds test and dial indicator



Order No.	Price
FN60NF1033	Price

Flex Dial Gage Holder

With Popeye Magnetic Base 360° Fine Adjustment at the Base

- 5 Axis, 3 dimensional holder
- Central locking mechanism with spring loaded bearing
- 70LBF On/off magnetic base
- Holds dial indicator with 3/8” stem and test indicator with dovetail
- Supplied with adapter for 6mm



Order No.	Price
FN60NF1024	Price

Flex Dial Gage Holder

With Fine Adjustment on the Top Clamp

- Universal swivel clamp holds 3/8”, 8mm, 6mm and dovetail
- Noga unique central locking mechanism with spring loaded bearing
- Powerful 70LBF on/off magnetic base
- Length: bottom arm – 2.20”, top arm – 2.00”



Order No.	Price
FN60NF61003	Price

Flex Dial Gage Holder

With Fine Adjustment at the Base

- Holds 3/8” stems and dovetail
- Noga unique central locking mechanism with spring loaded bearing
- Powerful 70LBF on/off magnetic base with fine adjustment at base
- Length: bottom arm – 2.20”,top arm – 2.00”



Order No.	Price
FN60NF10433	Price

Popeye Switchable On/Off Type - Base Only

- 2”W x 2-3/8”L x 2-3/16”H
- 180LBF holding force
- 3 dimensional fine adjustment
- Top thread M8



Order No.	Price
FN60DG3678	Price

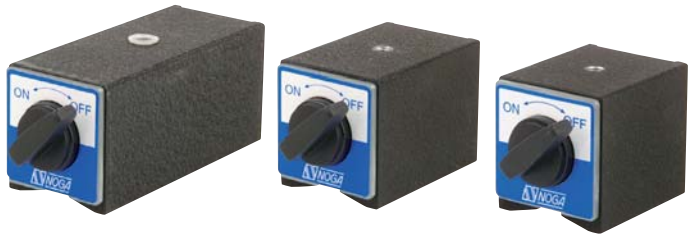
Popeye Switchable On/Off Type - Base Only

- 1-3/16”W x 1-9/16”L x 1-3/8”H
- 70LBF holding force
- 360° fine adjustment
- Top thread M8



Order No.	Price
FN60NF1937	Price

Switchable On/Off Type - Bases Only



Base Size	Top Thread	Order No.	Price
180LBF-2 x 2-3/8 x 2-3/16	M8	**FN60DG0036**	Price
225LBF-2 x 3 x 2-3/16	M8	**FN60DG0038**	Price
290LBF-2 x 4-3/4 x 2-3/16	M10	**FN60DG0039**	Price

Nogaflex Magnetic Base

And Procheck Test Indicator

- Unique, 5 axis, 3 dimensional holder
- With fine adjustment
- Central locking mechanism
- Complete with .030” x .0005” Procheck test indicator



Order No.	Price
NB65NF1033SET	Price

Dial Gage Holders with Power On/Off Magnetic Base

Fine Adjustment At Base

- Top clamp holds 3/8” stem and dovetail
- Central locking mechanism with spring loaded bearing
- Noga dial gauge holder is dimensional
- Powerful 176LBF on/off magnetic base with fine adjustment on the magnet base



Arm Length (in.)	Order No.	Price
4.33 x 3.98	**FN60DG10533**	Price
5.26 x 5.24	**FN60MG10533**	Price

Dial Gage Holders with Power On/Off Magnetic Base

Fine Adjustment On Top Clamp

- Top clamp holds 3/8” stem and dovetail
- Central locking mechanism with spring loaded bearing
- NOGA dial gage holder is 3-dimensional
- Most powerful on/off magnetic base (176 LBF)



Arm Length (in.)	Order No.	Price
5.26 x 5.24	**FN60MG61003**	Price
4.33 x 3.98	**FN60DG61003**	Price

Economy Dial Gage Holders with Magnetic Base

Fine Adjustment At Base

- 3/8” 8mm, 6mm & dovetail clamp
- Unique 3-point arm lock system
- Improved “at base” single direction fine adjustment
- Magnetic base with on/off switch



Arm Length (in.)	Magnetic Base No.	Order No.	Price
4.89 x 4.49	PH3100	**FN60PH3100**	Price
7.87 x 7.48	PH2040	**FN60PH2040**	Price
10.23 x 8.85	PH4016	**FN60PH4016**	Price

Long Reach Heavy Duty Dial Gage Holder with On/Off Magnetic Base

Fine Adjustment On Top Clamp

- Central locking mechanism with spring loaded bearing
- Rigid, steel arms
- Powerful on/off magnetic base (180 LBF)
- Extra long arm (6.43” x 4.45”)



Order No.	Price
FN60MG71003	Price

Big Boy Dial Gage Holder With On/Off Magnetic Base

Fine Adjustment On Top Clamp

- Central locking mechanism with spring loaded bearing
- Most powerful on/off magnetic base (290 LBF)
- 3-Dimensional dial gage holder
- Arm dimensions (12.80” x 9.50”)



Order No.	Price
FN60MA61003	Price

Test Indicator Axial Support

- Central locking arm
- Holds indicators with 3/8” diameter stem or dovetail
- Most useful for centering holes on milling machines





Order No.	Price
FN60NF1018	Price

Heavy Duty Magnetic Base PROCHECK Indicator Set

And Procheck Indicator Set

Noga Magnetic Base

- Central locking mechanism
- Powerfull 176 lb force on/off magnetic base
- Easy 3-dimensional set-up

Procheck AGD 2 Style Dial Indicator

- 0-1” travel with 0-100 dial and .001” graduation
- Revolution counter
- Mount with 3/8” stem or lug back (supplied)

22 Piece Point Set

- 22 contact points (4-48 thread)







Order No.	Price
NB65DG61003DPK	Price

Magnetic Base Indicator Holder

Model NF6160

- New double fine adjustment - Bottom: unique single direction; Top: universal swivel clamp
- Powerful ON/OFF magnetic base with 70 lbs force
- Holds 6mm, 8mm 3/8", dovetail, and back lug
- Unique central locking mechanism with Noga designed spring loaded bearing
- Five axis holder
- Instantly fastens in any position
- Fast and easy to set up gauges into required position
- Black finished arms
- Bottom arm measures 56mm
- Top arm measures 51mm
- Indicator NOT included



Order No.	Price
FN60NF6160	Price

Magnetic Base Indicator Holder

Model MG6161

- New double fine adjustment - Bottom: unique single direction; Top: universal swivel clamp
- Powerful ON/OFF magnetic base with 176 lbs force
- Holds 6mm, 8mm 3/8", dovetail, and back lug
- Unique central locking mechanism with Noga designed spring loaded bearing
- Five axis holder
- Instantly fastens in any position
- Fast and easy to set up gauges into required position
- Black finished arms
- Bottom arm measures 133mm
- Top arm measures 113mm
- Indicator NOT included



Order No.	Price
FN60MG6161	Price

Double Fine Adjustment Magnetic Base

Model DG6160

- New double fine adjustment - Bottom: unique single direction; Top: universal swivel clamp
- Powerful ON/OFF magnetic base with 176 lbs force
- Holds 6mm, 8mm 3/8", dovetail, and back lug
- Unique central locking mechanism with Noga designed spring loaded bearing
- Five axis holder
- Instantly fastens in any position
- Fast and easy to set up gauges into required position
- Black finished arms
- Bottom arm measures 110mm
- Top arm measures 101mm



Order No.	Price
FN60DG6160	Price

8mm Swivel Clamp for Indicators

Model No.	Order No.	Price
FA1100	**FN60FA1100**	Price



Mini Magnetic Indicator Holders

Model LC6200 & LC6210



- Powerful round magnet with 66 lbs force
- Unique central locking mechanism with Noga designed spring loaded bearing
- Five axis holder
- Instantly fastens in any position
- Easy set up into required position
- Black finished arms
- Bottom and top arms both measure 38mm
- Indicator NOT included

Stem Hole	Order No.	Price
8mm	**FN60LC6200**	Price
3/8	**FN60LC6210**	Price

Mini Magnetic Indicator Holder

Model PH5000



- Powerful round magnet with 66 lbs force
- Holds 6mm, 8mm 3/8", dovetail, and back lug
- Uniques swivel clamp for all dial and test indicators
- Easy set up of gauges into required position
- Strong arm lock by using the unique 3-point system
- Black finished arms
- Post measures 110mm
- Arm measures 110mm
- Indicator NOT included

Order No.	Price
FN60PH5000	Price

Centering Universal Holder

Model DG1022



- Used for centering workpieces
- Universal fine adjustment
- Holds 6mm, 8mm, 3/8, dovetail amd back lug
- Centering rod Ø8mm x 40mm
- Black finished arms
- Bottom arm 110mm, top arm 101mm

Order No.	Price
FN60DG1022	Price

Quick Release

Model AD4000



- Make a quick change to your equipment without having to fiddle with screws and threads
- Simply pull back the red sleeve and slot in your camera, light source or any other device into the Quick Release attachment
- Compatible with a range of Noga arms
- Bottom thread M6, top thread 1/4 UNC

Order No.	Price
FN60AD4000	Price

Clamps

Model CS4500 & CS4550



- Soft grip
- Expands onto round and flat surfaces up to 45mm

Desccription	Order No.	Price
1/4 & 3/8 Threads	**FN60CS4500**	Price
1/4, 3/8, M6, & M8 Threads	**FN60CS4550**	Price

Mitutoyo Mini-Magnetic Stand

- Fine adjustment
- Accepts both 1/4” and 5/32” stem
- Overall height 4.8” (approx.)
- 55” LBF magnetic pull



Order No.	Price
MT807014-10	Price

GEM Mini-Magnetic Base

- Fine adjustment
- Powerful permanent magnet base measures 1-3/16” dia. x 1-3/8” high
- Ball swivel locks at 90° at any position in 360°
- 5/16” Diameter center post is 5” high
- Cross bar is 1/4” x 5”

MADE IN THE USA



Description	Order No.	Price
Mini Mag Stand with Fine Adjustment	ND50555FA	Price

TESA / brown & sharpe Miti-Mite Permanent Magnet Bases

No. 7762 and 7763 Miti-Mite

- Use on round or flat surfaces
- Swivel clamp hole is 1/4” diameter for stepped rod (included) or for offset rod 599-7753-120
- Base is approximately 1-1/4” square x 1-3/4” high
- Height to top of post is approximately 5-1/2”
- Stepped rod included is 4-1/2” long with steps of 7/32”, 1/4” and 5/16”

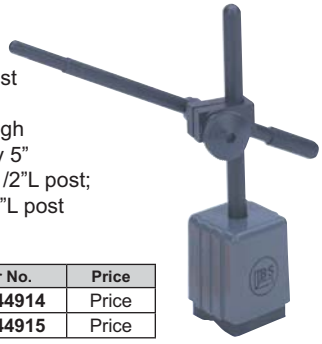


Model No.	Description	Order No.	Price
599-7762	Mini Mag Stand -Standard	MV4544916	Price
599-7763	Mini Mag Stand with Fine Adjustment	MV4544917	Price

TESA / brown & sharpe Miti-Mite Permanent Magnet Bases

No. 7760 and 7761 Miti-Mite

- Ball and socket action and jointed post
- Use on round or flat surfaces
- Base dimensions1-1/4” sq x 1-3/4” high
- Height to top of post is approximately 5”
- Supplied with one each: 7/32”D x 1-1/2”L post; 7/32”D x 4-3/8”L post; 5/16”D x 1-1/2”L post



Model No.	Description	Order No.	Price
599-7760	Standard	MV4544914	Price
599-7761	Fine Adjustment	MV4544915	Price

TESA / brown & sharpe Miti-Mite Heavy Duty Permanent Magnet Holder

No. 7764 and 7765 Miti-Mite

- Holder with ball and socket action takes all types of indicators
- Use on round or flat surfaces
- Base is approximately 4” long x 1-1/4” wide x 3/4” high
- Finger-tip release
- Height to top of post is approximately 6-1/4”



Model No.	Description	Order No.	Price
599-7764	HD Permanemt Magnet Holder w/o Fine Adjust	MV4544918	Price
599-7765	HD Permanemt Magnet Holder w/ Fine Adjust	MV4544919	Price

FLEXBAR Mini-Flex Magnetic Base with Fine Adjustment

MADE IN THE USA

- Locks in any position
- Heavy duty magnetic base has fine adjustment and 25 lb pull
- Post: 5”
- Base: 1-1/8” dia. x 1-3/8” high



Order No.	Price
GG4518009	Price

PROCHECK Mini-Magnetic Universal Test Indicator Holder with Fine Adjustment

- Base can be installed in vertical, horizontal, angular and inverted positions
- Base size: 1-1/16” diameter, 1” high
- Height: 5”
- Extension rod is 1/4” x 3-1/2” with 1/4” hole
- With fine adjustment



Order No.	Price
KE50MMB1	Price

PROCHECK Magnetic Base with Stage Adaptor

- Universal Magnetic Base
- Stage Adaptor
- Swivel Range 210
- Protective Case Included
- 1 Year Warranty



Order No.	Price
PC21UMB1	Price

Flexible Stem Magnetic Bases



- Stem flexes almost 360° and locks into position with cam lever-operated cable and tension adjustment
- Accepts all AGD indicators
- Permanent magnet (90 lb pull)

	Flexbar		Procheck	
Description	Order No.	Price	Order No.	Price
Flexible Stem-Standard	-	-	NL80350	Price
Flexible Stem-Fine Adjustment	GG4518038	97.20	NL80355	Price

Dual Axis In-Line Fine Adjustor



- The fine adjustment assembly is actuated by a very smooth micro-screw thumb adjustor making it ideal for high precision indicating applications
- Holds AGD dial indicators with 3/8" stems (8mm bushing, adaptor included) and test indicators with dovetail
- On/off mag base with V on bottom: 2" x 2-1/4" x 2-5/8",90 lb pull
- Dual axis fine adjustment
- Height: 18-1/2"

Order No.	Price
GG4518059	Price

Universal Type Magnetic Base Indicator Holders

- Rugged magnetic holder for indicators
- Assures fast accurate work in facing, boring, turning, etc
- Indicator NOT included







Description	Order No.	Price
Universal with Ball Socket & Fine Adjustment	NL80TMB1	Price
Universal Base Only	NL80TMB2	Price
Universal with Fine Adjustment	NL80TMB3	Price

Magnetic Base Indicator Holders

- Ball swivel, locks at 90° at any position in 360°
- Mounts on flat, round and irregular surfaces
- Release lever
- Model G5000, G5000A and G5000B - 55lb pull
- Model G2500 - 35lb pull

Indicator NOT Included



Description	Base Size	Order No.	Price
Ball Swivel with Fine Adjustment	3-1/2 x 1-1/8 x 1	ND50G5000	Price
Ball Swivel - Standard Arm	3-1/2 x 1-1/8 x 1	ND50G5000A	Price
Release Lever Base ONLY	3-1/2 x 1-1/8 x 1	ND50G5000B	Price

Universal Magnetic Base

- 45 lbs. Holding power
- Diecast housing
- 5 Different locations for mounting accessories:
  — 3 Positions 1/4-20 thread for lug mounts
  — 1 Tapped hole 10-32
  — 1 Reamed hole 3/8"



Description	Order No.	Price
Mighty Mag Standard Model - USA	NL8098279	Price
Mighty Mag with Quick Release - USA	NL8098279Q	Price
Universal Mag Base - Import	NL80UMB1	Price

Omnibase Magnetic Base Indicator Holder



- Attaches firmly to any shape or contour
- Dovetail attachment (included) – the unit accommodates AGD and test indicators
- Cam-lock mechanism for fine adjustment
- Powerful permanent magnet

Order No.	Price
MV4551945	Price

Magnetic Contour Form Base

- Cam lock mechanism easily loosens segments for contour adjustments - No more hassles using an extra fixture to set indicators
- Unlimited versatility; can be used with coolant systems, lamps, etc.
- Available with fine adjusments or flexible arms and clamps
- 1 Year Warranty

New!





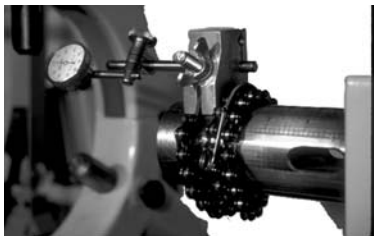


Description	Order No.	Price
Contour Form, Fine Adjustment	PC21MBAFA130	Price
Contour Form, Chrome Flex Arm	PC21MBAFL130	Price
Contour Form, Base Only	PC21MBAO130	Price

Blohm Chain Indicator Holder

MADE IN THE USA

Used in Flex coupling, steadyrest and horizontal boring mill alignment.



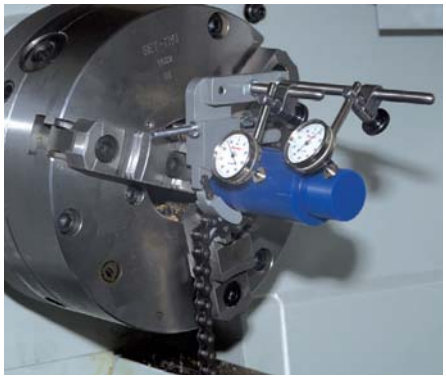
- Fast and easy setup
- Solid mounting
- Cast aluminum body
- 3 Rods of varying lengths furnished
- 3 Rod mounting holes
- Chain length 30”

Order No.	Price
NL80CH1	Price

Indicator NOT Inlcuded

Chain-Clamp Indicator Holder

- **24” Chain-Clamp Holder—** has a lightweight aluminum body with stainless steel holding rods (one 5/16” diameter x 3” long. and one 5/16” diameter x 6” long). A 24” chain (ANSI No. 41) for a 9” diameter capacity adds flexibility.
- **Reverse Alignment Kit—** enables you to take simultaneous shaft-to-shaft readings (also known as reverse alignment). Includes two chain clamps, inspection mirror, and plastic storage case.
- **Complete Reverse Alignment Kit with Test Indicators—** using the two Starrett indicators at different points along the shaft, you can easily find any shaft misalignment. Includes two chain clamps, two Starrett 196B1 test indicators (0-0.2” range, graduated in .001” increments, 0-100 dial reading), two swivel clamps, inspection mirror, and a plastic storage case.



MADE IN THE USA

Description	Order No.	Price
24" Chain-Clamp Holder	NL81SLS1	Price
Reverse Alignment Kit	NL81SLS2	Price
Complete Reverse Alignment Kit	NL81SLS3	Price

Flexpost® Clamp On Indicator Holder

MADE IN THE USA

Maximum Rigidity/Excellent Positioning

- C-Clamp Type
- 1-3/8” Vertically
- Throat to center of screw – 3/4”



Order No.	Price
GG4518032	Price

Flexarm Vise Grip Indicator Holder

MADE IN THE USA

Attaches to Any Convenient Object

- Flexbar Flexarm holder
- 7CR vise grip clamp



Order No.	Price
GG4518053	Price

Off-The-Post Flexpost®

MADE IN THE USA

Maximum Rigidity Excellent Positioning

- Universal Clamp (Accepts 1/8” to 1/2” Dia.) Post Clamp
- Use with: AGD and test indicators, sensors, magnifiers, optic probes, wires for welding, etc.
- Precision Engineered
- Instant positioning – instant locking
- Post clamp (Clevis) fits 1/2” Dia. Post
- Supports up to 4 lb load
- Top mounting clamp grips all shapes .125” to .510” diameter



Order No.	Price
GG4518046	Price

Heavy Duty Long-Reach Mag-Based Indicator Stand

Over 4 Feet Total Reach!

Features heavy-duty swivel clamps. Long-reach indicator stand dimensions:

MADE IN THE USA

- Total reach: 48”
- Main post: 3/4” dia. x 12” L
- 2nd Post: 1/2” dia. x 15” L
- 3rd Post: 1/2” dia. x 15” L
- 4th Post: includes fine adjuster and indicator holder-7/16”dia. x 6” L
- Heavy powerful magnetic base-2-3/8” x 2” x 4-11/16”



Order No.	Price
GG4518054MAG	Price

Indicator NOT Included

Universal Magnetic Bases

132 Lbs. of magnet pull

- Unique 3 dimensional central locking mechanism is used to easily set up gages into required position
- Includes fine adjustment feature
- Will accept all dovetail and AGD stem indicators



Item	Order No.	Price
Mitutoyo	MT807033B	Price
PROCHECK	NL80TMBUM	Price

Indicator not included

PROCHECK Toolmaker's Surface Gages

- Spindle arm and scribers are adjustable and lock into position at any angle for laying out and scribing lines
- Hardened and ground steel base has V-groove for scribing cylindrical work
- Recessed front allows spindle to be depressed below baseline for depth gaging
- With scriber point and two spindles



Spindles	Order No.	Price
4 & 7	**NE60231**	Price
9 & 12	**NE60233**	Price
12 & 18	**NE60235**	Price

Starrett Full Size Surface Gages

MADE IN THE USA

- V-groove in the base for cylindrical work
- V-groove on the front end which allows the spindle to adjust to any angle above or below the base
- Fine adjustment
- Scriber and spindle holes are in permanent alignment
- No. 57 Series = cast iron base
- No. 257 Series = hardened steel base



Model Number	Base Dim. (in.)	Spindle Length (in.)	Order No.	Price
257A	2-3/16 x 2-3/8	5/16 x 9	**MV7051240**	Price
257B	2-3/16 x 2-3/8	(2) 5/16 x 9, 5/16 x 12	**MV7051241**	Price
257C	3-1/2 x 3-3/16	3/8 x 12	**MV7051242**	Price
257D	3-1/2 x 3-3/16	(2) 3/8 x 12, 3/8 x 18	**MV7051243**	Price
57A	3 x 2-9/16	5/16 x 9	**MV7050292**	Price
57B	3 x 2-9/16	(2) 5/16 x 9, 5/16 x 12	**MV7050293**	Price
57D	3-3/4 x 3-3/8	(2) 3/8 x 12, 3/8 x 18	**MV7050295**	Price

Starrett Small Base Surface Gage

2” x 1-1/2”

MADE IN THE USA

- V-groove in the base for cylindrical work
- V-groove on the front end which allows the spindle to adjust to any angle above or below the base
- Fine adjustment
- Scriber and spindle holes are in permanent alignment



Spindle Length (in.)	Order No.	Price
(2) 4 & 7	**MV7050290**	Price

Fowler Surface Gage with Built-in Switchable Magnetic Base with Indicator

- Set includes 3-1/8” x 2-1/16” permanent magnetic base with on/off switch, fine adjustment on base and a 5/16” x 9 upright.
- Swivel clamp to mount indicator
- Two dovetail stems
- Fine adjusting knob 5/32” x 3/8
- 4” hardened scriber
- Form fitted shop-hardened case for easy accessibility, and storage
- With indicator

XTRA-SURF



Order No.	Price
NA5552155747	Price

Fowler Surface Gage with Built-in Switchable Magnetic Base

- Set includes 3-1/8” x 2-1/16” permanent magnetic base with on/off switch, fine adjustment on base and a 5/16” x 9 upright.
- Swivel clamp to mount indicator
- Two dovetail stems
- Fine adjusting knob 5/32” x 3/8
- 4” hardened scriber
- Form fitted shop-hardened case for easy accessibility, and storage

XTRA-SURF



Order No.	Price
NA5552155743	Price

Squar-Ol

MADE IN THE USA

- Used in the manufacture of inspection gauges where perfect squareness is a must.
- Compact and flexible design is appreciated when checking small parts, gauges, dies sections or precision work
- Pivoting grip can receive the standard 60° indicators dovetail or clamp the 5/32” diameter stems
- Features fine adjustment to adjust the contact of the indicator tip in order to bring the dial hand in a desirable reading position
- Set “0” reading with master square and compare squareness with your work
- Hardened and ground base provides two pockets, one upper and one lower to mount the inserted reference ring



Order No.	Price
MV60700	Price

Fowler Height Transfer & Squareness Gage

- Used for a variety of surface plate jobs
- Large fine adjustment knob for precise control
- Swivel clamp anchors swivel and indicator for added accuracy
- Rear surface of the gage has a reference surface to square against a master for checking squareness
- Includes a 6” x 4” long post, indicator rod and clamp.



Indicator and standard shown not included.

Order No.	Price
NA5553620010	Price

PROCHECK Indicator/Mag Base Sets

with 22 Pc. Contact Point Kit

- Magnetic base with fine adjustment
- 1” Travel indicator with .001” graduation, 0-100 reading, revolution counter
- Can be supplied with Procheck indicator or Brown & Sharpe E-Z Read Console indicator



Set Contains	Order No.	Price
1" Brown & Sharpe Indicator, Economy Mag Base, And 22 Piece Contact Point Kit	**MV4501B**	Price
1" ProCheck Indicator, Economy Mag Base, And 22 Piece Contact Point Kit	**NB6501**	Price

Fowler 0-1" Travel Dial Indicator

With Free Procheck Magnetic Base

Indicator:

- Graduation: .001”, range: 0-1”
- Continuous reading: 0-100
- Revolution counter hand
- Meets AGD specifications

Procheck Mag Base:

- Fine adjustment
- Accepts all AGD indicators & stem mount test indicators with 1/4” shank
- V-base for use on rounded surfaces



Set Contains	Order No.	Price
Fowler 0-1" Travel Premium Black Dial Indicator With Certification With ProCheck Fine Adjustment Mag Base	**NB6552520110BMB**	Price
Fowler 0-1" Travel Standard White Dial Indicator Without Certification-With ProCheck Fine Adjustment Mag Base	**NB6552520110MB**	Price

Fowler Articulating Mag Base and Indicator Combo

Articulating Mag Base:

- Adjust in almost unlimited ways
- Fine adjust
- 85 lb Pull
- V-slot on base for mounting on rounded surfaces

AGD Indicator:

- 1” Travel
- Reading: .001”
- Continuous reading: 0-100
- AGD 2, 2-1/4” dial diameter
- Revolution counter
- Tolerance markers
- Lug back mount
- Carbide point





Order No.	Price
NA5552585150	Price

Dial Indicator with Mighty Mag Magnetic Base

Consists of 1 each of the following:

- 1” Travel .001” graduation black dial indicator
- 22 Piece point kit for AGD style indicators
- Mighty Mag magnetic base





Set Contains	Order No.	Price
1" Brown & Sharpe Indicator, Mighty Mag Base, And 22 Piece Contact Point Kit	**MV45VP98279B**	Price
1" ProCheck Indicator, Mighty Mag Base, And 22 Piece Contact Point Kit	**NB65VP98279BF**	Price

Mitutoyo Magnetic Bases Complete with Indicators

- MT807046 supplied with a 1” travel (.001” graduation) indicator for general measuring purposes
- MT807045, supplied with .050” range (.0001” graduation) indicator for close tolerance work
- MT8064PKA075 supplied with 1” travel (.001” graduation) indicator and plastic storage case
- All sets supplied with MT807010S 32 lb pull magnetic base (no fine adjustment)



Set Contains	Range	Grad.	Order No.	Price
7010S Mag base and 2804S-10 indicator	0-050	.0001"	**MT807045**	Price
7010S Mag base and 2416S indicator	0-1	.001"	**MT807046**	Price
7010S Mag base, 2416S indicator and plastic case	0-1	.001"	**MT8064PKA075**	Price

NOGA Heavy Duty Magnetic Base

And Procheck Indicator Set

Noga Magnetic Base

- Central locking mechanism
- Powerfull 176 lb force on/off magnetic base
- Easy 3-dimensional set-up

Procheck AGD 2 Style Dial Indicator

- 0-1” travel with 0-100 dial and .001” graduation
- Revolution counter
- Mount with 3/8” stem or lug back (supplied)

22 Piece Point Set

- 22 contact points (4-48 thread)



Order No.	Price
NB65DG61003DPK	Price

PROCHECK Machinists Tool Kit

With Dial Caliper and Mechanical Micrometer

- 0 - 6” Dial caliper .001” graduation
- 0 - 1” Mechanical micrometer .0001” graduation
- Shop-hardened case
- 1 Year Warranty



Order No.	Price
PC21MCKDIGDL	Price

PROCHECK PREMIUM Electronic Machinists Set

- 0 - 6” Digital caliper .001” resolution
- 0 - 1” Digital micrometer with ball attachment .0005” resolution
- Shop hardened case
- 1 Year Warranty

USB CONNECT



Type	Order No.	Price
IP40	**PC20MCKEIP40**	Price
IP54-ABS	**PC20MCKEIP54ABS**	Price

PROCHECK Central Lock Universal Magnetic Base & Indicator Set

- Anodized 7” universal clamp
- Easy grip and lock
- On/off magnetic base with fine adjustment
- 1 Year Warranty



Order No.	Price
PC21CLMB7FA35K	Price

PROCHECK Central Lock Clamp with Indicator

- Anodized 7” universal clamp with fine adjustment magnetic base with on/off switch
- 0-1” Digital indicator
- Protective case
- 1 Year Warranty



Order No.	Price
PC21CLMB7FA11K	Price

PROCHECK Central Lock Universal Clamp & Indicator Set

- Anodized universal clamp
- Easy grip and lock
- Test indicator with .030” range and .0005” graduations
- 5/32” and 3/8” diameter posts with dovetail clamp
- Protective padded case
- 1 Year Warranty



Order No.	Price
PC21UC35K	Price

PROCHECK Fine Adjustment Magnetic Base & Indicator Sets

IP54 Protection

- 0-1” Dial indicator
- Graduation: .001”
- On/off magnetic base with fine flexible arm
- Rubber bellows on stem
- O-ring seal on safety cap
- Protective case
- 1 Year Warranty



Description	Order No.	Price
Fine Adj.-Flex Arm	**PC20MBFL11K**	Price
IP54 - Fine Adjustment	**PC21MBFA1514K**	Price

PROCHECK PREMIUM Magnetic Bases & Electronic Indicator PC20MBFL15EK

- 0-1” Digital indicator
- Resolution: .0005”/0.01mm
- Magnetic base with fine adjustment
- Protective case
- 1 Year Warranty





PC20MBFA15EK

Description	Order No.	Price
Fine Adjustment	**PC20MBFA15EK**	Price
Flex Arm	**PC20MBFL15EK**	Price

PROCHECK Universal Mag Base & Indicator Set

- Test indicator range .030”
- Graduation .0005”
- Universal magnetic base
- Swivel range: 210°
- Protective case included
- 1 Year Warranty



Order No.	Price
PC21UMB35K	Price

PROCHECK Magnetic Base & Indicator Set

With Double Range Indicator

- Double range test indicator range: .060”
- Graduation: .0005”
- Universal magnetic base
- Stage adaptor
- Swivel range: 210°
- Protective case included
- 1 Year Warranty



Order No.	Price
PC21UMB65K	Price

PROCHECK Quill Clamp & Indicator Set

- Heavy-duty quill clamp with CNC machined body
- Red anodized finish
- Test indicator with .030” range and .0005” graduations
- 5/32” and 3/8” diameter posts with dovetail clamp
- Protective padded case
- 1 Year Warranty

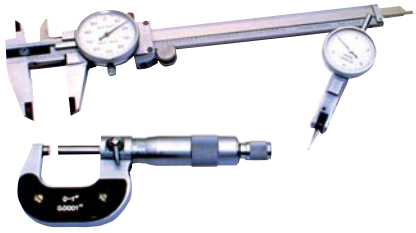


Order No.	Price
PC21Q35K	Price

PROCHECK 3 Pc. Set-Up

And Inspection Kit

Set consists of 1 of each:
- 0-6” Stainless steel dial caliper, .001” graduation
- 0-1” Outside micrometer, .0001” graduation
- .0005” Test indicator with 3/8” and 5/32” shank

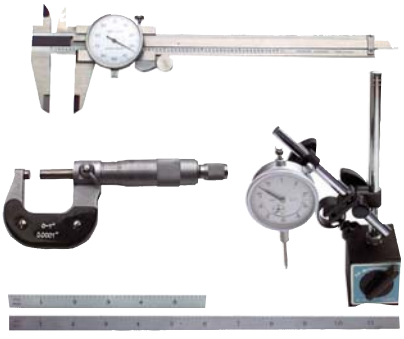


Order No.	Price
NB65TCM3	Price

PROCHECK 6 Pc. Machinist Set-Up

And Inspection Kit

Set consists of 1 of each:
- 0-6” Stainless steel dial caliper, .001” graduation
- 0-1” Outside micrometer, .0001” graduation
- Magnetic base with fine adjustment
- 1” Travel indicator, .001” graduation
- 6” scale with 4R graduation
- 12” scale with 4R graduation



Order No.	Price
NB65MSK6	Price

PROCHECK 9 Pc. Machinist Set-Up

And Inspection Kit

Set Consists of 1 of each:
- 6” x .001” Dial caliper
- 0-1” x .0001” Outside micrometer
- .030” x .0005” Test indicator
- 1” Travel x .001” graduation dial indicator
- Quill clamp-type indicator holder
- Magnetic indicator base with fine adjustment
- 22 piece point kit for AGD style indicators
- 6” scale with 1/64, 1/32, 1/16 and 1/8” graduation
- 12” scale with 1/64, 1/32, 1/16 and 1/8” graduation



Order No.	Price
NB65MSK9	Price

PROCHECK 6 Pc. Layout

And Inspection Kit

- 0 - 1” x .0001” Outside ratchet micrometer
- 6” x .001” Dial caliper
- 4 Pc. 12” combination square set with 4R graduation



Order No.	Price
NB653PCS2	Price

PROCHECK 0-6" Micrometer Set & Telescoping Gage Set

0-6” Micrometer Set
- .0001” Graduation
- Setting standards
- Ratchet stop
- Spindle lock

6 Pc. Telescoping Gage Set
- Self centering contacts
- 0 - 6” Range



Order No.	Price
NB656CRMST	Price

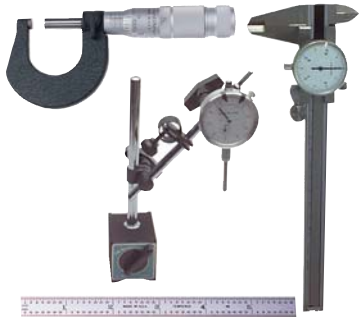
PROCHECK 6 Pc. Machinist's Starter Set

Featuring TESA TECHNOLOGY | brown & sharpe 1” Value-Line Mike

Set Consists of :
- B&S 0-1” micrometer
- Satin-chrome thimble, .0001” reading, tungsten carbide tipped anvils, enamel frame with spindle lock

6” ProCheck Dial Caliper
- 001” graduations, .100” per revolution of dial

0-1” AGD Indicator
- .001” graduations, .100” per revolution of dial
- Magnetic base with fine adjustment
- Two flexible steel rules: one 6” and one 12” long, both with 4R graduations (6” shown)



Order No.	Price
NB65MSK6BS	Price

PROCHECK Workshop Measuring Sets

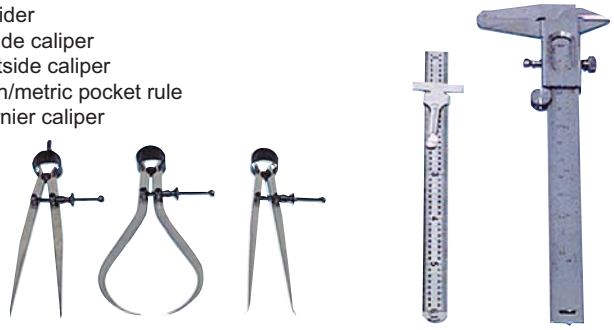


Description	Order No.	Price
2, 3, 4, & 6" Squares in storage box	**NE604PCMTS**	Price
2, 4, & 6" Squares, 1-1/2" capacity center finder, 5 & 6" long scribers in storage box	**NE606PCMTS**	Price
Scriber, 3" divider, 1/32-5/8 bore gage, screw cutting gage, 4-42 & 0.25-6.0mm screw pitch gage, 4"/100mm brass caliper, automatic center punch, protractor/depth gage, 6"/150mm flexible rule, 4" steel square, storage box	**NE6011PCMTS**	Price

PROCHECK 5 Pc. Technical Measuring Set

Set consists of 1 of each:

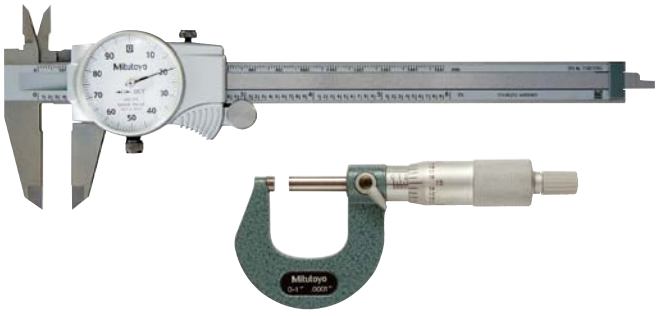
- 6” Divider
- 6” Inside caliper
- 6” Outside caliper
- 6” Inch/metric pocket rule
- 5” Vernier caliper



Order No.	Price
NE60TMS001	Price

Mitutoyo Measuring Kit

- Micrometer .0001” graduation
- Caliper .001” graduation



Order No.	Price
MT8064PKA074B	Price

Starrett Basic Electronic Tool Set

Basic starter set (no output) - includes:

- 0-6”/0-150mm Electronic slide caliper (**799A-6/150)**
- 0-1”/0-25mm Electronic outside micrometer (**3732XFL-1)**



Order No.	Price
MV7012206	Price

Fowler Depth Gage and Poly-Cal Kit - Inch/Metric/Fraction

XTRA-VALUE

Poly-Cal:

- Range: 6”/150mm
- Polycarbonate frame
- Resolution: .0005”/0.01mm, fractions by 1/64 increments
- Absolute/Incremental measurement

Xtra-Value Depth Gage:

- Spring-loaded with a hold measurement button for ease-of-use
- Super large display
- Range: 0-6”/150mm
- Resolution: .0005”/0.01mm (fractions in 1/64” increments)
- Supplied in shop-hardened case



Order No.	Price
NA5554004255	Price

Fowler Micrometer Inspection Set

Includes:

- (1) 0-1”/0-25mm IP54 fluid resistant electronic micrometer (54-860-001)
- (1) Compact, folding micrometer stand with a unique locking mechanism that positions the micrometer for perfect use and viewing (52-247-005)
- (2) .200” ball attachments for special inspection applications (52-285-005)
- Packaged in a durable wooden case



Description	Order No.	Price
0-1" IP54 Fluid Resistant Electronic Micrometer (54-860-001), Compact Folding Micrometer Stand (52-247-005), 2 Ball Attachments, Wooden Case	**NA5554860777**	Price
Micrometer Stand Only	**NA5552247005**	Price

Test Indicator & Quill Type Holder Combo

Test Indicator:
- Jeweled movement
- Range: .030”
- Graduations: .0005”
- Auto-reversing dial
- Includes two dovetail stems and a case

Quill Type Holder
- 1-7/8 capacity
- Reach from 0-12” diameter
- Adapts immediately for fast and positive indication



Item	Description	Order No.	Price
Fowler	.030" Range Test Indicator, 3 Contact Points, 2 Dovetail Stems, Quill-Type Holder In Case	NB6552562778H	Price
PROCHECK	Quill-Type Indicator Holder With ProCheck Indicator	NB65QK1B	Price

TESA / brown & sharpe BesTest® Indicator, Mag Base & Indicator Point Set

BestTest® Indicator:
- .0005” Graduations – .030” range. Reads 0-15-0
- Includes carbide tip point: (.080” dia. by 1/2” long)

Magnetic Holder:
- Two universal ball sockets
- Fine adjustment
- Dovetail clamp
- Base 1-3/16” dia., 1” high
- Extension rod 1/4” dia. by 3-1/2”



Order No.	Price
MV4551733MBP	Price

Fowler X-Test Horizontal Test Indicator Quill-Type Holder Combo

Test Indicator:
- .060” Range
- Graduation: .0005”
- Dial reading: 0-15-0
- Jeweled movement
- Revolution counter
- Easy-to-read tilted dial
- Automatic reversal
- Swivel arc: 210°
- .080” Tungsten carbide point
- Includes 2 dovetail stems
- Furnished in molded case

Quill Type Holder
- 1-7/8” capacity
- Reach from 0-12” diameter
- Adapts immediately for fast and positive indication





Order No.	Price
NB65525622001H	Price

Nogaflex Magnetic Base

And Procheck Test Indicator

- Unique, 5 axis, 3 dimensional holder
- With fine adjustment
- Central locking mechanism
- Complete with .030” x .0005” Procheck test indicator



Order No.	Price
NB65NF1033SET	Price

Fowler X-Test Horizontal Test Indicator

With Procheck Magnetic Base

Procheck Mag base: Locking screw and two universal ball sockets for setting at any angle position. Microfine adjustment screw. Removable extension arm. Dovetail form holder with locking control to hold dovetail test indicators. Accepts .250” diameter test indicator stems. The base is finished in wrinkled enamel.

Fowler Indicator:
- .060” Range
- Graduation: .0005”
- Dial reading: 0-15-0
- Jeweled movement
- Revolution counter
- Easy-to-read tilted dial
- Automatic reversal
- Swivel arc: 210”
- 3 Tungsten carbide points
- Includes 2 dovetail stems
- Furnished in molded case





Order No.	Price
NB6552562001MB	Price

Mitutoyo Dial Test Indicator Precision Tool Kit

- Graduation: .0005”
- Range: .030”
- Dial reading: 0-15-0
- Jeweled bearings, anti-magnetic
- 3/8” Stem
- Accepts 3/8” or 5/32” holding stems, plus dovetail groove
- 150N Magnetic force





Order No.	Price
MT80513-907-10E	Price

Fowler AGD Indicator & Fine Adjust Mag Base

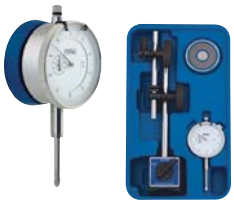
Included Magnetic Indicator Back for mounting to most metal surfaces!

Indicator features:
- 1" Travel
- AGD 2
- 2-1/4" Dial diameter
- Reading: .001"
- Continuous reading 0-100

Magnetic Base features:
- 85lb pull
- Fine adjustment
- V-bottom base

Magnetic Indicator Back features:
- Use for positioning the indicator on most metal surfaces
- Protective coating

All packed in a shop hardened case



Order No.	Price
NA5552585125	Price

Fowler Chrome Indicator/Mag Base Set

Included magnetic indicator back for mounting to most metal surfaces

AGD Indicator featues:
- AGD 2
- Dial diameter: 2-1/4"
- Travel: 1"
- Reading: .001"
- Continuous reading: .100"
- **Carbide tipped point**

Flex Arm Mag Base features:
- 85lb pull magnet
- Corrosion resistant chrome plated flex arm
- Holds rigidly in almost any position
- V-base for mounting on rounded surfaces

Magnet Indicator Back features:
- Use for positioning the indicator on most metal surfaces
- Protective coating

All packed in a shop hardened case

FLEX MAG SET



Order No.	Price
NA5552585500	Price

Fowler Chrome Flex Magnetic Base/ Indicator Set

FLEX MAG SET

With Indi-X Blue Electronic Indicator

INDI-X blue

Indi-X Blue Indicator features:
- Direct inch/metric conversion
- 1"/25mm Travel
- Auto off feature
- 2-1/4" Dial face
- Lug back and 3/8" stem diameter
- Resolution .0005"/0.01mm
- Tolerance indicators
- Absolute/incremental reading
- Floating zero
- Carbide tipped point

Flex Arm Mag Base features:
- Corrosion resistant chrome plated flex arm
- 85lb pull magnet
- Holds rigidly in almost any position
- V-base for mounting on rounded surfaces

Magnetic Indicator Back features:
- Use for positioning the indicator on most metal surfaces
- Protective coating

All in a shop hardened case



Order No.	Price
NA5554585100	Price

Fowler Bowers X-PROOF™ XTRA-VALUE

IP54 Measuring Set

Protected to IP54 DUST & FLUID RESISTANT

X-SERIES

6" / 150mm Euro-Cal IV NA55541003301
- Reads in inch, metric, and fractions
- Resolution: .0005" 0.01mm / 64ths

Electronic Micrometer NA55548150012
- Range: 0 - 1" / 0 - 25mm
- Resolution: .00005" / 0.001mm



Order No.	Price
NA5554004875	Price

Fowler Fine Adjust Mag Base Set

With Indi-X Blue Electronic Indicator

INDI-X blue

Indi-X Blue Indicator Features:
- Direct inch/metric conversion
- 1"/25mm Travel
- Auto off feature
- 2-1/4" Dial face
- Lug back and 3/8" stem diameter
- Resolution .0005"/0.01mm
- Tolerance indicators
- Absolute/incremental reading
- Floating zero
- Carbide tipped point

Magnetic Base Features:
- 85lb pull
- Fine adjustment
- V-bottom base

Magnetic Indicator Back Features:
- Use for positioning the indicator on most metal surfaces
- Protective coating

All in a shop-hardened case



Order No.	Price
NA5554585075	Price

Fowler Anyform Mag Base Set

Anyform Magnetic Base:
- Fit mag base to any shape or form
- Magnetic segments conform to any odd shape or contour
- Cam-lock mechanism provides for easy and accurate fine adjustments of the steel segments
- Rigid one piece construction
- 40lb pull

Indicator features:
- 1" Travel
- 2-1/4" Dial diameter
- AGD 2
- Reading: .001"
- Continuous reading 0-100

All packed in a shop hardened case



Order No.	Price
NA5552585215	Price

Fowler Flex Arm Base & White Face Dial Indicator Combo

Indicator features:
- 1" Travel
- AGD 2
- 2-1/4" Dial diameter
- Reading: .001"
- Continuous reading: 0-100
- Revolution counter
- Tolerance indicators

Flex-Arm Mag Base features:
- 85lb pull
- Holds rigidly in any position desired
- V-base for placing on round surfaces
- On-off lever release magnet



Order No.	Price
NA5552641300	Price

Fowler Shockproof Dial Caliper with Depth Attachment



Shockproof Dial Caliper:
- Tough shockproof design
- 4-Way measuring
- Solid stainless steel construction
- Silky-smooth movement throughout
- 100" Range per revolution
- .001 Reading dial face

Depth Attachment:
- Attaches quickly
- Positive locking screw
- Precision-ground contact surface

Packed in a custom-fit wooden case



Dial Face Color	Order No.	Price
Black	NA5552008710	Price
White	NA5552008700	Price

Fowler Indicator/Mag Base Combo

A Versatile Test Indicator, Universal and Mag Base Combo!

XTRA MAG

X-TEST







X-Test Indicator:
- Range: .060”
- Graduation: .0005”
- Dial reading: 0-15-0
- Dial Diameter: 1-1/2”
- Jewelled movement
- Revolution counter
- Automatic reversal
- 210° Swivel arc
- Tungsten carbide points: 040”, 080” and .120”

Xtra Mag Base:
- 2 universal ball sockets
- Microfine adjustment screw
- 3-9/16” extension arm
- Dovetail mounting

All complete in a shop hardened case



Order No.	Price
NA5552562105	Price

Fowler Mag Base and Dial Indicator Set

- Includes 1” indicator and mag base, plus rods, swivel clamp and shop-hardened case
- The 2” diameter .001” indicator features: satin chrome finish,tolerance hands, lug back and revolution counter
- The 6” high mag base features a 1.5” x 1.5” x 1.75” 50 lb pull base and a 4.5” long sidearm
- All exposed metal is finished in anodized black for corrosion resistance



Order No.	Price
NA5552522101	Price

Fowler Easy Mount Holder

- Mount this flexible arm anywhere
- Arm is attached to vise grip locking pliers that clamp securely to a variety of surfaces
- 12” Flex arm can be set to almost any measuring position required
- Indicator features 0-1” or 1”/25mm travel, .001” or .001”/0.01mm graduation
- Includes shop hardened case





Description	Order No.	Price
1" Indicator w/Flex Mount	NA5552520757	Price
25mm Indicator w/Flex Mount	NA5552520730	Price

Fowler Mini Mag Set

NOGA SIMPLY SOPHISTICATED

- Complete 22 Pc. contact point set
- High impact aluminum aircraft case

NOGA Mini Mag Base
- Base size: 1-1/2” x 1-1/4” x 1-3/4”
- Post size: 7”
- Unique fine adjustment mechanism
- On/Off lever
- Magnet pull: 70 lb

AGD 1 Indicator
- Range: .250”
- Dial diameter: 1-5/8”
- Graduation: .001”
- 0-100 Continuous reading



Order No.	Price
NA5552585310	Price

Fowler A Versatile Universal & Mag Base Combo

XTRA MAG

Mag Base:
- 2 Universal ball sockets
- Microfine adjustment screw
- 3-9/16” Extension arm
- Dovetail mounting





Test Indicator:
- Range: .030”
- Reading: 0-15-0
- Jewelled movement
- Graduation: .0005”
- Auto-reversing
- .080” diameter point

All complete in a shop hardened case
Virtually unlimited positioning as a Universal Base!

Type	Order No.	Price
Xtra Mag Magnetic Base	NA5552585105	Price
Xtra Mag Magnetic Base With Test Indicator	NA5552585100	Price

Fowler Anyform & Easy Mount Holder With Indicator

This kit provides a combination of holding applications. Use the vise grip and flex arm to check runout and gear backlash. Attach the flex arm to the Anyform base for magnetically mounting on virtually any metallic surface.



Combo Kit Includes both:

Easy Mount Holder
- Mount this flexible arm anywhere
- Arm is attached to vise griplocking pliers that clamp securely to a variety of surfaces
- 12” flex arm can be set to almost any measuring position required
- Indicator features 0-1” travel and .001” graduations

Anyform Magnetic Base
- Fit mag base to any shape or form
- Magnetic segments conform to any odd shape
- Rigid one piece construction
- 40 lb pull

Everything packed in a convenient, shop hardened case

Order No.	Price
NA5552520700	Price

Fowler Locking Arm Mag Base & Indicator Set

X-LOCK

Locking Arm Mag Base Features:
- Accepts all AGD dial indicators and test indicators
- Length of arm 6”
- Push button magnetic base
- The central locking mechanism allows for easy set up of gages
- Includes shop hardened case

AGD Indicator Features:
- 1” Travel
- Continuous reading: 0-100
- AGD 2, 2-1/4” dial diameter
- Revolution counter
- Tolerance markers
- Lug back mount
- Carbide points



Order No.	Price
NA5552588030	Price

Fowler Water Resistant Indicator Set

Magnetic Base:
- Fine adjustment
- Base dimensions: 2” x 2-11/32” x 1-13/16”
- Also mounts test indicators with 1/4” post
- 85 lb Pull
- On-Off lever release magnet
- V-base for placing on round surfaces



X -Proof Indicator:
- Travel: 1”
- Reading: .001”
- Continuous reading: 0-100
- Tolerance markers
- AGD 2, 2-1/4” dia.
- Lug back and carbide point
- Robust, shockproof design
- Rubber bellows on stem
- O-ring seal on safety cap
- O-ring protection for bezel and rotating dial
- Sealed back plate

Order No.	Price
NA5552585155	Price

Fowler Machinist Universal Measuring Set

Set consists of:
- 1 – 0-1” Micrometer, .0001” graduation
- 1 – 6” Black face dial caliper, .001” graduation 0-100 reading
- 1 – 6” Flexibile EZ read rule, 4R graduation
- Protective case



Order No.	Price
NA5552004000	Price

Fowler Toolmaker Universal & Shockproof Measuring Sets

Set consists of
- 0-1” Micrometer, .0001 graduation
- 6” Dial caliper, .001 graduations, 0-100 reading
- 6” Flexible Rule
- Shop hardened case
- NA55-52004239 = Shock Proof Set





Type	Order No.	Price
Machinist Universal Measuring Set	**NA5552095007**	Price
Shockproof Measuring Set	**NA5552004239**	Price

Fowler Blackface Measuring Sets

Set includes:
- 0-6” Shockproof caliper, .001 graduation, .100” range/rev., thumbroll
- 0-1” Outside micrometer, .0001” graduation, insulated frame
- Shop hardened case

Test Indicator:
- .030” Range
- .0005” Graduation
- 2 Dovetail stems and 3 contact points; .040”, .080” & .120”



Description	Order No.	Price
0-1" Outside Micrometer, 6" Shockproof Dial Caliper, .030" Range Test Indicator, 2 Dovetail Stems, 3 Contact Points, Shop-Hardened Case	**NA5552229770**	Price
0-1" Outside Micrometer, 6" Shockproof Dial Caliper, Shop-Hardened Case	**NA5552229710**	Price

Fowler Basic Electronic Measuring Set

Set consists of:
- 0 – 1”/25mm Electronic micrometer, .00005”/0.001mm resolution
- 6”/150mm Electronic caliper, .0005”/0.01mm resolution, patented ceramic chip
- Shop hardened case



Order No.	Price
NA5554004850	Price

Fowler Electronic Caliper & EZ-Read Micrometer Set Micrometer Set

Set consists of:
- 0 – 1” EZ-Read digit counter micrometer, direct reading to .0001” without a vernier
- 6”/150mm Electronic caliper, .0005”/0.01mm resolution
- Shop hardened case



Order No.	Price
NA5554004201	Price

Fowler Water Resistant Electronic Measuring Set

Set consists of:
0 – 1”/25mm IP54 electronic micrometer, .00005”/0.001mm resolution
- 6” Steel rule, 4R graduations
- 6”/150mm IP54 electronic caliper, .0005”/0.01mm resolution, direct RS-232 output
- Shop hardened case
- 5 Year warranty



Order No.	Price
NA5554004854	Price

Fowler Chrome Flex Anyform Magnetic Bases

Flex Arm Anyform Mag Base Features:
- Corrosion resistant chrome plated flex arm
- Holds rigidly in most any position
- 40 Lb. pull magnet
- Versatile - 70 steel segments work like a contour gage to fit the mag base securely to practically any shape or form

X-Proof IP54 Indicator Features
- Shockproof design
- Travel: 1”
- Reading: .001”
- Continuous reading 0-100
- Tolerance markers
- Group 2 AGD 2-1/4” diameter
- Lugback
- Carbide point



Face Color	Order No.	Price
Black	**NA5552585255**	Price
White	**NA5552585245**	Price

Mitutoyo DP-1VR Digimatic Mini-Processor

Mitutoyo's new DP-1VR is so compact, it fits right on your palm. But with this powerful little device you can print data from a digimatic caliper, micrometer and more using the Data Output function, and can even calculate statistics. Printing speed is excellent, and with the built-in thermal line printer there's virtually no noise. What's more, the thermosensitive paper has outstanding durability and chemical resistance for long-term storage. The DP-1VR even lets you transmit the data to a computer using an RS232C connecting cable.

- Printing method: Thermal line printer
- Printing dot: 384 dot (8 dot/mm)
- Printing speed: 6.5mm/s (using AC adapter)
- Printing paper: 48m
- Printing line: Approx. 6500 lines for large characters Approx. 12000 lines for normal characters
- Processing capacity: Mode: 1/2/3: 9999 data Mode 0: 100000 data
- Printing data: Measurement data, GO/±NG judgement, number of data, maximum/minimum value, range, average, standard deviation, number of defective, fraction defective, process capability index, histogram, D-chart, control chart generation for Xd-bar and control limit data, date and time
- Output function: Output the measuring data (RS232C) or GO/±NG judgment
- Input timer: 0.25s, 1s, 5s, 30s, 1min, 30min, 60min
- Voltage: 120V
- Power: AC adapter 6V (not interchangeable to DP-1HS) Electric battery: LR6 (alkaline), Ni-Mh (AA size)

Shown with optional micrometer



Order No.	Price
MT80264-504-5A	Price

CDI CHICAGO Electronic Measuring System (EMS)

- Allows for the simultaneous connection of up to four devices and supports nearly any digimatic gage regardless of the manufacturer
- Custom made tablet stand
- Quality color 7" tablet with remote display Android App
- USB and RS232 PC connection
- Data logging/collection, can be saved as CSV file on Micro SD card, e-mail or transfer to PC
- Programmable auto request
- Max, min and freeze hold in Quadrature
- Travel reverse
- View one, two, or four channels



EMS4 Electronic Measuring System



Electronic Measuring System with Probe (Sold Separately)



AGD Style Probe

Description	Range	Resolution	AGD Size	Order No.	Price
EMS4 Data Collection System	-	-	-	**MV66EMS4**	Price
Probe for EMS4	.060" / 1.5mm	.0001 / 0.002mm	AGD 2	**MV66C2300**	Price
Probe for EMS4	.150" / 3.8mm	.0001 / 0.002mm	AGD 2	**MV66C2400**	Price
Probe for EMS4	.250" / 6.35mm	.0001 / 0.002mm	AGD 2	**MV66C2500**	Price
Probe for EMS4	.600" / 15mm	.0001 / 0.002mm	AGD 2	**MV66C2600**	Price
Probe for EMS4	1.0" / 25.4mm	.0001 / 0.002mm	AGD 3	**MV66C2110**	Price
Probe for EMS4	2.0" / 50mm	.0001 / 0.002mm	Rectangular	**MV66C2720**	Price
Probe for EMS4	4.0" / 101.6mm	.0001 / 0.002mm	Rectangular	**MV66C2820**	Price
Probe for EMS4	.060" / 1.5mm	.00005 / 0.001mm	AGD 2	**MV66C3300**	Price
Probe for EMS4	.150" / 3.8mm	.00005 / 0.001mm	AGD 2	**MV66C3400**	Price
Probe for EMS4	.250" / 6.35mm	.00005 / 0.001mm	AGD 2	**MV66C3500**	Price
Probe for EMS4	.600" / 15mm	.00005 / 0.001mm	AGD 2	**MV66C3600**	Price
Probe for EMS4	1.0" / 25.4mm	.00005 / 0.001mm	AGD 3	**MV66C3110**	Price

TESA | brown & sharpe TLC-TWIN Wireless Solution

Bi-Directional communication between a measuring tool and a computer is easy with these accessories for your TWIN-CAL (Calipers sold separately)



TLC-Twin Emitter-Receiver (MV4547430)
- Bi-directional communication between computer workstation and measuring tools equipped with a TLC component
- Range up to 39 feet (12 meters) depending on surroundings
- Swiss made

TWIN Station Receiver (MV4547431)
- Connect up to 48 instruments equipped with TLC-TWIN emitter receivers to a single TWIN Station equipped computer
- Connect to a computer through a standard USB port
- Aluminum housing provides optimum protection and durabililty
- Swiss made



Data-Direct (MV4531440) and StatExpress (MV4531451) Software
- Use Data-Direct collection and reporting software to transfer measuring data to any interface; data can be customized with date and/or hour and saved in .csv format
- Use StatExpress software to analyze measured results for more advanced quality assurance requirements

Description	Model No.	Order No.	Price
TLC-TWIN Emitter-receiver for Brown & Sharpe TWIN Series Measuring Tool	04760180	**MV4547430**	Price
TWIN-Station Receiver	05030012	**MV4547431**	Price
TLC-USB Cable	04760181	**MV4547428**	Price
TLC-DIGIMATIC Cable	04860182	**MV4547429**	Price
DataDirect Data Collection and Reporting Software	04981001	**MV4531440**	Price
StatExpress Quality Assurance Software	04981002	**MV4531451**	Price

PROCHECK Wireless Data Transfer Stick

- Wireless data output to computer
- A single receiver to a single transmitter
- Works with all ProCheck ABS equiped tools
- Data transfer within 20 feet
- Battery: 3V 2032
- 1 Year Warranty



USB CONNECT

Description	Order No.	Price
Receiver & Transmitter	**PC26WDT2ABS**	Price
Transmitter Only †	**PC26WTD1ABS**	Price

†Compatable with Bluetooth Enabled Tools

PROCHECK ABSOLUTE Output Cables, USB with Data Send Control

- Connect tools via USB port and send data to spreadsheets or SPC program (program supplied separately)
- 1 Year Warranty

SMART CONNECT



Size	Order No.	Price
Absolute/Smart Connect Large 5 Pin L5 Connector/USB	**PC26DCBL5PIN**	Price
USB Connet Small 4 Pin S4 Connector/USB	**PC26DCBS4PIN**	Price

Fowler Wireless Transmitter

- Allows wireless input from Economy and IP54 Economy Calipers as well as Indi-Max Indicators
- Input directly in to Excel, Word, Cad and Notepad programs
- Includes 1 USB receiver and 1 Transmitter (good for 1 tool)
- Audible as well as LED indications when data is sent
- Simple plug and play operation
- Includes 1 spare battery (CR2032), instructions, and storage case
- Wireless technology allows the use of the tool up to 60' away from computer



Order No.	Price
NA5554115100	Price

Fowler Bowers Proximity Cable for Bore Gages

With USB Connection

- For use with Fowler Bowers Pistol Grip and regular electronic bore gages



Order No.	Price
NA5554115526	Price

Fowler USB Blue Tooth Receiver

- Receives data from Sylvac BT instruments only



Order No.	Price
NA5554115246BT	Price

PROCHECK 12"/300mm Twin-Column Electronic Height Gage



- Rigid twin column structure
- 6 Digit LCD display and minus sign (–)
- Functions include: zero setting, inch/mm conversion, data hold, plus/minus presetting
- Large size feed wheel
- Lock on measuring slider
- Carbide tipped scriber
- Resolution .001”/0.01mm

Order No.	Price
NB60EHG12	Price

PROCHECK ABSOLUTE Digital Height Gages



- Large easy to read LCD display
- Absolute technology that memorizes origin zero
- Resolution .0005” / 0.01mm
- Accuracy .0015”
- Indication variability .0005” / 0.01mm
- Connect and interactive with Procheck absolute digital indicators
- Optional USB data kit (PC26DCBL5PIN) available
- Compatible with optional wireless adaptor (PC26WTD1ABS)
- 1 Year Warranty

Size	Order No.	Price
0 - 12 / 0 - 300mm	**PC20HG012E**	Price
0 - 24 / 0 - 600mm	**PC20HG024E**	Price

PROCHECK ABSOLUTE 6" Digital Height Gage



- 3-Read display in inches, metric 1/128”
- IP54: splash water, oil and dust resistant
- Resolution: .0005” / 0.01mm
- Magnetic base
- 1 Year Warranty

Order No.	Price
PC20EHG06AB	Price

PROCHECK ABSOLUTE Electronic Height Gages



- Direct inch/metric conversion
- Floating zero
- Direct RS-232 output
- Large, high contrast LCD display
- Positive lock
- Hold feature
- Carbide scriber
- Absolute/incremental measurement
- Fitted case
- 1 Year Warranty

Size (in./mm)	Resolution (in./mm)	Graduation	Order No.	Price
0 - 12 / 0 - 300mm	.0005 / 0.01mm	±.0015"	**PC20EHG125**	Price
0 - 18 / 0 - 450mm	.0005 / 0.01mm	±.002"	**PC20EHG185**	Price
0 - 24 / 0 - 600mm	.0005 / 0.01mm	±.003"	**PC20EHG245**	Price

PROCHECK Precision Vernier Height Gages



- With magnifier
- Extra heavy base for stability
- Fine adjustment
- Adjustable scale to compensate for wear
- Satin chromed finish
- Offset scriber for easy zero reference point
- Magnifier for easy reading
- Complete with styrofoam fitted case

Size	Graduation	Order No.	Price
12"	.001"/0.02mm	**NB60HG12**	Price
18"	.001"/0.02mm	**NB60HG18**	Price
24"	.001"/0.02mm	**NB60HG24**	Price

PROCHECK Dial Height Gages



- Heavy duty base
- Fine adjustment
- Scriber and clamp
- Easy-to-read dial face

Range (mm/in.)	Reading (mm/in.)	Order No.	Price
6"	.001"	**NB60HGD6**	Price
8"	.001"	**NB60HGD8**	Price
12"	.001"	**NB60HGD12**	Price
12"/300mm	.001"/0.02mm	**NB60HGD12EM**	Price

PROCHECK Twin Column Digital Count Dial Height Gages

Large dial indicator and error proof digital counter makes this height gage easy to read.



- Carbide tipped scriber
- Chrome plated double beams
- Digital counter with zero reset button
- Fine adjustment wheel and lock
- .001” Graduation/.100” (dual reading)
- Bottom of base is hardened, ground and lapped for maximum flatness

Size	Order No.	Price
12"	**NB60TC12HG**	Price
18"	**NB60TC18HG**	Price
24"	**NB60TC24HG**	Price

Fowler Workshop Transfer Stand



- Overall height 19.5”
- Sturdy construction gives complete rigidity when measuring
- Chrome-plated tubular post
- Base is hardened and lapped
- Can be used with dial test indicators
- Quick adjustment on main column with large locking knob
- Weight 6 lbs

Order No.	Price
NA5552620019	Price

Indicator shown not included

Fowler Height Transfer & Squareness Gage



- Used for a variety of surface plate jobs
- Large fine adjustment knob for precise control
- Swivel clamp anchors swivel and indicator for added accuracy
- Rear surface of the gage has a reference surface to square against a master for checking squareness
- Includes a 6” x 4” long post, indicator rod and clamp.

Order No.	Price
NA5553620010	Price

Indicator and standard shown not included.

Fowler Workshop Transfer Stand



- Overall height: 12”
- Revolutionary design
- Large range fine adjustment
- Can be locked in any position
- Base: 3” wide x 3.54” long
- Holds test indicators or dial gages with dovetail holders and special adapters
- Large capacity positioning range
- Large handwheel for fine adjustment
- Stainless steel adjustment
- Packed in deluxe aluminum case
- Weight 4.8 lbs (2.2 kg)

Order No.	Price
NA5552620717	Price

Indicator shown not included

Fowler Dial Height Gages



- Easty-to-read large 1 rev. dial
- Graduations 0.001”
- Fine-adjust for precise control
- Stainless steel construction with satin chrome finish
- Carbide tipped scriber
- Ergonomically shaped base for ease of handling

Range (in.)	Order No.	Price
0 - 6	NA55521700061	Price
0 - 12	NA55521700121	Price

Fowler Computer Connect Kit

- Used with products that feature direct RS232C output allowing connection of tool to any computer or printer without the need of an interface
- Kit includes 80” (2m) connecting cable with 9 pin IBM compatible, 9/25 pin adaptor, support disk and instructions

Description	Order No.	Price
Ultra-Cal III Computer Connect Kit	NA5554115333	Price
Half Duplex Computer Kit	NA5554115336	Price
Footswitch for Computer Connect Kit (requires 54-115-334)	NA5554618165	Price

Fowler Dial & Electronic Twin Beam Height Gages



Common Features

- Knob for coarse and fine adjustment
- Carbide tipped scriber, locking lever
- Base is hardened, ground and lapped for maximum flatness
- Supplied with fitted wooden case

Twin Beam Dial Height Gages

- Range: 0-12” or 0-24”
- Coarse readings: .100” - fine readings: .001”
- Digit counter readout
- Dual chrome-plated beams
- Zero/reset button

Description	Order No.	Price
12" Twin Beam Dial Height Gage	NA5552174212	Price
24" Twin Beam Dial Height Gage	NA5552174224	Price

Fowler Twin Beam Electronic Height Gages with Offset Scriber



- Carriage design with offset scriber holder
- Base is ground and lapped for flatness
- Handwheel provides course and fine movement
- Updated electronic and mechanical design offers better accuracy and movement of carriage
- Carbide tipped scriber
- Functions include preset, in/mm conversion and ABS/INC for direct or comparative measuring

Range (in/mm)	Accuracy	Description	Order No.	Price
0 - 12 / 0 - 300	+/- .0016"/.04mm	Height Gage	NA55541742123	Price
0 - 24 / 0 - 600	+/- .002"/.05 mm	Height Gage	NA55541742243	Price
Contact Sensor for Twin Beam Electronic Height Gage			NA55541742250	Price

Fowler Electronic Height Gage



- High quality, accuracy and durability
- Large base for easy movement
- True inch/metric conversion
- Range: 0 - 20” / 500mm
- Resolution: .0005” / 0.01mm
- Accuracy: ± .0025”
- Repeatability: .0005” / 0.01mm (±2S)
- Deluxe wooden case with reinforced metal edges
- Large easy to read LCD
- Non-glare chrome reading surface
- Overall height: 28”
- Beam thickness: 1.25 x 4”
- Presettable display

Order No.	Price
NA5554106020	Price

Fowler Electronic Height Gages



- Direct inch/metric conversion
- Large, high contrast LCD display
- ABS/INC measurement
- Floating zero
- Resolution .0005” / 0.01mm
- Hold feature
- Positive lock, carbide scriber

Z-HEIGHT-E

Range	Accuracy	Order No.	Price
0-6 / 0-150mm	.001"	NA5554175006	Price
0-12 / 0-300mm	±.0015"	NA5554175012	Price
0-18 / 0-450mm	±.0015"	NA5554175018	Price
0-24 / 0-600MM	±.002"	NA5554175024	Price

Mitutoyo Digit Count Hite

Height Gage with Dual Directional Digital Counter

The double digital counter can be zero-set at any height within any range by depressing the zero-reset button located by the individual counter.

- Carbide tipped scriber
- Chrome plate beams
- Digital counter comes with zero-reset button
- Bottom surface of the base is hardened, ground and lapped
- With fine-adjusting feed wheel and lock



Size	Digital Counter	Graduation	Order No.	Price
12"	.100" (Dual Reading)	.001"	**MT80192-150**	Price
18"	.100" (Dual Reading)	.001"	**MT80192-151**	Price
24"	.100" (Dual Reading)	.001"	**MT80192-152**	Price
40"	.100" (Dual Reading)	.001"	**MT80192-153**	Price
300mm	1.0mm (Dual Reading)	0.01mm	**MT80192-130**	Price
450mm	1.0mm (Dual Reading)	0.01mm	**MT80192-131**	Price
600mm	1.0mm (Dual Reading)	0.01mm	**MT80192-132**	Price
1000mm	1.0mm (Dual Reading)	0.01mm	**MT80192-133**	Price

Mitutoyo LCD Digimatic Height Gages

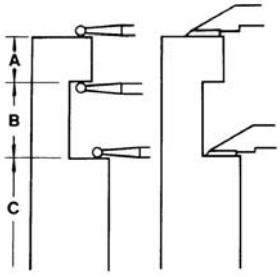
- Preset for LCD setting
- Hold function
- Slider locking clamps
- Large LCD numerals
- SPC output provided
- Operates on a single SR44 battery cell
- Zero, inch/mm, +/–, preset, hold & data-send functions



Description	Resolution	Order No.	Price
8"/200mm	.0005"/0.01mm	**MT80570-244**	Price
12"/300mm	.0005"/0.01mm	**MT80570-312**	Price
18"/450mm	.0005"/0.01mm	**MT80570-313**	Price
24"/600mm	.0005"/0.01mm	**MT80570-314**	Price

Mitutoyo Optional Touch Probe

- .118" Probe diameter is automatically comensated
- Dimensions A, B & C can be measured continuously with two-directional probe



Order No.	Price
MT80192-008†	Price

† Touch probe for height gages with output only

Mitutoyo 5 Pc. Digimatic Height Gages

Heavy Duty • With Output

The latest generation of height gages from Mitutoyo have instant, easy-to-see, error-free LCD readout and may be used in SPC Systems.

- Extra-rugged, two-column construction for more precise upward and downward slider movements. Switchable coarse/fine adjustment through large feed wheel
- Supplied with carbide-tipped scriber
- Supplied with three (Size AA) batteries. Battery life is 900 continuous hours.

† Note: 192-67X-10 Series can be used with optional two-directional touch probe featuring built-in probe diameter compensation to allow top and bottom land measurement automatically. Probe diameter is .118" (MT80192-008)



Size	Resolution	Order No.	Price
12"/300mm	.0005"/0.01mm	**MT80192-630-10**	Price
12"/300mm	.0005"/0.01mm	**MT80192-670-10†**	Price
18"/450mm	.0005"/0.01mm	**MT80192-631-10**	Price
18"/450mm	.0005"/0.01mm	**MT80192-671-10†**	Price
24"/600mm	.0005"/0.01mm	**MT80192-632-10**	Price
24"/600mm	.0005"/0.01mm	**MT80192-672-10†**	Price
40"/1000mm	.0005"/0.01mm	**MT80192-633-10**	Price
40"/1000mm	.0005"/0.01mm	**MT80192-673-10†**	Price
1000mm	0.01mm	**MT80192-615-10**	Price

Mitutoyo SPC Connecting Cables-Straight Type

Length	Order No.	Price
40" / 1m	**MT80905338**	Price
80" / 2m	**MT80905409**	Price

Mitutoyo High Precision Digital Height Gage

- Resolution: .0001"/0.001mm
- Accuracy: ±.0002"
- Straightness: .0002"
- Length standard: linear encoder
- Response speed (Max):20"/s (500mm/s)
- Display: fluorescent tube (6-digit,-sign)
- Power supply: AC adapter (9V 500mA)
- Standard accessories: AC adaptor (525694A), scriber (900258) and scriver clamp (905007)



Size	Squareness	Weight	Order No.	Price
18"/450mm	±.0003"	32.8 lbs	**MT80574-211-1A**	Price
24"/600mm	±.0004"	35.6 lbs	**MT80574-210-1A**	Price

PROCHECK Digital Protractor Set



- USB data output
- Setting preset value
- Removable blade
- Changeable direction
- Zero setting at any position
- 3 measurement patterns (1 x 360°, 2 x 180°, 4 x 90°)
- 1 Year Warranty

Order No.	Price
PC23496EDS	Price

Bevel Protractor with Dial Reading

- Dial reads each 10 degree and indicator pointer shows each degree and 5 minutes of angle
- Includes blade, acute angle attachment and fitted case

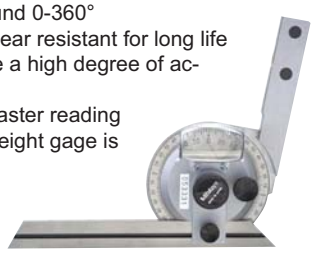


Item	Blade Size	Order No.	Price
PROCHECK	6 & 12	PC23496150MM	Price
Fowler	6 & 12	NA5552440777	Price

Mitutoyo Universal Bevel Protractors

For more precise angle measurements, the Protractor can be attached to MITUTOYO Height Gages. A clamp for this is furnished with the case.

- Can be set at 5 minute intervals by a fine adjustment knob
- Satin chrome finished dial face has clear and crisp graduations
- Dial from 0-90, 90-0, 0-90, 90-0 around 0-360°
- Hardened stainless steel, rust and wear resistant for long life
- Flush-reading, no parallax error, give a high degree of accurate measurements
- With magnifier glass for easier and faster reading
- Attachment clamp 950749 for inch height gage is supplied
- Fine adjustment knob for measuring or setting of minute angles
- Positive rigid locking clamp



Description	Dial	Vernier	Order No.	Price
With 6" Blade and Height Gage attachment clamp	1°	5 min.	MT80187-904	Price
With 12" Blade and Height Gage attachment clamp	1°	5 min.	MT80187-906	Price

Mitutoyo Accessories & Parts For Universal Bevel Protractor

Description	Order No.	Price
6" Blade	MT80187-104	Price
12" Blade	MT80187-103	Price
Acute Angle Attachment	MT80187-105	Price
Bevel Protractor Clamp Attachment for Inch Height Gages	MT80950749	Price
Bevel Protractor Clamp Attachment for Metric Height Gages	MT80950750	Price

Fowler Contact Sensor for HG



Order No.	Price
NA55541742260	Price

Starrett Bevel Protractor

Description - Bevel Protractor		
Blade Size	Order No.	Price
7	MV7051394	Price
12	MV7051396	Price
7 & 12	MV7051398	Price

Description - Bevel Protractor-Certified		
Blade Size	Order No.	Price
7 & 12	MV7066929	Price



MADE IN THE USA

Starrett Acute Angle Attachment For Bevel Protactor

MADE IN THE USA

Order No.	Price
MV7051392	Price

Bevel Protractor with 6" & 12" Blades

- Magnifier for vernier
- Includes 6" & 12" blades and an angle attachment
- Satin chrome finish for easy readings
- Graduation: 360°
- Reading to 5 minutes
- Includes fitted case



Item	Blade Size	Order No.	Price
PROCHECK	12	NB45496G	Price
Fowler	6 & 12	NA5552440612	Price

Fowler Electronic Universal Protractor

- Hardened stainless steel
- Range selection: 1 x 360°, 2 x 180°, 4 x 90°
- Dual reading LCD display arc minutes/decimal degrees
- Preset function
- 6" and 12" Blades and acute angle attachment included
- Fine adjustment
- RS-232 output
- Measuring range: 0-360°
- Resolution: 30"
- Accuracy: ±5 min.

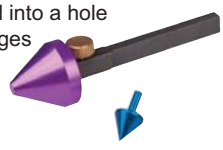


Order No.	Price
NA5554440750	Price

Fowler Height Gage Accessories

Centering Cone Set:

- Locates the hole center as the cone is inserted into a hole
- Can be adapted for use with various height gages
- Measures holes from 1/16 to 1-1/16" ID
- Bar dimensions 5/16 x 3/16"
- Includes 1 holding bar and 2 centering cones



Probe Set:

- Lets you use any M2 threaded CMM probe in your height gage
- Holders comes with 3 ruby ball CMM probes - 2mm ruby ball x 20mm length
- Bar dimensions 1/2 x 1/4"
- Can be adapted for use with various height gages



Type	Order No.	Price
Centering Cone Set	NA55525651000	Price
Centering Cone Set	NA55525651050	Price
CMM Probe Set	NA55525651100	Price

Fowler Trimos Electronic Height Gages

V3, V4 & V5

- Electronically adjsutable measuring force 0.75/1.5 (N)
- Lithium-ion rechargeable batteries
- Cast iron base for optimal stability
- RS232 and USB interfaces
- Measures heights, diameters, perpendicularity, centerlines Min/Max/Delta
- Resolution .00005”/0.001mm
- Repeatability (2s): .00008”/0.002mm (Ø .00016”/0.004mm)
- Includes charging unit, measuring insert with ruby ball Ø4mm, probe holder elbow Ø8mm, setting gage, user’s manual, test certificate



Type - V3 Electronic Height Gage						
Measuring Range	Range with Probe Inverted	Max. Permissable Errors	Frontal Squareness Deviation	Air Cushion	Order No.	Price
16" / 407mm	20" / 508mm	.00032"/ 0.008mm	.0004"/ 0.010mm	NO	**NA5554192340**	Price
28" / 711mm	31.9" / 812mm	.00032"/ 0.008mm	.0006"/ 0.015mm	NO	**NA5554192370**	Price

Type - V4 Electronic Height Gage						
Measuring Range	Range with Probe Inverted	Max. Permissable Errors	Frontal Squareness Deviation	Air Cushion	Order No.	Price
16" / 407mm	28.3" / 719mm	.0002"/ 0.005mm	.0004"/ 0.010mm	YES	**NA5554191440**	Price
28" / 711mm	40.2" / 1023mm	.00028"/ 0.007mm	.0006"/ 0.015mm	YES	**NA5554191470**	Price

Type - V5 Electronic Height Gage						
Measuring Range	Range with Probe Inverted	Max. Permissable Errors	Frontal Squareness Deviation	Air Cushion	Order No.	Price
16" / 407mm	28.3" / 719mm	2.5+L(mm)/ 300	.0002"/ 0.005mm	YES	**NA5554199540**	Price
28" / 711mm	40.2" / 1023mm	2.5+L(mm)/ 300	.00032"/ 0.008mm	YES	**NA5554199570**	Price
43.7" / 1110mm	56" / 1422mm	2.5+L(mm)/ 300	.00043" /0.011mm	YES	**NA5554199590**	Price

Type - Probe Sets		
Measuring Range	Order No.	Price
7 Pc. Economy Probe Set	**NA5554199107**	Price
16 Pc. Macro Probe Set	**NA5554199106**	Price
21 Pc. Micro Probe Set	**NA5554199105**	Price

TESA | brown & sharpe Magna 400/700 Height Gages

Made to withstand severe workshop conditions.



- Shop proof technology
- Long measuring span and rugged design
- Fully protected against: water, dust & oil

Features:

- 16” (400 mm) and 28” (700 mm) measuring range
- Electronics completely protected against liquids or dust penetration
- Automatic diameter measurement using TESA’s patented system which determines the culmination point
- Parallelism and perpendicularity measurements
- TESA opto-electronic measuring system (patented)
- Compatible with TESA MICRO-HITE accessories, including measuring inserts and holder
- SCS calibration certificate delivered with each instrument
- .00001/.0001/0.01mm Resolution
- 6 V, Rechargeable battery pack
- RS-232 Digital output

Model Number	007.30047	007.30059
Size	16"/400mm	28"/715mm
Resolution	.00001/.0001/0.001mm	.00001/.0001/0.001mm
Brand Name	Tesa	Tesa
Type	Magna Electronic Height Gages	Magna Electronic Height Gages
Application range with standard insert holder 00760143	570mm/22"	870mm/34"
Application range with insert holder 00760057	0 to 625mm/0 to 24"	0 to 925mm/0 to 36"
Application range with insert holder S07001622	795mm/31"	1095mm/43"
Maximum Permanent Error	<8µm/<.0003"	<8µm/<.0003"
Repeatability in flat surfaces	2s=<3 µm/2s=<.00015"	2s=<3 µm/2s=<.00015"
Displacement speed	0, 5 m/s	0, 5 m/s
Measuring force	1,5 N ±0,5 N (acoustic signal)	1,5 N ±0,5 N (acoustic signal)
Autonomy	60 h	60 h
Masse	14 kg	16 kg
Air Cushion	No	No
Battery Pack	6 V, rechargeable	6 V, rechargeable
Digital output	RS-232	RS-232
Protection degree	IP55 or IP65 for electronic unit and measuring system	IP55 or IP65 for electronic unit and measuring system
Fine adjustment	Yes	Yes
Measuring head lock	Yes	Yes
Storage temperature range	-10°C to 60°C	-10°C to 60°C
Operating temperature	10°C to 40°C	10°C to 40°C
Repeatability on inside bores	2s=<5 µm/2s=<.00020"	2s=<5 µm/2s=<.00020"
Measuring Span	415mm/16"	715mm/28"

Model No.	Measuring Span	Order No.	Price
007.30047	415mm/16"	**MV4028260**	Price
007.30059	715mm/28"	**MV4028261**	Price

Starrett® Altissimo 24" Digital Height Gage



- Dynamic bi-directional probing with point and scan modes
- Five measurement modes: (ID/OD Diameters, center, TIR, max/min., continuous display)
- Automatic calculation of eight measurement routines
- Speed wheel also has fine adjust
- Locking mechanism for scribing
- Rechargeable NiMH batteries with 100 hours of continuous life
- Auto power off after two hours with retention of probe calibration
- Output data to Starrett SPC Plus® hardware and software and to PCs
- Instant inch/millimeter conversion
- Two selectable Datums and Preset
- Measuring Range: 24"/600mm (Extendable to 30"/750mm by rotating probe holder 180°)
- Resolution: .0001"/.0005"/.001" (0.001mm/0.01mm/0.02mm)
- Accuracy: ±.0006" (0.015mm) Band width at 68°F (20°C)
- Repeatability: ±.0001" (±0.002mm)
- Power Source: NiMH rechargeable batteries (120V AC/60Hz charger/ adapter furnished) Operation time: 80 hr. recharging time: 10 Hours
- Standard Accessories: .1875"/4.8mm dia. Carbide probe, probe holder, AC charger/adapter, probe calibration block
- Dimensions: 11" L × 7-3/4"W × 36-1/2" H
- Weight: 40 lbs (18Kg)
- Perpendicularity: .0004" (0.010mm)

Order No.	Price
MV7067008	Price

Suburban Height Gages



- State of the art readout with soft touch keyboard and user friendly graphics
- Both USB and RS232 ports for data output
- Swivel adjustment on readout for easy viewing
- Motorized and manual movements with rapid jog (speed 35mm/second)
- Air bearing cushion with built in air pump
- Can be used as a go / no go gauge
- Quick manual squareness measurement
- CE approved
- Measuring functions: contact above / below - shaft - bore - groove/ ledge -flatness / paralleslism deviation - angle - 2D - chain measurements - Squareness* - multiple reference points
- Measuring force: 1 N ± .2
- Inch/metric conversion
- Order numbers ending in M= magnetic scale and U= glass scale

Measuring Span	Resolution	Repeatability	Order No.	Price
0 - 450mm / 350 - 800mm	0.01 / 0.001 / 0.0005mm	0.002mm	**MS55MH450M**	Price
0 - 450mm / 350 - 800mm	.001 / 0.001 / 0.0005 / 0.0001mm	0.001mm	**MS55MH450U**	Price
0 - 600mm / 350 - 950mm	0.01 / 0.001 / 0.0005mm	0.002mm	**MS55MH600M**	Price
0 - 600mm / 350 - 950mm	.001 / 0.001 / 0.0005 / 0.0001mm	0.001mm	**MS55MH600U**	Price
0 - 1000mm / 350 - 1350mm	0.01 / 0.001 / 0.0005mm	0.002mm	**MS55MH1000M**	Price
0 - 1000mm / 350 - 1350mm	.001 / 0.001 / 0.0005 / 0.0001mm	0.001mm	**MS55MH1000U**	Price

***With electronic probe Magnascan PH**

Starrett® Electronic Height Gages



- Large, easy-to-read display, an intuitive control panel, clear bar graduations, resolution of .0005", RS232 output, and a full range of user functions
- Clear bar graduations in .100" and 5mm increments
- Large .380" (9.65mm), easy-to-read LCD display reads to .0005" and 0.01mm
- Inch-millimeter conversion
- Carrier and scriber designed to read from zero
- Hold control retains a reading at any position
- Plus or minus indication ensures reading in proper direction
- Vertical bar is closer to the center of base than competing products for superior stability
- Resolution: .0005" (0.01mm)
- Overall Accuracy: ± .0015" (.04mm) 0-18" (0-450mm), ± .002" (0.05mm) 18-24 (450-600mm)
- Set ZERO at any position
- Manual on/off with auto off after 30 minutes non use
- Large positive action keypad
- Ability to retain and return to the true zero reading
- PRESET button to install any reading at any position
- Ability to assign minimum and maximum limits
- RS232 output for data collection, analysis, and hard copy documentation, supports: – Starrett 772 Advanced Data Collection Systems – Starrett 761 Series Data Multiplexers – Other RS232 devices
- 1-1/2+ Years battery life. Two 3-volt batteries furnished (CR2450).

Range	Resolution	Order No.	Price
18" / 400mm	.0005" / 0.01mm	**MV7072625**	Price
24" / 600mm	.0005" / 0.01mm	**MV7046003**	Price

Starrett® 6"/150mm Electronic Height Gage



- Easy-to-read LCD with .35" high characters
- Lock to hold the slide in position
- Fine adjustment thumb roll for precision measurements
- Inch-millimeter conversion
- Zero at any position
- Manual ON/OFF with auto-off
- Single, 3-Volt CR2032 battery
- Linear accuracy: ± .001" / ±0.03mm
- Resolution: .0005" / 0.01mm

Model Number	Order No.	Price
3751AZ-6/150	**MV7012221**	Price

PROCHECK PREMIUM Extended Range Dial Bore Gage Sets

- Extend range 1.4 to 6” (35mm to 160mm) range covers two of the most popular sets
- Easy to read dial face
- Insulated grip
- Carbide anvils and chrome plated handle
- Includes extension holder and fitted case
- 1 Year Warranty



Total Range	Graduation	Probe Depth	Number of Anvils	Number of Spacers	Order No.	Price
1.4 - 6"	.0005	6	15	3	**PC21DBG14065**	Price
35-150mm	0.01mm	150mm	16	3	**PC21DBG35150M**	Price

PROCHECK ABSOLUTE Extended Range Electronic Bore Gage Sets with Output

Bore Gage Set Features:

- Extended range 1.4 to 6” (35mm to 160mm) range covers two of the most popular sets
- Insulated grip
- Carbide anvils and chrome plated handle
- Includes extension holder and fitted case



Electronic Indicator Features:

- Bar graph and numeric digital display
- Preset with recall
- ABS/INC measurement
- 1 Year Warranty
- Min/max/TIR

Total Range	Resolution	Probe Depth	Number of Anvils	Number of Spacers	Order No.	Price
0.7 - 6	.00005"/0.001mm	-	-	-	**PC20EBG0765EMAB**	Price
1.4 - 6	.00005"/0.001mm	6	15	3	**PC21EBG14065EM**	Price

PROCHECK Bore Gage Setting Sets

- Accurately set any bore gage up to 6” in diameter to an accuracy of .0001”

Set includes:

- Base anvil: 2.750” x .80”
- Adjustable anvil: 2.375” x .375” (two each)
- Internal capacity: 6”/150mm
- Depth capacity” 1”/25mm
- Centralizer capacity width: 2.625”/66.7mm
- Quick-release holder for fast adjustment



Size	Order No.	Price
0 - 6	**PC24BGSMI**	Price
0 - 150mm	**PC24BGSMM**	Price

PROCHECK Stand Only

- Stand only for metric bore gage setting set



Order No.	Price
PC24BGSMSD	Price

PROCHECK Super Precision Deep Bore Dial Gage Set

- Measures bore to 10” deep, Range 0.7” to 6” diameter
- Super Precision Deep Bore Gauge
- Accuracy: 0.0005” with crisp precision graduations
- Includes gage and interchange-able contact points
- Carbide tip on measuring plunger
- ABS storage case included
- 1 Year Warranty



Order No.	Price
PC21DBG0765	Price

PROCHECK Dial Bore Gage Set .0005” Graduation

- Easy to use – simple sturdy construction
- For close tolerance measurement of holes, taper and roundness
- Self-centering
- Gages are supplied with AGD 2 dial indicators and fitted case



Range (in.)	Probe Depth (in.)	No. of Anvils	Order No.	Price
.4 - .7"	4	11	**NB45CBGB2**	Price
.70 - 1.5"	6	9	**NB45CBGC2**	Price
1.4 - 2.4"	6	6	**NB45CBGD2**	Price
2 - 6"	6	11	**NB45CBGE2**	Price

PROCHECK PREMIUM Electronic Digital Internal Bore Gages

- IP54 water and dust protective rating
- Resolution: 0.00005” / 0.001mm
- Carbide measuring surfaces
- Contact points are designed to allow measurements near the bottom of blind holes
- Setting ring included
- Compatible with 3 Procheck data output options: USB or Bluetooth wireless and hardwire connect (Not included)
- Friction thimble
- Completed with protective case
- Wrench included
- Complete in molded case
- 1 Year Warranty



Size	Order No.	Price
.236 - .315" (6-8mm)	**PC20EIBG68MI5**	Price
.315 - .394" (8-10mm)	**PC20EIBG810MI5**	Price
.394 - .472" (10-12mm)	**PC20EIBG1012MI5**	Price
.472 - .650" (12-16.51mm)	**PC20EIBG1216MI5**	Price
.650 - .800" (16.51-20.32mm)	**PC20EIBG1620MI5**	Price
.800 - 1" (20.32-25.40mm)	**PC20EIBG2025MI5**	Price
1 - 1.2" (25.4-30.48mm)	**PC20EIBG2530MI5**	Price
1.2 - 1.6" (30.48-40.64mm)	**PC20EIBG3040MI5**	Price
1.6 - 2" (40.64-50.80mm)	**PC20EIBG4050MI5**	Price

PROCHECK Flat Jaws Only

- Flat jaw only for metric bore gage setting set



Order No.	Price
PC24BGSMFJ	Price

Washer Set for Procheck Bore Gages

- Used for smaller step adjustments
- Contains .02, .05, .1, .2 and .3 washers

Order No.	Price
NB456126076	Price

Fowler Dial Bore Gage Sets

With Carbide Anvils

- Graduation: .0005”
- Easy to read
- Economical
- Self-centering
- Insulated grip
- Chrome plated handle
- Includes extension holder & fitted case







Range	No. of Anvils	Order No.	Price
.7 - 1.5"	8	**NA5552646100**	Price
2 - 6"	11	**NA5552646300**	Price
4 - 12"	5	**NA5552646600**	Price

Fowler Dial Bore Gage Sets

- Carbide anvils
- Easy to read
- Economical
- Graduation: .0005” or 0.01mm
- Insulated grip
- 1.4” to 6” range or 35 to 160mm
- Chrome plated handle
- Includes extension holder and fitted case



Range	No. of Anvils	Order No.	Price
35 - 160mm	16	**NA5552646220**	Price
1.4 - 6"	15	**NA5552646400**	Price

Fowler 2" - 6" Right Angle Dial Bore Gage

- Measure difficult-to-reach bores in tight or inconveniently located spaces on machine applications
- Carbide anvils
- Easy-to-read .0005”graduation
- Chrome plated handle and insulated grip
- Includes extension holder and fitted wooden case



Order No.	Price
NA5552646250	Price

Fowler Bore Gage Setting Master Kits

For accurately setting any bore gage up to 6” in diameter to an accuracy of .0001”

Each Set Includes Setting Device

- Base anvil: 2.750” x .80”
- Adjustable anvil 2.375” x .375” (two each)
- Internal capacity: 6”
- Depth capacity: 1”
- Centralizer capacity width: 2.625”
- Quick release holder for fast adjustment



36 Pc. Economy Gage Block Set Included

- Tolerances to .00005”
- Certificate of Calibration to NIST
- High quality aluminum case



Range	Order No.	Price
0 - 150mm	**NA5553646010**	Price
0 - 6"	**NA5553646000**	Price

Fowler Electronic Bore Gage

Industry’s two most popular bore gage ranges combined in one easy-to-use ELECTRONIC set!

All the benefits included in the X-Tender¨ Dial Bore Gage are now available with an electronic indicator providing inch/metric reading capability.

Bore Gage Features:

- Range: 1.4”-6”/35mm-150mm
- Carbide anvils
- Easily adjustable
- Self-centering
- Includes extension holder
- Shop hardened case

Indicator Features:

- Dual reading inch/metric electronic indicator
- Bar graph and numeric digital display
- Resolution: .00005”/0.001” mm
- Preset with recall
- ABS/INC measurement
- Min/Max/TIR



Order No.	Price
NA5554646401	Price

Fowler Bowers Electronic Bore Gages

- Larger easier to read display
- Self-centering heads
- USB connectivity
- Four preset memories
- Fixed anvils
- Resolution: .00005” / 0.001mm
- Tungsten carbide measuring faces on all 3 point heads .500” & up.
- Sizes over .500” (12.5mm) feature blind bore capability
- Setting rings included in all sets
- Includes UKAS certificates for all pistol grips, heads and rings



Range	Model No.	Order No.	Price
.080 - .250 (2-6mm)	54-367-000-0	**NA5554367000**	Price
.250 - .375 (6-10mm)	54-367-010-0	**NA5554367010**	Price
.375 - .750 (10-20mm)	54-367-020-0	**NA5554367020**	Price
.750 - 2 (20-50mm)	54-367-050-0	**NA5554367050**	Price
2 - 4 (50 - 100mm)	54-367-100-0	**NA5554367100**	Price
4 - 6 (100 - 150mm)	54-367-105-0	**NA5554367105**	Price
4 - 8 (100-200mm)	54-367-200-0	**NA5554367200**	Price
6 - 8 (150 - 200mm)	54-367-110-0	**NA5554367110**	Price

Starrett Dial Bore Gages

No. 82 Series

MADE IN THE USA



- Measures the diameter of any hole within range of its interchangeable probes
- With the indicator set to the nominal dimension and its dial adjusted to zero, the probe is inserted in the hole with variations to .0001” read on the indicator
- Measurements are taken by comparison, therefore a set master such as gage blocks or bench type micrometer should be used as a reference standard

Starrett No.	Total Range (in.)	Graduation (in.)	No. of Probes	Order No.	Price
82AZ	.107 - .266"	.0001	5	**MV7055791**	Price
82BZ	.217 - .594"	.0001	6	**MV7055792**	Price
82CZ	.560 - 1.565"	.0001	8	**MV7055793**	Price

Starrett Dial Bore Gages

No. 84AZ Series

MADE IN THE USA



- For inspecting bores and checking hole size
- An adjusting range screw with positive locking feature and two centralizing plungers provides three-point contact for true alignment
- The gaging contact and centralizing plungers are hardened tool steel, spring loaded for sensitivity and repeatability

Starrett No.	Total Range w/Extension (in.)	Gradu-ation (in.)	Max. Bore Depth (in.)	Order No.	Price
84AZ-111-4J	1-1/2 - 3	.0001	4	**MV7000026**	Price
84AZ-134-4J	1-1/2 - 3	.0005	4	**MV7000030**	Price
84AZ-111-5J	3 - 5-3/16	.0001	6	**MV7000027**	Price
84AZ-134-5J	3 - 5-3/16	.0005	6	**MV7000031**	Price
84AZ-111-6J	5 - 8-1/8	.0001	6	**MV7000028**	Price
84AZ-134-6J	5 - 8-1/8	.0005	6	**MV7000032**	Price
84AZ-111-7J	8 - 12-1/8	.0001	7	**MV7000029**	Price
84AZ-134-7J	8 - 12-1/8	.0005	7	**MV7000033**	Price

INSIZE Bore Gage Sets



- Optional accessory: setting ring (part no. 6313), dial indicator range .25”,graduation .0005”
- Bore gages included 1.4-2”(dial indicator and handle are not included) and 2-6”

Model No.	Size	Graduation (in.)	Order No.	Price
2824-3SE	.7 6"	.0005	**SZ202824S3E**	Price
2824-S2E	1.4 - 6"	.0005	**SZ202824S2E**	Price

Mitutoyo Bore Gages

For Blind Holes



- Capable of ID measurement close to the bottom of a hole
- Pendulum guide structure improves sliding
- Carbide contact faces
- Extension rods available (sold separately) for deep holes
- Indicatator information:: 2046SB 0.01mm, 2109SB 0.001mm, 2922SB.0005”,2923SB .0001”

Range	Probe Type	Model No.	Comments	Order No.	Price
0.6.1.4"	Blind Hole	511-428	w/ 2922SB (.0005")	**MT80511-428**	Price
0.6.1.4"	Blind Hole	511-438	w/ 2923SB.10 (.0001")	**MT80511-438**	Price
1.4.2.4"	Blind Hole	511-429	w/ 2922SB (.0005")	**MT80511-429**	Price
1.4.2.4"	Blind Hole	511-439	w/ 2923SB.10 (.0001")	**MT80511-439**	Price
2.6"	Blind Hole	511-430	w/ 2922SB (.0005")	**MT80511-430**	Price
2.6"	Blind Hole	511-440	w/ 2923SB.10 (.0001")	**MT80511-440**	Price
15.35mm	Blind Hole	511-425	w/ 2046SB (0.01mm)	**MT80511-425**	Price
35.60mm	Blind Hole	511-426	w/ 2046SB (0.01mm)	**MT80511-426**	Price
35.60mm	Blind Hole	511-436	w/ 2109SB.10 (0.001mm)	**MT80511-436**	Price
50.150mm	Blind Hole	511-427	w/ 2046SB (0.01mm)	**MT80511-427**	Price
50.150mm	Blind Hole	511-437	w/ 2109SB.10 (0.001mm)	**MT80511-437**	Price

Mitutoyo Bore Gages

Type 511 & 526



- All Mitutoyo dial bore gages are supplied with AGD 2 dial indicator and fitted carrying case
- A reference chart is furnished which indicates the spacer and rod sizes to be selected for the specific range
- 10” extension rod to increase measuring depth from the edge is available for 511-185, 186, 188 and 189 (Part No. 101421)
- To increase the length of interchangeable measuring rods, a 2” extension collar is available for use with 511-162 and 511-753 (Part No. 101421)

Graduation - .0001					
Range (in.)	Probe Depth (in.)	No. of Anvils	No. of Spacers	Order No.	Price
.24 - .4"	2	9	1	**MT80511-212**	Price
.3 - .4"	2.2	6	0	**MT80526-122**	Price
.4 - .7"	2.4	8	0	**MT80526-123**	Price
.7 - 1.4"	4	9	2	**MT80511-751**	Price
.7 - 6"	4 / 6	26 (2" Sub Anvil)	10	**MT80511-932**	Price
1.4 - 2.5"	6	6	4	**MT80511-752**	Price
2 - 6"	6	11	4	**MT80511-753**	Price
4 - 6.5"	6	13	4	**MT80511-754**	Price

Graduation - .0005					
Range (in.)	Probe Depth (in.)	No. of Anvils	No. of Spacers	Order No.	Price
.24 - .4"	2	9	1	**MT80511-213**	Price
.3 - .4"	2.2	6	0	**MT80526-119**	Price
.4 - .7"	2.4	8	0	**MT80526-120**	Price
1.4 - 2.5"	6	6	4	**MT80511-742**	Price
2 - 6"	6	11	4	**MT80511-743**	Price
4 - 6.5"	6	13	4	**MT80511-744**	Price
6.5 - 10	9.8	13	4	**MT80511-745**	Price

Fowler Bowers Electronic Bore Gages

Pistol Grip

- Larger easier to read swivel display
- USB connectivity
- Four preset memories
- Fixed anvils
- Resolution: .00005” / 0.001mm
- Trigger is adjustable for minimum over travel
- Tungsten carbide measuring faces on all 3 point heads .500” & up.
- Sizes over .500” (12.5mm) feature blind bore capability
- Setting rings included in all sets
- Includes UKAS certificates for all pistol grips, heads and rings



Size Range	Includes	Model No.	Order No.	Price
.80-.250"	5 heads, 1 handle, 3 rings	54-567-009-BT	**NA5554567009**	Price
1/4 - 3/8"	2 heads, 1 handle, 1 ring	54-567-010-BT	**NA5554567010**	Price
1/4 - 3/4" (6-20mm)	5 heads, 1 handle, 3 rings	54-567-620-BT	**NA5554567620**	Price
3/8 - 3/4"	3 heads, 1 handle, 2 rings	54-567-020-BT	**NA5554567020**	Price
3/4 - 2"	3 heads, 1 handle, 2 rings	54-567-050-BT	**NA5554567050**	Price
.750" - 4" (20-100mm)	6 heads, 1 handle, 4 rings	54-567-210-BT	**NA5554567210**	Price
2 - 4" (50-100mm)	3 heads, 1 handle, 2 rings	54-567-100-BT	**NA5554567100**	Price
4 - 6" (100-150mm)	2 heads, 1 handle, 1 ring	54-567-105-BT	**NA5554567105**	Price
4 - 8" (100-200mm)	4 heads, 1 handle, 2 rings	54-567-200-BT	**NA5554567200**	Price
6 - 8" (150-200mm)	2 heads, 1 handle, 1 ring	54-567-110-BT	**NA5554567110**	Price

FLEXBAR TRIGA-BORE 3 Point Bore Gaging System

For The Accurate and Precise Measurement of Internal Diameters

ORDERING INSTRUCTIONS

1. Choose handle by range TRIGA BORE[a] Pistol Grip Style Bore Gage Handles*

2. Choose correct gage head and master setting ring 3-Point Bore Gage Heads and Master Setting Ring

3.Corresponding master setting ring

4. ELECTRONIC INDICATOR Featuring .00005” (0.001mm) Resolution with ± .0001” Accuracy; Repeatability: 0.002mm/.001” ± 2s

Example for .500” bore, Handle: GG45-20308, Head: GG45-20314, Ring: GG45-21167, Indicator: MT80-543-456B

- Measuring Range: .236”/6mm to 7.87”/200mm
- Easy to use
- Self centering operation
- Interchangeable/economical heads



1. Triga Bore™ Pistol Grip Gage Handles +

Range	Order No.	Price
Accepts Heads .236 - .630" / 6 - 16mm	**GG4520308**	Price
Accepts Heads .630 - 7.874" / 16 - 200mm	**GG4520309**	Price

+ Accepts indicators with 3/8” or 8 mm diameters (bushing included). Operates with 1” travel indicators.

2. Triga Bore™ Bore Gage Head Only

Head Size	Head Accuracy	Order No.	Price
.236 - .315" / 6 - 8mm	.0001	**GG4520312**	Price
.315 - .394" / 8 - 10mm	.0001	**GG4520313**	Price
.394 - .511" / 10 - 13mm	.0015	**GG4520314**	Price
.511 - .630" / 13 - 16mm	.0015	**GG4520315**	Price
.630 - .787" / 16 - 20mm	.0015	**GG4520316**	Price
.787 - 1.023" / 20 - 26mm	.0015	**GG4520317**	Price
1.023 - 1.260" / 26 - 32mm	.0015	**GG4520318**	Price
1.260 - 1.575" / 32 - 40mm	.0015	**GG4520319**	Price
1.575 - 1.968" / 40 - 50mm	.0015	**GG4520320**	Price
1.968 - 2.362" / 50 - 60mm	.0015	**GG4520321**	Price
2.362 - 2.756" / 60 - 70mm	.0015	**GG4520322**	Price
2.756 - 3.150" / 70 - 80mm	.0015	**GG4520323**	Price
3.150 - 3.543" / 80 - 90mm	.0015	**GG4520324**	Price
3.543 - 3.937" / 90 - 100mm	.0015	**GG4520325**	Price

3. Triga Bore™ Master Setting Ring Bilateral Class Z Steel/For Trigabore Head

For Use With	Size	Order No.	Price
.236-.315" / 6-8mm	.2912	**GG4521162**	Price
.315-.394" / 8-10mm	.3437	**GG4521164**	Price
.394-.511" / 10-13mm	.4375	**GG4521167**	Price
.511-.630" / 13-16mm	.5025	**GG4521172**	Price
.630-.787" / 16-20mm	.7187	**GG4521177**	Price
.787-1.023" / 20-26mm	.9062	**GG4521185**	Price
1.023-1.260" / 26-32mm	1.0312	**GG4521191**	Price
1.260-1.575" / 32-40mm	1.4062	**GG4521205**	Price
1.575-1.968" / 40-50mm	1.7500	**GG4521450**	Price
1.968-2.362" / 50-60mm	2.1875	**GG4521451**	Price
2.362-2.756" / 60-70mm	2.5625	**GG4521452**	Price
2.756-3.150" / 70-80mm	2.9375	**GG4521453**	Price
3.150-3.543" / 80-90mm	3.3437	**GG4521454**	Price
3.543-3.937" / 90-100mm	3.7500	**GG4521455**	Price

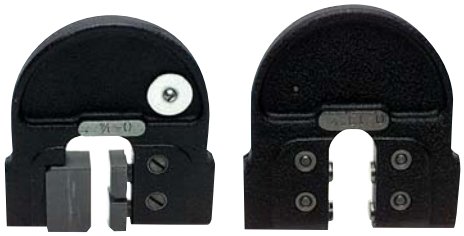
4. Mitutoyo Electronic Indicator

Order No.	Price
MT80543-476B	Price

Adjustable Limit Snap Gages

Larger Sizes Available

Model A and C supplied with round buttons as standard



Type - Model A		
Range (in.)	Order No.	Price
0 - 1/2	**NC501A**	Price
1/2 - 1	**NC502A**	Price
1 - 1-1/2	**NC503A**	Price
1-1/2 - 2	**NC504A**	Price
2 - 2-1/2	**NC505A**	Price
2-1/2 - 3	**NC506A**	Price
3 - 3-3/4	**NC507A**	Price
3-3/4 - 4-1/2	**NC508A**	Price
4-1/2 - 5-1/4	**NC509A**	Price
5-1/4 - 6	**NC5010A**	Price

Type - Model C		
Range (in.)	Order No.	Price
0 - 1/4	**NC501C**	Price
1/4 - 1/2	**NC502C**	Price
1/2 - 3/4	**NC502XC**	Price
3/4 - 1	**NC503C**	Price
1 - 1-1/4	**NC503XC**	Price
1-1/4 - 1-1/2	**NC504C**	Price
1-1/2 - 1-3/4	**NC504XC**	Price
1-3/4 - 2	**NC505C**	Price
2 - 2-1/4	**NC505XC**	Price
2-1/4 - 2-1/2	**NC506C**	Price
2-1/2 - 2-3/4	**NC506XC**	Price
2-3/4 - 3-1/16	**NC507C**	Price
3-1/16 - 3-7/16	**NC507XC**	Price
3-7/16 - 3-13/16	**NC508C**	Price
3-13/16 - 4-3/16	**NC508XC**	Price
4-3/16 - 4-9/16	**NC509C**	Price
4-9/16 - 4-15/16	**NC509XC**	Price
4-15/16 - 5-5/16	**NC5010C**	Price
5-5/16 - 5-11/16	**NC5010XC**	Price
5-11/16 - 6-1/8	**NC5011C**	Price
6-1/8 - 6-5/8	**NC5011XC**	Price
6-5/8 - 7-1/8	**NC5012C**	Price

U.S. Government Surplus Adjustable Snap Gages

- Top quality brands
- Shelf worn

Save Up to 75%



Range (in.)	Model C	
	Order No.	Price
4-3/16 - 4-9/16	**NC519C**	Price
5-11/16 - 6-1/8	**NC5111C**	Price
6-1/8 - 6-5/8	**NC5111XC**	Price
8-5/8 - 9-1/8	**NC5114C**	Price
10-5/8 - 11-1/8	**NC5116C**	Price

Fowler Snap Gages - Flat Anvils

Indicator Features:

- Dual reading inch/metric electronic indicator
- Resolution: .00005" / 0.001mm
- Preset with recall
- ABS/INC measurement
- Min/Max/TIR

This versatile electronic snap gages provides all the features of standard snap gages.

Special Features:

- Ranges available: 0-8"/0-200mm
- Adjustable anvil through 1"/25mm range
- Adjustable gaging pressure
- Lightweight, metalurgically stabilized aluminum frame
- .66" Square tungsten carbide anvils
- Within the 1/2" central square surface, anvils are parallel within: .00015" on sizes up to 4"/100mm, .0002" on sizes 4"/100mm to 8"/200mm



	Snap Gage Only		Snap Gage with Electronic Indicator	
Range (in./mm)	Order No.	Price	Order No.	Price
0 - 1 / 0 - 25mm	**NA5552666471†**	904.06	**NA5554666371**	Price
1 - 2 / 22 - 51mm	**NA5552666472†**	936.89	**NA5554666372**	Price
2 - 3 / 51 - 76mm	**NA5552666473†**	963.05	**NA5554666373**	Price
3 - 4 / 76 - 102mm	**NA5552666474†**	990.10	**NA5554666374**	Price
4 - 5 / 102 - 127mm	**NA5552666475†**	1,027.96	**NA5554666375**	Price
5 - 6 / 127 - 152mm	**NA5552666476†**	1,192.38	**NA5554666376**	Price
6 - 7 / 152 - 178mm	**NA5552666477†**	1,238.24	**NA5554666377**	Price
7 - 8 / 178 - 203mm	**NA5552666478†**	1,286.56	**NA5554666378**	Price

† See Dial Indicators for use with Snap Gages below

Fowler †Dial Indicators for use with Snap Gages

Graduation	Range	Dial Reading	Order No.	Price
.0001	.200	0-50-0	**NA5552540000**	Price
.0005	.500	0-25-0	**NA5552540001**	Price
0.002mm	2mm	0-10-0	**NA5552540004**	Price
0.01mm	5mm	0-50-0	**NA5552540003**	Price

Fowler Replacement Battery for Electronic Snap Gage

Description	Order No.	Price
Replacement Battery	**NA5554902110**	Price

Fowler XT Series Holemike Sets

- Graduations: .00025”
- 3-Pt contact with tungsten carbide measuring anvils above .5”
- Blind bore measuring above .5”
- Ratchet stop for consistent measuring
- Non-removeable anvils
- Extensions available for deep measuring
- Heads with special anvils available for threads, splines, slots, etc.
- Setting rings included
- Includes UKAS certificates for all holemikes and setting rings
- Every gage is individually serialized
- Special anvils available



Range	Includes	Order No.	Price
.08 - .120"	2 heads, 1 handle, 1 ring	**NA5552255365**	Price
.120 - .250"	3 heads, 1 handle, 2 rings	**NA5552255465**	Price
.250 - .375"	2 heads, 1 handle, 1 ring	**NA5552255565**	Price
.375 - .750"	3 heads, 1 handle, 2 rings	**NA5552255665**	Price
.750 - 2"	3 heads, 1 handle, 2 rings	**NA5552255775**	Price
2 - 4"	3 heads, 1 handle, 2 rings	**NA5552255885**	Price
4 - 6"	2 heads, 1 handle, 1 ring	**NA5552255890**	Price
6 - 8"	2 heads, 1 handle, 1 ring	**NA5552255900**	Price

Individual Gages also available

TESA | brown & sharpe Micromaster Intrimiks

- Easy-to-read accurate measurement of bore diameters



Range (in.)	Model No.	Order No.	Price
.138 - .158" / 3.5 - 4mm	599-290-28-1	**MV4527499**	Price
.158 - .178" /4 - 4.5mm	599-290-30-1	**MV4527500**	Price
.178 - .217" / 4.5 - 5.5mm	599-290-32-1	**MV4527501**	Price
.217 - .256" / 5.5 - 6.5mm	599-290-32-1	**MV4527502**	Price
.240 - .320" / 6 - 8mm	599-290-35-1	**MV4527503**	Price
.320 - .400" / 8 - 10mm	599-290-42-1	**MV4527504**	Price
.400 - .480"/ 10 - 12mm	599-290-50-1	**MV4527505**	Price
.430 - .550" / 11 - 14mm	599-290-60-1	**MV4527506**	Price
.550 - .670" / 14 - 17mm	599-290-70-1	**MV4527507**	Price
.670 - .790" / 17 - 20mm	599-290-80-1	**MV4527508**	Price
.790 - .990" / 20 - 25mm	599-290-100-1	**MV4527509**	Price
.990 - 1.18" / 25 - 30mm	599-290-120-1	**MV4527510**	Price
1.18 - 1.38" / 30 - 35mm	599-290-140-1	**MV4527511**	Price
1.38 - 1.58" / 35 - 40mm	599-290-160-1	**MV4527512**	Price
1.58 - 1.98" / 40 - 50mm	599-290-200-1	**MV4527513**	Price
1.98 - 2.36" / 50 - 60mm	599-290-240-1	**MV4527514**	Price

Mitutoyo Borematic with Absolute Encoder

Features:

- LCD readout .00005”/0.001mm
- Carbide tipped contact points
- Two measurement modes — ABS (absolute) and INC (incremental) modes
- Rotatable display SPC output
- Functions include: origin setting, origin restoration, zero-setting, pre-setting, data hold, error alarm, low-battery alarm, data output
- Power supply: SR44 (button-type silver oxide cell), 1 pc.
- Borematic display unit available use part number MT80568-015 to order



Set Measuring Range	Order No.	Price
.275 - .5"	**MT80568-928**	Price
.275 - 5"/ 6.985 - 12.7mm	**MT80568-979-10**	Price
1 - 2"	**MT80568-930**	Price
Display Unit	**MT80568-015**	Price

Complete with display unit, contact heads and setting rings.

Mitutoyo Digimatic Holtests

The Digimatic Holtest is a three-point internal micrometer with digital display (LCD).

- Functions include: zero-setting, preset, data hold, inch/mm conversion, error alarm, data output
- ABS (absolute) and INC (incremental) modes
- LCD Readout .00005” / 0.001mm
- Can be linked to the M-SPC (Mitutoyo Statistical Process Control) system
- Power: silver oxide cell battery (SR-44), offers 4,500 hours of life



Range	Order No.	Price
.275 -.35" / 6.925 - 8.89mm	**MT80468-261**	Price
.35 - .425" / 8.89 - 10.795mm	**MT80468-262**	Price
.5 - .65" / 12.7 - 16.51mm	**MT80468-264**	Price
.65 - 8" / 16.51 - 20.32mm	**MT80468-265**	Price
1 - 1.2 / 25.4 - 30.48mm	**MT80468-267**	Price
1.2 - 1.6" / 30.48 - 40.64mm	**MT80468-268**	Price
1.6 - 2" / 40.64 - 50.8mm	**MT80468-269**	Price

For SPC output order connecting cable 937387 (40”/1m) or 965013 (80”/2mm). Larger sizes and sets available.

Mitutoyo Mitutoyo SPC Connecting Cables

6 Pin Type, Round

Length (in./mm)	Order No.	Price
40" / 1m	**MT80937387**	Price
80" / 2m	**MT80965013**	Price

Starrett® Internal and External Chamfer Gages

- These gages directly measure the diameter of chamfered holes
- No setting master is necessary
- When the three-blade plunger is pressed against a flat surface, the gage should read the set number stamped on the back of the indicator
- In case of wear, the gage may be adjusted to read the proper number

Capacity (in.)	Angle (Degree)	Model No.	Order No.	Price
0 - 3/8	0-90 ID	683-1Z	**MV7063684**	Price
0 - 1/2	0-90 ID	683-2Z	**MV7063685**	Price
0 - 1	0-90 ID	683-3Z	**MV7063686**	Price
1 - 2	0-90 ID	683-4Z	**MV7063687**	Price
0 - 3/8	90-127 ID	684-1Z	**MV7063688**	Price
0 - 1/2	90-127 ID	684-2Z	**MV7063689**	Price
0 - 1	90-127 ID	684-3Z	**MV7063690**	Price
1 - 2	90-127 ID	684-4Z	**MV7063691**	Price
1/8 - 1/2	0-90 OD	685-1Z	**MV7063692**	Price
3/16 - 1	0-90 OD	685-2Z	**MV7063693**	Price
1 - 2	0-90 OD	685-3Z	**MV7063694**	Price
1/8 - 1/2	90-127 OD	686-1Z	**MV7063695**	Price
3/16 - 1	90-127 OD	686-2Z	**MV7063696**	Price
1 - 2	90-127 OD	686-3Z	**MV7063697**	Price



ID Style



OD Style

Starrett® Countersink Gages

- Gages are offered in three different angles so that the gage sets on the angular side of the countersink, as opposed to a chamfer gage which sets on the top edge of the chamfer
- With case

Capacity	Angle (Degree)	Model No.	Order No.	Price
.020 - .170	82	687-1Z	**MV7063698**	Price
.020 - .170	90	688-1Z	**MV7063702**	Price
.020 - .170	100	689-1Z	**MV7063706**	Price
.160 - .360	82	687-2Z	**MV7063699**	Price
.160 - .360	90	688-2Z	**MV7063703**	Price
.160 - .360	100	689-2Z	**MV7063707**	Price
.360 - .560	82	687-3Z	**MV7063700**	Price
.360 - .560	90	688-3Z	**MV7063704**	Price
.360 - .560	100	689-3Z	**MV7063708**	Price
.560 - .780	82	687-4Z	**MV7063701**	Price
.560 - .780	90	688-4Z	**MV7063705**	Price
.560 - .780	100	689-4Z	**MV7063709**	Price



Starrett® Hole Gages

- Fast, accurate, easy to read and have a balanced design for easy one hand operation
- The gage can be pressed down on a flat surface and checked so the size should read the same as the set number stamped on the back of the indicator
- Can also be checked and set with an optional "setting master"
- Includes case

Capacity (in.)	Model No.	Order No.	Price
.010 - .040	690-1Z	**MV7063710**	Price
.030 - .136	690-2Z	**MV7063711**	Price
.130 - .230	690-3Z	**MV7063712**	Price
.230 - .330	690-4Z	**MV7063713**	Price
.25 - 1.00mm	690M-1Z	**MV7063714**	Price
.75 - 3.30mm	690M-2Z	**MV7063715**	Price
3.30 - 5.85mm	690M-3Z	**MV7063716**	Price
5.85 - 8.35mm	690M-4Z	**MV7063717**	Price



Starrett® Check Gage Stand

For Chamfer, Countersink and Hole Gages

- Holds chamfer, countersink and hole gages
- Balanced design for easy one-hand operation

Order No.	Price
MV7063875	Price



BARCOR Mechanical Chamfer Gages



- A precision instrument designed specifically to measure the top (major) diameter of a chamfer, countersink, center drill, or tapered hole.
- Merely press the spring loaded, conically ground, precision 3-blade gaging plunger into the chamfer or countersink and instantly read the dial in .001" or 0.01mm/0.02mm diameter increments
- Also a direct reading gage -no setting master (standard) or look-up chart is required
- To "Zero" the gage or check the setting, press the base of the gage against any flat ground surface and adjust the dial to read the "Set To" number stamped on the back
- Guaranteed accuracy: within ± .001" in 0°–90° models / within ± .002" in 90°–127° models

	127 ID		127 OD		90 ID		90 OD	
Capacity (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
0 - 3/8	**MX550127**	Price	**MX550127E**	Price	**MX550090**	Price	**MX550090E**	Price
0 - 1/2	**MX555127**	Price	**MX555127E**	Price	**MX555090**	Price	**MX555090E**	Price
0 - 1	**MX551127**	Price	**MX551127E**	Price	**MX551090**	Price	**MX551090E**	Price
1 - 2	**MX552127**	Price	**MX552127E**	Price	**MX552090**	Price	**MX552090E**	Price

BARCOR Electronic Chamfer Gages



- Like BARCOR's well-known mechanical counterpart, the electronic CHAMFER GAGE requires no setting master (standard) or look up chart
- To "Zero" or "Set" the gage, just press the base against any flat ground surface and rotate the bezel to the "Set To" number stamped on the back
- Equipped with rechargeable long life batteries, the gage may also be powered continuously through its 110 VAC adapter/ battery charger or directly from a printer, PC, data collector, etc

	127 ID		127 OD		90 ID		90 OD	
Capacity (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
0 - 3/8	**MX550127EL**	Price	**MX550127EEL**	Price	**MX550090EL**	Price	**MX550090EEL**	Price
0 - 1/2	**MX555127EL**	Price	**MX555127EEL**	Price	**MX555090EL**	Price	**MX555090EEL**	Price
0 - 1	**MX551127EL**	Price	**MX551127EEL**	Price	**MX551090EL**	Price	**MX551090EEL**	Price
1 - 2	**MX552127EL**	Price	**MX552127EEL**	Price	**MX552090EL**	Price	**MX552090EEL**	Price

BARCOR Countersink Gages



- A precision instrument designed specifically to measure the top (major) countersink diameter
- Merely press the spring loaded, exact angle gaging plunger into the countersink and read the dial directly in .002" or 0.05mm diameter increments on the dial face
- Also a direct reading gage - it reads the dimension as called out on your print
- This gage gives you fact, accurate, and repeatable readings on the shop floor or in the gage room
- Virtually foolproof, even the inexperienced can use the countersink gage with reliable results
- Guaranteed accuracy: ± .0005" or ± .015mm

Countersink Angle	Capacity (in.)	Order No.	Price
82	.020 - .170	**MX55820**	Price
82	.160 - .360	**MX55821**	Price
82	.360 - .560	**MX55822**	Price
82	.560 - .780	**MX55823**	Price
82	.780 - .980	**MX55824**	Price
82	.980 - 1.180	**MX55825**	Price
90	.020 - .170	**MX55900**	Price

Countersink Angle	Capacity (in.)	Order No.	Price
90	.160 - .360	**MX55901**	Price
90	.360 - .560	**MX55902**	Price
90	.560 - .780	**MX55903**	Price
90	.780 - .980	**MX55904**	Price
90	.980 - 1.180	**MX55905**	Price
100	.020 - .170	**MX551000**	Price
100	.160 - .360	**MX551001**	Price
100	.360 - .560	**MX551002**	Price
100	.560 - .780	**MX551003**	Price
100	.780 - .980	**MX551004**	Price
100	.980 - 1.180	**MX551005**	Price
110	.020 - .170	**MX551100**	Price
110	.160 - .360	**MX551101**	Price
110	.360 - .560	**MX551102**	Price
110	.560 - .780	**MX551103**	Price
110	.780 - .980	**MX551104**	Price
110	.980 - 1.180	**MX551105**	Price
120	.020 - .170	**MX551200**	Price
120	.160 - .360	**MX551201**	Price
120	.360 - .560	**MX551202**	Price
120	.560 - .780	**MX551203**	Price
120	.780 - .980	**MX551204**	Price

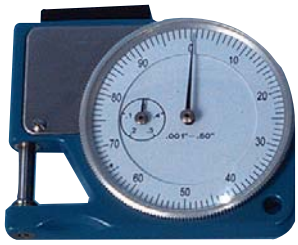
BARCOR Hole Gages

- A precision instrument designed to give you a diameter reading in less than two seconds
- Merely insert the precision ground, hardened tool steel gaging plunger into the hole, press the base of the gage firmly against the part and read the dial directly in .001" or 0.02mm diameter increments on the dial face
- Guaranteed accuracy: ±.00025"



Capacity (in.)	Order No.	Price
.010 to .040	**MX55040**	Price
.030 to .130	**MX55130**	Price
.130 to .230	**MX55230**	Price
.230 to .330	**MX55330**	Price
.330 to .430	**MX55430**	Price
.430 to .530	**MX55530**	Price
.530 to .630	**MX55630**	Price
.630 to .730	**MX55730**	Price
.730 to .830	**MX55830**	Price
.830 to .930	**MX55930**	Price
.930 to 1.030	**MX551030**	Price

PROCHECK Pocket Dial Thickness Gages



Range	Dial Reading	Graduation	Throat Depth	Order No.	Price
0 - .500"	0-100	.001"	1/2"	**NB60DTG2**	Price
0 - 10mm	0-100	0.01mm	13mm	**PC21DTG10MM**	Price

PROCHECK Dial Thickness Gage

- Main body machined from aluminum
- Easy lift handle
- Measuring faces lapped and polished



Range	Graduation	Order No.	Price
0 - .050	.0001	**PC21DTG05**	Price

PROCHECK Electronic Thickness Gage

- Convenient "Snap Action" instruments with LCD readout
- By pressing down and releasing the thumb lever these gages allow quick and efficient checking of workpiece thickness up to .5"(12.7mm)
- 7 Keys Includes: TOL, SET, ABS, RANGE, in/mm, DIR, ZERO/ON/OFF.
- Range: 0-.5"/0-12.7mm
- Display: 7-Digit LCD with [-] sign .000"/0.01mm



Order No.	Price
PC20ETG05	Price

Fowler Dial Thickness Gages

- Ceramic anvils
- Direct reading 0-100 (with revolution center) on easy-to-read dial
- Frame is hammertone baked enamel
- Microfine graduations for .001" or .01mm minimum reading
- Spindle of hardened stainless steel
- Features a thumb release mechanism
- Includes case

Range (in.)	Dial Reading	Graduation (in.)	Throat Depth (in.)	Order No.	Price
0 - .500	0-50	.005	.500	**NA5552545777**	Price
0 - .500	0-100	.001	1	**NA5552550005**	Price
0 - .500	0-100	.001	4.75	**NA5552550010**	Price
0 - .500	0-100	.001	.500	**NA5552545000**	Price

Starrett Indicator Pocket Gages

- 3/8" Range, 5/16" to 1/2" throat depth
- Revolution counter

MADE IN THE USA



Graduation	Dial Reading	Order No.	Price
.0005	0-50	**MV7053115**	Price
.001	0-100	**MV7056067†**	378.00
.001	0-100	**MV7053114**	Price
.01mm	0-100	**MV7053116**	Price

†Rounded contacts

CDI CHICAGO Portable Thickness Gages

- Specifically designed for hand use
- Electronic indicator resolution .0005"
- Lifting levers are supplied on all indicators

MADE IN THE USA



Range	Throat Depth (in.)	Anvil (in.)	Contact Point (in.)	Order No.	Price
0 - .500	2	1" Dia. Flat	3/16 Dia. Radius	**MV65DG1010**	Price
0 - 1"	6	1" Dia. Flat	3/16 Dia. Radius	**MV65DG109**	Price

Mitutoyo Dial Thickness Gages

- Quick and efficient means of inspection with their convenient grip handle
- Thumb trigger
- Sping loaded spindle



Range	Dial Reading	Graduation	Throat Depth	Order No.	Price
0 - .050	0-10	.0001	1-1/8	**MT807326S**	Price
0 - .1/2	0-100	.001	30mm	**MT807300S**	Price
0 - 1	0-100	.001	30mm	**MT807304S**	Price
0 - 1	0-100	.001	30mm	**MT807322S**	Price
0 - 10mm	0-100	.01mm	25mm	**MT807301**	Price



NA5552545000



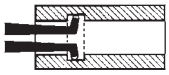
NA5552550005



NA5552545777

PROCHECK Internal Dial Caliper Gages

- 001” Graduation
- For checking internal bores, recess diameters, etc
- Each instrument has a movement of 1”
- Can be set with a micrometer or ring gage
- Dial face diameter 2”
- Bezel rotates for zero setting
- Arms automatically open when button is released
- Length of arm 3-1/4”
- Carbide measuring points
- Made to precision tolerances





Range (in.)	Order No.	Price
.375 - 1.375	**NB45IC37**	Price
.750 - 1.750	**NB45IC75**	Price
1.125 - 2.125	**NB45IC112**	Price
1.500 - 2.500	**NB45IC150**	Price
1.875 - 2.875	**NB45IC187**	Price
2.250 - 3.250	**NB45IC225**	Price
2.875 - 3.875	**NB45IC287**	Price
3.250 - 4.250	**NB45IC325**	Price
3.625 - 4.625	**NB45IC362**	Price
4.000 - 5.000	**NB45IC400**	Price

PROCHECK External Dial Caliper Gages

- .001” Graduation
- Each instrument has a movement of 1”
- Can be set with a micrometer or ring gage
- Dial face diameter 2”
- Bezel rotates for zero setting
- Arms automatically open when button is released
- Length of arm 3-1/4”
- Carbide measuring points
- Made to precision tolerances



Range (in.)	Order No.	Price
0 - 1	**NB45EC01**	Price
.375 - 1.375	**NB45EC37**	Price
.750 - 1.750	**NB45EC75**	Price
1.125 - 2.125	**NB45EC112**	Price
1.500 - 2.500	**NB45EC150**	Price
1.875 - 2.875	**NB45EC187**	Price
2.250 - 3.250	**NB45EC225**	Price
2.875 - 3.875	**NB45EC287**	Price
3.250 - 4.250	**NB45EC325**	Price
3.625 - 4.625	**NB45EC362**	Price

Fowler Internal Caliper Gages

- Easy to hold
- RS232 output
- Rugged housing
- Large LCD display
- Resolution: .0005”/0.01mm
- Accuracy ± .0008”/±0.02mm
- Preset capability
- Direct inch/metric conversion
- Absolute/incremental measurements
- High-impact, aircraft aluminum case



Range (in./mm)	Order No.	Price
.200 - .590 / 5 - 15mm	**NA5554554611**	Price
.200 - 1 / 5 - 25mm	**NA5554554622**	Price
.400 - 1.2 / 10 - 30mm	**NA5554554623**	Price
.790 - 1.6 / 20 - 40mm	**NA5554554624**	Price
1.2 - 2 / 30 - 50mm	**NA5554554625**	Price
Computer Connect Kit	**NA5554115777**	Price

Fowler External Caliper Gages

- Easy to hold
- RS232 output
- Rugged housing
- Large LCD display
- Resolution: .0005”/0.01mm
- Accuracy ± .0008”/±0.02mm
- Preset capability
- Direct inch/metric conversion
- Absolute/incremental measurements
- High-impact, aircraft aluminum case



Range (in./mm)	Order No.	Price
0 - .400 / 0 - 10mm	**NA5554554711**	Price
0 - .790 / 0 - 20mm	**NA5554554722**	Price
.400 - 1.2 / 10 - 30mm	**NA5554554723**	Price
.790 - 1.6 / 20 - 40mm	**NA5554554724**	Price
1.2 - 2 / 30 - 50mm	**NA5554554725**	Price
Computer Connect Kit	**NA5554115777**	Price

Fowler Internal & External Electronic Caliper Gages

XTRA-VALUE

- Robust housing
- Large LCD display
- Reading: .01”/ 0.1mm / 64ths
- Accuracy: .01”/ 0.1mm / 64ths
- Spring loaded with locking nut
- Battery: CR2032 (included)





Style	Total Opening Range	Order No.	Price
Inside Caliper	.5 - 6 / 150mm	**NA5554554730**	Price
Outside Caliper	0 - 6 / 150mm	**NA5554554630**	Price

HC & HD Series Counting Scales

Features:

- Disables all key functions except (On/Off) (Zero) (Tare) (Sample) (Enter/M+PRT) for error-free use
- Automatic Counting Accuracy Improvement (ACAI) feature for excellent counting accuracy
- Automatic power off to conserve battery life
- Weighing units LB and KG
- Large easy-to-read wide angle LCD displays
- 120V AC Adapter (TB163) included
- **5 Year WarrantyFeatures:**



Style - HC Series				
English Cap./Res.	Metric Cap./Res.	Pan Size	Order No.	Price
15 lbs x .002 lbs	6 kg x .001 kg	8.3 x 11.8	**RH55HC6KI**	Price
30 lbs x .005 lbs	15 kg x .002 kg	8.3 x 11.8	**RH55HC15KI**	Price

Style - HD Series				
English Cap./Res.	Metric Cap./Res.	Pan Size	Order No.	Price
30 lbs x .005 lbs	12 kg x 2g	11.8 x 15	**RH55HD12KB**	Price
60 lbs x .01 lbs	30 kg x 5g	11.8 x 15	**RH55HD30KB**	Price

Style - Rechargeable Battery Pack		
English Cap./Res.	Order No.	Price
Rechargeable Battery Pack for all HC Series Scales	**RH55HC06I**	Price
Rechargeable Battery Pack for all HD Series Scales	**RH55AD1681**	Price

FG Series Bench Scales

Features:

- Robust construction, large LCD
- Battery or AC adapter operation
- Moisture protected load cell
- Display head tilts on the optional column
- Stainless steel weighing pan
- Wide range of options & accessories available including high resolution & carrying handle
- Pan size: 11.8 x 15”



Capacity/Resolution	Order No.	Price
60 lbs x .02 lbs	**RH55FG30K**	Price
150 lbs x .05 lbs	**RH55FG60K**	Price
300 lbs x .1 lbs	**RH55FG150K**	Price
400 lbs x .1 lbs	**RH55FG200K**	Price

EK-I & EW-I Series Portable Lab Balances

Features:

- Multiple weighing units (g, oz, lb, ozt, dwt, ct, mm, and gn)
- Percentage and counting mode
- 8 Built-in weighing units plus counting and percentage
- 120V AC Adapter (TB102) included



Pan Size	Capacity/Resolution	Order No.	Price
4.3 diameter	30 / 60 / 150g x .01 / .02 / .05g	**RH55EW150I**	Price
5.2 x 6.7	300 / 600 / 1500g x .1 / .2 / .5g	**RH55EW1500I**	Price

Pocket Scales

Features:

- Multiple weighing units (g, oz, dwt, ozt)
- Standard calibration weights
- Simple operation
- Auto power off
- Operates on 2 AAA batteries
- 3-1/4″ × 3″ Pan size
- Vinyl carrying case



English Cap./Res.	Metric Cap./Res.	Order No.	Price
3.5 oz x .005 oz	100g x .1g	**RH55PV100**	Price
7 oz x .005 oz	200g x .1g	**RH55PV200**	Price
16 oz x .005 oz	500g x .1g	**RH55PV500**	Price

GX Series Toploader Balances

Features:

- Super hybrid sensor technology
- Internal calibration, standard WinCT
- Mulitiple weighing units
- Data memory function
- Auto environmental adjustment
- Clear VFD display
- GLP/LIMS/ISO compliance
- RS-232C standard interface



Capacity/Resolution	Order No.	Price
210g x .001g	**RH55GX200**	Price
410g x .001g	**RH55GX400**	Price
610g x .001g	**RH55GX600**	Price
2100g x .01g	**RH55GX2000**	Price
4100g x .01g	**RH55GX4000**	Price
6100g x .1g	**RH55GX6000**	Price
8100g x .1g	**RH55GX8000**	Price

Starrett® DFG Digital Force Gages



- Can be used as a handheld force gage for basic applications or with a FMM Digital Force Tester, or MTL and MTH Manual Testers
- Real Time
- Peak Tension Testing
- Peak Compression Testing

Model No.	Force Capacity (Resolution/Newtons)	Force Capacity (Resolution/Kilograms)	Force Capacity (Resolution/Pounds)	Thread Size	Style	Order No.	Price
DFG-10	50	5	10	M6 x 1-6g	Gauge, Handheld	**MV7073129**	Price
DFG-100	500	50	110	M6 x 1-6g	Gauge, Handheld	**MV7073130**	Price
DFG-20	100	10	20	M6 x 1-6g	Gauge, Handheld	**MV7073131**	Price
DFG-200	1000	100	225	M6 x 1-6g	Gauge, Handheld	**MV7073132**	Price
DFG-50	250	25	50	M6 x 1-6g	Gauge, Handheld	**MV7073133**	Price
DFG-500	2500	250	550	M10 x 1.5-6g	Gauge, Handheld	**MV7073134**	Price

Starrett® Digital Force Gage - Series DFC



- Can be used as a handheld instrument for basic applications or as a force sensor when used with a FMM Digital Force Tester, MTL and MTH Manual Tester
- Limited Testing
- Load Average Testing
- Time Average Testing
- Cyclic Count Testing
- Cyclic Duration Testing
- Constant Hold Testing

Model No.	Force Capacity (Resolution/Newtons)	Force Capacity (Resolution/Kilograms)	Force Cap. (Resolution/Pounds)	Thread Size	Style	Order No.	Price
DFC-10	50	5	10	M6 x 1-6g	Gauge, Handheld	**MV7073121**	Price
DFC-100	500	50	110	M6 x 1-6g	Gauge, Handheld	**MV7073122**	Price
DFC-2	10	1	2	M6 x 1-6g	Gauge, Handheld	**MV7073123**	Price
DFC-20	100	10	20	M6 x 1-6g	Gauge, Handheld	**MV7073124**	Price
DFC-200	1000	100	225	M6 x 1-6g	Gauge, Handheld	**MV7073125**	Price
DFC-5	25	2	5	M6 x 1-6g	Gauge, Handheld	**MV7073126**	Price
DFC-50	250	25	50	M6 x 1-6g	Gauge, Handheld	**MV7073127**	Price
DFC-500	2500	250	550	M10 x 1.5-6g	Gauge, Handheld	**MV7073128**	Price

Starrett® MTH-550 Manual Tester





- The MTH has a load measurement capacity of 550lbf (2500N, 250kgf)
- Force measurement is performed using a Starrett digital force gage
- The MTH-550 is an ideal, affordable solution for spring testing; Fit the MTH-550 with a digital force gage and optional digital scale to determine spring rates, intital tension and more

Features:

- Tension or Compression Testing
- Excellent for Cost-Effective Spring Testing
- Effortless Crosshead Movement
- Precision Worm Gear Design
- Excellent Position Resoluton: Single Rotation for 0.03" (0.75mm)
- 30" (762mm) Column Height, 15" (380mm) Working Area
- Adjustable Gage Mounting

Model No.	Thread Size	Style	Type	Order No.	Price
MTH-550	M10 x 1.5-5H	Stands, Manual, Handwheel	Test Frame	**MV7073147**	Price
MTH-SCALE	-	Accessories, Force	Digital Scale Assembly	**MV7073451**	Price
MTH-550	-	Accessories, Force	Adapter Kit	**MV7073453**	Price

Starrett® MTL-110 Manual Tester





- The MTL-110 can measure force up to 110lbf (500N, 50kgf)
- Ideal for component testing
- Options include a digital scale for measuring deflection distance
- The base adapter adjusts to accommodate different gage models

Features:

- Compact design is ideal for Lean Manufacturing Environments
- Lever-type, Quick-action Crosshead Movement
- Precision Rack and Pinion
- Excellent Position Resolution: Single Rotation for 3" (76mm)
- Adjustable Gage Mounting

Model No.	Force Capacity (Resolution/Newtons)	Force Capacity (Resolution/Kilograms)	Force Capacity (Resolution/Pounds)	Thread Style	Style	Type	Order No.	Price
MTL-110	500	50	110	-	Stands, Manual, Lever	Test Frame	**MV7073148**	Price
MTL-SCALE	-	-	-	-	Accessories, Force	Digital Scale Assembly	**MV7073450**	Price
MTL-110	-	-	-	-	Accessories, Force	Adapter Kit	**MV7073452**	Price

Starrett® MTL-330 Manual Tester

- The MTL-330 can measure force up to 330lbf (1500N, 150kgf)
- Ideal for tensile and compression testing applications and spring testing
- Optional digital scale can determine spring rates, initial tension and more
- Easily mounted to your workbench for secure testing
- Optional gage adapter kits are available for use with Non-Starrett force gages

Features:

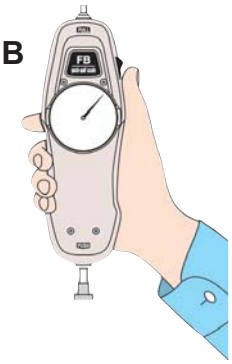
- Compact design is ideal for Lean Manufacturing Environments
- Lever-type, Quick-action Crosshead Movement
- Precision Rack and Pinion
- Excellent Position Resolution: Single Rotation for 3" (76mm)
- Adjustable Gage Mounting



Model No.	Force Capacity (Resolution/Newtons)	Force Capacity (Resolution/Kilograms)	Force Capacity (Resolution/Pounds)	Thread Size	Style	Type	Order No.	Price
MTL-330	1500	150	330	M6	Stands, Manual, Lever	Test Frame	**MV7073149**	Price
MTL-SCALE330	-	-	-	-	Accessories, Force	Digital Scale Assembly	**MV7073716**	Price

Mechanical Force Gage - Series FB

- FB Ranges (Resolution) Accuracy: FB ±0.3% F.S
- Ergonomic, heavy-duty metal case
- 165 lbf Overload capacity
- Real time and peak mode
- Tare ring
- No batteries needed
- Mountable to test fixtures
- Intrinsically safe
- Carrying case and standard attachments included



Capacity (Resolution/ Pounds)	Order No.	Price
5 lbf (.05 lbf)	**NA43FB5**	Price
50 lbf (.2 lbf)	**NA43FB50**	Price
100 lbf (1 lbf)	**NA43FB100**	Price
150 lbf (1 lbf)	**NA43FB150**	Price

Capacity (Resolution/ Kilograms)	Order No.	Price
1 kgf (10gf)	**NA43FB1KG**	Price
50 kgf (500 gf)	**NA43FB50KG**	Price

Capacity (Resolution/ Newtons)	Order No.	Price
20 N (.2 N)	**NA43FB20N**	Price
300 N (2.5 N)	**NA43FB300N**	Price

NOTE: Reverse display units available (for use on vertical test stands, for tension applications)

High Capacity Mechanical Force Gage - Series ESH

- Capacity up to 500 lbs
- Rugged design for heavy usage
- Heavy-duty metal construction
- 135% Overload capacity
- Tare ring
- Real time and peak mode
- Mountable to test fixtures
- Carrying case and standard accessories Included (as shown)

ESH Ranges (Resolution) Accuracy: ESH ±0.5% F.S




Capacity (Resolution/Pounds)	Order No.	Price
200 lbf (2 lbf)	**NA43ESH200**	Price
300 lbf (2.5 lbf)	**NA43ESH300**	Price
400 lbf (4 lbf)	**NA43ESH400**	Price
500 lbf (5 lbf)	**NA43ESH500**	Price

NOTE: Reverse display units available (for use on vertical test stands, for tension applications)

Vertical Lever Stand

- Standard compression model easily converted to tension
- Optional distance meter
- Operates with a single downward lever stroke
- Maximum load 220 lbs
- Stroke 4”
- Maximum clearance 5” (10” with optional AP003 extender plate)



Description	Order No.	Price
Vertical Compression Stand for Force Gauges	**NA43LV220C**	Price
Vertical Compression Stand with Distance Meter for Force Gauges	**NA43LV220SC**	Price
Vertical Tension Stand for Force Gauges	**NA43LV220T**	Price
Vertical Tension Stand with Distance Meter for Force Gauges	**NA43LV220ST**	Price

Digital Force Gage with Outputs - Series DS2 Series DS2

DS2 Ranges (Resolution)

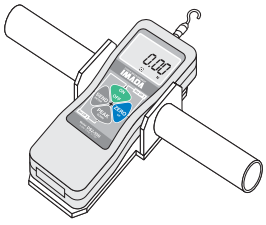
- Accuracy: ±0.2% F.S. ±1 LSD
- Ergonomic, durable, heavy-duty metal construction
- Push-button selectable lbf, kgf, and Newton units
- RS-232C, Digimatic and analog outputs
- Programmable high/low setpoints with LCD indicators
- Overload capacity 200% F.S.
- Overload alarm, display flashes at overload limit
- Low battery icon
- Runs on internal NI-MH batteries or AC adapter
- Selectable real time or peak mode operation
- Push-button tare function
- Reversible display
- Set of 6 attachments, AC charger/adapter and carrying case

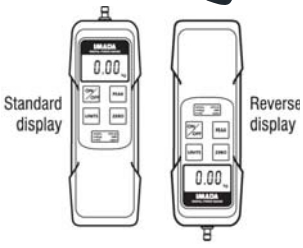
Capacity (Resolution) Pounds (Ounces)	Capacity (Resolution) Kilograms (Grams)	Capacity (Resolution) Model Newtons	Order No.	Price
7.0 ozf (.01 ozf)	200.0 gf (.1 gf)	2.000 N (.001 N)	**NA43DPS05**	Price
18.0 ozf (.01 ozf)	500.0 gf (.1 gf)	5.000 N (.001 N)	**NA43DPS1**	Price
4.400 lbf (.001 lbf)	2.0 kgf (.001 kgf)	20.00 N (.01 N)	**NA43DPS4**	Price
11.00 lbf (.01 lbf)	5 kgf (.001 kgf)	50.00 N (.01 N)	**NA43DPS11**	Price
44.00 lbf (.01 lbf)	20 kgf (.01 kgf)	200.0 N (.1 N)	**NA43DPS44**	Price
110.0 lbf (.1 lbf)	50 kgf (.01 kgf)	500.0 N (0.1 N)	**NA43DPS110**	Price
220.0 lbf (.1 lbf)	100.0 kgf (.1 kgf)	1000.0 N (1 N)	**NA43DPS220**	Price

Note: Use an "R" suffix for reverse display units (for use on vertical test stands)







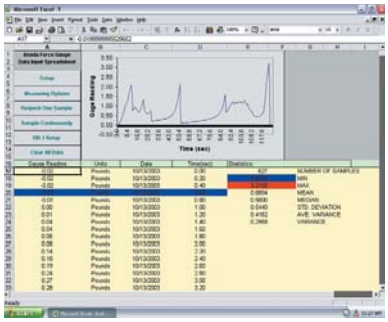


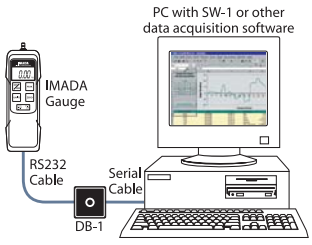
Data Acquisition Software

Use SW-1 to capture and display the current value and calculate max/min, average, and standard deviation. Use buttons on the spreadsheet to operate the gauge from your computer.
The optional DB-1 data button works with SW-1 software to further automate data acquisition. Enter peak measurements into the spreadsheet and 'zero' the gauge with just a touch of the button. Save unnecessary time at the computer and gauge for more efficient testing.

- Full SPC and graphing capabilities
- Designed for Imada Gauges
- Automates your data collection
- PC with SW-1 or other data acquistion software



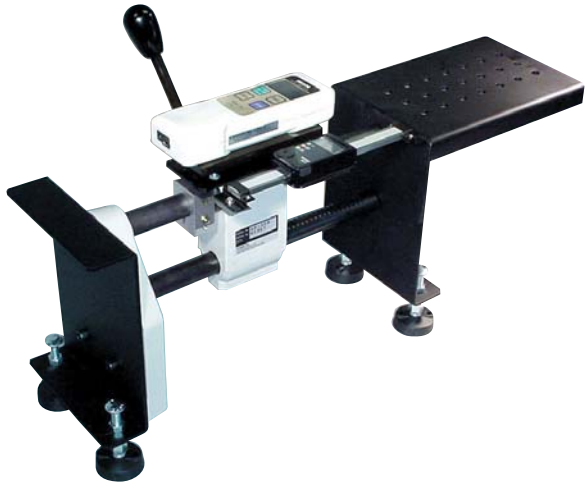




Description	Order No.	Price
SW-1 Data Acquisition Software	**NA43SW1**	Price

Horizontal Lever Stand

- Both tension and compression testing
- Optional distance meter
- Stroke 4"
- Maximum load 220 lbs
- Lever action allows rapid testing
- Large work area accommodates a wide variety of samples



Description	Order No.	Price
Horizontal Lever Stand with Distance Meter for Force Gauges	**NA43LH220S**	Price

PROCHECK Rockwell Type Hardness Tester
with Automatic Weight Selection

Standard Accessories:
- 5-3/4″ Testing table
- 2-3/16″ Testing table
- 2-3/16″ Testing table with “V” groove
- 120° Diamond penetrator
- 1/16″ Steel ball penetrator
- Rockwell A test block (1 pc.)
- Rockwell B test blocks (2 pcs.)
- Rockwell C test blocks (3 pcs.)
- Screwdrivers (2 pcs.)
- Complete instruction manual
- Dustproof plastic cover
- Maximum load (kgf): 150
- Load range (kgf): 60, 100, 150
- Initial range load: 10
- Maximum test height: 4-1/4″
- Depth of throat: 5-1/4″
- Below base: 2″
- Size of base: 7″ × 18″
- Machine height: 24-1/2″
- Approximate net weight: 150 lbs

Order No.	Price
NR50900330	Price



PROCHECK 3-R Hardness Tester
Equal in Quality to Finest Testers Made

Complete list of accessories included:
- Diamond penetrator
- 1/16″ Ball penetrator 10 replacement balls for same
- 3 Anvils; 1 large V-block anvil, 1 small V-block anvil, 1 flat anvil
- 2 Hardness test pieces. 1 each scale “B” and “C”
- 3 Weights (60-50-40kg)
- Dust cover
- Storage case for accessories
- Test height: 8″
- Depth from center to column: 5-11/16″
- Overall height: 24″
- Length: 17-1/2″
- Width: 8″
- Weight: 240 lbs



Order No.	Price
NR50PCHT3	Price

Accessories for Rockwell Type Hardness Testers

Description	Order No.	Price
“B” Scale Testing Block	NR60RTBB†	Price
“C” Scale Testing Block	NR60RTBC†	Price
1/16" Steel Ball	NR60BP116	Price

Description	Order No.	Price
1/8" Steel Ball	NR60BP118	Price
Diamond Tip	NR60EPDN	Price

† Must specify hardness at time of order.

Hardness Coversion Charts

Hardness Tester Information

Hardness Tester Set Up

Make sure all surfaces are free of dust and oil. Wipe penetrator, spindle mount, anvil surface, anvil base and mount, test piece and items to be tested with clean lint free cloth to insure good contact on all surfaces.

Selecting the type of test to perform, penetrator and weight setting used

A scale: Used for testing hardness of metals such as tungsten carbide alloy, etc. over 70 Rockwell hardness on the C scale. Also to be used when testing hard sheet materials and surface quenched (case hardened) materials. Use diamond penetrator and set weight selector to 60kg.

B scale: Used for testing hardness of softer or mild hardened metals and unquenched steel part. : Use 1/16” steel ball penetrator and set weight selector to 100kg.

C scale: Used for testing hardness of heat-treated steel parts. Use diamond penetrator and set weight selector to 150kg.

Seating the penetrator to eliminate clearance between the penetrator and the mounting spindle.
- Seating procedure: Place the penetrator in the spindle and turn mounting screw slightly to hold penetrator in place. DO NOT TIGHTEN AT THIS TIME
- Place on flat anvil and appropriate test block to correspond with penetrator and the scale test to be preformed (A, B or C)
- Pull front load lever forward to apply test weight (Load)
- In the load position tighten the screw to hold penetrator firmly
- Swing back lever to lock position (unload) to release test weight

Checking Hardness Tester Calibration

Price	The repeatability of the testblock readings shall be not greater than:
Rockwell C Scale:	
Price	0.5
Below 60	1.0
Rockwell B Scale:	
Price	1.0
Below 45 to 1.5, inclusive	1.5
Rockwell A Scale:	
Price	0.5
Below 80 to 60.5, inclusive	1.0
Rockwell 30 N Scale:	
Price	0.7
Below 77.5 to 41.5, inclusive	1.0
Rockwell 30 T C Scale:	
Price	1.0
Below 46.2 to 15.0, inclusive	1.5

If a tester is in constant use, checking the tester with test blocks should done daily to see if tester is out of calibration or if the penetrator is damaged.

If used throughout a given scale, the recommended practice is to check it at the high, low and middle range of this scale. For example C scale: the tester should be checked at C63, C45 and C25.

If only one or two ranges are used, test blocks should be chosen which fall within ±5 hardness numbers on any scale using the diamond penetrator and ±10 numbers on any scale using the ball penetrator.

Running a minimum of 5 tests, the average must fall within the tolerances indicated on the block for the tester to be considered in calibration. In addition, the difference between the highest and lowest reading on the 5 tests must not be greater than the value specified in table shown for the hardness range of the test block. If the average of the five readings is outside of test block limits, the recommended practice is to clean and examine the tester according to the instruction manual. Before assuming that the tester is the prime cause of readings outside of test block limits, replace the ball in the ball penetrator or examine the diamond point of the diamond penetrator. Replace the penetrator if it is damaged.

Spacing of indentations on the test block is also important. The same rule applies as when testing any material: the distance from center to center of indentations must be at least three diameters. The readings, usually higher, from any indentations spaced too closely together should be disregarded.

INSIZE Manual Rockwell Hardness Tester



- Hardness scale: HRA, HRB, HRC, HRD, HRF, HRG
- Preliminary test force 98N/10kgf
- Test force: 588N/60kgf, 980N/100kgf, 1471N/150kgf
- Display analogue
- Stage elevation manual
- Load control manual
- Min. reading 0.5HR
- Results Dipslay: HLD
- Size: 25.59” L x 17.13” W x 35.63” H
- Weight: 231 lbs

Order No.	Price
SZ20ISHR150	Price

Starrett Twin Analog Bench Hardness Tester

Model 3815



- Direct analog dial reading
- Advanced design provides Rockwll and Rockwell Superficial testing
- Engineered to provide sensitive and accurate readings
- Conforms to ASTM E-18
- Tests Rockwell scales A, B, C, D E, F G H, K, L, M
- Tests Superficial Rockwell Scales: HR15N, HR15T, HR30N, HR30T, HR45N, HR45T
- Includes a diamond conical indentor, 1/16” ball indentor, HRC, HRB, HR15N, HR30N, and HR45T test blocks, 5.87” (150mm) test table, 2.5: (63mm) flat anvil, standard vee anvil, accessory case and dust cover

Order No.	Price
MV7012800	Price

Starrett 3814 Analog Hardness Tester



Analog Features:
- Ability to handle Rockwell Scales A through H and K
- Stable cast iron construction
- Ideal basic hardness testing for many typical applications
- Test force control - hydraulic dashpot system
- Results display - analog - dial gage
- 30”H x 8.5”W x 20”D
- Economically priced

Digital Features:
- Automated routines reduce operator involvement and speed measurement
- LED panel displays proper load setting
- Programmable scale conversions, dwell times and tester counter
- Sample averaging is automatically calculated
- RS-232C output
- Test force control - motoized
- Results display - digital readout
- 28”H x 8.9”W x 19.6” D
- Convenient mini printer for outputting readings

Technical Specifications:
- Minor load - 10Kgf
- Major load - A:60Kgf, B:100Kgf, C:150Kgf
- Test force application - (Dead weight applies test force)
- Throat depth - 6.6” (168mm)
- Maximum test height - 6.69” (169.9mm)
- Unit weight - 187 lbs (85kg)

Results Display	Order No.	Price
Analog - Dial Gage	**MV7067754**	Price

GENERAL Hardness Meter

- Measure the surface and coating hardness of installed machines and components, die molding surfaces and bearings
- Console stores up to 1250 tests
- Measurement accuracy: +/- 0.5%
- Display size and type: 112 x 64 pixel LCD
- Auto power off after 3 minutes of inactivity
- Power source: 2 AAA batteries (not included)
- Includes: console, D type impact device, standard hardness test block with a nominal hardness value of 797 HLD, cleaning brush and support ring, hard plastic carrying case
- Limited 2 year warranty



Order No.	Price
NB49UTEMHT20	Price

INSIZE Portable LEEB Hardness Tester

- Min. reading: 1HLD, 1HV, 1HB, 0.1HRC, 0.1HRB, 1HS, 1MPa
- Accuracy ±6HLD (when HLD=800)
- Display: Leeb(HLD), converted hardness, material, impact direction, test times, average value, date
- Output bluetooth
- Supplied with impact device D
- Set measurement times (1~9) to have average value
- Based on Leeb(HLD), converted to Vickers(HV), Brinell(HB), Rockwell(HRC and HRB), Shore(HS) and tensile strength(MPA)
- Memory of 99 measurement values for browsing
- Connected with printer via bluetooth
- Automatic power off. According to ASTM A 956
- Results Display: HRA, B, C, D, F, G
- Size: 12.99" L x 11.42" W x 3.74" H



Order No.	Price
SZ20ISHPHB	Price

FLEXBAR Portable Quick-Check Rockwell Hardness Tester

A quick & easy checking gage for flat workpieces. Ideal for spot or production checking

- Pocket size — length is 9-1/4″, weight is 4 oz
- Minimum size of workpiece: 1" square x 1/2 thick
- Precise reading in Rockwell C scale — pretested for positive release and dependable accuracy
- 20 Rc to 65 Rc hardness of the Rockwell C scale
- Will not mar the surface of heat treated parts
- Includes carrying case

MADE IN THE USA



Order No.	Price
GG4517295	Price

GENERAL Hardness Tester ASTM Rated - Pen Style

Check hardness on most metals - True hand held compact model.

Features and Specifications:

- Quick and reliable check on most metals
- Wide measuring range: direct display of converted hardness values in Rockwell HRB, HRC, Vickers HV, Brinell HB and Shore HS (Min/Max/Avg)
- Impact device provides testing at any angle, even upside down
- 1250 readings memory with data output USB
- High accuracy ±0.5%
- Hardness parameter HL, HRC, HRB, HV, HB, HS
- Battery life: 16 hours continuous (Auto Power Off)
- Display functions: Hardness scale, hardness value, average indicator and average value, impact direction, type of impact device connected, memory reference
- Overall dimensions: 6.2"L x 1.6"W x 1"D (158 x 41 x 26mm) Weight: 4.2 oz (120g)
- Conforming to ASTM A 956

Includes: Main unit with impact device, cleaning brush, software & cable, certificate, manual and carrying case





Order No.	Price
NB49EMHT40	Price

Hardness Testing Files

Consists of 6 different special files, color coded for hardness assessment.
A unique set of six specially shaped files, each with a nonslip grip, color-coded handle. The Rockwell value is printed on each handle and the files range from HRc 40 through HRc 65.
Testing files have specially curved tips which can reach into internal slots, grooves and bores. Large surface-hardened gears, large printing cylinders or weld zones of heat affected pipe lines which cannot be moved to a stationary tester.



Order No.	Price
NR50FHC6	Price

Rex DUROMETERS Durometers

ISO 9001

For Use on Rubbers and Plastics



Vest Pocket Features
- Ultra lightweight, 5 x 4.5″H
- Excellent for hard-to-reach places
- Virtually unbreakable, superior accuracy
- Precision construction
- Easy to read, holds reading until reset
- Furnished with a leather pouch

MADE IN THE USA

Standard Dial Features
- Large dial, full 360° sweep, 2.25″ x 6.125″H
- Superior 1/2 point accuracy
- Custom made carrying case

Note:
Shore “A” for soft material and Shore “D” is for harder material

Shore Scale	Type	Order No.	Price
A	Standard Dial Durometer	**NR551600A**	Price
A	Vest Pocket Durometer	**NR551500A**	Price
D	Standard Dial Durometer	**NR551600D**	Price
D	Vest Pocket Durometer	**NR551500D**	Price

Rex DUROMETERS Test Block Kits



MADE IN THE USA

- Color coded specimens (approx. 2 × 2″)
- 1/4” Thickness
- Rubber material
- Various durometer hardness values ranging from 30 to 90 durometers
- Size 5.5L × 4.687W × 2.562″H
- TBKA: 7 Specimens
- TBKD: 3 Specimens

Shore Scale	Order No.	Price
A	**NR55TBKA**	Price
D	**NR55TBKD**	Price

Fowler Portable Durometers

Applications:
35° blunt taper Durometers are suitable for testing soft and natural rubber products, neoprene, polyesters, soft P.V.C., leather, thiokol, nitrile rubbers, wax, felt.
Sharp 30°: testing hard rubber, hard synthetic materials, e.g. acrylics, glass, polystyrol, thermoplastics, printing rolls, vinyl sheets, cellulose acetates, densified wood, etc.



- Manufactured in accordance with DIN, ASTM, ISO and JIS specifications
- Test pieces should have a thickness of at least .20″ (5mm) to provide accurate readings that conform to Shore A hardness scales and .12″ (3mm) for Shore D hardness scales
- The test piece size should extend .47″ (12mm) from each side
- Includes reference test block, operating instructions and fitted case

Shore Scale	Penetrator	Order No.	Price
A	Blunt Taper 35°	**NA5553762101**	Price
D	Sharp Point 30°	**NA5553762102**	Price

Fowler Portable Shore Durometers



Fowler’s Portable Shore Durometers are just the right gage for testing the hardness of flexible materials such as rubber and plastics

Applications:
Durometers with the 35° blunt taper are suitable for testing soft and natural rubber products, neoprene, polyesters, soft P.V.C., leather, thiokol, nitrile rubbers, wax, felt and more
Durometers with the sharp 30° point are ideal for testing hard rubber, hard synthetic materials, e.g. acrylics, glass, polystyrol, thermoplastics, printing rolls, vinyl sheets, cellulose acetates, densified wood, etc.

Made in ENGLAND



- Manufactured in accordance with DIN, ASTM, ISO & JIS specifications, two styles available in analog and digital readout
- Both Shore A and B scale units are available to fit a wide variety of applications
- Price includes reference test block, operating instructions & wooden box

Description	Penetrator	Shore Scale	Order No.	Price
Digital Shore Durometer	Blunt Taper 35°	A	**NA5554762001**	Price
Digital Shore Durometer	Sharp Point 30°	D	**NA5554762002**	Price
Portable Shore Durometer	Blunt Taper 35°	A	**NA5553762001**	Price

Mitutoyo Hardmatic Durometers



Applications:
- Suitable for testing of natural rubber, neoprene, polyesters, P.V.C., leather, nitrite rubber, wax, vinyl, cellulose acetates and glass polystyrene
- Designed in accordance with the ASTM D 2240, ISO868, ISO 7619, DIN 53 505, JIS K 6253, and JIS K 7215 specifications
- Units are available in both Shore A and Shore D scales, and will test a wide variety of applications
- Provided with data hold function, permitting the operator to make an error-free reading on the LCD screen
- Provided with a peak retaining hand for error-free reading
- Tip Angle: 30°±0.5°
- Digital: Data hold, Zero-setting, SPC output, Power ON/OFF (Power supply: SR44 x 1pc.) Analog Durometer: Peak retaining hand
- Dimensions: 2.3 x 1.3 x 5.7in 56 x 33.5 x 144mm

Model No.	Shore Scale	Penetrator	Order No.	Price
HH-335-10	A	Blunt Taper (Tip Dia. .79mm)	**MT80811-335-10**	Price
HH-336-10	A	Blunt Taper (Tip Dia. .79mm)	**MT80811-336-10**	Price
HH-337-10	D	Sharp Point (Tip Curvature 0.1±0.01mm	**MT80811-337-10**	Price
HH-338-10	D	Sharp Point (Tip Curvature 0.1±0.01mm	**MT80811-338-10**	Price

Mitutoyo Hardmatic Durometer Accessories for HH-300 Series



Type	Order No.	Price
HH-300 "A" Scale Durometer Stand	**MT8064AAA962**	Price
HH-300 Combination "D" & "A" Scale Durometer Stand	**MT8064AAA796**	Price
HH-300 Moticam 1080	**MT8064AAB526**	Price

INSIZE Roughness Testers

- 21 roughness parameters
- Connected with printer via bluetooth
- Display roughness values
- Profile and curve
- Memory of maximum 100 results
- Automatic power off



Model No.	Measuring Range	Order No.	Price
ISR-C002	6299 µin	**SZ20ISRC002**	Price
ISR-C003	Rq: 2~590µin, Rz, Rt: 4~1968µin	**SZ20ISRC003**	Price

Starrett Electronic Durometer

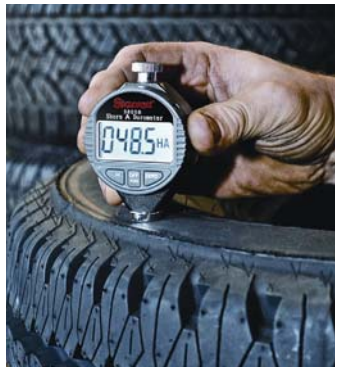
Model 3805B



- Compact, easy to use and accurate
- Measures Shore A values for a wide variety of soft materials including rubber, soft vulcanized (i.e. tire), natural nitrile, elastomeretric materials (rubber and rubber-like); GR-S, GR-1, neoprene, thiokol, flexible polyacrylic esters, other soft materials including wax, felt, leather, etc. (materials that would normally yield under fingernail pressure)

Features & Specifications:

- Extra large LED display
- Simple 3-button control
- Auto hold feature
- Measuring range: 0-100 HSA
- Deviation: <1% H
- Resolution : 0.5 H
- Accurate and repetitive deviation = 20~90HSA
- HSA <+/-1 grade
- Custom carrying case



Order No.	Price
MV7069882	Price

Starrett Surface Roughness Testers

SR Series

- Uses Li-Poly rechargeable batteries
- Filter: 2CR/Gaussian (Gaussian on SR160)
- Operates in 41-104° F (5-40°C), 0-80% non-condensing humidity
- Able to calibrate to ISO 4287 standards
- SR300 and SR400 have USB Type A
- Skidded measurement type
- Full line of accessories are available



SR300



SR160

Starrett No.	Resolution	Traversing Length	Measuring Range	Evaluation Length	Order No.	Price
SR160	0.4µin (10nm)	.2" (5mm)	200µm	-	**MV7072584**	Price
SR300	100nm. 20nm, 10nm	17.5mm	200µm, 100µm, 10µm	.01 - .48" (0.25-17.5mm)	**MV7021000**	Price
SR400	50nm, 10nm, 5nm	25.6mm	400µm, 100µm, 10µm	.01 - .89" (0.25-25.6mm)	**MV7021001**	Price

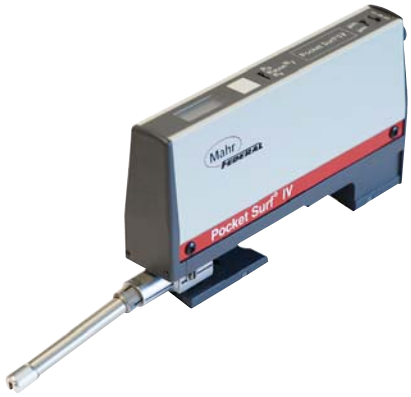
Fowler Portable Roughness Tester

- Small compact size
- 2 Selectable parameters: Ra andRz
- Large LCD display
- Meets ISO and DIN standards
- NIST traceable specimen included
- Uses 9 volt battery (approx. 3000 measurements)
- Includes fitted case



Description	Order No.	Price
X-Pro Portable Roughness Tester, .0002" Probe	**NA5554410600**	Price
X-Pro Portable Roughness Tester, .0004" Probe	**NA5554410500**	Price

Mahr Federal Pocket Surf® IV Portable Surface Roughness Gages



- Traverse speed: 5.08mm / .2” per second
- Probe type: Piezoelectric
- Maximum stylus force: 150.0 mN / 1500 mgf
- Power: consumer type alkaline battery, 9 volt
- Operating temperature: 10° to 45° C / 50° to 113° F
- Storage temperature: -20° to 65° C / -4° to 149° F
- Kit is furnished complete with fitted case, and included a Pocket Surf unit with a general purpose probe and a 3.2µm/125µinch (nominal) reference speciman, 9 volt battery, and riser plate

Description	Order No.	Price
10 µm Radius	**NA652191800**	Price
5 µm Radius	**NA652191802**	Price

Mitutoyo Portable Surftest SJ-210P



This Surftest is designed to be hand carried for portable use anywhere. Power is supplied by either AC or the unit’s own rechargeable batteries. Data is presented in micro-inches on a large LCD screen. An upper control limit may be set for GO/NO-GO inspection. For hard copy printout the Surftest may be connected to Mitutoyo’s Surftest printer. SPC processing is also possible by connection to any of the Mitutoyo data processors.

Easy to use: 2.4-inch color graphic LCD with backlight
The color LCD provides excellent readability and an intuitive display that’s easy to negotiate. The LCD also includes a backlight for improved visibility in dark environments.

Simple key layout
The surfest SJ-210 can be operated easily using the keys on the front of the unit and under the sliding cover.

Highly functional:
Advanced data storage capabilities
Up to 10 measurement conditions and one measured profile can be stored in the internal memory.

Optional memory card
An optional memory card can be used as an extended memory to store large quantities of measured profiles and conditions.

Password protection
Access to each feature can be password-protected, which prevents unintended operations and allows you to protect your settings.

Multilingual support
The display interface supports 16 languages, which can be freely switched.

Stylus alarm (patent pending in Japan)
An alarm warns you when the cumulative measurement distance exceeds a preset limit.

Features:
Compact and easy-to-use surface roughness testers for high-accuracy measurement on the shop floor.



- Auto-calibration for simple gain adjustment
- The detector/drive unit can be detached from the display unit to tacillate measurement
- Largest measuring range in its class 300um (1200uin)
- Digimatic and RS-232 data output is avalable for SPC operation
- 2-Way power system (AC adapter and rechargeable built-in battery)
- Portable for easy measurement anywhere
- 39 Analysis parameters are provided
- Compatible with JIS 82, JIS 94, JIS 01, ISO, ANSI, and VDA standards
- Larage color LCD can be dislayed horizontally or vertically
- 10 Sets of measurement conditions and 1 set of measurement results can be stored in display unit.

Parameters:
- Ra, Rq, Rz, Ry, Rp, Rv, R1, R3z, Rsk, Rku, Rc, RPc, RSm, Rmax, Rz1maxS, HSC, RzJIS, Rppl, Rir, Rmr, Rmr(c), Rx, Rpk, Mr1, Mr2, A1, A2, Vo, Rpm, tp, Htp, R, Rx

Order No.	Price
MT80178-561-02A	Price

GAR Conventional Machining Microfinish Comparator

MADE IN THE USA

- Twenty-two surface finish specimens from six different machining processes: lapped, ground, blanchard ground, shape-turned, milled and profiled — ranging from 2 to 500 microinches



Order No.	Price
NB61S22	Price

GAR Conventional Machining Microfinish Comparator

MADE IN THE USA

- Twelve surface finish specimens from five different machining processes: lapped, ground profiled, shape-turned and milled — ranging from 4 to 125 microinches



Order No.	Price
NB61G60	Price

GAR Conventional Machining Microfinish Comparator

MADE IN THE USA

- Twelve surface finish specimens from four different machining processes: shape-turned, ground, profiled, milled — ranging from 250 to 2,000 microinches

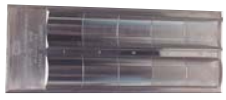


Order No.	Price
NB61G61	Price

GAR Cylindrical Ground Microfinish Comparator

MADE IN THE USA

- Ten surface finish specimens, 5-ID and 5-OD with a range of 4 to 63 microinches



Order No.	Price
NB61G62	Price

GAR Cylindrical Turned Microfinish Comparator

MADE IN THE USA

- Ten surface finish specimens, 5-ID and 5-OD with a range of 16 to 250 microinches



Order No.	Price
NB61G63	Price

GAR Cast Microfinish Comparator

MADE IN THE USA

- Nine surface finish specimens ranging from 20 to 900 microinches



Order No.	Price
NB61C9	Price

GAR Grit Blast Microfinish Comparator

MADE IN THE USA

- Six surface finish specimens ranging from 32 to 1000 microinches



Order No.	Price
NB61G6	Price

GAR Shot Blast Microfinish Comparator

MADE IN THE USA

- Six surface finish specimens ranging from 32 to 1000 microinches



Order No.	Price
NB61SH6	Price

GAR EDM Microfinish Comparator

MADE IN THE USA

- Nine surface finish specimens ranging from 16 to 250 microinches



Order No.	Price
NB61E9	Price

GAR Master Visual Tactual Set

MADE IN THE USA

- Eight individual blocks with fifteen replicated machined surface finish specimens ranging from 2 to 125 microinches



Order No.	Price
NB61M15	Price

GAR Pak Kit

MADE IN THE USA

- Contains order no. S-22, G-6, SH-6 and E-9 surface finish comparators



Order No.	Price
NB61G4	Price

GAR Precision Reference Standard

MADE IN THE USA

For Surface Analyzing Equipment

- An economical calibration standard for surface analyzing equipment
- Ra values 119.5 and 16.1; includes certification traceable to NIST



Order No.	Price
NB61PRS2	Price

FLEXBAR Economy Surface Roughness Comparator

Features:

- 16 to 500 micro finish
- 18 Exact reproductions of milled, turned, shaped ground surfaces and flame cutting
- Black unbreakable plastic
- 3-1/2 × 5″ pocket size
- Scratch resistant and has a hang-up hole
- Complete with plastic case



Order No.	Price
NB6216007	Price

Surface Roughness Comparator

WORLD CLASS QUALITY

- Helps avoid costly under or over-finishing
- Pocket-size gage has 22 precision surfaces from 2 to 500 micro-inches
- Lapped, ground, blanched, turned, milled and profiled surfaces
- Complete with leather case

Order No.	Price
NB62RG1	Price

FLEXBAR Master Surface Roughness Comparator

30 specimens from 2 to 500 micro finish with graph which correlates CLA, AA and RA values plus ISO “N” scale

- (3) spec. flat lapping
- (3) spec. reaming
- (6) spec. grinding
- (6) spec. horizontal milling
- (6) spec. vertical milling
- (6) spec. turning
- Wallet Style Case.

This scale conforms to SAE and Military Specifications for visual and tactile inspections



Order No.	Price
NB6216008	Price

Reversible Gage Handles

MADE IN THE USA

Double End

All reversible pin gage handles are made to the American Gage design standards. These handles are made from aluminum, with collets anodized red for the "No Go" gaging member, green for the "Go" gaging member, and with a polished hexagon center, bushings NOT included.



- Bushings not included
- Handles – Go/No Go Gages

Double-end handle with collet shown
Gage pins not included.

Size to Range	Order No.	Price
.0040 to .0750	**JR511WDE**	Price
.075 to .1800	**JR512WDE**	Price
.1801 to .2810	**JR513WDE**	Price
.2811 to .4060	**JR514WDE**	Price
.4061 to .5100	**JR515WDE**	Price
.5101 to .6350	**JR516WDE**	Price
.6351 to .7600	**JR517WDE**	Price
.7601 to 1.010	**JR518WDE**	Price

Reversible Gage Handles

Single End

MADE IN THE USA

	Green		Red	
Size Range	Order No.	Price	Order No.	Price
.0040 to .0750	**JR511WSG**	Price	**JR511WSR**	Price
.0751 to .1800	**JR512WSG**	Price	**JR512WSR**	Price
.1801 to .2810	**JR513WSG**	Price	**JR513WSR**	Price
.2811 to .4060	**JR514WSG**	Price	**JR514WSR**	Price
.4061 to .5100	**JR515WSG**	Price	**JR515WSR**	Price
.5101 to .6350	**JR516WSG**	Price	**JR516WSR**	Price
.6351 to .7600	**JR517WSG**	Price	**JR517WSR**	Price
.7601 to 1.010	**JR518WSG**	Price	**JR518WSR**	Price

Bushings for Reversible Handles

Reversible, Wire Type, Plain Pin Gage

- Split design allows 1 bushing to hold pins within a .005″ range
- Material: 1W and 2W are brass, 3W thru 8W are aluminium



Size Range (Above to Thru)	Order No.	Price
.0111 to .0130	**JR511W013**	Price
.0131 to .0150	**JR511W016**	Price
.0151 to .0200	**JR511W020**	Price
.0201 to .0250	**JR511W025**	Price
.0251 to .0300	**JR511W030**	Price
.0301 to .0350	**JR511W035**	Price
.0351 to .0400	**JR511W040**	Price
.0401 to .0450	**JR511W045**	Price
.0451 to .0500	**JR511W050**	Price
.0501 to .0550	**JR511W055**	Price

Size Range (Above to Thru)	Order No.	Price
.0551 to .0600	**JR511W060**	Price
.0601 to .0650	**JR511W065**	Price
.0651 to .0700	**JR511W070**	Price
.0701 to .0750	**JR511W075**	Price
.0751 to .0820	**JR512W082**	Price
.0821 to .0890	**JR512W089**	Price
.0891 to .0960	**JR512W096**	Price
.0961 to .1030	**JR512W103**	Price
.1031 to .1100	**JR512W110**	Price
.1101 to .1170	**JR512W117**	Price
.1171 to .1240	**JR512W124**	Price
.1241 to .1310	**JR512W131**	Price
.1311 to .1380	**JR512W138**	Price
.1381 to .1450	**JR512W145**	Price
.1451 to .1520	**JR512W152**	Price
.1521 to .1590	**JR512W159**	Price
.1591 to .1660	**JR512W166**	Price
.1661 to .1730	**JR512W173**	Price
.1731 to .1800	**JR512W180**	Price
.1801 to .1880	**JR513W188**	Price
.1881 to .1960	**JR513W196**	Price
.1961 to .2040	**JR513W204**	Price
.2041 to .2120	**JR513W212**	Price
.2121 to .2200	**JR513W220**	Price
.2201 to .2280	**JR513W228**	Price

Size Range (Above to Thru)	Order No.	Price
.2281 to .2360	**JR513W236**	Price
.2361 to .2440	**JR513W244**	Price
.2441 to .2520	**JR513W252**	Price
.2521 to .2610	**JR513W261**	Price
.2611 to .2710	**JR513W271**	Price
.2711 to .2810	**JR513W281**	Price
.2811 to .2910	**JR514W291**	Price
.2911 to .3010	**JR514W301**	Price
.3011 to .3110	**JR514W311**	Price
.3111 to .3210	**JR514W321**	Price
.3211 to .3310	**JR514W331**	Price
.3311 to .3410	**JR514W341**	Price
.3411 to .3510	**JR514W351**	Price
.3511 to .3610	**JR514W361**	Price
.3611 to .3710	**JR514W371**	Price
.3711 to .3820	**JR514W382**	Price
.3821 to .3940	**JR514W394**	Price
.3941 to .4060	**JR514W406**	Price
.4061 to .4200	**JR515W420**	Price
.4201 to .4350	**JR515W435**	Price
.4351 to .4500	**JR515W450**	Price
.4501 to .4650	**JR515W465**	Price
.4651 to .4800	**JR515W480**	Price
.4801 to .4950	**JR515W495**	Price
.4951 to .5100	**JR515W510**	Price

Size Range (Above to Thru)	Order No.	Price
.5101 to .5320	**JR516W532**	Price
.5321 to .5470	**JR516W547**	Price
.5471 to .5630	**JR516W563**	Price
.5631 to .5790	**JR516W579**	Price
.5791 to .5940	**JR516W594**	Price
.5941 to .6100	**JR516W610**	Price
.6101 to .6250	**JR516W625**	Price
.6251 to .6350	**JR516W635**	Price
.6351 to .6560	**JR517W656**	Price
.6561 to .6720	**JR517W672**	Price
.6721 to .6880	**JR517W688**	Price
.6881 to .7040	**JR517W704**	Price
.7041 to .7190	**JR517W719**	Price
.7191 to .7350	**JR517W735**	Price
.7351 to .7500	**JR517W750**	Price
.7501 to .7600	**JR517W760**	Price
.7601 to .7810	**JR518W781**	Price
.7811 to .8120	**JR518W812**	Price
.8121 to .8430	**JR518W843**	Price
.8431 to .8750	**JR518W875**	Price
.8751 to .9060	**JR518W906**	Price
.9061 to .9370	**JR518W937**	Price
.9371 to .9680	**JR518W968**	Price
.9681 to 1.000	**JR518W1000**	Price

PROCHECK Universal Gage Pin Handles

- Unique spring chuck design eliminates multi-collet system
- One handle can cover the range of a single standard gage pin set



Range (in.)	Order No.	Price
.011 to .060	**JR608000**	Price
.061 to .250	**JR608001**	Price
.251 to .500	**JR608002**	Price
.501 to .625	**JR608003**	Price
.626 to .750	**JR608004**	Price

Range (in.)	Order No.	Price
.751 to .832	**JR608005**	Price
.833 to .916	**JR608006**	Price
.917 to 1.000	**JR608007**	Price

PROCHECK 3 Pc. Universal Gage Pin Handle Set

.011" to .500" Range

Covers the most popular sizes.



Order No.	Price
JR608012	Price

PROCHECK Gage Handle

- Suitable for handling all plug gages from 1/32 through 1/2" (0.79-12.7mm)
- Go and no-go clearly marked
- Made from aluminum



Order No.	Price
NE60GPH13212	Price

Gage Pin Handle

MADE IN THE USA

- Cover the most used pins with one handle and no bushings
- Handles all plug gage sizes from 1/32″ thru 1/2″ diameter
- Go and No Go clearly marked



Order No.	Price
NB75Z2800	Price

PROCHECK Class ZZ Gage Pin Sets

Certified and Non-Certified (+/-.0002” Tol.)

- Check locations
- Check gage slots
- Check hole size and depth between holes
- Ground edges
- Centerless lapped with A10 micro finish or better
- Heat treated to 60/63 RC
- Uniform 2″ length
- Furnished with case



			Gage Pin Set		Gage Pin Set (Certified)	
Size Range	Tolerance Type	No. of Pieces	Order No.	Price	Order No.	Price
.011 to .060	Minus (No Go)	50	**JR60H0M**	Price	**JR60H0CM**	Price
.011 to .060	Plus (Go)	50	**JR60H0P**	Price	**JR60H0CP**	Price
.061 to .250	Minus (No Go)	190	**JR60H1M**	Price	**JR60H1CM**	Price
.061 to .250	Plus (Go)	190	**JR60H1P**	Price	**JR60H1CP**	Price
.251 to .500	Minus (No Go)	250	**JR60H2M**	Price	**JR60H2CM**	Price
.251 to .500	Plus (Go)	250	**JR60H2P**	Price	**JR60H2CP**	Price
.501 to .625	Minus (No Go)	125	**JR60H3M**	Price	**JR60H3CM**	Price
.501 to .625	Plus (Go)	125	**JR60H3P**	Price	**JR60H3CP**	Price
.626 to .750	Minus (No Go)	125	**JR60H4M**	Price	**JR60H4CM**	Price
.626 to .750	Plus (Go)	125	**JR60H4P**	Price	**JR60H4CP**	Price
.751 to .832	Minus (No Go)	82	**JR60H5M**	Price	**JR60H5CM**	Price
.751 to .832	Plus (Go)	82	**JR60H5P**	Price	**JR60H5CP**	Price
.833 to .916	Minus (No Go)	84	**JR60H6M**	Price	**JR60H6CM**	Price
.833 to .916	Plus (Go)	84	**JR60H6P**	Price	**JR60H6CP**	Price
.917 to 1.000	Minus (No Go)	84	**JR60H7M**	Price	**JR60H7CM**	Price
.917 to 1.000	Plus (Go)	84	**JR60H7P**	Price	**JR60H7CP**	Price

Starrett Gage Pin Sets

- Color coded, fully adjustable, go/no-go gage handle furnished with each set
- Sets are supplied in rugged, high impact protective cases with each space marked for the appropriate gage
- Full inspection report with every set, on each individual gage pin
- .001″ Increment sets
- Each pin is centerless lapped to a 10 RA micro-inch finish and is clearly etched with the stated size
- All gages are 2 inches long, centerless lapped, and hardened to RC 60/62
- All sharp corners are broken
- Manufactured to .0002” tolerance



			Minus (No Go)		Plus (Go)	
Size Range	No. of Pieces	Weight	Order No.	Price	Order No.	Price
.011 to .060	50	3 lbs	**MV7067481**	Price	**MV7067480**	Price
.061 to .250	190	8 lbs	**MV7067483**	Price	**MV7067482**	Price
.251 to .500	250	22 lbs	**MV7067485**	Price	**MV7067484**	Price

PROCHECK Class ZZ Gage Pin Sets

Large Range, Non-Certified (+/-.0002” Tol.)



Fit - Minus (No Go)		
Size Range	Order No.	Price
.061 to .500	**JR60H12M**	Price

Fit - Plus (Go)		
Size Range	Order No.	Price
.061 to .500	**JR60H12P**	Price

Vermont Gage

Black Guard Class ZZ Gage Pin Sets (+/-.0002" Tol.)

Typically penetrating .00004″ to .00006″, black oxide gives you a visual wear indication to wear patterns allowing inspector to calibrate or replace gage pins more effectively.

- Class ZZ tolerance (+/-.0002″)
- Prevents rust and corrosion
- Visible wear indication
- Longer gage life
- Certificate of accuracy included

MADE IN THE USA







CERTIFIED ISO 9002

			Minus (No Go)		Plus (Go)	
Size Range	No. of Pieces	Weight	Order No.	Price	Order No.	Price
.011 to .060	50	2 lbs	**JR50AGM**	Price	**JR50AGP**	Price
.061 to .250	190	6 lbs	**JR50BGM**	Price	**JR50BGP**	Price
.251 to .500	250	20 lbs	**JR50CGM**	Price	**JR50CGP**	Price
.501 to .625	125	21 lbs	**JR50DGM**	Price	**JR50DGP**	Price
.626 to .750	125	31 lbs	**JR50EGM**	Price	**JR50EGP**	Price
.751 to .832	82	27 lbs	**JR50FGM**	Price	**JR50FGP**	Price
.833 to .916	84	33 lbs	**JR50GGM**	Price	**JR50GGP**	Price
.917 to 1.000	84	38 lbs	**JR50HGM**	Price	**JR50HGP**	Price

Vermont Gage Class ZZ Gage Pin Sets (+/-.0002" Tol.)



MADE IN THE USA

			Minus (No Go)		Plus (Go)	
Size Range	No. of Pieces	Weight	Order No.	Price	Order No.	Price
.011 to .060	50	2 lbs	**JR50AM**	Price	**JR50AP**	Price
.0115 to .0605	50	2 lbs	**JR50AAM**	Price	**JR50AAP**	Price
.061 to .250	190	6 lbs	**JR50BM**	Price	**JR50BP**	Price
.0615 to .2505	190	6 lbs	**JR50BBM**	Price	**JR50BBP**	Price
.251 to .500	250	20 lbs	**JR50CM**	Price	**JR50CP**	Price
.2515 to .5005	250	20 lbs	**JR50CCM**	Price	**JR50CCP**	Price
.501 to .625	125	21 lbs	**JR50DM**	Price	**JR50DP**	Price
.626 to .750	125	31 lbs	**JR50EM**	Price	**JR50EP**	Price
.751 to .832	82	27 lbs	**JR50FM**	Price	**JR50FP**	Price
.833 to .916	84	33 lbs	**JR50GM**	Price	**JR50GP**	Price
.917 to 1.000	84	38 lbs	**JR50HM**	Price	**JR50HP**	Price

Metric Class ZZ Gage Pin Sets

Size Range	Tolerance Type	No. of Pieces	Weight	Order No.	Price
.20 to 1.28mm	Minus (No Go)	50	.45 kg	**JR50AMM**	Price
.20 to 1.28mm	Plus (Go)	50	.45 kg	**JR50AMP**	Price
1.30 to 4.98mm	Minus (No Go)	190	3.62 kg	**JR50BMM**	Price
1.30 to 4.98mm	Plus (Go)	190	3.62 kg	**JR50BMP**	Price
5.00 to 9.98mm	Minus (No Go)	250	10 kg	**JR50CMM**	Price
5.00 to 9.98mm	Plus (Go)	250	10 kg	**JR50CMP**	Price
10.00 to 13.98mm	Minus (No Go)	200	9.0 kg	**JR50DMM**	Price
10.00 to 13.98mm	Plus (Go)	200	9.0 kg	**JR50DMP**	Price

Vermont Gage

MADE IN THE USA

Gage Pin Custom Drawer System - Class ZZ (+/-.0002" Tol.)



Drawer units can be made up from any standard gage sets.
Also available from Vermont Gage:

- Class X, Y, Z gage pins
- Extra long gage pin
- Chrome plated and carbide gage pins
- Steel and carbide ring gages
- Tri-lock and taper lock gages

Type - Gage Pin 4-Drawer Unit (.0005" Increments)					
		Minus (No Go)		Plus (Go)	
Size Range	No. of Pieces Drawer Holds	Order No.	Price	Order No.	Price
.061 to .5005	880	**JR50CD5M**	Price	**JR50CD5P**	Price

Type - Gage Pin 4-Drawer Unit (.001" Increments)					
		Minus (No Go)		Plus (Go)	
Size Range	No. of Pieces Drawer Holds	Order No.	Price	Order No.	Price
.061 to .750	690	**JR50CD1M**	Price	**JR50CD1P**	Price
.251 to .832	582	**JR50CD2M**	Price	**JR50CD2P**	Price
.501 to .916	416	**JR50CD3M**	Price	**JR50CD3P**	Price
.626 to 1.000	375	**JR50CD4M**	Price	**JR50CD4P**	Price

Type - Gage Pin 8-Drawer Unit (.001" Increments)					
		Minus (No Go)		Plus (Go)	
Size Range	No. of Pieces Drawer Holds	Order No.	Price	Order No.	Price
.061 to 1.000	940	**JR50CD6M**	Price	**JR50CD6P**	Price

Above consists of 2 (two) 4-drawer units (stacked). 1 drawer is empty and can be used to store handles, bushings, mikes.

Individual Gage Pins Available:

Class ZZ Steel, Series JR50 –Class ZZ Steel Black Guard, Series JR52 –Class X Steel, Series JR53

Class ZZ Steel (JR50) and Black Guard (JR52) Gage Pins	
Size Range	Price
.011 - .060	Price
.0115 - .0605	Price
.061 - .500	Price
.0615 - .5005	Price
.501 - .625	Price
.626 - .750	Price
.751 - .832	Price
.833 - .916	Price

Class X (JR53) Gage Pins	
Size Range	Price
.0040 - .0250	Price
.0251 - .0750	Price
.0751 - .2810	Price
.2811 - .4060	Price
.4061 - .5100	Price
.5101 - .6350	Price
.6351 - .7600	Price
.7601 - 1.000	Price

Class "ZZ" (+/-.0002" Tol.) and "X" (.00004" up to .8250 and .00006" from .8251 to 1"

To order Individual Gage Pins Specify Series, Size and Tolerance (Plus, Minus for Class ZZ and Go, No-Go for Class X) when ordering:

Ordering Example Sizes:
Class ZZ Steel Pin Gage .125" Plus Tolerance: JR50125P or JR501255P if ordering in .0005 increments.
Class ZZ Black Guard Pin Gage .125" Plus Tolerance: JR52125P or JR521255P if ordering in .0005 increments.
Class X Steel .125" Go Tolerance: JR53125GO or JR531251GO if ordering in .0001 increments.

Metric Gage Pins also Available in Class ZZ Steel (JR50) and Steel Black Guard (JR52). Specify Series (JR50 or JR52) Size (Example 3.17mm) and Tolerance (Plus or Minus). Order as: JR50317MMP - Call for Price

Fowler 240 Pc. X-Tended Range Pin Gage Sets

Ideal for checking hole size, location, gage slots, distance between holes, go/no-go gaging and setting other gages and micrometers.

- Class ZZ
- Black oxide finish offers extra protection against corrosion and rust, promoting longer life, also highlights wear trends that enables calibration to be performed more effectively
- Range: .011" - .250" in .001" increments
- Set includes: 2 handles in case and our X-Glide all purpose teflon lubricant
- Certificate of accuracy traceable to NIST and registered ISO 9001



Fit	Tolerance	Order No.	Price
Minus	+.0000"/-.0002"	**NA5553880833**	Price
Plus	+.0002"/-.0000"	**NA5553880823**	Price

LANO-LUBE by Flexbar

Multi-Purpose Pure Lanolin AAA

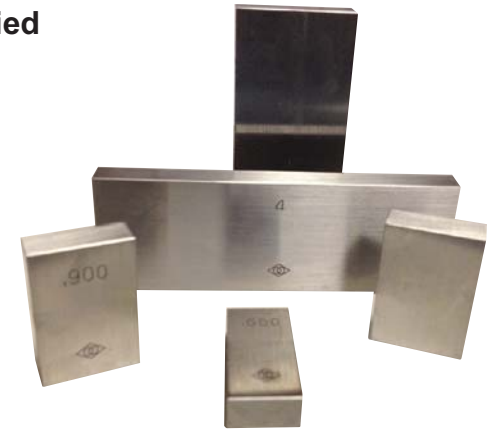


- 2 oz. Size
- Good for inspection
- Gaging
- Drilling centers
- Tapping
- Turning
- Moisture free
- Stops rust
- No odor
- Anti-seize properties
- Hazard Code: 58

Order No.	Price
JR5111152	Price

PROCHECK Rectangular Steel Gage Blocks - Grade 0, Certified

- Meets or exceeds the latest Federal Spec ASME B89.1.9-2002
- All blocks are supplied with certificate of calibration traceable to NIST
- All blocks are also supplied with long form ISO certificate showing deviation of each block, signed by an inspector from a US 17025 Lab
- Metric sizes available- call for quote



Size	Grade	Material	Order No.	Price
.03125	0	Steel	**NB600I03125RS0C**	Price
.050	0	Steel	**NB600I05000RS0C**	Price
.060	0	Steel	**NB600I06000RS0C**	Price
.0625	0	Steel	**NB600I06250RS0C**	Price
.070	0	Steel	**NB600I07000RS0C**	Price
.080	0	Steel	**NB600I08000RS0C**	Price
.090	0	Steel	**NB600I09000RS0C**	Price
.09375	0	Steel	**NB600I09375RS0C**	Price
.1000	0	Steel	**NB600I10000RS0C**	Price
.1001	0	Steel	**NB600I10010RS0C**	Price
.1002	0	Steel	**NB600I10020RS0C**	Price
.1003	0	Steel	**NB600I10030RS0C**	Price
.1004	0	Steel	**NB600I10040RS0C**	Price
.1005	0	Steel	**NB600I10050RS0C**	Price
.1006	0	Steel	**NB600I10060RS0C**	Price
.1007	0	Steel	**NB600I10070RS0C**	Price
.1008	0	Steel	**NB600I10080RS0C**	Price
.1009	0	Steel	**NB600I10090RS0C**	Price
.101	0	Steel	**NB600I10100RS0C**	Price
.102	0	Steel	**NB600I10200RS0C**	Price
.103	0	Steel	**NB600I10300RS0C**	Price
.104	0	Steel	**NB600I10400RS0C**	Price
.105	0	Steel	**NB600I10500RS0C**	Price
.106	0	Steel	**NB600I10600RS0C**	Price
.107	0	Steel	**NB600I10700RS0C**	Price
.108	0	Steel	**NB600I10800RS0C**	Price
.109	0	Steel	**NB600I10900RS0C**	Price
.110	0	Steel	**NB600I11000RS0C**	Price
.111	0	Steel	**NB600I11100RS0C**	Price
.112	0	Steel	**NB600I11200RS0C**	Price
.113	0	Steel	**NB600I11300RS0C**	Price
.114	0	Steel	**NB600I11400RS0C**	Price
.115	0	Steel	**NB600I11500RS0C**	Price
.116	0	Steel	**NB600I11600RS0C**	Price
.117	0	Steel	**NB600I11700RS0C**	Price
.118	0	Steel	**NB600I11800RS0C**	Price
.119	0	Steel	**NB600I11900RS0C**	Price
.120	0	Steel	**NB600I12000RS0C**	Price
.121	0	Steel	**NB600I12100RS0C**	Price
.122	0	Steel	**NB600I12200RS0C**	Price
.123	0	Steel	**NB600I12300RS0C**	Price
.124	0	Steel	**NB600I12400RS0C**	Price
.125	0	Steel	**NB600I12500RS0C**	Price
.126	0	Steel	**NB600I12600RS0C**	Price
.127	0	Steel	**NB600I12700RS0C**	Price
.128	0	Steel	**NB600I12800RS0C**	Price
.129	0	Steel	**NB600I12900RS0C**	Price
.130	0	Steel	**NB600I13000RS0C**	Price
.131	0	Steel	**NB600I13100RS0C**	Price
.132	0	Steel	**NB600I13200RS0C**	Price
.133	0	Steel	**NB600I13300RS0C**	Price
.134	0	Steel	**NB600I13400RS0C**	Price

Size	Grade	Material	Order No.	Price
.135	0	Steel	**NB600I13500RS0C**	Price
.136	0	Steel	**NB600I13600RS0C**	Price
.137	0	Steel	**NB600I13700RS0C**	Price
.138	0	Steel	**NB600I13800RS0C**	Price
.139	0	Steel	**NB600I13900RS0C**	Price
.140	0	Steel	**NB600I14000RS0C**	Price
.141	0	Steel	**NB600I14100RS0C**	Price
.142	0	Steel	**NB600I14200RS0C**	Price
.143	0	Steel	**NB600I14300RS0C**	Price
.144	0	Steel	**NB600I14400RS0C**	Price
.145	0	Steel	**NB600I14500RS0C**	Price
.146	0	Steel	**NB600I14600RS0C**	Price
.147	0	Steel	**NB600I14700RS0C**	Price
.148	0	Steel	**NB600I14800RS0C**	Price
.149	0	Steel	**NB600I14900RS0C**	Price
.150	0	Steel	**NB600I15000RS0C**	Price
.160	0	Steel	**NB600I16000RS0C**	Price
.170	0	Steel	**NB600I17000RS0C**	Price
.180	0	Steel	**NB600I18000RS0C**	Price
.190	0	Steel	**NB600I19000RS0C**	Price
.200	0	Steel	**NB600I20000RS0C**	Price
.210	0	Steel	**NB600I21000RS0C**	Price
.250	0	Steel	**NB600I25000RS0C**	Price
.300	0	Steel	**NB600I30000RS0C**	Price
.315	0	Steel	**NB600I31500RS0C**	Price
.350	0	Steel	**NB600I35000RS0C**	Price
.400	0	Steel	**NB600I40000RS0C**	Price
.450	0	Steel	**NB600I45000RS0C**	Price
.500	0	Steel	**NB600I50000RS0C**	Price
.550	0	Steel	**NB600I55000RS0C**	Price
.600	0	Steel	**NB600I60000RS0C**	Price
.650	0	Steel	**NB600I65000RS0C**	Price
.700	0	Steel	**NB600I70000RS0C**	Price
.750	0	Steel	**NB600I75000RS0C**	Price
.800	0	Steel	**NB600I80000RS0C**	Price
.850	0	Steel	**NB600I85000RS0C**	Price
.900	0	Steel	**NB600I90000RS0C**	Price
.950	0	Steel	**NB600I95000RS0C**	Price
1.00	0	Steel	**NB601I00000RS0C**	Price
2.00	0	Steel	**NB602I00000RS0C**	Price
3.00	0	Steel	**NB603I00000RS0C**	Price
4.00	0	Steel	**NB604I00000RS0C**	Price
5.00	0	Steel	**NB605I00000RS0C**	Price
6.00	0	Steel	**NB606I00000RS0C**	Price
7.00	0	Steel	**NB607I00000RS0C**	Price
8.00	0	Steel	**NB608I00000RS0C**	Price
9.00	0	Steel	**NB609I00000RS0C**	Price
10.00	0	Steel	**NB6010I0000RS0C**	Price
12.0	0	Steel	**NB6012I0000RS0C**	Price
16.0	0	Steel	**NB6016I0000RS0C**	Price
20.00	0	Steel	**NB6020I0000RS0C**	Price

PROCHECK Certified Rectangular Block Sets

All gage block sets are assigned serial numbers and certificate of grades and tolerances

- **Premium certified sets** come with Long form certifications from an ISO 17025 certified U.S. Laboratory and will meet all of your ISO requirements
- **Economy set** comes with non-traceable certificate only

36 Pc. Sets Include:



- 2 Blocks – .1000″ and .1005″
- 9 Blocks – .1001″ thru .1009” step of .0001″
- 9 Blocks – .101″ thru .109″ step of .001″
- 9 Blocks – .110″ thru .190″ step of .01″
- 3 Blocks – .200″ thru .300″ and .500″
- 3 Blocks – 1.000″, 2.000″ and 4.000″
- 1 Block – .10005″
- 1 Fitted wooden case

81 Pc. Sets Include:

- 9 Blocks – .1001″ thru .1009″ step of .0001″
- 49 Blocks – .101″ thru .149″ step of .001″
- 19 Blocks – .150″ thru .950″ step of .050″
- 4 Blocks – 1.000″ thru 4.000″ step of 1.000″
- 1 Fitted wooden case

Type - Economy Rectangular Gage Block Set				
Material	**No. of Pieces**	**Grade**	**Order No.**	**Price**
Steel	36	0	**NB602672062**	Price
Steel	36	B	**NB602672060**	Price
Steel	81	0	**NB602672066**	Price
Steel	81	B	**NB602672065**	Price
Ceramic	81	0	**NB602672CER2**	Price

Type - Premier Certified Rectangular Gage Block Set				
Material	**No. of Pieces**	**Grade**	**Order No.**	**Price**
Steel	36	0	**NB602672062CT**	Price
Steel	36	B	**NB602672060CT**	Price
Steel	81	0	**NB602672066CT**	Price
Steel	81	B	**NB602672065CT**	Price

PROCHECK Square Gage Block Sets

All gage block sets are assigned serial numbers and certificate of grades and tolerances



- **Premium certified sets** come with Long form certifications from an ISO 17025 certified U.S. Laboratory and will meet all of your ISO requirements
- **Economy set** comes with non-traceable certificate only

81 Pc. sets include:

- 1 Block – .050″
- 10 Blocks – .100″ thru .1009″ by .0001″
- 49 Blocks – .101″ thru .149″ by .001″
- 17 Blocks – 150″ thru .950″ by .05″
- 4 Blocks – 1.000″ thru 4.000″ by 1.000″

Type - Economy Square Gage Block Set				
Material	**No. of Pieces**	**Grade**	**Order No.**	**Price**
Steel	81	B	**NB602672SQ**	Price

Type - Premier Certified Square Gage Block Set				
Material	**No. of Pieces**	**Grade**	**Order No.**	**Price**
Steel	81	2	**NB602672SQ2CT**	Price
Steel	81	B	**NB602672SQCT**	Price

PROCHECK Long Rectangular Block Set



- Premium certified sets come with long form certifications from an ISO 17025 certified U.S. Laboratory and will meet all of your ISO requirements
- 8 Piece set includes: 1 of each – 5″, 6″, 7″, 8″, 10″, 12″, 16″ and 20”

Order No.	Price
NB602672LONGCT	Price

Fowler CERTIFIED SPACE-BLOX



- Tolerances to .00005″
- Certificate of inspection included
- Inspected according to meet NIST Federal Specification ASME B89. 1.9 - 2002 tolerances on length for inch gage blocks
- 36 blocks
- Ground hardened and tapped
- 4 Connection screws included
- Includes shop hardened fitted case

Order No.	Price
NA5553680050	Price

PROCHECK 36 Pc. Millionths Space Block Set

3/4″ Diameter with 1/4-28 ID thread, ground, hardened and lapped. 4 Connecting screws included to form any length desired.. Accuracy: ±.0002”.



Consists of the following sizes:

- 9 Blocks – .101″ thru .109″ by .001″
- 15 Blocks – .050″ thru .190″ by .010″
- 9 Blocks – .200″ thru 1.000″ by .100″
- 1 Block – .0625″
- 1 Block – .125″
- 1 Block – 1.000″

Order No.	Price
NF80PR1	Price

Fowler Bore Gage Setting Master Kits

Use Fowler’s Bore Gage Setting Master Kit for accurately setting any bore gage up to 6” in diameter to an accuracy of .0001”



Each Set Includes Setting Device

- Base anvil: 2.750” x .80”
- Adjustable anvil 2.375” x .375” (two each)
- Internal capacity: 6”
- Depth capacity: 1”
- Centralizer capacity width: 2.625”
- Quick release holder for fast adjustment

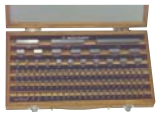


36 Pc. Economy Gage Block Set Included

- Tolerances to .00005”
- Certificate of Calibration to NIST
- High quality aluminum case!

Range	Order No.	Price
0 - 150mm	**NA5553646010**	Price
0 - 6"	**NA5553646000**	Price

Mitutoyo Precision Inch and Metric Rectangular Gage Block Sets



Type - Inch Rectangular Gage Block Set				
Blocks Per Set	Grade	Blocks Included in Sets	Order No.	Price
9	AS1	.625",.100",.125",.200",.250",.500",1.00", and 2.000"	**MT80516-935-26+**	242.00
81	0	9 Blocks, .1001-.1009", .0001" steps; 49 Blocks, .101-.149", .001" steps; 19 Blocks, .050-.950", .050" steps; 4 Blocks, 1.000-4.000", 1.000" steps	**MT80516-902-26**	Price
81	AS1	9 Blocks, .1001-.1009", .0001" steps; 49 Blocks, .101-.149", .001" steps; 19 Blocks, .050-.950", .050" steps; 4 Blocks, 1.000-4.000", 1.000" steps	**MT80516-903-26**	Price
81	AS2	9 Blocks, .1001-.1009", .0001" steps; 49 Blocks, .101-.149", .001" steps; 19 Blocks, .050-.950", .050" steps; 4 Blocks, 1.000-4.000", 1.000" steps	**MT80516-904-26**	Price

Type - Metric Rectangular Gage Block Set				
Blocks Per Set	Grade	Blocks Included in Sets	Order No.	Price
35	AS1	2 Blocks, .1000 & .10005"; 9 Blocks, .1001-.1009", .0001" steps; 9 Blocks, .101-.109", .001" steps; 9 Blocks, .110-.190", .01" steps; 3 Blocks, .200, .300 and .500"; 3 Blocks, 1.000, 2.000 and 4.000"	**MT80516-915-26**	Price
47	0	1 Block, 1.005mm; 9 Blocks, 1.01-1.09", .01mm steps; 9 Blocks, 1-1.9", .01mm steps; 24 Blocks, 1-24", 1mm steps; 4 Blocks, 25-100", 25mm steps	**MT80516-958-26**	Price
47	AS1	1 Block, 1.005mm; 9 Blocks, 1.01-1.09", .01mm steps; 9 Blocks, 1-1.9", .01mm steps; 24 Blocks, 1-24", 1mm steps; 4 Blocks, 25-100", 25mm steps	**MT80516-959-26**	Price
87	0	9 Blocks, 1.001-1.009mm; 49 Blocks, 1.01-1.49", .01mm steps; 19 Blocks, 0.5-9.5", .5mm steps; 10 Blocks, 10-100", 10mm steps	**MT80516-946-26**	Price
103	0	1 Block, 1.005mm; 49 Blocks, 1.01-1.49", .01mm steps; 49 Blocks, 0.5-24.5", .5mm steps; 4 Blocks, 25-100", .25mm steps	**MT80516-942-26**	Price
103	AS1	1 Block, 1.005mm; 49 Blocks, 1.01-1.49", .01mm steps; 49 Blocks, 0.5-24.5", .5mm steps; 4 Blocks, 25-100", .25mm steps	**MT80516-943-26**	Price
112	AS1	1 Block, 1.0005mm; 1 Block, 0.5mm; 9 Blocks, 1.001-1.009", .001mm steps; 49 Blocks, 1.01-1.49", .01mm steps; 48 Blocks, 1-24.5", 0.5mm steps; 4 Blocks, 25-100", 25mm steps	**MT80516-939-26**	Price
112	AS2	1 Block, 1.0005mm; 1 Block, 0.5mm; 9 Blocks, 1.001-1.009", .001mm steps; 49 Blocks, 1.01-1.49", .01mm steps; 48 Blocks, 1-24.5", 0.5mm steps; 4 Blocks, 25-100", 25mm steps	**MT80516-940-26**	Price

Type - Steel Thin Rectangular Gage Block Set				
Blocks Per Set	Grade	Blocks Included in Sets	Order No.	Price
10	AS2	10 Blocks, .005-.050", .005" steps	**MT80516-926-26**	Price

+ No Optical Flat

Fowler Micrometer Calibration Set

- 9 Pc. rectangular sets including two optical flats
- Assists in meeting both Federal specification GGG-C-105c and ISO 9000 requirements
- Contains one block of each of the following sizes: .0625, .100, .125, .200, .250, .300, .500, 1.000, & 2.000″
- Two optical flats that vary in size by .0125″ which allows checking anvil faces at half rotations of spindle for measuring flatness
- Supplied with fitted wooden case and certification to NIST on each block
- Meets specifications for grades shown in chart



Material	Grade	Order No.	Price
Steel	0	**NA5553670002**	Price

Mitutoyo Square Gage Block Sets

Call us for carbide gage block sets and other gage accessories



Type - Accessory Kit for Square Gage Block Set		
Blocks Per Set	Order No.	Price
27	**MT80516-612**	Price

Type - Square Gage Block Set				
Blocks Per Set	Grade	Blocks Included in Sets	Order No.	Price
36	0	1 Block .05", 10 Blocks .1001-.1009", 9 Blocks .101-.109", 5 Blocks .1-.5", 3 Blocks 1,2 and 3"	**MT80516-422-26**	Price
36	AS1	1 Block .05", 10 Blocks .1001-.1009", 9 Blocks .101-.109", 5 Blocks .1-.5", 3 Blocks 1,2 and 3"	**MT80516-423-26**	Price
81	0	9 Blocks, .1001-.1009, .0001 steps; 49 Blocks, .101-.149, .001" steps; 19 Blocks, .050-.950, .050" steps; 4 Blocks, 1.000-4.000, 1.000" steps	**MT80516-402-26**	Price
81	AS1	9 Blocks, .1001-.1009, .0001 steps; 49 Blocks, .101-.149, .001" steps; 19 Blocks, .050-.950, .050" steps; 4 Blocks, 1.000-4.000, 1.000" steps	**MT80516-403-26**	Price

Fowler Rectangular Gage Blocks

Each block is rectangular steel, hardened to 65 RC, stress relieved, tapped to accurate size, parallelism and flatness, then carefully inspected and marked for size

- All blocks are individually serialized and calibrated, with individual certification traceable to the National Institute of Standards and Technology.
- Grade 2 tolerance = +4, -2 millionths for sizes up to 1″
- Grade 3 tolerance = +8, -4 millionths for sizes up to 1″
- Economy / Shop Grade tolerance = ±50 mil

Block sizes included in 36 Pc. sets:
- 9 Blocks .1001″ thru .1009″ steps of .001″
- 9 Blocks .101″ thru .109″ steps of .001″
- 9 Blocks .110″ thru .190″ steps of .010″
- 5 Blocks .100″ thru .500″ steps of .100″
- 3 Blocks 1″, 2″ 4″1 Block .050″



Block sizes included in 81 Pc. sets:
- 9 Blocks .1001″ thru .1009″ steps of .0001″
- 49 Blocks .101″ thru .149″ steps of .001″
- 19 Blocks .050″ thru .950″ steps of .05″
- 4 Blocks 1.000″ thru 4.000″ steps of 1.000″

Description	Order No.	Price
36 Pc. Grade 2	**NA5553670038**	Price
36 Pc. Grade 3	**NA5553670036**	Price
36 Pc. Shop-Blox	**NA5553672036**	Price
81 Pc. Grade 0	**NA5553670080**	Price
81 Pc. Grade 3	**NA5553670081**	Price
81 Pc. Shop-Blox	**NA5553672081**	Price

Starrett Gage Block Sets

MADE IN THE USA

Rectangular Croblox Carbide Gage Block Set in Case





- The world's most complete gage block selection
- Rectangle, square & heavy duty styles from .010″ thru 20.000″
- All sets available with certificate of inspection & etched serial number
- Greatest range — .100″ to 12.000″ in .001″ steps
- Greater efficiency — allows two men to work from the set at the same time
- Greater accuracy on build-ups — allows using a minimum number of blocks

Type - Rectangular Croblox® Carbide Gage Block Set in Case				
Blocks Per Set	**Range**	**Blocks Included in Sets**	**Order No.**	**Price**
81	Grade 2+4 — 2 Microinches.100" to 12.000" in steps of .001".200" to 12.000" in steps of .0001"	9 blocks .1001 thru .1009 (steps of .0001); 49 blocks .101 thru .149 (steps of .001); 19 blocks .050 thru .950 (steps of .050); 4 blocks 1.000 thru 4.000 (steps of 1")	**MV75RC81A1**	Price

Type - Rectangular Steel Gage Block Set in Case				
Blocks Per Set	**Range**	**Blocks Included in Sets**	**Order No.**	**Price**
9	Grade 2+4 — 2 Microinches.0625" to 4.000" in steps of .0625".100" to 4.000" in steps of .100"	1 block ea. size: .0625, .100, .125, .300, .500; 2 blocks .200 & .250; 2 blocks 1.000 & 2.000	**MV75RS9A1**	Price

Type - Square Croblox® Gage Block Sets in Case				
Blocks Per Set	**Range**	**Blocks Included in Sets**	**Order No.**	**Price**
36	Grade 2+4 — 2 Microinches.200" to 8.000" in steps of .001".300" to 8.000" in steps of .0001"	1 block ea. size: .050, .400, .500, 1.000, 2.000 & 4.000; 9 blocks .1001 thru .1009 (steps of .0001); 9 blocks .101 thru .109 (steps of .001); 9 blocks .110 thru .190 (steps of .010); 3 blocks .100, .200, .300 (steps of .100)	**MV75SC36A1**	Price
81	Grade 2+4 — 2 Microinches.100" to 12.000" in steps of .001".200" to 12.000" in steps of .0001"	9 blocks .1001 thru .1009 (steps of .0001); 49 blocks .101 thru .149 (steps of .001); 19 blocks .050 thru .950 (steps of .050); 4 blocks 1.000 thru 4.000 (steps of 1")	**MV75SC81A1**	Price

Type - Square Steel Gage Block Sets in Case				
Blocks Per Set	**Range**	**Blocks Included in Sets**	**Order No.**	**Price**
36	Grade 2+4 — 2 Microinches.200" to 8.000" in steps of .001".300" to 8.000" in steps of .0001"	1 block ea. size: .050, .400, .500, 1.000; 9 blocks .1001 thru .1009 (steps of .0001); 9 blocks .101 thru .109 (steps of .001); 9 blocks .110 thru .190 (steps of .010); 3 blocks .100, .200, .300 (steps of .100); 2 blocks 2.000, 4.000	**MV75SS36A1**	Price
81	Grade 2+4 — 2 Microinches.100" to 12.000" in steps of .001".200" to 12.000" in steps of .0001"	9 blocks .1001 thru .1009 (steps of .0001); 49 blocks .101 thru .149 (steps of .001); 19 blocks .050 thru .950 (steps of .050); 4 blocks 1.000 thru 4.000 (steps of 1")	**MV75SS81A1**	Price

Starrett Gage Block Accessories for Rectangular Sets

Material - Clamps		
Description	**Order No.**	**Price**
1-1/2" Capacity Clamp	**MV75RA5**	Price
4" Capacity Clamp	**MV75RA6**	Price
6 1/2" Capacity Clamp	**MV75RA7**	Price
12" Capacity Clamp	**MV75RA8**	Price
Base Block - 1" Thickness	**MV75RA13**	Price
Case	**MV75CS9111**	Price
Center Point	**MV75RA12**	Price
Scriber Point	**MV75RA11**	Price

Material - Jaws (Sold Individually)		
Description	**Order No.**	**Price**
Half Round Jaw .250 Radius	**MV75RA1†**	155.00
Straight Gage Block Jaw - 2" Long; .250" Thick	**MV75RA4†**	99.00

†Item Needs Pair of Jaws

Starrett Standard Rectangular Gage Block Accessory Set



Includes:

- 1 of each 1-1/2", 4", 6-1/2", 12" capacity clamps
- .250 Radius half round jaw (2 required)
- 2" Long x .250" thick straight straight jaw (2 required)
- 1 each base block-1" thickness
- Center point
- Scriber

Order No.	Price
MV75AC11A	Price

Starrett Standard Square Gage Block Accessory Set



Includes:

- 1 of Each .125" radius and .250 radius half round jaw, .500" thick straight jaw (pair required)
- 2 of Each long flat head screws, short flat head screws, and slotted nuts
- 1 of Each 3/4", 1-1/2", 2-1/4". 3" solid tie rod
- 1 of Each 4-1/2" , 16" adjustable tie rod
- Case

Order No.	Price
MV75SA25A	Price

Starrett Gage Block Accessories for Square Sets

Material - Jaws (Sold Individually)		
Description	**Order No.**	**Price**
Half Round Jaw .125 Radius	**MV75SA1†**	170.00
Half Round Jaw .250 Radius	**MV75SA2†**	170.00

Material - Screws		
Description	**Order No.**	**Price**
2 Long Flat Head Screw	**MV75SA9**	Price
2 Short Flat Head Screw	**MV75SA10**	Price
2 Slotted Nuts	**MV75SA11**	Price

Material - Straight		
Description	**Order No.**	**Price**
.500 Thick	**MV75SA3†**	100.00
1 Center Point	**MV75SA5**	Price
1 Scriber Point	**MV75SA4**	Price
2 Knurled Screws	**MV75SA7**	Price
2 Studs	**MV75SA8**	Price
Base Block	**MV75SA6**	Price

Material - Tie Rods		
Description	**Order No.**	**Price**
1 1-1/2" Long Solid Tie Rod	**MV75SA13**	Price
1 2-1/4" Long Solid Tie Rod	**MV75SA14**	Price
1 3" Long Solid Tie Rod	**MV75SA15**	Price
1 3/4" Long Solid Tie Rod	**MV75SA12**	Price
1 4-1/2" Long Adjustable Tie Rod	**MV75SA16**	Price
16" Long Adjustable Tie Rod	**MV75SA17**	Price
Case	**MV75CS9168**	Price

†Item Needs Pair of Jaws
Note: 4-pc minimum order in special size gage blocks. Any Sets or Individual Gage Blocks, Purchased with Certifications and/or Etched S/N ARE NON-Cancelable or Returnable

Starrett Crystal Pink Granite Surface Plates



Grade AA - Laboratory Grade
This is typically specified for precision operations in constant temperature gaging rooms and metrology departments.

Grade A - Inspection Grade
This is typically specified for general work in quality control.

Grade B - Toolroom Grade
This is typically specified for production checking work throughout the shop.

Unilateral Flatness Tolerance
Overall flatness tolerance is based on unilateral measurement. All points on the work surface shall be contained between two parallel planes separated at a distance no greater than the amount specified for each particular grade and size as shown in our listings.

Repeat Reading Tolerance
In addition to the overall flatness tolerance referred to above, Starrett provides repeat reading tolerances as specified in U.S. Federal Specification GGG-P-463C.

MADE IN THE USA

- Meets or exceeds U.S. Federal Specification GGG-P-463C for flatness
- Great surface hardness and wear resistance — the highest percentage of quartz crystals of any granite plate
- Smooth, jewel-like quartz bearing points protect accuracy and finish of both the surface and the tools used on it
- Quality and economy combined
- Comparable to black granite plates while outwearing them as much as 5 to 1
- Meets or exceeds 50 lbs per square foot (24kg per 1,000 sq. cm) load bearing specifications. Available in 100 lb (45 kg) test series

Grade - A - Inspection Ledge - No Ledge

Surface Size (in.)	Unilateral Flatness Tolerance	Thickness (in.)	Weight (lbs.)	Order No.	Price
12 x 12	.0001	4	55 lbs	**NS6080604**	Price
12 x 18	.0001	4	85 lbs	**NS6080613**	Price
18 x 18	.0001	4	125 lbs	**NS6080622**	Price
18 x 24	.00013	6	248 lbs	**NS6080631**	Price
24 x 24	.00014	6	330 lbs	**NS6080649**	Price
24 x 36	.00017	6	495 lbs	**NS6080658**	Price
36 x 36	.0002	6	745 lbs	**NS6080704**	Price
36 x 48	.0003	8	1320 lbs	**NS6080713**	Price
36 x 60	.0004	10	2065 lbs	**NS6080722**	Price
36 x 72	.0005	10	2475 lbs	**NS6080731**	Price
48 x 72	.0006	10	3300 lbs	**NS6080758**	Price
48 x 96	.0008	12	5280 lbs	**NS6080776**	Price

Grade - B - Toolroom Ledge - No Ledge

Surface Size (in.)	Unilateral Flatness Tolerance	Thickness (in.)	Weight (lbs.)	Order No.	Price
12 x 12	.0002	4	55 lbs	**NS6080607**	Price
12 x 18	.0002	4	85 lbs	**NS6080616**	Price
18 x 18	.0002	4	125 lbs	**NS6080625**	Price
18 x 24	.00026	4	165 lbs	**NS6080634**	Price
24 x 24	.00028	4	220 lbs	**NS6080652**	Price
24 x 36	.00034	6	495 lbs	**NS6080661**	Price
36 x 36	.0004	6	745 lbs	**NS6080707**	Price
36 x 48	.0005	6	990 lbs	**NS6080716**	Price
36 x 60	.0007	8	1650 lbs	**NS6080725**	Price
36 x 72	.001	8	1980 lbs	**NS6080734**	Price
48 x 72	.001	8	2640 lbs	**NS6080761**	Price
48 x 96	.0015	10	4400 lbs	**NS6080779**	Price

Grade - A - Inspection Ledge - Two Ledge

Surface Size (in.)	Unilateral Flatness Tolerance	Thickness (in.)	Weight (lbs.)	Order No.	Price
12 x 12	.0001	4	50 lbs	**NS6080605**	Price
12 x 18	.0001	4	78 lbs	**NS6080614**	Price
18 x 18	.0001	4	120 lbs	**NS6080623**	Price
18 x 24	.00013	6	224 lbs	**NS6080632**	Price
24 x 24	.00014	6	306 lbs	**NS6080650**	Price
24 x 36	.00017	6	460 lbs	**NS6080659**	Price
36 x 36	.0002	6	710 lbs	**NS6080705**	Price
36 x 48	.0003	8	1250 lbs	**NS6080714**	Price
36 x 60	.0004	10	1950 lbs	**NS6080723**	Price
36 x 72	.0005	10	2340 lbs	**NS6080732**	Price
48 x 72	.0006	10	3165 lbs	**NS6080759**	Price
48 x 96	.0008	12	5060 lbs	**NS6080777**	Price

Grade - B - Toolroom Ledge - Two Ledge

Surface Size (in.)	Unilateral Flatness Tolerance	Thickness (in.)	Weight (lbs.)	Order No.	Price
12 x 12	.0002	4	50 lbs	**NS6080608**	Price
12 x 18	.0002	4	76 lbs	**NS6080617**	Price
18 x 18	.0002	4	118 lbs	**NS6080626**	Price
18 x 24	.00026	4	155 lbs	**NS6080635**	Price
24 x 24	.00028	4	210 lbs	**NS6080653**	Price
24 x 36	.00034	6	460 lbs	**NS6080662**	Price
36 x 36	.0005	6	710 lbs	**NS6080708**	Price
36 x 48	.0005	6	955 lbs	**NS6080717**	Price
36 x 60	.0007	8	1560 lbs	**NS6080726**	Price
36 x 72	.001	8	1870 lbs	**NS6080735**	Price
48 x 72	.001	8	2530 lbs	**NS6080762**	Price
48 x 96	.0015	10	4215 lbs	**NS6080780**	Price

PRO-CHECK Precision Toolroom Black Granite Surface Plates



- Granite surface plates meet or exceed Federal Specification GGG-P-463c
- Does not rust or corrode
- Does not nick or burr tools
- Harder than steel
- Retains accuracy for years
- Guaranteed repeat reading
- Autocollimator checked for overall accuracy
- Certificate of accuracy not included
- All plates are 0-ledge with grade B accuracy.

Width (in.)	Length (in.)	Thickness (in.)	Overall Accuracy	Weight (lbs.)	Order No.	Price
9	12	3	±.0001	38 lbs	**NS50C09120**	Price
12	12	3	±.0001	60 lbs	**NS50C12120**	Price
12	18	3	±.0001	75 lbs	**NS50C12180**	Price
18	24	3	±.00015	147 lbs	**NS50C18240**	Price
24	36	4	±.0002	418 lbs	**NS50C24360**	Price
36	48	6	±.0004	1258 lbs	**NS50C36480**	Price
36	72	6	±.0007	1850 lbs	**NS50C36720**	Price

CHALLENGE Three Point Steel Surface Plates

- **Applications:** three point surface plates provide a precise reference surface for toolmaking, layout or checking the accuracy of other surfaces. The three point bearing pads and rigid ribbed construction permit support by less accurate surfaces without disturbing the surface accuracy. Wooden cover supplied with each plate.
- **Tolerances:** available precision ground flat within .0005” (0.0125mm) or hand scraped flat within .0002” (0.005mm)
- **Options:** wheeled and stationary stands are available to provide a working height of approximately 36” for plates 18” x 24” and larger
- **Optional steel handles available**



W (in.)	L (in.)	Weight	Hand Scraped Three Point Surface Plate Order No.	Price	Precision Ground Three Point Surface Plate Order No.	Price
8	12	29 lbs	**NL30TP0812SC**	Price	**NL30TP0812GR**	Price
12	12	45 lbs	**NL30TP1212SC**	Price	**NL30TP1212GR**	Price
12	18	80 lbs	**NL30TP1218SC**	Price	**NL30TP1218GR**	Price
12	24	150 lbs	**NL30TP1224SC**	Price	**NL30TP1224GR**	Price
18	24	235 lbs	**NL30TP1824SC**	Price	**NL30TP1824GR**	Price
24	24	325 lbs	**NL30TP2424SC**	Price	**NL30TP2424GR**	Price
24	36	475 lbs	**NL30TP2436SC**	Price	**NL30TP2436GR**	Price
36	48	950 lbs	-	-	**NL30TP3648GR**	Price

PROCHECK Surface Plate Stands With Leveling Screws



- Designed for use with Procheck O-Ledge surface plates these stands are constructed from angle iron and are easy to assemble
- Working height 36”

Width (in.)	Length (in.)	Weight (lbs.)	Order No.	Price
18	24	54 lbs	**NS50C1824S**	Price
24	36	110 lbs	**NS50C2436S**	Price
18	24	54 lbs	**NS50C1824S**	Price
24	36	110 lbs	**NS50C2436S**	Price
36	48	150 lbs	**NS50C3648S**	Price
36	48	150 lbs	**NS50C3648S**	Price

For larger size plates use NT50 series

Surface Plate Stands

Stands with Level Screws or Casters and Floor Lock.

MADE IN THE USA



- Heavy gage reinforced angle iron
- Built to hold six times the weight of the surface plates
- Overall working height 36″
- Specify the amount of “lips” or “ledgers” and brand of plate when ordering your stand. Other sizes available

Surface plate not included

			Surface Plate Stand 0-Ledge with Casters		Surface Plate Stand 0-Ledge with Leveling Screws	
Width (in.)	Length (in.)	Weight (lbs.)	Order No.	Price	Order No.	Price
12	18	77 lbs	**NT5112180**	Price	**NT5012180**	Price
18	24	93 lbs	**NT5118240**	Price	**NT5018240**	Price
24	24	102 lbs	**NT5124240**	Price	**NT5024240**	Price
24	36	115 lbs	**NT5124360**	Price	**NT5024360**	Price
24	48	128 lbs	**NT5124480**	Price	**NT5024480**	Price
36	48	166 lbs	**-**	-	**NT5036480**	Price
36	60	225 lbs	**-**	-	**NT5036600**	Price
36	72	245 lbs	**-**	-	**NT5036720**	Price
48	48	235 lbs	**-**	-	**NT5048480**	Price
48	60	255 lbs	**-**	-	**NT5048600**	Price
48	72	265 lbs	**-**	-	**NT5048720**	Price
48	96	300 lbs	**-**	-	**NT5048960**	Price

†Larger sizes with casters available call for price and delivery. USA Stands are made to order.

Starrett Surface Plate Covers

MADE IN THE USA

- Strong vinyl material with soft cloth lining
- Protects surface plate from dust
- Fits snugly over top of standard size surface plates

Width (in.)	Length (in.)	Order No.	Price
12	18	**NS6083002**	Price
18	18	**NS6083003**	Price
18	24	**NS6083004**	Price
24	24	**NS6083005**	Price
24	36	**NS6083006**	Price
30	48	**NS6083007**	Price
36	36	**NS6083009**	Price
36	48	**NS6083008**	Price
36	60	**NS6083012**	Price
36	72	**NS6083013**	Price
48	72	**NS6083010**	Price
48	96	**NS6083011**	Price



Starrett Surface Plate Stands Stationary & Rolling

They are structurally engineered to support twice the weight of the plate with ample safety factor—yet are shipped knocked down for easy on-site assembly with carriage bolts (included) and a single wrench.

Steel stand for surface plates 24” x 36” and smaller
Steel stand for surface plates 30” x 48” and larger



NS6082005



NS6082004

		Surface Plate Stand-Rolling			Surface Plate Stand-Stationary		
Width (in.)	Length (in.)	Weight (lbs.)	Order No.	Price	Weight (lbs.)	Order No.	Price
18	24	75 lbs	**NS6082001**	Price	70 lbs	**NS6082000**	Price
24	24	85 lbs	**NS6082005**	Price	80 lbs	**NS6082004**	Price
24	36	110 lbs	**NS6082007**	Price	100 lbs	**NS6082006**	Price
36	36	135 lbs	**NS6082017**	Price	130 lbs	**NS6082016**	Price
36	48	127 lbs	**NS6082019**	Price	116 lbs	**NS6082018**	Price
36	60	153 lbs	**NS6082021**	Price	124 lbs	**NS6082020**	Price
36	72	200 lbs	**NS6082023**	Price	175 lbs	**NS6082022**	Price
48	72	310 lbs	**NS6082029**	Price	200 lbs	**NS6082028**	Price
48	96	-	**-**	-	220 lbs	**NS6082032**	Price

F.O.B. Factory

Starrett Toolmaker's Flats

MADE IN THE USA

Sturdy Felt Lined Case for Surface Plate Covers

12″L x 8″W x 2″H



Type	Order No.	Price
Black Toolmakers Flat	**NS6081802**	Price
Case	**NS6081804**	Price
Crystal Pink Toolmakers Flat	**NS6081803**	Price

Granite Surface Plate Cleaner

- Special formulation designed to work in all QC environments
- Hazard Code: 58

Brand Name - Generic USA		
Size	Order No.	Price
1/2 Gallon	**NB75Z9408**	Price
1 Pint	**NB75Z9406†**	4.75
1 Pint	**NB75Z9412**	Price
1 Quart	**NB75Z9407**	Price
1 Gallon	**NB75Z9409**	Price
5 Gallon	**NB75Z9410**	Price

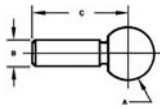
Brand Name - Starrett		
Size	Order No.	Price
1 Gallon	**NS6081823**	Price



† Spray Pump Bottle

VALTRA Standard Tooling Balls

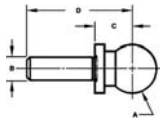




			Press Fit		Slip Fit	
A (in.)	B (in.)	C (in.)	Order No.	Price	Order No.	Price
.2500	.1250	9/16	**MA62826706**	Price	**MA62826705**	Price
.3750	.1875	3/4	**MA62826711**	Price	**MA62826710**	Price
.5000	.2500	1-1/2	**MA62826721**	Price	**MA62826720**	Price
.5000	.2500	15/16	**MA62826716**	Price	**MA62826715**	Price
.5000	.3125	1-1/2	**MA62826726**	Price	**MA62826725**	Price
.5000	.3750	1-1/2	**MA62826731**	Price	**MA62826730**	Price

VALTRA Shoulder Tooling Balls





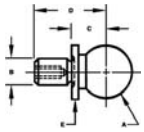
				Press Fit		Slip Fit	
A (in.)	B (in.)	C (in.)	D (in.)	Order No.	Price	Order No.	Price
.2500	.1250	.2000	9/16	**MA62826806**	Price	**MA62826805**	Price
.3750	.1875	.3000	3/4	**MA62826811**	Price	**MA62826810**	Price
.5000	.2500	.4000	15/16	**MA62826816**	Price	**MA62826815**	Price
.5000	.2500	.5000	1-3/8	**MA62826821**	Price	**MA62826820**	Price
.5000	.3125	.5000	1-1/2	**MA62826826**	Price	**MA62826825**	Price
.7500	.3750	.5000	1-1/4	**MA62826831**	Price	**MA62826830**	Price
6mm	3mm	6mm	12mm	**MA62826808**	Price	-	-

Slip-fit shank tolerance is plus 0.0000, minus 0.0004. Press-fit shank tolerance is plus 0.0003, minus 0.0000. Ball and shank are concentric within 0.0002 T.I.R.

VALTRA Toolmaker's Construction Balls

- Available with tapped hole for screw mounting
- Shoulder provides precise base to centerline dimension to facilitate locating ball center





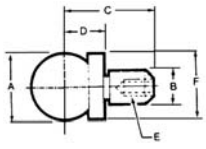
					No-Hole		Tapped†	
A	B	C	D	E	Order No.	Price	Order No.	Price
.5000	.2500	.3125	5/8	.490	**MA62826877**	21.25	**MA62826875**	Price
12mm	6mm	12mm	22mm	12.5mm	**MA62826887**	27.80	**MA62826885**	Price

†Thread hole #6-32x1/4" deep.

TE-CO Premium Short Shank Inspection Balls

- Concentricity of ball to shank .0001" T.I.R.
- One piece construction
- Designed for inspection applications such as coordinate measuring machines

MADE IN THE USA





A (in.)	B (in.)	C (in.)	D (in.)	E Thread	F (in.)	Order No.	Price
.2500	.1247	.58	.2000	-	.250	**SG5510601**	Price
.3750	.1872	.74	.3000	-	.375	**SG5510602**	Price
.3750	.3125	.74	.3000	8-32	.500	**SG5510603**	Price
.5000	.2497	.63	.3125	6-32	.500	**SG5510604**	Price
.5000	.2497	.88	.5000	6-32	.500	**SG5510606**	Price
.5000	.2497	.93	.4000	6-32	.500	**SG5510605**	Price
.5000	.3750	1.31	.3750	10-24	.625	**SG5510607**	Price
.6250	.3122	1.08	.4500	8-32	.625	**SG5510608**	Price
.6250	.3750	1.42	.4500	10-24	.625	**SG5510609**	Price
.6875	.3750	1.47	.5000	10-24	.750	**SG5510610**	Price
.7500	.3750	1.53	.5625	10-24	.750	**SG5510611**	Price
1.0000	.5000	1.64	.7000	10-24	1.000	**SG5510612**	Price

TE-CO Precision Tooling Balls

- Ball diameter = ±.00005"
- Shank diameter = ±.0000, –.0002"
- Concentricity of ball to shank = .0002" T.I.R.
- Hardened & ground steel (440 stainless)
- Two piece construction



Ball Dia. (in.)	Shank Dia. (in.)	Order No.	Price
.2500	.1247	**SG5510850**	Price
.3750	.1872	**SG5510851**	Price
.5000	.2497	**SG5510852**	Price
.6250	.3122	**SG5510853**	Price
.7500	.3747	**SG5510854**	Price
.8750	.4372	**SG5510855**	Price
1.0000	.4997	**SG5510856**	Price

52 Pc. Precision Gage Ball Sets

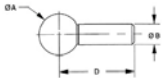
- 26 Pairs of Precision Balls – 1 Pair of each size: 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2, 17/32, 9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4, 13/16, 7/8, 15/16, 1″
- Chrome steel hardened to 63RC
- Ground and lapped
- Grade 24 accuracy — AFBMA Certified
- Provided in a sturdy case



Brand Name	Order No.	Price
Fowler	**NA5552438766**	Price

Jergens Tooling Balls, Standard Tolerance



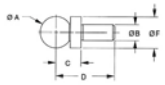


- One piece construction
- Close tolerances - .0002 T.I.R.
- 86290 Steel hardened Rc 58-62

A (in.)	B (in.)	D (in.)	Order No.	Price
.2500	.1250	9/16	**SG6629031**	Price
.3750	.1875	3/4	**SG6629032**	Price
.5000	.2500	1-1/2	**SG6629034**	Price
.5000	.2500	15/16	**SG6629033**	Price
.5000	.3750	1-1/2	**SG6629035**	Price

Jergens Slip Fit & Press Fit Inspection Balls





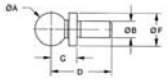
- One piece construction
- .0002 T.I.R.
- 8620 Steel hardened Rc58-62

Type - Press Fit Inspection Ball			
C (in.)	D (in.)	Order No.	Price
.2000	9/16	**SG6629085**	Price
.3000	3/4	**SG6629086**	Price
.4000	1-5/16	**SG6629087**	Price
.5000	1-1/4	**SG6629089**	Price
.5000	1-3/8	**SG6629088**	Price

Type - Split Fit Inspection Ball			
C (in.)	D (in.)	Order No.	Price
.2000	9/16	**SG6629041**	Price
.3000	3/4	**SG6629042**	Price
.4000	15/16	**SG6629043**	Price
.5000	1-1/4	**SG6629045**	Price
.5000	1-3/8	**SG6629044**	Price

Jergens Precision Slip Fit Inspection Balls



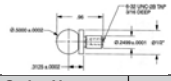


- Used as reference points for inspection applications in conjunction with Coordinate Measuring Machines to accurately measure the workpiece
- Concentricity of ball to shank - .0002 T.I.R.
- Hardened and ground steel (440 Stainless)
- Two-piece construction

A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	Order No.	Price
.2500	.1247	.2000	9/16	1/4	**SG6629075**	38.65
.3750	.1872	.3000	3/4	3/8	**SG6629076**	43.20
.5000	.2497	.4000	15/16	1/2	**SG6629077**	43.20
.6250	.3122	.4500	1-1/16	5/8	**SG6629078**	46.25
.7500	.3747	.5000	1-1/4	3/4	**SG6629079**	57.05
1.0000	.4997	.7000	1-5/8	1	**SG6629081**	80.00

Jergens Fixture Balls

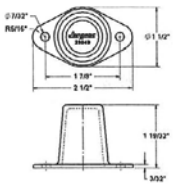




- Assembled by a welding technique that retains the initial high percision and fine finish of the balls
- Material: type 440-C stainless steel hardened to Rc 58-62
- Eccentricity, ball to shank, .0002 T.I.R. maximum
- Two piece welded construction

A (in.)	B (in.)	D (in.)	Order No.	Price
.2500	.1247	.5600	**SG6629001**	Price
.3750	.1872	.7500	**SG6629002**	Price
.5000	.2497	.9400	**SG6629003**	Price
.6250	.3122	1.0600	**SG6629004**	Price
.7500	.3747	1.2500	**SG6629005**	Price
.8750	.4372	1.4400	**SG6629006**	Price
1.000	.4997	1.6200	**SG6629007**	Price

Jergens Tooling/Inspection Ball Cover

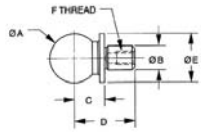


- Mounts directly to the fixture with two number 10 (M4) screws
- Fits most tooling balls up to 3/4”

Order No.	Price
SG6629049	Price

Jergens Construction Balls



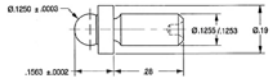


- Heavy duty, resists lateral forces
- Material: 8620 steel hardened Rc58-62
- Close tolerances - .0002 T.I.R.
- One piece construction

A (in/mm)	B (in/mm)	C (in/mm)	D (in/mm)	E (in/mm)	Thread	Order No.	Price
.5000	.2500	.3125	5/8	1/2	Not Tapped	**SG6629052**	Price
.5000	.2500	.3125	5/8	1/2	6-32 x 1/4	**SG6629051**	Price
10mm	5mm	10mm	20mm	10mm	Not Tapped	**SG6629091**	Price
12mm	6mm	12mm	22mm	12mm	Not Tapped	**SG6629092**	Price
6mm	3mm	6mm	16mm	6mm	Not Tapped	**SG6629090**	Price

Jergens Carbide Construction Ball



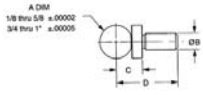


- Two piece construction
- Used as reference points for inspection applications in conjunction with Coordinate Measuring Machines to accurately measure the workpiece
- Concentricity of ball to shank - .0002 T.I.R.
- Hardened and ground
- Material: ball - carbide; shank - 440 stainless

Order No.	Price
SG6629099	Price

Jergens Checking Balls



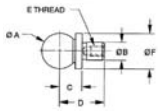


- High precision stainless steel checking balls are made to closer tolerances and avoid excessive side forces
- The accurately located shoulder provides for positive positioning, repositioning, or replacement
- Materal: type 440-C stainless steel hardened to Rc 58-26
- Eccentricity, ball to shank, .0002 T.I.R. maximum
- Two piece welded construction

A (in.)	B (in.)	C (in.)	D (in.)	Order No.	Price
.1250	.1255	.0938	.3750	**SG6629010**	Price
.2500	.1247	.2000	.5600	**SG6629011**	Price
.3750	.1872	.3000	.7500	**SG6629012**	Price
.5000	.2497	.4000	.9400	**SG6629013**	Price
.5000	.2500	.3125	.2500	**SG6629021**	Price
.6250	.3122	.4500	1.0600	**SG6629014**	Price
.7500	.3747	.5000	.12500	**SG6629015**	Price
.8750	.4372	.6000	1.4400	**SG6629016**	Price
1.000	.4997	.7000	1.6200	**SG6629017**	Price

Jergens Inspection Balls





- Material: 8620 steel
- Case hardened
- Used as reference points for inspection applications in conjunction with Coordinate Measuring Machines to accurately measure the workpiece
- Concentricity of ball to shank - .0001 T.I.R.
- One-piece construction

A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Order No.	Price
.2500	.1247	.2000	.5800	-	1/4	**SG6629060**	Price
.3750	.1872	.3000	.7500	-	3/8	**SG6629061**	Price
.3750	.3125	.3000	.7400	8-32	1/2	**SG6629062**	Price
.5000	.2497	.3125	.6300	6-32	1/2	**SG6629063**	Price
.5000	.2497	.4000	.9300	6-32	1/2	**SG6629064**	Price
.5000	.2497	.5000	.8800	6-32	1/2	**SG6629065**	Price
.5000	.3750	.3750	1.3100	10-24	5/8	**SG6629066**	Price
.6250	.3750	.4500	1.4200	10-24	5/8	**SG6629068**	Price
.6875	.3750	.5000	1.4700	10-24	3/4	**SG6629069**	Price
.7500	.3750	.5625	1.5300	10-24	3/4	**SG6629070**	Price
1.0000	.5000	.7000	1.6400	10-24	1	**SG6629071**	Price

facsimile® QUICK-SETTING COMPOUND

MADE IN THE USA

Quick Setting Compound Kits

"Facsimile" is a special plastic compound kit which is used for duplicating surface flats, roughness and for dimensional transfer of inaccessible locations. Many other applications are listed below and many more in our free 20 page applications booklet

- Make duplicates for measuring, such as gages, etc
- Test surface geometry, flatness, microfinish, etc
- Make permanent records of surface geometry, etc
- Make custom holding and nesting fixtures
- Make quick jigs
- Make excellent stylus patterns
- Make instant molds and patterns
- Cast small run parts and prototypes
- Mask, fill in and seal
- Fretting depth of blade dovetails in jet engines
- Makes potting, bonding and repairing easy
- Closer inspection can be performed by allowing the casting to cure in a pressure vessel (15 psi)
- FACSIMILE - will not affect the surface of ferrous or non-ferrous materials to which it is applied
- When casting in a "Confined" area, it is better to cast 1/2 of the internal shape
- Remember - when casting without releasing agent, an ACETONE soak removes FACSIMILE
- Hazard Code: 04
- Class 3 UN#1247

Introductory Kit
One lb Kit order No. GG4516000
Complete Kit Contains:
FACSIMILE Powder, 1 lb Troy
1 — 120 cc FACSIMILE liquid
1 — 60cc Flexbar Release Agent
1 — Powder scoop
1 — Molding clay
10 — Wooden spatulas
1 — 1 oz Polypropylene measuring cup



Size	Order No.	Price
1 lb	**GG4516000**	Price
25 lb	**GG4516025**	Price
3 lb	**GG4516003**	Price

facsimile® QUICK-SETTING COMPOUND Refills for Kits

TECHNICAL DATA
A test submitted by E. I. Dupont DeNemour & Company to an independent test lab showed the following properties of "Facsimile."
TEST PIECE: Approximately 1" round by 1/4" thickness
COMPRESSION TEST: Maximum load 6,800 lbs
Compression strength 9,650 PSI
MECHANICAL PROPERTIES: Ultimate tensile 3,415 PSI
WATER ABSORPTION: (24 hours at 73°) 0.31 by weight
The kit contains all material and instructions. The "Facsimile" can be diluted from putty consistency to a watery to best suit your job needs. If larger quantities of "Facsimile" are desired, they can be ordered 3 lb, 25 lb, 50 lb and 100 lb kits at proportionate lower prices per pound

MADE IN THE USA

Type - Refill for Facsimile Kit		
Description	**Order No.**	**Price**
1 lb Bar Molding Clay	**GG4516213**	Price
1 lb Jar Facsimile Powder•	**GG4516202**	Price
100 ea. 1 oz. Plastic Cups Graduated	**GG4516210**	Price
100 ea. 3 oz. Paper Cups Graduated	**GG4516209**	Price
100 ea. Sticks, Mixing, Narrow	**GG4516212**	Price
100 ea. Sticks, Mixing, Wide	**GG4516214**	Price
120cc Bottle Facsimile Liquid†	**GG4516205**	Price
20 pk. 6-1/2 oz. Plastic Cups Graduated	**GG4516211**	Price
25 lb Drum Facsimile Powder•	**GG4516204**	Price
3 lb Jar Facsimile Powder•	**GG4516203**	Price

Type - Refill for Facsimile Kit		
Description	**Order No.**	**Price**
60cc Release Agent, oil based•	**GG4516914**	Price
60cc Release Agent, soap based•	**GG4516200**	Price
Gallon Can Facsimile Liquid‡	**GG4516208**	Price
Pint Can Facsimile Liquid†	**GG4516206**	Price
Pint Release Agent, oil based•	**GG4516915**	Price
Pint Release Agent, soap based•	**GG4516201**	Price
Quart Can Facsimile Liquid†	**GG4516207**	Price

Type - Special Release Agent		
Description	**Order No.**	**Price**
Epoxy Parfilm (20oz. Spray Can)	**GG4516136**	Price

reprorubber Thin Pour Metrology

Casting Material

MADE IN THE USA

THIN POUR (No. 16135)
Final Color — LIGHT GREEN
For internal-shape applications where a thin pour will completely fill the cavity without voids. Hazard Code: 58
A complete replica casting is quickly formed
- Manipulation time is 2 minutes and cure time is 12 minutes
- Start to finish: 14 minutes

You Can Take Impressions Of:
- All metals non-metals paper or cardboard items
- All plastics, rubber,ceramic, glass items,wood, marble, etc



Other Uses Include:
- Fixturing where semi-rigid structure is desired
- Making joints where flexibility is required
- Prototypes of rubber type components such as gaskets, washers, etc
- As a mask for high temperature plasma spray of metallic coatings

Physical Advantages Over the Hard-Copy Replicas:
- Replica is easy to remove — even if there are under cuts or grooves
- Cross-sectioning of replica is easily accomplished with a knife or razor
- It can then be checked on an optical comparator or microscope
- Surface finish replication is exact with excellent optical properties
- Reprorubber copies can be recopied (copy from a "female mould" yields a male-shaped replica)
- Replicas are permanent — will not leach or ooze out nor out gas
- No more 16 hour cure times as with RTV SILICONES
- More accurate than all other RTV COMPOUNDS
- REPRORUBBER putty will withstand up to 300° F (or more)

Order No.	Price
GG4516135	Price

reprorubber Quicksetting Putty Metrology

Casting Material

MADE IN THE USA



QUICK SETTING PUTTY (No. 16130)
Final Color — LIGHT BLUE
Roll two equal-sized balls of catalyst putty and base putty and simply knead them together like dough. Excellent for external shapes. Simply spread over master pushing down with fingers and wait for cure 8-10 minutes. You have 2-3 minutes of manipulation time. Therefore 13 minutes start to finish. You can also cast internal shapes and cavities but some pressure should be applied such as a weighted object on top
Exotic Metrology-Grade Rubber — Self-Curing in Minutes Virtually Perfect Replica Castings of Internal and External Forms Non-Toxic — Easy to Use — 100 Times Faster Than RTV Silicones - No Release Agent is Ever Needed
Hazard Code: 58

PHYSICAL PROPERTIES and APPLICATIONS

	REPRORUBBER THIN POUR	REPRORUBBER QUICK SETTING PUTTY
Mix Time (Stirring in a cup)	30″-45″	30″-45″
Working Time (Manipulation Time)	2'00″	2'00″ (from beginning of mix)
Setting Time (at room temperature)	10'-12'	6'00″
Permanent Deformation	0.2%	0.3%
Dimensional Stability	less than 0.50	less than -0.25
Tear Strength	44 pounds per sq. in.	105 pounds per sq. inch
Elongation	6.0 at break	6.3 at break
Durometer (Shore A-2)	30-15 minutes	50-7 minutes
Temperature Stability	1 Week @ 72° C	1 Week@ 72° C
Detail Reproduction	EXCELLENT	EXCELLENT

Order No.	Price
GG4516130	Price

Machineable Wax

You can easily machine Flexbar Machinable Wax without the need for costly and messy coolants or lubricants, because MACHINABLE WAX is “self-lubricating”, “non-abrasive” and it will not fuse when machined at high-end spindle rpm’s and feed rates. Unlike wood or plastic, MACHINABLE WAX will not “gum up” on tool bits. As illustrated by the machined and assembled prototype on the front of this bulletin, sharp edges can be maintained, accurate threads can be cut and thin wall sections maintained with the quality of surface finish capable of being produced by your cutting tools and machine. MACHINABLE WAX is not cellular, grainy, or abrasive so “voids” in machined surfaces (common with plastics and wood) and “tool wear” are negligible. Flexbar Machinable Wax will also machine “within designated tolerances” to provide you with a dimensionally accurate prototype that can be assembled for checking.



- Hardness: 50-55 (Shore “D” scale)
- Specific gravity: 92
- Flash point: 575°F
- Softening point: 226°F
- Volumetric shrinkage @ room temperature: 7%
- Coloring: permanent, oil base, blue dye

Size	Description	Order No.	Price
1.5 Dia x 12	Cylinder	**GG4515170**	Price
2 Dia x 12	Cylinder	**GG4515165**	Price
3" Dia x 12	Cylinder	**GG4515166**	Price
4" Dia x 14	Cylinder	**GG4515167**	Price
6" Dia x 18	Cylinder	**GG4515168**	Price
3 x 7 x 1.5	Rectangular Block	**GG4515160**	Price
3 x 7 x 3	Rectangular Block	**GG4515161**	Price
5 x 10 x 3	Rectangular Block	**GG4515162**	Price
6 x 12 x 3	Rectangular Block	**GG4515163**	Price
24 x 24 x 2	Rectangular Block	**GG4515164**	Price

Fine Proofing Alloy

Uses of NO. 16117
PROOFING VIA REPLICATION OF:
Dies • Moulding • Internal and External Thread Forms • Texture Check • Groove Slots • O-Ring Grooves • Gear Teeth • Splines • Surface Finish Replication • Extra-Fine Fixturing • Checking Undercuts

OTHER USES:
1. Precision holding of irregular work pieces during machining.
2. Dental-type model making.
3. Drill bushings for drill jigs.
4. Checks for lens buffing—gem cutting.
5. Transfer templates in contour jigs.
6. Cores for electroforming.
7. Compound wax patterns—lost wax patterns.
8. Duplicating plastic. Facsimile or Plaster patterns.



Flexbar No. 16117 Fine Proofing Alloy can be used in conjunction with our facsimile Measure-Image Replicating Material. Accordingly—you can clone or reproduce original parts for prototypes, small production runs, etc.

Physical Properties No. 15158

Melting Temperature or Range °F	158	• Latent Heat of Fusion BTU/lb.	14	Composition %		Growth-Shrinkage Time After Casting	
Weight lb./in.³	.339	Brinell Hardness No.	9.2	Bismuth	50.0	6 Minutes	+.0027
• Specific Heat—		Tensile Strength		Lead	Price	30 Minutes	+.0045
Liquid	.040	—Lbs./in.²	5990	Tin	13.3	1 Hour	+.0051
Solid	.040	• % Elongation in Slow Loading	200	Price	10.0	5 Hours	+.0051
		Loading, Lbs./in.²		Indium	None	24 Hours	+.0051
		• Max. Load 30 Sec.	10,000			21 Days	+.0057
		• Max. Load 5 Min.	4,000				
		• Safe Sustained Load	300				

Order No.	Price
GG4516117	Price

Fixturing Alloy



Uses of No. 15158
CHUCKS, JIGS AND FIXTURES:
1. Spinning metal into re-entrant or bottle neck shapes.
2. Holding irregular shaped work pieces during machining.
3. Bushings anchored in drill jigs.
4. Cast ref. surfaces in assembly, checking, die spotting, drilling, inspection fixtures.
5. Transfer templates in contour jigs.

MODELS AND PATTERNS:
1. Duplicate patterns for foundry match plates, ceramics, plastics and pottery
2. Patterns compensated for shrinkages

- Reusable low-temperature melting alloy (158°F) for supporting thin-walled sections which require machining. Does not shrink upon solidification. After machining you simply melt it out in hot water.
- Melts at 54° F below boiling point of water. Simply put it in a cast iron, stainless steel or porcelain lined pot and into hot water bath to melt it.
- Reusable many times.
- No drosses created owing to low heat required prior to pouring it.

Order No.	Price
GG4515158	Price

Melting Temperature or Range °F	117	• Latent Heat of Fusion BTU/lb.	6	Composition %		Growth-Shrinkage Time After Casting	
Weight lb./in.³	.32	Brinell Hardness No.	12	Bismuth	44.7	6 Minutes	+.0002
• Specific Heat—		Tensile Strength		Lead	22.6	30 Minutes	.0000
Liquid	.035	—Lbs./in.²	5400	Tin	8.3	1 Hour	-.0001
Solid	.035	• % Elongation in Slow Loading	1.5	Cadmium	5.3	5 Hours	-.0002
				Indium	19.1	24 Hours	-.0002
						21 Days	
-.0002							

Fault Finder Inspection Kit 1070

Group 1

- **Kit Contains:** 4 - #1071 Cleaner; 2 - #1072 Penetrant; 2 - #1073 Developer
  Advantages: portability, accuracy, versatility, simplicity, availability
- Group 1 is Certified
- Kit contains no chlorine or sulfur-bearing solvents
- Because of its carrier solvents, Group 1 is our least flammable system
- Hazard Code: 3



Description	Size	Order No.	Price
Fault Finder Inspection Kit	Kit	**LP501070**	Price
Developer for Fault Finder Kit	7.5 oz	**LP501073**	Price
Penetrant for Fault Finder Kit	7.5 oz	**LP501072**	Price
Cleaner for Fault Finder Kit	8.5 oz	**LP501071**	Price

Starrett® HE400 Horizontal Benchtop Optical Comparator

- HE400 horizontal benchtop optical comparator offers a 16” screen, 10” fast traverse X-axis travel, 4” Y-axis travel, quick change bayonet fitting lenses, Q-axis digital protractor with angular measurements to 1” resolution and MetLogix software control systems
- Simple to use, yet have great capacity and performance to satisfy an exceptionally wide range of dimensional inspection applications and complex measuring requirements
- Precision optics, superb lighting and a highly accurate workstage which combine to ensure bright, sharp images and exceptional accuracy



Model No.	Screen Size (in.)	Measuring Range	Description	Order No.	Price
HE400-M1E-SP	16	10" x 4" X - Y Axis	With MetLogix M1E & Optical Edge Detection	**MV85HE400M1ESP**	Price
HE400-M1-SP	16	10" x 4" X - Y Axis	With Metlogix M1	**MV85HE400M1SP**	Price

Suburban MASTER-VIEW™ Line of Optical Comparators Complete and Ready to Use Complete and Ready to Use

On all Master-View™ Optical Comparators

- Surface illumination through duplex fiber optics
- High capacity 4”x8” travel stage with 4.5”x19” work surface
- 10X Lens system
- Overlay chart clips
- Vernier reading to 5 minutes of arc
- Ball way construction handles loads to 100 lbs
- 3-Position rotary switch selects profile, surface, or combination surface and profile illuminations modes
- Rotary frosted glass screen with 90° crossline and 360° protractor rim
- Heavy-duty monorail type welded steel frame

Suburban Master-View Plus™ 14" Optical Comparator

Model MV-14-P-FAGOR Readout

Master-View Plus™ includes all the standard features of our standard Master-View™

Plus:
FAGOR NV-20

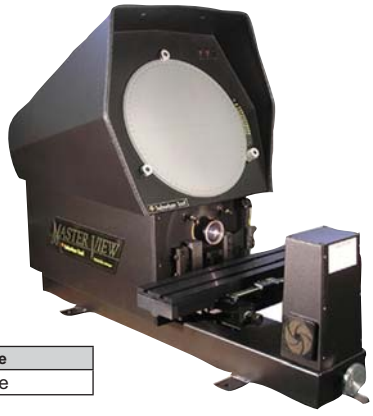
- 2-Axis digital readout
- Linear comp
- Inch/mm conversion
- Absolute/incremental swtich
- 5 Micron glass scales
- .0002″ Resolution



Order No.	Price
MS55MV14P	Price

Suburban Master-View™ Basic MV-14

- All the standard features of the Master-View™ line plus LCD digital scales on the X and Y axis providing .0005” reading.



Order No.	Price
MS55MV14	Price

Suburban The Original MASTER-VIEW™ and MASTERVIEW II™ Optical Comparator

Master-View™ Basic MV-14 all the standard features of the Master-View™ line plus LCD digital scales on the X and Y axis providing .0005″ reading.

Master-View with Quadra-Check® 200 series readout
Standard features plus Quadra-Check® 200 series readout and Acu-Rite® glass scales, .0001″ reading on X and Y scales.
Four models are available.
MV-14-Q with Quadra-Check® 200 series readout
MV-14-QR Series 200 readout plus digital protractor
MV-14-QE Series 200 readout plus fiber optic edge detection
MV-14-QRE Series 200 readout with both digital protractor and fiber optic edge detection



Model Number	Order No.	Price
MV14Q	**MS55MV14Q**	Price
MV14QE	**MS55MV14QE**	Price
MV14QR	**MS55MV14QR**	Price
MV14QRE	**MS55MV14QRE**	Price

Mitutoyo PH-A14 Horizontal Profile Projectors

- Mitutoyo's lens technology and workmanship combine to provide a bright, crisp image for error-free inspection
- 8" x 4" floating-type workstage incorporates linear scales for fast, accurate measurement
- The workstage provides high accuracy and can handle a workload of up to 100 lbs
- 10X objective lens and fiber illuminator are standard accessories



Model No.	Description	Order No.	Price
64PKA087	PH-A14 Profile Projector w/QM Data (Arm Mount)	**MT8064PKA087**	Price
64AAA129B	Optional Stand for PH-A14 Projectors	**MT8064AAA129B**	Price

Mitutoyo PH-3515F Horizontal Profile Projectors

- Heavy-duty bench top model with horizontal optical system
- Erect image on day-bright screen
- 14" (356mm) diameter protractor screen with crosshair line for easy alignment
- Floating-type workstage incorporates linear scales for fast, easy measurement
- Suitable for thread pitch measurements - free from blurred or distorted images when the workpiece is angled



Model No.	Description	Order No.	Price
64PKA088A	PH-3515F Profile Projector w/QM Data (Arm Mount)	**MT8064PKA088A**	Price
64AAB176	Optional Stand for PH-3515F Projector	**MT8064AAB176**	Price

Mitutoyo PV-5110 Profile Projector

Model No. 304-919A

- Large 500mm screen
- Floor model uses a downward illumination system
- Digital readout protractor screen (including zero-setting, ABS/INC coordinate switching functions) for easy and error-free angle measurement
- Angled screen allows projected images to be easily traced or compared with a template
- Oblique surface illumination system provided clear and bright images, allowing easy inspection of non-reflective workpieces such as plastic parts or printed materials
- **Includes**: 8"x4" stage, 10X projection lens set, surface illumination unit, counter stand for KA counter, power cord, halogen bulb, fuse, grounding wire, allen wrench, vinyl cover



Order No.	Price
MT80304-919A	Price

Mitutoyo ABSOLUTE Vertical Digimatic Scale Units

- The ORIGIN key allows setting of an absolute zero point to be used as reference in subsequent measurements. Once set, the ABS Digimatic Scale Unit is ready to show its true position whenever turned on rather than 0.00" as with standard models
- The ZERO/ABS key allows the display to be zero-set at any slider position along the beam for incremental comparison measurements. This key will also allow return to the absolute coordinate with a display of the true position from the origin point
- No rack, no pinion, no glass scale
- Safely embedded in the hardened stainless steel blade
- Horizontal or vertical face according to the scale mounting direction
- Special type that is provided with diameter displaying function is available for lathes
- All units come with two mounting brackets, each located at either end of the scale
- With SPC data output



Range (in/mm)	Accuracy (in/mm)	Resolution (in/mm)	Order No.	Price
0 - 6 / 0 - 150mm	.001 / 0.03mm	.0005 / 0.01mm	**MT80572-311-10**	Price
0 - 8 / 0 - 200mm	.001 / 0.03mm	.0005 / 0.01mm	**MT80572-312-10**	Price

Mitutoyo Working Standard Scales Series 182

- High precision glass scales manufactured under Mitutoyo's leading-edge Linear scale production technology
- Ideal for checking magnification accuracy of profile projectors and microscopes, and the table feeding accuracy of measuring equipment
- Graduation 0.1mm (thickness: 20µm), 0.5mm (thickness: 50µm), 1mm (thickness: 100µm)

Range	Graduation (in.)	Width	Order No.	Price
100mm	0.1	125mm	**MT80182-512-10**	Price
100mm	0.5	130mm	**MT80182-521-10**	Price
150mm	0.1	175mm	**MT80182-513-10**	Price
200mm	0.5	230mm	**MT80182-522-10**	Price
250mm	1	280mm	**MT80182-531-10**	Price
300mm	0.5	330mm	**MT80182-523-10**	Price
400mm	0.5	430mm	**MT80182-524-10**	Price
500mm	1	530mm	**MT80182-532-10**	Price
750mm	1	780mm	**MT80182-533-10**	Price

Fowler 12" Basic Bench Top Optical Comparator

with Digital Indicators

12” Basic Bench Top Optical Comparator Standard with Profile and Surface illumination. A must for all tool room applications this bench top comparator is lightweight, portable and economical.

- Featuring the basics for comparative/absolute measurements.
- 1 quadrant protractor screen graduated to 10X, 20X & 40X
- 2 each, AGD Group 2,0 - 1″/25mm electronic digital indicators with .0005″/.01mm resolution
- 10X lens is included with the unit and other lenses are available
- T-slot stage with a travel of 6″ horizontally and 2-1/2″ vertically make the unit universal for many different types of set-ups
- Uses a standard 110 power source so no expensive special electrical supply is needed



Order No.	Price
NA5553900000	Price

PROCHECK Large Capacity Bench Centers

Heavy base provides extra stability for large workpieces

- Accuracy: less than .00015” runout
- Chart supplied with each instrument
- Adjustable gibs
- Adjustable indicator holder included
- Made by one of the world’s largest manufacturers
- Includes 2MT center
- Indicator NOT included



Center Distance (in.)	Max. Dia. (in.)	OAL (in.)	Order No.	Price
20	12	27-1/2	**MV501**	Price
40	19	47	**MV502**	Price

O.C.White Co. Super-Scope® HD Integrated Inspection

Standard Features

- 5MP Hybrid HDMI/USB camera with advanced onboard imaging controls
- Unlimited working distance 6” to infinity
- Up to 80x magnification with options
- 24” Tall heavy duty double ball bearing base
- ∞ - 9mm Field of view
- 100-240V (50/60hz) autoswitchable
- 1-40x Scale Range
- Integrated 12” screen with 300 DPI resolution

Onboard Software Features (No PC Required)

- Image & video capture
- Browse saved images
- Split-screen compare
- Calibrated measurement
- Digital zoom with H/V image invert
- Region of interest cropping
- Crosshair overlay
- Calibration bar
- Data export to excel or txt file



Model Number	Field of View	Power	Scale Range	Comments	Order No.	Price
TKSS	∞ - 9mm	100-240V (50/60hz) autoswitchable	1-40x	No Light Source	**KC54TKSS**	Price
TKSS-F	∞ - 9mm	100-240V (50/60hz) autoswitchable	1-40x	FL1000 Fluorescent Ring Light	**KC54TKSSF**	Price
TKSS-LV2	∞ - 9mm	100-240V (50/60hz) autoswitchable	1-40x	LV2000-B LED Ring Light	**KC54TKSSLV2**	Price

O.C.White Co. ProZoom® 6.5 Microscopes

Standard Features

- 5 - 65x Standard magnification range (up to 390x w/options)
- Super wide 28mm high eye point and wide field eyepieces
- 45° Eyepiece angle
- 90mm of working distance with 0.5x objective lens
- Interpupillary distance adjustment on eyepiece tubes
- Built with ESD safety construction and materials
- Trinocular package includes 0.3x CCD adapter
- 100-240V (50/60hz) autoswitchable
- LV2000-B LED light ring included
- 5 Year mechanical warranty (1 year electrical)

Onboard Software Features (No PC Required)

- Image & video capture
- Browse saved images
- Split-screen compare
- Calibrated measurement
- Digital zoom with H/V image invert
- Region of interest cropping
- Crosshair overlay
- Calibration bar
- Data export to excel or text file



Model No.	Field of View	Scale Range	Comments	Order No.	Price
TKPZ-L-LV2	58-5.5mm	10-65x	Binocular Style, Lab Base	**KC54TKPZLLV2**	Price
TKPZ-LV2	46-3.5mm	5-65x	Binocular Style, 0.5 Aux Lens, Ball Bearing Arm Base	**KC54TKPZLV2**	Price
TKPZT-HU-LV2	46-3.5mm	5-65x	Trinocular Style, 12" "Heads-Up" Screen, Ball Bearing Arm Base	**KC54TKPZTHULV2**	Price
TKPZT-LV2	46-3.5mm	5-65x	Trinocular Style, 22" LED Screen, Ball Bearing Arm Base	**KC54TKPZTLV2**	Price

Fowler Microscope

XTRA-RANGE

- 10X eyepiece with adjustable centers and rubber eyecups
- 2X objective lens
- Top swiveling light source - 12 volt lamp, 110V supply
- Positive rack and pinion focusing
- Articulated 12″ long extension arm
- Heavy base plate insures stability and houses transformer which measures 5″ x 8″ x 2.5″
- Overall column with a height of 12″



Order No.	Price
NA5553640280	Price

Fowler Stereo Microscope

- Includes 1X and 3X objectives, 10X eyepiece and 12 volt incident (top) illuminator with an on/off switch
- Wide field eyepieces are mounted in 45° inclined eyetube with interpupilary distance adjustable from 2 to 3″ (50 to 75mm)
- Objectives are mounted in 180° revolving turret with positive click stop - parfocal and parcentered
- Optional eyepieces available to increase magnification to 60X
- 2.5″ (60mm) reversible white/black stage plate provided
- Pair of rubber eye cups included



Order No.	Price
NA5553640320	Price

PROCHECK 200X Digital Microscope with Stand

- Magnification 10x - 200x @ 17” montitor full screen view
- Optical format: 1/3” CMOS Sensor (4:3)
- Field of View: Min: 2.5mm x 1.9mm @ 17mm working distance (200x), Max: 100mm x 75mm @ 300mm working distance (10x)
- Image sensor: 2.0 Mega Pixels
- Video Capture Resolution 1600 x 1200, 1280 x 1960, 640 x 480
- Color: 24 bit RGB or YUV or MJPG
- Lens: High precision microscope lens
- Focus Range: Manual from 8mm to 300mm
- White balance: Auto
- Exposue Time: Auto
- Light Source: Integrated adjustable LED illumination
- Length: 122mm
- Diameter: 36mm
- Output: USB streaming video
- Power supply: from USB
- Software included
- Microscope stand included
- 1 Year Warrant
- Laptop not included



Order No.	Price
PC22DM200S	Price

Fowler Deluxe Stereo Microscope

- Includes 2X and 4X objectives, 10X eyepiece,eyecups and dust cover, top & bottom illumination
- Wide field eyepieces are mounted in 45° inclined eyetube with interpupillary distance adjustable from 2 to 3″ (50 to 75mm)
- Sharp image definition
- Optional eyepieces available to increase magnification to 80X
- Objectives are mounted in 180° revolving turret with positive click stop - parfocal and parcentered
- Two 3.5″ (95mm) stage plates provided
- Rack and pinion focusing



Order No.	Price
NA5553640902	Price

Fowler Deluxe Stereo Zoom Microscope

- Binocular head can be rotated a full 360° and locked into any position desired
- Includes 10x eyepieces and eyecups
- 7-45x Magnifications
- Field of view: 33–5mm
- Sharp image definition
- Rack and pinion focusing
- Top and bottom illumination
- Illumination can be adjusted separately

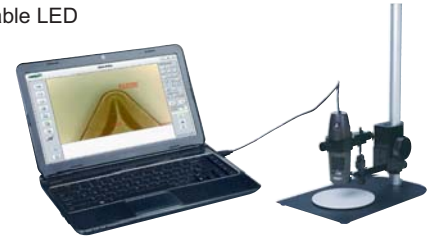


Order No.	Price
NA5553640777	Price

INSIZE Digital Measuring Microscope

10X - 200X Power

- Short focus distance type
- Illumination built in adjustable LED
- Power supply USB
- Can take pictures and videos
- Supplied with software
- Class 2B
- Standard ANSI B1.2
- Laptop not included



Order No.	Price
SZ20ISMPM200SB	Price

INSIZE Digital Measuring Microscope

- Connected to TV and computer
- Take pictures and videos, saved to memory card
- Measurement on computer with accuracy ±.0004”
- Large working distance because focus distance of camera is adjustable
- Automatic white balance and exposure, white-black display mode
- Automatic power off



Model No.	Power	Order No.	Price
ISM-DM40	15X - 205X	**SZ20ISMDM40**	Price

GENERAL Live Video Wireless Data-Logging Video Inspection Systems



- Big, bright color LCD for crystal-clear real-time video imaging
- Probes are water, oil, and dust resistant to IP67
- DCS280's grip and monitor are IP54 splash-proof
- 2.4" Diagonal TFT color LCD
- Batteries are included
- 3 Year limited manufacturer warranty

Probe & Tip Size	Display Size	Live/Recording	Interface	Power Source	Order No.	Price
9mm x 3' (1m) length	2.4	Live Only	Live Only	4 AA Batteries	**NB49DCS280**	Price

Hawkeye® Precision Borescopes

See the Places You Always Needed to See… But Couldn't













- See inside of pipes, tubes, valves, meters, bores, cross-holes, castings and injection molds
- Magnification of up to 25 times or more
- Portable and ready to use
- Built-in light source
- Bright clear images, straight-on or 90° view

Hawkeye Precision Borescope Kit Includes:

- Hawkeye Precision Borescope
- Hawkeye SideWays 90° adapter
- Mini-Maglite® flashlight with batteries
- Keyed aluminum & ABS carrying case

Specifications:

- Working length: 7" & 12" & 17"
- Tube diameter: Super Slim.109", Slim .188", Hardy .313"
- Tube material: type 304 stainless steel
- Field of view: 40º
- Direction of view: 0º from primary axis of borescope
- Actual view: 6.5mm @ 7mm distance, 41mm @ 50mm distance
- Range of focus: .04" (1mm)
- Resolution: 45 line pairs per mm @ 5mm subject distance
- Kit weight (12" Slim): 4 lbs 6 oz

Description	Order No.	Price
Hardy 12" Kit	**MS4680812**	Price
Hardy 17" Kit	**MS4680817**	Price
Hardy 7" Kit	**MS4680807**	Price
Nova Light Source†	**MS4681412**	Price

Description	Order No.	Price
Slim 12" Kit	**MS4681912**	Price
Slim 17" Kit	**MS4681917**	Price
Slim 7" Kit	**MS4681907**	Price
Slim 7" with 90° Adaptor	**MS4681906**	Price

†The Hawkeye Nova is a portable, rechargeable Xenon light source 10 times as bright as our standard light. Great for use in large cavities and bores, such as pipes and engine cylinders.

Hawkeye® Flexible Borescopes

The Hawkeye Flexible Borescope fits into places with restricted access, can be flexed into places with tight access, and has "memory" to retain its working set. The Hawkeye Flexible Borescope brings illumination from a powerful, portable Nova Light, through glass fibers to the subject. A clear, bright image is returned to the eyepiece through 18,000 optical glass fibers, revealing burrs, contaminants, or flaws in weld joints.

- Outside diameter Borescope: .310″, mirror tip: .375″
- Working length: 39.4″
- Direction of view: 0° & 90° (with included mirror tip)
- Field of view: 40°
- Focal distance: .500″ to infinity
- Light source: Nova light with Xenon lamp and NiCd battery (charger included)
- Includes lockable metal case with die-cut foam







Order No.	Price
MS46HFB2A	Price

DCS1600 High Preformance Data Logging Video Borescope System

Portable hand held complete borescope system with monitor, camera and video

Features:

- Compact, palm-sized unit includes LED light source, 3.5” (89mm) extra wide TFT (Thin Film Transistor) display, camera and recorder
- Takes still photos and video (Multiple video formats compatible with most software including Windows media player, no special software required
- Internal SD memory allows user to save a whole video and output later
- TV monitor output, computer USB output, data logging function
- Multiple mirrored viewing tips and extra wide view angle
- Comes with a 3.3 ft (1m) long flexible probe with 0.2” (5.5mm) diameter camera tip
- Insert tube is resistant to water, oil, dust, gasoline, and scratches



Specifications:

- Light source: white LED
- Field of view: horizontal field angle: 46º, vertical field angle: 34º, diagonal field angle: 56º
- Depth of field (DOF): 1cm ~ 6cm
- Working temperature: 0º to 55ºC
- Power: rechargeable Li-Polymer battery 3.7V, AC 100-240V 50-60Hz power consumption DC5.5 1.8A (up to 4 hours record time)
- Recording medium: 1G SD CARD (up to 2G)
- Video out format: NTSC & PAL

Complete kit includes : Charger, lens module cable 3.3ft (1m), SD 512M memory card, 30°, 45° and 60° mirrors, USB to 5-pin mini-B cable, cleaning cloth, cotton swab, instructions, hard blowmolded case

Order No.	Price
NB49DCS1600	Price

Recording Video Inspection Camera/Borescope

With High-Performance Articulating Probe

- Ideal for aircraft inspection, machinery, and production line
- Display: 3.5” (89mm) diagonal TFT color LCD
- Display resolution: 320 x 240 pixels (QVGA)
- Camera and recording resolution: 640 x 480 pixels (VGA)
- 2X zoom and horizontal mirroring controls on front panel
- Recording medium, standard size SD card
- Power source: rechargable 3.7V Li-ion battery or AC2 adaptor / charger (included)
- Includes: H16 console, P18HPART high performance wireless articulating probe, 70° mirrored probe viewing tip, 4GB SD memory card, AC2 adaptor/battery charger, USB and A/V cables, hard plastic carrying case
- Limited 1 year warranty



Order No.	Price
NB49DCS16HPART	Price

Wet / Dry Video Scopes

- Standard probes are 1m long
- Monitors include 3.5” (89mm) diagonally color LCD with 320 x 240 pixel resolution
- Video shown on monitor can be inverted 180°
- IP67 rating eliminates concerns about accidentally dropping or dunking grip or monitor into water, makes it possible to inspect sewer and water lines carrying running water
- Grip, probe, and monitor are guaranteed leakproof to depth of 1m





Description	Order No.	Price
Non-recording with 8mm probe	**NB49DCS600A**	Price
Recording with 8mm probe	**NB49DCS660A**	Price

Wireless Recording Video Inspection Camera/Borescope

With High Performance Articulating Probe

- Ideal for aircraft inspection, machinery, and production line
- Display: 3.5” (89mm) diagonal TFT color LCD
- Display resolution: 320 x 240 pixels (QVGA)
- Recording rsolution: 640 x 480 pixels (VGA)
- Wireless frequency / range: 2.4 GHz / 33 ft. (10m)
- Recording medium, standard size SD card (4GB card included)
- Power source: rechargable 3.7V Li-ion battery or AC2 adaptor / charger (included)
- Includes: DCS1800 console, P18HPART high performance wireless articulating probe, 110° mirrored probe viewing tip, 4GB SD memory card, AC2 adaptor/battery charger, A/V cable, hard plastic carrying case
- Limited 1 year warranty



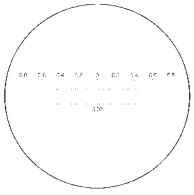
Order No.	Price
NB49DCS18HPART	Price

Fowler Pocket Scope and Micro-Lite

Available in 20x or 40x

Pocket Scope Features:
- Fixed focus, no moving parts–never loses focus
- Accurate readings without adjusting
- Compact in size, under 5″
- Provides on-the-job viewing
- Special bevelled opening gathers and focuses light
- .002” Reticle View

Micro-Lite Features:
- Invaluable for inspection and measurement of hard-to-see and reach places





Power	Description	Field of View	Scale Range	Order No.	Price
-	Micro-Light uses AAA Battery (not included)	-	-	**NA5552662045**	Price
20X	Pocket Scope & Micro Light Set	.190	0-.18	**NA5552662050**	Price
20X	Scope w/.002" reticle	.190	0-.18	**NA5552662020**	Price
40X	Pocket Scope & Micro-Light Set	.082	0-.07	**NA5552662055**	Price
40X	Scope w/.001" reticle	.082	0-.07	**NA5552662040**	Price

Fowler Deep Hole Light Kit

- Permits viewing in deep holes, around corners, under grooves, etc
- Includes battery case for 2 penlight batteries and a battery case for one battery for use where space is limited, batteries not included
- Features a positive switch
- Curved and straight light conveying devices place intense illumination at their ends directly on the bottom of the hole being viewed
- A small mirror permits viewing in a manner similar to a dentist examining teeth
- Includes plastic case



Order No.	Price
NA5552270000	Price

PROCHECK Deluxe Shop Microscopes

with Adjustment Focal Wheel

- Designed for very distinct, sharp and no color distortion magnified images
- Features illumination torch with 2 AAA batteries

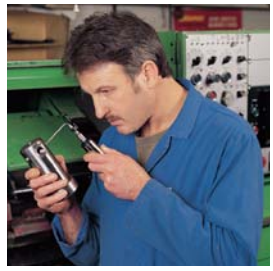


Power	Order No.	Price
40X	**NL51DSM40**	Price
80X	**NL51DSM80**	Price

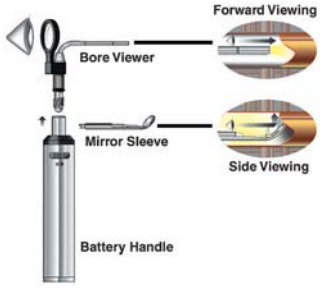
Fowler BoreView Inspection Set

Compact size and built-in illumination makes this bore viewer fully portable. Top quality internal inspection viewer that can be used anywhere!

Each Kit Includes:
- Battery-holding handle
- Batteries
- Illuminated probe (3″ long × 120″ dia.)
- 3X magnifier (3/4” dia.)
- Mirror (3/8” dia.)
- Spare bulb
- Shop hardened case
- Views bores from 1/8” in diameter and up
- Stainless steel construction
- Perfect for inspection, maintenance and mold makers







Order No.	Price
NA5552660777	Price

FLEXBAR Economy Inspecto-Scope

- Economically priced, medical Otoscope ideal for magnifying and illuminating hard to see areas
- Packaged complete with three specula, and soft plastic carrying pouch
- Uses convenient “C” batteries



Type	Description	Order No.	Price
Inspecto-Scope	With Light	**GG4512280**	Price
Inspecto-Scope Bulb	Fits 12280	**GG4512281**	Price

One Piece Airflow Volume Anemometer-Thermometer



- Ideal for measuring the airflow speed and volume output of exhaust fans and blowers
- Airspeed measurement range/accuracy 80 to 5900 ft./min (0.4 to 30 m/sec, 1.4 to 126 km/hr., 0.9 to 78.3 mph, 0.8 to 68 knots) +/- 2%
- Airspeed measurement resolutions: 1 fpm, 0.01 m/sec, 0.1 km/hr, 0.1mph, 0.1 knots
- Ambient temperature measurement range/accuracy/resolution: 14° to 122°F (-10° to 50° C)/ +/- 8° F (+/- 1° C)/0.1°
- LCD size 1.5 x 1.3" (38 x 33mm)
- Power source: 9V battery (included)
- Comes with hard plastic carrying case
- 1 Year limited warranty

Order No.	Price
NB49DCFM8906	Price

Ultrasonic Thickness Gage

- Measure the thickness of metals, plastics, ceramics, glass and other ultrasonic wave-conducting materials with two parallel surfaces
- Thickness measurement range: .026 to 9.843" (0.65 to 250mm)
- Thickness measurement accuracy: +/-0.04mm from 0.65 to 9.99mm; +/- 1% +0.04mm from 10 to 99.99mm; +/- 0.3% from 100 to 250mm
- Thickness measurement resolutions: .01" / 0.1mm and .001" / 0.01mm
- Working frequency range: 2.0 to 7.5 MHz
- Sound velocity measurement range: 37 to 373 miles/min (1000 to 9999 m/s)
- Auto power off after 2 minutes of inactivity
- Power source: 2 AAA batteries (included)
- Ultrasonic couplant
- Hard plastic carrying case
- 1 Year limited warranty



Order No.	Price
NB49UTEGEMTT2	Price

Vibration Meter



- Selectable units of in/s or mm/s for Velocity and ft/s squared or m/s squared for acceleration
- Remote vibration sensor on 39" (1m) cable
- Wide frequency range of 10Hz to 1kHz
- Max/min record values for later recall
- Data hold
- Auto power off
- RMS or peak value measurement
- Includes: Instructions, magnetic mount, hard case

Order No.	Price
NB49VB8201HA	Price

Carbon Monoxide Detector



- Adjustable CO warning level
- LCD dual digital display
- Bright backlight
- Self test
- Low battery indication
- Fahrenheit/Celsius selectable
- Auto power off
- Auto zero
- CO range: 0~999ppm
- Resolution: 1ppm
- 3AAA alkaline batteries, operation manual, wrist strap & carrying pouch

Order No.	Price
NB49DCO1001	Price

Portable Gas Leak Detector



- Highly sensitive wide range gas detector
- Detect methane, natural gases, coal gases, hexane, propane, ethane, butane, pentane, isopropyl alcohol, halogenation hydrocarbon, (methanol, ethanol, butanol) aether, ketone (butone, protone), hydrogen, toluene, and other compounds, (gasoline, industrial solvent, lacquer, refrigerant, sulfur dioxide, ammonia, sulfured hydrogen, acetic acid, etc)
- Quick response
- 3-Color leak indication
- LED & audio indication
- Gas concentration alarm
- Adjustable sensitivity
- Includes batteries

Order No.	Price
NB49NGD268	Price

Digital Moisture Meter



- Measures moisture content over the range 8% to 30%
- Built-in low battery indicator
- Decay condition direct
- Resolution: 0.1% moisture content
- Accuracy: ±2%
- Operating Temperature: 32 to 122°F (0 to 50°C)
- Operating Humidity: Less than 90% R.H.
- LCD with display
- Display will show the moisture content directly in "% moisture Content"
- Protective cover

Order No.	Price
NB49MMD4E	Price

Water Alarm



- Detects water leaks from plumbing & appliances
- Alarm sounds when water is detected
- Helps reduce water damage
- Low battery indicator
- Size: 4.3" x 4.3" x 1"
- Power: (1) 9V battery

Order No.	Price
NB49WA500	Price

GENERAL Three-Range Light Meter



- Has the range and accuaracy needed to make meaningful measurementsof indoor and outdoor light levels
- Measurement range: 0 to 200/2000/20,000 lux (0 to 20/200/2000 foot-candles)
- Measurement accuracy: +/- 3% of reading in two narrowest ranges; +/- 5% in reading of widest range
- Measurement resolution (max): 1ft-cd (10 lux)
- Probe cord length: 5 feet (1.5m)
- Power source: 9V battery (included)
- Includes: light probe with protective cover, battery, hard plastic carrying case
- Limited 1 year warranty

Order No.	Price
NB49DLM2000	Price

GENERAL Industrial Heat Index Monitor

- Displays heat index, temperature, humidity & dew point
- Outdoor monitoring
- Danger icon with audible beep
- Min/max memory with reset
- Data hold
- °F/°C
- Large digital display
- Auto off with low battery indicator
- Battery included



Order No.	Price
NB49SAM800IND	Price

GENERAL Contact/Non Contact Tachometer



- Measurement types: Rotation speed (RPM); Total revolutions (REV); Surface speed (I/M, M/M, Y/M, F/M) and Length (M, YD, FT)
- Non-contact RPM measurements up to 100cm from target
- Laser diode detection
- Laser sighting
- LCD display
- Auto power off
- 40 point memory: 10 selectable MAX, 10 selectable MIN, 10 selectable AVG, and 10 selectable DATA measurements
- Ultra low power consumption in shutdown mode 9V Battery, Cone adapter, Funnel adapter, Contact adapter, Master wheel (10cm)
- Reflective tape 0.59"x20.67" (15x525mm)
- Hard carrying case

Order No.	Price
NB49PCT900	Price

GENERAL Mini Digital Contact and Non-Contact Tachometer



- Auto range function
- Two operating buttons for easy use, low battery icon
- Auto power off
- Hold function
- Displays ft./min., meter/min., and yards/min
- Range: 10.0 to 99,999 RPM
- Power supply: AA battery (included)
- Sampling time: 1 second

Order No.	Price
NB49PCT2236	Price

GENERAL Temperature Humidity Pen

- Humidity range: 5 to 95RH
- Temperature: 14° to 122°F
- Fast response
- High accuracy
- Auto power OFF (20 minutes)
- Memory (Min./Max.)
- °F/°C Switch
- On/Off switch
- Belt or pocket clip
- Reset switch
- Battery included



Order No.	Price
NB49PHT8708	Price

Starrett Digital Tachometer



- Powerful 30-function tachometer allows up to 20,000 contact optical RPM or up to 100,000 RPM non-contact measurement
- Can measure in revs, inches, feet, yards, centimeters and meters
- Allows viewing of target and display simultaneously
- Totalizer acts as optical counter, accumulates input, operates as stopwatch, and can be used in either automatic or manual mode
- Ergonomic design makes measurement of speed and RPM safe and simple

Order No.	Price
MV7068930	Price

Tempil® Tempilstik® Temperature Indicating Sticks



- Stick instantly melts at desired temperature for easy and immediate inspection
- Calibration free with 100% reliability at +/- 1% of desired temperature
- Easy to use aluminum holder, imprinted part number and temperature on each stick

Temperature Range	Order No.	Price
66°C / 150°F	LH5228006	Price
93°C / 200°F	LH5228012	Price
149°C / 300°F	LH5228026	Price
149°C / 300°F	LH5228031	Price

Temperature Range	Order No.	Price
204°C / 400°F	LH5228035	Price
232°C / 450°F	LH5228039	Price
260°C / 500°F	LH5228043	Price
288°C / 550°F	LH5228045	Price

GENERAL Digital Stem Thermometer

- °F/°C switch
- Data hold
- Stainless steel piercing probe
- Pocket clip
- Drop resistant
- Measurement range: -58° to 302°F (-50° to 150°C)
- Measurement accuracy: ±1.8°F (±1°C) from -22° to 302°F (-30° to 150°C); ±4°F (±2°C) elsewhere
- Response time: 0.5 seconds
- Probe length: 3.8”
- Auto power off after 1 hour of inactivity
- Power source 1 LR44 battery (included)



Order No.	Price
NB49HDT304K	Price

Tempil Non-Contact Infrared Measurement Device

Model IRT-16



- Engineered to provide instant, superior accuracy and consistency in surface temperature measurement for a wide range of applications
- Lightweight and compact design
- Laser pointer with 16:1 distance to spot ratio
- 4 Digit blacklit dual display
- °C or °F selectable readout
- Min/Max/Ave and differential temperature mode available
- Built-in jack for K-type thermocouple probe to allow direct contact measurement

Description	Measurement Range	Order No.	Price
IRT16 Infrared Thermometer	-76°F(-60°C)-1157°F(-625°C)	**LH5224200**	Price
IRT16 Infrared Thermometer-NIST Certified	-76°F(-60°C)-1157°F(-625°C)	**LH5224202**	Price
K-Probe Thermocouple	-76°F(-60°C)-1157°F(-625°C)	**LH5224201**	Price

GENERAL Heat Seeker™ 8:1 Mid-Range Infrared Thermometer



Features & Benefits:

- Rugged and ergonomic design
- Backlit LCD display
- Sighting laser can be turned off
- °F/°C selectable
- CE, RoHS, WEEE approved

Specifications:

- Distance to spot (D:S) Ratio: 8:1
- Measurement range: -4° to 604°F (-20° to 317°C)
- Measurement accuracy: ±4°F or 2% of reading, whichever is greater
- Emissivity: fixed at 0.95
- Resolution: 0.5°F / 0.5°C
- Operating temperature: 32° to 122°F (0° to 50°C) @ 10 to 90% RH
- Storage temperature: 14° to 140°F (-10° to 60°C)
- Dimensions: 6.14 x 3.95 x 1.26 in (156 x 100 x 32 mm)
- Weight: 6 oz (135g)
- Power source: (1) 9V battery (included)

Order No.	Price
NB49IRT206	Price

Tempil ESTIK® Electronic Surface Thermometer

MADE IN THE USA

- Incorporated with the latest micro-thermocouple technology
- Advanced accuracy of +/- 2%
- Improves accuracy by eliminating errors due to reflection and other surface conditions
- Ergonomic hand grip with one-button operation
- Instant measurement read-out
- 3 Digit bright LED display
- Durable heat-resistant housing with rubberized grip
- °C or °F selectable readout



Description	Measurement Range	Order No.	Price
Estik Tempilstik Kit	32°F (0°C) to 999°F (537°C)	**LH5224290**	Price
Estik Tempilstik Kit-NIST Certified	32°F (0°C) to 999°F (537°C)	**LH5224251**	Price
Estik Thermocouple Band Replacement	-	**LH5224252**	Price

GENERAL 12:1 Wide-Range Infrared Thermometer

Features & Benefits:

- Sighting laser can be turned off
- Large 4-digit backlit LCD
- Selectable temperature unit
- Fast response time
- Auto power off
- CE, RoHS, WEEE approved

Specifications:

- Distance to spot (D:S) Ratio: 12:1
- Measurement range: -25° to 999°F (-32° to 535°C)
- Measurement accuracy: ±5°F (±3°C) from -25° to -4°F (-32° to -20°C); ±3°F (±2°C) from -4° to 212°F (-20° to 100°C); ±2°F from 212° to 999°F (100° to 535°C)
- Resolution: 0.1°F (0.1°C)
- Emissivity: fixed at 0.95
- Response time: 0.5 seconds
- Operating temperature: 32° to 122°F (0° to 50°C) @ 10 to 90% RH



- Auto power off after 6 seconds of inactivity
- Battery life: 16 hours
- Dimensions: 6.69 x 5.23 x 1.77 in (170 x 133 x 45 mm)
- Weight: 5.8 oz (163g)
- Power source: (1) 9V battery (included)
- Soft carrying case

Order No.	Price
NB49IRT650	Price

GENERAL Analog Multi-Meter

- Fuse & diode protected
- AC/DC volts to 500V
- 0-250mA Resistance
- 0-100 Ohms, 18 ranges
- Self-storing leads
- Dimensions: 4″ × 2.5″ × .75″
- Single knob function
- Battery included



Order No.	Price
NB49AM35UL	Price

GENERAL Digital Multimeter

True RMS

- With NCV detection and Lo-Z mode
- 19 Functions
- 48 Ranges
- Measures AC/DC voltage, AC/DC current, resistance, capacitance, frequency, duty cycle, continuity, diode integrity
- Maximum voltage resolution 10µV
- Overvoltage protection level 1000V
- Backlit dual readout LCD
- Auto power off after 30 minutes of non-use



Order No.	Price
NB49DMM570	Price

GENERAL Digital Multimeter

Auto Ranging

- CAT III 600V
- 8 Functions
- 25 Ranges
- Measures AC/DC voltage, AC/DC current, resistance, diode integrity
- Maximum voltage resolution 0.5mV
- Backlit LCD



Order No.	Price
NB49DMM45	Price

LANG TOOLS CAT III Digital Multimeter Kit

- 600V AC/DC, 10A AC/DC
- 32MΩ resistance
- Frequency to 32kHz
- Continuity and diode test
- Temperature to 1400° F
- RPM for 1-8 cylinders
- Digital display and analog bargraph
- Protective rubber boot
- Tilt stand for hands-free operation
- Dual fuse protection
- Kit includes meter, temperature adapter, thermocoupler, inductive pickup, test leads, fabric pouch



Order No.	Price
KL4013803	108.11

LANG TOOLS Digital Multimeter Kit

- Designed to withstand a 10' drop
- Measures 1000V DC 10A DC
- RPM, temperature, resistance, continuity, diode test
- Millisecond pulse width
- Frequency to 200kHz
- 10MΩ input impedence
- 250µs min/max recording
- Kit includes meter, inductive pickup, temperature probe, test leads, alligator clips, and fabric pouch



Order No.	Price
KL4013804	270.36

Santronics Voltage Testers

Ultimate AC Sensor

- Sense voltage without metallic contact
- Audible and visual
- 50-1000V AC



Order No.	Price
RX313000	Price

AC Sensor

- Sense voltage without metallic contact
- 50-1000V AC
- Visual only alert



Order No.	Price
RX313115	Price

Low AC Sensor

- Sense voltage without metallic contact
- 24-90V AC
- Visual only alert



Order No.	Price
RX313215	Price

DC Detector

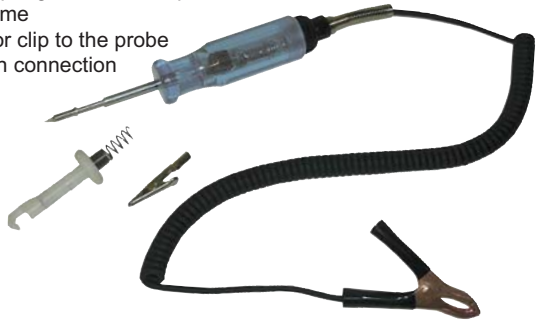
- 6-50V DC



Order No.	Price
RX313315	Price

Lisle Circuit Tester Kit

- Heavy duty tester signals with a light & buzzer
- Test low voltage up to 28 volts
- Finds electrical shorts, checks polarity, detects battery drain & checks circuits from a distance
- Heavy duty coil cord extends over 8 ft
- Detachable, spring-loaded hook pulls the center of the wire into the probe every time
- Attach alligator clip to the probe when a clip-on connection is needed



Order No.	Price
KN6528640	47.30

Lisle Low Circuit Tester

- Quick check both AC & DC current up to 28 volts with power on
- Helps locate shorts or breaks in wiring
- Complete with insulated grounding clip



Order No.	Price
KN6526250	7.65

STEELMAN PRO Thermal Leak Detector

- Infrared thermometer with 2-inch multicolor LDS screen that changes color to show fluctuations and help identify leaks
- Measures temperatures ranging from -40° F to 986° F (-40° C to 530° C)
- High accuracy thermal sensor measures temperature with less than 2% error range
- Distance spot ratio means you can get accurate measurements while remaining at a safe distance
- Automatic shutoff feature saves battery life when not in use
- Built-in laser so you know exactly where you're measuring
- Powered by a single 9-volt battery (included)



Order No.	Price
KE5379186	55.30

LANG Retractable Test Lead

- 2 x 10 Retractable
- Easily wind up into plastic housing



Order No.	Price
KL401140	16.61

General Screwdriver Tester

- Bright red LED
- Self-test
- AC voltage test 70 to 250VAC
- Continuity test
- Polarity check
- Checks fuses
- When tip is in contact with live (HOT) part of AC voltage, red LED lights
- Battery included



Order No.	Price
NB49ST600LED	Price

Lisle Circuit Tester Pliers

- Fits 16 gauge and smaller wire
- Safe for use on 12 volt automotive computer circuits
- Operating range of 6-28 volts, draws less than 19 mA. at 12 volts DC
- Dual probes and polarity indicator
- The 1st probe flips out enabling you to check hard-to reach connections and can be flipped back when not in use
- The 2nd probe with centering V design allows you to penetrate the center of the wire every time



Order No.	Price
KN6528850	27.35

VERSA-HOOK™

MADE IN THE USA

- Versatile hook on a heavy duty 2-1/2″ dia. magnet
- Great for blo-guns, hand tools, work lights and more
- Assembles up or down
- Patent pending



Order No.	Price
NL8020301	Price

Digital Stop Watch

- Normal time shows: hour, minute, second, AM/PM indicator, month, date, day
- 12/24 Hour user selectable
- 1/100 Second chronograph
- 8 Recallable lap memories
- Count-down timer with one second ews



Order No.	Price
NB49SW269	Price

100 Minute Count-up & Count-down Timer

- Timer and stopwatch
- Count-down from 99:59
- Count-up to 99:59
- Displays min. and sec.
- Automatic memory
- Loud alarm
- Large display
- Includes: battery, magnet, stand & clip on back



Order No.	Price
NB49TI170	Price

Count-up & Count-down Timer/Stopwatch

- Timer and stopwatch
- Displays hours, minutes and seconds
- Split & lap function
- Automatically counts-up after reaching zero
- Memory function
- Extra loud alarm
- Large display
- Power source: 1 “LR44” battery



Order No.	Price
NB49TI150	Price

Temperature-Humidity Monitor With Clock

- Displays the ambient temperature above the relative humidity (RH) above the current or alarm time on a triple readout LCD
- 12/24 hour alarm clock with 8 minute snooze option
- °F/°C switch
- Flip-up stand for table or desk placement plus hanger hole for wall mounting
- Power source: AAA battery (included)
- Limited 1 year warranty



Order No.	Price
NB49DTH800	Price

Digital 45° Read pH Pen

- Total push button operation
- Automatic calibration at the touch of a button
- Simultaneous displays pH and temperature
- °F or °C Temperature
- Replaceable pH electrode module
- Data hold, durable waterproof housing
- Auto power off & low battery indicator, handy pocket clip
- pH range: 0.00 to 14.00 pH
- 4 Digit LCD at an easy-to-read 45° angle
- Includes: carrying case & batteries



Order No.	Price
NB49DPH8690	Price

Jumbo Display Wide Range Digital Light Meter

- 3-1/2″ digit LCD displays LUX, FC, low battery, MAX & HOLD indication
- Accurately displays light level in foot candles (FC) or LUX over a wide range
- Max hold and data hold
- Auto power off
- Range: 200, 2000, 20,000, 50,000 FC/LUX
- Accuracy: ±5% rdg ±10dgts (<10,000 FC/LUX)
- Accuracy: ±10% rdg ±10dgts (>10,000 FC/LUX)
- Resolution: 0.1 FC/LUX
- Power source: 1 “12-volt” battery included
- Weight: 5.6 oz.



Order No.	
NB49DLM1337	Price

Flexible & Wide Rigid Rules

- Made of the finest quality steel
- Hardened and tempered
- Satin chrome finish



Type - Flexible				
Length	Style	Width	Order No.	Price
6	3R	1/2	**MZ80006301**	Price
6	4R	1/2	**MZ80006401**	Price
6	5R	1/2	**MZ80006501**	Price
6	16R	1/2	**MZ80006161**	Price
6	D/M	1/2	**MZ80006561**	Price
6	E/M	1/2	**MZ80006261**	Price
12	3R	1/2	**MZ80012301**	Price
12	4R	1/2	**MZ80012401**	Price
12	5R	1/2	**MZ80012501**	Price
12	16R	1/2	**MZ80012161**	Price
12	D/M	1/2	**MZ80012561**	Price
12	E/M	1/2	**MZ80012261**	Price
18	3R	3/4	**MZ80018301**	Price
18	4R	3/4	**MZ80018401**	Price
18	5R	3/4	**MZ80018501**	Price
18	16R	3/4	**MZ80018161**	Price
18	D/M	3/4	**MZ80018561**	Price
18	E/M	3/4	**MZ80018261**	Price
24	3R	3/4	**MZ80024301**	Price
24	4R	3/4	**MZ80024401**	Price
24	5R	3/4	**MZ80024501**	Price
24	16R	3/4	**MZ80024161**	Price
24	D/M	3/4	**MZ80024561**	Price
24	E/M	3/4	**MZ80024261**	Price
150mm	Metric	1/2	**MZ80150751**	Price
300mm	Metric	1/2	**MZ80300751**	Price
450mm	Metric	3/4	**MZ80450751**	Price
600mm	Metric	3/4	**MZ80600751**	Price

Type - Wide Rigid				
Length	Style	Width	Order No.	Price
6	16R	3/4	**MZ80006162**	Price
6	3R	3/4	**MZ80006302**	Price
6	4R	3/4	**MZ80006402**	Price
6	5R	3/4	**MZ80006502**	Price
6	D/M	3/4	**MZ80006562**	Price
6	E/M	3/4	**MZ80006262**	Price
12	16R	1	**MZ80012162**	Price
12	3R	1	**MZ80012302**	Price
12	4R	1	**MZ80012402**	Price
12	5R	1	**MZ80012502**	Price
12	D/M	1	**MZ80012562**	Price
12	E/M	1	**MZ80012262**	Price
18	16R	1-1/8	**MZ80018162**	Price
18	3R	1-1/8	**MZ80018302**	Price
18	4R	1-1/8	**MZ80018402**	Price
18	5R	1-1/8	**MZ80018502**	Price
18	D/M	1-1/8	**MZ80018562**	Price
18	E/M	1-1/8	**MZ80018262**	Price
24	16R	1-1/8	**MZ80024162**	Price
24	3R	1-1/8	**MZ80024302**	Price
24	4R	1-1/8	**MZ80024402**	Price
24	5R	1-1/8	**MZ80024502**	Price
24	D/M	1-1/8	**MZ80024562**	Price
24	E/M	1-1/8	**MZ80024262**	Price
150mm	Metric	3/4	**MZ80150752**	Price
300mm	Metric	1	**MZ80300752**	Price
450mm	Metric	1-1/8	**MZ80450752**	Price
600mm	Metric	1-1/8	**MZ80600752**	Price

EZ Read Black Chrome Scales



Type - Flexible				
Size (in.)	Style	Width (in.)	Order No.	Price
6	3R	1/2	**NB35EZ63F**	Price
6	4R	1/2	**NB35EZ64F**	Price
6	5R	1/2	**NB35EZ65F**	Price
6	16R	1/2	**NB35EZ616F**	Price
6	E/M	1/2	**NB35EZ6EMF**	Price
12	4R	1/2	**NB35EZ124F**	Price
12	5R	1/2	**NB35EZ125F**	Price
12	16R	1/2	**NB35EZ1216F**	Price
12	E/M	1/2	**NB35EZ12EMF**	Price
18	4R	3/4	**NB35EZ184F**	Price
18	5R	3/4	**NB35EZ185F**	Price
18	16R	3/4	**NB35EZ1816F**	Price
24	4R	3/4	**NB35EZ244F**	Price
24	5R	3/4	**NB35EZ245F**	Price
24	16R	3/4	**NB35EZ2416F**	Price

Type - Wide Rigid				
Size (in.)	Style	Width (in.)	Order No.	Price
6	16R	3/4	**NB35EZ616C**	Price
6	3R	3/4	**NB35EZ63C**	Price
6	4R	3/4	**NB35EZ64C**	Price
6	5R	3/4	**NB35EZ65C**	Price
6	E/M	3/4	**NB35EZ6EMC**	Price
12	16R	1	**NB35EZ1216C**	Price
12	4R	1	**NB35EZ124C**	Price
12	5R	1	**NB35EZ125C**	Price
12	E/M	1	**NB35EZ12EMC**	Price
18	16R	1-1/8	**NB35EZ1816C**	Price
18	4R	1-1/8	**NB35EZ184C**	Price
18	5R	1-1/8	**NB35EZ185C**	Price
24	16R	1-1/8	**NB35EZ2416C**	Price
24	4R	1-1/8	**NB35EZ244C**	Price
24	5R	1-1/8	**NB35EZ245C**	Price

Graduation Chart

3R: 32nds, 64ths, 10ths, 50ths
4R: 8ths, 16ths, 32nds, 64ths
5R: 32nds, 64ths, 10ths, 100ths
16R: 32nds, 64ths, 50ths, 100ths

E/M: 32nds, 64ths, mm, 0.5mm
D/M: 10ths, 100ths, mm, 0.5mm
Metric: mm, 0.5mm, mm, 0.5mm

Hook Rules



Length (in.)	Style	Width (in.)	Order No.	Price
6	4R	3/4	**MZ80402H06**	Price
12	4R	1	**MZ80402H12**	Price
18	4R	1-1/8	**MZ80402H18**	Price
24	4R	1-1/8	**MZ80402H24**	Price

Magnet Rules



- High powered magnets set into rule for hands free use (magnet every 6″)
- Stick to top of tool box or side of machine
- Available in rigid style only

	4R		5R		E/M	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
6	**MZ80402006MG**	Price	**MZ80502006MG**	Price	**MZ80262006MG**	Price
12	**MZ80402012MG**	Price	**MZ80502012MG**	Price	**MZ80262012MG**	Price
18	**MZ80402018MG**	Price	**MZ80502018MG**	Price	**MZ80262018MG**	Price
24	**MZ80402024MG**	Price	**MZ80502024MG**	Price	**MZ80262024MG**	Price
36	**MZ80402036MG**	Price	**MZ80502036MG**	Price	**MZ80262036MG**	Price
48	**MZ80402048MG**	Price	**MZ80502048MG**	Price	**MZ80262048MG**	Price

Certified Steel Rules

- Includes certification for all ISO applications



Type - Flexible					
		4R		5R	
Size (in.)	Width (in.)	Order No.	Price	Order No.	Price
6	1/2	**MZ80401006CT**	Price	**MZ80501006CT**	Price
12	1/2	**MZ80401012CT**	Price	**MZ80501012CT**	Price
18	3/4	**MZ80401018CT**	Price	**MZ80501018CT**	Price
24	3/4	**MZ80401024CT**	Price	**MZ80501024CT**	Price
36	3/4	**MZ80401036CT**	Price	**MZ80501036CT**	Price
48	3/4	**MZ80401048CT**	Price	**MZ80501048CT**	Price

Type - Rigid					
		4R		5R	
Size (in.)	Width (in.)	Order No.	Price	Order No.	Price
6	3/4	**MZ80402006CT**	38.10	**MZ80502006CT**	38.10
12	1	**MZ80402012CT**	63.10	**MZ80502012CT**	63.10
18	1-1/8	**MZ80402018CT**	90.15	**MZ80502018CT**	90.15
24	1-1/8	**MZ80402024CT**	106.15	**MZ80502024CT**	106.15
36	1-1/4	**MZ80402036CT**	207.70	**MZ80502036CT**	207.70
48	1-1/4	**MZ80402048CT**	299.45	**MZ80502048CT**	299.45

Also available in E/M grad. To order use: MZ80-2610, then size (06, 12, 24 etc.) then, CT to order flexible models. To order rigid models use MZ80-2620, then size, then CT.
Example: 6" flexible certified rule with E/M graduation is MZ80-261006CT

Round End Rules



Length (in.)	Front Side	Width (in.)	Order No.	Price
6	32nds, 64ths	15/32	**MZ807202SS6†**	4.10
6	Metric and 64ths	15/32	**MZ807203SS6†**	4.10

†Equivalent chart on back.

Extra Long Steel Scales



Size (in.)	Graduation	Approx. Width (in.)	Thickness	Order No.	Price
36	16R	1-1/4	.050	**MZ80300036**	Price
36	4R	1-1/4	.050	**MZ80300032**	Price
36	5R	1-1/4	.050	**MZ80300034**	Price
48	16R	1-1/4	.050	**MZ80300042**	Price
48	4R	1-1/4	.050	**MZ80300038**	Price
48	5R	1-1/4	.050	**MZ80300040**	Price

Starrett® Steel Rules

- 4 Styles available Full-Flex (1/64th thick) Semi-Flex (1/50th thick) Spring-Tempered (3/64th thick)
- 2 Hook styles available - adjustable hook and adjustable double hook
- Staggered graduation
- All rules are machine divided and tempered for accuracy and long wear
- Rule Graduation
  - 3R: 1/32, 1/64, 1/10 and 1/50ths
  - 4R: 1/8, 1/16, 1/32, and 1/64ths
  - 5R: 1/32, 1/64, 1/10, and 1/100ths
  - 16R: 1/32, 1/64, 1/50 and 1/100ths
  - 30: 1/2mm one side, mm 1/2mm other
  - 31: 1/32, 1/64, 1/2mm
  - 34: mm, 1/2mm. 10ths. 50ths
  - 35/37: mm, 1/2mm both sides (E-mm End)
  - 36: 1/32, 1/2mm, 1/64, mm

MADE IN THE USA





Type - Chrome Single Hook Scale				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
6	4R	3/4	**MV7052673**	Price
12	4R	1	**MV7052674**	Price
18	4R	1-1/8	**MV7052675**	Price
24	4R	1-1/4	**MV7052676**	Price
36	4R	1-1/4	**MV7052677**	Price

Type - Double Hook Scales (Regular Finish)				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
6	4R	3/4	**MV7052662**	Price
12	4R	1	**MV7052664**	Price

Type - Full-Flexible				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
6 x 150mm	31	1/2	**MV7051331**	Price
6 x 150mm	34	1/2	**MV7056262**	Price
11-3/4 x 300mm	31	1/2	**MV7051332**	Price
11-3/4 x 300mm	34	1/2	**MV7056696**	Price
19-1/2 x 500mm	34	3/4	**MV7056697**	Price
150mm	30	1/2	**MV7051329**	Price
300mm	30	1/2	**MV7051330**	Price

Type - Heavy Spring Tempered Chrome Scale				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
24	4R	1-1/4	**MV7051484**	Price
24	16R	1-1/4	**MV7051509**	Price
36	4R	1-1/2	**MV7051485**	Price
36	16R	1-1/2	**MV7051510**	Price
48	4R	1-1/2	**MV7051486**	Price
48	16R	1-1/2	**MV7051511**	Price
72	4R	1-1/2	**MV7051488**	Price
72	16R	1-1/2	**MV7051513**	Price

Type - Heavy Spring Tempered Chrome Scale with Certification				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
36	4R	1-1/2	**MV7066888**	Price
48	4R	1-1/2	**MV7066889**	Price

Type - Satin Chrome Finish Flexible Steel Rule				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
6	3R	1/2	**MV7051334**	Price
6	4R	1/2	**MV7066008**	Price
6	5R	1/2	**MV7051347**	Price
6	6R	1/2	**MV7051352**	Price
6	9R	1/2	**MV7051357**	Price
6	16R	1/2	**MV7051374**	Price
12	4R	1/2	**MV7066009**	Price
12	5R	1/2	**MV7051348**	Price
12	16R	1/2	**MV7051375**	Price
18	5R	3/4	**MV7051349**	Price
18	16R	3/4	**MV7051376**	Price
24	4R	3/4	**MV7056645**	Price
24	5R	3/4	**MV7051350**	Price
24	16R	3/4	**MV7051377**	Price

Type - Satin Chrome Finish Flexible Steel Rule with Certification				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
6	5R	1/2	**MV7066880**	Price
12	5R	1/2	**MV7066881**	Price

Type - Satin Chrome Finish Semi-Flexible Steel Rule				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
6	3R	3/4	**MV7051335**	Price
12	3R	3/4	**MV7051336**	Price
24	3R	1	**MV7051338**	Price
6	4R	3/4	**MV7051343**	Price
12	4R	3/4	**MV7051344**	Price

Type - Semi-Flexible				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
300mm	35	1	**MV7056048**	Price

Type - Spring Tempered Chrome Scale				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
6	4R	3/4	**MV7052678**	Price
6	6R	3/4	**MV7052652**	Price
6	16R	3/4	**MV7052701**	Price
12	4R	1	**MV7052679**	Price
12	16R	1	**MV7052702**	Price
18	4R	1-1/8	**MV7052680**	Price
24	4R	1-1/4	**MV7052681**	Price
36	4R	1-1/4	**MV7052682**	Price
48	4R	1-1/4	**MV7052683**	Price

Type - Spring Tempered Chrome Scale with Certification				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
6	4R	3/4	**MV7066884**	Price
12	4R	1	**MV7066885**	Price
18	4R	1-1/8	**MV7066886**	Price
24	4R	1-1/4	**MV7066887**	Price

Type - Spring-Tempered				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
5-3/4 x 150mm	36	3/4	**MV7052634**	Price
6 x 150mm	36	3/4	**MV7057064**	Price
11-3/4 x 300mm	36	1	**MV7052635**	Price
150mm	35	3/4	**MV7052630**	Price
150mm	35E	3/4	**MV7055968**	Price
150mm	37	3/4	**MV7056049**	Price
300mm	35	1	**MV7052631**	Price
500mm	35	1-1/8	**MV7052632**	Price
1000mm	35	1-1/4	**MV7052633**	Price

Type - Spring-Tempered with Certification				
Size (in./mm)	Graduation	Width (in.)	Order No.	Price
5-3/4 x 150mm	36	3/4	**MV7066890**	Price
11-3/4 x 300mm	36	1	**MV7066891**	Price
150mm	35	3/4	**MV7066893**	Price
300mm	35	1	**MV7066894**	Price

Mitutoyo Precision Scales

- Hardened & tempered
- Satin chrome finish



Type - Full Flexible Rules			
Size (in.)	Width (in.)	Order No.	Price
6 (3R)	1/2	**MT80182-204**	Price
6 (4R)	1/2	**MT80182-201**	Price
6 (5R)	1/2	**MT80182-203**	Price
6 (16R)	1/2	**MT80182-202**	Price
6 x 150mm	1/2	**MT80182-205†**	Price
6 x 150mm	1/2	**MT80182-206•**	Price
6 x 150mm	1/2	**MT80182-207♦**	Price
6 x 150mm	1/2	**MT80182-208‡**	Price
150mm	1/2	**MT80182-211♦**	Price
12 (3R)	1/2	**MT80182-224**	Price
12 (4R)	1/2	**MT80182-221**	Price
12 (5R)	1/2	**MT80182-223**	Price
12 (16R)	1/2	**MT80182-222**	Price
12 x 300mm	1/2	**MT80182-225†**	Price
12 x 300mm	1/2	**MT80182-226•**	Price
300mm	1/2	**MT80182-231♦**	Price
18 (4R)	3/4	**MT80182-141**	Price
18 (5R)	3/4	**MT80182-243**	Price
18 (16R)	3/4	**MT80182-242**	Price
18 x 450mm	3/4	**MT80182-245†**	Price
450mm	3/4	**MT80182-251♦**	Price
24 (3R)	3/4	**MT80182-264**	Price
24 (4R)	3/4	**MT80182-261**	Price
24 (5R)	3/4	**MT80182-263**	Price
24 (16R)	3/4	**MT80182-262**	Price
24 x 600mm	3/4	**MT80182-265†**	Price
60mm	3/4	**MT80182-271♦**	Price

Type - Wide Rigid Rules			
Size (in.)	Width (in.)	Order No.	Price
6 (3R)	3/4	**MT80182-104**	Price
6 (4R)	3/4	**MT80182-101**	Price
6 (5R)	3/4	**MT80182-103**	Price
6 (16R)	3/4	**MT80182-102**	Price
6 x 150mm	3/4	**MT80182-105†**	Price
6 x 150mm	3/4	**MT80182-106•**	Price
6 x 150mm	3/4	**MT80182-107♦**	Price
6 x 150mm	3/4	**MT80182-108‡**	Price
150mm	3/4	**MT80182-111♦**	Price
12 (3R)	1	**MT80182-124**	Price
12 (4R)	1	**MT80182-121**	Price
12 (5R)	1	**MT80182-123**	Price
12 (16R)	1	**MT80182-122**	Price
12 x 300mm	1	**MT80182-125†**	Price
12 x 300mm	1	**MT80182-126•**	Price
300mm	1	**MT80182-131♦**	Price
18 (3R)	1-3/16	**MT80182-144**	Price
18 (4R)	1-3/16	**MT80182-241**	Price
18 (5R)	1-3/16	**MT80182-143**	Price
18 (16R)	1-3/16	**MT80182-142**	Price
18 x 450mm	1-3/16	**MT80182-145†**	Price
450mm	1-3/16	**MT80182-151♦**	Price
24 (4R)	1-3/16	**MT80182-161**	Price
24 (5R)	1-3/16	**MT80182-163**	Price
24 (16R)	1-3/16	**MT80182-162**	Price
24 x 600mm	1-3/16	**MT80182-165†**	Price
60mm	1-3/16	**MT80182-171♦**	Price

†, •, ‡, ♦ - See Graduation Chart

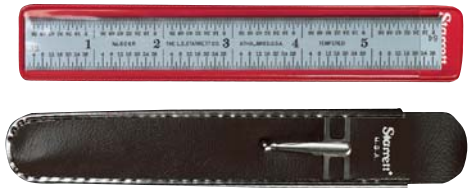
Graduation Chart

Inch			Metric		
Graduation	One Side	Opposite Side	Graduation	One Side	Opposite Side
3R	1/32-1/64	1/10-1/50	mm only †	1mm–1/2mm	1mm–1/2mm
4R	1/16-1/8	1/32-1/64	em ★	1/32-1/64	1/2mm–1mm
5R	1/32-1/64	1/10-1/100	em ♦	1/10-1/100	1/2mm–1mm
16R	1/32-1/64	1/50-1/100	em ‡	1/10-1/50	1/2mm–1mm
			em •	1/50-1/100	1/2mm–1mm

Starrett 6" Rule Cases with Clip

MADE IN THE USA

- Leather-like case with pocket clip for 6″ steel rules
- Rounded metal-bound edges prevent pocket from becoming worn and torn by rule corners



Starret No.	Description	Order No.	Price
1612	for 1/2" wide ruler	**MV7055433**	Price
1634	for 3/4" wide ruler	**MV7055434**	Price

INSIZE Ruler

- 6"/150mm
- Graduations 1/64, 1/32, 1/16, 0.5mm, 1mm
- Stainless steel
- Non-glare surface



Order No.	Price
SZ207110150	Price

Mitutoyo Pocket Steel Rule with Clip

- 6″ × 150mm
- 1/64 & 1mm Graduation



Order No.	Price
MT80950-300	Price

GENERAL 6" Flexible Economy Steel Rules - Stainless Steel and Satin Chrome

- Precision made, with etched fine black graduations
- Stainless steel or satin chrome finish



Type - Satin Chrome Finish Precision Rules					
Size (in./mm)	Side 1	Side 2	Width (in.)	Order No.	Price
6	10ths, 100ths	32nds, 64ths	15/32	**NE50CF616**	Price

Type - Stainless Steel Flexible Rule					
Size (in./mm)	Side 1	Side 2	Width (in.)	Order No.	Price
6	1mm, 16ths	-	15/32	**NE50305ME**	Price
6	32nds, 64ths	-	1/4	**NE503011†**	Price
6	32nds, 64ths	Dec. Equiv.	15/32	**NE503001†**	Price
6	8ths, 16ths	w/32nds End Grad.	3/4	**NE50307**	Price
6	32nds, 64ths	Dec. Equiv.	3/4	**NE50308**	Price
150mm	1mm, .5mm	-	15/32	**NE50300MM†**	Price
6 x 150mm	1mm, 64ths	Metric Equiv.	15/32	**NE50300ME†**	Price

PROCHECK PREMIUM 2 Pc. Combination Square Set

- Cast & ground square
- Hardened and tempered satin chrome ruler
- Graduated in 8ths, 16ths, 32nds and 64ths
- Protractor moves 180° in both directions
- Square / miter head features a level vial and a hardened scribe tool
- Fitted case included
- 1 Year Warranty



Order No.	Price
PC23CS1224	Price

PROCHECK PREMIUM 4 Pc. 12" Combination Square Set

- Precision cast & ground square, center and protractor
- Hardened and tempered satin chrome ruler
- Graduated in 8ths, 16ths, 32nds and 64ths
- Protractor moves 180° in both directions
- Square/miter head features a level vial and a hardened scribe tool
- Fitted case included
- 1 Year Warranty



Order No.	Price
PC23CS1244	Price

PROCHECK PREMIUM Combination Square Heads

- Precision cast & ground centre head
- 1 Year Warranty



Head	Order No.	Price
Center	**PC23CH12**	Price
Square	**PC23SH12**	Price

PROCHECK PREMIUM 12" Combination Square Protractor Head

- Precision cast & ground
- Protractor head moves 180° in both directions
- 1 Year Warranty



Order No.	Price
PC23PH12	Price

PROCHECK Combination Square Blades - 4R

- Hardened and tempered satin chrome ruler
- Graduated in 8ths, 16ths, 32nds and 64ths



Size (in.)	Order No.	Price
12	**PC23B124C**	Price
18	**PC23B184C**	Price
24	**PC23B244C**	Price

PROCHECK PREMIUM 6" Combination Squares

- Fully hardened and tempered steel blade
- Satin chrome finish
- Etched, machine divided 4R graduations - 8ths, 16ths, 32nds and 64ths
- Fitted case
- 1 Year Warranty



Includes	Order No.	Price
4R Blade	**PC23CS0624**	Price
4R Blade, Center Head	**PC23CS0634**	Price

PROCHECK PREMIUM Double Squares with 4R Chrome

- Blades: Heavy duty hardened, precision ground satin chrome
- Easy to read marked increments
- Made to US Standard Accuracy and Squareness
- Comes with storage case with foam insert
- 1 Year Warranty



Size (in.)	Fits	Order No.	Price
4	2-1/2" Base	**PC23DS44**	Price
6	3-3/4" Base	**PC23DS64**	Price

PROCHECK PREMIUM 4" & 6" Precision Double Square Set

- 4" 4R blade with 2.5" base
- 6" 4R blade with 3.75" base
- Blades: Heavy duty hardened, precision ground satin chrome blade
- Easy to read marked increments
- Made to US Standard Accuracy and Squareness
- Comes with storage case with foam insert
- 1 Year Warranty



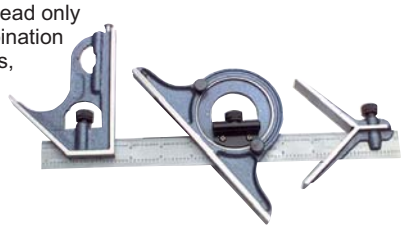
Order No.	Price
PC23DSS46	Price

PROCHECK 12" Combination Square Sets

Sets consist of:

- 4 Pc set: 12" blade, square head, center head and protractor head
- 3 Pc set: 12" blade, square head and center head
- 2 Pc set: 12" blade, square head only

All sets supplied with 12" combination square blade, graduated in 8ths, 16ths, 32nds and 64ths



Pieces Per Set	Order No.	Price
2 Pcs.	**NB60CS122**	Price
3 Pcs.	**NB60CS123**	Price
4 Pcs.	**NB60CS124**	Price

PROCHECK Double Square

- Used for precision layout work
- All blades are hardened and tempered with easy to read markings



Size	Graduation	Order No.	Price
4	4R (8ths, 16ths, 32nds & 64ths)	**NB60DS404R**	Price
4	16R (32nds, 64ths, 50ths, 100ths)	**NB60DS416R**	Price
4	E/M (0.5mm, 32nds, mm, 64ths)	**NB60DS4EM**	Price
6	4R (8ths, 16ths, 32nds & 64ths)	**NB60DS604R**	Price
6	16R (32nds, 64ths, 50ths, 100ths)	**NB60DS616R**	Price
6	E/M (0.5mm, 32nds, mm, 64ths)	**NB60DS6EM**	Price
100mm	Metric (mm, 0.5mm both sides)	**NB60DS100FM**	Price
150mm	Metric (mm, 0.5mm both sides)	**NB60DS150FM**	Price

2 Pc. Combination Square Sets

- Contains square head and blade



MADE IN THE USA

Blade Length	Graduation	Cast Iron		Hardened	
		Order No.	Price	Order No.	Price
12	4R	**NB40S12112**	Price	**NB40H12112**	Price
12	16R	**NB40S14112**	Price	**NB40H14112**	Price

3 Pc. Combination Square Sets

- Contains square head, center head and blade

MADE IN THE USA



Blade Length	Graduation	Cast Iron		Hardened	
		Order No.	Price	Order No.	Price
12	4R	**NB40S12212**	Price	**NB40H12212**	Price
12	16R	**NB40S14212**	Price	**NB40H14212**	Price
18	4R	**NB40S12218**	Price	**NB40H12218**	Price
18	16R	**NB40S14218**	Price	**NB40H14218**	Price
24	4R	**NB40S12224**	Price	**NB40H12224**	Price
24	16R	**NB40S14224**	Price	**NB40H14224**	Price

4 Pc. Combination Square Sets

MADE IN THE USA

- Hardened sets contain square head, center head, reversible protractor and blade



Blade Length	Graduation	Order No.	Price
12	-	**NB40H11812**	Price
12	16R	**NB40H11612**	Price
12	E/M	**NB40H12712**	Price
12	Metric	**NB40H12812**	Price
18	4R	**NB40H11818**	Price
18	16R	**NB40H11618**	Price
-	-	**NB40H11824**	Price
24	16R	**NB40H11624**	Price

Combination Square Components

MADE IN THE USA

Size	Description	Assembly		Cast Iron		Hardened	
		Order No.	Price	Order No.	Price	Order No.	Price
6	Center Head	-	-	**NB40S122B**	Price	**NB40H122B**	Price
6	Locking Device for 6" Square & Center Heads	**NB40006LB**	Price	-	-	-	-
6	Square Head	-	-	**NB40S121B**	Price	**NB40H121B**	Price
12	Center Head	-	-	**NB40S122A**	Price	**NB40H122A**	Price
12	Locking Device for 12" Square & Center Heads	**NB40012LB**	Price	-	-	-	-
12	Reversible Protractor Head	-	-	**NB40S188A**	Price	-	-
12	Square Head	-	-	**NB40S121A**	Price	**NB40H121A**	Price

NB40S188A



NB40S121A





NB40S122A

Double Squares

MADE IN THE USA



Length	Graduations	Order No.	Price
4	4R (8ths, 16ths, 32nds, 64ths)	**NB40S1044**	Price
4	16R (32nds, 64ths, 50ths, 100ths)	**NB40S10416**	Price
4	E/M (0.5mm, 32nds, mm, 64ths)	**NB40S104EM**	Price
6	4R (8ths, 16ths, 32nds, 64ths)	**NB40S1054**	Price
6	16R (32nds, 64ths, 50ths, 100ths)	**NB40S10516**	Price
6	E/M (0.5mm, 32nds, mm, 64ths)	**NB40S105EM**	Price
100mm	Metric (mm, 0.5mm both sides)	**NB40S104MM**	Price
150mm	Metric (mm, 0.5mm both sides)	**NB40S105MM**	Price

Combination Square Blades

MADE IN THE USA



Length	Graduation	Order No.	Price
6	4R	**NB40B181**	Price
6	16R	**NB40B182**	Price
6	E/M	**NB40B183**	Price
12	4R	**NB40B185**	Price
12	16R	**NB40B186**	Price
12	E/M	**NB40B187**	Price
18	4R	**NB40B189**	Price
18	16R	**NB40B190**	Price
18	E/M	**NB40B193**	Price
24	4R	**NB40B191**	Price
24	16R	**NB40B192**	Price
24	E/M	**NB40B194**	Price
150mm	Metric	**NB40B184**	Price
300mm	Metric	**NB40B188**	Price
450mm	Metric	**NB40B195**	Price
600mm	Metric	**NB40B196**	Price

6" Combination Square Sets

MADE IN THE USA

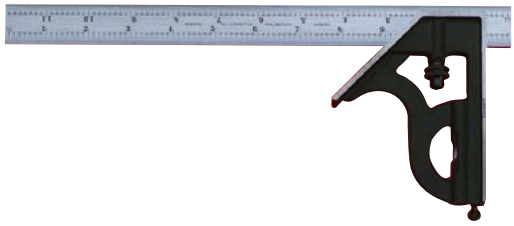


Length	Graduation	Description	Cast Iron		Hardened	
			Order No.	Price	Order No.	Price
6	4R	2 Piece	**NB40S1216**	Price	**NB40H1216**	Price
6	4R	3 Piece	**NB40S1226**	Price	**NB40H1226**	Price
6	16R	2 Piece	**NB40S1416**	Price	**NB40H1416**	Price
6	16R	3 Piece	**NB40S1426**	Price	**NB40H1426**	Price
6	E/M	2 Piece	**NB40S1446**	Price	**NB40H1446**	Price
6	E/M	3 Piece	**NB40S1246**	Price	**NB40H1246**	Price
150mm	Metric	2 Piece	**NB40S1456**	Price	**NB40H1456**	Price
150mm	Metric	3 Piece	**NB40S1256**	Price	**NB40H1256**	Price

Starrett® 2 Pc. Combination Squares with Square Head & Blade

- Reversible lock bolts
- Spirit level in square & protractor head
- Tempered steel machine divided blade
- Direct reading 180° protractor scale

MADE IN THE USA

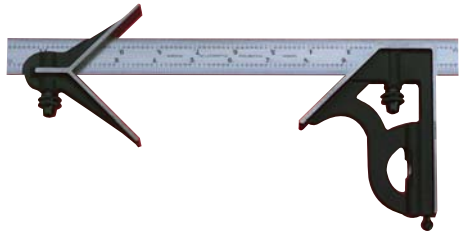


Size	Grad.	Blade Finish	Cast Head Black Wrinkle Finish		Forged & Hardened Head Smooth Black Enamel Finish	
			Order No.	Price	Order No.	Price
6	4R	Chrome	**MV7056362**	Price	**MV7056392**	Price
6	4R	Regular	**MV7050051**	Price	**MV7050205**	Price
6	16R	Chrome	**MV7056364**	Price	**MV7056394**	Price
6	16R	Regular	**MV7050053**	Price	**MV7050207**	Price
12	4R	Chrome	**MV7056366**	Price	**MV7056396**	Price
12	4R	Regular	**MV7050055**	Price	**MV7050209**	Price
12	16R	Chrome	**MV7056368**	Price	**MV7056398**	Price
12	16R	Regular	**MV7050057**	Price	**MV7050211**	Price
18	4R	Chrome	**MV7056370**	Price	**MV7056400**	Price
18	4R	Regular	**MV7050059**	Price	**MV7050213**	Price
18	16R	Chrome	**MV7056372**	Price	**MV7056402**	Price
18	16R	Regular	**MV7050061**	Price	**MV7050215**	Price
24	4R	Chrome	**MV7056374**	Price	**MV7056404**	Price
24	4R	Regular	**MV7050063**	Price	**MV7050217**	Price
24	16R	Chrome	**MV7056376**	Price	**MV7056406**	Price
24	16R	Regular	**MV7050065**	Price	**MV7050219**	Price

Starrett® 3 Pc. Combination Squares with Square Head, Center Head & Blade

- Reversible lock bolts
- Spirit level in square & protractor head
- Tempered steel machine divided blade
- Direct reading 180° protractor scale

MADE IN THE USA

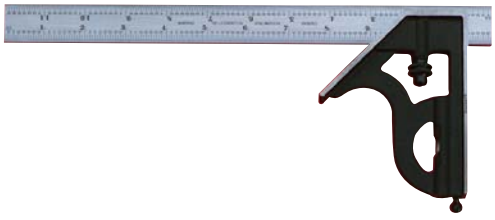


Size	Grad.	Blade Finish	Cast Head Black Wrinkle Finish		Forged & Hardened Head Smooth Black Enamel Finish	
			Order No.	Price	Order No.	Price
6	4R	Chrome	**MV7056363**	Price	**MV7056393**	Price
6	4R	Regular	**MV7050052**	Price	**MV7050206**	Price
6	16R	Chrome	**MV7056365**	Price	**MV7056395**	Price
6	16R	Regular	**MV7050054**	Price	**MV7050208**	Price
12	4R	Chrome	**MV7056367**	Price	**MV7056397**	Price
12	4R	Regular	**MV7050056**	Price	**MV7050210**	Price
12	16R	Chrome	**MV7056369**	Price	**MV7056399**	Price
12	16R	Regular	**MV7050058**	Price	**MV7050212**	Price
18	4R	Chrome	**MV7056371**	Price	**MV7056401**	Price
18	4R	Regular	**MV7050060**	Price	**MV7050214**	Price
18	16R	Chrome	**MV7056373**	Price	**MV7056403**	Price
18	16R	Regular	**MV7050062**	Price	**MV7050216**	Price
24	4R	Chrome	**MV7056375**	Price	**MV7056405**	Price
24	4R	Regular	**MV7050064**	Price	**MV7050218**	Price
24	16R	Chrome	**MV7056377**	Price	**MV7056407**	Price
24	16R	Regular	**MV7050066**	Price	**MV7050220**	Price

Starrett® 2 Pc. Combination Squares with Square Head & Blade

with Standard Letter of Certification

MADE IN THE USA

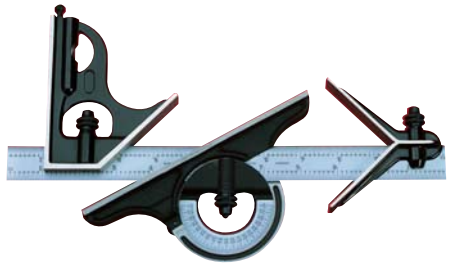


Size	Grad.	Blade Finish	Cast Head Black Wrinkle Finish		Forged & Hardened Head Smooth Black Enamel Finish	
			Order No.	Price	Order No.	Price
12	4R	Chrome	**MV7066896**	Price	**MV7066897**	Price

Starrett® 4 Pc. Combination Squares with Square Head, Center Head, Protractor Heads & Blade

- Reversible lock bolts
- Spirit level in square & protractor head
- Tempered steel machine divided blade
- Direct reading 180° protractor scale

MADE IN THE USA



Head - Cast Head Black Wrinkle Finish				
Size	Grad.	Blade Finish	Order No.	Price
12	4R	Regular	**MV7051556**	Price
12	16R	Regular	**MV7051557**	Price

Head - Forged & Hardened Head Smooth Black Enamel Finish				
Size	Grad.	Blade Finish	Order No.	Price
12	4R	Chrome	**MV7051548**	Price
12	16R	Chrome	**MV7051549**	Price
18	4R	Chrome	**MV7051550**	Price
18	4R	Regular	**MV7051544**	Price
12	16R	Regular	**MV7051543**	Price
12	4R	Regular	**MV7051542**	Price

Head - Non-Reversing Protractor Head available in Cast Iron Heads only.				
Size	Grad.	Blade Finish	Order No.	Price
12	4R	Chrome	**MV7050046**	Price
12	4R	Regular	**MV7050042**	Price

Graduation Chart

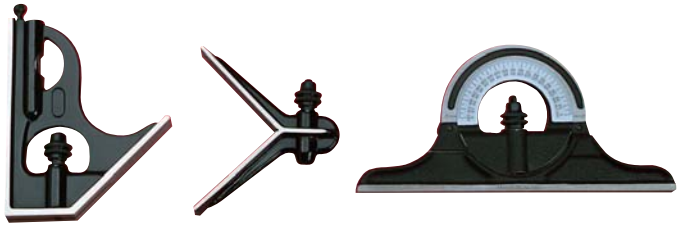
3R: 32nds, 64ths, 10ths, 50ths
4R: 8ths, 16ths, 32nds, 64ths
5R: 32nds, 64ths, 10ths, 100ths
16R: 32nds, 64ths, 50ths, 100ths

E/M: 32nds, 64ths, mm, 0.5mm
D/M: 10ths, 100ths, mm, 0.5mm
Metric: mm, 0.5mm, mm, 0.5mm

Starrett® Combination Square Components

MADE IN THE USA

- Square heads, center heads and protractor heads only for combination squares, combination sets and bevel protractors



Type - Center Head				
Size	Starrett No.	Head	Order No.	Price
4	C11-4	Cast Black Wrinkle Finish	**MV7050072**	Price
4	C33-4	Forged and Hardened Smooth Black Enamel Finish	**MV7050226**	Price
6	C11-6	Cast Black Wrinkle Finish	**MV7050073**	Price
6	C33-6	Forged and Hardened Smooth Black Enamel Finish	**MV7050227**	Price
12, 18, 24"	C11-1224	Cast Black Wrinkle Finish	**MV7050074**	Price
12, 18, 24"	C33-1224	Forged and Hardened Smooth Black Enamel Finish	**MV7050228**	Price

Type - Non Reversible Protractor Head				
Size	Starrett No.	Head	Order No.	Price
12, 18, 24"	PNR1224W	Cast Black Wrinkle Finish	**MV7050107**	Price

Type - Reversible Protractor Head				
Size	Starrett No.	Head	Order No.	Price
12, 18, 24"	PR-1224S	Smooth Black Enamel Finish	**MV7052515**	Price
12, 18, 24"	PR-1224W	Cast Black Wrinkle Finish	**MV7052525**	Price

Type - Square Head				
Size	Starrett No.	Head	Order No.	Price
4	H11-4	Cast Black Wrinkle Finish	**MV7050069**	Price
4	H33-4	Forged and Hardened Smooth Black Enamel Finish	**MV7050223**	Price
6	H11-6	Cast Black Wrinkle Finish	**MV7050070**	Price
6	H33-6	Forged and Hardened Smooth Black Enamel Finish	**MV7050224**	Price
12, 18, 24"	H11-1224	Cast Black Wrinkle Finish	**MV7050071**	Price
12, 18, 24"	H33-1224	Forged and Hardened Smooth Black Enamel Finish	**MV7050225**	Price

Starrett® Blades

MADE IN THE USA

Only for Combination Squares, Sets and Bevel Protractors.

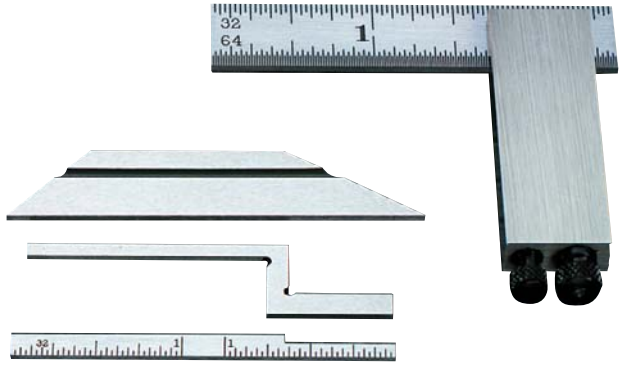


Size	Graduation	Blade Finish	Order No.	Price
4	4R	Chrome	**MV7050077**	Price
4	16R	Chrome	**MV7050078**	Price
4	4R	Regular	**MV7050076**	Price
6	4R	Chrome	**MV7050080**	Price
6	4R	Regular	**MV7050079**	Price
6	16R	Chrome	**MV7050082**	Price
6	16R	Regular	**MV7050081**	Price
12	4R	Chrome	**MV7050084**	Price
12	4R	Regular	**MV7050083**	Price
12	6R	Chrome	**MV7050085**	Price
12	16R	Chrome	**MV7050087**	Price
12	16R	Regular	**MV7050086**	Price
18	4R	Chrome	**MV7050089**	Price
18	4R	Regular	**MV7050088**	Price
18	16R	Chrome	**MV7050091**	Price
18	16R	Regular	**MV7050090**	Price
24	4R	Regular	**MV7050092**	Price
24	4R	Chrome	**MV7050093**	Price
24	6R	Chrome	**MV7050094**	Price
24	16R	Chrome	**MV7050096**	Price
24	16R	Regular	**MV7050095**	Price

Additional square heads, center heads and protractor heads available. 36" and 48" blade available. Call with your requirements.

Starrett® Die Makers' Squares

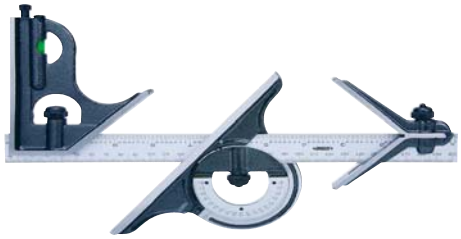
- Larger knurled thumb screw locks sliding blades at any position, and smaller one tilts blades at angle; to set blades, release blade clamp screw, and tilt blade to desired angle by turning small knurled screw
- Blade held in position by tightening clamping screw
- Head and blades are hardened and ground
- Offset blade, used where it would be impossible to sight straight blade, protrudes from square about 1-1/2" and is 1/8" wide
- Both sides of each edge are beveled to give line contact



LSS No.	Size (in.)	Graduations	Order No.	Price
453A	2-1/2	32nds, 64ths	**MV7052345**	Price
453C	2-1/2	32nds, 64ths	**MV7052347**	Price
453E	2-1/2	32nds, 64ths	**MV7052349**	Price
453EZ	2-1/2	32nds, 64ths	**MV7052351**	Price

INSIZE Combination Square Set

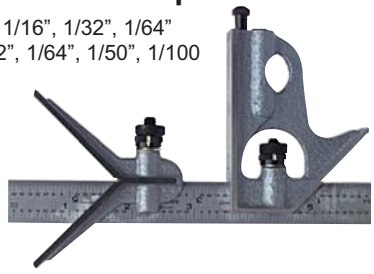
- Graduation 1/8ths, 1/16ths, 1/32nds 1/64ths (4R)
- Can be used to measure angles 0-180°
- Includes center head, protractor head, square head, and rule



Model No.	Order No.	Price
2278-180E	**SZ202278180E**	Price

Mitutoyo Combination Square Sets

- 4R Graduation: 1/8”, 1/16”, 1/32”, 1/64”
- 16R Graduation: 1/32”, 1/64”, 1/50”, 1/100



”

Description - [[NULL]]				
Type	**Head**	**Blade**	**Order No.**	**Price**
3 Piece Combination Square Set	Square Head, Center Head	12", 4R Blade	**MT80180-903B**	Price

Description - 12” 16R Graduation Regular Blade 4 Piece Combinatioin Square Set				
Type	**Head**	**Blade**	**Order No.**	**Price**
4 Piece Combination Square Set	Square Head, Center Head, Protractor Head	12", 16R Blade	**MT80180-906B**	Price

Mitutoyo Combination Square Components

- 4R Graduation: 1/64”, 1/32”, 1/16”, 1/8”
- 16R Graduation: 50th, 100ths, 1/64”, 1/32”



Description - Blade Only			
Size	**Graduation**	**Order No.**	**Price**
6"	16R	**MT80180-402U**	Price
12"	Inch/mm	**MT80180-503B**	Price
18	16R	**MT80180-702U**	Price
18"	4R	**MT80180-701B**	Price
150mm	1/2, 1", 1/2mm, 1mm	**MT80180-405U**	Price
300mm	1/2mm, 1mm	**MT80180-505**	Price

Description - Head Only		
Size	**Order No.**	**Price**
Fits 12" to 24" Blades	**MT80180-202B**	Price

TESA TECHNOLOGY | brown & sharpe Combination Square Sets

Combination squares are commonly used for layout, set-up, checking heights and depths and setting angles. They are also often used as try squares, center gages, bevel protractors and rules.
Square Heads and Protractors are supplied with levels. Square Heads also include a hardened steel scriber.
Square Heads and Center Heads are available in hardened and non-hardened models.
Inch, metric, or inch/metric reading Combination Squares are available in complete sets or components may be purchased separately.

Type of Head Listing:

1-Square Head (Not Hardened)
2-Square Head (Hardened)
3-Center Head (Not Hardened)
4-Center Head (Hardened)
5-Protractor (Non-Reversible)
6-Protractor (Reversible)

2 Pc. Combination Square Sets

Blade and Square Head

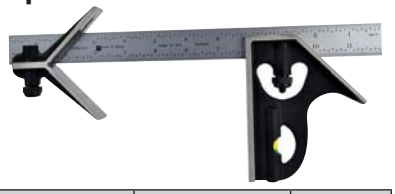


Blade Size (in.)	Type of Head in Set	Blade No.	Order No.	Price
12	1	599-9400-1204	**MV4544180**	Price
12	2	599-9400-1204	**MV4544168**	Price
12	2	599-9400-1204-1	**MV4544169†**	Price
12	5	599-9400-1204	**MV4544204**	Price
24	1	599-9400-2404	**MV4544181**	Price
24	2	599-9400-2404	**MV4544172**	Price
24	6	599-9400-2404	**MV4544205**	Price

†Satin-chrome blade

3 Pc. Combination Square Sets

Blade, Square Head, Center Head



Blade Size (in.)	Type of Head in Set	Blade No.	Order No.	Price
12	1 & 3	599-9400-1204	**MV4544158**	Price
12	1 & 3	599-9400-1204	**MV4544177**	Price
12	3 & 5	599-9400-1204-1	**MV4544159†**	Price
24	1 & 3	599-9400-2404	**MV4544178**	Price
24	2 & 4	599-9400-2404	**MV4544162**	Price
24	2 & 4	599-9400-2404-1	**MV4544163†**	Price

4 Pc. Combination Square Sets

Blade, Square, Center, and Protractor Heads



Blade Size (in.)	Type of Head in Set	Blade No.	Order No.	Price
12	1, 3, & 6	599-9400-1204	**MV4544200**	Price
12	2, 4, & 6	599-9400-1204-1	**MV4544193†**	Price
24	1, 3, & 6	599-9400-2404	**MV4544201**	Price
24	2, 4, & 6	599-9400-2404	**MV4544196**	Price
24	2, 4, & 6	599-9400-2404-1	**MV4544197†**	Price

TESA TECHNOLOGY | brown & sharpe Combination Square Blades



- Inch-Reading Blades			
Length (in.)	Graduations	Order No.	Price
12	1/8, 1/16, 1/32, 1/64	**MV4545081**	Price
12	1/8, 1/16, 1/32, 1/64	**MV4545082**	Price
18	1/32, 1/64, 1/10, 1/100	**MV4550418†**	Price
18	1/8, 1/16, 1/32, 1/64	**MV4551070†**	Price
24	1/8, 1/16, 1/32, 1/64	**MV4545091**	Price
24	1/8, 1/16, 1/32, 1/64	**MV4545092†**	Price

- Inch/Metric Blades			
Length (in.)	Graduations	Order No.	Price
300mm	1mm, 1/64, 0.5mm, 1/32	**MV4545085†**	Price
300mm	1mm, 1/64, 0.5mm, 1/32	**MV4545399**	Price

- Metric Blades			
Length (in.)	Graduations	Order No.	Price
300mm	1 mm & 0.5mm (Front and Back)	**MV4545398†**	Price

†Satin-chrome finish

TESA TECHNOLOGY | brown & sharpe Tempered Steel Conversion & Hook Rules



Description - Inch Reading Narrow Tempered Chrome Finish Hook Rule								
L (in.)	W (in.)	T (in.)	1st	2nd	3rd	4th	Order No.	Price
6	7/32	3/64	-	32nds	-	64ths	**MV4550406**	Price
12	7/32	3/64	-	32nds	1	64ths	**MV4550409**	Price

Description - Inch Reading Tempered Chrome Finish Hook Rule								
L (in.)	W (in.)	T (in.)	1st	2nd	3rd	4th	Order No.	Price
6	3/4	3/64	8ths	16ths	32nds†	64ths†	**MV4550134**	Price
6	3/4	3/64	10ths	100ths	32nds†	64ths†	**MV4546485**	Price
12	1	3/64	8ths	16ths	32nds†	64ths†	**MV4545378**	Price
18	1	3/64	8ths	16ths	32nds†	64ths†	**MV4551072**	Price
24	1	3/64	8ths	16ths	32nds†	64ths†	**MV4551071**	Price

Description - Inch Reading Tempered Steel Hook Rules								
L (in.)	W (in.)	T (in.)	1st	2nd	3rd	4th	Order No.	Price
12	1	3/64	8ths	16ths	32nds	64ths	**MV4545568**	Price

Description - Inch/Metric Conversion Rule-Chrome Tempered Flexible Steel								
L (in.)	W (in.)	T (in.)	1st	2nd	3rd	4th	Order No.	Price
127mm	19mm	.45mm	1/32	1mm	1/10	1mm	**MV4544150**	Price

Values for W(width) and T(thickness) are approximate.
† Indicates Bull's Eye and numbered graduations.
‡ Stainless Tempered Steel
*** Available while supplies last**

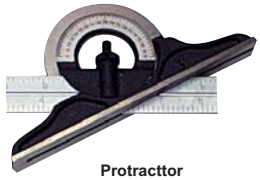
TESA TECHNOLOGY | brown & sharpe Combination Square Components



Square Head



Center Head



Protracttor

Individual Components	Order No.	Price
2-Square Head (Hardened)	**MV4545072**	Price
4-Center Head (Hardened)	**MV4545088**	Price
6-Protractor (Reversible)	**MV4545102**	Price

TESA TECHNOLOGY | brown & sharpe Adjustable Double Square

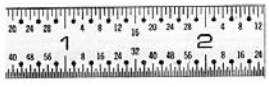
- Chrome finished blade, hardened and ground square head provide means for laying out and measuring with a single tool
- Blade locks securely in set position in head

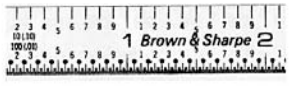


Blade Length (in.)	B&S No.	Graduations	Order No.	Price
4	599-555-1	50ths, 100ths, 32nds, 64ths	**MV4546308**	Price
4	599-555-3	64ths, 32nds, 16ths, 8ths	**MV4526995**	Price

TESA TECHNOLOGY | brown & sharpe Tempered Flexible Steel Rules

Inch, Chrome Finish





L (in.)	W• (in.)	T• (in.)	1st	2nd	3rd	4th	Order No.	Price
6	1/2	1/64	8ths‡	16ths	32nds†	64ths†	**MV4544140**	Price
6	1/2	1/64	10ths‡	50ths‡	32nds†	64ths†	**MV4544139**	Price
6	1/2	1/64	10ths‡	100ths‡	32nds†	64ths†	**MV4544141**	Price
6	1/2	1/64	50ths	100ths	32nds	64ths	**MV4550133**	Price
12	1/2	1/64	8ths	16ths	32nds	64ths	**MV4545990**	Price
12	1/2	1/64	10ths‡	100ths‡	32nds	64ths	**MV4545380**	Price
18	3/4	3/64	8ths	16ths	32nds	64ths	**MV4551068**	Price
24	3/4	3/64	8ths	16ths	32nds	64ths	**MV4545992**	Price
24	3/4	3/64	10ths‡	100ths‡	32nds	64ths	**MV4545991**	Price

• Values for W (width) and T (thickness) are approximate.
† Indicates Bull's Eye and numbered graduations.
†† Indicates numbered graduations.

Fowler Combination Square Sets with Hardened Heads

Combination sets are used as height gages, depth gages, levels, marking gages, scribers, center gages, bevel protractors, steel rules and plumb.

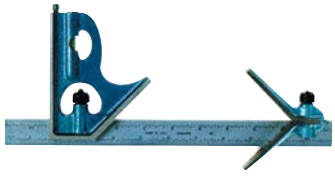
- Blades are chrome plated, fully hardened and tempered, 4R (graduated in 8ths, 16ths, 32nds and 64ths)
- Square head has level and scriber
- Finished in baked blue enamel
- Fitted case included
- Meet Fed. Specs. Type VI, Class B

2 Pc. Combination Square Sets with Hardened Heads



Fowler No.	Blade Size (in.)	Order No.	Price
52-388-012	12	**NA5552388012**	Price
52-388-018	18	**NA5552388018**	Price
52-388-024	24	**NA5552388024**	Price

3 Pc. Combination Square Sets with Hardened Heads



Fowler No.	Blade Size (in.)	Order No.	Price
52-386-006	6	**NA5552386006**	Price
52-386-012	12	**NA5552386012**	Price
52-386-018	18	**NA5552386018**	Price

4 Pc. Combination Square Sets with Hardened Heads



Fowler No.	Blade Size (in.)	Order No.	Price
52-370-012	12	**NA5552370012†**	Price
52-385-012	12	**NA5552385012**	Price
52-385-024	24	**NA5552385024**	Price

† NA5552370012 with etch pen

Fowler Double Squares

- Hardened and tempered precision ground satin chrome blades
- Can also be used as parallel
- Cast head
- Supplied in 4R graduations (8ths, 16ths, 32nds, and 64ths)



Blade Length	Model No.	Order No.	Price
4	52-435-000	**NA5552435000**	Price
6	52-435-006	**NA5552435006**	Price

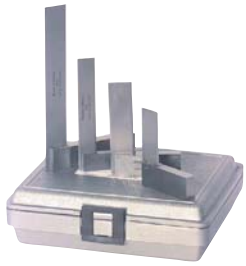
Workshop Square Sets

- Complete in a shop-hardened protective molded case
- Squareness of the blade edge to the working face of stock is .0006″

Blade Size 2”; Beam Size 1-1/2”
Blade Size 3”; Beam Size 2-1/2”
Blade Size 4”; Beam Size 3”
Blade Size 7”; Beam Size 4”

TESA | brown & sharpe | Fowler

Description	Blades (in.)	Brown & Sharpe		Fowler	
		Order No.	Price	Order No.	Price
3 Piece Combination Square Set	2, 4, & 6	**MV4527061**	Price	**NA5552432444**	Price
4 Piece Precision Square Set	2, 3, 4, & 6	**MV4527060**	Price	**NA5552432246**	Price
4 Piece Precision Square Set	4, 6, 9, & 12	**-**	-	**NA5552432469**	Price



Fowler Fixed Tip Scriber

- Heavy duty
- Fixed carbide tip
- Pencil-like design
- Pocket clip



Order No.	Price
NA5552500090	Price

Fowler Carbide Tipped Scriber with Magnetic End Cap

- Heavy duty
- Replaceable carbide tip
- Knurled grip
- Pocket clip
- Magnetic end cap



Description	Order No.	Price
Replaceable Tip Carbide Scriber with Magnetic End Cap	**NA5552500080**	Price
Replacement Carbide Scriber Tip	**NA5552500085**	Price

Fowler Carbide Tipped Super Scriber

- Lightweight
- Retractable carbide tip
- Knurled grip
- Machined aluminum body
- Pocket clip



Description	Order No.	Price
Carbide Super Scriber	**NA5552500050**	Price
Carbide Scriber Refill	**NA5552500055**	Price

Fowler Pocket Carbide Scriber

- Lightweight
- Retractable carbide tip
- Fluted grip
- Blue anodized aluminum body
- Pocket clip



Description	Order No.	Price
Carbide Scriber Refill	**NA5552515046**	Price
Pocket Carbide Scriber	**NA5552500000**	Price

Metal Etching Pen

- Use any place metals, hardened as well as thin walled, have to be marked or identified
- Effective on heavy metals, stainless steel, iron, copper, brass, nickel, tin, lead
- Special acid solution flows like ink in a felt-tip pen and a permanent etch is produced on the metal
- Leaves distinctive, smudge-proof, black markings
- Ideal for toolroom use and marking in the machine shop
- Apply on clean surface - after application wipe dry with oily cloth



Order No.	Price
NB45MEP1	Price

Starrett 3020 Series Toolmakers' Grade Stainless Steel Solid Squares

Global Series

- This high quality toolmakers' square offers squareness accuracy to .00020" (0.005mm) for every 6.0" (150mm)
- Length of blade from the inner edge of the beam to the end of the blade

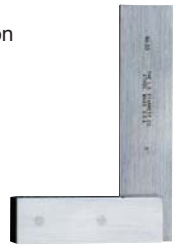


Description	Blade Length (mm)	Beam Length (mm)	Cat No.	Order No.	Price
3" Square †	75mm	50mm	3020-3	**MV7012225**	Price
4" Square †	100mm	75mm	3020-4	**MV7012226**	Price
6" Square †	150mm	100mm	3020-6	**MV7012227**	Price
12" Square † †	300mm	175mm	3020-12	**MV7012228**	Price
Complete Set of All Squares †			S3020Z	**MV7012229**	Price

† 3", 4" and 6" Squares are packed one in a plastic case unless otherwise ordered.
† † 12" Square and set of 4 squares shipped in box with fitted foam insert. Wood cases may be purchased separately

Starrett Hardened Steel Squares

- Hardened, ground and lapped to insure parallelism and straightness
- Beam is grooved at inside corner for clearance
- 6" and 12" available with standard letter of certification
- Wood cases available



Length of Blade (in.)	Length of Beam (in.)	Order No.	Price
1-1/2	1-1/2	**MV7050128**	Price
3	2-3/8	**MV7050130**	Price
4-1/2	3-1/2	**MV7050132**	Price
6	4-5/16	**MV7050134**	Price
12	7	**MV7050136**	Price

Starrett Beveled Edge Squares

MADE IN THE USA

- Blades beveled on both edges of each side
- Beams grooved at inside corner for clearance
- Available in 1-1/2:", 3" and 4-1/2" blade lengths



Length of Blade (in.)	Length of Beam (in.)	Type	Order No.	Price
6	4-5/16	Beveled Edge Square	**MV7050283**	Price
6	-	Wood Case Only for Square	**MV7055155**	Price

Fowler Bevel Edge Squares

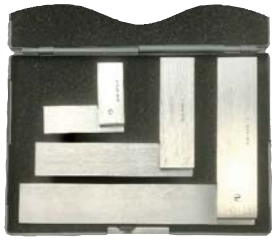
- Ground and lapped for staightness and parallelism
- Hardened to Rockwell 55C
- Accuracy: .00008″ + length/100,000



Blade Size (in.)	Beam Length (in.)	Order No.	Price
4	3	**NA5552426004**	Price
6-3/4	4	**NA5552426006**	Price
8-1/2	5-1/8	**NA5552426008**	Price
10-1/2	6-3/8	**NA5552426010**	Price

PRO-CHECK 3 Pc. Precision Engineer Square Set

- 2", 4" & 6"
- Hardened steel
- True squares and right angles both inside and outside
- Beams and blades are ground and lapped for parallelism
- Length of blade is measured from corner edge of beam to end of blades
- DIN-1 standard
- Protective case included
- 1 Year Warranty



Order No.	Price
PC23ESS246	Price

Solid Squares

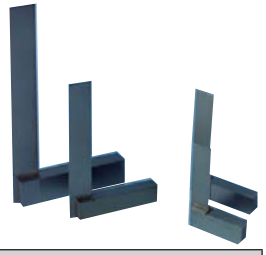


- Made from high quality tool steel
- Have true right angles inside and outside
- Beams and blades are precision ground
- Blade is hardened
- Length of blade is measured from inner edge of beam to end of blade

Blade Length (in.)	Beam Length (in.)	Order No.	Price
2	1-1/2	**NB4070002**	Price
3	2-1/2	**NB4070003**	Price
4	3	**NB4070004**	Price
6	4	**NB4070006**	Price
9	6	**NB4070009**	Price
12	8	**NB4070012**	Price
2, 3, 4, & 6	4 Pc. Set	**NE60ES4**	Price
4, 6, 9, & 12	Large 4 Pc. Set	**NE60ES4L**	Price

PRO-CHECK Machinist Squares

- Made of finest quality ground steel with heavy thick stock
- Blade is hardened and ground for straightness and parallelism
- Squares are accurate both inside and outside



- Precision Square			
Blade Size (in.)	Beam Length (in.)	Order No.	Price
2	2	**NE6002**	Price
3	3	**NE6003**	Price
4	3	**NE6004**	Price
6	4	**NE6006**	Price
9	5-1/2	**NE6009**	Price
12	7	**NE6012**	Price
18	10	**NE6018**	Price
24	13	**NE6024**	Price

- 4 Piece Precision Square Set			
Blade Size (in.)	Beam Length (in.)	Order No.	Price
2, 3, 4, & 6	4 Pc. Set	**NE60ES4**	Price
4, 6, 9, & 12	Large 4 Pc. Set	**NE60ES4L**	Price

PRO-CHECK 4 Pc. Diemakers Square Set

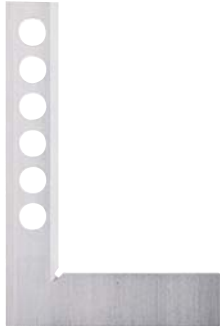
- All tools are hardened and ground, very finely finished and extremely accurate
- 1-1/2" triangular straight edge with a removable hardle (length 2-1/2")
- Beam is grooved at inner corner for clearance of bur and dirt



Order No.	Price
PC23DMS4PS	Price

Fowler mini-COMBO SQUARE Bevel & Magnetic Base Squares

- Made of hardened chrome steel
- Bores in blade reduces weight and provides fixturing locaitons
- Embedded magnets in base models (52-434-Sereis) holds square in position vertically or horizontally
- Designed for layout and measurement work
- 52-434 Series has graduated scales in 16ths on front and rear of blade
- Ground and lapped to meet DIN 875 standards



Type - Bevel Edge Square w/Bores		
Size (in.)	Order No.	Price
4	**NA55524380040**	Price
6	**NA55524380060**	Price
8	**NA55524380080**	Price

Type - Straight Edge		
Size (in.)	Order No.	Price
4	**NA55524340040**	Price
6	**NA55524340060**	Price
8	**NA55524340080**	Price

Type - Straight Edge w/Bores		
Size (in.)	Order No.	Price
4	**NA55524330040**	Price
6	**NA55524330060**	Price
8	**NA55524330080**	Price

Empire 6" Pocket Square

- 6″ Etched stainless steel blade with inch grads
- Accuracy guaranteed square to .001″ per inch
- True Blue® vial for accuracy



Order No.	Price
KP75255	Price

Empire 12" Combination Square

- 12″ Steel blade with inch graduations
- Machined square head
- Self-aligning drawbolt, hardened scriber



Order No.	Price
KP75230	Price

Empire 12" Polysquare™ Combination Square

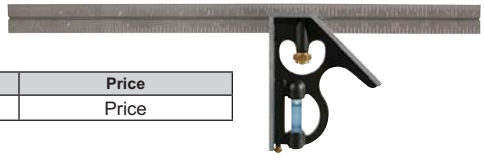
- 12″ Satin steel blade with inch graduations
- Durable Polycast™ head, full view acrylic vial
- Self-aligning drawbolt



Order No.	Price
KP75220	Price

Empire 16" Heavy Duty Professional

- 16″ Etched stainless steel blade with inch grads
- Accuracy guaranteed square to .001″ per inch
- True Blue® vial for accuracy



Order No.	Price
KP75280	Price

STANLEY 12" Combination Squares

- Hard chrome blade graduated in 8ths, 16ths and 32nds is coated to resist rust
- Level vial positioned for maximum visibility
- KP442300 has precision machined working surfaces for improved accuracy



Model No.	Description	Order No.	Price
46-123	Yellow Handle	KP442300	Price
46-222	Die-Cast Handle	KP442365	Price

PROCHECK Magnetic Dial Protractor With Replaceable Center Punch

- Used to determine angles on machine setup or find and mark center of square or round stock
- 0 - 90°
- 4-Quad



Order No.	Price
PC23MP490V	Price

PROCHECK Magnetic Dial Protractor with Punch

- Range: 360° (90° x 4)
- Resolution: 1°
- Magnet insert on both inside and bottom of the legs
- Hardened steel center punch
- Mark center of flat, square, or round stock
- 1 Year Warranty



Order No.	Price
PC23MP490VO	Price

Starrett Angle Meter-AM2

- Sturdy high-impact plastic
- Scale readings from 0° to 90° in any quadrant
- Measures any angle for pitch or slope
- Pitch/angle calculator finds rise, run, angle, pitch on 12″ or rafter lumber lengths

MADE IN THE USA



Order No.	Price
MV8036080	Price

Empire Small Angle Magnetic Protractor

- Magnetic base
- Full view acrylic vial protractor dial is graduated in 5° increments
- Durable Polycast® construction



Order No.	Price
KP75361	Price

Empire Magnetic Polycast® Protractor

- Magnetic base and back
- Easy reading dial with adjustable angle pointer
- Built-in angle pitch calculator on back
- Polycast® construction



Order No.	Price
KP7536	Price

Starrett Steel Straight Edges

- Precision made of fine tool steel to rigid Starrett standards
- Ground all over and finely finished
- Unexcelled for drawing or scribing straight lines and checking surfaces for straightness
- 12 to 72 Inch • 380-385-387 Type
- 380 Type: not beveled, not graduated
- 385 Type: beveled one edge only, not graduated
- 387 Type: beveled one edge only, graduated



Description - 380-No Bevel, No Grad.					
Size	Approx. Width (in.)	Approx. Thickness (in.)	LSS No.	Order No.	Price
12	1-13/32	11/64	380-12	**MV7051438**	Price
18	1-13/32	11/64	380-18	**MV7051439**	Price
24	1-13/32	11/64	380-24	**MV7051440**	Price
36	2-13/32	7/32	380-36	**MV7051441**	Price
48	2-13/32	7/32	380-48	**MV7051442**	Price
72	3-5/32	9/32	380-72	**MV7051444**	Price

Description - 385-Bevel, No Grad.					
Size	Approx. Width (in.)	Approx. Thickness (in.)	LSS No.	Order No.	Price
12	1-13/32	11/64	385-12	**MV7051455**	Price
18	1-13/32	11/64	385-18	**MV7051456**	Price
24	1-13/32	11/64	385-24	**MV7051457**	Price

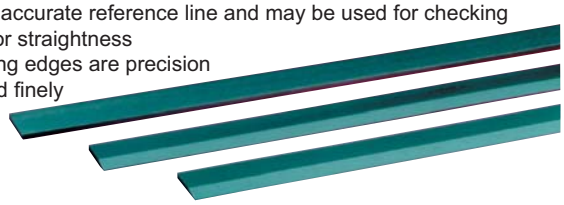
Description - 385-Bevel, No Grad.					
Size	Approx. Width (in.)	Approx. Thickness (in.)	LSS No.	Order No.	Price
36	2-13/32	7/32	385-36	**MV7051458**	Price
48	2-13/32	7/32	385-48	**MV7051459**	Price
72	3-5/32	9/32	385-72	**MV7051461**	Price

Description - 387-Bevel, 32nd Grad.					
Size	Approx. Width (in.)	Approx. Thickness (in.)	LSS No.	Order No.	Price
12	1-13/32	11/64	387-12	**MV7051468**	Price
18	1-13/32	11/64	387-18	**MV7051469**	Price
24	1-13/32	11/64	387-24	**MV7051470**	Price
36	2-13/32	7/32	387-36	**MV7051471**	Price
48	2-13/32	7/32	387-48	**MV7051472**	Price

Suburban Straight Edges

MADE IN THE USA

- Perfect for drawing or scribing straight lines
- Graduated and non-graduated models available
- Working edges are straight within .0005" per foot
- Extremely accurate reference line and may be used for checking surfaces for straightness
- Two working edges are precision ground and finely finished



Type - Steel Square Edge-No Bevel, No Graduations					
Length (in.)	Width (in.)	Thickness (in.)	Weight	Order No.	Price
12	1-13/32	11/64	2 lbs	**NJ51SE12TS**	Price
24	1-13/32	11/64	4 lbs	**NJ51SE24TS**	Price
36	2-13/32	7/32	8 lbs	**NJ51SE36TS**	Price
48	2-13/32	7/32	11 lbs	**NJ51SE48TS**	Price
72	3-5/32	9/32	36 lbs	**NJ51SE72TS**	Price

Type - Steel Straight Edge-With Bevel and Graduations					
Length (in.)	Width (in.)	Thickness (in.)	Weight	Order No.	Price
24	1-13/32	11/64	4 lbs	**NJ51SE24TSBG**	Price
36	2-13/32	7/32	8 lbs	**NJ51SE36TSBG**	Price
48	2-13/32	7/32	11 lbs	**NJ51SE48TSBG**	Price

Type - Steel Straight Edge-With Bevel, No Graduations					
Length (in.)	Width (in.)	Thickness (in.)	Weight	Order No.	Price
12	1-13/32	11/64	2 lbs	**NJ51SE12TSB**	Price
24	1-13/32	11/64	4 lbs	**NJ51SE24TSB**	Price
36	2-13/32	7/32	8 lbs	**NJ51SE36TSB**	Price
48	2-13/32	7/32	11 lbs	**NJ51SE48TSB**	Price
72	3-5/32	9/32	36 lbs	**NJ51SE72TSB**	Price
96	3-1/4	5/16	42 lbs	**NJ51SE96TSB**	Price
120	3-1/4	5/16	64 lbs	**NJ51SE120TSB**	Price

Suburban Cast Iron Straight Edges

MADE IN THE USA

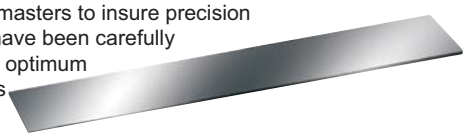
- Made of stress-relieved cast iron for maximum stability
- Cored & ribbed for increased rigidity and reduced weight
- Top & bottom faces are precision ground parallel and straight to within .0001" per 12"
- Use for setting up and leveling machinery & equipment and for checking the flatness of surfaces or scribing
- Also can be used for positioning above & parallel to a surface



Length (in.)	Width (in.)	Height (in.)	Weight	Order No.	Price
24	1	2	10 lbs	**NJ51SE24CI**	Price
36	1-1/2	3	27 lbs	**NJ51SE36CI**	Price
48	1-1/2	3	36 lbs	**NJ51SE48CI**	Price
60	2	4	95 lbs	**NJ51SE6024CI**	Price
72	2	4	110 lbs	**NJ51SE72CI**	Price

Fowler Straight Edges

- Use for basic accuracy applications including scribing, drafting, and straightness inspection
- Made of selected steels
- Hardened for superior wear resistance
- Matched to precision masters to insure precision
- Width and thickness have been carefully determined to provide optimum rigidity-to-weight ratios



Length (in.)	Width (in.)	Thickness (in.)	Straightness (in.)	Order No.	Price
18	1.32	.150	.0003	**NA5552480050**	Price
24	2	5/16	.0003	**NA5552480055**	Price
36	2-1/2	1/4	.0004	**NA5552480060**	Price

PROCHECK Precision Straight Edges with Inch Scale

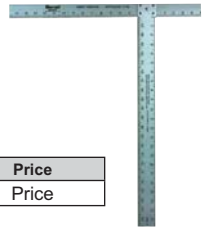
- Made of hardened steel
- Accuracy: 0.001"
- Thickness: 3/16"
- Width: 1-9/16"
- Satin Chrome finish
- All edges have true right angles
- Bevel edge has 1/64" precision scale is US standard
- Protective pouch included
- 1 Year Warranty



Length (in.)	Order No.	Price
12	**PC23SE12**	Price
24	**PC23SE24**	Price
36	**PC23SE36**	Price

Starrett® Giant Aluminum Square

No. DS Series

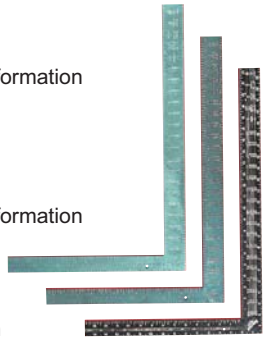


- The offset head is 22″ x 1-1/2″
- The standard square is 1/8″ thick
- Graduations or inches, 8ths and 16ths

Size	Description	Order No.	Price
48 x 2	Assembled	**MV8036119**	Price

Starrett® 24" Rafter Squares

No. RS Series



- 24″ Long and 2″ wide body, 16″ long and 1-1/2″ wide tongue
- 1/8″ and 1/16″ face side, 1/10, 1/12″, 1/16″ back side

No. RSS-24 Professional Rafter Square
- Tempered steel
- Permanently stamped graduations and information
- Scale for tenths measurements
- Clear coating for rust resistance

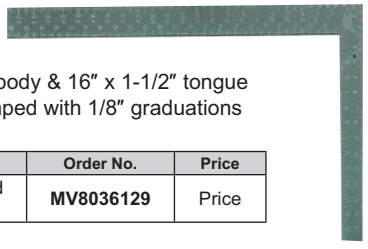
No. RSA-24 Professional Rafter Square
- Lightweight aluminum
- Permanently stamped graduations and information

No. RS-24 Rafter Square
- Tempered steel
- Black enamel finish
- White printed graduations and information

Model No.	Description	Order No.	Price
RS24	Steel, Printed Scale	**MV8036128**	Price
RSA24	Aluminum, Stamped Scale	**MV8036131**	Price
RSS24	Steel, Stamped Scale	**MV8036130**	Price

Starrett® 24" Exact® Professional Framing Square

No. FS-24

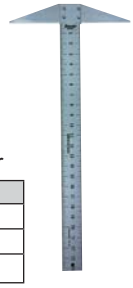


- 1 Pc. tempered steel, 24″ x 2″ body & 16″ x 1-1/2″ tongue
- Face & back permanently stamped with 1/8″ graduations

Size	Description	Order No.	Price
24	Framing Square, Stamped Steel Scale	**MV8036129**	Price

Starrett® Aluminum T-Square

No. T 24-48”



- 2″ Wide, .081″ thick anodized aluminum
- Large, easy-to-read numbers
- Graduations are 1/8″ on one edge and 1/16″ on the other

Length (in.)	Order No.	Price
24	**MV8036134**	Price
36	**MV8036136**	Price
48	**MV8036138**	Price

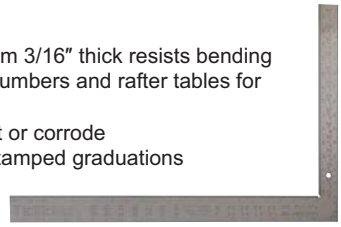
Empire® Heavy Duty MAGNUM™ Rafter Square



- Solid aluminum extruded square will not bend or break
- Aluminum will not rust or corrode
- Stamped conversion tables

Order No.	Price
KP752990	7.70

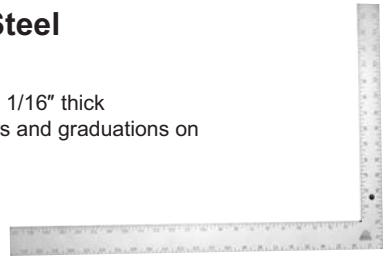
Empire® 16" x 24" "Fat Boy" Aluminum Framing Square



- 50% thicker, heavy-gauge aluminum 3/16″ thick resists bending
- Deep stamped inch graduations, numbers and rafter tables for long life
- Aluminum construction will not rust or corrode
- Includes 1/8″, 1/10”, 1/12”, 1/16″ stamped graduations

Order No.	Price
KP751240	Price

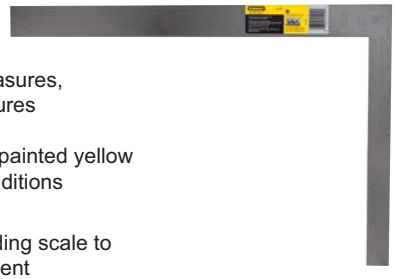
Empire® 16" x 24" Steel Tradesman Square



- 24″ x 2″ body, 16″ x 1″ tongue, 1/16″ thick
- Permanently stamped numbers and graduations on satin steel finish
- Durable epoxy finish

Order No.	Price
KP751110	Price

STANLEY Rafter & Carpenter's Squares



- Embossed graduations
- Protective finish resists rust and corrosion

Rafter:
- Markings include brace measures, octagon scale, board measures and rafter table
- KP442350 graduations are painted yellow for readability in all light conditions

Carpenter:
- KP442345 has reverse reading scale to make measuring more efficient

Type - Carpenters Square					
Model No.	**Size (in.)**	**Graduation (in.)**	**Description**	**Order No.**	**Price**
45-300	16 x 24	1/8 Back; 1/8 Face	Aluminum, Buffed	**KP441100**	Price
45-500	16 x 14	1/8 Back; 1/8 Face	Steel, Buffed	**KP442345**	Price

Type - Rafter Square					
Model No.	**Size (in.)**	**Graduation (in.)**	**Description**	**Order No.**	**Price**
45-011	16 x 24	1/10, 1/12, 1/16	Aluminum, Black	**KP442350**	Price
45-910	16 x 24	1/10 Back, 1/12 Back, 1/16 Back; 1/16 Face, 1/8 Face	Steel, Buffed	**KP442360**	Price

STANLEY Pocket Square



- Lightweight and compact to fit into pocket or tool belt
- Works as a rafter square, try square, protractor and power saw guide
- 6-7/8” Blade
- 10-1/4” Base Length
- 0 to 90° Graduation
- ABS Plastic

Model No.	Order No.	Price
46-060	**KP441150**	Price

Starrett® Measure Stix™ Steel Measuring Tapes

Adhesive Backing

MADE IN THE USA

- Mount on work benches, saw tables, drafting tables, etc.



Blade Width	Length	Order No.	Price
1/2	12'	**MV8063170**	Price
1/2	4'	**MV8063168**	Price
3/4	6'	**MV8063169**	Price
1/2 (13mm)	4' (1.2m)	**MV8063171**	Price

Starrett® Aluminum Straight Edge Rules

- English measure
- Flexible anodized aluminum
- 2″ Width
- 1/8″ and 1/16″ Graduation

MADE IN THE USA



Starrett No.	Length (in.)	Thickness (in.)	Order No.	Price
ASE48	48	.125	**MV8036092**	Price
ASE24	24	.081	**MV8036090**	Price
ASE36	36	.081	**MV8036091**	Price
ASE60	60	.125	**MV8036093**	Price

Empire® Polysteel™ T-Bevel

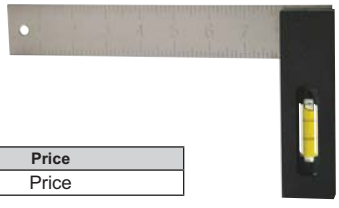
- Durable Polycast® handle
- Adjustable 9″ stainless steel blade
- Low profile locking nut for left or right hand use



Order No.	Price
KP75130	Price

Empire® Polysteel™ Tri-Square

- Stainless steel blade has 1/8″ graduations
- Durable Polycast® handle with acrylic vial
- Use for plumb, level, and 45° work



Order No.	Price
KP75120	Price

Lufkin® Red End® Folding Wood Rule

- Marked both sides, both edges to 16ths, 16 stud centers in red
- Numbering begins on inside of rule
- Marked both sides, both edges to 16ths, 16 stud centers in red
- Numbering begins on inside of rule

MADE IN THE USA



Blade Dimension (in.)	Order No.	Price
5/8 x 6	**MZ50066F**	Price

Fowler Digi-Pro Electronic Protractor

The Digi-Pro electronic protractor includes embedded magnets for unique measurement areas. On/Off, Zero, Hold and Reverse features to invert the display for easier reading in certain situations.

- Embedded 25 lb pull magnets
- Full, 360° measuring range
- Accuracy: ±.2°
- Repeatability: ±.05°
- Resolution: .05°
- Invertible display feature
- Voltage: Standard 3V lithium battery

Use the Digi-Pro to make fast and accurate angular measurements. Ideal for fabrication applications.



Length (in.)	Order No.	Price
4	**NA5554440740**	Price
12	**NA5554440775**	Price

PRO-CHECK 10" Digital Protractor with Inch/Metric Scale

- 8” (10” on back) Stainless steel rule blade with inch and metric scales
- Reversible reading, hold function and locking feature
- Measure inside and outside angles
- Lightweight, easy to use
- Measuring range: 0-360°, resolution: .05°
- Accuracy: ±0.2°, repeatability: .05°
- Battery: 3V CR2032 battery included (replacement part number KA56ECR2032)
- 1 Year Warranty



Resolution	Sensitivity	Accuracy	Reading	Order No.	Price
.05°	+/- .2°	+/- .2°	360°	**PC23EP10EM**	Price

Starrett® Prosite™ Protractors

- Perfect miter joints every time
- Direct reading - no calculations required
- Durable aluminum construction



Length	Model No.	Order No.	Price
7	505A-7	**MV7011677**	Price
12	505A-12	**MV7067752**	Price

Starrett® Electronic Protractor

Model CP505E-12

- Large LED display
- 3 Button control with modes clearly designated on the display
- Full 360° swing
- Horizontal and vertical level vials
- Locking knob
- Comes with storage pouch



Order No.	Price
MV7020939	Price

STANLEY IntelliTools™ Distance Estimator & Sensor



Distance Estimator:
- Operates on 9V battery
- Automatic shut-off for longer battery life
- Large, easy-to-read LCD screen
- Accuracy: ±5%
- One person measuring distances up to 40°
- Calculates area and volume
- Manual addition mode for unique applications
- Last three measurements are displayed

Pro Stud Sensor:
- Directs and locates studs and joists
- Ergonomic styling
- Large, patented LCD screen for visual detection warning
- Quick response ASIC technology
- High impact ABS housing
- Multi-read depths

Model No.	Type	Order No.	Price
77-018	Distance Estimatoer	**KP441600**	Price
77-050	Stud Sensor 50	**KP442415**	Price
STHT77406	Stud Sensor 200	**KP442410**	Price

STANLEY Alignment Lasers

- Raised bubble vials
- Wall laser
- 360° Rotating wall attachment



Model No.	Description	Beam Color	Range	Beams	Accuracy	Battery	Order No.	Price
STHT77148	Manual	Red	15'	1	1/8 @ 10'	(2) AA	**KP441140**	Price
STHT77149	Self-Leveling	Red	25'	2	1/8 @ 10'	(2) AAA	**KP441155**	Price

STANLEY Self-Leveling Combination Lasers

FatMAX SLP5 & SCL-D:
- Self-leveling spot beams and horizontal line
- Project down beam with raised clearance
- Integrated magnetic pivoting base
- Locking pendulum



Model No.	Description	Beam Color	Range	Beams	Accuracy	Battery	Order No.	Price
FMHT77321	FatMax SCL-D	Red	165'	4	1/4 @ 30'	(3) AA	**KP444195**	Price

STANLEY Self-Leveling Dot Laser Level

- Projects 3 beams - up, down, horizontal
- Locking pendulum
- Over-molded grips for comfort and control
- QuickLink bracket and mounting system



Model No.	Description	Beam Color	Range	Beams	Accuracy	Battery	Order No.	Price
STHT77342	SPL3	Red	100'	3	1/4 @ 50'	(2) AA	**KP441040**	Price

STANLEY Self-Leveling Lasers

FatMAX 360 LASER:
- Self-leveling 360° line and vertical line
- 1/4" thread mounts and wall mount bracket
- Locking pendulum



CUBIX:
Range: 50'
- Accuracy ± 1/4"
- Self-leveling cross lines
- QuickLink™ bracket and mounting system
- Locking pendulum

CROSS90:
- Self-leveling cross line and plumb spots
- 1/4 and 5/8" thread
- Optional pulse mode allows use with detector
- Locking pendulum

Model No.	Description	Beam Color	Range	Beams	Accuracy	Battery	Order No.	Price
FMHT77137	FatMax 360	Red	165'	3	1/8 @ 30'	(3) AA	**KP444000**	Price
STHT77340	Cubix	Red	50'	2	1/4 @ 30'	(2) AA	**KP441340**	Price
STHT77341	Cross90	Red	50'	3	1/4 @ 30'	(2) AA	**KP441335**	Price

STANLEY Self-Leveling Rotary Lasers

- Bright, high power beam delivers maximum visibility for 2000' diameter working range
- Multiple scanning mode 10°, 45°, 90°
- Anti-drift system



Model No.	Description	Beam Color	Range	Accuracy	Battery	Order No.	Price
FMHT77427	FatMax RL HVPW	Red	2000'	1/16 @ 100'	NiCd	**KP444185**	Price
FMHT77429	FatMax RL HW + Rotary Laser	Red	2000'	1/16 @ 100'	NiCd	**KP444190**	Price
FMHT77439	Digital	Red	2000'	1/16 @ 100'	NiCd	**KP444095**	Price

PROTO Tethered Tape Rule Sleeve

- Tethered tape measure sleeve with D-ring securely keeps tape measure attached
- Made from durable material to withstand heavy wear



Max. Tool Weight (lbs.)	Model No.	Order No.	Price
2	JTAPESLV	**KP4274210**	Price

STANLEY FatMax® Tape Measures

FATMAX® WITH BLADE ARMOR®:
Blade Armor® is a thermoplastic industrial coating on the first 6" of the blade to reduce blade breakage

- Entire blade coated in Mylar® for maximum strength
- 3-Rivet end-hook grabs side, top or bottom for easy measuring
- Stud markings at 16" and 19.2"
- Forward blade lock
- Rubber cushion grip and high-impact yellow ABS case
- 11' Standout
- Belt clip



FATMAX® STAINLESS LONG:

- 3:1 Gear ratio rewinds tape 3x faster
- Tru-Zero end hook for inside and outside measurements
- Rubber cushion grip and high-impact yellow ABS case
- Steel roller cage protects case from being cut by blade retraction

FATMAX® AUTO-LOCK:

- Made for control and long blade life
- Manual mode for the ability to disengage lock for speed marking
- Detachable hook allows users to work efficiently in different conditions
- 11' Blade standout for reach and efficiency
- Blade Armor® coating for 10x blade life
- Hook storage securely stores hook when not in use

Style - FatMax Auto-Lock 11' Stand Out					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
FMHT33316S	16'	1-1/4	1/16	**KP444015**	Price
FMHT33338L	25'	1-1/4	1/16	**KP444020**	Price
FMHT33348	30'	1-1/4	1/16	**KP444025**	Price

Style - FatMax Magnetic 11' Stand Out					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
FMHT33865S	25'	1-1/4	1/16	**KP444120**	Price
FMHT33866	26' / 8mm	1-1/4	1/16; 1mm	**KP444125**	Price

Style - FatMax Premium 13' Stand Out					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
FMHT33509S	35'	1-1/4	1/16	**KP444220**	Price
FMHT33969S	16'	1-1/4	1/16	**KP444210**	Price

Style - FatMax Stainless Long					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
34-130	100'	3/8	1/8	**KP444090**	Price

Style - FatMax w/Blade Armor					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
33-716	16'	1-1/4	1/16	**KP444235**	Price
33-725	25'	1-1/4	1/16	**KP444240**	Price
33-726	26' / 8mm	1-1/4	1/32, 1/16; 1mm	**KP444260**	Price
33-730	30'	1-1/4	1/16	**KP444245**	Price
33-735	35'	1-1/4	1/16	**KP444250**	Price

STANLEY Standard Tape Measures

- Polymer coating for long life
- Corrosion resistant hook
- 1" Wide blades feature hook that moves to allow inside and outside measure
- Forward blade lock
- Hi-visibility yellow, high-impact plastic
- Blade returns automatically once blade lock is released
- 1" Wide blades have 7" standout



Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
30-454	25'	1	1/16, 1/8	**KP441510**	Price
30-455	25'	1	1/16	**KP442200**	Price
30-456	26' / 8mm	1	1/32, 1/16; 1mm	**KP442210**	Price
30-464	30	1	1/16	**KP442205**	Price
30-485	12'	1/2	1/32, 1/16	**KP442215**	Price
30-495	16'	3/4	1/32, 1/16	**KP442220**	Price
30-496	16' / 5mm	3/4	1/32, 1/16; 1mm	**KP442225**	Price

STANLEY Rubber Overmold Tape Measures

- Rugged rubber overmold for impact resistance
- 10' Blade standout for reach and efficiency
- Tylon blade coating for durability and long blade life
- Tru-Zero™ end hook for accurate measurements
- High impact case design for durability



Model No.	Length	Width (in.)	Graduation	Order No.	Price
STHT33569LW	26' / 8mm	1-1/8	1/16; 1mm	**KP442245**	Price
STHT33594S	16'	1-1/8	1/16	**KP442230**	Price
STHT33596LW	25'	1-1/8	1/16	**KP442235**	Price
STHT33597S	30'	1-1/8	1/16	**KP442240**	Price

STANLEY Powerlock® Tape Measures

- Entire blade coated in Mylar® for maximum strength
- 3-Rivet end-hook on Powerlock with Blade Armor and 1" blades
- Stud markings at 16" and 19.2"
- Blade returns automatically once blade lock is released
- Belt clip

POWERLOCK® WITH BLADER ARMOR®:

- Blade Armor® is a thermoplastic industrial coating on the first 6" of the blade to reduce blade breakage
- 10% smaller case than standard powerlocks
- Chrome plated case
- 8" standout

POWERLOCK® HEAVY DUTY:

- Heavy-duty contractor grade tape rule
- Yellow die cast metal case
- Stud markings on 33-312 only



POWERLOCK 1/2" & 3/4" BLADES:

- Chrome plated case

Style - Heavy Duty Powerlock					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
33-272	12'	1/2	1/16, 1/10	**KP441920**	Price
33-312	12'	3/4	1/32, 1/16	**KP441980**	Price

Style - Heavy Duty Powerlock 1/2"					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
33-212	12'	1/2	1/32, 1/16	**KP441970**	Price
33-215	12'/3.5mm	1/2	1/32, 1/16; 1mm	**KP441975**	Price

Style - Heavy Duty Powerlock 3/4"					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
33-116	16'	3/4	1/32, 1/16	**KP441945**	Price
33-158	16' / 5mm	3/4	1/32, 1/16; 1mm	**KP441950**	Price

Style - Powerlock					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
33-835	35'	1	1/16	**KP441910**	Price

Style - Powerlock 1"					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
33-425	25'	1	1/16	**KP441900**	Price
33-428	26' / 8mm	1	1/32, 1/16; 1mm	**KP441915**	Price
33-430	30'	1	1/16	**KP441905**	Price

Style - Powerlock w/Blade Armor					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
33-516	16'	1	1/16	**KP441955**	Price
33-525	25'	1	1/16	**KP441960**	Price

STANLEY LeverLock® Tape Measures

- Automatic blade lock holds blade securely in position
- Write-on label for repeated use with carpenter's pencil
- Non-marring frictionless base to help protect work surface
- Easy inside/outside measurements
- 1.5x stronger anti-glare blade



Style - Leverlock					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
STHT30810	12'	1/2	1/32	**KP441825**	Price
STHT30812	16'	3/4	1/32	**KP441830**	Price
STHT30825	25'	1	1/16	**KP441800**	Price
STHT30830	30	1	1/16	**KP441805**	Price

Style - Leverlock Center Read					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
STHT30758L	25'	1	1/16	**KP441605**	Price

Style - Leverlock Engineers					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
STHT30759L	25'	1	1/16	**KP441610**	Price

Style - Leverlock Magnetic Tip					
Model No.	Length	Width (in.)	Graduation (in.)	Order No.	Price
STHT33281L	25'	1	1/16	**KP441620**	Price

Lufkin® Series 1000 Power Tapes

- Toggle lock button
- Four rivet Quad-Hook™ on 1″ wide blades
- Graduated 1/16″ top edge
- Graduated to 1/16″ bottom edge, first 12″ to 1/32″ (except 1 blades)
- Hi-Viz® orange case



Blade Dimension	Replacement Blade	Order No.	Price
1/2 x 10'	-	**MZ50PHV1023CME**	Price
1/2 x 10'	-	**MZ50PHV1010**	Price
1/2 x 12'	-	**MZ50PHV1012**	Price
3/4 x 12'	R1312	**MZ50PHV1312**	Price
3/4 x 16'	RW325	**MZ50PHV1316**	Price
1 x 25'	-	**MZ50PHV1425**	Price
1 x 26'	-	**MZ50PHV1048CME**	Price
1 x 30'	-	**MZ50PHV1430**	Price

Lufkin® Control Series Tape Measures

- The Drag Strip™ access opening on the bottom of the tape allows users to regulate blade feed and return with their fingertip for greater control
- Rigid extra wide blade provides 10' of standout
- Wide end hook holds better and makes marking easier
- D-ring for tether strap or easy hanging storage
- Durable molded case allows for added control and grip



Size	Type	Order No.	Price
3/4 x 16'	English	**MZ50CS8516**	Price
1-3/16 x 25'	English	**MZ50CS8525**	Price
1-3/16 x 26' (8M)	Metric/English	**MZ50CS8525CME**	Price

Lufkin® Economy Tapes

- Contour grip case
- Hi-Viz® Orange
- Graduated to 1/16″ bottom edge, first 12″ to 1/32″ (standard read)

† Quickread tape in blue



Blade Dimension	Order No.	Price
1/2 x 10'	**MZ50L610**	Price
3/4 x 16'	**MZ50L616**	Price
1 x 25'	**MZ50L625**	Price
1 x 25'	**MZ50QRL625MP†**	Price

Lufkin® Autolock 25' Measuring Tape

- Non-slip rubber grip & Hi-Viz® ABS plastic body
- Automatic blade lock
- Recessed lock release to reduce accidental retraction



Type	Order No.	Price
Standard Autolock	**MZ50AL725**	Price
Autolock with Magnetic Tip	**MZ50AL725MAG**	Price

Lufkin® Magnetic Tip 25' Measuring Tape

- Non-slip rubber blade lock button
- Magnetic end hook features powerful dual magnets
- Non-slip co-molded rubber grip & tough Hi-Viz® orange ABS plastic body



Order No.	Price
MZ50L725MAG	Price

Lufkin® Self Centering Tape

- The top edge is standard measurement, bottom edge is exactly half
- Measure on the top edge of the blade and look at the lower edge for the center



Order No.	Price
MZ50L625SCTMP	Price

Lufkin® Quickread Tapes

- Toggle lock button
- Marked with fractions to 1/8″ and decimal equivalents
- Graduated feet and inches to 1/16″ top edge
- Graduated to 1/16″ bottom edge, first 12″ to 1/32″ (except 1″ blade)



Blade Dimension	Order No.	Price
3/4	**MZ50PQR1312**	Price
3/4	**MZ50PQR1316**	Price
1	**MZ50PQR1425**	Price

Lufkin® XL Power Return Tape, Hi-Viz® Case, Cushion Grip

1-3/16" x 25'

- New blade designed to achieve 10' stand-out
- Soft touch lock button
- Rubber cushion absorbs impact and improved grip
- Clearcoat blade protection and 4-rivet end hook
- Easy on/off belt clip



Order No.	Price
MZ50XL8525	Price

Lufkin® Mezurall®

- Graduated to 1/16″ on top and bottom edge; bottom edge to 1/32″ for the first 12″ bottom edge
- Metric/english version graduated to 1/16″ top edge, mm lower edge, decimeters in red



Blade Dimension	Case Color	Order No.	Price
1/2 x 8'	Chrome	**MZ50W928**	Price
1/2 x 10'	Black	**MZ50Y8210**	Price
1/2 x 10'	Chrome	**MZ50W9210**	Price
1/2 x 12'	Black	**MZ50Y8212**	Price
1/2 x 12'	Chrome	**MZ50W9212**	Price
1/2 (13mm) x 10' (3mm)	Chrome	**MZ50W9210ME**	Price
3/4 x 12'	Chrome	**MZ50W9312**	Price

Lufkin® Chrome Clad Mezurall®

- Graduated to 1/16″ on top and bottom edge; bottom edge to 1/32″ for the first 12″ bottom edge
- Metric/english version graduated to 1/16″ top edge, mm lower edge, decimeters in red
- Chrome clad blade



Blade Dimension	Case Color	Order No.	Price
1/2 x 12'	Chrome	**MZ50C9212**	Price
1/2 x 12'	Chrome	**MZ50C9212X†**	Price

†Graduated to 1/10' in (Engineers Scale)

Lufkin® Executive® Thinline Pocket Tapes

- 1/4″ Wide yellow clad blade
- Graduated to 1/16″, first 12″ to 1/32″
- 16″ Centers designated by diamonds, every 12″ in red
- Metric/english version graduated to 1/16″ inch top edge, mm lower edge



Blade Dimension	Order No.	Price
1/4 x 6'	**MZ50W606**	Price
1/4 x 8'	**MZ50W608**	Price
1/4 (6mm) x 6' (2mm)	**MZ50W606ME**	Price

Lufkin® Pee Wee Pocket Tapes

- 1/4″ Wide yellow clad blade
- Graduated to 1/16″, first 1/2″ to 1/32″
- 1/16″ Centers designated by diamonds, every 12″ in red



Blade Dimension	Order No.	Price
1/4 x 6'	**MZ50W616**	Price
1/4 x 10'	**MZ50W6110**	Price

Lufkin® Series 2000 Tapes

- Toggle lock button
- Four rivet Quad-Hook™ on 1″ wide blades
- Graduated to 1/16″ top edge
- Bottom edge graduated to 1/16″, first 12″ to 1/32nd inch (except 1″ blade)
- Metric/english blades upper edge graduated to 1/16″, lower edge graduated in mm
- Decimal blade upper edge to mm, lower edge to 1/10″
- Chrome finished case



- English		
Blade Dimension	**Order No.**	**Price**
1/2 x 10'	**MZ50P2210**	Price
1/2 x 12'	**MZ50P2212**	Price
3/4 x 12'	**MZ50P2312**	Price
3/4 x 16'	**MZ50P2316**	Price
1 x 25'	**MZ50P2125**	Price
1 x 33'	**MZ50P2133**	Price

- Metric/Decimal		
Blade Dimension	**Order No.**	**Price**
13mm (1/2) x 3mm (10')	**MZ50P2210MEX**	Price

- Metric/English		
Blade Dimension	**Order No.**	**Price**
13mm (1/2) x 3mm (10')	**MZ50P2223CME**	Price
19mm (3/4) x 5mm (16')	**MZ50P2335ME**	Price

Lufkin® Hi-Viz® Universal Lightweight Tapes

- Hi-Viz® orange case
- Yellow clad blade with hook ring
- Graduated to 1/8″ with instantaneous foot reading, 16″ centers indicated by a diamond
- Replacement blade for 50' - OY50
- Replacement blade for 100' - OY100



Blade Dimension	Order No.	Price
3/8 x 50'	**MZ5050**	Price
3/8 x 100'	**MZ50100**	Price

Lufkin® 3/8" x 100' ProSeries 3:1 Ratio Long Steel Tape

- 3:1 Gear ratio for fast blade retrieval
- Precise, easy to read black and red blade markings
- Premium steel blade resists kinks



Order No.	Price
MZ50PS100S	Price

Lufkin® Speedwinder Tapes

- Impact-resistant self-standing orange/black case
- Heavy-duty yellow clad blade protected by an abrasion resistant coating (.008" / 0.02mm thick)
- Extends and rewinds in less time than conventional long steel tapes
- Easy-to-read bold black markings



Size	Graduation	Order No.	Price
3/8 x 50'	8ths & 16ths	**MZ50HYT50**	Price
3/8 x 50'	8ths front, mm & cm back	**MZ50HYT15CME**	Price
3/8 x 100'	8ths & 16ths	**MZ50HYT100**	Price
3/8 x 100'	10ths & 100ths	**MZ50HYT100D**	Price
3/8 x 100'	8ths front, mm & cm back	**MZ50HYT30CME**	Price
3/8 x 164'	8ths front, mm & cm back	**MZ50HYT50CME**	Price

Lufkin® Artisan Diameter Tape

- Nubian® blade
- Graduated consecutive inches to 1/16" one side; other side to diameter inches, with an extra diameter inch subdivided to 1/64" left hand



Blade Dimension	Order No.	Price
3/8 x 240'	**MZ50120P**	Price

Lufkin® Banner Diameter Tape

- Rugged, vinyl-covered steel case
- Large easy winding drum with a nylon roller guide
- Yellow clad blade with folding hook ring (banner only)
- Graduated to 1/8" with instantaneous foot reading, 1/16" centers indicated by a diamond



Fits - English		
Blade Dimension	Order No.	Price
3/8 x 50'	**MZ50HW223**	Price
3/8 x 100'	**MZ50HW226**	Price

Fits - Metric/English		
Blade Dimension	Order No.	Price
3/8 (10mm) x 50' (15m)	**MZ50HW223ME**	Price
3/8 (10mm) x 100' (30m)	**MZ50HW226ME**	Price

Lufkin® Home Shop Tape



Blade Dimension	Order No.	Price
3/8 x 50'	**MZ50HW50**	Price
3/8 x 100'	**MZ50HW100**	Price

Empire® Power Grip Tapes

- Molded thick rubber boot fits comfortably in hand for better control, absorbs impact
- Rubber boot
- Bold, clear numbers on bright yellow blades
- Rigid blade provides excellent stand-out, with protective acrylic coating



	Fractional Read			Standard Read		
Length	Color	Order No.	Price	Color	Order No.	Price
16'	Gray	**KP757517**	Price	Black	**KP757516**	Price
25'	Gray	**KP757526**	Price	Black	**KP757525**	Price
30'	Gray	**KP757531**	Price	-	**-**	

Empire® Open Reel Fiberglass Tapes

- Heavy-duty construction
- High impact resistant ABS body
- Printed two sides, inch and engineer's 1/10th foot scale.
- Fiberglass tape will not rot, corrode, or distort
- Numbers and graduations are printed in black on white blade
- Yellow case with comfortable rubber hand grip



Length	Width	Order No.	Price
100'	1/2 Open Reel	**KP756799**	Price
200'	1/2 Open Reel	**KP756820**	Price
300'	1/2 Open Reel	**KP756830**	Price

KOMELON The Professional™ Power Tapes

- Impact resistant case construction designed for comfort and strength
- Nylon coated blade for maximum durability
- Inch/metric scale



Model No.	Width	Length	Order No.	Price
4912IM	5/8	12'/3.5m	**MZ554912IM**	Price
4916IM	3/4	16'/5m	**MZ554916IM**	Price
4925IM	1	25'/7.5m	**MZ554925IM**	Price
4930IM	1	30'/9m	**MZ554930IM**	Price

KOMELON Self Lock™ Evolution Power Tapes

- Automatic blade lock
- Easy to work thumb puch button retrieval
- Nylon coated blade for maximum durability
- Ergonomically designed case
- Hi-viz blade color
- Dual end hook
- Printed on both sides of blade



Model No.	Width	Length	Order No.	Price
EV28116	1	16'	**MZ55EV28116**	Price
EV2825	1	25'	**MZ55EV2825**	Price
EV2830	1	30'	**MZ55EV2830**	Price

KOMELON Monster MagGrip™ Magnetic Tapes

- Magnetic dual end hook for easier one-person measurement
- Double-sided printing provides precise marking and line drawing
- Rubberized case protects end hook and button
- Nylon coated blade for maximum durability



Model No.	Width	Length	Order No.	Price
7116	1	16'	**MZ557116**	Price
7125	1	25'	**MZ557125**	Price
7130	1	30'	**MZ557130**	Price

KOMELON Power Blade™ II Power Tapes

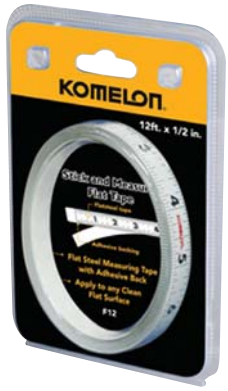
- Super compact wide blade tape
- High viz color on chrome color case
- Large read numbers
- Printing on both sizes of blade



Model No.	Width (in.)	Length	Order No.	Price
81416	1-1/16	16'	**MZ5581416**	Price
81425	1-1/16	25'	**MZ5581425**	Price
81430	1-1/16	30'	**MZ5581430**	Price

KOMELON Flat Tape Adhesive Back

- Flat steel measuring tape with adhesive back
- Apply to any clean surface
- Tape is 1/2” wide and 12’ in length



Order No.	Price
MZ55F12	Price

KOMELON Measuring Wheel

- Lightweight, durable and comfortable to use
- Wheel is made of corrosion resistant ABS, PVC
- 5-Digit counter with telescoping handle
- Protective outer jacket
- Measures in feet/inches
- 14” Diameter wheel
- Counter measures to 10,000 feet

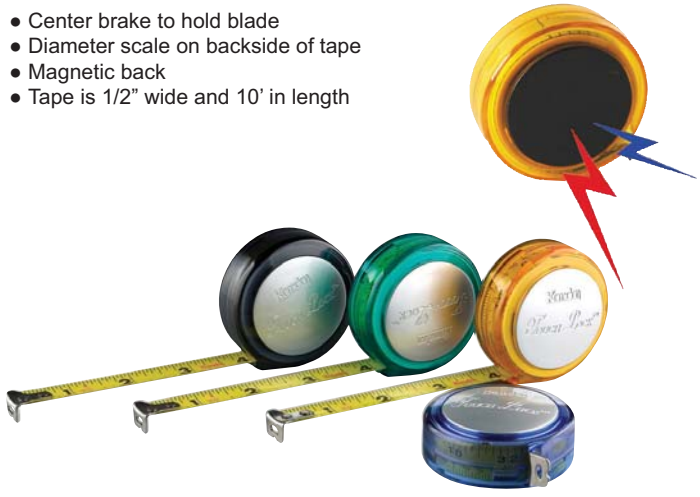




Order No.	Price
MZ55MK4512	Price

KOMELON Touch Lock™ Power Tape

- Center brake to hold blade
- Diameter scale on backside of tape
- Magnetic back
- Tape is 1/2” wide and 10’ in length



Order No.	Price
MZ553110	Price

Starrett® Exact® Tape Measures

- Graduated in 16ths
- Nylon coated blade provides twice the abrasion resistance as other tapes
- High impact resistant ABS plastic case and rubber plastic overmolding
- Includes steel belt clip



Blade Width	Order No.	Price
1/2" x 12'	**MV8030649**	Price
3/4" x 16'	**MV8060400**	Price
1" x 25'	**MV8030654**	Price
1" x 30'	**MV8030657**	Price
1" x 35'	**MV8030658**	Price

Starrett® Exact® Plus Tape Measures

- Graduated in 16ths
- Wider blade providing a 9' standout
- Nylon coated blade provides 6X abrasion resistance
- PC-ABS plastic case and heavy overmolding
- Positive lock holds blade firmly in place
- Black anodized steel belt clip



Size	Model No.	Order No.	Price
1.06" x 16'	KTXP106-16N	**MV8030636**	Price
1.06" x 25'	KTXP106-25N	**MV8030638**	Price
1.06" x 30'	KTXP106-30N	**MV8030641**	Price
1.06" x 35'	KTXP106-35N	**MV8030645**	Price

Starrett® Steel Blade Long Tapes

510 Series • Closed Reel

- High visibility ABS plastic case
- Steel blade provides precise measurement up to 100'
- Easy to read 1/8" graduations
- Included folding hook



Size	Model No.	Order No.	Price
3/8" x 50'	KTS510-50-N	**MV8030618**	Price
3/8" x 100'	KTS510-100-N	**MV8030622**	Price

Starrett® Exact® Plus Steel Blade Long Tape

511 Series • Closed Reel

- Features 4X faster blade retraction
- 1/8" Graduations
- Easy-to-read aluminum colored nylon clad rigid blade
- Folding hook with snap for storage



Size	Model No.	Order No.	Price
1/2" x 100'	KTXP511-100-N	**MV8030601**	Price

Starrett® Exact® Steel Blade Long Tapes

530 Series • Closed Reel

- Vinyl clad steel case
- Nylon rollers to reduce blade wear
- Easy to read 1/8" graduations
- Folding ring hook



Size	Model No.	Order No.	Price
3/8" x 50'	530-50	**MV8065945**	Price
3/8" x 100'	530-100	**MV8065946**	Price

Starrett® Fiberglass Blade Long Tape

538 Series • Closed Reel

- Features 4X faster blade retraction
- 1/8" and 1/100" Graduations
- Rubber plastic overmolded on ABS plastic case
- Folding hook ring with snap for storage



Order No.	Price
MV8030615	Price

Starrett® Exact® Torpedo Level

Magnetic Frame

- Measures 9-1/2" (240mm)
- Finished with an aluminum frame and red high visibility paint
- Impact resistant ABS plastic end caps
- Vertical, horizontal, and 45° vials
- Milled top surface finished with a V-groove
- Magnetic bottom surface



Order No.	Price
MV8030727	Price

Starrett® Exact® Plus Torpedo Level

Magnetic Frame

- Measures 10" (250mm)
- Manufactured with a sturdy die cast enclosed aluminum frame with durable powder coat paint
- Vertical, horizontal and 45° vials
- Includes milled top surface finished with a V-groove
- Magnetic bottom surface



Order No.	Price
MV8030726	Price

Starrett® Torpedo Level

Aluminum and Plastic Frame

- Measures 9" (225mm)
- Manufactured with extruded aluminum frame with high visibility yellow and red ABS plastic construction for impact resistance
- Vertical, horizontal and 45° vials
- V-grooved top surface and magnetic bottom surface



Order No.	Price
MV8030728	Price

Bullseye™ Circular Levels

- All purpose, 360° vial level in all directions
- Sturdy plastic construction
- Large sight for ease of reading
- Use on ranges, refrigerators, washers, dryers, stereos, RV's



Item	Description	Order No.	Price
Empire	1-3/4 Diameter	**KP753604**	Price
Starrett	1-3/4 Diameter	**MV8036078**	Price

STANLEY Torpedo Levels

- Top Reading Vials; 9" - 3 Vials (1 Plumb, 1 level, 1-45°)



Model No.	Description	Order No.	Price
42-264	Magnetic Base - Plastic Frame; Black	**KP441540**	Price
42-465	Magnetic Base - Cast Aluminum Frame	**KP443100**	Price

STANLEY FatMax® Xtreme® Torpedo Level

- Die cast aluminum body
- Rare earth magnets for ultimate holding power
- 180° Rotating vial to duplicate angles
- Pipe groove for use on rounded surfaces
- 3 Solid acrylic block vials
- Length: 11-3/4"



Model No.	Order No.	Price
43-609M	**KP444135**	Price

Empire 9" Heavy Duty Magnetic Torpedo Level

- True Blue® vials are accurate to within .0005″ per inch in all 10 level and plumb working positions
- Heavy duty extruded aluminum frame, top read window
- Vials read plumb, level and 45°
- Strong-holding magnetic edge
- V-grooved working edge fits on pipe or conduit



Order No.	Price
KP759919	Price

Empire Pocket Level

- Strong molded frame
- Top read window
- Overall length 5″
- Durable pocket clip



Order No.	Price
KP75845	Price

Empire 9" Magnetic Torpedo Level

- Durable acrylic vials read plumb, level and 45°
- Solid aluminum frame, 9″ overall length, top read window
- Magnetic edge frees hands



Order No.	Price
KP755819	Price

Empire 9" Magnetic Torpedo Level

- Strong, accurate 9″ POLYCAST™ frame
- Non-conductive frame insulates from heat, cold and electrically
- Strong holding magnetic edge
- Vials read plumb, level and 45°



Order No.	Price
KP753319	Price

Empire 12" Magnetic Tool Box Level

- True Blue® vials are accurate to within .0005″ per inch in all 10 level and plumb working positions
- Heavy duty 12″ extruded aluminum frame, top read windows
- 4 Vials read plumb, level, 45°, and VARI-PITCH™
- Powerful, full-length magnetic edge
- VARI-PITCH™ vial reads slope in 1/8″ increments



Order No.	Price
KP7599112	Price

Fowler 9" Electronic Level

XTRA-VALUE

Fowler's 9" Laser Level provides instant 4 x 90° digital inclination display. With embedded magnets on its measuring surface, a beamsplitter projects a 90° laser cross hair for leveling at a distance. It also includes a 1/4-20 mount for tripod use.



- Measuring range: 4 x 90°
- Resolution: .05°
- Accuracy: ±.2°
- Repeatability: ±.05°
- Standard 9 volt battery (250 hours life)
- Dimensions: 9"L x 1"W x 2-1/4"H
- Includes two way level and plumb vials
- Reversible reading for inverted use
- Bar not included

Order No.	Price
NA5554440600	Price

360° Digital Level/Protractors

- Instant LCD display of level, tilt, true vertical or any angle in between to highest accuracy, 1/10 of a degree reading
- Deviation from true plane is measurable through full 360° (4×90°)
- Floating zero-provides zero selection anywhere within its 360° range
- Hold button
- Reset plus Superset self-calibration modes
- Battery (included)
- Low battery indicator
- Automatic shut-off

SPECIFICATIONS
Measuring Range . 360° (4×90°)
Resolution . . . . . 0.1°
Accuracy . . . . . 0-10° ±0.1°
11-79° ±0.2° 80-90° ±0.1°
Repeatability 05
Cross Axis Error . . . . Less than 2° up to 20°
Operating Temperature
Range . . . . . –5° to +50°C
Storage Temperature
Range . . . . . –20° to +60°C
Size . . . . . 6.0×1.2×1.9″ high
Weight . . . . . 10.2 oz.



Brand	Description	Order No.	Price
Mitutoyo	Digital Protractor w/o SPC	**MT80950-317**	Price
	Digital Protractor w/ SPC Output	**MT80950-318**	Price
md	Digital Level w/o SPC	**NA42360**	Price

Starrett Pocket Levels

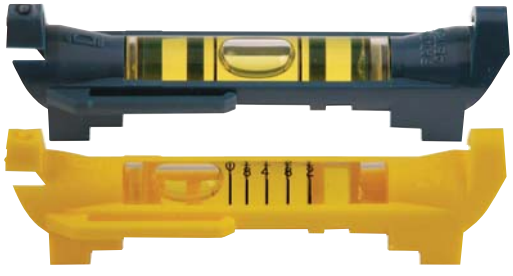
- Available in 2-1/2” and 3-1/2” sizes made from hexagonal stock 3/8” and 1/2” inch wide respectively
- Made with convex ends



Starrett No.	Size (in.)	Description	Order No.	Price
135A	2-1/2	With Main Vial	**MV7050570**	Price
135B	3-1/2	With Main Vial	**MV7050571**	Price

Empire Line Level Set

- Lightweight construction minimizes line sag
- Unbendable open hooks allow level to slide freely
- Pocket clip helps prevent loss
- Use for landscaping, plumbing, masonry work, gutters, and sheet metal work
- VARI-PITCH™ vial reads from level to 1/2″ ptich in 1/8″ increments



Order No.	Price
KP7583038	Price

Empire 580/581 Series Aluminum Levels

- Advanced frame design assures accuracy
- Top read window
- Beveled end plates protect vials from shock
- 581 Series feature full length magnetic strips



Description	Order No.	Price
24" Aluminum	**KP7558024**	Price
24" Magnetic Aluminum	**KP7558124**	Price
48" Aluminum	**KP7558048**	Price
48" Magnetic Aluminum	**KP7558148**	Price
72" Aluminum	**KP7558072**	Price
72" Magnetic Aluminum	**KP7558172**	Price

Empire e70/em71 Series Levels

- True Blue® vials are accurate to within .0005″ per inch in all ten level and plumb working positions
- 300° View top-reading level vial
- Solid block acrylic vials won’t break, leak or fog
- Milled edges for accuracy
- Dual molded rubber endcaps for extreme shock resistance
- Ergonomic rubber hand grips
- em71 Series magnetic levels have rare earth magnets for super-strong holding onto ferrous surfaces



Description	Order No.	Price
24" e70 Level	**KP75E7024**	Price
24" Magnetic em71 Level	**KP75EM7124**	Price
48" e70 Level	**KP75E7048**	Price
72" Magnetic em71 Level	**KP75EM7178**	Price

Empire e80/em81 Series Heavy Duty Aluminum Levels

- True Blue® vials are accurate to within .0005″ per inch in all ten level and plumb working positions
- Super strong anodize I-beam frame
- Shock-absorbing end plates
- Top read window
- em81 Series levels feature strong holding magnetic edges



Description	Order No.	Price
24" Heavy Duty Aluminum Level	**KP7588024**	Price
24" Heavy Duty Magnetic Aluminum Level	**KP7588124**	Price
48" Heavy Duty Aluminum Level	**KP7588048**	Price
48" Heavy Duty Magnetic Aluminum Level	**KP7588148**	Price

Macklanburg-Duncan Levels

SMARTTOOL The Only Level That Reads All Angles

- **SMARTTOOL™** SmartTool™ digitally displays degrees, percent slope and pitch to 1/10 degree accuracy
- Extremely durable, it will keep its accuracy for years with push button calibration
- Features audio sound at level and plumb
- Comes with standard 9 Volt battery
- NA4292346 Module can be used alone or with NA4292288 and NA4242296



Description	Order No.	Price
Magnetic Bracket for NA4292346	**NA4292395**	Price
Module	**NA4292346**	Price
Sensor Module in a 24" Rail	**NA4292288**	Price
Sensor Module in a 48" Rail	**NA4292296**	Price

PROCHECK PREMIUM 360° Digital Level / Protractor



- IP65 Water & dust resistance
- Military grade alloy surfaces
- Alloy contracted body
- V groove surfaces
- Strong magnetic base
- Digital Level Sensor
- Anodized finish
- Precision lapping
- Micro USB Charging
- Rechargeable Battery
- Tilt Range: 0°-90° x 4
- Resolotuion: 0.05°
- Repeatability: 0.1°
- Size 6 x 2.4 x 1.2”
- HAZ05
- 1 Year Warranty

IP65

Model No.	Accuracy	Type	Order No.	Price
06LP360R	0.2°	360° Digital Level Protractor	**PC2306LP360R**	Price
06LP360RW	0.2°	360° Digital Level Protractor with Wireless Connect	**PC2306LP360RW**	Price

Suburban Magnetic Cylinder Squares

Checks Squareness to 50 Millionths Inch

- Designed to easily check squareness
  4-1/2 to 4-1/4”
  1-1/2 to 1-7/16”
  3-1/2 to 3-3/8”
- From steel selected and normalized to insure stability and uniformity

MADE IN THE USA



Length (in.)	Base Dia. (in.)	Shaft Dia. (in.)	Order No.	Price
4-1/4	1-7/16	1/2	**NJ50MCS4**	Price
6-1/2	3-3/8	1	**NJ50MCS6**	Price

PROCHECK Cylinder Squares

- The squares are hardened and ends are lapped to 90° angular accuracy with the cylinders as follows:
  6″ square to ±.00010”
  12″ square to ±.00015”
- Includes fitted case
- These cylindrical squares are used in surface plates as a 90° reference angle
- Can be used for checking squares, height gages and many other instruments



Dia. Sq. x Ht. (in.)	Weight	Order No.	Price
3 x 6	15 lbs	**NN852750006**	Price
4 x 12	44 lbs	**NN852750012**	Price

PROCHECK Master Precision Levels

This is a Master Precision Level for accurately checking the work of machinists and toolmakers, the setting up of machinery, and other work that requires extreme leveling accuracy.

- The main level vial is graduated to 10 second accuracy (1 division equals .0005″ per foot)
- This is an auxiliary level which enables the user to check side declinations
- The body of the level is of cast iron and the base is hand scraped for extreme accuracy
- There are plastic knobs on the frame to insulate the instrument from the heat of the hand
- Includes fitted case



Size (in.)	Order No.	Price
8	**NN952422008**	Price
12	**NN952422012**	Price

PROCHECK Mini Magnetic Level / Protractor

- 2-in-1 Digital level & protractor
- 4-Side measuring with magnets on 3 side
- Aluminum alloy body
- Large clear LCD display, reversible reading
- Measuring range: 4 X 90°, repeatability: 0.1°
- Resolution: .05°, accuracy: ± 0.2°
- Standard 9V battery included
- 1 Year Warranty



Resolution	Sensitivity	Accuracy	Reading	Order No.	Price
.05°	+/- .1°	+/- .1°	360° (4x90°)	**PC23MLP360**	Price

Starrett Machinist Levels

- Main vials are ground and graduated and adjustable to a positive setting
- V-groove running the length of the level base
- Cross test vial (except 4” model)
- Main level vials have graduations that are approximately 80-90 seconds or .005”/foot(0.42mm/meter)



Description - Without Certification			
Starrett No.	Size (in.)	Order No.	Price
98-4	4	**MV7050440**	Price
98-6	6	**MV7050441**	Price
98-8	8	**MV7050442**	Price
98-12	12	**MV7050443**	Price
98Z-12	12 w/case	**MV7050444**	Price
98-18	18	**MV7050445**	Price
98Z-18	18 w/case	**MV7050446**	Price

Description - With Standard Letter of Certification			
Starrett No.	Size (in.)	Order No.	Price
98-6W/SLC	6	**MV7066935**	Price
98-12W/SLC	12	**MV7066934**	Price
98Z-12W/SLC	12 w/case	**MV7066933**	Price

Starrett Master Precision Levels

- Ground and graduated main vial of 10 second accuracy–one division equals .0005″ per foot
- Auxiliary level vial shows lateral position as guide to horizontal setting
- Insulated from handling by non-conductive top plate
- Level vials positioned to reduce breakage
- Made of seasoned cast iron
- Base carefully machined and scraped
- Black wrinkled finish on non-working surfaces
- Length of base 15”, width of base 1-5/8”, height of level 3”



Starrett No.	Order No.	Price
199Z	**MV7050719**	Price
199ZW/SLC	**MV7066932†**	Price

Sent in finished wood case
†With Standard Letter of Certification

Fowler Mini-Mag Protractor

The mini-MAG Protractor provides instant 360° digital inclination display of any angle with the additional unique feature of embedded magnets on two sides.

mini-MAG Protractor



- Embedded magnets with 35 lb. pull
- Measuring range: 360° (4 x 90°)
- Resolution: .05°
- Accuracy: ± .1°
- Repeatability: ± .1°
- Voltage: standard 9V battery (250 hrs.)

Order No.	Price
NA55544224501	Price

Fowler Mini-Mag Plus Protractor

- IP54 protection against debris and fluids
- USB rechargeable battery with status light (cable included)
- Backlit display
- Tilt % function
- Auto-off after 5 minutes
- Embedded magnets on sides and bottom (3.5 lbs pull)
- Measuring range 360° (4 x 90)
- Display automatically inverts
- Resolution: 0.05°
- Accuracy: ±0.2°
- Repeatability: 0.05°
- Hold feature
- Zero function
- Smaller size (2.12 x 2.12 x 0.9")
- Light weight: 2.7 oz.
- Anodized alloy housing

Protected to: IP54 COOLANT & FLUID RESISTANT



Order No.	Price
NA5554422500	Price

Fowler Digi-Level

XTRA-VALUE

- Provides instant 360° digital inclination display of any angle, aluminum housing, with large LCD, reading hold, absolute 0° at sea level
- Measuring range: 360° (4 x 90°)
- Resolution: .05°
- Accuracy: ± .2° maximum error
- Repeatability: ±.1°
- Dimension: 4" L x 1" W x 3" H
- Voltage: standard 9V battery
- Battery life: up to 250 hrs
- Operating temp: -5°C to 50°C (23°F to 122°F)
- Storage temp: -20°C to 65°C (-4°F to 17°F)
- Weight: 1.1 lbs
- Supplied in vinyl pouch



Order No.	Price
NA5554422444	Price

Fowler Clinotronic Plus

WYLER

- Resolution of 0.01° (selectable)
- Adjustable base depth
- Display: use any units common to inclination measurements
- Desired units selected by push button
- Automatic setting of zero by push button command.
- Absolute or relative measuring mode selectable by push button
- Built-in calibration program
- Seal-tec technology for excellent performance in difficult environmental conditions
- Interface connection RS-232 is integrated. Special purpose cables available.
- Low battery indication
- No loss of calibration data by power failure
- Price includes calibration cable and case

Technical Specifications



- Measuring range/capacity: ±45°/0-360°
- Response time: Value available within 5 seconds
- Sensitivity: Depending on units set -.01°
- Repeatability: <.01°
- Linearity: Within 3 min. of arc
- Temp. coefficient: Less than 0.01°/°C
- Data output: Serial
- Battery: Standard AA 1.5V alkaline/130hrs or AA 3.0V Mn02-lithium (for longer operation - 300 hrs.)
- Housing: Aluminum hard anodized
- Dimensions: 4 x 3 x 1" (100 x 75 x 30mm)
- Weight: 13 oz. (380 grams)
- Temp. range: Operational 0 to 4°C

Order No.	Price
NA5554635601	Price

Fowler Magnetic Precision Spirit Level

WYLER

- Sensitivity: 4 sec., .0002"/ 10", .02mm/m
- Overall Dimensions: 5-7/8" x 1-9/16" x 5-7/8"
- Checks and levels cylinder, horizontal and verticle surfaces
- One prismatic and one flat measuring surface
- Magnets insure complete adherance to vertical surfaces of parts and vertical arbors or shafts. Operators on milling and boring units, inspectors and fitters work with free hands
- Includes fitted case



Order No.	Price
NA5553422048	Price

Fowler Spirit Level

WYLER

- Sensitivity: 10 sec., .0005"/ 10", 0.05mm/m
- Overall dimensions: 4" x 1-3/8" x 4"
- Two prismatic sides
- Insulated handle
- Ultra high quality
- Handscraped by Swiss craftsmen
- Clear view of the main vial can be observed not only from above but also from both sides-this full view allows position of the bubble to be read easily
- Includes fitted case



Order No.	Price
NA5553422058	Price

Fowler Cross Spirit Levels

- Used for leveling machines & other apparatus
- Screw-on type
- Fluid resistant
- Light weight



WYLER

Length (in.)	Width	Thickness	Sensitivity	Order No.	Price
3.15	2.64	.667	.001 / 10 (.1mm/m 20 sec)	NA5552422078	Price
6	2.64	1.18	.0002 /10 (.02mm/m, 4 sec)	NA5552422079	Price

Starrett® Key Caddy

- Heavy duty die cast case
- 21" Stainless steel chain
- Large key ring
- Belt clip
- Returns keys and other articles automatically
- Great for welders to carry torch ignitors

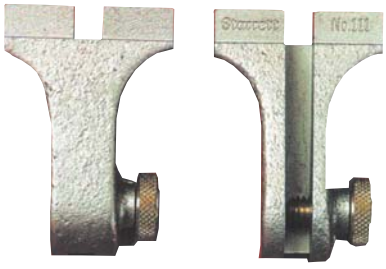


Order No.	Price
MV8063135	Price

Starrett® Stair Gage Fixture Attachments

For rafter and framing squares

- A pair of these fixtures clamped to a carpenter's framing or rafter square forms a handy gage for laying out stair stringers, hip, valley and other rafter cuts plus many other unusual cuts
- Furnished in pairs — one right and one left hand



MADE IN THE USA

Width Slot (in.)	Length (in.)	Order No.	Price
3/16	1-7/8	**MV7050476**	Price

PROCHECK® Mechanical Production Counters

Hand Tally Type:

- Each time thumb lever is depressed a unit appears on dial
- Chrome finish
- Registers 0 to 9999

Machine Type:

- Arm and spring actuate counter
- Knob resets to zero
- 4 flange holes for rigid mounting
- Arm may be in any position
- Registers 0 to 99999



Type	Digit	Order No.	Price
Hand	4	**MB50251**	Price
Machine	5	**MB50250**	Price

Brass Plumb Bobs

- Lacquered finish to resist corrosion
- Ties easily to any string or line
- Extra hardened steel tip included
- Used for installing deck posts, support beams, plumbing, etc



Empire GENERAL

Weight (oz.)	Empire		General	
	Order No.	Price	Order No.	Price
8 oz	**KP75908BR**	Price	**NE508008**	Price
12 oz	**KP75912BR**	Price	**NE5080012**	Price
16 oz	**KP75916BR**	Price	**-**	-
24 oz	**KP75924BR**	Price	**-**	-

KEY-BAK® Key Reels and Holders

- A secure way to manage frequently used keys, tools, and devices
- These retractors and holders offer various mounting options for ease of use and security
- Each retractor is tested in excess of 100,000 pulls



RP650003011 **RP650005005** **RP650005011** **RP650007023** **RP650308201** **RP650485821** **RP650487022** **RP650488803** **RP650S48803**

Description	Retraction Force	Attachment Type	Application	Includes	Order No.	Price
24" (Extended) Stainless Steel Chain Reel w/Belt Clip for Torch Striker or Similar (Tool not included)	8 to 10 oz	Belt Clip	Holds torch striker (Not Included) and other Small Tools	Split Ring	**RP650005005**	Price
24" (Extended) Stainless Steel Chain Tool Reel w/Bracket Mount (Chuck Key not Included)	8 to 10 oz	Bracket Mount	For Holding Drill Chuck Keys (Chuck Key not Included)	Plastic Clamp	**RP650007023**	Price
24" (Extended) Stainless Steel Chain Key Reel w/Belt Clip	8 to 10 oz	Belt Clip	For Holding Keys	Split Ring	**RP650005011**	Price
24" (Extended) Stainless Steel Chain Key Reel w/Belt Loop	9 to 10 oz	Belt Loop	For Holding Keys, Flash Light And Small Hand Tools	Split Ring	**RP650003011**	Price
48" (Extended) Kevlar Cord Key Reel w/Belt Clip	8 to 10 oz	Belt Clip	For Holding Keys, Flash Light And Small Hand Tools	Split Ring	**RP650485821**	Price
Bracket Mount, 48" (Extended) Stainless Steel chain Tool Reel w/ Bracket Mount, Large swivel	8 to 10 oz	Bracket Mount	Gauge And Tool Holder, Theft Deterrent	Large Yoke	**RP650487022**	Price
Carabineer Clip with Split Ring	-	Caribeener and Split Ring	For Holding Keys, Flash Light And Small Hand Tools	Split Ring	**RP650308201**	Price
Securit 48" (Extended) Kevlar Cord Retractor w/ Carabineer Clip	8 to 10 oz	Caribeener	For Holding Keys, Flash Light And Small Hand Tools	Split Ring	**RP650488803**	Price
Super 48" (Extended) Kevlar Cord Key Reel w/Belt Clip	8 to 10 oz	Belt Clip	For Holding Keys, Flash Light And Small Hand Tools	Split Ring	**RP650S48803**	Price

MAG-MATE® Extended Reach Pocket Mirrors

- Each rotates 360˚, swivel 180˚, slim profile for tight spots
- Non-slip, solvent-resistant comfort grip
- NE70321S-A can be bent to a permanent position or remove inside stiffening wire to snake into position, NE70306TR has a pocket clip handle, NE70316M is a glass 3x magnifier, NE703714SW is a large, dolly mounted, inspection mirror with swivel wheels, 3" clearance, and a flashlight clip on handle



Style	Mirror (in.)	Ln. (in.)	Extended (in.)	Material	Wt. (lbs.)	Order No.	Price
A	1-1/2	4-1/2	24	Glass	.07	**NE70306TR**	13.66
B	2 x 2	7	29	Acrylic	.21	**NE70312A**	12.29
C	2-1/2 x 2	7-1/4	36-1/2	Magnifier	.18	**NE70316M**	19.11
D	2 x 1-1/4	6-1/2	36-1/2	Glass	.17	**NE70315**	10.04
E	3 x 2-1/4	7-1/2	36-1/2	Glass	.15	**NE70316**	16.81
F	3-1/2 x 2-1/2	7-1/4	32-3/4	Glass	.21	**NE70318**	17.91
G	3-7/8	15-3/4	32-1/2	Glass	.51	**NE70375**	37.22
H	2-1/2 x 1-7/8	25	25	Acrylic	.35	**NE70321SA**	25.77
J	2-1/4	7-1/16	14-1/4	Glass	.25	**NE70309TR**	18.52
K	1 x 1-1/2	11	-	Glass	.18	**NE70311**	22.10
L	1-3/4 x 2-1/2	16-1/4	-	Glass	.20	**NE70317**	23.81
M	7 x 14	49	74	Glass	5.25	**NE703714SW**	183.85
O	7/8	8	8	Glass	-	**NE70302**	11.68

MAG-MATE® Inspection Tool Kits

- Telescoping tools, mirror or magnifier, and Rare Earth magnetic retriever in a kit!
- Non-slip, solvent resistant grips
- Foam-lined snap-lock case
- Magnet diameter is 5/8" except as noted below

Note: NE70MMK200 is non-conduction nylon construction, including the grip, and does not come in a case, magnet is 5/16" dia.. NE70MMK301 contains a lighted magnetic pick-up tool, 4-jaw, 7/16" dia., 8-3/4" mechanical finger retriever and round magnifying inspection mirror, and magnet is 11/16" dia..



NE70MMK201



NE70MMK204

Mirror or Magnifier (in.)	Description	Lift (lbs.)	Shaft	Style	Length (in.)	Extended Length (in.)	Order No.	Price
1-1/2	Glass Mirror	1	Nylon	Swivel Magnet Head	8-1/4	8-1/4	**NE70MMK200**	17.58
2-1/2 x 1-3/4	Acrylic Mirror	14	Stainless Steel	Fixed Magnet Head	7-1/2	34	**NE70MMK201**	46.56
2-1/2 x 1-3/4	3X Magnifier	14	Stainless Steel	Fixed Magnet Head	7-1/2	34	**NE70MMK202**	46.56
2-1/2 x 1-3/4	Acrylic Mirror	14	Stainless Steel	Swivel Magnet Head	7-1/2	34	**NE70MMK203**	50.76
2-1/2 x 1-3/4	3X Magnifier	14	Stainless Steel	Swivel Magnet Head	7-1/2	34	**NE70MMK204**	50.76
2-1/2	3X Magnifying Mirror	22	Stainless Steel	Fixed Magnet Head	7	36	**NE70MMK301**	66.72

MAG-MATE® Inspection Mirror/Magnet Combination Tools

- Ideal to see behind, underneath or around machinery
- These telescoping inspection mirrors have powerful Rare Earth magnets on the opposite end, use the magnet to retrieve metal items or as a magnetic base to hold the inspection mirror in place



A B C D E F

Style	Mirror (in)	Material	Lift (Lbs.)	Dia. (in.)	Ln. (in)	Ext Ln. (in.)	Order No.	Price
A	2 x 1-1/4	Glass	2	5/16	6	24-1/4	**NE70315G240**	14.34
B	1-1/2	Glass	2	5/16	6	23-1/2	**NE70306G240**	13.01
C	2 x 2	Glass	2	5/16	6-1/4	28	**NE70301G240**	13.82
D	1-7/8 x 2-1/2	Acrylic	12	1/2	7-3/4	34-1/2	**NE70321A931**	38.14
E	2 x 3	Stainless	7	1/2	8-1/4	38	**NE70314S925**	37.49
F	3-7/8	Glass	20	-	14-1/4	14-1/4	**NE70375G990**	67.46

MAG-MATE® Stainless Steel Inspection Mirrors

- Ideal for use in critical areas where foreign objects cannot be left behind
- FOD free and great for high heat areas
- Telescoping shafts and non-slip solvent resistant grips on all models except NE70IMS103 and NE70IMS105 which have knurled handles and bendable shafts



A1 A2 B1 B2 C D E

Style	Shape	Mirror Size (in.)	Handle	Minimum Length (in.)	Extended Length (in.)	Order No.	Price
A1	Round	3/8	Copper	11-1/2	11-1/2	**NE70IMS103**	21.56
A2	Round	1/2	Copper	12	12	**NE70IMS105**	21.63
B1	Round	1-1/4	Stainless Steel	7	35	**NE70IMS115**	21.94
B2	Round	2-1/4	Stainless Steel	7	36	**NE70IMS123**	22.19
C	Oval	2 x 1	Stainless Steel	7	36	**NE70IMS210**	22.64
D	Rectangular	2 x 2	Stainless Steel	7	35-1/2	**NE70IMS223**	22.46
E	Rectangular	3 x 2	Stainless Steel	7	37	**NE70IMS234**	22.53

MAG-MATE® Read Rite™ Inspection Mirror

- Allows the user to see a non-inverted image in difficult viewing locations
- The Read Rite™ mirror shows the numbers as they would be if they were visually accessible with the eye thereby virtually eliminating deciphering and transcription errors
- Stainless steel mirror-no glass to break
- Telescoping hex rod shaft prevents mirror from swinging while in use
- Double ball hinge with adjustable tension, 360° rotation
- Dual sided- has Read Rite™ mirror on one side, regular inspection mirror on the other
- Non-slip and solvent resistant
- Mirror measures 3-1/2 x 2"
- Extendable handle reaches 15-1/2 to 28-1/2"



Order No.	Price
NE70390SS	23.85

GENERAL Glass Inspection Mirrors

- These mirrors facilitate inspection of inaccessible workpieces and machines by tool makers, inspectors and mechanics
- All glass mirrors adjust to any angle and offer chrome plated brass handles, some with cushioned grip



Type - Inspection Mirror				
Model	Mirror Size	Handle Length	Order No.	Price
555	1-1/4	8-1/2 (fixed)	NE50555	Price
557	2-1/4	10-1/2 (extends to 15")	NE50557	Price
558	1 x 2	9 (fixed)	NE50558	Price
560	3-1/2 x 2	11-1/2 (extends to 16")	NE50560	Price

Type - Replacement Inspection Mirror (No Handle)			
Model	Mirror Size	Order No.	Price
Replacement mirror with frame, for No.557	2-1/4	NE50557RMF	Price
Replacement mirror with frame, for No.560	3-1/2 x 2	NE50560RMF	Price

GENERAL Metal Inspection Mirrors

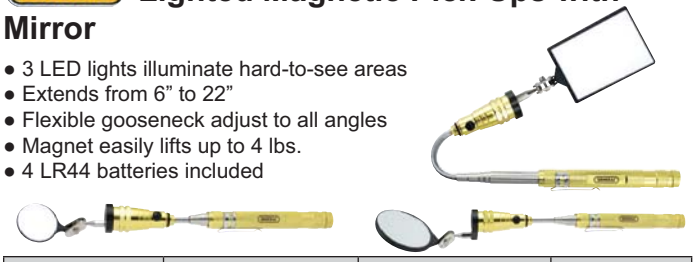
- Includes plastic protective sheath
- Heavy-duty construction



Size (in.)	Shape	OAL (in.)	Order No.	Price
1-1/4 x 2	Rectangular	9-3/4 (extends to 26")	NE505561	Price
3-3/4	Round	9-3/4 (extends to 26")	NE505563	Price

GENERAL Lighted Magnetic Pick-Ups with Mirror

- 3 LED lights illuminate hard-to-see areas
- Extends from 6" to 22"
- Flexible gooseneck adjust to all angles
- Magnet easily lifts up to 4 lbs.
- 4 LR44 batteries included



Size (in.)	Shape	Order No.	Price
1-1/2	Round	NE5091555	Price
2-1/2	Round	NE5091557	Price
2 x 3"	Rectangular	NE5091560	Price

GENERAL Lighted Telescoping Inspection Mirror

- 2 LED lights illuminate hard-to-see areas
- Extend to over 20"
- Flexible gooseneck adjusts to all angles
- 2 CR2032 batteries included



Size (in.)	Shape	Overall Length	Order No.	Price
2	Round	8 (extends to 23")	NE5092557	Price
2 x 3"	Rectangular	9 (extends to 24")	NE5092560	Price

GENERAL Mini Light with Magnetic Pick-up

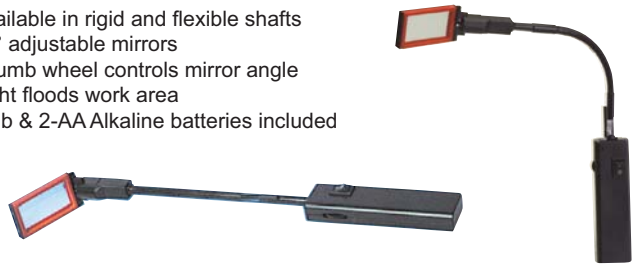
- Mini Light is fastened to a stainless steel telescoping wand molded into a rugged high-impact ABS plastic handle
- Telescope from 7-3/4" - 28-3/4" (197mm - 720mm)
- 4 "LR41" batteries



Order No.	Price
NE50759582	Price

STEELMAN Inspector Mirrors

- Available in rigid and flexible shafts
- 90° adjustable mirrors
- Thumb wheel controls mirror angle
- Light floods work area
- Bulb & 2-AA Alkaline batteries included



Length	Description	Order No.	Price
18" Flexible	Lighted inspectors mirror, 90 degree adj. Mirrors	KE5305180A	42.80
18" Rigid	Lighted inspectors mirror, 90 degree adj. Mirrors	KE5305100A	35.10

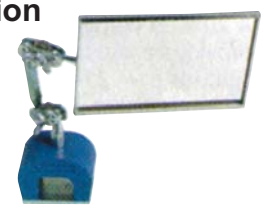
STREAMLIGHT Stylus Reach 18" Flexible Light with LED Bulb

- Includes flexible 18.75" extension cable that allows for 25.5" reach
- High-intensity LED lasts 100,000 hrs
- Powered by 3 AAAA alkaline batteries
- Runs up to 60 continuous hours
- Arctic white LED (10 lumens)
- 25.5" Extended; 13" folded
- 3.5 oz



Order No.	Price
KA5765418	37.88

GENERAL 3-1/2" x 2" Inspection Mirror with Magnetic Base



Order No.	Price
NE50MB560	Price

2 Pc. Telescopic Inspection Mirror & Magnetic Pick-up Set

- Ball joint swivel on mirror holds at any angle
- Powerful magnet picks up 2 lbs.
- 2" Inspection mirror for viewing hard-to-see areas
- Mirror telescopes from 11" to 16-1/2"



MADE IN THE USA

Length (in.)	Order No.	Price
7 - 21-/12	KP8349200	9.40

PROTO Inspection Mirrors

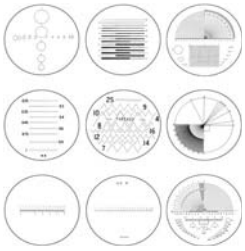
- Versatile all-angle ball joint
- Features telescoping handle (J2372 and J2373)
- With pocket clip (J2373)



Model No.	Size (in.)	Shape	OAL (in.)	Order No.	Price
J2371	1 x 2	Oval	8-3/4	KP4270310	7.68
J2370	7/8	Round	7-1/2	KP4270305	7.68
J2372	2-1/4	Round	10 - 14	KP4270315	11.22
J2373	2-1/8 x 3-1/2	Rectangular	11-1/4 - 15-1/2	KP4270320	11.22
J2374	1-1/4	Round	8	KP4270325	7.92

PROCHECK LED 10X Optical Comparator

With 9 Reticles





- LED lighted scale maginifer with 9 reticles
- 7 Ultra bright LEDs
- Distortion free with 10X high resolution
- View area: 1-1/4”
- Recticle diameter: 34mm
- Includes fitted case
- 1 Year Warranty

Order No.	Price
PC22L10XLED9PCS	Price

PROCHECK LED Lighted 10X Optical Comparator - Multi Scale Lens

- 8 LED ring illumination
- Multiple read reticule included*
- Knurled focus ring with cover
- Storage case included
- Supplied with (4) AG9 button type batteries



Multi read reticule includes the following scales and templates*:

- 0-90° angle and 0.01 to 10mm radius
- 10mm-0-10mm center scale
- 1/2” by 1/10th and 1/8” by 1/64th scales
- 0.1 to 1.0mm, .005” to .050” and 1/64th to 1/16th diameter templates
- 29°, 55°, 60° and 118° included angle
- 1 Year Warranty

Power	Order No.	Price
10X	**PC22L10XLED**	Price

PROCHECK 10X Optical Comparator Set

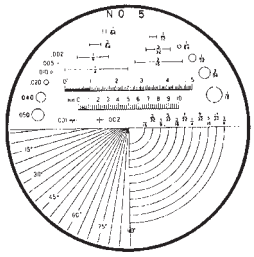
- Easy-to-use, precision focusing measuring magnifier
- Makes instant, on-the-spot measurements of linear dimensions... angles, radii and diameter
- Comes complete with R1, R5, R6, R8 and R12, 1-1/2″ replaceable reticles
- Can double as a high power magnifier



Order No.	Price
KA5210XS	Price

PROCHECK 10X Optical Comparator

- Comes with reticle R8
- In an attractive leather case

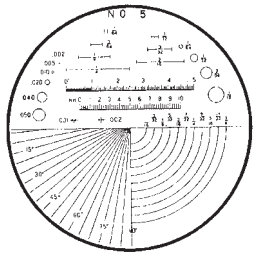




Order No.	Price
KA5210X	Price

PROCHECK 7X Optical Comparator

- Comes with reticle R8
- Leather case





Order No.	Price
KA527X	Price

PROCHECK 7X Optical Comparator Set

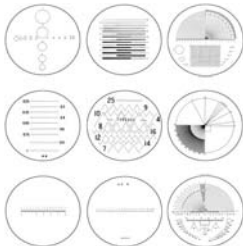
- Easy to use, precision focusing measuring magnifier
- Makes instant, on-the-spot measurements of linear dimensions... angles, radii and diameter
- Comes complete with R1, R5, R6, R8 and R12, 1-1/2” replaceable reticles
- Can double as a high power magnifier



Order No.	Price
KA527XS	Price

Fowler 10X Pocket Optical Comparator Set With Illuminator





- Magnifies images which are sharp, undistorted and aberration free
- Convenient for checking angles, thread measurements, hole sizes, as well as photo engraving, etching and many more applications
- The illuminator attachment assists where additional light is required
- The optical comparator, illuminator and the nine reticles are packaged in a durable wooden case

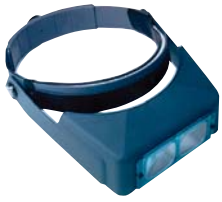
Order No.	Price
NA5552664609	Price

Opti-Visor – Magnification plus Comfort

Improve Vision, Work Faster Precision Work Made Easier with New Dial-Adjustment

MADE IN THE USA

- Optically correct precision glass prismatic lenses
- Genuine leather comfort band
- Unique dial adjustment fits anyone
- Wear over regular or safety glasses
- Tilts upward when not in use (no tunnel vision)
- **Note:** Opti-Loupe is also available and easily attaches to any Opti-Visor lens plate adds extra power - for monocular use only - Order No. JZ50LP1

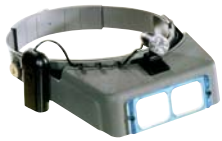


		Opti-Visor Magnifying Visor		Opti-Visor Replacement Lens	
Magnifies	Focal Length (in.)	Order No.	Price	Order No.	Price
1.5X	20	**JZ50DA2**	Price	**JZ50LP2**	Price
1.75X	14	**JZ50DA3**	Price	**JZ50LP3**	Price
2.5X	8	**JZ50DA5**	Price	**JZ50LP5**	Price
2.75X	6	**JZ50DA7**	Price	**JZ50LP7**	Price
2X	10	**JZ50DA4**	Price	**JZ50LP4**	Price
3.5X	4	**JZ50DA10**	Price	**JZ50LP10**	Price

Donegan Visorlight®

- Hands-free light with Xenon Laserbeam bulb
- 4 to 5 Hours battery life, continuous use
- Operates on 2 AA batteries (not included)

Visor NOT included





Type	Order No.	Price
Visorlight Magnifier with 10" Cord	**JZ50LT06**	Price
Visorlight Magnifier with 42"Cord	**JZ50LT42**	Price

BAUSCH + LOMB Illuminated Coddington Magnifier

- 10X Magnification
- 1″ Focal distance
- Corrected lens
- Requires two AA batteries (not included)



Order No.	Price
KA4083434	Price

Donegan Eyeglass Loupe

- Designed with maximum comfort and utility
- High quality optical grade materials from precision ground and polished molds
- Lightweight and tough materials provide superior durability
- Lens pivots out of the way for normal viewing
- Easily aligns when magnification is needed
- Eyeglass loupes are available in single or double lens combinations with a variety of focal length and powers
- Changeable cams are included to fit eyeglass frames from 1/16″ to 1/4″ temple width
- Eyeglass clamp easily converts from right to left temple mounting



Type - Double Loupe Magnifier				
Focal Length (in.)	Magnification	Size	Order No.	Price
2	4X to 7X	24mm	**JZ50ELD2515**	Price
1-1/2	5X to 7X	24mm	**JZ50ELD215**	Price

Type - Single Loupe Magnifier				
Focal Length (in.)	Magnification	Size	Order No.	Price
2	5X	24mm	**JZ50ELS2**	Price
2-1/2	4X	24mm	**JZ50ELS25**	Price
3-1/2	3X	24mm	**JZ50ELS35**	Price

PROCHECK Triplet Jewel Magnifiers

- Hastings triplet glass lens system-three separate lenses bonded together
- Handle type swing case
- Coated lens



Power	Order No.	Price
10X	**PC228310**	Price
15X	**PC228315**	Price
20X	**PC228320**	Price
30X	**PC228330**	Price

PROCHECK 20X Magnifier with LED & UV Light

- Metal frame body
- Distortion free lenses
- LED and UV lighted lens
- 20X lenses
- Leather case included
- 1 Year Warranty



Order No.	Price
PC22L20XLUV	Price

PROCHECK Aspheric Magnifier



- These fixed focus, all plastic magnifiers are very useful in the industrial field
- The lenses are of aspheric type that give a clear non-distorted image across the diameter of the lens
- 1″ Diameter 5X & 10X magnification
- Folds neatly into case

Order No.	Price
KA53V341D	Price

PROCHECK Magnifiers

Magnify small type, prints or parts

Item	Size	Power	Order No.	Price
	Loupe	4.5X	NE60130	Price
	-	3X	PC221348	Price
	-	5X, 10X	PC223061	Price
	2"	2X	PC221850	Price
	3"	2X	PC221875	Price
	4"	2X	PC221800	Price
	4	2X, 4X	KA531150P	Price
	2 x 4"	3X	PC223011	Price
	2 x 4"	2X, 8X	PC223012	Price

PROCHECK Illuminated Magnifiers

- Handy magnifier with 5X and 10X power lens and light



Power	Order No.	Price
5X, 10X	PC223061	Price

Illuminated Flashlight Magnifiers

WORLD CLASS QUALITY

- Graduated bottom scale for visual checking
- (2) “C” Batteries required (not included)
- Operates same as a flashlight



Power	Order No.	Price
10X	KA5310X1M	Price
5X	KA535X1M	Price

GENERAL Magnifiers





Power	Size (in.)	Type	Order No.	Price
2.5X to 5X	2 x 4 Rect	Illuminated Magnifier	NE50565	Price
3X	4 Dia	Illuminated Magnifier	NE50554	Price
4X	1" Cube	Illuminated Pocket Magnifier	NE50553	Price
4X	2 Dia.	Reading Glass Magnifier	NE50538	Price
5X	1 Dia	Eye Loupe	NE50527	Price
5X	2-1/4 Long	Magnifying Tweezers	NE50425	Price
6X	1-1/4 Dia	Pocket Magnifier with Case	NE50537	Price
8X	1 Dia	Pocket Magnifier with Case	NE50536	Price
2.5X	-	Pocket Magnifier with Case	NE50532	Price

Opti-Pak Handy Pocket Magnifiers

- These offer a unique design compact in size that is convenient to carry in pocket or purse
- The durable plastic case slides open for use as a handle and snaps shut to protect the magnifier when not in use
- Three different powers are available to provide the right magnification for the right job
- Magnifiers are color coded by magnification



Power	Type	Order No.	Price
3X	Light Gray Pocket Magnifier	JZ50P703	Price
4X	Medium Gray Pocket Magnifier	JZ50P704	Price
5X	Dark Gray Pocket Magnifier	JZ50P705	Price

TITAN Magnifying Glass with LED Light

2.2X

New!

- 4.4x Magnification
- LED light
- Non-distorting optical grade glass lens
- Comfortable TPR rubber grip handle
- TPR rubber framing for extra protection
- Slide on/off switch to control light
- Lens measures 2-7/8”
- 7-1/4” overall length
- Includes (3) LR44 batteries



Order No.	Price
KP8215029	Price

BAUSCH + LOMB Inspection Eye Loupes

- Optical quality glass lens
- Considered the standard in industry for many years
- Rests comfortably in the eye socket



Focal Power	Lens Distance (in.)	Size (in.)	Order No.	Price
4X	2.5	1	**KA40814173**	Price
5X	2	1	**KA40814172**	Price
7X	1.5	1	**KA40814171**	Price
10X	1	1	**KA40814170**	Price

BAUSCH + LOMB Hastings Triplet Magnifiers



- Highly corrected magnifiers-Bausch & Lomb's finest
- Three separate lenses, bonded together to form a compound lens, provide sharp, very distinct images
- No color distortion even under 14-20X power
- A swingaway, nickel-plated case protects lens and serves as a handle

Power	Focal Distance (in.)	Lens Size	Order No.	Price
7X	1-1/2	19.8mm	**KA40816168**	Price
10X	1	15.8mm	**KA40816171**	Price
14X	.8	12.5mm	**KA40816175**	Price
20X	1/2	8.3mm	**KA40816181**	Price

BAUSCH + LOMB Folding Pocket Magnifiers



- Wide range of powers: 3 - 20X
- By combining lenses, three powers are available with 2-lens models, seven different powers with the 3-lens model
- Swing-away case of durable plastic serves both as handle and as protective case

Power	Focal Distance (in.)	Lens Size	Order No.	Price
4X	2-1/2	36mm	**KA40812354**	Price
4X to 9X	2.5 to 1.1	23mm	**KA40812364**	Price
5X to 20X	2 to .5	20.3mm	**KA40812367**	Price

BAUSCH + LOMB Compact Lighted Magnifier

- Ideal for inspecting or reading in low light conditions
- Convenient size, perfect for tool box or pocket
- Rugged, take it anywhere
- Stores in its own protective case
- Push buttons first to release large (2″) 2X lens; again to light the lamp
- Batteries included (2AAA)



Order No.	Price
KA40819008	Price

BAUSCH + LOMB Bar Magnifiers

These bar magnifiers lie flat on the page, doubling the height of letters, while magnifying two lines of type at a time without any need to focus.

- **Magna-Bar™:** The 5-1/4″ Magna-Bar easily covers the full-page width of most books
- **Magna-Rule®:** The 10″ overall length Magna-Rule offers an 8″ scale in both inches and centimeters, making it very useful with tabulated data. It also serves as a linear guide
- **Both have 2X magnification.**





Type	Order No.	Price
Magna Bar Magnifier	**KA40812617**	Price
Magna Rule Magnifier	**KA40812618**	Price

BAUSCH + LOMB Measuring Magnifiers

Valuable tool wherever precision work is performed. Available in "stand" style or illuminated Lenscope model. Both use B&L's Hastings Triplet lens. Adjustable for individual focus, providing a flat, distortion-free image. Both usable with photo-metallic glass measuring scales; order separately.

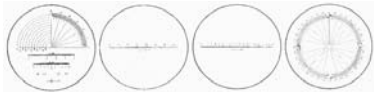




- 813435: 7X power Transparent body allows natural light to fall on magnified area. Leather storage case included
- 813442: 10X
  Two illumination lamps, 45° or 90° from the viewing angle. 2 AA batteries not included. Ergonomic plastic body. Fits easily in a pocket. Hinged-top storage case included

Power	Focal Distance (in.)	Lens Size	Order No.	Price
7X	1.5	19.8mm	**KA40813435**	Price

BAUSCH + LOMB Measuring Scales



Description	Order No.	Price
General purpose. Radii from 1/8" to 5/8" in 1/32nd inch. angles in single degrees to 90°. 10mm scale in 0.1 increments. 1/2" scale in 0.005" increments. Line widths of 0.001", 0.002" and 0.003"	**KA40813436**	Price
Inch. 3/4" in 0.005" intervals	**KA40813437**	Price
Protractor. 360° in single degrees	**KA40813439**	Price
mm. 20mm in 0.1mm intervals	**KA40813438**	Price

BAUSCH + LOMB Pre-Moistened Lens Cleaning Tissues

- Non-silicone based, anti-fog, anti-static, individually-packaged tissues treated with special surfactants clean all glass and plastic lenses.
- Easy, convenient to use. Perfect for home, light industrial, office, toolbox, glove box, car or truck
- Excellent for computer screens, automobile mirrors and more
- 100 Tissues per box



Order No.	Price
KA408574GM	Price

BAUSCH + LOMB Lens Cleaning Station - Wet

- With 16 oz silicone anti-fog lens cleaning fluid and 1520 large tissues
- Box size: 8-1/2″ x 4-1/2″ x 8-1/8″



Order No.	Price
KA408565	Price

Fisher Machine V-Blocks & Clamps

MADE IN THE USA

- 1-1/4″ x 1-1/4″ x 1-5/8″ long
- Capacity: Large vee 1″ dia. Small vee 1/2″
- Hardened and match ground
- Square and parallel within .0002″
- Two serial numbered vee block with clamps



Order No.	Price
NG49VB2	Price

Starrett® V-Blocks and Clamps

MADE IN THE USA

- Can be used on base, end, and either side
- Clamp is provided with an adjustable side screw/caps to support block
- Groove at stepped end at right angle to base and is handy for holding shouldered studs, round pins, etc
- Hole clearance for drilling and remove dowel pins provided
- Block has four 3/8-16 tapped holes, two in base and one on each side to attach angle iron for face plate or magnetic chuck mounting
- Block made of hardened steel
- Sides are ground parallel and the groove central and parallel to sides and base
- Size is 1-7/8” square, base length about 3-1/2”

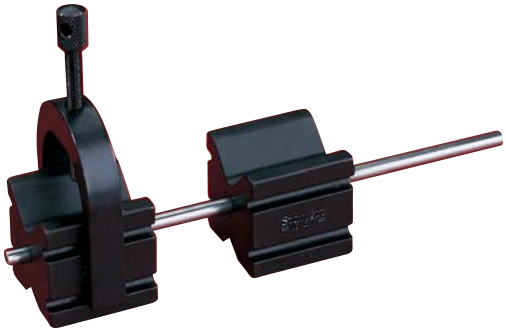


Starrett No.	Description	Order No.	Price
567	Set Complete, with One V Block and One Clamp	**MV7052588**	Price
567B	Clamp, Only	**MV7070885**	Price

Starrett® Small V-Blocks

MADE IN THE USA

- Case hardened and may be used singly or in pairs
- A removable 6” steel rod keeps blocks in alignment and under work
- Blocks are furnished in pairs each 1-1/4” square
- Large V about 13/16” and small V about 13/32” across the mouth

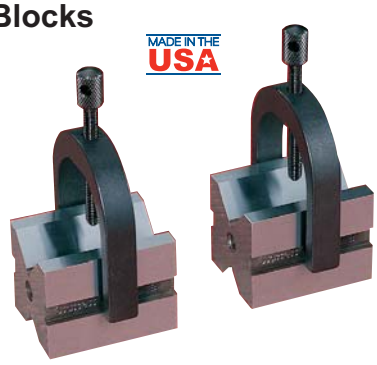


Starrett No.	Description	Order No.	Price
271A	Two V Blocks (one pair)	**MV7051293**	Price
271B	Clamp, Only	**MV7051294**	Price
271C	Set Complete, Two V-Blocks (one pair) and Clamp	**MV7051295**	Price

Starrett® Small V-Blocks

MADE IN THE USA

- V’s are ground central, parallel and square with ends and sides
- Made of tool steel and hardened
- Manufactured and numbered in pairs, so that V’s in each blocks are always in alignment
- Tapped hole 1/4-20 through sides
- Angle iron and blocks can then be attached to lathe face-plate or held by magnetic chuck
- Each block about 1-1/4” square and 1-5/8” long



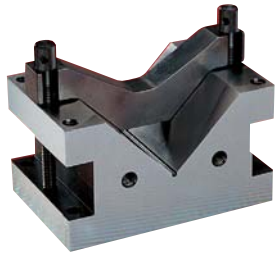
Starrett No.	Description	Order No.	Price
278	Set Complete, Two V Blocks (one pair) and Two Clamps	**MV7051312**	Price
278B	Clamp Only	**MV7051313**	Price

Many more levels are available from the STARRETT line from cross test to bench levels. Call us with your requirements.

Starrett® V-Blocks and Clamps

MADE IN THE USA

- Handles round work up to a diameter of 4″
- Can be used on its side or on its end with no interference from the clamp
- A reversible swing-away style clamp
- Clamp can be positioned at either end or at the center of the V-block
- Two tapped holes in one end of the V-block provide for mounting it perpendicular to a face plate.
- Clearance holes in the bottom provide for mounting the V-block to angle plates or other fixturing
- 5-1/4″ wide, 3″, high and 3-3/8″ long and is precision ground
- V-Block and clamp are also made from hardened steel and each V-block is furnished with two clamp screws

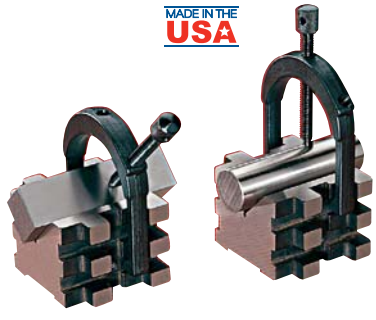


Starrett No.	Description	Capacity	Order No.	Price
578A	V-Block and Clamp	Max. Dia. 4" Min. Dia. 9/16"	**MV7064960**	Price
578B	Clamp Only	-	**MV7064988**	Price

Starrett® Wide Range V-Blocks

MADE IN THE USA

- 2 Position clamping for large or small work
- Block can be used on base, ends or sides
- Block holds round work up to 2″ diameter and square work up to 1-7/16″ (or 1-9/16″ square with screw at top)
- Tapped holes for mounting the V block on face plates or angle irons
- V-block is made of hardened steel and all sides are precision ground parallel and square and V-groove ground central and parallel to sides and base



Starrett No.	Description	Order No.	Price
568A	V-Block and Clamp	**MV7052590**	Price
568B	Clamp Only	**MV7052591**	Price
568C	V-Block and Clamps (Matched Pair)	**MV7052592**	Price

Ultra Wee-Vee Set & Mini-Vee Combo Set

Unique universal holding tool for small, miniature, or intricate parts. Ideal holding fixture for grinding/indexing punches and pins, drilling, milling, EDM, inspection on optical comparators.



Features:
- Capacity .030″ to 9/32”
- Furnished with bridges to straddle long workpieces, allowing top hold-down screw of V-Block clamp to be utilized
- Hardened and high precision ground Wee Blocks, squareness and parallelism within .0002″
- Set contains 2 Ultra Wee-Vee Blocks, size A .030″ - 5/32″ cap, and size B .050″ - 9/32″ cap., Bridge A and B, plus 5 Upper Prisms, 1/8″, 5/32″, and 3/16″ cap., all in a fitted case

V-Block Specifications:
- Size: 1-5/8″W x 1-3/4″H x 2-3/4″T
- Capacity: 1-1/2″

Item	Brand Name	Order No.	Price
TESA / brown & sharpe	Brown & Sharpe	**MV4526913**	Price
Fowler	Fowler	**NA5552475110**	Price

Fowler V-Block Set

2 Each @:
- Dimensions: 1-1/2″L x 1-1/4″W x 1-1/4″H
- Work capacity: approximately 1″
- 2 Clamps

2 Each @:
- Dimensions: 2″L x 1-1/2″W x 1-1/2″H
- Work capacity: 1-1/2″
- 2 Clamps

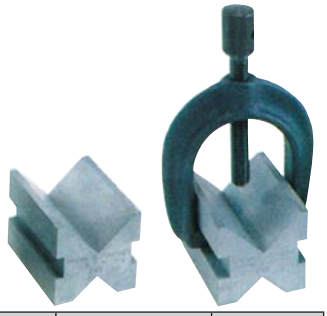
All Feature:
- Surfaces are square and parallel within .0005″
- V-grooves are square and parallel with all surfaces within .0005″
- Corresponding dimensions for each pair are alike within .0005″
- All enclosed in shop-hardened case



Order No.	Price
NA5552475500	Price

TESA / brown & sharpe No. 749 V-Blocks & Clamps

Made in numbered pairs from mild steel. Surfaces (except V) are square and parallel with each other within .002″. V grooves square and parallel with all surfaces within .0035″.

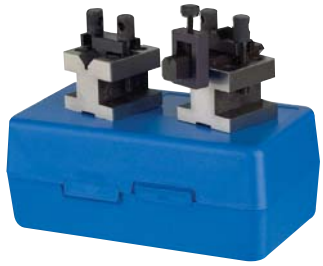


Dimensions:
- Size: 1-1/2″ square x 2″ long
- Capacity: approx. 1-1/2″ (40 mm) diameter

B&S No.	Description	Order No.	Price
599-749	V-Block & Clamp Set	**MV4544532**	Price
599-749-12	Extra V-Block Clamp Only	**MV4551890**	Price

Fowler X-BLOX Jr. V-Block Set

- Mini Vee: Use this universal holding tool for small, miniature or intricate parts.
  Dimensions: 1-3/8″ x 1-3/8″ x 1-3/16″
- Reversible swing-away clamps
- Versatile clamp, plus unique offset hole pattern in top of blocks, offers a large variety of clamping possibilities
- All blox are hardened and ground, squareness and parallelism within .0003″
- Set capacity: .030″- 1.285″
- Includes shop hardened case



Order No.	Price
NA5552475025	Price

TESA / brown & sharpe No. 749-1 V-Blocks & Clamps

For larger and heavier work. Made in numbered pairs from mild steel. Set consists of two blocks and one clamp. Blocks feature two clamping grooves. Lower grooves permit blocks to be clamped to table.

Accuracy:
Sides are square with each other within .003″. Ends are square with sides within .003″. V groove is parallel and central with sides within .002″. V groove is 90° ±1/2°. V's of pairs are central and parallel to each other within .004″.



Dimensions:
- Size: 2-1/2″ square x 3″ long
- Capacity: approx. 1/2″ to 2-1/2″ diameter

B&S No.	Description	Order No.	Price
599-749-1	V-Block & Clamp Set	**MV4544533**	Price
599-9749-12	Extra V-Block Clamp Only	**MV4545210**	Price

Micro-Rise V-Blocks

Features:
- Hardened and ground anvils support up to 1,000 lbs
- Wide angle “V” accepts 3/16″ to 5″ diameters
- Insures solid support without deflection



Dimensions:
- Base - 1-3/4 x 4”
- ‘V Section’ - 13/16” wide
- Height closed - 3”
- Height open - 3-1/2”
- Standard ‘V’ angle - 120°
- Special ‘V’ angle - 90°

Type	Order No.	Price
Micro-Rise V-Block	**GG4516505**	Price
Micro-Rise V-Block with Clamps	**GG4516507**	Price

Fowler V-Block Set

Universal Type



- Two clamps with screw hole at 90° included
- 2" Clamping capacity
- Constructed with stepped grooves allowing the clamps to be inserted without protrusion, thus allowing the V-block to be used on base, ends or sides
- Hardened steel
- Measures 2-3/4 x 2 x 2"
- Matched pair of V-blocks are perfectly aligned with 90° V-grooves ground central and parallel to the sides and base within .0004" accuracy

Fowler No.	Order No.	Price
52-475-555-0	**NA5552475555**	Price

PROCHECK Quadruple V-Blocks



- Made from seasoned closed grained cast iron
- Universal V-block consisting of four different sized grooves
- Supplied in pairs

Size	Width of Vee (in.)	Order No.	Price
3-3/4 x 2-3/4 x 1-3/8	3/4, 1-3/16, 1-9/16, 2	**NG54QVB1**	Price
4 x 4 x 1-3/16	3/4, 1-3/16, 1-9/16, 2	**NG54QVB2**	Price
4-3/4 x 4-3/4 x 1-3/8	1-3/16, 1-9/16, 2, 3-3/8	**NG54QVB3**	Price
4-3/4 x 4-3/4 x 2-3/8	1-3/16, 1-9/16, 2, 3-3/8	**NG54QVB4**	Price

Fowler V-Block Set



- Parallel and square within .0003"
- Measures 1-3/8 L x 1-3/8 W x 1-3/16" H
- Reversible swing-away clamps
- Ø Capacity: .030" to 1.285"
- Offset hole pattern on top of blocks for large variety of clamping possibilities

Fowler No.	Order No.	Price
52-475-001-1	**NA5552475001**	Price

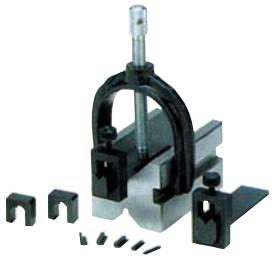
PROCHECK Versa Block Set



- 2 Pc. set - 1-3/8 x 1-3/8
- V-blocks are parallel, square and centered within .0002"
- Completely hardened and ground tool steel
- Storage case included

Size	Order No.	Price
1-3/8 x 1-3/8	**PC24NVB111**	Price

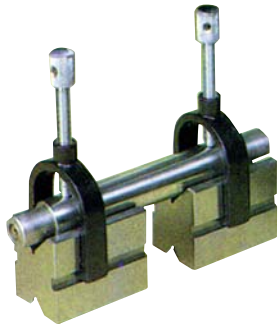
PROCHECK Mini V-Blocks



- A unique & universal holding tool for small, miniature or intricate parts used in conjunction with larger V-blocks
- Capacity .030 to 9/32"
- Ideal holding fixture for grinding/indexing punches & pins - drilling - milling - EDM - inspection on optical comparators
- Furnished with bridges to straddle long workpieces allowing top holddown screw for V-blocks clamp to be utilized
- Hardened & high precision ground for squareness and parallelism to within .0002"
- Attractive case

Order No.	Price
NB75Z1000	Price

PROCHECK V-Block Sets



- A precision set for toolmakers & machinists
- Made of hardened tool steel machined and ground in pairs to close tolerances
- Clamping capacity 1"
- Two V-blocks and two clamps are included in the set

Capacity (in.)	Size (in.)	Order No.	Price
1	1-1/4 x 1-1/4 x 1-5/8	**NG52NVB117**	Price
1-1/2	1-5/8 x 1-3/4 x 2-3/4	**NG52NVB150**	Price

PROCHECK All Angle V-Blocks & Clamp



- Can be used on base, on end, also flat on either side
- Clamp provided with adjustable side screw to prevent tilting when drilling, grinding, or milling
- Holding capacity: 1-5/16"
- Measures 1-7/8 x 1-7/8 x 3-1/2"

Order No.	Price
NG52NVB567	Price

Fowler All Angle V-Blocks & Clamp

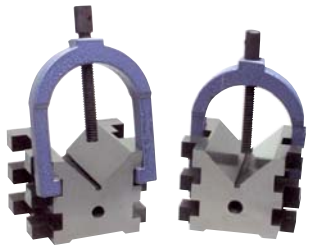


- For grinding, milling or drilling
- Made of hardened and precision ground tool steel
- Sides are parallel and vee is central and ground
- Central hole is provided for drilling and removing pins
- V-block has four 3/8-16 tapped holes, two on the bottom and one on each side
- Can be used on base, on end, also flat on either side
- Holding capacity: 1-5/16"
- Measures 1-7/8 x 1-7/8 x 3-5/8"

Order No.	Price
NA5552475050	Price

PROCHECK Multi-Use V-Block and Clamp Set

- Stepped groove construction permits low or high clamping
- Holds square or round work
- Hardened steel
- All sides precision ground parallel and square
- Size: 2-1/2" x 2-3/4" x 2"
- Capacity: 2" round - 1-7/16" square



Order No.	Price
NG52NVB7502	Price

PROCHECK Precision V-Block

- All sides are ground square and parallel to each other
- Matched accuracy .0002" 90° vee's are ground central, parallel, and square with the ends precision ground
- Hardened and ground chrome steel
- Sold in precision matched pairs only



- **NG5352475015** and **NG5352475020** (shown) are designed so the clamps do not protrude over the sides; thus the tool can be used on its sides

Max. Vee Cap. (in.)	Dim. W x H x L (in.)	Order No.	Price
1	1-3/8 x 1-5/8 x 1-3/4	**NG5352475005**	Price
1-1/2	1-3/4 x 2-1/2 x 2-7/8	**NG5352475015**	Price
1-1/2	1-5/8 x 1-3/4 x 2-3/4	**NG5352475010**	Price
2-1/8	2-3/4 x 3-1/2 x 4-7/8	**NG5352475020**	Price

Suburban Precision Ground V-Blocks

- All vee blocks are parallel, square and central within .0002" except VB466, VB466S2 & VB666 which are within .0003"
- SineSet® models bolt directly to SineSet® sine plate or compound sine plate of the same series. S1 models also bolt to AP-664-S1 90° conversion plate



Type - 60° V-Block & Clamp Set				
Dimensions (in.)	Capacity (in.)	Weight	Order No.	Price
2-1/2 x 2-1/2 x 2	1-3/8	3 lbs	**NJ50VB602**	Price
2-1/2 x 2-1/2 x 2	1-3/8	3 lbs	**NJ50VB602S0**	Price
3 x 4 x 3	2-1/4	8 lbs	**NJ50VB604**	Price
3 x 4 x 3	2-1/4	9 lbs	**NJ50VB604S1**	Price

Type - 90° V-Block & Clamp Set				
Dimensions (in.)	Capacity (in.)	Weight	Order No.	Price
2-1/2 x 2-1/2 x 2	1-3/8	3 lbs	**NJ50VB222**	Price
2-1/2 x 2-1/2 x 2	1-3/8	3 lbs	**NJ50VB222S0**	Price
3 x 4 x 3	2-1/4	9 lbs	**NJ50VB334**	Price
3 x 4 x 3	2-1/4	9 lbs	**NJ50VB334S1**	Price
6 x 6 x 4	4-3/8	33 lbs	**NJ50VB466**	Price
6 x 6 x 4	4-3/8	33 lbs	**NJ50VB466S2**	Price
6 x 6 x 6	4-3/8	50 lbs	**NJ50VB666**	Price

PROCHECK Precision Steel V-Blocks

- Precision made tool steel completely hardened and ground
- Reversible swing-away clamp, combined with offset hole pattern, provides a variety of clamping possibilities
- Blocks are slotted on sides to allow easy clamping to any surface
- Sold individually or in matched sets



Max./Min. Vee Cap. (in.)	Dim. W x H x L (in.)	No. of Blocks	Order No.	Price
13/64 to 1-3/16	2-1/2 x 2 x 2-1/2	1	**NG52NVB222I**	Price
13/64 to 1-3/16	2-1/2 x 2 x 2-1/2	2	**NG52NVB222**	Price
9/32 to 1-9/16	3 x 3 x 4	1	**NG52NVB334I**	Price
9/32 to 1-9/16	3 x 3 x 4	2	**NG52NVB334**	Price

PROCHECK Cast Iron V-Blocks

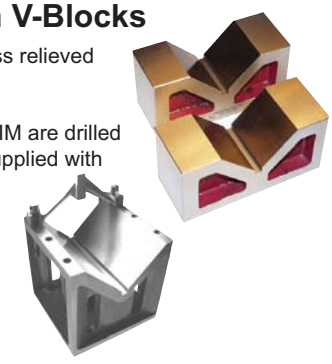
- Manufactured from high quality close-grained gray iron castings seasoned as a precaution against distortion and accurately machined to very close tolerances
- Supplied in matched pairs, each block having a truly centered 90° vee



Max. Vee Cap. (in.)	Dim. W x H x L (in.)	Order No.	Price
1	2 x 1-1/4 x 1	**NG54VEB2**	Price
1-3/4	3 x 2-3/8 x 1-5/16	**NG54VEB3**	Price
2	4 x 2-5/8 x 1-5/8	**NG54VEB4**	Price
2	5 x 3-1/8 x 2	**NG54VEB5**	Price
3-1/4	6 x 3-1/2 x 2-1/2	**NG54VEB6**	Price
3-1/2	7 x 4-1/2 x 3	**NG54VEB7**	Price
4	8 x 5-1/2 x 4	**NG54VEB8**	Price
5	10 x 6-5/8 x 5	**NG54VEB10**	Price
6-1/2	12 x 8 x 7	**NG54VEB12**	Price

Suburban Cast Iron V-Blocks

- Made from class 40 cast iron, stress relieved and annealed
- All have 90° Vee's
- Models VB888CIM and VB1-1-1-CIM are drilled and tapped on the top face, and supplied with one clamp and two clamp screws per v-block
- Ground square, paraleel and central within .0005"
- Type A shown



Type - V-Block & Clamp Set			
Dim. W x H x L (in.)	Dia. Capacity (in.)	Order No.	Price
8 x 8 x 8	6-3/8	**NJ50VB888CIM**	Price
10 x 10 x 10	8-3/8	**NJ50VB101010CIM**	Price

Type - V-Blocks (No Clamps)			
Dim. W x H x L (in.)	Dia. Capacity (in.)	Order No.	Price
5 x 2-1/2 x 2	3-1/2	**NJ50VB225MCI**	Price
6 x 3-1/2 x 3	4-3/4	**NJ50VB336MCI**	Price
7 x 6 x 6	5-1/2	**NJ50VB667MCI**	Price
8 x 8 x 6	7	**NJ50VB688MCI**	Price
12 x 12 x 12	11-3/4	**NJ50VB121212MCI**	Price

PROCHECK Magnetic V-Block - Single Vee

- For round or odd-shaped pieces
- Grinding-machining
- Scribing-measuring
- Lifetime magnets
- Usable on 4 surfaces
- Size: 2-3/8” x 2-7/8” x 4-7/8”



Order No.	Price
NG50KVH2	Price

PROCHECK Magnetic V-Block

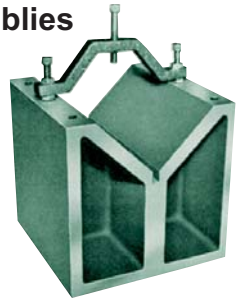
- Holds both itself and the works on any flat ferrous surface, including a permanent magnet chuck (without energizing the chuck)
- There are two vees, the smaller for workpiece up to 3/4” diameter, and the larger for workpieces up to 2-1/2” diameter
- Vees and faces are energized or de-energized simultaneously by turning the control handle
- The vee block can be used either way; up or standing on end



Dim. W x H X L (in.)	Weight (lbs.)	Order No.	Price
2-3/4 x 3-3/4 x 4	9.5 lbs	NH50E934	Price

CHALLENGE V-Block Clamp Assemblies

- Size fits “C” dimension of V-blocks
- V-blocks not included



Size (in.)	Order No.	Price
8	NL30VTA08	Price
12	NL30VTA12	Price

PROCHECK Planer & Shaper Gage

With Level

- All working surfaces are precision ground and held to close tolerances
- Well balanced base helps avoid tipping
- Has 3” extension with knurled grip
- A level is provided in the base for machine setups and gage work
- Range: 1/4 to 9-1/4”
- Base size: 5-1/4” long x 3/4” wide



Order No.	Price
NC52NPG599	Price

CHALLENGE Slotted V-Blocks with Clamp

- Easily machinable for adding mounting, workholding or measuring features
- Guaranteed accurate to the tolerances shown
- Made of meehanite or equivalent- it’s qualities include strength, toughness and wear resistance
- V-blocks slotted with clamp



Size (in.)	Approx. Shipping Weight	Order No.	Price
3 x 3-1/2 x 6	32 lbs	NL30VC0303E06	Price
6 x 6 x 7	96 lbs	NL30VC060607	Price

Suburban Planer Gage

- Body and slide are hardened and ground alloy steel castings
- Wide body for stable operation
- Beveled construction eliminates side play and provides accurate alignment and parallelism
- Multiple tapped holes in the slide allow for attachment of extension rib or other accessories
- 3” Extension nib and fitted wooden case included
- Base dimensions: 6-3/16” x 1-1/8” x 3-1/2”
- Range: 7/16” to 10”
- Weight: 6 lbs



Order No.	Price
NJ50PG613	Price

CHALLENGE V-Blocks

- For supporting and holding cylindrical work for layout, machining, inspection or as fixture components
- A relief is provided in the center of the V for drill clearance
- Furnished in matched pairs
- Base, sides and V are precision ground-the V is central, square with the sides and parallel to the base within .0005” (.013mm)
- Ends are machine finished (ends can be special ordered precision ground-call for price and availability)



Size (in.)	Approx. Shipping Weight	Order No.	Price
2 x 2-1/2 x 5	12 lbs	NL30VS0202E05	Price
3 x 3-1/2 x 6	26 lbs	NL30VS0303E06	Price
6 x 6 x 7	84 lbs	NL30VS060607	Price
6 x 8 x 8	130 lbs	NL30VS060808	Price
12 x 12 x 12	420 lbs	NL30VS121212	Price

PROCHECK Precision Angle Plates

- Hardened steel
- Precision ground angles
- Each block is 1/4" thick



Size	Order No.	Price
30-60-90 Degree	**PC24SAP369**	Price
45-45-90 Degree	**PC24SAP449**	Price
1 of each Above	**PC24SAP2PS**	Price

5" Sine Bar Set

Set Includes:
(1) 5" Sine bar hardened and ground and parallel top to bottom of rolls within .0002"
(18) Blocks with a range of 1/2° to 15° resulting angle, including two blocks providing "Taper-per-foot" of 1/4° and 1/2°

- Exact constant within .0001"



Comments - Sine Bar Only			
Item	Brand Name	Order No.	Price
TESA / brown & sharpe	Brown & Sharpe	**MV4526986**	Price
Fowler	Fowler	**NA5552455035**	Price

Comments - Sine Bar Set			
Item	Brand Name	Order No.	Price
TESA / brown & sharpe	Brown & Sharpe	**MV4527264**	Price
Fowler	Fowler	**NA5552455050**	Price

Ultra Precision 12 Pc. Angle Block Set

Ideal for Production and Inspection Applications

Features:

- Made from hardened steel, precision ground
- Angular accuracy .0001" per inch ±30 arc seconds
- 3" long × 1/4" thick
- Simple, quick angle set-ups
- Includes a shop hardened molded case
- Avoid errors by eliminating calculations
- Complete set of 12 blocks: 1/4°, 1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°

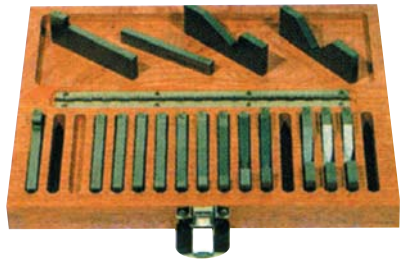


Item	Brand Name	Order No.	Price
TESA / brown & sharpe	Brown & Sharpe	**MV4526883**	Price
Fowler	Fowler	**NA5552666777**	Price

TESA TECHNOLOGY / brown & sharpe 17 Pc. Precision Angle Block Set

Get quick set-ups for grinding various angles from 1/4° to 45°. Just load on vise and rest the workpiece at any angle you choose. Eliminates time wasted dressing an angle in a grinding wheel - then dressing it flat again later! Made from hardened steel and supplied in a fitted wooden case.

- **Accuracy: .0003"**
- Complete Set of 17 Blocks: 1/4°, 1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°, 35°, 40°, 45° and 2 riser blocks



B&S No.	Description	Order No.	Price
599-921-17	1/4° to 45°	**MV4526693**	Price

PROCHECK Precision Ground Sine Bars

- Center to center distance between center of rolls is accurate within .0002"
- Top surface is accurate to .00003"
- Parallelism .00004"



Dim. (in.)	Order No.	Price
15/16 x 5	**NB5052455010**	Price
1 x 10	**NB5052455015**	Price
2 x 5	**NB5052455020**	Price

Suburban Precision Sine Bars

- Hardened to Rc 58-62
- Ground square and parallel within .0002"
- The body size is 1" x 1" on the 5" model and is 1-1/8" x 1-1/4" on the 10" model
- Rail, can be mounted at either end



Dim. (in.)	Center Distance of Rolls	Weight	Order No.	Price
1 x 1-11/16 x 6	5.000 within .0001	2 lbs	**NJ50SB111**	Price
1-1/8 x 2-1/16 x 11	10.000 within .0001	5 lbs	**NJ50SB1110**	Price

Precision Economy Sine Bars

2-1/2" and 5" Sine Bar

- 5/8" Diameter rolls
- Furnished with back plate
- Hardened and ground
- Used with Jo-blocks (gage blocks) these sine bars far exceed the accuracy that you would expect in this low priced precision instrument
- Accuracy range of parallelism. 0002", center distance of .0003"
- Fisher Machine brand is made is the USA



	Fisher Machine		Procheck	
Dim. (in.)	Order No.	Price	Order No.	Price
1 x 2-1/2	**NG4925SB**	Price	**NB5225SB**	Price
1 x 5	**NG4950SB**	Price	**NB5250SB**	Price

Fowler Adjustable V Block

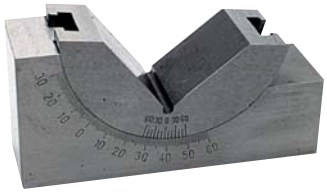
- Hardened and precision ground
- 3.75″ L x 1.75″ W x 2″ H and offers approximately 1.75″ work space
- Ideal for setup, milling, grinding and drilling applications
- Angle accuracy ±10 sec.
- Squareness within .0002″
- Comes complete in deluxe fitted wooden case



Order No.	Price
NA5552585090	Price

60° Precision Angle Blocks

Fast. Simple. Easy To Use For: Drilling, Milling, Grinding & Set Up Applications

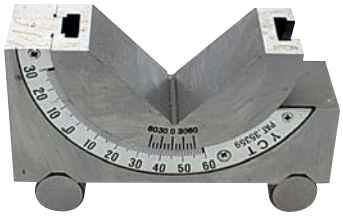


- 0-60° Adjustable angle by locking the hex screw on the bottom
- Squareness .0002″
- Angle Accuracy ±10″ HRC 50-55°
- 1-3/16”W x 1-13/16”H x 4”L

Item	Order No.	Price
PROCHECK	NG52AP2	Price
TESA / brown & sharpe	MV4527397	Price

PROCHECK 60° Precision Sine Angle Block

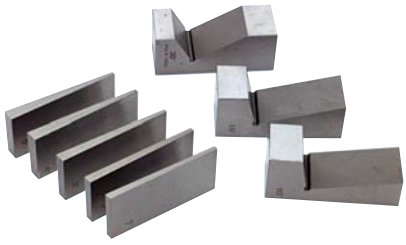
- Diameter of rolls 5/8″
- Height of block including rolls 2-3/4″
- 1-3/16”W x 2-3/8”H x 4”L



Order No.	Price
NG52APS2	Price

PROCHECK Universal Angle Block Set

- V-Block — 10°, 15°, 30°
- Angle plate — 1°, 2°, 3°, 4°, 5°
- ±10 Second tolerance
- Hardness— HRC 45-50
- All ground finish
- No sine vise, sine plate, angle vise, angle chart or block gage needed



Order No.	Price
NG52UAB8	Price

Precision Angle Blocks

A simplified, accurate and quick method for angle set-ups in tooling, production and inspection.

- Furnished in 1° increments to 5° and in 5° increments to 30°
- Hardened and precision ground
- Accuracy ±.0001″ per inch
- Size 3″ long x 1/4” thick
- Ten block set in fitted case



Item	Order No.	Price
PROCHECK	NM51PAB10	Price
Suburban	NJ50AB10ST	Price

PROCHECK Thin Angles Thin Angle

- **#1 Set - 1/2° thru 5°:** By using two angles, this set will span 1/2° thru 5° in half-degree increments, or 1° thru 9° in one degree increments.
- **#2 Set - 6° thru 10°:** By combining #1 Set and #2 set 1/2° thru 10° in half-degree increments can be obtained; or 1° thru 19° can be obtained.



Pieces per Set	Order No.	Price
5	NM51TA2	Price
6	NM51TA1	Price

PROCHECK 3" Sine Bar

- Fits in bottom of vise to accurately set work at desired angle
- Can be used to set milling machine head, set work accurately to T-slots of milling tables, set swivel vise or angle vise
- Sine bar can be mounted on side of vise



Order No.	Price
NM51TPS	Price

PROCHECK Thin Pair Parallel Set

Milling and Drilling Parallels

- Set work pieces to needed height in vise jaws in seconds
- Complete set of 8 parallels in 1/8” increments
- 5/32” Thickness allows drilling thru work near edges without hitting parallels



Order No.	Price
NM51TPP	Price

Ultra Precision Parallel

1/4” Wide 9 Pair Set



- Set includes 9 pairs with 1/4” widths of: 3/4″, 7/8″, 1″,1-1/8″, 1-1/4″, 1-3/8″, 1-1/2″, 1-5/8″, 1-3/4″

Features:
- Parallel to ±.0001″
- Paired ±.0001 in height†
- Hardened to 50 HRC
- Includes shop hardened protective molded case
- Size: 6″ long by 1/32″ wide

† Height specifications relate to consistency within each pair; absolute height is nominal.

Item	Order No.	Price
TESA / brown & sharpe	MV4526882	Price
Fowler	NA5552437250	Price

Ultra Precision Parallels

1/8” Wide 10 Pair Set



- Set includes 10 pairs with 1/8″ widths of: 1/2″, 5/8″, 3/4″, 7/8″, 1″, 1-1/8″, 1-1/4″, 1-3/8″, 1-1/2″, and 1-5/8”
- Parallel within .0002″
- Variation in height† of matched parallels ±.00015″
- 58-63 HRc hardness
- High grade alloy steel
- Includes sturdy storage & carrying case

†Height specifications relate to consistency within each pair; absolute height is nominal.

Item	Order No.	Price
TESA / brown & sharpe	MV4586615	Price
Fowler	NA5552437000	Price

Ultra Precision Parallels

1/32” Wide 10 Pair Set



Features:
- Set includes 10 pairs with 1/32″ widths of: 1/2″, 5/8″, 3/4″, 7/8″, 1″,1-1/8″, 1-1/4″, 1-3/8″, 1-1/2″, 1-5/8″
- Parallel to ± .0001″
- Paired ±.0001 in height†
- Hardened to 50 HRC
- Includes shop hardened protective molded case
- Size: 6″ long by 1/32″ wide

† Height specifications relate to consistency within each pair; absolute height is nominal.

Item	Order No.	Price
TESA / brown & sharpe	MV4526884	Price
Fowler	NA5552437031	Price

Fowler Machinist Set Up Kit

1-2-3 Block Set
- Tolerance: .0001″ (squareness per inch)
- Dimensions: 1″ x 2″ x 3″
- Hardened to 58-60 Rockwell C
- Matched accuracy within .0002″ per inch

Angle Block Set
- Precision ground
- Accuracy ±30 seconds
- All blocks 3″ long and 1/4″ thick
- Each set includes 1° thru 5° blocks in 1° increments and 5° thru 30° blocks in 5° increments as well as 1/4″ and 1/2″ blocks

Spacer Blocks
- 3/4″ diameter, 1/4-28 ID thread
- Ground hardened and tapped
- 4 connection screws included
- Accuracy ±.0001″

Jack Stand Set
- Up to 1000 lbs
- Range: 2-1/4″ to 3-3/8″
- Jack base diameter: 1-1/4″
- 1″ and 2″ extension bases
- Extensions may be combined

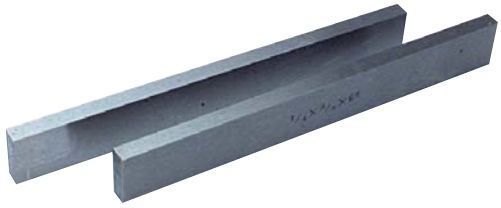
Set supplied with individual cases



Order No.	Price
NA5553666100	Price

PROCHECK Precision Ground Steel Parallels

- Made of high grade tool steel, hardened and precision ground
- Sold in pairs
- 4-faces accuracy within .00015” per 6 inches



Length (in.)	Size (in.)	Order No.	Price
6	1/4 x 1/2	NM60001	Price
6	1/4 x 5/8	NM60002	Price
6	1/4 x 3/4	NM60003	Price
6	3/8 x 1/2	NM60004	Price
6	3/8 x 3/4	NM60005	Price
6	1/2 x 5/8	NM60006	Price
6	1/2 x 3/4	NM60007	Price
6	1/2 x 1	NM60008	Price
6	5/8 x 7/8	NM60009	Price
9	1/2 x 3/4	NM60010	Price
9	1/2 x 1	NM60011	Price

Length (in.)	Size (in.)	Order No.	Price
9	3/4 x 1	NM60012	Price
9	3/4 x 1-1/2	NM60013	Price
12	3/4 x 1	NM60014	Price
12	3/4 x 1-1/4	NM60015	Price
12	1 x 1-1/4	NM60016	Price
12	1 x 1-1/2	NM60017	Price
12	1 x 2	NM60018	Price
12	1-1/4 x 1-1/2	NM60019	Price
12	1-1/4 x 2	NM60020	Price
12	1-1/2 x 2	NM60021	Price

PROCHECK Precision Parallel Set

4 Matched Pairs of 3/16" & 1/2" Width



- Set of 4 matched pairs of hardened and ground parallels for use in set-up for drilling, milling and layout work
- Tolerance: parallel to .0003" on 2 sides, top and bottom dimensions within .001" allowances
- Hardness: case hardened to RC 55 to 62 on 2 sides, top and bottom only
- Includes sizes: 3/16 x 1.000 x 6", 3/16 x 1.250 x 6", 1/2 x 1.500 x 6", 1/2 x 1.750 x 6"

Order No.	Price
NM50CP31612	Price

PROCHECK 3/16" & 1/2" Precision Parallels Individual Pairs



Width (in.)	Dimensions (in.)	Order No.	Price
3/16	1.000 x 6	**NM50CP1**	Price
1/2	1.000 x 6	**NM50CPH1**	Price
3/16	1.250 x 6	**NM50CP2**	Price
1/2	1.250 x 6	**NM50CPH2**	Price
3/16	1.500 x 6	**NM50CP3**	Price
1/2	1.500 x 6	**NM50CPH3**	Price
3/16	1.750 x 6	**NM50CP4**	Price
1/2	1.750 x 6	**NM50CPH4**	Price

PROCHECK 1/8" Steel Parallel Set

Thin Styled, Matched Pairs - 10 Pair in Fitted Box



- Made of high grade alloy steel, hardened and ground from 1/8" stock
- Two holes in each parallel
- Accuracy: ±.0002" parallelism in height ±.001" to size in height

Order No.	Price
NM55TPS11	Price

PROCHECK 1/8" Individual Parallels



Size (in.)	Order No.	Price
1/8 x 1/2 x 6	**NM55TP1**	Price
1/8 x 5/8 x 6	**NM55TP2**	Price
1/8 x 3/4 x 6	**NM55TP3**	Price
1/8 x 7/8 x 6	**NM55TP4**	Price
1/8 x 1 x 6	**NM55TP5**	Price
1/8 x 1-1/8 x 6	**NM55TP6**	Price
1/8 x 1-1/4 x 6	**NM55TP7**	Price
1/8 x 1-3/8 x 6	**NM55TP8**	Price
1/8 x 1-1/2 x 6	**NM55TP9**	Price
1/8 x 1-5/8 x 6	**NM55TP10**	Price

PROCHECK Precision Parallel Sets

3/16" or 1/2" Thickness
4 Matched Pairs in Hardwood Storage Box

- Made from fine quality tool steel stress relieved against distortion
- Precision ground and hardened
- Recommended for layout work, standards and setups
- The holes are designed for easier handling and setups
- Tolerance: parallel to .0003" on 2 sides, top and bottom
- Dimensions: within .001" allowance
- Hardness: case hardened to HRC 55 to 62 on 2 sides, top and bottom only
- Supplied in matched pairs
- All are 6" overall length



Size (in.)	Width (in.)	Order No.	Price
1 to 1-3/4	1/2	**NM50CP12**	Price
1 to 1-3/4	3/16	**NM50CP316**	Price

PROCHECK 1/4" Precision Parallel Set

- 9 Pairs — 1/4" thick, 6" long
- 2 Pc. each: 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, & 1-3/4"
- Accuracy ±.0002"
- Made of high grade tool steel
- Hardened and precision ground



Order No.	Price
NM55TPS9	Price

PROCHECK Ultra Thin Style Steel Parallels

20 Pair Set

- Hardened to 50RC
- Parallelism .0001"
- Height .001" accuracy
- Includes fitted case
- 1/32" Thick
- Range of sizes include 1/2" thru 1-11/16" in 1/16" increments



Order No.	Price
NM55UTPS20	Price

Wavy Parallel Sets



- 9 Pairs - 1/2" to 1-1/2" in 1/8" height increments - 4-1/4" overall length
- Guaranteed to size in height and parallelism ±.0002"
- For use on: precision clamping of parts in drilling, boring, milling, grinding, assembly work, etc
- Can be used as elastic shims
- Thin and fragile workpieces can be secured without damage
- Made of high quality spring steel, hardened, stress relieved and precision ground

Item	Order No.	Price
TESA TECHNOLOGY / brown & sharpe	**MV4527279**	Price

Ball Bearing V-Blocks

Enables you to inspect and detect out-of-round conditions and lobes with no damage to parts and no damage to blocks.

MADE IN THE USA

V-Block with Clamp & Balls in Pairs



Special Features:
- Accuracy of Balls: 25 Millionth of an inch sphericity on small and medium set. 50 Millionths of an inch on large set
- Overall accuracy of matched pairs ±5 microns
- Balls Rockwell C-62 — Surface finish 0.2 microinch

Size (in.)	Inspection Capacity (in.)	Dia. of Balls	Wt. Capacity of Pair	Work Capacity W/Clamps	Order No.	Price
2 x 2 x 1	3/64 to 2-1/2" Dia.	1/2	220 lbs	1-1/4	**GG4516093**	Price
3-3/8 x 3-3/8 x 1-3/8	3/32 to 5" Dia.	15/16	1100 lbs	2-1/2	**GG4516094**	Price
4-3/4 x 4-3/4 x 2-3/8	3/16 to 15" Dia.	1-1/2	2000 lbs	3	**GG4516095**	Price

Important note: Balls are fixed in blocks and are not designed to rotate in use. Block with clamp and balls in pairs.

TESA TECHNOLOGY | brown & sharpe

Adjustable Parallel Sets

MADE IN THE USA

- Quickly adjusted to size using just a micrometer
- Clamp screws lock parallels to size
- Each parallel has a generous range, eliminating the need for stocking many solid parallels



B&S No.	Size	Pieces	Order No.	Price
599-673-10	3/8 to 1-5/16 (10-33mm)	4	**MV4544515**	Price
599-673-20	3/8 to 2-1/4 (10-57mm)	6	**MV4544516**	Price

Fowler

Adjustable Parallels

- Each parallel has two dovetailed pieces that slide on each other and lock in position with set screws
- Easily adjusted and set up to size with a micrometer
- Can be quickly inserted in slots and expanded to size
- Sizes: 3/8 - 1/2", 1/2 - 11/16", 11/16 - 15/16". 15/16 - 1-5/16", 1-5/16 - 1-3/4", 1-3/4 - 2-1/4"
- Slot size determined by measuring the parallels externally with a micrometer



New!

Order No.	Price
NA5552437006	Price

PEC TOOLS

Adjustable Parallels

MADE IN THE USA

- Consists of two precision ground pieces which slide smoothly on each other
- Locked into position by set screws
- Can be quickly inserted into openings and expanded to exact size, then measured with a micrometer



Description	Capacity (in.)	Order No.	Price
Individual	3/8 to 1/2	**NB40112A**	Price
Individual	1/2 to 11/16	**NB40112B**	Price
Individual	11/16 to 15/16	**NB40112C**	Price
Individual	15/16 to 1-5/16	**NB40112D**	Price
Individual	1-5/16 to 1-3/4	**NB40112E**	Price
Individual	1-3/4 to 2-1/4	**NB40112F**	Price
4 Pc. Set	3/8 to 1-5/16	**NB40S1124**	Price
6 Pc. Set	3/8 to 2-1/4	**NB40S1126**	Price

PROCHECK

Adjustable Parallel Sets

- Ideal for layout work, for gauging and for various set-ups in milling machines and grinders
- Made of tool steel, precision ground
- Each parallel consists of two ground pieces which slide smoothly on each other and can be locked in position by set screws provided
- Desired size can be set accurately with micrometer
- Set is furnished in fitted plastic case with size range markings



Description	Order No.	Price
3/8 to 1-5/16 - 4 pc.	**NM51AP4**	Price
3/8 to 2-1/4 - 6 pc.	**NM51AP6**	Price

Starrett

Adjustable Parallels

- Can be inserted in openings and expanded to size, Size of opening can then be determined by measuring parallels with micrometer
- Parallels consist of two dovetailed pieces that slide smoothly and can be easily adjusted
- Smaller sizes, A, B, and C are locked by one screw while larger sizes, D, E, F, have two lock screws
- All parallels are 9/32″ thick

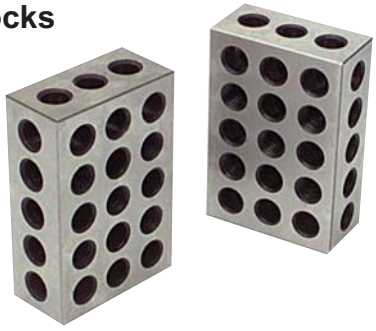
MADE IN THE USA

Starrett No.	Range (in./mm)	Description	Order No.	Price
154A	3/8 to 1/2 (9.5-12.7mm)	-	**MV7050578**	Price
154B	1/2 to 11/16 (12.7-17.5mm)	-	**MV7050579**	Price
154C	11/16 to 15/16 (17.5-24mm)	-	**MV7050580**	Price
154D	15/16 to 1-5/16 (24-33mm)	-	**MV7050581**	Price
154E	1-5/16 to 1-3/4 (33.3-44.4mm)	-	**MV7050582**	Price
154F	1-3/4 to 2-1/4 (44.4-57.1mm)	-	**MV7050583**	Price
S154LZ	3/8 to 2-1/4	6 pc Set A Thru F in Case	**MV7050586**	Price
S154LZZ	-	Case Only for 6 Pc. Set	**MV7055195**	Price
S154SZ	3/8 to 1-5/16	4 pc Set A Thru D In Case	**MV7050584**	Price
S154SZZ	-	Case Only for 4 Pc. Set	**MV7055194**	Price



PROCHECK Tri-Blocks

- Hardened 55 to 62 HRC
- Tolerance .0003″ to .0005″/0.005mm to 0.010mm



Size (in.)	Order No.	Price
1 x 2 x 3	**NM52E123**	Price
2 x 4 x 6	**NM52PR246**	Price
25 x 50 x 75mm	**NM52E25M**	Price

Fowler One Hole Steel 1-2-3 Blocks

- Tolerance: .0001″ (squareness per inch)
- Dimensions: 1″ x 2″ x 3″
- Hardened to 58-60 Rockwell C
- Matched accuracy within .0002″ per inch



Order No.	Price
NA5552439001	Price

Ultra Precision Ground 1-2-3 Blocks

Ideal for Precision Layout & Setup

- Each block precision ground on all six surfaces
- Case hardened (HRC 55–60)
- Surface finish from 6 to 16 microinches
- Squareness on all sides to within .0001″
- 23 holes: 5 tapped 3/8-16; 18 untapped thru holes
- The cross drilling is designed to give minimum weight yet maximum strength
- Oversized to allow for nominal .0001–.0003″
- Each set consists of a matched pair of 1 x 2 x 3″ blocks, five 3/8-16 stainless steel socket head cap screws, hex key, and shop-hard-molded case



Item	Order No.	Price
PROCHECK	**NM52PR123**	Price
TESA / brown & sharpe	**MV4526764**	Price
Fowler	**NA5552439032**	Price

TESA / brown & sharpe Universal 1-2-3 Block Set

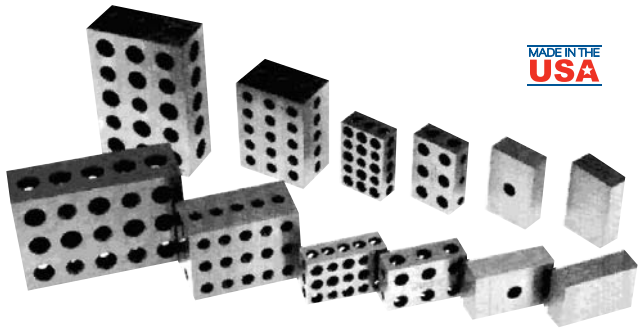
- Each block precision ground/case hardened on all six sides
- Surface finish from 6 to 16 microinches
- Squareness on all sides to within .0001″
- 11 holes on three faces: 5 holes tapped for holding down or conversion to an angle plate. 6 holes drilled through with deep recesses for easy clamping
- Oversized to allow for nominal lapping up to .0003″
- Complete with protective shop hardened molded case
- Set consists of a matched pair of 1 x 2 x 3″ blocks, five zinc plated 5/16-18 socket head cap screws and a hex key wrench



B&S No.	Order No.	Price
599-750-50	**MV4527396**	Price

Suburban Precision Tri-Blocks

- Made of hardened steel, ground on all six sides
- Available as single blocks or in matched pairs, per chart
- NJ50B123H1M has one 1/2″ through hole in 2″ x 3″ face
- 11-Hole models have 5/16-18 tapped holes
- 23-Hole models have 3/8-16 tapped holes
- All models except NJ50PB123 are furnished in fitted wooden boxes
- NJ50B123H11M, NJ50B123H23M, NJ50B234H23M & NJ50B246H23N have drilled, counterbored & tapped holes to allow screw mounting and conversion into angle plates & other precision set-ups



Size (Inches)	Pair or Single	No. of Holes	Square	Weight	Order No.	Price
1 x 2 x 3 .0001	Single	No	.0002 total	2 lbs	**NJ50PB123**	Price
1 x 2 x 3 .0001 / .0003	Pair	11	.0001 per in.	3 lbs	**NJ50BB123H11M**	Price
1 x 2 x 3 .0001 / .0003	Pair	23	.0001 per in.	3 lbs	**NJ50B123H23M**	Price
1 x 2 x 3 .0001 / .0003	Pair	No	.0001 per in.	3 lbs	**NJ50B123NHM**	Price
1 x 2 x 3 .0002	Pair	1	.0001 per in.	3 lbs	**NJ50BB123H1M**	Price
2 x 3 x 4 .0001 / .0003	Pair	23	.0001 per in.	12 lbs	**NJ50B234H23M**	Price
2 x 4 x 6 .0001 / .0003	Pair	23	.0001 per in.	24 lbs	**NJ50B246H23M**	Price

Fowler Heavy Duty Screw Jack MAX-JACK

- Simplify set-up applications on all machine and inspection operations
- Adjustable from 4.5" to 8"
- Quick-acting height adjustment
- Fine adjust ring for easy leveling
- Height locking ring
- Lifting capacity 2000 lbs (approx.)



Order No.	Price
NA5552104050	Price

Starrett "Little Giant" Jack Screws

- For leveling work on planer beds, upright drills and setting up machinery
- The versatility of this tool is greatly increased by the number of attachments available

MADE IN THE USA



Range - 1-1/2 to 2-1/4		
Description	**Order No.**	**Price**
191A Jack only	MV7050688	Price
191B Extension base	MV7050689	Price
191C Extension base	MV7050690	Price
191D Auxiliary Pointed Screw	MV7050691	Price
191E Extension base	MV7050692	Price
191D Extension V base	MV7050693	Price
S191 Set complete with all attachments	MV7050687†	Price

Range - 2-1/4 to 3-1/8		
Description	**Order No.**	**Price**
190A Jack only	MV7050681	Price
190B Extension base	MV7050682	Price
190C Extension base	MV7050683	Price
190D Auxiliary Pointed Screw	MV7050684	Price
190E Extension base	MV7050685	Price
190F Extension V base	MV7050686	Price
S190 Set complete with all attachments	MV7050680†	Price

† Maximum height with attachments: S190, 6-1/8"; S191, 3-3/4"

Fowler Machinist Jack Set

- Set consists of 2 machinists jacks in a shop-hardened case.
- Individual jacks consist of a heavy, steel cast 1-1/2" base with adjustable steel screw and tilting swivel head, with a lock nut for permanent positioning
- Range: Min. 3"; Max: 4", capacity: 1000 lbs



Order No.	Price
NA5552104025	Price

Screw Jack Sets

- Up to 1000 lbs
- Range: 2.25" to 3.37"
- 1" and 2" extension bases
- Extensions may be combined
- Includes shop hardened case



Item	Order No.	Price
TESA TECHNOLOGY / brown & sharpe	MV4527421	Price
Fowler	NA5552104000	Price

PROCHECK Jackscrew Set

- For leveling and adjusting machinery
- Easily fits into tight locations
- Total screw travel: 1"
- Minimum height: 2-3/8"
- Maximum body diameter is 1-1/4"
- Interchangeable parts have ringed shoulders and recesses for perfect alignment
- Set includes body, pivoting screw pad, conical screwpoint, 2" body extension, 1" body extension, Vee cap, knife edge cap and wrench, shop hardened case
- Black oxide finish



Order No.	Price
PC24JS7PS	Price

NATIONAL Machinist's Jack

- Base is made of a heavy cast steel with 1" adjustable screw and tilting swivel head; lock nut for permanent positioning
- Lifting capacity approximately 1,000 lbs
- Range: Minimum 3", maximum 4"



Order No.	Price
NE60193	Price

NATIONAL 2 Pc. All Purpose Clamp Set

- Made of stainless steel
- Serrated jaws provide a vise like grip when clamp is locked
- Has many applications
- 7" Curved, & 4-1/2" straight

WORLD CLASS QUALITY



Order No.	Price
NE60GPS	Price

PROCHECK 3 Pc. Drill Gage Set



- Consists of 3 gages for checking drill bit sizes #1 thru #60, letter sizes A thru Z, and fractional sizes 1/16-1/2" x 64ths
- Chromed

Order No.	Price
NE60HMC958	Price

Starrett Drill Gages

MADE IN THE USA

- Drill gages are used to quickly and conveniently identify drill bit sizes
- Made of heavy gage steel, machined and ground to close tolerances
- Hole sizes and decimal equivalents are permanently etched on the face


MV7050677


MV7050718


MV7050676


MV7051320

Drill Range	Size (W X L) (in.)	Order No.	Price
#1 to 60	1-1/2 x 5-1/2	MV7050676	Price
#61 to 80	3/4 x 2	MV7051320	Price
1/16 to 1/2 by 64ths	2-5/16 x 6-1/4	MV7050677	Price
A to Z	2-5/16 x 6-1/4	MV7050718	Price

GENERAL Drill Gages

- General's drill gages are used to quickly and conveniently identify drill bit sizes
- Hole sizes and decimal equivalents are permanently etched on the face
- No. 13 is 3″ x 1-1/8″ wide; Nos. 14 & 15 are 5″ x 2″ wide

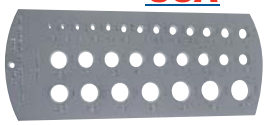

NE5014


NE5015

Description	Order No.	Price
1/16 to 1/2 by 64ths	NE5014	Price
#1 to 60	NE5015	Price

1/16" to 1/2" Fractional Size Drill Gage

MADE IN THE USA

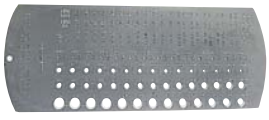


- Gage has 29 measuring holes for determining twist drill sizes from 1/16" to 1/2" in 1/64" increments
- Shows drill sizes in inches and decimal equivalents

Order No.	Price
NB405052	Price

1.5 to 12.5mm Metric Twist Drill & Drill Rod Gage

MADE IN THE USA

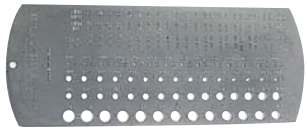


- Gages 30 sizes from 1.5 to 12.5mm
- Gage shows metric sizes with decimal equivalents

Order No.	Price
NB405076	Price

1.0 to 5.9mm Metric Twist Drill & Drill Rod Gage

MADE IN THE USA

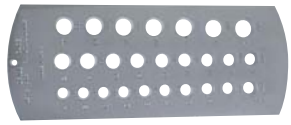


- Gages 57 sizes from 1.0 to 5.9mm
- Gage shows metric sizes with decimal equivalents

Order No.	Price
NB405075	Price

1-60 Twist Drill & Machine Screw Tap Gage

MADE IN THE USA

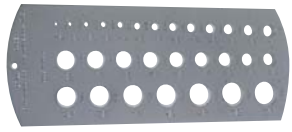


- Tells at a glance the correct size tap drill for machine screw tap in "NF" National Fine or "NC" National Coarse thread series
- Shows the correct body size drill to use
- 60 Sizes shown with number and decimal equivalent of drill at each hole

Order No.	Price
NB405051	Price

61-80 Twist Drill & Drill Rod Gage

MADE IN THE USA

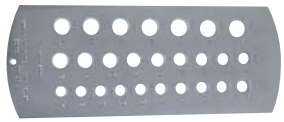


- Used to gage and select the correct twist drill and steel drill rod in the small size range from 61 through 80
- Each hole shows the size number and the corresponding decimal equivalent

Order No.	Price
NB405054	Price

A to Z Alphabet Drill Gage

MADE IN THE USA



- Used to select or check drill sizes from "A" to "Z"
- Each gage hole is marked by letter and its decimal equivalent from .234 inch diameter through .413 inch diameter

Order No.	Price
NB405053	Price

Starrett Tap and Drill Gage



- Show correct size tap drill for any National Coarse or National Fine tap from #2-56NC to 1/4-28NF to produce 75% full thread
- Gage also shows correct body size drill and provides 60 holes marked with number, size and decimal equivalent of drills from No.1 through No. 60
- Hardened, ground, polished and tested for accuracy
- Gage is 5/64" thick by 2-5/16" wide by 6-1/4" long

Model No.	Range of Tap Drill	Range of Body Drill	Order No.	Price
185	50 to 3	44 to 1/4	MV7050675	Price

GENERAL Reference Table



- Essential tap drill and decimal equivalents reference table for toolmakers, machinists and mechanics
- Front has machine screw size tap drill chart for recommended 75 depth thread
- Back has decimal equivalents table in 64ths from 1/64″ to 63/64″
- For National Fine and National Special series of machine screws
- Convenient 6″ rule is graduated in 64ths

Order No.	Price
NE50715	Price

GENERAL Sheet Metal Gage



- For gaging uncoated sheet metal, plate iron and steel
- Gage numbers are U.S. Standard 0 to 36, based on weights in ounces per square in.
- Decimal equivalents are on reverse side
- Chrome finished is hardened & tempered
- 3-1/4″ Diameter, 3/32″ thick

Order No.	Price
NE5021	Price

American Standard Wire Gage for Non-Ferrous Metals

- Gage sheets, plates and wire made of non-ferrous metals such as copper, brass, aluminum, etc.
- Sizes range from 0 to 36
- Decimal equivalents shown on reverse side

MADE IN THE USA



Order No.	Price
NB405056	Price

U.S. Standard Wire Gage for Sheet, Plate-Iron & Steel

- Gage is made to the recognized commercial standard in the United States for uncoated sheet metal, plate iron and steel, based on weights in ounces per square foot
- Gage provides measurements from 0 to 36 on one face; decimal equivalents on reverse side



Item	Order No.	Price
	NB405058	Price
PROCHECK	**NE60RGW1**	Price

Drill Point Gage

MADE IN THE USA

- Ensures correct drill point angle of 59° for better, faster cutting
- Accurately measures drill lip lengths
- An all-around tool — also can be used as plain rule, hook rule, depth gage, try square and slide caliper



Item	Head Bevel/ Grad.	Hook Rule Length	Hook Rule Graduations	Order No.	Price
	Bevel 59° Grad. 32nds	6	8ths, 16ths, 32nds, 64ths	**NB405070**	Price
Starrett	Bevel 59° Grad. 32nds	6	8ths, 16ths, Quick Reading 32nds, 64ths	**MV7050150**	Price

Starrett U.S. Standard Gage-Hardened Sheet

- Made to the United States standard for uncoated sheet, plate iron and steel based on weights in ounce per square foot
- Range: .3125" - .007"
- Satin chrome finish
- Decimal equivalents on reverse side
- Carefully tested after hardening



Order No.	Price
MV7051318	Price

Starrett Steel Wire Gage

- For gaging steel wire and drill rod to the American Steel & Wire Company (Washburn & Moen) standard and checks sizes from 0 to 36
- Also known as United States steel wire gage
- Decimal equivalents on back
- Satin finish
- Carefully tested for accuracy after hardening

MADE IN THE USA



Range Gage No.	Order No.	Price
0 to 36	**MV7051321**	Price

Starrett English Standard Wire Gage

- For gaging iron wire, hot and cold rolled sheet steel and in some cases sheet iron by the English Standard Wire system also known as Birmingham or Stubs
- Satin finish
- Tested after hardening

MADE IN THE USA



Range Gage No.	Order No.	Price
1 to 36	**MV7050678**	Price

Fowler Drill and Wire Gages





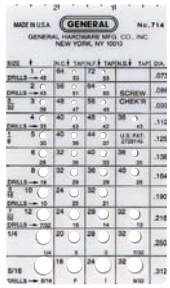


Type - Drill Gage		
Description	**Order No.**	**Price**
1/16 to 1/2 Jobber Drill-29 Holes	**NA5552480005**	Price
A to Z Letter Drill-26 Holes	**NA5552480020**	Price
#1 to #60 Number Drill-60 Holes	**NA5552480010**	Price
#61 to #80 Number Drill-20 Holes	**NA5552480015**	Price
1 to 5.9 mm Jobber Drill-57 Holes	**NA5552480006**	Price
1.5 to 12.5mm Drill Gage-30 Holes	**NA5552480008**	Price

Type - Wire Gage		
Description	**Order No.**	**Price**
American Standard: 0 to 36 Gauge	**NA5552480040**	Price
US Standard: 0 to 36 Gauge	**NA5552480030**	Price

General Quick Check Screw Gage

- Quick way to identify machine screws, bolts, wood screws, self tapping screws, standard size rivets, and common cotter pin sizes up to 5/16" (8mm)
- 3" scale to check screw lengths
- Checker gives required drill size for corresponding tap size and proper drill size for like hole
- Threaded holes indicate threads per inch while unthreaded indicate size by number and fractions of an inch
- Durable engineering plastic



Order No.	Price
NE50714	Price

PROCHECK 5/16"-6" Telescoping Gage Sets

- Uniform contact pressure
- Self centering plungers
- Locks on any setting
- Rounded contacts
- Knurled knob on handle
- Available individually or in sets
- Bore size obtained by measuring over gage contacts with a micrometer



Style	Order No.	Price
Economy	**NN40290100**	Price
Premium	**PC24TSG6PS**	Price
TiN Coated	**PC24TGS6PST**	Price

PROCHECK Telescoping Gages

- Measure inside diameter
- Spring loaded plunger expands within the bore
- Knurled end clamp



Range (in.)	Order No.	Price
5/16 to 1/2	**PC24TSG1P**	Price
1/2 to 3/4	**PC24TSG2P**	Price
3/4 to 1-1/4	**PC24TSG3P**	Price
1-1/4 to 2-1/8	**PC24TSG4P**	Price
2-1/8 to 3-1/2	**PC24TSG5P**	Price
3-1/2 to 6	**PC24TSG6P**	Price

PROCHECK 12" Telescoping Gages

- Measure inside diameter
- Long handles for extra depth applications
- Spring loaded plunger expands within the bore
- Knurled clamp



Range (in.)	Order No.	Price
5/16 to 1/2	**PC24TSG1P12**	Price
1/2 to 3/4	**PC24TSG2P12**	Price
3/4 to 1-1/4	**PC24TSG3P12**	Price
1-1/4 to 2-1/8	**PC24TSG4P12**	Price
2-1/8 to 3-1/2	**PC24TSG5P12**	Price
3-1/2 to 6	**PC24TSG6P12**	Price

Telescoping Hole Gages

- Uniform contact pressure
- Self centering plungers
- Locks on any setting
- Rounded contacts
- Knurled knob on handle
- Available individually or in sets
- Bore size obtained by measuring over gage contacts with a micrometer



Item	Description	Model No.	Order No.	Price
	Set of 4 Gages, including sizes 5/16" - 2&1/8"	3S-4	**NB40T134**	Price
	Set of 5 Gages, including sizes 5/16" - 6"	3S-5	**NB40T135**	Price
	Complete set of all six sizes	3S-6	**NB40T136**	Price
TESA	4 Pc. Set 5/16 - 2-1/8" with 6" Arm	599-591-10	**MV4545368**	Price
	6 Pc. Set 5/16 - 6" with 6" Arm	599-591-20	**MV4545369**	Price
Fowler	6 Pc. Set 5/16 - 6" with 6" Arm	52-470-006	**NA5552470006**	Price
	6 Pc. Set 5/16 - 6" with 12" Arm	52-470-007	**NA5552470007**	Price

Starrett Telescoping Gages

MADE IN THE USA

- 5/16" to 6" Range
- Uniform contact pressure
- Self centering plungers
- Locks on any setting
- Rounded contacts
- Knurled knob on handle
- Available individually or in sets
- Bore size obtained by measuring over gage contacts with a micrometer



Type - Set of four, No. 579A,B,C,D, in case				
Starrett No.	English Range (in.)	Metric Range	Order No.	Price
S579GZ	5/16 to 2-1/8 (8-54mm)	4	**MV7052616**	Price

Type - Set of six, No. 579A,B,C,D,E,F, in case				
Starrett No.	English Range (in.)	Metric Range	Order No.	Price
S579HZ	5/16 to 6 (8-150mm)	6	**MV7052617**	Price

Type - Telescoping Gage			
Starrett No.	English Range (in.)	Order No.	Price
579A	5/16 to 1/2 (8-12.7mm)	**MV7052610**	Price
579A-8	5/16 to 1/2 (8-12.7mm)	**MV7063192**	Price
579A-12	5/16 to 1/2 (8-12.7mm)	**MV7063195**	Price
579B	1/2 to 3/4 (12.7mm-19mm)	**MV7052611**	Price
579B-8	1/2 to 3/4 (12.7mm-19mm)	**MV7063193**	Price
579B-12	1/2 to 3/4 (12.7mm-19mm)	**MV7063196**	Price
579C	3/4- to 1-1/4 (19-32mm)	**MV7052612**	Price
579C-8	3/4- to 1-1/4 (19-32mm)	**MV7063194**	Price
579C-12	3/4- to 1-1/4 (19-32mm)	**MV7063197**	Price
579D	1-1/4 to 2-1/8 (32-54mm)	**MV7052613**	Price
579D-12	1-1/4 to 2-1/8 (32-54mm)	**MV7063198**	Price
579E	2-1/8 to 3-1/2 (54-90mm)	**MV7052614**	Price
579E-12	2-1/8 to 3-1/2 (54-90mm)	**MV7063199**	Price
579F	3-1/2 to 6 (90-150mm)	**MV7052615**	Price
579F-12	3-1/2 to 6 (90-150mm)	**MV7063200**	Price

Note: -8 on Starrett No, means the handle is 8"; -12 means the handle is 12"

Mitutoyo Telescope Gage Sets

- 5/16" to 6" Range
- Uniform contact pressure
- Self centering plungers
- Locks on any setting
- Rounded contacts
- Knurled knob on handle
- Available individually or in cets
- Bore size obtained by measuring over gage contacts with a micrometer



Range (in./mm)	OAL	Order No.	Price
1/2 to 6 (12.7-150mm)	5	**MT80155-904**	Price
5/16 to 2-1/8 (8-54mm)	4	**MT80155-907**	Price
5/16 to 6 (8-150mm)	6	**MT80155-903**	Price

Individual Telescoping Gages Available

Fowler 5/16" to 6" Range Telescoping Gage Set with Titanium Coated Contact Points

- Contact points are Titanium coated for accuracy and durability
- Double action rigid handle with self-centering contacts
- Constant spring tension for uniform feel
- Includes fitted vinyl case



Order No.	Price
NA5552470000	Price

PROCHECK Small Hole Gage Set

1/8"-1/2" Range



- Range: .125 - .500"
- Knurled knob for size adjustment
- Gaging surface fully hardened for long life
- Extra long for gaging deep & shallow holes
- Hole size obtained by measuring over contact points with micrometer
- Case included

Order No.	Price
NN40290200	Price

Mitutoyo Small Hole Gages



- (.125″ to .500″) Extra long for gaging deep and shallow holes, slots and similar work
- Gaging surface is a full-round with a flat bottom; permits use in smallest of shallow holes, slots and grooves, etc
- Knurled knob at end of handle is used for size adjustment. Hole size is obtained by measuring over the contact points with a micrometer
- Gaging surface is fully hardened to insure long tool life
- Supplied 4 gages in a fitted case



Type - Extra Long Small Hole Gages			
Range (in./mm)	Probe Depth (L in.)	Order No.	Price
.125 to .200 (3-5mm)	.880	**MT80154-105**	Price
.200 to .300 (5-7.5mm)	1.200	**MT80154-106**	Price
.300 to .400 (7.5-10mm)	1.600	**MT80154-107**	Price
.400 to .500 (10-13mm)	1.600	**MT80154-108**	Price

Type - Set of 4 Gages			
Range (in./mm)	Overall Length (in.)	Order No.	Price
.125 to .500 (3-13mm)	4	**MT80154-901**	Price

Starrett Small Hole Gages Full-Ball, Short Style

- Knurled knob for adjusting contacts
- Hardened contacts

MADE IN THE USA



Type - Small Hole Gages				
Starrett No.	English Range (in.)	Metric Range (mm)	Order No.	Price
830A	.125 to .150	3.2 to 3.8mm	**MV7053076**	Price
830B	.150 to .200	3.8 to 5.1mm	**MV7053077**	Price
830C	.200 to .300	5.1 to 7.6mm	**MV7053078**	Price
830D	.300 to .400	7.6 to 10.2mm	**MV7053079**	Price
830E	.400 to .500	10.2 to 12.7mm	**MV7053080**	Price

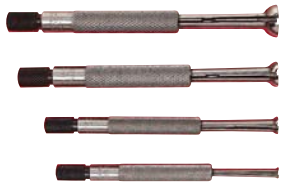
Type - Full Ball Short Small Hole Gage Set				
Starrett No.	English Range (in.)	Metric Range (mm)	Order No.	Price
S830FZ	.125 to .500	3.2 to 12.7	**MV7053081**	Price

Type - Small Hole Gage Set Case Only				
Starrett No.	English Range (in.)	Metric Range (mm)	Order No.	Price
S830FZZ	-	-	**MV7055392**	Price

Starrett Small Hole Gages Full-Ball Style

- Regulate by turning knurled knob at end of handle
- Accurately measures holes, slots, grooves and recesses
- Measurements obtained by measuring ball contact with micrometer

MADE IN THE USA



Type - Full Ball Small Hole Gage Set				
Starrett No.	English Range (in.)	Metric Range (mm)	Order No.	Price
S829EZ	.125 to .500	3.2 to 12.7	**MV7053074**	Price

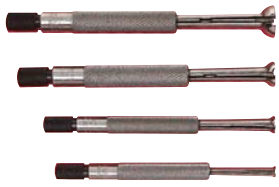
Type - Small Hole Gage Set Case Only				
Starrett No.	English Range (in.)	Metric Range (mm)	Order No.	Price
S829EZZ	-	-	**MV7055391**	Price

Type - Small Hole Gages				
Starrett No.	English Range (in.)	Metric Range (mm)	Order No.	Price
829A	.125 to .200	3.2 to 5.1mm	**MV7053070**	Price
829B	.200 to .300	5.1 to 7.6mm	**MV7053071**	Price
829C	.300 to .400	7.6 to 10.2mm	**MV7053072**	Price
829D	.400 to .500	10.2 to 12.7mm	**MV7053073**	Price

Starrett Small Hole Gages Half-Ball Style

- Long length
- Knurled knob for adjusting contacts
- Hardened contacts

MADE IN THE USA



Type - Small Hole Gages				
Starrett No.	English Range (in.)	Metric Range (mm)	Order No.	Price
831A	.125 to .200	3.2 to 5.1mm	**MV7053083**	Price
831B	.200 to .300	5.1 to 7.6mm	**MV7053084**	Price
831C	.300 to .400	7.6 to 10.2mm	**MV7053085**	Price
831D	.400 to .500	10.2 to 12.7mm	**MV7053086**	Price

Type - Small Hole Gage Set				
Starrett No.	English Range (in.)	Metric Range (mm)	Order No.	Price
S831EZ	.125 to .500	3.2 to 12.7	**MV7053087**	Price

Type - Small Hole Gage Set Case Only				
Starrett No.	English Range (in.)	Metric Range (mm)	Order No.	Price
S831EZZ	-	-	**MV7055393**	Price

PEC Small Hole Gages

- Gaging surface is fully hardened
- Satin chrome finish
- Set supplied in fitted case

MADE IN THE USA



Capacity (in.)	Order No.	Price
4 Pc. Set-Sizes A-D	**NB404S4**	Price
Size A-.125 to .200	**NB404A**	Price
Size B-.200 to .300	**NB404B**	Price
Size C-.300 to .400	**NB404C**	Price
Size D-.400 to .500	**NB404D**	Price

Small Hole Gage Set

Range: .125″ to .500″ (3.18 to 12.7mm)



Item	Order No.	Price
TESA / brown & sharpe	**MV4551885**	Price
Fowler	**NA5552472104**	Price

PROCHECK Flat Leg Pattern Dividers & Calipers



- Flat leg dividers and caliper legs are forged of special caliper steel
- Hardened and tempered bow springs and fulcrum spools assure uniform tension without side play
- Adjusting screw has a self-seating washer and nut to permit quick and positive adjustment
- Dividers have hardened points
- Calipers have hardened measurement faces

	Divider		Inside Caliper		Outside Caliper	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	**NE60D4**	Price	**NE60IC4**	Price	**NE60OC4**	Price
6	**NE60D6**	Price	**NE60IC6**	Price	**NE60OC6**	Price
8	**NE60D8**	Price	**NE60IC8**	Price	**NE60OC8**	Price
10	**NE60D10**	Price	**NE60IC10**	Price	**NE60OC10**	Price
12	**NE60D12**	Price	**NE60IC12**	Price	**NE60OC12**	Price
18	**NE60D18**	Price	**NE60IC18**	Price	**NE60OC18**	Price
24	**NE60D24**	Price	**NE60IC24**	Price	**NE60OC24**	Price
36	**NE60D36**	Price	**NE60IC36**	Price	**NE60OC36**	Price
4, 6, 8	**NE603DS†**	15.25	**NE603ICS†**	15.25	**NE603OCS†**	Price

† 3 piece set

PROCHECK Spring Caliper Sets



- Consists of 1 each: inside, outside and divider
- 4″, 6″, 8″ and 12″ sets

Size (in.)	Order No.	Price
4	**NE604CS**	Price
6	**NE606CS**	Price
8	**NE608CS**	Price
12	**NE6012CS**	Price

GENERAL All American Pocket Protector Kit



- This handy pocketsize toolkit is designed for the mechanic, machinist or hobbyist
- The kit contains four of General's best-selling tools: No. 300, 6″ rule; No. 383X, telescoping magnetic pickup; No. 87, automatic center punch and No. 88, scriber
- All tools packaged in vinyl pocket protector which can be snapped closed.
- Pocket flap is imprinted with full color American flag

Order No.	Price
NE50S008	Price

Mitutoyo Spring Dividers, Outside Spring Calipers, Inside Spring Calipers

- **Spring dividers:** fully hardened and tempered joints, spring, washers and divider points, high carbon steel legs deeply heat treated for lifetime service and has a brushed, natural steel finish
- **Outside spring calipers:** contact ends fully rounded to give accurate dimension and has a brushed, natural finish
- **Inside spring calipers:** ends fully rounded to give accurate contact with work and has a brushed, natural steel finish



Description	Order No.	Price
6" Inside Spring Caliper	**MT80950-232**	Price
6" Outside Spring Caliper	**MT80950-222**	Price
6" Spring Divider	**MT80950-212**	Price
8" Inside Spring Caliper	**MT80950-233**	Price
8" Outside Spring Caliper	**MT80950-223**	Price
8" Spring Divider	**MT80950-213**	Price

PEC TOOLS Dividers & Calipers

MADE IN THE USA



- Easy adjustment over entire range
- Centrally located adjustment screw
- Balanced legs, uniform tension
- Polished natural steel finish
- Hardened tips on all dividers

	Inside Caliper		Outside Caliper		Spring Divider	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	**NB408200004**	Price	**NB408300004**	Price	**NB408100004**	Price
6	**NB408200006**	Price	**NB408300006**	Price	**NB408100006**	Price
8	**NB408200008**	Price	**NB408300008**	Price	**NB408100008**	Price
12	**NB408200012**	Price	**NB408300012**	Price	**NB408100012**	Price

PROCHECK 4" & 6" Hermaphrodite Calipers



Size (in.)	Order No.	Price
4	**NE60HC4**	Price
6	**NE60HC6**	Price

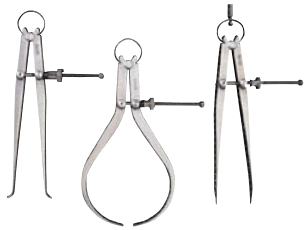
Precision Adjustable Trammels



- Draw large circles and measure sizable distances with the accuracy of a divider
- Fine adjusting screw sets points accurately
- Points are removable & may be replaced with the pencil holder
- Die cast bodies with hardened & ground 3″ needlepoint legs
- Clamp opening for beam is 3/8″× 3/4″

Item	Order No.	Price
GENERAL	**NE50520**	Price
Starrett	**MV7050268**	Price

Starrett® Flat "Yankee" Calipers and Dividers



Type - Divider (Solid Nut)			
Starrett No.	Size (in.)	Order No.	Price
83A-4	4	**MV7050376**	Price
83A-6	6	**MV7050378**	Price
83A-8	8	**MV7050380**	Price
83A-12	12	**MV7050384**	Price

Type - Divider (Spring Nut)			
Starrett No.	Size (in.)	Order No.	Price
83B-4	4	**MV7050377**	Price
83B-6	6	**MV7050379**	Price
83B-8	8	**MV7050381**	Price
83B-12	12	**MV7050385**	Price

Type - Inside Caliper (Solid Nut)			
Starrett No.	Size (in.)	Order No.	Price
73A-4	4	**MV7050334**	Price
73A-6	6	**MV7050336**	Price
73A-8	8	**MV7050338**	Price
73A-12	12	**MV7050342**	Price

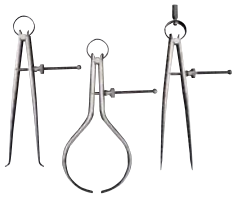
Type - Inside Caliper (Spring Nut)			
Starrett No.	Size (in.)	Order No.	Price
73B-4	4	**MV7050335**	Price
73B-6	6	**MV7050337**	Price
73B-8	8	**MV7050339**	Price
73B-12	12	**MV7050343**	Price

Type - Outside Caliper (Solid Nut)			
Starrett No.	Size (in.)	Order No.	Price
79A-4	4	**MV7050364**	Price
79A-6	6	**MV7050366**	Price
79A-8	8	**MV7050368**	Price
79A-12	12	**MV7050372**	Price

Type - Outside Caliper (Spring Nut)			
Starrett No.	Size (in.)	Order No.	Price
79B-4	4	**MV7050365**	Price
79B-6	6	**MV7050367**	Price
79B-8	8	**MV7050369**	Price
79B-12	12	**MV7050373**	Price

Starrett® Toolmaker's Calipers and Dividers

With Round Legs - Solid Nut



- Legs are made from round stock drawn down to a smooth taper
- Fulcrum stud is hardened, bearing surfaces of legs are sufficiently large to prevent any side deflection
- Bow spring is strong and flexible, with adjustment centrally located in legs to assure smooth action

MADE IN THE USA

Type - Divider			
Starrett No.	Size (in.)	Order No.	Price
277-3	3	**MV7051309**	Price
277-6	6	**MV7051311**	Price

Type - Inside Caliper			
Starrett No.	Size (in.)	Order No.	Price
274-3	3	**MV7051301**	Price
274-6	6	**MV7051303**	Price

Type - Outside Caliper			
Starrett No.	Size (in.)	Order No.	Price
275-3	3	**MV7051305**	Price
275-6	6	**MV7051307**	Price

Starrett® Firm Joint Inside & Outside Calipers

MADE IN THE USA



Type - Inside Caliper			
Starrett No.	Size (in.)	Order No.	Price
27-6	6	**MV7050193**	Price
27-12	12	**MV7050196**	Price
27-18	18	**MV7050197**	Price
27-24	24	**MV7050198**	Price



Type - Outside Caliper			
Starrett No.	Size (in.)	Order No.	Price
26-6	6	**MV7050186**	Price
26-12	12	**MV7050189**	Price
26-18	18	**MV7050190**	Price
26-24	24	**MV7050191**	Price
26-36	36	**MV7050192**	Price

Starrett® 6" Firm Joint Hermaphrodite Calipers

MADE IN THE USA



Model 243-6

- Improved firm joint and a round adjustable point
- The leg holding the adjustable point is offset

Order No.	Price
MV7051143	Price

Starrett® Dividers

- Quadrant adjusting nut provides fine adjustment for close measurements
- Lock nut
- Adjustable points



Starrett No.	Size (in.)	Order No.	Price
92-6	6	**MV7050423**	Price
92-9	9	**MV7050426**	Price

Starrett® Steel Beam Trammels

MADE IN THE USA



Starrett No.	Beam Size	Scribe Circle Dia. (in.)	Order No.	Price
C251A	10-1/2	18	**MV7051205**	Price
C251AZZ	Case Only	-	**MV7055243**	Price
C251B	14-1/2	26	**MV7051207**	Price
C251BZZ	Case Only	-	**MV7055244**	Price
C251C	20	36	**MV7051209**	Price
C251CZZ	Case Only	-	**MV7055245**	Price

Starrett® Steel Beam Trammels Attachments

MADE IN THE USA



Starrett No.	Attachments	Order No.	Price
C251D	Coupling, with extra 20" beam (when used with No. C251C will scribe circle 72" diam.)	**MV7051211**	Price
C251E	Trammel Ball Points & Holder	**MV7051212**	Price

PROCHECK Inch Radius Gage Sets



- All sets have stainless steel, hardened, satin chrome clad finish
- Each blade marked with size
- Plastic case included

Gages Per Set	Range	Order No.	Price
8	9/16 to 1 by 16ths	**NB67L300E**	Price
25	1/64 to 17/64 by 64ths and 9/32 to 1/2 by 32nds	**NB67L300CX**	Price

PROCHECK Angle Gage Set



- 18 Individual gages for easy use
- 8 Gaging surfaces per gage
- Each gage checks primary, 1/2 primary and complementary angles
- Quick and accurate inspection of angles and ID or OD chamfers
- Inspect angles on ground form tools and cutters

Order No.	Price
NB67L300AG	Price

Starrett Radius Gage Sets



- Made of stainless steel with no-glare satin finish
- Individual gages permit each gage to be used separately for greatest accuracy and convenience
- Each gage is marked with its radius and has five different gaging surfaces for both convex and concave radii
- Available with handy gageholder for checking radii in hard-to-reach locations.
- All sets furnished in attractive, protective case

MADE IN THE USA

Individual gages with or without holder are available - price on application

Type - Radius Gage Sets				
Starrett No.	**Gages Per Set**	**Range (in.)**	**Order No.**	**Price**
S167AHZ	17	1/64 to 17/64 by 64ths	**MV7050616**	Price
S167AZ	16	1/32 to 17/64 by 64ths	**MV7050615**	Price
S167BZ	8	9/32 to 1/2 by 32nds	**MV7050617**	Price
S167CHZ	25	1/64 to 17/64 by 64ths and 9/32 to 1/2 by 32nds	**MV7050619**	Price
S167CZ	24	1/32 to 17/64 by 64ths and 9/32 to 1/2 by 32nds	**MV7050618**	Price
S167DZ	16	1/32 to 1/2 by 32nds	**MV7050620**	Price
S167MAHZ	14	.5 to 7mm by 0.5mm	**MV7055818**	Price
S167MAZ	13	1mm to 7mm by 0.5mm	**MV7055817**	Price
S167MCHZ	22	.5 to 7mm by .5 and 8mm to 15mm by 1mm	**MV7055821**	Price
S167MCZ	21	1mm to 7mm by 0.5mm and 8mm to 15mm by 1mm	**MV7055820**	Price
S167MDZ	15	1mm to 15mm by 1mm	**MV7055822**	Price
SD167FHZ	19	.020 to .500	**MV7063460**	Price
SD167GZ	26	.010 to .500	**MV7063433**	Price
110	-	Holder Only	**MV7050475**	Price

Type - Radius Gage Set with Certification				
Starrett No.	**Gages Per Set**	**Range (in.)**	**Order No.**	**Price**
S167CHZW/SLC	25	1/64 to 17/64 by 64ths and 9/32 to 1/2 by 32nds	**MV7066876**	Price

PROCHECK 26 Pc. Decimal and Metric Radius Gage Sets



- Used for inspection, layout, pattern making and all other machining jobs
- Satin chrome finish
- Each gage is marked with its size
- Each gage has five measuring surfaces for convex and concave radii

Size	Order No.	Price
.010 - .500	**PC24L300D**	Price
0.5 - 13mm	**PC24L300M**	Price

Mitutoyo Radius Gage Sets



No. of Leaves	Size (in.)	Order No.	Price
8	9/32 to 1/2 by 32nds	**MT80186-904**	Price
10	.550 to 1 by .050	**MT80186-907**	Price
17	1/64 to 17/64 by 64ths	**MT80186-903**	Price
25	1/64 to 17/64 by 64ths & 9/32 to 1/2 by 32nds	**MT80186-901**	Price
26	.010-.030 by .005, .040-.100 by .010, .120-.300 by .020, .350-.500 by .050	**MT80186-906**	Price

Fowler Radius Gages



- Check radius, concave and convex work
- Non-rust steel, precision ground
- Used for inspection, layout, pattern making and other machining jobs
- Holders accommodate gages at 30° and 45°
- 26 piece set with holder. Ranges 1/64″ - 17/64″ by 64ths and 9/32″ - 1/2″ by 32nds in vinyl case

Order No.	Price
NA5552470010	Price

PROCHECK Fillet and Radius Gages

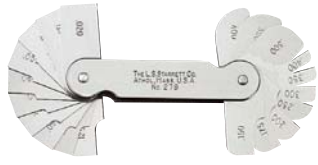


Range by 64ths	No. of Leaves	Order No.	Price
1/32 to 1/4	30	**NE60RG30**	Price
17/64 to 1/2	32	**NE60RG32**	Price

Starrett Radius Gage

MADE IN THE USA

Has 20 leaves as follows:



- (9) With concave and convex radii from .020″ to .100″ by .010″
- (4) With concave and convex radii from .125″ to .200″ by .025″
- (1) With concave and convex radii of .250″
- (3) With concave radii only from .300″ to .400 by .050″
- (3) With convex radii only from .300″ to .400″ by .050″

Starrett No.	No. of Leaves	Range	Order No.	Price
279	20	.020 to .400	**MV7051314**	Price

Radius Gages

MADE IN THE USA

- Used for measuring concave and convex surfaces
- Each blade clearly marked with radius size
- Blades protected in sturdy steel case
- Locking device at each end to secure all blades for storage or position an individual blade for use
- Concave and convex surfaces may be measured with the external and internal radius on each leaf



No. of Leaves	Range	Order No.	Price
16	1/32 to 17/64 by 64ths	**NB405041**	Price
16	9/32 to 33/64 by 64ths	**NB405042**	Price
32	17/64 to 1/2 by 64ths	**NB405044**	Price

PROTO Master Feeler Gauge Sets

MADE IN THE USA



Thickness	No. of Blades	Model No.	Order No.	Price
Sizes: 003", 004", 005", 006", 008", 010", 012", 015", 018"	9	J000A	**KP4272425**	Price
Sizes: 0015" thru 040" except 019"	25	J000AA	**KP4272430**	Price
Sizes: 006mm, 007mm, 008mm, 010mm, 015mm, 020mm, 025mm, 030mm, 035mm, 040mm, 045mm, 050mm, 055mm, 060mm, 070mm	15	J00MM15	**KP4272435**	Price
004mm, 005mm, 006mm, 007mm, 008mm, 009mm, 010mm, 015mm, 020mm, 025mm, 030mm, 035mm, 040mm, 045mm, 050mm, 055mm, 060mm, 065mm, 070mm, 075mm, 080mm, 085mm, 090mm, 095mm, 100mm	25	J00MM25	**KP4272440**	Price

PROTO 6 Blade Non-Magnetic Feeler Gauge Set

MADE IN THE USA

- Contains non-magnetic brass feeler blades for checking the air gap in electronic ignition systems for all weather conditions
- 1/2" x 3" Blades in steel holder
- Sizes: .006", .008", .010", .012", .014", .016"
- Blades etched with both decimal size and metric equivalent



Model No.	Order No.	Price
J000BR	**KP4272470**	Price

PROTO Long Blade Feeler Gauges

MADE IN THE USA

- Individual sizes



Thickness (in.)	Model No.	Order No.	Price
.0015	J0015L	**KP4272315**	Price
.002	J002L	**KP4272325**	Price
.003	J003L	**KP4272335**	Price
.004	J004L	**KP4272345**	Price
.005	J005L	**KP4272355**	Price
.006	J006L	**KP4272365**	Price

PROTO Bent Feeler Gauge Set

MADE IN THE USA

11 Blades

- 1/2" x 4-3/16" Blades with a 1" bend in steel holder
- Sizes: .006", .008", .010", .011", .012", .013", .014", .015", .018", .019", .020"
- Blades etched with both decimal size and metric equivalent



Model No.	Order No.	Price
J000M	**KP4272450**	Price

PROTO Blade Step Cut Feeler Gauge Set

MADE IN THE USA

22 Blades

- Go / No-Go 1/2 x 3-5/16" blades in steel holder
- Each blade has two different thicknesses
- Sizes: .004/.006", .005/.007", .006/.008", .007/.009", .008/.010, .009/.011", .010/.012", .011/.013", .012/.014", .013/.015", .014/.016", .015/.017", .016/.018", .017/.019", .018/.020", .019/.021", .020/.022", .021/.023", .022/.024", .023/.025", .024/.026", .025/.027"
- Blades etched with both decimal size and metric equivalent



Model No.	Order No.	Price
J000N	**KP4272455**	Price

PROTO Short Blade Feeler Gauges

MADE IN THE USA

- Short blade feeler gauge



Thickness (in.)	Model No.	Order No.	Price
.002	J002	**KP4272320**	Price
.003	J003	**KP4272330**	Price
.004	J004	**KP4272340**	Price
.005	J005	**KP4272350**	Price
.006	J006	**KP4272360**	Price
.009	J009	**KP4272385**	Price
.010	J010	**KP4272390**	Price

PROTO Long Feeler Gauge Sets

MADE IN THE USA

- 1/2" x 12" Blades in steel holder
- Sizes: .0015", .002", .003", .004", .005", .006", .008", .010", .012", .014", .015", .020"
- Blades etched with both decimal size and metric equivalent

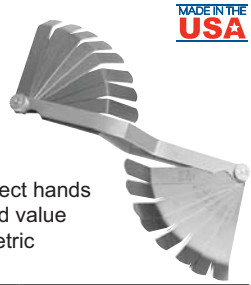


Thickness	Model No.	Order No.	Price
Sizes: .0015", .002", .003", .004", .005", .006", .008", .010", .012", .014", .015", .020"	J000SL	**KP4272460**	Price
Sizes: 0015", 002", 003", 004", 005", 006", 007", 008", 009", 010", 011", 012", 013", 014", 015", 016", 017", 018", 019", 020", 021", 025", 027", 030", 040"	J000TL	**KP4272465**	Price

PROTO 16 Blade Overhead Valve Feeler Gauge Set

MADE IN THE USA

- 1/2" Wide bent gauges for setting overhead valves
- Sizes: .009", .010", .011", .014", .015", .016", .017", .018", .019", .020", .021", .023", .024" .025" .026", .027".
- Blades are offset at a right angle to help protect hands from a hot manifold while setting an overhead value
- Blades etched with both decimal size and metric equivalent



Model No.	Order No.	Price
J000R	**KP4272420**	Price

PROCHECK Feeler Thickness Gages

- Straight leaf thickness gage - 1/2" wide x 3" long
- Tapered leaf thickness gage - 3" long leaves taper from 1/2" to 1/4"



No. of Leaves	Style	Range	Order No.	Price
9	Straight	.0015 to .015	**NB45STG9**	Price
26	Straight	.0015 to .025	**NB45STG26**	Price
26	Tapered	.0015 to .025	**NB45TTG26**	Price

GENERAL Economy Feeler Thickness Gages

15 Leaf Economy Gage with 3" Leaves

- Gage includes: .002, .003, .004, .005, .006, .007, .008, .010, .011, .012, .013, .014 .015, .020, & .025"
- Metric range from .051 to .635mm



26 Leaf Economy Gage

General's best selling feeler gauge provides precision accuracy at a reasonable priceTT

- 3" x 1/2" leaves
- 26 leaves include the following sizes: .0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, and .025"
- Metric range from .037 to .635mm

No. of Leaves	Range	Order No.	Price
26	.0015 to .025 (.037 to .635mm)	**NE50230**	Price

GENERAL Feeler Thickness Gages

- Made of the finest high grade precision gage steel.
- Each leaf is etched with size numbers in thousandths for quick identification.
- Knurled lock nut holds the leaves in desired position.
- Gages conform to government specifications GGG–G–17b.



		Straight Leaves	
No. of Leaves	Range	Order No.	Price
26	.0015 to .025	**NE50226**	Price

PEC Feeler Gages

MADE IN THE USA

- Made from the finest steel feeler gage stock available, hardened and tempered
- Lock-nub securely holds one or more blades in any desired position for taking measurements
- Each blade clearly marked with thickness
- Blades easily removed or replaced
- Sturdy steel case protects blades safely and securely



Type of Blades	Width at Tip	Blade Length	No. of Blades	Thicknesses Included	Order No.	Price
Straight	1/2	3	15	.0015 to .200	**NB405015**	Price
Straight	1/2	3	26	.0015 to .025	**NB405026**	Price
Straight	1/2	3	26	.0015 to .035	**NB405027**	Price
Straight	1/2	4-1/2	13	.0015 to .200	**NB405013**	Price
Straight, 30° Bent End	1/2	3-1/4	25	.0015 to .035	**NB405012**	Price
Tapered	1/4	3	26	.0015 to .025	**NB405026T**	Price

Starrett Thickness Gages

MADE IN THE USA

- Made in a wide range of types and sizes to meet all requirements with 6 up to 26 leaves ranging from .0015" to .200" thick, straight or tapered
- Leaves made of tempered steel, carefully finished to correct thickness, individually tested and marked
- A locking device is furnished on most gages
- Leaves may be easily removed or replaced



Style - Regular				
No. of Leaves	Size of Leaves	Range	Order No.	Price
8	1/2 x 12	.002 to .015	**MV7050654**	Price
9	1/2 x 3-1/32	.0015 to .015	**MV7050649**	Price
13	1/2 x 4-1/2	.0015 to .200	**MV7052464**	Price
13	12.7mm x 114mm	0.04 to 0.50mm	**MV7052465**	Price
13	12.7mm x 77mm	0.03 to 0.50mm	**MV7057086**	Price
20	12.7mm x 77mm	0.05 to 1mm	**MV7055974**	Price
22	1/2 x 3-1/2	.0015 to .035	**MV7057099**	Price
22	1/2	Spark Plugs	**MV7057098**	Price
26	1/2 x 3-1/32	.0015 to .025	**MV7050314**	Price
31	1/2 x 3-1/32	.0015 to .035	**MV7057097**	Price

Style - Tapered				
No. of Leaves	Size of Leaves	Range	Order No.	Price
8	1/2-1/4 x 3-1/32	.002 to .015	**MV7050652**	Price
9	1/2-1/4 x 3-1/32	.0015 to .015	**MV7050650**	Price
9	12.7-7mm x 114mm	0.04 to 0.30mm	**MV7050656**	Price
13	12 - 7.7mm x 152mm	0.03 to 0.50mm	**MV7057088**	Price
26	1/2-1/4 x 3-1/32	.0015 to .025	**MV7050315**	Price

Fowler Thickness Gages



Type	No. of Leaves	Range	Length	Order No.	Price
Inch	10	.0015 to .025	4	**NA5552485005**	Price
Inch	26	.0015 to .025	3	**NA5552485006**	Price
Metric	13	0.05 to 1mm	100mm	**NA5552485008**	Price
Metric	20	0.05 to 1mm	100mm	**NA5552485010**	Price

LANG Feeler Gages

- Equipped with knurled lock-nut which released the blades instantly for rapid selction and when tightened locks the individual blade into working position
- Sizes are permanently etched on each blade



No. of Leaves	Range	Length (in.)	Order No.	Price
25	0.04mm to 1.00mm	3	**KL40FG30**	7.35
25	.0015 to .040	12	**KL4012025**	31.35

LANG Go-No-Go Step Ground Feeler Gauge

- Contains twenty-two 3" x 1/2" step ground blades with thicknesses: .004-.006, .005-.007, .006-.008, .007-.009, .008-.010, .009-.011, .010-.012, .011-.013, .012-.014, .013-.015, .014-.016, .015-.017, .016-.018, .017-.019, .018-.020,.019-.021, .020.-.022, .021-.023, .022-.024, .023.-.025, .024-.026, .025-.027
- Step ground blades are ground at the tip .002" less than the normal blade thickness to permit a quick check for proper setting or clearance
- Equipped with a knurled lock-nut for instant blade release and when tightened locks the individual blade into working position
- Both decimal and metric sizes are permanently etched on each blade

Order No.	Price
KL403013A	13.50

BAKER Double End Plug Thread Gages With Handle



Available in Unified Inch Coarse, Unified Inch Fine and ISO Metric Threads

Class of Fit:
Fractional & machine sizes 2B
- Metric sizes 6H



Thread Type - UNC		
Size	Order No.	Price
4-40	NB7304402B	Price
6-32	NB7306322B	Price
8-32	NB7308322B	Price
10-24	NB7310242B	Price
1/4-20	NB7316202B	Price
5/16-18	NB7320182B	Price
3/8-16	NB7324162B	Price
7/16-14	NB7328142B	Price
1/2-13	NB7332132B	Price

Thread Type - UNF		
Size	Order No.	Price
4-48	NB7304482B	Price
6-40	NB7306402B	Price
8-36	NB7308362B	Price
10-32	NB7310322B	Price
1/4-28	NB7316282B	Price
5/16-24	NB7320242B	Price
3/8-24	NB7324242B	Price
7/16-20	NB7328202B	Price
1/2-20	NB7332202B	Price

Thread Type - Metric		
Size	Order No.	Price
M2 x .4	NB73020406H	Price
M2.5 x .45	NB73025456H	Price
M3 x .5	NB73030506H	Price
M4 x .7	NB73040706H	Price
M5 x .8	NB73050806H	Price

Thread Type - Metric		
Size	Order No.	Price
M6 x 1	NB73060106H	Price
M8 x 1.25	NB73081256H	Price
M10 x 1.5	NB73101506H	Price
M12 x 1.75	NB73121756H	Price

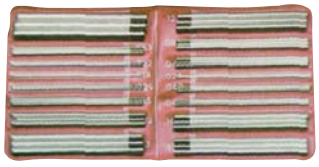
Flynn English or Metric Thread Measuring Sets



- Consists of 16 sets of (3) stainless steel wires, 3 inches long
- Accurate to tolerance of plus or minus .001"
- Supplied in handy leatherette case with chart showing dimensions for measuring threads 40 to 3 TPI

Type	Order No.	Price
60 Degrees-English	GE5011	100.00
60 Degrees-Metric	GE5011M	120.00

Thread Measuring Wire Sets

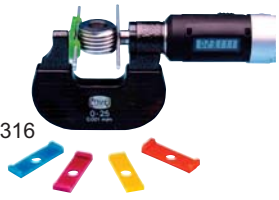


- 48 wires — 16 different sizes
- Measures all threads from 3 - 48 threads per inch
- Measures all metric threads from 0.5 mm to 6 mm
- Laminated chart included
- Furnished in fitted vinyl case

Item	Order No.	Price
Fowler	NA5552485048	Price
PROCHECK	NB5316	Price
Pee Dee	NG4916	Price

P.D. Check Set & Thread Measuring Wire Set

Value Package



- Set consists of (1) GG4516707 & (1) NB5316

Order No.	Price
NB6516707W	Price

Van Keuren Double End TiN Coated Thread Plug Gage With Handle



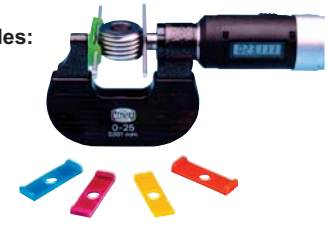
- Manufactured from High Speed Steel and TiN coated
- TiN coating provides added hardness and lubricity which greatly increases gage life and provides greater surface hardness as well as corrosion and abrasion resistance
- Ideal for severe gaging applications

Thread Type - UNC				
	2B		3B	
Size	Order No.	Price	Order No.	Price
1/2-13	VK10500132BSTIN	Price	VK10500133BSTIN	Price
1/4-20	VK10250202BSTIN	Price	VK10250203BSTIN	Price
10-24	VK10190242BSTIN	Price	VK10190243BSTIN	Price
12-24	VK10216242BSTIN	Price	VK10216243BSTIN	Price
2-56	VK10086562BSTIN	Price	VK10086563BSTIN	Price
3/4-10	VK10750102BSTIN	Price	VK10750103BSTIN	Price
3/8-16	VK10375162BSTIN	Price	VK10375163BSTIN	Price
3-48	VK10099482BSTIN	Price	VK10099483BSTIN	Price
4-40	VK10112402BSTIN	Price	VK10112403BSTIN	Price
5/16-18	VK10312182BSTIN	Price	VK10312183BSTIN	Price
5/8-11	VK10625112BSTIN	Price	VK10625113BSTIN	Price
5-40	VK10125402BSTIN	Price	VK10125403BSTIN	Price
6-32	VK10138322BSTIN	Price	VK10138323BSTIN	Price
7/16-14	VK10437142BSTIN	Price	VK10437143BSTIN	Price
8-32	VK10164322BSTIN	Price	VK10164323BSTIN	Price
9/16-12	VK10562122BSTIN	Price	VK10562123BSTIN	Price

Thread Type - UNF				
	2B		3B	
Size	Order No.	Price	Order No.	Price
1/2-20	VK10500202BSTIN	Price	VK10500203BSTIN	Price
1/4-28	VK10250282BSTIN	Price	VK10250283BSTIN	Price
10-32	VK10190322BSTIN	Price	VK10190323BSTIN	Price
12-28	VK10216282BSTIN	Price	VK10216283BSTIN	Price
2-64	VK10086642BSTIN	Price	VK10086643BSTIN	Price
3/4-16	VK10750162BSTIN	Price	VK10750163BSTIN	Price
3/8-24	VK10375242BSTIN	Price	VK10375243BSTIN	Price
3-56	VK10099562BSTIN	Price	VK10099563BSTIN	Price
4-48	VK10112482BSTIN	Price	VK10112483BSTIN	Price
5/16-24	VK10312242BSTIN	Price	VK10312243BSTIN	Price
5/8-18	VK10625182BSTIN	Price	VK10625183BSTIN	Price
5-44	VK10125442BSTIN	Price	VK10125443BSTIN	Price
6-40	VK10138402BSTIN	Price	VK10138403BSTIN	Price
7/16-20	VK10437202BSTIN	Price	VK10437203BSTIN	Price
8-36	VK10164362BSTIN	Price	VK10164363BSTIN	Price
9/16-18	VK10562182BSTIN	Price	VK10562183BSTIN	Price

P.D. Check™ Thread Wire Attachment System

Patented
Makes thread triangles, thread MIC's and all other current methods obsolete
- Fits all micrometers with .245 to .312 anvils
- No more lost thread wire in the chip pans
- Each part fits 2 sizes of wires



Set of 5 Color-Coded Holders includes:
.018" - .022" (Purple)
.024" - .032" (Blue)
.040" - .045" (Yellow)
.055" - .063" (Green)
.072" - .081" (Red)
Fast, Accurate Measurement
Micrometer not included

Order No.	Price
GG4516707	Price

Vermont Gage

MADE IN THE USA

Double End Thread Plug Gages With Handle & Short Form Certification

Gage Class: 2B

- Other sizes, pitches and classes available. Call for price and delivery
- Finest wear resistant steel — lapped finish
- Short form certification included with each gage at no additional charge
- Add $20.00 per member for long form



	NC			NF		
Size	Pitch	Order No.	Price	Pitch	Order No.	Price
#0	-	-	-	80	EY52000802B	Price
#1	64	EY52001642B	Price	72	EY52001722B	Price
#2	56	EY52002562B	Price	64	EY52002642B	Price
#3	48	EY52003482B	Price	56	EY52003562B	Price
#4	40	EY52004402B	Price	48	EY52004482B	Price
#5	40	EY52005402B	Price	44	EY52005442B	Price
#6	32	EY52006322B	Price	40	EY52006402B	Price
#8	32	EY52008322B	Price	36	EY52008362B	Price
#10	24	EY52010242B	Price	32	EY52010322B	Price
#12	24	EY52012242B	Price	28	EY52012282B	Price
1/4	20	EY52040202B	Price	28	EY52040282B	Price
5/16	18	EY52050182B	Price	24	EY52050242B	Price
3/8	16	EY52060162B	Price	24	EY52060242B	Price
7/16	14	EY52070142B	Price	20	EY52070202B	Price
1/2	13	EY52080132B	Price	20	EY52080202B	Price
9/16	12	EY52090122B	Price	18	EY52090182B	Price
5/8	11	EY52100112B	Price	18	EY52100182B	Price
3/4	10	EY52120102B	Price	16	EY52120162B	Price
7/8	9	EY52140092B	Price	14	EY52140142B	Price
1	8	EY52160082B	Price	12	EY52160122B	Price
1-1/8	7	EY52180072B	Price	12	EY52180122B	Price
1-1/4	7	EY52200072B	Price	12	EY52200122B	Price
1-3/8	6	EY52220062B	Price	12	EY52220122B	Price
1-1/2	6	EY52240062B	Price	12	EY52240122B	Price

Vermont Gage

MADE IN THE USA

Go/No-Go Ring Gage With Short Form Certification (Without Holder)

Gage Class: 2A

- Made by the finest gage manufacturers
- Finest wear-resistant steel — lapped finish
- Treated & processed for long life & stability



	NC			NF		
Size	Pitch	Order No.	Price	Pitch	Order No.	Price
#0	-	-	-	80	EY55000802A	Price
#1	64	EY55001642A	Price	-	-	-
#2	56	EY55002562A	Price	64	EY55002642A	Price
#3	48	EY55003482A	Price	56	EY55003562A	Price
#4	40	EY55004402A	Price	48	EY55004482A	Price
#5	40	EY55005402A	Price	44	EY55005442A	Price
#6	32	EY55006322A	Price	40	EY55006402A	Price
#8	32	EY55008322A	Price	36	EY55008362A	Price
#10	24	EY55010242A	Price	32	EY55010322A	Price
#12	24	EY55012242A	Price	28	EY55012282A	Price
1/4	20	EY55040202A	Price	28	EY55040282A	Price
5/16	18	EY55050182A	Price	24	EY55050242A	Price
3/8	16	EY55060162A	Price	24	EY55060242A	Price
7/16	14	EY55070142A	Price	20	EY55070202A	Price
1/2	13	EY55080132A	Price	20	EY55080202A	Price
9/16	12	EY55090122A	Price	18	EY55090182A	Price
5/8	11	EY55100112A	Price	18	EY55100182A	Price
3/4	10	EY55120102A	Price	16	EY55120162A	Price
7/8	9	EY55140092A	Price	14	EY55140142A	Price
1	8	EY55160082A	Price	12	EY55160122A	Price
1-1/8	7	EY55180072A	Price	12	EY55180122A	Price
1-1/4	7	EY55200072A	Price	12	EY55200122A	Price
1-3/8	6	EY55220062A	Price	12	EY55220122A	Price
1-1/2	6	EY55240062A	Price	12	EY55240122A	Price

Vermont Gage

Double End Thread Plug Gages With handle & Short Form Certification - Metric

MADE IN THE USA

Gage Class: 6H



Size	Pitch	Order No.	Price
M1.6	.35	EY52163506H	Price
M2	.4	EY52204006H	Price
M2.5	.45	EY52254506H	Price
M3	.5	EY52305006H	Price
M3.5	.6	EY52356006H	Price
M4	.7	EY52407006H	Price
M4.5	.75	EY52457006H	Price
M5	.8	EY52508006H	Price
M6	1	EY52601006H	Price
M7	1	EY52701006H	Price
M8	1	EY52801006H	Price
M8	1.25	EY52801256H	Price
M10	1.25	EY52101256H	Price
M10	1.5	EY52101506H	Price
M12	1.25	EY52121256H	Price
M12	1.75	EY52121756H	Price
M14	1.5	EY52141506H	Price
M14	2	EY52142006H	Price
M16	1.5	EY52161506H	Price
M16	2	EY52162006H	Price
M18	1.5	EY52181506H	Price
M18	2.5	EY52182506H	Price
M20	1.5	EY52201506H	Price
M20	2.5	EY52202506H	Price

Vermont Gage

Go/No-Go Ring Gage With Short Form Certification Metric (Without Holder)

MADE IN THE USA

Gage Class: 6G



Size	Pitch	Order No.	Price
M1.6	.35	EY55163506G	Price
M2	.4	EY55204006G	Price
M2.5	.45	EY55254506G	Price
M3	.5	EY55305006G	Price
M3.5	.6	EY55356006G	Price
M4	.7	EY55407006G	Price
M4.5	.7	EY55457006G	Price
M5	.8	EY55508006G	Price
M6	1	EY55601006G	Price
M7	1	EY55701006G	Price
M8	1	EY55801006G	Price
M8	1.25	EY55801256G	Price
M10	1.25	EY55101256G	Price
M10	1.5	EY55101506G	Price
M12	1.25	EY55121256G	Price
M12	1.75	EY55121756G	Price
M14	1.5	EY55141506G	Price
M14	2	EY55142006G	Price
M16	1.5	EY55161506G	Price
M16	2	EY55162006G	Price
M18	1.5	EY55181506G	Price
M18	2.5	EY55182506G	Price
M20	1.5	EY55201506G	Price
M20	2.5	EY55202506G	Price

Vermont Gage Go Thread Plug Gages with Short Form Certification (without Handle)

MADE IN THE USA

Gage Class: 2B



- Other sizes, pitches and classes available. Call for price and delivery.
- Finest wear resistant steel lapped finish.
- Short Form Certification included with each Gage At No Additional Charge Add $20.00 per Member for Long Form

	NC			NF		
Size	Pitch	Order No.	Price	Pitch	Order No.	Price
#0	-	-	-	80	EY50000802B	Price
#1	64	EY50001642B	Price	72	EY50001722B	Price
#2	56	EY50002562B	Price	64	EY50002642B	Price
#3	48	EY50003482B	Price	56	EY50003562B	Price
#4	40	EY50004402B	Price	48	EY50004482B	Price
#5	40	EY50005402B	Price	44	EY50005442B	Price
#6	32	EY50006322B	Price	40	EY50006402B	Price
#8	32	EY50008322B	Price	36	EY50008362B	Price
#10	24	EY50010242B	Price	32	EY50010322B	Price
#12	24	EY50012242B	Price	28	EY50012282B	Price
1/4	20	EY50040202B	Price	28	EY50040282B	Price
5/16	18	EY50050182B	Price	24	EY50050242B	Price
3/8	16	EY50060162B	Price	24	EY50060242B	Price
7/16	14	EY50070142B	Price	20	EY50070202B	Price
1/2	13	EY50080132B	Price	20	EY50080202B	Price
9/16	12	EY50090122B	Price	18	EY50090182B	Price
5/8	11	EY50100112B	Price	18	EY50100182B	Price
3/4	10	EY50120102B	Price	16	EY50120162B	Price
7/8	9	EY50140092B	Price	14	EY50140142B	Price
1	8	EY50160082B	Price	12	EY50160122B	Price
1-1/8	7	EY50180072B	Price	12	EY50180122B	Price
1-1/4	7	EY50200072B	Price	12	EY50200122B	Price
1-3/8	6	EY50220062B	Price	12	EY50220122B	Price
1-1/2	6	EY50240062B	Price	12	EY50240122B	Price

Vermont Gage Go Thread Plug Gages with Short Form Certification Metric (without Handle)

Gage Class: 6H

MADE IN THE USA



Size	Pitch	Order No.	Price
M1.6	.35	EY50163506H	Price
M2	.4	EY50204006H	Price
M2.5	.45	EY50254506H	Price
M3	.5	EY50305006H	Price
M3.5	.6	EY50356006H	Price
M4	.7	EY50407006H	Price
M4.5	.7	EY50457006H	Price
M5	.8	EY50508006H	Price
M6	1	EY50601006H	Price
M7	1	EY50701006H	Price
M8	1	EY50801006H	Price
M8	1.25	EY50801256H	Price

Size	Pitch	Order No.	Price
M10	1.25	EY50101256H	Price
M10	1.5	EY50101506H	Price
M12	1.25	EY50121256H	Price
M12	1.75	EY50121756H	Price
M14	1.5	EY50141506H	Price
M14	2	EY50142006H	Price
M16	1.5	EY50161506H	Price
M16	2	EY50162006H	Price
M18	1.5	EY50181506H	Price
M18	2.5	EY50182506H	Price
M20	1.5	EY50201506H	Price
M20	2.5	EY50202506H	Price

Plug Gage Handles Only



Range	Order No.	Price
#0 to #3 - (1.6mm to 2.5mm)	EY56000P	Price
#4 to #6 - (3.0mm to 3.5mm)	EY5600P	Price
#8 to #12 - (4.0mm to 5.0mm)	EY560P	Price
1/4 to 5/16 - (6.0mm to 8.0mm), 1/16 NPT	EY561P	Price
3/8 to 1/2 - (10.0mm to 12.0mm), 1/8 NPT	EY562P	Price
9/16 to 13/16 - (14.0mm to 20.0mm), 1/4-3/8 NPT	EY563P	Price
7/8 to 1-1/8 - (22.0mm to 27.0mm), 1/2-3/4 NPT	EY564P	Price
1-3/16 to 1-1/2 (30.0mm to 36.0mm) and 1 to 2 NTP	EY565P	Price
2-1/2 to 3 NPT	EY566P	Price

Vermont Gage No Go Thread Plug Gages with Short Form Certification (without Handle)

MADE IN THE USA



Gage Class: 2B

	NC			NF		
Size	Pitch	Order No.	Price	Pitch	Order No.	Price
#0	-	-	-	80	EY51000802B	Price
#1	64	EY51001642B	Price	72	EY51001722B	Price
#2	56	EY51002562B	Price	64	EY51002642B	Price
#3	48	EY51003482B	Price	56	EY51003562B	Price
#4	40	EY51004402B	Price	48	EY51004482B	Price
#5	40	EY51005402B	Price	44	EY51005442B	Price
#6	32	EY51006322B	Price	40	EY51006402B	Price
#8	32	EY51008322B	Price	36	EY51008362B	Price
#10	24	EY51010242B	Price	32	EY51010322B	Price
#12	24	EY51012242B	Price	28	EY51012282B	Price
1/4	20	EY51040202B	Price	28	EY51040282B	Price
5/16	18	EY51050182B	Price	24	EY51050242B	Price
3/8	16	EY51060162B	Price	24	EY51060242B	Price
7/16	14	EY51070142B	Price	20	EY51070202B	Price
1/2	13	EY51080132B	Price	20	EY51080202B	Price
9/16	12	EY51090122B	Price	18	EY51090182B	Price
5/8	11	EY51100112B	Price	18	EY51100182B	Price
3/4	10	EY51120102B	Price	16	EY51120162B	Price
7/8	9	EY51140092B	Price	14	EY51140142B	Price
1	8	EY51160082B	Price	12	EY51160122B	Price
1-1/8	7	EY51180072B	Price	12	EY51180122B	Price
1-1/4	7	EY51200072B	Price	12	EY51200122B	Price
1-3/8	6	EY51220062B	Price	12	EY51220122B	Price
1-1/2	6	EY51240062B	Price	12	EY51240122B	Price

Vermont Gage No Go Thread Plug Gages with Short Form Certification Metric (without Handle)

MADE IN THE USA



Gage Class: 6H

Size	Pitch	Order No.	Price
M1.6	.35	EY51163506H	Price
M2	.4	EY51204006H	Price
M2.5	.45	EY51254506H	Price
M3	.5	EY51305006H	Price
M3.5	.6	EY51356006H	Price
M4	.7	EY51407006H	Price
M4.5	.7	EY51457006H	Price
M5	.8	EY51508006H	Price
M6	1	EY51601006H	Price
M7	1	EY51701006H	Price
M8	1	EY51801006H	Price
M8	1.25	EY51801256H	Price

Size	Pitch	Order No.	Price
M10	1.25	EY51101256H	Price
M10	1.5	EY51101506H	Price
M12	1.25	EY51121256H	Price
M12	1.75	EY51121756H	Price
M14	1.5	EY51141506H	Price
M14	2	EY51142006H	Price
M16	1.5	EY51161506H	Price
M16	2	EY51162006H	Price
M18	1.5	EY51181506H	Price
M18	2.5	EY51182506H	Price
M20	1.5	EY51201506H	Price
M20	2.5	EY51202506H	Price

Vermont Gage American National Taper Pipe Thread Plug Gages

MADE IN THE USA



Gage Class: L1

- Handle sold separately
- ANPT and six-step available - call for price and delivery
- Short form certification included with each gage at no additional charge - add $30.00 per member for long form

Size	Pitch	NPT		NPTF	
		Order No.	Price	Order No.	Price
1/16	27	EY60001NPTL1	Price	EY60001NPTFL1	Price
1/8	27	EY60002NPTL1	Price	EY60002NPTFL1	Price
1/4	18	EY60004NPTL1	Price	EY60004NPTFL1	Price
3/8	18	EY60006NPTL1	Price	EY60006NPTFL1	Price
1/2	14	EY60008NPTL1	Price	EY60008NPTFL1	Price
3/4	14	EY60012NPTL1	Price	EY60012NPTFL1	Price
1	11-1/2	EY60016NPTL1	Price	EY60016NPTFL1	Price
1-1/4	11-1/2	EY60020NPTL1	Price	EY60020NPTFL1	Price
1-1/2	11-1/2	EY60024NPTL1	Price	EY60024NPTFL1	Price
2	11-1/2	EY60032NPTL1	Price	EY60032NPTFL1	Price
2-1/2	8	EY60040NPTL1	Price	EY60040NPTFL1	Price
3	8	EY60048NPTL1	Price	EY60048NPTFL1	Price

Vermont Gage

MADE IN THE USA

Go Thread Ring Gages With Short Form Certification



Gage Class: 2A

- Made by the finest gage manufacturers
- Finest wear-resistant steel - lapped finish
- Treated & processed for long life & stability
- Other sizes, pitches and classes available - call for price and delivery
- Short form certification included with each gage at no additional charge, add $20.00 per member for long form

	NC			NF		
Size	Pitch	Order No.	Price	Pitch	Order No.	Price
#0	-	-	-	80	EY53000802A	Price
#1	64	EY53001642A	Price	72	EY53001722A	Price
#2	56	EY53002562A	Price	64	EY53002642A	Price
#3	48	EY53003482A	Price	56	EY53003562A	Price
#4	40	EY53004402A	Price	48	EY53004482A	Price
#5	40	EY53005402A	Price	44	EY53005442A	Price
#6	32	EY53006322A	Price	40	EY53006402A	Price
#8	32	EY53008322A	Price	36	EY53008362A	Price
#10	24	EY53010242A	Price	32	EY53010322A	Price
#12	24	EY53012242A	Price	28	EY53012282A	Price
1/4	20	EY53040202A	Price	28	EY53040282A	Price
5/16	18	EY53050182A	Price	24	EY53050242A	Price
3/8	16	EY53060162A	Price	24	EY53060242A	Price
7/16	14	EY53070142A	Price	20	EY53070202A	Price
1/2	13	EY53080132A	Price	20	EY53080202A	Price
9/16	12	EY53090122A	Price	18	EY53090182A	Price
5/8	11	EY53100112A	Price	18	EY53100182A	Price
3/4	10	EY53120102A	Price	16	EY53120162A	Price
7/8	9	EY53140092A	Price	14	EY53140142A	Price
1	8	EY53160082A	Price	12	EY53160122A	Price
1-1/8	7	EY53180072A	Price	12	EY53180122A	Price
1-1/4	7	EY53200072A	Price	12	EY53200122A	Price
1-3/8	6	EY53220062A	Price	12	EY53220122A	Price
1-1/2	6	EY53240062A	Price	12	EY53240122A	Price

Vermont Gage

MADE IN THE USA

No-Go Thread Ring Gage With Short Form Certification



Gage Class: 2A

	NC			NF		
Size	Pitch	Order No.	Price	Pitch	Order No.	Price
#0	-	-	-	80	EY54000802A	Price
#1	64	EY54001642A	Price	72	EY54001722A	Price
#2	56	EY54002562A	Price	64	EY54002642A	Price
#3	48	EY54003482A	Price	56	EY54003562A	Price
#4	40	EY54004402A	Price	48	EY54004482A	Price
#5	40	EY54005402A	Price	44	EY54005442A	Price
#6	32	EY54006322A	Price	40	EY54006402A	Price
#8	32	EY54008322A	Price	36	EY54008362A	Price
#10	24	EY54010242A	Price	32	EY54010322A	Price
#12	24	EY54012242A	Price	28	EY54012282A	Price
1/4	20	EY54040202A	Price	28	EY54040282A	Price
5/16	18	EY54050182A	Price	24	EY54050242A	Price
3/8	16	EY54060162A	Price	24	EY54060242A	Price
7/16	14	EY54070142A	Price	20	EY54070202A	Price
1/2	13	EY54080132A	Price	20	EY54080202A	Price
9/16	12	EY54090122A	Price	18	EY54090182A	Price
5/8	11	EY54100112A	Price	18	EY54100182A	Price
3/4	10	EY54120102A	Price	16	EY54120162A	Price
7/8	9	EY54140092A	Price	14	EY54140142A	Price
1	8	EY54160082A	Price	12	EY54160122A	Price
1-1/8	7	EY54180072A	Price	12	EY54180122A	Price
1-1/4	7	EY54200072A	Price	12	EY54200122A	Price
1-3/8	6	EY54220062A	Price	12	EY54220122A	Price
1-1/2	6	EY54240062A	Price	12	EY54240122A	Price

Vermont Gage

MADE IN THE USA

Go Thread Ring Gages With Short Form Certification Metric



Gage Class: 6G

Size	Pitch	Order No.	Price
M1.6	.35	EY53163506G	Price
M2	.4	EY53204006G	Price
M2.5	.45	EY53254506G	Price
M3	.5	EY53305006G	Price
M3.5	.6	EY53356006G	Price
M4	.7	EY53407006G	Price
M4.5	.75	EY53457006G	Price
M5	.8	EY53508006G	Price
M6	1	EY53601006G	Price
M7	1	EY53701006G	Price
M8	1	EY53801006G	Price
M8	1.25	EY53801256G	Price

Size	Pitch	Order No.	Price
M10	1.25	EY53101256G	Price
M10	1.5	EY53101506G	Price
M12	1.25	EY53121256G	Price
M12	1.75	EY53121756G	Price
M14	1.5	EY53141506G	Price
M14	2	EY53142006G	Price
M16	1.5	EY53161506G	Price
M16	2	EY53162006G	Price
M18	1.5	EY53181506G	Price
M18	2.5	EY53182506G	Price
M20	1.5	EY53201506G	Price
M20	2.5	EY53202506G	Price

Vermont Gage

MADE IN THE USA

No-Go Thread Ring Gage With Short Form Certification Metric



Gage Class: 6G

Size	Pitch	Order No.	Price
M1.6	.35	EY54163506G	Price
M2	.4	EY54204006G	Price
M2.5	.45	EY54254506G	Price
M3	.5	EY54305006G	Price
M3.5	.6	EY54356006G	Price
M4	.7	EY54407006G	Price
M4.5	.75	EY54457006G	Price
M5	.8	EY54508006G	Price
M6	1	EY54601006G	Price
M7	1	EY54701006G	Price
M8	1	EY54801006G	Price
M8	1.25	EY54801256G	Price

Size	Pitch	Order No.	Price
M10	1.25	EY54101256G	Price
M10	1.5	EY54101506G	Price
M12	1.25	EY54121256G	Price
M12	1.75	EY54121756G	Price
M14	1.5	EY54141506G	Price
M14	2	EY54142006G	Price
M16	1.5	EY54161506G	Price
M16	2	EY54162006G	Price
M18	1.5	EY54181506G	Price
M18	2.5	EY54182506G	Price
M20	1.5	EY54201506G	Price
M20	2.5	EY54202506G	Price

Vermont Gage

MADE IN THE USA

American National Taper Pipe Thread Ring Gages



- **Gage Class: L1**
- Short form certification included with rach gage at no additional charge
- Add $35.00 per member for long form
- ANPT and Six-Step available. Call for price and delivery

		NPT		NPTF	
Size	Pitch	Order No.	Price	Order No.	Price
1/16	27	EY61001NPTL1	Price	EY61001NPTFL1	Price
1/8	27	EY61002NPTL1	Price	EY61002NPTFL1	Price
1/4	18	EY61004NPTL1	Price	EY61004NPTFL1	Price
3/8	18	EY61006NPTL1	Price	EY61006NPTFL1	Price
1/2	14	EY61008NPTL1	Price	EY61008NPTFL1	Price
3/4	14	EY61012NPTL1	Price	EY61012NPTFL1	Price
1	11-1/2	EY61016NPTL1	Price	EY61016NPTFL1	Price
2	11-1/2	EY61032NPTL1	Price	EY61032NPTFL1	Price
3	8	EY61048NPTL1	Price	EY61048NPTFL1	Price
1-1/2	11-1/2	EY61024NPTL1	Price	EY61024NPTFL1	Price
1-1/4	11-1/2	EY61020NPTL1	Price	EY61020NPTFL1	Price
2-1/2	8	EY61040NPTL1	Price	EY61040NPTFL1	Price

Vermont Gage

Ring Gage Holder

MADE IN THE USA



Range	Order No.	Price
#0 to #12 - (1.6mm to 6.0mm)	EY561R	Price
1-3/16 to 1-1/2 - (30.0mm to 39.0mm)	EY566R	Price
1/4 to 5/16 - (7.0mm to 8.0mm)	EY562R	Price
3/8 to 1/2 - (9.0mm to 12.0mm)	EY563R	Price
7/8 to 1-1/8 - (20.0mm to 28.0mm)	EY565R	Price
9/16 to 13/16 - (14.0mm to 18.0mm)	EY564R	Price

PROCHECK 4 Pc. Screw Pitch and Radius Gage Set

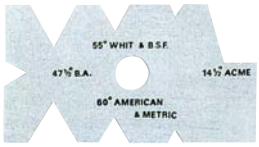
Consists of 1 each:
- Screw pitch & center gage
- 1/32″ to 1/4″ Radius gage set
- 17/32″ to 1/2″ Radius gage set
- 51 Leaf screw pitch gage – 4 to 84 pitch



Order No.	Price
NB654PCRS	Price

PROCHECK 2" Screw Cutting Gage

- Made from ground stainless steel
- Clearly etched graduation
- Used for gaging thread profiles 47-1/2° British Association, 14-1/2° Acme, 60° American and metric, 55° Whitworth and BSF



Order No.	Price
NE60MGC2254	Price

PROCHECK Twist Drill Grinding Gage

- For twist drills with acute angle of 118° up to 2″ (50mm) diameter
- Made from stainless steel



Order No.	Price
NE60MGG2376	Price

PROCHECK Universal Grinding Gage

- Made of polished stainless steel
- Clearly etched graduations
- Combines twist drill grinding gages, thread gage
- Measures square and hexagonal angles of 120°, 118°, 90°, 60°, 55°



Order No.	Price
NE60MGG2377	Price

SHINWA Tapered Bore Gage With Rule

- Stainless steel
- Fully heat treated with photographically etched graduations
- 1-15mm Tapered gage with 130mm rule



Order No.	Price
MZ75700S	Price

Starrett Taper Gages

MADE IN THE USA

- For determining hole size in dies and all kinds of other work
- Reads in thousandths of an inch
- All sizes are made from spring tempered steel approximately .012″ thick and have a locking device which makes it possible to lock any leaf in position for use



No. of Leaves	Range	Length	Order No.	Price
8	1/10 to 1/2 x .001	2-1/2	**MV7051290**	Price
10	1/2 to 1 x .001	2-3/4	**MV7051291**	Price
10	2 to 12mm	64mm	**MV7056031**	Price
13	12 to 25mm	70mm	**MV7056032**	Price

Starrett Taper Gage

MADE IN THE USA

- A highly useful tool especially valuable on bearing work and for gaging slots
- Made of quality tool steel 7/16″ wide by 6-1/4″ long
- Accurately tapered throughout its entire length for quick, convenient measuring of slot widths, etc
- One side is graduated from .010″ to .150″ in thousandths and the reverse side from 0.3mm to 4mm in one-twentieth of a mm (.05mm)



Range	Order No.	Price
.010 to .150 (0.3 to 4mm)	**MV7051292**	Price

Tapered Bore Gages

WORLD CLASS QUALITY

- 1 to 15mm Range
- Handy gage for measuring cylindrical bores, bearing work and for gaging slots
- Made from matte finished stainless steel
- Clearly etched graduations for precise measurement



Item	Brand Name	Order No.	Price
PROCHECK	Procheck	**NE60MGB0359**	Price
SHINWA	Shinwa	**MZ75700A**	Price

PROCHECK Center Squares

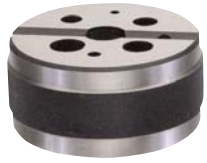
- 1 to 15mm Range
- Handy gage for measuring cylindrical bores, bearing work and for gaging slots
- Made from matte finished stainless steel
- Clearly etched graduations for precise measurement



Size (in.)	Order No.	Price
3	**NE60MCS2257**	Price
1-1/2	**NE60MCS2256**	Price

PROCHECK Bench Block

- 3″ Diameter, 1-1/2″ height
- 7 Hole, 1/8″ to 5/8″ diameter
- Very handy for holding work when driving pins, drilling, etc
- V-groove across the face accommodates round and odd shaped stock
- Smooth finish on the face preserves the work being held
- Hardened and ground knurled body for a firm grip



Order No.	Price
NE60MBB0370	Price

Mitutoyo Pitch Gages

- Pitch size stamped on each gage
- Whitworth, Unified and Metric Pitch Gages available

Class - Metric				
Inches Range	No. of Leaves	Description	Order No.	Price
4-42 / .4 to 7mm	51	Unified 60°	**MT80188-151**	Price
.4 to 7mm	18	.4, .5, .75, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	**MT80188-121**	Price
.4 to 7mm	21	.4, .5, .7, .75, .8, .9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	**MT80188-122**	Price



MADE IN THE USA

MT80188-151

Class - Thread Gaging				
Inches Range	No. of Leaves	Description	Order No.	Price
4 to 42 TPI	30	Unified 60°	**MT80188-111**	Price
4-42TPI	30	Whitworth 55°	**MT80188-101**	Price
4-60TPI	28	Whitworth 55°	**MT80188-102**	Price
4 to 84 TPI	51	Unified 60°	**MT80950-253**	Price



MT80950-253

Screw Pitch Gages

MADE IN THE USA

- Narrow designed blades permit use for internal and external screw threads
- Correct pitch is determined by matching blade teeth with threads
- Each blade made from finest quality steel available
- Each blade clearly marked with proper thread size
- Blades protected in sturdy steel case
- Locking device at each end to secure all blades for storage, or position an individual blade for use



NB405651



NB405642

Type of Blades	No. of Blades	No. of Groups	Blades Included	Order No.	Price
English Gage	22	2	9-40"	**NB405622**	Price
English Gage	28	2	2-1/4-28"	**NB405626†**	Price
English Gage	28	2	4-80"	**NB405628**	Price
English Gage	30	2	4-42"	**NB405642**	Price
English Gage	51	3	4-84"	**NB405651**	Price
English/Metric	28	2	4-56" & .50-6.00mm	**NB405629**	Price
English Gage	30	2	6-60"	**NB405660**	Price
Metric Gage	18	2	.5 to 7mm	**NB405617†**	Price
Metric Gage	28	2	.25 to 2.50mm	**NB405625**	Price

† Center Gage with coarse and fine notch included

PRO-CHECK Screw Pitch Gages

No. of Leaves	No. of Pitch	Order No.	Price
30	4 to 42	**NE60SP30**	Price
51	4 to 84	**NE60SP51**	Price



PRO-CHECK Acme Screw Pitch Gages

No. of Leaves	Type	Order No.	Price
12	Metric	**NB4530720**	Price
16	Inch	**NB4529730**	Price



Fowler Screw Pitch Gages

Features #52-470 Series

- Pressure angle 14.5°
- Involute Gear Tooth Gages easily determine pitch diameter of involute gears from 6-80 and 2-5 in inch and .5-5 and 6-12 in metric

Features #52-485-015, 020, & 051

- Narrow designed blades permit use for internal and external screw threads
- Locking device at each end to secure all blades for storage or position
- Correct pitch is determined by matching blade teeth with threads
- Precisely ground and finished
- Blades marked with thread size

Features #52-485-030

- Acme Screw Pitch Gages (29° angle) made of fine stainless steel. Each blade is 3″/90mm long and .03″/.8mm thick.



NA5552485051



NA5552470141



NA5552485015



NA5552470151



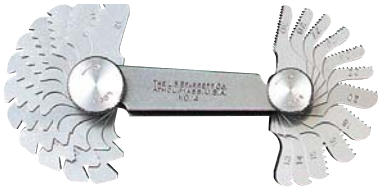
NA5552485030

Description	Order No.	Price
Acme Screw Pitch Gage with 16 blades (1,1-1/3,1-1/2,1-3/4,2,2-1/2,3,3-1/2,4,5,6,7,8,9,10 & 12 pitch); 29° angle	**NA5552485030**	Price
Involute Gear Tooth Gages-Inch Series; 14 leaves w/ ring holder. Pitch range: 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 36, 40, 48, 64, 80	**NA5552470140**	Price
Involute Gear Tooth Gages-Inch Series; 7 leaves w/ ring holder. Pitch range: 2,2-1/2,3,3-1/2,4,4-1/2,5	**NA5552470141**	Price
Involute Gear Tooth Gages-Metric Series; 13 leaves w/ring holder. Pitch range: 0.5,0.75,1.0,1.25,1.5,1.75, 2,2.5,2.75,3,3.25,3.5,3.75,4.0,4.5,5	**NA5552470150**	Price
Involute Gear Tooth Gages-Metric Series; 7 leaves w/ ring holder. Pitch range: 6,7,8,9,10,11,12	**NA5552470151**	Price
Screw Pitch Gage with 24 blades, Metric Series;0.25mm-6.0mm	**NA5552485020**	Price
Screw Pitch Gage with 30 blades, Inch Series; 4-42 pitch standard V thread	**NA5552485015**	Price
Screw Pitch Gage with 51 blades, Inch Series; 4-84 pitch standard V thread	**NA5552485051**	Price

Starrett® Screw Pitch Gages

MADE IN THE USA

- For gaging V, Unified, American National and U.S. Standard 60°, and Whitworth Standard 55° threads
- All have a locking device at both ends of case for locking any leaf of leaves in desired position
- Leaves on all gages have special narrow design for easy checking of internal threads in nuts, etc. and flatted teeth for checking both V and American National or U.S. Standard threads
- Each leaf stamped with number of threads per inch



No. of Leaves	Range of Threads	Order No.	Price
27	2-1/4 to 28 Threads per inch	**MV7050588**	Price
28	4 to 80 Threads per inch	**MV7052486**	Price
30	4 to 42 Threads per inch	**MV7050035**	Price
51	4 to 84 Threads per inch	**MV7052484**	Price

Starrett® No. 284 29° Acme Screw Thread Gage

- Standard for grinding and setting tools when cutting Acme threads
- Range from 1 to 10 threads per inch
- Angles and edges of gage are hardened, ground and carefully tested



Range Pitch	Order No.	Price
1 to 10	**MV7051319**	Price

PEC Tools Acme Screw Thread Gage

MADE IN THE USA

- Used for grinding and setting tools when cutting acme threads whose sides have an inclination of 14-1/2° (29° included angle)
- Angles and edges are precision ground
- Black-oxidized finish provides protection against corrosion



Order No.	Price
NB405640	Price

Mitutoyo Center Gage

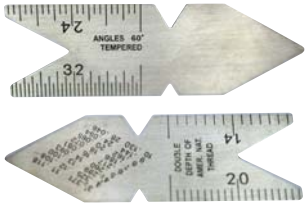
- Useful for finding the number of threads per inch
- Graduated in 14ths, 20ths, 24ths and 32nds



Order No.	Price
MT80950-201	Price

PROCHECK Center Gage

- Useful for finding the number of threads per inch
- Graduated in 14ths, 20ths, 24ths and 32nds

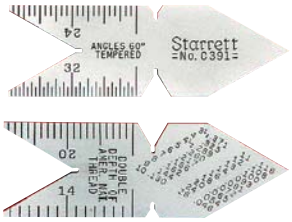


Order No.	Price
NE60CG60	Price

Starrett® Center Gages

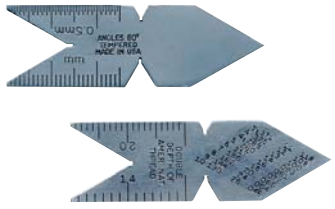
MADE IN THE USA

- Used for finding number of threads per inch
- No. C391 has table of double depths of threads for determining size of tap drills and has scale graduated in 14ths, 20ths, 24ths, and 32nds
- All gaging surfaces ground



Starrett No.	Description	Order No.	Price
C391	American Unified National Standard, 60°	**MV7051475**	Price
C396	Whitworth or English Standard, 55°	**MV7051477**	Price
C398M	Metric Standard, 60°	**MV7051478**	Price

Fowler Center Gages



Type	Graduation	Order No.	Price
Inch	14ths, 20ths, 24ths, 32nds	**NA5552505001**	Price
Metric	.5mm and 1mm	**NA5552505002**	Price

PEC Tools Center Gages



Type	Description	Order No.	Price
American National or U.S. Standard Center Gage	14th and 20ths graduations provided on one side, 24ths and 32nds on reverse side. Gage also features a table of double depths of threads for slecting size of tap drills.	**NB405031**	Price
Metric Center Gage	Graduated in mm and 0.5mm	**NB405032**	Price

PROCHECK Thread Measuring Triangles

- Checks all standard 60° threads for class of thread fit
- To find out the class of thread fit, just attach the triangles to your micrometer with the rubber holders, insert into thread, and mike the distance over the thread (refer to our included chart to read the class of fit)
- Each set includes a pair of triangles, 2 rubber holders, and reference chart
- **Micrometer NOT included**

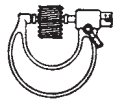




Order No.	Price
NB75Z9035	Price

Micrometer Thread Tip

Attachments for Micrometer w/.270" Diameter Anvil & Spindles





- Adapts a regular outside micrometer to measure threads
- Each tip is approximately .150" long: the set of two are approximately .300" (this dimension must be subtracted when reading is taken)
- Sold in pairs

For Threads	Order No.	Price
8 - 13 TPI	**MX5019T813**	Price

PROCHECK Z-Axis Setters

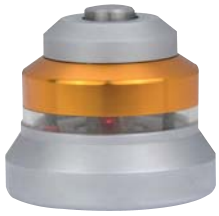
- Establish “0” reference point with built in indicator
- Positioning accuracy and repeatability .0004”/0.01mm
- 1.45”/37mm Square



Height (in.)	Style	Order No.	Price
2	-	**PC21ZAS2CNC**	Price
4	With Magnetic Base	**PC21ZAS4CNCM**	Price

PROCHECK Electronic Z Indicator

- Axial Preset Gage
- Red lamp with light up when touched
- Use vertical or horizontally
- 13.5mm Magnet Base diameter
- .56mm Probe Face diameter



Order No.	Price
PC20EZAP2M	Price

Fowler Mirage Tool Set

- Easy and affordable way to set Z depths quickly and accurately
- Slowly lower cutting tool toward Tool Set indicator will light upon contact
- Can be operated directly off table or from machine vise
- Aluminum contact face eliminates carbide chipping on cutting tools
- Repeatability: .0002”
- Block dimensions: 1” x 2” x 3”
- Batteries included



Order No.	Price
NA5554575750	Price

Fowler Electronic Edge Finders

MADE IN THE USA

- Six equally spaced light ports provide visibility at any angle
- Read off any electrically conductive metal
- Edge finder lights instantly when stylus touches work edge
- Repeatability: .0002”
- Furnished complete with LED, 12 volt battery and protective case
- **Along with light indication, model NA55-54575650 emits an audible “beep” at moment of contact.**



NA5554575600



NA5554575625



NA5554575650

Stylus	Shank	Audible	Order No.	Price
.200	1/2	No	**NA5554575600**	Price
.200 (Ball)	1/2	No	**NA5554575625**	Price
.400 (Ball)	3/4	Yes	**NA5554575650**	Price

Mitutoyo Zero-Setters

- Fast and sure establishment of “0” reference point with built-in indicator
- Spring loaded setting face to safe guard against damage from over run.
- Body diameter 1.44” (36.5mm)
- Wooden case included



Height	Graduation	Order No.	Price
1	.0005	**MT80950-111**	Price
25mm	.01mm	**MT80950-112**	Price

Electronic Edge Finder

MADE IN THE USA

1/2” Shank

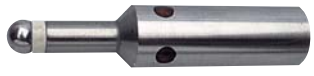


- Quick, precise
- .200 x 5/8 stylus
- 4” long
- Lights instantly when touched to work surface
- Replacement bulb - Order No. GA52MM1Bulb
- Replacement battery - Order No. KA56L92BP2 (2Pack)

Order No.	Price
GA52MM1	Price

Electronic Edge Finder/Probes

- Extremely accurate, all precision ground
- Steel ball for easy coordinate calculating
- As probe, can be used to measure inside, outside, height and depth



Brand Name - Quality Import			
Description	**Accuracy**	**Order No.**	**Price**
10mm Ball Diameter, 20mm Shank	.005mm TIR, 97mm OAL	**NA45EF1**	Price

Brand Name - USA			
Description	**Accuracy**	**Order No.**	**Price**
.400" Ball Diameter, 3/4 Shank	.00002 TIR, 3-7/8" OAL	**NB5150000**	Price

3-Dimensional Electronic Sensor (x,y,z)

Quick Detection of Position



- Operates in horizontal or vertical position
- Travel zone for all 3 axis .200
- Shank size .750
- Probe diameter .200
- Repeatability ±.0005

MADE IN THE USA



Order No.	Price
NB5150003	Price

Electronic Pre-Set Gage

- Designed of one-piece construction which gives strength and accuracy
- Made of high-quality tool steel hardened to 60 Rc
- Precision ground on all surfaces
- Four highly visible LED lights
- Easily replaced LED lamp and battery
- Repeatability T.I.R. within .0002” – 0.006mm

MADE IN THE USA



Order No.	Price
NB5150002	Price

Fisher Machine Edge Finders

- Gives the machine operator an audible clicking sound when the tip jumps
- Black tip on the audible edge finder is easy to see when it jumps


NG49AA


NG49AB


NG49ABB

Type - Audible Edge Finder		
Description	Order No.	Price
1/4" x .200	**NG49A250**	Price
3/8" x .200	**NG49AA**	Price
1/2" x .200	**NG49AB**	Price
1/2" x .500	**NG49ABB**	Price
3/4" x .750	**NG49A750**	Price

Type - Non-Audible Edge Finder		
Description	Order No.	Price
1/2" x .200 x Point Micro Center Finder	**NG49F**	Price
1/2" x Point Micro Center Finder	**NG49D**	Price
3/8" x .200 x Point Micro Center Finder	**NG49E**	Price
3/8" x Point Micro Center Finder	**NG49C**	Price

Fowler Edge Finder Sets

Conventional Only Contains:

- 3/8 x .200" Edge finder
- 1/2 x .200" Edge finder
- 1/4 x .200" Edge finder
- 3/4 x .750" Edge finder
- Complete in fitted case

Audible/Conventional Contains:

- 3/8" x .200" Combo edge & center finder
- 1/2 x .200" Combo edge & center finder
- 3/8 x .200" Audible edge finder
- 1/2 x .500" Audible edge finder
- Complete in fitted case



Type	Order No.	Price
Combo Audible/Conventional Edge & Center Finder Set	**NA5552575100**	Price
Conventional Edge Finder Set	**NA5552575125**	Price

TESA / brown & sharpe & Fisher Machine 4 Pc. Micro Edge Finder Sets

- Four of the most popular edge finders in one convenient set



	Brown & Sharpe		Fisher Machine	
Description	Order No.	Price	Order No.	Price
4 Pc. Audible Edge Finder Set	**MV4528448**	Price	**NG494AEF**	Price
4 Pc. Edge Finder Set	**MV4528447**	Price	**NG494EF**	Price

Fowler Edge & Center Finders

- Edge and center finders are hardened and ground all over
- Accurately locates the starting point for all types of machine work and jig boring
- Accuracy = .0002"
- Price includes fitted vinyl case


NA5552575010


NA5552575015


NA5552575020


NA5552575025


NA5552575030


NA5552575035

Description	Order No.	Price
Edge Finder 3/8" x .200"	**NA5552575010**	Price
Edge Finder 1/2" x .200"	**NA5552575015**	Price
Combo Edge & Center Finder 3/8" x .200"	**NA5552575020**	Price
Combo Edge & Center Finder 1/2" x .200"	**NA5552575025**	Price
Edge Finder 3/8" x 10mm	**NA5552575030**	Price
Edge Finder 10mm x 10mm	**NA5552575035**	Price

Individual Edge & Center Finders

- Edge finders accurately locate working edges, shoulders, grooves, center points and scribed lines
- Hardened and centerless ground to precision tolerances


Single End .500"


Double End .200" & .500"


Double End .200"/Point


Single End .200"

				Brown & Sharpe		PEC Tools		General		Procheck		Starrett	
Style	End	Shank (in.)	Tip Size (in./mm)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
Center	Single End	3/8	Point	-	-	-	-	-	-	**NE60089**	Price	-	-
Center	Single End	1/2	Point	-	-	-	-	-	-	**NE60090**	Price	-	-
Center	Single End	1/2	.500	-	-	**NB40420041**	Price	-	-	-	-	-	-
Edge	Single End	1/2	.200	**MV4527031**	Price	**NB404200039**	Price	-	-	**NE60088**	Price	-	-
Edge	Single End	1/2	.500	**MV4544595**	Price	**NB404200077**	Price	**NE50260**	Price	**NE60083**	Price	-	-
Edge	Single End	3/8	.200	**MV4527030**	Price	**NB404200038**	Price	**NE50263**	Price	**NE60085**	Price	**MV7053062**	Price
Edge	Double End	1/2	.200 x .500	**MV4544596**	Price	**NB404200076**	Price	**NE50262**	Price	**NE60084**	Price	-	-
Edge/Center	Double End	3/8	.200 x Point	-	-	**NB404200073**	Price	-	-	**NE60087**	Price	-	-
Edge/Center	Double End	1/2	.200 x Point	-	-	**NB404200074**	Price	**NE50264**	Price	**NE60086**	Price	**MV7053063**	Price
Edge	Single End	10mm	6mm	-	-	-	-	-	-	-	-	**MV7056041**	Price
Edge	Single End	10mm	10mm	**MV4527037**	Price	-	-	-	-	-	-	-	-
Edge	Single End	9.5mm (.375)	10mm	**MV4527036**	Price	-	-	-	-	-	-	-	-
Edge	Double End	3/8	.200 x .375	**MV4527032**	Price	-	-	-	-	-	-	-	-
Edge	Double End Long	1/2	.200 x .500	**MV4527033**	Price	-	-	-	-	-	-	-	-
Edge	Audible	3/8	.200	**MV4527038**	Price	-	-	-	-	-	-	-	-
Edge	Audible	1/2	.200	**MV4527039**	Price	-	-	-	-	-	-	-	-
Edge	Audible	1/2	.500	**MV4527042**	Price	-	-	-	-	-	-	-	-
Edge	Audible	9.5mm (.375)	10mm	**MV4527040**	Price	-	-	-	-	-	-	-	-
Edge	Audible	10mm	10mm	**MV4527041**	Price	-	-	-	-	-	-	-	-

Fowler Optical Center Punch

- Efficient and precision punching of hole centers
- Magnified center dot and circle for accurate punching
- Used for marking, punching, stoking and riveting
- 9x acrylic lens



Order No.	Price
NA5552500075	Price

CNC Machine Set-Up Gage

- Designed especially for the CNC slant bed machine - offering a solution to a common tool setting problem previously not addressed by any other tool
- This versatility also lets it work on inverted tools on conventional machines

MADE IN THE USA



Order No.	Price
NB75Z8995	Price

5 Pc. Wiggler Sets

- For accurately locating working points on drill presses, lathes, milling and other machines
- Set consists of snap in holder, needle point attachment, ball contact attachment, disc contact attachment and offset indicator holder
- Supplied in plastic pouch

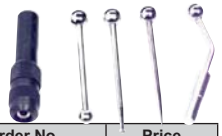


Item	Order No.	Price
PROCHECK	NE60WCFS	Price
PEC TOOLS	NB404100004	Price

TESA TECHNOLOGY | brown & sharpe Wigglers

- Four interchangeable attachments accurately indicate tool-spindle positions relative to ground surfaces, gage blocks, buttons, holes, slots or crossed layout lines for making precise setups
- Chrome plated





Description	Order No.	Price
5 Piece Wiggler Set	MV4544597	Price
Ball Contact Attachment (.250" Diameter)	MV4544598	Price
Disc Contact Attachment (.100" Diameter)	MV4544599	Price
Needle Point Attachment	MV4544601	Price
Offset Indicator Holder	MV4544600	Price
Shank	MV4544602	Price

Starrett® Wiggler or Center Finder

MADE IN THE USA

- Furnished with offset indicator holder and new chuck design to hold all attachments
- Four attachments adapt the tool to countless applications and are snapped in chuck without removing collet nut
- Using offset indicator holder D, the mechanic can sweep holes or OD' s for checking run-out or concentricity, establish center distances, check straightness or alignment of flat surfaces
- With point A, working centers can be accurately located



Description	Order No.	Price
Ball contact only (.250" ball)	MV7053067	Price
Center Finder, and 4 attachments, Complete with Case A, B, C, D	MV7053064	Price
Center Finder, without Indiator holder without case	MV7053065	Price
Disc contact only (.100" disc.)	MV7053068	Price
Offset Indicator Holder Only	MV7053069	Price
Shank with Point Length; Closed-2-3/8", Open-4-1/8", Shank diameter-3/8"	MV7053066	Price

PROCHECK Round Bar Center Finder

- Accurately and quickly locates center on round workpiece
- For execution, place the tool in drill chuck or collet and line up pointer with the line scribed on the shaft
- 3/8" Shank diameter
- 4-1/8" Overall length



Order No.	Price
NE60RBCF38	Price

PEC TOOLS Center Finder

MADE IN THE USA

- Accurately and quickly locates center on round workpieces
- Satin chrome finish
- Place tool in drill chuck or collet and line-up pointer with line scribed on shaft



Order No.	Price
NB404200100	Price

NATIONAL Brass Handle Pin Vise



- Ideal for holding small rods & wires etc
- Heavy knurled brass body
- Overall length 3-1/8″ with holding capacity 0-.028″

Order No.	Price
KS60HMC049	Price

NATIONAL Swivel Head Pin Vise



- Two double end reversible collets are made of hardened tool steel
- 4″ overall and 5/16″ diameter body

Order No.	Price
KS60HMC048	Price

NATIONAL Double End Pin Vise



- Each end has a double end collet which may be reversed to desired size
- Nickel plated body is made of tubing to permit use of long wire or rods
- 3-3/4″ long with 5/16″ body diameter
- Range 0 - .125

Order No.	Price
KS60HMC042	Price

NATIONAL Single End Individual Pin Vises & 4 Pc. Set

- For holding small rods, wire, drills, taps, and other small tools
- Tool steel collets are hardened and grip firmly when screw chuck is tightened
- Nickel plated body is hollow to permit holding of long rods of wire

Range	Order No.	Price
0 to .040	KS60HMC044	Price
.032 to .059	KS60HMC045	Price
.052 to .122	KS60HMC046	Price
.118 to .188	KS60HMC047	Price
4 Piece Set 0 to .188"	KS60HMC043	Price



TESA / brown & sharpe Series 790 Pin Vises

- Handy, sure-grip tool holders feature a through hole in the handle for holding wires, taps, drills, files, scriber points and the like
- Reduced handle diameter easy rotation between thumb and finger
- Available individually in four sizes or as a complete set
- Provided in a chrome finish



Range Inch/Metric	B & S No.	Order No.	Price
0-.040 / 0-1.0	599-790-1	MV4545387	Price
.030 to .062 / 0.75 - 1.5	599-790-2	MV4545388	Price
.050 to .125 / 1.27 - 3.1mm	599-790-3	MV4545389	Price
.115 to .197 / 2.9 - 5mm	599-790-4	MV4545390	Price
Set of 4 Pin Vises in fitted plastic case	599-790	MV4545386	Price

TESA / brown & sharpe No. 793 Pin Chucks

- Provide convenient means for holding small work on lathes and other machines
- Set consists of a chuck and three interchangeable collets to hold work from .010″ to .100″ diameter

B&S No.	Order No.	Price
599-793	MV4546480	Price



GENERAL Swivel Head Pin Vise

- An exceptional pin vise for delicate work on models, instruments, and jewelry
- Single collet made of hardened tool steel
- Has large free wheeling swivel head
- 4” overall and 5/16” diameter body
- Capacity .10 to .125” (.0 to 3.2mm)



Order No.	Price
NE5092	Price

GENERAL Adjustable Pin Vise

- Use for electronic assembling, toolmaking, model making and hobbies
- Holds small drills, burrs, wires, files, reamers and other small tools
- 3 jaw hardened steel keyless chuck, sturdy plastic handle
- Overall length 6-7/8”; body diameter 1”
- Capacity .040 to .250” (1 mm to 6.4 mm)

Order No.	Price
NE5093	Price



GENERAL Double End Pin Vise

- Each end has a double end collet which may be reversed to desired size
- Nickel plated body is made of tubing to permit use of long wire or rods
- 3-3/4 long with 5/16″ body diameter
- Capacity .0 to .125″ (0 mm to 3.2 mm)



Order No.	Price
NE5090	Price

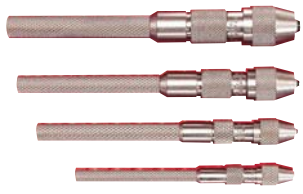
GENERAL Single End Pin Vise Set

- For holding small rods, wire, drills, taps and other small tools
- Tool steel collets are hardened and grip firmly when screw chuck is tightened
- Nickel plated body is hollow to permit holding of long rods of wire
- Available in individual sizes
- Conforms to government specs. GGG-V-412a



Range	General Model No.	Order No.	Price
0 to .055 / 0 - 1.40mm	94A	NE5094A	Price
.025 to .075 / 64 - 1.91mm	94B	NE5094B	Price
.045 to .125 / 1.14 - 3.2mm	94C	NE5094C	Price
.110 to .187 / 2.80 - 4.75mm	94D	NE5094D	Price
Set of 4 sizes, 94A-D (0-.187) packed in plastic case	S94	NE50S94	Price

Starrett® Pin Vises



- Smooth handle allows vise to be held in machine chucks or collets
- Hole through entire length to accommodate stock up to the full size capacity to end allows fast opening and closing
- End of the handle is knurled and has a smaller diameter than chuck to allow rapid opening and closing and rapid rotation between the thumb and finger when filing or forming small work
- All four vises have heavy nickel plated finish

Range (in./mm)	Set Complete	Order No.	Price
.010 to .055 / 0.25 - 1.4mm	Single End	MV7051136	Price
.025 to .075 / 0.64 - 1.9mm	Single End	MV7051137	Price
.045 to .135 / 1.2 - 3.4mm	Single End	MV7051138	Price
.110 to .200 / 2.8 - 5.1mm	Single End	MV7051139	Price
.010-.200 / 0.25mm - 5.1mm	4 piece set in Protective Case	MV7051140	Price

Drafting Compasses

Standard Friction Compass

- Solid brass legs with satin chrome finish
- Legs are jointed for increased range


MZ85211TC


MZ85212TC


MZ85213TC

Diameter	Style	Order No.	Price
1/16 to 14	Drafting Compass	MZ85211TC	Price
1/16 to 14	Drafting Compass with Pen Adapter	MZ85212TC	Price

10 Pc. Drafting Instrument Set

Set includes:

- 4-3/4" and 5-3/4" Spring blade adjustable ruling pens
- 6" Pivot compass with pen, pencil and lengthening bar
- 3-3/4" Bow pencil, 4" bow divider and 6" tfriction divider
- Screwdriver and spare lead supplied in spare parts holder



Order No.	Price
MZ854360TC	Price

Precision Pencil Compass

- Carpentry quality pencil compass is made of long lasting die cast, rust resistant metal
- Spring tension adjustment for marking up to 8″ diameters
- Scribe guide for edge marking
- For use with pencil (included) or slim ballpoint pen

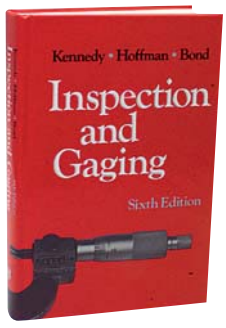


Order No.	Price
NE50842	Price

Inspection and Gaging

Sixth Edition

By **Clifford W. Kennedy, Edward G. Hoffman, & Steven D. Bond**
1987, 654pp., illus
Concise yet comprehensive, training manual and reference provides the many phases of inspection work and their application.

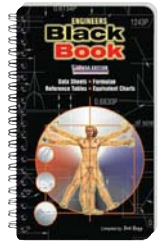


Features:

- Discusses a range of manual and automatic measuring devices along with their specific functions and the specialized functions involved with their use
- Analyzes the methods and duties of inspectors

Order No.	Price
MY5011496	Price

Engineers Black Book

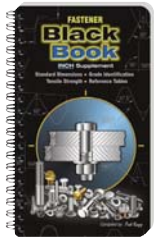


- Matt-laminated and greaseproof pages ensure glare-free reading and long life
- Wire-bound so book lies flat
- Drill point sharpening guide included
- Color coded for easy reading and reference
- Engineering drawing standards, formulae, spur gear calculations, equivalent charts
- Tapping drill sizes, sheet metal and wire gages, keys and keyways
- Weights of materials, lubricants-coolants, hardening and tempering surface coatings
- Speeds and feeds, keys and keyways

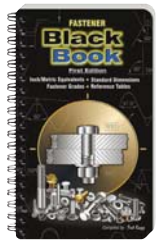
Order No.	Price
MY55EBB3INCH	Price

Fastener Black Books

Technical fastener resource consolidating the abundance of fastener information into an easy-to-read user friendly format. Pages are durable, tear resistant and glare-free. Pages can be easily wiped clean, so this reference book is perfect for shop environments. Great tool for engineers, apprentices, trainees, tradesmen, machinists, machine shops, tool rooms, technical colleges, fabricators, sheet metal workers, etc.



MY55FBBINCH



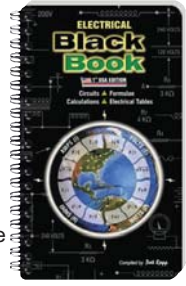
MY55FBBUSA

Description	Order No.	Price
Inch Size Only	MY55FBBINCH	Price
Inch/Metric	MY55FBBUSA	Price

Electrical Black Book

with Digital Multimeter

Technical electrical resource book consolidating the most commonly used electrical information into an easy-to-read user friendly format. Included is a handy pocket digital multimeter. Pages are durable, tear resistant and glare-free. Pages can be easily wiped clean, so this reference book is perfect for shop environment. Great tool for engineers, apprentices, electricians, trainees, tradesmen, machinists, machine shops, tool rooms, technical colleges, fabricators, sheet metal workers, etc.

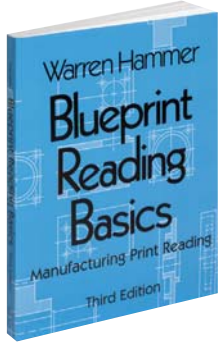


Order No.	Price
MY55ELBBNEC2014	Price

Blueprint Reading Basics

By Warren Hammer

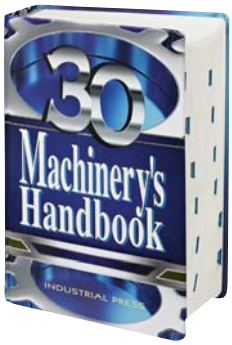
- Includes many new worksheets designed to facilitate the reader's ability to form a mental picture from a drawing
- Each chapter contains an introduction, a detailed review, illustrations, review questions, and worksheets
- Industry standards (including ASME Y 14.5, Geometric Dimensioning and Tolerancing), practices, and copies of industrial blueprints are included throughout
- Written in a easy-to-understand manner that is appropriate for machinists, mechanics, technicians, and inspectors, as well as students taking blueprint reading, machine shop or tool and die courses



Order No.	Price
MY5030268	Price

Machinery's Handbook and Machinery's Handbook Guide

30th Edition



Contains useful, practical, and hard-to-find information, and provides a wealth of engineering and shop standards, illustrations, formulas, and readable tables and graphs.
Authors: Oberg, Jones, Horton & Ryffel, 2,896 Pages

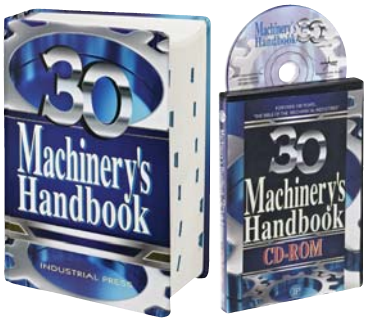
Features:

- Provides extensive coverage of mathematics, cutting tools, speeds and feed, screw thread systems, metallurgy, metrology, and other critical topics
- Metric and inch dimensions of: bolts, nuts, and screws; rivets; pins and dowels; tapers; steels and non-ferrous metals; and more
- Cross-references important subjects for greater convenience

Description	Order No.	Price
30th Edition Handbook Guide 4.4 x 7"	**MY5030947**	Price
30th Edition Large Print Handbook 7 x 10"	**MY5030923**	Price
30th Edition Toolbox Handbook 4.6 x 7"	**MY5030916**	Price

Machinery's Handbook on CD

30th Edition

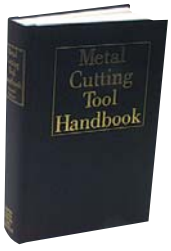


- Complete text search
- Interlinks to related topics and examples
- Extensive cross-referencing between CD and print edition makes them perfect complements

Description	Order No.	Price
30th Edition CD-ROM	**MY5030930**	Price
30th Edition Large Print 7 x 10"	**MY5030978**	Price
30th Ed. Toolbox Handbook 4.6 x 7" & CD-ROM Combo	**MY5030961**	Price

Metal Cutting Tool Handbook

By **United States Cutting Tool Institute**

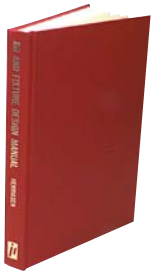


Covers advances in technology, tooling, materials and designs.

Order No.	Price
MY5011771	Price

Jig and Fixture Design Manual

By **Eric K. Henriksen**
1973, 312pp., illus.



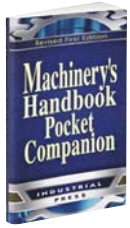
Features:

- Describes fixture components in full
- Presents the fundamental principles for efficiently combining the components into successful fixtures
- Applies basic engineering principles to the mechanical and economical analysis of the complete design
- Includes metric conversion tables and appendices on transfer of tolerances, measuring of angles in radians, and the dimensioning of fixture by stress analysis

Order No.	Price
MY5010988	Price

Machinery's Handbook Pocket Companion

30th Edition



Machinery's Handbook Pocket Companion puts all the basic information you need right at your fingertips. Extremely concise yet authoritative, this valuable tool draws on Machinery's Handbook's wealth of tables, charts and text to provide quick and easy access to the most basic data.

Order No.	Price
MY5030954	Price

Machinery's Handbook & Calc Pro 2 Combos

30th Edition



The Machinery's Handbook along with a Calc Pro 2

Calculator Features:

- Materials function: users can choose from 20 popular materials
- Processes: face milling, end milling, slot milling, turning, boring, drilling
- Speeds and feeds
- Work in and convert between US and metric units

Description	Order No.	Price
30th Ed. Large Print Handbook 7 x 10" & Calc Combo	**MY5036109**	Price
30th Ed. Toolbox Handbook 4.6 x 7" & Calc Combo	**MY5036093**	Price

Machine Shop Practice Second Edition

Volume I: 1981, 496pp., illus. Volume II: 1981, 517pp., illus.
Karl H. Moltrecht

Features:



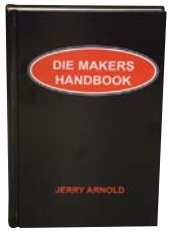
- Now offers sections on numerical control, grinding wheels, single point cutting tools and tool wear, basic drilling machine setups, and formulas
- Gives greater attention to methods of setting up the workpiece on milling machines, horizontal boring machines, planners and shapers
- Includes more than 760 illustrations on 70 tables.

Type	Order No.	Price
Volume I	**MY5011267**	Price

Type	Order No.	Price
Volume II	**MY5011321**	Price

Die Makers Handbook

By Jerry Arnold



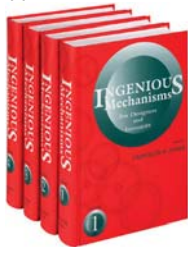
- Expressly prepared to help avoid the pitfalls associated with stamping designs, die designs and stamping die function
- Numerous illustrations, this book is especially designed for advanced apprentices, journeymen and students of die design

Order No.	Price
MY5031322	Price

Ingenious Mechanisms for Designers and Inventors

By **Franklin D. Jones; Volume I & II**
By **Holbrook L. Horton; Volume III**
By **John A. Newell & Holbrook L. Horton; Volume IV**

Gives inventors and designers concise, illustrated descriptions of many of the most ingenious mechanical movements ever designed. Fully describes and illustrates with working diagrams cam applications, special cam designes, interlocking devices, valve diagrams, tripping or stop mechanisms, feeding and ejecting mechanisms for power presses, and more.



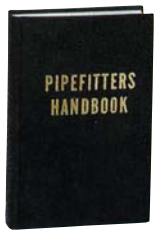
Description	Order No.	Price
Complete Set of Four	**MY5010848**	Price
Volume I; 536pp., illus.	**MY5010295**	Price
Volume III; 536 pp., illus.	**MY5010317**	Price
Volume IV; 493 pp., illus.	**MY5010325**	Price
Volume II; 538 pp., illus.	**MY5010309**	Price

Pipefitters Handbook

By Forrest R. Lindsay

464 pp., illus.

This handy reference contains thousands of facts and figures relevant to pipefitters, steamfitters — anyone concerned with layout and installation of pipe.

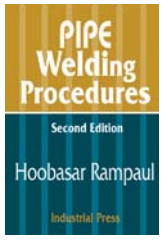


Order No.	Price
MY5030199	Price

Pipe Welding Procedures

Second Edition

A standard reference for decades, this new edition of **Pipe Welding Procedures** continues to reinforce the welder's understanding of procedures. Describes in detail the manipulating procedures used to weld pipe joints. Readers will find useful information on heat input and distribution, essentials of shielded metal-arc technology, distortion, pipe welding defects, welding safety.

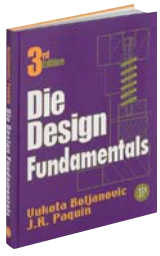


Order No.	Price
MY5031411	Price

Die Design Fundamentals

By **J.R. Paquin & R.E. Crowley**

Gives graphically detailed assistance in understanding the principles of die design.

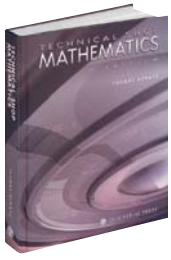


Order No.	Price
MY5011720	Price

Technical Shop Mathematics

By John G. Anderson

Suitable for home study, classroom use, or as a superior reference guide for the shop professional, this practical text presents a review and introduction to basic shop mathematics in a straight-forward manner.

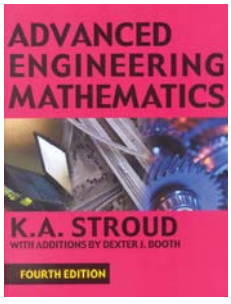


Order No.	Price
MY5011453	Price

Advanced Engineering Mathematics

Fourth Edition

This best-selling reference is almost like having your own personal tutor. You proceed at your own rate and any difficulties you may encounter are resolved before you move on to the next topic. A step-by-step programmed approach that is complemented by hundreds of worked examples and exercises.

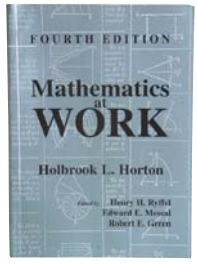


Order No.	Price
MY5031691	Price

Math At Work

Fourth Edition

By Holbrook L. Horton, Henry H. Ryffel, Edward Messal and Bob Green



- Helps its readers solve a wide array of mathematical problems specifically related to mechanical work
- Entire text has been carefully reviewd and edited where necessary for greater clarity and accuracy
- Now includes trigonometric and common logarithm tables
- This book is renowned for its ability to duplicate, as far as possible, personal instruction

Order No.	Price
MY5030830	Price

Shop Reference For Students & Apprentices

Secon Edition

By **Edward G. Hoffman & Christopher J. McCauley editors**



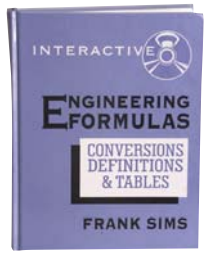
- Compiled for students and apprentices in vocational schools, technical institutes, and in the shop
- Covers areas of prime interest to draftsman, machinists, tool makers, diemakers, and other shop personnel
- It will prepare students to use the standard reference Machinery's Handbook upon entering their professional careers

Order No.	Price
MY5030792	Price

Engineering Formulas Interactive

By Frank Sims

With Intellisim™, a powerful interactive math engine developed by Intellipro, Inc., you can use the CD-ROM to quickly perform dynamic calculations and analysis on over 100 of the most popular equations in this book.

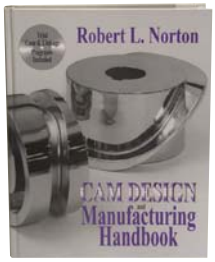


- Change parameters at will
- Calculate results easily; Graphically plot results
- Evaluate formulas for a range of values
- Copy formulas and results to clipboard
- Supports algebraic, differential and mixed equation systems
- Customize formulas and modify and combine each formula on the CD-ROM
- Contains over 450 units conversions, 180 term definitions plus every significant engineering subject with applicable formulas
- Properties of materials, formulas for geometric figures and formulas for structural sections are all included
- System requirements: Windosw 3.1/95/98/NT; CD-ROM drive, 16MN available RAM; 10MB available HD space, VGA compatible monitor

Order No.	Price
MY5030873	Price

CAM Design and Manufacturing Handbook

By **Robert L. Norton, P.E.**

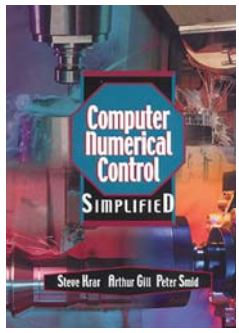


- Provides all the information needed to properly design, model, analyze, specify, and manufacture cam-follower systems
- Complete coverage of: Proper Cam Design Techniqus, Single- and Multi-Dwell Cams, Classical Cam Functions, Polynomial Cams, Spline Functions for Cams, Pressure Angle & Radius of Curvature, Radial and Barrel Cams, Translating & Oscillating Followers, Roller & Flat-Faced Followes, Forward & Inverse Dynamic Analyses, Residual Vibrations Polydyne & Splinedyne Cams, Cam Profile Definition, Cutter Compensation, Conjugate Cams, Cam Materials & Manufacturing Techniques, Stress Analysis of the Cam Follower Joint, Measurement of Cam Follower Dynamics, Extensive Bibliography of the Cam Literature, Case Studies of Cam Designs, Cam and Linkage Design Programs on CD-Rom
- 90-day Trial demonstration copy of the Professional Version of Dynacam for Windows V.7.0

Order No.	Price
MY5031225	Price

CNC Simplified

Includes CD-ROM



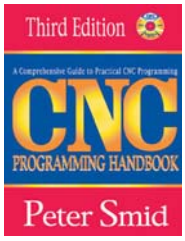
This textbook covers everything from programming basics to bench-top teaching machines to industrial machines to milling and turning programming to an introduction to CAD/CAM. What's more, a CAD/CAM SOFTWARE PROGRAM, included in each book, makes it possible to design a part on the computer, generate machining codes, and simulate the tool path (cutting action) to check for programming errors.

CD is not compatible with Windows Vista or higher

Order No.	Price
MY5031330	Price

CNC Programming Handbook

By **Peter Smid**

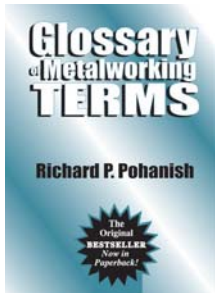


- Both milling and turning topics are discussed, with nearly 1000 illustrations, tables, formulas and actual examples
- This book is well sutied for use as a basic text in a wide variety of CNC training programs

Order No.	Price
MY5033474	Price

Glossary of Metalworking Terms

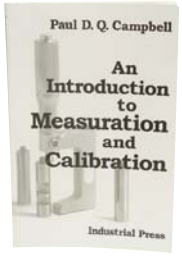
As the only modern glossary of terms related to the fabrication and use of metals and metallurgy, **Glossary of Metalworking Terms** covers more than 4,000 essential general and functional terms used in all areas related to metalworking and manufacturing technology. Many entries are cross-referenced to make related topics instantly accessible.



Order No.	Price
MY5031284	Price

An Introduction To Measuration & Calibration

By Paul Campbell



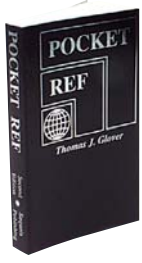
- Accuracy and consistency are essential to success in manufacturing, and the technology of precision measurement is fully explained and illustrated in this important book
- Both apprentice and practicing engineers will discover a vast amount of new material than can be applied to virtually any imaginable measurement of calibration task

Order No.	Price
MY5030601	Price

Pocket Reference Book

By Thomas J. Glover

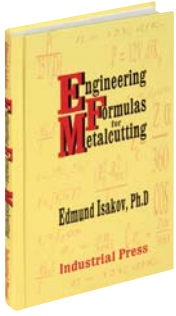
Excellent reference for engineers, managers, foremen, purchasing agents, maintenance persons and crafsmen. Contains tables, maps, formulas, constants and conversions.



Order No.	Price
MY50235903	Price

Engineering Formulas for Metalcutting

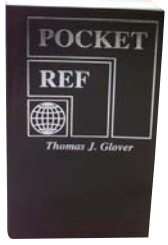
A unique and invaluable resource, **Engineering Formulas for Metalcutting** will enable users to calculate necessary speeds, feeds and required machining power in order to maximize the productivity of cutting. Providing information on formulas and their applications, describes mechanical properties of the most popular work materials, such as steels, cast irons and nonferrous alloys.



Order No.	Price
MY5031748	Price

Pocket PC Reference Book

New 4" x 6" Size and 1000+ pages
Hard-to-find information for IBM PC's and compatibles and extensive PC industry phone book. The new 4" x 6" size packs 10 additional sections and thousands of updates.



Order No.	Price
MY50235962	Price

Power Tools



Air Hose, Blow Guns, Spray Guns & Accessories E43-E55

Angle Grinders E21-E23

Band Saw Blades E36, E61-E82

Circular Saw Blades E36

Drill Motors & Drivers E3-E8

Die Grinders E9-E14, E15, E18-E20

Dynabrade Tools & Accessories E10-E12, E14

Filters, Regulators & Lubricators E49, E55-E58

Hand Grinders & Accessories E25-E32

Heat Guns, Blowers E2

Hole Cutters, Magnetic Drills, Saws E83-E91

Impact Wrenches & Ratchets E37-E41

Jig & Reciprocating Saw Blades E59-E60

Sanders, Polishers & Accessories E15-E20

Saws E33-E35

Shears & Nibblers E24

Utility Hammers & Chippers E42

STEINEL HB1750 Profesional Heat Blower

The Steinel® HB 1750 Heat Gun has easily interchangeable color coded variable temperature keys for the right temperature every time . Each key is designed to give specific temperature outputs from 200° and 1200° F.

- Easily interchangeable color coded variable temperature keys.
  Blue: 200°F to 300°F
  Gray: 300°F to 500°F
  Yellow: 500°F to 750°F
  Orange: 750°F to 1000°F
  Red: 1000°F to 1200°F
- Fully adjustable, quick lock stand for hands-free operation and stores temperature keys for convenience
- Powerful turbine blower with air delivery rate up to 23 CFM
- Gun cylinder will not get hot while in operation
- Lightweight and quiet, with a soft ergonomic grip
- Plug-in heating element takes only seconds to change
- Convenient slide switch (Off / Cool / Hot) and baffle to adjust air and temperature within key ranges

Use for a variety of applications including shrink wrapping, desoldering, paint drying, paint stripping, welding plastics, softening adhesives, and thawing frozen pipes



Order No.	Price
PD5534750	Price

STEINEL SV750 High Output Blower

- Self cooling output tube
- Adjustable air baffles
- Slide switch with cool air stage
- Removable stand
- Double insulated
- Temperature range: 750°F - 1000°F (399°C - 538°C)
- Voltage: 120VAC / 60Hz output: 1750 watt
- One year limited warranty



Order No.	Price
PD5534075	Price

Milwaukee Heavy Duty Heat Gun

- Impact resistant heating element
- Efficient soft air velocity: increases surface temperature to the required working temperature faster than conventional hot air heat guns
- Cool air inlet design allows air movement at peak efficiency
- Support stand enables gun to be stationary for workbench or assembly work
- Dual temperature 570°F and 1000°F
- 3 position rocker switch — off / high / low
- Volts: 120 AC
- Amps: 11.6
- Air temperature: 570°F / 1000°F
- Net weight: 1.6 lbs



Order No.	Price
PD5089756	Price

STEINEL SV 800 Dual Temperature Heat Gun

- Dual temperature: Low: 600°F High: 950°F
- Cool air stage: enables rapid cool down
- Output: 1300 watts
- Voltage: 120 VAC / 60 Hz
- Certifications: UL / C-UL
- 1 Year Warranty



Order No.	Price
PD5534100	Price

STEINEL SV 803 Variable Temperature Heat Gun - 3 Stage Air Flow

- Variable temperature: Up to 1050°F
- 3 Stage airflow: cool air, 140°F, low speed, high speed
- Output: 1400 watts
- Voltage: 120 VAC / 60 Hz
- Certifications: UL / C-UL
- 1 Year warranty



Order No.	Price
PD5534103	Price

STEINEL SV 803K Heat Gun Kit

- Includes: SV803 Heat gun, 39mm reflector nozzle, 75mm spreader nozzle and heavy duty carrying case
- Variable temperature: up to 1050°F
- 3 Stage airflow: cool air, 140°F, low speed, high speed
- Output: 1400 watts
- Voltage: 120 VAC/60Hz
- Certifications: UL/C-UL
- 1 Year warranty



Order No.	Price
PD5534104	Price

metabo 2-Speed Variable Temperature Heat Gun

- Double insulation Variospeed (V) electronics
- Powerful motor with double fan for sustained power, even under heavy loads in continuous use
- Easy to clean air filter
- Air flow and temperature are easily adjusted with one hand
- Air flow 8.5/15.9 CFPM
- Rated input watts: 1400
- Air temperature: 572/932°F
- Tool weight: 2.0 lbs



Order No.	Price
PD35H1600	Price

DEWALT Heat Gun Model D26950

- Variable temperature control
- Built-in overload protection
- Built-in kickstand provides greater stability
- Ergonomic comfort grip
- Temperature range: 150°F to 1,100°F
- 13 Amp, 1,550 watts



Order No.	Price
PD20D26950	Price

Air Powered Drills - 3/8" Chuck


PF50CP9285


PF50CP887


PF50CP879


PF52FP3501


PJ707525


PF52UT8895

Item	Features	Style	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Exhaust Type	Order No.	Price
Chicago Pneumatic	General maintenance with power, speed and productivity, good for vertical drilling and screw driving, powerful motor, industrial qualtity Jacobs chuck, ergonomic grip, handle exhaust	Pistol Grip, Reversible	2000	6 CFM	1/4 NPT	3/8-24	Handle	**PF50CP9790**	Price
	General maintenance with power, speed and productivity, good for vertical drilling and to reach confined areas, built in regulator for efficient control	Straight	2800	6.75 CFM	1/4 NPT	3/8-24	Handle	**PF50CP887**	Price
	Variable speed type motor, teasing throttle, industrial quality chuck	Right Angle, Reversible	1800	5.25 CFM	1/4 NPT	3/8-24	Handle	**PF50CP879**	Price
	Variable speed type motor, teasing throttle, industrial quality chuck	Right Angle, Reversible	2000	5.3 CFM	1/4 NPT	3/8-24	Handle	**PF50CP879C**	Price
Air Supreme	Lightweight for ease of operation, muffled exhaust for quiet operation, precision key type chuck	Non-Reversible	2200	17 CFM	1/4 NPT	3/8-24	Handle	**PJ707500**	Price
	Precision key type chuck, muffled exhaust for quiet operation	Reversible	1800	17 CFM	1/4 NPT	3/8-24	Handle	**PJ707525**	Price
JET	Standard keyed chuck, Sealed ball bearing design, Variable-speed throttle, Side-mounted forward/reverse switch, Lightweight aluminum construction	Reversible	2000	4 CFM	1/4 NPT	-	Handle	**PJ80505600**	Price
FLORIDA PNEUMATIC	High speed, compact design for close quarter work, direct drive can't be damaged by overloading, lightweight nylon design	Non-Reversible	20000	4 CFM	1/4 NPT	3/8-24	Front	**PF52FP3050**	Price
	High speed, straight handle design for hard-to-reach areas, direct drive can't be damaged by overloading	Straight, Non-Reversible	20000	4 CFM	1/4 NPT	3/8-24	Front	**PF52FP3501**	Price
	Jacobs® industrial chuck, Through handle exhaust with built-in silencing system, Ergonomically designed handle with "Softouch" coating. Best for continuous drilling in high volume applications	Non-Reversing	2600	4.6 CFM	1/4 NPT	3/8-24	Handle	**PF52UT8895**	Price
	Jacobs® industrial chuck, Through handle exhaust with built-in silencing system, Ergonomically designed handle with "Softouch" coating. Best for continuous drilling in high volume applications	Reversing	1800	4.6 CFM	1/4 NPT	3/8-24	Handle	**PF52UT8895R**	Price
	Trigger mounted reverse for easy operation, triple planetary gears for durability, through handle exhaust	Reversible	1800	3.5 CFM	1/4 NPT	3/8-24	Handle	**PF52UT8833R**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Air Powered Drills - 1/2" Chuck


PJ707550


PF50CP9286


PJ707575

Item	Features	Style	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Exhaust Type	Order No.	Price
Chicago Pneumatic	Variable speed type motor, teasing throttle, industrial quality chuck	Pistol Grip, Side Handle, Rev.	840	6.9 CFM	1/4 NPT	3/8-24	Handle	**PF50CP9789C**	Price
	Lightweight for ease of use, triple idler planetary gears, double ball bearing supported spindle, teasing throttle	Pistol Grip, Side Handle, Rev.	600	6 CFM	1/4 NPT	3/8-24	Handle	**PF50CP9286C**	Price
Air Supreme	Precision key type chuck, planetary type gearing, auxiliary side handle included	Non-Reversible	500	17 CFM	1/4 NPT	3/8-24	Handle	**PJ707550**	Price
	Precision key type chuck, quick reverse lever, auxiliary side handle included	Reversible	750	17 CFM	1/4 NPT	3/8-24	Handle	**PJ707575**	Price
AIRCAT	Pistol Grip	Reversible	400	6 CFM	1/4 NPT	-	Pistol	**PF544450**	Price

Air Powered Drills - 1/2" Chuck

Item	Features	Style	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Exhaust Type	Order No.	Price
JET	Industrial gear train, Ergonomic "D" style handle with inside teasing trigger, External munted Zerk grease fittings, Auxilliary handle	-	1200	5 CFM	3/8 NPT	1/2-20	Handle	**PJ80550670**	Price
	Standard keyed chuck, Sealed ball bearing design, Variable speed throttle, Side-mounted, forward/reverse switch, Auxiliary side handle	-	800	4 CFM	1/4 NPT	3/8-24	Handle	**PJ80505601**	Price
	Jacobs® industrial chuck, Through handle exhaust with built-in silencing system, Ergonomically designed handle with “Softouch” coating. Best for continuous drilling in high volume applications	Non-Reversing	500	4.6 CFM	1/4 NPT	3/8-24	Handle	**PF52UT8896**	Price
	Jacobs® industrial chuck, Through handle exhaust with built-in silencing system, Ergonomically designed handle with “Softouch” coating. Best for continuous drilling in high volume applications	Reversing	400	4.6 CFM	1/4 NPT	3/8-24	Handle	**PF52UT8896R**	Price
	Pistol Grip	Reversible	100000	5 CFM	1/4 NPT	-	Pistol	**PF52UT8090Q**	Price
	Pistol Grip	Reversible	1800	4 CFM	1/4 NPT	-	Pistol	**PF52UT2964A**	Price
	Pistol Grip	Reversible	800	4 CFM	1/4 NPT	-	Pistol	**PF52UT2960**	Price
	Reliable planetary gear system, Trigger mounted reverse switch. Best for intermittent general drilling and MRO	Reversing	1800	4 CFM	1/4 NPT	3/8-24	Rear	**PF52UT2855R**	Price
	Trigger mounted reverse for ease of operation, removable auxiliary handle for control	Reversible	800	4 CFM	1/4 NPT	3/8-24	Handle	**PF52FP786**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Variable Speed Reversing Drills



PD20DW235G



PD652614



PD50020020



PC65PC700D

Brand	Chuck Size (in.)	Chuck Style	No Load Amps	RPM	Order No.	Price
DEWALT	3/8	Keyless	6.7	0 - 1200	**PD20DW222**	Price
	3/8	Keyed	7.0	0 - 1200	**PD20DW223G**	Price
	1/2	Keyed	7.8	0 - 850	**PD20DW235G**	Price
	1/2	Keyed	10.0	0 - 1200 / 0 - 3,500	**PD20DWD520K**	Price
	1/2	Keyed	10.5	0 - 1200	**PD20DWD220**	Price
	1/2	Keyless	10.0	0 - 1000	**PD20DWD215G**	Price
	3/8	Keyless	8.0	0 - 2500	**PD20DWD115K**	Price
Milwaukee	3/8	Keyed	7.0	0 - 1200	**PD50020020**	Price
	3/8	Keyless	7.0	0 - 1200	**PD50020220**	Price
	1/2	Keyed	5.5	0 - 850	**PD5002346**	Price
	1/2	Keyed	8.0	0 - 850	**PD50029920**	Price
	1/2	Keyed	8.0	0 - 850	**PD50030020**	Price
PORTER CABLE	3/8	Keyless	6.0	0 - 2500	**PC65PC600D**	Price
	1/2	Keyed	7.0	0 - 800	**PC65PC700D**	Price

Hammer Drills







PD20D25262K

Item	Chuck Capacity (in.)	Chuck Style	Cord	No Load Amps	RPM	Order No.	Price
DEWALT	1	SDS	8', 2 Conductor	8.0	0 - 1150	**PD20D25323K**	Price
	1	SDS	Yes	8.0	0-1500	**PD20D25262K**	Price
	1-1/8	SDS	yes	8.5	0-1450	**PD20D25263K**	Price
Milwaukee	1/2	Keyed	3-Wire Quik-Lok Cord Set- 2 Speeds	6.5	0 - 950 / 0 - 3200	**PD50537820**	Price

DEWALT 20V MAX XR Brushless 1" D-Handle Rotary hammer

- Allows the tool to maintain speed through the entire application without bogging down
- Optimized 2.6J mechanism
- Durable German Engineered mechanism for long service life
- Compact size
- 4.0Ah packs provide all day run time
- SDS+ Chuck type
- 0 - 5550 Blows per minute
- VSR Switch
- 3/16 - 5/8" Optimal concrete drilling



Model No.	Voltage	RPM	Order No.	Price
DCH133M2	20V	0-1500	**PD20DCH133M2**	Price

DEWALT 60V MAX Brushless 1-9/16" SDS MAX Combination Hammer Kit

- 6.1 J's of impact energy provides corded power without the cord
- SHOCKS - Active Vibration Control reduces vibration felt by the use of the handles
- E-Clutch for maximum control in bind-up situations
- Brushless motor for all day runtime and durability
- 3,150 Blows per minute
- (2) 20V/60V MAX FLEXVOLT 9.0Ah Batteries
- Side Handle



Model No.	Voltage	RPM	Order No.	Price
DCH481X2	60V	0-540	**PD20DCH481X2**	Price

D-Handle Drills



PD20DW130V



PD5010071



PD5016101

Brand	Chuck Capacity (in.)	Chuck Style	Cord	No Load Amps	RPM	Order No.	Price
DEWALT	1/2	Keyed	8' Double Insulated Cord	9.0	0 - 550	**PD20DW130V**	Price
Milwaukee	1/2	Keyed	3-Wire Quik-Lok Cord	7.0	0 - 600	**PD5010071**	Price
	1/2	Keyed	Double Insulated Cord	7.0	650	**PD5016101**	Price

Angle & Specialty Drills



PD50DW160V



PD5031076



PD50DWD460K



PD50DWD460K

Item	Chuck Capacity (in.)	Chuck Style	Type	No Load Amps	RPM	Order No.	Price
DEWALT	1/2	Keyed	Right Angle Drill Kit	11.0	0 - 330 / 0 - 1300	**PD20DWD460K**	Price
	3/8	Keyed	Right Angle Drill Kit	4.0	0 - 1200	**PD20DW160V**	Price
	1/2	Keyed	Right Angle Drill Kit	7.0	600 Straight, 400/900 Right Angle	**PD20DW120K**	Price
Milwaukee	3/8	Keyed	Close Quarter Angled Drill	3.5	0 - 1300	**PD50037020**	Price
	1/2	Keyed	Right Angle Drill Kit	7.0	0 - 500	**PD5031076**	Price

DEWALT Heavy Duty Cordless Compact Drill Driver Kits

- Keyless chuck
- All metal planetary gears
- Variable RPM in all speeds
- Includes batteries, side handles, driver bit and case
- Metal ratcheting chuck with carbide jaws



Model No.	Voltage	Chuck Size (in.)	Max Power (VWO)	No. of Speed Settings	RPM	Clutch Settings	Order No.	Price
DCD780C2	20V	1/2	350	2	0-600 / 0-2000	15	**PD20DCD780C2**	Price
DCD785C2	20V	1/2	350	2	0-600 / 0-2000	14	**PD20DCD785C2**	Price
DCD980M2	20V	1/2	535	3	0-2000	22	**PD20DCD980M2**	Price
DC901KL	36V	1/2	750	3	0-400 / 0-1200 / 0-1600	22	**PD20DC901KL**	Price
DCD960KL	18V (XRP)	1/2	450	3	0-500 / 0-1250 / 0-2000	22	**PD20DCD960KL**	Price
DC720KA	18V	1/2	440	2	0-500 / 0-1700	17	**PD20DC720KA**	Price
DCD940KX	18V (XRP)	1/2	480	3	0-450 / 0-1450 / 0-1800	22	**PD20DCD940KX**	Price

XRP™ Batteries have extended run time vs standard batteries

DEWALT Hammer Drills

- 7.8 Amp motor provides high performance and overload protection
- High/low gear for high speed drilling or high toque applications
- Dual mode: hammerdrill/drill for wood, steel or masonry applications
- Lightweight design for easy use and handling in a variety of orientations
- Two-finger trigger for increased comfort
- 360° side handle with depth rod offers greater control, versatility, and increased depth accuracy
- Variable speed allows for precise hole placement on work surface



Model No.	Voltage	Chuck Size (in.)	No. of Speed Settings	RPM	Order No.	Price
DW505	120	1/2	2	0-19,000/0-46,000 BPM	**PD20DW505**	Price
DW505K	120	1/2	2	0-19,000/0-46,000 BPM	**PD20DW505K**	Price

Milwaukee Cordless Drill/Driver Hammer Drill Kits

- Variable speed, reversing motor
- Ratcheting keyless chuck
- Multiple speeds and clutch positions
- V28 Volt battery weighs less than 18 volt batteries
- Lithium-Ion battery maintains power throughout entire discharge cycle, eliminates memory effect



Model No.	Voltage	Chuck Size (in.)	Max. Torque (in/lbs)	No. of Speed Settings	RPM	Hazard Code	Order No.	Price
2407-22	12V	3/8	275 in/lbs	2	0-400, 0-1,500	HAZ05	**PD50240722**	Price
26066CT	18V	1/2	500 in/lbs	2	0-400/0-1,800	HAZ05	**PD50260622CT**	Price
0724-24	28V-Lithion Ion	1/2	600 / BPM 0 - 27000	2	0-600 / 0-1800	HAZ05	**PD50072424**	Price

Milwaukee 4 Pc. Combo Tool Kit

- All the popular tools in a handy carry-all with two batteries and one charger
- Includes hammer drill, reciprocating saw, circular saw and worklight



Voltage	Hazard Code	Order No.	Price
28V-Lithion Ion Kit	HAZ05	**PD50092829**	Price

DEWALT 20V MAX Rotary Hammer / Impact Driver Combo Kit

- Compact for fitting in tight spaces and increasing productivity
- 3 LED lights make it ideal for working in the dark
- D-Handle
- Lightweight high-performance
- Durable German Engineered mechanism
- 2.6 joules of impact energy
- (2) Tools included
- (2) 5Ah Lithium Ion Batteries and Charger
- Keyless chuck
- Bag included



Model No.	Voltage	No Load Speed	Order No.	Price
DCK233P2	20V	0-2000 RPM	**PD20DCK233P2**	Price

DEWALT 20V Lithium Ion Compact Drill Driver Kits



- Features a two-speed transmission and LED lights
- Compact, lightweight design fits into tight areas
- Ergonomic handle delivers comfort and control
- Model DCK280C2 Includes: DCD780 1/2" Drill Driver; (2) 20V Max Lithium Ion Battery Packs; Charger: (2) Belt hook; Contractor Bag
- Model DCK285C2 Includes: DCD785 1/2" Hammerdrill; DCF885 1/4" Impact Driver; (2) 20 V max Lithium Ion 1.5 Ah Battery Packs; Charger; (2) Belt Hooks; Contractor Bag
- Haz Code HAZ05

Model No.	Voltage	Chuck Size (in.)	No. of Speed Setings	RPM	Order No.	Price
DCK280C2	20V	1/2 Ratcheting	2	0-600 / 0-2000	**PD20DCK280C2**	Price
DCK285C2	20V	1/2 Ratcheting	2	0-600 / 0-2000	**PD20DCK285C2**	Price

DEWALT Flexvolt™ Hammer Drill & Impact Kit

DCD996 1/2" HAMMER DRILL:

- 3-Speed, high performance 0-2000 RPM, all-metal transmission optimizes tool-to-task for fast application speeds and improved run time
- 1/2" compact size (8.4" length) and lightweight design
- 0-38250 Blows per minute for fast drilling in masonry materials
- 3-Mode LED providing lighting in dark or confined spaces

DCF887 1/4" IMPACT DRIVER:



- Provides 1825 lbs of max torque at fast 0-3250 RPM speed and 0-3600 impacts per minute
- Compact size (5.3 length) and lightweight in design

INCLUDES:

- DCB203 20V MAX XR 2.0Ah Lithium Ion Battery
- DCB606 20V/60V MAX Flexvolt 6.0AH/2.0AH Lithium Ion Battery
- DCB118 20V/60V MAX Fan-Cooled Rapid Charger
- (2) Belt Hooks
- 360 Degree Side Handle
- Contractor Bag

Model No.	Order No.	Price
DCK299D1T1	**PD20DCK299D1T1**	Price

DEWALT 20V Max XR Lithium Ion Brushless Hammer Impact Driver Kit



- Features LED lights with 20-second trigger release delay providing increased visibility in dark or confined spaces
- All metal transmission optimizes tool-to-task for fast application speeds and imrpoved run-time
- XR Li-Ion batteries with fuel gauge provides 33% more capacity over standard packs
- 0-34,000 BPM for fast drilling in masonry materials
- Includes: DCD995 1/2" Hammerdrill; DCF886 1/4" Impact Driver; (2) 20V Max XR High Capacity Li-Ion Batteries 4.0 Ah; Charger; (2) Belt Hooks; (1) Bit Holder; 360° Side handle; Contractor Bag
- Haz Code HAZ05

Model No.	Voltage	Chuck Size (in.)	No. of Speed Settngs	RPM	Order No.	Price
DCK296M2	20V	1/2	3	0-2000 / 0-3200	**PD20DCK296M2**	Price

DEWALT 20V Lithium Ion Hammer Drill Impact Driver Kit



- Features 3 LED lights with 20-second delay to provide visibility without shadows
- Includes; DCD985 1/2" Hammerdrill; DCF885 1/4" Impact Driver; (2) 20V Max Lithium Ion 3.0 Ah Battery Packs; Fast Charger; 360° Side Handle; Belt Hook; Contractor Bag
- Haz Code HAZ05

Model No.	Voltage	Chuck Size (in.)	No. of Speed Settings	RPM	Order No.	Price
DCK290L2	20V	1/2 Ratcheting	3	0-2800	**PD20DCK290L2**	Price

DEWALT 20V MAX XR Drywall Screw Gun & Impact Driver Kit

- Brushless motor in both units that delivers maximum run time
- (2) Belt hooks included on both units for portability
- LEDs for increased visibility
- Precision drive in speed 1 for precision applications and added control
- XR Li-ION batteries with fuel gauge
- (2) DCB204 20V MAX XR 4.0Ah Battery Pack
- Charger
- Contractor Bag



DCF620 20V MAX XR DRYWALLS SCREWGUN:

- Balanced and ergonomic
- 4400 RPM

DCF887 20V MAX XR 1/4" IMPACT DRIVER:

- Compact (5.55" Length) and lightweight
- One-handed loading 1/4" hex chuck accepts 1" bit tips
- 3-speed settings for optimized application versatility

Model No.	Order No.	Price
DCK267M2`	**PD20DCK267M2**	Price

DEWALT 20V MAX XR Litium Ion Brushless Premium Hammer Drill & Impact Driver Combo Kit

DCD996 20V MAX 1/2" HAMMER DRILL:

- 3-speed, high performance 0-2250 RPM, all-metal transmission optimizes tool-to-task for fast application speeds and improved run-time
- Compact size (8.4" length) and lightweight design
- 0-38250 Blows per minute for fast drilling in masonry materials
- 3-Mode LED providing lighting in dark or confined spaces

DCF887 20V MAX 1/4" IMPACT DRIVER:

- 1825 lbs of max torque at fast 0-3250 RPM speed and 0-3600 impacts per minute
- Compact size (5.3" length) and lightweight in design



INCLUDES:

- (2) DCB205 20V MAX XR High Capacity Li-Ion Batteries 5.0aH
- Charger
- (2) Belt Hooks
- 360 degree side handle
- Kit Box

Model No.	Order No.	Price
DCK299P2	**PD20DCK299P2**	Price

Milwaukee Electromagnetic Motors



- Drills larger than 4253-1 have dual mount gear case permitting reverse mounting of drill for close quarter work
- Model #4253-1: 5/8-11 or 1/2-13 Taps not recommended
- Model #4262-1: Use of steel Hawg™ cutters requires 3/4" shank arbor Model# 49-57-0030 Theaded or 49-57-0032 Quick Change
- Model #4292-1 and #4297-1: Use of steel Hawg™ cutters requires #3 MT arbor Model # 49-57-0010 Threaded, 49-57-0012 Quick Change, or 49-57-0013 Quick Change Chipbreaker

Model No.	Amps	No Load RPM	Drill Cap. (in.)	Tap Cap. (in.)	Chuck/Taper	Order No.	Price
4253-1	6.2	600	1/2	5/8-18	Chuck	**PD5042531**	Price
4262-1	11.5	350	3/4	1-1/4	Chuck	**PD5042621**	Price
4292-1	11.5	750 - 375	1-1/4	1-1/4	3MT	**PD5042921**	Price
4297-1	11.5	500 - 250	1-1/4	1-1/4	3MT	**PD5042971**	Price



Milwaukee Heavy Duty Electromagnetic Drill Stands

Fixed Base



- Variable speed base
- 4 Combinations available
- Up to 1670 lbs drill point pressure
- 9" Drill travel
- Size: 15"H x 4-1/4"W x 11"L

Order No.	Price
PD504202	Price

Milwaukee Heavy Duty Electromagnetic Drill Stands

Adjustable Base

ISO 9002



- Variable speed base
- 4 Combinations available
- Up to 1600 lbs drill point pressure
- 11" Drill travel
- Adjustable 3/4" in direction of base length and 20° right or left
- Size: 17-1/4"H x 4-1/4"W x 11"L

Order No.	Price
PD504203	Price

Milwaukee Heavy Duty Right Angle Drill Attachment



- Ideal for cordless drills and screwdrivers
- Durable – all metal construction
- Compact – measures only 2" wide
- Convenient – accepts standard 1/4" hex drive accessories
- Handles high torquea

Order No.	Price
PD5049228510	Price

TEKTON 3 Pc. Power Socket Adapter Set



- Sand-blasted chrome vanadium steel
- For 1/4, 3/8 & 1/2" drive sockets

Order No.	Price
KP852902	Price

GENERAL Precision Drill Guide



- General's drill guide with your portable electric drill brings drill press accuracy and versatility to handheld drilling jobs
- Drills accurate right angled or variable angled holes with built-in protractor scale
- Adjusts to 45° angle in either direction of vertical drill position
- Portable and lightweight; folds flat for toolbox storage
- Built in depth stop
- Slide lock for sanding and buffing applications
- Anchoring pins hold the guide securely in place on flat surfaces, narrow edges, or large tubing
- V-groove for positioning round stock, pipe or tubing
- Use with 3/8" and 1/2" portable electric drills (not included) with 3/8-24 threaded shaft
- Complete set No. 36/37 includes chuck, key and adapter No. 37

Order No.	Price
NE503637	Price

GENERAL "Original" Drill Grinding Attachment



- Fractional drills 1/8" to 3/4"
  Number size drills 30 to 1
  Letter size drills A to Z
  Millimeter size drills 3.0 to 19.0
- Permits sharpening of drill bits to factory accuracy
- Lock in
- Automatically adjusts to correct clearance angle
- For use with ANSI, OSHA & UL approved standard electric bench grinders or surface grinders
- Instructions included

Order No.	Price
NE50825	Price

DEWALT 7.2 Volt Cordless Screwdriver

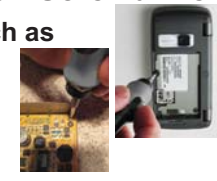


- Type: 1/4" hex heavy-duty variable speed with reversing
- Battery: rechargeable 7.2 volt
- No load speed: 0-500 RPM
- Recharge: 1-hour charger
- Includes: battery pack with charger, two 7.2 volt compact batteries, 2 screwdriver bits, heavy-duty carrying case
- Features: adjustable two-position handle allows for operation as both in-line and pistol-grip, 80 in/lbs of maximum torque

Order No.	Price
PD20DW920K2	Price

GENERAL Cordless Power Precision Screwdriver

Ideal for Ultra-delicate Applications Such as Computer and Electronics Repair



- 10+ hours of power
- 100+ RPM motor with forward and reverse controls
- Super-torque drive
- Quick-change chuck
- Ergonomic design allows for various comfortable grips
- Precision bit assortment (1/8" drive): Phillips: #00 & #0, Slotted: 1/16" & 1/8", Torx T5 & T6



Size	Voltage	RPM	Order No.	Price
1/8	3V DC (2x AAA)	103	**NE50500**	Price

Air Powered Die Grinders - Straight


PF50CP9112QB


PF50CP9111QB


PJ60DG1


PJ60RG38A




PF52FP3751R

Item	Features	Free Speed RPM	Average Air Consumption	Air Inlet Size	Collet/ Chuck Size (in.)	Exhaust Type	Order No.	Price
AIRCAT	Patented quiet tuned exhaust, superior steel grade internal bearings, feather trigger, ergonomically designed housing	22000	6 CFM	1/4 NPT	1/4	-	**PF546201**	Price
Chicago Pneumatic	22,000 RPM, 1/4" and 6mm collet, lock-off throttle, speed and power, precision control and safety, excellent tool for general high speed polishing and grinding	22000	13 CFM	1/4 NPT	1/4 & 6mm	Rear	**PF50CP872**	Price
	Compact and lightweight tool designed for easy maneuverability, excellent for high-speed blending, smoothing, porting, and deburring in confined areas, front exhaust	30000	12 CFM	1/4 NPT	1/4 & 6mm	Front	**PF50CP876**	Price
	Composite body over mould, ergonomic grip, variable speed regulator, directs exhaust away from the operator	28000	4.3 CFM	1/4 NPT	1/4 & 6mm	Rear	**PF50CP9105QB**	Price
	Composite body over mould, ergonomic grip, variable speed regulator, directs exhaust away from the operator, .5 HP	22000	5.5 CFM	1/4 NPT	1/4 & 6mm	Rear	**PF50CP9111QB**	Price
	Extended spindle, composite body over mould, ergonomic grip, variable speed regulator, directs exhaust away from the operator, .5 HP	22000	5.6 CFM	1/4 NPT	1/4 & 6mm	Rear	**PF50CP9112QB**	Price
	Heavy-duty air die grinder, adjustable power regulator, lock off throttle, square handle design for positive grip	24000	10.5 CFM	1/4 NPT	1/4	Rear	**PF50CP860**	Price
FLORIDA PNEUMATIC	Heavy duty ball bearing construction, extra high horsepower, non stall motor, low weight impact resistant ergo composite housing, rear exhaust	20000	4 CFM	1/4 NPT	1/4	Rear	**PF52FP3751R**	Price
JET	1 HP motor provides heavy-duty power, Impact resistant composite housing, Sealed ballb earing design, Variable-speed throttle, 360 Degree Rotating air inlet	20000	5.3 CFM	1/4 NPT	1/4	Rear	**PJ80505480**	Price
	Lightweight aluminum construction, full size, extended design, sealed ball bearing, safety throttle lock, variable-speed throttle	22000	4 CFM	1/4 NPT	1/4	Rear	**PJ80505402**	Price
	Lightweight aluminum construction, full size, Sealed ball bearing design, safety throttle lock, variable-speed, built-in air regulator	23000	4 CFM	1/4 NPT	1/4	Rear	**PJ80505401**	Price
	Lightweight aluminum construction, full size, sealed ball bearing, ergonomically designed rubber grip, 360° rotating air inlet	20000	4 CFM	1/4 NPT	1/4	Rear	**PJ80505404**	Price
	Precision collets, Precision throttle valve, 78 dBA noise pressure level, Contoured “softouch” handle, Precision spiral gears and heavy duty angle head, Rear exhaust, Best for: Precision grinding in die shops, precision engineering shops and aircraft/engine manufacture. input .45HP and lube free	20000	4.5 CFM	1/4 NPT	1/4	Rear	**PF52UT8724**	Price
	Safety lock-off throttle, Rear exhaust, Best for: General intermittent grinding and deburring	25000	4.5 CFM	1/4 NPT	1/4	Rear	**PF52UT2720**	Price
	Safety lock-off throttle, Rear exhaust, Precision engineered for added reliability, Ergonomic “Softouch” coating offers ultimate comfort and reduced vibration, Best for: Continuous heavy duty grinding.	22000	5.5 CFM	1/4 NPT	1/4	Rear	**PF52UT8728E**	Price
	Safety lock-off throttle, Rear exhaust, Precision engineered, Ergonomic “Softouch” coating , Best for: Continuous heavy duty grinding	22000	5.5 CFM	1/4 NPT	1/4	Rear	**PF52UT8728**	Price
Air Supreme	All ball bearing construction, lever throttle for positive speed control, complete with collet wrenches	22000	4 CFM	1/4 NPT	1/4	Rear	**PJ60DG1**	Price
	Extended heavy duty spindle, lever type throttle	22000	16 CFM	1/4 NPT	1/8 & 1/4	Rear	**PJ60RG38A**	Price
FLORIDA PNEUMATIC	Straight handle design, ideal for hard to reach areas, large paddle switch	20000	4 CFM	1/4 NPT	1/4	Front	**PF52FP3751**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Air Powered Die Grinders - Right Angle, Pistol Grip


PJ60SM522


PF50CP875

Item	Features	Free Speed RPM	Average Air Consumption	Air Inlet Size	Collet/ Chuck Size (in.)	Exhaust Type	Order No.	Price
AIRCAT	Superior steel grade internal bevel gears, feather trigger, patented quiet technology, for high speed blending, smoothing, porting and deburring, ergonomically designed housing	22000	6 CFM	1/4 NPT	1/4	-	**PF546255**	Price
Chicago Pneumatic	Composite body over mould, ergonomic grip, variable speed regulator, directs exhaust away from the operator	24000	4.35 CFM	1/4 NPT	1/4 & 6mm	Rear	**PF50CP9106QB**	Price
	Mini angle grinder compact, lightweight design, 90° angle head allows flexibility in confined areas	22500	11 CFM	1/4 NPT	1/4 & 6mm	Front	**PF50CP875**	Price
JET	1 HP motor, Impact resistant composite housing, Precision spiral bevel gears, Right-angle head design, Tapered angle gear housing	12000	5.3 CFM	1/4 NPT	1/4	Rear	**PJ80505482**	Price
Air Supreme	Lever throttle for positive speed control, complete with collet wrenches	20000	4 CFM	1/4 NPT	1/4	Rear	**PJ60SM522**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Air Powered Die Grinders - Right Angle, Pistol Grip





DOTCO Right Angle Grinders

- Composite housing
- Wide array of speeds; front and rear exhaust models available
- Ergonomic and balanced design minimized operator fatigue



Model No.	Collet (in.)	Air Inlet Size (in.)	RPM	Length (in./ mm)	Exhaust	Order No.	Price
12LF201-36	1/4	1/4	12000	6.6 in / 167.6mm	Front	**PF6512LF20136**	Price
12LF280-36	1/4	1/4	12000	6.6 in / 167.6mm	Rear	**PF6512LF28036**	Price
12LF281-36	1/4	1/4	12000	6.6 in / 167.6mm	Rear	**PF6512LF28136**	Price
12R0380-18	1/8	1/8	80000	5.5 in / 139.7mm	Rear	**PF6512R038018**	Price

NORTON Mini Quick Change Disc Sanders

- Double bearing spindle generates superb aconcentricity reducing vibrations allowing for longer use and finer finishes
- Control in both precision and power with the speed regulator
- Better tool handling

Kit Includes Model 66261150077:

- (1) 2” Sander, (25) 2” 36 Grit Blaze R980P 3-Ply TR Discs, (50) 2” Medium Grit Rapid Prep Non-Woven TR Discs, (1) 2” Medium Density Back-Up Pad



Average Air Consumption	RPM	Style	Order No.	Price
3 CFM	22000	Sander	**MH80DS250076**	Price
3CFM	22000	Sander Kit	**MH80DS250077**	Price

DOTCO 1/4" Collet Die Grinder

30,000 RPM • Front Exhaust

- Durable and ergonomic housing
- Compact size for ultimate control - easy access to confined areas
- Ideal for die and mold work as well as deburring
- Comprehensive selection of speeds available
- Comes equipped with lock-off lever

Specifications:

- Air Inlet Size: 1/4”
- RPM 20,000
- .3 HP
- Front Exhaust
- Length 6” / 152.4mm
- Weight: .88 lbs



Order No.	Price
PF6512L100036	Price

DYNABRADE 1.3 HP Right Angle Grinder

4-1/2” Diameter, 12,000 RPM

- For fast weld removal, rust and scale removal and heavy deburring
- Ideal for use with Type 27 grinding wheels

Specifications:

- Weight 4.5 lbs
- 1.3 HP @ 12,000 RPM
- 4-1/2” Diameter
- 5/8-11 Spindle
- Rear exhaust
- Hose size 3/8”



Order No.	Price
PF3052632	Price

.4 HP, Straight-Line, 25,000 RPM, Extended Rear Exhaust Die Grinder (1/4"/6mm Collet)

Model 48201

- Gearless motors decrease downtime and lessen repair expense
- Collet design reduces tool run-out

Specifications:
- Weight: 1.4 lbs
- .4 HP @ 25,000 RPM
- Hose size: 1/4”



Order No.	Price
PF3048201	Price

.4 HP, 7°, 25,000 RPM, Rear Exhaust Die Grinder (1/4" Collet)

Model 52335

- Gearless motors decrease downtime & lessen repair expenses
- Ideal for hard-to-reach areas

Specifications:
- Weight: 1.0 lbs
- .4 HP @ 25,000 RPM
- Hose size: 1/4”



Order No.	Price
PF3052335	Price

5 HP, Straight-Line, 20,000 RPM, Front Exhaust Die Grinder (1/4" Collet)

Model 51302

Gearless motors decrease downtime and lessen repair expense when compared to geared tools

Specifications:
- Weight: 1.5 lbs
- .5 HP @ 20,000 RPM
- Hose size: 3/8”



Order No.	Price
PF3051302	Price

7 HP Straight-Line Die Grinder

Model 52258

- Includes 1/4” Collet insert
- Gearless for reduced maintenance and downtime

Specifications:
- Weight 2.1 lbs
- .7 HP @ 20,000 RPM
- Hose size: 1/4”
- Front Exhaust



Order No.	Price
PF3052258	Price

.5 HP, Straight-Line, Extension Type 20,000 RPM, Side Exhaust Die Grinder (1/4" Collet)

Model 53502

- Gearless motors decrease downtime & lessen repair expense
- 51112 (1/8”) Collet Insert is optional

Specifications:
- Weight: 3.2 lbs
- .5 HP @ 20,000 RPM
- Hose size: 3/8”



Order No.	Price
PF3053502	Price

.7 HP Right Angle Die Grinder

Model 54343

- Ideal for rapid material removal, deburring, finishing and polishing
- Thermal-insulated handle
- Lightweight aluminum head
- Safety-lock throttle lever
- Collet 1/4”

Specifications:
- Weight 2.17 lbs
- .7 HP @ 12,000 RPM
- Hose size: 3/8”
- Rear Exhaust



Order No.	Price
PF3054343	Price

.7 HP Straight-Line Die Grinder, Steel Housing

Model 53811

- Used in steel fabrication, welding operations, shipyards, and foundries
- Gearless for reduced maintenance and downtime
- Includes 1/4” Collet insert

Specifications:
- Weight: 2.2 lbs
- .7 HP @ 20,000 RPM
- Hose size: 3/8”
- Front Exhaust



Order No.	Price
PF3053811	Price

7° Offset Front Exhaust Short Shank Die Grinder

MADE IN THE USA

Model 52211

- 18,000 RPM
- Weight: 1.7 lbs
- .37/.51 HP @ Max RPM
- Hose size: 1/4”
- Gearless motor



	Model No.	Order No.	Price
18000	52211	**PF3052211**	Price
20000	52212	**PF3052212**	Price

3" Diameter, .5 HP, 20,000 RPM, Front Exhaust Cut-Off Wheel Tool

Model 52434

- Uses 3” diameter cut-off wheels
- Weight 2.0 lbs
- .5 HP @ 20,000 RPM
- Hose size 3/8”

MADE IN THE USA



Order No.	Price
PF3052434	Price

Dynadie® III Air Powered Reciprocating Filer

Model 12250

- Replaces tedious hand filing, polishing and scraping
- Easily enters narrow slots
- Weight: 1.8 lbs, 77 dB(A)
- .2 HP @ 5,000 SPM
- Hose size: 3/8”

MADE IN THE USA



Order No.	Price
PF3012250	Price

1/4" NPT Original Aluminum Dynaswivel

Model 95460

- For use with most air tools, grinders, sanders, glue guns, staple guns, drills, buffers
- Universal joint that connects portable air tools to an air line
- Swivels 360° at two pivot points allowing the air hose to drop directly to the floor



Order No.	Price
PF3195460	Price

Dynaswivel® Air Line Connectors

- For use with most air tools, grinders, sanders, glue guns, staple guns, drills, buffers, etc
- Improves tool maneuverability
- Swivels 360° at two pivot points







Thread Size	Recommended Weight	Air Flow Range	Order No.	Price
1/2 NPT	0.8 lbs	46 to 65 CFM	**PF3195462**	Price
1/4 NPT	0.2 lbs	Up to 33 CFM	**PF3194300**	Price
1/4 NPT	0.25 lbs	Up to 25 CFM	**PF3195734**	Price
3/8 NPT	0.4 lbs	26 to 45 CFM	**PF3195461**	Price

† This Dynaswivel is made of a composite.

Composite Coupler & Plug Assemblies

- Assemblies include one 1/4” NPT coupler and one 1/4” NPT plug
- Maximum working pressure: 150 PSIG; air flow up to 74 SCFM



Model No.	Coupler Thread	Plug Thread	Order No.	Price
94990	Female	Male	**PF3194990**	Price
94991	Female	Female	**PF3194991**	Price
94992	Male	Male	**PF3194992**	Price

Dynacushion® Pneumatic Wheels

- Used with portable and bench grinders
- Supports coated abrasive and non-woven nylon belts
- Excellent on stainless steel
- Maximum RPM: 3,500
- Wheel size: 5” dia. x 3-1/2” wide





Replacement Wheel	Arbor Hole	Belt Size	Order No.	Price
92801	5/8-11 Thread	3-1/2" W x 15-1/2" L	**PF3192801**	Price
92825	5/8-11 Thread	3" W x 10-11/16" L	**PF3192825**	Price
94481	5/8-11 Thread	3-1/2" W x 15-1/2" L	**PF3194472**	Price

Universal Arbor

MADE IN THE USA

- Female-thread mounts to tool. 3/8-24, 1/2-20 and 5/8-11 sizes available
- Accommodate 1/2” to 3” wide wheels in 1/2” increments
- 5/8” or 1” Diameter center hole may be mounted



Order No.	Price
PF3113061	Price

Arbor Kit

MADE IN THE USA

Model 13074

- Mounts to 3/8-24, 1/2-20, 5/8-11 male spindle sizes
- Accepts any Dynacushion® or accessory which has 5/8” bore from spindle sizes 1/2” to 3” wide in 1/2” increments



Order No.	Price
PF3113074	Price

Air Supreme 48 Pc. 1/4" 22,000 RPM Die Grinder Kit

Kit Includes:

- (1) 22,000 RPM 1/4" Die grinder
- (1) 1/8" Collet
- (5) 1/8" Shank stones
- (5) 1/4" Shank stones
- (2) Spanner wrenches
- (1) 1/4" NPTF air fitting
- (4) Sanding drums
- (16) Abrasive sleeves
- (1) 2" Sanding pad
- (5) Abrasive paper
- (1) 3" Sanding pads
- (5) 3" Abrasive paper
- (1) Blow molded case



Order No.	Price
PJ75T210K	Price

Air Supreme Pneumatic Cut Off Tool & Right Angle Grinder Kit

Kit Includes:

- 1/4" Right angle die grinder
- 3" Cut-off tool
- 3 - Abrasive cut-off wheels
- 5 - Mounted points with 1/8" shank
- 5 - Mounted points with 1/4" shank
- 3 - Spanner wrenches
- 1 - Blow molded case
- 1 - Air fitting



Order No.	
PJ752060	

Air Supreme 26 Pc. Right Angle Grinder Surface Prep Kit

Kit Includes:

- (1) 20,000 RPM R/A Die grinder
- (5) 2" Conditioning discs
- (5) 3" Conditioning discs
- (1) 2" Roll on holders
- (1) 3" Roll on holders
- (1) 1/8" Collets
- (1) 1/4" Collets
- (1) 10 Pc.stone assortment
- (1) Blow molded case



Order No.	Price
PJ752010	Price

Air Powered Cut Off Tools





Item	Features	Free Speed RPM	Average Air Consumption	Air Inlet Size	Wheel Size	Exhaust Type	Order No.	Price
AIRCAT	Adjustable 9-position indexible guard, 0.6HP motor provides non-stall operation, side mounted wheel and in-line motor, composite grip has been ergonomically designed, high grade material precision parts designed for industrial and heavy duty automotive use	18000	6 CFM	1/4 NPT	3	Rear	PF546525A	Price
AIRCAT	Extended length for better reach, compact tapered gear housing with close-coupled grinding wheel, reaches inside corners of as little as 30 degrees with 4" wheel, superior steel grade internal gears for longer life, 1.0 HP motor eliminates "stall" and increases reliablity, spindle lock for ease of wheel change, 11 position rotational guard, grinder disc sizes: 4" (1/16 x 3/8) (1/8 x 3/8)	14000	6 CFM	1/4 NPT	4	Rear	PF546275A	Price
JET	Heavy duty ball bearing construction, 3/16" mild steel capacity, 360 degree rotating metal safety guard, safety throttle lock	20000	4 CFM	1/4 NPT	3	Rear	PJ80505930	Price
FLORIDA PNEUMATIC	Heavy duty shear & grinder in one, see through cutting guard, slices from thin gauge sheet metal to 3/4" steel pipe, large paddle type switch, complete with 2 pcs 3" dia. x 3/8" AH cut-off wheels	20000	4 CFM	1/4 NPT	3	Rear	PF52FP3801A	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Air-Flo™ Air Tool

For Piston Driven & Rotary Air T

- Superior oxidation stability
- Resistance to formation of gums, sludges and deposits
- Anti-wear fortified for extended life, lower maintenance
- Protection against rust and corrosion
- Excellent seal compatibility
- Metal-wetting properties
- Dirt particles held in suspension
- Contaminants flushing



Size	Order No.	Price
16 oz	LJ55PNTAF	Price
1 Gallon	LJ5501GAF	Price

Coilhose Pneumatics Air Tool Lubricants

- A specially formulated high grade lubricant which prolongs the service life of air tools, cylinders and accessories
- Inhibits rust and is non-corrosive, non-reactive, stable (non-decomposing), completely non-toxic and non-hazardous
- **Hazard Code: 58**

MADE IN THE USA



Size	Order No.	Price
4 Ounces	NV50ATL004	Price
16 Ounces	NV50ATL016	Price
32 Ounces	NV50ATL032	Price
1 Gallon	NV50ATL128	Price

DEWALT 1/4" Sheet Palm Grip Sander

- 2.3 AMP motor sands at 14,000 OPM
- Improved paper clamp features for better paper retention
- Rubber dust boot over the switch to protect against dust ingestion
- To attach dust port to other vacs within 1-1/4” hoses use DWV9000 universal quick connector
- Rubber overmold texture will provide smooth and comfortable control while sanding
- Locking dust-port system that allows the user to lock vacuum hose up with the sander
- Separate counterweight design reduces vibration
- Paper Punch
- Dust Bag



Model No.	Order No.	Price
DWE6411	**PD20DWE6411**	Price

Professional Series Die Grinders



PD20DW888



PD35GE700



PD505192



PD505196

Item	Features	No Load Amps	RPM	Collet/Chuck	Order No.	Price
DEWALT	High power 4.5 motor for all 1-1/2" grinding applications and features a convenient paddle switch with lock-on button for easy gripping	4.2	25000	1/4	**PD20DWE4887**	Price
	All ball bearing construction, (2) wrenches, trigger switch, 3-prong 8′ cord	5.0	19000	1/8, 1/4	**PD20DW888**	Price
Milwaukee	All ball and roller bearing construction, self-stopping brush system, light-weight nylon housing, double insulated 8’ cord, on / off toggle switch	4.5	21000	1/8, 1/4	**PD505192**	Price
	All ball and roller bearing construction, self-stopping brush system, light-weight nylon housing, double insulated 8’ cord, trigger switch	11.0	14500	1/8, 1/4	**PD505196**	Price
metabo	Extended spindle, auto-stop carbon brushes, variable speed, double insulated, includes collet and collet wrench	6.2	7000-27000	1/4	**PD35GE700**	Price

Dynisher®

MADE IN THE USA

Model 13450

- Excellent for blending and finishing stainless steel and most other metals, leaving an in-line scratch pattern
- Operator uses back-and-forth motion; shield can be adjusted for work right up to side walls
- Shown with optional Dynachushion® wheel PF3094473

Specifications:

- Weight 5.7 lbs, 80 dB(A)
- 1 HP @ 2,800 RPM
- Hose size 3/8”
- Included 3/4” arbor accepts a variety of abrasives and accessories



Order No.	Price
PF3013450	Price

Dynastraight® Finishing Tool

Model 13501

- Any Dynacushion® pneumatic wheel with 5/8” bore may be mounted
- Works on stainless steel, aluminum, carbon steel, plastic, fiberglass, composites, wood and more
- Ergonomically designed, featuring high-torque air motor with rear exhaust and safety-lock throttle

Specifications:

- Weight 4.3 lbs, 82 dB(A)
- 1 HP @ 1,800 RPM
- Hose size 3/8”
- 13071 Combo Arbor for up to 3” wide wheels which have either 5/8” or 1” dia. center hole



Order No.	Price
PF3013501	Price

Extension Dynastraight® Flapper

Model 51134

- Includes 51116 Flap Wheel Adapter which accepts wheels with 1/4-20 male mandrel

Specifications:

- Weight: 3.4 lbs, 93 dBA
- .43 HP @ 18,000 RPM
- Hose size: 3/8”
- Length: 17-1/8” overall



Order No.	Price
PF3051134	Price

DEWALT Orbital Sanders

- Control finish system minimizes gouging at startup
- Dust Collection System
- Variable speed
- 3.0 No Load Amps
- 7,000 - 10,000 OPM
- 5” Hook & Loop Pad/Belt



Order No.	Price
PD20D26453K	Price

5" Dynorbital-Spirit™ Non Vacuum Random Orbital Sander

Model 59020

- Incorporates the latest engineering and manufacturing technology to create the lightest sander on the market today
- New 3-1/2" low profile design, improves control and offers greater operator visibility
- Easily replaceable drop-in motor



Specifications:

- Weight: 1.4 lbs, 75 dB(A)
- .25 HP @ 12,00 RPM
- 3/16" Diameter orbit
- Includes perfectly balanced weight-mated pad — the ultimate in swirl-free finishes

Order No.	Price
PF3359020	Price

5" Self-Generated Vacuum Dynorbital-Spirit Random Orbital Sander

Model 59023

- Includes low profile, premium urethane weight-mated sanding pad
- Floating rotor utilizes five blades

Specifications:

- Weight 1.49 lbs
- .25 HP @ 12,000 RPM
- Rear Exhaust
- Hose size: 1/4"
- Orbit Dia. 3/16"



Order No.	Price
PF3359023	Price

5" Dynorbital® Supreme Non-Vacuum Random Orbital Sander

Model 56815

- Long established as the BEST random orbital sander on the market
- Highest quality construction for dependable performance
- Low-profile design, smooth and quiet
- Includes low-profile, premium urethane, weight-mated sanding pad



Specifications:

- Weight 2.1 lbs, 78 dB(A)
- .28 HP @ 12,000 RPM
- 3/16" Diameter orbit
- Hose size 1/4"

Order No.	Price
PF3356815	Price

5" Two-Hand Dynorbital® Non-Vacuum Random Orbital Sander

Model 58415

- Long handle allows for two-handed support of tool
- Includes low-profile, premium urethane, weight-mated sanding pad



Specifications:

- Weight 2.5 lbs, 81 dB(A)
- .45 HP @ 12,000 RPM
- 3/8" Diameter orbit
- Hose size 1/4"

Order No.	Price
PF3058415	Price

5" Diameter Sanding Pads

- Premium urethane pads resist heat build-up
- Our exclusive single-piece hub design reduces vibration and wear
- Pads are perfectly weight-mated for Dynabrade models
- 5/16-24 Male thread
- 13,000 RPM maximum operating speed



Vac-Type	Thickness (in.)	Density	Order No.	Price
Non-Vac Sander Pad	3/8	Medium	**PF3156106**	Price
Non-Vac Sander Pad	3/8	Soft	**PF3156102**	Price
Non-Vac Sander Pad	5/8	Medium	**PF3156175**	Price
Non-Vac Sander Pad	5/8	Soft	**PF3156185**	Price
Vacuum Sander Pad	3/8	Medium	**PF3156104**	Price

Central Vacuum Disc Sanders

- Flexible non-marring vacuum shroud allows capture of dust and debris
- 1-1/4" Dia. vacuum port for connection to external central vacuum system
- Includes backup pad







Disc Diameter (in.)	Spindle Thread	Free Speed RPM	Order No.	Price
2	1/4-20	20000	**PF3051232**	Price
3	1/4-20	20000	**PF3050561**	Price
5	5/8-11	12000	**PF3052596**	Price

Silver Supreme Randon Orbital Sander

Non-Vacuum Type-Model 69020

- The most durable random orbital sander ever built – the ultimate combination of supreme power and lightweight comfort!
- Innovations include all-steel components and new compact Ergo Grip
- Easily replaceable drop-in motor



Tool Specs:

- Weight: 1.8 lbs, 77 dB(A)
- .26 HP @ 12,000 RPM
- 3/16" Diameter orbit
- Hose size: 1/4"
- Includes low-profile, premium urethane, weight-mated sanding pad

Order No.	Price
PF3369020	Price

5" & 6" Air Powered Palm & Orbital Sanders


PF546310


PJ80505710


PF52FP8965


PJ80505720


PF50CP870

Item	Features	Disc Dia.	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Order No.	Price
AIRCAT	10,000 RPM, 3/16" (2.5 mm) Orbit, Low weight (2.3 lbs) and low air consumption (2.5 CFM average), Lubrication free air motor with patented double sealing to prevent dust contamination, Isolated motor design reduces vibration to 1.8 m/sec, Internal silencing system reduces noise level to 82 dBA, Built-in thumb operated speed regulator for instant control, Rubberized comfort palm grip, Low profile only 3-3/4" high	6	10000	2.5 CFM	1/4 NPT	5/16 - 24	**PF546310**	Price Price
	Lubrication free air motor, Double sealed motor, Anti vibration motor, Silencing technology, Throttle lever and ergonomic grip	6	11000	1.6 CFM	1/4 NPT	-	**PF546700**	Price
JET	Dual action pad motion, Ergonomically designed grip, Built-in, tool-less air regulator, Balanced bearing construction, For feather edging, metal prep, and finish work	6	10000	4 CFM	1/4 NPT	5/16-24	**PJ80505720**	Price
	Random orbital sander with a balanded sanding pad, Impact resistant composite housing, Hook and loop sanding pads, Ergonoomically designed grip, For swirl-free finishes, .25 HP	5	12000	2 CFM	1/4 NPT	5/16-24	**PJ80505730**	Price
	Random orbital sander with a balanded sanding pad, Impact resistant composite housing, Hook and loop sanding pads, Ergonoomically designed grip, For swirl-free finishes, .25 HP	6	12000	2 CFM	1/4 NPT	5/16-24	**PJ80505731**	Price
	Rectangular pad, Lighweight aluminum construction, Heavy-duty ball bearing construction, Palm trigger, Quick-action paper clamps	3-2/3 x 6-1/2	8000	4 CFM	1/4 NPT	5/16-24	**PJ80505710**	Price
Chicago Pneumatic	Balanced counterweight design for low vibration sanding, full 1/2 HP motor, heavy duty ball bearing construction, built-in speed regulator	6	9600	8 CFM	1/4 NPT	5/16-24	**PF50CP870**	Price
	Redi power grip for better handling, speed regulator, PSA mount, swivel rear exhaust, low vibration and noise, 5mm orbit no vacuum	5	12000	8 CFM	1/4 NPT	5/16-24	**PF50CP3511**	Price
UT	Extended Handle, 6" Pad	6	10000	4 CFM	1/4 npt	-	**PF52UT8788**	Price
	Contoured composite housing for comfort, 3/16" orbit for swirl free finish, built-in regulator, weighs 1.5 lbs	5	12000	8 CFM	1/4 NPT	5/16-24	**PF52FP8965**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Air Powered Belt Sanders


PF52UT8702


PF52UT8703


PJ80505750

Item	Features	Free Speed RPM	Average Air Con-sumption	Air Inlet Size	Belt Size (in.)	Order No.	Price
JET	Head rotates 360 degrees, Ergonomically designed grive, Safety throttle lock, 360 degree rotating air inlet, Variable-speed throttle	18000	4.2 CFM	1/4 NPT	3/4 x 20-1/2	**PJ80505751**	Price
	Head rotates 360 degrees, Ergonomically designed grive, Safety throttle lock, 360 degree rotating air inlet, Variable-speed throttle	20000	4.2 CFM	1/4 NPT	1/2 x 24	**PJ80505752**	Price
	Head rotates 360 degrees, Ergonomically designed grive, Safety throttle lock, 360 degree rotating air inlet, Variable-speed throttle	20000	4.2 CFM	1/4 NPT	3/8 x 13	**PJ80505750**	Price
UT	0.5 HP motor, Belt tracking permits use of 1/8", 1/4", 1/2" belts x 24" long, Ergonomic design grip, Low weight composite belt guard, Safety lock-off throttle, Built-in regulator, Interchangeable contact arms, Best for sanding, grinding, deburring, blending,& polishing	20000	5 CFM	1/4 NPT	1/4,1/2 x 24	**PF52UT8701**	Price
	Head rotates 360 degrees, Interchangeable contact arms, Safety lock-off throttle, Ergonomi-cally designed, Swivel air inlet and built-in silencing, Best for: Light grinding, sanding	18000	4 CFM	1/4 NPT	1/2 x 12	**PF52UT8719K**	Price
	Head rotates 360 degrees, Interchangeable contact arms, Safety lock-off throttle, Ergonomi-cally designed, Swivel air inlet and built-in silencing, Best for: Light grinding, sanding	20000	16 CFM	1/4 NPT	3/4 x 18	**PF52UT8718K**	Price
	Good for medium to heavy duty sanding, adjustable rotating head, rear and side exhaust, lever throttle type	16000	4.5 CFM	1/4 NPT	3/8 x 13	**PF52UT8702**	Price
	Good for medium to heavy duty sanding, adjustable rotating head, rear and side exhaust, lever throttle type with lock	16000	5 CFM	1/4 NPT	3/4 x 20-1/2	**PF52UT8703**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Air Powered Polishers 7"


PJ707645


PJ707640

Item	Features	Style	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Order No.	Price
Air Supreme	Heavy duty motor for tough jobs, built-in regulator for desired speed, dead handle and spindle wrench included	Angle	2500	30 CFM	1/4 NPT	5/8-11	**PJ707640**	Price
	Heavy duty motor for tough jobs, built-in regulator for desired speed, lever throttle control, polishing bonnet not included	Vertical	2000	19 CFM	1/4 NPT	5/8-11	**PJ707645**	Price

Air Powered High Speed Sanders 5"


PJ80505710


PF52FP8965


PJ80505710


PF52FP8965

Item	Features	Style	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Order No.	Price
JET	Lightweight aluminum construction, Heavy-duty ball bearing construction	-	18000	4 CFM	1/4 NPT	7/16-20	**PJ80505700**	Price
Chicago Pneumatic	Rugged 1/2 HP motor with low vibration, variable speed throttle, built-in regulator	5" Sander	16000	12 CFM	1/4 NPT	7/16-20	**PF50CP9778**	Price
FLORIDA PNEUMATIC	Ideal for feathering, touch-up and production sanding, 4-vane motor for low vibration, spring mounted trigger, features an impact resistant handle	Angle	20000	4 CFM	1/4 NPT	7/16-20	**PF52FP2000**	Price
Air Supreme	Perfect for feathering, touch-up and production sanding, built-in air regulator, complete with sanding pad sizes 3", 4-1/2" and 5-1/2", contoured trigger throttle for positive sanding control	Angle	18000	17 CFM	1/4 NPT	7/16-20	**PJ707600**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Air Powered Angle & Vertical Sanders 7"


PJ707635


PJ707630


PF50CP8695


PF50CP8655

Brand	Features	Style	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Order No.	Price
Air Supreme	Compact size reduces operator fatigue, planetary gear reduction for longer gear life, exhaust deflector to direct exhaust	Vertical	4800	19 CFM	1/4 NPT	5/8-11	**PJ707635**	Price
	Heavy duty motor for tough jobs, ball bearing construction for extended tool life, automatic throttle release, side handle for extra control	Angle	5000	30 CFM	1/4 NPT	5/8-11	**PJ707630**	Price
Chicago Pneumatic	An economical 1 HP general purpose sander, contoured throttle control for easy handling, reversible dead handle for right or left handed operation	Angle	5000	13 CFM	1/4 NPT	5/8-11	**PF50CP8695**	Price
	An economical 1 HP general purpose sander, rugged planetary gear system for long tool life, automatic release throttle with positive stop action, compact, lightweight makes it easy to handle	Vertical	5000	11.25 CFM	1/4 NPT	5/8-11	**PF50CP8655**	Price
FLORIDA PNEUMATIC	Extra Heavy Duty Bearings & Spiral Gears, High Energy Stall Resistant Motor, Precision Engineered	Angle	4500	7 CFM	1/4 NPT	5/8-11	**PF52FP716B**	Price
	0.7 HP Motor, Safety lock-off throttle, Compact design, Only 3.5 lbs., Best for: General surface preparation	Angle	9000	16 CFM	1/4 NPT	5/8-11	**PF52UT8749S**	Price

metabo® Burnisher

- 4.5” dia. x 4” length maximum size wheel
- Long lasting motor
- High performance spiral beveled gears
- Dial controlled variable speed (900-2810 no load RPM)
- Double insulated
- 98 in/lbs maximum torque
- 10.0 Amps
- 1200 Rated input watts
- 5/8-11 Spindle thread
- Shown with optional flap wheel



Order No.	Price
PD35SE12115	Price

Dynabug "Jitterbug Type" Air-Powered Orbital Non-Vac Sander

MADE IN THE USA

Model 57810

- Includes premium vinyl face sanding pad (57850) for PSA abrasives



Specifications:

- Weight 2.75 lbs
- .18 HP @ 8,000 RPM
- Hose size 1/4"
- Includes low profile urethane, weight-mated non-vac pad

Order No.	Price
PF3057810	Price

Dynaline Non-Vac In-line Sander Versatility Kit

MADE IN THE USA

Model 57405

- Ideal for Blending and Graining stainless steel
- Dynaline non vacuum tool, 3-2/3" x 7" hook face, non-vac pad (57852), medium grade (94951) and very fine (94956) abrasive impregnated non-woven nylon sheets



Specifications:

- Weight 2.6 lbs
- .3 HP @ 2,400 SPM
- Hose size 1/4"
- Includes low profile urethane, weight-mated non-vac pad

Order No.	Price
PF3057405	Price

3" Dia. Buffer (3,200 RPM)

MADE IN THE USA

Model 51400

- For superior finishes on metal and composites
- Great for polishing clear coat

Specifications:

- Weight: 1.7 lbs
- .31 HP @ 3,200 RPM
- Hose size: 1/4"
- Includes 50126 Hook face pad, 90027 Terry & 90028 Wool buffing bonnets



Order No.	Price
PF3051400	Price

2" Dia., .4 HP, 7°, 25,000 RPM Rear Exhaust Disc Sander

MADE IN THE USA

Model 48503

- Gearless for reduced maintenance and downtime
- Handle is offset 7° for greater operator comfort and control
- Lightweight composite housing, reduces vibration and is thermal-insulated to prevent cold air transmission to operator



Specifications:

- Weight: 1.1 lbs
- .4 HP @ 25,000 RPM
- Hose size: 1/4"
- Includes 51344 Locking-Type 2" Dia. pad

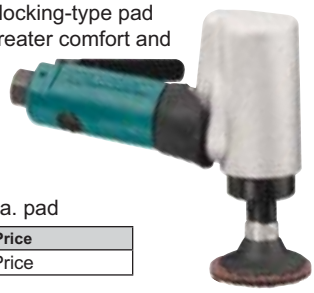
Order No.	Price
PF3048503	Price

2" Dia., .5 HP, 7°, 20,000 RPM Front Exhaust Disc Sander

MADE IN THE USA

Model 52402

- Has 1/4-20 male spindle. Includes locking-type pad
- Composite handle is offset 7° for greater comfort and control



Specifications:

- Weight: 1.7 lbs
- .43 HP @ 20,000 RPM
- Hose size: 3/8"
- Includes 51344 Locking-Type 2" Dia. pad

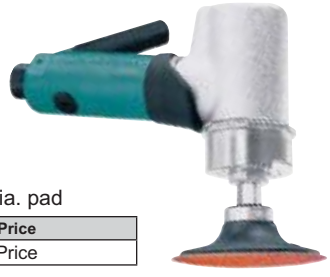
Order No.	Price
PF3052402	Price

3" Dia., .7 HP, 7°, 20,000 RPM Front Exhaust Disc Sander

MADE IN THE USA

Model 52412

- Gearless for less maintenance
- Removable side handle
- Composite handle is offset 7°



Specifications:

- Weight 2.0 lbs
- .7 HP @ 20,000 RPM
- Hose size 3/8"
- Includes 51347 Locking-Type 3" Dia. pad

Order No.	Price
PF3052412	Price

Disc Pad For Rol-On Locking Type Discs

MADE IN THE USA

Model 51347

- 3" Diameter; 3/8-24 female thread; medium density
- 20,000 RPM maximum operating speed



Model 51348

- 2" Diameter; 1/4-20 female thread: medium density
- 30,000 RPM maximum operating speed

Size	Order No.	Price
2	**PF3151348**	Price
3	**PF3151347**	Price

'The Original' Dynafile® Abrasive Belt Machine

Model 14000

- Belt housing has larger opening for belt tracking and operation
- Composite belt guard
- Lightweight, thermal-insulated composite motor housing reduces vibration and cold air transmission to operator
- Adjustable speed to 5,800 surface feet per minute
- Replaces tedious hand filing and sanding
- Work in areas as small as 3/8" diameter
- They Dynafile accepts over 30 interchangeable contact arms



Order No.	Price
PF3014000	Price

Dynafile® Versatility Kit

Model 14010

- 14000 Dynafile with five contact arms and abrasive belts in a durable case

Specifications:

- Weight: 3.0 lbs, 84 dBA
- .5 HP @ 20,000 RPM
- Maximum SFPM: 5,800
- Hose size: 3/8"
- 11218 Contact arm included for 1/2" × 24" belts



Order No.	Price
PF3014010	Price

Dynafile II Abrasive Belt Tool

Model 15420

- Grinds corner welds with no undercutting
- Tool accepts belts 24" long in widths of 1/4 or 1/2", deburr, blend and polish

Specifications:

- Weight 2.84 lbs
- .7 HP @ 20,000 RPM
- 7° Offset
- Front Exhaust
- For 1/4, 1/2" W x 24" L Belts
- Grinding head pivots 180°



Order No.	Price
PF3015420	Price

Dynafile® II Abrasive Belt Machine For 18" Long Belts

Model 40320

Grind, deburr, blend and polish, on metal, plastic, fiberglass, composites, rubber, glass and more.

- Includes 11206 Contact Arm for 3/4" W × 18" L abrasive belts
- Ideal for use with coated abrasive and non-woven nylon belts!
- Grind off contact wheel or platen pad. Finish & polish using slack of belt



Order No.	Price
PF3040320	Price

Dynafile® II Contact Arms



PF3111203



PF3111300



PF3111304



PF3111204



PF3111206

Width (in.)	Length (in.)	Contact Wheel	Platen	Order No.	Price
1/2	18	1/4 x 3/8	-	**PF3111300**	Price
1/2	18	5/8 x 3/8	1/2	**PF3111203**	Price
1/2	18	5/8 x 3/8	1/2	**PF3111304**	Price
1/8, 1/4 or 1/2	18	1 x 3/8	-	**PF3111204**	Price
5/8 or 3/4	18	3/4 x 5/8	3/4	**PF3111206**	Price

Dynafile® Contact Arms



PF3111213



PF3111231



PF3111218



PF3111216



PF3111219



PF3111232

Width (in.)	Length (in.)	Contact Wheel	Platen	Order No.	Price
1/2	24	3/4 x 1/2	1/2	**PF3111231**	Price
1/2	24	5/16 x 3/8	1/2	**PF3111213**	Price
1/2	24	5/8 x 3/8	1/2	**PF3111218**	Price
1/4	24	5/8 x 1/8	1/4	**PF3111216**	Price
1/4 or 1/2	24	1 x 3/8	-	**PF3111219**	Price
1/8 or 1/4	24	1 x 3/8	-	**PF3111232**	Price

Contact Wheels For Dynafile® and Dynafile II® Contact Arms

Wheel Size (D x W) (in.)	Material	Fits Contact Arm	Order No.	Price
1/4 x 3/8	Steel	11300	**PF3111332**	Price
5/16 x 3/8	Steel	11213	**PF3111068**	Price
5/8 x 1/8	Rubber	11216	**PF3111074**	Price
3/4 x 1/2	Rubber	11231	**PF3111084**	Price
1 x 3/8	Radiused Rubber	11219, 11204	**PF3111080**	Price
3/4 x 5/8	Rubber	11206	**PF3111282**	Price
5/8 x 3/8	Rubber	11218, 11203, 11304	**PF3111078**	Price
1 x 3/8	Tapered Urethane	11232	**PF3111086**	Price

Platen For Dynafile® and Dynafile II® Contact Arms

Size (in.)	Fits	Order No.	Price
1/4	11216 Contact Arm	**PF3111032**	Price
1/2	11304 Contact Arm	**PF3111026**	Price
1/2	11027 Contact Arm	**PF3111027**	Price
1/2	11231 Contact Arm	**PF3111135**	Price
1/2	11203 & 11213 Contact Arm	**PF3111025**	Price
3/4	11206 Contact Arm	**PF3111109**	Price

No platen needed for contact arms 11080, 11086 and 11204
† Sold each all others 5 pk

Dynafile II Abrasive Belt Tools

Model 40326

- Grind, deburr, blend and polish, on metal, plastic, fiberglass, composites, rubber, glass and more
- Grind from contact wheel or platen pad; finish and polish using slack of belt
- Belt guard easilty detaches for quick abrasive change

Specifications:

- Weight 2.71 lbs
- .5 HP @ 20,000 RPM
- 7° Offset
- Front Exhaust, 1/4 - 3/4" W x 20-1/2" L
- Includes: 11287 Contact Arm for 5/8 or 3/4" wide abrasive belts



Power	RPM	Order No.	Price
.4 HP	20,000	**PF3040352**	Price
.5 HP	20,000	**PF3040326**	Price

Electric Dynafile® II Versatility Kit

Model 40611

- Optional 40078 Adapter allows use of 24" long belts; extends reach to 7", with contact arm
- 40500 Electric Dynafile® II with 11202, 11203 and 11204 Contact Arms for 1/2" W × 18" L abrasive belts
- Eight abrasive belts
- Durable carrying case



Type	Order No.	Price
Abrasive Belt Machine with 11203 Contact Armory	**PF3040500**	Price
Versatility Kit	**PF3040501**	Price

Mini Dynafile® II Versatility Kit

Model 15006

- 15003 Mini Dynafile® II with 15026, 15028 and 15030 contact arms for 1/2" W × 12" L belts
- Assorted coated and non-woven nylon belts
- Includes 01644 threaded collet insert to easily convert tool to 1/4" die grinder
- Durable carrying case



Order No.	Price
PF3015006	Price

Dynafile® II Versatility Kit

Model 40321

- 40320 Dynafile II with 11203, 11204 and 11206 Contact arms for 3/4" W x 18" L belts
- 50010 Collet (1/4") for die grinder use
- Eight abrasive belts

Specifications:

- Weight 2.5 lbs, 84 dBA
- .5 HP @ 20,000 RPM
- Maximum SFPM 4,550
- Hose size 3/8"



Order No.	Price
PF3040321	Price

Mini Dynafile® II Abrasive Belt Machine

Model 15003

- Tool includes 15026 Contact Arm for 1/2" W × 12" L abrasive belts

Specificatons:

- Weight: 1.8 lbs, 87 dBA
- .3 HP @ 25,000 RPM
- Maximum SFPM 4,890
- Hose size: 3/8"



Order No.	Price
PF3015003	Price

Dynabelter® Abrasive Belt

Model 11475

- Tool includes 11681 Contact Arm Assembly for 1" W x 30" L abrasive belts

Specifications:

- Weight 7.5 lbs, 92 dB(A)
- .7 HP @ 1,800 RPM
- Maximum SFPM 5,890
- Hose size 1/2"



Order No.	Price
PF3011475	Price

Surf Pro® Aluminum Oxde & Zirconia Abrasive Belts

Aluminum Oxide File Belts:

- Aluminum oxide resin cloth abrasive belts for bench and standing grinders
- Butt splice bi-directional for stronger belt life
- Closed coat for metals working
- Full resin bond coating on "X" weight - heavy duty cloth backing

Zirconia Portable Files:

- Alumina Zirconia grain provides added life over aluminum oxide cloth belts
- Premium material for superior performance in severe grinding aplications on stainless steel, alloys and aluminum
- Full resin bond coating on "Y" weight - Extra heavy duty cloth backing



Material - Aluminum Oxide		
Belt Size (in.)	Order No.	Price
1/4 x 18	**SP10B14018060A**	Price
1/4 x 18	**SP10B14018080A**	Price
1/4 x 18	**SP10B14018120A**	Price
1/4 x 18	**SP10B14018220A**	Price
1/4 x 24	**SP10B14024060A**	Price
1/4 x 24	**SP10B14024080A**	Price
1/4 x 24	**SP10B14024120A**	Price
1/4 x 24	**SP10B14024220A**	Price
1/2 x 18	**SP10B12018040A**	Price
1/2 x 18	**SP10B12018060A**	Price
1/2 x 18	**SP10B12018080A**	Price
1/2 x 18	**SP10B12018120A**	Price
1/2 x 18	**SP10B12018180A**	Price
1/2 x 18	**SP10B12018220A**	Price
1/2 x 24	**SP10B12024040A**	Price
1/2 x 24	**SP10B12024060A**	Price
1/2 x 24	**SP10B12024080A**	Price
1/2 x 24	**SP10B12024120A**	Price
1/2 x 24	**SP10B12024180A**	Price
1/2 x 24	**SP10B12024220A**	Price
3/4 x 18	**SP10B34018220A**	Price
3/4 x 18	**SP10B34018040A**	Price
3/4 x 18	**SP10B34018060A**	Price
3/4 x 18	**SP10B34018080A**	Price
3/4 x 18	**SP10B34018120A**	Price
3/4 x 18	**SP10B34018180A**	Price
3/4 x 20-1/2	**SP10B35205040A**	Price
3/4 x 20-1/2	**SP10B35205060A**	Price
3/4 x 20-1/2	**SP10B35205080A**	Price
3/4 x 20-1/2	**SP10B35205120A**	Price
3/4 x 20-1/2	**SP10B35205220A**	Price

Material - Aluminum Oxide		
Belt Size (in.)	Order No.	Price
1 x 30	**SP10B01030060A**	Price
1 x 30	**SP10B01030080A**	Price
1 x 30	**SP10B01030120A**	Price
1 x 30	**SP10B01030180A**	Price
1 x 30	**SP10B01030220A**	Price

Material - Zirconia Alumina		
Belt Size (in.)	Order No.	Price
1/4 x 18	**SP10B14018060Z**	Price
1/4 x 18	**SP10B14018080Z**	Price
1/4 x 18	**SP10B14018120Z**	Price
1/2 x 18	**SP10B12018040Z**	Price
1/2 x 18	**SP10B12018060Z**	Price
1/2 x 18	**SP10B12018080Z**	Price
1/2 x 18	**SP10B12018120Z**	Price
1/4 x 24	**SP10B12024040Z**	Price
1/2 x 24	**SP10B12024060Z**	Price
1/2 x 24	**SP10B12024080Z**	Price
1/2 x 24	**SP10B12024120Z**	Price
3/4 x 18	**SP10B34018040Z**	Price
3/4 x 18	**SP10B34018060Z**	Price
3/4 x 18	**SP10B34018080Z**	Price
3/4 x 18	**SP10B34018120Z**	Price
3/4 x 20-1/2	**SP10B35205040Z**	Price
3/4 x 20-1/2	**SP10B35205060Z**	Price
3/4 x 20-1/2	**SP10B35205080Z**	Price
3/4 x 20-1/2	**SP10B35205120Z**	Price
1 x 30	**SP10B01030040Z**	Price
1 x 30	**SP10B01030060Z**	Price
1 x 30	**SP10B01030080Z**	Price
1 x 30	**SP10B01030120Z**	Price

4-1/2", 5" & 6" Angle Grinders


PD35W9115Q


PD20DWE43114


PD20DWE402


PD35WE15150


PD5061486

Wheel Size (in.) - 4-1/2						
Item	Features	No Load Amps	RPM	Spindle Size (in.)	Order No.	Price
DEWALT	Dust Ejection System™, paddle switch with lock on button, auto-off brushes, 2 position side handle, one-touch guard	11.0	11000	5/8-11	**PD20DWE402**	Price
DEWALT	Hex Wrench, Quick-Change™ Wheel Release, Slim ergonomic body design, One-Touch™ guard, Low profile, jam-pot gear, 2-position removable side handle, Depressed center wheel	7.0	12000	5/8-11	**PD20DWE4011**	Price
DEWALT	One-Touch™ Guard, Low profile, jam-pot gear case, 2-position removable side handle, Quick-Change™ wheel release, Wrench	9.0	12000	5/8-11	**PD20DWE4120N**	Price
metabo	Metabo Long life motor, M-Quick system for tool free disc change, torque limiting clutch, restart protection	8.0	10,500	5/8-11	**PD35W9115Q**	Price
metabo	Robust, universal and economical; Pwoerful motor with good overload capacity, Twist-proof protective cover, Paddle switch with dead-man function, Auto-stop carbon brushes	8.0	11000	5/8-11	**PD35W7515**	Price
BOSCH	Lock-on/off switch, Service Minder™ brushes, epoxy coated field windings, double insulated, 2-position auxiliary handle	6.0	11000	5/8-11	**PD801375A**	Price
Milwaukee	3-Position handle, paddle switch, spindle lock, all ball and roller bearing aluminum gear housing, double insulated 8″ cord	8.5	10000	5/8-11	**PD5061486**	Price
VAPER	Metal gear housing, right or left handle mount	4.3	12000	5/8-11	**PD27AG4543**	Price

Wheel Size (in.) - 5						
Item	Features	No Load Amps	RPM	Spindle Size (in.)	Order No.	Price
DEWALT	Dust Ejection System, E-Clutch™, Power Loss Reset®, Side handle, Inner and Outer Flange, Type 27 Guard	13.0	11000	5/8-11	**PD20DWE43114**	Price
DEWALT	Dust Ejection System, E-Clutch™, Power Loss Reset®, Side handle, Inner and Outer Flange, Type 27 Guard	13.0	11000	5/8-11	**PD20DWE43114N**	Price
DEWALT	Dust Ejection System, Side handle, Inner and Outer Flanges, Type 27 Guard	13.0	9000	5/8-11	**PD20DWE43113**	Price
DEWALT	Dust Ejection System™, Dual Abrasion Protection, E-Clutch®, Power Loss Reset®, Low profile, jam-pot gear case, Keyless adjustable guard, No Lock On paddle switch, Quick-Change™ Wheel Release, One-piece brush arm, Power-Off® Advaced overLoad Protection, Vibration-reducing side handle, Aut-off brushes, Wrench	13.0	11000	5/8-11	**PD20D28114N**	Price

Wheel Size (in.) - 6						
Item	Features	No Load Amps	RPM	Spindle Size (in.)	Order No.	Price
DEWALT	Dual Clutch Protection, Quick-Change™ wheel release, One-piece brush arm, Power-Off Advanced Overload Protection, Vibration-reducing side handle, Auto-off brushes, No Lock on paddle switch, Dust ejection system, Dual abrasion protection, E-Clutch, Power-Loss Reset, Low profile, jam-pot gear case, Keyless adjustable guard	13.0	9000	5/8-11	**PD20D28144N**	Price
DEWALT	Dust Ejection System™, Dual abrasion protection, Vibration reducing side handle, Auto-off brushes, Lock Off, Quick-Change™ Wheel Release, One-piece brush arm, Keyless adjustable guards, Wrench	13.0	9000	5/8-11	**PD20D28066N**	Price
DEWALT	Dust Ejection System™, Dual abrasion protection, Vibration-reducing side handle, Auto-off brushes, Quick-Change™ Wheel elease, One-piece brush arm, Low profile, jam-pot gear case, Keyless adjustable guard, Wrench	13.0	9000	5/8-11	**PD20D28065**	Price
DEWALT	Dust Ejection System™, Dual abrasion protection, Vibration-reducing side handle, Auto-off brushes, Quick-Change™ Wheel elease, One-piece brush arm, Low profile, jam-pot gear case, Keyless adjustable guard, Wrench	13.0	9000	5/8-11	**PD20D28065N**	Price
DEWALT	Power Loss Reset®, Dust Ejection System, Grinder, Side handle, Inner and outer flange, 6" Type 27 Guard, 6' Type 1 Guard, 5" Type 27 Guard	13.0	9000	5/8-11	**PD20DWE43066**	Price
DEWALT	2-Position handle, switch with lock on side, dual clutch and abrasion protection	13.0	9000	5/8-11	**PD20D28140**	Price
metabo	Metabo Long life motor, M-Quick system for tool free disc change, S-automatic torque limiting clutch, restart protection	13.5	9600	5/8-11	**PD35WE15150**	Price
metabo	Metabo Long life motor, Tacho-Constamatic full wave electronics, tool free disc change, electronic overload protection	8.0	9600	5/8-11	**PD35WEF9125**	Price
metabo	Metabo Long life motor, Tacho-Constamatic full wave electronics, tool free disc change, electronic overload protection	8.0	9600	5/8-11	**PD35WEPF9125**	Price

7", 9" & 7/9" Angle Sanders/Grinders



PD20DWE4557



PD35W24180



PD506072



PD8018936

Item	Size (in.)	Features	No Load Amps	RPM	Spindle Size	Order No.	Price
DEWALT	7	Overload protection, Dust Ejection System™ increased brush life and protects the motor, Anti vibe trigger handle reduces user fatigue, automatic turnoff brushes, S style code	15.0	8500	5/8-11	**PD20DWE4557**	Price
	9	Overload protection, Dust Ejection System™ increased brush life and protects the motor, Anti vibe trigger handle reduces user fatigue, automatic turnoff brushes, S style code	15.0	6500	5/8-11	**PD20DWE4559**	Price
metabo	7	Spindle lock, anti-vibration 3 position side handle, auto stop carbon brushes, AC/DC capability	15.0	2400	5/8-11	**PD35W24180**	Price
	9	Spindle lock, 3 position side handle, 3 position rear handle for cutting/ grinding, auto-stop carbon brushes, toolless guard adjustment	15.0	6600	5/8-11	**PD35W23230**	Price
Milwaukee	7/9	Overload protection, debris baffles, soft-grip main handle, 7" and 9" type 27 guard,	15.0	6000	5/8-11	**PD50608830**	Price
	7/9	Spiral bevel gear, 2 finger switch, light weight design, aluminum gear housing with spindle lock, reversible handle	13.0	5000	5/8-11	**PD506072**	Price
BOSCH	9	3 Position handle, lock on/off switch, metal gear cover, AC/DC capability, spiral bevel gears, epoxy coated field winding	15.0	6000	5/8-11	**PD8018936**	Price

metabo® WPF 18 LTX 125 Cordless Flat Head Angle Grinder



- Extremely flat gear head permits working at acute angles down to 43°
- Compact design for quick removal of welding slag, rust or paint in tight places e.g. frame constructions
- Low-fatigue working even at weld seams during out-of-position welding thanks to slim handle
- Robust motor for long service life
- Paddle switch with dead-man function: safe to operate due to an ergonomically integrated non-slip switch
- Tool-free adjustable guard; twist-proof
- Battery pack can be swivelled for better working in hard to reach places
- Detachable dust filter protects motor from coarse particles
- Overload protection: protects the motor from overheating
- Electronic soft start for smooth start-up
- Restart protection: prevents unintentional start-up after power supply interruption
- Ultra-M technology for highest performance, gentle efficient charging, optimum energy utilization and long service life
- Battery packs with capacity display for checking the charge status
- 3-year warranty on battery packs

Model No.	Voltage	Spindle Size (in.)	RPM	Wheel Size (in.)	Order No.	Price
WPF18 LTX 125	18V	5/8-11	8000	5	**PD35WPF18LT122D**	Price
WPF18 LTX 125 Bare	18V	5/8-11	8000	5	**PD35WPF18LT125B**	Price

DEWALT Flexvolt® 60V MAX Grinder 1 Battery Kit

- Kickback Brake engages when a pinch, stall, or bind-up event is sensed and the electronic brake engages with maximum force to quickly stop the wheel, reduce the movement of the grinder, and shut the grinder off
- Brake engages when trigger is released, stopping speeds of 1.5 seconds with standard grinding wheel
- E-Clutch activates in less than a tenth of a second when a pinch/stall is detected, shutting down the motor
- Lithium Ion Battery
- HAZ05



Kit Includes:

- DCG414 Grinder
- (1) DCB606 Flexvolt™ Lithium Ion Battery
- Fast Charger
- Side Handle
- 4-1/2” Type 27 Wheel
- 4-1/2” Type 27 Guard
- 6” Type 27 Guard
- Wrench
- Flanges
- Kit Bag

Model No.	Voltage	RPM	Spindle Size	Featues	Order No.	Price
DCG414T1	2.2HP, 60V	9000	5/8-11	13 Amp motor, Kickback Brake, E-Clutch, Brake engage when trigger is released	**PD20DCG414T1**	Price

Air Powered Angle Grinders 4", 4-1/2" & 5"






Size - 4							
Item	Features	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Order No.	Price
Chicago Pneumatic	Bevel gears & governed motor, Robust steel keyless rotative wheel guard, 1000 hour service interval, Safety Lever, Composite handle & grip	12000	4.7 l/s	1/4	3/8-24	**PF508941075400**	Price
	Ideal for cleaning, deburring, and blending, spiral bevel gearing in angle head, removable dead handle, aluminum alloy housing, rotatable guard	12000	6 CFM	1/4 NPT	3/8-24	**PF50CP9120CR**	Price
	Cast aluminum gear case, Spindle lock, Two-position auxiliary handle, Ball bearing motor, Complete with lambswool mop	13500	6 CFM	3/8 NPT	-	**PF52UT8744**	Price
	Safety lock-off throttle, Air cooled gears, Ergonomic grip, Exhaust silencing, Left or right handle positions, Best for heavy duty surface prep and material removal	11000	6.5 CFM	1/4 NPT	3/8-24	**PF52UT87854**	Price
	Safety lock-off throttle, Maintains speed under load, Heavy duty spiral gears, Ergonomic composite grip, Best for heavy grinding and MRO applications	10000	6 CFM	1/4 NPT	3/8-24	**PF52UT87751**	Price
Air Supreme	Uses type 27 depressed center wheels, locking lever throttle, safety guard and auxiliary handle included	11000	18 CFM	1/4 NPT	3/8-24	**PJ707820**	Price

Size - 4-1/2							
Item	Features	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Order No.	Price
Chicago Pneumatic	Bevel gears & governed motor, Robust steel keyless adjustable wheel rotative guard, 1000 hour service interval, Safety Lever, Composite handle & grip	12000	4.7 l/s	1/4	5/8-11	**PF508941075452**	Price
	Rotatable guard, ergonomic side handle design, powerful motor, durable alloy body	12000	21 CFM	1/4 NPT	5/8-11	**PF50CP9122BR**	Price
	Safety lock-off throttle, Air cooled gears, Ergonomic grip, Exhaust silencing, Left or right handle positions, Best for heavy duty surface prep and material removal	10000	5 CFM	1/4 NPT	5/8-11	**PF52UT87801**	Price
	Safety lock-off throttle, Heavy duty air cooled gears, Ergonomic grip, Exhaust silencing, Left or right handle positions, Best for heavy duty surface prep and material removal	11000	6.5 CFM	1/4 NPT	5/8-11	**PF52UT87855**	Price

Size - 4-1/2 or 5							
Item	Features	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Order No.	Price
	Cast aluminum gear case, Spindle lock, Two-position auxiliary handle, Ball bearing motor, Complete with lambswool mop	12000	6 CFM	3/8 NPT	-	**PF52UT8745**	Price

Size - 5							
Item	Features	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Order No.	Price
JET	Aluminum alloy housing with steel wheel guard, heavy duty ball bearings, machined and hardened gears safety lock throttle	12000	4 CFM	1/4 NPT	5/8-11	**PJ80505451**	Price
Chicago Pneumatic	Bevel gears & governed motor, Robust steel keyless adjustable wheel rotative guard, 1000 hour service interval, Safety Lever, Composite handle & grip	12000	18.9 l/s	1/4	5/8-11	**PF508941075502**	Price
	Industrial grade durability with up to a 2000 hour maintenance inerval, Superior torque for maximal productivity, Superior ergonomics, Spindle lock button, Keyless rotative guard	12000	32 l/s	3/8	5/8-11	**PF506151607220**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

Air Powered Angle Grinders 7"






Item	Features	Style	Free Speed RPM	Average Air Consumption	Air Inlet Size	Spindle Thread	Order No.	Price
Chicago Pneumatic	1-1/4 HP motor, spiral bevel gearing in angle head, uses type 27 depressed center wheels, removable dead handle, aluminum alloy housing, spindle lock	Angle	7500	6 CFM	1/4 NPT	5/8-11	**PF50CP9123**	Price
JET	Aluminum alloy housing with steel wheel guard, heavy duty ball bearings, machined and hardened gears, safety lock throttle	Angle	8500	6 CFM	3/8 NPT	5/8-11	**PJ80505452**	Price
	Governor prevents overspeed , heavy duty ball bearing construction, lever throttle, removable side handle for increased control	Angle	4500	24 CFM	1/4 NPT	5/8-11	**PF52UT8757**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

Chicago Pneumatic CP9361 Air Scribe

- Lightweight, easy to operate
- Simple, piston supplied power for trouble free use
- Graduated sleeve throttle permits accurate power selection
- Change of stylus converts tool to scaler or hammer



Order No.	Price
PF50CP9361	Price

Chicago Pneumatic CP93611 Air Scribe Kit

Air Scribe Kit Includes CP9361 air scribe and 1 each of the following: Anvil for use with chisels and blanks, Flat chisel for scaling and deburring, Chisel blank (can be ground to special shapes for specific jobs), Round nose chisel, High strength carbide-tipped stylus point, 8', 1/4" I.D. Air hose and Air filter

- Accessories also available individually see chart



Type	Order No.	Price
Air Scriber Kit	**PF50CP93611**	Price

FLORIDA PNEUMATIC Engraver

- Used for marking hard materials
- Great for marking identification numbers on small parts
- Suitable for non-ferrous metals, hardened tool steel, glass, ceramic, plastics, etc
- Adjustable power/requires no lubrication
- Engraving point made of tungsten carbide



Type	Order No.	Price
Engraving Point	**PF529780011**	Price
Pneumatic Engraving Pen	**PF52FP780**	Price

Accessories for CP9361 Air Scribe

Description	Order No.	Price
P-043886 1/4 ID 8' Air Hose	**PF50P043886**	Price
P-054177 Stylus Only	**PF50P054177**	Price
P-054182 Chisel Point	**PF50P054182**	Price
P-054183 Flat Chisel	**PF50P054183**	Price
P-054184 Chisel Blank	**PF50P054184**	Price
P-054207 Anvil	**PF50P054207**	Price
P-056381 Air Filter	**PF50P056381**	Price

Milwaukee Professional Series Shear

6805

- All ball and needle bearing
- Brushes designed for easy replacement
- Easy to use toggle switch
- No adjustments needed for straight cuts or curves
- Simple blade adustments – no shims
- Double insulated 8′ cord set
- Amperage: 4.0 Amps
- Capacity in steel: 16 gauge
- Strokes per min.: 4000



Order No.	Price
PD506805	Price

Milwaukee Professional Series Shear

6850

- Trigger speed control
- Aluminum gear case
- Impact resistant handle
- All ball and roller bearings
- 360° Swivel head
- 2-Wire 10′ cord set
- Amperage: 4.0 Amps
- Capacity in steel: 18 GA
- Spindle speed RPM: 0-2,500



Milwaukee Professional Series Nibblers

6880

- Removable side handle
- Cutting guide on front for pattern work
- Starting hole required 1.65"
- Easy replacement of punch and die
- Jam-free operation
- Double insulated 8' cord set
- Amperage: 4.0 Amps
- Capacity in steel: 10 GA
- Strokes per minute.: 1000



Order No.	Price
PD506880	Price

FLORIDA PNEUMATIC Air Powered Filers

- Reciprocating air file makes filing in confined spaces easy
- Metal removal is made easy with a full 1/4" stroke length
- Includes: flat, round, triangular, and bastard cut files
- 4 CFM



Order No.	Price
PF52FP705	Price

Air Powered Nibblers & Shears

• 1/4 NPT









Item	Description	Average Air Consumption	Order No.	Price
AIRCAT	2,500 strokes per minute, Oversized anvil and pouch, Composite handle and throttle level, Rotational rear exhaust muffler	16 CFM	**PF546330**	Price
JET	Lightweight aluminu, pistol grip construction, Cuts metal up to 18 gauge thick, Cutter head swivels 360 degrees, Rebplaceable cutting jaws and blades, Heavy-duty ball bearing construction	4 CFM	**PJ80505910**	Price
Air Supreme	Cuts out quarter panels without distorting edges, design of unit allows starting cut in center of panel, lever throttle for slow speed starting, cuts a tight 1/4″ radius with great accuracy, cuts in steel up to 16 gauge	16 CFM	**PJ707715**	Price
	Shears aluminum and tin up to 20 gauge, makes clean cuts in steel up to 16 gauge, cuts squares, angles, circles and straight lines, variable speed throttle for maximum control, muffled handle exhaust, 2,500 blows per minute	16 CFM	**PJ707705**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

DREMEL® High Performance Rotary Tool Kit

Model 4000-2/30

- The Dremel 4000 variable speed rotary tool offers the highest performance and most versatility of all Dremel rotary tools-increased motor strength plus electronic feedback circuitry enables consistent performance at all speed levels
- Uses all existing Dremel accessories and attachments plus high performance attachments to complete the widest range of projects
- Slim, ergonomic body provides a 360° grip zone
- Circle cutter/straight edge guide
- Sanding/grinding guide
- Storage case
- Includes 30 genuine Dremel accessories
- Quick start book





Order No.	Price
PH504000230	143.40

DREMEL® Rotary Tool Kit

Model 3000-1/24

- Variable speed 5,000-32,000 RPM
- EZ Twist™ nose cap with wrench for fast accessory changes
- Cool-running ball bearing construction for smooth and quiet operation
- Replaceable motor brushes extend tool life
- Can be used with all Dremel rotary tool accessories and most attachments
- 2 Year warranty



Order No.	Price
PH503000124	103.40

DREMEL® Single Speed MultiPro™ Tool

Model 100-N/7

- Single speed (35,000 RPM)
- Thrust bearing for greater drilling capacity
- Double insulated motor
- Unique collet nut for fast replacement of bits
- Tapered housing for comfort and finger tip control
- Accessory bit holder



Order No.	Price
PH50275	63.90

DREMEL® MultiPro 7700 Two Speed Cordless Kit

- Motor: 7.2 volt DC
- Speed: 2 speed, 10,000 and 20,000 RPM
- Housing: sturdy, shatter resistant nylon
- Battery pack: nickel cadmium
- Recharge: 3 hours
- Collet capacity: up to 1/8” shank
- Tool weight: 9 ounces
- Set includes: 7.2 volt two speed MultiPro cordless tool with cat. 757-01 battery pack, 3-hour charger, storage case, 15 accessories



Order No.	Price
PH507700115	71.85

DREMEL® 7300-N/8 2 Speed Cordless Rotary Tool

- Designed for drilling, sanding, shaping, detailing and other light-duty jobs
- Compact, go-anywhere, use-anytime tool
- Two speed motor -6,500 / 13,000 RPM
- Can be used with any Dremel accessory bit with up to a 1/8” shank



Order No.	Price
PH507300N8	43.70

DREMEL® Variable Speed Lithium Ion Cordless Kit

- 8V Lithium-ion battery pack
- Comfort grip body
- Tool weight: 22 oz
- Speeds: variable 5,000-30,000 RPM
- Motor: 8V DC
- Collet capacity: 1/32” to 1/8” (1/8” included)
- Set includes: lithium-ion battery pack, 1-hour battery charger, nose cap collet wrench, 21 assorted accessories & carrying case



Order No.	Price
PH508100N21	128.00

DREMEL® 7000-N/5 Cordless Rotary Tool

New!

- Designed for drilling, sanding, shaping, detailing and other light-duty jobs
- Uses standard AA alkaline batteries to eliminate the need for a battery charger
- Battery charge time: 3 hours
- Can be used with most Dremel rotary tool accessories with up to a 1/8” shank diameter
- Ideal performance for small craft projects
- Cordless—goes anywhere. No electrical outlet required
- Two-speed simplicity is ideal for variety of materials



Order No.	Price
PH507000N5	36.10

DREMEL® High Performance Rotary Tool

Model 4200-4/36

- EZ Change



Order No.	Price
PH504200436	190.40

DREMEL® MM20-07 Multi-Max™

- Oscillating multi-tool gives DIY-ers a powerful professional performance
- 2.3-amp motor – as powerful as many professional oscillating cutting tools
- Solid-performing and comfortably operating oscillating tool
- Optimal Control. Safe Operation. High Precision. Minimal Dust
- Two-year warranty



Order No.	Price
PH50MM2007	111.40

MM30-04 Multi-Max™

- Features 3.3 amps of power ranking it as among the most powerful oscillating tools available
- Solid performing and comfortably operating oscillating tool as you will find
- Powerful 3.3-amp motor helps cut through tougher materials
- Innovative magnetic accessory interface
- Convenient on-tool integrated wrench
- Extra-wide 3.2-degree angle of oscillation
- Variable speeds from 10,000 to 23,000 OPM – the widest speed range of any oscillating cutting tool
- Two-year warranty

Order No.	Price
PH50MM3004	164.00

MM40-05 Multi-Max™

- Robust and powerful 3.8-amp motor with Quick-Boost™ electronic feedback MM40 is capable of tackling demanding jobs while it automatically maintains constant speed through the toughest materials
- High Performance 3.8-amp motor – for the most demanding applications
- Tool-less Quick Lock™ accessory change system lets you switch between accessories with a simple turn of a lever
- Innovative Quick Hold™ magnetic accessory interface
- Ergonomic grip gives you greater comfort and control while using our oscillating cutting tool
- Optimal Control. Safe Operation. High Precision. Minimal Dust
- Extra-wide 3.2-degree angle of oscillation
- Two-year warranty.

Order No.	Price
PH50MM4005	206.40

DREMEL® Moto-Saw™



- Detachable coping function for handheld use to take the tool to the work piece
- Auto tensioning quick change™ mechanism for easy accessory change and optimal blade tensioning
- Variable speed control for optimal cutting in a variety of materials
- Fast clamp base attaches to various tables, benches and surfaces
- Dust port adapter keeps line of sight clear and work space clean
- Blue edge guide locking levers illustrated on packaging are not included in the kit and do not affect performance of the tool
- Two year warranty

Order No.	Price
PH50MS2001	158.40

DREMEL® Saw-Max™ Tool Kit



- Powerful 6 Amp motor – easily tackles the toughest applications
- Versatile cutting system – for cutting a variety of materials including wood, plastic, metal, tile and masonry
- Worm drive™ gearing – for durability and power
- Excellent line of sight for precise, confident cuts

Order No.	Price
PH50SM2002	211.60

DREMEL® 16 Pc. Corded Rotary Tool

Model 200-1/15

- Offers the precision and control required to complete a wide range of projects
- Two speed settings allow you to use the low speed setting for cleaning applications and using brush accessories and the high speed setting for routing, cutting and sanding applications.
- Lawn Mower and Garden Tool Sharpening Attachment
- Ideal for multiple applications on a variety of materials
- Includes 15 genuine Dremel accessories
- AMP: 1.15
- Voltage: 120V
- Cord length: 6 ft.
- Set Includes: Rotary Tool, (15) Assorted Accessories, (1) Attachment
- Two year warranty



Order No.	Price
PH50200115	82.20

DREMEL® 6 Pc. EZ Lock Starter Kit



- Kit includes 5 pieces 1-1/2" diameter wheels plus EZ lock mandrel
- 1 Pc. mandrel design eliminates the need for screw and screwdriver
- Effortless locking and loading - no tiny mandrel screw to lose
- Compatible with all Dremel rotary tools

Order No.	Price
PH50EZ406	17.60

DREMEL® 12V Max Lithium-ion Cordless Rotary Tool Kit

Model 822-2/28

- 33% Longer run time compared to the Dremel 8200 when cutting screws
- Variable speed from 5,000 to 30,000 rpm provides maximum control and precision
- Can be used with all current Dremel rotary tool accessories and attachments
- Includes 2 lithium ion batteries for extended run-time



Order No.	Price
PH508220228	Price

DREMEL® EZ Lock™ Sanding/ Polishing Kit

- Reusable storage box
- Application and material usage information included
- Contains 7 EZ Lock sanding and polishing accessories
- Includes three abrasive buffs, two detail abrasive wheels, one cloth polishing wheel, and polishing compound



Order No.	Price
PH50EZ68401	Price

DREMEL® EZ Lock™ Cutting Kit

- Reusable storage box
- Application and material usage information included
- Effortless locking and loading - no tiny mandrel screw to lose
- Cut-off wheels last 2 times longer than current fiberglass-reinforced cut-off wheels
- Compatible with all Dremel rotary tools
- Cut-off wheels labeled for easy identification
- First patented system of its kind



Order No.	Price
PH50EZ68801	Price

DREMEL® 110 Pc. All Purpose Accessory Kit

Model 709-02



Order No.	Price
PH5070902	Price

DREMEL® EZ Lock™ EZ Drum™ Kit

- EZ Lock™ mandrel and EZ Drum™ mandrel for faster accessory changes
- Reusable storage box
- Application and material usage information included
- The kit features 18 EZ Lock sanding and grinding accessories and includes one EZ Lock™ mandrel, one EZ Drum™ mandrel, 6 sanding discs, 1 grinding wheel, 2 grinding stones, 6 sanding bands, and 1 abrasive buff



Order No.	Price
PH50EZ68601	Price

DREMEL® 160 Pc. All Purpose Accessory Kit

- Comes with re-useable storage case and 160 accessories
- Can stand upright or hang on a wall by hook
- Ideal for cutting, sanding, polishing, grinding, and carving
- A complete start-up kit offering the breadth of accessories helpful for wide assortment of tasks
- EZ twist nose cap wrench, EZ Lock mandrel, and EZ Lock cut-off wheels are part of this 160-piece kit filled with genuine Dremel accessories

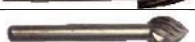
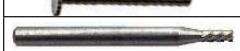


Order No.	Price
PH5071008	Price

DREMEL® EZ Lock™ Accessories

Type	Order No.	Price
1/2" Thin Cut, Cut-off Wheel	PH50EZ409	Price
1-1/2" Cut-off Wheel (12 Pack)	PH50EZ456B	Price
1-1/2" Cut-off Wheel (5 Pack)	PH50EZ456	Price
1-1/2" Cut-off Wheel (5 Pack)	PH50EZ476	Price
1-1/2" Diamond Wheel	PH50EZ545	Price
1-1/2" Grinding Wheel	PH50EZ541GR	Price
1-1/2" Premium Metal Cutting Wheel	PH50EZ506CU	Price
120 Grit Sanding Disc	PH50EZ412SA	Price
240 Grit Sanding Disc	PH50EZ413SA	Price
60 Grit Sanding Disc	PH50EZ411SA	Price
Lock Mandrel	PH50EZ40201	Price
Sanding Disc Multi Pack	PH50EZ414SA	Price

DREMEL® Line Of MultiPro Accessories High Speed Cutters
1/8” Shank

Item	Size (in.)	Order No.	Price
	3/32	**PH50190**	Price
	1/8	**PH50118**	Price
	1/8	**PH50191**	Price
	1/8	**PH50194**	Price
	3/16	**PH50192**	Price
	1/4	**PH50100**	Price
	1/4	**PH50116**	Price
	1/4	**PH50117**	Price
	1/4	**PH50121**	Price
	1/4	**PH50125**	Price
	5/16	**PH50114**	Price
	5/16	**PH50115**	Price
	5/16	**PH50124**	Price
	5/16	**PH50134**	Price
	5/16	**PH50144**	Price
	3/8	**PH50199**	Price
	9/16	**PH50193**	Price

DREMEL® Full Line Of MultiPro Accessories Tungsten Carbide Cutters
1/8” Shank

Item	Size (in.)	Order No.	Price
	3/32	**PH509902**	Price
	3/32	**PH509904**	Price
	1/8	**PH509901**	Price
	1/8	**PH509903**	Price
	1/8	**PH509905**	Price
	1/8	**PH509906**	Price
	1/8	**PH509909**	Price
	1/8	**PH509910**	Price

DREMEL® Replacement Motor Brushes

For Use With	Order No.	Price
232 & 332	**PH5090828**	Price
245, 245 & 250	**PH5090825**	Price
275, 285, 395, 277 Type 3	**PH5090930**	Price

Safety glasses should be worn when using cutting tools. See Index.

DREMEL® Full Line Of MultiPro Accessories Wire & Bristle Brushes

Item	Type	Order No.	Price
	Carbon Steel Brush	**PH50428T**	Price
	Carbon Steel Brush	**PH50442T**	Price
	Carbon Steel Brush	**PH50443T**	Price
	Nylon Bristle Brush	**PH50403T**	Price
	Nylon Bristle Brush	**PH50404T**	Price
	Nylon Bristle Brush	**PH50405T**	Price

DREMEL® Drill Press



- Converts Moto-Tool into a precision drill press
- Features rack and pinion feed handle; calibrated depth shaft; 6” × 6”; slotted base
- Holds MultiPro Models 275, 285, 395, 398 and 780 only

Order No.	Price
PH50212	Price

DREMEL® Collets For MultiPro Tools & Moto Flex Tools

- For Moto-Tool Nos.: 245 & 250; series 3 or later: 260, 270 & 280; series 2 or later: 370, 380, 232, 332, 275, 285, 295, 241, 246 & 395

Size (in.)	Order No.	Price
1/32	**PH50437**	Price
1/32	**PH50483**	Price
1/16	**PH50436**	Price
1/16	**PH50482**	Price
3/32	**PH50481**	Price
1/8	**PH50480**	Price





DREMEL® Quick Change C



- Includes 4 collets
- Fits Flex-Shaft 225 type 2, and Moto-Tool 275, 285, 395, 410, 595, 850 and 950

Order No.	Price
PH504485	Price

DREMEL® Cut Off Wheels



Size (in.)	Features	For Use With	Qty. Per Vial	Order No.	Price
1-1/4 x .045	Fiberglass reinforced	402 Mandrel	5	**PH50426**	Price
15/16 x .025	Emery wheel for slicing and cutting off metal & plastic	402 Mandrel	36	**PH50409**	Price
15/16 x .040	Emery, heavy duty	402 Mandrel	20	**PH50420**	Price

DREMEL® 69 Pc. Cut Off Wheel Assortment



- Includes 1 Pc. No. 402 mandrel and assorted cut-off wheels

Order No.	Price
PH50688	Price

DREMEL® Flex Shaft Attachment



- Comfort grip hand-piece and integrated shaft lock button
- 5” bend radius provides more flexibility during use
- Accepts up to 1/8” shank accessories
- Fits tool models: 4000, 400, 398, 395, 300, 285, 275, 200, 100, 8200, 800

Order No.	Price
PH50225	Price

DREMEL® Mandrels 1/8" Shank

Order No.	Price
PH50401	Price
PH50402	Price



FOREDOM® 2272 Craft Kit

MADE IN THE USA

1/8 HP • 0-18,000 RPM

- For use on wood, metal, plastic, leather, glass, stone and more

Includes:

- S Model machine with powerful 1/8 HP motor and FCT-1 foot control
- No. 30 Handpiece with key-type chuck - Takes up to 5/32" shank
- Accessory Kit No. 20 with 35 assorted accessories including cutters, burrs, mounted points and abrasive wheels
- Maintenance supplies



Order No.	Price
RM302272	Price

FOREDOM® SM Bench Model with Built In Control

MADE IN THE USA

- 1/8 HP
- 0-18,000 RPM
- Standard with No. 30 hand piece
- 39" Flex shaft



Order No.	Price
RM30SM30	Price

FOREDOM® TXH Motor Kit

- TXH Motor with heavy duty shaft SXR Control in metal housing
- No. 44HT handpiece with 1/8" and 1/4" collets, pin & wrench
- HK25 - 10 pc. accessory kit
- Grease
- Spare motor brushes
- Industrial kit



Order No.	Price
RM30TXH440	Price

FOREDOM® BL Bench Lathe - 1/6 Horsepower

MADE IN THE USA

- Variable speed bench lathe in a compact size suitable for use at the workbench
- Magnet motor is extremely quiet and smooth running with all the power and speed required for a variety of polishing and buffing jobs
- Cast iron base has suction cup feet for a secure hold on the work surface
- Lathe comes with the TM-5 (left hand) and TM-6 (right hand) Tapered Spindles for holding buffs and brushes up to 4" (100mm) in diameter
- 1/6 HP High torque motor
- 125 Watts (continuous rating)
- 5/16" Dia. motor shaft
- Ball bearing
- 1,800-7,000 RPM
- CSA Certified



Order No.	Price
RM30BL1	Price

FOREDOM® Maintenance Kits

MADE IN THE USA

- Available for all Foredom flexible shaft power tools except Model H
- These kits contain a spare flexible shaft, a pair of replacement motor brushes, flexible shaft grease, and motor oil (except the MK-9 kit for ball bearing motors)



For Use With	Order No.	Price
Ball Bearing Motors, CC, DD, MM	**RM30MK9**	Price

DUMORE CORPORATION Quality is our legacy — Model 35 1/5 HP Hand Grinder

- 35,000 RPM
- Three precision bearings seated in steel inserts give rigid spindle support for mounted wheels up to 1" diameter
- Forced air ventilation
- Quick change chuck
- 1/5 HP with 1/4" Collet chuck, 115V, AC/DC



Order No.	Price
RL9535171	Price

Milwaukee M12 12-Volt Lithium-Ion Cordless Rotary Tool Kit

- 12 Volt REDLITHIUM battery charges withing 30 minutes HAZ05
- Click and set on/off switch for precise speed selection Compact, lightweight design allows you to work comfortably in tight spaces
- REDLITHIUM offers 40% more run time, 20% more speed and torque, fade-feree power, operates down to 0/-18, runs 20%



Model No.	RPm	Set Includes	Order No.	Price
2460-21	32000	2460-20 M12 cordless lithium-ion rotary tool, 48-11-2401 M12 REDLITHIUM battery, 48-59-2401 M12 lithium-ion charger, cutting wheels, mandrel, wrench, carrying case	**PD50246021**	Price

FOREDOM® #30 Hand Piece

MADE IN THE USA

- Geared chuck - 5/32" capacity
- Prelubricated ball bearings - no maintenance
- For all motors except "H"

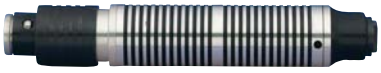


Order No.	Price
RM3030	Price

FOREDOM® #25H Hand Piece

- Heavy-duty handpiece features one piece spindle and permanently lubricated shielded ball bearings for cool running continuous use
- Precision collets available in sizes from 1/16" to 1/4" and millimeter sizes
- Furnished with 1/4" collet (unless otherwise specified), pin and wrench for changing collets
- Size: 1-1/32"D x 6-1/2"L
- Weight: 10 oz.
- For "H" motors only

MADE IN THE USA



Order No.	Price
RM3025H	Price

FOREDOM® Electronic Foot Control Metal Housing

- Motor controls for all motors except "H" and "R"

MADE IN THE USA



Order No.	Price
RM30SCT1	Price

FOREDOM® #44H Hand Piece

MADE IN THE USA

- Collet Handpiece is similar to the No. 30H but is a collet-type handpiece
- Furnished with 1/4" collet (unless otherwise specified), pin and wrench for changing collets
- Other collet sizes 1/16" to 1/4" in 1/32" increments, 3mm and 6mm. 1" Diameter, 6-1/4" long
- Weight 9-1/2 oz
- For "H" motors only



Order No.	Price
RM3044HT	Price

FOREDOM® #30H Hand Piece

MADE IN THE USA

- Chuck type handpiece features permanently lubricated shielded ball bearings and geared chuck
- Accommodates accessory shank sizes up to 5/32"
- Comes complete with chuck key
- 1" Diameter, 5-3/4" long
- Weight 8 oz
- For "H" motors only



Order No.	Price
RM3030H	Price

FOREDOM® Electronic Foot Control Heavy Duty Plastic Housing

†Motor controls for all motors except "H" and "R"

MADE IN THE USA



Order No.	Price
RM30FCT1	Price

FOREDOM® #25 Hand Piece

MADE IN THE USA

- Precision handpiece for continuous work
- Collet chuck - 1/16" to 1/4" collets available
- Furnished with 1/8" collet
- Lifetime - lubricated double-shielded bearings
- For all motors except "H"



Order No.	Price
RM3025	Price

FOREDOM® Electronic Manual Control

Motor controls for all motors except "H" and "R"

MADE IN THE USA



Order No.	Price
RM30EM1	Price

FOREDOM® #44 Hand Piece

MADE IN THE USA

- Similar to No. 30 for larger shanks
- Collet chuck - 1/16" to 1/4" collets
- Furnished with 1/4" collet
- Prelubricated ball bearings - no maintentance
- For all motors except "H"



Order No.	Price
RM3044	Price

FOREDOM® Slim Hand Piece for Fine Detailed Work

MADE IN THE USA

- Chuck guard protects fingers
- Collet chuck: 1/32" - 1/8"
- Comes with 3/32" collet and wrench
- Pre-lubricated ball bearing—no maintenance
- For all motors except "H"



Order No.	Price
RM308	Price

Dual Action Rotary Tool Set



- Use to sand, polish, clean and do detail work
- Two speeds: 1650 / 1800 RPM. Model number: DT2000.
- Two motions: Circular Back and forth Double insulated
- Includes: Nylon straight brush, Nylon wheel brush Nylon twisted wire brush Conical felt tip Sanding wheel adhesive sanding discs Storage/carrying case.

FREE Bonus accessory tools:

- Brush material includes, nylon, non-ferrous, and Tampico fiber
- Brush Styles: Round, Rectangular, and tubular (10 Pc.)
- File Styles: Bastard/Coarse, 2nd cut/med, Smooth/fine (13Pc.)

Type	Order No.	Price
Accessory Kit	KW905109	Price
Rotary Tool	KW9020003	Price
Rotary Tool & Accessory Kit	KW9020003A	Price

air turbine tools® Model 200SV



MADE IN THE USA

- Oil-free operation — Only clean, dry air required
- No oil mist — No fogging or contamination of parts
- Constant high speed under variable load — Controlled by patented governor — Save up to 30% on compressed air
- Improved cutting tool action — High torque and high constant speed means less operator pressure plus extended tool life
- Turbine drive — Less vibration, fewer moving parts, no maintenance, fewer repairs
- Quiet, under 67 dBa — rear exhaust prevents interference with workpiece
- Ergonomic function — for operator comfort. Puts less strain on wrist and hand, reducing the possibility of Carpal Tunnel Syndrome



Free Speed RPM	Power Rating HP	Air Inlet Size	Air Consumption Idle CFM	Air Consumption Stall Flow	TIR Collet Held Shank	Sound Level	Collet/Chuck Size (in.)	Weight	Order No.	Price
50000	3	1/4 NPT	2	10	Less than .001"	Less than 67 dBa	1/8	5.4 oz	**PF53200**	Price

air turbine tools® Model 201SV



MADE IN THE USA



Free Speed RPM	Power Rating HP	Air Inlet Size	Air Consumption Idle CFM	Air Consumption Stall Flow	TIR Collet Held Shank	Sound Level	Collet/Chuck Size (in.)	Weight	Order No.	Price
40000	.15	1/4 NPT	1	8	Less than .001"	Less than 65 dBa	1/8	6 oz	**PF5332140**	Price
50000	.2	1/4 NPT	3	8	Less than .001"	Less than 65 dBa	1/8	6 oz	**PF5332150**	Price
65000	.2	1/4 NPT	3	8	Less than .001"	Less than 65 dBa	1/8	6 oz	**PF5332160**	Price

air turbine tools® Model 202SV





MADE IN THE USA

Free Speed RPM	Power Rating HP	Air Inlet Size	Air Consumption Idle CFM	Air Consumption Stall Flow	TIR Collet Held Shank	Sound Level	Collet/Chuck Size (in.)	Weight	Order No.	Price
40000	.45	1/4 NPT	6	21.5	Less than .001"	Less than 67 dBa	1/8	8 oz	**PF5332240**	Price
50000	.5	1/4 NPT	7.5	21.5	Less than .001"	Less than 67 dBa	1/8	8 oz	**PF5332250**	Price
65000	.55	1/4 NPT	12	21.5	Less than .001"	Less than 67 dBa	1/8	8 oz	**PF5332260**	Price

air turbine tools® Model 525SV





MADE IN THE USA

Free Speed RPM	Power Rating HP	Air Inlet Size	Air Consumption Idle CFM	Air Consumption Stall Flow	TIR Collet Held Shank	Collet/Chuck Size (in.)	Weight	Order No.	Price
30000	.4	1/4 NPT	5.5	21.5	Less than .001"	1/4	14.5 oz	**PF5332530**	Price

air turbine tools® Model 200SV & 201SV Collet Accessories

Type	Size (in.)	Fits	Order No.	Price
Long Collet	1/16	200SV Grinder	**PF5312143**	Price
Long Collet	1/8	200SV Grinder	**PF5312141**	Price
Long Collet	3/32	200SV Grinder	**PF5312144**	Price
Long Collet Nut	-	200SV Grinder	**PF5312149**	Price

air turbine tools® Model 202SV Collet Accessories

Type	Size (in.)	Fits	Order No.	Price
Long Collet	1/16	202SV Grinder	**PF5312295**	Price
Long Collet	1/8	202SV Grinder	**PF5312291**	Price
Long Collet	3/32	202SV Grinder	**PF5312296**	Price
Long Collet Nut	-	202SV Grinder	**PF5312298**	Price

air turbine tools® Model 525SV Collet Accessories

Type	Size (in.)	Fits	Order No.	Price
Long Collet	1/4	525SV Grinder	**PF5312446**	Price
Long Collet	1/8	525SV Grinder	**PF5312443**	Price
Long Collet Nut	-	525SV Grinder	**PF5312449**	Price

air turbine tools® High Flow Filter/ Regulator



- Filter provides a high performance, space saving combination unit
- Ideal for use in high flow applications that require regulated, high quality air

Order No.	Price
PF5330003	Price

air turbine tools® High Flow Regulator & Filter



- Air Turbine tools require dry, clean air filtered at 5+ micron extraction - Contaminated air supply damages your tool's mechanism - For long tool life, tap into the compressed air line before oil is added
- High Flow Filters Port Size NPT: 3/8"
- Filter Element Rating: 5+ Micron
- Flow: 65 scfm

Order No.	Price
PF5330004	Price

100,000 RPM Pencil Grinder

- High speed, turbine-driven air motor has no wearable gears, vanes or blades, assuring longer tool life.
- Oil-free operation minimizes maintenance time and repair costs
- Enhanced cut rate is ideal for use on titanium and other metals, plus alloys, graphite, wood, glass, and resin with high glass content
- Ceramic bearings provide optimum performance and reliability
- Tool speed is adjustable with simple twist of on/off switch
- Stainless steel tool housing offers stability and durability
- Ergonomic pencil-type shaft provides greater operator control
- Tactile cues on shaft end alert operator to rotating collet area
- Changing of attachment is achieved with easy, one-wrench maneuver



Collet/Chuck Size (in.)	Free Speed RPM	Exhaust Type	Max. Air Flow CFM/SCFM (LPM)	Air Pressure PSIG (Bar)	Hose I.D. Sice Inch (mm)	Air Inlet Size	Weight Lb. (kg)	Length Inch (mm)	Height Inch (mm)	Order No.	Price
1/16	100000	Rear	1/6 (170)	90 (6.2)	1/4 (6)	1/4 NPT	.84 (.38)	5-5/16 (135)	1-1/2 (37)	**PF3051811**	Price
3/32	100000	Rear	1/6 (170)	90 (6.2)	1/4 (6)	1/4 NPT	.84 (.38)	5-5/16 (135)	1-1/2 (37)	**PF3051812**	Price
1/8	100000	Rear	1/6 (170)	90 (6.2)	1/4 (6)	1/4 NPT	.84 (.38)	5-5/16 (135)	1-1/2 (37)	**PF3051810**	Price

DOTCO Right Angle Pencil Grinders

- Industrial bearing provides long life expectancy
- Designed for precision deburring and metal removal
- Compact and light aluminum weight housing
- Roll throttle equipped



Model No.	Length (in./mm)	Collet/Chuck Size (i.)	RPM	Order No.	Price
10R0401-18	5/8 in / 147.3mm	1/8	60000	**PF6510R040118**	Price
12R0410-18	5.8 in / 147.3mm	1/8	60000	**PF6512R041018**	Price

DOTCO Turbine Grinder

- Requires no air line lubrication - High precision ball bearings for long life expectancy
- Two-stage turbine motor with roll throttle
- Achieves a superb finish with its high speed and precision spindle
- Light weight and durable aluminum housing
- Low vibration and quiet operation minimizes operator fatigue

Specifications:

- Length: 5.4" / 137.2mm
- Collet/Chuck Size: 1/8"
- Free Speed RPM: 100000
- HP: .06
- Weight: .441 lbs



Order No.	Price
PF6510R900008	Price

.1 HP Straight-Line Pencil Grinder

Model 51730

Integrated collet with 1/8" Collet insert

- Ideal for precision deburring and finishing
- No wearable gears, vanes or blades
- Oil-free operation
- Air motor is contrilled with patented governor, providing constant tool speed under load



Specifications:

- Weight .78 lbs
- .1 HP @ 50,000 RPM
- Air Inlet: 1/4" NPT
- Rear Exhaust

Order No.	Price
PF3051730	Price

DOTCO Pencil Grinder 1/8" Collet

- Industrial bearing provides long life expectancy
- Designed for precision deburring and metal removal
- Compact and light weight composite housing
- Roll throttle equipped

Specifications:

- Air Inlet Size: 1/8"
- RPM 60,000
- .1 HP
- Rear Exhaust
- Length 5.8" / 147.3mm
- Weight: .220 lbs



Order No.	Price
PF6512R041018	Price

Precision Air Grinders with 1/8" Collet

- Designed for high speed hand grinding, deburring, drilling, polishing, burring and sanding
- An in-line filter and oiler should be used to provide adequate lubrication to the air motor
- Air Pressure must be kept below 85 lb/in - High air pressure increases speed which causes damage to the wheels and grinder

Item	RPM	Order No.	Price
Air Supreme	54000	**PJ65TG11A**	Price
Chicago Pneumatic	60000	**PF50CP9104QB**	Price
	54000	**PF52UT87062**	Price





DEWALT 14" Abrasive Chop Saw with Quick Change™ Blade Change System

- Powerful 15 Amp/5.5 HP (maximum motor HP)
- QUIK-CHANGE™ blade change system providing the ability to change wheels without a wrench
- Exclusive QUIK-FENCE™ tool-free, 45° adjustable fence allows for fast and accurate angle cuts without using a wrench
- Quick-lock vise allows for fast clamping on different size materials
- Soft start extends gear and motor life by reducing start up torque
- Ergonomically designed "D" handle provides a more comfortable hand position, reducing fatigue
- Extra wide solid steel base provides increased stability when cutting longer material. Four pre-drilled holes in the base allow easy bolt down to any work bench
- Heavy-duty lock down pin allows head of the saw to be locked in the carrying position
- Large cutting capacity (5" round / 4-1/2" x 6-1/2" rectangle) provides the ability to cut a wide variety of materials



Order No.	Price
PD20D28715	Price

DEWALT 14" Abrasive Chop Saw

- 15 Amp/4 HP (maximum motor HP)
- Ergonomically designed "D" handle reduces fatigue and increasing productivity
- Quick-lock vise for fast clamping on different size materials
- 45° pivoting fence allows for fast and accurate angle cuts
- Spindle lock allows user to make wheel changes quickly and easily
- Integrated top handle allows the saw to be carried around easily
- Heavy-duty lock down pin
- On-board wheel change wrench



Order No.	Price
PD20D28710	Price

metabo® 14" Chop Saw

- Lock-off button and Spindle lock
- Pivoting wheel guard
- Steel base
- 4,100 No load RPM
- 2,300 Rated input watts
- 1" Arbor size
- 9-3/8" Quick release vise (0-45 °)



Cutting Capacity	Angle Setting	Motor	Order No.	Price
Max 2-1/2" bar, 5" pipe	0-45	15 Amps, 120V	**PD35CS23355**	Price

DEWALT 14" Multi-Cutter™ Saw

- Cuts a wide variety of materials including ferrous and non-ferrous metals
- Utilizing a carbide tipped blade allows the depth of cut to remain constant throughout blade life
- Multi-cutter cuts 4 times faster than chop saws and 8 times faster than portable band saws in 2" x 2" x 1/4" angle iron
- 14" 70-tooth carbide tipped blade with specially designed carbide teeth deliver fast, precise, virtually burr-free cuts
- Largest capacity in its class: 5-3/16" round & 4-1/2" x 6-1/2" rectangular
- Ergonomically designed horizontal handle helps reduce user fatigue
- 15 Amp / 4 HP motor provides more overload capacity for increase performance
- Patented QUIK-FENCE™ tool-free, 45° adjustable fence allows for fast and accurate angle cuts without using a wrench
- Quick-lock vise allows for fast clamping on different size materials
- Extra wide solid steel base with four pre-drilled holes in the base allow easy bolt down to any work bench
- On-board wheel change wrench allows for convenient storage and greatly reduces the risk of lost wrenches



Order No.	Price
PD20DW872	Price

DEWALT Flexvolt® 12" 120V MAX Double Bevel Compound Miter Saw Kit

- Corded or coredless power delivers ultimate flexibility
- CUTLINE Blade Positioning System
- Runtime up to 289 cross cuts in baseboard along with best in class vertical capacity against sliding force
- 2 x 8" 45° Bevel Cut Capacity
- 4 x 6" 45° Miter Cut Capacity
- 10" with back fence 90° Cross-Cut Capacity
- 6-1/2" Vertical Capacity (Baseboard Against Fence)
- 6-5/8" Vertical Capacity (Crown Molding Vertically Nested)
- 3800 RPM No Load Speed
- 5/8" Arbor
- Includes: Blade, Blade Change Wrench, Dust Bag, (2) 60V MAX Lithium Ion Batteries, Dual Port Fast Charger, 120V AC Adapter



Model No.	Order No.	Price
DHS716AT2	**PD20DHS716AT2**	Price

Portable Band Saws


PD20DWM120K


PD506230

Brand	Features	No Load Speed	Cutting Capacity (in.)	Motor	Order No.	Price
DEWALT	44-7/8 x 1/2 x .020" blade (included)	100 - 350 FPM	5 x 4-3/4	10 Amps	**PD20DWM120K**	Price
Milwaukee	44-7/8 x 1/2 x .020" blade (included)	0 - 350 SFM	4-3/4 x 4-3/4	6 Amps	**PD506230**	Price
	44-7/8 x 1/2 x .020" blade (included)	250/200 SFM	3-1/2 x 4-1/2	6 Amps	**PD506226**	Price
	44-7/8 x 1/2 x .020" blade (included)	350/250 SFM	4-3/4 x 4-3/4	6 Amps	**PD506236**	Price

See Index for bandsaw blades.

Milwaukee Cordless Portable Band Saw



Features	No Load Speed	Cutting Cap. (in.)	Order No.	Price
44-7/8 x 1/2 x .020" blade (included)	0-225 / 0-350 FPM	4-3/4 x 4-3/4	**PD50072921**	Price

Reciprocating Saws


PD20DWE357


PD20DWE305


PD50651922

Item	Features	No Load Speed	Motor	Stroke (in.)	Order No.	Price
DEWALT	4 Position keyless lever action blade clamp, variable speed trigger	0-2900 SPM	12 Amps	1-1/8	**PD20DWE305**	Price
	Compact and lightweight design; 14.5" in total length fits between studs and allows user to make cuts in confined spaces	0-3000 SPM	12 Amps	1-1/8	**PD20DWE357**	Price
Milwaukee	Trigger controlled variable speed, double insulated 8' cord set, case and bi-metal blade assortment, Quik-Lok™ blade clamp system	0 - 3000 SPM	12 Amps	3/4	**PD50650922**	Price
	Trigger controlled variable speed, double insulated 8' cord set, case and bi-metal blade assortment, Quik-Lok™ blade clamp system	0- 3000 SPM	12 Amps	1-1/8	**PD50651922**	Price

Cordless Reciprocating Saws


PD20DC385K


PD50071922


PD20DC305K

Item	Features	Voltage	No Load Speed	Stroke (in.)	Order No.	Price
DEWALT	Rubber overmod grip for comfort, keyless lever-action blade clamp, pivoting shoe, LED light	60V	0 - 3000 SPM	1-1/8	**PD20DCS388T2**	Price
	Toolless blade-change system, aluminum gearbox with insulated cover, four orbital-action settings, adjustable dust blower	18V	0 - 3000 SPM	1/8	**PD20DC385K**	Price
	Trigger controlled variable speed, 36V high performance battery, high power motor, electric brake, 4-position keyless blade clamp	36V	0 - 3000 SPM	1-1/8	**PD20DC305K**	Price
	Trigger controlled variable speed, keyless 4-position blade clamp, LED light	20V	0 - 2900 SPM	1-1/8	**PD20DCS367B**	Price
Milwaukee	Trigger controlled variable speed, V28 lithium-ion batteries, charger, runs faster than most corded tools, up to twice the run time of 18 volt tools	28V	0 - 3000 SPM	1-1/8	**PD50071922**	Price

t

Air Powered Reciprocating Saw



Brand	Description	Average Air Consumption	Air Inlet Size	Order No.	Price
UT	Air saw for cutting straight and curved surfaces, built-in air regulator for positive speed control, lever type with safety throttle, 9,000SPM.	4 CFM	1/4 NPT	**PF52UT8999**	Price

Cordless Circular Saw

Brand	Features	No Load Amps	RPM	Blade Size (in.)	Order No.	Price
BOSCH	Lightweight composite footplate, powerful dust blower, 56° bevel capacity, carbide tooth blade, wrench, jobsite tool bag. lightweight magnesium lower and upper guard, large adjustment levers	15 Amps	5600	7-1/4	**PD80CS10**	Price
Milwaukee	Helical cut gears, ball and roller bearings, impact resistant glass reinforced nylon motor housing, lower guard contour lip design, blade and wrench, electric brake, 8-position locking main handle, lightweight aluminum base, case	15 Amps	5800	7-1/4	**PD50639021**	Price



PD80CS10


PD50639021

Milwaukee Cordless Circular Saw

Includes	Features	Voltage	Amp Hours	RPM	Blade Size (in.)	Order No.	Price
2-V28 Batteries, 1 Charger, Case	Weight less and maintains power longer than standard 18 volt models, no memory effect	28V	3	4200 RPM	6-1/2	**PD50073022**	Price



Morse Metal Cutting Circular Saws

Metal cutting saws utilize motors with higher torque for cutting through tough metals and have special chip collection chambers to prevent flying chips

Features	No Load Speed	Motor	Blade Size (in.)	Order No.	Price
Laser guide, 0-45º beveling, overload switch, side handle, retracting blade quard, quick release chip collection champer, 7' power cord, safety googles, ear plugs, Metal Devil NXT steel cutting blade, carry case. Maximum cutting reach: 2-3/8	3800 RPM	120V / 60 Hz / 13 Amp	7	**FX55CSM7NXTB**	Price
Laser guide, 0-45º beveling, overload switch, side handle, retracting blade quard, quick release chip collection champer, 7' power cord, safety googles, ear plugs, Metal Devil NXT steel cutting blade, carry case. Maximum cutting reach: 3-1/4"	2300 RPM	120V / 60 Hz / 13 Amp	9	**FX55CSM9NXTB**	Price
0-45º Mitering vise, overload switch, retracting blade guard, quick release chip collection chamber, 6mm & 8mm blade wrench, safety goggles, ear plugs, Metal Devil NXT steel cutting blade	1300 RPM	120V / 60 Hz / 15 Amp with Worm Drive	14	**FX55CSM14MB**	Price





Jigsaws

Brand	Features	No Load Amps	RPM	Order No.	Price
BOSCH	Toolless blade-change system, aluminum gearbox with insulated cover, variable speed, dial sets operating speed, exclusive multi-directional blade clamp, four orbital-action settings, adjustable dust blower	7.0	3,100	**PD80JS470EB**	Price
DEWALT	Powerful variable speed motor deliver the cutting power for the most demanding materials, keyless blade clamp allows for quick blade change, 4-position orbital action, all-metal gear case, shoe bevels 0° to 45°	5.5	0 - 3,100	**PD20DW317K**	Price
DEWALT	Powerful variable speed motor deliver the cutting power for the most demanding materials, keyless lever-action blade clamp for quick and easy blade changes, all-metal gear case, 4-position orbital action, positive bevel detents for most common angles 0°, 15°, 30°, and 45°, extra-large rubber grip and counter-balance mechanism for reduced vibration, integrated dust blower maintains visibility of cut line, non-marring plastic shoe cover, accepts only T-shank blades	6.5	500 - 3100	**PD20DW331K**	Price
Milwaukee	Variable speed, top handle design, double insulated 8' cord, barrel grip design, trigger speed control, universal system blade chuck	3.8	500 - 3100	**PD5062566**	Price







Starrett® Univerz™ Portable Bands

- Bi-Metal Unique, the best all-around bi-metal blade available.
- Cuts harder materials faster and longer
- Fits machine models: Black & Decker, Greenlee, Milwaukee, Porter-Cable, Ridgid, Rockwell, Skil
- 3-Pack sleeve provides better efficiencies, saves time, improves productivity (priced each sold in multiples of 3)



Length (in.)	Width (in.)	Thickness (in.)	TPI	Order No.	Price
44-7/8"	1/2	.020	10 S	**FX8314600**	Price
44-7/8"	1/2	.020	10-14 S	**FX8315708**	Price
44-7/8"	1/2	.020	14 S	**FX8314601**	Price
44-7/8"	1/2	.020	14-18 S	**FX8316088**	Price
44-7/8"	1/2	.020	18 S	**FX8314602**	Price
44-7/8"	1/2	.020	24 S	**FX8314603**	Price

Snap-on Industrial Brands | BAHCO Portable Bandsaw Blades

Bi-Metal M-42 Wavy Tooth



- M42 material ensures longer life on all materials
- 44-7/8″ Length
- Wavy tooth design provides smoother cutting and better harmonics
- 5-Pack sleeve provides better efficiencies, saves time, improves productivity (priced each sold in multiples of 5)

Width (in.)	Thickness (in.)	TPI	Order No.	Price
1/2	.020	10 W	**FX848230319**	Price
1/2	.020	10-14 W	**FX848230357**	Price
1/2	.020	14 W	**FX848230326**	Price
1/2	.020	14-18 W	**FX848230364**	Price
1/2	.020	18 W	**FX848230333**	Price
1/2	.020	24 W	**FX848230340**	Price

Morse Portable Bandsaw Blades

Size 44-7/8" x 1/2"

MADE IN THE USA

Bi-Metal HSS Applications:

- Fit all standard portable band saw machines
- For pipe, tubing and solids
- Cut any machinable metal, including conduit, angle iron, structurals, rebar, stainless steel tubing, etc.

Advantages & Benefits:

- Longer lasting than carbon blades
- High resistance to heat and wear for long life
- High shock resistance reduces breakage
- Variable pitch reduces vibration for faster cutting and longer life

Advantages & Benefits:

- Low cost cutting in mild steels

3-Pack sleeve provides better efficiencies, saves time, improves productivity (priced per pack)



Material - Bi-Metal		
TPI	Order No.	Price
10 R	**FY600044781210**	Price

Material - M-42 Cobalt High Speed Steel		
TPI	Order No.	Price
10-14	**FY6000447812VT**	Price

Material - Carbon Steel		
TPI	Order No.	Price
14 W	**FY500044781214**	Price
18 W	**FY500044781218**	Price
24 W	**FY500044781224**	Price

Morse Metal Cutting Circular Saw Blades

Applications

- Steel plate / tread plate
- Angle iron / channel iron
- Steel studs
- Galvanized pipe, rebar, threaded rod

Metal Devil



Advantages & Benefits:

- Fast cuts: Cut through 6" x 1/4" steel plate in approximately 12 seconds
- Less heat generated so parts can be handled immediatelya

For Use With - Aluminum				
Dia.	No. of Teeth	Hole Size	Order No.	Price
12	80T	1	**FX55CSM1280NAC**	Price
7-1/4	60T	5/8	**FX55CSM72560NAC**	Price
9	72T	1	**FX55CSM972NAC**	Price
14	80T	1	**FX55CSM1480NAC**	Price

For Use With - Steel				
Dia.	No. of Teeth	Hole Size	Order No.	Price
12	60T	1	**FX55CSM1260NSC**	Price
14	66T	1	**FX55CSM1466NSC**	Price
250mm	80T	32mm	**FX55ICNT25080SB**	Price
285mm	80T	32mm	**FX55ICTNK2858SB**	Price
360mm	100T	50mm	**FX55ICNT36010SB**	Price
360mm	80T	40mm	**FX55ICNI36080SB**	Price
5-3/8	32T	20mm	**FX55CSM53832NSC**	Price
7	40T	20mm	**FX55CSM740NSC**	Price
7-1/4	40T	5/8 KO	**FX55CSM72540NSC**	Price
7-1/4	48T	5/8 KO	**FX55CSM72548NSC**	Price

For Use With - Thin Steel				
Dia.	No. of Teeth	Hole Size	Order No.	Price
14	90T	1	**FX55CSM1490NTSC**	Price
360mm	100T	40mm	**FX55ICAM360100S**	Price
360mm	100T	40mm	**FX55ICNT360100C**	Price
360mm	60T	50mm	**FX55ICAM36060CB**	Price
360mm	80T	40mm	**FX55ICAM36080CB**	Price
7	68T	20mm	**FX55CSM768NTSC**	Price
7-1/4	68T	5/8 KO	**FX55CSM72568TSC**	Price
9	68T	1	**FX55CSM968NTSC**	Price

See index for metal cutting circular saws

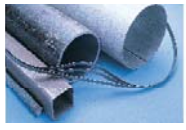
LENOX Portable Bandsaw Blades

Cutting Recommendations

General Purpose Applications such as tubing, pipe, structurals, and solids of mild to difficult machinability

Tooth Forms Available

VARI-TOOTH® | STANDARD





Description - WOLF-BAND™ Portable Bandsaw Blade						
Length (in.)	Width (in.)	Thickness (in.)	Product No.	TPI	Order No.	Price
44-7/8"	1/2	.020	3842338PW1014	10-14CW	**FX9008423**	Price
44-7/8"	1/2	.020	3842438PW14	14CW	**FX9008424**	Price
44-7/8"	1/2	.020	3842538PW18	18CW	**FX9008425**	Price
44-7/8"	1/2	.020	3842638PW24	24CW	**FX9008426**	Price
44-7/8"	1/2	.020	3842738PW1418	14-18	**FX9008427**	Price

Description - Master Band 2 Portable Bandsaw Blade						
Length (in.)	Width (in.)	Thickness (in.)	Product No.	TPI	Order No.	Price
44-7/8"	1/2	.020	8011238EW1418	14-18	**FX9009407**	Price
44-7/8"	1/2	.020	8011438EW1014	10-14	**FX9009403**	Price
44-7/8"	1/2	.020	8011538EW14	14	**FX9009404**	Price
44-7/8"	1/2	.023	8011638EW18	18	**FX9009405**	Price

Air Powered Ratchets


PF54803RW


PF50CP9426


PJ80505313


PF52UT80101

Item	Drive	Features	Free Speed RPM	Average Air Consumption	Air Inlet Size	Order No.	Price
AIRCAT	1/4	Reversible, Signle Pawl Mechanism	320	4	1/4 NPT	**PF54800**	Price
	3/8	Reversible	300	3	1/4 NPT	**PF54807**	Price
	3/8	Internal impact mechanism eliminates torque reaction and risk of finger trapping, 80 ft-lb Maximum torque, 600 RPM run-down speed with built-in regulator for control, Very quiet compared to conventional air ratchets-only 79 dba, Composite handle grip increases operating comfort, Needle bearing construction increases reliability, Push and lock reverse switch	600	4 CFM	1/4 NPT	**PF54803RW**	Price
	1/2	Reversible, Twin Pawl Mechanism	280	4	1/4 NPT	**PF548025**	Price
Chicago Pneumatic	1/4	Small lightweight with soft grip handle, Under 6" in length, torque up to 35 Nm (27 ft lb), speed 275 RPM	275	12.5 CFM	1/4 NPT	**PF50CP9426**	Price
	1/4	Compact, lightweight, easy operation, durable	15000	0.7 l/s	1/4	**PF508941077110**	Price
	1/4	Progressive tease throttle, Small ratchet (only 6.5"/165mm long) - convenient forward and reverse button - one-finger directional changes - compact and lightweight Ideal for tight access applications	200	2.75 CFM	1/4 NPT	**PF50CP825**	Price
	3/8	Small lightweight with soft grip handle, quick release button, under 6" in length, torque up to 35 Nm (27 ft lb), speed 275 RPM	275	12.5 CFM	1/4 NPT	**PF50CP9427**	Price
	3/8	Compact, lightweight, easy operation, durable	15000	0.7 l/s	1/4	**PF508941077210**	Price
	3/8	High durability, compact, powerful, easy operation	8510	1.9 l/s	1/4	**PF508941077270**	Price
	3/8	Features CP's new TriSpring anti-slip head design which virtually eliminates slippage while reducing the potential for heat build-up, even in long run downs - compact, yet packed with power and speed - ultimate torque: 68Nm (50ft/lbs)	150	3.75 CFM	1/4 NPT	**PF50CP828**	Price
	3/8	Best power to weight ration: 346 ft-lbs / 470 Nm, ultra compact, easy to use, durable	9000	2 l/s	1/4	**PF508941077311**	Price
	1/2	Ultra lightweight, easy operation,c ompact, durable	1400	2.6 l/s	1/4	**PF508941077321**	Price
	1/2	Extreme torque, compact, lighweight, easy to handle, durable	7000	3 l/s	1/4	**PF508941077491**	Price
	1/2	Lightweight due to composite housing, suited for all maintenance applications	8200	3 l/s	1/4	**PF508941077480**	Price
	1/2	Superior durability - designed for intensive use, Comfortable and light weight	8400	14.2 lbs	1/2	**PF506151590570**	Price
	1/2	Compact head design, hardened gears, 50 ft/lbs max torque	160	4.25 CFM	1/4 NPT	**PF50CP886H**	Price
	1/2	Features CP's new TriSpring anti-slip head design which virtually eliminates slippage while reducing the potential for heat build-up, even in long run downs - compact, yet packed with power and speed - ultimate torque: 68Nm (50ft/lbs)	150	3.75 CFM	1/4 NPT	**PF50CP828H**	Price
	1/2	High durability, compact, powerful, easy operation	9000	1.9 l/s	1/4	**PF508941077370**	Price
	3/4	Superior durability - designed for intensive use, Comfortable and light weight	5100	18 l/s	3/8	**PF506151590580**	Price
	1	Superior durability - designed for intensive use, Comfortable and light weight	1050	18 l/s	3/8	**PF506151590590**	Price
JET	1/2	Heavy-duty ball and needle bearing construction, ergonomic grip, built-in air regulator, rear exhaust, swivel air inlet	280	4 CFM	1/4 NPT	**PJ80505313**	Price
	1/4	Full reversing capacity, Lever throttle type, compact head design, rear exhaust, working torque range of 18 ft/lbs @ 90 PSI	150	3 CFM	1/4 NPT	**PF52UT2000**	Price
	3/8	High torque, Triple idler gear and twin pawl drive for smooth operation, Triple heat treated alloy steel ratchet and head, Precision engineered, Ergonomic “Softouch”coating, Best for heavy duty MRO and vehicle service	200	4.5 CFM	1/4 NPT	**PF52UT8006**	Price
	3/8	Triple idler gear for smooth operation, Steel ratchet head, Best for: Intermittent MRO and vehicle service	160	8 CFM	1/4 NPT	**PF52UT20051**	Price
	1/2	Extended length and powerful motor provide 90 ft/lb torque, Triple heat treated alloy steel ratchet and head, Precision engineered, Ergonomic "softouch" coating, Best for heavy duty MRO and vehicle service	200	5.5 CFM	1/4 NPT	**PF52UT80101**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

Air Powered Impact Wrenches - 1/4" and 3/8" Drive


PF50CP8222


PF52FP739


PF52FP720A


PJ80JSM4140


PF52UT8030R

Item	Drive	Features	Style	Average Air Consumption	Air Inlet Size	Order No.	Price
AIRCAT	3/8	Twin hammer mechanism, pistol grip handle, reversible, 700 ft/lbs loosening torque, 1750 blows per minute, flip lever forward /reverse	Angle	6 CFM	1/4 NPT	**PF541355XL**	Price
	3/8	Butterfly, Built-in swivel air inlet, 3 position built-in power switch, provides 80 ft/lbs of torque, double hammer mechanism	Straight	8 CFM	1/4 NPT	**PF541320**	Price
	3/8	Pistol Grip Handle, Reversible	Angle	8 CFM	1/4 NPT	**PF541076XL**	Price
Chicago Pneumatic	3/8	Composite body with magnesium clutch housing, twin hammer clutch, 3 power settings in forward position, slim style nose, cushion grip handle, 331 max torque ft/lbs	Angle	21.2 CFM	1/4 NPT	**PF50CP8222**	Price
FLORIDA PNEUMATIC	3/8	Butterfly trigger and multi-torque regulator, straight handle design with air inlet, lightweight aluminum housing for reduced operator fatigue, 74 ft/lbs of torque @ 90 PSI, lightweight and compact	Straight	6 CFM	1/4 NPT	**PF52FP720A**	Price
JET	1/4	Ergonomic grip, multiple torque settings, heavy duty ball bearing construction, rotating air inlet, low noise volume, twin hammer mechanism, 250 ft/lbs max torque	Angle	4 CFM	1/4 NPT	**PJ80JSM4072**	Price
	3/8	Butterfly, single hammer impact mechanism, variable speed throttle, lightweight aluminum construction, 360° swivel brass air inlet	Straight	3 CFM	1/4 NPT	**PJ80505100**	Price
	3/8	Twin Hammer impact mechanism, ergonomically designed grip, lightweight aluminum construction, 3 position forward & reverse power settings	Straight	5 CFM	1/4 NPT	**PJ80505106**	Price
	3/8	Twin Hammer impact mechanism, 600 ft/lbs maximum break away torque, composite housing, one-hand forward/reverse switch design, four position speed selection	Angle	5.9 CF,	1/4 NPT	**PJ80505120**	Price
	3/8	Magnesium hammer case for ultimate weight reduction, Weighs only 2.7 lbs., Twin hammer 320 ft/lbs max torque	Angle	9.5 CFM	1/4 NPTF	**PF52UT8085R**	Price
	3/8	Easy access reversing switch, ring type socket retainer, aluminum housing with PVC guard for protection of housing, built in power regulator 74 ft/lbs of torque @ 90 PSI	Angle	8 CFM	1/4 NPT	**PF52UT8030R**	Price
	3/8	Easy access reversing switch, ring type socket retainer, aluminum housing with PVC guard for protection of housing, built in power regulator 74 ft/lbs of torque @ 90 PSI	Angle	8 CFM	1/4 NPT	PF52UT8030R	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

Air Screwdrivers - 1/4" Chuck

Jet Brand Features:
- Ergonomic handle
- Ball and needle bearing construction
- Variable speed triggers for positive control
- Quick action reversing valve and quick change chuck
- Rotating air inlet
- Rear exhaust


PJ80JSM8472


PF50CP2780

Chicago Pneumatic Features:
- Positive clutch screwdriver
- Quick change chuck
- Reverse control at trigger
- High speed and high torque

Item	Style	HP	Free Speed RPM	Torque	Air Pressure	Average Air Consumption	Air Inlet Size	Hose Size	Vibration Value (m/s2)	OAL (in.)	Noise Level	Order No.	Price
JET	Adjustable	1/2	800	45 ft/lbs	90 PSI	4 CFM	1/4 NPT	3/8	0.3	8-3/8	83 db(A)	**PJ80505660**	Price
	Positive	1/2	1800	115 ft/lbs	90 PSI	4 CFM	1/4 NPT	3/8	0.3	7-3/8	83 db(A)	**PJ80505661**	Price
	Positive	1/2	800	145 ft/lbs	90 PSI	4 CFM	1/4 NPT	3/8	0.3	7-3/16	83 db(A)	**PJ80JSM8672**	Price
Chicago Pneumatic	Right Angle, Reversible	-	2100	133 in/lbs	-	2.5 CFM	1/4 NPT	3/8	2.5	6.46	89 db(A)	**PF50CP2780**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

Air Powered Angle Impact Wrenches - 1/2" Drive



PF50CP6500RS



PJ707225

Item	Features	Average Air Consumption	Air Inlet Size	Order No.	Price
Air Supreme	Easy access reversing switch, urethane nose cover to protect housing, up to 5/8" bolt capacity, 279 ft/lbs of torque @ 90 PSI	23 CFM	1/4 NPT	**PJ707250**	Price
	Fully reversible, complete torque control, vinyl cover for protection of housing, rocking dog clutch, 229 ft/lbs of torque @ 90 PSI	15 CFM	1/4 NPT	**PJ707225**	Price
	Fully reversible, complete torque control, vinyl cover for protection of housing, rocking dog clutch, 9-piece impact socket set, 1/2" U-joint, 5" extension, 228 ft/lbs of torque @ 90 PSI	15 CFM	1/4 NPT	**PJ60I8500S2**	Price
AIRCAT	Hard hitting twin hammer mechanism, 725 ft-lb max. torque, Designed for tire shops to operate up to 125 psi air pressure, Improved design ergonomic grip provides maximum operating comfort, Cross bolt style forward/reverse with built-in regulator, Triple heat treated alloy steel hammers, hammer cage & anvil, Reliable throttle design with tease trigger	8 CFM	1/4 NPT	**PF541460XL2**	Price
	Hard hitting twin hammer mechanism, 725 ft-lb max. Torque, Designed for tire shops to operate up to 125 PSI air pressure, Improved design ergonomic grip provides maximum operating comfort, Cross bolt style forward/reverse with built-in regulator, Triple heat treated alloy steel hammers, hammer cage & anvil, Reliable throttle design with tease trigger	8 CFM	1/4 NPT	**PF541460XL**	Price
	Low weight composite housing, jumbo hammer mechanism, silencing technolgy, ergonomically designed grip, trigger mounted combined revers & power switch, provides 500 ft/lbs maximum torque	8 CFM	1/4 NPT	**PF541250K**	Price
	Pistol Grip Handle, Impact Twin Clutch, Reversible	8 CFM	1/4 NPT	**PF541150**	Price
	Pistol Grip Handle, Reversible	8 CFM	1/4 NPT	**PF541056XL**	Price
	Refined design twin hammer increases blow frequency and blow efficiency, 800 ft-lb max. torque, Very fast torque development, 9,000 RPM free speed provides fast rundown, Six position power management switch in back cap provide great balance & handling comfort, Brushed aluminum housing finish	8 CFM	1/4 NPT	**PF541450**	Price
	Refined design twin hammer increases blow frequency and blow efficiency, 800 ft-lb max. torque, Very fast torque development, 9,000 RPM free speed provides fast rundown, Six position power management switch in back cap provides great balance & handling comfort, Brushed aluminum housing finish	8 CFM	1/4 NPT	**PF5414502**	Price
Chicago Pneumatic	CP patented clutch, one hand reverse button with 4 power settings, ring socket retainer, working torque range of 50-450 ft/lbs	5.5 CFM	1/4 NPT	**PF50CP749**	Price
	Dyna-Pact oil bath clutch, one hand push button forward/reverse, 4 power settings in forward and ultimate power in reverse, handle exhaust with 360° air inlet, comfort contoured handle grip	3.75 CFM	1/4 NPT	**PF50CP734H**	Price
	Pin clutch in oil batch, steel clutch housing, pin type socket retainer rugged 3 piece construction, working torque range of 25-320 ft/lbs	13 CFM	1/4 NPT	**PF50CP9542**	Price
	Steel clutch housing, ring type of socket retainer, rugged 3 piece construction, working torque range of 25-320 ft/lbs	13 CFM	1/4 NPT	**PF50CP9541**	Price
	Steel clutch housing, twin dog clutch, 4 forward power settings plus max reverse power, ergonomic grip, 625 max torque ft/lbs	25.4 CFM	1/4 NPT	**PF50CP8252**	Price
	CP pioneered rocking dog clutch, friction type of socket retainer, working torque range of 360-525 ft/lbs	6.25 CFM	1/4 NPT	**PF50CP6500RSR**	Price
	CP rocking dog clutch, rugged 3-pc. construction, pin type socket retainer, working torque range of 360-525 ft/lbs	6.25 CFM	1/4 NPT	**PF50CP6500RS**	Price
JET	Pinless hammer impace mechanism convyes power to the anvil, lightweight aluminum construction, one-hand forward/reverse button	4 CFM	1/4 NPT	**PJ80505102**	Price
	Twin Hammer impact mechanism, compact design, ergonomically designed grip, lightweight aluminum construction, 960 ft/lbs maximum break away torque	5 CFM	1/4 NPT	**PJ80505107**	Price
	Twin Hammer impact mechanism, composite housing, one-hand forward/reverse switch design, four position speed selection and full reverse power, 1200 ft/lbs maximum break away torque	6.7 CFM	1/4 NPT	**PJ80505121**	Price
	Twin hammer, 800 ft/lb max torque, built in power management and reverse/forward switch, triple heat treaded alloy steel hammer, anvil and cage	7.3 CFM	1/4 NPTF	**PF52UT8160R**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Air Powered Impact Wrenches - 3/4" Drive

Item	Features	Style	Average Air Consumption	Air Inlet Size	Order No.	Price
AIRCAT	Refined design twin hammer increases blow efficiency and doubles hammer mechanism life, 1400 ft-lb max. Torque and 1600 ft-lb loosening torque, Hammer parts are made from triple heat treated Ni-cr-mo alloy steel for ultimate reliability, Improved design ergonomic grip for maximum operating comfort, Combined six position power management and reverse knob for ultimate control	Angle	8 CFM	3/8 NPT	**PF541777**	Price
	Refined design twin hammer increases blow frequency and efficiency, 1400 ft-lb maximum torque, Power management switch with three power settings, Molded-in buffers protect tool from side impact, Titanium finish hammer case, Designed for heavy duty fleet maintenance and industrial MRO work	Angle	8 CFM	3/8 NPT	**PF541770XL**	Price
	Super Clutch twin hammer mechanism, ergonomically designed handle, quiet tuned exhaust, flip lever forward and reverse, provides 1600 ft/lbs loosening torque	Angle	10 CFM	3/8 NPT	**PF541600THA**	Price
	Twin Hammer, power switch with 3 power settings, molded-in buffers, ergonomically designed grip and trigger, titanium finish hammer case, Kit includes: (1) 3/4" Impact Wrench, (1) Aircat Tool Bag, (1) 3/4" Deep Impact Socket Set; 1, 1-1/16, 1-1/8, 1-1/4, 1-5/16, 1-3/8, 1-7/16 & 1-1/2"	Angle	8 CFM	3/8 NPT	**PF541770XLK**	Price
Chicago Pneumatic	Durable twin hammer clutch. High power: 1200 ft-lbs. Combined power regulator with forward/reverse.	Impact Wrench	7.5 CFM	3/8 NPT	**PF50CP7763**	Price
	Internal speed regulator, pin clutch in oil bath, built-in power regulator, pin type socket retainer, rugged 3-pc. construction, working torque range of 75-500 ft/lbs	Angle	30 CFM	3/8 NPT	**PF50CP9561**	Price
	One hand push button forward/reverse, 4 power settings in forward and ultimate power in reverse, handle exhaust with 360° air inlet, comfort contoured handle grip	Angle	6 CFM	3/8 NPT	**PF50CP772H**	Price
FLORIDA PNEUMATIC	Patented roller cam clutch, built-in regulator, ring socket retainer for quick socket retainer, pin type clutch, working torque generates up to 700 ft/lbs of torque @ 90 PSI	Angle	8 CFM	1/4 NPT	**PF52FP772**	Price
JET	Ergonomic grip, multiple torque settings, heavy duty ball bearing construction, rotating air inlet, low noise volume, twin hammer mechanism, 250 ft/lbs max torque	Angle	7.3 CFM	3/8 NPT	**PJ80505123**	Price
	Smooth-fast DynaPact® clutch- 900 ft/lb max, single hand forward/reverse operation, built in multi position regulator	Angle	8.8 CFM	1/4 NPTF	**PF52UT2310R1**	Price
	Twin hammer-1200 ft/lb max torque, combined reverse and power management switch, ergonomic composite housing and grip for lower weight, weighs 6.2 lbs	Angle	10 CFM	1/4 NPTF	**PF52UT8360C**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

Air Powered Impact Wrenches - 1" Drive





Item	Features	Average Air Consumption	Air Inlet Size	Order No.	Price
AIRCAT	2,300 ft-lb Maximum torque, Unique low wear pin-less hammer for ultimate reliability and added hitting power, Combined reverse and power management switch, Triple heat treated alloy steel hammer cage & anvil, Hammer case can be repositioned for side handle to be on right side, Brushed aluminum motor housing, The most reliable 1" Impact Wrench	16 CFM	1/2 NPT	**PF541994**	Price
	Hard hitting twin hammer mechanism, 1700 ft-lb Max. Torque, Fast run-down speed, Weighs only 12 lbs, Triple heat treated alloy steel hammers, hammer cage & anvil, Rugged construction with reliable bolt-on assist handle, Durable brushed aluminum motor housing	8 CFM	1/2 NPT	**PF5418911**	Price
	Hard hitting twin hammer mechanism, 1700 ft-lb Maximum torque, Fast run-down speed, Weighs only 15.8 lbs, Triple heat treated alloy steel hammers, hammer cage and anvil, Rugged construction with reliable bolt-on assist handle, Durable brushed aluminum motor housing	8 CFM	1/2 NPT	**PF541891**	Price
	Unique low wear pinless hammer for ultimate reliability and added hitting power, 1800 ft-lb Maximum torque, Combined directional change and power management switch, Latest technology precision engineered hammer mechanismand motor, Rugged construction with reliable bolt-on assist handle, Hammer case can be repositioned for side handle to be on right side, Durable brushed aluminum motor housing	12 CFM	1/2 NPT	**PF541893**	Price
	Unique low wear pinless hammer for ultimate reliability and added hitting power, 1800 ft-lb Maximum torque, Combined directional change and power management switch, Latest technology precision engineered hammer mechanismand motor, Rugged construction with reliable bolt-on assist handle, Hammer case can be repositioned for side handle to be on right side, Durable brushed aluminum motor housing	12 CFM	1/2 NPT	**PF5418931**	Price
JET	6" Extended Anvil, Pinless Clutch impact mechanism, Built in regulator with forward/reverse 3-position power setting, Lightweight aluminum construction, D-Handle grip with inside trigger	11 CFM	1/2 NPT	**PJ80505206**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

DEWALT 18V Cordless XRP™ Impact Wrench Kits



- Compact size and lightweight design allows user to get into tight spaces when performing applications
- Durable magnesium gear case and all-metal transmission for extended durability
- Includes 1 hour charger, (2) 18V XRP™ batteries, kit box

Model No.	Voltage	Drive Size (in.)	No Load Speed (RPM)	Impacts/Min (IPM)	Maximum Torque (in/lbs)	Maximum Torque (ft/lbs)	Order No.	Price
DC820KA	18V	1/2 Sq / Detent pin retention	0 - 2400	0 - 2700	1740	145	**PD20DC820KA**	Price
DC825KA	18V	1/4 Hex shank Quick-release	0 - 2400	0 - 2700	1330	111	**PD20DC825KA**	Price
DW059K2	18V	1/2	1650	2600	3600	300	**PD20DW059K2**	Price

DEWALT Professional Series Impacts



- 1/2” Square drive with detent pin
- Complete ball bearing construction
- Die cast aluminum gear housing
- AC/DC forward/reverse rocking switch
- Amperage: 7.5 Amps
- Impacts per Min.: 2,700
- Torque ft/lbs: 325

Order No.	Price
PD20DW292	Price

Milwaukee Professional Series Impacts



- 1/2” Square drive with pin detent retainer
- New mechanism delivers higher torque and smoother operation
- Metal gear and transmission housing
- Forward/reverse rocker switch is ideal when frequent reversing is necessary
- Amperage: 7.0 Amps
- Impacts per Min.: 2600
- Torque ft/lbs: 300

ISO 9001

Order No.	Price
PD50907020	Price

DEWALT Cordless Screw Gun Kits



- Ideal for metal fastening applications
- Brushless motor for increased efficiency and runtime
- Versa-Clutch™ System to help prevent damage to material and fasteners
- LED light for increased visibility and illuminating dark work areas
- HAZ05

Model No.	Type	Voltage	RPM	Features	Order No.	Price
DCF622B	With Battery	20V MAX	0 - 2000	1/4" Quick Release Hex, Brushless motor, Versa-Clutch System, LED light, Belt hook	**PD20DCF622B**	Price
DCF622M2	Bare Tool	20V MAX	0 - 2000	1/4" Quick Release Hex, Brushless motor, Versa-Clutch System, LED light, 20V MAX XR 4.0 Ah Batteries, Belt hook, Fast Charger, Tool Bag	**PD20DCF622M2**	Price

DEWALT 20V Lithium Ion Impact Driver Kits



- Compact, lightweight design fits into tight areas
- 3 LED lights with 20-second delay after trigger release, provide visibility without shadows
- Belt hook included for portability
- XR™ Li-Ion batteries with fuel gauge provides 33% more capacity over standard packs
- One-handed loading 1/4” hex chuck accepts 1” bit ips
- Haz Code HAZ05

Model No.	Drive (in.)	Impacts Per Min.	No Load Speed	Voltage	Order No.	Price
DCF85M2	1/4 Hex	0 - 3200	0 - 2800	20V	**PD20DCF885M2**	Price
DCF885C2	1/4 Hex	0 - 3200	0 - 2800	20V	**PD20DCF885C2**	Price

DEWALT 20V MAX XR High Torque 3/4" Impact Wrench



- Multi-speed control
- LED light with 20 second delay for increased visibiltiy
- Compact design of 8-13/16” in length
- 3/4” hog ring with retention pin anvil
- HAZ05

Model No.	Type	Impacts Per Min.	Max. Torque (ft/lbs)	No Load Speed	Order No.	Price
DCF897B	Bare Tool	0 - 2400	700	400/1200/1900	**PD20DCF897B**	Price
DCF897P2	With Battery	2400	750	400/1200/1900	**PD20DCF897P2**	Price

DEWALT 20V MAX XR 3/8" Compact Impact Wrench



- Compact and ergonomic with only 5-1/2” head length
- Brushless motor for increased efficiency and run time
- 3 LED Lights
- Belt Clip

Model No.	Type	Impacts Per Min.	Max. Torque (ft/lbs)	RPM	Order No.	Price
DCF890B	Bare Tool	0 - 3200	150	0 - 2800	**PD20DCF890B**	Price
DCF890M2	With Battery	0 - 3200	150	0 - 2800	**PD20DCF890M2**	Price

Air Powered Utility Hammers/Chippers


PJ707905


PF52FP1010


PF50CP9356


PF50CP7111


PF50CP7150


PF52UT8630

Style - Pistol						
Brand	Features	Blows per Minute	Average Air Consumption	Air Inlet Size	Order No.	Price
Air Supreme	Heat treated piston for longer life, accepts .401 shank accessories, trigger speed control, built-in power regulator, alloy steel barrel	3500	12 CFM	1/4 NPT	**PJ707905**	Price
	Heat treated piston for longer life, accepts .401 shank accessories, trigger speed control, built-in power regulator, alloy steel barrel	4500	12 CFM	1/4 NPT	**PJ707900**	Price
Florida Pneumatic	Ideal for removal or separation of rivets, ball joints, king pins, or U-joints, accepts .401 shank accessories, revolutionary patented safety chuck, impact resistant	2600	4 CFM	1/4 NPT	**PF52FP1010**	Price
Chicago Pneumatic	For light to medium duty chipping, trimming, rivet cutting, and peening, lightweight unit accepts .401 shank accessories, zip quick retainer, piston is air cushioned on the return stroke	2300	6.25 CFM	1/4 NPT	**PF50CP7150**	Price
	For light to medium duty chipping, trimming, rivet cutting, and peening, lightweight unit accepts .401 shank accessories, zip quick retainer, piston is air cushioned on the return stroke	3000	6.25 CFM	1/4 NPT	**PF50CP7111**	Price

Style - Straight						
Brand	Features	Blows per Minute	Average Air Consumption	Air Inlet Size	Order No.	Price
Chicago Pneumatic	Simple plate valve design for smooth throttling, easy release retainer for quick chisel changes, heat treated piston cylinder sleeve and bushing for long tool life, lever type throttle	4600	15 CFM	1/4 NPT	**PF50CP9356**	Price
	Easy to use straight handle design, positive lock chisel retainer, lever throttle for precise speed control, internal buffer absorbs shock	4600	6 CFM	1/4 NPT	**PF52UT8630**	Price

Air Powered Needle Scalers


PF52FP1060A


PF52FP1050


PF50CP0952


PF50CP0951


PJ80505800

Item	Features	Blows per Minute	Average Air Consumption	Air Inlet Size	Order No.	Price
Chicago Pneumatic	General maintenance needle scaler easily convertible to a weld flux chipping hammer, quick change chisel retainer, adjustable sleeve, 1/8" steel needles and 1.37" width chisel with high resistance to wear	4800	4 CFM	1/4 NPT	**PF50CP7120**	Price
	Ideal for removing rust, scale, paint, weld spatter, and residue from a variety of work surfaces, pneumatic needle return reduces spring breakage, simple vaneless design reduces maintenance, medium duty needle scaler	3900	4 CFM	3/8 NPT	**PF50CP0952**	Price
	Medium duty needle scaler converts to weld flux chipper by removing needle scaling attachment, chisel and 19 needles included,Ideal for removing rust, scale, paint, weld spatter, work surfaces, simple vaneless design, reduces maintenance	3600	4 CFM	3/8 NPT	**PF50CP0951**	Price
Florida Pneumatic	Removes almost any surface material, rust & corosion. needles adapt to uneven surfaces. Gets into restricted access areas. Built-in regulator for control.	5700	4 CFM	1/4 NPT	**PF52FP1060A**	Price
	Great for reaching into confined spaces, needles adapt themselves to any work surface including uneven work surfaces, built-in regulator provides fingertip control	3700	4 CFM	1/4 NPT	**PF52FP1050**	Price
JET	Heavy duty, heat treated barrels and pistons, Lever lock retainer, Easily convert tool from needle scaler to flux chipper, Includes one set of needles	4600	4 CFM	1/4 NPT	**PJ80505800**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Needle Sets For Air Powered Needle Scalers

- 19 Pc. Set fits Florida Pneumatic FP1050
- All others fit Chicago Pneumatics needle scalers



Dia. (in.)	Type	Order No.	Price
5/64	29 Piece Needle Set for Scaler	**PF50NP123905**	Price
5/64	53 Piece Needle Set for Scaler	**PF50NP123906**	Price
1/8	12 Piece Needle Set for Scaler	**PF50NP123901**	Price
1/8	23 Piece Needle Set for Scaler	**PF50NP123902**	Price
-	19 Piece Needle Set for FP-1050	**PF52109020**	Price

Lisle Locking Air Tool Holder

Organize air tools with the lockable tool holder

- Hold up to five pneumatic tools in a 10” space
- Fits all popular quick connect fittings
- Locking feature protects your air tools from theft (lock not included)
- Durable powder-coated finish



Order No.	Price
KN6549960	Price

Typhoon™ 1/4" NPT Blow Gun With High Flow Tip

- Maximum flow for easy clean-up and blow-off of even the heaviest shavings and chips
- Lightweight and ergonomic
- 1/4″ NPT up to 34 CFM at 125 PSI and 2.1 lbs of thrust
- OSHA compliant



Inlet	Description	Order No.	Price
1/4 NPT	Chrome Plated High Flow Tip	**LT51TYP2501CS**	Price
1/4 NPT	High Flow Tip	**LT51TYP2500CS**	Price
3/8 NPT	Multi-Jet Tip	**LT51TYP3800MJ**	Price

Ultimate Blow Gun Kit

- Includes a variable flow, pistol grip blow gun (Model 771-NT)
- Compact and durable
- Includes a tip for virtually every application



Order No.	Price
LT51BGKITCST	Price

CoBlo™ Coupler Blow Gun

- Combination quick coupling and blow gun
- For metalworking or woodworking operations
- Easy push button trigger
- Works with tool connected or disconnected
- Max working pressure: 120 psi
- 1/4” industrial with 1/4” female NPT



Order No.	Price
LT5115CBG4FDPB	Price

Cyclone® Blow Guns - Modular System

- Ergonomically superior gun body for maximum comfort and control
- Variable flow trigger regulates air flow precisely
- Durable gun body is ideal for extreme use.
- Unique modular accessory system - customize the gun extension length & tips for a given application
- Meets or exceeds OSHA standards
- 1/4” NPT intlet

Item	Description	Order No.	Price
	Cyclone 12" Extension Tube	**LX55AG1012**	Price
	Cyclone 6" Extension Tube	**LX55AG1006**	Price
	Cyclone Chip Guard	**LX55AG1092**	Price
	Cyclone Extreme Flo Safety Tip	**LX55AG1090**	Price
	Cyclone F1 High Flow Air Gun w/ high flow tip	**LX55AG1502**	Price
	Cyclone F3 Quiet Flo Safety Air Gun w/cone tip	**LX55AG1102**	Price
	Cyclone Quiet-Flo Safety Tip	**LX55AG1091**	Price

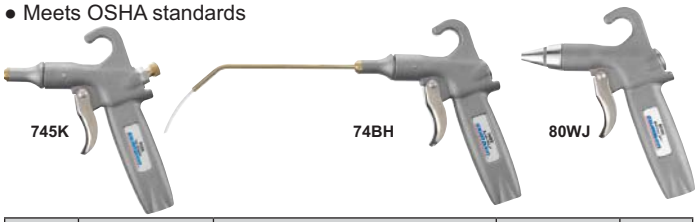
Blow Guns

1/4” NPT Inlet Unless Otherwise Noted

Item	Description	Order No.	Price
	360(deg) Rotating Extended Reach Nozzle with Rubber Tip	**LX55AG2**	Price
	Booster tip for greatly increased air flow.	**LX55AG218**	Price
	Built-in quick industrial coupler plug, standard safety bypass.	**LX55AG503**	Price
	Designed to clean molds and delicate surfaces where metal tips might harm critical areas.	**LX55AG7**	Price
	For blowing out otherwise inaccessible holes. Hard stainless steel tubing soldered to brass 1/8” npt base. 5 tips in plastic case (.134, .095, .065, .050, .042)	**LX55AG901**	Price
	Replacement tip for LX55-AG7 above	**LX55AG904**	Price
	Tip swivels freely to discourage tampering. Tip pressure will not exceed 30 psi. Good blast of air for cleaning.	**LX55AG206**	Price

Safety and Blind Hole Air Guns

- Ergonomic pistol grip and trigger eliminates hand fatigue
- 1/4" NPT inlet
- Maximum operating pressure 120 PSI
- Meets OSHA standards



Model	Type	Features	Order No.	Price
74BH	Blind Hole Air Blow Gun	Delivers a high velocity jet of air into deep crevices & blind holes (down to 1/8" dia.) to flush out chips and dirt	**LW5574BH**	Price
74SK	Air Blow Gun	Safety air shield protects workers from hazardous chip fly-back	**LW5574SK**	Price
80WJ	Whisper Air Blow Gun	Unique nozzle design reduces noise levels 6-20 dB less than conventional air guns	**LW5580WJ**	Price

Lazer Series Air Guns

- Unique design offers comfort for any size hand
- Ergonomic grip reduces hand fatigue
- Ready for use with any 1/8″ NPT inlet connector
- Features 1/4″ NPSM outlet for optional safety nozzles
- Meets OSHA 1910.242(b) regarding output pressure
- All metal construction





Type	Order No.	Price
Lazer Blow Gun-Pistol Grip	**LW55LRZ650**	Price
Lazer Blow Gun-Palm Actuated	**LW55LRZ600**	Price

Lazer Series Air Gun Accessories

Item	Description	Order No.	Price
	12" Extension with Venturi	**LW5518VNE012S**	Price
	18" Gun Extension with Venturi	**LW5518VNE018S**	Price
	3" Extension with Venturi	**LW5518VNE003S**	Price
	6" Blow Gun Extension with Venturi	**LW5518VNE006S**	Price
	Booster Nozzle	**LW55LRZN03**	Price
	Replacement Venturi Nozzle	**LW55LRZN02**	Price

Magnetic Base Gunslinger®

Extension Air Gun Holder

- Sturdy, high density polyethylene tube; 12" length; 1-3/4" ID
- Magnets have a combined holding force of 190 lbs; 3-1/4" OD base
- Convenient and easy storage
- Keeps tools ready for instant use
- Works with all extension air guns
- Patent pending



Order No.	Price
LW55200A30	Price

Force 5™ Air Gun

Advanced Venturi Nozzle Serves Two Purposes

- Delivers 100% of the power as supplied by the air compressor
- Air speed increases as it passes through the side ports
- The increased volume of air greatly intensifies power at the tip
- Meets OSHA standards - should the nozzle become blocked, all of the air flow exits through the side ports, the dead-end pressure at the tip is held to less than 30 PSI
- Lightweight, heavy duty air gun with aluminum extension for cleaning hard-to-get-at areas
- Adjustable auxiliary handle
- Dead-man trigger assures safe operation
- 3/4" FNPT inlet optimizes flow and power

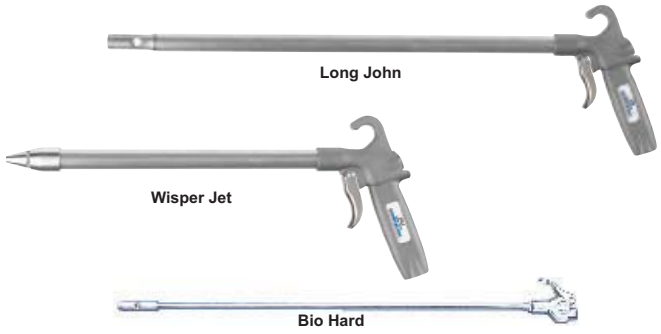


Size (in.)	Order No.	Price
24	**LW55F5024AA**	Price
36	**LW55F5036AA**	Price
48	**LW55F5048AA**	Price
60	**LW55F5060AA**	Price
72	**LW55F5072AA**	Price

Long Series Air Guns

- 1/4" NPT inlet
- Maximum operating pressure 120 PSI
- Ideal for reaching inaccessible or difficult to reach locations
- Meets OSHA standards
- UPS dimensional weight shipping rates apply

- **Blo-Hard Safety Air Gun - Model 900LJ** compact, thumb lever operated air gun fits comfortably in the palm of the hand
  Long John® Safety Air Gun - Model 75LJ venturi tip increases thrust & limits static pressure to less than 30 psi when tip is blocked
  Whisper Jet® Air Gun - Model 80LJ operates 6-20 dB quieter than conventional air guns



	Blo-Hard Air Blow Gun		Long John® Air Blow Gun		Whisper Jet® Air Blow Gun	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
6	**LW55900LJ6**	Price	**LW5575LJ6**	Price	**LW5580LJ6**	Price
12	**LW55900LJ12**	Price	**LW5575LJ12**	Price	**LW5580LJ12**	Price
18	**LW55900LJ18**	Price	**LW5575LJ18**	Price	**LW5580LJ18**	Price
24	**LW55900LJ24**	Price	**LW5575LJ24**	Price	**LW5580LJ24**	Price
36	**LW55900LJ36**	Price	**LW5575LJ36**	Price	**LW5580LJ36**	Price
48	**LW55900LJ48**	Price	**LW5575LJ48**	Price	**LW5580LJ48**	Price
60	**LW55900LJ60**	Price	**LW5575LJ60**	Price	**LW5580LJ60**	Price
72	**LW55900LJ72**	Price	**LW5575LJ72**	Price	**LW5580LJ72**	Price

Self Storing Nylon 11 Air Hose

- Made of tough abrasion-resistant nylon complete with fittings swivel one end except 100' bulk hose
- For use with pneumatic tool blow guns, sprayer, etc
- Available in 1/4", 3/8", 1/2", or 3/4" ID
- 100' Lengths – no fittings
- Self retracting: when not in use, automatically recoils
- Economical: provides a low cost replacement for reels or other expensive recoil mechanisms



Hose ID	Fitting Size	Order No.	Price
1/4" x 12'	1/4 MPT	**LT51N1412A**	Price
1/4" x 17'	1/4 MPT	**LT51N1417A**	Price
1/4" x 25'	1/4 MPT	**LT51N1425A**	Price
1/4" x 50'	1/4 MPT	**LT51N1450A**	Price
1/4" x 100'	None	**LT51N14100**	Price
3/8" x 12'	3/8 MPT	**LT51N3812A**	Price
3/8" x 17'	3/8 MPT	**LT51N3817A**	Price
3/8" x 25'	3/8 MPT	**LT51N3825A**	Price
3/8" x 50'	3/8 MPT	**LT51N3850A**	Price
3/8" x 100'	3/8 MPT	**LT51N38100**	Price

Nylon Recoil Hose

- 1/4" NPT fitting both ends with swivel
- 8' Long



Order No.	Price
LT510408	Price

Nylon Recoil & Blow Gun Set

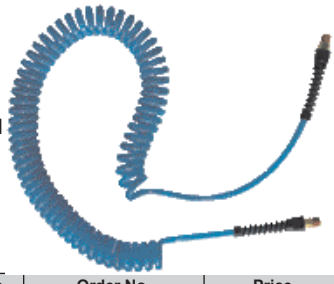
- Hose is manufactured from lightweight non-absorbent material, allows maximum airflow while reducing user fatigue
- Comes with a swivel fitting on the supply end of the assembly
- Combines an OSHA compliant safety air gun (600-S) with the advantages of the original coilhose 25' nylon 11 recoil air hose (N14-12A) in one package



Order No.	Price
LT51600N25A	Price

FlexCoil® Recoil Air Hose

- Flexeel® combines the durability of bulkier hoses with kink resistance and elasticity of polyurethane to make a tough, long-lasting air hose
- Up to 200 PSI working pressure
- Extremely flexible with excellent coil memory
- Will retain its flexibility even in extreme cold environments (down to -40° F)
- Factory applied thread sealant supplied on male swivel fittings
- 8" Supply end and 16" working end pigtails eliminate the need for whip hoses
- All of the above assemblies have two swivel MPT fittings
- Hose color is transparent blue



Hose ID	Fitting Size	Length	Order No.	Price
1/4	1/4 MPT	10'	**LT51PUE1410BT**	Price
1/4	1/4 MPT	15'	**LT51PUE1415BT**	Price
1/4	1/4 MPT	20'	**LT51PUE1420BT**	Price
1/4	1/4 MPT	25'	**LT51PUE1425BT**	Price

FlexCoil® Polyurethane Self-Storage Hose

- Polyurethane can be stretched under extreme conditions and will still return to its original shape
- All sizes and lengths come complete with two swivel male fittings
- The fittings have factory applied thread sealant on them
- 8" Supply end and 16" Working end pigtails eliminate the need for whip hoses
- 25% Lighter than rubber
- Good chemical and abrasion resistance
- Maximum working pressure is 125 PSI at 75° F



Hose ID	Fitting Size	Hose Color	Order No.	Price
1/4" x 10'	1/4 MPT	Dark Blue	**LT51PU1410BB**	Price
1/4" x 10'	1/4 MPT	Transparent Blue	**LT51PU1410BT**	Price
1/4" x 15'	1/4 MPT	Dark Blue	**LT51PU1415BB**	Price
1/4" x 15'	1/4 MPT	Transparent Blue	**LT51PU1415BT**	Price
1/4" x 20'	1/4 MPT	Dark Blue	**LT51PU1420BB**	Price
1/4" x 20'	1/4 MPT	Transparent Blue	**LT51PU1420BT**	Price
1/4" x 25'	1/4 MPT	Dark Blue	**LT51PU1425BB**	Price
1/4" x 25'	1/4 MPT	Transparent Blue	**LT51PU1425BT**	Price
1/4" x 50'	1/4 MPT	Dark Blue	**LT51PU1450BB**	Price
1/4" x 50'	1/4 MPT	Transparent Blue	**LT51PU1450BT**	Price
3/8" x 10'	3/8 MPT	Dark Blue	**LT51PU3810BB**	Price
3/8" x 10'	3/8 MPT	Transparent Blue	**LT51PU3810BT**	Price
3/8" x 15'	3/8 MPT	Dark Blue	**LT51PU3815BB**	Price
3/8" x 15'	3/8 MPT	Transparent Blue	**LT51PU3815BT**	Price
3/8" x 20'	3/8 MPT	Dark Blue	**LT51PU3820BB**	Price
3/8" x 20'	3/8 MPT	Transparent Blue	**LT51PU3820BT**	Price
3/8" x 25'	3/8 MPT	Dark Blue	**LT51PU3825BB**	Price
3/8" x 25'	3/8 MPT	Transparent Blue	**LT51PU3825BT**	Price
3/8" x 50'	3/8 MPT	Dark Blue	**LT51PU3850BB**	Price
3/8" x 50'	3/8 MPT	Transparent Blue	**LT51PU3850BT**	Price

† .160 Hose ID available on request

FlexCoil® Polyurethane Hose Blow Gun Set

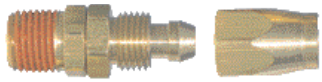
- Consists of: (1) OSHA-compliant 600-S blow gun and (1) PU14-25B-T 1/4" x 25' polyurethane hose in transparent blue with 2 swivel fittings



Order No.	Price
LT51600PU25BT	Price

Flexcoil® & Flexeel® Strain Relief Replacement Fittings

- Reusable fittings for use with coil-hose polyurethane self-storing hoses



Hose ID (in.)	Thread Size	Type	Order No.	Price
1/4	1/4 MPT	Rigid Fitting	**LT51PRM0404**	Price
1/4	1/4 MPT	Swivel Fitting	**LT51PSM0404**	Price
3/8	1/4 MPT	Rigid Fitting	**LT51PRM0604**	Price
3/8	1/4 MPT	Swivel Fitting	**LT51PSM0604**	Price
3/8	3/8 MPT	Rigid Fitting	**LT51PRM0606**	Price
3/8	3/8 MPT	Swivel Fitting	**LT51PSM0606**	Price

Thermoplastic Air Hose



- Thermoplastic hose is lightweight and flexible
- Tough PVC cover protects against cuts and abrasions, while a rayon spiral synthetic cord assures added strength
- Working pressure of 300 PSI at 70°F
- –20°F to +150°F operating temperature range
- Available in bulk without fittings and assemblies with fittings

Description - Bulk Hose No Fittings					
Hose ID (in.)	Length	Fitting Size	Working Pressure	Order No.	Price
1/4	100'	None	300 PSI	**LT51TP4M100**	Price
3/8	100'	None	300 PSI	**LT51TP6M100**	Price

Description - Hose Assemblies with Fittings					
Hose ID (in.)	Length	Fitting Size	Working Pressure	Order No.	Price
1/4	25'	1/4 MPT	300 PSI	**LT51TP4025**	Price
1/4	50'	1/4 MPT	300 PSI	**LT51TP4050**	Price
3/8	25'	3/8 MPT	300 PSI	**LT51TP6025**	Price
3/8	50'	3/8 MPT	300 PSI	**LT51TP6050**	Price

Flexeel® Air Hose



- Flexeel® is extremely lightweight and tough, making it an excellent alternative to much bulkier rubber and plastic hoses
- Reinforced construction eliminates the possibility of having the various layers separate due to constant expansion and contraction during pulsating operations, such as with staple or nail guns
- Flexeel® will remain flexible even in extremely cold environments (down to –45°F)

Description - Bulk Hose No Fittings					
Hose OD (in.)	Hose ID (in.)	Length	Fitting Size	Order No.	Price
3/8	1/4	100'	None	**LT51PFE4100T**	Price
3/8	1/4	50'	None	**LT51PFE4050T**	Price
9/16	3/8	100'	None	**LT51PFE6100T**	Price
9/16	3/8	50'	None	**LT51PFE6050T**	Price

Description - Hose Assemblies with Fittings					
Hose OD (in.)	Hose ID (in.)	Length	Fitting Size	Order No.	Price
3/8	1/4	100'	1/4 MPT	**LT51PFE41004T**	Price
3/8	1/4	25'	1/4 MPT	**LT51PFE40254T**	Price
3/8	1/4	50'	1/4 MPT	**LT51PFE40504T**	Price
9/16	3/8	25'	3/8 MPT	**LT51PFE60256T**	Price
9/16	3/8	50'	3/8 MPT	**LT51PFE60506T**	Price

Brass Hose Fittings





Hose ID (in.)	Thread Size (in.)	Order No.	Price
1/8	1/8 MPT	**LT51B0202**	Price
3/16	1/4 MPT	**LT51B0304**	Price
3/16	1/8 MPT	**LT51B0302**	Price
1/4	1/4 FPT	**LT51FR0404**	Price
1/4	1/4 MPT	**LT51B0404**	Price
1/4	1/8 FPT	**LT51FR0402**	Price
1/4	1/8 MPT	**LT51B0402**	Price
1/4	3/8 FPT	**LT51FR0406**	Price
1/4	3/8 MPT	**LT51B0406**	Price
5/16	1/4 FPT	**LT51FR0504**	Price
5/16	1/4 MPT	**LT51B0504**	Price

Hose ID (in.)	Thread Size (in.)	Order No.	Price
3/8	1/2 MPT	**LT51B0608**	Price
3/8	1/4 FPT	**LT51FR0604**	Price
3/8	1/4 MPT	**LT51B0604**	Price
3/8	3/8 FPT	**LT51FR0606**	Price
3/8	3/8 MPT	**LT51B0606**	Price
1/2	1/2 FPT	**LT51FR0808**	Price
1/2	1/2 MPT	**LT51B0808**	Price
1/2	1/4 FPT	**LT51FR0804**	Price
1/2	1/4 MPT	**LT51B0804**	Price
1/2	3/8 FPT	**LT51FR0806**	Price
1/2	3/8 MPT	**LT51B0806**	Price

Hose Crimper

- Furnished with mounting holes for permanent installations or it may be used as a portable tool for hose assembly in the field
- Crimps 1/4" to 3/8" ID hose in either a one or two braid design



Order No.	Price
LT51CV500	Price

Hose Splicer Barb

Hose ID (in.)	Order No.	Price
1/4	**LT51BS04**	Price
5/16	**LT51BS05**	Price
3/8	**LT51BS06**	Price
1/2	**LT51BS08**	Price



Brass Hose Ferrules

Ferrule ID	Length (in.)	Order No.	Price
.525	1	**LT51HF7323**	Price
.568	1	**LT51HF7325**	Price
.593	1	**LT51HF7326**	Price
.625	1	**LT51HF7327**	Price
.656	1	**LT51HF7328**	Price
.687	1	**LT51HF7329**	Price
.718	1	**LT51HF7330**	Price



Worm Drive Hose Clamps

620 Type Partial Stainless Steel

- 5/16" Hex slotted carbon clear chromate plated steel screw
- 1/2" 201 Stainless band
- Stainless steel housing

640 Type All Stainless

- 5/16" Hex slotted 305 stainless steel screw
- 1/2" 301 Stainless band
- 301 Stainless housing



Type - Partial Stainless Hose Clamp			
Effective Range (in.)	Fit Hose ID (in.)	Order No.	Price
3/8 to 7/8	5/16 to 3/8	**LX505206**	Price
7/16 to 1	5/16 to 1/2	**LX505208**	Price
1/2 to 1-1/16	3/8 to 5/8	**LX505210**	Price
1/2 to 1-1/4	3/8 to 3/4	**LX505212**	Price
11/16 to 1-1/2	3/4 to 7/8	**LX505216**	Price
3/4 to 1-3/4	3/4 to 1-1/8	**LX505220**	Price
1 to 2	7/8 to 1-3/8	**LX505224**	Price
1-1/4 to 2-1/4	1-1/4 to 1-5/8	**LX505228**	Price
1-1/2 to 2-1/2	1-1/2 to 1-7/8	**LX505232**	Price
1-3/4 to 2-3/4	1-3/4 to 2	**LX505236**	Price

Type - Stainless Hose Clamp			
Effective Range (in.)	Fit Hose ID (in.)	Order No.	Price
3/8 to 7/8	5/16 to 3/8	**LX506706**	Price
7/16 to 1	5/16 to 1/2	**LX506708**	Price
1/2 to 1-1/4	3/8 to 3/4	**LX506710**	Price
11/16 to 1-1/4	5/8 to 3/4	**LX506712**	Price
11/16 to 1-1/2	3/4 to 7/8	**LX506716**	Price
3/4 to 1-3/4	3/4 to 1-1/8	**LX506720**	Price
1 to 2	7/8 to 1-3/8	**LX506724**	Price
1-1/4 to 2-1/4	1-1/4 to 1-5/8	**LX506728**	Price
1-1/2 to 2-1/2	1-1/2 to 1-7/8	**LX506732**	Price
1-3/4 to 2-3/4	1-3/4 to 2	**LX506736**	Price

Hose Cutter

- Accurately & easily cut hose or tubing up to 1-1/4" diameter
- Ergonomically designed handle provides the user with a sure, comfortable grip and minimizes fatigue
- Stainless steel blade allows even braided hose to be cut clean and straight with minimum effort
- Cuts without burring, allowing a leak-free fitting connection
- Blade can be reversed to extend its cutting life
- Steel clip keeps closed jaws locked in the closed position
- Hose cutter length is 9-3/8"



Type	Order No.	Price
Hose Cutter	**LT51PXC098R**	Price
Hose Cutter Replacement Blade	**LT51PXC099M**	Price

Polyethylene Tubing



- Resistant to many chemicals and solvents
- Produced from high-quality resins and extruded to close tolerances
- Economical and popular for low pressure applications

O.D.	I.D.	Length	Working Pressure	Color	Order No.	Price
1/8	.062	100'	150	Black	**LT51PE021100K**	Price
1/8	.062	100'	150	Natural	**LT51PE021100**	Price
5/32	.106	100'	150	Black	**LT51PE2510100K**	Price
5/32	.106	100'	150	Natural	**LT51PE2510100**	Price
1/4	.170	100'	135	Black	**LT51PE0417100K**	Price
1/4	.170	100'	135	Natural	**LT51PE0417100**	Price
3/8	.250	100'	120	Black	**LT51PE064100K**	Price
3/8	.250	100'	120	Natural	**LT51PE064100**	Price

Polyvinyl Tubing



- Resistant to many chemicals and solvents
- Complies with FDA standards for food contact
- Clear, lightweight, and non-toxic
- More flexible than nylon and polyethylene

O.D.	I.D.	Length	Working Pressure	Color	Order No.	Price
5/16	3/16	100'	73	Clear	**LT51PV053100**	Price
3/8	1/4	100'	73	Clear	**LT51PV064100**	Price
1/2	3/8	100'	60	Clear	**LT51PV086100**	Price

Polyurethane Tubing



- Made from an ether based compound which will not degrade when exposed to water
- Polyurethane has become a popular choice for tubing due to its extreme flexibility and resistance to kinking

O.D.	I.D.	Length	Working PSI@70F	Color	Order No.	Price
5/32	3/32	100'	176	Blue	**LT51PT2503100B**	Price
5/32	3/32	100'	176	Transparent Blue	**LT51PT2503100TB**	Price
1/4	.160	100'	148	Blue	**LT51PT0404100B**	Price
1/4	.160	100'	148	Transparent Blue	**LT51PT0404100TB**	Price
3/8	1/4	100'	147	Blue	**LT51PT0606100B**	Price
3/8	1/4	100'	147	Transparent Blue	**LT51PT0606100TB**	Price
1/2	.320	50'	140	Transparent Blue	**LT51PT080950TB**	Price

Multi Color Ribbon (MCR) Polyurethane Tubing



- MCR provides an efficient alternative to applications requiring multiple tubing runs
- Economical: less time consuming than spiral wrapping, jacketing, cable tying, or gluing
- Color coded: easier to trace lines for testing or trouble shooting
- MCR is made from 95 durometer polyurethane tubing

O.D.	I.D.	Length	No. of Tubes	Color	Order No.	Price
1/4	.160	50'	2	Red/Blue	**LT51PT040450RB**	Price
1/4	.160	50'	4	Red/Blue/White/Clear	**LT51PT040450RBW**	Price
3/8	1/4	50'	2	Red/Blue	**LT51PT060650RB**	Price
3/8	1/4	50'	4	Red/Blue/White/Clear	**LT51PT060650RBW**	Price

Nylon 11 Tubing



- High quality nylon tubing for applications requiring light weight, toughness, flexibility, and chemical resistance
- Abrasion and corrosion resistant
- Resistant to oil and grease

O.D.	I.D.	Length	Working PSI@70F	Color	Order No.	Price
5/32	.106	100'	225	Black	**LT51NC2525100K**	Price
5/32	.106	100'	225	Natural	**LT51NC2525100N**	Price
1/4	.170	100'	265	Black	**LT51NC0440100K**	Price
1/4	.170	100'	265	Natural	**LT51NC0440100N**	Price
3/8	.275	100'	220	Black	**LT51NC0650100K**	Price
3/8	.275	100'	220	Natural	**LT51NC0650100N**	Price
1/2	.375	100'	200	Black	**LT51NC0862100K**	Price
1/2	.375	100'	200	Natural	**LT51NC0862100N**	Price
4mm	2.7mm	100'	275	Black	**LT51NC0465100K**	Price
4mm	2.7mm	100'	275	Natural	**LT51NC0465100N**	Price
6mm	4mm	100'	280	Black	**LT51NC0610100K**	Price
6mm	4mm	100'	280	Natural	**LT51NC0610100N**	Price
8mm	6mm	100'	210	Black	**LT51NC0810100K**	Price
8mm	6mm	100'	210	Natural	**LT51NC0810100N**	Price
10mm	8mm	100'	180	Black	**LT51NC1010100K**	Price
10mm	8mm	100'	180	Natural	**LT51NC1010100N**	Price

Tubing Fittings

- Designed to use with Coilhose bulk Nylon 11 recoil tubing
- Fitting, ferrule, nut and inserts are included with the fittings

Rigid Female



Hose I.D. (in.)	Fitting Thread (in.)	Order No.	Price
1/4	1/4 FPT	**LT51CRF0404**	Price
3/8	3/8 FPT	**LT51CRF0606**	Price

Rigid Male



Hose I.D. (in.)	Fitting Thread (in.)	Order No.	Price
1/4	1/4 MPT Rigid	**LT51CRM0404**	Price
3/8	1/2 MPT Rigid	**LT51CRM0808**	Price
3/8	1/4 MPT Rigid	**LT51CRM0604**	Price
1/2	3/8 MPT Rigid	**LT51CRM0606**	Price

Swivel Male



Hose I.D. (in.)	Fitting Thread (in.)	Order No.	Price
1/4	1/4 MPT Swivel	**LT51CSM0404**	Price
3/8	1/4 MPT Swivel	**LT51CSM0604**	Price
3/8	3/8 MPT Swivel	**LT51CSM0606**	Price
1/2	1/2 MPT Swivel	**LT51CSM0808**	Price

Recoil Nylon Union



Hose ID (in.)	Order No.	Price
1/4	**LT51CU04**	Price
3/8	**LT51CU06**	Price
1/2	**LT51CU08**	Price

Lock On Rubber Hose





- Made of tough neoprene tube and cover
- Resists abrasion and oil
- High tensile rayon cord provides extra strength
- Lock-on hose eliminates the need for ferrules or clamps, facilitates quick and permanent in-the-field installations and repair
- Temperature range is 40°F to 175°F. When pressurized, lock-on hose contracts to grip the fitting and slightly elongates, providing a positive grip

Description - Bulk Hose No Fittings				
Hose ID (in.)	Length	Fitting Size	Order No.	Price
1/4	100'	None	**LT51L14RM100**	Price
3/8	100'	None	**LT51L38RM100**	Price
1/2	100'	None	**LT51L12RM100**	Price

Description - Hose Assemblies with Fittings				
Hose ID (in.)	Length	Fitting Size	Order No.	Price
1/4	25'	1/4	**LT51L14R025**	Price
1/4	50'	1/4	**LT51L14R050**	Price
3/8	25'	3/8	**LT51L38R025**	Price
3/8	50'	3/8	**LT51L38R050**	Price

Lock On Hose Fittings

Lock-on Hose and Fittings are designed to be used together — do not use other designs of hose with Lock-on Barbs or Lock-on Hose with other designs of fittings



Type - Rigid Hose Barb						
	Female			Male		
Hose ID (in.)	Thread Size (in.)	Order No.	Price	Thread Size (in.)	Order No.	Price
1/4	1/4 FPT	**LT51LRF0404**	Price	1/4 MPT	**LT51LRM0404**	Price
3/8	3/8 FPT	**LT51LRF0606**	Price	3/8 MPT	**LT51LRM0606**	Price
1/2	1/2 FPT	**LT51LRF0808**	Price	1/2 MPT	**LT51LRM0808**	Price

Type - Swivel Hose Barb						
	Female			Male		
Hose ID (in.)	Thread Size (in.)	Order No.	Price	Thread Size (in.)	Order No.	Price
1/4	1/4 FPT	**LT51LSF0404**	Price	1/4 MPT	**LT51LSM0404**	Price
3/8	3/8 FPT	**LT51LSF0606**	Price	3/8 MPT	**LT51LSM0606**	Price
1/2	1/2 FPT	**LT51LSF0808**	Price	1/2 MPT	**LT51LSM0808**	Price

Splicer



Hose ID (in.)	Order No.	Price
1/4	**LT51LS0404**	Price
3/8	**LT51LS0606**	Price
1/2	**LT51LS0808**	Price

Industrial Air Hose



- Used with air operated portable compressors and air tools
- 150 PSI working pressure
- 2 Braid construction
- Oil and weather resistant
- Cut to length

Hose ID (in.)	Order No.	Price
1/4	**LT50004**	Price
3/8	**LT50006**	Price
1/2	**LT50008**	Price
5/8	**LT50010**	Price
3/4	**LT50012**	Price

Coupled Ready To Use Air Hose



- 1/4" Male fitting both ends
- 200 PSI working pressure

Hose ID (in.)	Length	Order No.	Price
1/4	10'	**LT520410**	Price
1/4	25'	**LT520425**	Price
1/4	50'	**LT520450**	Price
3/8	10'	**LT524610**	Price
3/8	25'	**LT524625**	Price
3/8	50'	**LT524650**	Price

Thermoplastic Bulk Air Hose

MADE IN THE USA



- Made out of prime PVC tube and cover for air and water applications
- 3/8" ID × 41/64" OD
- Blue cover over white tube
- 300 PSI
- Rayon spiral synthetic cord
- 20°F to +150°F temperature range

Hose ID	Order No.	Price
3/8	**LT50TP6500**	Price

360° Air Tool Swivel

WORLD CLASS QUALITY



- Easily position your air tool in those awkward positions or angles
- Swivels 360°
- Saves your air hose
- A simple union between your air hose and your air tool
- 1/4" NPT fitting

Order No.	Price
PJ60360	Price

Air-Flo™ Air Tool Oil

For Piston Driven & Rotary Air Tools



- Superior oxidation stability
- Resistance to formation of gums, sludges and deposits
- Anti-wear fortified for extended life, lower maintenance
- Protection against rust and corrosion
- Excellent seal compatibility
- Metal-wetting properties
- Dirt particles held in suspension
- Contaminants flushing

Size	Order No.	Price
16 oz	**LJ55PNTAF**	Price
1 Gallon	**LJ5501GAF**	Price

Air Tool Lubricants

MADE IN THE USA



- A specially formulated high grade lubricant which prolongs the service life of air tools, cylinders and accessories
- Inhibits rust and is non-corrosive, non-reactive, stable (non-decomposing), completely non-toxic and non-hazardous
- **Hazard Code: 58**

Size	Order No.	Price
4 Ounces	**NV50ATL004**	Price
16 Ounces	**NV50ATL016**	Price
32 Ounces	**NV50ATL032**	Price
1 Gallon	**NV50ATL128**	Price

Air Supreme air hoses and reels are offered in a variety of materials designed for today's tough shop environment. Weather it's the traditional tough and economical red rubber, the light weight and durable Bluebird® or the super strong, oil resistant Oil Shield®, Air Supreme has the hose to get the job done!

Air Supreme® Red Rubber Air Hose



- 80% the weight of traditional red rubber hoses
- Ozone resistant cover provides protection from extreme weather, abrasions & kinks
- Resists mild grease, oil & diesel
- Constructed with high strength polyester braided reinforcement
- Flexibility in extreme conditions from -40°F to 190°F
- 4 finger grip bend restrictor for better ergonomics
- 300 PSI

Hose ID (in.)	Length	Fitting Size	Order No.	Price
1/4	50'	1/4 NPT	**PJ72A14050AH**	Price
1/4	100'	1/4 NPT	**PJ72A14100AH**	Price
3/8	25'	1/4 NPT	**PJ72A38025AH**	Price
3/8	50'	1/4 NPT	**PJ72A38050AH**	Price
3/8	100'	1/4 NPT	**PJ72A38100AH**	Price
1/2	25'	1/2 NPT	**PJ72A12025AH**	Price
1/2	50'	1/2 NPT	**PJ72A12050AH**	Price
1/2	100'	1/2 NPT	**PJ72A12100AH**	Price

Air Supreme® Retractable Air Hose Reels



- Heavy duty steel construction
- 12-Point ratchet for better resolution
- Horizontal and vertical mount options
- Adjustable guide arm
- Powder coated, corrosion resistant

Brand Name	Size	Order No.	Price
Air Supreme	1/4" x 50'	**PJ72B38050AHR**	Price
Air Supreme	1/2" X 50'	**PJ72B12050AHR**	Price
Air Supreme	1/4" x 50'	**PJ72BO38050AHR**	Price
Air Supreme	1/2" X 50'	**PJ72BO12050AHR**	Price
Air Supreme	1/4" x 50'	**PJ72A38050AHR**	Price
Air Supreme	1/2" X 50'	**PJ72A12050AHR**	Price

PRM PRO Air Filter Reg Lube Unit



- Heavy gauge all steel reel assembly
- Ratchet gearing locks reel at desired length

Order No.	Price
KP8321001	Price

Comparison chart for Rubber Hoses offered by Air Supreme			
Parameter	**BluBird 300PSI**	**BluBird Oil-Shield 300PSI**	**Red Rubber 300PSI**
Tube Oil Resistance	RMA Class C	RMA Class A	RMA Class C
Cover Oil Resistance	RMA Class C	RMA Class A	RMA Class C
Min. Tube Tensile (Mpa)	10-12	8-10	5.50-6.50
Tube Elongation (%)	250-350%	250-350%	250-350%
Min. Cover Tensile (Mpa)	9-12	7-9	8-10
Cover Elongation (%)	600-800%	400-600%	600-800%
Safety Factor / Min. Burst Pressure (PSI)	4:1 / 1200	4:1 / 1200	4:1 / 1200
Temperature Range	-50 to 190F	-30 to 190F	-40 to 190F
Ozone / Weathering Resitance	Excellent	Average	Excellent
Automotive / Garage Application	Good	Excellent	Good
Cold Weather Application / Flexibility	Excellent	Good	Very Good
Roofing / Construction Application	Excellent	Good	Good
DIY Application	Excellent	Good	Very Good

Air Supreme® BluBird Oil Shield Oil Resistant Air Hose



- Ultra light, super-strong rubber
- RMA class A oil resistant core tube and cover
- Constructed with high strength polyester braided reinforcement
- Flexibility in extreme conditions from -30°F to 190°F
- 4 Finger grip bend restrictor for better ergonomics
- 300 PSI

Hose ID (in.)	Length	Fitting Size	Order No.	Price
3/8	25'	1/4 NPT	**PJ72BO38025AH**	Price
3/8	50'	1/4 NPT	**PJ72BO38050AH**	Price
3/8	100'	1/4 NPT	**PJ72BO38100AH**	Price
1/2	25'	1/4 NPT	**PJ72BO12025AH**	Price
1/2	50'	1/4 NPT	**PJ72BO12050AH**	Price
1/2	100'	1/4 NPT	**PJ72BO12100AH**	Price

Air Supreme® BluBird Ultra Light Air Hose



- Lightweight & ultra durable
- Ozone resistant cover provides protection from extreme weather, abrasions & kinks
- Constructed with high strength polyester braided reinforcement
- Lesser carbon footprint
- Flexibility in extreme conditions from -50°F to 180°F
- 300PSI

Hose ID (in.)	Length	Fitting Size	Order No.	Price
1/4	25'	1/4 NPT	**PJ72B14025AH**	Price
1/4	50'	1/4 NPT	**PJ72B14050AH**	Price
1/4	100'	1/4 NPT	**PJ72B14100AH**	Price
3/8	25'	1/4 NPT	**PJ72B38025AH**	Price
3/8	50'	1/4 NPT	**PJ72B38050AH**	Price
3/8	100'	1/4 NPT	**PJ72B38100AH**	Price
1/2	25'	1/2 NPT	**PJ72B12025AH**	Price
1/2	50'	1/2 NPT	**PJ72B12050AH**	Price
1/2	100'	1/2 NPT	**PJ72B12100AH**	Price

Air Supreme® Whip and Snubber Hoses



- Whip and snubber hoses are used to extend the life of the main air hose
- Most hose wear and failure occurs near the point of use, where all the bending and flexing occurs - whip hose will take the brunt of the abuse, giving the main air hose a much longer service life

Description	Order No.	Price
BluBird 3/8" x 3' Whip Hose	**PJ72B383W14**	Price
BluBird 1/2" x 3' Whip Hose	**PJ72B123W12**	Price
Oil-Shield 3/8" x 3' Whip Hose	**PJ72BO383W14**	Price
Oil-Shield 1/2" x 3' Whip Hose	**PJ72BO123W12**	Price
Oil-Shield 3/8" x 5' Snubber Hose	**PJ72B385W14**	Price
Oil-Shield 3/8" x 5' Snubber Hose	**PJ72BO385SW14MF**	Price

REELCRAFT Hose Reel



MADE IN THE USA

- All steel construction
- Compact design
- Automatic spring retractable
- Extends hose life
- Durable baked-on powder coat finish
- Suitable for air and water applications
- Full flow shaft and swivel
- Multi-position guide arm allows for mounting on either floor, wall, ceiling, bench or in pit
- Improves safety, convenience and productivity
- Pos-I-Latch mechanism automatically maintains desired workin glength of hose
- All reels are permanently factory lubricated
- Heavy duty brackets to eliminate bending due to angular hose pull
- 300 PSI Maximum
- Hose included

Hose Length	Hose ID (in.)	Hose OD	Size (in.)	Order No.	Price
25'	3/8	.640	12-5/8 x 5-3/8 x 12-7/8	**LT704625OLP**	Price
25'	1/2	.781	13-3/4 x 6 x 14-1/2	**LT705825OLP**	Price
35'	1/4	.500	12-5/8 x 5-3/8 x 12-7/8	**LT704435OLP**	Price
35'	3/8	.640	13-3/4 x 6 x 14-1/2	**LT705635OLP**	Price
50'	3/8	.640	16-1/2 x 6 x 17-1/2	**LT705650OLP**	Price
50'	3/8	.688	19 x 7 x 20-1/4	**LT707650OLP**	Price
50'	1/2	.844	19 x 7 x 20-1/4	**LT707850OLP**	Price
70'	3/8	.688	19 x 7 x 20-1/4	**LT707670OLP**	Price

REELCRAFT RT Series Hose Reels



- Structural strength
- Easy maintenance
- Long lasting latch spring
- Multi-position guide arm allows for mounting on either floor, wall, ceiling, bench or in pit
- Improves safety, convenience and productivity
- Lightweight
- Corrosion resistance

Hose Length	Hose ID (in.)	Hose OD	Size (in.)	PSI	Order No.	Price
35'	3/8	.640	16-1/2 x 5-3/4 x 17-5/8	1000	**LT70RT635OMP**	Price
35'	3/8	.640	16-1/2 x 5-3/4 x 17-5/8	300	**LT70RT635OLP**	Price
35'	3/8	.750	16-1/2 x 5-3/4 x 17-5/8	5000	**LT70RT635OHP**	Price
35'	1/2	.781	16-1/2 x 6-1/4 x 17-5/8	300	**LT70RT835OLP**	Price
50'	1/4	.500	16-1/2 x 5-3/4 x 17-5/8	300	**LT70RT450OLP**	Price
50'	3/8	.640	16-1/2 x 6-1/4 x 17-5/8	300	**LT70RT650OLP**	Price

COXREELS Hand Crank Reels





- All welded steel "A" frame construction for superior reel structure
- Exclusive low profile outlet riser and open drum slot design for flat smooth hose wrap
- Permanently lubricated self-aligning pillow block bearings for trouble-free and smooth rotation
- Adjustable tension brake to prevent "free-wheeling" during operation
- Long-handled locking pin to secure reel from rotation during transport or storage

Type - U Shaped Frame				
Hose ID	Length	W x H x L	Order No.	Price
3/8	100'	6 x 16-1/2 x 15-1/4"	**LT551123100**	Price
3/8	150'	5-3/4 x 18-1/4 x 17"	**LT551123150**	Price

Type - A Shaped Frame				
Hose ID	Length	W x H x L	Order No.	Price
1/2	100'	18-1/4 x 13 x 12"	**LT5511254100**	Price
1/2	200'	22-3/4 x 13 x 12"	**LT5511254200**	Price

COXREELS Pedestal Spring Rewind Reels



- Sturdy single pedestal reel with space saving design facilitates workplace organization
- Guide arm adjusts to wall, floor, vehicle and overhead positions
- Solid one piece, heavy gauge 1/4" steel base and support post for maximum stability
- 1" Solid steel axle and lubricated precision bearings for smooth rotation

Style - EZ-Coil				
Hose ID	Length	W x H x L	Order No.	Price
1/2	50'	6 x 16-1/2 x 15-1/4"	**LT55EZPLP450**	Price
1/4	25'	7 x 18-5/8 x 17-1/8"	**LT55EZPLP125**	Price
3/8	25'	8-1/2 x 14-7/8 x 13-1/2"	**LT55EZPLP325**	Price

Style - EZ-Coil				
Hose ID	Length	W x H x L	Order No.	Price
3/8	50'	8-1/2 x 14-7/8 x 13-1/2"	**LT55EZPLP350**	Price

Style - Spring Driven				
Hose ID	Length	W x H x L	Order No.	Price
1/2	50'	9-3/8 x 21-1/4 x 19-1/2"	**LT55PLP450**	Price
1/4	25'	10-1/4 x 21-1/4 x 19-1/2"	**LT55PLP125**	Price
3/8	25'	8-1/4 x 21-1/4 x 19-1/2"	**LT55PLP325**	Price
3/8	50'	9-3/8 x 25-1/2 x 24"	**LT55PLP350**	Price

COXREELS Side Mount Workstation Reels









- 360° Payout designed for use from any direction
- Heavy gauge steel arm mounts flat to any surface such as tool boxes, benches, vehicle lifts, beams, etc
- 2-Bolt mounting pattern easily mounts and detaches for multiple work station applications
- Hose control bar is full drum width preventing derailment
- Multi-position locking ratchet secures hose at desired length
- 300 PSI hose, 3/8 ID
- Professional grade heavy duty steel construction
- Also available with EZ-Coil® controlled retraction, patented EZ-Coil® reduces retraction speed by up to 80%
- Rolled edges & ribbed discs provide strength & safety
- Brass NPT swivel, machined from solid with stainless steel stud

				EZ-Coil		Standard	
Mount	Length	W x H x L	Weight	Order No.	Price	Order No.	Price
Side Mount	-	8-1/2 x 14-7/8 x 13-1/2"	32 lbs.	-	-	**LT55SL17L350**	Price
Side Mount	25"	7-3/8 x 10-5/8 x 10-1/2"	23 lbs.	**LT55EZSR15L325**	Price	**LT55SR15L325**	Price
Side Mount	50"	6-1/2 x 14-7/8 x 13-1/2"	32 lbs.	**LT55EZSR17L350**	Price	**LT55SR17L350**	Price

ColorConnex™

Color Code System for Standard Interchanges

Introducing ColorConnex™, Legacy's EXCLUSIVE Color Code System for standard pneumatic coupler and plug inter-changes. This unique, patent pending system allows for easy color-matching of plugs to couplers; eliminating confusion.



† Kits

3 Piece - Includes one female plug, one male plug and one female coupler
5 Piece - Includes one female plug, three male plugs and one female coupler
7 Piece - Includes two female plugs, three male plugs, one female coupler and one male coupler
14 Piece. - Includes four female plugs, six male plugs, two female coupler and two male couplers

	ARO Type B-Green		Automotive Type C-Blue		Industrial Type D-Red	
Description	Order No.	Price	Order No.	Price	Order No.	Price
1 Piece 1/4" Body, 1/4" NPT Female Coupler	LX55A71410B	Price	LX55A72410C	Price	LX55A73410D	Price
1 Piece 1/4" Body, 1/4" NPT Male Coupler	LX55A71420B	Price	LX55A72420C	Price	LX55A73420D	Price
2 Piece 1/4" Body, 1/4" NPT Female Plug	LX55A71430B2PK	Price	LX55A72430C2PK	Price	LX55A73420D2PK	Price
2 Piece 1/4" Body, 1/4" NPT Male Plug	LX55A71440B2PK	Price	LX55A72440C2PK	Price	LX55A73440D2PK	Price
3 Piece 1/4" Body, 1/4" NPT Coupler and Plug Kit	LX55A71452B†	Price	LX55A72452C†	Price	LX55A73452D†	Price
5 Piece 1/4" Body, 1/4" NPT Coupler and Plug Kit	LX55A71456B†	Price	LX55A72456C†	Price	LX55A73456D†	Price
7 Piece 1/4" Body, 1/4" NPT Coupler and Plug Kit	LX55A71457B†	Price	LX55A72457C†	Price	LX55A73457D†	Price
14 Piece 1/4" Body, 1/4" NPT Coupler and Plug Kit	LX55A71458B†	Price	LX55A72458C†	Price	LX55A73458D†	Price

ColorConnex™ High Flow and X-Flo Push Type Couplers



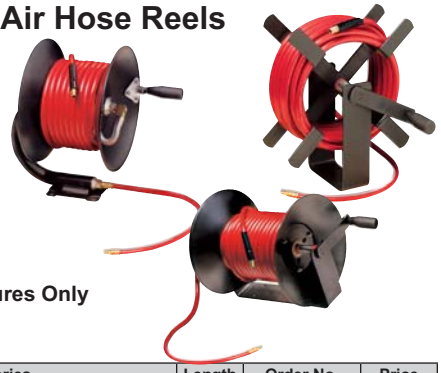
- Fully automatic, quick coupling action, no sleeve to pull back
- Push-connect easy connect system
- 35% lighter than standard steel coupler
- 8 ball push connect coupler
- Hi-flow - provide 40% more SCFM air than standard couplers.
- Max airflow: 105 SCFM
- X-Flo couplers 25% more flow for improved air tool performance, ideal for extreme flow applications

Description	Order No.	Price
Hi-Flow Plug-1/4 Body, 1/4 Female NPT	LX55A63430X	Price
Hi-Flow Plug-1/4 Body, 1/4 Male NPT	LX55A63440X	Price
Hi-Flow Plug-1/4 Body, 3/8 Female NPT	LX55A63630X	Price
Hi-Flow Plug-1/4 Body, 3/8 Male NPT	LX55A63640X	Price
X-Flow Coupler TYPE D 1/4 Female NPT	LX55A73416DX	Price
X-Flow Coupler TYPE D 1/4 Male NPT	LX55A73426DX	Price
X-Flow Type D 1/4 Plug 3/8 Female NPT	LX55A73630DX	Price
X-Flow Type D 1/4 Coupler 3/8 Female NPT	LX55A73610DX	Price
X-Flow Type D 1/4 Coupler 3/8 Male NPT	LX55A73620DX	Price

Manual Air Hose Reels

Common Features

- 3/8" Airhose
- Bend restrictor
- Brake
- Swivel handle
- Baked enamel finish
- 3' Lead-in hose
- Mounting bracket (wall, workbench, vehicle)



Contractors Series Features Only

- HD steel drum
- Inlet swivel

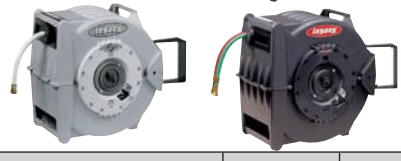
Model No.	Series	Length	Order No.	Price
L8550	Workforce Series Manual Air Hose Reel	50'	LX55L8550	Price
L8650	Contractor Series Manual Air Hose Reel	50'	LX55L8650	Price
L8652	Contractor Series Manual Air Hose Reel	100'	LX55L8652	Price

Auto Rewind, Auto Leveling Hose Reels

Featuring a unique winding system that automatically layers the hose back forth across the reel. This ensures that the hose is coiled smoothly easily... every time.



- Auto-rewind
- 3/4" Hose swivel
- Free standing base
- Latching & free-run mode
- Adjustable hose stopper



Hose OD (in.)	Hose Length	Hose Style	Order No.	Price
3/8	50'	Levelwind Retractable Air Hose Reel	LX55L8305	Price
3/8	75'	Levelwind Retractable Air Hose Reel	LX55L8306	Price
3/8	100'	Levelwind Retractable Air Hose Reel	LX55L8310	Price
5/8	50'	Levelwind Retractable Garden Hose Reel	LX55L8346	Price
3/4	50'	Levelwind Retractable Twin Hose Reel	LX55L8363	Price

FLEXZILLA

Extreme FLexibility

- Temperature range: (-40°F to 150°F)
- 300 PSI working pressure
- Reinforced bend restrictor
- Excellent abrasion resistance
- Superior bend radius
- Lightweight and easy to handle



Hose ID	Length (in.)	Fitting Size	Order No.	Price
1/4	25'	1/4 Male NPT	LX55HFZ1425YW2	Price
1/4	50'	1/4 Male NPT	LX55HFZ1450YW2	Price
1/4	100'	1/4 Male NPT	LX55HFZ14100YW2	Price
3/8	25'	1/4 Male NPT	LX55HFZ3825YW2	Price
3/8	50'	1/4 Male NPT	LX55HFZ3850YW2	Price
3/8	100'	1/4 Male NPT	LX55HFZ38100YW2	Price

Flexzilla Pro High Flow Coupler

- Allows twice the flow to your air tools
- Connect Flexzilla Hihg Flow fitting from your tool all the way to the compressor



Order No.	Price
LX55A53426FZX	Price

Automotive (Trueflate) Series Couplers and Conectors

- This series of couplers and connectors is designed to interchange with the automotive (Tru-Flate) interchange series of other manufacturers
- All Coilhose (Tru-Flate) Series 16 couplers will accept any Coilhose Series 16 connectors
- All Coilhose (Tru-Flate) Series 59 couplers will accept any Coilhose Type 59 connectors
- All 1/4" body couplers are brass and all 3/8" body couplers are steel

Couplers

MADE IN THE USA



Body Size (in.) - 1/2 Series - 12 Series		
Thread Size (in.)	Order No.	Price
1/2 FPT	**LX50120**	Price
1/2 Hose Barb	**LX50128**	Price
1/2 MPT	**LX50122**	Price
3/8 FPT	**LX50123**	Price
3/8 MPT	**LX50121**	Price

Body Size (in.) - 1/4 Series - 15 Series		
Thread Size (in.)	Order No.	Price
1/4 FPT	**LX50150**	Price
1/4 Hose Barb	**LX50153**	Price
1/4 MPT	**LX50152**	Price
1/8 FPT	**LX50158**	Price
1/8 MPT	**LX50159**	Price
3/8 FPT	**LX50151**	Price
3/8 Hose Barb	**LX50156**	Price
3/8 MPT	**LX50155**	Price
5/16 Hose Barb	**LX50154**	Price

Body Size (in.) - 3/8 Series - 58 Series		
Thread Size (in.)	Order No.	Price
1/2 FPT	**LX50584**	Price
1/2 Hose Barb	**LX50588**	Price
1/2 MPT	**LX50587**	Price
1/4 FPT	**LX50582**	Price
1/4 MPT	**LX50583**	Price
3/8 FPT	**LX50580**	Price
3/8 Hose Barb	**LX50586**	Price
3/8 MPT	**LX50581**	Price

Connectors

MADE IN THE USA



Body Size (in.) - 1/2 Series - 12 Series		
Thread Size (in.)	Order No.	Price
1/2 FPT	**LX501202**	Price
1/2 Hose Barb	**LX501208**	Price
1/2 MPT	**LX501201**	Price
3/8 FPT	**LX501204**	Price
3/8 Hose Barb	**LX501207**	Price
3/8 MPT	**LX501203**	Price

Body Size (in.) - 1/4 Series - 15 Series		
Thread Size (in.)	Order No.	Price
1/4 FPT	**LX501502**	Price
1/4 Hose Barb	**LX501506**	Price
1/4 MPT	**LX501501**	Price
1/8 FPT	**LX501509**	Price
1/8 MPT	**LX501504**	Price
3/8 FPT	**LX501505**	Price
3/8 Hose Barb	**LX501508**	Price
3/8 MPT	**LX501503**	Price
5/16 Hose Barb	**LX501507**	Price

Body Size (in.) - 3/8 Series - 58 Series		
Thread Size (in.)	Order No.	Price
1/2 FPT	**LX505805**	Price
1/2 Hose Barb	**LX505808**	Price
1/2 MPT	**LX505809**	Price
1/4 FPT	**LX505804**	Price
1/4 MPT	**LX505803**	Price
3/8 FPT	**LX505802**	Price
3/8 Hose Barb	**LX505806**	Price
3/8 MPT	**LX505801**	Price

Heavy Duty Mechanical Hose Balancers

- Specifically designed for the use of lightweight assembly tools where delicate balancing and uncluttered installation is a must
- The compressed air enters the balancer via a rotating airtight joint pressurizing the hose and the air tool
- Features a permanently lubricated precision mechanism housed in a steel case



Working Range	Order No.	Price
1 to 3.5 lbs	**NV50BH02**	Price
2 to 4.5 lbs	**NV50BH05**	Price
4 to 5.8 lbs	**NV50BH08**	Price

Heavy Duty Mechanical Tool Balancers

- Enable all types of portable tools weighing up to 25 lbs to be suspended within easy reach of the operator
- Prevents damage to tools by eliminating accidental dropping of the suspended tool



Working Range	Order No.	Price
1 to 3.5 lbs	**NV50BL02**	Price
2 to 4.5 lbs	**NV50BL05**	Price
4.5 to 8 lbs	**NV50BL08**	Price
6.5 to 13.5 lbs	**NV50BL10**	Price
11 to 19 lbs	**NV50BL15**	Price
18 to 25 lbs	**NV50BL25**	Price

Retractable Air Hose Reels

- Industrial grade rubber air hose, 250 PSI
- Heavy gauge all steel reel assembly
- Ratchet gearing locks reel at desired hose length
- 50' Hose length



Item	Hose ID (in.)	Order No.	Price
PRM PRO	3/8	**KP8322450**	Price
TEKTON	1/2	**KP8546848**	Price
	3/8	**KP8546845**	Price

Automotive (Trueflate) Series Couplers and Conectors

- This series of couplers and connectors is designed to interchange with the automotive (Tru-Flate) interchange series of other manufacturers
- All Coilhose (Tru-Flate) Series 16 couplers will accept any Coilhose Series 16 connectors
- All Coilhose (Tru-Flate) Series 59 couplers will accept any Coilhose Type 59 connectors
- All 1/4" body couplers are brass and all 3/8" body couplers are steel

Couplers



Series - 16 Body Size (in.) - 1/4		
Thread Size (in.)	Order No.	Price
1/4 FPT	**LX50160**	Price
1/4 Hose Barb	**LX50163**	Price
1/4 MPT	**LX50162**	Price
1/8 MPT	**LX50169**	Price
3/8 FPT	**LX50161**	Price
3/8 Hose Barb	**LX50166**	Price
3/8 MPT	**LX50165**	Price

Series - 59 Body Size (in.) - 3/8		
Thread Size (in.)	Order No.	Price
1/4 FPT	**LX50592**	Price
1/4 MPT	**LX50593**	Price
3/8 FPT	**LX50590**	Price
3/8 Hose Barb	**LX50598**	Price
3/8 MPT	**LX50591**	Price

Connectors



Series - 16 Body Size (in.) - 1/4		
Thread Size (in.)	Order No.	Price
1/4 FPT	**LX501602**	Price
1/4 Hose Barb	**LX501606**	Price
1/4 MPT	**LX501601**	Price
1/8 MPT	**LX501604**	Price
3/8 FPT	**LX501605**	Price
3/8 Hose Barb	**LX501608**	Price
3/8 MPT	**LX501603**	Price

Series - 59 Body Size (in.) - 3/8		
Thread Size (in.)	Order No.	Price
1/4 FPT	**LX505904**	Price
1/4 MPT	**LX505903**	Price
3/8 FPT	**LX505902**	Price
3/8 Hose Barb	**LX505906**	Price
3/8 MPT	**LX505901**	Price

1/4" ARO Interchange Couplers and Connectors

- This series is designed to interchange with the ARO interchange series of other manufacturers
- All Coilhose ARO interchange Series 14 brass couplers will accept all Series 14 hardened steel connectors

Couplers



Series - 14		
Thread Size (in.)	Order No.	Price
1/4 FPT	**LX50140**	Price
1/4 Hose Barb	**LX50143**	Price
1/4 MPT	**LX50142**	Price
3/8 FPT	**LX50141**	Price
3/8 MPT	**LX50145**	Price

Connectors



Series - 14		
Thread Size (in.)	Order No.	Price
1/4 FPT	**LX501402**	Price
1/4 Hose Barb	**LX501406**	Price
1/4 MPT	**LX501401**	Price
1/8 MPT	**LX501404**	Price
3/8 FPT	**LX501405**	Price
3/8 MPT	**LX501403**	Price
5/16 Hose Barb	**LX501407**	Price

Acme Interchange Couplers and Connectors

- Allows 15-30% more flow than other manufacturers 1/4" interchanges
- The "radius design" connector allows more surface area contact with the locking balls, making it more durable even in high vibration conditions
- Weighs 25% less than other interchanges, which reduces user fatigue and maximizes users range of motion
- Six locking balls provide a more secure and balanced connection
- Available in four different body configurations

Couplers



Body Size (in.)	Barb Size	Order No.	Price
1/4	1/4 FPT	**LX50A900B4F**	Price
1/4	1/4 Hose Barb	**LX50A900B4H**	Price
1/4	1/4 MPT	**LX50A900B4M**	Price
1/4	3/8 FPT	**LX50A900B6F**	Price
1/4	3/8 Hose Barb	**LX50A900B6H**	Price

Connectors



Body Size (in.)	Barb Size	Order No.	Price
1/4	1/4 FPT	**LX50A900N4F**	Price
1/4	1/4 Hose Barb	**LX50A900N4H**	Price
1/4	1/4 MPT	**LX50A900N4M**	Price
1/4	3/8 FPT	**LX50A900N6F**	Price
1/4	3/8 Hose Barb	**LX50A900N6H**	Price
1/4	3/8 MPT	**LX50A900N6M**	Price

Automatic Combo Couplers

- One-handed push-to-connect operation provides quick installation.
- 25% lighter than other manufacturers' industrial interchange couplers
- Six ball construction which provides a more secure and balanced connection
- When used with Acme interchange connectors, they allow more air flow than 1/4" body quick disconnects from other manufacturers



Body Size (in.)	Barb Size	Order No.	Price
1/4	1/4 FPT	**LX5015C90B4F**	Price
1/4	1/4 Hose Barb	**LX5015C90B4H**	Price
1/4	1/4 MPT	**LX5015C90B4M**	Price
1/4	3/8 FPT	**LX5015C90B6F**	Price
1/4	3/8 Hose Barb	**LX5015C90B6H**	Price
1/4	3/8 MPT	**LX5015C90B6M**	Price

Automatic Universal Couplers

- Interchanges with the three most popular 1/4" interchange connectors: Industrial (Type 15), Automotive (Type 16), and ARO (Type 14)
- Automatic for one-handed push-to-connect operation



Thread Size	Order No.	Price
1/4 FPT	**LX50150U**	Price
1/4 MPT	**LX50152U**	Price

Ball Swivels

- All brass with nickel plating
- Extends the life of the hose by eliminating kinking and twisting
- Increases the tool maneuverability and production capacity



Hose I.D. (in.)	Thread Size	Order No.	Price
1/4	1/4 MPT	**LX50B0404BS**	Price
5/16	1/4 MPT	**LX50B0504BS**	Price
3/8	1/4 MPT	**LX50B0604BS**	Price
-	1/4 FPT x 1/4 MPT	**LX50CF0404BS**	Price

Ball Swivels With Connectors



Description	Order No.	Price
1/4 Body ARO Connector x 1/4 MPT	**LX501404BS**	Price
1/4 Body Automotive Connectors x 1/4 MPT	**LX501604BS**	Price
1/4 Body Industrial Connectors x 1/4 MPT	**LX501504BS**	Price

Non-Marring Safety Industrial Composite Couplers

- Manufactured out of a heavy duty, high impact fiberglass composite, which protects finished surfaces from scratching and marring that can occur with brass or steel couplers
- Can be used with any standard industrial interchange connector
- Offers additional protection against "hose whip" upon disconnection by safely bleeding off air line pressure through a two-step release mechanism



Body Size (in.)	Thread Size	Order No.	Price
1/4	3/8 FPT	**LX50151SE**	Price
1/4	3/8 MPT	**LX50155SE**	Price

Whip Hoses

- Acts as a shock absorber and protects against tool vibration
- Provides the operator with an easier and wider range of motion
- Available in both neoprene and Flexeel®



Hose Material - Flexeel				
Fitting Size	Length	Fitting	Order No.	Price
1/4	12"	1- Male Swivel x 1- Rigid Female	**LX50FP0412BS**	Price
1/4	18"	1- Male Swivel x 1- Rigid Female	**LX50FP0418BS**	Price
1/4	24"	1- Male Swivel x 1- Rigid Female	**LX50FP0424BS**	Price

Hose Material - Neoprene				
Fitting Size	Length	Fitting	Order No.	Price
1/4	24"	1- Male Swivel x 1- Rigid Female	**LX50RP0424BS**	Price

Acme Interchange Couplers and Connectors

- Allows 15-30% more flow than other manufacturers 1/4" interchanges
- The "radius design" connector allows more surface area contact with the locking balls, making it more durable even in high vibration conditions
- Weighs 25% less than other interchanges, which reduces user fatigue and maximizes users range of motion
- Six locking balls provide a more secure and balanced connection
- Available in four different body configurations

Connectors



Thread Size	Order No.	Price
1/4 FPT	**LX501102**	
1/4 Hose Barb	**LX501106**	
1/4 MPT	**LX501101**	
3/8 Hose Barb	**LX501108**	
3/8 MPT	**LX501103**	

Couplers



Thread Size	Order No.	Price
1/4 Hose Barb	**LX50113**	Price
1/4 MPT	**LX50112**	Price
3/8 FPT	**LX50111**	Price
3/8 Hose Barb	**LX50116**	Price

Coilhose Miniature Series Filters Regulators and Lubricators

- Designed for applications where space is limited or when high flow requirements are not necessary
- These units feature a tough die cast zinc body construction with either 1/8" or 1/4" in/out ports

Miniature Series Filters



- 20 Micron filter element
- Manual drain allows easy removal of fluids
- Bowl volume 1.5 oz

Port Size (in.)	Order No.	Price
1/4 NPT	**NV50MF2**	Price

Miniature Series Regulators

- Self-relieving feature protects downstream system components from over-pressurization
- Patented snap-lock non-rising adjusting knob locks in place and maintains pressure setting
- Order pressure gauge separately



Port Size (in.)	Order No.	Price
1/8 NPT	**NV50MR1**	Price
1/4 NPT	**NV50MR2**	Price

Integral Miniature Filter/Regulator



- Combines filter and regulator features into a compact single unit
- Order gauge separately

Port Size (in.)	Order No.	Price
1/4 NPT	**NV50MFC2**	Price

Miniature Trio Assemblies



- Includes filter, regulator & lubricator in one assembly with a 0-160 PSI pressure gauge

Port Size (in.)	Order No.	Price
1/8 NPT	**NV50MFRL1G**	Price
1/4 NPT	**NV50MFRL2G**	Price

Miniature Series Coalescing Filters



- Removes 99.97% of oil and water aerosols as well as solids larger than 0.3 microns
- A coalescing filter must be used with a pre-filter in order to filter out the larger particles that would clog the coalescing filter

Port Size (in.)	Order No.	Price
1/4 NPT	**NV50MC2**	Price

Miniature Series Lubricators



- Provides constant oil delivery at both steady and pulsing air flows
- See-through drip tube gives visual indication of lubricant flow rate
- Bowl volume 1.5 oz

Port Size (in.)	Order No.	Price
1/4 NPT	**NV50ML2**	Price

Miniature Series Accessories





Type	Order No.	Price
0-160 PSI Gauge with 1-1/2" Dial	**NV5026G160**	Price
Mounting Bracket and Panel Nut	**NV50MR140MB**	Price

In Line Series Filters Regulators and Lubricators

- An economical way to operate, protect and maintain your air tools
- Supplied with female inlet and male outlet threads for easy installation into the tool
- Designed for applications where standard controls can't be used

In Line Adjustable Pressure Regulators



- Adjustable pressure setting allows use with various tools
- Operates from 50-145 PSI
- 1/4" FPT inlet 1/4" MPT outlet
- Provides a mobile alternative to bulkier pressure regulators
- User can select desired pressure and lock the setting in place

Order No.	Price
NV504214ADJ	Price

In Line Filter



- 60 Micron sintered bronze filter element
- Aluminum body

Port Size (in.)	Order No.	Price
1/4 FPT x MPT	**NV504022**	Price

In Line Air Flow Regulators



- Aluminum body
- 1-1/2" dial gauge (0-160 PSI)
- Helps fine-tune air tool performance when supply air pressure is set at correct level

Port Size (in.)	Type	Order No.	Price
1/4 FPT x MPT	In-Line Flow Regulator with Gauge	**NV504012G**	Price

Legacy Tire Chuck Gages - Direct Airline Tire Chucks

Direct airline chucks have a shut-off valve built into the chuck head, and therefore CANNOT be used on tire inflator gages

Description	Order No.	Price
1/4 FPT Thread	**LX55AL3000**	Price
1/4 FPT Thread with Chuck Clip	**LX55AL3010**	Price



Economy In Line Lubricator

- Protects expensive air tools
- Eliminates any guesswork by automatically administering oil to the tool
- Lightweight and compact
- Clear casing allows users to easily monitor oil levels



Port Size (in.)	Order No.	Price
1/4 NPT	**NV5040024**	Price

plews Tire Pressure Gages

All gages feature bright chrome plating, recessed deflator pin machined in chuck head and a handy pocket clip



Description	Order No.	Price
Standard Tire Gauge for general purpose use on passenger cars, vans and light trucks. Calibrated 10-50 PSI in 1 lb. units, 70-350 kPa in 10 kPa units, and .7-3.5 bar in .1 bar units	**LX5017509**	Price
High Pressure Tire Gauge ideal for all higher pressure applications on lightweight trucks (1/2 to 2-1/2 tons), step vans, pickups and air shocks. Calibrated 20-120 PSI in 2 lb. units, 140-820 kPa in 20 kPa units, and 1.4-8.2 bar in .2 bar units.	**LX5017519**	Price

26 Series Filters Regulators & Lubricators

- Offers a balance of compact size and optimum flow
- Once delivery rate is set, proportional oil-to-air delivery rate assures even lubrication at all times
- The 26 Series features either 1/4" or 3/8" in/out ports

26 Series Filters



- Excellent water removal efficiency
- Bowl guard is standard and mounts independent of the bowl
- Bowl volume: 3.8 oz

Port Size (in.)	Order No.	Price
1/4 NPT	**NV5026F2**	Price
3/8 NPT	**NV5026F3**	Price

26 Series Coalescing Filters



- Bowl guard is standard and mounts independent of the bowl
- Removes 99.97% of oil and water aerosols as well as solids larger than 0.3 microns
- A coalescing filter must be used with a pre-filter in order to filter out the larger particles that would clog the coalescing filter

Port Size (in.)	Order No.	Price
1/4 NPT	**NV5026C2**	Price
3/8 NPT	**NV5026C3**	Price

Integral 26 Series Filter/ Regulators



- Space saving design offers both filter and regulator features in one unit
- Requires only two pipe connections, reducing the possibility of leakage
- Order pressure gauge separately

Port Size (in.)	Order No.	Price
1/4 NPT	**NV5026FC2**	Price
3/8 NPT	**NV5026FC3**	Price

26 Series Regulators



- Balanced poppet design assures superior performance
- Non-rising regulation adjustment knob locks in place and maintains desired pressure setting
- Order pressure gauge separately

Port Size (in.)	Order No.	Price
1/4 NPT	**NV5026R2**	Price
3/8 NPT	**NV5026R3**	Price

26 Series Lubricators

- Once delivery rate is set, proportional oil-to-air delivery rate assures even lubrication at all times
- Lubricant can be added through a fill port without shutting down the air line
- Bowl guard is standard and mounts independent of the bowl
- Bowl volume: 3.8 oz



Port Size (in.)	Order No.	Price
1/4 NPT	**NV5026L2**	Price
3/8 NPT	**NV5026L3**	Price

26 Series Trio Assemblies

- Includes filter, regulator & lubricator in one assembly with a 0-160 PSI pressure gauge



Port Size (in.)	Order No.	Price
1/4 NPT	**NV5026FRL2G**	Price
3/8 NPT	**NV5026FRL3G**	Price

26 Series Accessories



- 26 Series Accessories
- This series offers a balance of compact size and optimum flow. Once delivery rate is set, proportional oil-to-air delivery rate assures even lubrication at all times. The 26 Series features either 1/4 or 3/8 in/out ports.

Order No.	Price
NV5026G160	Price
NV50MR140MB	Price

27 Modular Series Filters Regulators and Lubricators

- Constructed of aluminum and offers a compact design
- Modular construction allows the unit to be connected together either with clamps, which connect without disturbing existing piping or with standard nipples

27 Modular Series Lubricators



- Lubricant can be added through fill port without shutting down airline
- Once delivery rate is set lubricant is proportionately delivered at all other air flows
- Bowl guard is supplied as standard
- Bowl volume 8.5 oz

Port Size (in.)	Order No.	Price
3/8 NPT	**NV5027L3**	Price
1/2 NPT	**NV5027L4**	Price
3/4 NPT	**NV5027L6**	Price

27 Modular Series Regulators



- Balanced poppet valve design assures superior performance
- Diaphragm type regulator has low initial pressure drop while maintaining high sensitivity
- Regulator adjustment knob locks into place to maintain the desired pressure setting
- Order pressure gauge separately

Port Size (in.)	Order No.	Price
3/8 NPT	**NV5027R3**	Price
1/2 NPT	**NV5027R4**	Price
3/4 NPT	**NV5027R6**	Price

27 Modular Series Coalescing Filters



- Removes 99.97% of oil and water aerosols as well as solids larger than 0.3 Microns
- A coalescing filter must be used with a pre-filter in order to filter out the larger particles that would clog the coalescing filter
- Bowl volume 8.5 oz

Port Size (in.)	Order No.	Price
3/8 NPT	**NV5027C3**	Price
1/2 NPT	**NV5027C4**	Price
3/4 NPT	**NV5027C6**	Price

Integral 27 Modular Series Filter/Regulators



- Space saving design offers both filter and regulator features in one unit
- Requires only two pipe connections, reducing the possibility of leakage
- Order pressure gauge separately

Port Size (in.)	Order No.	Price
3/8 NPT	**NV5027FC3**	Price
1/2 NPT	**NV5027FC4**	Price
3/4 NPT	**NV5027FC6**	Price

27 Modular Series Filters



- 40 Micron filter element
- Bowl guard supplied as standard
- Bowl volume 8.5 oz

Port Size (in.)	Order No.	Price
3/8 NPT	**NV5027F3**	Price
1/2 NPT	**NV5027F4**	Price
3/4 NPT	**NV5027F6**	Price

27 Modular Series Trio

- Includes filter, regulator and lubricator in one assembly with a 0-160 PSI pressure gauge



Port Size (in.)	Order No.	Price
3/8 NPT	**NV5027FRL3G**	Price
1/2 NPT	**NV5027FRL4G**	Price
3/4 NPT	**NV5027FRL6G**	Price

27 Series Modular Accessories



Type	Order No.	Price
0-160 PSI Gauge with 2" Dial	**NV508800160**	Price
Modular System Mounting Bracket and Connecting Clamp Kit	**NV5027MB01**	Price
Wall Mounting Connecting Clamp Kit	**NV5027MB02**	Price

Heavy Duty Series Filters Regulators and Lubricators

- An excellent solution for applications where higher air flow is the primary concern.
- Top level performance and long lasting durability is assured by such features as an extra large bronze filter element, critically close air regulation, mist-type lubricant atomization, and a rugged die cast aluminum body

Heavy Duty Series Filters

- 40 Micron sintered bronze filter element
- Polycarbonate bowl with guard
- Manual drain



Port Size (in.)	Order No.	Price
1/4 NPT	**NV508822R**	Price
3/8 NPT	**NV508823R**	Price
1/2 NPT	**NV508824R**	Price
1 NPT	**NV508828**	Price

Heavy Duty Series Regulators

- Provides high flow rates with accurate control and a fast response
- Built-in diaphragm prevents rupture
- Order gauge separately



Port Size (in.)	Order No.	Price
1/4 NPT	**NV508802**	Price
3/8 NPT	**NV508803**	Price
1/2 NPT	**NV508804**	Price
3/4 NPT	**NV508806**	Price
1 NPT	**NV508808**	Price

Heavy Duty Series Lubricators

- Mist type atomizing sightglass
- Polycarbonate bowl with guard
- Oil can be delivered without shutting down airline
- Once delivery rate is set, lubrication is uniformly maintained



Port Size (in.)	Order No.	Price
1/4 NPT	**NV508842R**	Price
3/8 NPT	**NV508843R**	Price
1/2 NPT	**NV508844R**	Price
3/4 NPT	**NV508846**	Price
1 NPT	**NV508848**	Price

Heavy Duty Series Coalescing Filters

- No tools required for replacing elements
- A coalescing filter must be used with a pre-filter in order to filter out the larger particles that would clog the coalescing filter
- Will remove 99.9% of liquid aerosols and particles larger than 0.1 micron size



Port Size (in.)	Order No.	Price
1/4 NPT	**NV508922R**	Price
3/4 NPT	**NV508926**	Price
1/2 NPT	**NV508924R**	Price
3/8 NPT	**NV508923R**	Price
1 NPT	**NV508928**	Price

Heavy Duty Tamper Proof Regulators

- Prevents additional wear on tools and equipment due to overpressure
- Set the pressure than remove the adjusting key



Port Size (in.)	Order No.	Price
1/4 NPT	**NV508802K**	Price
3/8 NPT	**NV508803K**	Price
1/2 NPT	**NV508804K**	Price
3/4 NPT	**NV508806K**	Price
1 NPT	**NV508808K**	Price

Heavy Duty Trios

- Includes filter, regulator and lubricator in one assembly with a 0-160 PSI pressure gauge



Port Size (in.)	Order No.	Price
1/4 NPT	**NV508882AAG**	Price
3/8 NPT	**NV508883AAG**	Price
1/2 NPT	**NV508884AAG**	Price
3/4 NPT	**NV508886AAG**	Price
1 NPT	**NV508888AAG**	Price

Heavy Duty Series Accessories





Type	Order No.	Price
1/2" Mounting Bracket for Heavy Duty	**NV50880014RB**	Price
1/4"-3/8" Mounting Bracket for Heavy Duty	**NV50880012RB**	Price
3/4" -1" Mounting Bracket for Heavy Duty	**NV50880016RB**	Price

Heavy Duty Desiccant Air Dryers

- Moist pressurized air enters the inlet port of the desiccant dryer into a bed of silica gel. The silica gel absorbs the water vapor in the air allowing the now dry air to pass through to downstream equipment
- Use of a desiccant dryer requires the placement of a pre-filter and a coalescing filter before the desiccant air dryer and a filter after the dryer
- The desiccant gel can be regenerated for reuse



Port Size (in.)	Order No.	Price
1/4 NPT	**NV508422**	Price
3/8 NPT	**NV508423**	Price
1/2 NPT	**NV508424**	Price

Mechanical Condensate Drains



- Collect moisture accumulated from compressor tanks, filters, drop legs, after coolers, dryers and other devices and discharges it
- Contains a manual override feature, through use of a petcock, to permit draining between automatic drain times

Bowl Type	Order No.	Price
Metal	**NV508514M**	Price
Polycarbonate with Plastic Guard	**NV508514**	Price

Relief Valves - ASME Approved

- Help ensure safe operation of your compressor system by guarding against tank over pressure by quickly releasing excess pressure
- Machined from brass bar stock
- Silicon rubber soft seal to ensure a tight, leak-free seal
- Manual pull ring allows for testing and system pressure relief
- ASME/National Board Approval & Canadian Registration



PSI	Relief Rate	Order No.	Price
70	60 SCFM	**NV50SV070**	Price
100	75 SCFM	**NV50SV100**	Price
125	105 SCFM	**NV50SV125**	Price
165	120 SCFM	**NV50SV150**	Price
200	160 SCFM	**NV50SV200**	Price

Solid State Automatic Drain Valve

- Cycle time can be set from 1 to 45 minutes
- Drain time can be adjusted from 1 to 15 seconds
- Bronze filter built right into the body protects the drain valve from foreign particles in the line
- Operates on 120V 60Hz/110V 50 Hz voltage (supplied with 6 foot heavy duty grounded power cord)
- Manual override permits valve to be opened between set cycles
- Includes an electronic timer for automatic operation at the application from a remote location



Order No.	Price
NV508653	Price

Starrett Bi-Metal High Speed Steel Power Hacksaw Blades

MADE IN THE USA

- Bi-metal high speed steel edge blades - great for tough materials and conditions of all types
- High speed steel cutting edge gives them unparalleled cutting efficiency
- Tough alloy steel back resists breakage when used under less than ideal conditions
- Blades will handle irregular shapes and interrupted cuts with easewith ease



Length (in.)	Width (in.)	Thickness	Pinhole Dia.	TPI	Starrett No.	Order No.	Price
12	5/8	.032	.187	14	BS12143	**FV6240289**	Price
12	5/8	.032	.187	18	BS12183	**FV6240290**	Price
12	1-1/8	.050	.281	10	BS12105	**FV6240097**	Price
12	1-1/8	.050	.281	14	BS12145	**FV6240098**	Price
14	1-1/8	.050	.281	10	BS14105	**FV6240099**	Price
14	1-1/8	.050	.281	14	BS14145	**FV6240100**	Price
14	1-3/8	.062	.281	6	BS14066	**FV6240101**	Price
14	1-3/8	.062	.281	10	BS14106	**FV6240102**	Price
14	1-5/8	.075	.281	6	BS14067	**FV6240105**	Price
17	1-3/8	.062	.281	6	BS17066	**FV6240113**	Price
17	1-3/8	.062	.281	10	BS17106	**FV6240114**	Price
18	1-3/8	.062	.281	6	BS18066	**FV6240115**	Price
18	1-3/8	.062	.281	10	BS18106	**FV6240116**	Price
18	1-5/8	.075	.281	4	BS18047	**FV6240118**	Price
18	1-5/8	.075	.281	6	BS1806-7	**FV6240273**	Price
18	1-7/8	.088	.281	4	BS18048	**FV6240121**	Price
18	1-7/8	.088	.281	6	BS18068	**FV6240122**	Price
21	1-7/8	.088	.281	4	BS21048	**FV6240126**	Price

Starrett Bi-Metal Unique High Speed Steel Hand Hacksaw Blades

Safe-Flex



- Best for tough materials and conditions of all types
- Welded cutting edge of high-speed steel with a tough, alloy steel back
- 1/2” Wide x .025 thick
- 10 Blades per pack

		Bluestripe®	
Length (in.)	TPI	Order No.	Price
10	18	**FV60BS1018**	Price
10	24	**FV60BS1024**	Price
12	18	**FV60BS1218**	Price
12	24	**FV60BS1224**	Price
12	32	**FV60BS1232**	Price

Nicholson 10" Hand Hacksaw Blades

MADE IN THE USA

- High speed steel
- 1/2” Wide
- .025” Thickness
- Sold in packs of two



Length (in.)	TPI	Order No.	Price
10	24	**FV51HS10242PK**	Price

PROFIT Bi-Metal Hand Hacksaw Blades

- Used for cutting metal
- Bi-Metal construction outlasts high speed steel or conventional, flexible blades

Length (in.)	TPI	Order No.	Price
12	18	**FV53HHSBM1218**	Price
12	24	**FV53HHSBM1224**	Price

Snap-on Industrial Brands / BAHCO Bi-Metal Hand Hacksaw Blades

- Precision ground teeth for all kinds of metal sawing
- Blade back made of strong, flexible spring steel with a tooth line of high-alloyed super high speed steel
- Bi-Metal construction guarantees the blade to keep its sharpness for a long time
- Combine extreme cutting performance and wear resistance with a high degree of flexibility
- Vastly superior to all-hard high speed blades or conventional, flexible blades





Length (in.)	Width (in.)	Thickness (in.)	TPI	Blades/Pkg.	Order No.	Price
12	1/2	.025	18	10	**KL303001810P**	Price
12	1/2	.025	18	100	**KL3030018100**	Price
12	1/2	.025	18	2	**KL30300182P**	Price
12	1/2	.025	18, 24, 32	3	**KL303003P**	Price
12	1/2	.025	24	10	**KL303002410P**	Price
12	1/2	.025	24	100	**KL3030024100**	Price
12	1/2	.025	24	5	**KL30300245P**	Price
12	1/2	.025	32	10	**KL303003210P**	Price
12	1/2	.025	32	2	**KL30300322P**	Price
12	1/2	.025	32	5	**KL30300325P**	Price

Snap-on Industrial Brands / BAHCO Tungsten Carbide Hacksaw Blade

Metal Cutting

- Anti-corrosion treated, carbon steel blade back
- Tungsten carbide grit toothing
- Fits all 12” metal saw frames



Blade Length (in.)	Order No.	Price
12	**KL303816300**	Price

Hand Hacksaw Blades

- High speed steel
- 1/2” Wide
- .025” Thick
- Quantity discounts - 200 pc. - 10%, 500 pc. - 15% (quantities of one part number)



Length (in.)	TPI	Order No.	1 pair	200 pair	500 pair
10	18	**FV51HS1018**	Price	Price	Price
10	24	**FV51HS1024**	Price	Price	Price
10	32	**FV51HS1032**	Price	Price	Price
12	18	**FV51HS1218**	Price	Price	Price

Packing: 100 blades per box - 10 blades per bundle.

World Class Quality Power Hacksaw Blades

High Speed Steel



Length (in.)	Width (in.)	Thickness	TPI	Order No.	Price
12	5/8	.032	24	**FX6060004**	Price
17	1	.050	10	**FV5017105**	Price
17	1-1/4	.062	4	**FV5017046**	Price
17	1-1/4	.062	6	**FV5017066**	Price
18	1-3/4	.088	6	**FV5018068**	Price
21	1-3/4	.088	4	**FV5021048**	Price
21	1-3/4	.088	6	**FV5021068**	Price
24	1-3/4	.088	4	**FV5024048**	Price
24	1-3/4	.088	6	**FV5024068**	Price
24	2	.100	3	**FV5024030**	Price

Milwaukee Sawzall® Blades



Style - 1/2" Universal Tang Wood Cutting Blades				
Length (in.)	TPI	Recommended For	Order No.	Price
6	6	Fast cutting, nail embedded wood, general roughing in	PD5048013035	Price
9	5	Fast cutting, nail embedded wood, general roughing in	PD5048013036	Price
12	5	Fast cutting, nail embedded wood, general roughing in	PD5048013037	Price

Style - All Purpose Blades				
Length (in.)	TPI	Recommended For	Order No.	Price
12	10/14	Extra length - all woods, nail embedded, composition materials, plastic, cast aluminum, light gauge non-ferrous metals, cast iron	PD50480050194	Price
4	10	All woods, nail embedded, composition materials, plastic, cast aluminum, non-ferrous metals	PD5048013090	Price
8	8/12	All woods, nail embedded, composition materials, plastic, cast aluminum, non-ferrous metals	PD5048013093	Price
12	8/12	Extra length - all woods, nail embedded, composition materials, plastic, cast aluminum, light gauge non-ferrous metals, cast iron	PD5048013094	Price

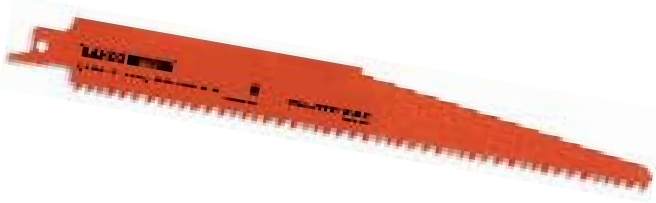
Style - Demolition Blades Ax and Torch				
Length (in.)	TPI	Recommended For	Order No.	Price
6	14	Metal pipe, angle iron, steel or nail embedded wood	PD5048005782	Price
6	18	Metal pipe, angle iron, steel or nail embedded wood	PD5048005784	Price
6	5/8	Wood or nail embedded wood. Excellent for plunge cutting	PD5048005021	Price
9	18	Metal pipe, angle iron, steel or nail embedded wood.	PD5048005788	Price
9	5/8	Wood or nail embedded wood. Excellent for plunge cutting	PD5048005026	Price
12	18	Metal pipe, angle iron, steel or nail embedded wood.	PD5048005789	Price
12	5/8	Wood or nail embedded wood. Excellent for plunge cutting	PD5048005027	Price

Style - Metal Cutting Blades				
Length (in.)	TPI	Recommended For	Order No.	Price
3-5/8	14	Metal Scroll - Heavy gauge metal, hard rubber, fiber	PD5048011162	Price
3-5/8	18	Metal Scroll - Metal thinner than 1/8" thick	PD5048011163	Price

Style - Tungsten Carbide Blades				
Length (in.)	TPI	Recommended For	Order No.	Price
6	Coarse	Medium & coarse grits for cutting plywood, hardwood flooring, cast iron, stainless steel, fiberglass materials, ceramic tile, cast stone, slate, clay pipe, carbon, brick, plaster, marble, chalkboard	PD5048001420	Price
9	Coarse	Medium & coarse grits for cutting plywood, hardwood flooring, cast iron, stainless steel, fiberglass materials, ceramic tile, cast stone, slate, clay pipe, carbon, brick, plaster, marble, chalkboard	PD5048001430	Price

Snap-on Industrial Brands | BAHCO Bi-Metal Blade 3840 DSL

- Extra heavy duty bi-metal blade with coarse teeth for building and demolition work
- Blade thickness is increased 0.63" (1.6mm) for greater strength – making this blade ideal for cutting any building material – even heavy wood with large-dimension nails



Length (in.)	TPI	Order No.	Price
6	10	FX8414150194773	Price
8	10/14	FX8414150194957	Price
6	10	FX8414150194827	Price
8	10/14	FX8414150194964	Price
6	14	FX8414150194766	Price
6	14	FX8414150194810	Price
6	18	FX8414150194759	Price
6	18	FX8414150194803	Price
9	10	FX8414150194834	Price
9	10	FX8414150194889	Price
9	14	FX8414150194841	Price
9	14	FX8414150194872	Price

Length (in.)	TPI	Order No.	Price
9	18	FX8414150194858	Price
9	18	FX8414150194865	Price
12	10	FX8414150194940	Price
12	10	FX8414150194896	Price
12	14	FX8414150194933	Price
12	14	FX8414150194902	Price
12	18	FX8414150194926	Price
12	18	FX8414150194919	Price
6	5/8	FX848246631	Price
8	5/8	FX848246662	Price
12	5/8	FX848246679	Price

Starrett King Cut® Fire, Rescue & Demolition Blades

- Bi-metal Construction joins vacuum hardened high speed steel tooth edge to durable steel back provides exceptional strength and extended blade life
- Extra thick .063 x 1" wide blade for added durability



Length (in.)	TPI	Order No.	Price
6	10/14	FV6311454	Price
6	6/10	FV6311457	Price
8	10/14	FV6311463	Price
8	6/10	FV6311466	Price

Length (in.)	TPI	Order No.	Price
9	10/14	FV6311472	Price
9	6/10	FV6311475	Price
12	10/14	FV6311481	Price
12	6/10	FV6311484	Price

Snap-on Industrial Brands | BAHCO Reciprocati Saw Blade SetReciprocating Saw Blade Set

10 Pc. set contains: (2) 4" Straight blades, 24T, 6T; (2) 4" Contour blades, 10T and 18T; (1) 6" Sloped blade, 5/8T; (4) 6" Straight blades, 10T, 14T, 18T and 24T; (1) 6" Sloped wood cutting blade 7T



Order No.	Price
FX848247041	Price

Starrett Unified Shank® Jig Saw Blades

- Starrett's exclusive and patented design Unified Shank® has literally changed the shape of one of the jig saw blades-now one shank fits both universal and Bosch shank jig saws
- Starrett's bi-metal unique high speed steel blade process makes them the both versatile and long lasting blades
- Sold in 5-packs; 20-packs available – call for pricing



For Use With - Metalcutting							
Length (in.)	TPI	Width (in.)	Thickness	Style	Set Type	Order No.	Price
2	24	3/16	.040	Wavy	Scroll	**FV6368729**	Price
2	24	5/16	.040	Wavy	Regular	**FV6368728**	Price
2	32	5/16	.040	Wavy	Regular	**FV6368731**	Price
4	24	3/8	.040	Wavy	Regular	**FV6368730**	Price

For Use With - Multi-Cutting							
Length (in.)	TPI	Width (in.)	Thickness	Style	Set Type	Order No.	Price
2	14	3/16	.040	Wavy	Scroll	**FV6368725**	Price
2	14	5/16	.040	Wavy	Regular	**FV6368724**	Price
2	18	5/16	.040	Wavy	Regular	**FV6368726**	Price
2	Coarse	5/16	.040	Grit	Carbide	**FV6368753**	Price
4	10/14	3/8	.040	Wavy	Varipitch	**FV6368723**	Price
4	18	3/8	.040	Wavy	Regular	**FV6368727**	Price

For Use With - Woodworking							
Length (in.)	TPI	Width (in.)	Thickness	Style	Set Type	Order No.	Price
3	6	5/16	.050	Ground	Alternate	**FV6368718**	Price
3	6	5/16	.050	Ground	Tapered	**FV6368717**	Price
3	8	5/16	.050	Regular	Alternate	**FV6368720**	Price
3	10	5/16	.050	Ground	Tapered	**FV6368721**	Price
3	10	5/16	.050	Ground	Tapered, Downstroke	**FV6368722**	Price
4	6	3/8	.050	Skip	Alternate	**FV6368719**	Price

Starrett Unified Shank® Jig Saw Assortment Pack

- Includes 1 pc. each of all Unified Shank® jig saw blades plus BU56 6T blade for wood



Order No.	Price
FV6311974	Price

BOSCH T-Shank Jig Saw Blades

Fit Bosch Jig Saw Models 1584AVS & 1587AVS plus DeWalt, Hitachi, Makita, Milwaukee, Metabo, Porter Cable and Craftsman



Use:
High Carbon Steel: For softer materials: wood, laminated particle board and plastics
High Speed Steel: For cutting metal, aluminum and non-ferrous metal
Bi-Metal: Highly flexible, suitable for demanding applications where there is a risk of breakeage or where extreme versatility is required

Length (in.)	TPI	Material	Order No.	Price
3	12	High Carbon Steel	**PD80T119BO**	Price
3	14	Bi-Metal High Speed Steel	**PD80T118BF**	Price
3	14	High Speed Steel	**PD80T118B**	Price
3	24	Bi-Metal High Speed Steel	**PD80T118AF**	Price Price
3	24	High Speed Steel	**PD80T118A**	Price
4	6	Bi-Metal High Speed Steel	**PD80T144DF**	Price
4	6	High Carbon Steel	**PD80T144D**	Price
4	8	Bi-Metal High Speed Steel	**PD80T111CF**	Price
4	10	High Carbon Steel	**PD80T101B**	Price
4	14	High Speed Steel	**PD80T101A**	Price

Milwaukee Jig Saw 1/4" Universal Shank Blades



Sold 5 per pack

For Use With - General Purpose - Milled Teeth						
Length (in.)	TPI	Style	Width (in.)	Recommended For	Order No.	Price
4	6	Set	9/32	Very fast cutting wood with nails	**PD5048422300**	Price
4	10	Set	9/32	Fast clean cutting wood with nails	**PD5048422310**	Price

For Use With - Metal Cutting - Milled Teeth						
Length (in.)	TPI	Style	Width (in.)	Recommended For	Order No.	Price
4	8	Set	9/32	Aluminum non-ferrous	**PD5048420850**	Price
5	14	Raker	9/32	Thick metal & tubing	**PD5048422192**	Price
5	24	Wavy	9/32	Under 1/8" thick metal	**PD5048422166**	Price
2-3/4	18	Wavy	9/32	Over 1/8" thick metal	**PD5048422120**	Price
2-3/4	24	Wavy	9/32	Under 1/8" thick metal	**PD5048422160**	Price
3-5/8	14	Wavy	9/32	Over 1/4" thick metal	**PD5048422190**	Price

Jig Saw T-Shank Blades



Sold 5 per pack

For Use With - General Purpose - Milled Teeth						
Length (in.)	TPI	Style	Width	Recommended For	Order No.	Price
3	20	Wavy	3/16	Scroll cutting wood with nails	**PD5048425390**	Price
4	6	Set	9/32	Very fast cutting wood with nails	**PD5048425300**	Price
4	10	Set	9/32	Fast clean cutting wood with nails	**PD5048425310**	Price

For Use With - Metal Cutting - Milled Teeth						
Length (in.)	TPI	Style	Width	Recommended For	Order No.	Price
3	14	Wavy	9/32	Over 1/4" thick metal	**PD5048425190**	Price
3	18	Wavy	9/32	Over 1/8" thick metal	**PD5048425121**	Price
3	24	Wavy	9/32	Under 1/8" thick metal	**PD5048425161**	Price
4	8	Set	9/32	Aluminum non-ferrous	**PD5048425850**	Price
5-1/4	14	Raker	9/32	Thick metal & tubing	**PD5048425192**	Price
5-1/4	24	Wavy	9/32	Under 1/8" thick metal	**PD5048425166**	Price

Milwaukee Jig Saw Special Application Blades



Sold 5 per pack

Length (in.)	Style	Width (in.)	Recommended For	Order No.	Price
2-3/4	Tunsten Carbide Grit	5/16	Ceramics & Tile	**PD5048420801**	Price

LENOX MAX CT™

EXCEPTIONAL BLADE LIFE

Multi-chip tooth pattern balances the chip load and redues cutting forces

- Next generation welding technology prevents premature tooth loss

FASTER, STRAIGHTER CUTS

- Aggressive rake angles aid in tooth penetraion in difficult to cut metals
- Optimized gullet geom-etry increases beam strenth for straighter cuts



SUPERIOR PART FINISH

- Precision ground carbides create razor sharp teeth for a mirror-like finish on cut parts



Width x Thickness		TPI			
Inch	MM	0.9/1.1	1.0/1.4	1.4/2.0	2/3
1-1/4x.042	34x1.07			●	●
1-1/2x.050	41x1.27			●	●
2x.050	54x1.27			●	●
2x.063	54x1.60	●	●	●	●
2-5/8x.063	67x1.60	●	●	●	
3x.063	80x1.60	●			

● New Specs

Width (in.)	Length (in.)	Thickness (in.)	Teeth	Order No.	Price
1-1/2	13' 6	.050	2.0/3.0	**FX901928822**	Price
1-1/2	15'	.050	2.0/3.0	**FX901914887**	Price
1-1/4	11' 6	.042	2.0/3.0	**FX901914799**	Price
2	17' 3	.063	2.0/3.0	**FX901931815**	Price
2	21' 1	.063	1.4/2.0	**FX901930542**	Price
2	22' 10	.063	1.4/2.0	**FX901926706**	Price
2	22' 6	.063	1.4/2.0	**FX901914888**	Price
2	25' 2	.063	1.4/2.0	**FX901914891**	Price
2	27' 4	.063	1.4/2.0	**FX901937299**	Price
2-5/8	24' 7	.063	2.0/3.0	**FX901925093**	Price
2-5/8	25' 2	.063	1.4/2.0	**FX901918692**	Price
2-5/8	25' 5	.063	1.4/2.0	**FX901958986**	Price
2-5/8	30' 4	.063	1.4/2.0	**FX901918694**	Price

LENOX Versa Pro™

LONG BLADE LIFE IN A VARIETY OF METALS

- Proprietary grade of tungsten carbide tips with increased toughness retain a sharp cutting edge
- Multi-chip tooth design balances the chip load and reduces the cutting forces

EASY TO RUN WITH NO BREAK IN

- Pre-honed cutting edge minimizes tooth chipping and eliminates the need to break-in the blade



OUTSTANDING PART FINISH

- Precision ground carbide tips have clean, sharp edges that deliver smoother parts



Width x Thickness		TPI				
Inch	MM	0.9/1.1	1.0/1.4	1.4/2.0	2/3	3/4
1-1/4x.042	34x1.07			●	●	●
1-1/2x.050	41x1.27			●	●	●
2x.050	54x1.27			●	●	
2x.063	54x1.60	●	●	●	●	
2-5/8x.063	67x1.60	●	●	●	●	
3x.063	80x1.60	●				

● New Specs

Width (in.)	Length (in.)	Thickness (in.)	Teeth	Order No.	Price
1-1/2	13' 6	.050	2.0/3.0	**FX901998372**	Price
1-1/2	15'	.050	2.0/3.0	**FX902000025**	Price
1-1/2	15' 4	.050	1.4/2.0	**FX902017305**	Price
1-1/2	15' 8	.050	2.0/3.0	**FX902001247**	Price
1-1/2	16'	.050	2.0/3.0	**FX902014792**	Price
1-1/2	17' 5	.050	2.0/3.0	**FX902004967**	Price
1-1/2	19'	.050	1.4/2.0	**FX902018567**	Price
1-1/2	28'	.050	1.4/2.0	**FX902035144**	Price
1-1/4	12' 6	.042	3.0/4.0	**FX902019479**	Price
1-1/4	14' 6	.042	3.0/4.0	**FX901999874**	Price
1-1/4	15'	.042	2.0/3.0	**FX902000398**	Price
1-1/4	15'	.042	3.0/4.0	**FX901999992**	Price
1-1/4	15' 4	.042	3.0/4.0	**FX902000399**	Price
1-1/4	17' 6	.042	2.0/3.0	**FX902026904**	Price
2	19'	.063	2.0/3.0	**FX902008216**	Price
2	21' 1	.063	2.0/3.0	**FX902004431**	Price
2	22' 6	.063	0.9/1.1	**FX902025432**	Price
2	22'10	.063	2.0/3.0	**FX902027397**	Price

LENOX HRX

Engineered to cut structurals, tubing and bundles

LONG BLADE LIFE WHEN CUTTING LARGE STRUCTURAL BEAMS

- Designed to resist stripping teeth
- Power Blast Technology® strengthens the blade to minimize breaks



STRAIGHT CUTS THROUGH WIDE CROSS SECTIONS

- Designed to improve chip flow and reduce blade deflection for cutting efficiency
- Tooth geometry designed to minimize edge chipping and crooked cuts

WIDE KERF LIMITS PINCHING IN LARGER BEAMS

- Alternating set teeth widen the cutting channel to limit blade pinching

Width (in.)	Length (in.)	Thickness	Teeth	Order No.	Price
1-1/2	20' 6	.050	3.0/4.0	**FX902044060**	Price
1-1/4	14' 6	.042	4.0/6.0	**FX902029712**	Price
1-1/4	16'	.042	4.0/6.0	**FX902029713**	Price
2	30' 6	.063	3.0/4.0	**FX902044944**	Price
2-5/8	32'	.063	2.0/3.0	**FX902039366**	Price
2-5/8	32' 2	.063	3.0/4.0	**FX902046444**	Price
2-5/8	32' 2	.063	3.0/4.0	**FX902046445**	Price
2-5/8	34' 5	.063	1.4/2.0	**FX902042892**	Price



Width x Thickness		TPI						
Inch	MM	2/3	3/4	4/6	5/7	5/8	6/10	10/14
5/8x.032	16x0.80							*
3/4x.035	19x0.90			♦		♦	♦	♦
1x.035	27x0.90	♦†	♦	♦	♦	♦	♦	♦
1-1/4x.042	34x1.07	♦†	♦†	♦†		♦		
1-1/2x.050	41x1.27	♦	♦†	♦†		♦		
2x.050	54x1.27	♦	♦†	♦		♦		
2x.063	54x1.60	♦†	♦†	♦		♦		
2-5/8x.063	67x1.60	♦†	♦†	♦				

*=Matrix edge
†=Extra heavy set available

LENOX Armor CT Black

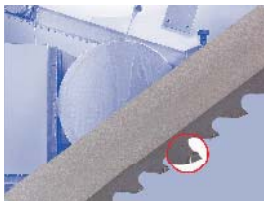
For Extreme Cutting Rates



High quality Micrograined carbide
- Tailored to cut a wide range of materials

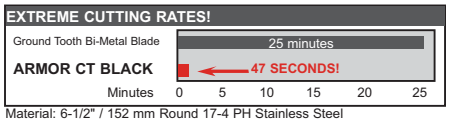
New high performance backing steel
- Exceptionally long fatigue life

AlTin ARMOR for productivity and blade life
- Aluminum, Titanium and Nitrogen combine to form a coating that is hard and tough, protecting each tooth from heat and wear with an armor-like barrier





Applications
- Carbon steels
- Alloy steels
- Aluminum
- Bearing steels
- Stainless steels
- Mold steels
- Tool steels
- Titanium alloys
- Bundled, mild steel tubing



Material: 6-1/2" / 152 mm Round 17-4 PH Stainless Steel

Specifications

Width × Thickness		TPI				
Inches	MM	0.6/0.8	0.9/1.1	1.4/1.6	1.8/2.0	2.5/3.4
1-1/4 × .042	34 × 1.07				♦	♦
1-1/2 × .050	41 × 1.27			♦	♦	♦
2 × .063	54 × 1.60		♦	♦	♦	♦
2-5/8 × .063	67 × 1.60	♦	♦	♦	♦	
3 × .063	80 × 1.60	♦	♦			

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1-1/4	14' 11"	.042	1.8-2.0	**FX901790341**	Price
1-1/4	14' 11"	.042	2.5-3.4	**FX9080996**	Price
1-1/4	16' 4"	.042	1.8-2.0	**FX901777403**	Price
1-1/2	15' 6"	.050	1.4-1.6	**FX9047700**	Price
1-1/2	15' 6"	.050	1.8-2.0	**FX9085367**	Price
1-1/2	15' 6"	.050	2.5-3.4	**FX9076352**	Price
1-1/2	16' 5"	.050	1.8-2.0	**FX9085372**	Price

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1-1/2	18' 10"	.050	1.8-2.0	**FX9083083**	Price
2	19' 1"	.063	1.8-2.0	**FX9085371**	Price
2	22'	.063	0.9-1.1	**FX901783597**	Price
2	22'	.063	1.4-1.6	**FX9076289**	Price
2	26' 3"	.063	0.9-1.1	**FX901790342**	Price
2	26' 3"	.063	1.4-1.6	**FX9075886**	Price
2-5/8	25' 2"	.063	0.9-1.1	**FX9066358**	Price

For blade sizes not listed-Call REX

LENOX Tri-Tech CT

Set Style Carbide Blade For Difficult To Cut Metals

STRAIGHT CUTS. NO PINCHING.

Set style tooth pattern eliminates pinching in high stress metals
Wide kerf clearance enables plunge cutting



PROLONGED BLADE LIFE

High grade carbide tips are precision ground for efficient cutting
High performance backing steel minimizes body breakage

EXTREME VERSATILITY

Cuts a range of materials from high strength steels to Nickel-based alloys
Positive rake angle provides strength and durability at the cutting edge



Specifications

Width × Thickness		TPI				
Inches	MM	0.6/0.8	0.9/1.1	1.4/1.8	1.8/2.0	2.5/3.4
1-1/4 × .042	34 × 1.07				♦	♦
1-1/2 × .050	41 × 1.27			♦	♦	♦
2 × .063	54 × 1.60		♦	♦	♦	♦
2-5/8 × .063	67 × 1.60	♦	♦	♦		
3 × .063	80 × 1.60	♦	♦			

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1-1/4	14' 11"	.042	1.8-2.0	**FX901766954**	Price
1-1/4	16' 4"	.042	1.8-2.0	**FX901777404**	Price
1-1/2	19'	.050	1.8-2.0	**FX9092498**	Price
2	22' 6"	.063	1.8-2.0	**FX9092368**	Price
2	22' 6"	.063	2.5-3.4	**FX9092902**	Price
2	26' 3"	.063	0.9-1.1	**FX901790343**	Price
2	26' 3"	.063	1.4-1.8	**FX901774745**	Price
2-5/8	32'	.063	1.4-1.8	**FX901775407**	Price

LENOX Tri-Master®

Versatile Carbide Tipped Blade

Precision triple chip grind
- Smooth cuts, excellent finish

New high performance backing steel
- Exceptionally long fatigue life

Applications
- Abrasive, non-ferrous materials
- Wood cutting
- Alloy steels



- Tool steels
- Bearing steels
- Carbon steels
- Stainless steels
- Mold steels



Specifications

Tooth Form / Width × Thickness		VARI-TOOTH® TPI				Standard TPI
Inches	MM	1.2/1.8	1.5/2.3	2/3	3/4	3
3/8 × .032	9.5 × 0.80				♦	♦
1/2 × .025	12.7 × 0.64					♦
3/4 × .035	19 × 0.90					♦
1 × .035	27 × 0.90			♦	♦	♦
1-1/4× .042	34 × 1.07		♦	♦	♦	♦
1-1/2× .050	41 × 1.27	♦		♦	♦	♦
2 × .063	54 × 1.60	♦		♦		
2-5/8× .063	67 × 1.60	♦				
3 × .063	80 × 1.60	♦				

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1/2	19' 3"	.025	3	**FX9000408NS**	Price
3/4	7' 9"	.035	3	**FX9000350**	Price
1	11'	.035	3	**FX9000396NS**	Price
1	12'	.035	3-4	**FX9013159**	Price

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1	12' 10"	.035	3-4	**FX9049580**	Price
1	13' 6"	.035	3	**FX9000398NS**	Price
1-1/4	14' 3"	.042	3	**FX9000157**	Price
1-1/2	19'	.050	2-3	**FX9000407NS**	Price

For blade sizes not listed-Call REX

REX supply is an authorized Lenox Saw Service Center. We have the ability to weld most blades at our Houston Facility-to fill each order quickly and efficiently.

LENOX Classic Pro™

The Ultimate Multi-Purpose Blade

Exceptional Blade Life

Proprietary backing steel preparation increases fatigue life and minimizes band breaks. Robust M42 high speed steel edge provides superior heat and wear resistance.

Extremely Versatile

Cuts a wide range of metals from low carbon steels to higher strength alloys. Advanced design enables production cutting of solids and structurals. Positive rake angle improves tooth penetration on saws with limited feed force.

Consistent Performance Cut After Cut

Unique tooth geometry and set minimizes noise and vibration from the very first cut. Smooth, straight cuts when cutting multiple pieces or wide cross sections

Specifications
Classic Pro™

Width × Thickness		TPI			
Inches	MM	2/3	3/4	4/6	5/8
1 × .035	27 × 0.90	♦	♦	♦	♦
1-1/4 × .042	34 × 1.07	♦	♦	♦	♦
1-1/2 × .050	41 × 1.27	♦	♦■	♦	♦
2 × .050	54 × 1.27	♦	♦	♦	
2 × .063	54 × 1.60	♦■	♦■	♦	

■ = Extra heavy set available to prevent blade pinching



Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1	10' 10-1/2"	0.035	3-4	**FX901792823**	Price
1	10' 10-1/2"	0.035	4-6	**FX901792849**	Price
1	11' 6"	0.035	3-4	**FX901792826**	Price
1	11' 6"	0.035	4-6	**FX901792864**	Price
1	12'	0.035	3-4	**FX901792828**	Price
1	12'	0.035	4-6	**FX901792867**	Price
1	12' 10"	0.035	3-4	**FX901792831**	Price
1	12' 10"	0.035	4-6	**FX901792871**	Price
1	12' 6"	0.035	3-4	**FX901792830**	Price
1	12' 6"	0.035	4-6	**FX901792870**	Price
1	13' 11"	0.035	3-4	**FX901802482**	Price
1	13' 11"	0.035	4-6	**FX901792877**	Price
1	13' 6"	0.035	3-4	**FX901792834**	Price
1	13' 6"	0.035	4-6	**FX901792874**	Price
1	14' 6"	0.035	3-4	**FX901792836**	Price

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1	14' 6"	0.035	4-6	**FX901792881**	Price
1-1/4	13' 6"	0.042	3-4	**FX901792990**	Price
1-1/4	13' 6"	0.042	4-6	**FX901793088**	Price
1-1/4	14' 6"	0.042	3-4	**FX901793064**	Price
1-1/4	14' 6"	0.042	4-6	**FX901793093**	Price
1-1/4	15'	0.042	4-6	**FX901793097**	Price
1-1/4	15' 8"	0.042	3-4	**FX901793070**	Price
1-1/4	15' 8"	0.042	4-6	**FX901793101**	Price
1-1/2	15'	0.05	3-4	**FX901792857**	Price
1-1/2	19'	0.05	3-4	**FX901792997**	Price
2	19' 1"	0.05	3-4	**FX901793141**	Price

For blade sizes not listed- Call REX
REX supply is an authorized Lenox Saw Service Center. We have the ability to weld most blades at our Houston Facility-to fill each order quickly and efficiently.

LENOX Classic™

The Ultimate Multi-Purpose Blade

Designed For Long Life In General Purpose Cutting Applications

Patented TUFF TOOTH[a] design reduces tooth strippage. M-42 high speed steel edge for excellent heat and wear resistance on:

- Aluminum/Non Ferrous Metals
- Carbon Steel
- Structural Steel
- Alloy and Tool Steel
- Stainless Steel
- Wood

Specifications
Classic™

Tooth Form Width × Thickness		Tuff Tooth™ TPI		Vari-Tooth® TPI			
Inches	MM	4/6	6/8	5/8	6/10	8/12	10/14
3/4 x .035	19 x .90	♦	♦	♦	♦	♦	♦
1 x .035	27 x .90	♦	♦	♦	♦	♦	♦
1-1/4 x .042	34 x 1.07	♦	♦	♦	♦	♦	



Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
3/4	10' 10-1/2"	.035	8-12	**FX9079694**	Price
3/4	11' 6"	.035	10-14	**FX9080617**	Price
3/4	11' 6"	.035	8-12	**FX9080616**	Price
3/4	7' 9"	.035	10-14	**FX9080430**	Price
3/4	7' 9"	.035	4-6	**FX9010020**	Price
3/4	7' 9"	.035	6-8	**FX9010040**	Price
3/4	7' 9"	.035	8-12	**FX9010045**	Price
3/4	9' 7-1/2"	.035	10-14	**FX9072180**	Price
3/4	9' 7-1/2"	.035	6-8	**FX9080508**	Price
3/4	9' 7-1/2"	.035	8-12	**FX9000802**	Price
1	10' 10-1/2"	.035	6-8	**FX9010100**	Price
1	11' 6"	.035	10-14	**FX9080816**	Price
1	11' 6"	.035	6-8	**FX9010160**	Price
1	12' 10"	.035	6-8	**FX9000175NS**	Price

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1	12' 6"	.035	10-14	**FX9080908**	Price
1	12' 6"	.035	6-8	**FX9010280**	Price
1	13' 11"	.035	10-14	**FX9000800**	Price
1	13' 11"	.035	6-8	**FX9010460**	Price
1	14' 6"	.035	10-14	**FX9081030**	Price
1	14' 6"	.035	6-8	**FX9010465**	Price
1-1/4	13' 6"	.042	6-8	**FX9010520**	Price
1-1/4	14' 3"	.042	6-8	**FX9000156NS**	Price
1-1/4	14' 6"	.042	6-8	**FX9010580**	Price
1-1/4	15'	.042	6-8	**FX9000191**	Price

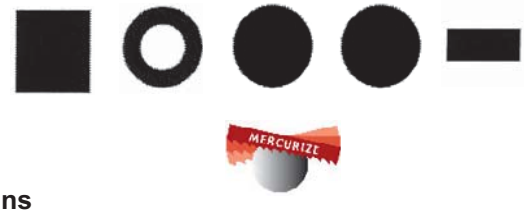
For blade sizes not listed- Call REX
REX supply is an authorized Lenox Saw Service Center. We have the ability to weld most blades at our Houston Facility-to fill each order quickly and efficiently.

LENOX QXP™

For Extreme Production Rates

Large capacity gullet
- Improved chip carrying capacity
- For production cutting of alloy and carbon steels

Extreme positive rake tooth profile
- Easy penetration with reduced feed force





Applications
- Precision cutting
- Aluminum
- Carbon steels
- Bearing steels
- Alloy steels
- Tool steels
- Stainless steels
- Solids, heavy-walled tubing

Specifications

Width × Thickness		TPI					
Inches	MM	1.0/1.3	1.5/2.0	2/3	3/4	4/6	5/8
3/4 × .035	19 × 0.90					†	
1 × .035	27 × 0.90			♦	♦	♦	♦
1-1/4 × .042	34 × 1.07		♦	♦	♦	♦	♦
1-1/2 × .050	41 × 1.27		♦	♦	♦	♦	
2 × .063	54 × 1.60	♦	♦	♦	♦	♦	
2-5/8 × .063	67 × 1.60	♦	♦	♦	♦		
3 × .063	80 × 1.60	♦					

† LENOX LXP® spec

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1	10' 10-1/2"	.035	3-4	**FX9090021**	Price
1-1/4	10' 10-1/2"	.042	3-4	**FX9092237**	Price
1	11'	.035	5-8	**FX9095653**	Price
1	11' 10"	.035	3-4	**FX9095401**	Price
1	11' 11"	.035	4-6	**FX901772332**	Price
1	11' 6"	.035	2-3	**FX9097884**	Price
1	11' 6"	.035	3-4	**FX9095378**	Price
1	11'	.035	4-6	**FX9094741**	Price
1	12'	.035	3-4	**FX9089436**	Price
1	12'	.035	4-6	**FX9089437**	Price
1	12'	.035	5-8	**FX9089322**	Price
1	12' 10"	.035	4-6	**FX9095557**	Price
1	12 '6"	.035	4-6	**FX9089972**	Price
1	13' 6"	.035	3-4	**FX9096114**	Price
1	13' 6"	.035	4-6	**FX9089486**	Price
1	13' 6"	.035	5-8	**FX9094960**	Price
1	14' 6"	.035	2-3	**FX9097893**	Price
1	14' 6"	.035	3-4	**FX9097892**	Price
1	14' 6"	.035	4-6	**FX9097891**	Price
1-1/2	17'	.050	2-3	**FX9097216**	Price
1-1/2	17'	.050	3-4	**FX9092766**	Price
1-1/2	17' 5"	.050	3-4	**FX9096090**	Price
1-1/2	18' 10"	.050	2-3	**FX9089927**	Price
1-1/2	18' 10"	.050	3-4	**FX9095981**	Price
1-1/2	18' 10"	.050	4-6	**FX9097273**	Price
1-1/2	19' 2"	.050	3-4	**FX9095614**	Price
1-1/2	19' 6"	.050	2-3	**FX901783017**	Price
1-1/4	11' 6"	.042	3-4	**FX9089554**	Price
1-1/4	11' 6"	.042	4-6	**FX9094803**	Price

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1-1/4	11' 6"	.042	5-8	**FX901772329**	Price
1-1/4	12' 6"	.042	2-3	**FX9094884**	Price
1-1/4	12' 6"	.042	3-4	**FX9089452**	Price
1-1/4	12' 6"	.042	4-6	**FX9094330**	Price
1-1/4	13' 5"	.042	4-6	**FX9095448**	Price
1-1/4	13' 6"	.042	2-3	**FX9096998**	Price
1-1/4	13' 6"	.042	3-4	**FX9094804**	Price
1-1/4	13' 6"	.042	4-6	**FX9094489**	Price
1-1/4	14' 6"	.042	2-3	**FX9089807**	Price
1-1/4	15'	.042	2-3	**FX9089590**	Price
1-1/4	15'	.042	4-6	**FX9092046**	Price
1-1/4	15' 4"	.042	3-4	**FX9089783**	Price
1-1/4	15' 8"	.042	2-3	**FX9094895**	Price
1-1/4	15' 8"	.042	3-4	**FX9095936**	Price
1-1/4	15' 8"	.042	4-6	**FX9091161**	Price
1-1/4	16' 5"	.042	3-4	**FX901779113**	Price
1-1/4	17' 2"	.042	2-3	**FX901780839**	Price
1-1/4	17' 6"	.042	4-6	**FX9099929**	Price
1-1/4	17' 8"	.042	3-4	**FX901783018**	Price
1-1/4	22' 6"	.042	3-4	**FX9089591**	Price
2	22'	.063	2-3	**FX9092548**	Price
2	22'	.063	3-4	**FX9096822**	Price
2	22' 2"	.063	2-3	**FX901773733**	Price
2	22' 6"	.063	2-3	**FX9091505**	Price
2	23' 7"	.063	2-3	**FX9094888**	Price
2	23' 7"	.063	3-4	**FX9096476**	Price
2	23' 7"	.063	4-6	**FX901799193**	Price

For blade sizes not listed- Call REX
REX supply is an authorized Lenox Saw Service Center. We have the ability to weld most blades at our Houston Facility-to fill each order quickly and efficiently.

LENOX Contestor GT®

High Bi-metal Blade

GT: Ground Tooth

- Cuts with less feed pressure





High speed steel edge

- M-42 standard
- M-51 available as listed below

Unique gullet design

- Increased beam strength

Applications

- Aerospace alloys
- Tool steels
- Stainless steels
- Nickel-based alloys
- Titanium alloys

Use when tool life and cutting accuracy is most important.

Specifications

Width × Thickness		TPI					
Inches	MM	0.7/1.0	1.0/1.3	1.4/2.0	2/3	3/4	4/6
1 × .035	27 × 0.90				●	●	●
1-1/4 × .042	34 × 1.07			♦	♦	♦	♦
1-1/2 × .050	41 × 1.27		♦	♦	♦■	♦■	♦
2 × .050	54 × 1.27		♦	♦	♦	♦	
2 × .063	54 × 1.60	♦	♦	♦	♦■	♦	♦
2-5/8 × .063	67 × 1.60	♦	♦■	♦■	♦	♦	♦
3 × .063	80 × 1.60	♦	♦	♦			

● Milled tooth
♦ Ground tooth
■ Available with M-51 edge

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
2-5/8	28' 10"	.063	1.4-2.0	**FX9041568**	Price
2-5/8	39'	.063	1.4-2.0	**FX9067858**	Price
3	37'	.063	1.4-2.0	**FX9048522**	Price
3	40'	.063	1.0-1.3	**FX9082462**	Price
1	11' 6"	.035	3-4	**FX9000095**	Price
1	11' 6"	.035	4-6	**FX9000210NS**	Price
1	12'	.035	3-4	**FX9000216NS**	Price
1	12'	.035	4-6	**FX9000222NS**	Price
1	12' 10"	.035	2-3	**FX9000238NS**	Price
1	12' 10"	.035	3-4	**FX9000228NS**	Price
1	12' 10"	.035	4-6	**FX9000229NS**	Price
1	12' 4"	.035	3-4	**FX9000219NS**	Price
1	12' 6"	.035	3-4	**FX9000094**	Price
1	13' 3"	.035	3-4	**FX9000232NS**	Price
1	13' 3"	.035	4-6	**FX9000233NS**	Price
1	13' 6"	.035	4-6	**FX9000241NS**	Price
1	14' 6"	.035	4-6	**FX9085941**	Price
2	19'	.063	2-3	**FX9082853**	Price
2	19' 1"	.050	2-3	**FX9013229**	Price
2	21' 8"	.063	0.7-1.0	**FX9000267NS**	Price
2	22'	.063	2-3	**FX9000263**	Price
2	22' 2"	.063	2-3	**FX9082873**	Price
2	25'	.063	2-3	**FX9041378**	Price
2	26' 3"	.063	2-3	**FX9016962**	Price
2	31' 6"	.063	2-3	**FX9000301NS**	Price
1-1/2	15' 4"	.050	2-3	**FX9082741**	Price
1-1/2	15' 4"	.050	3-4	**FX9082742**	Price
1-1/2	15' 4"	.050	4-6	**FX9041224**	Price
1-1/2	15' 6"	.050	2-3	**FX9082743**	Price
1-1/2	15' 6"	.050	3-4	**FX9082744**	Price

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1-1/2	16' 8"	.050	2-3	**FX9041169**	Price
1-1/2	16' 8"	.050	3-4	**FX9093858**	Price
1-1/2	16' 8"	.050	4-6	**FX9093859**	Price
1-1/2	17' 11"	.050	2-3	**FX9041182**	Price
1-1/2	17' 11"	.050	3-4	**FX9098383**	Price
1-1/2	17' 11"	.050	4-6	**FX9098384**	Price
1-1/2	19'	.050	2-3	**FX9000058**	Price
1-1/2	19'	.050	3-4	**FX9000061**	Price
1-1/2	21' 6"	.050	2-3	**FX9000257NS**	Price
1-1/2	23'	.050	2-3	**FX9041214**	Price
1-1/2	23'	.050	3-4	**FX9078293**	Price
1-1/4	12'	.042	3-4	**FX9082634**	Price
1-1/4	12'	.042	4-6	**FX9000201NS**	Price
1-1/4	12' 6"	.042	4-6	**FX9000230NS**	Price
1-1/4	13' 5"	.042	2-3	**FX9000237NS**	Price
1-1/4	13' 5"	.042	4-6	**FX9041110**	Price
1-1/4	13' 6"	.042	2-3	**FX9082653**	Price
1-1/4	13' 6"	.042	3-4	**FX9000225**	Price
1-1/4	13' 6"	.042	4-6	**FX9000224**	Price
1-1/4	14' 6"	.042	3-4	**FX9000247NS**	Price
1-1/4	14' 6"	.042	4-6	**FX9000248NS**	Price
1-1/4	15'	.042	1.4-2.0	**FX9000153**	Price
1-1/4	15'	.042	2-3	**FX9082667**	Price
1-1/4	15'	.042	3-4	**FX9082668**	Price
1-1/4	15' 6"	.042	2-3	**FX9000340**	Price
1-1/4	15' 6"	.042	3-4	**FX9000341**	Price
1-1/4	16' 4"	.042	2-3	**FX9094581**	Price
1-1/4	16' 4"	.042	3-4	**FX9098407**	Price
1-1/4	16' 4"	.042	4-6	**FX9094632**	Price
2-5/8	27' 3"	.063	2-3	**FX9096329**	Price
2-5/8	27' 3"	.063	4-6	**FX9092794**	Price

For blade sizes not listed-Call REX
REX supply is an authorized Lenox Saw Service Center. We have the ability to weld most blades at our Houston Facility-to fill each order quickly and efficiently.

LENOX Rx®+

Engineered to Cut Structurals, Tubing & Bundles

Reinforced tooth design
- For long life and extreme durability

Unique, patented tooth profile
- Powers through interrupted cuts
- Eliminates tooth strippage
- Minimizes harmonics for reduced noise levels

M-42 high speed steel tooth edge
- For durability

Applications
- Large cross section profiles
- Bundled structural steel and tubing



Specifications

Width × Thickness		TPI				
Inches	MM	2/3	3/4	4/6	5/8	10/14
5/8 × .032	16 × 0.80					●
3/4 × .035	19 × 0.90			♦	♦	
1 × .035	27 × 0.90	♦	♦	♦	♦	
1-1/4 × .042	34 × 1.07	♦■	♦■	♦■	♦	
1-1/2 × .050	41 × 1.27	♦■	♦■	♦■	♦	
2 × .050	54 × 1.27	♦■	♦■	♦■	♦	
2 × .063	54 × 1.60	♦■	♦■	♦		
2-5/8 × .063	67 × 1.60	♦■	♦■	♦		

■ Extra heavy set available to prevent blade pinching
● Matrix edge

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
5/8	7' 5"	.032	10-14	**FX9000304**	Price
3/4	10'	.035	4-6	**FX9000141NS**	Price
3/4	10' 10-1/2"	.035	5-8	**FX9080563**	Price
3/4	11'	.035	5-8	**FX9080588**	Price
3/4	11' 6"	.035	5-8	**FX9080611**	Price
3/4	9'	.035	4-6	**FX9080470**	Price
1	11' 3"	.035	4-6	**FX9093588**	Price
1	11' 6"	.035	5-8	**FX9000144NS**	Price
1	12'	.035	4-6	**FX9080846**	Price
1	12'	.035	5-8	**FX9080850**	Price
1	12' 1"	.035	5-8	**FX9080865**	Price
1	12' 10"	.035	5-8	**FX9000146NS**	Price
1	12' 6"	.035	5-8	**FX9093620**	Price
1	13' 11"	.035	5-8	**FX9080969**	Price
1	13' 3"	.035	4-6	**FX9028463**	Price
1	13' 6"	.035	4-6	**FX9080941**	Price
1	14' 6"	.035	5-8	**FX9081024**	Price
2	19'	.063	4-6	**FX9028359**	Price
2	22'	.050	3-4	**FX9093346**	Price
2	22' 6"	.063	2-3	**FX9019754**	Price
2	23'	.063	3-4	**FX9013489**	Price
2	24' 6"	.063	3-4	**FX9013502**	Price
2	24' 6-1/2"	.063	2-3	**FX9000164NS**	Price
2	26' 3"	.063	3-4	**FX9013482**	Price

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
2	28' 10"	.063	3-4	**FX9000162NS**	Price
2	29' 6"	.063	2-3	**FX9097292**	Price
2	29' 6"	.063	3-4	**FX9084375**	Price
1-1/2	13' 5"	.050	5-8	**FX9093389**	Price
1-1/2	15' 4"	.050	4-6	**FX9027880**	Price
1-1/2	15' 6"	.050	5-8	**FX9000115**	Price
1-1/2	16' 8"	.050	4-6	**FX9028762**	Price
1-1/2	18' 10"	.050	3-4	**FX9000259**	Price
1-1/2	19' 8"	.050	4-6	**FX9028447**	Price
1-1/2	20' 6"	.050	2-3	**FX9000200**	Price
1-1/4	11' 6"	.042	3-4	**FX9027146**	Price
1-1/4	13' 6"	.042	2-3	**FX9000305**	Price
1-1/4	13' 6"	.042	3-4	**FX9000199NS**	Price
1-1/4	13' 6"	.042	4-6	**FX9000402**	Price
1-1/4	13' 6"	.042	5-8	**FX9000405**	Price
1-1/4	14' 6"	.042	3-4	**FX9000307**	Price
1-1/4	14' 6"	.042	4-6	**FX9081212**	Price
1-1/4	15'	.042	4-6	**FX9027993**	Price
1-1/4	15'	.042	5-8	**FX9093736**	Price
1-1/4	15' 6"	.042	4-6	**FX9027828**	Price
1-1/4	15' 8"	.042	2-3	**FX9000219**	Price
1-1/4	16'	.042	4-6	**FX9000306**	Price
1-1/4	17'	.042	3-4	**FX9027483**	Price
2-5/8	33'	.063	2-3	**FX9085462**	Price

For blade sizes not listed-Call REX
REX supply is an authorized Lenox Saw Service Center. We have the ability to weld most blades at our Houston Facility-to fill each order quickly and efficiently.

Band-Ade® Sawing Fluid and Machine Cleaner

Features:
- Synthetic
- Contains no Phenols, Nitrites or Halogens
- Formulated specifically for sawing
- Contains no oil

Advantages:
- Mixes easily
- Does not contain any ingredients on the EPA priority pollutants list
- Good lubricity
- Retards bacterial growth

Benefits
- Can be welded over and painted over
- Clean to use
- Used to cut all metals
- Improves blade performance
- No “Monday morning stink”
- Long sump life

Size	Type	Hazard Code	Order No.	Price
1 Gallon	Machine Cleaner	HAZ57	**FX9068006**	Price
2-1/2 Gallon	Sawing Fluid	HAZ57	**FX9068005**	Price
5 Gallon	Sawing Fluid	HAZ57	**FX9068003**	Price
55 Gallon	Sawing Fluid	HAZ06	**FX9068001**	Price



LENOX Diemaster 2®

Engineered for Contour Cutting

M-42 high speed steel tooth edge
- For durability

Designed to run at high speed
- Run at twice the speed of carbon

Increased blade life
- Lasts 10 times longer than carbon blades

General purpose hand-fed applications
- Tool and die shops
- Machine shops
- Maintenance facilities





Applications
- Carbon steels
- Light alloy steels
- Mold steels
- Tool steels
- Stainless steels
- Sheet metal

Specifications

Tooth Form / Width × Thickness		Vari-Tooth® TPI				Standard TPI				Hook TPI		
Inches	MM	6/10	8/12	10/14	14/18	10	14	18	24	3	4	6
1/4 x .025	6.4 x .64			●	●							●
1/4 x .035	6.4 x .90			●								●
3/8 x .025	9.5 x .64			●	●							
3/8 x .035	9.5 x .90					●					●	●
1/2 x .020	12.7 x .50			♦	♦		♦	♦	♦			
1/2 x .025	12.7 x .64	●	●	●	●		●	●			●	●
1/2 x .035	12.7 x .90					●	●			●	●	●

♦ Matrix edge

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1/2	5' 4-1/2"	.025	6-10	**FX9080160**	Price
1/2	5' 4-1/2"	.025	8-12	**FX9080161**	Price
1/2	5' 4-1/2"	.025	10-14	**FX9080162**	Price
1/2	5' 4-1/2"	.025	14-18	**FX9080164**	Price
1/2	7' 5"	.025	6-10	**FX9000122**	Price
1/2	7' 5"	.025	10-14	**FX9080186**	Price
1/2	7' 9"	.025	10-14	**FX9080198**	Price
1/2	7' 9"	.025	14-18	**FX9000449**	Price
1/2	8'	.025	6-10	**FX9000197**	Price

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1/2	9' 4"	.025	6-10	**FX9081911**	Price
1/2	10'	.025	10-14	**FX9080245**	Price
1/2	11' 9"	.025	10-14	**FX9082337**	Price
1/2	12' 2"	.025	14-18	**FX9053426**	Price
1/2	12' 6"	.025	6-10	**FX9080272**	Price
1/2	12' 6"	.025	8-12	**FX9080273**	Price
1/2	12' 10"	.025	6-10	**FX9000107**	Price
1/2	14' 8"	.025	10-14	**FX9082148**	Price

For blade sizes not listed-Call REX

LENOX Neo-Type®

Hard Back Carbon Steel Blade

Applications
- Ferrous metals
- Utility cutting of mild steels
- For use on small cut-off saws and hand-fed applications

Specifications

Tooth Form / Set Pattern / Width × Thickness		Standard Ranker Set TPI					Wavy TPI	Hook Ranker Set TPI		
Inches	MM	6	8	10	14	18	24	3	4	6
1/4 x .025	6.4 x .64			●	●	●	●		●	●
3/8 x .025	9.5 x .64		●	●	●	●		●	●	●
1/2 x .025	12.7 x .64	●	●	●	●	●	●		●	
5/8 x .032	16 x .80			●	●					
3/4 x .032	19 x .80	●	●	●	●	●		●	●	
1 x .035	25.4 x .90	●	●	●	●			●		



Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
1/4	6' 8"	.025	10	**FX9090080**	Price
1/4	7' 9"	.025	6 H	**FX9000114**	Price
1/4	12' 3"	.025	10	**FX9000441NS**	Price
1/4	12' 7"	.025	14	**FX9000163**	Price
1/2	5' 4-1/2"	.025	6	**FX9090419**	Price
1/2	5' 4-1/2"	.025	10	**FX9090421**	Price
1/2	5' 4-1/2"	.025	14	**FX9090423**	Price
1/2	5' 4-1/2"	.025	18	**FX9090425**	Price
1/2	9' 7"	.025	14	**FX9058852**	Price

Width (in.)	Length	Thickness (in.)	Teeth	Order No.	Price
5/8	7' 9"	.032	14	**FX9000449NS**	Price
3/4	9' 7"	.032	8	**FX9000555**	Price
3/4	10'	.032	10	**FX9091006**	Price
3/4	11' 6"	.032	10	**FX9091091**	Price
1	11' 6"	.035	6	**FX9000455NS**	Price

For blade sizes not listed-Call REX
Rex supply is an authorized Lenox Saw Service Center. We have the ability to weld most blades at our Houston Facility-to fill each order quickly and efficiently.

LENOX Portable Bandsaw Blades

Cutting Recommendations
General Purpose Applications such as tubing, pipe, structurals, and solids of mild to difficult machinability

Tooth Forms Available
VARI-TOOTH® STANDARD





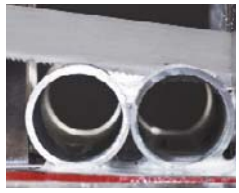
Description - WOLF-BAND™ Portable Bandsaw Blade						
Length (in.)	Width (in.)	Thickness (in.)	Product No.	TPI	Order No.	Price
44-7/8"	1/2	.020	3842338PW1014	10-14CW	**FX9008423**	Price
44-7/8"	1/2	.020	3842438PW14	14CW	**FX9008424**	Price
44-7/8"	1/2	.020	3842538PW18	18CW	**FX9008425**	Price
44-7/8"	1/2	.020	3842638PW24	24CW	**FX9008426**	Price
44-7/8"	1/2	.020	3842738PW1418	14-18	**FX9008427**	Price

Description - Master Band 2 Portable Bandsaw Blade						
Length (in.)	Width (in.)	Thickness (in.)	Product No.	TPI	Order No.	Price
44-7/8"	1/2	.020	8011238EW1418	14-18	**FX9009407**	Price
44-7/8"	1/2	.020	8011438EW1014	10-14	**FX9009403**	Price
44-7/8"	1/2	.020	8011538EW14	14	**FX9009404**	Price
44-7/8"	1/2	.023	8011638EW18	18	**FX9009405**	Price

Starrett Verstix™ Bandsaw Blades

- Developed and tested by Starrett, with a patent application pending, Versatix™ MP band saw blades set new standards in cutting structural steels, sections, tubes and small solids
- New tooth design resulting in a significant increase in tooth strength and consequent reduction in tooth strippage
- The perfect choice for cutting sections, structurals, tubes and small solids
- Ideal for use on manual “pull down” band saw machines where uncontrolled feed rates can easily overload the teeth with a standard blade





Length (in.)	Width (in.)	Thickness (in.)	TPI	Order No.	Price
7' 9"	3/4	.035	4-6	**FX8162051**	Price
7' 9"	3/4	.035	5-8	**FX8162052**	Price
7' 9"	3/4	.035	6-10	**FX8162053**	Price
9'	3/4	.035	4-6	**FX8162054**	Price
9'	3/4	.035	6-10	**FX8162056**	Price
9' 9"	3/4	.035	4-6	**FX8162057**	Price
9' 9"	3/4	.035	5-8	**FX8162058**	Price
9' 9"	3/4	.035	6-10	**FX8162059**	Price
10'	3/4	.035	5-8	**FX8162060**	Price
10'	1	.035	4-6	**FX8162061**	Price
10'	1	.035	5-8	**FX8162062**	Price
10'	1	.035	6-10	**FX8162063**	Price
10' 4"	1	.035	3-4	**FX8162064**	Price
10' 4"	1	.035	4-6	**FX8162065**	Price
10' 4"	1	.035	5-8	**FX8162066**	Price
10' 4"	1	.035	6-10	**FX8162067**	Price
10' 5"	3/4	.035	5-8	**FX8162068**	Price
10' 10-1/2	3/4	.035	4-6	**FX8162069**	Price
10' 10-1/2	3/4	.035	5-8	**FX8162070**	Price
10' 10-1/2	1	.035	4-6	**FX8162071**	Price
10' 10-1/2	1	.035	5-8	**FX8162072**	Price
10' 10-1/2	1	.035	6-10	**FX8162073**	Price
11'	3/4	.035	4-6	**FX8162074**	Price
11'	3/4	.035	5-8	**FX8162075**	Price
11'	3/4	.035	6-10	**FX8162076**	Price
11'	1	.035	4-6	**FX8162077**	Price
11'	1	.035	5-8	**FX8162078**	Price
11'	1	.035	6-10	**FX8162079**	Price
11' 5"	1	.035	4-6	**FX8162080**	Price
11' 5"	1	.035	5-8	**FX8162081**	Price
11' 6"	1	.035	3-4	**FX8162085**	Price
11' 6"	1	.035	4-6	**FX8162086**	Price
11' 6"	1	.035	5-8	**FX8162087**	Price
11' 6"	1-1/4	.042	2-3	**FX8162089**	Price
11' 6"	1-1/4	.042	3-4	**FX8162090**	Price
11' 6"	1-1/4	.042	4-6	**FX8162091**	Price
11' 6"	1-1/4	.042	5-8	**FX8162092**	Price
11' 6"	1-1/4	.042	6-10	**FX8162093**	Price
11' 6"	3/4	.035	4-6	**FX8162082**	Price
11' 6"	3/4	.035	5-8	**FX8162083**	Price
11' 6"	3/4	.035	6-10	**FX8162084**	Price
11' 6"	1	.035	6-10	**FX8162088**	Price
12'	1	.035	3-4	**FX8162094**	Price
12'	1	.035	4-6	**FX8162095**	Price
12'	1	.035	5-8	**FX8162096**	Price
12'	1	.035	6-10	**FX8162097**	Price
12'	1-1/4	.042	2-3	**FX8162098**	Price
12'	1-1/4	.042	3-4	**FX8162099**	Price
12'	1-1/4	.042	4-6	**FX8162100**	Price
12'	1-1/4	.042	5-8	**FX8162101**	Price
12'	1-1/4	.042	6-10	**FX8162102**	Price
12'	1	.042	3-4	**FX8162103**	Price
12' 6"	1	.035	4-6	**FX8162104**	Price
12' 6"	1	.035	5-8	**FX8162105**	Price
12' 6"	1	.035	6-10	**FX8162106**	Price
12' 6"	1-1/4	.042	2-3	**FX8162107**	Price
12' 6"	1-1/4	.042	3-4	**FX8162108**	Price
12' 6"	1-1/4	.042	4-6	**FX8162109**	Price
12' 6"	1-1/4	.042	5-8	**FX8162110**	Price
12' 10"	1	.035	3-4	**FX8162111**	Price
12' 10"	1	.035	4-6	**FX8162112**	Price

Length (in.)	Width (in.)	Thickness (in.)	TPI	Order No.	Price
12' 10"	1	.035	5-8	**FX8162113**	Price
12' 10"	1	.035	6-10	**FX8162114**	Price
13' 2"	1	.035	4-6	**FX8162115**	Price
13' 3"	1	.035	3-4	**FX8162116**	Price
13' 3"	1	.035	4-6	**FX8162117**	Price
13' 3"	1	.035	5-8	**FX8162118**	Price
13' 3"	1	.035	6-10	**FX8162119**	Price
13' 5"	1-1/4	.042	2-3	**FX8162120**	Price
13' 5"	1-1/4	.042	3-4	**FX8162121**	Price
13' 5"	1-1/4	.042	5-8	**FX8162122**	Price
13' 5"	1-1/4	.042	6-10	**FX8162123**	Price
13' 6"	1	.035	3-4	**FX8162124**	Price
13' 6"	1	.035	4-6	**FX8162125**	Price
13' 6"	1	.035	5-8	**FX8162126**	Price
13' 6"	1	.035	6-10	**FX8162127**	Price
13' 6"	1-1/4	.042	2-3	**FX8162128**	Price
13' 6"	1-1/4	.042	3-4	**FX8162129**	Price
13' 6"	1-1/4	.042	4-6	**FX8162130**	Price
13' 6"	1-1/4	.042	5-8	**FX8162131**	Price
13' 6"	1-1/4	.042	6-10	**FX8162132**	Price
13' 11"	1	.035	4-6	**FX8162133**	Price
13' 11"	1	.035	5-8	**FX8162134**	Price
13' 11"	1	.035	6-10	**FX8162135**	Price
14' 3"	1	.035	4-6	**FX8162136**	Price
14' 3"	1	.035	5-8	**FX8162137**	Price
14' 3"	1	.035	6-10	**FX8162138**	Price
14' 3"	1-1/4	.042	2-3	**FX8162139**	Price
14' 3"	1-1/4	.042	4-6	**FX8162140**	Price
14' 3"	1-1/4	.042	5-8	**FX8162141**	Price
14' 3"	1-1/4	.042	6-10	**FX8162142**	Price
14' 6"	1	.035	3-4	**FX8162143**	Price
14' 6"	1	.035	4-6	**FX8162144**	Price
14' 6"	1	.035	5-8	**FX8162145**	Price
14' 6"	1	.035	6-10	**FX8162146**	Price
14' 6"	1-1/4	.042	2-3	**FX8162147**	Price
14' 6"	1-1/4	.042	3-4	**FX8162148**	Price
14' 6"	1-1/4	.042	4-6	**FX8162149**	Price
14' 6"	1-1/4	.042	5-8	**FX8162150**	Price
14' 6"	1-1/4	.042	6-10	**FX8162151**	Price
14' 8"	3/4	.035	5-8	**FX8162152**	Price
14' 8"	1	.035	5-8	**FX8162153**	Price
15'	1	.035	4-6	**FX8162154**	Price
15'	1-1/4	.042	2-3	**FX8162155**	Price
15'	1-1/4	.042	3-4	**FX8162156**	Price
15'	1-1/4	.042	5-8	**FX8162157**	Price
15'	1-1/4	.042	6-10	**FX8162158**	Price
15' 4"	1-1/4	.042	4-6	**FX8162159**	Price
15' 6"	1	.035	5-8	**FX8162160**	Price
15' 6"	1	.035	6-10	**FX8162161**	Price
15' 6"	1-1/4	.042	2-3	**FX8162162**	Price
15' 6"	1-1/4	.042	3-4	**FX8162163**	Price
15' 6"	1-1/4	.042	5-8	**FX8162164**	Price
15' 6"	1-1/4	.042	6-10	**FX8162165**	Price
15' 8"	1-1/4	.042	3-4	**FX8162166**	Price
15' 8"	1-1/4	.042	4-6	**FX8162167**	Price
15' 8"	1-1/4	.042	5-8	**FX8162168**	Price
16'	1-1/4	.042	5-8	**FX8162170**	Price
16'	1-1/4	.042	4-6	**FX8162169**	Price
18' 6"	1-1/4	.042	4-6	**FX8162171**	Price
19' 5"	1-1/4	.042	4-6	**FX8162172**	Price

Special lengths can be supplied-call for quote

Starrett Intenss Pro™ M42 Cobalt HSS Bandsaw Blades - Welded to Length

Applications: High production cutting on a full range of steels from mild to stainless up 42HRC and nickel based and non-ferrous alloys

- Beam welded bi-metal construction, fatigue resistant alloy steel back
- Unique design, triple-tempered M42 Cobalt HSS teeth
- Higher wear/heat resistance. Faster, straighter cuts
- Excellent penetration, chip clearance, finish

MADE IN THE USA



Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
9'	3/4	.035	5-8	**FX870900340508G**	Price
10'	3/4	.035	4-6	**FX871000340406G**	Price
10' 6"	1	.035	3-4	**FX871006100304G**	Price
10' 10-1/2"	3/4	.035	4-6	**FX871010534406G**	Price
10' 10-1/2"	1	.035	4-6	**FX871010510406G**	Price
10' 10-1/2"	1	.035	5-8	**FX871010510508G**	Price
11'	3/4	.035	4-6	**FX871100340406G**	Price
11'	1	.035	3-4	**FX871100100304G**	Price
11'	1	.035	4-6	**FX871100100406G**	Price
11'	1	.035	5-8	**FX871100100508G**	Price
11' 5"	3/4	.035	5-8	**FX871105340508G**	Price
11' 6"	3/4	.035	4-6	**FX871106340406G**	Price
11' 6"	3/4	.035	5-8	**FX871106340508G**	Price
11' 6"	1	.035	2-3	**FX871106100203G**	Price
11' 6"	1	.035	3-4	**FX871106100304G**	Price
11' 6"	1	.035	4-6	**FX871106100406G**	Price
11' 6"	1	.035	5-8	**FX871106100508G**	Price
11' 6"	1-1/4	.042	2-3	**FX871106125203G**	Price
11' 6"	1-1/4	.042	3-4	**FX871106125304G**	Price
11' 6"	1-1/4	.042	4-6	**FX871106125406G**	Price
11' 6"	1-1/4	.042	5-8	**FX871106125508G**	Price
12'	1	.035	3-4	**FX871200100304G**	Price
12'	1	.035	4-6	**FX871200100406G**	Price
12'	1	.035	5-8	**FX871200100508G**	Price
12'	1-1/4	.042	3-4	**FX871200125304G**	Price
12'	1-1/4	.042	4-6	**FX871200125406G**	Price
12' 4"	1	.035	3-4	**FX871204100304G**	Price
12' 6"	1	.035	3-4	**FX871206100304G**	Price
12' 6"	1	.035	4-6	**FX871206100406G**	Price
12' 6"	1	.035	5-8	**FX871206100508G**	Price
12' 6"	1-1/4	.042	4-6	**FX871206125406G**	Price
12' 6"	1-1/4	.042	5-8	**FX871206125508G**	Price
12' 10"	3/4	.035	4-6	**FX871210340406G**	Price
12' 10"	1	.035	3-4	**FX871210100304G**	Price
12' 10"	1	.035	4-6	**FX871210100406G**	Price
12' 10"	1	.035	5-8	**FX871210100508G**	Price
12' 10"	1-1/4	.042	4-6	**FX871210125406G**	Price
13' 4"	1	.035	5-8	**FX871304100508G**	Price
13' 6"	1	.035	2-3	**FX871306100203G**	Price
13' 6"	1	.035	3-4	**FX871306100304G**	Price

Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
13' 6"	1	.035	4-6	**FX871306100406G**	Price
13' 6"	1	.035	5-8	**FX871306100508G**	Price
13' 6"	1-1/4	.042	2-3	**FX871306125203G**	Price
13' 6"	1-1/4	.042	3-4	**FX871306125304G**	Price
13' 6"	1-1/4	.042	4-6	**FX871306125406G**	Price
13' 6"	1-1/4	.042	5-8	**FX871306125508G**	Price
13' 11"	1	.035	4-6	**FX871311100406G**	Price
13' 11"	1	.035	5-8	**FX871311100508G**	Price
14' 6"	3/4	.035	4-6	**FX871406340406G**	Price
14' 6"	3/4	.035	5-8	**FX871406340508G**	Price
14' 6"	1	.035	3-4	**FX871406100304G**	Price
14' 6"	1	.035	4-6	**FX871406100406G**	Price
14' 6"	1	.035	5-8	**FX871406100508G**	Price
14' 6"	1-1/4	.042	2-3	**FX871406125203G**	Price
14' 6"	1-1/4	.042	3-4	**FX871406125304G**	Price
14' 6"	1-1/4	.042	4-6	**FX871406125406G**	Price
14' 6"	1-1/4	.042	5-8	**FX871406125508G**	Price
14' 8"	3/4	.035	4-6	**FX871408340406G**	Price
14' 8"	3/4	.035	5-8	**FX871408340508G**	Price
15'	1-1/4	.042	4-6	**FX871500125406G**	Price
15'	1-1/4	.042	5-8	**FX871500125508G**	Price
15'	1-1/2	.050	3-4	**FX871500150304G**	Price
15' 2"	1-1/2	.050	2-3	**FX871502150203G**	Price
15' 6"	1	.035	5-8	**FX871506100508G**	Price
15' 6"	1-1/4	.042	2-3	**FX871506125203G**	Price
15' 6"	1-1/4	.042	3-4	**FX871506125304G**	Price
15' 6"	1-1/4	.042	4-6	**FX871506125406G**	Price
15' 6"	1-1/4	.042	5-8	**FX871506125508G**	Price
15' 6"	1-1/2	.050	2-3	**FX871506150203G**	Price
15' 8"	1-1/4	.042	2-3	**FX871508125203G**	Price
15' 8"	1-1/4	.042	3-4	**FX871508125304G**	Price
15' 8"	1-1/4	.042	4-6	**FX871508125406G**	Price
16' 2"	1-1/4	.042	2-3	**FX871602125203G**	Price
16' 2"	1-1/4	.042	3-4	**FX871602125304G**	Price
16' 2"	1-1/4	.042	4-6	**FX871602125406G**	Price
17' 6"	1-1/4	.042	4-6	**FX871706125406G**	Price
17' 6"	1-1/2	.050	3-4	**FX871706150304G**	Price
17' 9"	1-1/2	.050	3-4	**FX871709150304G**	Price
18' 10"	1-1/2	.050	2-3	**FX871810150203G**	Price
18' 10"	1-1/2	.050	3-4	**FX871810150304G**	Price

Special lengths available - Call for quote.

Starrett Intenss Pro-VTH™ M42 Cobalt HSS Bandsaw Blades - Welde



Features:

- Beam welded bi-metal construction, fatigue resistant alloy steel back
- Unique design, triple-tempered M42 Cobalt HSS teeth
- Pulsator's uniquely aggressive "surging" cutting action

Benefits:

- Greater wear and heat resistance
- Less down time due to longer blade life, increased efficiency

Length	Width (in.)	Thickness (in.)	Tooth	Order No.	Price
11'	1	.035	3-4	**FX871100100304P**	Price
11'	1	.035	4-6	**FX871100100406P**	Price
11' 5"	1	.035	4-6	**FX871105100406P**	Price
11' 6"	1	.035	3-4	**FX871106100304P**	Price
11' 6"	1	.035	4-6	**FX871106100406P**	Price
11' 6"	1-1/4	.042	3-4	**FX871106125304P**	Price
12'	1	.035	3-4	**FX871200100304P**	Price
12'	1	.035	4-6	**FX871200100406P**	Price
12'	1-1/4	.042	2-3	**FX871200125203P**	Price
12' 6"	1	.035	2-3	**FX871206100203P**	Price
12' 6"	1-1/4	.042	3-4	**FX871206125304P**	Price
12' 10"	1	.035	3-4	**FX871210100304P**	Price
13' 6"	1	.035	3-4	**FX871306100304P**	Price
13' 6"	1-1/4	.042	2-3	**FX871306125203P**	Price
13' 6"	1-1/4	.042	3-4	**FX871306125304P**	Price
14' 6"	1	.035	4-6	**FX871406100406P**	Price
14' 6"	1-1/4	.042	2-3	**FX871406125203P**	Price
14' 6"	1-1/4	.042	3-4	**FX871406125304P**	Price
15'	1-1/4	.042	2-3	**FX871500125203P**	Price
15'	1-1/4	.042	3-4	**FX871500125304P**	Price
15'	1-1/4	.042	4-6	**FX871500125406P**	Price
15' 6"	1-1/4	.042	2-3	**FX871506125203P**	Price
15' 6"	1-1/4	.042	3-4	**FX871506125304P**	Price
16' 2"	1-1/4	.042	2-3	**FX871602125203P**	Price
17' 4"	1-1/2	.050	3-4	**FX871704150304P**	Price
18' 10"	1-1/2	.050	2-3	**FX871810150203P**	Price

Special lengths can be supplied-Call for quote

Starrett Duratec PH™ Bandsaw Blades - Welded to Length



- Light to medium bandsaws used in toolrooms and maintenance
- Increased tensile strength for both contour and straight cutting, improves rate of cut and accuracy
- Economical cutting of low alloy, non-ferrous metals

Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
7' 8"	3/4	.032	3 H	**FX8507083403**	Price
8' 11"	3/4	.032	6 S	**FX8508113406**	Price
9' 6"	3/4	.032	14 S	**FX8509063414**	Price
11'	1	.035	3 H	**FX8511001003**	Price
11' 5"	1	.035	3 H	**FX8511051003**	Price
12' 6"	1/2	.025	14 S	**FX8512061214**	Price

Special lengths can be shipped - Call for quote.

Starrett Digital Tachometer

- Powerful 30-function tachometer allows up to 20,000 contact optical RPM or up to 100,000 RPM non-contact measurement
- Can measure in revs, inches, feet, yards, centimeters and meters
- Allows viewing of target and display simultaneously
- Totalizer acts as optical counter, accumulates input, operates as stopwatch, and can be used in either automatic or manual mode
- Ergonomic design makes measurement of speed and RPM safe and simple



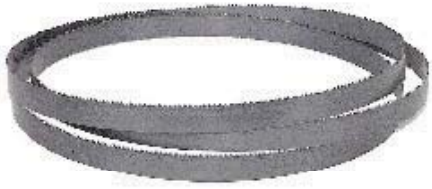
Order No.	Price
MV7068930	Price

Starrett Hard Back Bandsaw Blades - 100' Coils



Width	Thickness	TPI	Order No.	Price
3/4	.032	10 R	**FX80048R10R**	Price

64-1/2" x 1/2" x .025" Bi Metal Portable Band Blades

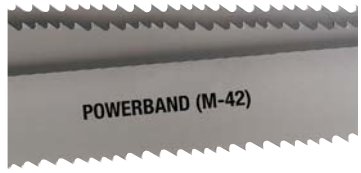


Brand Name - M K Morse		
TPI	Order No.	Price
6 R	**FY60050451206**	Price
10 R	**FY60050451210**	Price
14 R	**FY60050451214**	Price
10-14	**FY6005045121014**	Price
18 R	**FY6005045120018**	Price

Brand Name - Starrett		
TPI	Order No.	Price
10-14 S	**FX8305045121014**	Price
18 W	**FX8305045120018**	Price

Starrett® Intenss® M42 Bandsaw Blades - Welded to Length

- Ideal general purpose metal sawing blade
- 8% Cobalt (M42) HSS cutting edge welded to an alloy steel back
- Used on horizontal and light-duty vertical machines for both straight and contour cutting
- Faster cutting rate over a wide range of materials



Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
5'	1/2	.025	8-12 S	**FX830500120812**	Price
5'	1/2	.025	10-14 S	**FX830500121014**	Price
5' 4-1/2"	1/2	.025	8-12 S	**FX830504120812**	Price
5' 4-1/2"	1/2	.025	10-14 S	**FX8305045121014**	Price
5' 4-1/2"	1/2	.025	18 W	**FX8305045120018**	Price
5' 4-1/2"	1/2	.035	10-14 S	**FX830504121014**	Price
7' 5"	1/2	.035	10-14 S	**FX830705121014**	Price
7' 9"	1/2	.025	10-14 S	**FX830709121014**	Price
7' 9"	1/2	.035	14 S	**FX830709120014**	Price
7' 9"	3/4	.035	4-6 S	**FX830709340406**	Price
7' 9"	3/4	.035	6-10 S	**FX830709340610**	Price
7' 9"	3/4	.035	8-12 S	**FX830709340812**	Price
7' 9"	3/4	.035	10-14 S	**FX830709341014**	Price
7' 9"	3/4	.035	14 S	**FX830709340014**	Price
9'	3/4	.035	4-6 S	**FX830900340406**	Price
9'	3/4	.035	6-10 S	**FX830900340610**	Price
9'	3/4	.035	8-12 S	**FX830900340812**	Price
9'	3/4	.035	14 S	**FX830900340014**	Price
9' 6"	3/4	.035	6-10 S	**FX830906340610**	Price
9' 6"	3/4	.035	10-14 S	**FX830906341014**	Price
9' 6"	3/4	.035	14 S	**FX830906340014**	Price
9' 9"	3/4	.035	5-8 S	**FX830909340508**	Price
10'	1/2	.025	10-14 S	**FX831000121014**	Price
10'	3/4	.035	4-6 S	**FX831000340406**	Price
10'	3/4	.035	5-8 S	**FX831000340508**	Price
10'	3/4	.035	6-10 S	**FX831000340610**	Price
10'	3/4	.035	8-12 S	**FX831000340812**	Price
10'	3/4	.035	10-14 S	**FX831000341014**	Price
10'	1	.035	5-8 S	**FX831000100508**	Price
10'	1	.035	8-12 S	**FX831000100812**	Price
10' 5"	1/2	.025	10-14 S	**FX831005121014**	Price
10' 5"	3/4	.035	4-6 S	**FX831005340406**	Price
10' 5"	3/4	.035	5-8 S	**FX831005340508**	Price
10' 5"	3/4	.035	6-10 S	**FX831005340610**	Price
10' 6"	1	.035	6-10 S	**FX831006100610**	Price
10' 10-1/2"	1	.035	5-8 S	**FX831010510508**	Price
10' 10-1/2"	1	.035	6-10 S	**FX831010510610**	Price
10' 10-1/2"	1	.035	8-12 S	**FX831010510812**	Price
10' 10-1/2"	1	.035	10-14 S	**FX831010511014**	Price
11'	3/4	.035	4-6 S	**FX831100340406**	Price
11'	3/4	.035	5-8 S	**FX831100340508**	Price
11'	1	.035	4-6 S	**FX831100100406**	Price
11'	1	.035	5-8 S	**FX831100100508**	Price
11'	1	.035	6-10 S	**FX831100100610**	Price
11'	1	.035	8-12 S	**FX831100100812**	Price
11'	1	.035	10-14 S	**FX831100101014**	Price
11' 3"	1	.035	5-8 S	**FX831103100508**	Price
11' 3"	1	.035	6-10 S	**FX831103100610**	Price
11' 6"	3/4	.035	4-6 S	**FX831106340406**	Price
11' 6"	3/4	.035	5-8 S	**FX831106340508**	Price
11' 6"	3/4	.035	6-10 S	**FX831106340610**	Price
11' 6"	3/4	.035	8-12 S	**FX831106340812**	Price
11' 6"	3/4	.035	10-14 S	**FX831106341014**	Price

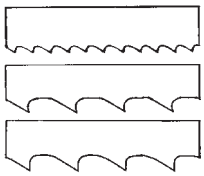
Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
11' 6"	1	.035	2-3 S	**FX831106100203**	Price
11' 6"	1	.035	3-4 S	**FX831106100304S**	Price
11' 6"	1	.035	4-6 S	**FX831106100406S**	Price
11' 6"	1	.035	5-8 S	**FX831106100508**	Price
11' 6"	1	.035	6-10 S	**FX831106100610**	Price
11' 6"	1	.035	8-12 S	**FX831106100812**	Price
11' 6"	1	.035	10-14 S	**FX8311061001014**	Price
11' 6"	1-1/4	.042	4-6 S	**FX831106125406**	Price
11' 6"	1-1/4	.042	5-8 S	**FX831106125508**	Price
12'	1	.035	3-4 S	**FX831200100304**	Price
12'	1	.035	4-6 S	**FX831200100406**	Price
12'	1	.035	5-8 S	**FX831200100508**	Price
12'	1	.035	6-10 S	**FX831200100610**	Price
12'	1	.035	8-12 S	**FX831200100812**	Price
12'	1-1/4	.042	3-4 S	**FX831200125304**	Price
12'	1-1/4	.042	5-8 S	**FX831200125508**	Price
12' 6"	1/2	.025	10-14 S	**FX831206121014**	Price
12' 6"	1/2	.025	14-18 S	**FX831206121418**	Price
12' 6"	1/2	.035	10-14 S	**FX8312061210**	Price
12' 6"	3/4	.035	10-14 S	**FX831206341014**	Price
12' 6"	1	.035	4-6 S	**FX831206100406**	Price
12' 6"	1	.035	5-8 S	**FX831206100508**	Price
12' 6"	1	.035	6 S	**FX831206100006**	Price
12' 6"	1	.035	6-10 S	**FX831206100610**	Price
12' 6"	1	.035	10-14 S	**FX831206101014**	Price
12' 6"	1-1/4	.042	4-6 S	**FX831206125406**	Price
12' 6"	1-1/4	.042	5-8 S	**FX831206125508**	Price
13' 3"	1	.035	4-6 S	**FX831303100406**	Price
13' 3"	1	.035	5-8 S	**FX831303100508**	Price
13' 6"	1	.035	3-4 S	**FX831306100304**	Price
13' 6"	1	.035	4-6 S	**FX831306100406**	Price
13' 6"	1	.035	5-8 S	**FX831306100508**	Price
13' 6"	1	.035	6-10 S	**FX831306100610**	Price
13' 6"	1	.035	8-12 S	**FX831306100812**	Price
13' 6"	1-1/4	.042	3-4 S	**FX831306125304**	Price
13' 6"	1-1/4	.042	4-6 S	**FX831306125406**	Price
13' 11"	1	.035	5-8 S	**FX831311100508**	Price
13' 11"	1	.035	6-10 S	**FX831311100610**	Price
13' 11"	1	.035	10-14 S	**FX831311101014**	Price
14' 4"	1	.035	6-10 S	**FX831404100610**	Price
14' 5"	1	.035	4-6 S	**FX831405100406**	Price
14' 5"	1	.035	8-12 S	**FX831405100812**	Price
14' 6"	3/4	.035	4-6 S	**FX831406340406**	Price
14' 6"	3/4	.035	6-10 S	**FX831406340610**	Price
14' 6"	1	.035	4-6 S	**FX831406100406**	Price
14' 6"	1	.035	5-8 S	**FX831406100508**	Price
14' 6"	1	.035	6-10 S	**FX831406100610**	Price
14' 6"	1	.035	8-12 S	**FX831406100812**	Price
14' 6"	1	.035	10-14 S	**FX831406101014**	Price
14' 6"	1-1/4	.042	4-6 S	**FX831406125406**	Price
14' 6"	1-1/4	.042	5-8 S	**FX831406125508**	Price
16'	1-1/4	.042	6-10 S	**FX831600125610**	Price

Special lengths can be supplied - Call for quote.

Starrett Duratec FB Carbon Steel Bandsaw Blade Coils

MADE IN THE USA

Blade Selection Guide
Rake: Choose the rake based on the material/shape to be cut
Shape:
Regular: Conventional tooth for general purpose sawing, zero or positive rake
Hook: 10° Positive rake for fast cutting of non-ferrous metals and non-metallics
Skip: Zero rake, widely spaced teeth and shallow gullets for cutting large sections
Pitch
Constant: Usually for general purpose cutting



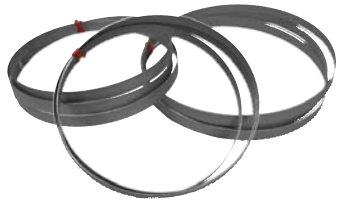


Applications
- Light to medium, vertical and horizontal machines
- Low alloy, non-ferrous metal
- Furniture, composition board
- Plastic of numerous types
- Non-ferrous foundry materials

RAKE SELECTION	Materials/Shapes To Be Cut
Positive	X X
Straight (Zero)	X X X X X X

				100'		250'	
Width	Thickness	Tooth Shape	TPI**	Order No.	Price	Order No.	Price
1/8	.025	Regular	14 S	**FX8610004**	Price	**-**	-
1/8	.025	Regular	18 S	**FX8610005**	Price	**-**	-
3/16	.025	Skip	4 S	**FX8610073**	Price	**FX8610182**	Price
3/16	.025	Regular	10 S	**FX8610007**	Price	**FX8610124**	Price
3/16	.025	Regular	14 S	**FX8610008**	Price	**FX8610125**	Price
1/4	.025	Hook	4	**FX8610098**	Price	**FX8610207**	Price
1/4	.025	Skip	4 S	**FX8610074**	Price	**FX8610183**	Price
1/4	.025	Skip	6 S	**FX8610076**	Price	**FX8610185**	Price
1/4	.025	Regular	18 W	**FX8610015**	Price	**FX8610130**	Price
1/4	.025	Regular	32 W	**FX8610055**	Price	**FX8610166**	Price
3/8	.025	Hook	3	**FX8610100†**	Price	**FX8610209†**	Price
3/8	.025	Hook	4	**FX8610101**	Price	**FX8610210**	Price
3/8	.025	Skip	4 S	**FX8610079**	Price	**FX8610189**	Price
3/8	.025	Regular	18 W	**FX8610020**	Price	**FX8610135**	Price
1/2	.020	Regular	10 S	**FX8610024**	Price	**-**	-
1/2	.020	Regular	18 W	**FX8610028**	Price	**-**	-
1/2	.025	Hook	3	**FX8610104**	Price	**FX8610213**	Price
1/2	.025	Hook	4	**FX8610105**	Price	**FX8610214**	Price
1/2	.025	Skip	4 S	**FX8610085**	Price	**FX8610195**	Price
1/2	.025	Regular	10 S	**FX8610025**	Price	**FX8610140**	Price
1/2	.025	Regular	18 W	**FX8610029**	Price	**FX8610144**	Price
1/2	.025	Regular	24 W	**FX8610061**	Price	**FX8610172**	Price
5/8	.032	Regular	10 S	**FX8610033**	Price	**FX8610148**	Price
3/4	.032	Skip	3 S	**FX8610089**	Price	**FX8610199**	Price
3/4	.032	Regular	8 S	**FX8610037**	Price	**FX8610152**	Price
3/4	.032	Regular	10 S	**FX8610038**	Price	**FX8610153**	Price
1	.035	Hook	2	**FX8610112**	Price	**FX8610220**	Price
1	.035	Skip	3 S	**FX8610094**	Price	**FX8610204**	Price
1	.035	Regular	8 S	**FX8610044**	Price	**FX8610159**	Price
1	.035	Regular	10 S	**FX8610045**	Price	**FX8610160**	Price

**** Key: P= Positive Rack, S= Straight (Zero) Rake, W= Wavy Set, Zero Rake**
† Especially good on wood bevel.
Note: Coils are shipped random length which may vary plus or minus 10%



HEM SAW Bi-Metal Blades for Manual Bandsaws

- Saw Blades for Hem Saw Utility Saws

Model No.	Dia. (in.)	Teeth	Thickness	Description	Order No.	Price
F-120014-000-00-0-000	56-3/4 x 1/2	14	.025	Blade for NG120 Saws	**PW70F120014**	Price
F-120114-000-00-0-000	56-3/4 x 1/2	10-14	.025	Blade for NG120 Saws	**PW70F120114**	Price
F-120812-000-00-0-000	56-3/4 x 1/2	8-12	.025	Blade for NG120 Saws	**PW70F120812**	Price
F-160014-000-00-0-000	68-1/4 x 1/2	14	.025	Blade for NG160 Saws	**PW70F160014**	Price
F-160114-000-00-0-000	68-1/4 x 1/2	10-14	.025	Blade for NG160 Saws	**PW70F160114**	Price
F-160610-000-00-0-000	68-1/4 x 1/2	6-10	.025	Blade for NG160 Saws	**PW70F160610**	Price
F-215114-000-00-0-000	84-1/4 x 3/4	10-14	.035	Blade for N215XL Saws	**PW70F215114**	Price
F-215610-000-00-0-000	84-1/4 x 3/4	6-10	.035	Blade for N216XL Saws	**PW70F215610**	Price
F-782014-000-00-0-000	52-1/2 x 1/2	14	.025	Blade for 782XLH & 105ABS Saws	**PW70F782014**	Price
F-782114-000-00-0-000	52-1/2 x 1/2	10-14	.025	Blade for 782XLH & 105ABS Saws	**PW70F782114**	Price
F-782812-000-00-0-000	52-1/2 x 1/2	8-12	.025	Blade for 782XLH & 105ABS Saws	**PW70F782812**	Price

Bahco's bandsaw blades are the perfect choice for a variety of applications. Designed for production and general purpose application sawing.

3857 EASY-CUT BIMETAL

Easy Cut blades cut almost anything without changing blades!

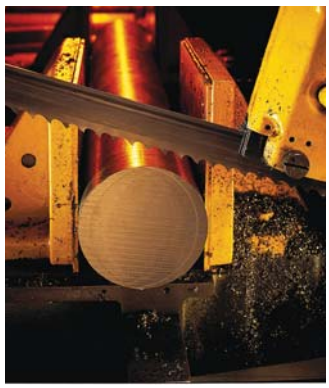


Features

- General purpose sawing in tool rooms, machine shops, maintenance rooms, fabricating and welding shops
- Perfect for tool steel, mild steel, stainless steel, aluminum, copper, brass, wood, plastic, tubing, solids, bundles.
- Easy to order: Simply specify blade width and length
- Save time and money by reducing blade inventory, operator labor, and machine down time.

M42 SANDFLEX BIMETAL

Perfect for solids, bundles, pipes profiles and castings



Features

- Multi-purpose tooth shapes for a variety of applications.
- Designed for production and general purpose application sawing.
- Guaranteed to lower your cost per cut.
- Bahco's bimetal bandsaw blades' high speed steel tooth tips and flexible alloy steel backing material deliver the most cost effective bandsaw blade for metal sawing applications.

3851 COBRA BIMETAL



For high productivity cutting of large of small work pieces.

Features

- Specially designed tooth shapes for maximum cutting performance.
- M42 tooth tips offer heat and wear resistance for long blade life.
- Excellent choice for production cutting of the toughest materials.

3853 TOP FABRICATOR BIMETAL



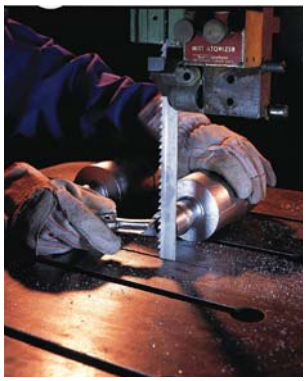
For Cutting Tubes or Profiles for the structural and fabrication industry.

Features

- Tooth design makes the teeth stronger, more resistant to tooth-stripping and longer lasting.
- M42 tooth material gives longer blade life.
- Unique, patented set gives a better surface finish.
- The unique combination of tooth design and rake angle provides very low cutting forces and longer tool life.

3869 CARBIDE TRIPLE SET

A foundry bandsaw blade for non-ferrous and abrasive materials.



Features

- Special design for foundry use.
- Carbide teeth and triple set configuration for fast cutting, easy feeding, straight and radial cutting of gates and risers.
- Perfect for aluminum, copper, brass, magnesium, zirconium, plastics, and other abrasive materials.

3868 CARBIDE TRIPLE SET " XTRA"

A superior to bimetal blades with faster cutting rates, lower costs per cut and extended tool life.



Features

- Carbide will save you money by cutting faster and lasting longer than any bimetal bandsaw blades.
- Patented ground tooth design features a triple chip blade with set teeth.
- Perfect for cutting titanium, high nickel alloys, stainless steel, abrasive tool steel, graphite, aluminum with high silicon or matrix alloys, aerospace alloys.

In addition to the saw products in this catalog, Bahco offers a complete line of production cutting and general purpose bandsaw blades. For more information please contact our customer service department.

Easy Cut M42 Bi Metal Bandsaw Blades - Welded to Length

- Unique, innovative tooth design allows the same blade to cut a wide range of shapes and material
- Cut mild steel, stainless steel, and non-ferrous materials including aluminum, copper, brass even plastic without changing blades
- M42 teeth for good heat resistance, new tooth design resists stripping
- More cuts with less down time for blade changes due to material or shape
- Medium tooth configuration for general use



Length	Width (in.)	Thickness (in.)	Order No.	Price
5'	1/2	.025	**FX8477205000**	Price
5' 4-1/2"	1/2	.025	**FX8477205044**	Price
7' 10"	3/4	.035	**FX8480207100**	Price
7' 11"	1/2	.025	**FX8477207110**	Price
7' 11"	3/4	.035	**FX8480207110**	Price
7' 5"	1/2	.025	**FX8477207050**	Price
7' 6"	1/2	.025	**FX8477207060**	Price
7' 9"	1/2	.025	**FX8477207090**	Price
7' 9"	3/4	.035	**FX8480207090**	Price
7' 9-1/2"	1/2	.025	**FX8477207094**	Price
8'	1/2	.025	**FX8477208000**	Price
8' 11"	1	.035	**FX8483308110**	Price
8' 11"	3/4	.035	**FX8480208110**	Price
8' 2-1/2"	1/2	.025	**FX8477208024**	Price
8' 2-1/2"	3/4	.035	**FX8480208024**	Price
8' 5"	3/4	.035	**FX8480208050**	Price
9'	1/2	.025	**FX8477209000**	Price
9'	3/4	.035	**FX8480209000**	Price
9' 10"	1	.035	**FX8483309100**	Price
9' 10"	3/4	.035	**FX8480209100**	Price
9' 10-1/2"	1/2	.025	**FX8477209104**	Price
9' 11-1/2"	1	.035	**FX8483309114**	Price
9' 2"	3/4	.035	**FX8480209020**	Price
9' 3"	1/2	.025	**FX8477209030**	Price
9' 3"	3/4	.035	**FX8480209030**	Price
9' 4"	3/4	.035	**FX8480209040**	Price
9' 5"	1/2	.025	**FX8477209050**	Price
9' 6"	1/2	.025	**FX8477209060**	Price
9' 6"	3/4	.035	**FX8480209060**	Price
9' 7-1/2"	1/2	.025	**FX8477209074**	Price
9' 7-1/2"	3/4	.035	**FX8480209074**	Price
9' 8"	1	.035	**FX8483309080**	Price
9' 9"	3/4	.035	**FX8480209090**	Price
10'	1	.035	**FX8483310000**	Price
10'	1/2	.025	**FX8477210000**	Price
10'	3/4	.035	**FX8480210000**	Price
10' 1"	1	.035	**FX8483310010**	Price
10' 1"	1/2	.025	**FX8477210010**	Price
10' 10"	1	.035	**FX8483310100**	Price
10' 10-1/2"	1	.035	**FX8483310104**	Price
10' 10-1/2"	1/2	.025	**FX8477210104**	Price
10' 10-1/2"	3/4	.035	**FX8480210104**	Price
10' 2"	1/2	.025	**FX8477210020**	Price
10' 2"	3/4	.035	**FX8480210020**	Price
10' 3"	1	.035	**FX8483310030**	Price
10' 3"	1/2	.025	**FX8477210030**	Price
10' 5"	1	.032	**FX8483310050**	Price
10' 5"	3/4	.035	**FX8480210050**	Price
10' 6"	1	.035	**FX8483310060**	Price
10' 6"	1/2	.025	**FX8477210060**	Price
10' 9"	1	.035	**FX8483310090**	Price
10' 9"	1/2	.025	**FX8477210090**	Price
10' 9"	3/4	.035	**FX8480210090**	Price
11'	1	.035	**FX8483311000**	Price
11'	3/4	.035	**FX8480211000**	Price
11' 1"	1	.035	**FX8483311010**	Price
11' 1"	3/4	.035	**FX8480211010**	Price
11' 10"	1	.035	**FX8483311100**	Price
11' 11"	1	.035	**FX8483311110**	Price
11' 3"	1	.035	**FX8483311030**	Price
11' 4"	1	.035	**FX8483311040**	Price
11' 5"	1	.035	**FX8483311050**	Price
11' 5"	3/4	.035	**FX8480211050**	Price
11' 6"	1	.035	**FX8483311060**	Price
11' 6"	1/2	.025	**FX8477211060**	Price
11' 6"	3/4	.035	**FX8480211060**	Price
11' 8"	1-1/4	.042	**FX8486411080**	Price
11' 8"	3/4	.025	**FX8480211080**	Price
11' 9"	3/4	.035	**FX8480211090**	Price
12'	1	.035	**FX8483312000**	Price
12'	1/2	.025	**FX8477212000**	Price
12' 1"	1	.035	**FX8483312010**	Price
12' 1"	1-1/4	.042	**FX8486412010**	Price
12' 10"	1	.035	**FX8483312100**	Price
12' 10"	1/2	.025	**FX8477212100**	Price
12' 10"	3/4	.035	**FX8480212100**	Price
12' 3"	1	.035	**FX8483312030**	Price
12' 3"	3/4	.035	**FX8480212030**	Price
12' 4"	1-1/4	.042	**FX8486412040**	Price
12' 5"	1	.035	**FX8483312050**	Price
12' 5"	3/4	.035	**FX8480212050**	Price
12' 6"	1	.035	**FX8483312060**	Price
12' 6"	1/2	.025	**FX8477212060**	Price
12' 6"	3/4	.035	**FX8480212060**	Price
12' 9"	1/2	.025	**FX8477212090**	Price
12' 9"	1-1/4	.042	**FX8486412090**	Price
13'	1	.035	**FX8483313000**	Price
13' 11"	1	.035	**FX8483313110**	Price
13' 11"	1-1/4	.042	**FX8486413110**	Price
13' 2"	1/2	.025	**FX8477213020**	Price
13' 3"	1	.035	**FX8483313030**	Price
13' 4"	1	.035	**FX8483313040**	Price
13' 5"	1	.035	**FX8483313050**	Price
13' 5"	1-1/4	.042	**FX8486413050**	Price
13' 6"	1	.035	**FX8483313060**	Price
13' 6"	1/2	.025	**FX8477213060**	Price
13' 6"	1-1/4	.042	**FX8486413060**	Price
14'	1	.035	**FX8483314000**	Price
14' 11"	1/2	.025	**FX8477214110**	Price
14' 11"	3/4	.035	**FX8480214110**	Price
14' 3"	1	.035	**FX8483314030**	Price
14' 3"	1-1/4	.042	**FX8486414030**	Price
14' 4"	1-1/4	.042	**FX8486414040**	Price
14' 5"	1	.035	**FX8483314050**	Price
14' 6"	1	.035	**FX8483314060**	Price
14' 6"	1-1/4	.042	**FX8486414060**	Price
14' 6"	3/4	.035	**FX8480214060**	Price
14' 8"	1/2	.025	**FX8477214080**	Price
14' 8"	3/4	.035	**FX8480314080**	Price
15'	1-1/4	.042	**FX8486415000**	Price

Special Lengths & Coils Available - Call for Quote

Carbide Tipped Triple Set Bandsaw Blades - Welded to Length

- Carbide tipped teeth, triple set tooth configuration
- Fast cutting, easy feeding blade on straight or radius cutting
- Used in foundries, on smaller machines and difficult materials



Length	Width (in.)	Thick-ness (in.)	TPI	Order No.	Price
7' 9"	1/2	.035	3	**FX8420058907090**	Price
7' 9"	3/4	.035	3	**FX8417730007090**	Price
7' 9"	3/4	.035	4	**FX8419774207090**	Price
7' 9"	1	.035	3	**FX8417734807090**	Price
7' 9"	1	.035	4	**FX8418259507090**	Price
9'	1/2	.035	3	**FX8420058909000**	Price
9'	3/4	.035	3	**FX8417730009000**	Price
9'	3/4	.035	4	**FX8419774209000**	Price
9' 7-1/2"	1/2	.035	3	**FX8420058909074**	Price
9' 7-1/2"	3/4	.035	3	**FX8417730009074**	Price
9' 7-1/2"	3/4	.035	4	**FX8419774209074**	Price
9' 7-1/2"	1	.035	3	**FX8417734809074**	Price
9' 7-1/2"	1	.035	4	**FX8418259509074**	Price
10'	3/4	.035	3	**FX8417730010000**	Price
10'	3/4	.035	4	**FX8419774210000**	Price
10'	1	.035	3	**FX8417734810000**	Price
10'	1	.035	4	**FX8418259510000**	Price
10' 5"	3/4	.035	3	**FX8417730010050**	Price
10' 5"	3/4	.035	4	**FX8419774210050**	Price
10' 5"	1	.035	3	**FX8417734810050**	Price
10' 5"	1	.035	4	**FX8418259510050**	Price
10' 9"	3/4	.035	3	**FX8417730010090**	Price
10' 9"	3/4	.035	4	**FX8419774210090**	Price
10' 9"	1	.035	3	**FX8417734810090**	Price
10' 9"	1	.035	4	**FX8418259510090**	Price
10' 10-1/2"	3/4	.035	3	**FX8417730010104**	Price
10' 10-1/2"	3/4	.035	4	**FX8419774210104**	Price
10' 10-1/2"	1	.035	3	**FX8417734810104**	Price
10' 10-1/2"	1	.035	4	**FX8418259510104**	Price
11'	3/4	.035	3	**FX8417730011000**	Price
11'	3/4	.035	4	**FX8419774211000**	Price
11'	1	.035	3	**FX8417734811000**	Price
11'	1	.035	4	**FX8418259511000**	Price
11' 6"	3/4	.035	3	**FX8417730011060**	Price
11' 6"	3/4	.035	4	**FX8419774211060**	Price
11' 6"	1	.035	3	**FX8417734811060**	Price
11' 6"	1	.035	4	**FX8418259511060**	Price
12'	1	.035	3	**FX8417734812000**	Price
12'	1	.035	4	**FX8418259512000**	Price
12' 6"	3/4	.035	3	**FX8417730012060**	Price
12' 6"	3/4	.035	4	**FX8419774212060**	Price
12' 6"	1	.035	3	**FX8417734812060**	Price
12' 6"	1	.035	4	**FX8418259512060**	Price
13' 3"	1	.035	3	**FX8417734813030**	Price
13' 3"	1	.035	4	**FX8418259513030**	Price
13' 6"	1	.035	3	**FX8417734813060**	Price
13' 6"	1	.035	4	**FX8418259513060**	Price
13' 11"	1	.035	3	**FX8417734813110**	Price
13' 11"	1	.035	4	**FX8418259513110**	Price
14' 6"	3/4	.035	3	**FX8417730014060**	Price
14' 6"	3/4	.035	4	**FX8419774214060**	Price
14' 6"	1	.035	3	**FX8417734814060**	Price
14' 6"	1	.035	4	**FX8418259514060**	Price
14' 6"	1-1/4	.042	3	**FX8417735514060**	Price
15' 6"	1-1/4	.042	3	**FX8417735515060**	Price

Special Lengths & Coils Available - Call for Quote

Snap-on INDUSTRIAL BRANDS | BAHCO

3851 Cobra M42

High Productiivity Blades

For high productivity cutting of large or small workpieces and contour cutting



- Specially designed tooth shapes for maximum cutting performance
- M42 tooth tips offer heat and wear resisitance for long blade life
- Excellent choice for production cutting of the toughest materials

COMBO tooth shape is similar to Regular. It is suitable for multi-purpose cutting of thin-walled tubes and profiles in most materials

Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
9'	3/4	.035	5-8	**FX8412640709034**	Price
9'	1	.035	5-8	**FX8412640709000**	Price
9' 9"	3/4	.035	5-8	**FX8412640709934**	Price
9' 10"	1	.035	5-8	**FX8412640709100**	Price
9' 11-1/2"	1	.035	5-8	**FX8412640709114**	Price
10	3/4	.035	5-8	**FX8412640710034**	Price
10'	1	.035	4-6	**FX8412639110000**	Price
10'	1	.035	5-8	**FX8412640710000**	Price
10' 5"	1	.035	5-8	**FX8412640710050**	Price
10' 10"	1	.035	3-4	**FX8412638410100**	Price
10' 10"	1	.035	5-8	**FX8412640710100**	Price
10' 10-1/2"	1	.035	4-6	**FX8412639110104**	Price
10' 10-1/2"	1	.035	5-8	**FX8412640710104**	Price
11'	1	.035	3-4	**FX8412638411000**	Price
11'	1	.035	4-6	**FX8412639111000**	Price
11'	1	.035	5-8	**FX8412640711000**	Price
11' 6"	1	.035	3-4	**FX8412638411060**	Price
11' 6"	1	.035	4-6	**FX8412639111060**	Price
11' 6"	1	.035	5-8	**FX8412640711060**	Price
11' 8"	1	.035	5-8	**FX8412640711080**	Price
12'	1	.035	3-4	**FX8412638412000**	Price
12'	1	.035	4-6	**FX8412639112000**	Price
12'	1	.035	5-8	**FX8412640712000**	Price
12' 1"	1	.035	4-6	**FX8412639112010**	Price
12' 3"	1	.035	3-4	**FX8412638412030**	Price
12' 3"	1	.035	5-8	**FX8412640712030**	Price
12' 4"	1	.035	5-8	**FX8412640712040**	Price
12' 5"	1	.035	5-8	**FX8412640712050**	Price
12' 6"	1	.035	3-4	**FX8412638412060**	Price
12' 6"	1	.035	4-6	**FX8412639112060**	Price
12' 6"	1	.035	5-8	**FX8412640712060**	Price
12' 10"	1	.035	5-8	**FX8412640712100**	Price
13'	1-1/4	.042	4-6	**FX8412649013000**	Price
13' 2"	1	.035	4-6	**FX8412639113020**	Price
13' 2"	1	.035	5-8	**FX8412640713020**	Price
13' 2"	1-1/4	.042	4-6	**FX8412649013020**	Price
13' 3"	1	.035	2-3	**FX8412637713030**	Price
13' 3"	1	.035	3-4	**FX8412638413030**	Price
13' 3"	1	.035	4-6	**FX8412639113030**	Price
13' 3"	1	.035	5-8	**FX8412640713030**	Price
13' 5"	1-1/4	.042	5-8	**FX8412650613050**	Price
13' 6"	1	.035	3-4	**FX8412638413060**	Price
13' 6"	1	.035	4-6	**FX8412639113060**	Price
13' 6"	1	.035	5-8	**FX8412640713060**	Price
13' 6"	1-1/4	.042	2-3	**FX8412647613060**	Price
13' 6"	1-1/4	.042	3-4	**FX8412648313060**	Price
13' 6"	1-1/4	.042	4-6	**FX8412649013060**	Price
13' 6"	1-1/4	.042	5-8	**FX8412650613060**	Price
13' 10"	1	.035	4-6	**FX8412639113100**	Price
13' 11"	1	.035	4-6	**FX8412639113110**	Price
14'	1-1/4	.042	3-4	**FX8412648314000**	Price
14' 2"	1	.035	2-3	**FX8412637714020**	Price
14' 2"	1	.035	3-4	**FX8412638414020**	Price
14' 2"	1	.035	5-8	**FX8412640714020**	Price
14' 3"	1-1/4	.042	2-3	**FX8412647614030**	Price
14' 3"	1-1/4	.042	4-6	**FX8412649014030**	Price
14' 3"	1-1/4	.042	5-8	**FX8412650614030**	Price
14' 4"	1	.035	5-8	**FX8412640714040**	Price
14' 5"	1	.035	4-6	**FX8412639114050**	Price
14' 5"	1	.035	5-8	**FX8412640714050**	Price
14' 5"	1-1/4	.042	4-6	**FX8412649014050**	Price
14' 6"	1	.035	3-4	**FX8412638414060**	Price
14' 6"	1	.035	4-6	**FX8412639114060**	Price
14' 6"	1	.035	5-8	**FX8412640714060**	Price
14' 6"	1-1/4	.042	3-4	**FX8412648314060**	Price
14' 6"	1-1/4	.042	4-6	**FX8412649014060**	Price
14' 6"	1-1/4	.042	5-8	**FX8412650614060**	Price
14' 8"	1	.035	5-8	**FX8412640714080**	Price
14' 9"	1-1/4	.042	5-8	**FX8412650614090**	Price
14' 10"	1	.035	3-4	**FX8412638414100**	Price
14' 10"	1	.035	4-6	**FX8412639114100**	Price
14' 11"	1-1/4	.042	2-3	**FX8412647614110**	Price
14' 11"	1-1/4	.042	3-4	**FX8412648314110**	Price
14' 11"	1-1/4	.042	4-6	**FX8412649014110**	Price
14' 11"	1-1/4	.042	5-8	**FX8412650614110**	Price
15'	1	.035	3-4	**FX8412638415000**	Price
15'	1	.035	5-8	**FX8412640715000**	Price
15'	1-1/4	.042	2-3	**FX8412647615000**	Price
15'	1-1/4	.042	3-4	**FX8412648315000**	Price
15'	1-1/4	.042	4-6	**FX8412649015000**	Price
15'	1-1/4	.042	5-8	**FX8412650615000**	Price
15' 3"	1-1/4	.042	4-6	**FX8412649015030**	Price
15' 4"	1-1/4	.042	2-3	**FX8412647615040**	Price
15' 4"	1-1/4	.042	3-4	**FX8412648315040**	Price
15' 4"	1-1/4	.042	4-6	**FX8412649015040**	Price
15' 4"	1-1/4	.042	5-8	**FX8412650615040**	Price
15' 6"	1	.035	3-4	**FX8412638415060**	Price
15' 6"	1	.035	4-6	**FX8412639115060**	Price
15' 6"	1	.035	5-8	**FX8412640715060**	Price
15' 6"	1-1/4	.042	3-4	**FX8412648315060**	Price
15' 6"	1-1/4	.042	4-6	**FX8412649015060**	Price
15' 6"	1-1/4	.042	5-8	**FX8412650615060**	Price
15' 8"	1	.035	5-8	**FX8412640715080**	Price
15' 8"	1-1/4	.042	2-3	**FX8412647615080**	Price
15' 8"	1-1/4	.042	3-4	**FX8412648315080**	Price
15' 8"	1-1/4	.042	4-6	**FX8412649015080**	Price
15' 8"	1-1/4	.042	5-8	**FX8412650615080**	Price
16'	1	.035	3-4	**FX8412638416000**	Price
16'	1-1/4	.042	3-4	**FX8412648316000**	Price
16'	1-1/4	.042	4-6	**FX8412649016000**	Price
16'	1-1/4	.042	5-8	**FX8412650616000**	Price
16' 2"	1-1/4	.042	4-6	**FX8412649016020**	Price
16' 6"	1-1/4	.042	3-4	**FX8412648316060**	Price
16' 6"	1-1/4	.042	4-6	**FX8412649016060**	Price
16' 6"	1-1/4	.042	5-8	**FX8412650616060**	Price
16' 8"	1-1/4	.042	4-6	**FX8412649016080**	Price
16' 8"	1-1/4	.042	5-8	**FX8412650616080**	Price
16' 10"	1-1/4	.042	2-3	**FX8412647616100**	Price
16' 10"	1-1/4	.042	4-6	**FX8412649016100**	Price
17"	1-1/4	.042	3-4	**FX8412648317000**	Price
17"	1-1/4	.042	4-6	**FX8412649017000**	Price
17"	1-1/4	.042	5-8	**FX8412650617000**	Price
17' 2"	1-1/4	.042	3-4	**FX8412648317020**	Price
17' 4"	1-1/4	.042	3-4	**FX8412648317040**	Price
17' 5"	1-1/4	.042	4-6	**FX8412649017050**	Price
17' 6"	1-1/4	.042	3-4	**FX8412648317060**	Price
17' 6"	1-1/4	.042	4-6	**FX8412649017060**	Price
17' 6"	1-1/4	.042	5-8	**FX8412650617060**	Price
17' 10"	1-1/4	.035	4-6	**FX8412649017100**	Price
18'	1-1/4	.042	5-8	**FX8412650618000**	Price
18' 4"	1-1/4	.042	4-6	**FX8412649018000**	Price
18' 6"	1-1/4	.042	2-3	**FX8412647618060**	Price
18' 6"	1-1/4	.042	3-4	**FX8412648318060**	Price
18' 6"	1-1/4	.042	4-6	**FX8412649018060**	Price
18' 6"	1-1/4	.042	5-8	**FX8412650618060**	Price
18' 10"	1-1/4	.042	4-6	**FX8412649018100**	Price
19' 8"	1-1/4	.042	3-4	**FX8412648319080**	Price
19' 8"	1-1/4	.042	4-6	**FX8412649019080**	Price
22' 6"	1-1/4	.042	4-6	**FX8412649022060**	Price
22' 6"	1-1/4	.042	5-8	**FX8412650622060**	Price

Snap-on INDUSTRIAL BRANDS | BAHCO

Sand Flex M42

Bandsaw Blades



- M42 High Speed Steel for durability and longer tool life
- Perfect for solids, bundles, pipes, profiles and castings
- Multi-purpose tooth shapes for a variety of applications
- Designed for production and general purpose sawing

Length	Width	Thickness	TPI	Order No.	Price
4' 8-1/8"	1/2	.020	14-18	**FX842134004081**	Price
4' 8-1/8"	1/2	.020	10-14	**FX842131904081**	Price
5'	1/2	.020	10-14	**FX842131905000**	Price
5'	1/2	.025	10-14	**FX845079905000**	Price
5' 4-1/2"	1/2	.020	10-14	**FX842131905044**	Price
5' 4-1/2"	1/2	.025	10-14	**FX845079905044**	Price
5' 4-1/2"	1/2	.020	14-18	**FX842134005044**	Price
5' 4-1/2"	1/2	.035	10-14	**FX843130105044**	Price
5' 8"	1/2	.025	10-14	**FX845079905080**	Price
6' 8"	1/2	.025	10-14	**FX845079906080**	Price
6' 8"	1/2	.020	10-14	**FX842131906080**	Price
6' 9"	1/2	.025	10-14	**FX845079906090**	Price
7' 1"	3/4	.035	10-14	**FX843996107010**	Price
7' 5"	1/2	.020	10-14	**FX842131907050**	Price
7' 5"	1/2	.035	10-14	**FX843130107050**	Price
7' 5"	1/2	.025	6-10	**FX842161607050**	Price
7' 5"	1/2	.025	10-14	**FX845079907050**	Price
7' 6"	1/2	.020	10-14	**FX842131907060**	Price
7' 6"	1/2	.025	10-14	**FX845079907060**	Price
7' 9"	1/2	.025	10-14	**FX845079907090**	Price
7' 9"	1/2	.035	10-14	**FX843130107090**	Price
7' 9"	3/4	.035	5-8	**FX845086707090**	Price
7' 9"	3/4	.035	10-14	**FX843996107090**	Price
7' 9"	3/4	.035	6-10	**FX843994707090**	Price
7' 9"	3/4	.035	8-12	**FX843995407090**	Price
7' 9"	3/4	.035	4-6	**FX845085007090**	Price
7' 9"	1	.035	10-14	**FX845091107090**	Price
7' 9-1/2"	1/2	.025	10-14	**FX845079907094**	Price
7' 10"	1/2	.025	10-14	**FX845079907100**	Price
7' 10"	3/4	.035	10-14	**FX843996107100**	Price
7' 10"	3/4	.035	6-10	**FX843994707100**	Price
7' 11"	1/2	.020	10-14	**FX842131907110**	Price
7' 11"	1/2	.025	10-14	**FX845079907110**	Price
7' 11"	3/4	.035	6-10	**FX843994707110**	Price
8'	1/2	.025	10-14	**FX845079908000**	Price
8' 2"	1/2	.025	8-12	**FX843993008020**	Price
8' 2"	3/4	.035	10-14	**FX843996108020**	Price
8' 2-1/2"	1/2	.035	10-14	**FX843130108024**	Price
8' 2-1/2"	3/4	.035	10-14	**FX843996108024**	Price
8' 5"	3/4	.035	6-10	**FX843994708050**	Price
8' 5"	3/4	.035	10-14	**FX843996108050**	Price
8' 9"	1/2	.025	10-14	**FX845079908090**	Price
8' 10"	3/4	.035	10-14	**FX843996108100**	Price
8' 10"	1	.035	10-14	**FX845091108100**	Price
8' 10"	1	.035	6-10	**FX844002808100**	Price
8' 11"	3/4	.035	6-10	**FX843994708110**	Price
8' 11"	3/4	.035	10-14	**FX843996108110**	Price
8' 11"	1	.035	10-14	**FX845091108110**	Price
8' 11"	1	.035	8-12	**FX844003508110**	Price
9'	1/2	.035	10-14	**FX843130109000**	Price
9'	3/4	.035	6-10	**FX843994709000**	Price
9'	3/4	.035	5-8	**FX845086709000**	Price
9'	3/4	.035	10-14	**FX843996109000**	Price
9' 2"	1/2	.025	10-14	**FX845079909020**	Price
9' 2"	3/4	.035	10-14	**FX843996109020**	Price
9' 2"	3/4	.035	6-10	**FX843994709020**	Price
9' 3"	1/2	.025	10-14	**FX845079909030**	Price
9' 3"	3/4	.035	10-14	**FX843996109030**	Price
9' 4"	1/2	.025	10-14	**FX845079909040**	Price
9' 5"	1/2	.025	10-14	**FX845079909050**	Price
9' 6"	1/2	.025	10-14	**FX845079909060**	Price
9' 6"	1/2	.025	6-10	**FX843992309060**	Price
9' 6"	3/4	.035	10-14	**FX843996159060**	Price
9' 7"	3/4	.035	10-14	**FX843996109070**	Price
9' 7"	3/4	.035	6-10	**FX843994709070**	Price
9' 7-1/2"	1/2	.035	10-14	**FX843130109074**	Price
9' 7-1/2"	3/4	.035	10-14	**FX843996109074**	Price
9' 7-1/2"	1	.035	10-14	**FX845091109074**	Price
9' 8"	3/4	.035	10-14	**FX843996109080**	Price
9' 9"	3/4	.035	10-14	**FX843996109090**	Price
9' 9"	1	.035	10-14	**FX845091109090**	Price
9' 10"	1/2	.025	10-14	**FX845079909100**	Price
9' 11"	1	.035	10-14	**FX845091109110**	Price
9' 11-1/2"	1	.035	10-14	**FX845091109114**	Price
9' 11-1/2"	1	.035	4-6	**FX843999209114**	Price
9' 11-1/2"	1	.035	6-10	**FX844002809114**	Price
10'	1/2	.025	6-10	**FX843992310000**	Price
10'	1/2	.025	10-14	**FX845079910000**	Price
10'	3/4	.035	5-8	**FX845086790000**	Price
10'	3/4	.035	10-14	**FX843996110000**	Price
10'	3/4	.035	6-10	**FX843994710000**	Price
10'	1	.035	8-12	**FX844003510000**	Price
10'	1	.035	5-8	**FX844001110000**	Price
10'	1	.035	10-14	**FX845091150000**	Price
10'	1	.035	6-10	**FX844002810000**	Price
10' 1"	1/2	.025	10-14	**FX845079910010**	Price
10' 1"	3/4	.035	10-14	**FX843996150010**	Price
10' 2"	1/2	.025	10-14	**FX845079910020**	Price
10' 2"	1	.035	10-14	**FX845091110020**	Price
10' 3"	1/2	.025	10-14	**FX845079910030**	Price
10' 3"	1/2	.035	10-14	**FX843130110030**	Price
10' 3"	1	.035	10-14	**FX845091110030**	Price
10' 5"	3/4	.035	6-10	**FX843994710050**	Price
10' 5"	1	.035	6-10	**FX844002810050**	Price
10' 5"	1	.035	10-14	**FX845091110050**	Price
10' 6"	1/2	.035	10-14	**FX843130110060**	Price
10' 6"	1	.035	6-10	**FX844002810060**	Price
10' 6"	1	.035	10-14	**FX845091110060**	Price
10' 8"	1/2	.025	10-14	**FX845079910080**	Price
10' 9"	3/4	.035	4-6	**FX845085010090**	Price
10' 9"	3/4	.035	10-14	**FX843996110090**	Price
10' 9"	3/4	.035	6-10	**FX843994710090**	Price
10' 9"	1	.035	6-10	**FX844002810090**	Price
10' 9"	1	.035	10-14	**FX845091110090**	Price
10' 10"	1/2	.025	10-14	**FX845079910100**	Price
10' 10"	1/2	.035	10-14	**FX843130110100**	Price
10' 10"	1	.035	4-6	**FX843999210100**	Price
10' 10"	1	.035	6-10	**FX844002810100**	Price
10' 10"	1	.035	10-14	**FX845091110100**	Price
10' 10-1/2"	1/2	.025	10-14	**FX845079910104**	Price
10' 10-1/2"	3/4	.035	10-14	**FX843996110104**	Price
10' 10-1/2"	3/4	.035	8-12	**FX843995410104**	Price
10' 10-1/2"	3/4	.035	6-10	**FX843994710104**	Price
10' 10-1/2"	3/4	.035	5-8	**FX845086710104**	Price
10' 10-1/2"	3/4	.035	4-6	**FX845085010104**	Price
10' 10-1/2"	1	.035	4-6	**FX843999210104**	Price
10' 10-1/2"	1	.035	6-10	**FX844002810104**	Price
10' 10-1/2"	1	.035	8-12	**FX844003510104**	Price
10' 10-1/2"	1	.035	5-8	**FX844001110104**	Price
10' 10-1/2"	1	.035	10-14	**FX845091110104**	Price
10' 11"	3/4	.035	10-14	**FX843996110110**	Price
11'	3/4	.025	10-14	**FX845079911000**	Price
11'	3/4	.035	10-14	**FX843996111000**	Price
11'	1	.035	5-8	**FX844001111000**	Price
11'	1	.035	8-12	**FX844003511000**	Price
11'	1	.035	6-10	**FX844002811000**	Price
11'	1	.035	10-14	**FX845091111000**	Price
10' 5"	1	.035	4-6	**FX843999211000**	Price
11' 1"	3/4	.035	10-14	**FX843996111010**	Price
11' 1"	3/4	.035	5-8	**FX845086711010**	Price
11' 1"	1	.035	5-8	**FX844001111010**	Price
11' 3"	1	.035	6-10	**FX844002811030**	Price
11' 3"	1	.035	4-6	**FX843999211030**	Price
11' 4"	1	.035	10-14	**FX845091111040**	Price
11' 4"	1	.035	6-10	**FX844002811040**	Price
11' 5"	3/4	.035	6-10	**FX843994711050**	Price
11' 5"	3/4	.035	10-14	**FX843996111050**	Price
11' 5"	1	.035	8-12	**FX844003511050**	Price

Snap-on INDUSTRIAL BRANDS | BAHCO

Sand Flex M42



Bandsaw Blades

- M42 High Speed Steel for durability and longer tool life
- Perfect for solids, bundles, pipes, profiles and castings
- Multi-purpose tooth shapes for a variety of applications
- Designed for production and general purpose sawing

Length	Width	Thickness	TPI	Order No.	Price
11' 6"	1/2	.035	10-14	**FX843130111060**	Price
11' 6"	3/4	.035	4-6	**FX845085011060**	Price
11' 6"	3/4	.035	8-12	**FX843995411060**	Price
11' 6"	3/4	.035	5-8	**FX845086711060**	Price
11' 6"	3/4	.035	10-14	**FX843996111060**	Price
11' 6"	3/4	.035	6-10	**FX843994711060**	Price
11' 6"	1	.035	10-14	**FX845091111060**	Price
11' 6"	1	.035	6-10	**FX844002811060**	Price
11' 6"	1	.035	4-6	**FX843999211060**	Price
11' 6"	1	.035	5-8	**FX844001111060**	Price
11' 6"	1	.035	3-4	**FX843998511060**	Price
11' 6"	1	.035	8-12	**FX844003511060**	Price
11' 6"	1-1/4	.042	4-6	**FX844006611060**	Price
11' 8"	3/4	.025	10-14	**FX845079911080**	Price
11' 8"	3/4	.035	10-14	**FX843996111080**	Price
11' 9"	1	.035	10-14	**FX845091111090**	Price
11' 10"	1	.035	5-8	**FX844001111100**	Price
11' 11"	1	.035	5-8	**FX844001111110**	Price
12'	1/2	.025	6-10	**FX843992312000**	Price
12'	1/2	.025	10-14	**FX845079912000**	Price
12'	1	.035	8-12	**FX844003512000**	Price
12'	1	.035	4-6	**FX843999212000**	Price
12'	1	.035	5-8	**FX844001112000**	Price
12'	1	.035	10-14	**FX845091112000**	Price
12'	1	.035	6-10	**FX844002812000**	Price
12'	1	.035	3-4	**FX843998512000**	Price
12'	1-1/4	.042	4-6	**FX844006612000**	Price
12' 1"	1	.035	5-8	**FX844001112010**	Price
12' 1"	1	.035	10-14	**FX845091112010**	Price
12' 1"	1	.035	6-10	**FX844002812010**	Price
12' 2"	1	.035	6-10	**FX844002812020**	Price
12' 3"	3/4	.035	6-10	**FX843994712030**	Price
12' 3"	1	.035	6-10	**FX844002812030**	Price
12' 3"	1-1/4	.042	4-6	**FX844006612030**	Price
12' 4"	1	.035	5-8	**FX844001112040**	Price
12' 5"	3/4	.035	4-6	**FX845085012050**	Price
12' 6"	1/2	.025	6-10	**FX843992312060**	Price
12' 6"	1/2	.025	10-14	**FX845079912060**	Price
12' 6"	1/2	.035	10-14	**FX843130112060**	Price
12' 6"	1/2	.025	6	**FX842945512060**	Price
12' 6"	3/4	.035	10-14	**FX843996112060**	Price
12' 6"	1	.035	6-10	**FX844002812060**	Price
12' 6"	1	.035	10-14	**FX845091112060**	Price
12' 6"	1	.035	5-8	**FX844001112060**	Price
12' 6"	1	.035	3-4	**FX843998512060**	Price
12' 6"	1	.035	4-6	**FX843999212060**	Price
12' 6"	1	.035	8-12	**FX844003512060**	Price
12' 6"	1-1/4	.042	4-6	**FX844006612060**	Price
12' 9"	1	.035	4-6	**FX843999212090**	Price
12' 10"	1/2	.025	10-14	**FX845079912100**	Price
12' 10"	3/4	.035	10-14	**FX843996112100**	Price
12' 10"	1	.035	6-10	**FX844002812100**	Price
12' 10"	1	.035	4-6	**FX843999212100**	Price
12' 10"	1	.035	5-8	**FX844001112100**	Price
13' 0"	1/2	.025	8-12	**FX843993013000**	Price
13' 2"	1	.035	10-14	**FX843996113020**	Price
13' 3"	1	.035	6-10	**FX844002813030**	Price
13' 3"	1	.035	4-6	**FX843999213030**	Price
13' 3"	1	.035	5-8	**FX844001113030**	Price
13' 4"	1	.035	4-6	**FX843999213040**	Price
13' 4"	1	.035	6-10	**FX844002813040**	Price
13' 4"	1	.035	10-14	**FX845091113040**	Price
13' 5"	1-1/4	.042	4-6	**FX844006613050**	Price
13' 5"	1-1/4	.042	10-14	**FX845079913050**	Price
13' 5"	1-1/4	.042	5-8	**FX845093513050**	Price
13' 6"	1/2	.025	10-14	**FX845079913060**	Price
13' 6"	1	.035	5-8	**FX844001113060**	Price
13' 6"	1	.035	3-4	**FX843998513060**	Price
13' 6"	1	.035	4-6	**FX843999213060**	Price
13' 6"	1	.035	6-10	**FX844002813060**	Price
13' 6"	1-1/4	.042	3-4	**FX844005913060**	Price
13' 6"	1-1/4	.042	4-6	**FX844006613060**	Price
13' 6"	1-1/4	.042	6-10	**FX845094213060**	Price
13' 11"	1	.035	4-6	**FX843999213110**	Price
13' 11"	1	.035	5-8	**FX844001113110**	Price
13' 11"	1	.035	6-10	**FX844002813110**	Price
13' 11"	1	.035	8-12	**FX844003513110**	Price
14'	1-1/4	.042	4-6	**FX844006614000**	Price
14' 3"	1	.035	4-6	**FX843999214030**	Price
14' 3"	1-1/4	.042	4-6	**FX844006614030**	Price
14' 4"	1	.035	6-10	**FX844002814040**	Price
14' 5"	1	.035	5-8	**FX844001114050**	Price
14' 6"	3/4	.035	4-6	**FX845085014060**	Price
14' 6"	3/4	.035	6-10	**FX843994714060**	Price
14' 6"	3/4	.035	10-14	**FX843996114060**	Price
14' 6"	3/4	.035	8-12	**FX843995414060**	Price
14' 6"	3/4	.035	5-8	**FX845086714060**	Price
14' 6"	1	.035	4-6	**FX843999214060**	Price
14' 6"	1	.035	6-10	**FX844002814060**	Price
14' 6"	1	.035	5-8	**FX844001114060**	Price
14' 6"	1	.035	8-12	**FX844003514060**	Price
14' 6"	1	.035	3-4	**FX843998514060**	Price
14' 6"	1	.035	10-14	**FX845091114060**	Price
14' 6"	1-1/4	.042	4-6	**FX844006614060**	Price
14' 6"	1-1/4	.042	3-4	**FX844005914060**	Price
14' 6"	1-1/4	.042	6-10	**FX845094214060**	Price
14' 6"	1-1/4	.042	5-8	**FX845093514060**	Price
14' 7"	1/2	.025	10-14	**FX845079914070**	Price
14' 8"	3/4	.035	10-14	**FX843996114080**	Price
14' 8"	3/4	.035	5-8	**FX845086714080**	Price
14' 8"	3/4	.035	4-6	**FX845085014080**	Price
14' 8"	3/4	.035	8-12	**FX843995414080**	Price
14' 8"	3/4	.035	6-10	**FX843994714080**	Price
14' 11"	3/4	.035	5-8	**FX845086714110**	Price
14' 11"	1/2	.025	6-10	**FX843992314110**	Price
14'11"	1-1/4	.042	4-6	**FX844006614110**	Price
15'	1-1/4	.042	4-6	**FX844006615000**	Price
15'	1-1/4	.042	3-4	**FX844005915000**	Price
15'	1-1/4	.042	6-10	**FX845094215000**	Price
15'	1-1/2	.050	3-4	**FX844008015000**	Price
15'	1-1/2	.050	2-3	**FX844007315000**	Price
15'	1-1/2	.050	4-6	**FX844009715000**	Price
15' 2"	1-1/4	.042	3-4	**FX844005915020**	Price
15' 4"	1-1/4	.042	3-4	**FX844005915040**	Price
15' 4"	1-1/2	.050	3-4	**FX844008015040**	Price
15' 5"	1	.035	4-6	**FX843999215050**	Price
15' 6"	1	.035	3-4	**FX843998515060**	Price
15' 6"	1	.035	4-6	**FX843999215060**	Price
15' 6"	1-1/4	.042	6-10	**FX845094215060**	Price
15' 6"	1-1/4	.042	4-6	**FX844006615060**	Price
15' 6"	1-1/4	.042	3-4	**FX844005915060**	Price
15' 8"	3/4	.035	6-10	**FX843994715080**	Price
16' 8"	3/4	.035	6-10	**FX843994716080**	Price
15' 8"	1-1/4	.042	4-6	**FX844006615080**	Price
16'	1-1/4	.042	4-6	**FX844006616000**	Price
17'	1-1/2	.050	3-4	**FX844008017000**	Price
17' 2"	1-1/2	.050	3-4	**FX844008017020**	Price
17' 5"	1-1/2	.050	3-4	**FX844008017050**	Price
17' 9"	1-1/2	.050	3-4	**FX844008017090**	Price
18' 6"	1-1/2	.050	3-4	**FX844008018060**	Price
18' 10"	1-1/2	.050	3-4	**FX844008018100**	Price
19'	1-1/2	.050	2-3	**FX844007319000**	Price
19' 2"	1-1/2	.050	2-3	**FX844007319020**	Price
22'	2	.050	2-3	**FX844623422000**	Price
22' 2"	2	.062	2-3	**FX844623422020**	Price
24' 11"	2	.062	2-3	**FX844623424110**	Price
27'	2	.062	2-3	**FX844623427000**	Price

3853 M42 Top Fabricator Blades

The unique combination of tooth design and rake angle provides very low cutting forces and longer tool life



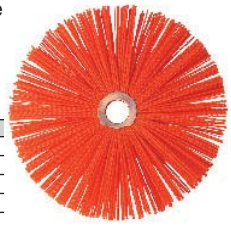
- Cuts: I-beam, H-beam, angle iron, channel, any structual steel, bundles, square and round tables
- Reduce: out of square cutting, stripped teeth, broken blades, cutting noise
- Increase: blade life

Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
9'	1	.035	5-8	**FX8420211809000**	Price
9' 10"	1	.035	5-8	**FX8420211809100**	Price
9' 11-1/2"	1	.035	5-8	**FX8420211809114**	Price
10'	1	.035	5-8	**FX8420211810000**	Price
10'	1	.035	4-6	**FX8418399810000**	Price
10' 5"	1	.035	5-8	**FX8420211810050**	Price
10' 10"	1	.035	5-8	**FX8420211810100**	Price
10' 10"	1	.035	3-4	**FX8428539510100**	Price
10' 10-1/2"	1	.035	5-8	**FX8420211810104**	Price
10' 10-1/2"	1	.035	4-6	**FX8418399810104**	Price
11'	1	.035	5-8	**FX8420211811000**	Price
11'	1	.035	4-6	**FX8418399811000**	Price
11'	1	.035	3-4	**FX8428539511000**	Price
11' 6"	1	.035	5-8	**FX8420211811060**	Price
11' 6"	1	.035	4-6	**FX8418399811060**	Price
11' 6"	1	.035	3-4	**FX8428539511060**	Price
11' 8"	1	.035	5-8	**FX8420211811080**	Price
12'	1	.035	5-8	**FX8420211812000**	Price
12'	1	.035	4-6	**FX8418399812000**	Price
12'	1	.035	3-4	**FX8428539512000**	Price
12' 1"	1	.035	4-6	**FX8418399812010**	Price
12' 3"	1	.035	5-8	**FX8420211812030**	Price
12' 3"	1	.035	3-4	**FX8428539512030**	Price
12' 4"	1	.035	5-8	**FX8420211812040**	Price
12' 5"	1	.035	5-8	**FX8420211812050**	Price
12' 6"	1	.035	5-8	**FX8420211812060**	Price
12' 6"	1	.035	4-6	**FX8418399812060**	Price
12' 6"	1	.035	3-4	**FX8428539512060**	Price
12' 10"	1	.035	5-8	**FX8420211812100**	Price
13'	1	.035	3-4	**FX8428539513000**	Price
13'	1-1/4	.042	4-6	**FX8418408713000**	Price
13' 2"	1	.035	5-8	**FX8420211813020**	Price
13' 2"	1	.035	4-6	**FX8418399813020**	Price
13' 2"	1-1/4	.042	4-6	**FX8418408713020**	Price
13' 3"	1	.035	5-8	**FX8420211813030**	Price
13' 3"	1	.035	4-6	**FX8418399813030**	Price
13' 3"	1	.035	3-4	**FX8428539513030**	Price
13' 5"	1-1/4	.042	5-8	**FX8420214913050**	Price
13' 6"	1	.035	5-8	**FX8420211813060**	Price
13' 6"	1	.035	4-6	**FX8418399813060**	Price
13' 6"	1	.035	3-4	**FX8428539513060**	Price
13' 6"	1-1/4	.042	5-8	**FX8420214913060**	Price
13' 6"	1-1/4	.042	2-3	**FX8428287513060**	Price
13' 6"	1-1/4	.042	4-6	**FX8418408713060**	Price
13' 6"	1-1/4	.042	3-4	**FX8418409413060**	Price
13' 10"	1	.035	4-6	**FX8418399813100**	Price
13' 11"	1	.035	4-6	**FX8418399813110**	Price
14'	1-1/4	.042	3-4	**FX8418409414000**	Price
14' 2"	1	.035	5-8	**FX8420211814020**	Price
14' 2"	1	.035	3-4	**FX8428539514020**	Price
14' 3"	1-1/4	.042	5-8	**FX8420214914030**	Price
14' 3"	1-1/4	.042	2-3	**FX8428287514030**	Price
14' 3"	1-1/4	.042	4-6	**FX8418408714030**	Price
14' 4"	1	.035	5-8	**FX8420211814040**	Price
14' 5"	1	.035	5-8	**FX8420211814050**	Price
14' 5"	1	.035	4-6	**FX8418399814050**	Price
14' 5"	1-1/4	.042	4-6	**FX8418408714050**	Price
14' 6"	1	.035	5-8	**FX8420211814060**	Price
14' 6"	1	.035	3-4	**FX8428539514060**	Price
14' 6"	1-1/4	.042	5-8	**FX8420214914060**	Price
14' 6"	1-1/4	.042	4-6	**FX8418408714060**	Price
14' 6"	1-1/4	.042	3-4	**FX8418409414060**	Price
14' 8"	1	.035	5-8	**FX8420211814080**	Price
14' 9"	1-1/4	.042	5-8	**FX8420214914090**	Price
14' 10"	1	.035	4-6	**FX8418399814100**	Price
14' 10"	1	.035	3-4	**FX8428539514100**	Price
14' 11"	1-1/4	.042	5-8	**FX8420214914110**	Price
14' 11"	1-1/4	.042	2-3	**FX8428287514110**	Price
14' 11"	1-1/4	.042	4-6	**FX8418408714110**	Price
15'	1	.035	5-8	**FX8420211815000**	Price
15'	1	.035	3-4	**FX8428539515000**	Price
15'	1-1/4	.042	5-8	**FX8420214915000**	Price
15'	1-1/4	.042	2-3	**FX8428287515000**	Price
15'	1-1/4	.042	4-6	**FX8418408715000**	Price
15'	1-1/4	.042	3-4	**FX8418409415000**	Price
15' 3"	1-1/4	.042	4-6	**FX8418408715030**	Price
15' 4"	1-1/4	.042	5-8	**FX8420214915040**	Price
15' 4"	1-1/4	.042	2-3	**FX8428287515040**	Price
15' 4"	1-1/4	.042	4-6	**FX8418408715040**	Price
15' 4"	1-1/4	.042	3-4	**FX8418409415040**	Price
15' 4"	1-1/4	.042	3-4	**FX8418409415050**	Price
15' 6"	1	.035	5-8	**FX8420211815060**	Price
15' 6"	1	.035	4-6	**FX8418399815060**	Price
15' 6"	1	.035	3-4	**FX8428539515060**	Price
15' 6"	1-1/4	.042	5-8	**FX8420214915060**	Price
15' 6"	1-1/4	.042	4-6	**FX8418408715060**	Price
15' 6"	1-1/4	.042	3-4	**FX8418409415060**	Price
15' 8"	1	.035	5-8	**FX8420211815080**	Price
15' 8"	1-1/4	.042	5-8	**FX8420214915080**	Price
15' 8"	1-1/4	.042	2-3	**FX8428287515080**	Price
15' 8"	1-1/4	.042	4-6	**FX8418408715080**	Price
15' 8"	1-1/4	.042	3-4	**FX8418409415080**	Price
16'	1	.035	3-4	**FX8428539516000**	Price
16'	1-1/4	.042	5-8	**FX8420214916000**	Price
16'	1-1/4	.042	4-6	**FX8418408716000**	Price
16'	1-1/4	.042	3-4	**FX8418409416000**	Price
16' 2"	1-1/4	.042	4-6	**FX8418408716020**	Price
16' 6"	1	.035	4-6	**FX8418399814060**	Price
16' 6"	1-1/4	.042	5-8	**FX8420214916050**	Price
16' 6"	1-1/4	.042	4-6	**FX8418408716060**	Price
16' 6"	1-1/4	.042	3-4	**FX8418409416060**	Price
16' 8"	1-1/4	.042	5-8	**FX8420214916080**	Price
16' 8"	1-1/4	.042	4-6	**FX8418408716080**	Price
16' 10"	1-1/4	.042	2-3	**FX8428287516100**	Price
16' 10"	1-1/4	.042	4-6	**FX8418408716100**	Price
17'	1-1/4	.042	5-8	**FX8420214917000**	Price
17'	1-1/4	.042	4-6	**FX8418408717000**	Price
17'	1-1/4	.042	3-4	**FX8418409417000**	Price
17' 2"	1-1/4	.042	3-4	**FX8418409417020**	Price
17' 4"	1-1/4	.042	3-4	**FX8418409417040**	Price
17' 5"	1-1/4	.042	4-6	**FX8418408717050**	Price
17' 6"	1-1/4	.042	5-8	**FX8420214917060**	Price
17' 6"	1-1/4	.042	4-6	**FX8418408717060**	Price
17' 6"	1-1/4	.042	3-4	**FX8418409417060**	Price
17' 10"	1	.035	4-6	**FX8418399817100**	Price
18'	1-1/4	.042	5-8	**FX8420214918000**	Price
18' 4"	1-1/4	.042	4-6	**FX8418408718040**	Price
18' 6"	1-1/4	.042	5-8	**FX8420214918060**	Price
18' 6"	1-1/4	.042	2-3	**FX8428287518060**	Price
18' 6"	1-1/4	.042	4-6	**FX8418408718060**	Price
18' 6"	1-1/4	.042	3-4	**FX8418409418060**	Price
18' 10"	1-1/4	.042	4-6	**FX8418408718100**	Price
19' 8"	1-1/4	.042	4-6	**FX8418408719080**	Price
19' 8"	1-1/4	.042	3-4	**FX8418409419080**	Price
22' 6"	1-1/4	.042	5-8	**FX8420214922060**	Price
22' 6"	1-1/4	.042	4-6	**FX8418408722060**	Price

Special Lengths & Coils Available - Call for Quote

Bandsaw Chip Brushes

- The new Milford nylon chip brush doesn't damage blade teeth and is less noisy than traditional steel brushes



Dia.	Width	Bore	Order No.	Price
3	1/2	1/2-3/8	**FX84CN3**	Price
4	1/2	1/2-3/8	**FX84CN4**	Price
6	1/2	5/8-1/2	**FX84CN6**	Price
100mm	13mm	10mm	**FX848269876**	Price

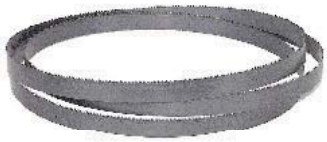
Bandsaw Blade Tensionmeter

- Proper blade tension is necessary for straight cuts and long blade life
- Bahco's tensionmeter is designed for easy, accurate measurement of the tension of all bandsaws



Order No.	Price
FX848145637	Price

M-42 Bi Metal Bandsaw Blades - Welded to Length



MADE IN THE USA

- Lasts up to 10 times longer, cuts 50% faster than standard carbon blades
- 8% cobalt alloy steel backer resists fatigue, positive rake teeth for increased penetration
- Cuts alloy steels (annealed and heat treated), tool and stainless steel, air hardened die steel
- Ideal for bundled or stacked pieces. Use on solids, shapes, tubing and structural materials

Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
7' 9"	1/2	.025	10 R	**FY6007091210**	Price
7' 9"	1/2	.025	10-14	**FY600709121014**	Price
7' 9"	1/2	.025	14 R	**FY6007091214**	Price
7' 9"	3/4	.035	10 R	**FY6007093410**	Price
7' 9"	3/4	.035	10-14	**FY6007093401014**	Price
7' 9"	3/4	.035	14 R	**FY6007093414**	Price
7' 9"	3/4	.035	4-6	**FY600709340406**	Price
7' 9"	3/4	.035	6-10	**FY600709340610**	Price
7' 9"	3/4	.035	8-12	**FY600709340812**	Price
9'	3/4	.035	10 R	**FY6009003410**	Price
9'	3/4	.035	4-6	**FY600900340406**	Price
9'	3/4	.035	6-10	**FY600900340610**	Price
9'	3/4	.035	8-12	**FY600900340812**	Price
9' 6"	3/4	.035	10 R	**FY6009063410**	Price
9' 6"	3/4	.035	10-14	**FY600906341014**	Price
9' 6"	3/4	.035	14 R	**FY6009063414**	Price
9' 6"	3/4	.035	4-6	**FY600906340406**	Price
9' 6"	3/4	.035	6-10	**FY600906340610**	Price
9' 9"	3/4	.035	4-6	**FY600909340406**	Price
9' 9"	3/4	.035	6-10	**FY600909340610**	Price
9' 9"	3/4	.035	8-12	**FY600909340812**	Price
9' 10"	1/2	.025	10-14	**FY600910121014**	Price
9' 11-1/2"	1	.035	3-4	**FY6009115100304**	Price
9' 11-1/2"	1	.035	6-10	**FY6009115100610**	Price
9' 11-1/2"	1	.035	8-12	**FY6009115100812**	Price
10'	1/2	.025	10 R	**FY6010001210**	Price
10'	1/2	.025	14 R	**FY6010001214**	Price
10'	1/2	.025	6-10	**FY601000120610**	Price
10'	3/4	.035	10 R	**FY6010003410**	Price
10'	3/4	.035	10-14	**FY601000341014**	Price
10'	3/4	.035	12 R	**FY601000340012**	Price
10'	3/4	.035	5-8	**FY601000340508**	Price
10'	3/4	.035	6-10	**FY60100034610**	Price
10'	3/4	.035	8 R	**FY6010003408**	Price
10'	3/4	.035	8-12	**FY60100034812**	Price
10'	1	.035	10-14	**FY60100011014**	Price
10'	1	.035	5-8	**FY60100010508**	Price
10'	1	.035	6-10	**FY60100010610**	Price
10'	1	.035	8-12	**FY60100010812**	Price
10' 10-1/2"	1	.035	10-14	**FY6010105101014**	Price
10' 10-1/2"	1	.035	5-8	**FY60101051058**	Price
10' 10-1/2"	1	.035	6 R	**FY60101051006**	Price
11'	3/4	.035	10 R	**FY6011003410**	Price
11'	3/4	.035	4-6	**FY601100340406**	Price
11'	1	.035	10 R	**FY6011001010**	Price
11'	1	.035	10-14	**FY601100101014**	Price
11'	1	.035	4-6	**FY60110010406**	Price
11'	1	.035	6 R	**FY6011001006**	Price
11'	1	.035	6-10	**FY60110010610**	Price
11' 1"	1	.035	10 R	**FY601101100010**	Price
11' 1"	1	.035	3-4	**FY601101100304**	Price
11' 3"	1	.035	14 R	**FY60110310014**	Price
11' 3"	1	.035	4-6	**FY601103100406**	Price
11' 3"	1	.035	6-10	**FY601103100610**	Price
11' 3"	1	.035	6 R	**FY60110310006**	Price
11' 4"	1	.035	6 R	**FY60110401006**	Price
11' 6"	1/2	.025	6-10	**FY60110612610**	Price
11' 6"	3/4	.035	10 R	**FY6011063410**	Price
11' 6"	3/4	.035	10-14	**FY601106341014**	Price
11' 6"	3/4	.035	4-6	**FY601106340406**	Price

Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
11' 6"	3/4	.035	6-10	**FY601106340610**	Price
11' 6"	3/4	.035	8 R	**FY6011063408**	Price
11' 6"	3/4	.035	8-12	**FY601106340812**	Price
11' 6"	1	.035	10 R	**FY6011061010**	Price
11' 6"	1	.035	10-14	**FY601106101014**	Price
11' 6"	1	.035	14 R	**FY6011061014**	Price
11' 6"	1	.035	4-6	**FY601106100406**	Price
11' 6"	1	.035	5-8	**FY60110610508**	Price
11' 6"	1	.035	6 R	**FY6011061006**	Price
11' 6"	1	.035	6-10	**FY60110610610**	Price
11' 6"	1	.035	8-12	**FY601106100812**	Price
11' 7"	1	.035	4-6	**FY601107100406**	Price
12'	1/2	.025	8-12	**FY601200120812**	Price
12'	3/4	.035	10 R	**FY6012003410**	Price
12'	3/4	.035	6-10	**FY601200340610**	Price
12'	3/4	.035	8 R	**FY6012003408**	Price
12'	1	.035	10 R	**FY6012001010**	Price
12'	1	.035	3-4	**FY60120010304**	Price
12'	1	.035	4-6	**FY601200100406**	Price
12'	1	.035	5-8	**FY601200100508**	Price
12'	1	.035	6-10	**FY60120010610**	Price
12' 6"	1/2	.025	6 R	**FY601206120006**	Price
12' 6"	3/4	.035	10 R	**FY6012063410**	Price
12' 6"	3/4	.035	10-14	**FY601206341014**	Price
12' 6"	3/4	.035	4-6	**FY601206340406**	Price
12' 6"	3/4	.035	6-10	**FY601206340610**	Price
12' 6"	1	.035	10 R	**FY6012061010**	Price
12' 6"	1	.035	10-14	**FY601206101014**	Price
12' 6"	1	.035	4-6	**FY601206100406**	Price
12' 6"	1	.035	5-8	**FY601206100508**	Price
12' 6"	1	.035	6 R	**FY6012061006**	Price
12' 6"	1-1/4	.042	5-8	**FY6012061140508**	Price
13'	1/2	.025	10-14	**FY601300121014**	Price
13'	1	.035	6-10	**FY60130010610**	Price
13' 2"	3/4	.035	10-14 W	**FY601302341014**	Price
13' 3"	1	.035	10-14	**FY601303101014**	Price
13' 3"	1	.035	4-6	**FY601303100406**	Price
13' 3"	1	.035	5-8	**FY601303100508**	Price
13' 3"	1	.035	6-10	**FY601303100610**	Price
13' 3"	1	.035	8-12	**FY601303100812**	Price
13' 4"	1	.035	4-6	**FY601304100406**	Price
13' 6"	3/4	.035	10 R	**FY6013063410**	Price
13' 6"	3/4	.035	6-10	**FY601306340610**	Price
13' 6"	1	.035	10 R	**FY6013061010**	Price
13' 6"	1	.035	4-6	**FY601306100406**	Price
13' 6"	1	.035	6 R	**FY6013061006**	Price
13' 6"	1	.035	6-10	**FY601306100610**	Price
13' 6"	1-1/4	.042	3-4	**FY6013061140304**	Price
14' 6"	1/2	.025	14 R	**FY601406120014**	Price
14' 6"	3/4	.035	10 R	**FY601406340010**	Price
14' 6"	3/4	.035	5-8	**FY601406340508**	Price
14' 6"	1	.035	3-4	**FY60140610034**	Price
14' 6"	1	.035	4 R	**FY6014061004**	Price
14' 6"	1	.035	4-6	**FY60140610046**	Price
14' 6"	1	.035	5-8	**FY601406100508**	Price
14' 6"	1	.035	8	**FY6014061008**	Price
14' 10"	1/2	.025	6-10	**FY601410120610**	Price
15' 8"	3/4	.035	4-6	**FY601508340406**	Price
16'	1/2	.025	8-12	**FY601600120812**	Price
16'	1-1/4	.042	5-8	**FY6016001140508**	Price

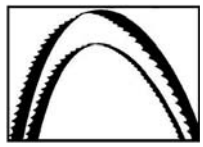
Special lengths can be supplied - Call for quote.

Matrix Bi-Metal High Speed Steel Band Saw Blades

NON-STOCK
WELDED TO LENGTH

MADE IN THE USA





To Order:
Specify — Series FY61 +
Blade Length, Width, Tooth, and Set

Pricing — Blade lengths that fall between sizes indicated, use price for longer blade
(Example: 8⌧1⌧ blade length, use 8⌧6⌧ blade price)

Tooth Selection

Width	Thickness	Raker	Variable Pitch Regular	VIP Pos.	Hook
1/4⌧	.025	10-14	10/14	-	6
3/8⌧	.025	8-10-14	10/14	-	4
1/2⌧	.025	6-10-14-18	6/10-8/12-10/14-14/18	-	3, 4
5/8⌧	.035	10-14	5/8-6/10-10/14	-	-
3/4⌧	.035	6-8-10-12-14	5/8-6/10-8/12-10/14	4/6	3
1	.035	4-6-8-10-14	3/4-4/6-5/8-6/10-8/12-10/14	3/4-4/6	3
1-1/4⌧	.042	4-6	3/4-4/6-5/8-6/10-8/12	3/4-4/6	2, 3
1-1/2⌧	.050	-	2/3-3/4-4/6-5/8	2/3-3/4-4/6	

Width Thickness Length	1/4, 3/8 & 1/2⌧ .025 Price	5/8 & 3/4⌧ .035 Price	1⌧ .035 Price	1-1/4⌧ .042 Price
5'	Price	Price	Price	Price
5'6"	Price	Price	Price	Price
6'	Price	Price	Price	Price
6'6"	Price	Price	Price	Price
7'	Price	Price	Price	Price
7'6"	Price	Price	Price	Price
8'	Price	Price	Price	Price
8'6"	Price	Price	Price	Price
9'	Price	Price	Price	Price
9'6"	Price	Price	Price	Price
10'	Price	Price	Price	Price
10'6"	Price	Price	Price	Price
11'	Price	Price	Price	Price
11'6"	Price	Price	Price	Price
12'	Price	Price	Price	Price
12'6"	Price	Price	Price	Price

Width Thickness Length	1/4, 3/8 & 1/2⌧ .025 Price	5/8 & 3/4⌧ .035 Price	1⌧ .035 Price	1-1/4⌧ .042 Price
13⌧	Price	Price	Price	Price
13⌧6⌧	Price	Price	Price	Price
14⌧	Price	Price	Price	Price
14⌧6⌧	Price	Price	Price	Price
15⌧	Price	Price	Price	Price
15⌧6⌧	Price	Price	Price	Price
16⌧	Price	Price	Price	Price
16⌧6⌧	Price	Price	Price	Price
17⌧	Price	Price	Price	Price
17⌧6⌧	Price	Price	Price	Price
18⌧	Price	Price	Price	Price
18⌧6⌧	Price	Price	Price	Price
19⌧	Price	Price	Price	Price
19⌧6⌧	Price	Price	Price	Price
20⌧	Price	Price	Price	Price
20⌧6⌧	Price	Price	Price	Price

M42 Cobalt Welded to Length Non-Stock Band Saw Blades

Tooth Selection

Width Thickness	Raker	Wavy	V/P 0 Rake	V/P Positive Rake	Hook
3/8⌧, .035	10	-	10/14	-	4
1/2⌧, .035	10, 14	-	10/14	-	3, 4, 6
3/4⌧, .035	6	-	4/6, 6/10,	4/6	2HS
-	-	-	8/12, 10/14	-	-
1⌧, .035	4, 6, 8	10	2/3, 3/4,	2/3, 3/4,	3, 4
-	-	-	4/6, 5/8	4/6, 5/7	-
-	-	-	6/10, 8/12,	-	-
-	-	-	10/14	-	-
1-1/4⌧, .042	4, 6	-	2/3, 3/4,	2/3, 3/4,	3, 4
-	-	-	4/6, 5/8	4/6, 5/7	-

To Order:
Specify — Series FY91 +
Blade Length, Width, Tooth, and Set



Advantages & Benefits:
- M42 high speed steel cutting edge provides highest heat & wear resistance
- Tooth hardness Rc67-69 prevents tooth damage
- 8% cobalt alloy steel backer for fatigue resistance
- Positive rake increases tooth penetration

Applications:
- For the toughest production cutting jobs in controlled cutting conditions
- Efficient cutting in solids with very low machinability
- NOT RECOMMENDED FOR structural materials, stacked or bundled materials or for machines with varied applications and operators
- Cuts “super⌧ alloys, tool steels, inconel, waspalloy, hastelloy, “D⌧

Width Thickness Length	3/8⌧ .035 Price	1/2⌧ .035 Price	3/4⌧ .035 Price	1⌧ .035 Price	1-1/4⌧ .042 Price
10'	Price	Price	Price	Price	Price
10'6"	Price	Price	Price	Price	Price
11'	Price	Price	Price	Price	Price
11'6"	Price	Price	Price	Price	Price
12'	Price	Price	Price	Price	Price
12'6"	Price	Price	Price	Price	Price
13'	Price	Price	Price	Price	Price
13'6"	Price	Price	Price	Price	Price
14'	Price	Price	Price	Price	Price
14'6"	Price	Price	Price	Price	Price
15'	Price	Price	Price	Price	Price

Width Thickness Length	3/8⌧ .035 Price	1/2⌧ .035 Price	3/4⌧ .035 Price	1⌧ .035 Price	1-1/4⌧ .042 Price
15'6"	Price	Price	Price	Price	Price
16'	Price	Price	Price	Price	Price
16'6"	Price	Price	Price	Price	Price
17'	Price	Price	Price	Price	Price
17'6"	Price	Price	Price	Price	Price
18'	Price	Price	Price	Price	Price
18'6"	Price	Price	Price	Price	Price
19'	Price	Price	Price	Price	Price
19'6"	Price	Price	Price	Price	Price
20'	Price	Price	Price	Price	Price
20'6"	Price	Price	Price	Price	Price

Matrix Bi Metal High Speed Steel Bandsaw Blades - 100' Coils

Width	Tooth / Set	Order No.	Price
1/2	10 R	**FX6503210R**	Price
1/2	10-14	**FX650321014R**	Price
1/2	14 R	**FX6503214R**	Price
1/2	18 R	**FX6503218R**	Price
3/4	10 R	**FX6504810R**	Price
3/4	14 R	**FX6504814R**	Price
3/4	4-6	**FX650480406R**	Price
3/4	6-10	**FX650480610R**	Price

Width	Tooth / Set	Order No.	Price
1	4-6	**FX651000406**	Price
1	5-8	**FX651000508**	Price
1	6 R	**FX6510006R**	Price
1	6-10	**FX651000610**	Price
1-1/4	3 H	**FX6512503H**	Price
1-1/4	4-6	**FX651250406**	Price
1-1/4	6 R	**FX6512506R**	Price
1-1/4	6-10	**FX651250610**	Price

250’ and 500’ Coils available — Call for quote

Carbon Hardback - Welded to Length



MADE IN THE USA

- Light to medium band saws used in toolrooms and maintenance
- Increased tensile strength for both contour and straight cutting, improves rate of cut and accuracy
- Economical cutting of low alloy, non-ferrous metals

Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
5' 4-1/2"	1/2	.025	10 R	**FY510504512010**	Price
5' 4-1/2"	1/2	.025	14 R	**FY510504512014**	Price
5' 4-1/2"	1/2	.025	14 W	**FY510504512014W**	Price
5' 4-1/2"	1/2	.025	18 W	**FY510504512018W**	Price
5' 4-1/2"	1/2	.025	24 W	**FY510504512024W**	Price
5' 4-1/2"	1/2	.025	6 R	**FY510504512006**	Price
7' 9"	1/4	.025	14 R	**FY510709140014**	Price
7' 9"	1/2	.025	10 R	**FY510709120010**	Price
7' 9"	1/2	.025	14 R	**FY510709120014**	Price
7' 9"	1/2	.025	14 W	**FY510709120014W**	Price
7' 9"	1/2	.025	18 W	**FY510709120018W**	Price
7' 9"	1/2	.025	4 S	**FY510709120004S**	Price
7' 9"	5/8	.025	10 R	**FY510709580010**	Price
7' 9"	5/8	.025	14 R	**FY510709580014**	Price
7' 9"	3/4	.032	10 R	**FY510709340010**	Price
7' 9"	3/4	.032	14 R	**FY510709340014**	Price
7' 9"	3/4	.032	18 W	**FY510709340018W**	Price
7' 9"	3/4	.032	6 R	**FY510709340006**	Price

Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
7' 9"	3/4	.032	8 R	**FY510709340008**	Price
7' 9-1/2"	1/4	.025	6 H	**FY510709514006H**	Price
7' 9-1/2"	3/8	.025	14 R	**FY510709538014**	Price
7' 9-1/2"	3/8	.025	4 S	**FY510709538004S**	Price
7' 9-1/2"	1/2	.025	14 R	**FY510709512014**	Price
10' 10-1/2"	3/4	.032	10 R	**FY511010534010**	Price
10' 10-1/2"	3/4	.032	10 W	**FY511010534010W**	Price
10' 10-1/2"	3/4	.032	14 R	**FY511010534014**	Price
10' 10-1/2"	3/4	.032	14 W	**FY511010534014W**	Price
10' 10-1/2"	3/4	.032	6 R	**FY511010534006**	Price
10' 10-1/2"	1	.035	10 R	**FY511010510010**	Price
10' 10-1/2"	1	.035	14 R	**FY511010510014**	Price
10' 10-1/2"	1	.035	8 R	**FY511010510008**	Price
11'	1	.035	10 R	**FY511100100010**	Price
11' 6"	1/2	.025	10 R	**FY511106120010**	Price
11' 6"	1/2	.025	14 R	**FY511106120014**	Price
11' 6"	1/2	.025	18 R	**FY511106120018**	Price
11' 6"	1/2	.025	8 R	**FY511106120008**	Price

Special Length Carbon Flexback and Hardback Pricing

To order: Specify Series (FY55-NS / Flexback or FY51-NS / Hardback) + Blade Length, Width, Tooth & Set Example: FY55NS + 7☒2☒L + 1/2☒ W +14T +Wavy
Off size pricing – Blade lengths that fall between sizes indicated, use price for longer blade length. Example: 7☒2☒ blade length, use 7☒6☒ blade price.)

Please Specify Material, Length, Width, Teeth per inch and tooth set when ordering (Tooth / Set does not affect pricing)

	3/16☒ & 1/4☒ .025		3/8☒ Wide .025		1/2☒ Wide .025		5/8☒ Wide .032		3/4☒ Wide .032		1☒ Wide .035	
Length	Flexback	Hardback	Flexback	Hardback	Flexback	Hardback	Flexback	Hardback	Flexback	Hardback	Flexback	Hardback
5′	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
5′6″	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
6′	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
6′6″	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
7′	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
7′6″	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
8′	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
8′6″	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
9′	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
9′6″	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
10′	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
10′6″	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
11′	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
11′6″	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
12′	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
12′6″	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
13	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
13'6"	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
14	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price
14'6"	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price	Price

Carbon Flexback 100' Coils



MADE IN THE USA

Width (in.)	Thickness	TPI	Order No.	Price
1/4	.025	10 R	**FX5001610R**	Price
1/4	.025	14 R	**FX5001614R**	Price
1/4	.025	18 R	**FX5001618R**	Price
1/4	.025	24 R	**FX5001624R**	Price
1/4	.025	32 W	**FX5001632W**	Price
1/4	.025	4 H	**FX5001604H**	Price
1/4	.025	4 S	**FX5001604S**	Price
1/4	.025	6 H	**FX5001606H**	Price
1/4	.025	6 S	**FX5001606S**	Price
1/4	.025	8 R	**FX5001608R**	Price
3/8	.025	10 R	**FX5002410R**	Price
3/8	.025	14 R	**FX5002414R**	Price
3/8	.025	18 R	**FX5002418R**	Price
3/8	.025	24 R	**FX5002424R**	Price
3/8	.025	3 H	**FX5002403H**	Price
3/8	.025	4 H	**FX5002404H**	Price
3/8	.025	4 S	**FX5002404S**	Price
3/8	.025	6 H	**FX5002406H**	Price

Width (in.)	Thickness	TPI	Order No.	Price
3/8	.025	8 R	**FX5002408R**	Price
1/2	.025	10 R	**FX5003210R**	Price
1/2	.025	14 R	**FX5003214R**	Price
1/2	.025	14 W	**FX5003214W**	Price
1/2	.025	18 R	**FX5003218R**	Price
1/2	.025	18 W	**FX5003218W**	Price
1/2	.025	24 R	**FX5003224R**	Price
1/2	.025	24 W	**FX5003224W**	Price
1/2	.025	3 H	**FX5003203H**	Price
1/2	.025	32 W	**FX5003232W**	Price
1/2	.025	4 H	**FX5003204H**	Price
1/2	.025	4 S	**FX5003204S**	Price
1/2	.025	6 H	**FX5003206H**	Price
1/2	.025	6 R	**FX5003206R**	Price
1/2	.025	8 R	**FX5003208R**	Price
5/8	.025	4 H	**FX5004004H**	Price
5/8	.032	10 R	**FX5004010R**	Price
5/8	.032	10 W	**FX5004010W**	Price

Width (in.)	Thickness	TPI	Order No.	Price
5/8	.032	14 R	**FX5004014R**	Price
5/8	.032	14 W	**FX5004014W**	Price
3/4	.032	10 R	**FX5004810R**	Price
3/4	.032	14 R	**FX5004814R**	Price
3/4	.032	14 W	**FX5004814W**	Price
3/4	.032	18 R	**FX5004818R**	Price
3/4	.032	3 H	**FX5004803H**	Price
3/4	.032	4 H	**FX5004804H**	Price
3/4	.032	6 H	**FX5004806H**	Price
3/4	.032	6 R	**FX5004806R**	Price
3/4	.032	8 R	**FX5004808R**	Price
1	.035	10 R	**FX5010010R**	Price
1	.035	14 R	**FX5010014R**	Price
1	.035	14 W	**FX5010014W**	Price
1	.035	6 R	**FX5010006R**	Price
1	.035	8 R	**FX5010008R**	Price

Other widths and tooth set in 250' and 500' coils available - Call for price.

Carbon Flexback - Welded to Length



MADE IN THE USA

- General purpose cutting of mild steel and non-ferrous metals
- Cuts wood, plastic, cork, fiberglass, graphite, aluminum, brass, bronze, cast iron, copper, lead, zinc, etc
- Fatigue resistance even at high speed — good wear resistance in select application - low cost

Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
5'	1/2	.025	10 R	**FY5005001210**	Price
5'	1/2	.025	14 R	**FY5005001214**	Price
5'	1/2	.025	18 R	**FY5005001218**	Price
5'	1/2	.025	24 R	**FY5005001224**	Price
5' 4"	1/2	.025	10 R	**FY5005041210**	Price
5' 4"	1/2	.025	14 R	**FY5005041214**	Price
5' 4"	1/2	.025	18 R	**FY5005041218**	Price
5' 4"	1/2	.025	24 R	**FY5005041224**	Price
5' 4"	1/2	.025	8 R	**FY5005041208**	Price
5' 4-1/2	3/8	.025	14 R	**FY50050453814**	Price
5' 4-1/2	1/2	.025	10 R	**FY50050451210**	Price
5' 4-1/2	1/2	.025	14 R	**FY50050451214**	Price
5' 4-1/2	1/2	.025	18 R	**FY50050451218**	Price
5' 4-1/2	1/2	.025	24 R	**FY50050451224**	Price
5' 4-1/2	1/2	.025	6 R	**FY50050451206**	Price
5' 8"	1/2	.025	10 R	**FY5005081210**	Price
6' 8"	3/8	.025	10 R	**FY500608380010**	Price
7' 5"	1/2	.025	10 R	**FY5007051210**	Price
7' 5"	1/2	.025	14 R	**FY5007051214**	Price
7' 5"	1/2	.025	18 R	**FY5007051218**	Price
7' 5"	1/2	.025	6 R	**FY5007051206**	Price
7' 8-1/2	3/8	.025	10 R	**FY500708538**	Price
7' 8-1/2	3/8	.025	14 R	**FY50070853814**	Price
7' 9"	1/4	.025	10 R	**FY5007091410**	Price
7' 9"	1/4	.025	14 R	**FY5007091414**	Price
7' 9"	1/2	.025	10 R	**FY5007091210**	Price
7' 9"	1/2	.025	14 R	**FY5007091214**	Price
7' 9"	1/2	.025	18 R	**FY5007091218**	Price
7' 9"	1/2	.025	6 R	**FY5007091206**	Price
7' 9"	3/4	.032	10 R	**FY5007093410**	Price
7' 9"	3/4	.032	14 R	**FY5007093414**	Price
7' 9"	3/4	.032	6 R	**FY5007093406**	Price
7' 9-1/2"	1/2	.025	10 R	**FY50070951210**	Price
7' 9-1/2"	1/2	.025	14 R	**FY50070951214**	Price
7' 9-1/2"	1/2	.025	18 R	**FY50070951218**	Price
7' 9-1/2"	1/2	.025	6 R	**FY50070951206**	Price
7' 10"	3/4	.032	10 R	**FY5007103410**	Price
7' 11"	1/2	.025	10 R	**FY5007111210**	Price
7' 11"	1/2	.025	14 R	**FY5007111214**	Price
7' 11"	1/2	.025	18 R	**FY5007111218**	Price
7' 11"	1/2	.025	6 R	**FY5007111206**	Price
8'	1/4	.025	10 R	**FY5008001410**	Price
8'	1/4	.025	14 R	**FY5008001414**	Price
8'	1/2	.025	10 R	**FY5008001210**	Price
8'	1/2	.025	14 R	**FY5008001214**	Price
8'	3/4	.032	10 R	**FY5008003410**	Price
8' 2"	3/4	.032	10 R	**FY5008023410**	Price
8' 2-1/2"	1/2	.025	10 R	**FY50080251210**	Price
8' 2-1/2"	1/2	.025	14 R	**FY50080251214**	Price
8' 2-1/2"	5/8	.032	10 R	**FY50080255810**	Price
8' 2-1/2"	5/8	.032	14 R	**FY50080255814**	Price
8' 2-1/2"	3/4	.032	10 R	**FY50080253410**	Price
8' 2-1/2"	3/4	.032	14 R	**FY50080253414**	Price
8' 5"	3/4	.032	10 R	**FY5008053410**	Price
8' 5"	3/4	.032	14 R	**FY5008053414**	Price
8' 10"	5/8	.032	14 R	**FY5008105814**	Price
8' 11"	5/8	.032	14 R	**FY5008115814**	Price
8' 11"	3/4	.032	10 R	**FY5008113410**	Price
8' 11"	3/4	.032	14 R	**FY5008113414**	Price
8' 11"	1	.035	10 R	**FY5008111010**	Price
8' 11"	1	.035	14 R	**FY5008111014**	Price
9'	1/2	.025	10 R	**FY5009001210**	Price
9'	1/2	.025	14 R	**FY5009001214**	Price

Length	Width (in.)	Thickness (in.)	TPI	Order No.	Price
9'	1/2	.025	18 R	**FY5009001218**	Price
9'	1/2	.025	6 R	**FY5009001206**	Price
9'	5/8	.032	8 R	**FY5009005808**	Price
9'	3/4	.032	10 R	**FY5009003410**	Price
9'	3/4	.032	14 R	**FY5009003414**	Price
9'	3/4	.032	18 R	**FY5009003418**	Price
9'	3/4	.032	6 R	**FY5009003406**	Price
9'	3/4	.032	8 R	**FY5009003408**	Price
9' 6"	1/2	.025	10 R	**FY5009061210**	Price
9' 6"	1/2	.025	14 R	**FY5009061214**	Price
9' 6"	1/2	.025	18 R	**FY5009061218**	Price
9' 6"	3/4	.032	10 R	**FY5009063410**	Price
9' 6"	3/4	.032	14 R	**FY5009063414**	Price
9' 7-1/2"	3/4	.032	14 R	**FY50090753414R**	Price
9' 7-1/2"	1	.035	10 R	**FY50090751210**	Price
9' 10"	3/8	.025	10 R	**FY5009103810**	Price
9' 10"	3/8	.025	14 R	**FY5009103814**	Price
9' 10"	1/2	.025	14 R	**FY5009101214**	Price
9' 10"	3/4	.032	10 R	**FY5009103410**	Price
9' 10"	3/4	.032	14 R	**FY5009103414**	Price
9' 11"	1	.035	14 R	**FY5009111014**	Price
9' 11-1/2	1	.035	6 R	**FY50091105106**	Price
9' 11-1/2	1	.035	10 R	**FY500911051010**	Price
10'	3/4	.032	10 R	**FY5010003410**	Price
10'	3/4	.032	18 R	**FY5010003418**	Price
10'	3/4	.032	8 R	**FY5010003408**	Price
10'	1	.035	10 R	**FY5010001010**	Price
10' 5"	3/4	.032	10 R	**FY5010053410**	Price
10' 5"	3/4	.032	14 R	**FY5010053414**	Price
10' 5"	3/4	.032	6 R	**FY5010053406**	Price
10' 5"	3/4	.032	8 R	**FY5010053408**	Price
10' 10"	3/8	.025	14 R	**FY501010380014**	Price
10' 10-1/2	3/4	.032	10 R	**FY50101053410**	Price
10' 10-1/2	3/4	.032	14 R	**FY50101053414**	Price
10' 10-1/2	3/4	.032	8 R	**FY50101053408**	Price
10' 10-1/2	1	.035	10 R	**FY501010501010**	Price
11' 5"	3/4	.032	10 R	**FY5011053410**	Price
11' 5"	3/4	.032	6 R	**FY5011053406**	Price
11' 5"	3/4	.032	8 R	**FY5011053408**	Price
11' 5"	1	.035	10 R	**FY5011051010**	Price
11' 5"	1	.035	14 R	**FY5011051014**	Price
11' 5"	1	.035	8 R	**FY5011051008**	Price
11' 6"	3/4	.032	10 R	**FY5011063410**	Price
11' 6"	3/4	.032	14 R	**FY5011063414**	Price
11' 6"	3/4	.032	6 R	**FY5011063406**	Price
11' 6"	3/4	.032	8 R	**FY5011063408**	Price
11' 6"	1	.035	10 R	**FY5011061010**	Price
11' 6"	1	.035	14 R	**FY5011061014**	Price
11' 6"	1	.035	6 R	**FY5011061006**	Price
11' 6"	1	.035	8 R	**FY5011061008**	Price
11' 10"	1/2	.025	8 R	**FY50111012008**	Price
12'	1	.035	10 R	**FY5012001010**	Price
12'	1	.035	14 R	**FY5012001014**	Price
12' 6"	1/2	.025	10 R	**FY5012061210**	Price
12' 6"	1/2	.025	14 R	**FY5012061214**	Price
12' 6"	3/4	.032	10 R	**FY5012063410**	Price
12' 6"	3/4	.032	14 R	**FY5012063414**	Price
12' 6"	1	.035	10 R	**FY5012061010**	Price
12' 6"	1	.035	14 R	**FY5012061014**	Price
13' 6"	1	.035	8 R	**FY5013061008**	Price
14' 9"	3/4	.032	6 R	**FY5014093406**	Price
19' 5"	1/2	.025	4	**FY50190505004**	Price

LENOX Big Daddy 2000G Hole Saw Kit

3/4, 7/8, 1, 1-1/8, 1-3/8, 1-1/2, 1-3/4, 2, 2-1/8, 2-1/4, 2-1/2, 2-11/16, 3, 3-1/4, 3-3/8, 3-5/8, 3-3/4, 4-1/8, 4-1/2, 4-3/4" (19, 22, 25, 29, 35, 38, 44, 51, 54, 57, 64, 68, 76, 83, 86, 92, 95, 105, 114, 121mm)
Arbors: 1L and SNAP-BACK™ 2L and 5L



Order No.	Price
FX9030804	Price

LENOX General Purpose 700G Hole Saw Kit

7/8, 1, 1-1/4, 1-3/8, 1-1/2, 1-3/4, 2-1/8" (22, 25, 32, 35, 38, 44, 54mm)
Arbors: SNAP-BACK™ 5L and 6L



Order No.	Price
FX9030807	Price

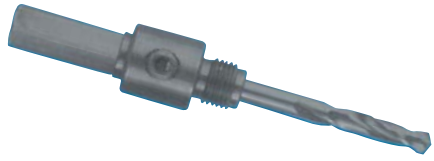
LENOX Electrician 600L Hole Saw Kit

7/8, 1-1/8, 1-3/8, 1-3/4, 2, 2-1/2" (22, 29, 35, 44, 51, 64mm)
Arbors: SNAP-BACK™ 2L and 5L



Order No.	Price
FX9030800	Price

LENOX Hole Saw Arbors



Item No.	Shank Size	Fits Chuck Size (in.)	Fits Hole Saw (in.)	Order No.	Price
1L	Hex	1/2	9/16 to 1-3/16	**FX9030001**	Price
2L	Hex	1/2	1-1/4 to 6	**FX9030002**	Price
3L	Hex	3/4	1-1/4 to 6	**FX9030003**	Price
4L	Round	1/4	9/16 to 1-3/16	**FX9030004**	Price
5L	Hex	3/8	9/16 to 1-3/16	**FX9030005**	Price
6L	Hex	3/8	1-1/4 to 6	**FX9030006**	Price
7L	Hex	3/8	1-5/8 to 6	**FX9030007**	Price

LENOX General Purpose 1200G Hole Saw Kit

5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-3/4, 2, 2-1/2, 3" (16, 19, 22, 25, 29, 32, 35, 38, 44, 51, 64, 76mm)
Arbors: 1L and SNAP-BACK™ 2L



Order No.	Price
FX9030820	Price

LENOX Hole Saw Accessories



Item No.	Type	Fits Chuck Size (in.)	Fits Arbor No.	Order No.	Price
10X	10" Hole Saw Arbor Extension	3/8 & Larger	5L, 6L, 7L	**FX9030843**	Price
12X	12" Hole Saw Arbor Extension	1/2 & Larger	1L, 2L, 3L	**FX9030847**	Price
18X	18" Hole Saw Arbor Extension	1/2 & Larger	1L, 2L, 3L	**FX9030848**	Price

LENOX Hole Saws

- Unique tooth shape evenly distributes cutting force over a wider area of the tooth
- Patented variable tooth set and height ensure that each tooth works independently, with super efficiency
- Virtually indestructible



Item No.	Hole Size (in.)	Use Arbor No.	Order No.	Price
10L	5/8	1L, 4, 5L	**FX9030010**	Price
11L	11/16	1L, 4, 5L	**FX9030011**	Price
12L	3/4	1L, 4, 5L	**FX9030012**	Price
13L	13/16	1L, 4, 5L	**FX9030013**	Price
14L	7/8	1L, 4, 5L	**FX9030014**	Price
15L	15/16	1L, 4, 5L	**FX9030015**	Price
16L	1	1L, 4, 5L	**FX9030016**	Price
17L	1-1/16	1L, 4, 5L	**FX9030017**	Price
18L	1-1/8	1L, 4, 5L	**FX9030018**	Price
19L	1-3/16	1L, 4, 5L	**FX9030019**	Price
20L	1-1/4	2L, 3L, 6L	**FX9030020**	Price
21L	1-5/16	2L, 3L, 6L	**FX9030021**	Price
22L	1-3/8	2L, 3L, 6L	**FX9030022**	Price
23L	1-7/16	2L, 3L, 6L	**FX9030023**	Price
24L	1-1/2	2L, 3L, 6L, 7L	**FX9030024**	Price
25L	1-9/16	2L, 3L, 6L, 7L	**FX9030025**	Price
26L	1-5/8	2L, 3L, 6L, 7L	**FX9030026**	Price
27L	1-11/16	2L, 3L, 6L, 7L	**FX9030027**	Price
28L	1-3/4	2L, 3L, 6L, 7L	**FX9030028**	Price
29L	1-13/16	2L, 3L, 6L, 7L	**FX9030029**	Price
30L	1-7/8	2L, 3L, 6L, 7L	**FX9030030**	Price
32L	2	2L, 3L, 6L, 7L	**FX9030032**	Price
33L	2-1/16	2L, 3L, 6L, 7L	**FX9030033**	Price
34L	2-1/8	2L, 3L, 6L, 7L	**FX9030034**	Price
36L	2-1/4	2L, 3L, 6L, 7L	**FX9030036**	Price
38L	2-3/8	2L, 3L, 6L, 7L	**FX9030038**	Price
40L	2-1/2	2L, 3L, 6L, 7L	**FX9030040**	Price
41L	2-9/16	2L, 3L, 6L, 7L	**FX9030041**	Price
42L	2-5/8	2L, 3L, 6L, 7L	**FX9030042**	Price
43L	2-11/16	2L, 3L, 6L, 7L	**FX9030043**	Price
44L	2-3/4	2L, 3L, 6L, 7L	**FX9030044**	Price
46L	2-7/8	2L, 3L, 6L, 7L	**FX9030046**	Price
48L	3	2L, 3L, 6L, 7L	**FX9030048**	Price
50L	3-1/8	2L, 3L, 6L, 7L	**FX9030050**	Price
54L	3-3/8	2L, 3L, 6L, 7L	**FX9030054**	Price
56L	3-1/2	2L, 3L, 6L, 7L	**FX9030056**	Price
58L	3-5/8	2L, 3L, 6L, 7L	**FX9030058**	Price
60L	3-3/4	2L, 3L, 6L, 7L	**FX9030060**	Price
62L	3-7/8	2L, 3L, 6L, 7L	**FX9030062**	Price
64L	4	2L, 3L, 6L, 7L	**FX9030064**	Price
66L	4-1/8	2L, 3L, 6L, 7L	**FX9030066**	Price
68L	4-1/4	2L, 3L, 6L, 7L	**FX9030068**	Price
70L	4-3/8	2L, 3L, 6L, 7L	**FX9030070**	Price
72L	4-1/2	2L, 3L, 6L, 7L	**FX9030072**	Price
74L	4-5/8	2L, 3L, 6L, 7L	**FX9030074**	Price
76L	4-3/4	2L, 3L, 6L, 7L	**FX9030076**	Price
80L	5	2L, 3L, 6L, 7L	**FX9030080**	Price
88L	5-1/2	2L, 3L, 6L, 7L	**FX9030088**	Price
96L	6	2L, 3L, 6L, 7L	**FX9030096**	Price

LENOX Plumber 600P Hole Saw Kit

3/4, 7/8, 1-1/8, 1-1/2, 1-3/4, 2-1/4”
(19, 22, 29, 38, 44, 57mm)
Arbors: SNAP-BACK™ 2L and 5L



Order No.	Price
FX9030808	Price

LENOX Refrigeration 600R Hole Saw Kit

5/8, 7/8, 1-1/8, 1-3/8, 1-5/8, 2-1/8”
(16, 22, 29, 35, 41, 54mm)
Arbors: 5L, 6L, One 56PD pilot drill



Order No.	Price
FX9030830	Price

LENOX Snap Back Arbors

- Faster and easier to engage / disengage hole saw
- Prevents threads from stripping
- Drives off pins, not threads
- No tools needed
- Prevents hole saw from locking on arbor
- No adapters required
- Arbor threads directly into all hole saws
- Easier plug removal



Item No.	Shank Size (in.)	Fits Chuck Size (in.)	Fits Hole Saw	Order No.	Price
2L	1/2 & Larger	1-1/4 - 6	20L-96L	**FX901779772**	Price
5L	3/8 & Larger	9/16 - 1-3/16	9L-19L	**FX901779669**	Price
6L	3/8 & Larger	1-1/4 - 6	20L-96L	**FX901779670**	Price

LENOX SPEED SLOT® Hole Saw Mini Kits

- Compact size allows for easy storage in tool bags and tool boxes
- Hole saw and arbor storage for commonly used hole saws and two SNAP-BACK® quick change arbors
- SNAP-BACK® quick change arbors no tools, no adapters required
- The SPEED SLOT bi-metal hole saws outperforms all competitors in wood cutting, plug removal and metal cutting applications
- Enhanced tooth geometry, a thin kerf design, and an advanced coating contribute to the efficiency of the cutting for up to 2X life in metal cutting





No. of Pieces	Set Contains	Order No.	Price
7	1-1/4, 1-3/8, 1-1/2, 2, 2-1/2" Arbors: 2L, 5L	**FX9008623**	Price
7	7/8, 1-1/8, 1-3/8, 1-1/2, 2" Arbors: 2L, 5L	**FX9008647**	Price
8	7/8, 1-1/8, 1-3/8, 1-3/4, 2, 2-1/2" Arbors: 2L, 5L	**FX9008630**	Price

Starrett 5 Pc. Electrician's Fastcut™ Hole Saw Kit



Bi-Metal

- Four Fastcut bi-metal hole saws: 3, 3-5/8, 4-1/8, 4-1/2''; A2 Arbor

Order No.	Price
FZ7069925	Price

Starrett 15 Pc. Electrician's Fastcut™ Hole Saw Kit



Bi-Metal

Eleven Fastcut bi-metal hole saws: 7/8, 1-1/8, 1-3/8, 1-3/4, 2, 2-1/2, 3, 3-5/8, 4-1/8, 4-1/2, 4-3/4''; A1, A2 Arbors; A12 Arbor adaptor; A7 Ejector spring

Order No.	Price
FZ7069938	Price

Starrett 13 Pc. Maintenance Fastcut™ Kit



Bi-Metal

Nine bi-metal hole saws: 3/4, 7/8, 1-1/8, 1-3/8, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2''; A15 12'' Extension; A3 Ultimate arbor; A3-3, A3-4 Ultimate arbor adaptors

Order No.	Price
FZ7069998	Price

Starrett 14 Pc. Carbide Tipped Maintenance Kit



Nine carbide tipped hole saws: 3/4, 7/8, 1-1/8, 1-3/8, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2'', XA1, XA2 Arbors, XA014C Carbide tipped pilot bit, A15 12'' Extension, A7 Ejector spring

Order No.	Price
FZ7069971	Price

Starrett 14 Pc General Purpose Fastcut™ Hole Saw Kit



Bi-Metal

Includes:

- Nine bi-metal hole saws: 3/4, 7/8, 1-1/8, 1-3/8, 1-1/2, 1-3/4, 2, 2-1/4, & 2-1/2''
- One each A1, A2 arbors
- A014C high speed pilot drill bit
- A12 arbor adaptor
- A7 ejector spring

Order No.	Price
FZ7001218	Price

Starrett 21 Pc Industrial Fastcut™ Hole Saw Kit



Bi-Metal

Fifteen Fastcut bi-metal hole saws: 3/4'', 7/8'', 1-1/8'', 1-3/8'', 1-1/2'', 1-3/4'', 2'', 2-1/4'', 2-1/2'', 3'', 3-1/4'', 3-5/8'', 3-3/4'', 4-1/4'', 4-1/2' ; A1, A2 , A4 Arbors; A5 12'' Extension; A12 Arbor adaptor; A7 Ejector spring

Order No.	Price
FZ7001220	Price

Starrett 27 Pc General Purpose Fastcut™ Hole Saw Kit



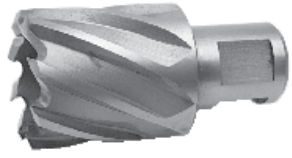
Bi-Metal

Twenty bi-metal hole saws: 3/4'', 7/8'', 1'', 1-1/8'', 1-1/4'', 1-3/8'', 1-1/2'', 1-3/4'', 2'', 2-1/8'', 2-1/4'', 2-1/2'', 2-5/8'', 3'', 3-1/4'', 3-3/8'', 3-5/8'', 3-3/4'', 4-1/8'', 4-1/4'', 4-1/2'', 4-3/4''; A1, A2 Arbors; A014C High speed pilot bits; A7 Ejector spring

Order No.	Price
FZ7001221	Price

Universal Hole Cutters

For Use With Portable Magnetic Drills Except Milwaukee Brand





Designed for fast, efficient hole making. Universal Cutters cut only that material necessary to produce a quality hole — the rest pops out as a slug

		1"		2"	
Drill Diameter (in.)	Decimal Equivalent	Order No.	Price	Order No.	Price
11/16	.6875	-	-	FZ60UC044L	Price
3/4	.7500	-	-	FZ60UC048L	Price
7/8	.8750	FZ60UC056S	Price	-	-
15/16	.9375	-	-	FZ60UC060L	Price
1	1.0000	FZ60UC100S	Price	-	-
1-3/16	1.1875	FZ60UC112S	Price	FZ60UC112L	Price
-	-	-	-	-	-
1-7/16	1.4375	FZ60UC128S	Price	FZ60UC128L	Price
-	-	-	-	FZ60UC136L	Price
1-13/16	1.8125	FZ60UC152S	Price	-	-
-	1.8750	-	-	FZ60UC156L	Price
-	-	-	-	-	-
2	2.0000	-	-	FZ60UC200L	Price
14mm	.5512	FZ60UC14MS	Price	-	-
16mm	.6299	FZ60UC16MS	Price	FZ60UC16ML	Price
18mm	.7087	FZ60UC18MS	Price	-	-
20mm	.7874	FZ60UC20MS	Price	FZ60UC20ML	Price
22mm	.8661	FZ60UC22MS	Price	FZ60UC22ML	Price
24mm	.9449	FZ60UC24MS	Price	-	-
26mm	1.0236	FZ60UC26MS	Price	-	-
30mm	1.1811	FZ60UC30MS	Price	-	-
32mm	1.2598	FZ60UC32MS	Price	-	-

Starrett® Hole Saws



- **FASTCUT™ Bi-Metal:** Ideal for stainless and mild steel sheet and tubes with wall thickness up to 1/8", Hole saw depth 1-5/8", New tooth material for enhanced heat and wear resistance
- **Carbide Tipped:** High-hardness, carbide tipped teeth with a triple chip tooth grind, for use on materials that are too hard and abrasive for regular steel hole saws. Cutting depth is 1-5/8". Saws have constant 3-pitch teeth
- **Carbide Grit:** Will cut ceramics, glass resins, asbestos and other abrasive materials that would wear out conventional saws. Tough steel body with multiple carbide grits permanently bonded to the teeth. Cuts smooth holes. Cutting depth is 1-5/8"
- **Diamond Edge:** Synthetic diamond grit bonded to steel saw provides exceptional performance on non-metallic material

	Deep Cut HSS		Fastcut Dual Pitch HSS		Fastcut HSS		Carbide Grit		Carbide Tipped		Diamond Grit		Fastcut™ Variable Pitch	
Hole Size	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
9/16	-	-	-	-	FZ7000485	Price	-	-	-	-	FZ7556704	Price	-	-
5/8	-	-	-	-	FZ7000483	Price	-	-	-	-	FZ7556705	Price	-	-
11/16	-	-	-	-	FZ7000548	Price	-	-	-	-	-	-	-	-
3/4	FZ7000427	Price	FZ7000893	Price	FZ7000482	Price	-	-	FZ7265614	Price	FZ7556707	Price	-	-
25/32	FZ7000481	Price	-	-	-	-	-	-	-	-	-	-	-	-
13/16	-	-	FZ7000939	Price	FZ7000549	Price	-	-	-	-	-	-	-	-
7/8	FZ7000428	Price	FZ7000895	Price	FZ7000484	Price	FZ7555919	Price	FZ7265615	Price	FZ7556710	Price	-	-
15/16	-	-	FZ7000940	Price	FZ7000550	Price	-	-	-	-	-	-	-	-
1	FZ7000429	Price	FZ7000897	Price	FZ7000486	Price	FZ7555920	Price	FZ7265616	Price	-	-	-	-
1-1/16	FZ7000432	Price	FZ7000900	Price	FZ7000489	Price	FZ7555921	Price	-	-	-	-	-	-
1-1/8	FZ7000433	Price	FZ7000901	Price	FZ7000490	Price	-	-	FZ7265617	Price	FZ7556714	Price	-	-
1-3/16	FZ7000435	Price	FZ7000903	Price	-	-	-	-	-	-	-	-	-	-
1-1/4	FZ7000431	Price	FZ7000899	Price	FZ7000488	Price	FZ7555922	Price	FZ7265618	Price	-	-	-	-
1-5/16	FZ7000437	Price	FZ7000905	Price	FZ7000494	Price	-	-	-	-	-	-	-	-
1-3/8	FZ7000436	Price	FZ7000904	Price	FZ7000493	Price	-	-	-	-	FZ7556718	Price	-	-
1-7/16	-	-	FZ7000907	Price	FZ7000497	Price	-	-	-	-	-	-	-	-
1-1/2	FZ7000430	Price	FZ7000898	Price	FZ7000487	Price	-	-	FZ7265620	Price	FZ7555924	Price	-	-
1-9/16	FZ7000441	Price	FZ7000909	Price	FZ7000499	Price	-	-	-	-	-	-	-	-
1-5/8	FZ7000438	Price	FZ7000906	Price	FZ7000495	Price	FZ7555925	Price	FZ7265621	Price	FZ7556722	Price	-	-
1-11/16	FZ7000475	Price	FZ7000941	Price	FZ7000551	Price	-	-	-	-	-	-	-	-
1-3/4	FZ7000434	Price	FZ7000902	Price	-	-	-	-	FZ7265622	Price	FZ7556724	Price	-	-
1-13/16	FZ7000476	Price	FZ7000942	Price	FZ7000552	Price	-	-	-	-	-	-	-	-
1-7/8	FZ7000440	Price	FZ7000908	Price	FZ7000498	Price	-	-	FZ7265623	Price	FZ7556726	Price	-	-
2	FZ7000442	Price	FZ7000910	Price	FZ7000500	Price	-	-	FZ7265624	Price	FZ7556727	Price	-	-
2-1/16	FZ7000445	Price	FZ7000913	Price	-	-	-	-	-	-	-	-	-	-
2-1/8	FZ7000446	Price	FZ7000914	Price	FZ7000506	Price	-	-	FZ7265625	Price	FZ7556729	Price	-	-
2-1/4	FZ7000444	Price	FZ7000912	Price	FZ7000504	Price	-	-	FZ7265626	Price	FZ7556730	Price	-	-
2-5/16	FZ7000449	Price	FZ7000917	Price	-	-	-	-	-	-	-	-	-	-
2-3/8	FZ7000448	Price	FZ7000916	Price	FZ7000508	Price	-	-	FZ7265627	Price	FZ7556732	Price	-	-
2-1/2	FZ7000443	Price	FZ7000911	Price	FZ7000503	Price	-	-	FZ7265628	Price	FZ7556733	Price	-	-
2-9/16	FZ7000452	Price	FZ7000920	Price	-	-	-	-	-	-	-	-	-	-
2-5/8	FZ7000450	Price	FZ7000918	Price	-	-	-	-	FZ7265629	Price	FZ7556736	Price	-	-
2-3/4	FZ7000447	Price	FZ7000915	Price	-	-	-	-	FZ7265630	Price	FZ7556737	Price	-	-
2-7/8	FZ7000451	Price	FZ7000919	Price	-	-	-	-	-	-	-			-
3	FZ7000453	Price	FZ7000921	Price	FZ7000515	Price	-	-	FZ7265631	Price	FZ7555934	Price	-	-
3-1/8	FZ7000456	Price	FZ7000924	Price	-	-	-	-	-	-	-	-	-	-
3-1/4	FZ7000455	Price	FZ7000923	Price	-	-	-	-	FZ7265632	Price	FZ7556741	Price	-	-
3-3/8	FZ7000458	Price	FZ7000926	Price	-	-	-	-	FZ7265633	Price	FZ7556742	Price	-	-
3-1/2	FZ7000454	Price	FZ7000922	Price	FZ7000517	Price	-	-	FZ7265634	Price	FZ7556743	Price	-	-
3-5/8	FZ7000459	Price	FZ7000927	Price	-	-	-	-	FZ7265635	Price	-	-	-	-
3-7/8	FZ7000460	Price	FZ7000928	Price	-	-	-	-	-	-	-	-	-	-
3-3/4	FZ7000457	Price	FZ7000925	Price	-	-	-	-	FZ7265636	Price	FZ7556745	Price	FZ7055117	Price
4	FZ7000461	Price	FZ7000929	Price	FZ7000526	Price	-	-	FZ7265637	Price	FZ7556747	Price	-	-
4-1/8	FZ7000464	Price	FZ7000932	Price	-	-	-	-	FZ7265638	Price	-	-	-	-
4-1/4	FZ7000463	Price	FZ7000931	Price	-	-	-	-	FZ7265639	Price	FZ7556749	Price	FZ7055121	Price
4-3/8	FZ7000466	Price	FZ7000934	Price	-	-	-	-	FZ7265640	Price	-	-	-	-
4-1/2	FZ7000462	Price	FZ7000930	Price	-	-	-	-	FZ7265641	Price	FZ7556751	Price	-	-
4-3/4	FZ7000465	Price	FZ7000933	Price	-	-	-	-	FZ7265642	Price	-	-	-	-
5	FZ7000467	Price	FZ7000935	Price	-	-	-	-	FZ7265643	Price	FZ7556753	Price	-	-
5-1/4	FZ7000469	Price	-	-	-	-	-	-	-	-	-	-	-	-
5-1/2	FZ7000468	Price	FZ7000936	Price	-	-	-	-	FZ7265644	Price	-	-	-	-
6	FZ7000471	Price	FZ7000937	Price	-	-	-	-	FZ7265645	Price	FZ7556755	Price	-	-
6-5/16	FZ7000477	Price	-	-	-	-	-	-	-		-	-	-	-
6-5/8	FZ7000478	Price	-	-	-	-	-	-	-	-	-	-	-	-
6-31/32	FZ7000479	Price	-	-	-	-	-	-	-	-	-	-	-	-
8-9/32	FZ7000480	Price	-	-	-	-	-	-	-	-	-	-	-	-

Bi-Metal Hole Saw Sets



With Case

- Bi-Metal blade that combines a flexible, shaft-resistant, spring steel back with high speed steel cutting edge
- Create clean, accurate holes in most machinable materials
- Knockout holes allow easy core removal
- 1-1/2” Cutting depth for all sizes
- Packed in a convenient, durable, plastic carrying case

No. of Pieces	Set Contains (in.)	Order No.	Price
7	7/8, 1, 1-1/8, 1-1/4, 1-1/2; Arbor fits 9/16 - 1-3/16, 1-1/4 - 6" Reducing Adapter	**FX848454920**	Price
9	7/8, 1-1/8, 1-3/8, 1-3/4, 2, 2-1/2; Arbor and Extension	**FX848454999**	Price
13	3/4, 7/8, 1-1/8, 1-3/8, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2; Adapter, Pilot Drill and Arbor	**FX848454937**	Price
21	3/4, 7/8, 1-1/8, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2, 3, 3-1/4, 3-5/8, 3-3/4, 4-1/8, 4-3/4; Adaptor, Pilot Drill and Arbor	**FX848454975**	Price

Starrett Hole Saw Arbors

Each arbor furnished with a 1/4” pilot drill. Quick-Hitch™ arbors permit instant change of hole saws without tools and without removing the arbor from the chuck. The no. A4 model is supplied with flats to fit a 5/8” wrench. When specifying carbide grit or diamond grit saws, specify “X” arbors with carbide tipped pilot drills



					Carbide Tipped			High Speed Steel		
Fits Hole Saw (in.)	Fits Chuck Size (in.)	Shank Size (in.)	Screw Thread (in.)	Fits Morse Taper Adapter	Starrett Model No.	Order No.	Price	Starrett Model No.	Order No.	Price
9/16 to 1-3/16	1/4	1/4 Round	1/2-20	MA05, MA06	-	-	-	A4	**FZ7055144**	Price
9/16 to 1-3/16	3/8	11/32 Hex	1/2-20	MA05, MA06	XA1	**FZ7056758**	Price	A1	**FZ7055141**	Price
1-1/4 to 6	3/8	11/32 Hex	5/8-18	MA05, MA06	XA10	**FZ7056763**	Price	A10	**FZ7056615**	Price
1-1/4 to 6	1/2	7/16 Hex	5/8-18	MA02, MA03	XA2	**FZ7056759**	Price	A2	**FZ7055142**	Price

Starrett 12" Arbor Extensions



Fits Starrett Arbor No.	Fits Chuck Size	Order No.	Price
A1, A10	3/8	**FZ7056651**	Price
A2	1/2	**FZ7055145**	Price

Starrett Arbor Pilot Drills

Four drills available, two high speed steel and two carbide tipped, to fit Starrett arbors as listed. Size 1/4” diameter



Starrett Model No.	Fits Starrett Arbor No.	Material	For Use With	Order No.	Price
KA014D-N	All arbors with through hole in hex shank	High Speed Steel	Use with regular saws	**FZ7011562**	Price
A014C	All Except A4	High Speed Steel	Use with regular saws	**FZ7056616**	Price
XA014C	All Except A4	Carbide Tipped	Use with carbide & diamond saws	**FZ7056617**	Price

Starrett Arbor Adapter & Ejector Spring

Arbor Adapter: Fits Starrett Arbors Nos. A1, A4 and A11, allowing use of saws up to 6” in size with 5/8-18 screw thread

Ejector Spring: Fits over pilot drill. Pushes core out of saw after cut





Starrett Model No.	Type	Order No.	Price
A12	Arbor Adapter	**FZ7063260**	Price
A7	Ejector Spring	**FZ7055151**	Price

Starrett 'Oops' Arbor

A new arbor used to enlarge already existing or mistakenly cut holes. Use the “Oops” Arbor with the saw for the existing hole in place of the pilot drill on the larger hole saw arbor



Fits Starrett Arbor No.	For Use With	Order No.	Price
A1 (13/16" to 1-3/16"), A2 or A10 (1-1/4" to 6")	9/16" - 5-1/2" minimum hole. Enlargement is 3/16" between pilot saw diameter & cutting saw diameter.	**FZ7066078**	Price

Starrett Hole Saw Cowl

Perfect accessory for a safe and clean worksite. Collects dust and debris generated in sawing, especially in vertical position. Compatible with complete range of Starrett hole saws, supplied with case



Order No.	Price
FV6311941	Price

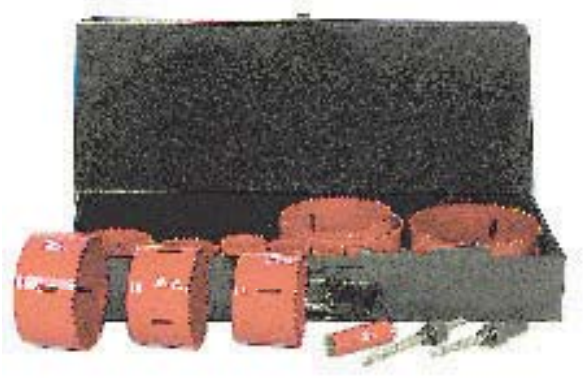
Starrett Quick Change Adapters



Fits Starrett Arbor No.	Order No.	Price
A4 (FZ70-55144), XA4 Plus all cordless smooth cut hole saws	**FZ7011939**	Price

MORSE Hole Saw Kits

- 1-15/16” Cutting Depth



Kit Type	No. of Pieces	Set Contains (in.)	Order No.	Price
Electrician's Kit	8	7/8, 1-1/8, 1-3/8, 1-3/4, 2, 2-1/2; MA34, MA45PS Arbors	**FZ50177771**	Price
Industrial Kit	19	3/4, 7/8, 1-1/8, 1-3/8, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2, 3, 3-1/4, 3-5/8, 3-3/4, 4-1/4, 4-1/2; MA24, MA34, MA45PS Arbors; ME12 Extension	**FZ50177870**	Price
Maintenance Kit	11	3/4, 7/8, 1-1/8, 1-3/8, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2, 3, 3-1/4, 3-5/8, 3-3/4, 4-1/4, 4-1/2, MA24, MA34, MA45PS Arbors	**FZ50177825**	Price
Maintenance Kit Carbide Tipped	11	3/4, 7/8, 1-1/8, 1-3/8, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2; MA34CT, MA45PCT Arbors	**FZ50157933**	Price
Master Electrician's Kit	13	7/8, 1-1/8, 1-3/8, 1-/34, 2, 2-1/2, 3, 3-5/8, 4-1/8, 4-1/2; MA24, MA34, MA45PS Arbors	**FZ50177757**	Price
Plumber's Kit	8	3/4, 7/8, 1-1/8, 1-1/2, 1-3/4, 2-1/4; MA34, MA45PS Arbors	**FZ50177795**	Price

MORSE Pilot Drills & Extension

MADE IN THE USA



Description	Order No.	Price
Pilot Drill - 1/4" Diameter Fits All Arbors	**FZ50A014D**	Price
Pilot Drill - 1/4" x 3" OAL - With 2 Weldon Flats	**FZ50A014E**	Price
Pilot Drill - 1/4" x 3" OAL - With flat (G) short flute - (F) std. flute	**FZ50A014F**	Price
Pilot Drill - 1/4" x 3" OAL - With flat (G) short flute - (F) std. flute	**FZ50A014G**	Price
12" Extension for 7/16" arbors	**FZ50ME12**	Price

MORSE Hole Saw Arbors

MADE IN THE USA

- Durable, heavy duty, carbon steel arbors come complete with pilot drills



Shank Size	Screw Thread	Fits Hole Saw	Order No.	Price
1/4 Hex	1/2-20	9/16 to 1-3/16	**FZ50139007**	Price
3/8 Hex	1/2-20	9/16 to 1-3/16	**FZ50139014**	Price
7/16 Hex	5/8-18	1-1/4 to 6	**FZ50139038**	Price

MORSE Heavy Duty Hole Saws

MADE IN THE USA

Bi-Metal High Speed Steel

- M3 Cutting edge
- 4/6 Variable pitch
- Positive rake
- 1-1/2” Cutting depth
- Cut holes in wood, plastic or any machinable metal, including: nail-embedded wood, plywood, pipe and stainless steel



Carbide Tipped

- Tungsten carbide tooth tips
- Ground and set teeth
- 1-15/16” Cutting depth
- Designed for sawing holes in abrasive materials such as fiberglass, particle board, asbestos board, cast iron and formica

	Bi-Metal		Carbide Tipped	
Hole Size (in.)	Order No.	Price	Order No.	Price
9/16	**FZ50177092**	Price	-	-
5/8	**FZ50177108**	Price	-	-
11/16	**FZ50177115**	Price	-	-
3/4	**FZ50177122**	Price	**FZ50157124**	Price
13/16	**FZ50177139**	Price	**FZ50157131**	Price
7/8	-	-	**FZ50157148**	Price
15/16	**FZ50177153**	Price	**FZ50157155**	Price
1	**FZ50177160**	Price	**FZ50157162**	Price
1-1/16	**FZ50177177**	Price	**FZ50157179**	Price
1-1/8	-	-	**FZ50157186**	Price
1-3/16	**FZ50177191**	Price	**FZ50157193**	Price
1-1/4	**FZ50177207**	Price	**FZ50157209**	Price
1-5/16	**FZ50177214**	Price	**FZ50157216**	Price
1-3/8	-	-	**FZ50157223**	Price
1-7/16	**FZ50177238**	Price	**FZ50157230**	Price
1-1/2	**FZ50177245**	Price	**FZ50157247**	Price
1-9/16	**FZ50177252**	Price	**FZ50157254**	Price
1-5/8	**FZ50177269**	Price	**FZ50157261**	Price
1-11/16	**FZ50177276**	Price	**FZ50157278**	Price
1-3/4	**FZ50177283**	Price	**FZ50157285**	Price
1-13/16	**FZ50177290**	Price	**FZ50157292**	Price
1-7/8	**FZ50177306**	Price	**FZ50157308**	Price
2	**FZ50177320**	Price	**FZ50157322**	Price
2-1/16	**FZ50177337**	Price	**FZ50157339**	Price
2-1/8	**FZ50177344**	Price	**FZ50157346**	Price
2-1/4	**FZ50177368**	Price	**FZ50157360**	Price
2-5/16	**FZ50177375**	Price	**FZ50157377**	Price
2-3/8	**FZ50177382**	Price	**FZ50157384**	Price
2-1/2	**FZ50177405**	Price	**FZ50157407**	Price
2-9/16	**FZ50177412**	Price	**FZ50157414**	Price
2-5/8	**FZ50177429**	Price	**FZ50157421**	Price
2-3/4	**FZ50177443**	Price	**FZ50157445**	Price
2-7/8	**FZ50177467**	Price	**FZ50157469**	Price
3	**FZ50177481**	Price	**FZ50157483**	Price
3-1/8	**FZ50177504**	Price	**FZ50157506**	Price
3-1/4	**FZ50177528**	Price	**FZ50157520**	Price
3-3/8	**FZ50177542**	Price	**FZ50157544**	Price
3-1/2	**FZ50177566**	Price	**FZ50157568**	Price
3-5/8	**FZ50177580**	Price	**FZ50157582**	Price
3-3/4	**FZ50177603**	Price	**FZ50157605**	Price
3-7/8	**FZ50177627**	Price	**FZ50157629**	Price
4	**FZ50177641**	Price	**FZ50157643**	Price
4-1/8	**FZ50177665**	Price	**FZ50157667**	Price
4-1/4	**FZ50177689**	Price	**FZ50157681**	Price
4-3/8	**FZ50177702**	Price	**FZ50157704**	Price
4-1/2	**FZ50177726**	Price	**FZ50157728**	Price
4-3/4	**FZ50177764**	Price	**FZ50157766**	Price
5	**FZ50177801**	Price	**FZ50157803**	Price
5-1/2	**FZ50177887**	Price	**FZ50157889**	Price
6	**FZ50177962**	Price	**FZ50157964**	Price

Hougen RotaBroach™ Hole Cutters

For Use with Portable Magnetic Drills



- Designed for fast, efficient hole making
- Universal Cutters cut only that material necessary to produce a quality hole—the rest pops out as a slug

		1		2	
Size (in.)	Decimal Equivalent	Order No.	Price	Order No.	Price
7/16	.4375	FZ8012114	Price	FZ8012214	Price
1/2	.5000	FZ8012116	Price	FZ8012216	Price
9/16	.5625	FZ8012118	Price	FZ8012218	Price
5/8	.6250	FZ8012120	Price	FZ8012220	Price
11/16	.6875	FZ8012122	Price	FZ8012222	Price
3/4	.7500	FZ8012124	Price	FZ8012224	Price
13/16	.8125	FZ8012126	Price	FZ8012226	Price
7/8	.8750	FZ8012128	Price	FZ8012228	Price
15/16	.9375	FZ8012130	Price	FZ8012230	Price
1	1.0000	FZ8012132	Price	FZ8012232	Price
1-1/16	1.0625	FZ8012134	Price	FZ8012234	Price
1-1/8	1.1250	FZ8012136	Price	FZ8012236	Price
1-3/16	1.1875	FZ8012138	Price	FZ8012238	Price
1-1/4	1.2500	FZ8012140	Price	FZ8012240	Price
1-5/16	1.3125	FZ8012142	Price	FZ8012242	Price
1-3/8	1.3750	FZ8012144	Price	FZ8012244	Price
1-7/16	1.4375	FZ8012146	Price	FZ8012246	Price
1-1/2	1.5000	FZ8012148	Price	FZ8012248	Price
1-9/16	1.5625	FZ8012150	Price	FZ8012250	Price
1-5/8	1.6250	FZ8012152	Price	FZ8012252	Price
1-11/16	1.6875	FZ8012154	Price	FZ8012254	Price
1-3/4	1.7500	FZ8012156	Price	FZ8012256	Price
1-13/16	1.8125	FZ8012158	Price	FZ8012258	Price
1-7/8	1.8750	FZ8012160	Price	FZ8012260	Price
1-15/16	1.9375	FZ8012162	Price	FZ8012262	Price
2	2.0000	FZ8012164	Price	FZ8012264	Price

Also Available in Metric

Hougen RotoCut™ Sheet Metal Hole Cutter Kit

The kit ever tool box should have!

- For materials up to 1/4" thick
- Fits 3/8" and larger drill chucks
- Kit contains: 5/16, 3/8, 7/16, 1/2, 9/16. 5/8, and 3/4" cutters, extra pilots, arbor, center punch & hex wrench



Order No.	Price
FZ8011075	Price

Hougen Copperhead™ Carbide Cutter Kit

Fractional kit contains 5 cutters, 2 pilots and hex wrenches

Drill Depth	Cutter Diameter	Order No.	Price
2	9/16, 11/16. 13/16, 15/16, 1-1/16"	FZ8018002	Price

Hougen RotaCut™ Sheet Metal Cutters "11,000—Series"

Does not include arbor



1/4" to 3/4" use arbor FZ8011088
13/16" to 1-1/2" use arbor FZ8011005

Dia. (in.)	Order No.	Price
1/4	FZ8011100	Price
5/16	FZ8011104	Price
3/8	FZ8011108	Price
13/32	FZ8011110	Price
7/16	FZ8011112	Price
1/2	FZ8011116	Price
9/16	FZ8011120	Price
5/8	FZ8011124	Price
11/16	FZ8011128	Price

Dia. (in.)	Order No.	Price
3/4	FZ8011132	Price
13/16	FZ8011136	Price
7/8	FZ8011140	Price
15/16	FZ8011144	Price
1	FZ8011148	Price
1-1/16	FZ8011152	Price
1-1/8	FZ8011156	Price
1-1/4	FZ8011164	Price
1-1/2	FZ8011168	Price

Hougen Copperhead™ Carbide Cutters

	2		3	
Cutter Dia. (in.)	Order No.	Price	Order No.	Price
9/16	FZ8018218	Price	-	-
5/8	FZ8018220	Price	-	-
11/16	FZ8018222	Price	FZ80318222	Price
3/4	FZ8018224	Price	-	-
13/16	FZ8018226	Price	FZ80318226	Price
7/8	FZ8018228	Price	FZ80318228	Price
15/16	FZ8018230	Price	FZ80318230	Price
1	FZ8018232	Price	FZ80318232	Price
1-1/16	FZ8018234	Price	FZ80318234	Price
1-1/8	FZ8018236	Price	FZ80318236	Price
1-3/16	FZ8018238	Price	FZ80318238	Price
1-1/4	FZ8018240	Price	FZ80318240	Price
1-5/16	FZ8018242	Price	FZ80318242	Price
1-3/8	FZ8018244	Price	FZ80318244	Price
1-1/2	FZ8018248	Price	FZ80318248	Price
1-5/8	FZ8018252	Price	-	-
1-3/4	FZ8018256	Price	-	-
1-7/8	FZ8018260	Price	-	-
2	FZ8018264	Price	-	-



For 2" drill depth, use pilot FZ8010530. For 3" drill depth, use pilot FZ8010535.

Hougen Pilots for RotaBroach Hole Cutters

Description	Order No.	Price
1"Length Pilot 7/16-9/16 Hougen	FZ8010531	Price
1"Length Pilot 5/8-2" Hougen	FZ8010527	Price
2"Length Pilot 7/16-9/16 Hougen	FZ8010532	Price
2" Length Pilot 5/8-2" Hougen	FZ8010528	Price

Hougen "17,000–Series" Rotaloc™ Annular Cutters

New for the FZ80HMD115

Dia. (in.)	Order No.	Price
1/2	FZ8017116	Price
9/16	FZ8017118	Price
5/8	FZ8017120	Price
11/16	FZ8017122	Price
3/4	FZ8017124	Price
13/16	FZ8017126	Price

Dia. (in.)	Order No.	Price
7/8	FZ8017128	Price
15/16	FZ8017130	Price
1	FZ8017132	Price
1-1/16	FZ8017134	Price

Use FZ8017100 pilot for HMD115 or FZ8017470 for HMD150

Hougen Model HMD904 Portable Magnetic Drill



Electrical System	Motor	Hole Cap./Dia. Depth	Cutter/Mount	Dimensions	Magnet Base	Magnet Strength 1" Plate	Magnet 3/8" Plate	Net Weight	Shipping Weight	Order No.	Price
120V, 50/60 Hz 8A, 960W	7.2A, 450 RPM	7/16 - 1-1/2" (12mm-38mm)/ 2" (50mm)	Rotabroach "12,000 Series" 3/4" Shank	16-3/8" H x 7-3/16" W x 8-1/4" L	3-1/8" W x 6-9/16" L	Dead Lift 1680 lbs/Drillpoint Breakaway 900 lbs	1124 lbs/741 lbs	27.5 lbs	38.1 lbs	**FZ80HMD904**	Price

Model HMD904S Portable Magnetic Drill—Swivel Base

Electrical System	Motor	Hole Cap./ Dia. Depth	Cutter/Mount	Dimensions	Magnet Base	Magnet Strength 1" Plate	Magnet 3/8" Plate	Net Weight	Shipping Weight	Swivel area	Order No.	Price
120V, 50/60 Hz 8A, 960W	7.2A, 450 RPM	7/16 - 1-1/2" (12mm-38mm)/ 2" (50mm)	Rotabroach "12,000 Series" 3/4" Shank	16-3/8" H x 7-3/16" W x 8-1/4" L	3-1/8" W x 6-9/16" L	Dead Lift 1240 lbs/Drillpoint Breakaway Back 700 lbs Forward 640 lbs	965 lbs/ Back 585 lbs Forward 485 lbs	30.5 lbs	41.1 lbs	1-1/8" W x 1-3/8" L	**FZ80HMD904S**	Price



Hougen Model HMD917 Portable Magnetic Drill

Electrical System	Motor	Hole Cap./Dia. Depth	Cutter/Mount	Dimensions	Magnet Base	Magnet Strength 1" Plate	Magnet 3/8" Plate	Net Weight	Order No.	Price
115V, 50/60 Hz 135.A, 1553W	12.5A, 250/450 RPM	7/16 - 2-3/8" (12mm-60mm)/3" (76mm)	Rotabroach 12,000 Series 3/4" Shank	25-13/16"H x 8-3/16"W x 12-13/16"H	3-1/2"W x 7-3/4"L (89mm x 197mm)	Dead lift 2385 lbs/Drill point breakaway 1290 lbs	1635 lbs/825 lbs	46 lbs	**FZ80HMD917**	Price

Model HMD917S Portable Magnetic Drill—Swivel Base

Electrical System	Motor	Hole Capacity/Dia. Depth	Cutter Mount	Dimensions	Swivel Area	Base	Swivel Magnet 1" Plate	Swivel Magnet 3/8" Plate	Net Weight	Order No.	Price
115V, 50/60 Hz, 13.5A, 1553W	12.5A, 250/450 ROM	7/16 - 2-3/8" (12mm-60mm)/3" (76mm)	Rotabroach 12,000 Series 3/4" Shank	25-13/16"H x 8-3/16"W x 12-13/16"H	1-1/8"W x 1-3/8"L	3-1/2"W x 7-3/4"L (89mm x 197mm)	Dead lift 2480 lbs/Drillpoint Dreakaway back 1218 lbs, Forward 1043 lbs	Dead lift 1782 lbs/Drillpoint breakaway back 1067 lbs, Forward 796 lbs	50 lbs.	**FZ80HMD917S**	Price

All drills include carrying case, pint of coolant, safety chain & hex wrenches

Hougen Model HMD927 Portable Magnetic Drill—Power Feed



Electrical System	Motor	Manual Cap./Dia. Depth	Cutter/Mount	Dimensions	Magnet Base	Magnet Strength 1" Plate	Magnet 3/8" Plate	Net Weight	Shipping Weight	Order No.	Price
115V, 50/60 Hz - 10A, 1150W - 230V, 50/60 Hz - 5A, 1150W	9A (115V), 4.5A (230V), 250/450 RPM	7/16" - 1-5/8" (12mm-41mm)	12,000 Series & Copperhead™ & Fusion™ cutters, 3/4" Shank	22-13/16"H x 7-11/16"W x 14-11/16"L 579mm x 195mm x 373mm)	3-1/8"W x 6-9/16"L (79mm x 167mm)	Dead lift 1750 lbs/Drillpoint Breakaway 995 lbs	1310 lbs/710 lbs.	43 lbs.	56 lbs.	**FZ80HMD927**	1,695.00

Hougen HMD505/HMD508



A Rugged, High Powered Drill for Fabrication and High Production Environments

- Two speed gear box - 250 & 450 RPM (HMD505) or higher speed 450 & 750 RPM (HMD508)
- Positive slug ejection
- Patented quill feed arbor for smooth cuts and minimal maintenance
- Two stage magnet engages full power when motor is turned on
- Feed handles quickly change from side to side
- Lift detector safety system
- Rear mounted controls
- Coolant bottle included
- Optional pressurized coolant system available
- With coolant bottle and carrying handle removed, drill becomes only 15" (381mm) high
- Carrying case included
- 1 Year warranty

Electrical System	Motor	Diameter/Depth	Cutter/Mount	Dimensions	Magnet Base	Magnet 1" Plate	Magnet 3/8" Plate	Weight	Order No.	Price
115V, 50/60 Hz 15A, 1725W	14A	7/16 - 2-3/8" (12-60mm)/ 3" (76mm)	Rotabroach "12,000 Series" 3/4" Shank	20" H x 4-3/4" W x 10-3/4" H	4" W x 8" L	Dead Lift 2560 lbs/Drillpoint Breakaway1080 lbs	1550 lbs/820 lbs	45 lbs	**FZ80HMD505**	Price
115V, 50/60 Hz 15A, 1725W	14A	7/16 - 2-3/8" (12-60mm)/ 3" (76mm)	Copperhead Carbide Cutters 3/4" Shank	20" H x 4-3/4" W x 10-3/4" H	4" W x 8" L	Dead Lift 2560 lbs/Drillpoint Breakaway1080 lbs	1551 lbs/820 lbs	46 lbs	**FZ80HMD508**	Price

All drills include: carrying case, pint of coolant, hex wrenches and safety chain.

MARXMAN MAINTENANCE TOOLS Bogdan™ Mag Drills

Free Ejector Pin With Every Cutter!

Because they remove metal only at the periphery of the hole being cut, Bogdan Mag-Drills require less power and thrust than conventional twist drills, effectively increasing the capacity of your existing machines. Multiple cutting edges produce higher feed rates, lower cutting resistance and better quality holes for increased productivity and longer tool life



- 3/4" Diameter shank with 2 flats at 90°
- Made from the finest Sheffield steel
- M2 High Speed Steel for most applications
- M35 Cobalt Steel for tougher applications, better finish, higher speeds and feeds and longer tool life
- CNC ground finish

	High Speed Steel				M-35 Cobalt			
	1" Cut Length		2" Cut Length		1" Cut Length		2" Cut Length	
Drill Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
7/16	**MT7782029**	Price	**MT7782056**	Price	**MT7781000**	Price	**MT7781027**	Price
1/2	**MT7782030**	Price	**MT7782057**	Price	**MT7781001**	Price	**MT7781028**	Price
9/16	**MT7782031**	Price	**MT7782058**	Price	**MT7781002**	Price	**MT7781029**	Price
5/8	**MT7782032**	Price	**MT7782059**	Price	**MT7781003**	Price	**MT7781030**	Price
11/16	**MT7782033**	Price	**MT7782060**	Price	**MT7781004**	Price	**MT7781031**	Price
3/4	**MT7782034**	Price	**MT7782061**	Price	**MT7781005**	Price	**MT7781032**	Price
13/16	**MT7782035**	Price	**MT7782062**	Price	**MT7781006**	Price	**MT7781033**	Price
7/8	**MT7782036**	Price	**MT7782063**	Price	**MT7781007**	Price	**MT7781034**	Price
15/16	**MT7782037**	Price	**MT7782064**	Price	**MT7781008**	Price	**MT7781035**	Price
1	**MT7782038**	Price	**MT7782065**	Price	**MT7781009**	Price	**MT7781036**	Price
1-1/16	**MT7782039**	Price	**MT7782066**	Price	**MT7781010**	Price	**MT7781037**	Price
1-1/8	**MT7782040**	Price	**MT7782067**	Price	**MT7781011**	Price	**MT7781038**	Price
1-3/16	**MT7782041**	Price	**MT7782068**	Price	**MT7781012**	Price	**MT7781039**	Price
1-1/4	**MT7782042**	Price	**MT7782069**	Price	**MT7781013**	Price	**MT7781040**	Price
1-5/16	**MT7782043**	Price	**MT7782070**	Price	**MT7781014**	Price	**MT7781041**	Price
1-3/8	**MT7782044**	Price	**MT7782071**	Price	**MT7781015**	Price	**MT7781042**	Price
1-7/16	**MT7782045**	Price	**MT7782072**	Price	**MT7781016**	Price	**MT7781043**	Price
1-1/2	**MT7782046**	Price	**MT7782073**	Price	**MT7781017**	Price	**MT7781044**	Price
1-9/16	**MT7782047**	Price	**MT7782074**	Price	**MT7781018**	Price	**MT7781045**	Price
1-5/8	**MT7782048**	Price	**MT7782075**	Price	**MT7781019**	Price	**MT7781046**	Price
1-11/16	**MT7782049**	Price	**MT7782076**	Price	**MT7781020**	Price	**MT7781047**	Price
1-3/4	**MT7782050**	Price	**MT7782077**	Price	**MT7781021**	Price	**MT7781048**	Price
1-13/16	**MT7782051**	Price	**MT7782078**	Price	**MT7781022**	Price	**MT7781049**	Price
1-7/8	**MT7782052**	Price	**MT7782079**	Price	**MT7781023**	Price	**MT7781050**	Price
1-15/16	**MT7782053**	Price	**MT7782080**	Price	**MT7781024**	Price	**MT7781051**	Price
2	**MT7782054**	Price	**MT7782081**	Price	**MT7781025**	Price	**MT7781052**	Price
2-1/16	**MT7782055**	Price	**MT7782082**	Price	**MT7781026**	Price	**MT7781053**	Price

Milwaukee Electromagnetic Motors



- Drills larger than 4253-1 have dual mount gear case permitting reverse mounting of drill for close quarter work
- Model #4253-1: 5/8-11 or 1/2-13 Taps not recommended
- Model #4262-1: Use of steel Hawg™ cutters requires 3/4" shank arbor Model# 49-57-0030 Theaded or 49-57-0032 Quick Change
- Model #4292-1 and #4297-1: Use of steel Hawg™ cutters requires #3 MT arbor Model # 49-57-0010 Threaded, 49-57-0012 Quick Change, or 49-57-0013 Quick Change Chipbreaker

Model No.	Amps	No Load RPM	Drill Cap. (in.)	Tap Cap. (in.)	Chuck/Taper	Order No.	Price
4253-1	6.2	600	1/2	5/8-18	Chuck	**PD5042531**	Price
4262-1	11.5	350	3/4	1-1/4	Chuck	**PD5042621**	Price
4292-1	11.5	750 - 375	1-1/4	1-1/4	3MT	**PD5042921**	Price
4297-1	11.5	500 - 250	1-1/4	1-1/4	3MT	**PD5042971**	Price



Milwaukee Heavy Duty Electromagnetic Drill Stands

Fixed Base

- Variable speed base
- 4 Combinations available
- Up to 1670 lbs drill point pressure
- 9" Drill travel
- Size: 15"H x 4-1/4"W x 11"L

Order No.	Price
PD504202	Price



Milwaukee Heavy Duty Electromagnetic Drill Stands

Adjustable Base

ISO 9002

- Variable speed base
- 4 Combinations available
- Up to 1600 lbs drill point pressure
- 11" Drill travel
- Adjustable 3/4" in direction of base length and 20° right or left
- Size: 17-1/4"H x 4-1/4"W x 11"L

Order No.	Price
PD504203	Price



Hand Tools



Cutters & Snips F22-F23, F27-F28
Files F172-F181
Gear Pullers F167-F169
Hammers F126-F133
Hand Saws F170-F171
Hex Keys F84-F90
Hex & Torx Tools F84-F96
Insert Bits & Sets F94-F110
Insulated Tools F41
Knives & Cutters F157-F164
Nut Drivers F125
Pipe & Tube Tools F154-F156
Pliers & Cutters F17-F42
Punches, Chisels & Pry Bars F134-F147
Retaining Ring Pliers F36-F39
Scissors & Shears F163-F164
Scrapers F181-F182
Scribers F141
Screw Extractors F111-F115
Screwdrivers & Sets F116-F124
Socket Tools F43-F76
Stamps & Stencils, Marking F150-F153
Staple & Glue Guns F165-F166
Tethered Tools F184-F186
Torque Wrenches F78-F83
Torx® Products F91-F96
Transfer Punches & Transfer Screws F148-F149
Tweezers F114
Wrenches F2-F16

Snap-on Industrial Brands | Williams | TEKTON | Wright Tool Perfecting Performance

Combination Wrench Sets

- Sets available in standard combination, open-end only, flare nut, jumbo, stubby, and mini
- Chrome and satin finish
- USA and globally made
- Lifetime warranty against manufacturer's defect



KP3011006



KP851937



KP50714



KP30WS1172SCA

Special Feature - Combination Wrench							
Pcs. Per Set	Pt. Size	Set Includes	Case	Made In	Brand	Order No.	Price
7	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Roll Pouch	USA	Williams	**KP30WS1170SCA**	Price
7	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Denim Tool Roll	USA	Wright Tool	**KP50707**	Price
7	12	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	Denim Tool Roll	USA	Wright Tool	**KP50705**	Price
8	12	Stubby 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4"	Fabric Pouch	Global	TEKTON	**KP85WRN01086**	Price
9	12	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Vinyl Pouch	Global	Williams	**KP3011002**	Price
11	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Vinyl Pouch	Global	Williams	**KP3011007**	Price
11	12	1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8	Vinyl Pouch	Global	Williams	**KP3011019**	Price
11	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Denim Tool Roll	USA	Wright Tool	**KP50711**	Price
11	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Vinyl Pouch	Global	Williams	**KP3011004**	Price
11	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16 & 1	Fabric Pouch	Global	Generic	**KP8310010**	Price
11	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Roll Pouch	USA	Williams	**KP30WS1171SCA**	Price
14	12	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16	Vinyl Pouch	Global	Williams	**KP3011008**	Price
14	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4	Fabric Pouch	Global	Generic	**KP8310014**	Price
14	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4	Denim Tool Roll	USA	Wright Tool	**KP50714**	Price
15	12	1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1" and Case	Store and Go Keeper	Global	TEKTON	**KP8518772**	Price
15	12	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4	Roll Pouch	USA	Williams	**KP30WS1172SCA**	Price
15	12	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4	Denim Tool Roll	USA	Wright Tool	**KP50715**	Price
16	12	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4	Vinyl Pouch	Global	Williams	**KP3011009**	Price
16	12	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4	Vinyl Pouch	Global	Williams	**KP3011006**	Price
26	12	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2	Roll Pouch	USA	Williams	**KP30WS1190SCA**	Price

Special Feature - Stubby Combination Wrench							
Pcs. Per Set	Pt. Size	Set Includes	Case	Made In	Brand	Order No.	Price
7	12	Stubby- 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Roll Pouch	Global	Williams	**KP3011030**	Price

PROTO Combination ASD Wrench Sets - Fractional & Metric

- ASD - Antislip Design
- Full polish, satin, black oxide
- Box ends designed with Torque Plus™

MADE IN THE USA



KP4213955



KP4213745



KP4213785



KP4213970



KP4213950



KP4213965



KP4213960



KP4213770



KP4213980

Type - Fractional							
No. of Pieces	Point	Finish	Case	Set Includes	Model No.	Order No.	Price
7	12	Satin	Tool Roll	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	J1200HASD	**KP4213970**	Price
7	12	Full Polish	Tool Roll	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	J1200H-T500	**KP4213785**	Price
10	12	Satin	Tool Roll	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4	J1200GASD	**KP4213965**	Price
14	12	Black Oxide	Tool Roll	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4	J1200FBASD	**KP4213980**	Price
15	12	Satin	Tool Roll	5/16, 3/8. 7/16. 1/2, 9/16, 5/8, 11/16, 3/4, 13/16. 7/8. 15/16, 1", 1-1/16, 1-1/8, 1-1/4"	J1200FASD	**KP4213960**	Price
15	12	Full Polish	Tool Roll	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4	J1200F-T500	**KP4213770**	Price
16	12	Satin	None	1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2, 2-1/16, 2-1/8, 2-3/16, 2-1/4, 2-3/8, 2-1/2	J1200F-HD	**KP4213745**	Price
26	12	Satin	None	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8,11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-/8, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2	J1200-80ASD	**KP4213955**	Price
31	12	Satin	Tool Roll, Some Loose	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2, 2-1/16, 2-1/8, 2-3/16, 2-1/4, 2-3/8, 2-1/2"	J1200-90ASD	**KP4213950**	Price

Type - Metric							
No. of Pieces	Point	Finish	Case	Set Includes	Model No.	Order No.	Price
9	12	Satin	Tool Roll	7, 8, 9, 10, 11, 12, 13, 14, 15mm	J1200H-MASD	**KP4214005**	Price
15	12	Satin	Tool Roll	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21mm	J1200F-MASD	**KP4213995**	Price
15	12	Satin	Tool Roll	7, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 29, 30, 32mm	J1200P-MASD	**KP4214000**	Price
17	12	Full Polish	Tool Roll	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24mm	J1200RM-T500	**KP4213780**	Price

TEKTON | Snap-on Industrial Brands | WILLIAMS | WRIGHT TOOL Perfecting Performance





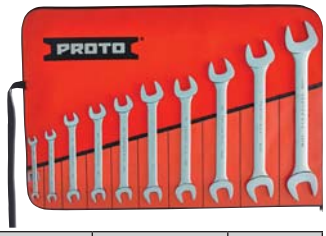
Combination Metric Wrench Sets

Lifetime warranty against manufacturer's defect

Pcs. Per Set	Pt. Size	Set Includes	Case	Made In	Brand	Order No.	Price
9	12	6, 7, 8, 9, 10, 11, 12, 13, 14mm Heat treated, Chrome Satin Finish	Vinyl Pouch	Global	Williams	**KP3011010**	Price
9	12	8, 9, 10, 11, 12, 13, 14, 15, 16mm and Case	Store and Go Keeper	Global	TEKTON	**KP8518785**	Price
10	12	7, 8, 9, 10, 11, 12, 13, 15, 17mm Heat Treated, Chrome Satin Finish	Roll Pouch	USA	Williams	**KP30MWS5A**	Price
15	12	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22mm and Roll-up Storage Pouch	Store and Go Keeper	Global	TEKTON	**KP85WRN03393**	Price
11	12	7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 19mm Heat Treated, Chrome Plated	Denim Tool Roll	USA	Wright Tool	**KP50750**	Price
11	12	6, 8, 9, 10, 11, 12, 13, 15, 17, 18, 19mm Drop-forged Steel Heat Treated Chrome Vandium and Triple Chrome Plated	Fabric Pouch	Global	Generic	**KP8310011**	Price
12	12	Stubby 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Fabric Pouch	Global	TEKTON	**KP85WRN01190**	Price
14	12	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm Heat Treated, Chrome Satin Finish	Vinyl Pouch	Global	Williams	**KP3011012**	Price
15	12	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22mm Heat Treated, Chrome Plated	Denim Tool Roll	USA	Wright Tool	**KP50752**	Price
15	12	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22mm and Case	Store and Go Keeper	Global	TEKTON	**KP8518792**	Price
18	12	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm Heat Treated, Chrome Satin Finish	Roll Pouch	USA	Williams	**KP30MWS18A**	Price
19	12	Stubby 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm	Vinyl Pouch	Global	Williams	**KP3011014**	Price

PROTO 10 Pc. Satin Open-End Wrench Set

MADE IN THE USA



- Satin finish provides corrosion resistance and a slip-resistant grip
- 15° Angle heads
- Special heat-treated alloy steel permits slim shanks for strength and durability
- Standard open-end configuration

Set Includes	Model No.	Order No.	Price
1/4x5/16, 5/16x3/8, 7/16x1/2, 1/2x9/16, 9/16x5/8, 5/8x3/4, 11/16x3/4, 13/16x7/8, 15/16x1, 1-1/16x1-1/8	J3000H	**KP4212685**	Price

PROTO 9 Pc. Short Angle Open-End Wrench Set

MADE IN THE USA

Satin Finish



- 15° and 75° angle heads
- Compact shank design and short length for access in confined spaces
- Standard open end configuration

Set Includes	Model No.	Order No.	Price
7/32, 15/64, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2	J3300A	**KP4212705**	Price

PROTO Extra Thin Open-End Wrenches

MADE IN THE USA

Satin Finish



- Satin finish provides corrosion resistance and a slip resistant grip
- Ultra-thin profile and long handle produce improved access to hard-to-reach fasteners
- Use when high leverage or distance from a hot assembly is required
- Opening is designed to cover tappets, screws and lock nuts without excessive overhang which improves access

Size (in.)	OAL (in.)	Model No.	Order No.	Price
7/16 x 1/2	10	J3425	**KP4212645**	Price
1/2 x 9/16	10	J3426	**KP4212650**	Price
9/16 x 5/8	10	J3430	**KP4212655**	Price
11/16 x 3/4	10	J3435	**KP4212660**	Price
13/16 x 7/8	10	J3440	**KP4212665**	Price

PROTO 11 Pc. Angle Open-End Wrench Set

MADE IN THE USA

Full Polish Finish • Metric



- Full polish finish provides corrosion and easy-to-clean surfaces
- 15° and 60° angle heads allow wrench to be used in four different turning angles for greater access in tight work areas

Set Includes	Model No.	Order No.	Price
9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	J3100M	**KP4212940**	Price

PROTO Ratcheting Flare-Nut Wrenches

New!

MADE IN THE USA

12 Point



- Non-reflective black oxide finish for use where non-plated products are required
- Pivoting head allows user to place the wrench over the connected pipes to reach the fastener

Size (in.)	OAL Approx. (in.)	Model No.	Order No.	Price
1/2	5-1/2	J3816	**KP4263020**	Price
11/16	7	J3822	**KP4263035**	Price
13/16	9-1/2	J3826	**KP4263045**	Price

Size (in.)	OAL Approx. (in.)	Model No.	Order No.	Price
7/8	9-1/2	J3828	**KP4263050**	Price
15/16	9-1/2	J3830	**KP4263055**	Price

Flare Nut Wrench Sets Flare Nut Wrench Sets

- Works on fittings
- Designed to prevent fastener rounding



KP30WSSCF7



KP655891010



KP3011690



KL5089100

Special Feature - Flare Nut Wrench - SAE							
Pcs. Per Set	Pt. Size	Set Includes	Case	Made In	Brand	Order No.	Price
4	6	3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 7/8	Vinyl Pouch	Global	Williams	**KP3011690**	Price
5	-	FLEX HEAD 1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 7/8	Blow Mold Tray	Global	Gearwrench	**KP6589100**	Price
5	6	3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 1, 7/8 x 1-1/8	Roll Pouch	USA	Williams	**KP30WS14**	Price

Special Feature - Flare Nut Wrench - Metric							
Pcs. Per Set	Pt. Size	Set Includes	Case	Made In	Brand	Order No.	Price
5	6	9 x 11, 10 x 12, 13 x 14, 15 x 17, 19 x 21mm	Vinyl Pouch	Global	Williams	**KP3011692**	Price
6	-	FLEX HEAD 9 x 11mm, 10 x 12mm, 13 x 14mm, 15 x 17mm, 16 x 18mm, 19 x 21mm	Blow Mold Tray	Global	Gearwrench	**KP6589101D**	Price
7	12	CROWFOOT 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2	Clips and Rail	-	Williams	**KP30WSSCF7**	Price

PROTO 1/2" & 3/8" Drive Crowfoot Wrench Sets

MADE IN THE USA



- Crowfoot wrenches are used in hard-to-reach, restricted access situations where a standard wrench or ratchet cannot reach.
- Anti-Slip Design open end (ASD).
- The arched surfaces are designed to spread the contact forces over a greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding.
- Broad size range ensures the right tool for the application will be available.
- Typically used in lower torque applications.
- Full polish finish provides corrosion resistance and easy-to-clean surfaces

New!

No. of Pcs.	Set Includes	Model No.	Order No.	Price
22	15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2, 2-1/8, 2-3/8, 2-7/16, 2-1/2 Inch.	J53000CF	**KP4218855**	Price
15	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4	J49003CF	**KP4218845**	Price
9	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8"	J49004CF	**KP4218875**	Price

PROTO 3/8" & 1/2" Drive Open-End Crowfoot Wrenches

MADE IN THE USA

- Crowfoot wrenches are used in hard to reach, restricted access situations where a standard wrench or ratchet cannot reach
- Anti-slip design open end (ASD)
- The arched surfaces are designed to spread the contact forces over a greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding
- Broad size range ensures the right tool for the application will be available.
- Typically used in lower torque applications
- Full polish finish provides corrosion resistance and easy to clean surfaces
- Locking hole feature helps keep the crowfoot wrench engaged on the extension during use reducing downtime due to detachment of crowfoot in awkward spaces
- Use with locking extensions to reach into spaces too small for a mechanic's arm or where the fastener is out of site



New!

3/8" Drive				
Size	OAL (in.)	Model No.	Order No.	Price
3/8	1-13/64	J4912CF	**KP4218100**	Price
7/16	1-3/16	J4914CF	**KP4218105**	Price
1/2	1-5/16	J4916CF	**KP4218110**	Price
9/16	1-9/32	J4918CF	**KP4218115**	Price
5/8	1-1/2	J4920CF	**KP4218120**	Price
11/16	1-31/64	J4922CF	**KP4218125**	Price
3/4	1-41/64	J4924CF	**KP4218130**	Price
13/16	1-5/8	J4926CF	**KP4218135**	Price
7/8	1-19/32	J4928CF	**KP4218140**	Price
15/16	1-5/8	J4930CF	**KP4218145**	Price
1	1-49/64	J4932CF	**KP4218150**	Price
1-1/16	2-3/16	J4934CF	**KP4218155**	Price
1-1/8	2-7/32	J4936CF	**KP4218160**	Price
1-1/4	2-5/32	J4940CF	**KP4218170**	Price
1-3/8	2-1/2	J4944CF	**KP4218180**	Price
1-7/16	2-5/8	J4946CF	**KP4217480**	Price
1-5/8	2-13/16	J4952CF	**KP4217495**	Price
1-11/16	2-15/16	J4954CF	**KP4217500**	Price
12mm	1-15/32	J4912MCF	**KP4218335**	Price

1/2" Drive				
Size (in.)	OAL (in.)	Model No.	Order No.	Price
15/16	2-13/16	J5330CF	**KP4217530**	Price
1	2-13/16	J5332CF	**KP4217535**	Price
1-1/16	2-7/8	J5334CF	**KP4217540**	Price
1-1/8	3	J5336CF	**KP4217545**	Price
1-3/16	3	J5338CF	**KP4217550**	Price
1-1/4	3-5/16	J5340CF	**KP4217555**	Price
1-5/16	3-5/16	J5342CF	**KP4217560**	Price
1-3/8	3-3/8	J5344CF	**KP4217565**	Price
1-7/16	3-3/8	J5346CF	**KP4217570**	Price
1-1/2	3-7/16	J5348CF	**KP4217575**	Price
1-9/16	3-1/2	J5350CF	**KP4217580**	Price
1-5/8	3-1/2	J5352CF	**KP4217585**	Price
1-11/16	3-13/16	J5354CF	**KP4217590**	Price
1-3/4	3-13/16	J5356CF	**KP4217595**	Price
1-13/16	3-7/8	J5358CF	**KP4217600**	Price
1-7/8	3-7/8	J5360CF	**KP4217605**	Price
2	3-15/16	J5364CF	**KP4217610**	Price
2-1/4	4-3/8	J5372CF	**KP4218270**	Price
2-3/8	4-7/16	J5376CF	**KP4218275**	Price
2-1/2	4-1/2	J5380CF	**KP4218285**	Price

TEKTON 14 Pc. 1/2" Drive Jumbo Crowfoot Wrench Set - SAE

Specifications:

- Drop forged heat treated alloy steel construction
- Corrosion-resistant chrome plated finish
- Reaches fasteners in tight spaces that standard wrenches cannot
- Use with any 1/2" drive ratchet or torque wrench



Contents:

- 14 Pc. 1/2" Dr. Crowfoot Wrenches (SAE): 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-11/16, 1-3/4, 1-13/16, 1-7/8, 2"
- Complete with snap-in storage tray

Order No.	Price
KP852585	Price

Snap-on Industrial Brands | WILLIAMS 3/8" & 1/2" Dr. Crowfoot Open End Wrench, SAE



- Designed for hard to reach fasteners
- Satin chrome finish
- Designed for quick engagement on both 6 and 12 point fasteners

Size	OAL	Order No.	Price
3/8	1-1/4	**KP3010700**	Price
7/16	1-3/8	**KP3010701**	Price
1/2	1-1/2	**KP3010702**	Price
9/16	1-3/4	**KP3010703**	Price
5/8	1-3/4	**KP3010704**	Price
11/16	2	**KP3010705**	Price
3/4	2	**KP3010706**	Price
7/8	2-1/4	**KP3010708**	Price
1	2-1/4	**KP3010710**	Price
1-1/8	2	**KP3010712**	Price
1-1/4	1-1/8	**KP3010714**	Price
1-1/2	2-1/2	**KP3010718**	Price

PROTO 3/8" Drive Crowfoot Wrenches

Flare Nut

MADE IN THE USA

- Designed for speed and safety
- Special heat-treated alloy steel helps increase strength and durability
- 12 point box end allows for fine indexing, helping to improve speed and access
- Fits 4, 6 and 12 point fasteners
- Full polish finish provides corrosion resistance and easy to clean surfaces
- Locking hole helps hold crowfoot in place during use
- Use with a locking extension to help prevent tool loss in awkward locations

New!



Size (in.)	Model No.	Order No.	Price
15/16	J4930FL	**KP4217240**	Price
1	J4932FL	**KP4217200**	Price

Combination Wrenches – Fractional 12 Point

Snap-On Williams Features:

- Satin finish provides corrosion resistance and a slip resistant grip
- 12 point box end allows for fine indexing, helping to improve speed and access
- Anti-slip design (ASD) open end
- Fractional sizes 11/32” and smaller and sizes 1-5/16” and larger do not have the ASD feature
- Box ends incorporate the TorquePlus™ system

Snap-On Williams Features:

- SUPERCOMBO® open end has specially designed grooves that direct wrench force away from fastener corners
- SUPERTORQUE® box opening design allows application of higher torque without rounding or deforming hex fastener points. No contact is made at the corners. Instead, wrenching forces are placed on the flat surfaces behind the points
- Meets or exceeds aerospace specification AS 954 for 12 point fasteners.
- May be used on all common hex (6 point) fasteners with considerable advantage over conventional boxend wrenches to increase both hand tool flexibility and economy

- **Snap-On Williams Globally** Snap-on Williams Global products meet or exceed ANSI specifications, and are sourced globally



Snap-On Williams



Wright Tool

PROTO MADE IN THE USA | WORLD CLASS QUALITY Snap-on INDUSTRIAL BRANDS WILLIAMS MADE IN THE USA | WRIGHT TOOL MADE IN THE USA

	USA			Global			USA			USA		
	Satin			Chrome Satin			Chrome Satin			Chrome Plated		
Size (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
1/4	4-7/8	**KP4214455**	Price	5-1/8	**KP3011108**	Price	4-1/4	**KP301208SC**	Price	4-59/64	**KP501108**	Price
5/16	5-3/8	**KP4214460**	Price	5-13/16	**KP3011110**	Price	5-3/4	**KP301210SC**	Price	5-1/2	**KP501110**	Price
3/8	6	**KP4214370**	Price	6-1/2	**KP3011112**	Price	6-1/2	**KP301212SC**	Price	6	**KP501112**	Price
7/16	7	**KP4214375**	Price	7-5/16	**KP3011114**	Price	7-1/4	**KP301214SC**	Price	6-1/2	**KP501114**	Price
1/2	8	**KP4214380**	Price	8-1/8	**KP3011116**	Price	8	**KP301216SC**	Price	7-3/16	**KP501116**	Price
9/16	8-7/8	**KP4214385**	Pice	8-3/4	**KP3011118**	Price	8-3/4	**KP301218SC**	Pice	7-31/32	**KP501118**	Pice
5/8	9-1/2	**KP4214390**	Price	9-1/2	**KP3011120**	Price	9-1/2	**KP301220SC**	Price	8-3/8	**KP501120**	Price
11/16	10-1/4	**KP4214395**	Price	10-1/4	**KP3011122**	Price	10-1/4	**KP301222SC**	Price	9-11/64	**KP501122**	Price
3/4	11	**KP4214400**	Price	11	**KP3011124**	Price	11	**KP301224SC**	Price	10-3/64	**KP501124**	Price
13/16	11-7/8	**KP4214405**	Price	11-13/16	**KP3011126**	Price	11-3/4	**KP301226SC**	Price	10-7/8	**KP501126**	Price
7/8	12-1/2	**KP4214410**	Price	12-1/2	**KP3011128**	Price	12-1/2	**KP301228SC**	Price	11-3/4	**KP501128**	Price
15/16	13-1/4	**KP4214415**	Price	13-1/4	**KP3011130**	Price	13-1/4	**KP301230SC**	Price	12-9/16	**KP501130**	Price
1	14	**KP4214420**	Price	13-15/16	**KP3011132**	Price	14	**KP301232SC**	Price	13-3/8	**KP501132**	Price
1-1/16	15-1/4	**KP4214425**	Price	14-1/4	**KP3011134**	Price	14-3/4	**KP301234SC**	Price	14-15/16	**KP501134**	Price
1-1/8	15-7/8	**KP4214430**	Price	15-1/2	**KP3011136**	Price	15-1/2	**KP301236SC**	Price	15-3/16	**KP501136**	Price
1-1/4	16-7/8	**KP4214435**	Price	17-1/8	**KP3011140**	Price	17	**KP301240SC**	Price	16-3/4	**KP501140**	Price
1-5/16	17-5/8	**KP4213625**	Price	-	**-**	-	17-3/4	**KP301242**	Price	19	**KP501142**	Price
1-3/8	18-1/2	**KP4213630**	Price	-	**-**	-	18-1/2	**KP301244**	Price	20	**KP501144**	Price
1-7/16	19-3/8	**KP4213635**	Price	-	**-**	-	19-1/4	**KP301246**	Price	21	**KP501146**	Price
1-1/2	20-1/4	**KP4213645**	Price	-	**-**	-	20	**KP301248**	Price	22	**KP501148**	Price
1-5/8	23	**KP4213655**	Price	-	**-**	-	21-1/2	**KP301180**	Price	23	**KP501152**	Price
1-11/16	23	**KP4213660**	Price	-	**-**	-	22-5/16	**KP301182**	Price	23	**KP501154**	Price
1-3/4	25	**KP4213665**	Price	-	**-**	-	22-7/8	**KP301184**	Price	25	**KP501156**	Price
1-13/16	25	**KP4213670**	Price	-	**-**	-	23-1/2	**KP301186**	Price	25	**KP501158**	Price
1-7/8	28	**KP4213675**	Price	-	**-**	-	24	**KP301188**	Price	28	**KP501160**	Price
2	28	**KP4213680**	Price	-	**-**	-	25-1/8	**KP301190**	Price	28	**KP501164**	Price
2-1/16	29-1/2	**KP4213685**	Price	-	**-**	-	25-13/16	**KP301191**	Price	28-1/4	**KP501166**	Price
2-1/8	29-1/2	**KP4213690**	Price	-	**-**	-	26-3/8	**KP301192**	Price	28-1/2	**KP501168**	Price
2-3/16	29-1/2	**KP4213695**	Price	-	**-**	-	27	**KP301193**	Price	28-3/4	**KP501170**	Price
2-1/4	29-1/2	**KP4213730**	Price	-	**-**	-	27-9/16	**KP301194**	Price	29	**KP501172**	Price
2-3/8	31-1/2	**KP4213735**	Price	-	**-**	-	28-3/4	**KP301195**	Price	29-1/4	**KP501176**	Price
11/32	5-5/8	**KP4218800**	Price	-	**-**	-	-	**-**	-	-	**-**	-
1-3/16	15-7/8	**KP4214800**	Price	-	**-**	-	-	**-**	-	-	**-**	-
2-1/2	31-1/2	**KP4213740**	Price	-	**-**	-	-	**-**	-	-	**-**	-

PROTO Combination Wrenches Fractional - 6 Point

MADE IN THE USA



Satin Finish

- Satin finish provides corrosion resistance and a slip resistant grip
- 6 Point box end allows for large wrench to fastener contact area which helps prevent rounding of the fastener
- Fractional sizes 11/32" and smaller and sizes 1-5/16" and larger do not have the ASD feature
- Box ends incorporate the TorquePlus™ system

Size (in.)	OAL (in.)	Model No.	Order No.	Price
5/16	5-3/8	J1210HA	**KP4214760**	Price
3/8	6	J1212HASD	**KP4214120**	Price
7/16	7	J1214HASD	**KP4214125**	Price
1/2	8	J1216HASD	**KP4214130**	Price
9/16	8-7/8	J1218HASD	**KP4214135**	Price
5/8	9-1/2	J1220HASD	**KP4214140**	Price
3/4	11	J1224HASD	**KP4214150**	Price
7/8	12-1/2	J1228HASD	**KP4214160**	Price
15/16	13-1/4	J1230HASD	**KP4214165**	Price
1	14	J1232HASD	**KP4214170**	Price

Combination Wrenches-Metric 12 Point

Snap-On Williams Features:

- **SUPERTORQUE®** box opening design allows application of higher torque without rounding or deforming hex fastener points. No contact is made at the corners. Instead, wrenching forces are placed on the flat surfaces behind the points
- Chrome satin finish



Wright Tool Features:

- Wright wrenches feel as good as they look. And they have a reserve of strength for tough jobs
- They feature the patented Wright Drive™, which provides more torque with less fastener damage, distributing stress evenly over a larger contact area and away from the fastener corners
- Chrome satin finish

	Wright Tool			-		
Size	OAL	Order No.	Price	OAL	Order No.	Price
7mm	132.26mm	**KP501107MM**	Price	140mm	**KP3011507**	Price
8mm	139.37mm	**KP501108MM**	Price	140mm	**KP3011508**	Price
9mm	147.40mm	**KP501109MM**	Price	165mm	**KP3011509**	Price
10mm	155.85mm	**KP501110MM**	Price	171mm	**KP3011510**	Price
11mm	165.13mm	**KP501111MM**	Price	189mm	**KP3011511**	Price
12mm	173.86mm	**KP501112MM**	Price	197mm	**KP3011512**	Price
13mm	182.58mm	**KP501113MM**	Price	206mm	**KP3011513**	Price
14mm	202.39mm	**KP501114MM**	Price	222mm	**KP3011514**	Price
15mm	209.25mm	**KP501115MM**	Price	233mm	**KP3011515**	Price
16mm	217.81mm	**KP501116MM**	Price	241mm	**KP3011516**	Price
17mm	232.77mm	**KP501117MM**	Price	260mm	**KP3011517**	Price
18mm	243.33mm	**KP501118MM**	Price	271mm	**KP3011518**	Price
19mm	255.24mm	**KP501119MM**	Price	279mm	**KP3011519**	Price
20mm	275.13mm	**KP501120MM**	Price	289mm	**KP3011520**	Price
21mm	286.97mm	**KP501121MM**	Price	300mm	**KP3011521**	Price
22mm	298.09mm	**KP501122MM**	Price	318mm	**KP3011522**	Price
23mm	308.81mm	**KP501123MM**	Price	318mm	**KP3011523**	Price
24mm	319.13mm	**KP501124MM**	Price	338mm	**KP3011524**	Price
25mm	339.75mm	**KP501125MM**	Price	354mm	**KP3011525**	Price
26mm	351.66mm	**KP501126MM**	Price	354mm	**KP3011526**	Price
27mm	363.58mm	**KP501127MM**	Price	368mm	**KP3011527**	Price
29mm	-	-	-	394mm	**KP3011529**	Price
30mm	406.40mm	**KP501130MM**	Price	394mm	**KP3011530**	Price
32mm	425.45mm	**KP501132MM**	Price	435mm	**KP3011532**	Price
36mm	520.70mm	**KP501136MM†**	Price	-	-	-
41mm	584.20mm	**KP501141MM†**	Price	-	-	-
46mm	635.00mm	**KP501146MM†**	Price	-	-	-
50mm	711.20mm	**KP501150MM†**	Price	-	-	-

†36mm-50mm Round stem • Forged steel
Snap-On Williams made globally

PROTO Combination Wrenches Fractional - 12 Point

MADE IN THE USA



Black Oxide Finish

- Non-reflective black oxide finish
- 12 point box
- The box end is countersunk for easy application to the fastener
- 15° angled offset box end helps keep shank clear of obstructions
- Anti-slip design (ASD) open end
- Sizes 1-5/16" and larger do not have ASD feature
- Box ends incorporate the TorquePlus™ system

Size (in.)	OAL (in.)	Model No.	Order No.	Price
3/8	6	J1212BASD	**KP4214225**	Price
7/16	7	J1214BASD	**KP4214230**	Price
1/2	7-7/8	J1216BASD	**KP4214235**	Price
9/16	8-7/8	J1218BASD	**KP4214240**	Price
5/8	9-1/2	J1220BASD	**KP4214245**	Price
11/16	10-1/4	J1222BASD	**KP4214250**	Price
3/4	11	J1224BASD	**KP4214255**	Price
13/16	11-7/8	J1226BASD	**KP4214260**	Price
7/8	12-1/2	J1228BASD	**KP4214265**	Price
15/16	13-1/4	J1230BASD	**KP4214270**	Price
1	14	J1232BASD	**KP4214275**	Price
1-1/16	15-1/4	J1234BASD	**KP4214280**	Price
1-1/8	15-7/8	J1236BASD	**KP4214285**	Price
1-1/4	16-7/8	J1240BASD	**KP4214290**	Price

PROTO Combination Wrenches Metric - 12 Point

MADE IN THE USA



Satin Finish

- Satin finish
- 12 Point box end
- Anti-slip design (ASD) open end
- Metric sizes 9mm and smaller and sizes 36mm and larger do not have the ASD feature

Size	OAL (in.)	Model No.	Order No.	Price
6mm	4-29/32	J1206MA	**KP4217615**	Price
7mm	5-5/32	J1207MA	**KP4214465**	Price
8mm	5-13/32	J1208MA	**KP4214470**	Price
9mm	5-21/32	J1209MA	**KP4214475**	Price
10mm	5-29/32	J1210MASD	**KP4214440**	Price
11mm	6-29/32	J1211MASD	**KP4214445**	Price
12mm	7-45/64	J1212MASD	**KP4214450**	Price
13mm	7-29/32	J1213MASD	**KP4214025**	Price
14mm	8-13/16	J1214MASD	**KP4214030**	Price
15mm	9-5/32	J1215MASD	**KP4214035**	Price
16mm	9-35/64	J1216MASD	**KP4214040**	Price
17mm	10-9/32	J1217MASD	**KP4214045**	Price
18mm	10-11/16	J1218MASD	**KP4214050**	Price
19mm	11-1/32	J1219MASD	**KP4214055**	Price
20mm	11-27/64	J1220MASD	**KP4214060**	Price
21mm	11-13/16	J1221MASD	**KP4214065**	Price
22mm	12-17/32	J1222MASD	**KP4214070**	Price
23mm	12-59/64	J1223MASD	**KP4214075**	Price
24mm	13-5/16	J1224MASD	**KP4214080**	Price
25mm	14-1/16	J1225MASD	**KP4214085**	Price

PROTO Reversible Combo Ratcheting Wrenches - 12 Point



Full Polish Finish

New!

- 12 Point box end
- Fits 4, 6 and 12 point fasteners
- The wrench self aligns with the fastener
- Full polish finish provides corrosion resistance
- The box end is countersunk for easy application to the fastener
- Anti-slip design (ASD) open end
- Box end incorporates the TorquePlus™ system
- 72 Tooth ratcheting mechanism rotates 5 degrees of swing

Size (in.)	OAL (in.)	Model No.	Order No.	Price
7/32	5	JSCV07T	**KP4215785**	Price
5/16	5-1/2	JSCV10T	**KP4215800**	Price
3/8	6-1/4	JSCV12T	**KP4215810**	Price
7/16	6-1/2	JSCV14T	**KP4215815**	Price
1/2	7	JSCV16T	**KP4215820**	Price
9/16	7-1/2	JSCV18T	**KP4215825**	Price
5/8	8-3/16	JSCV20T	**KP4215830**	Price
11/16	8-7/8	JSCV22T	**KP4215835**	Price
3/4	9-3/4	JSCV24T	**KP4215840**	Price
7/8	11-7/16	JSCV28T	**KP4215850**	Price
15/16	12-3/4	JSCV30T	**KP4215855**	Price
1-1/16	14-1/8	JSCV34T	**KP4215865**	Price
1-1/8	15-7/8	JSCV36T	**KP4215870**	Price
1-1/4	16-3/4	JSCV40T	**KP4215875**	Price

Ratcheting Box Wrench Set

- Straight and offset
- Fractional and metric
- 6 and 12 point
- Heat treated
- Chrome plated
- Thin narrow jaw for access to limited space
- Ratcheting allows for turning without removal of wrench



KP30WS5

Size - Fractional								
Pcs. Per Set	Made In	Pt. Size	Special Feature	Set Includes	Case	Brand	Order No.	Price
4	Global	6	Long 15° -Flex Head Ratcheting	5/16 x 3/8, 7/16 x 1/2, 9/16 x 5/8, 11/16 x 3/4	Store and Go Keeper	TEKTON	**KP85WRN77062**	Price
4	Global	6	Long 15° -Flex Head Ratcheting	5/16 x 3/8, 7/16 x 1/2, 9/16 x 5/8, 11/16 x 3/4	Store and Go Keeper	TEKTON	**KP85WRN76062**	Price
5	USA	12	25 ° Offset Reverse Lever	1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 7/8 Heat treated, Chrome box end OFFSET by 25°. Heat Treated, Chrome Plated	Vinyl Tool Pouch	Williams	**KP30WS5**	Price
5	USA	12	25° Reversible Offset	1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 3/4, 11/16 x 7/8	Tool Caddy	Lang	**KL405362**	Price
5	USA	12	Straight	1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 3/4, 11/16 x 7/8	Tool Caddy	Lang	**KL405373**	Price
5	USA	6 & 12	Straight	1/4 x 5/16, 3/8 x 7/16, 1/2 x 9/16, 5/8 x 11/16, 3/4 x 7/8 Heat Treated, Chrome Plated. 2 Larger sizes-12 point	Vinyl Tool Pouch	Williams	**KP30WS12**	Price

Size - Metric								
Pcs. Per Set	Made In	Pt. Size	Special Feature	Set Includes	Case	Brand	Order No.	Price
5	USA	12	Reversible Offset	7 x 8, 9 x 10, 12 x 13, 14 x 15, 19 x 21	Tool Caddy	Lang	**KL405363**	Price
5	USA	6 & 12	Straight	7 x 8, 9 x 10, 11 x 12, 13 x 14, 15 x 17 Heat Treated and Chrome Plated. Largest size 12 point	Vinyl Tool Pouch	Williams	**KP30MWS30**	Price
6	Global	6	Long 15° -Flex Head Ratcheting	8 x 10, 9 x 11, 12 x 14, 13 x 15, 16 x 18, 17 x 19mm	Store and Go Keeper	TEKTON	**KP85WRN76164**	Price
6	Global	6	Long 15° -Flex Head Ratcheting	8 x 10, 9 x 11, 12 x 14, 13 x 15, 16 x 18, 17 x 19mm	Store and Go Keeper	TEKTON	**KP85WRN77164**	Price

Individual Ratcheting Box Wrenches 6 - 12 Point

- Fractional and metric
- Straight and offset 25°
- Chrome plated
- Ratcheting allows for turning without removal of wrench



KP30RB2428

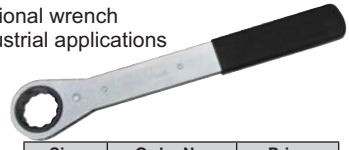
Type - Straight Ratcheting Fractional						
		PROTO			Snap-on Industrial Brands / WILLIAMS	
Size (in.)	Length (in.)	Model No.	Order No.	Price		
1/4 x 5/16	4-1/2	J1191T-A	**KP4213490**	Price	**KP30RB810**	Price
3/8 x 7/16	5-1/2	J1192T-A	**KP4213505**	Price	**KP30RB1214**	Price
1/2 x 9/16	6-7/8	J1193T-A	**KP4213520**	Price	**KP30RB1618**	Price
9/16 x 5/8	8-1/8	-	**-**	-	**KP30RB1820**	Price
5/8 x 11/16	8-1/8	J1194-A	**KP4213525**	Price	**KP30RB2022**	Price
5/8 x 3/4	8-1/8	J1196-A	**KP4213545**	Price	**KP30RB2024**	Price
3/4 x 7/8	9-1/4	J1195-A	**KP4213535**	Price	**KP30RB2428**	Price
13/16 x 15/16	9-1/4	J1197-A	**KP4213550**	Price	-	-
1 x 1-1/16	15	J1198	**KP4213145**	Price	-	-
1-1/8 x 1-1/4	15	J1199	**KP4213150**	Price	-	-

Type - 25° Offset Ratcheting Fractional				
Size (in.)	Length (in.)	Brand	Order No.	Price
1/4 x 5/16	4-1/4	Williams	**KP30RBO810**	Price
3/8 x 7/16	5-7/16	Williams	**KP30RBO1214**	Price
1/2 x 9/16	6-3/4	Williams	**KP30RBO1618**	Price
5/8 x 11/16	8	Williams	**KP30RBO2022**	Price
5/8 x 3/4	8	Williams	**KP30RBO2024**	Price
11/16 x 13/16	9-1/8	Williams	**KP30RBO2226**	Price
3/4 x 7/8	9-1/8	Williams	**KP30RBO2428**	Price

Type - Straight Ratcheting Metric						
		PROTO			Snap-on Industrial Brands / WILLIAMS	
Size (in.)	Length (in.)	Model No.	Order No.	Price	Order No.	Price
7 x 8mm	4-1/2	J1191M-A	**KP4213485**	Price	**KP30RBM0708**	Price
9 x 10mm	5-1/2	-	**-**	-	**KP30RBM0910**	Price
11 x 12mm	6-7/8	-	**-**	-	**KP30RBM1112**	Price
13 x 14mm	6-7/8	-	**-**	-	**KP30RBM1314**	Price
15 x 17mm	8-1/8	J1195M-A	**KP4213540**	Price	**KP30RBM1517**	Price
16 x 18mm	8-1/8	J1196M	**KP4213135**	Price	**KP30RBM1618**	Price
19 x 21mm	9-1/4	-	**-**	-	**KP30RBM1921**	Price

LANG Large Ratcheting Box Wrench - 12 Point

- Built for those tough jobs where lots of torque, leverage and durability are required
- Requires less effort than a conventional wrench
- For heavy duty equipment and industrial applications
- Chrome finish



Size	Order No.	Price
1-5/16	**KL40RB42**	Price
1-3/8	**KL40RB44**	Price
1-7/16	**KL40RB46**	Price
1-9/16	**KL40RB50**	Price
1-5/8	**KL40RB52**	Price
1-11/16	**KL40RB54**	Price
1-3/4	**KL40RB56**	Price

Size	Order No.	Price
1-13/16	**KL40RB58**	Price
1-7/8	**KL40RB60**	Price
2	**KL40RB64**	Price
2-1/8	**KL40RB68**	Price

PROTO Refrigeration Wrenches

- Hex openings are used for packing gland fittings, mounting bolts, clutch bolts, tubing fittings, dust cap nuts and oil check plugs
- Square openings are used on male service valves, plug fittings, compressor valves and refrigerant charging tanks
- Easy changes in turning direction which helps



Size (in.)	OAL (in.)	Model No.	Order No.	Price
1/4 x 3/16 (Sq) & 9/16 x 1/2 (Hex)	6-3/4	J1111	**KP4263000**	Price
1/4 x 3/8 (Sq) & 3/16 x 5/16 (Sq)	5-1/2	J1112	**KP4263005**	Price

PROTO Double Box Wrenches - 12 Point

Full Polish Finish

- Full polish finish provides corrosion resistance and easy to clean surfaces
- Satin finish provides corrosion resistance and a slip resistant grip
- 12 Point box end allows for fine indexing, helping to improve speed and access
- Fits 4, 6 and 12 point fasteners
- Box ends incorporate the TorquePlus™ system

New! MADE IN THE USA



Size (in.)	OAL (in.)	Model No.	Finish	Order No.	Price
5/16 x 3/8	6-15/16	J1170	Full Polish	**KP4213265**	Price
7/16 x 1/2	8-1/16	J1171	Full Polish	**KP4213270**	Price
1/2 x 9/16	8-3/8	J1126L	Full Polish	**KP4213090**	Price
3/4 x 7/8	13-1/8	J1139	Full Polish	**KP4213100**	Price
15/16 x 1	15-1/8	J1175	Full Polish	**KP4213290**	Price
1-1/16 x 1-1/8	17-1/2	J1176	Full Polish	**KP4213295**	Price
1-1/16 x 1-1/4	18-1/4	J1151	Satin	**KP4213105**	Price

Box End Wrenches – 12 Point

- 10° or 45° Size
- Chrome finish

MADE IN THE USA



Snap-on Industrial Brands | WILLIAMS | WRIGHT TOOL

	Williams			Wright Tool		
	10° Offset Box End Wrench			45° Double Offset Box End Wrench		
Size (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
1⁄2 x 9/16	-	-	-	8-3/4	**KP5051618**	Price
3/4 x 7/8	11-3/4	**KP307731A**	Price	11-3/4	**KP5052428**	Price

PROTO Offset Double Box Reversible Ratcheting Wrenches

MADE IN THE USA

Full Polish Finish



- 25° Offset box end helps keep shank clear of obstructions
- Shorter length for access to confined workspaces
- Reversing switch lever allows for easy changes in turning direction which helps improve speed
- Full polish finish on handle provides corrosion resistance and easy to clean surfaces

			12			6		
Size (in.)	OAL (in.)	Points	Model No.	Order No.	Price	Model No.	Order No.	Price
7/32 x 9/32	4-1/4	12	J1179T	**KP4213300**	Price	-	-	
1/4 x 5/16	4-1/4	12	J1181T	**KP4213305**	Price	-	-	
1/4 x 5/16	4-1/4	6	-	-	-	J1181-A	**KP4213445**	Price
3/8 x 7/16	5-7/16	12	J1182T	**KP4213310**	Price	-	-	
3/8 x 7/16	5-7/16	6	-	-	-	J1182-A	**KP4213455**	Price
1/2 x 9/16	6-3/4	12	J1183T	**KP4213315**	Price	-	-	
1/2 x 9/16	6-3/4	6	-	-	-	J1183-A	**KP4213465**	Price
5/8 x 11/16	8	12	J1184-A	**KP4213475**	Price	-	-	
3/4 x 7/8	9-1/8	12	J1185-A	**KP4213430**	Price	-	-	
5/8 x 3/4	8	12	J1186	**KP4213130**	Price	-	-	

PROTO Offset Deep Double Box Wrench 12 Point

MADE IN THE USA



Satin Finish

- Satin finish provides corrosion resistance and a slip resistant grip
- 12 Point box end allows for fine indexing, helping to improve speed and access
- Fits 4, 6 and 12 point fasteners
- 60° Deep offset helps improve access to deeply recessed fasteners
- Offset handle helps keep knuckles clear of obstruction to help save time
- Box ends incorporate the TorquePlus™ system

Size (in.)	OAL (in.)	Model No.	Order No.	Price
3/8 x 7/16	7-3/4	J8180	**KP4213170**	Price
1/2 x 9/16	9	J8181	**KP4213175**	Price
5/8 x 11/16	10-1/4	J8182	**KP4213180**	Price
11/16 x 13/16	11-1/2	J8183A	**KP4213250**	Price

PROTO Offset Spud Wrenches-Open End 12 Point

MADE IN THE USA



Black Oxide Finish

- Non-reflective black oxide finish for use where non-plated products are required
- Long offset handle provides greater leverage and clearance for knuckles and obstructions
- Hardened tapered handle aligns bolt and rivet holes
- Openings are precision broached for proper fit

Size (in.)	OAL (in.)	Model No.	Order No.	Price
1-1/8	16-11/16	JC907A	**KP4216455**	Price
3/4	11-13/16	JC904A	**KP4216430**	Price

PROTO Obstruction Box Wrenches - 12 Point

Satin Finish



MADE IN THE USA

- Satin chrome finish provides corrosion resistance and a slip resistant grip
- Made of forged steel then heat-treated
- Curved half-moon shape helps improve access to hidden, difficult to reach locations
- 12 Point box end allows for fine indexing, helping to improve speed and access
- Fits 4, 6 and 12 point fasteners
- Box ends incorporate the TorquePlus™ system

Size (in.)	OAL (in.)	Model No.	Order No.	Price
7/16 x 1/2	5-3/4	J1725	**KP4213155**	Price
9/16 x 5/8	6-5/8	J1730	**KP4213160**	Price
5/8 x 3/4	7-1/4	J1731	**KP4213165**	Price

PROTO Check Nut Wrenches



Black Oxide Finish

- Use check nut wrenches to tighten jam nuts, check nuts or lock nuts
- In confined spaces, the 15° head allows for a full 30° rotation by flipping wrench over
- Ultra thin profile improves access in close quarters
- Non-reflective black oxide finish for use where non-plated products are required

MADE IN THE USA

Size (in.)	OAL (in.)	Model No.	Order No.	Price
7/16	4	JKE14	**KP4218400**	Price
1/2	4	JKE16	**KP4218405**	Price
9/16	4-1/2	JKE18	**KP4218415**	Price
5/8	5-1/8	JKE20	**KP4218420**	Price
11/16	5-1/8	JKE22	**KP4218425**	Price

Ratcheting Wrenches

- Allows ratcheting of nuts and bolts without removing wrench from fastener, making jobs faster and easier
- Ratcheting box end needs as little as 5° to move fasteners versus 30° for standard box end wrenches
- Up to 25% longer to access hard-to-reach fasteners
- 13 Locking positions allow access to hard-to-get places
- Up to 25% more torque with less fastener rounding



KP85WRN53091



KP4215315



KP659509RN

Price Style - Fractional Price								
Pcs. Per Set	Point Size	Set Includes	Style	Case	Made In	Brand	Order No.	Price
4	12	13/16, 7/8, 15/16, 1	15° Offset Reversible Combination Set	Plastic Tray	USA	Williams	**KP30WS1164RC**	Price
7	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Pivoting Wrench Set	Blow Mold Tray	Global	Gearwrench	**KP65EHT9700**	Price
7	12	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Reversible Combination Set	Roll-up Storage Pouch	Global	Gearwrench	**KP65EHT9567R**	Price
7	12	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4	Reversible Combination Set	Plastic Tray	Global	Gearwrench	**KP659317**	Price
8	12	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Reversible Combination Set	Blow Mold Tray	Global	Gearwrench	**KP65EHT9533N**	Price
8	12	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Reversible Combination Set	Plastic Tray	Global	Gearwrench	**KP659308**	Price
8	12	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	15° Offset Reversible Combination Set	Plastic Tray	Global	Williams	**KP30WS1168RCS**	Price
8	12	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Reversible Combination Set	Vinyl Pouch	Global	Williams	**KP30WS1168RC**	Price
9	6	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Open End Angled 15°	Roll-up Storage Pouch	Global	TEKTON	**KP85WRN53087**	Price
9	12	9/32, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Reversible Combination Set	Roll-up Storage Pouch	USA	Proto	**KP4215315**	Price
13	6	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Open End Angled 15° -Flex Head Ratcheting	Roll-up Storage Pouch	Global	TEKTON	**KP85WRN57091**	Price
13	6	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Open End Angled 15°	Roll-up Storage Pouch	Global	TEKTON	**KP85WRN53091**	Price
13	12	5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Reversible Combination Set	Roll-up Storage Pouch	Global	Gearwrench	**KP659509RN**	Price
13	12	5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Reversible Combination Set	Plastic Tray	Global	Gearwrench	**KP659509N**	Price
13	12	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Reversible Combination Set	Roll	Global	Gearwrench	**KP6585199R**	Price
13	12	5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Reversible Combination Set	Plastic Tray	Global	Gearwrench	**KP659702**	Price
13	12	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Reversible Combination Set	Plastic Tray	Global	Gearwrench	**KP659312**	Price
13	12	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Reversible Combination Set	Plastic Tray	Global	Gearwrench	**KP6585199**	Price
14	12	1/4, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1	Non-Reversible Combination Set	Roll-up Storage Pouch	USA	Proto	**KP4215305**	Price
18	Spline	1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4	Reversible Combination Set	Roll-up Storage Pouch	Global	Proto	**KP4215195**	Price
20	12	7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 1-1/2	Reversible Combination Set	Roll-up Storage Pouch	USA	Proto	**KP4215320**	Price
20	Spline	7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 1-1/2	Reversible Combination Set	Roll-up Storage Pouch	Global	Proto	**KP4217975**	Price

STEELMAN | Snap-on Industrial Brands | WILLIAMS | TEKTON | PROTO | WRIGHT TOOL | GEARWRENCH

Ratcheting Wrenches

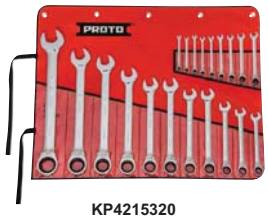
- Allows ratcheting of nuts and bolts without removing wrench from fastener, making jobs faster and easier
- Ratcheting box end needs as little as 5° to move fasteners versus 30° for standard box end wrenches
- Up to 25% longer to access hard-to-reach fasteners
- 13 Locking positions allow access to hard-to-get places
- Up to 25% more torque with less fastener rounding



KE5378965



KP30MWS12RCS



KP4215320



KP85WRN57187



KP65602N

Style - Metric								
Pcs. Per Set	Point Size	Set Includes	Style	Case	Made In	Brand	Order No.	Price
4	12	21, 22, 24, 25mm	15° Offset Reversible Combination Set	Plastic Tray	USA	Williams	**KP30MWS4RC**	Price
7	12	10, 12, 13, 14, 15, 17, 19mm	Pivoting Wrench Set	Blow Mold Tray	Global	Gearwrench	**KP65EHT9900**	Price
8	12	8, 10, 12, 13, 14, 15, 17, 19mm	2.5 Degree Swing, Box End	EVA Foam Tray	Global	Steelman	**KE5378965**	Price
8	12	8, 10, 12, 13, 14, 15, 17, 19mm	15° Offset Combination Set	Handy Carry Pack	Global	Wright Tool	**KP50M8MRCW**	Price
9	6	8, 9, 10, 11, 12, 13, 14, 15, 16mm	Open End Angled 15°	Roll-up Storage Pouch	Global	TEKTON	**KP85WRN53187**	Price
9	6	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Open End Angled 15°	Roll-up Storage Pouch	Global	TEKTON	**KP85WRN53190**	Price
9	6	8, 9, 10, 11, 12, 13, 14, 15, 16mm	Open End Angled 15° -Flex Head Ratcheting	Roll-up Storage Pouch	Global	TEKTON	**KP85WRN57187**	Price
10	Spline	10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Non-Reversible Combination Set	Roll-up Storage Pouch	Global	Proto	**KP4217965**	Price
12	6	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Open End Angled 15°	Roll-up Storage Pouch	Global	TEKTON	**KP85WRN50190**	Price
12	12	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	15° Offset Reversible Combination Set	Plastic Tray	Global	Williams	**KP30MWS12RCS**	Price
12	6	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Open End Angled 15° -Flex Head Ratcheting	Roll-up Storage Pouch	Global	TEKTON	**KP85WRN57190**	Price
12	12	8, 9, 10, 11, 12, 13, 14, 15, 16,17 18,19mm	2.5 Degree Swing, Box End	EVA Foam Tray	Global	Steelman	**KE5378964**	Price
13	Spline	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Reversible Combination Set	Roll-up Storage Pouch	Global	Proto	**KP4217980**	Price
16	12	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 24, 25mm	Reversible Combination Set	Plastic Tray	Global	Gearwrench	**KP659602N**	Price
22	Spline	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 24, 27, 30, 32, 34, 36mm	Reversible Combination Set	Roll-up Storage Pouch	Global	Proto	**KP4217985**	Price

PROTO Non-Reversible Combo Ratcheting Wrenches - Spline* - Fractional

Black Chrome Finish

New!



- Spline design enables the wrench to contact conventional fasteners away from the corners, which applies force over a larger area, reducing risk of fastener scoring.
- The high contact surface area which is away from fastener points enables turning of highly rounded fasteners
- Anti-slip design (ASD) open end
- Black chrome finish is corrosion resistant and visually distinctive

Size	OAL (in.)	Model No.	Order No.	Price
5/16	5-1/2	JSCR10	**KP4217625**	Price
3/8	6-1/4	JSCR12	**KP4217635**	Price
7/16	6-1/2	JSCR14	**KP4217640**	Price
1/2	7	JSCR16	**KP4217645**	Price
9/16	7-1/2	JSCR18	**KP4217650**	Price
3/4	9-3/4	JSCR24	**KP4217665**	Price
7/8	11-7/16	JSCR28	**KP4217675**	Price
15/16	12-3/4	JSCR30	**KP4217680**	Price

PROTO Combo Reversible Ratcheting Wrenches Fractional - Spline*

MADE IN THE USA

Full Polish Finish

New!



- Anti-slip design (ASD) open end
- Smooth transition from head to shank
- Industrial strength I-Beam shank provides broad bearing surface helping improve comfort and helping reduce hand fatigue
- Protected switch lever helps prevent accidental reversal
- Compact ratcheting head improves access
- 72 Teeth provide 5° ratcheting

Size (in.)	OAL (in.)	Model No.	Order No.	Price
5/16	5-27/64	JSCV10A	**KP4212305**	Price
7/16	6-29/32	JSCV14A	**KP4212320**	Price
1/2	7-29/32	JSCV16A	**KP4212325**	Price
9/16	8-49/64	JSCV18A	**KP4212330**	Price
5/8	9-33/64	JSCV20A	**KP4212335**	Price
3/4	11-3/64	JSCV24A	**KP4212345**	Price
7/8	12-35/64	JSCV28A	**KP4212355**	Price

PROTO Combo Reversible Ratcheting Wrenches Metric - Spline*

MADE IN THE USA

Full Polish Finish

New!



- Anti-slip design (ASD) open end
- Smooth transition from head to shank
- Industrial strength I-Beam shank provides broad bearing surface helping improve comfort and helping reduce hand fatigue
- Protected switch lever helps prevent accidental reversal
- Compact ratcheting head improves access
- 72 Teeth provide 5° ratcheting

Size	OAL (in.)	Model No.	Order No.	Price
10mm	5-29/32	JSCVM10A	**KP4214515**	Price
12mm	7-23/32	JSCVM12A	**KP4214525**	Price
13mm	7-29/32	JSCVM13A	**KP4214530**	Price
14mm	8-49/64	JSCVM14A	**KP4214535**	Price
15mm	9-9/64	JSCVM15A	**KP4214540**	Price
16mm	9-33/64	JSCVM16A	**KP4214545**	Price
17mm	10-17/64	JSCVM17A	**KP4214550**	Price
18mm	10-11/16	JSCVM18A	**KP4214555**	Price

PROTO Reversible Combo Ratcheting Wrenches - Spline*

New!

Black Chrome Finish



- Fractional spline wrenches can be used on fractional 4, 6, 12 point, spline and Torx® fasteners
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed
- 15° Angled offset box end helps keep shank clear of obstructions
- Anti-slip design (ASD) open end
- Black chrome finish is corrosion resistant and visually distinctive

Size (in.)	OAL (in.)	Model No.	Order No.	Price
7/32	5	JSCV07	**KP4217750**	Price
1/4	5	JSCV08	**KP4217755**	Price
9/32	5-1/2	JSCV09	**KP4217760**	Price
5/16	5-1/2	JSCV10	**KP4217765**	Price
11/32	5-15/16	JSCV11	**KP4217770**	Price
3/8	6-1/4	JSCV12	**KP4217775**	Price
7/16	6-1/2	JSCV14	**KP4217780**	Price
1/2	7	JSCV16	**KP4217785**	Price
9/16	7-1/2	JSCV18	**KP4217790**	Price
5/8	8-3/16	JSCV20	**KP4217795**	Price
11/16	8-7/8	JSCV22	**KP4217800**	Price
3/4	9-3/4	JSCV24	**KP4217805**	Price
13/16	11-7/16	JSCV26	**KP4217810**	Price
7/8	11-7/16	JSCV28	**KP4217815**	Price
15/16	12-3/4	JSCV30	**KP4217820**	Price
1	12-3/4	JSCV32	**KP4217825**	Price
1-1/16	14-1/8	JSCV34	**KP4217830**	Price
1-1/8	15-7/8	JSCV36	**KP4217835**	Price
1-1/4	16-3/4	JSCV40	**KP4217840**	Price
1-1/2	19-5/16	JSCV48	**KP4217845**	Price

PROTO Reversible Combo Ratcheting Wrenches - 12 Point

Full Polish Finish



Size	OAL (in.)	Model No.	Order No.	Price
10mm	6-1/4	JSCVM10T	**KP4215905**	Price
11mm	6-9/16	JSCVM11T	**KP4215910**	Price
13mm	7	JSCVM13T	**KP4215920**	Price
17mm	8-7/8	JSCVM17T	**KP4215940**	Price
19mm	9-3/4	JSCVM19T	**KP4215950**	Price
24mm	12-3/4	JSCVM24T	**KP4215965**	Price
27mm	14-1/8	JSCVM27T	**KP4215970**	Price

PROTO Reversible Combo Ratcheting Wrenches - Spline*

New!

Black Chrome Finish



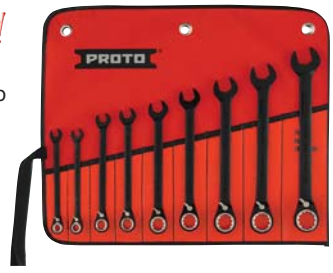
Size	OAL (in.)	Model No.	Order No.	Price
8mm	5-1/2	JSCVM08	**KP4217860**	Price
10mm	6-1/4	JSCVM10	**KP4217870**	Price
12mm	6-3/4	JSCVM12	**KP4217880**	Price
13mm	7	JSCVM13	**KP4217885**	Price
14mm	7-1/2	JSCVM14	**KP4217890**	Price
15mm	7-7/8	JSCVM15	**KP4217895**	Price
17mm	8-7/8	JSCVM17	**KP4217905**	Price
19mm	9-3/4	JSCVM19	**KP4217915**	Price
24mm	12-3/4	JSCVM24	**KP4217930**	Price
30mm	15-7/8	JSCVM30	**KP4217940**	Price

PROTO 9 Pc. Combination Ratcheting Wrench Sets - Spline*

Black Chrome Finish

New!

- Black chrome finish is corrosion resistant and visually distinctive
- Fractional spline wrenches can be used on fractional 4, 6, 12 point, spline fasteners and Torx® fasteners
- The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed
- 15° Angled offset box end helps keep shank clear of obstructions
- Anti-slip design (ASD) open end



Set Includes	Style	Model No.	Order No.	Price
1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Reversible (Stubby)	JSCVS-9S	**KP4215285**	Price
1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Non-Reversible	JSCR-9S	**KP4212000**	Price
9/32, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Reversible	JSCV-9S	**KP4217970**	Price

***Spline will turn 6 & 12 point fastners**

Adjustable Wrenches

- Forged steel
- Chrome plated
- Wrench size marked on too





MADE IN THE USA

MADE IN THE USA

TEKTON | IRWIN VISE-GRIP | CRESCENT Trusted by the Trades | CHANNELLOCK | Snap-on Industrial Brands | WILLIAMS

	Generic		Tekton		Irwin		Crescent		Channellock		Snap-On/Williams	
OAL (in.)	Approx. Opening (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
4	1/2	-	-	KP8523001	Price	-	-	KW50AC24VS	Price	LB50804	Price	KP30AP4A	Price
6	15/16	KP8310106	Price	KP8523002	Price	KX502078606	Price	KW50AC26VS	Price	LB50806W	Price	KP30AP6A	Price
8	1-1/8	KP8310108	Price	KP8523003	Price	KX502078608	Price	KW50AC28VS	Price	LB50808W	Price	KP30AP8A	Price
10	1-5/16	KP8310110	Price	KP8523004	Price	KX502078610	Price	KW50AC210VS	Price	LB50810W	Price	KP30AP10A	Price
12	1-1/2	KP8310112	Price	KP8523005	Price	KX502078612	Price	KW50AC212VS	Price	LB50812W	Price	KP30AP12A	Price
15	1-3/4	-	-	KP8523006	Price	-	-	KW50AC215VS	Price	-	-	KP30AP15A	Price
18	2-1/16	-	-	-	-	-	-	KW50AC218VS	Price	-	-	-	-
24	2-7/16	-	-	-	-	-	-	KW50AC224VS	Price	-	-	-	-

PROTO Adjustable Wrenches

MADE IN THE USA

Satin Finish and Black Oxide

- Extra wide jaw capacity
- Square jaw opening provides strength and tight fit

New!



		Black Oxide			Satin		
Length (in.)	Max. Opening (in.)	Model No.	Order No.	Price	Model No.	Order No.	Price
4	1/2	J704S	KP4215090	Price	J704	KP4215080	Price
6	15/16	J706S	KP4215105	Price	J706	KP4215095	Price
8	1-1/8	J708S	KP4215120	Price	J708	KP4215110	Price
10	1-5/16	J710S	KP4215135	Price	J710	KP4215125	Price
12	1-1/2	J712S	KP4215150	Price	J712	KP4215140	Price
15	1-11/16	J715S	KP4215160	Price	J715	KP4215155	Price
18	2-1/16	J718S	KP4215170	Price	J718	KP4215165	Price
24	2-7/16	J724S	KP4215180	Price	J724	KP4215175	Price

Adjustable Wrench – Black Finish

MADE IN THE USA

- Forged steel
- Size etched on tool



CRESCENT Trusted by the Trades | Snap-on Industrial Brands | WILLIAMS

		Crescent		Williams	
OAL (in.)	Approx. Opening (in.)	Order No.	Price	Order No.	Price
4	1/2	KW50AT24VS	Price	KP30AB4A	Price
6	15/16	KW50AT26VS	Price	KP30AB6A	Price
8	1-1/8	KW50AT28VS	Price	KP30AB8A	Price
10	1-5/16	KW50AT210VS	Price	KP30AB10A	Price
12	1-1/2	KW50AT212VS	Price	KP30AB12A	Price
15	1-3/4	-	-	KP30AB15A	Price
18	2-1/16	-	-	KP30AB18A	Price
24	2-7/16	-	-	KP30AB24A	Price

CHANNELLOCK Slim Jaw Wrenches

New!

- Xtra Slim 3/16” jaws means maximum accessibility
- Super wide opening lets you tackle big jobs with a compact wrench
- 4 Thread knurl & non-protruding jaws provide greater capacity
- Minimal head width improves performance in confined spaces



OAL (in.)	Approx. Opening (in.)	Finish	Order No.	Price
7	1.34	Chrome	LB506SWCB	Price
8-1/2	1-1/2	Chrome	LB5085SWBC	Price

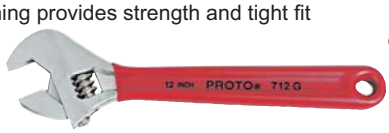
PROTO Adjustable Wrenches - Cushion Grip

Satin Finish

MADE IN THE USA

- Soft cushion grip for additional comfort
- Extra wide jaw capacity
- Square jaw opening provides strength and tight fit

New!



OAL (in.)	Opening (in.)	Model Number	Order No.	Price
4	1/2	J704G	KP4215085	Price
6	15/16	J706G	KP4215100	Price
8	1-1/8	J708G	KP4215115	Price
10	1-5/16	J710G	KP4215130	Price
12	1-1/2	J712G	KP4215145	Price

Snap-on Industrial Brands | WILLIAMS Adjustable Chrome Ratcheting Wrench

- Ratcheting mechanism allows easy use in limited space
- Measurement scale on head conveniently shows fastener size
- Wrench heads are fully polished for easy clean-up
- Exceed ANSI specifications for strength
- Precision hardened and anti-corrosion treated



OAL (in.)	Opening (in.)	Finish	Order No.	Price
6	1/2	Chrome	KP3013106	Price
8	3/4	Chrome	KP3013108	Price
10	1	Chrome	KP3013110	Price

Snap-on Industrial Brands | BAHCO Adjustable Ergo Wrench

- Ergo comfort handle
- Slim head design
- Measurement scale on jaws

ergo®



OAL (in.)	Approx. Opening (in.)	Order No.	Price
6	3/4	KL309070RCUS	Price
8	1-1/16	KL309071RCUS	Price
10	1-3/16	KL309072RCUS	Price
12	1-5/16	KL309073RCUS	Price

PROTO Clik-Stop® Adjustable Wrenches

MADE IN THE USA

Black Oxide Finish



New!

- Non-reflective ProtoBlack™ finish for use where non-plated products are required
- Extra wide jaw capacity
- Square jaw opening provides strength and tight fit
- Clik-Stop® locking design holds the moving jaw of an adjustable wrench in place when the wrench is in use

Opening (in.)	OAL (in.)	Model No.	Order No.	Price
1/2	4	J704SL	**KP4215010**	Price
15/16	6	J706SL	**KP4215020**	Price
1-1/8	8	J708SL	**KP4215030**	Price
1-5/16	10	J710SL	**KP4215040**	Price

Opening (in.)	OAL (in.)	Model No.	Order No.	Price
1-1/2	12	J712SL	**KP4215050**	Price
1-11/16	15	J715SL	**KP4215060**	Price
2-1/16	18	J718SL	**KP4215070**	Price

CRESCENT Tapered Handle Wrench



OAL (in.)	Max. Cap. (in.)	Order No.	Price
15	1-11/16	**KW50AT115**	Price
18	2-1/16	**KW50AT118**	Price

PROTO Clik-Stop® Adjustable Spud Wrench

- Non-reflective black oxide finish for use where none plated products are required
- CLIK-STOP® jaw locking feature automatically locks the movable jaw in a fixed position
- Large jaw opening fits all nuts and bolts up to 1-1/2 inches
- Square jaw opening provides strength and tight fit
- Eliminates the need for carrying several fixed size wrenches
- Hardened taper handle aligns bolt and rivet holes

MADE IN THE USA

New!



Opening (iin.)	OAL (in.)	Model No.	Order No.	Price
1-1/2	16-3/32	J712SC	**KP4216380**	Price

PROTO 3 Pc. Clik-Stop® Adjustable Wrench Set

MADE IN THE USA

Satin Finish

New!

- Clik-Stop® locking design holds the moving jaw of an adjustable wrench in place when the wrench is in use
- Satin finish provides corrosion resistance and a slip resistant grip
- Extra wide jaw capacity
- Square jaw opening provides strength and tight fit



Set Includes	Model No.	Order No.	Price
8", 10", 12"	J790	**KP4215185**	Price

PROTO 3 Pc. Adjustable Wrench Set

MADE IN THE USA

New!

- Satin finish provides corrosion resistance and a slip resistant grip
- Extra wide jaw capacity
- Square jaw opening provides strength and tight fit
- Rugged I-beam style handle and reinforced stress areas; radius corner design



Set Includes	Model No.	Order No.	Price
8", 10", 12"	J795	**KP4215190**	Price

CRESCENT Trusted by the Trades. | TITAN | Snap-on Industrial Brands | WILLIAMS

Spud Wrenches

- Heavy duty drop forged steel
- Chrome plated to resist corrosion
- Precision machined surfaces
- Tapered tang for aligning bolt holes or other matching parts
- Measurement Scale on head conveniently shows fastern size



KW50AT115SPUD

KP82211

OAL (in.)	Max. Cap. (in.)	Brand Name	Order No.	Price
10	1-1/4	Titan	**KP82211**	Price
10	1-1/8	Crescent	**KW50AT10SPUD**	Price
15	1-3/8	Williams	**KP3013625A**	Price
16	1-1/2	Crescent	**KW50AT115SPUD**	Price
16	1-1/2	Titan	**KP82216**	Price

PROTO 3 Pc. Adjustable Wrench Set

MADE IN THE USA

New!

Black Oxide Finish

- Non-reflective black oxide finish for use where non-plated products are required
- Extra wide jaw capacity
- Square jaw opening provides strength and tight fit



Set Includes	Model No.	Order No.	Price
8", 10", 12"	J795S	**KP4217145**	Price

Snap-on Industrial Brands | WILLIAMS

4 Pc. Adjustable Wrench Sets

- Measurement scale on head conveniently shows fastener size
- Wrench heads are fully polished for easy clean-up
- Exceed ANSI specifications for strength
- Precision hardened and anti-corrosion treated



Set Includes	Finish	Case	Order No.	Price
6, 8, 10, 12"	Black	Vinyl Pouch	**KP3013642A**	Price
6, 8, 10, 12"	Chrome	Vinyl Pouch	**KP3013342A**	Price

PROTO

3 Pc.Cushion Grip Adjustable Wrench Set

- Soft cushion grip for additional comfort
- Extra wide jaw capacity
- Square jaw opening provides strength and tight fit

MADE IN THE USA

New!



Set Includes	Model No.	Order No.	Price
8"., 10", 12"	J795G	**KP4217155**	Price

Adjustable Wrench Sets

- Hardened steel
- Thumb wheel lever
- Lifetime warranty



PRM PRO | IRWIN VISE-GRIP

		PRM Pro			Irwin		
Pcs. Per Set	Set Includes (in.)	Handle	Order No.	Price	Handle	Order No.	Price
4	6, 8, 10, 12 Chrome Plated	Plain	**KP8310100**	32.35	Comfort Grip	**KX502078706**	Price

Snap-on Industrial Brands | WILLIAMS

3 Pc. Ratcheting Adjustable Wrench Set

- Measurement scale on head conveniently shows fastener size
- Wrench heads are fully polished for easy clean-up
- Exceed ANSI specifications for strength
- Precision hardened and anti-corrosion treated
- Ratchets allowing quicker tightening



Set Includes	Finish	Case	Handle	Order No.	Price
6, 8, 10"	Chrome	Vinyl Pouch	Comfort Grip	**KP3013343**	Price

TITAN

Spark Plug Connector Crimper

- Loaded with H1 Die for crimping spark plug wire connectors
- Corrosion resistant carbon steel frame
- Quick change jaw design
- Comfort grip handles
- Safety release
- Adjustable compression
- Ratcheting mechanism releases after full compression



Length (in.)	Order No.	Price
11.6	**KP8211956**	Price

Adjustable Hook Spanner Wrenches

MADE IN THE USA

- Ideal for adjusting collars, lock nut rings, and bearings
- Specifically engineered to hold up under the most rigorous industrial use
- Industrial black finish, SAE



PROTO | Snap-on Industrial Brands | WILLIAMS

				Proto		Williams	
Capacity Range For Dia. (in.)	Thick-ness (in.)	Depth (in.)	Approx. Length (in.)	Order No.	Price	Order No.	Price
3/4 to 2	11/32	1/8	6-3/8	**KP4216385**	Price	**KP30471**	Price
1-1/4 to 3	13/32	5/32	8-1/8	**KP4216390**	Price	**KP30472**	Price
2 to 4-3/4	15/32	3/16	11-3/8	**KP4216395**	Price	**KP30474**	Price
4-1/2 to 6-1/4	15/32	1/4	12-1/8	**KP4216400**	Price	**KP30474A**	Price
6-1/8 to 8-3/4	15/32	5/16	13-3/4	**KP4216965**	Price	**KP30474B**	Price

Adjustable Face Spanner Wrenches

MADE IN THE USA

- Ideal for adjusting collars, lock nut rings, and bearings
- Specifically engineered to hold up under the most rigorous industrial use
- Industrial black finish, SAE

New!



PROTO | Snap-on Industrial Brands | WILLIAMS

				Proto		Williams	
Capacity (in.)	Extreme Dia. (in.)	Height (in.)	Length (in.)	Order No.	Price	Order No.	Price
2	3/16	1/8	6-3/8	**KP4216405**	Price	**KP30482**	Price
3	1/4	3/16	8-1/4	**KP4216410**	Price	**KP30483**	Price
4	5/16	1/4	10-3/8	**KP4216415**	Price	**KP30484**	Price

Adjustable Pin Spanner Wrenches

MADE IN THE USA

- Ideal for adjusting collars, lock nut rings, and bearings
- Specifically engineered to hold up under the most rigorous industrial use
- Industrial black finish, SAE



PROTO | Snap-on Industrial Brands | WILLIAMS

					Proto		Williams	
Capacity Range for Dia. (in.)	Thick-ness (in.)	Depth (in.)	Height (in.)	Approx. Length (in.)	Order No.	Price	Order No.	Price
3/4 to 2	11/32	1/8	1/8	6	**KP4216970**	Price	**KP30O471**	Price
3/4 to 2	11/32	3/16	5/32	6	**KP4216975**	Price	**KP30O471A**	Price
1-1/4 to 3	13/32	3/16	3/16	8	**KP4216980**	Price	**KP30O472**	Price
1-1/4 to 3	13/32	1/4	7/32	8	**KP4216985**	Price	**KP30O472A**	Price
2 to 4-3/4	15/32	1/4	1/4	11	**KP4216990**	Price	**KP30O474**	Price
4-1/2 to 6-1/4	15/32	3/8	1/4	12	**KP4216995**	Price	**KP30O474A**	Price

PROTO Adjustable Face Spanner Wrenches

Black Oxide Finish

- Non-reflective black oxide finish for use where non-plated products are required
- Precision machined pins provide engagement with holes or slots on the face of a bearing or nut
- Used to tighten collars, lock nut rings and seal/packing nuts on hydraulic cylinders

MADE IN THE USA



Capacity (in.)	OAL (in.)	Pin Dia. (in.)	Pin Length (in.)	Model No.	Order No.	Price
2	6-3/8	3/16	1/4	JC482	**KP4216405**	Price
3	8-1/4	1/4	1/4	JC483	**KP4216410**	Price
4	10-3/8	5/16	1/2	JC484	**KP4216415**	Price

PROTO Heavy-Duty Offset Striking Wrenches -Fractional

New!

Black Oxide Finish • 12 Point

MADE IN THE USA

- Large striking surface for surer blow contact and more efficient transmittal of force to fastener
- Short handle permits use in close quarters
- Box opening designed to remain on fastener when wrench is struck
- For use where extreme force is necessary to loosen or set large fasteners
- Heavy box walls provide greater torque transmission
- Offset handle clears obstructions



Size (in.)	OAL (in.)	Model No.	Order No.	Price
1	8-1/2	J2616SW	**KP4218605**	Price
1-1/16	8-1/2	J2617SW	**KP4216500**	Price
1-1/8	11	J2618SW	**KP4216505**	Price
1-3/16	10-3/4	J2619SW	**KP4218610**	Price
1-1/4	10-3/4	J2620SW	**KP4216510**	Price
1-5/16	11-1/2	J2621SW	**KP4216515**	Price
1-3/8	12	J2622SW	**KP4218615**	Price
1-7/16	12	J2623SW	**KP4216520**	Price
1-1/2	12	J2624SW	**KP4216525**	Price
1-9/16	12-1/4	J2625SW	**KP4218620**	Price
1-5/8	12-1/4	J2626SW	**KP4216530**	Price
1-11/16	13-7/16	J2627SW	**KP4216535**	Price
1-3/4	13-7/16	J2628SW	**KP4216540**	Price
1-13/16	13-7/16	J2629SW	**KP4216545**	Price
1-7/8	13-7/16	J2630SW	**KP4216550**	Price
1-15/16	13-7/16	J2631SW	**KP4218625**	Price
2	13-7/16	J2632SW	**KP4216555**	Price
2-1/16	13-1/2	J2633SW	**KP4218630**	Price
2-1/8	13-7/8	J2634SW	**KP4216565**	Price
2-3/16	13-1/2	J2635SW	**KP4216570**	Price
2-1/4	13-1/2	J2636SW	**KP4216575**	Price
2-5/16	13-1/2	J2637SW	**KP4216585**	Price
2-3/8	13-1/2	J2638SW	**KP4216590**	Price
2-1/2	13-1/2	J2640SW	**KP4216595**	Price
2-9/16	13-1/2	J2641SW	**KP4216600**	Price
2-11/16	13-1/2	J2643SW	**KP4218640**	Price
2-3/4	13-1/2	J2644SW	**KP4216615**	Price
2-15/16	16	J2647SW	**KP4216625**	Price
3	16	J2648SW	**KP4216630**	Price
3-1/8	16	J2650SW	**KP4216635**	Price
3-1/2	18	J2656SW	**KP4218660**	Price
3-3/4	18	J2660SW	**KP4218665**	Price

PROTO Slip Joint Pliers

MADE IN THE USA

- Has two jaw positions and shear type wire cutter



Approx. OAL (in.)	Jaw Length (in.)	Jaw Thickness (in.)	Jaw Width (in.)	Handle Type	Model No.	Order No.	Price
6	1-5/16	9/32	7/8	w/Grip	J275G	**KP4230085**	Price
6-1/2	1-3/4	3/8	1-3/16	no Grip	J276	**KP4230090**	Price
6-1/2	1-3/4	3/8	1-3/16	w/Grip	J276G	**KP4230095**	Price
8	1-3/4	1-13/64	1-13/64	no Grip	J278	**KP4230100**	Price
8	1-3/4	1-13/64	1-13/64	w/Grip	J278G	**KP4230105**	Price
9-1/2	2-3/8	1-7/64	1-7/64	no Grip	J280	**KP4230110**	Price
9-1/2	2-3/8	15/32	1-7/16	w/Grip	J280G	**KP4230115**	Price

STANLEY Slip Joint Pliers

New!

- Adjustable joint design used for grasping and turning
- Oil-resistant dipped handle allows for a comfortable grip
- Drop-forged steel is strong and durable
- Meets ANSI specifications



OAL (in.)	Capacity (in.)	Jaw Adj. (in.)	Model No.	Order No.	Price
6-3/4	1/2	2	84-097	**KP433032**	Price
8	1-3/4	2	84-098	**KP433034**	Price

IRWIN VISE-GRIP Thin Nosed Slip Joint Pliers

- Thin nose for tight spots
- Durable nickel chromium steel
- Machined jaws
- Induction hardened cutting edge
- Meets ANSI specifications
- Limited lifetime warranty



Length (in.)	Wire Cutter	Handle Type	Order No.	Price
6	Yes	ProTouch Grip	**KX501773623**	Price

PROTO Thin Nose Slip Joint Pliers

- Easy access to tight areas
- Has two jaw positions and shear type wire cutter
- Plastisol grips for added comfort

MADE IN THE USA

New!



Approx. OAL (in.)	Jaw Length (in.)	Jaw Width (in.)	Model No.	Order No.	Price
6-1/2	1-15/16	1-1/16	J202G	**KP4230385**	Price

Slip Joint Pliers

- Heat treated steel
- Chrome plated

LB50526



KP3023101



KW50H26



KX502078406



KP8537122



Approx. Size (in.)	Capacity (in.)	Handle Type	Brand Name	Order No.	Price
5	-	Steel with Comfort Grip	Channellock	**LB50524**	Price
6	1	Comfort Grip	Channellock	**LB50526**	Price
6	1	Plain Grip	Crescent	**KW50H26**	Price
6	1	ProTouch Grip	Irwin	**KX502078406**	Price
6	1-11/32	Steel	Irwin	**KX501773617**	Price
6	1	Comfort Grip	Williams	**KP3023101**	Price
6-1/2	-	Slim Cushion Grip	TEKTON	**KP8537122†**	Price
7	1	Comfort Grip	Channellock	**LB50537**	Price
8	-	Slim Cushion Grip	TEKTON	**KP8537123†**	Price
8	1-1/8	Comfort Grip	Williams	**KP3023102**	Price
8	1-1/8	Plain Grip	Crescent	**KW50H28**	Price
8	1-1/8	ProTouch Grip	Irwin	**KX502078408**	Price
8	1-5/32	Steel	Irwin	**KX501773616**	Price
10	-	Slim Cushion Grip	TEKTON	**KP8537124†**	Price
10	1-3/8	Comfort Grip	Channellock	**LB505410**	Price
10	2-1/2	ProTouch Grip	Irwin	**KX501773637**	Price

PROTO Hose Clamp Pliers

MADE IN THE USA

- Installs and removes wire spring tension clamps
- Two position jaws grip full range of clamp sizes
- Plastisol grips for added comfort

New!



Approx. OAL (in.)	Model No.	Order No.	Price
7-3/4	J252G	**KP4230400**	Price

PROTO Oil Filter Wrenches

New!

MADE IN THE USA

- Handle swivels to avoid obstructions
- Stainless steel band for added strength



Capacity (in.)	Length (in.)	Model No.	Order No.	Price
2-7/8 to 3-1/4	8	J3007	**KP4217375**	Price
3-1/2 to 3-7/8	8-1/2	J3006	**KP4217370**	Price
4-1/8 to 4-1/2	9-1/2	J3008	**KP4217380**	Price

IRWIN VISE-GRIP Locking Pliers



Type - Curved Jaw Locking Plier				
Length (in.)	Jaw Adjust. (in.)	Jaw Thickness (in.)	Order No.	Price
7	1-5/8	5/16	**KX507CR**	Price
10	1-7/8	3/8	**KX5010CR**	Price

Type - Curved Jaw Locking Plier with Wire Cutter				
Length (in.)	Jaw Adjust. (in.)	Jaw Thickness (in.)	Order No.	Price
4	15/16	1/4	**KX504WR**	Price
5	1-1/4	1/4	**KX505WR**	Price
7	1-5/8	5/16	**KX507WR**	Price
10	1-7/8	3/8	**KX5010WR**	Price

Type - Straight Jaw Locking Plier				
Length (in.)	Jaw Adjust. (in.)	Jaw Thickness (in.)	Order No.	Price
7	1-1/8	7/16	**KX507R**	Price
10	1-1/2	5/8	**KX5010R**	Price

IRWIN VISE-GRIP Large Jaw Locking Pliers



Jaw Opening	Order No.	Price
0 to 3-1/8, 0-79mm	**KX5012LC**	Price

IRWIN VISE-GRIP Locking Chain Clamp

Holds and locks around any size or shape — anything the chain can be wrapped around



Description	Chain Length (in.)	Order No.	Price
Extension Chain Only	18	**KX5020EXT**	Price
Locking Chain Clamp	19	**KX5020R**	Price
Replacement Chain Only	18	**KX5020REP**	Price

IRWIN VISE-GRIP 2 Pc. Locking Plier Set

Includes:

- 7” Curved jaw plier (7WR)
- 6” Long nose plier (6LN)



Order No.	Price
KX50213H	Price

IRWIN VISE-GRIP C-Clamps

Small jaw areas at contact points are ideal for working in close quarters



Length (in.)	Jaw Adjust. (in.)	Throat Height (in.)	Throat Depth (in.)	Order No.	Price
6	0-2	2	1-3/8	**KX506R**	Price
11	3-3/4	3-3/4	2-1/2	**KX5011R**	Price
18	0-8	4	9-1/2	**KX5018R**	Price
24	0-10	10	16	**KX5024R**	Price

IRWIN VISE-GRIP C-Clamps with Self-leveling Swivel Pads



Length (in.)	Jaw Adjust. (in.)	Throat Height (in.)	Throat Depth (in.)	Order No.	Price
6	0-2	2	1-1/4	**KX506SP**	Price
11	3-3/4	3-3/4	2-1/2	**KX5011SP**	Price
18	0-8	4	9-1/2	**KX5018SP**	Price
24	0-10	10	15-1/2	**KX5024SP**	Price

IRWIN VISE-GRIP 5 Pc. Locking Plier Set

Includes:

- 5” Curved Jaw (5WR)
- 6” Long Nose (6LN)
- 7” Curved Jaw (7WR)
- 10” Curved Jaw (10WR)
- 10” Straight Jaw (10R)



Order No.	Price
KX5068	Price

IRWIN VISE-GRIP 2 Pc. Locking Plier Set

Includes:

- 5” Curved jaw plier (5WR)
- 10” Curved jaw plier (10WR)



Order No.	Price
KX50215G	Price

IRWIN VISE-GRIP Long Nose Locking Pliers with Wire Cutter



Length (in.)	Jaw Adjust. (in.)	Jaw Thickness (in.)	Jaw Length (in.)	Order No.	Price
4	1-3/4	1/8	1-1/2	**KX504LN**	Price
6	2-1/4	1/8	1-3/4	**KX506LN**	Price
9	3	3/16	2-1/2	**KX509LN**	Price

IRWIN VISE-GRIP Welding Clamp



Length (in.)	Jaw Width (in.)	Throat Depth (in.)	Order No.	Price
9	2-3/4	1-5/8	**KX509R**	Price

IRWIN VISE-GRIP Sheet Metal Tool



Length (in.)	Jaw Width (in.)	Throat Depth (in.)	Order No.	Price
8	3-1/8	1-3/4	**KX508R**	Price

IRWIN VISE-GRIP 3 Pc. Locking Plier Set

Includes:
5″ Curved jaw plier (5WR)
6″ Long nose plier (6LN)
10″ Curved jaw plier (10WR)
Plus: Storage pouch



Order No.	Price
KX50321GS	Price

IRWIN VISE-GRIP 4 Pc. Locking Plier Set

Includes:

- 5” Curved jaw plier (5WR)
- 6” Long nose plier (6LN)
- 7” Straight jaw plier (7R)
- 10” Curved jaw plier (10CR)
- Storage pouch



Order No.	Price
KX50428GS	Price

New!

PROTO Locking Pliers

MADE IN THE USA

Nickel Chrome



- High tensile strength microalloy steel
- Great for holding, placing and extracting piece

Approx. OAL (in.)	Jaw Width (in.)	Jaw Adj. (in.)	Type	Model No.	Order No.	Price
7-1/2	17/32	1-11/32	Straight Jaw	J291NC	**KP4230640**	Price
9	1/2	1-1/2	Curved Jaw	J292NC	**KP4230635**	Price
9	19/32	1-11/16	Straight Jaw	J293NC	**KP4230620**	Price

PROTO Straight Jaw Locking Pliers

MADE IN THE USA



Approx. OAL (in.)	Jaw Width (in.)	Jaw Length	Model No.	Order No.	Price
7-1/2	35/64	1-1/4	J291XL	**KP4230500**	Price
9-1/2	5/8	1-19/32	J293XL	**KP4230485**	Price

PROTO Grooved Grip Locking Pliers



- Tapered groove in mobile jaw.
- Convex jaw.
- Firm hold of cylindrical objects without lateral movement.
- Clears small obstacles.
- Ideal for holding and handling drill bits, taps, fasteners and tubes

MADE IN THE USA

Approx. OAL (in.)	Jaw Width (in.)	Jaw Adj (in.)	Model No.	Order No.	Price
9-1/2	1/2	1-45/64	J282XL	**KP4230520**	Price

STANLEY Long Nose Locking Pliers

- Long nose jaws reach into tight spaces; ideal for tightening, clamping, twisting and turning flat objects



OAL (in.)	Capacity (in.)	Jaw Adj. (in.)	Jaw Length (in.)	Model No.	Order No.	Price
6-3/8	1-3/4	0	1-47/64	84-812	**KP433076**	Price
8-1/2	2-3/4	0	2-1/8	84-813	**KP433078**	Price

PROTO Long Nose Locking Pliers

MADE IN THE USA

- Long slim jaw design
- Curved section
- Can hold rounded objects
- Great for holding, placing and extracting pieces



Approx. OAL (in.)	Jaw Adj (in.)	Jaw Width (in.)	Model No.	Order No.	Price
7	2	19/64	J286LNXL	**KP4230510**	Price
9	2-1/2	13/32	J289LNXL	**KP4230515**	Price

STANLEY C Clamp Locking Pliers



OAL (in.)	Capacity (in.)	Model No.	Order No.	Price
7	2	84-816	**KP433080**	Price

STANLEY Straight Jaw Locking Pliers



- Straight jaws ideal for tightening, clamping, twisting and turning flat objects
- Induction hardened jaws last longer and grip better than non-induction hardened jaws
- Adjustment screw
- Built-in wire cutter
- Forged steel is strong and durable
- Meets ANSI specifications

OAL (in.)	Capacity (in.)	Jaw Adj. (in.)	Jaw Length (in.)	Model No.	Order No.	Price
7-1/2	1-1/3	0 - 1-3/4	1-1/3	84-810	**KP433072**	Price
9	1-3/4	0	1-1/8	84-811	**KP433074**	Price

STANLEY Curved Jaw Locking Pliers



- Induction hardened jaws last longer and grip better than non-induction hardened jaws
- Adjustment screw
- Built-in wire cutter

OAL (in.)	Capacity (in.)	Jaw Adj. (in.)	Jaw Adj. (in.)	Model No.	Order No.	Price
6-3/4	1-9/16	0	7/8	84-807	**KP433066**	Price
7-3/8	1-1/4	0	1-3/64	84-808	**KP433068**	Price
9	1-3/4	0	1-11/64	84-809	**KP433070**	Price

STANLEY Locking Pliers Set



Model No.	Order No.	Price
94-960	**KP433082**	Price

PROTO Curved Jaw Locking Pliers

MADE IN THE USA

- Multi-functional use
- Allows for firm hold on round shapes
- Wide jaw



Approx. OAL (in.)	Jaw Width (in.)	Jaw Adj. (in.)	With Cutter	Model No.	Order No.	Price
7-1/2	23/64	1-9/32	No	J290XL	**KP4230470**	Price
9-1/2	13/32	1-1/2	No	J292XL	**KP4230475**	Price
5-3/8	21/64	7/8	Yes	J293WRXL	**KP4230490**	Price
7-1/2	3/8	1-1/4	Yes	J294WRXL	**KP4230495**	Price
9-1/2	1/2	1-1/2	Yes	J292WRXL	**KP4230480**	Price

PROTO 3 Pc. Locking Pliers Sets

- Includes: 9-1/2' curved, 7-1/2' straight, 7' Longnose

MADE IN THE USA



Finish	Model No.	Order No.	Price
Black	J299RXL	**KP4230455**	Price
Nickel Chrome	J299NC	**KP4230450**	Price

PROTO Locking C-Clamp Pliers

- Wide and deep jaw profile to help clear obstacles and firmly clamp sections which locking pliers can not
- Clamp in close quarters for auto body work and welding shops

MADE IN THE USA



Approx. OAL (in.)	Jaw Width (in.)	Jaw Thickness (in.)	Throat Depth (in.)	Finish	Model No.	Order No.	Price
11	4-11/32	-	-	Nickel Chrome	J266NC	**KP4230625**	Price
7	2-25/32	1-61/64	1-61/64	Black Oxide	J265XL	**KP4230555**	Price
11	4-3/8	3-15/16	3-45/64	Black Oxide	J266XL	**KP4230560**	Price

PROTO Locking C-Clamp with Swivel Pads

MADE IN THE USA



Approx. OAL (in.)	Jaw Width (in.)	Jaw Thickness (in.)	Throat Depth (in.)	Finish	Model No.	Order No.	Price
12	1-1/8	1-11/64	3-45/64	Black Oxide	J270XL	**KP4230580**	Price

Snap-on Industrial Brands | Williams — Locking C-Clamp With Swivel Pad

- Bi-mold handles provide comfortable grip, reducing hand fatigue
- Convenient one-hand release lever
- Heavy-duty jaw surfaces provide extra gripping power



Length (in.)	Throat Depth (in.)	Handle Type	Order No.	Price
6	1-5/16	Standard	**KP3023222**	Price
9	2-3/16	Standard	**KP3023223**	Price
11	2-1/4	Standard	**KP3023224**	Price
14	4-1/2	Standard	**KP3023225**	Price

TEKTON — Swivel Pad Locking C-Clamps

- Drop forged hardened steel jaws
- Durable chrome plated finish
- Self-leveling jaw pads
- Knurled thumbscrew sets jaw capacity
- One-touch quick release



Length (in.)	Capacity (in.)	Order No.	Price
6	1-3/4	**KP853816**	Price
11	2-1/2	**KP853826**	Price
18	7	**KP853836**	Price

Irwin Vise-Grip — 6 Pc. Fast Release Locking Pliers

Why Soft Grips? Grips right, locks tight.
Comfortable yet rugged, cushioned handles make it easier to apply additional pressure and withstands rigorous use



Length (in.)	Style No.	Jaw Adj. (in.)	Order No.	Price
6	17T-6R	2	**KX5017T**	Price
12	19T-11R	3-1/8	**KX5019T**	Price

TEKTON — Locking Grip C-Clamp

- Adjustable
- Chrome vanadium steel, drop forged jaw
- Quick release pulling level



Length (in.)	Capacity (in.)	Order No.	Price
6	1-3/4	**KP853815**	Price
11	3-1/8	**KP853825**	Price
18	8-3/8	**KP853835**	Price

TEKTON — 8" Sheet Metal Clamp

- Drop forged carbon steel jaws
- Corrosion-resitant chrome plated finish
- Knurled thumbscew sets jaw capacity
- One-touch quick release
- Flat jaws hold and crimp sheet metal



Length (in.)	Capacity (in.)	Order No.	Price
8	1	**KP853855**	Price

TEKTON — 9" Welding Clamp

- Drop forged carbon steel jaws
- Corrosion-resitant chrome plated finish
- Knurled thumbscew sets jaw capacity
- One-touch quick release
- Deep jaws hold angle and bar stock



Length (in.)	Capacity (in.)	Order No.	Price
9	1-7/8	**KP853850**	Price

Snap-on Industrial Brands | Williams — Straight Locking Pliers

- Convenient one-hand release lever
- Heavy-duty jaw surfaces provide extra gripping power
- Chrome finish



Length (in.)	Handle Type	Order No.	Price
7	Standard	**KP3023304**	Price
10	Standard	**KP3023305**	Price

Irwin Vise-Grip — Curved Jaw Soft Grip Locking Pliers with Wire Cutter

Why Soft Grips? Grips right, locks tight.
Comfortable yet rugged, cushioned handles make it easier to apply additional pressure and withstands rigorous use



Length (in.)	Style No.	Jaw Adj. (in.)	Order No.	Price
7	7WR	1-5/8	**KX5007T**	Price
5	9WR	1-1/8	**KX5009T**	Price
10	10WR	1-7/8	**KX5005T**	Price

STEELMAN — 15" Extra Long Locking Pliers

45° and 90°

New!

- Longer neck gives a 15" total length to allow for extended reach to access tight areas
- One pair has jaws at 45° and the other at 90°
- Durable carbon steel
- Hardened steel jaws are designed to provide a secure, vise-like grip
- Nickel plated
- A turn screw can adjust the jaws to allow them to clamp onto varied sizes of material
- One-handed use, even when wearing gloves



Description	Jaw Adj.	Jaw Length	Jaw Thick-ness	Order No.	Price
45 Degree	0 - 1-3/4	1-1/8	.430"	**KE5399592**	Price
90 Degree	1-1/2	1-1/8	.430"	**KE5399593**	Price
45 & 90 Degree 2 Pc. Set	0 - 1-3/4	1-1/8	.430"	**KE5399591**	Price

Snap-on Industrial Brands | Williams — Locking Plier With Cutter

- Convenient one-hand release lever
- Heavy-duty jaw surfaces provide extra gripping power
- Chrome finish



Length (in.)	Handle Type	Order No.	Price
6	Standard	**KP3023309**	Price
9	Standard	**KP3023310**	Price

Irwin Vise-Grip — Long Nose Soft Grip Locking Pliers with Wire Cutter

Why Soft Grips? Grips right, locks tight.
Comfortable yet rugged, cushioned handles make it easier to apply additional pressure and withstands rigorous use



Length (in.)	Style No.	Jaw Adj. (in.)	Order No.	Price
6	6LN	2-1/4	**KX5014T**	Price

Snap-on Industrial Brands | Williams — Locking Pliers Sets

Features
- Convenient one-hand release lever
- Heavy-duty jaw surfaces provide extra gripping power
- Satin chrome finish



KP3023073



KP3023074



KP3023076

No. of Pcs.	Includes	Handle Type	Order No.	Price
3	5" Curved Jaw Locking Pliers with Cutter, 7" Curved Jaw Locking Pliers with Cutter, 10" Curved Jaw Locking Pliers with Cutter	Steel	KP3023072	Price
4	5" Curved Jaw Locking Pliers with Cutter, 10" Curved Jaw Locking Pliers with Cutter, 6" Long Nose with Wire Cutter, 9" Long Nose with Wire Cutter	Steel	KP3023074	Price
5	5" Curved Jaw Locking Pliers with Cutter, 7" Curved Jaw Locking Pliers with Cutter, 10" Straight Jaw, 9" Long Nose with Wire Cutter, 6" Locking C-Clamp	Steel	KP3023076	Price

IRWIN VISE-GRIP 2 Pc. Locking Plier Set

Why Soft Grips? Grips right, locks tight.
Comfortable yet rugged, cushioned handles make it easier to apply additional pressure and withstands rigorous use

Includes:
- 10″ Curved jaw plier with wire cutter
- 6″ Long-nose jaw plier with wire cutter



Order No.	Price
KX5077T	Price

IRWIN VISE-GRIP 6 Pc. Fast Release Set

Why Soft Grips? Grips right, locks tight. Comfortable yet rugged, cushioned handles make it easier to apply additional pressure and withstands rigorous use

Includes:
- 10″, 7″, 5″ Curved jaw locking plier with wire cutter
- 6″ Long nose locking plier
- 6″ & 11″ Locking c-clamps



Order No.	Price
KX502076709	Price

IRWIN VISE-GRIP 5-1/2" Full Flush Angled End Cutter Pliers

- ESD (Electrostatic Discharge) certified
- Spring loaded to reduce fatigue
- Limited lifetime warranty



Length (in.)	Style	Cutter	Jaw Width (in.)	Jaw Length (in.)	Handle Type	Order No.	Price
5-1/2	Flush Angled Cutter Plier	Yes	9/16	15/16	ProTouch Grip	KX501773600	Price

LANG Hose Clamp Pliers



KL403977



KL403975



KL40145

Description	Features	Order No.	Price
9" Angled Hose Clamp Pliers	For use on flat type hose clamps	KL403977	Price
9" Hose Clamp Pliers	For Corbin style hose clamps	KL403975	Price
9.75" Hose Pinch Off Pliers	Pliers eliminate the need to drain cooling system when servicing; Squeeze hoses shut and jaws swivel for parallel clamping	KL40145	Price

IRWIN VISE-GRIP 2 Pc. Locking Plier Set

Why Soft Grips? Grips right, locks tight.
Comfortable yet rugged, cushioned handles make it easier to apply additional pressure and withstands rigorous use

Includes:
- 5″ Curved jaw plier
- 10″ Curved jaw plier



Order No.	Price
KX50214T	Price

IRWIN VISE-GRIP Extra Long Reach Diagonal

- Superior long reach design for work in confined areas
- Machined jaws for maximum gripping strength
- Induction hardened cutting edge
- Pro Touch™ grip handle
- Limited lifetime warranty



Length (in.)	Style	Wire Cutter	Jaw Width (in.)	Jaw Length (in.)	Order No.	Price
11	Diagonal	Yes	1-1/8	1	KX501773389	Price

IRWIN VISE-GRIP 8" Hose Clamp Pliers

- Jaws designed to easily install/remove wire spring tension clamps
- Wire shearing feature
- Drop forged steel construction
- Meets or exceeds ANSI specifications
- Lifetime guarantee



Length (in.)	Wire Cutter	Jaw Width	Jaw Length	Handle Type	Order No.	Price
8	Yes	1-11/32	1-1/2	Dipped	KX501773627	Price

STANLEY Diagonal Cutting Pliers

- Fixed joint design used for cutting
- Individually sharpened blades cut soft and hard wire
- Oil-resistant dipped handle allows for a comfortable grip
- Drop-forged steel is strong and durable
- Meets ANSI specifications



Size (in.)	Model Number	Order No.	Price
5-3/4	84-104	**KP433040**	Price
6-3/16	84-105	**KP433042**	Price
7-5/16	84-108	**KP433044**	Price

STANLEY Bi-Material Diagonal Cutting Pliers

- Fixed joint design for cutting
- Induction hardened jaws helps tool stay sharp
- Blades cut soft and hard wire
- Drop-forged steel for strength and durability
- Bi-material handle for comfort and control
- Meets ANSI specifications



Size (in.)	Model No.	Order No.	Price
6-1/4	84-027	**KP433010**	Price
7-3/16	84-028	**KP433012**	Price

PROTO Heavy Duty Diagonal Cutting Pliers

- Induction hardened cutting edge
- Powerful leverage cuts heavy wire with ease
- Plastisol grips for added comfort



Aporox. OAL (in.)	Approx Jaw Width (in.)	Model No.	Order No.	Price
7	7/8	J209G	**KP4230320**	Price
8-1/2	1-1/4	J210G	**KP4230340**	Price

PROTO Diagonal Plastic Cutting Pliers

MADE IN THE USA

- Adjusting set screw allows fast, precise cutting and prevents cutting edges from damaging each other
- Coil spring for reduced hand fatigue
- Induction hardened cutting edges
- Plastisol grips for added comfort



Approx Length (in.)	Model No.	Order No.	Price
6-3/4	J212G	**KP4230325**	Price
7	J213G	**KP4230330**	Price

Snap-on Industrial Brands | WILLIAMS Heavy Duty Diagonal Cutting Pliers

- Double-dipped plastic handles
- Wider, high leverage jaws for increased cutting power
- Jaws are polished with rust-protective coating
- Double-dipped plastic handle grips are comfortable, yet durable
- Induction hardened and precisely ground cutting edges stay sharp longer



Length (in.)	Order No.	Price
6-1/4	**KP3023406**	Price
7	**KP3023407**	Price

CRESCENT Trusted by the Trades. Diagonal Cutting Pliers – Standard & Heavy Duty

- Designed for general wire & flush cutting
- 6” Standard, 7” & 8” Heavy duty
- Electronically induction hardened and hand-honed
- Long cutting edges for harder wires
- Round joint design
- Made of drop-forged alloy steel
- Red non-slip cushion handle grips



Length (in.)	Jaw Width (in.)	Order No.	Price
6	3/4	**KW509336CVN**	Price
7	1-7/32	**KW505427CVN**	Price
8	1-7/32	**KW505428CVN**	Price

CRESCENT Trusted by the Trades. 9” Linesman Compound Action Cutting Pliers

- Compound leverage design that increases cutting power
- Chrome vanadium steel for increased durability
- Co-molded grips for added comfort
- Induction hardened edges for long cutting life



Length (in.)	Order No.	Price
9	**KW50PS5429C**	Price

GEARWRENCH PivotForce™ Diagonal Cutting Compound Plier

- Forged steel for superior strength and durability
- Induction hardened cutting edge for long life
- Unique compound design requires 40% less effort to cut
- Easy-clean dipped handle grips
- Lifetime warranty



Length (in.)	Jaw Width (in.)	Order No.	Price
8	1-1/10	**KP6582120**	Price

CHANNELLOCK Lap Joint High Leverage Diagonal Cutting Pliers

MADE IN THE USA



- Laser heat treated cutting edges
- High carbon C1080 steel
- Precision machined knife and anvil style
- Cutting edges ensure perfect mating and superior cutting edge life

Length (in.)	Jaw Width (in.)	Order No.	Price
7	3/4	**LB50337**	Price
8	1-1/8	**LB50338**	Price

CHANNELLOCK Curved Lap Joint High Leverage Diagonal Plier

MADE IN THE USA



- Laser heat treated cutting edges
- High carbon C1080 steel
- Precision machined knife and anvil style
- Cutting edges ensure perfect mating and superior cutting edge life

Length (in.)	Jaw Width (in.)	Order No.	Price
7-3/4	1	**LB50447**	Price

Snap-on Industrial Brands | WILLIAMS Industrial Grade Diagonal Cutting Pliers

MADE IN THE USA



- Double-dipped plastic handles are designed to cut wire with ease
- Polished heads resist rust and corrosion, extending the tool life
- Induction hardened cutting edges
- Regular flush cutters are used for cutting hard wire

Length (in.)	Jaw Length (in.)	Order No.	Price
4	17/32	**KP30PL44C**	Price
5	11/16	**KP30PL45C**	Price

PRM PRO Heavy Duty Diagonal Cutters



- Drop forged steel
- Sharp cutting edges
- Cushioned handles

Length (in.)	Order No.	Price
6-1/2	**KP8312126**	Price
7-1/2	**KP8312127**	Price

CHANNELLOCK Box Joint Pliers

All tools:

- Laser heat treated cutting edges
- High carbon C1080 steel
- Precision machined knife and anvil style
- Cutting edges ensure perfect mating and superior cutting edge life



MADE IN THE USA

Length (in.)	Order No.	Price
5	**LB50435**	Price
6	**LB50436**	Price
7	**LB50437**	Price

PROTO Pinch-Off Pliers

MADE IN THE USA

- Patented clamping mechanism provides positive clamping without springs or adjustments
- Tested to 50,000 cycles without failure
- Heat-treated steel construction
- Swivel mounted clamps adjust to provide parallel clamping operation
- Cushioned hand grips
- For pinching-off flexible fuel lines, brake lines, and vacuum hoses in cars, motorcycles, and engines of all kinds



Length (in.)	Throat Depth (in.)	Jaw Width (in.)	Model No.	Order No.	Price
5-1/2	1-1/2	2	JFF554	**KP4231050**	Price
9-1/4	1-1/2	2	JFF555	**KP4231045**	Price

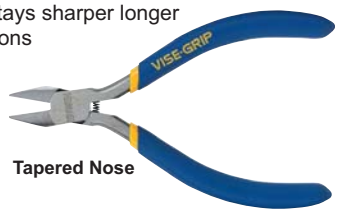
IRWIN VISE-GRIP Vise Grip Diagonal Cutting Pliers

Standard & Tapered Nose

- Durable nickel chromium steel construction
- Induction hardened cutting edge stays sharper longer
- Meets or exceeds ANSI specifications



Standard Nose



Tapered Nose

Style - Standard			
Length (in.)	Jaw Width (in.)	Order No.	Price
6	13/16	**KX502078306**	Price
7	1-1/8	**KX502078307**	Price
8	1-1/8	**KX502078308**	Price

Style - Tapered Nose			
Length (in.)	Jaw Width (in.)	Order No.	Price
5	13/16	**KX501773636**	Price
6	13/16	**KX501773635**	Price
10	1-3/16	**KX501773634**	Price

TEKTON High Leverage Diagonal Cutting Pliers



- Cut copper, aluminum, and soft steel wire in solid, stranded, and braided forms
- Twin blades are induction hardened for superior performance
- Slim, nonslip grips are comfortable to handle
- Made from high-strength chrome vanadium steel

Length (in.)	Jaw Length (in.)	Order No.	Price
6	3/4	**KP8534002**	Price
7	7/8	**KP8534013**	Price
10	1-3/8	**KP8534014**	Price

TEKTON 30° Offset Cutting Pliers

- Cut copper, aluminum, and steel wire (solid, stranded, or braided), metal bands, and small nails
- High-leverage jaws and long handles deliver more cutting power with less effort
- Twin blades are induction hardened for superior performance
- Slim, nonslip grips are comfortable and easy to handle
- Made from high-strength chrome vanadium steel



OAL (in.)	Order No.	Price
11	**KP8534025**	Price

Needle Nose Pliers

- Straight
- Vinyl and comfort grip
- Drop forged steel
- Side cutters available
- USA and global
- 4-1/2” to 11” Length
- Precision machined jaw
- Non-insulated
- Lifetime warranty on mfg. defect

KX501773624



KN5432750



KX501773612



KP8534202



LB50317



LB50317



KW507776C



KX502078216



KN5432621



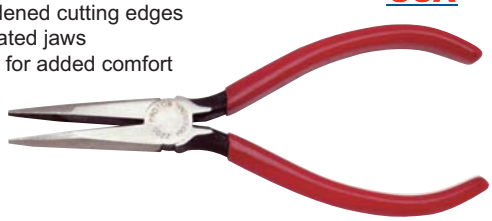
Aprox. Length (in.)	Jaw Length (in.)	Joint Width (in.)	Handle Type	Side Cutter	Spring In Handle	Style	Brand Name	Made In	Order No.	Price
4-1/2	5/8	9/16	Dipped	No	Yes	Round Nose	Irwin	Global	**KX501773612**	Price
4-1/2	1	9/16	Two Layer Plastic Grip	No	Yes	Short Nose	Williams	USA	**KP30PL114CS**	Price
5	1-1/4	9/16	Dipped	No	Yes	Curved Nose	Irwin	Global	**KX501773598**	Price
5-1/2	1-1/4	9/16	Dipped	No	Yes	Serrated Jaw	Irwin	Global	**KX501773599**	Price
5-3/4	21/32	3/8	Anti Static ESD Safe	No	No	Round Nose	Wiha	Germany	**KN5432750**	Price
6	1-25/32	23/32	ProTouch Grip	Yes	No	Long Nose	Irwin	Global	**KX502078216**	Price
6	2	3/8	Dipped	Yes	No	Long Nose	TEKTON	Global	**KP8534202**	Price
6-1/2	2	1-3/4	Vinyl Grip w/Flex Spring	Yes	Yes	Long Nose	Generic	Global	**KP8312107**	Price
6-1/2	2	9/16	Dipped	Yes	No	Long Nose	Generic	Global	**KP8312106**	Price
6-1/2	2-1/16	11/16	Vinyl Grip	No	No	Long Nose	Crescent	Global	**KW507776C**	Price
6-1/2	2.71	11/16	Soft Grip	Yes	No	10 AWG Cut Capacity	Wiha	Global	**KN5432618**	Price
7-1/2	2-11/16	11/16	Vinyl Grip	Yes	No	Long Nose	Crescent	Global	**KW507777C**	Price
8	1-1/4	1/2	Dipped	No	No	Machined Jaw	Irwin	Global	**KX501773619**	Price
8	2-1/2	3/8	Dipped	Yes	No	Long Nose	TEKTON	Global	**KP8534203**	Price
8	2-5/16	15/16	ProTouch Grip	Yes	No	Long Nose	Irwin	Global	**KX502078218**	Price
8	2-3/8	7/8	Classic Grip	Yes	No	Long Nose	Channellock	USA	**LB50317**	Price
8	2-7/16	15/16	ProTouch Grip	Yes	No	12 AWG Stripper	Irwin	Global	**KX501773624**	Price
8	2-1/2	3/4	Dipped	Yes	No	Long Nose	Generic	Global	**KP8312108**	Price
8-1/2	2-5/16	1	Code Blue® Soft Grip	Yes	No	-	Channellock	USA	**LB50318CB**	Price
8	3.68	3/4	Soft Grip	Yes	No	8 AWG Cut Capacity	Wiha	Global	**KN5432621**	Price
8	2.4	1.1	Dipped	Yes	No	Long Nose	Gearwrench	Global	**KP6582121**	Price
11	3-1/4	7/8	Dipped	No	No	Long Nose	Generic	Global	**KP8312111**	Price
11	3-1/8	3/8	Dipped	No	No	Long Nose	TEKTON	Global	**KP8534401**	Price

PROTO Needle Nose Pliers

MADE IN THE USA

- Induction hardened cutting edges
- Diamond serrated jaws
- Plastisol grips for added comfort

New!



Style - Standard				
Approx. OAL (in.)	Jaw Length (in.)	Model No.	Order No.	Price
5	1-3/16	J282G	**KP4230215**	Price
5-1/2	1-11/16	J229-03G	**KP4230205**	Price
6-1/2	1-7/8	J220G	**KP4230190**	Price

Style - W/ Side Cutter				
Approx. OAL (in.)	Jaw Length (in.)	Model No.	Order No.	Price
6-1/2	1-7/8	J226G	**KP4230217**	Price
7-1/2	2-5/8	J226-01G	**KP4230220**	Price

PROTO Needle Nose Coil Spring Pliers

MADE IN THE USA

- Induction hardened cutting edges
- Diamond serrated jaws
- Plastisol grips for added comfort

New!



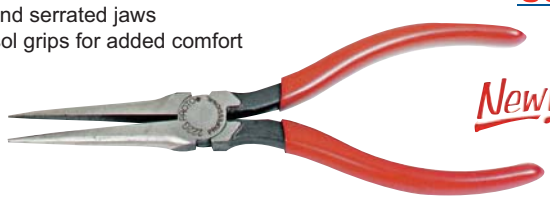
Approx. OAL (in.)	Jaw Length (in.)	Style	Model No.	Order No.	Price
5	1-3/16	W/ Spring	J282BSG	**KP4230210**	Price
5-1/2	1-11/16	W/ Side Cutter - Coil Spring	J229-01G	**KP4230200**	Price

PROTO Needle Nose Long Pliers

MADE IN THE USA

- Diamond serrated jaws
- Plastisol grips for added comfort

New!



Approx. OAL (in.)	Jaw Length (in.)	Model No.	Order No.	Price
6	2-5/32	J223G	**KP4230240**	Price
7	2-1/8	J222G	**KP4230235**	Price
7-3/4	1-9/16	J228G	**KP4230250**	Price

PROTO Bent Needle Nose Pliers

MADE IN THE USA

- Improved fulcrum point provides more holding power with less gripping effort
- Bent nose design to reach around obstructions
- Plastisol grips for comfort

New!



Approx. OAL (in.)	Jaw Length	Jaw Width	Model No.	Order No.	Price
6-1/2	1-5/8	3/4	J225G	**KP4230245**	Price
11-1/2	2-9/16	23/32	J241G	**KP4230265**	Price

PROTO Miniature Pliers

MADE IN THE USA

- For use in limited access or confined areas
- Pliers are hot-drop forged with a high polish finish for strength and cleaning ease
- Hardened and tempered jaws for strength and durability
- Dual leaf spring design helps increase durability while allowing the jaws to be maintained in the open position for quick use
- Full flush and semi-flush cutting edges are honed and electronically induction hardened for long life wire cutting

New!



Approx. OAL (in.)	Jaw Width (in.)	Jaw Length (in.)	Type	Model No.	Order No.	Price
4	7/16	1/4	End Cutting	J2836SCMP	**KP4230410**	Price
4-1/2	7/16	1-1/8	Solid Joint	J2856RNMP	**KP4230420**	Price
4-1/2	7/16	3/8	Flush Mini Angled	J2838FCMP	**KP4230415**	Price

STANLEY Long Nose Cutting Pliers

- Fixed joint design used for bending, turning and cutting
- Long nose design for use in hard-to-reach areas
- Oil-resistant dipped handle allows for a comfortable grip
- Drop-forged steel is strong and durable
- Meets ANSI specifications



OAL (in.)	Model No.	Capacity (in.)	Order No.	Price
7	84-101	1-3/8	**KP433036**	Price
8	84-102	1-11/16	**KP433038**	Price

PROTO Duckbill Pliers

MADE IN THE USA

- Wide, flat nose for better grip than standard needle-nose pliers
- Diamond serrated jaws
- Long handle for added leverage
- Plastisol grips for added comfort

New!



Approx. OAL (in.)	Jaw Length (in.)	Jaw Width (in.)	Model No.	Order No.	Price
7-3/4	1-9/16	17/32	J227G	**KP4230260**	Price

TITAN Pistol Grip Pliers with Crimper

- Ergonomic pistol grip handle provides greater gripping power while reducing hand fatigue
- Angled design for use in tight spaces & hard to reach areas
- Built in wire cutter & crimper for use with various electrical applications

New!



Approx. OAL (in.)	Order No.	Price
9	**KP8211400**	Price

Bent Needle Nose Pliers

- Vinyl and comfort grip
- Drop forged steel
- Side cutters available
- USA and global
- 5" to 11" Length
- Precision machined jaw
- Non-insulated
- Lifetime warranty on mfg. defect


LB50386


KN5432625


KP8534404

Length (in.)	Jaw Length (in.)	Aprox. Joint Width (in.)	Handle Type	Side Cutter	Spring In Handle	Brand Name	Bent Style	Made In	Order No.	Price
6-1/4	2-1/2	5/8	Soft Grip	Yes	Yes	Wiha	40°	Vietnam	**KN5432623**	Price
7	1-1/2	1/4	Dipped	Yes	No	TEKTON	90°	Global	**KP8534233**	Price
8	3-1/2	3/4	Soft Grip	Yes	No	Wiha	40°	Vietnam	**KN5432625**	Price
10	1-7/8	3/4	Dipped	No	No	TEKTON	90°	Global	**KP8534406**	Price
11	3	3/4	Dipped	No	No	TEKTON	45°	Global	**KP8534404**	Price

Flat Nose Pliers

- Drop forged steel
- Precision machined jaw
- Non-insulated
- Lifetime warranty on mfg. defect


LB50718

Length (in.)	Jaw Length (in.)	Jaw Width (in.)	Handle Type	Brand Name	Made In	Order No.	Price
6	2	2	Dipped	Irwin	Global	**KX501773621**	Price
8	1-1/5	2-1/8	Dipped	Irwin	Global	**KX501773620**	Price
8	1-3/16	17/32	Comfort Grip	Channellock	USA	**LB50718**	Price

11" Extra Long Reach Pliers

- Superior long reach design for work in confined areas
- Machined jaws for maximum gripping strength
- ProTouch Grip handle
- Limited lifetime warranty


KX501773390


KX501773388


KX501773583


KX501773582


KX501773387


KX501773584

Style	Jaw Width (in.)	Jaw Length (in.)	Order No.	Price
20° Bent Nose	1-3/4	3-1/4	**KX501773390**	Price
45° Bent Nose	2-1/4	2-1/2	**KX501773583**	Price
90° Bent Nose	2	2	**KX501773387**	Price
Flat Nose	2-1/2	3-1/4	**KX501773388**	Price
Needle Nose	2-1/2	3	**KX501773582**	Price
Standard Nose	2-1/2	3-1/4	**KX501773584**	Price

6" Long Nose Electricians Pliers 4-in-1



- Crimps, strips, grabs, and cuts
- Durable nickel chromium steel construction
- Induction hardened cutting edge stays sharper, longer
- Machined jaws for maximum gripping strength
- Meets or exceeds ANSI specifications
- Limited lifetime warranty

Length (in.)	Side Cutter	Jaw Width (in.)	Jaw Length (in.)	Order No.	Price
6	Yes	3/4	1-7/8	**KX501773626**	Price

Duck Bill Pliers

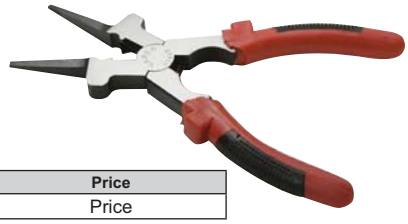
- Jaws are polished with rust-protective coating
- Flat wide nose provides a better grip than the regular needle nose models
- Double layer grips



Length (in.)	Jaw Length (in.)	Handle Type	Order No.	Price
6-1/2	2-1/16	Two Layer Plastic Grip	**KP30PL146C**	Price

MIG Wire Utlitiy Plier

- Needle nose pliers and wire cutter for pulling and trimming MIG wire
- Sharp edges for cleaning inside nozzle and around tips
- Small serrated hole for MIG tips
- Large serrated hole for nozzles
- Spring loaded handle with heavy insulated grip for comfort



Order No.	Price
KP8211448	Price

9" Welding Pliers 8 in 1

- Groove nose design for superior splatter removal
- Easy tip installation and removal
- Durable laser heat treated cutting edge
- Spring loaded



Order No.	Price
LB50360	Price

Strap Cutters

- Shear-cut blades give clean smooth easy cuts
- Workhead has black oxide, clean resistant finish
- Cushion grip handles

MADE IN THE USA



Length (in.)	Flat Strap Steel	Round Steel Tie Wire	Order No.	Price
9	3/4 x .035	Up to 14 Gauge	**KR550990T**	Price
12	1-1/4 x .050	-	**KR551290G**	Price
24	2 x .050	-	**KR552690GP**	Price

Cable Cutter

H.K. Porter

- Compact cable cutter
- Cuts 4/0 aluminum and 2/0 soft copper
- Lifetime warranty
- Tool not insulated


KR550890CSJ

Channellock Code Blue

- Cuts up to 4/0 aluminum and up to 2/0 soft copper
- Tool not designed for steel or ACSR and not insulated
- Limited warranty

MADE IN THE USA



		HK Porter		Channellock	
Length (in.)	Handle Type	Order No.	Price	Order No.	Price
9	Non-Slip Grip	**KR550890CSJ**	Price	-	-
9	Rubber Grip	-	-	**LB50911**	Price
9	Rubber Grip	-	-	**LB50911CB**	Price

Precision Ground Blade Cable Cutter

MADE IN THE USA

- Cuts up to 3/0 fine strand copper battery cable (not for use on steel cable)
- Precision ground blades minimize deflection

Plastisol grips for added comfort

New!



Length (in.)	Model No.	Order No.	Price
7-1/2	J288	**KP4230730**	Price

MAXILLA Bolt Cutters. . . . that FOLD!

- Folding design for compact storage and easy carrying
- Wide, ergonomic handles provide a powerful, non-slip grip
- CR-MO (Chromium-molybdenum) steel jaws with black oxide finish

New!





Length	Hard Metals Capacity	Soft Metals Capacity	Order No.	Price
18	1/4 (RC48)	5/16 (HB200)	**KE5393908**	Price
24	5/16 (RC48)	7/16 (HB200)	**KE5393909**	Price
36	7/16 (RC48)	9/16 (HB200)	**KE5393910**	Price

Bolt Cutters

H.K. Porter

MADE IN THE USA

- General plant maintenance tool
- Drop-forged, precision ground, alloy tool steel jaws, center-cut blades
- Toggle joints turn 50 lbs hand pressure to 4000 lbs of cutting pressure


KR550090MC

Ridgid

- Quick, easy adjustments through use of cam/bolt mechanism
- Slim head permits cutting close to surface
- Jaws made of ardened steel


KR5012708

TEKTON

- Cuts bolts, chain, threaded rod, wire and more
- Forged and hardened alloy steel jaws driven by a compound hinge
- Strong, high leverage tubular steel handles won't twist or give under load


KP853386

			HK Porter		Ridgid		Tekton	
Size (in.)	Soft Metals Cap. (in.)	Hard Metals Cap. (in.)	Order No.	Price	Order No.	Price	Order No.	Price
8	7/32	3/16	-	-	-	-	**KP853386**	Price
12	3/16	5/32	-	-	-	-	**KP853388**	Price
14	5/16	3/16	**KR551490MC**	Price	**KR5012708**	Price	**KP853391**	Price
18	3/8	1/4	**KR550090MC**	Price	**KR5012713**	Price	**KP853400**	Price
24	7/16	5/16	**KR550190MC**	Price	**KR5012718**	Price	**KP853410**	Price
30	1/2	3/8	**KR550290MC**	Price	**KR5012723**	Price	**KP853416**	Price
36	9/16	7/16	**KR550390MC**	Price	**KR5012728**	Price	**KP853421**	Price
42	11/16	1/2	**KR550590MC**	Price	**KR5012733**	Price	-	-

PROTO Straight Snips

- Designed for all straight cutting including inside and outside corners
- Plastisol grips for added comfort

MADE IN THE USA

New!



OAL (in.)	Blade Length (in.)	Model No.	Order No.	Price
7	1-1/2	J317	**KP4230985**	Price
10	2	J320	**KP4230990**	Price
12-3/4	2-3/4	J322	**KP4230995**	Price

PROTO Duckbill Snips

- Duckbill snips are designed for circle and odd shaped radius cutting
- Plastisol grips for added comfort

MADE IN THE USA

New!



OAL (in.)	Blade Length (in.)	Model No.	Order No.	Price
12-3/4	2-3/4	J312	**KP4230980**	Price

PROTO Bulldog Tinner Snips

- Designed for making straight and moderately irregular cuts
- Plastisol grips for added comfort

New!

MADE IN THE USA



OAL (in.)	Blade Length (in.)	Model No.	Order No.	Price
16	2-1/2	J336	**KP4231005**	Price

STANLEY Fatmax® Tin Snips

- Cuts up to 22 gauge cold-rolled steel or 26 gauge stainless steel
- Durable fully-polished steel blades are forged to stay sharp for long cutting life
- Laser Etched Blade Marking scale helps to make quick precise cuts
- Large handle rings and double dipped grips for comfort

New!



OAL (in.)	Cut	Model No.	Order No.	Price
10	Straight	FMHT73571	**KP439220**	Price
12	Straight	FMHT73992	**KP439228**	Price

STANLEY Fatmax® Duck Bill Snips

- Cuts up to 22 gauge cold-rolled steel or 26 gauge stainless steel
- Durable fully-polished steel blades are forged to stay sharp for long cutting life
- Laser Etched Blade Marking scale helps to make quick precise cuts
- Large handle rings and double dipped grips for comfort

New!



OAL (in.)	Cut	Model No.	Order No.	Price
10	Straight	FMHT73993	**KP439230**	Price

PROTO Miniature Snips

MADE IN THE USA



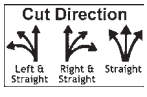
- Improved shearing action
- Increased length of cut from 1-1/8" to 2"
- Increased jaw opening
- Serrated bottom blade to grip material
- Ergonomic handle design
- Cuts up to 26 gauge cold-roll sheet metal
- Copper wire up to 18 AWG
- Soft steel wire up to 22 AWG

New!

OAL (in.)	Blade Length (in.)	Model No.	Order No.	Price
6-1/2	1-1/8	J308	**KP4231010**	Price

Aviation, Bulldog, and Offset Snips

- Cuts up to 18 gauge sheet metal
- Smooth cutting action
- Double hardened cutting edge
- Soft grip handles





FR50N2R



KX502073103



KP3028201

				Nicholson		Irwin		Snap-On/Williams	
Description	Length of Cut (in.)	Cut Direction	Approx. OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
Aviation Right	1-3/8	Right	10"	**FR50N2R**	Price	-	-	-	-
Aviation-Left	1-5/16	Left and Straight	10	-	-	**KX502073101**	Price	**KP3028201**	Price
Aviation-Right	1-5/16	Right and Straight	10	-	-	**KX502073102**	Price	**KP3028203**	Price
Aviation-Straight	1-3/8	Straight	10	-	-	**KX502073103**	Price	**KP3028205**	Price
Bulldog Notch Snip	3/4	Straight	9	-	-	**KX502073105**	Price	**KP3028211**	Price
Offset Snip-Left	1-5/16	Left and Straight	9-1/2	-	-	**KX502073201**	Price	**KP3028231**	Price
Offset Snip-Right	1-5/16	Right and Straight	9-1/2	-	-	**KX502073202**	Price	**KP3028233**	Price
Straight Cut Tinner	2	Straight	10	-	-	-	-	**KP3028305**	Price
Straight Cut Tinner	2-1/2	Straight	12	-	-	-	-	**KP3028307**	Price
Straight Cut Tinner	2-7/8	Straight	14	-	-	-	-	**KP3028309**	Price

Wiss Metalmaster® Compound Action Snips

- The recommended maximum cutting capacity is 18 gauge (.049) in low carbon cold rolled steel

MADE IN THE USA



Cut Direction	Blade Length (in.)	OAL (in.)	Order No.	Price
Left and Straight	1-3/8	9-3/4	**LA50M1R**	Price
Right and Straight	1-3/8	9-3/4	**LA50M2R**	Price
Straight	1-3/8	9-3/4	**LA50M3R**	Price

Wiss Metalmaster® Compound Action Bulldog Snips

- M-5R for notching or trimming extra heavy stock

MADE IN THE USA



Cutting Direction	Blade Length (in.)	OAL (in.)	Recommend Max. Cap. Low Carbon Cold Rolled Steel	Order No.	Price
Notch	7/8	9-1/4	16 Gauge (.065")	**LA50M5R**	Price

Wiss Metalmaster® Offset Snips

- The recommended maximum cutting capacity is 18 gauge (.049) in low carbon cold rolled steel

MADE IN THE USA



Cut Direction	Blade Length (in.)	OAL (in.)	Order No.	Price
Left	1-3/8	9-1/4	**LA50M6R**	Price
Right	1-3/8	9-1/4	**LA50M7R**	Price

Wiss Metalmaster® Special Series Snips

MADE IN THE USA

- Special Series Snips are specially hardened for unusual industrial requirements such as cutting today's space age metals like inconel, stainless steel and titanium
- Maximum capacity 18 gauge



Cut Direction	Blade Length (in.)	OAL (in.)	Order No.	Price
Left and Straight	1-3/8	9-3/4	**LA50M1RS1**	Price
Right and Straight	1-3/8	9-3/4	**LA50M2RS1**	Price

Wiss Metal-Wizz® Multi-Purpose Snips

MADE IN THE USA

- Often used for cutting screening and hardware cloth, light gauge sheet metal, synthetic shingles, tile gutters, downspouts, carpeting and much more
- Compound action, serrated jaws, safety latch



Cut Direction	Blade Length (in.)	OAL (in.)	Capacity	Order No.	Price
Straight	1-3/8	9	20 Gauge Low Carbon	**LA50MPC3**	Price

Wiss Bulldog Pattern Snips

- Bulldog snips provide greater cutting power for notching, nibbling and chopping heavy stock



Cut Direction	Blade Length (in.)	OAL (in.)	Recommend Max. Cap. Low Carbon Cold Rolled Steel	Order No.	Price
Notch	2-1/2	16-1/2	16 Gauge (.065")	**LA50W5N**	Price

Wiss Straight Pattern Snips



- Will cut wide curves when trimming light stock
- Blade face is flat and tends to guide the tool along a straight line

Cut Direction	Blade Length (in.)	OAL (in.)	Recommend Max. Cap. Low Carbon Cold Rolled Steel	Order No.	Price
Straight	1-3/4	7	23 Gauge (.025")	**LA50A13N**	Price
Straight	2	8-1/4	23 Gauge (.025")	**LA50A12N**	Price
Straight	2-1/2	11	21 Gauge (.032")	**LA50A10N**	Price
Straight	2-1/4	9-3/4	23 Gauge (.025")	**LA50A11N**	Price
Straight	3	12-1/2	20 Gauge (.035")	**LA50A9N**	Price
Straight	4	14-1/2	28 Gauge (.049")	**LA50W7N**	Price

Wiss Duckbill Combination Pattern Snips

Duckbill pattern snips feature the advantage of cutting moderately tight curves to the left or right in light stock as well as cutting straight

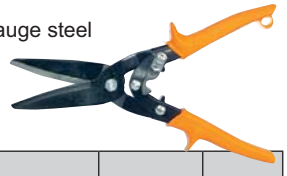


Cut Direction	Blade Length (in.)	OAL (in.)	Recommend Max. Cap. Low Carbon Cold Rolled Steel	Order No.	Price
Multi	2-1/4	10-1/4	23 Gauge (.025")	**LA50V10N**	Price
Multi	3	13	21 Gauge (.032")	**LA50V19N**	Price

Wiss MultiMaster Snips

MADE IN THE USA

- Combines long cut of a tinner's snip with the strength of compound action which multiplies the hand force by 5 times
- Cuts up to 20 gauge steel
- Non-slip serrated jaws and textured grips



Blade Length (in.)	OAL (in.)	Capacity	Order No.	Price
3	10-1/2	20 Gauge (.035")	**LA50M300**	Price

Crescent 4 Pc. Multi Blade Changeable Cutting Plier Set

- Multi-purpose blade for cutting wire, cable, rope, vinyl and plastics
- Quick change interchangeable blades for easy operation
- Cable head, straight head, serrated straight, slip joint plier
- Includes a bottle opener, wire cutter, bender, and holster
- Compound action design for more power with less effort



Overall Length	Blade Length	Cutting Capacity	Order No.	Price
10" on Snip, 11" Multi-blade, 8-1/2 Cable Cutter, 8" Plier	3-1/2 Multi-blade, 2-1/4 Snip, 1-1/2 cable cutter, & 2" Plier	18-20 Gauge Straight & Cable cuts soft wire	**KW50CMTS4**	Price

Available while supplies last

PROTO® Power-Track® II Tongue & Groove Pliers

MADE IN THE USA

New!

- Precision milled undercut groove joint provides interlocking feature for powerful non-slip performance
- Special fastener ensures permanent assembly, yet allows for easy adjustment
- Angled teeth provide superior gripping power over standard right angled teeth
- Plastisol grips for added comfort
- Natural finish



Approx. Length (in.)	Capacity (in.)	Jaw Length (in.)	Jaw Width (in.)	Model No.	Order No.	Price
5	15/32	7/8	13/16	J261SG	**KP4230145**	Price
7	1-1/8	1-3/8	1-3/4	J262SG	**KP4230150**	Price
10	2-1/8	1-15/16	2-3/4	J260SG	**KP4230165**	Price
12	2-5/8	2-1/4	2-3/4	J264SG	**KP4230155**	Price
17	4-1/16	3-3/8	4-1/8	J265SG	**KP4230160**	Price

IRWIN VISE-GRIP® Multi-Groove Tongue & Groove Pliers

Grips 50% faster than a regular plier because of the push-n-slide button. Comes with all-purpose jaw that provides a tremendous bite on material regardless of the shape it grabs

- Heat treated alloy
- Anti-pinch, non-slip ProTouch™ Grips provide comfort, control, and less hand fatigue
- Jaw design accommodates a variety of shapes
- Offset head for better leverage



Length (in.)	No. of Jaw Adj.	Capacity (in.)	Handle Type	Order No.	Price
8	13	1-3/4	ProTouch Grip	**KX502078108**	Price
10	16	2-1/4	ProTouch Grip	**KX502078110**	Price
12	19	2-3/4	ProTouch Grip	**KX502078112**	Price
16	21	4-1/2	ProTouch Grip	**KX502078116**	Price
20	25	6	ProTouch Grip	**KX502078120**	Price

TEKTON® Groove Joint Pliers

MADE IN THE USA

- Sharp, angled pipe-wrench-style teeth offer a sure bite
- Undercut tongue and grooves interlock for superior joint strength
- Adjustable nut and bolt fastener can be set to desired tension
- Broad, rounded handle profile keeps your hand comfortable



Length (in.)	No. of Jaw Adj.	Capacity (in.)	Order No.	Price
7-1/2	0 - 1	1	**KP8537523**	Price
10	0 - 1-1/2	1-1/2	**KP8537524**	Price
13	0 - 2-1/4	2-1/4	**KP8537525**	Price
16	0 - 4-1/4	4-1/4	**KP8537526**	Price

IRWIN VISE-GRIP® Standard Tongue & Groove Pliers

Right angle teeth grip in all directions. Grips 50% faster than a standard plier because of the push-n-slide button

- Heat treated alloy
- Anti-pinch, non-slip ProTouch™ Grips provide comfort, control, and less hand fatigue
- Jaw design accommodates a variety of shapes
- Offset head for better leverage



Length (in.)	No. of Jaw Adj.	Capacity (in.)	Handle Type	Order No.	Price
5	3	1/2	ProTouch Grip	**KX501773618**	Price
8	5	1-1/2	ProTouch Grip	**KX502078508**	Price
10	7	2	ProTouch Grip	**KX502078510**	Price
12	7	2-1/4	ProTouch Grip	**KX502078512**	Price

CHANNELLOCK® Original Grip Tongue & Groove Pliers

MADE IN THE USA

- Made from high carbon C1080 steel for superior performance
- Right angle, laser heat treated teeth grip better
- Undercut tongue & groove won't slip
- PermaLock® fastener eliminates nut and bolt failure
- Channellock Blue® comfort grip



Length (in.)	No. of Jaw Adj.	Capacity (in.)	Handle Type	Order No.	Price
4-1/2	3	1/2	Comfort Grip	**LB50424**	Price
6-1/2	5	7/8	Comfort Grip	**LB50426**	Price
9-1/2	5	1-1/2	Comfort Grip	**LB50420**	Price
10	7	2	Comfort Grip	**LB50430**	Price
12	7	2-1/4	Comfort Grip	**LB50440**	Price
16	8	4-1/4	Comfort Grip	**LB50460**	Price
20	12	5-1/2	Comfort Grip	**LB50480**	Price

STANLEY® Groove Joint Pliers

- Slip-resistant tongue and groove design used for grasping and turning
- Oil-resistant dipped handle allows for a comfortable grip
- Drop-forged steel is strong and durable
- Meets ANSI specifications

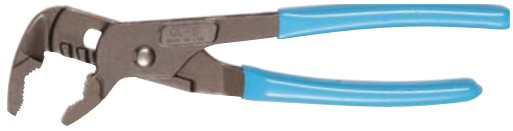


OAL (in.)	Model No.	Capacity (in.)	Jaw Adj. (in.)	Order No.	Price
8	84-109	1	6	**KP433046**	Price
10-1/4	84-110	2	7	**KP433048**	Price
12-5/8	84-111	2-1/16	8	**KP433050**	Price
16-1/4	84-020	3-11/16	9	**KP433002**	Price

CHANNELLOCK® Griplock Tongue & Groove Pliers

MADE IN THE USA

- Ergonomically designed offset head for greater leverage
- Special jaw design accommodates many shapes
- PermaLock® fastener eliminates nut and bolt failures
- CHANNELLOCK BLUE® grips for comfort



Length (in.)	No. of Jaw Adj.	Capacity (in.)	Handle Type	Order No.	Price
6-1/2	5	1-1/16	Comfort Grip	**LB50GL6**	Price
9-1/2	5	1-1/4	Comfort Grip	**LB50GL10**	Price
12-1/2	6	2-1/4	Comfort Grip	**LB50GL12**	Price

CHANNELLOCK® V-Jaw Tongue & Groove Pliers

MADE IN THE USA

- Right angle, laser heat-treated teeth grip better and last longer
- Undercut tongue & groove design won't slip
- V-Jaws give you more points of contact on round stock and tubing
- Patented reinforcing edge minimizes stress breakage
- PermaLock® fastener eliminates nut and bolt failure
- CHANNELLOCK® uses high-carbon C1080 steel for superior performance on the job and electronic coating for ultimate rust prevention
- CHANNELLOCK BLUE® grips for comfort



Length (in.)	No. of Jaw Adj.	Capacity (in.)	Handle Type	Order No.	Price
9-1/2	5	1-1/2	Comfort Grip	**LB50422**	Price
12	7	2-1/4	Comfort Grip	**LB50442**	Price

wiha Rapid Lock Tongue & Groove Pliers

Holds adjustment in position after locking onto the material. Designed with induction hardened jaws and a push button release system

- Heat treated alloy
- Vinyl and comfort grips
- Jaw design accommodates a variety of shapes
- Offset head for better leverage
- Made in Germany



Length (in.)	No. of Jaw Adj.	Capacity (in.)	Handle Type	Order No.	Price
10	5	1-3/4 Round 2 Hex	Soft Grip	**KN5432665**	Price
12	5	2 round 2-1/4 Hex	Soft Grip	**KN5432667**	Price

CHANNELLOCK Oil Filter and PVC Pliers

- High carbon steel construction
- PermaLock fastener eliminates nut and bolt failure
- Right angle teeth help ensure a strong grip
- Channellock Blue® comfort grip handles



OAL (in.)	For Oil Filter (in.)	Order No.	Price
9	1-3/4 thru 3	**LB50209**	Price
11-3/8	2-1/2 thru 3-3/4	**LB502012†**	Price
12	2-1/2 thru 3-3/4	**LB50212**	Price
15-1/2	2-1/2 thru 4-1/2	**LB50215**	Price

† 30 Degree angled head

IRWIN VISE-GRIP 9" Oil Filter/PVC Pipe Pliers

- Specially designed for oil filters or PVC pipe
- 4 Adjustment positions for versatility
- Lifetime warranty



Length (in.)	Capacity (in.)	Handle Type	Order No.	Price
9	1-3/4	Dipped	**KX501773631**	Price

CHANNELLOCK Nut Buster Tongue & Groove Pliers

High-carbon C1080 steel for superior performance on the job and electronic coating for ultimate rust prevention

- Parrot Nose design ideal for round surfaces
- Unique SAFE-T-STOP® feature prevents finger pinch
- Unique double tongue & groove design won't slip
- PermaLock® fastener eliminates nut and bolt failures
- CHANNELLOCK BLUE® grips for comfort

MADE IN THE USA



Length (in.)	No. of Jaw Adj.	Capacity (in.)	Handle Type	Order No.	Price
7	2	5/8	Comfort Grip	**LB50307**	Price
9-1/2	4	1-1/8	Comfort Grip	**LB50410**	Price
14	6	2	Comfort Grip	**LB50414**	Price

PROTO Angle Nose Pliers

MADE IN THE USA

- Nose angled for easy access
- Angled teeth provide superior gripping power over standard right angled teeth
- Plastisol grips for added comfort

New!



Approx. OAL (in.)	Jaw Length (in.)	Jaw Width (in.)	Jaw Thickness (in.)	Model No.	Order No.	Price
5-1/4	3/4	5/8	11/64	J235	**KP4230395**	Price

PROTO Soft Jaw Cannon Plug Pliers

MADE IN THE USA

- Four position pivot design provides greater concentricity
- Replaceable urethane padded jaws protect work piece from marking or scratching
- Plastisol grips for added comfort

New!



Approx. OAL (n.)	Capacity	Model No.	Order No.	Price
9-1/2	3/4 to 2-1/2	J253G	**KP4230390**	Price

wiha Slide Lock Tongue & Groove Pliers

Slide lock: 10 adjustment positions for maximum range. Holds adjustment in position after locking onto the material. Designed with induction hardened jaws

- Heat treated alloy
- Vinyl and comfort grips
- Jaw design accommodates a variety of shapes
- Offset head for better leverage
- Made in Germany



Length	No. of Jaw Adj.	Capacity (in.)	Handle Type	Order No.	Price
7	10	1-1/4 Round 1-1/2 Hex	Soft Grip	**KN5432660**	Price
10	10	1-3/4 Round 2 Hex	Soft Grip	**KN5432661**	Price
12	10	2 Round 2-1/4 Hex	Soft Grip	**KN5432663**	Price

Snap-on Industrial Brands | WILLIAMS Utility Superjoint Pliers

- Multiple parallel jaw positions are locked in to proper groove for superior non-slip performance
- Serrated jaws for maximum gripping power
- Polished heads resist rust and corrosion, extending the tool life



Length (in.)	Capacity (in.)	Handle Type	Order No.	Price
16	4	Double-Dipped Plastic Grip	**KP30PL1524C**	Price

TEKTON Fencing Pliers

- Multi-purpose tool for installing, maintaining, and repairing wire fences
- Seven tools in one: hammer, staple starter, staple puller, staple claw, two wire splicing crimpers, two shear-type wire cutters, and gripping jaws
- Slim, nonslip grips are comfortable and easy to handle
- Made from high-strength chrome vanadium steel



OAL (in.)	Order No.	Price
10-1/2	**KP8534541**	Price

CHANNELLOCK 2 Pc. Tongue & Groove Set

Includes:
- 6-1/2″ Tongue & Groove (426)
- 9-1/2″ Tongue & Groove (420)

MADE IN THE USA

Order No.	Price
LB50GS1	Price



PROTO Lock Joint Pliers Set

New!

- Fast, precise push-button adjustment with safety lock
- 12-position notches
- The closed position of the ergonomic comfort grip handles increases the tightening power
- Pipe wrench style teeth to self-grip
- Slim-profile self-gripping nose
- Long slim nose for improved reach in confined spaces
- 62 HRC high-frequency treated jaws
- Varnish finish, PVC grips



Set Includes	Model No.	Order No.	Price
1 of each 7", 10", & 12"	J260MGS	KP4230140	Price

CHANNELLOCK 2 Pc. Combo Set

Includes:
- 7″ Cutting plier (337)
- 9-1/2″ Tongue & Groove (420)

MADE IN THE USA

Order No.	Price
LB50GS2	Price



CHANNELLOCK 3 Pc. Tongue & Groove Set

Includes:
- 6-1/2″ Tongue & Groove (426)
- 9-1/2″ Tongue & Groove (420)
- 12″ Tongue & Groove (440)

MADE IN THE USA

Order No.	Price
LB50GS3	Price



CHANNELLOCK 2 Pc. Griplock® Set

Includes:
- 10″ Griplock® plier (GL10)
- 12″ Griplock® plier (GL12)

MADE IN THE USA

Order No.	Price
LB50GLS1	Price



CHANNELLOCK 3 Pc. Combo Set

Includes:
- 7-1/2″ Long nose plier (3017)
- 7″ Cutting plier (337)
- 10″ Tongue & Groove (430)

MADE IN THE USA

Order No.	Price
LB50GS4	Price



IRWIN VISE-GRIP 2 Pc. Groove Joint Plier Set

- Right angle teeth grips in all directions for maximum bite
- ProTouch Grip provide comfort, control and less hand fatigue
- Includes: 6” and 10” pliers
- Limited lifetime warranty



Order No.	Price
KX501773639	Price

IRWIN VISE-GRIP 3 Pc. Groove Joint Plier Set

- Right angle teeth grips in all directions for maximum bite
- ProTouch Grip provides comfort, control and less hand fatigue
- Includes: 6”, 8” and 10” pliers
- Limited lifetime warranty



Order No.	Price
KX501773638	Price

CHANNELLOCK 3 Pc. Griplock® Set

Includes:
- 6″ Griplock® plier (GL6)
- 10″ Griplock® plier (GL10)
- 12″ Griplock® plier (GL12)

MADE IN THE USA



Order No.	Price
LB50GLS3	Price

Linesman's Pliers

- Serrated jaws
- Cutter
- Forged steel
- Heavy duty construction
- Round or bevel nose
- #1773615 Heavy duty
- Lifetime warranty against manufacturing defects



KX502078208


LB500369

MADE IN THE USA


KP3023603

	Channellock		Irwin		Snap-On/Williams		Wiha	
Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
7	-	-	-	-	KP30PL204C	Price	KN5432606	Price
8	-	-	KX502078208	Price	KP3023403†	Price	KN5432609	Price
9	LB50369	Price	KX502078209	Price	KP3023603†	Price	KN5432615	Price
6	-	-	KX501771973	Price	-	-	KN5432603	Price
7-1/2	LB50367	Price	-	-	-	-	-	-
8-1/2	LB50368	Price	-	-	KP30PL205C	Price	-	-
9-1/2	-	-	KX501773615	Price	-	-	-	-

† Made Globally

Lineman's Pliers

MADE IN THE USA

- For utility linemen, wiring and electrical equipment installation, and maintenance
- Induction hardened cutting edges and diamond serrated jaws
- Built-in insulation crusher
- Plastisol grips for added comfort



Approx. OAL (in.)	Model No.	Order No.	Price
8-1/2	J268G	KP4230355	Price

High Leverage Lineman's Pliers

MADE IN THE USA

- Jaws have offset rivet for increased leverage
- Designed for cutting No 8 and other large wires
- Diamond serrated jaws
- Plastisol grips for added comfort



Approx. OAL (in.)	Model No.	Order No.	Price
9	J269G	KP4230370	Price

New England Style Lineman's Pliers

- Slim rounded nose for easy access in restricted spaces
- Diamond serrated jaws
- Plastisol grips for added comfort

MADE IN THE USA



Approx. OAL (in.)	Model No.	Order No.	Price
6	J266G	KP4230345	Price
7	J267G	KP4230350	Price

Lineman's Cutting Pliers

- Hardened cutting edges for durability
- Serrated jaw for additional grip and leverage
- Forged steel construction
- Rust resistant finish
- Double dipped handle for comfort
- Meets or exceeds ANSI standards



OAL (in.)	Model No.	Capacity (in.)	Order No.	Price
7-1/2	84-112	7/8	KP433052	Price
8-3/4	84-113	1-1/2	KP433054	Price

End Cutters

Tekton
- Hardened cutting edge
- Slim, nonslip grips
- Made from high-strength chrome vanadium steel


KP8534052

Channellock
- Laser heat treated cutting edges
- Hardened steel
- Cushioned grip handles
- Lifetime warranty
- Made in USA


LB50356

Irwin Vise-Grip
- Hardened cutting edge
- Soft grip handles
- Durable nickel chromium construction
- Made Globally


KX502078318

Proto
- Semi-flush cutting in areas inaccessible to side-cutting pliers
- High leverage for cutting of most wires and nails
- Plastisol grips
- **Wiha**

New!


KP4230360

- Hardened cutting edge
- Made from C70 steel forging
- Soft vinyl grip
- Made in Germany


KN5432658

	TEKTON		Channellock		Irwin		Proto			Wiha	
Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Model No.	Order No.	Price	Order No.	Price
6	KP8534052	Price	LB50356	Price	-	-	-	-	-	KN5432657	Price
7	-	-	LB50357	Price	-	-	-	-	-	KN5432658	Price
8	KP8534053	Price	LB50358	Price	KX502078318	Price	J272G	KP4230360	Price	KN5432659	Price

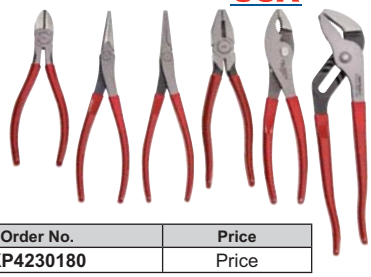
PROTO 6 Pc. Assorted Pliers Set

MADE IN THE USA

Contains 1 of each:

- 6" Diagonal cutting
- 7-3/4" Duckbill
- 7-3/4" Needle nose long
- 10" Tongue and groove
- 7" Lineman's New England
- 8" Combination slip-joint pliers

New!



Model No.	Order No.	Price
J202GS	**KP4230180**	Price

Snap-on Industrial Brands | WILLIAMS Combination Plier Sets

MADE IN THE USA



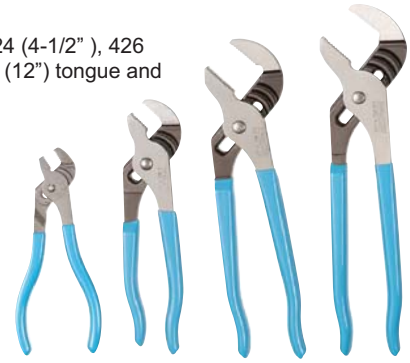
KP30PLS6A

No. of Pieces	Tools in set	Handle	Order No.	Price
4	11-3/4"Groove joint pliers, 8" Linesman pliers, 7" Heavy-duty diagonal cutting pliers, 8" Long nose pliers	Double-Dipped Plastic Grips	**KP3023054**	Price
4	8" Slip Joint Pliers, 9-3/4" Groove Joint Pliers, 7" Heavy-Duty Diagonal Cutting Pliers, 8" Long Nose Pliers	Double-Dipped Plastic Grips	**KP3023052**	Price
6	5" Utility superjoint, 6-1/2" Chain nose side cutters, 10" Utility superjoint, 7" Side cutting, 6" Diagonal cutting, 8 1/4" Front-end stripper	Double-Dipped Plastic Grips	**KP30PLS6A**	Price

CHANNELLOCK 4 Pc. Tongue & Groove Pliers Set

- Set consists of 1 each of 424 (4-1/2"), 426 (6-1/2"), 430 (10") and 440 (12") tongue and groove pliers
- Heat treated alloy
- Vinyl and comfort grips
- Jaw design accommodates a variety of shapes
- Offset head for better leverage

MADE IN THE USA



Order No.	Price
LB504444	Price

Snap-on Industrial Brands | WILLIAMS 3 Pc. Alligator Plier Set

- Includes 6", 7-1/2" and 9-1/2"
- Double-dipped plastic handle grips are comfortable yet durable
- Jaws are polished with rust-protective coating
- Packaged in a vinyl bag



Order No.	Price
KP3023053	Price

CODE BLUE CHANNELLOCK 8 Pc. Multi-Purpose Plier Set

MADE IN THE USA

- Santoprene soft rubber handles
- Polished high carbon steel
- Laser hardened cutting edges
- CBR8 Includes: 430, 420, 369, 911, 909, 358, 318, 338



Order No.	Price
LB50CBR8	Price

IRWIN VISE-GRIP 8 Pc. Combination Plier Set

- All purpose jaw grips on round, flat, square and hex shapes
- Press and slide button quickly adjusts lower jaw
- More groove positions provide the optimum hand location for a better grip on the work piece
- ProTouch Grip provides extra comfort and reduces hand fatigue
- Ratcheting action allows GrooveLock to be adjusted from the open position up to the work piece by pushing the handle up - no need to press the button
- Anti-pinch design prevents handles from pinching

Set Includes

- 8" GrooveLock plier
- 10" GrooveLock plier
- 12" GrooveLock plier
- 10" Adjustable wrench
- 8" Long nose plier
- 8" Linesman's plier
- 6" Diagonal cutter
- 6" Slip joint pliers
- Kit bag carrying case



Order No.	Price
KX502078712	Price

Snap-on Industrial Brands | WILLIAMS 17 Pc. Combination Plier Set

Includes:

- 8" Slip joint
- 9-3/4" Groove joint
- 15-3/4" Groove joint
- 7" Heavy duty diagonal cutting
- 6-1/4" Bent nose
- 8" Long nose
- 8-1/4" Multi-purpose wire cutter
- 5-1/2" Mini wire cutter
- 9" Heavy duty linesman
- 7" Ergo side cutting combination
- 10" Water pump
- 7" Nut gripping
- 6-1/2" Duck bill
- 7-1/2" End cutting
- 11" Bent nose
- 11" Long reach chain nose
- 11" Extra long diagonal



Handle Type	Order No.	Price
Double-Dipped Plastic Grip	**KP30PLS17**	Price

STANLEY 2 Pc. Pliers Set

- Designed for grasping, bending and cutting
- Oil-resistant dipped handle for a comfortable grip
- Drop-forged steel for strength and durability
- Meets ANSI specifications

Set Includes:

- 6” Slip Joint Pliers
- 6” Long Nose Pliers

New!



Model	Order No.	Price
84-212	**KP433060**	Price

STANLEY 3 Pc. Pliers Set

New!

- Pliers set designed for grasping, bending and cutting
- Oil-resistant dipped handle allows for a comfortable grip
- Drop-forged steel is strong and durable
- Meets ANSI specifications

Set Includes:

- 6” Slip Joint Pliers
- 6” Diagonal Pliers
- 6” Long Nose Pliers



Model No.	Order No.	Price
84-114	**KP433056**	Price

STANLEY 3 Pc. Bi-Material Pliers Set

New!

- Pliers set designed for grasping, bending and cutting
- Slip-resistant bi-material handle for a comfortable grip
- Drop-forged steel is strong and durable
- Meets ANSI specifications

Set Includes:

- 6” Diagonal
- 6” Long Nose
- 6” Slip Joint



Model No.	Order No.	Price
84-056	**KP433024**	Price

STANLEY 4 Pc. Bi-Material Pliers Set

New!

- Pliers set designed for grasping, bending and cutting
- Slip-resistant bi-material handle for a comfortable grip
- Drop-forged steel is strong and durable
- Meets ANSI specifications

Set Includes:

- 8” Slip Joint
- 7” Diagonal
- 8” Linesman
- 8” Long Nose



Model No.	Order No.	Price
84-058	**KP433026**	Price

STANLEY 6 Pc. Mini Pliers Set

- Pliers set designed for grasping, bending and cutting
- Oil-resistant dipped handle allows for a comfortable grip
- Drop-forged steel is strong and durable
- Meets ANSI specifications

New!

Set Includes:

- 4” Diagonal Pliers
- 4” End Cutting Pliers
- 4” Bent Nose Pliers
- 5” Long Nose Pliers
- 5” Flat Nose Pliers
- 5” Groove Joint Pliers



Model No.	Order No.	Price
84-079	**KP433028**	Price

PRM PRO 5 Pc. Mini Plier Sets

- Sturdy, spring loaded action
- Ideal for hobby projects, jewelers and precise enough for electronics
- Includes: 4-3/4″ Long nose, 4-1/2″ Diagonal, 4-1/2″ End nipper, 4-3/4″ Flat nose, 4-3/4″ Bent nose



No. of Pieces	Order No.	Price
5	**KP8312015**	Price

GEARWRENCH 2 Pc. PivotForce™ Compound Action Plier Set

- Includes KL5082120 and KL5082121
- Forged steel for superior strength and durability
- Induction hardened cutting edge for long life
- Unique compound design requires 40% less effort to cut
- Easy-clean dipped handle grips
- Lifetime warranty



Order No.	Price
KP6582124	Price

IRWIN VISE-GRIP Sets With Comfort Grips







Pcs. In Set	Description	Order No.	Price
3	6" Long Nose & Slip Joint, 10" Groove joint pliers	**KX502078704**	Price
4	6" Diagonal Cutter & Slip Joint, 8" Long nose, 10" Groove joint plier	**KX502078707**	Price
5	6" Diagonal Cutter & Slip Joint, 8" Linesman, 10" Adjustable wrench & Groove joint plier	**KX502078708**	Price

PROTO Retaining Ring Pliers - Convertible

- Converts from internal to external or vice versa, when pivot screw is moved to adjacent tapped hole
- Use with either external or internal retaining rings
- Fixed tips are precision formed and induction hardened for accurate fit and long wear
- Use the largest diameter tip that will fit the retaining ring being removed or installed

MADE IN THE USA

New!



Approx. OAL (in.)	Tip Dia. (in.)	Tip Angle	Shaft Dia (in.) (External)	Bore Dia. (in.) Internal)	Model No.	Order No.	Price
6	.038	0°	1/4 - 43/64	3/8 - 9/16	J399	**KP4230870**	Price
5-3/4	.038	0°	1/4 - 3/64	3/8 - 9/16	J370	**KP4230790**	Price
5-3/4	.038	90°	1/2 - 25/32	3/8 - 9/16	J371	**KP4230795**	Price
6	.047	0°	11/16 - 7/8	5/8 - 1	J372	**KP4230800**	Price
5-3/4	.047	45°	11/16 - 7/8	5/8 - 1	J373	**KP4230805**	Price
5-3/4	.047	90°	13/16 - 1	5/8 - 1	J374	**KP4230810**	Price
7-1/2	.070	0°	15/16 - 1-7/16	1-1/16 - 13/4	J385	**KP4230840**	Price
7-1/2	.070	45°	1 - 1-7/16	1-1/16 - 13/4	J375	**KP4230815**	Price
7-1/8	.070	90°	1 - 1/16, 2	1-7/16 - 2	J376	**KP4230820**	Price
9-1/4	.090	0°	1-1/2 - 3-1/2	1-13/16 - 3	J377	**KP4230825**	Price
9	.090	45°	1-1/2 - 3-1/2	1-13/16 - 3	J378	**KP4230830**	Price
8-1/2	.090	90°	1-1/2 - 1-3/4	1-13/16 - 3	J379	**KP4230835**	Price

PROTO Retaining Ring Pliers - External

- Used with external retaining rings
- Fixed tips are precision formed and induction hardened for accurate fit and long wear

MADE IN THE USA

New!



Approx. OAL (in.)	Tip Dia. (in.)	Tip Angle	Shaft Dia (in.) (External)	Model No.	Order No.	Price
6	.038	0°	1/4 - 21/32	J391	**KP4230850**	Price
6	.038	90°	1/4 - 1	J397	**KP4230865**	Price
7	.070	0°	7/16 - 2	J393	**KP4230855**	Price
9	.115	0°	1-1/2 - 3-1/2	J395	**KP4230860**	Price

PROTO Lock Ring Parallel Jaw Pliers

MADE IN THE USA

- For removal of lock snap rings used on bearing shafts
- Compound leverage simplifies removal
- Jaw tips are indented to hold ring ends and prevent breakage
- Jaws spread 1-1/4"
- Plastisol grips for added comfort



New!

Approx. OAL (in.)	Model No.	Order No.	Price
10-1/2	J251G	**KP4230745**	Price

Snap-on Industrial Brands | WILLIAMS® Retaining Ring Pliers- Internal and External

MADE IN THE USA

- Made of high carbon steel, black oxide
- Tips heat-treated for a secure grip
- Cushion grip handles. 4 tips include: .035 90°, .045 45°, 45° and 60° straight



Style - External Plier		
Bore or Shaft Dia. Range	**Order No.**	**Price**
3/32 - 1-1/32	**KP30PL1600C2**	Price
Style - Internal Plier		
Bore or Shaft Dia. Range	**Order No.**	**Price**
3/32 - 25/32	**KP30PL1600C1**	Price

LANG TOOLS QuickSwitch Retaining Ring Pliers

- **Simply switch the tab and squeeze the handles** to change between internal and external applications.
- **Dependable, Accurate Alignment** for tough alloy steel replaceable tips.
- **Precision** jaws and pivot.
- **Heavy-duty** ergonomic grips
- **Tip Kit Pouch Includes:** Color-coded tips, Allen wrench



MADE IN THE USA

Range (in.)	Tip Sizes (in.)	Order No.	Price
Internal 1/4 to 1 External 1/8 to 1	Straight .023, .039, .047 Bent .039, .047	**KL401421**	Price
Internal 3/8 to 2 External 1/4 to 2	Straight .023, .047, .074 Bent .039, .047	**KL401434**	Price
Internal 1-13/16 to 4 External 1-1/2 to 4	.090, .108, .120 Bent 15° and 70°	**KL4075**	Price

wiha Heavy Duty Series Retaining Ring Fixed Tip Pliers

- Drop forged & hardened
- Internal & external
- Rugged riveted joint
- Precision machined tips
- Straight & 90° angled



Description - 90° Bend Tip-For Internal Bore					
		90° Angle External Retaining Ring Plier		90° Angle Internal Retaining Ring Plier	
Bore Range	**Tip Dia. (in.)**	**Order No.**	**Price**	**Order No.**	**Price**
1/8 - 3/8	.035	**KN5432694**	Price	**-**	-
5/16 - 1/2	.035	**-**	-	**KN5432685**	Price
3/8 - 1	.050	**KN5432695**	Price	**-**	-
1/2 - 1	.050	**-**	-	**KN5432686**	Price
3/4 - 2-3/8	.070	**KN5432696**	Price	**KN5432687**	Price
1-1/2 - 4	.090	**KN5432697**	Price	**KN5432688**	Price

Description - Straight Tip-For Internal Bore					
		Straight External Retaining Ring Plier		Straight Internal Retaining Ring Plier	
Bore Range	**Tip Dia. (in.)**	**Order No.**	**Price**	**Order No.**	**Price**
1/8 - 3/8	.035	**KN5432689**	Price	**-**	-
5/16 - 1/2	.035	**-**	-	**KN5432681**	Price
3/8 - 1	.050	**KN5432690**	Price	**-**	-
1/2 - 1	.050	**-**	-	**KN5432682**	Price
3/4 - 2-3/8	.070	**KN5432691**	Price	**KN5432683**	Price
1-1/2 - 4	.090	**KN5432692**	Price	**KN5432684**	Price

Snap-on Industrial Brands | WILLIAMS® Snap Ring Pliers

MADE IN THE USA

- Internal snap rings designed for use in housings, boxes, etc
- External snap rings designed for use in shafts, studs, etc
- Pliers supplied with spring ratchet lock assembly which allows the ring to be compressed or expanded with gradual adjustments which lock at the desired size without continued pressure on the handles
- Made of high quality carbon steel with black-oxide finish to resist rust and other corrosions
- Tips heat treated for a secure grip
- Tips not provided with pliers when pliers are ordered individually

PL528



PL527



Bore or Shaft Dia. Range	Tip Dia.	Handle Type	Style	Order No.	Price
11/32 - 1-17/32	.108 / .120	Cushion	Internal Plier	**KP30PL528**	Price
5/16 - 1-13/16	.108 / .120	Cushion	Internal Plier	**KP30PL527**	Price

Snap-on Industrial Brands | WILLIAMS® Combination Internal/ External Snap Ring Pliers Set

- Cushioned grip handles
- Pliers are convertible for use on internal and external snap rings
- Knurled center screw with spring for easy changing and secure hold



No. of Pcs.	Set Includes	Finish	Order No.	Price
6	Fixed Pliers: .038, .047, .070 and .090 in both 0° and 90°	Black Oxide	**KP30PL1606**	Price
12	Fixed Pliers: .038, .047, .070 and .090 in degee of 0°, 45° and 90°	Black Oxide	**KP30PL1612**	Price

Snap-on Industrial Brands | WILLIAMS® Heavy Duty Snap Ring Plier Set

Pliers supplied with spring ratchet lock assembly, which allows the ring to be compressed or expanded with gradual adjustments which lock at the desired size without continued pressure on the handles

Set Includes:
Internal snap ring pliers: min. opening 5/16, max opening 1-13/32, OAL 9-1/2
External snap ring pliers: min. opening 11/32, max. opening 1-17/32, OAL 9-1/2

MADE IN THE USA



Tips Included:
- 90° x .108 Dia. angle tip
- .120 Dia. straight tip
- 15° x .120 Dia. angle tip
- 45° x .120 Dia. angle tip
- 90° x .120 Dia. angle tip
- .108 Dia. straight tip
- 15° x .108 Dia. angle tip
- 45° x .108 Dia. angle tip

Order No.	Price
KP30PL529	Price

TEKTON® Long Reach Hose Ring Pliers

- Round jaws grasp hose ends for easy removal or installation
- Cross-cut teeth grip evenly for twisting, pulling, and pushing
- Long handles reach deep into tight spaces
- Slim, non-slip grips are comfortable and easy to handle
- Made from high-strength chrome vanadium steel



Order No.	Price
KP8534435	Price

wiha 4 Pc. Retaining Ring Pliers

- Heavy duty forged style with soft vinyl grips
- Tips Included: .035, .050, .070 & .090
- Internal Capacity 5/16 to 4”
- External Capacity 1/8 to 4'



Type	Style	Capacity (in.)	Order No.	Price
90 Degree Bent	External	1/8 - 4	**KN5432629PT**	Price
90 Degree Bent	Internal	5/16 - 4	**KN5432627PT**	Price
Straight	External	1/8 - 4	**KN5432628PT**	Price
Straight	Internal	5/16 - 4	**KN5432626PT**	Price

PROTO 4 Pc. Convertible Ring Plier Set

- Design permits quick change-over to work internal or external rings
- Return spring designed to reduce fatigue
- Air cushioned grips
- Ring range: external (shaft) 1/4”- 2”; internal (bore) 3/8”- 2”

New!

MADE IN THE USA



Tip Dia.	Angles	Model No.	Order No.	Price
.038, .070	18°, 90°	J360C	**KP4230785**	Price

PROTO Replacement Tips for Retaining Ring Pliers

- Fits models J364 and J365 retainging ring pliers

New!

MADE IN THE USA



Description	Model No.	Order No.	Price
Replacement tip - 0°	J364-T0	**KP4230900**	Price
Replacement tip - 45°	J364-T45	**KP4230905**	Price
Replacement tip - 90°	J364-T90	**KP4230910**	Price

LANG TOOLS Replacement Tips for QuickSwitch Retaining Ring Pliers

MADE IN THE USA



Description	Order No.	Price
Replacement Tip Kit for 1421	**KL4012**	Price
Replacement Tip Kit for 1434	**KL4014**	Price
Replacement Tip Kit for 75 (3-pair 15°)	**KL406515**	Price
Replacement Tip Kit for 75 (3-pair 90°)	**KL406590**	Price

PROTO 12 Pc Convertible Ring Plier Set

- For bore diameter 3/8 to 3”
- Tip diameters .038, .047, .070, .090”
- Tip angles 0°, 45°, 90°
- For shaft diameters 1/4 to 3-11/32”
- Tip type fixed
- Overall lengths: 5-11/16, 5-3/4, 5-7/8, 7-1/8, 7-3/8, 7-1/2, 8-5/8, 9, 9-1/4”

MADE IN THE USA

New!



Model No.	Order No.	Price
J360B	**KP4230750**	Price

PROTO 18 Pc Small Ring Plier Set with Replaceable Tip

MADE IN THE USA

- Includes one internal and one external pliers
- Convenient blow-molded carrying case includes storage for spare rings
- Custom grip handles for added comfort
- Contains 16 interchangeable tips
- Covers ring range: external 1-1/2” - 3-3/4” internal 2-7/16” - 4”
- Spring loaded ratchet mechanism
- Pliers overall length 9-1/2”

New!



Model No.	Order No.	Price
J361	**KP4230760**	Price

LANG 12 Pc. Combination Int/Ext Retaining Ring Pliers Set

- Includes 12 fixed tip pliers sizes .038, .047, .070, .090 in 0°, 45°, and 90°angles
- Pliers are convertible for use on internal and external snap rings with cushioned grip handles
- They have a knurled center screw with a spring for easy changing and secure hold

MADE IN THE USA



Order No.	Price
KL403495	Price

LANG Heavy Duty Snap Ring Pliers

MADE IN THE USA

- Spring ratchet locking mechanism securely holds against snap ring tension
- Thumb release allows for smooth, controlled tension release
- Cushion grip for comfort
- External ring size: 3-1/2 - 6-1/2”, 89mm - 165mm
- Internal ring size: 3-1/16 - 6-1/4”, 78mm - 158mm
- Includes .120” diameter straight tip



Style	Aprox. OAL (in.)	Order No.	Price
External Retaining Ring Plier	16-1/2	**KL401486**	Price
Internal Retaining Ring Plier	16-1/2	**KL401485**	Price

LANG Snap Ring Plier with Automatic Lock

MADE IN THE USA

Internal Sizes 3-1/2” – 7” External 3-1/2” – 7”
Six pairs, color coded tips with -diameters .120, .150, .180, bent 20° and 72° in custom molded case



Order No.	Price
KL4087	Price

PROTO 18 Pc. Ring Plier Set with Replaceable Tip

MADE IN THE USA

- Includes one internal and one external pliers
- Covers ring range: External 1/4”-2”, Internal 3/8”-2”
- Contains 16 interchangeable tips (4 of each listed below) (Replacements available)
- Pliers overall length 6-1/4”

New!



Tips	Angles	Model No.	Order No.	Price
.038, .047, .070	0°, 45°, 90°	J380	**KP4230780**	Price

PROTO 6 Pc. Convertible Ring Plier Set

- Convenient blow-molded carrying case includes storage for space rings
- Ring range: external (shaft) 1/4"-3-11/32"; internal (bore) 3/8" - 3"
- Tip sizes .038, .047, .070"
- Tip angles 0°, 90°

New! MADE IN THE USA



Model No.	Order No.	Price
J360A	**KP4230755**	Price

PROTO Large Retaining Ring Pliers - Internal/External

New! MADE IN THE USA

- Spring-loaded ratchet mechanism minimizes operator fatigue by allowing the ring to be compressed or expanded through gradual "moves and then locks at the desired size without continued pressure on the handles
- Replaceable tips available (separately) in 0°, 45°, 90°



Tip Dia. (in.)	Tip Angle	OAL (in.)	Shaft Dia (in.) (External)	Bore Dia. (in.) Internal)	Model No.	Order No.	Price
.120	0°	16-1/2	-	3-1/16 - 6	J364	**KP4230895**	Price
.120	0°	16-1/2	3-1/2 - 6-1/2	-	J365	**KP4230915**	Price

PROTO Lock Ring "Horseshoe" Washer Pliers

MADE IN THE USA

- For spreading both soft iron "horseshoe" lock washers used on brakes and tempered steel lock rings used on gear and bearing shafts
- Plastisol grips for added comfort



OAL (in.)	Model No.	Order No.	Price
9	J250G	**KP4230740**	Price

LANG TOOLS Quick Switch Snap Ring Plier Set

- Internal sizes 1/8" – 4" (3mm-102mm)
- External 1/4" – 4" (7mm - 102mm)
- Contains: one each of Order No. 1421, 1434 and 75

MADE IN THE USA



Order No.	Price
KL401465	Price

GEARWRENCH 7" Insulated Diagonal Cutting Plier

- Insulated 100 volt certified
- Classic profile nose
- Hardened
- Red & black insulated handle
- Detailed safety warranty on holder



Length (in.)	Capacity	Order No.	Price
7.0	AWG #5	**KP6582031**	Price

wiha Insulated Ergo High Leverage Diagonal Cutters

- Induction hardened cutters
- Ergo super soft grips
- Hard chromed finish



Length (in.)	Capacity	Order No.	Price
6-1/2	AWG #6	**KN5432835**	Price
7	AWG #5	**KN5432836**	Price
8	AWG #4	**KN5432838**	Price

1000 Volt Rated Meets ASTM, VDE, NFPA Specs

wiha 6-in-1 Insulated Fully Magnetic 1/4" Driver

- Insulated 1/4" stainless holder
- Includes 6 insert bits hardened CVM tool steel — 58/60RC; Phillips: #1, #2, #3; Slotted: 4", 6", 8"
- Chambered individual bit storage in the handle
- Ergonomic power handle for maximum torque and user comfort
- Rotating cap allows one handed turning and frees other hand for positioning the work piece



Order No.	Price
KN5438006	Price

wiha 9" Insulated Electricians Knife

- Insulated - 1000 Volt Rated 10,000 volt tested
- Meets ASTM, VDE, EN/IEC NFPA-70E, OSHA
- With slip guard handles and blade sheath
- Molded on durable insulation, individually tested
- Guaranteed quality - Made in Germany



Length	Blade Length	Knife Style	Order No.	Price
9"	2"	Insulated Knife	**KN5415003**	Price

Snap-on Industrial Brands | WILLIAMS Convertable Retaining Ring Pliers

- Easily converts for use as internal or external rings
- 5 pairs of color-coded tips included
- **23803-**.024 ST, .038 ST, .038 90°, .047 90°, .070 ST Tips
- **23801-**.038 ST, .038 90°, .047 ST, .047 90°, .047 ST Tips



Bore or Shaft Capacity	Made in	Order No.	Price
up to 2	Global	**KP3023801**	Price

CHANNELLOCK Wire Stripper Cutters

- Strips insulation fast with no damage to wire
- Cuts copper wire clean
- Blades are especially heat treated for long life
- Channellock Blue® comfort grips
- Non Insulated

MADE IN THE USA



Length (in.)	Order No.	Price
6	**LB50958**	Price
7	**LB50957**	Price
8-1/2	**LB50908**	Price

PROTO Stainless Steel Electrician's Scissors

- Built with a complete internal stainless steel construction
- Blade consists of micro anti-slip teeth to help with the high leverage ratio
- Built-in wire stripper for AWG 12, 14, & 16
- Bi-material ergonomic handles with a hole for tethering
- Includes a holder with a belt clip

New!



Approx. Length (in.)	Model No.	Order No.	Price
6	J318SS	**KP4295945**	Price

PROTO Wire Stripper - Crimper

MADE IN THE USA

New!

- Box style crimp
- Crimps insulated and non-insulated terminals for 10-22 AWG
- Crimps non-insulated 7 mm and 8 mm auto ignition wire
- Cuts screw/bolt sizes 4-40, 5-40, 6-32, 8-32, 10-32, 10-24
- Anvil type wire cutter for cutting copper wire
- Air-pocket cushion grips for comfort



Approx. OAL (in.)	Strips	Model No.	Order No.	Price
8-1/2	10-22 AWG	J299	**KP4235015**	Price

PROTO Wire Stripper - Pliers

- Crimps insulated and non-insulated terminals for 10-22 AWG wire
- Crimps non-insulated 7 mm and 8 mm auto ignition wire
- Cuts screw/bolt sizes 4-40, 5-40, 6-32, 8-32, 10-32, 10-24 and copper wire
- Extended length curved cutter to handle heavier wire with less force
- Pliers nose designed to grip, bend, and pull wire
- Plastisol grips for added comfort

MADE IN THE USA

New!



Approx. OAL (in.)	Strips	Model No.	Order No.	Price
8	10-22 AWG	J298	**KP4235010**	Price

PROTO Wire Strippers - Cutters

- Wire cutter
- Pliers nose for pulling and looping wire
- Automatic spring return
- Plastisol grips for added comfort

MADE IN THE USA

New!



Approx. OAL (in.)	Strips	Model No.	Order No.	Price
6	22, 24, 26, 28, and 30 AWG	J296	**KP4235000**	Price
6	10, 12, 14, 16, 18, and 20 AWG	J297	**KP4235005**	Price

PROTO Safety Wire Twister Reversible & Automatic Pliers

MADE IN THE USA

- Reversible safety wire pliers provide right and left twist capability often eliminating the need for a second pliers
- Automatic spring return feature speeds operation and reduces fatigue
- Meet SAE Aerospace Standard AS 567 Twister Requirements.
- Provides all of the features of standard Proto® Safety Wire Pliers.

New!



Approx. OAL (in.)	Wire Size (in.)	Model No.	Order No.	Price
8	.020 - .041	J196	**KP4230715**	Price
11	.020 - .060	J197	**KP4230720**	Price
12	.020 - .060	J198	**KP4230725**	Price

PROTO Safety Wire Twister Pliers

MADE IN THE USA

- Safety wire is often used in aviation and other applications where vibration may cause fasteners to back out
- Heat-treated cutting edges for cutting tough stainless steel safety wire
- Flat top diamond serrations on jaws hold wire securely and resist nicking
- Diagonal nose allows access in tight work areas
- Automatic spring return feature speeds operation and reduces fatigue

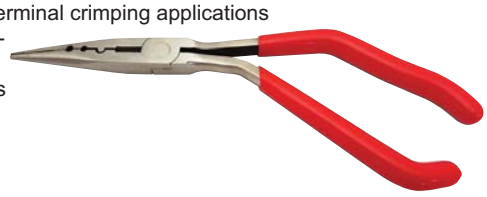
New!



Approx. OAL (in.)	Wire Size (in.)	Type	Twist Direction	Model No.	Order No.	Price
8	.020 - .041	Standard	Right	J190	**KP4230685**	Price
10	.020 - .060	Standard	Right	J191	**KP4230690**	Price
10	.020 - .060	Ergonomic Design	Right	J192	**KP4230695**	Price
18	.020 - .060	Deep Reach	Right	J193	**KP4230700**	Price
10	.020 - .060	Left Hand Twist	Left	J195	**KP4230710**	Price
J190, J191, J193	.020 - .060	3 Pc. Set	Right	J194	**KP4230705**	Price

TITAN 7 Pc. Ratcheting Crimpng Set

- Designed for most terminal crimping applications
- Includes: (1) ratcheting crimper & (6) interchangeable dies
- Dies quick change
- Ratcheting feature assures secure crimps



Order No.	Price
KP8211950	Price

wiha Insulated Tool Sets With Convenient Pouch

- 3 Sets to choose from
- Made by Wiha from high quality forged CV tool steel
- Induction hardened cutting edges and jaws
- Heavy duty steel riveted joint
- Soft ergo cushion grip handles for maximum comfort
- Multi-layered hard chrome finish, best anti-corrosion surface
- Convenient pouch fits on any standard belt
- Pro Series - 10,000 Volt Tested for 1000 Volt Rating
- Meet ASTM, CSA, EN/IEC, NFPA, OSHA, ISO Insulation specs


32873


32871


32872

Volt Rated/Tested	Includes	Order No.	Price
1000 Volt Rated, 10,000 Volt Tested	Insulated 6.3" Diagonal Cutters, 8" Long Nose Pliers, 8" Combination Pliers in Belt pack pouch	**KN5432873**	Price
1000 Volt Rated, 10,000 Volt Tested	Insulated 6.3" Diagonal Cutters, 8" Long Nose Pliers, Bit Holder with Phillips # 1-2, Square # 1-2, Slotted 4.5 & 6.5mm Bits in Belt pack pouch	**KN5432871**	Price
1000 Volt Rated, 10,000 Volt Tested	Insulated 6.3" Diagonal Cutters, 8" Long Nose Pliers, Slotted 3.0, 4.5 and Phillips # 2 Screwdrivers in Belt pack pouch	**KN5432872**	Price

wiha Inomic Combo and Long Nose Pliers

Advanced Ergo Design, Tool Head Mounted at Optimal 23º Off set

- For natural hand & wrist alignment, reduces fatigue & injury risk
- Grip is low weight fiber-glass reinforced with soft palm zone
- Heads are drop forged premium chrome vanadium tool steel
- Long life liduction hardened cutting edges and jaws
- Each tool has a convenient jaw lock and grip return spring
- Inomic meets ASTM, CSA, EN/IEC, NFPA, OSHA insulation specs
- Professional quality, design award excellence, made by Wiha


KN5432852

KN5432850

Length (in.)	Jaw Width	Order No.	Price
6-3/4	.70	**KN5432852**	Price
6-3/4	.94	**KN5432850**	Price

wiha Insulated "BitFlip" 8-in-1 Screw Driver

Rapid Access Flip Out Eight Bit Tray

- Available in standard or insulated models
- Handles are **1000 volt rated** insulation to EN/IEC 60900
- 3 Assortments to choose from
- With strong rare earth magnets
- Hardened tool steel shafts
- Precision machined 1/4" insert bits
- Bits storage in ergo cushion grip handle
- Guaranteed quality made by Wiha





No. of Pcs.	Set Includes	Order No.	Price
9	Slotted 4.5, 5.5, 6.5, 8mm Bits, Phillips # 0, 1, 2 & 3 Bits	**KN5438018**	Price
9	Slotted 4.5, 6.5mm Bits, Phillips # 0, 1, 2 & 3 bits and Square #1 & 2 Bits	**KN5438016**	Price
9	Slotted 4.5, 6.5mm Bits, Phillips # 1 & 2 bits and Torx T10, T15, T20 & T25 Bits. Insulation	**KN5438017**	Price

wiha 11 Pc. Insulated Electricans Kit

Tested & approved for the following standards: VDE 0680-201, AST-MF-1505-01, EN 60900, NFPA70E

Consists of 1 each:

- 3/32" Straight screwdriver
- 9/64" Straight screwdriver
- 3/16" Straight screwdriver
- 1/4" Straight screwdriver
- #0 Phillips screwdriver
- #1 Phillips screwdriver
- #2 Phillips screwdriver
- 6.3" Diagonal cutter
- 6.3" Needle nose pliers
- 6.3" Adjustable stripping pliers
- 8.0" Lineman's pliers



Order No.	Price
KN5432888	Price

wiha 11 Pc. Insulated Electricans Tool Set

1000 Volt Rated

- (1) - 8" Combination lineman's pliers
- (1) - 6-1/2" Long nose pliers
- (1) - 8" Long nose pliers (made in Taiwan)
- (1) - 6-1/2" Diagonal cutters
- (1) - 8" Heavy duty high leverage cutter
- (1) - Canvas tool bag (made in USA)
- 6 Pc. Insulated screwdriver set – phillips & slot (made in Germany)



Order No.	Price
KN5432390	Price

wiha Insulated Nut Driver Set

- Individually tested
- Meets ASTM,VDE, NFPA
- Ergo cushion grips
- Nut driver sizes: 3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2
- 1000 Volt rated

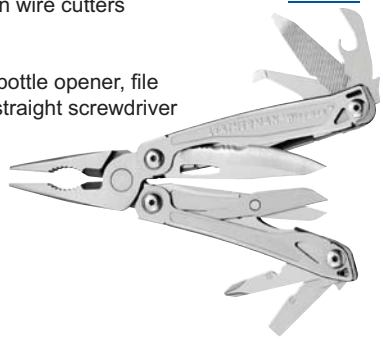


Order No.	Price
KN5432294	Price

LEATHERMAN Wingman Multi-Tool

MADE IN THE USA

- Spring-action needlenose & regular pliers
- Wire stripper plus spring-action wire cutters
- 420HC Combo knife
- Spring-action scissors
- Package opener, ruler, can & bottle opener, file
- Phillips plus medium & small straight screwdriver

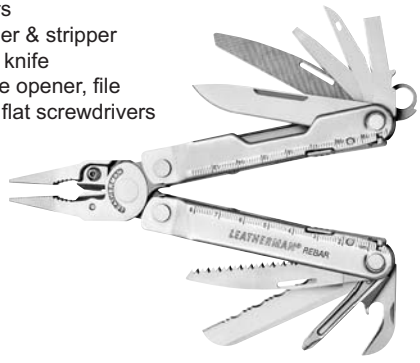


No. of Functions	Closed (in.)	Order No.	Price
14	3.8	**LA60831425**	Price

LEATHERMAN Rebar Multi-Tool

MADE IN THE USA

- Needlenose & regular pliers
- 154CM Wire cutters, crimper & stripper
- 420HC Straight & serrated knife
- Saw, awl, ruler, can & bottle opener, file
- Phillips, plus large & small flat screwdrivers
- Standard nylon sheath



No. of Functions	Closed (in.)	Order No.	Price
17	4	**LA60831547**	Price

LEATHERMAN Super Tool 300 Multi-Tool

MADE IN THE USA

- Needlenose & regular pliers
- 154CM Wire cutters, electrical crimper & wire stripper
- 420HC Straight or serrated knife
- Saw, files, scissors, awl, ruler, can & bottle opener
- Large bit driver & screwdriver
- Standard nylon sheath



No. of Functions	Closed (in.)	Order No.	Price
19	4.5	**LA60831181**	Price

STANLEY 12-in-1 Multi-Tool

New!

- Stainless-steel construction
- High quality nylon holster
- Includes the following tools, Long nose pliers, Curve jaw pliers, Wire cutter, saw, Phillips screwdriver, Standard screwdrivers (1/4", 5/16", 1/8"), Small knife, Large knife, Bottle opener



Model No.	OAL (in.)	Order No.	Price
84-519K	6-1/2	**KP433064**	Price

STANLEY 14-in-1 Multi-Tool

- 14 tools in 1 for versatility
- Compact design for easy portability and storage
- Side plate construction for durability
- Folds and locks at 90°, 135° and 180° to help prevent slippage
- 400 in-lbs max torque

Includes:

- 14-in-1 Multi-Tool
- Knife
- Saw
- 1/4" Drive
- File
- Bottle Opener
- 10mm, 11mm, 12mm 13mm Sockets
- 1/4" Drive Adaptor
- 5mm, 6mm Hex Bits
- #1, #2 Phillips Bit
- 6-8, 8-10 Standard Bit

New!



Model No.	Order No.	Price
STHT70695	**KP433084**	Price

TITAN Folding Knife with Locking Jaw Wrench

- Folding knife with locking blade
- Blade length: 3"
- Jaw opening: 0.25" - 0.75"
- Stainless steel construction



Closed (in.)	Length Open	Order No.	Price
6	8.85	**KP8211110**	Price

wiha ESD Safe Ultra Precision Technicians Cutters

- Double welded leaf spring release
- Full polished finished induction hardened cutting edges
- Non Insulated



Cut	Copper Cut	Order No.	Price
Bevel	1.4mm	**KN5432706**	Price
Flush	1mm	**KN5432708**	Price
Full Flush	1mm	**KN5432710**	Price
Semi Flush	1.1mm	**KN5432702**	Price

STANLEY 41 Pc. 14" Drive Mechanics Tool Set

New!

- Included 54 tooth pear head ratchets
- 12 point sockets for added torque
- Organized and labeled layout for easy identicaton inside case
- Meets or Exceeds ANSI Specs

Model No.	Set Includes	Order No.	Price
STMT74860	1/4" Drive Pear Head Ratchet; 1/4" Drive Spinner Handle; 1/4" Drive Bit Adapter; 1/4" Drive 12 Point Sockets - SAE 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 1/2", 4mm thru 12mm; 20 Specialty Bits	**KP437708**	Price



STANLEY 51 Pc. Mixed Tool Set

New!

- Includes Blow Mold Case for easy storage and portability
- Essential tools for home repair
- Meets or Exceeds ANSI Specs

Model No.	Set Includes	Order No.	Price
STMT74864	16 Ft. Stanley Tape Measure; Phillips Head Screwdriver; Flat Head Screwdriver; Snapoff Knife; 1/4" Drive Pear Head Ratchet; 1/4" Drive Spinner Handle; 1/4" Drive 12 Point Sockets 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8"; 1/4" Drive Bit Adapter, 8 Pc. SAE & MM Hex Keys; 20 Specialty Bits	**KP437716**	Price



STANLEY 65 Pc. Mixed Tool Set

New!

- Forged from high-quality steel and finished in high-polish nickel chrome or black chrome
- Ratchet handles are ergonomically designed and have an easy-to-use, thumb-operated reverse-switch mechanism
- Sockets and extensions remain locked onto the drive until disengaged with an easy-to-reach, low-profile quick-release button
- Feature Max-Drive™ design, a unique radius corner design that provides 15% more torque than standard sockets to tighten fasteners easily and simplify the turning of rounded corners
- Max-Drive™ helps reduce fastener wear by minimizing contact on the outer 5% of the fastener, helping to increase life expectancy than standard sockets
- Max-Drive™ helps reduce slipping on frozen or rusted fasteners
- Meets ANSI specification

Model No.	Set Includes	Order No.	Price
94-248	(30) 1/4" Drive Specialty Bits; (8) 1/4" Drive Sockets; (1) Each 16' Tape Rule, 18mm Snap-off Knife, 1/4" Dr. Bit Holder, 1/4" Drive Round Head Ratchet, Spinner Handle, Claw Hammer, Torpedo Level, 6" Long Nose Pliers, 6" Slip Joint Pliers, 2 Pt. Phillips Screwdriver, 65.mm Flat Screwdriver, (8) Ea. SAE & Metric Hex Keys; Blow Molded Carry Case	**KP435684**	Price



CRESCENT Trusted by the Trades. 170 Pc. Professional Tool Set

Set Includes:

Crescent® Quick-Release Ratchets
- 1/4", 3/8", and 1/2" Drive

Extension and Adapters
- 1/2" Drive 5" Extension bar
- 3/8" Drive 3" and 6" Extension bar
- 3/8" Female to 1/4" Male adapter

Sockets
- 6 Point SAE & Metric sockets – 1/2" and 1/4" Drive
- 12 Point SAE and Metric sockets – 3/8" Drive
- 5/8" and 13/16" Spark plug sockets

Crescent® Mechanic's Combination Wrenches
- Heat treated
- Metric & SAE

Crescent® 8" Long Nose Pliers
- Hardened cutting edge for durability
- Non-slip cushioned handle grips

Crescent® 10" Tongue & Groove Pliers
- Unique tooth design for better grip – increases torque transfer with less effort
- 6 positions, more flexibility and more grip comfort; increased capacity 1-13/16"

8" Adjustable Wrench
- Chrome alloy steel provides rust resistance and strength
- 1" Jaw capacity

Crescent® Magnetic Bit Driver
- Ergonomic cushion grip designed to decrease pressure points and allow increased torque transfer

Crescent® Driver Bits and Bit Holders
- S2 Tool steel for durability
- 40 Bits and 4 holders

Crescent® Hex Keys
- SAE and Metric



Order No.	Price
KW50CTK170CMP	Price

Snap-on Industrial Brands | Williams 63 Pc. 3/8" Drive Socket, Screwdriver, and Wrench Set



- 3/8″ Drive 8″ Pear-head ratchet, 3″, 6″, and 10″ Extensions
- 3/8″ Drive u-joint, Breaker bar, T-handle, 3/8″ x 1/4″ and 3/8″ x 1/2″ Adapters
- 13 Standard depth sockets sizes 1/4″ through 1″
- 14 Standard depth sockets sizes 6 through 19mm
- 7 Combination wrenches 1/4″ through 5/8″
- 4 Screwdrivers – 2 slotted and 2 Phillips®
- 1/4″ Drive spinner handle, u-joint, and bit holder
- 13 Hex bits, slotted, square, hex, and Phillips®

Order No.	Price
KP3050605	Price

Stanley 75 Pc. 1/4 & 3/8" Drive Mechanics Tool Set



- Designed to meet the needs of the professional mechanic - each of these tools has a limited Lifetime Warranty
- Forged from high-quality steel and finished in high-polish chrome
- Each ratchet handle is ergonomically designed and has an easy-to-use, thumb operated reverse-switch mechanism
- Sockets and extensions remain locked onto the drive until disengaged with an easy-to-reach, low-profile quick-release button
- Features our Max-Drive™ design, a unique radius corner design which provides 15% more torque to tighten fasteners easily and simplify the turning of rounded corners
- Helps reduce fastener wear by minimizing contact on outer 5% of fastener; helping increase life expectancy
- Helps reduce slipping on frozen or rusted fasteners
- Manufactured globally, and are designed to meet or exceed ANSI specifications

Model No.	Set Includes	Order No.	Price
85-595	1/4" Drive 6 Point Standard: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13 mm. 3/8" Drive 12 Point Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16 Inch, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm. 3/8" Drive 12 Point Deep: 3/8, 7/16, 1/2, 9/16, 11/16 Inch, 10, 12, 13, 14, 15 mm. Combination Wrenches: 3/8, 7/16, 1/2, 9/16, 5/8 Inch. Accessories: 3/8" Drive 6 Point 5/8" Spark Plug Socket, #1, #2, #3 Phillips Specialty Bits, 4, 5-1/2, 7 Inch Standard Slotted Specialty Bits, T10, T15, T20, T25, T30 Star Specialty Bits, 1/4" Drive Spinner Handle, 1/4" Drive Bit Holder, 1/4" & 3/8" Drive Round Head Ratchets Knurled Handle, 1/4" Drive 3" Extension Bar, 3/8" Drive 3, 6" Extention Bars. Blow-Molded Case.	KP435512	Price

Snap-on Industrial Brands | Williams 89 Pc. 1/4 & 3/8" Drive Metric Combination Kit



1/4" Drive Tools Included:

- Rugged case
- 7 Pc. of 36 Tooth quick release-ratchet, 1 1/2" & 3" Extension, Flex handle, Spinner handle, Universal joint, 1/4" F x 3/8" M Adapter
- 12 Pc.-1/4" Dr. Shallow 6-point sockets- 4mm through 12mm
- 6 Pc.-1/4" Dr. Hex bit sockets- 1/8 through 5/16
- 6 Pc.-1/4" Dr. Hex bit sockets- 3mm through 8mm
- 6 Pc.-1/4" Dr. Screwdriver bit sockets 5/32 through 9/32 slotted & #0 through #3 Phillips
- 6 Pc.-1/4" Dr. Torx® Bit sockets- T10 through T30

3/8" Drive Tools Included:

- 9 Pc. of 38 Tooth quick release-ratchet, 3", 6, & 10" Extension, 10" Flex handle, Sliding T handle, Universal joint, 3/8" F x 1/4" M Adapter, 3/8" F x 1/2" M Adapter
- 12 Pc.- 3/8" Dr. Shallow 6-point sockets- 8mm through 19mm
- 12 Pc.- 3/8" Dr. Deep 12-point sockets- 8mm through 19mm
- 4 Pc.- Comfort grip screw drivers 3/16 & 1/4 Slotted, & #1 x 3" & #2 Phillips
- 9 Pc.- 3/8" Drive 12 point combination wrenches 6mm through 19mm

Order No.	Price
KP3050622	Price

Snap-on Industrial Brands | Williams 95 Pc. 1/4" & 3/8" Drive Master Socket, Screwdriver & Wrench Set



- 1/4″ Drive ratchet, 1″ and 3″ extensions, u-joint, spinner handle, socket spinner, and breaker bar
- 10 Pcs. 1/4″ Drive standard depth sockets sizes 3/16″ - 9/16″
- 10 Pcs. 1/4″ Drive deep sockets sizes 3/16″ - 9/16″
- 12 Hex bit sockets sizes 1/8″ - 5/16″ and 3mm - 8mm
- 6 Screwdriver bit sockets sizes 5/32″, 7/32″, 9/32″, and #0, #1, and #2 Phillips®
- 6 Torx bit sockets sizes T10, T15, T20, T25, T27, and T30
- 3/8″ Drive 8″ pear-head ratchet, 3″, 6″, and 10″ extensions
- 3/8″ Drive u-joint, breaker bar, t-handle, 3/8″ x 1/4″, and 3/8″ x 1/2″ adapters
- 11 Standard depth 3/8″ drive sockets sizes 3/8″ - 1″
- 11 Deep 3/8″ drive sockets sizes 3/8″ - 1″
- 9 Combination wrenches 1/4″ - 3/4″
- 4 Screwdrivers 2 slotted and 2 Phillips®

Order No.	Price
KP3050611	Price

STANLEY 141 Pc. Fatmax® 1/4 & 3/8" Drive Mechanics Tool Set



- Oversized laser etched markings provide improved visibility
- Matte black chrome finish delivers premium rust resistance
- Chrome vanadium steel forging for strength and durability
- Durable blow mold carry case
- Meet or exceeds ANSI specifications

New!

Model No.	Set Includes	Order No.	Price
FMMT71663	67 Piece Max-Drive™ Socket Set – 1/4" Drive 6 Point Standard: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 5, 6, 7, 8, 9, 10, 11, 12, 13 mm. 1/4" Drive 6 Point Deep: 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 9, 10, 11, 12, 13 mm. 3/8" Drive 6 Point Standard: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 Inch, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm. 3/8" Drive 6 Point Deep: 5/8, 11/16, 3/4, 13/16, 7/8 Inch, 15, 16, 17, 18, 19 mm. Accessories: 3/8" Drive 6 Point 5/8" & 13/16" Spark Plug Sockets, 1/4" Drive Universal Joint, 3/8" Drive Universal Joint, 3/8" Drive Female to 1/4" Drive Male Adapter, 1/4" Drive Pear Head Ratchet, 1/4" Drive 6" Extension Bar, 3/8" Drive Pear Head Ratchet, 3/8" Drive 6" Extension Bar. 1/4" Drive Multi-Bit Ratcheting Screwdriver, (30) 1/4" Drive Specialty Bits, (15) 1/4" Drive Nut Bits: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 4, 5, 6, 7, 8 mm. 28 Piece Hex Key Set – Short Hey Keys: 3/64, 1/16, 5/64, 3/32, 7/64, 9/64 Inch, 1.5, 2, 2.5, 3, 4, 4.5 mm. Long Hex Keys: 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 1.5, 2, 2.5, 3, 4, 5, 6, 7 mm.	**KP435726**	Price

STANLEY 145 Pc. 1/4 & 3/8" Drive Socket Set



- Chrome vanadium forged body for torque, strength, and durability
- Full polish chrome finish for anti–corrosion protection
- Quick release allows user to remove extensions or sockets with one hand
- Tough and durable carry case for easy storage and mobility
- Meets or exceeds ANSI specifications

New!

Model No.	Set Includes	rice
STMT71653	1/4" Drive 6 Point Standard: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 Inch, 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm. 1/4" Drive 6 Point Deep: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 Inch, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm. 3/8" Drive 6 Point Standard: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16 Inch, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 mm. 3/8" Drive 6 Point Deep: 3/8, 7/16, 1/2, 9/16 Inch, 10, 12, 13, 14 mm. Combination Wrench: 3/8, 1/2, 9/16, 5/8 Inch, 10, 11, 12, 13 mm. Accessories: (30) Screwdriver Bits, (16) Hex Keys, (10) Nut Drivers, 1/4" Drive 3" Extension Bar, 1/4" Drive Pear Head Ratchet, 1/4" Drive Spinner Handle, 1/4" Drive Bit Holder, 3/8" Drive 6 Point 5/8" Spark Plug Socket, 3/8" Drive 3" Extension Bar, 3/8" Drive Pear Head Ratchet. Blow-Molded Case.	**KP435744**	Price

STANLEY 173 Pc. Mechanics Tool Set



- Chrome vanadium steel components for strength and durability
- Durable carry case for storage and mobility
- Meets or exceeds ANSI specifications

New!

Model No.	Set Includes	Order No.	Price
STMT74857	1/4" , 3/8", 1/2" Drive Pear Head Ratchet, 1/4" Drive 12 Point Sockets - SAE 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2", 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm 9mm, 10mm, 11mm, 12mm, 13mm, 14mm; 3/8" Drive 12 Point Sockets - SAE 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 13/16", 7mm thru 19mm; 1/2" Drive 12 Point Sockets - SAE 3/8, 7/16, 1/2, 9/16, 5/8", 13mm thru 17mm; Combination Wrenches 1/4, 3/8, 7/16, 1/2", 8mm, 9mm, 10mm, 12mm, 1/4" Drive Spinner Handle, 1/4" Drive Bit Adapter, 1/4" Drive 3" Extension Bar, 3/8" Drive Spark Plug - 5/8", 3/8" Drive 3" Extension Bar, Nut Bits 3/16, 7/32, 1/4, 5/16, 11/32, 3/8, 7/16" 6mm thru 12mm; 14 SAE & MM Long Arm Hex Keys	**KP437702**	Price

STANLEY 150 Pc. 1/4" & 3/8" Drive Mechanics Tool Set



- Chrome vanadium steel components for strength and durability
- Durable carry case for storage and mobility
- Meets or exceeds ANSI specifications

New!

Model No.	Set Includes	Order No.	Price
97-543	1/4" Drive 6 Point Standard: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 Inch, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm. 3/8" Drive 12 Point Standard: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 Inch, 9, 10, 12, 13, 14, 15, 17, 19 mm. 3/8" Drive 6 Point Deep: 7/16, 1/2, 9/16, 11/16, 3/4 Inch, 12, 13, 14, 15, 17 mm. Combination Wrenches: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8 Inch, 6, 8, 10, 12, 13, 14, 15 mm. Accessories: (55) Specialty Bits, (18) Hex Keys, 6" Long Nose Pliers, 6" Slip-Joint Pliers, 6.5 x 100 mm Flat Head Screwdriver, 5 x 75 mm Flat Head Screwdriver, 3" Phillips Screwdriver #1, 4" Phillips Screwdriver #2, 1/4" Drive Pear Head Ratchet, 1/4" Drive 3" Extension Bar, 3/8" Drive 3, 6" Extension Bars, 3/8" Drive 6 Point 5/8" Spark Plug Socket, 3/8" Drive 12 Point 13/16" Spark Plug Socket, 3/8" Drive Pear Head Ratchet, 3/8" Drive Male to 1/4" Drive Female Adapter. Blow-Molded Case.	**KP435724**	Price

STANLEY 179 Pc. Fatmax® 1/4, 3/8 & 1/2" Drive Mechanics Tool Set



- Oversized laser etched markings provide improved visibility
- Matte black chrome finish delivers premium rust resistance
- Chrome vanadium steel forging for strength and durability
- Durable blow mold carry case
- Meet or exceeds ANSI specifications

New!

Model no.	Set Includes	Order No.	Price
FMMT71664	95 Piece Max-Drive™ Socket Set – 1/4" Drive 6 Point Standard: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13 mm. 1/4" Drive 6 Point Deep: 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 9, 10, 11, 12, 13 mm. 3/8" Drive 6 Point Standard: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 Inch, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm. 3/8" Drive 6 Point Deep: 5/8, 11/16, 3/4, 13/16, 7/8 Inch, 15, 16, 17, 18, 19 mm. 1/2" Drive 12 Point Standard: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16 Inch, 12, 13, 14, 15, 17, 18, 19, 21 mm. Accessories: 3/8" Drive 6 Point 5/8" & 13/16" Spark Plug Sockets, 3/8" Drive Star Bit Sockets: T10, T15, T20, T27, T30, 1/4" Drive Universal Joint, 3/8" Drive Universal Joint, 3/8" Drive Female to 1/4" Drive Male Adapter, 1/2" Drive Female to 3/8" Drive Male Adapter, 1/4" Drive Pear Head Ratchet, 1/4" Drive 6" Extension Bar, 3/8" Drive Pear Head Ratchet, 3/8" Drive 6" Extension Bar, 1/2" Drive Pear Head Ratchet, 1/2" Drive 5" Extension Bar. 1/4" Drive Multi-Bit Ratcheting Screwdriver, (40) 1/4" Drive Specialty Bits, (15) 1/4" Drive Nut Bits: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 4, 5, 6, 7, 8 mm. 28 Piece Hex Key Set – Short Hey Keys: 3/64, 1/16, 5/64, 3/32, 7/64, 9/64 Inch, 1.5, 2, 2.5, 3, 4, 4.5 mm. Long Hex Keys: 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 1.5, 2, 2.5, 3, 4, 5, 6, 7 mm.	**KP435728**	Price

STANLEY 201 Pc. 1/4", 3/8" & 1/2" Drive Mechanics Tool Set

New!



- Chrome vanadium forged body for torque, strength, and durability
- Full polish chrome finish for anti–corrosion protection
- Quick release allows user to remove extensions or sockets with one hand
- Tough and durable carry case for easy storage and mobility
- Meets or exceeds ANSI specifications

Model No.	Set Includes	Order No.	Price
STMT71654	1/4" Drive 6 Point Standard: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm. 1/4" Drive 6 Point Deep: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm. 3/8" Drive 6 Point Standard: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 13/16 Inch, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm. 3/8" Drive 6 Point Deep: 3/8, 7/16, 1/2, 9/16, 5/8 Inch, 10, 12, 14 mm. 1/2" Drive 6 Point Standard: 3/8, 7/16, 1/2, 9/16, 5/8 Inch, 13, 14, 15, 16, 17 mm. Combination Wrench: 3/8, 7/16, 1/2, 9/16 Inch, 8, 9, 10, 12 mm. Accessories: (55) Screwdriver Bits, (28) Hex Keys, (17) Nut Drivers, 1/4" Drive 3" Extension Bar, 1/4" Drive Pear Head Ratchet, 1/4" Drive Spinner Handle, 1/4" Drive Bit Holder, 3/8" Drive 6 Point 5/8" Spark Plug Socket, 3/8" Drive 3" Extension Bar, 3/8" Drive Pear Head Ratchet, 1/2" Drive Pear Head Ratchet. Blow-Molded Case.	**KP435746**	Price

STANLEY 229 Pc. Fatmax® 1/4, 3/8 & 1/2" Drive Mechanics Tool Set



- Oversized laser etched markings provide improved visibility
- Matte black chrome finish delivers premium rust resistance
- Chrome vanadium steel forging for strength and durability
- Durable blow mold carry case
- Meet or exceeds ANSI specifications

New!

Model No.	Set Includes	Order No.	Price
FMMT71665	140 Piece Max-Drive™ Socket Set – 1/4" Drive 6 Point Standard: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16 Inch, 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm. 1/4" Drive 6 Point Deep: 5/32, 3/16, 1/4, 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 6, 7, 8, 9, 10, 11, 12, 13 mm. 3/8" Drive 6 Point Standard: 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16 Inch, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm. 3/8" Drive 6 Point Deep: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 Inch, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm. 1/2" Drive 12 Point Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 Inch, 10, 11, 12, 13, 14, 15, 17, 18, 19, 21, 22 mm. Accessories: 3/8" Drive E Sockets: E10, E11, E12, E14, E16, 3/8" Drive 6 Point 5/8" & 13/16" Spark Plug Sockets, 3/8" Drive Bit Sockets: (TX) T10, T15, T20, T27, T30, T40, T45, T50, T55, 3/8" Drive Hex Sockets: 5/32, 3/16, 7/32, 1/4, 9/32 Inch, 7, 8, 9, 10 mm, 1/4" Drive Universal Joint, 3/8" Drive Universal Joint, 3/8" Drive Female to 1/4" Drive Male Adapter, 1/2" Drive Female to 3/8" Drive Male Adapter, 1/4" Drive Pear Head Ratchet, 1/4" Drive 6" Extension Bar, 3/8" Drive Pear Head Ratchet, 3/8" Drive 6" Extension Bar, 1/2" Drive Pear Head Ratchet, 1/2" Drive 5" Extension Bar. 1/4" Drive Multi-Bit Ratcheting Screwdriver, (40) 1/4" Drive Specialty Bits, (20) 1/4" Drive Nut Bits: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2 Inch, 4, 5, 5.5, 6, 7, 8, 9, 10, 11, 12 mm. 28 Piece Hex Key Set – Short Hey Keys: 3/64, 1/16, 5/64, 3/32, 7/64, 9/64 Inch, 1.5, 2, 2.5, 3, 4, 4.5 mm. Long Hex Keys: 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 1.5, 2, 2.5, 3, 4, 5, 6, 7 mm.	**KP435730**	Price

Snap-on Industrial Brands | WILLIAMS® 22 Pc. Bolt-Thru Socket Set

Sockets and the Ratchet have openings on both ends so hard to reach nuts can be easily reached; opening allows the bolt to go through socket and the ratchet regardless of the length of the fastener





- 3/8” Drive bolt through set, 12 point
- SAE & Metric, 3/8” - 3/4” and 8mm - 19mm
- Ratchet w 7-locking positions
- Bolt-through square adaptor
- 3” Bolt through extension
- Blow molded case

Order No.	Price
KP3050671	Price

Snap-on Industrial Brands | WILLIAMS® 20 Pc. 3/4 Drive Socket Set

All Snap-On Williams sockets come with a standard life time warranty! The 33903 Snap-On Williams 3/4” extendable handle ratchet and socket set is one set of many revolutionary large drive tools that has interchangeable heads, and handles to make every job easy to complete with variable ratchet configurations. Unique extendable ratchet handle provides extra leverage when needed



- Ratchet head & extendable handle
- Sliding t-head
- Extensions 8” and 16”
- 12 Pt SAE sockets, 7/8” through 2”

Order No.	Price
KP3033903	Price

PROTO 1/4" Drive Socket Sets - 6 & 12 Point

- The TorquePlus™ design is a high-performance drive configuration which allows for quick and easy socket engagement to the fastener flats, and not the corners.
- Available in 6, 8 and 12Pt.
- Sets: Fractional and Metric
- Tool holders or Blow molded cases

MADE IN THE USA

New!

KP4282130



KP4282125



KP4280425





KP4280460



KP4280465



KP4280445

Style - Fractional						
No. of Pieces	Points	Type	Set Includes	Model No.	Order No.	Price
10	6	Deep	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Accessories: 6-1/4" Socket Bar with 10 Socket Clips	J47102	**KP4280455**	Price
10	12	Deep	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Accessories: 6-1/4" Socket Bar with 10 Socket Clips	J47100	**KP4280475**	Price
10	6	Standard	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Accessories: 6-1/4" Socket Bar with 10 Socket Clips	J47106	**KP4280460**	Price
10	12	Standard	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Accessories: 6-1/4" Socket Bar, 10 Socket Clips	J47104	**KP4280480**	Price
12	6	Standard	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16" Accessories: Classic Pear Head Ratchet 5", Socket Drive Holder	J47108	**KP4282105**	Price
12	12	Standard	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16" Accessories: Classic Pear Head Ratchet 5", Socket Drive Holder	J47110	**KP4282110**	Price
15	6	Standard	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Accessories: Pear Head Ratchet 5", Socket Driver, 2 and 6" Extensions, Universal Joint, and Blow-Molded Case	J47112	**KP4282115**	Price
15	6	Standard & Deep	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Accessories: Pear Head Ratchet 6-11/16, Socket Driver, 2 and 6" Extensions, Universal Joint, and Blow-Molded Case	J47112XL	**KP4281810**	Price
19	6 & 8	Standard	6 Pt: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". 8 Pt: 1/4, 5/16, 3/8" Accessories: Pear Head Ratchet 5", Socket Spinner 6", 2 and 6" Extensions, Universal Joint, Breaker Bar 5-3/4" and Blow-Molded Case	J47114	**KP4282120**	Price
25	6	Standard & Deep	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Deep: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Accessories: Pear Head Ratchet, 2 and 6" Extensions, Socket Driver, Universal Joint, and Blow-Molded Case	J47116	**KP4280440**	Price
25	12	Standard & Deep	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Deep: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Accessories: Pear Head Ratchet, 2 and 6" Extensions, Socket Driver, Universal Joint, and Blow-Molded Case	J47118	**KP4282125**	Price
37	6 & 8	Standard & Deep	6 Pt. Standard: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". 8 Pt Standard: 1/4, 5/16, 3/8", 6 Pt Deep: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16". Accessories: Phillips® Bits #1 and #2, Standard Bits 3/8, 3/16, 1/4", Pear Head Ratchet, 2, 3, and 6" Extensions, 6" Flex Extension, Hinge Handle, Socket Driver, Universal Joint, Sliding T-Handle, and Blow-Molded Case	J47120	**KP4280425**	Price

Style - Metric						
No. of Pieces	Points	Type	Set Includes	Model No.	Order No.	Price
12	12	Standard	5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14mm. Accessories: 9" Socket Bar with 11 Socket Clips	J47201	**KP4280465**	Price
12	12	Deep	5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14mm. Accessories: 9" Socket Bar with 11 Socket Clips	J47203	**KP4280470**	Price
12	6	Deep	4, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14mm. Accessories: 9" Socket Bar with 12 Socket Clips	J47202	**KP4280450**	Price
12	6	Standard	4, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14mm. Accessories: 9" Socket Bar with 12 Socket Clips	J47200	**KP4280445**	Price
17	6	Standard	4, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14mm Accessories: Classic Pear Head Ratchet 5", Socket Drive Holder, 2" & 6" Extensions, Universal Joint	J47204	**KP4282130**	Price
29	6	Standard & Deep	4, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14mm, Deep: 4, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14mm. Accessories: Pear Head Ratchet, Socket Driver, 2 and 6" Extensions, Universal Joint, and Blow-Molded Case	J47206	**KP4280430**	Price

1/4" & 3/8" Socket & Ratchet Sets

TEKTON | Snap-on Industrial Brands | WILLIAMS | WRIGHT TOOL Perfecting Performance | ARMSTRONG Industrial Hand Tools



KP30WSM26HFTB



KP8513501



KP3030922

Style - Fractional								
Pcs. Per Set	Drive (in.)	Points	Set Includes	Holder	Brand Name	Made In	Order No.	Price
10	1/4	6	Shallow: 3/8, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16"	Clips & Rail	Williams	Global	**KP3030922**	Price
13	1/4	6	3/16, 7/32 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2 ; 3 & 6" Extensions; Ratchet; Spinner Handle	Metal Box	Wright Tool	USA	**KP50A21**	Price
13	1/4	6 & 12	5/32, 3/16, 1/4, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16"; 5-1/2 Pt Ratchet; 2" Extension; U-Joint; Spinner Handle	Case	Williams	USA	**KP30WSM13FTB**	Price
25	1/4	12	Standard: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16", Deep: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16", 1/4" Dr Ratchet, 2 & 6" Extension, 1/4" Dr Universal Joint, 6" Plastic Handle Driver	Blow Mold	Armstrong	USA	**KL5015210**	Price
26	1/4	6	Shallow: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16" Deep: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16"; 2 & 6" Extensions; 5-1/2" Enclosed Head Ratchet; U-Joint; Spinner Handle	Metal Box	Williams	USA	**KP30WSM26HFTB**	Price
45	1/4 & 3/8	6	1/4" Dr.- Sockets SAE: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2"; Metric: 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13 mm; Nutdriver Handle; Screwdriver Bit Adapter; 1/4" (M) x 3/8" (F) Reducer; 1/4" Hex x 3/8 " Dr. Power Socket Adapter 3/8" Dr. Sockets SAE: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4"; Metric: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm; 5/8" Spark Plug Socket; Ratchet; 6" Extension; Universal Joint; Carrying Case	Carrying Case	TEKTON	Global	**KP8513501**	Price

Style - Fractional/Metric								
Pcs. Per Set	Drive (in.)	Points	Set Includes	Holder	Brand Name	Made In	Order No.	Price
40	1/4 & 3/8	6 & 8	6Pt. 1/4 Dr.: 5/32-1/2", 4-13mm, 8Pt.: 1/4, 5/16, 3/8"; 6Pt. 3/8 Dr: 7/16, 1/2, 5/8", 12, 14, 16mm; 6" Spinner Handle; Spin Disc; 5/8 Spark Plug Socket; 1/4 (M) x 3/8 (F) Adapter; 3" Extension; 3/8 Dr Ratchet	Blow Mold	Generic	Global	**KP8348020**	Price
47	1/4	6	Shallow SAE: 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 11, 12, 13"; Metric: 4-14mm; 1/8-5/16 & 3-8mm Hex Bit Sockets; 1-1/2 & 3" Extentions; U-Joint; Ratchet; Spinner Handle; Ratchet Spinner	Blow Mold	Williams	Global	**KP3050601**	Price
52	1/4, 3/8, 1/2	6 & 8	6Pt. 1/4 Dr.: 5/32-1/2", 4-13mm, 8Pt.: 1/4, 5/16, 3/8"; 3/8 Dr.: 9/16, 11/16, 3/4", 14, 16, 17mm; 6Pt. 1/2 Dr.: 3/8-13/16"; 1/4 (M) x 3/8 (F) Adaptor; 1/4 Dr. Spinner; 3/8 Dr. 3" Extension, 8" Ratchet, Speed Disc; 1/2 Dr.: 10" Ratchet, Speed Disc	Blow Mold	WorkShop	Global	**KP8581035**	Price

Style - Metric								
Pcs. Per Set	Drive (in.)	Points	Set Includes	Holder	Brand Name	Made In	Order No.	Price
9	1/4	6	Deep: 5 to 13mm	Clips & Rail	Wright Tool	USA	**KP50257**	Price
12	1/4	6	Shallow: 4, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14mm	Clips & Rail	Williams	Global	**KP3030926**	Price
51	1/4	6	Shallow SAE: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16"; Metric: 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm Deep SAE: 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16"; Metric: 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm ; 1/4" Dr. Ratchet; 1/4" Dr. Nutdriver Handle; 3 & 6" Extensions; Universal joint; Screwdriver Bit Adapter; Storage Case	Carrying Case	TEKTON	Global	**KP8513001**	Price

PROTO 3/8" Drive Spark Plug Sockets-6 Point

MADE IN THE USA

New!

- Chrome finish
- With rubber insert



Size (in.)	OAL (in.)	Model No.	Order No.	Price
5/8	2-1/2	J5020-50	**KP4202565**	Price
13/16	2-3/4	J5026HPA	**KP4202605**	Price

PROTO Battery Post and Terminal Cleaner

MADE IN THE USA

- Circular outer brush cleans contact area
- Cleans cable end with cap removed



Model No.	Order No.	Price
J2320	**KP4270215**	Price

PROTO 3/8" Drive Socket Sets - 6 & 12 Point

- The TorquePlus™ design is a high-performance drive configuration which allows for quick and easy socket engagement to the fastener flats, and not the corners.
- Available in 6, 8 and 12Pt.
- Sets: Fractional and Metric
- Tool holders or Blow molded cases

MADE IN THE USA



KP4280540



KP4280550



KP4282150



KP4282165

Style - Fractional						
No. of Pieces	Points	Type	Set Includes	Model No.	Order No.	Price
10	12	Standard	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8". Accessories: 9" Socket Bar, 10 Socket Clips	J52118	**KP4280600**	Price
10	6	Deep	5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8". Accessories: 9" Socket Bar, 10 Socket Clips	J52122	**KP4280605**	Price
10	6	Deep	6 Point Deep: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8". Accessories: 9" Socket Bar with 10 Socket Clips.	J52111	**KP4280615**	Price
10	12	Deep	12 Point Deep: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8" Accessories: 9" Socket Bar with 10 Socket Clips.	J52107	**KP4280610**	Price
12	6	Standard	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8", Accessories: Pear Head Ratchet, 3 and 6 Inch Extensions, and Blow-Molded Case	J52128	**KP4282135**	Price
12	12	Standard	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8", Accessories: Pear Head Ratchet, 3 and 6 Inch Extensions, and Blow-Molded Case	J52130	**KP4282140**	Price
13	6	Standard	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1", Accessories: 13 Inch Socket Bar with 13 Socket Clips	J52126	**KP4280570**	Price
13	6	Deep	6 Point Deep: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1". Accessories: 13" Socket Bar with 13 Socket Clips.	J52114	**KP4280560**	Price
13	12	Standard	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1", Accessories: 13 Inch Socket Bar with 13 Socket Clips	J52124	**KP4280565**	Price
13	12	Deep	12 Point Deep: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1". Accessories: 13" Socket Bar with 13 Socket Clips.	J52112	**KP4280555**	Price
22	6	Both	Standard 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8", Deep 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8", Accessories: Pear Head Ratchet, 3 and 6" Extensions, Universal Joint, Blow-Molded Case	J52134	**KP4282150**	Price
22	12	Both	Standard 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8", Deep 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8"; Accessories: Pear Head Ratchet, 3 and 6" Extensions, Universal Joint, Blow-Molded Case	J52136	**KP4282155**	Price
33	8 & 12	Both	8 Pt Standard 1/4, 5/16, 3/8", 12 Pt Standard. 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8", 12 Pt Deep 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8", 12 Point Flex 7/16, 1/2, 9/16, 5/8, 3/4" Accessories: Pear Head Ratchet, 3, 6, & 12" Extensions, Breaker Bar, Universal Joint, Speed Handle, Blow-Molded Case	J52138	**KP4282160**	Price
58	12	Both	Standard: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1". Deep: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1", Universal: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4", 8 Point Standard: 1/4, 5/16, 3/8, 7/16, 1/2". Hex: 1/8, 1/4, 5/32, 3/16, 5/16, 7/32, 3/8". Phillips®: #2, 3, 4 and 1/4 Slotted. Accessories: Pear Head Ratchet and Adapter, 3, 6, and 12" Extensions, Universal Joint, Hinge, Speed, Sliding T-Handle, and Metal Box	J52140	**KP4282165**	Price

Style - Metric						
No. of Pieces	Points	Type	Set Includes	Model No.	Order No.	Price
12	6	Deep	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm, Accessories: 13" Socket Bar with 12 Socket Clips	J52205	**KP4280595**	Price
12	6	Standard	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm, Accessories: 13 Inch Socket Bar with 12 Socket Clips	J52212	**KP4280580**	Price
12	12	Deep	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm, Accessories: 13" Socket Bar with 12 Socket Clips	J52209	**KP4280590**	Price
12	12	Standard	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm, Accessories: 13 Inch Socket Bar with 12 Socket Clips	J52216	**KP4280585**	Price
16	12	Standard	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm, Pear Head Ratchet, 6" Extension	J52218	**KP4282170**	Price
18	6	Standard	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23mm. Accessories: 17 Inch Socket Bar with 18 Socket Clips	J52203	**KP4280550**	Price
18	12	Standard	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23mm. Accessories: 17 Inch Socket Bar with 18 Socket Clips	J52207	**KP4280545**	Price
21	6	Standard	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26mm, Accessories: 9 and 11 Inch Socket Bars, and 21 Socket Clips	J52211	**KP4280540**	Price
21	12	Standard	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26mm, Accessories: 9 and 11 Inch Socket Bars, and 21 Socket Clips	J52215	**KP4280535**	Price
29	6	Both	Standard: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm, Deep: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm, Accessories: Pear Head Ratchet, 3 and 6" Extensions, Hinge Handle, Universal Joint, and Blow-Molded Case	J52220	**KP4282175**	Price
29	12	Both	Standard: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm. Deep: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm. Accessories: Pear Head Ratchet, 3 and 6" Extensions, Hinge Handle, Universal Joint, and Blow-Molded Case	J52222	**KP4282180**	Price

Snap-on Industrial Brands | WILLIAMS | TEKTON | WRIGHT TOOL Perfecting Performance | GEARWRENCH

3/8" Drive Standard, Deep and Combination Sockets

- Heat treated for superior strength
- Chrome plated
- Standard & deep sockets
- Lifetime warranty



KP3031924



KP50A31



KP30MSB29HFTB



KL5080568

Style - Fractional							
Pcs. Per set	Points	Set Includes (in.)	Case	Brand Name	Made In	Order No.	Price
9	12	Shallow: 1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4"	Clips & Rail	Williams	Global	**KP3031923**	Price
10	12	Standard: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8	Storage Rack	TEKTON	Global	**KP851203**	Price
13	12	Deep: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1"	Clips & Rail	Williams	Global	**KP3031928**	Price
13	12	SAE: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1"	Clips & Rail	Williams	USA	**KP30WSB13RC**	Price
13	12	Shallow: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1"	Clips & Rail	Williams	Global	**KP3031925**	Price
13	12	Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8; 3 & 6" Ext bars; 5/8" Spark plug socket; Rev. ratchet	Metal	Wright Tool	Global	**KP50A31**	Price
13	6	Standard: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1"	Clips & Rail	Williams	Global	**KP3031924**	Price
15	6	SAE: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8; 3, 6 & 11" Ext. bars; U-Joint; 8-9/16" Flex handle; 8" Narrow head ratchet	Metal	Williams	USA	**KP30WSB15FTB**	Price
21	12	Standard & Deep: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8 (no 7/8 deep) 3 & 6 " Ext. bars; 5/8 Spark plug socket; Reversible ratchet	Metal	Wright Tool	USA	**KP50A34**	Price
21	6 & 12	6-Pt Deep 3/8, 1/4, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 7/8"; 12 Pt Std 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4"; 3 & 6" Extension; 3/8" Teardrop ratchet	Blow Molded	Gearwrench	Global	**KP6580557**	Price
30	12	Deep:1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 7/8, 15/16, 1"; Std: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 3/8" Teardrop ratchet	Blow Molded	Gearwrench	Global	**KP6580568**	Price
34	6	Shallow 1/,5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1"; 1/4" Spinner handle; U-Joint; Hex bit holder; 3/8" Dr: Ratchet; 3 & 6" Extension; U-Joint; Hex bit holder;1/4" Hex screwdriver bits	Blow Molded	Williams	Global	**KP3050603**	Price
45	6	Shallow SAE: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4"; Metric: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm; Deep SAE: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4"; Metric: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm; 3/8" Dr. Ratchet ;3 & 6" Extensions; Universal joint; Storage Case	Storage Case	TEKTON	Global	**KP8513101**	Price

Style - Fractional Metric							
Pcs. Per set	Points	Set Includes (in.)	Case	Brand Name	Made In	Order No.	Price
22	6	SAE: 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8; Metric: 10-19mm; 3" Extension; Quick-release ratchet handle	Plastic Hang Rack	TEKTON	Global	**KP851061**	Price
29	6 & 12	Standard: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8; Metric: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm; 3 & 6" Ext. bars; U-Joint; 8" Narrow head ratchet	Metal	Williams	USA	**KP30WSMB29FTB**	Price

Style - Metric							
Pcs. Per set	Points	Set Includes (in.)	Case	Brand Name	Made In	Order No.	Price
10	12	Shallow: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Storage Rack	TEKTON	Global	**KP851204**	Price
14	12	Deep: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Clips & Rail	Williams	Global	**KP3031936**	Price
14	6	Deep: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Case	Wright Tool	USA	**KP50355**	Price
14	6	Standard : 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Case	Wright Tool	USA	**KP50354**	Price
14	6	Standard: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Clips & Rail	Williams	Global	**KP3031932**	Price
17	12	Standard : 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22mm	Clips & Rail	Williams	USA	**KP30MSB17RC**	Price
29	6	Standard & Deep: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm; 3 & 6" Ext. bars; 8-9/16" Flex handle, U-Joint, Narrow head 8" ratchet	Metal	Williams	USA	**KP30MSB29HFTB**	Price

PROTO 1/4" Drive Sockets - Fractional

MADE IN THE USA

6 & 12 Point

New!



- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

Size (in.)	OAL (in.)	6 Pt.			12 Pt.		
		Model No.	Order No.	Price	Model No.	Order No.	Price
1/8	7/8	J4704	**KP4201575**	Price	-	-	-
5/32	7/8	J4705	**KP4201595**	Price	-	-	-
3/16	7/8	J4706	**KP4201620**	Price	J4706T	**KP4201645**	Price
7/32	7/8	J4707	**KP4201650**	Price	J4707T	**KP4201675**	Price
1/4	7/8	J4708	**KP4201680**	Price	J4708T	**KP4201710**	Price
9/32	7/8	J4709	**KP4201715**	Price	J4709T	**KP4201740**	Price
5/16	7/8	J4710	**KP4201745**	Price	J4710T	**KP4201775**	Price
11/32	7/8	J4711	**KP4201780**	Price	J4711T	**KP4201805**	Price
3/8	7/8	J4712	**KP4201810**	Price	J4712T	**KP4201840**	Price
7/16	7/8	J4714	**KP4201855**	Price	J4714T	**KP4201880**	Price
1/2	7/8	J4716	**KP4201885**	Price	J4716T	**KP4201900**	Price
9/16	7/8	J4718	**KP4201905**	Price	J4718T	**KP4201920**	Price
5/8	7/8	J4720A	**KP4210440**	Price	-	-	-

1/4 Dr. Sockets

MADE IN THE USA

6 Pt. Standard & 12 Pt. Shallow



- Chrome plated
- Heat treated alloy steel
- Lifetime warranty

WRIGHT TOOL | Snap-on INDUSTRIAL BRANDS | WILLIAMS

		Wright Tool				Williams	
		6 Pt		6		12 Pt	
Size (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3/16	1	**KP3030106**	Price	**KP502006**	Price	**KP3030206**	Price
7/32	1	**KP3030107**	Price	**KP502007**	Price	**KP3030207**	Price
1/4	1	**KP3030108**	Price	**KP502008**	Price	**KP3030208**	Price
9/32	1	**KP3030109**	Price	**KP502009**	Price	**KP3030209**	Price
5/16	1	**KP3030110**	Price	**KP502010**	Price	**KP3030210**	Price
11/32	1	**KP3030111**	Price	**KP502011**	Price	**KP3030211**	Price
3/8	1	**KP3030112**	Price	**KP502012**	Price	**KP3030212**	Price
7/16	1	**KP3030114**	Price	**KP502014**	Price	**KP3030214**	Price
1/2	1	**KP3030116**	Price	**KP502016**	Price	**KP3030216**	Price
9/16	1	**KP3030118**	Price	-	-	**KP3030218**	Price

PROTO 1/4" Drive Deep Sockets Fractional

MADE IN THE USA

New!

6 & 12 Point



- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

Size (in.)	OAL (in.)	6			12		
		Model No.	Order No.	Price	Model No.	Order No.	Price
3/16	2	J4706L	**KP4201625**	Price	J4706LT	**KP4201635**	Price
7/32	2	J4707L	**KP4201655**	Price	J4707LT	**KP4201665**	Price
1/4	2	J4708L	**KP4201685**	Price	J4708LT	**KP4201695**	Price
9/32	2	J4709L	**KP4201720**	Price	-	-	-
5/16	2	J4710L	**KP4201750**	Price	J4710LT	**KP4201760**	Price
11/32	2	J4711L	**KP4201785**	Price	J4711LT	**KP4201795**	Price
3/8	2	J4712L	**KP4201815**	Price	J4712LT	**KP4201825**	Price
7/16	2	J4714L	**KP4201860**	Price	J4714LT	**KP4201870**	Price
1/2	2	J4716L	**KP4201890**	Price	J4716LT	**KP4201895**	Price
9/16	2	J4718L	**KP4201910**	Price	J4718LT	**KP4201915**	Price

PROTO 1/4" Drive Sockets - Metric

6 & 12 Point

New!

MADE IN THE USA



- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

Size	OAL (in.)	6			12		
		Model No.	Order No.	Price	Model No.	Order No.	Price
4mm	7/8	J4704M	**KP4201590**	Price	-	-	-
5mm	7/8	J4705M	**KP4201615**	Price	J4705TM	**KP4202175**	Price
5.5mm	7/8	J47055M	**KP4201605**	Price	-	-	-
6mm	7/8	J4706M	**KP4201640**	Price	-	-	-
7mm	7/8	J4707M	**KP4201670**	Price	J4707TM	**KP4202160**	Price
8mm	7/8	J4708M	**KP4201700**	Price	J4708TM	**KP4202155**	Price
9mm	7/8	J4709M	**KP4201735**	Price	-	-	-
10mm	7/8	J4710M	**KP4201765**	Price	J4710TM	**KP4202145**	Price
11mm	7/8	J4711M	**KP4201800**	Price	-	-	-
12mm	7/8	J4712M	**KP4201830**	Price	-	-	-
13mm	7/8	J4713M	**KP4201850**	Price	-	-	-
14mm	7/8	J4714M	**KP4201875**	Price	J4714TM	**KP4202125**	Price

1/4 Dr. Sockets - Metric

6 Pt. Standard & 12 Pt. Shallow



- Chrome plated
- Heat treated alloy steel
- Lifetime warranty

MADE IN THE USA

WRIGHT TOOL | Snap-on INDUSTRIAL BRANDS | WILLIAMS

	Wright Tool						Williams		
	6 Pt			6			12 Pt		
Size (mm)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price	OAL. (in.)	Order No.	Price
4	-	-	-	-	-	-	1	**KP3030604**	Price
5	1	**KP3030505**	Price	7/8	**KP502005MM**	Price	1	**KP3030605**	Price
5.5	-	-	-	-	-	-	1	**KP3030699**	Price
6	1	**KP3030506**	Price	7/8	**KP502006MM**	Price	1	**KP3030606**	Price
7	1	**KP3030507**	Price	7/8	**KP502007MM**	Price	1	**KP3030607**	Price
8	1	**KP3030508**	Price	7/8	**KP502008MM**	Price	1	**KP3030608**	Price
9	1	**KP3030509**	Price	7/8	**KP502009MM**	Price	1	**KP3030609**	Price
10	1	**KP3030510**	Price	7/8	**KP502010MM**	Price	1	**KP3030610**	Price
11	1	**KP3030511**	Price	7/8	**KP502011MM**	Price	1	**KP3030611**	Price
12	1	**KP3030512**	Price	7/8	**KP502012MM**	Price	1	**KP3030612**	Price
13	1	**KP3030513**	Price	7/8	**KP502013MM**	Price	1	**KP3030613**	Price
14	-	-	-	-	-	-	1	**KP3030614**	Price

PROTO 1/4" Drive Deep Sockets Metric

6 Point

MADE IN THE USA

New!



- Proto® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials
- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

Size	OAL Approx. (in.)	Model No.	Order No.	Price
5.5mm	2	J47055LM	**KP4201600**	Price
6mm	2	J4706LM	**KP4201630**	Price
7mm	2	J4707LM	**KP4201660**	Price
8mm	2	J4708LM	**KP4201690**	Price
9mm	2	J4709LM	**KP4201725**	Price
10mm	2	J4710LM	**KP4201755**	Price
11mm	2	J4711LM	**KP4201790**	Price
12mm	2	J4712LM	**KP4201820**	Price
13mm	2	J4713LM	**KP4201845**	Price

Deep Standard Sockets

1/4" Drive, 6 & 12 Pt., Chrome Finish



- Chrome plated
- Heat treated alloy steel
- Lifetime warranty

MADE IN THE USA

Snap-on Industrial Brands | WILLIAMS | WRIGHT TOOL

	Williams			Wright Tool					
	6 Pt			6			12		
Size (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
3/16	1-15/16	**KP3030306**	Price	1-15/16	**KP502506**	Price	2-1/32	**KP502606**	Price
7/32	1-15/16	**KP3030307**	Price	-	**-**	-	2-1/32	**KP502607**	Price
1/4	1-15/16	**KP3030308**	Price	1-15/16	**KP502508**	Price	2-1/32	**KP502608**	Price
9/32	1-15/16	**KP3030309**	Price	1-15/16	**KP502509**	Price	2-1/32	**KP502609**	Price
5/16	1-15/16	**KP3030310**	Price	1-15/16	**KP502510**	Price	2-1/32	**KP502610**	Price
11/32	1-15/16	**KP3030311**	Price	1-15/16	**KP502511**	Price	2-1/32	**KP502611**	Price
3/8	1-15/16	**KP3030312**	Price	1-15/16	**KP502512**	Price	2-1/32	**KP502612**	Price
7/16	1-15/16	**KP3030314**	Price	1-15/16	**KP502514**	Price	2-1/32	**KP502614**	Price
1/2	1-15/16	**KP3030316**	Price	1-15/16	**KP502516**	Price	2-1/32	**KP502616**	Price
9/16	1-15/16	**KP3030318**	Price	-	**-**	-	2-1/32	**KP502618**	Price

PROTO 3/8" Drive Sockets Fractional

6 & 12

MADE IN THE USA

New!



- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

Size (in.)	OAL Approx. (in.)	6 Pt.			12 Pt.		
		Model No.	Order No.	Price	Model No.	Order No.	Price
1/4	1	J5208H	**KP4202670**	Price	J5208	**KP4202665**	Price
5/16	1	J5210H	**KP4202705**	Price	J5210	**KP4202700**	Price
11/32	1	J5211H	**KP4210040**	Price	J5211	**KP4210055**	Price
3/8	1	J5212H	**KP4202740**	Price	J5212	**KP4202735**	Price
7/16	1	J5214H	**KP4202775**	Price	J5214	**KP4202770**	Price
1/2	1-1/8	J5216H	**KP4202810**	Price	J5216	**KP4202805**	Price
9/16	1-1/8	J5218H	**KP4202845**	Price	J5218	**KP4202840**	Price
5/8	1-1/8	J5220H	**KP4202875**	Price	J5220	**KP4202870**	Price
11/16	1-1/8	J5222H	**KP4202895**	Price	J5222	**KP4202890**	Price
3/4	1-3/16	J5224H	**KP4202910**	Price	J5224	**KP4202905**	Price
13/16	1-3/16	J5226H	**KP4202920**	Price	J5226	**KP4202915**	Price
7/8	1-5/16	J5228H	**KP4202930**	Price	J5228	**KP4202925**	Price
15/16	1-5/16	J5230H	**KP4202940**	Price	J5230	**KP4202935**	Price
1	1-3/8	J5232H	**KP4202950**	Price	J5232	**KP4202945**	Price

WRIGHT TOOL 3/8" Drive — 8 Pt. Sockets with Chrome Finish



- Chrome plated
- Alloy steel

Size (in.)	Length (in.)	Order No.	Price
1/4	1-5/64	**KP503308**	Price
5/16	1-5/64	**KP503310**	Price
3/8	1-5/64	**KP503312**	Price
7/16	1-5/64	**KP503314**	Price
1/2	1-5/64	**KP503316**	Price
9/16	1-5/64	**KP503318**	Price
5/8	1-5/64	**KP503320**	Price
11/16	1-7/64	**KP503322**	Price
3/4	1-11/64	**KP503324**	Price
13/16	1-3/16	**KP503326**	Price
7/8	1-9/32	**KP503328**	Price

Fed'l Specs: GGG-W-641e ANSI Spec: B107.1

PROTO 3/8" Drive Sockets Fractional

8 Point

MADE IN THE USA



- For square fasteners
- Full polish finish

Size (in.)	OAL Approx. (in.)	Model No.	Order No.	Price
1/4	1	J5208S	**KP4202685**	Price
5/16	1	J5210S	**KP4202720**	Price
3/8	1	J5212S	**KP4202755**	Price
7/16	1	J5214S	**KP4202790**	Price
1/2	1-1/8	J5216S	**KP4202825**	Price

PROTO 3/8" Drive Metric Sockets

6 & 12 Point

MADE IN THE USA



- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

Size	OAL Approx. (in.)	6 Pt.			12 Pt.		
		Model No.	Order No.	Price	Model No.	Order No.	Price
6mm	1-3/32	J5206MH	**KP4202650**	Price	J5206M	**KP4202645**	Price
7mm	1-3/32	J5207MH	**KP4202660**	Price	J5207M	**KP4202655**	Price
8mm	1-3/32	J5208MH	**KP4202680**	Price	J5208M	**KP4202675**	Price
9mm	1-3/32	J5209MH	**KP4202695**	Price	J5209M	**KP4202690**	Price
10mm	1-3/32	J5210MH	**KP4202715**	Price	J5210M	**KP4202710**	Price
11mm	1-3/32	J5211MH	**KP4202730**	Price	J5211M	**KP4202725**	Price
12mm	1-1/8	J5212MH	**KP4202750**	Price	J5212M	**KP4202745**	Price
13mm	1-1/8	J5213MH	**KP4202765**	Price	J5213M	**KP4202760**	Price
14mm	1-1/8	J5214MH	**KP4202785**	Price	J5214M	**KP4202780**	Price
15mm	1-1/8	J5215MH	**KP4202800**	Price	J5215M	**KP4202795**	Price
16mm	1-1/8	J5216MH	**KP4202820**	Price	J5216M	**KP4202815**	Price
17mm	1-1/8	J5217MH	**KP4202835**	Price	J5217M	**KP4202830**	Price
18mm	1-3/16	J5218MH	**KP4202855**	Price	J5218M	**KP4202850**	Price
19mm	1-3/16	J5219MH	**KP4202865**	Price	J5219M	**KP4202860**	Price
20mm	1-3/16	J5220MH	**KP4203035**	Price	-	**-**	-
21mm	1-9/32	-	**-**	-	J5221M	**KP4202885**	Price
22mm	1-5/16	-	**-**	-	J5222M	**KP4202900**	Price
24mm	1-5/16	-	**-**	-	J5224M	**KP4203075**	Price

Standard Length Sockets

3/8" Drive, 6 Pt.

MADE IN THE USA



- Chrome plated
- Heat treated alloy steel
- Lifetime warranty

Snap-on Industrial Brands | WILLIAMS | WRIGHT TOOL

	Williams			Williams USA			Wright Tool		
Size (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
1/4	1	**KP3031108**	Price	1-1/32	**KP30B608**	Price	1-5/64	**KP503008**	Price
5/16	1	**KP3031110**	Price	1-1/32	**KP30B610**	Price	1-5/64	**KP503010**	Price
3/8	1	**KP3031112**	Price	1-1/32	**KP30B612**	Price	1-5/64	**KP503012**	Price
7/16	1	**KP3031114**	Price	1-1/32	**KP30B614**	Price	1-5/64	**KP503014**	Price
1/2	1	**KP3031116**	Price	1-1/32	**KP30B616**	Price	1-5/64	**KP503016**	Price
9/16	1-1/16	**KP3031118**	Price	1-1/32	**KP30B618**	Price	1-5/64	**KP503018**	Price
5/8	1-1/16	**KP3031120**	Price	1-1/8	**KP30B620**	Price	1-5/64	**KP503020**	Price
11/16	1-1/16	**KP3031122**	Price	1-5/32	**KP30B622**	Price	1-5/64	**KP503022**	Price
3/4	1-1/8	**KP3031124**	Price	1-3/16	**KP30B624**	Price	1-11/64	**KP503024**	Price
13/16	1-1/8	**KP3031126**	Price	1-1/4	**KP30B626**	Price	1-3/16	**KP503026**	Price
7/8	1-7/32	**KP3031128**	Price	1-1/4	**KP30B628**	Price	1-9/32	**KP503028**	Price
15/16	1-7/32	**KP3031130**	Price	1-3/8	**KP30B630**	Price	1-3/8	**KP503030**	Price
1	1-7/32	**KP3031132**	Price	-	**-**	-	1-3/8	**KP503032**	Price

†Snap-On/Williams is Globally made

Standard Length Sockets

3/8" Drive, 12 Pt.



Size (in.)	† Snap-on Williams			Wright Tool			Snap-on Williams USA		
	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
1/4	1	KP3031208	Price	1-5/64	KP503108	Price	1-1/32	KP30B1208	Price
5/16	1	KP3031210	Price	1-5/64	KP503110	Price	1-1/32	KP30B1210	Price
11/32	-	-	-	-	-	-	1-1/32	KP30B1211	Price
3/8	1	KP3031212	Price	1-5/64	KP503112	Price	1-1/32	KP30B1212	Price
7/16	1	KP3031214	Price	1-5/64	KP503114	Price	1-1/32	KP30B1214	Price
1/2	1	KP3031216	Price	1-5/64	KP503116	Price	1-1/32	KP30B1216	Price
9/16	1-1/16	KP3031218	Price	1-5/64	KP503118	Price	1-1/32	KP30B1218	Price
5/8	1-1/16	KP3031220	Price	1-5/64	KP503120	Price	1-1/8	KP30B1220	Price
11/16	1-1/16	KP3031222	Price	1-5/64	KP503122	Price	1-5/32	KP30B1222	Price
3/4	1-1/8	KP3031224	Price	1-11/64	KP503124	Price	1-3/16	KP30B1224	Price
13/16	1-1/8	KP3031226	Price	1-3/16	KP503126	Price	1-1/4	KP30B1226	Price
7/8	1-7/32	KP3031228	Price	1-9/32	KP503128	Price	1-9/32	KP30B1228	Price
15/16	-	-	-	1-3/8	KP503130	Price	1-3/8	KP30B1230	Price
1	-	-	-	1-3/8	KP503132	Price	1-13/32	KP30B1232	Price

† Snap-on Williams is made Globally

PROTO 3/8" Drive Deep Sockets Fractional

6 & 12 Point

New!



- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

MADE IN THE USA

Size (in.)	OAL (in.)	6 Pt.			12 Pt		
		Model No.	Order No.	Price	Model No.	Order No.	Price
1/4	2-1/8	J5008H	KP4202390	Price	J5008	KP4202385	Price
5/16	2-1/8	J5010H	KP4202415	Price	J5010	KP4202410	Price
11/32	2-1/8	-	-	-	J5011	KP4210075	Price
3/8	2-1/8	J5012H	KP4202445	Price	J5012	KP4202440	Price
7/16	2-1/8	J5014H	KP4202475	Price	J5014	KP4202470	Price
1/2	2-1/8	J5016H	KP4202505	Price	J5016	KP4202500	Price
9/16	2-1/8	J5018H	KP4202535	Price	J5018	KP4202530	Price
5/8	2-3/4	J5020H	KP4202570	Price	J5020	KP4202560	Price
11/16	2-3/4	J5022H	KP4202580	Price	J5022	KP4202575	Price
3/4	2-3/4	J5024H	KP4202590	Price	J5024	KP4202585	Price
13/16	2-3/4	J5026H	KP4202600	Price	J5026	KP4202595	Price
7/8	2-3/4	J5028H	KP4202615	Price	J5028	KP4202610	Price
15/16	2-3/4	J5030H	KP4202625	Price	J5030	KP4202620	Price
1	2-3/4	J5032H	KP4202635	Price	J5032	KP4202630	Price

PROTO 3/8" Drive Deep Sockets - Metric-6 & 12 Point

MADE IN THE USA

New!



- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

Size	OAL (in.)	12			6		
		Model No.	Order No.	Price	Model No.	Order No.	Price
6mm	2-1/8	-	-	-	J5006MH	KP4203090	Price
7mm	2-1/8	J5007M	KP4202380	Price	J5007MH	KP4203095	Price
8mm	2-1/8	J5008M	KP4202395	Price	J5008MH	KP4203030	Price
9mm	2-1/8	J5009M	KP4202400	Price	J5009MH	KP4202405	Price
10mm	2-1/8	J5010M	KP4202420	Price	J5010MH	KP4202425	Price
11mm	2-1/8	J5011M	KP4202430	Price	J5011MH	KP4202435	Price
12mm	2-1/8	J5012M	KP4202450	Price	J5012MH	KP4202455	Price
13mm	2-1/8	J5013M	KP4202460	Price	J5013MH	KP4202465	Price
14mm	2-1/8	J5014M	KP4202480	Price	J5014MH	KP4202485	Price
15mm	2-3/4	J5015M	KP4202490	Price	J5015MH	KP4202495	Price
16mm	2-3/4	J5016M	KP4202510	Price	J5016MH	KP4202515	Price
17mm	2-3/4	J5017M	KP4202520	Price	J5017MH	KP4202525	Price
18mm	2-3/4	J5018M	KP4202540	Price	J5018MH	KP4202545	Price
19mm	2-3/4	J5019M	KP4202550	Price	J5019MH	KP4202555	Price
24mm	2-3/4	-	-	-	J5024MH	KP4210210	Price

Standard & Deep Metric Sockets 3/8" Drive, 6 Pt.

- Chrome plated
- Heat treated alloy steel

Lifetime Warranty



Size (mm)	Williams			Wright Tool					
	Metric Standard Socket			Metric Deep Socket			Metric Standard Socket		
	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
6	1	KP3031506	Price	2-1/4	KP503506MM	Price	1-1/16	KP503006MM	Price
7	1	KP3031507	Price	2-1/4	KP503507MM	Price	1-1/16	KP503007MM	Price
8	1	KP3031508	Price	2-1/4	KP503508MM	Price	1-1/16	KP503008MM	Price
9	1	KP3031509	Price	2-1/4	KP503509MM	Price	1-1/16	KP503009MM	Price
10	1	KP3031510	Price	2-1/4	KP503510MM	Price	1-1/16	KP503010MM	Price
11	1	KP3031511	Price	2-1/4	KP503511MM	Price	1-1/16	KP503011MM	Price
12	1	KP3031512	Price	2-1/4	KP503512MM	Price	1-1/16	KP503012MM	Price
13	1	KP3031513	Price	2-1/4	KP503513MM	Price	1-1/16	KP503013MM	Price
14	1-1/16	KP3031514	Price	2-1/4	KP503514MM	Price	1-1/16	KP503014MM	Price
15	1-1/16	KP3031515	Price	2-1/4	KP503515MM	Price	1-1/16	KP503015MM	Price
16	1-1/16	KP3031516	Price	2-1/4	KP503516MM	Price	1-1/16	KP503016MM	Price
17	1-1/16	KP3031517	Price	2-1/2	KP503517MM	Price	1-1/16	KP503017MM	Price
18	1-1/16	KP3031518	Price	2-1/2	KP503518MM	Price	1-1/16	KP503018MM	Price
19	1-1/8	KP3031519	Price	2-1/2	KP503519MM	Price	1-1/16	KP503019MM	Price

†Snap-On/Williams is Globally made

WRIGHT TOOL Deep Length Sockets

3/8" Drive, 6 Pt.

MADE IN THE USA

- Chrome plated
- Heat treated alloy steel
- Lifetime warranty



Size (in.)	OAL (in.)	Order No.	Price
1/4	2-7/32	**KP503508**	Price
5/16	2-7/32	**KP503510**	Price
3/8	2-7/32	**KP503512**	Price
7/16	2-7/32	**KP503514**	Price
1/2	2-7/32	**KP503516**	Price
9/16	2-1/4	**KP503518**	Price
5/8	2-1/4	**KP503520**	Price
11/16	2-5/16	**KP503522**	Price
3/4	2-5/16	**KP503524**	Price
13/16	2-9/16	**KP503526**	Price
7/8	2-7/8	**KP503528**	Price
15/16	3-3/64	**KP503530**	Price
1	3-3/64	**KP503532**	Price

Deep Length Sockets 3/8" Drive, 12 Pt.

- Chrome plated
- Heat treated alloy steel
- Lifetime warranty



MADE IN THE USA

WRIGHT TOOL | Snap-on INDUSTRIAL BRANDS | WILLIAMS

Size (in.)	Wright Tool			† Snap-on Williams		
	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
1/4	-	-	-	2-1/2	**KP3031408**	Price
5/16	-	-	-	2-1/2	**KP3031410**	Price
3/8	2-1/2	**KP503612**	Price	2-1/2	**KP3031412**	Price
7/16	2-1/2	**KP503614**	Price	2-1/2	**KP3031414**	Price
1/2	2-1/2	**KP503616**	Price	2-1/2	**KP3031416**	Price
9/16	2-1/2	**KP503618**	Price	2-1/2	**KP3031418**	Price
5/8	2-1/2	**KP503620**	Price	2-1/2	**KP3031420**	Price
11/16	2-1/2	**KP503622**	Price	2-3/4	**KP3031422**	Price
3/4	2-1/2	**KP503624**	Price	2-1/2	**KP3031424**	Price
13/16	2-9/16	**KP503626**	Price	2-1/2	**KP3031426**	Price
7/8	2-7/8	**KP503628**	Price	2-3/4	**KP3031428**	Price
15/16	3-3/64	**KP503630**	Price	2-3/4	**KP3031430**	Price
1	3-3/64	**KP503632**	Price	2-1/2	**KP3031432**	Price

† Snap-on Williams is made Globally

Snap-on INDUSTRIAL BRANDS | WILLIAMS Deep Metric Sockets

3/8" Drive, 12 Pt.

- Chrome plated
- Heat treated alloy steel
- Lifetime warranty



Size (mm)	OAL (in.)	Order No.	Price
6	2-1/2	**KP3031806**	Price
7	2-1/2	**KP3031807**	Price
8	2-1/2	**KP3031808**	Price
9	2-1/2	**KP3031809**	Price
10	2-1/2	**KP3031810**	Price
11	2-1/2	**KP3031811**	Price
12	2-1/2	**KP3031812**	Price
13	2-1/4	**KP3031813**	Price
14	2-1/2	**KP3031814**	Price
15	2-1/2	**KP3031815**	Price
16	2-1/2	**KP3031816**	Price
17	2-1/2	**KP3031817**	Price
18	2-1/2	**KP3031818**	Price
19	2-1/2	**KP3031819**	Price

PROTO 7 Pc 3/8" Drive Universal Socket Set - 12 Point

New!

MADE IN THE USA

- The TorquePlus™ design is a high performance drive configuration which allows for quick and easy socket engagement to the fastener flats, not the corners
- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage



Set Includes	Model No.	Order No.	Price
12 Point Universal 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4". Accessories: 6-1/4" Socket Bar with 7 Socket Clips.	J52102	**KP4280635**	Price

Snap-on INDUSTRIAL BRANDS | WILLIAMS 3/8" Drive Flex Socket Sets

- Clip rail case



Pc. Per Set	Points	Set Includes	Style	Order No.	Price
7	6	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4	Fractional	**KP3031938**	Price
11	6	Universal sockets 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Metric	**KP3031939**	Price

Snap-on INDUSTRIAL BRANDS | WILLIAMS 3/8" Drive Flex Sockets

6 Pt. Standard

- SUPERTORQUE® lobular openings for greater turning power without deforming the fastener
- Ideal for work in confined areas where fastener is inaccessible to standard sockets
- Designed for maximum engagement on 6 point fasteners
- Full polish chrome



Size (in.)	OAL (in.)	Order No.	Price
3/8	1-53/64	**KP3031142**	Price
7/16	1-53/64	**KP3031144**	Price
1/2	1-53/64	**KP3031146**	Price
9/16	1-53/64	**KP3031148**	Price
5/8	2	**KP3031150**	Price
11/16	2-3/64	**KP3031152**	Price
3/4	2-3/64	**KP3031154**	Price

6 Pt. Metric

Size (mm)	OAL (in.)	Order No.	Price
8	1-27/32	**KP3031528**	Price
10	1-55/64	**KP3031530**	Price
11	1-55/64	**KP3031531**	Price
12	1-55/64	**KP3031532**	Price
13	1-55/64	**KP3031533**	Price
14	1-15/16	**KP3031534**	Price
15	1-57/64	**KP3031535**	Price
16	2	**KP3031536**	Price
17	2	**KP3031537**	Price
18	2-1/64	**KP3031538**	Price
19	2-3/64	**KP3031539**	Price

PROTO 1/2" Drive Socket Sets - 6 & 12 Point

- The TorquePlus™ design is a high-performance drive configuration which allows for quick and easy socket engagement to the fastener flats, and not the corners.
- Available in 6, 8 and 12Pt.
- Sets: Fractional and Metric
- Tool holders or Blow molded cases
- Sets: Full sets or Sockets only

New!



KP4280745



KP4280715

MADE IN THE USA



KP4282195



KP4282220



KP4280790



KP4280775



KP4280770

Style - Fractional						
No. of Pieces	Points	Type	Set Includes	Model No.	Order No.	Price
12	12	Standard	7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1" Sockets, 10" Long Pear Head Ratchet, 5" Extension	J54116	**KP4282195**	Price
15	6	Standard	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4", Accessories: 17 Inch Socket Bar with 15 Socket Clips	J54110	**KP4280750**	Price
15	12	Standard	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4", Accessories: 17 Inch Socket Bar with 15 Socket Clips	J54114	**KP4280755**	Price
15	6	Deep	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4". Accessories: 17" Socket Bar with 15 Socket Clips	J54103	**KP4280775**	Price
15	12	Deep	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4". Accessories: 17" Socket Bar with 15 Socket Clips	J54107	**KP4280780**	Price
18	6	Standard	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4". Accessories: Pear Head Ratchet, 5" Extension, Hinge Handle, and Blow-Molded Case	J54122	**KP4282210**	Price
18	12	Standard	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4". Accessories: Pear Head Ratchet, 5" Extension, Hinge Handle, and Blow-Molded Case	J54120	**KP4282205**	Price
19	6	Standard	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2", Accessories: 17" Socket Bar with 19 Socket Clips	J54109	**KP4280735**	Price
19	12	Standard	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2". Accessories: 17" Socket Bar with 19 Socket Clips	J54113	**KP4280730**	Price
19	6	Deep	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2". Accessories: 17" Socket Bar with 19 Socket Clips	J54101	**KP4280745**	Price
19	12	Deep	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2". Accessories: 17" Socket Bar with 19 Socket Clips	J54105	**KP4280740**	Price
26	6 & 12	Standard & Deep	6 Point Standard: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4 Inch. 12 Point Standard: 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4 Inch. 12 Point Deep: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8,15/16, 1 Inch. Accessories: Pear Head Ratchet, Universal Joint, 17" Flex Handle. Blow-Molded Case.	85-434	**KP435508**	Price
26	12	Standard	3/8, 7/16, 1/2, 9/16, 19/32, 5/8, 21/32, 11/16, 3/4, 25/32, 13/16, 7/8, 15/16, 31/32, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4". Accessories: Pear Head Ratchet, 2-1/2, 5, and 10" Extensions, Hinge Handle, Universal Joint, Speed Handle, and Metal Box	J54124	**KP4282215**	Price
30	12	Standard & Deep	Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, Deep 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4", Accessories, Pear Head Ratchet, 5" & 10" Extensions, 15-3/4" Breaker Bar, Blow-Molded Case	J54126	**KP4282220**	Price

Style - Metric						
No. of Pieces	Points	Type	Set Includes	Model No.	Order No.	Price
15	6	Standard	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 mm. Accessories: 17 Inch Socket Bar with 15 Socket Clips	J54205	**KP4280770**	Price
15	12	Standard	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 mm. Accessories: 17 Inch Socket Bar with 15 Socket Clips	J54206	**KP4280765**	Price
15	12	Deep	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm. Accessories: 17" Socket Bar with 15 Socket Clips	J54207	**KP4280790**	Price
23	6	Standard	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32mm, Accessories: 13" and 17" Socket Bars with 23 Socket Clips	J54209	**KP4280720**	Price
23	12	Deep	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32mm. Accessories: (2) 17 Socket Bars with 23 Socket Clips	J54201	**KP4280725**	Price
24	12	Standard	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 36mm. Accessories: (2) 17" Socket Bars with 24 Socket Clips	J54211	**KP4280715**	Price
31	12	Standard & Deep	Standard: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26mm, Deep: 16, 17, 18, 19, 20, 21, 22, 24, 25, 26mm Accessories: Pear Head Ratchet 10", (2) Drive Extensions 5", 10", Breaker Bar 15-3/4", Blow Molded Case	J54214	**KP4282250**	Price

Snap-on Industrial Brands | WILLIAMS | TEKTON | WRIGHT TOOL

1/2" Drive Socket Sets

- Wright sets feature the patented “Wright Drive”, which creates more torque while protecting the fastener
- Snap-on Williams sets USA are designed with SUPERTORQUE® lobular design that protects the fastener against rounding and deforming
- Chrome plated
- Heat treated alloy
- Standard & deep 1/2” drive sockets
- Lifetime warranty

KP50A41



KP30329424





KP50419



KP30MSS33TB



Style - Fractional							
Pcs. Per Set	Points	Set Includes (in.)	Case	Brand Name	Made In	Order No.	Price
9	6	Deep: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1"	Clips & Rail	Williams	Global	**KP3032936**	Price
9	6	Shallow: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1"	Clips & Rail	Williams	Global	**KP3032934**	Price
10	12	SAE: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16"	Storage Rack	TEKTON	Global	**KP851205**	Price
11	6	Deep: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8	Clips & Rail	Williams	USA	**KP30WSSD11HRC**	Price
12	12	Shallow: 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/8"; Pear head ratchet; 6" Extension	Blow Mold Box	Williams	Global	**KP3050667**	Price
14	6	SAE 1/2" Drive shallow 6-point sockets (SAE): 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, and 1-1/4"	Plastic Case	TEKTON	Global	**KP854816**	Price
14	6	SAE: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4	Clips & Rail	Wright Tool	USA	**KP50419**	Price
15	12	Shallow: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1; 5 & 10" Ext. bars; U-Joint; 15-1/2" Flex handle; 10-3/8" Narrow head ratchet	Metal Box	Williams	USA	**KP30WSS15FTB**	Price
16	12	SAE: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4; 6 & 10" Ext. bars; Reversible ratchet	Metal Box	Wright Tool	USA	**KP50A41**	Price
16	12	Shallow: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-1/2	Clips & Rail	Williams	Global	**KP3032924**	Price
16	6	Deep: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-1/2"	Clips & Rail	Williams	Global	**KP3032939**	Price
16	6	SAE: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4, 2 Pc. Ext. Bars 6 & 10, Reversible Ratchet	Metal Box	Wright Tool	USA	**KP50A42**	Price
16	6	Shallow: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-1/2"	Clips & Rail	Williams	Global	**KP3032937**	Price
22	12	Shallow: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4; 2, 5, & 10" Ext. bars; Flex handle; Speeder; U-Joint; Narrow head ratchet	Metal Box	Williams	USA	**KP30WSS22FTB**	Price
23	12	Shallow: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4; 3"-6"-10" Extensions; 15" Flex handle breaker bar; U-Joint; 1/2"F x 3/8"M & 1/2"F x 3/4"M Adapter	Blow Mold Box	Williams	Global	**KP3050609**	Price

Style - Fractional/Metric						
Pcs. Per Set	Points	Set Includes (in.)	Brand Name	Made In	Order No.	Price
58	6	"11-pc. 1/2" Drive shallow & deep (22 total) 6-point sockets: 3/8, 7/16, 1/2,9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1", 15-pc. 1/2" Drive shallow & deep (30 total) 6-point sockets: 10 to 24 mm x 1mm, 1-pc. 1/2" Drive x 18" breaker bar, 2-pc. 1/2" Drive extensions: 3, 10", 1-pc. 1/2" Drive universal joint, 1-pc. 1/2" Drive ratchet (10" , 72 tooth)1-pc. Carrying case	TEKTON	Global	**KP8513201**	Price
84	6	1/2" Drive Socket Set (Sae/Mm), Master set has every size from 3/8 to 1-5/16 inch and 10 to 32 mm in both shallow and deep lengths, Includes universal joint and extra long 10-inch extension, All tools are made from premium-quality chrome vanadium steel with a mirror chrome plated finish, Tough carrying case with two built-in parts trays keeps everything organized	TEKTON	Global	**KP8513203**	Price

Style - Metric							
Pcs. Per Set	Points	Set Includes (in.)	Case	Brand Name	Made In	Order No.	Price
10	12	Metric: 13, 14, 15, 16, 17, 18, 19, 21, 22, 24mm	Storage Rack	TEKTON	Global	**KP851206**	Price
10	6	Shallow: 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 36mm	Clips & Rail	Williams	Global	**KP3032941**	Price
12	12	Shallow: 12 - 19mm, 22mm, 24mm; 6" Extension; 9-7/8" Pear head ratchet	Blow Mold Box	Williams	Global	**KP3050669**	Price
14	12	Metric: 10, 12, 13, 14, 15, 17, 18, 19, 20, 21, 24mm, 6 & 10" Ext. bars; Reversible ratchet	Metal Box	Wright Tool	USA	**KP50A46**	Price
14	6	Shallow: 11, 12, 13, 14, 15, 17, 18, 19, 21, 22, 24, 27, 30, 32mm	Plastic Case	TEKTON	Global	**KP854817**	Price
16	6	Shallow: 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm	Clips & Rail	Williams	Global	**KP3032943**	Price
25	12	Shallow:10mm - 32mm; 1/2" Dr: Quick release ratchet, 3, 6, & 10" Extension; Flex handle breaker bar; U-Joint; 1/2"F x 3/8"M & 1/2"F x 3/4"M Adapter	Blow Mold Box	Williams	Global	**KP3050619**	Price
29	12	Shallow: 10-34mm; 2, 5 & 10" Ext. bars; 15-1/2" Flex handle; U-Joint; 10-3/8" Enclosed head ratchet	Metal Box	Williams	USA	**KP30MSS29FTB**	Price
33	12	Shallow: 10mm thru 24mm; Deep; 13mm thru 30mm; 15-1/2" Flex handle; 10-3/8" Enclosed head ratchet; 2-5-10" Extension; U-Joint	Metal Box	Williams	USA	**KP30MSS33TB**	Price

PROTO 1/2" Drive Sockets

6 & 12 Point Fractional

New! MADE IN THE USA



- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

		6 Pt.			12 Pt.		
Size (in.)	OAL (in.)	Model No.	Order No.	Price	Model No.	Order No.	Price
5/16	1-1/2	J5410H	**KP4210085**	Price	J5410	**KP4210120**	Price
3/8	1-1/2	J5412H	**KP4203620**	Price	J5412	**KP4203615**	Price
7/16	1-1/2	J5414H	**KP4203645**	Price	J5414	**KP4203640**	Price
1/2	1-1/2	J5416H	**KP4203670**	Price	J5416	**KP4203665**	Price
9/16	1-1/2	J5418H	**KP4203695**	Price	J5418	**KP4203690**	Price
5/8	1-1/2	J5420H	**KP4203725**	Price	J5420	**KP4203720**	Price
11/16	1-1/2	J5422H	**KP4203755**	Price	J5422	**KP4203750**	Price
21/32	1-1/2	-	**-**	-	J5421	**KP4203740**	Price
3/4	1-1/2	J5424H	**KP4203780**	Price	J5424	**KP4203775**	Price
25/32	1-1/2	-	**-**	-	J5425	**KP4203795**	Price
13/16	1-1/2	J5426H	**KP4203810**	Price	J5426	**KP4203805**	Price
7/8	1-9/16	J5428H	**KP4203835**	Price	J5428	**KP4203830**	Price
15/16	1-9/16	J5430H	**KP4203865**	Price	J5430	**KP4203860**	Price
1	1-9/16	J5432H	**KP4203885**	Price	J5432	**KP4203880**	Price
1-1/16	1-5/8	J5434H	**KP4203905**	Price	J5434	**KP4203900**	Price
1-1/8	1-3/4	J5436H	**KP4203915**	Price	J5436	**KP4203910**	Price
1-3/16	1-3/4	J5438H	**KP4203930**	Price	J5438	**KP4203925**	Price
1-1/4	1-3/4	J5440H	**KP4203940**	Price	J5440	**KP4203935**	Price
1-5/16	1-3/4	J5442H	**KP4204235**	Price	J5442	**KP4204055**	Price
1-3/8	2-1/8	J5444H	**KP4204240**	Price	J5444	**KP4204060**	Price
1-7/16	2-1/8	J5446H	**KP4204245**	Price	J5446	**KP4204070**	Price
1-1/2	2-1/4	J5448H	**KP4204250**	Price	J5448	**KP4204080**	Price

PROTO 1/2" Drive Sockets

Fractional-8 Point

New! MADE IN THE USA



- For square nuts
- Chrome full polish

Size (in.)	OAL (in.)	Model No.	Order No.	Price
3/8	1-7/16	J5412S	**KP4203630**	Price
7/16	1-7/16	J5414S	**KP4203655**	Price
1/2	1-7/16	J5416S	**KP4203680**	Price
9/16	1-1/2	J5418S	**KP4203705**	Price
5/8	1-1/2	J5420S	**KP4203735**	Price
11/16	1-1/2	J5422S	**KP4203765**	Price
3/4	1-1/2	J5424S	**KP4203790**	Price
13/16	1-5/8	J5426S	**KP4203820**	Price
7/8	1-5/8	J5428S	**KP4203845**	Price
1	1-3/4	J5432S	**KP4203895**	Price

PROTO 1/2" Drive Spline Sockets

New! MADE IN THE USA



- Proto® Spline tools are designed to service high tensile strength fasteners used widely on military and commercial aircraft and in heavy machinery applications where vibration is prevalent. They are also used in automotive and industrial areas where high performance torque needs to be achieved
- Spline helps reduce foreign object debris (FOD) by having a precise fit between the fastening tool and its fastener
- Chrome full polish

Size (in.l)	OAL (in.)	Model No.	Order No.	Price
5/8	1-9/16	J5420SPL	**KP4209145**	Price
3/4	1-9/16	J5424SPL	**KP4209155**	Price

Snap-on Industrial Brands | WILLIAMS 1/2" Drive — 6 Pt. Standard Sockets with Chrome Finish

MADE IN THE USA



- Chrome plated
- Alloy steel

		WRIGHT TOOL		Snap-on Industrial Brands | WILLIAMS	
Size (in.)	Approx. OAL (in.)	Wright Tool Order No.	Price	Snap-On/Williams USA Order No.	Price
3/8	1-7/16	**KP504012**	Price	**KP30ST612**	Price
7/16	1-7/16	**KP504014**	Price	**KP30ST614**	Price
1/2	1-7/16	**KP504016**	Price	**KP30ST616**	Price
9/16	1-1/2	**KP504018**	Price	**KP30ST618**	Price
5/8	1-1/2	**KP504020**	Price	**KP30ST620**	Price
11/16	1-1/2	**KP504022**	Price	**KP30ST622**	Price
3/4	1-1/2	**KP504024**	Price	**KP30ST624**	Price
13/16	1-1/2	**KP504026**	Price	**KP30ST626**	Price
7/8	1-9/16	**KP504028**	Price	**KP30ST628**	Price
15/16	1-9/16	**KP504030**	Price	**KP30ST630**	Price
1	1-9/16	**KP504032**	Price	**KP30ST632**	Price
1-1/16	1-9/16	**KP504034**	Price	**KP30ST634**	Price
1-1/8	1-3/4	**KP504036**	Price	**KP30ST636**	Price
1-3/16	1-3/4	**KP504038**	Price	**-**	-
1-1/4	1-3/4	**KP504040**	Price	**KP30ST640**	Price
1-5/16	1-3/4	**KP504042**	Price	**-**	-
1-3/8	2-1/8	**KP504044**	Price	**-**	-
1-7/16	2-1/8	**KP504046**	Price	**-**	-
1-1/2	2-3/4	**KP504048**	Price	**-**	-

Fed'l Specs: GGG-W-641e ANSI Spec: B107.1

Snap-on Industrial Brands | WILLIAMS 1/2" Drive — 12 Pt. Standard Sockets with Chrome Finish



- Chrome plated
- Alloy steel

MADE IN THE USA

		Snap-On/Williams†		WRIGHT TOOL		Snap-On/Williams USA	
Size (in.)	Approx. Length (in.)	Order No.	Price	Wright Tool Order No.	Price	Order No.	Price
3/8	1-7/16	**KP3032212**	Price	**KP504112**	Price	**KP30ST1212**	Price
7/16	1-7/16	**KP3032214**	Price	**KP504114**	Price	**KP30ST1214**	Price
1/2	1-7/16	**KP3032216**	Price	**KP504116**	Price	**KP30ST1216**	Price
9/16	1-1/2	**KP3032218**	Price	**KP504118**	Price	**KP30ST1218**	Price
5/8	1-1/2	**KP3032220**	Price	**KP504120**	Price	**KP30ST1220**	Price
11/16	1-1/2	**KP3032222**	Price	**KP504122**	Price	**KP30ST1222**	Price
3/4	1-1/2	**KP3032224**	Price	**KP504124**	Price	**KP30ST1224**	Price
13/16	1-1/2	**KP3032226**	Price	**KP504126**	Price	**KP30ST1226**	Price
7/8	1-9/16	**KP3032228**	Price	**KP504128**	Price	**KP30ST1228**	Price
15/16	1-9/16	**KP3032230**	Price	**KP504130**	Price	**KP30ST1230**	Price
31/32	1-9/16	**-**	-	**-**	-	**KP30ST1231**	Price
1	1-9/16	**KP3032232**	Price	**KP504132**	Price	**KP30ST1232**	Price
1-1/16	1-9/16	**KP3032234**	Price	**KP504134**	Price	**KP30ST1234**	Price
1-1/8	1-3/4	**KP3032236**	Price	**KP504136**	Price	**KP30ST1236**	Price
1-3/16	1-3/4	**KP3032238**	Price	**KP504138**	Price	**KP30ST1238**	Price
1-1/4	1-3/4	**KP3032240**	Price	**KP504140**	Price	**KP30ST1240**	Price
1-5/16	1-3/4	**-**	-	**KP504142**	Price	**KP30ST1242**	Price
1-3/8	2-1/8	**-**	-	**KP504144**	Price	**KP30ST1244**	Price
1-7/16	2-1/8	**-**	-	**KP504146**	Price	**KP30ST1246**	Price
1-1/2	2-3/4	**KP3032248**	Price	**KP504148**	Price	**KP30ST1248**	Price

Fed'l Specs: GGG-W-641e ANSI Spec: B107.1 †Snap-On/Williams is Globally made

Snap-on Industrial Brands | WILLIAMS 1/2" Drive — 6 Pt. Deep Sockets with Chrome Finish

MADE IN THE USA



- Chrome plated
- Alloy steel

Size (in.)	Approx. OAL (in.)	Order No.	Price
1/2	3-1/4	**KP30SD616**	Price
9/16	3-1/4	**KP30SD618**	Price
5/8	3-1/4	**KP30SD620**	Price
11/16	3-1/4	**KP30SD622**	Price
3/4	3-1/4	**KP30SD624**	Price
13/16	3-1/4	**KP30SD626**	Price
7/8	3-1/4	**KP30SD628**	Price
15/16	3-1/4	**KP30SD630**	Price
1	3-1/4	**KP30SD632**	Price
1-1/16	3-1/4	**KP30SD634**	Price
1-1/8	3-1/4	**KP30SD636**	Price

Fed'l Specs: GGG-W-641e ANSI Spec: B107.1

PROTO 1/2" Drive Deep Sockets

Fractional-6 & 12 Point

MADE IN THE USA



- The TorquePlus™ design is a high performance drive configuration which allows for quick and easy socket engagement to the fastener flats, not the corners
- Chrome full polish

		6 Pt.			12 Pt.		
Size (in.)	OAL (in.)	Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	3-1/4	J5312H	**KP4204415**	Price	J5312	**KP4204390**	Price
7/16	3-1/4	J5314H	**KP4204410**	Price	J5314	**KP4204395**	Price
1/2	3-1/4	J5316H	**KP4203445**	Price	J5316	**KP4203440**	Price
9/16	3-1/4	J5318H	**KP4203465**	Price	J5318	**KP4203460**	Price
5/8	3-1/4	J5320H	**KP4203490**	Price	J5320	**KP4203480**	Price
11/16	3-1/4	J5322H	**KP4203510**	Price	J5322	**KP4203505**	Price
3/4	3-1/4	J5324H	**KP4203525**	Price	J5324	**KP4203520**	Price
13/16	3-1/4	J5326H	**KP4203545**	Price	J5326	**KP4203540**	Price
7/8	3-1/4	J5328H	**KP4203565**	Price	J5328	**KP4203560**	Price
15/16	3-1/4	J5330H	**KP4203575**	Price	J5330	**KP4203570**	Price
1	3-1/4	J5332H	**KP4203585**	Price	J5332	**KP4203580**	Price
1-1/16	3-1/4	J5334H	**KP4204275**	Price	J5334	**KP4203590**	Price
1-1/8	3-1/4	J5336H	**KP4204280**	Price	J5336	**KP4203595**	Price
1-3/16	3-1/4	J5338H	**KP4204405**	Price	J5338	**KP4204420**	Price
1-1/4	3-1/4	J5340H	**KP4204285**	Price	J5340	**KP4203600**	Price
1-5/16	3-1/2	J5342H	**KP4204290**	Price	J5342	**KP4204255**	Price
1-3/8	3-1/2	J5344H	**KP4204295**	Price	J5344	**KP4204260**	Price
1-7/16	3-1/2	J5346H	**KP4204300**	Price	J5346	**KP4204265**	Price
1-1/2	3-1/2	J5348H	**KP4204305**	Price	J5348	**KP4204270**	Price

1/2" Drive — 12 Pt. Deep Sockets with Chrome Finish



- Chrome plated
- Alloy steel
- Wright Tool USA made, Williams globally made

		Wright Tool		Snap-On/Williams	
Size (in.)	Approx. OAL (in.)	Order No.	Price	Order No.	Price
3/8	3-1/4	**KP504612**	Price	**KP3032412**	Price
7/16	3-1/4	**KP504614**	Price	**KP3032414**	Price
1/2	3-1/4	**KP504616**	Price	**KP3032416**	Price
9/16	3-1/4	**KP504618**	Price	**KP3032418**	Price
5/8	3-1/4	**KP504620**	Price	**KP3032420**	Price
11/16	3-1/4	**KP504622**	Price	**KP3032422**	Price
3/4	3-1/4	**KP504624**	Price	**KP3032424**	Price
13/16	3-1/4	**KP504626**	Price	**KP3032426**	Price
7/8	3-1/4	**KP504628**	Price	**KP3032428**	Price
15/16	3-1/4	**KP504630**	Price	**KP3032430**	Price
1	3-1/4	**KP504632**	Price	**KP3032432**	Price
1-1/16	3-1/4	**KP504634**	Price	**KP3032434**	Price
1-1/8	3-1/4	**KP504636**	Price	**KP3032436**	Price
1-3/16	3-1/4	**KP504638**	Price	**KP3032438**	Price
1-1/4	3-1/4	**KP504640**	Price	**KP3032440**	Price
1-5/16	3-1/4	**KP504642**	Price	-	-
1-3/8	3-1/4	**KP504644**	Price	-	-
1-7/16	3-1/2	**KP504646**	Price	-	-
1-1/2	3-1/2	**KP504648**	Price	**KP3032448**	Price

Fed'l Specs: GGG-W-641e ANSI Spec: B107.1

PROTO 1/2" Drive Deep Sockets

Metric -12 Point

MADE IN THE USA



- The TorquePlus™ design is a high performance drive configuration which allows for quick and easy socket engagement to the fastener flats, not the corners
- Chrome full polish

Size	OAL (in.)	Model No.	Order No.	Price
10mm	3-1/4	J5310M	**KP4203410**	Price
11mm	3-1/4	J5311M	**KP4203415**	Price
12mm	3-1/4	J5312M	**KP4203420**	Price
13mm	3-1/4	J5313M	**KP4203425**	Price
14mm	3-1/4	J5314M	**KP4203430**	Price
15mm	3-1/4	J5315M	**KP4203435**	Price
16mm	3-1/4	J5316M	**KP4203450**	Price
17mm	3-1/4	J5317M	**KP4203455**	Price
18mm	3-1/4	J5318M	**KP4203470**	Price
19mm	3-1/4	J5319M	**KP4203475**	Price
20mm	3-1/4	J5320M	**KP4203495**	Price
21mm	3-1/4	J5321M	**KP4203500**	Price
22mm	3-1/4	J5322M	**KP4203515**	Price
23mm	3-1/4	J5323M	**KP4204400**	Price
24mm	3-1/4	J5324M	**KP4203530**	Price
25mm	3-1/4	J5325M	**KP4203535**	Price
26mm	3-1/4	J5326M	**KP4203555**	Price
27mm	3-1/4	J5327M	**KP4204200**	Price
28mm	3-1/4	J5328M	**KP4204205**	Price
30mm	3-1/4	J5330M	**KP4204215**	Price
32mm	3-1/4	J5332M	**KP4204225**	Price

PROTO 1/2" Drive Sockets Black Oxide Fractional-12 Point

MADE IN THE USA

New!



- Proto® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials
- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage

Size (in.)	OAL (in.)	Model No.	Order No.	Price
7/16	1-1/2	J5414B	**KP4205055**	Price
1/2	1-1/2	J5416B	**KP4205060**	Price
9/16	1-1/2	J5418B	**KP4205065**	Price
5/8	1-1/2	J5420B	**KP4205070**	Price
11/16	1-1/2	J5422B	**KP4205075**	Price
3/4	1-1/2	J5424B	**KP4205080**	Price
13/16	1-1/2	J5426B	**KP4205085**	Price
7/8	1-9/16	J5428B	**KP4205090**	Price
15/16	1-9/16	J5430B	**KP4205095**	Price
1-1/8	1-3/4	J5436B	**KP4205110**	Price

Snap-on Industrial Brands | WILLIAMS 1/2" Drive Deep Sockets, 12 Point, Metric

- SUPERTORQUE® lobular openings for greater turning power without deforming the fastener
- Designed for maximum engagement on 6 and 12 point fasteners
- Full polish chrome

Size (mm)	OAL (in.)	Order No.	Price
10	3-1/4	**KP3032810**	Price
11	3-1/4	**KP3032811**	Price
12	3-1/4	**KP3032812**	Price
13	3-1/4	**KP3032813**	Price
14	3-1/4	**KP3032814**	Price
15	3-1/4	**KP3032815**	Price

Size (mm)	OAL (in.)	Order No.	Price
16	3-1/4	**KP3032816**	Price
17	3-1/4	**KP3032817**	Price
18	3-1/4	**KP3032818**	Price
19	3-1/4	**KP3032819**	Price
20	3-1/4	**KP3032820**	Price
21	3-1/4	**KP3032821**	Price
22	3-1/4	**KP3032822**	Price

Size (mm)	OAL (in.)	Order No.	Price
23	3-1/4	**KP3032823**	Price
24	3-1/4	**KP3032824**	Price
25	3-1/4	**KP3032825**	Price
26	3-1/4	**KP3032826**	Price
27	3-1/4	**KP3032827**	Price



PROTO 1/2" Drive Sockets Metric-6 & 12 Point

New!





MADE IN THE USA

- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

		6 Pt.			12 Pt.		
Size	OAL Approx. (in.)	Model No.	Order No.	Price	Model No.	Order No.	Price
9mm	1-1/2	-	-	-	J5409M	**KP4210255**	Price
10mm	1-1/2	-	-	-	J5410M	**KP4203605**	Price
11mm	1-1/2	-	-	-	J5411M	**KP4203610**	Price
12mm	1-1/2	J5412MH	**KP4204095**	Price	J5412M	**KP4203625**	Price
13mm	1-1/2	J5413MH	**KP4204100**	Price	J5413M	**KP4203635**	Price
14mm	1-1/2	-	-	-	J5414M	**KP4203650**	Price
15mm	1-1/2	J5415MH	**KP4204110**	Price	J5415M	**KP4203660**	Price
16mm	1-1/2	J5416MH	**KP4204115**	Price	J5416M	**KP4203675**	Price
17mm	1-1/2	J5417MH	**KP4204120**	Price	J5417M	**KP4203685**	Price
18mm	1-1/2	J5418MH	**KP4204125**	Price	J5418M	**KP4203700**	Price
19mm	1-1/2	J5419MH	**KP4204130**	Price	J5419M	**KP4203715**	Price
20mm	1-1/2	J5420MH	**KP4204135**	Price	J5420M	**KP4203730**	Price
21mm	1-1/2	J5421MH	**KP4204140**	Price	J5421M	**KP4203745**	Price
22mm	1-1/2	J5422MH	**KP4204145**	Price	J5422M	**KP4203760**	Price
23mm	1-1/2	-	-	-	J5423M	**KP4203770**	Price
24mm	1-1/2	J5424MH	**KP4204155**	Price	J5424M	**KP4203785**	Price
25mm	1-1/2	-	-	-	J5425M	**KP4203800**	Price
26mm	1-5/8	-	-	-	J5426M	**KP4203815**	Price
27mm	1-5/8	J5427MH	**KP4204170**	Price	J5427M	**KP4203825**	Price
28mm	1-3/4	-	-	-	J5428M	**KP4203840**	Price
30mm	1-3/4	J5430MH	**KP4204185**	Price	J5430M	**KP4203870**	Price
32mm	1-3/4	J5432MH	**KP4204195**	Price	J5432M	**KP4203890**	Price
36mm	2-1/4	J5436MH	**KP4210245**	Price	J5436M	**KP4203920**	Price

Snap-on Industrial Brands | WILLIAMS 1/2" Drive

MADE IN THE USA



12 Pt. Deep Metric Sockets

- Chrome plated
- Superior torquing design for power while not damaging the fastener
- Heat treated alloy steel
- Chamfered ends provide easy engagement of fastener
- Lifetime warranty

Size (mm)	Approx. OAL (in.)	Order No.	Price
13	3-1/4	**KP30SMD1213**	Price
14	3-1/4	**KP30SMD1214**	Price
15	3-1/4	**KP30SMD1215**	Price
16	3-1/4	**KP30SMD1216**	Price

Size (mm)	Approx. OAL (in.)	Order No.	Price
17	3-1/4	**KP30SMD1217**	Price
18	3-1/4	**KP30SMD1218**	Price
19	3-1/4	**KP30SMD1219**	Price
21	3-1/4	**KP30SMD1221**	Price

Size (mm)	Approx. OAL (in.)	Order No.	Price
22	3-1/4	**KP30SMD1222**	Price
24	3-1/4	**KP30SMD1224**	Price
27	3-1/4	**KP30SMD1227**	Price
30	3-1/4	**KP30SMD1230**	Price

1/2" Metric Sockets-Standard 12 Pt.



- Chrome plated
- Superior torquing design for power while not damaging the fastener
- Heat treated alloy steel
- Chamfered ends provide easy engagement of fastener
- Lifetime warranty

Snap-on Industrial Brands | WILLIAMS — WRIGHT TOOL — MADE IN THE USA — Snap-on Industrial Brands | WILLIAMS — MADE IN THE USA

	-			Wright Tool			-		
Size (mm)	Approx. OAL (in.)	Order No.	Price	Approx. OAL (in.)	Order No.	Price	Approx. OAL (in.)	Order No.	Price
9	1-1/2	**KP3032609**	Price	1-1/2	**KP504109MM**	Price	-	-	-
10	1-1/2	**KP3032610**	Price	1-1/2	**KP504110MM**	Price	1-1/2	**KP30STM1210**	Price
11	1-1/2	**KP3032611**	Price	1-1/2	**KP504111MM**	Price	1-1/2	**KP30STM1211**	Price
12	1-1/2	**KP3032612**	Price	1-1/2	**KP504112MM**	Price	1-1/2	**KP30STM1212**	Price
13	1-1/2	**KP3032613**	Price	1-1/2	**KP504113MM**	Price	1-1/2	**KP30STM1213**	Price
14	1-1/2	**KP3032614**	Price	1-1/2	**KP504114MM**	Price	1-1/2	**KP30STM1214**	Price
15	1-1/2	**KP3032615**	Price	1-1/2	**KP504115MM**	Price	1-1/2	**KP30STM1215**	Price
16	1-1/2	**KP3032616**	Price	1-1/2	**KP504116MM**	Price	1-1/2	**KP30STM1216**	Price
17	1-1/2	**KP3032617**	Price	1-1/2	**KP504117MM**	Price	1-1/2	**KP30STM1217**	Price
18	1-1/2	**KP3032618**	Price	1-1/2	**KP504118MM**	Price	1-1/2	**KP30STM1218**	Price
19	1-1/2	**KP3032619**	Price	1-1/2	**KP504119MM**	Price	1-1/2	**KP30STM1219**	Price
20	1-1/2	**KP3032620**	Price	1-1/2	**KP504120MM**	Price	1-1/2	**KP30STM1220**	Price
21	1-1/2	**KP3032621**	Price	1-9/16	**KP504121MM**	Price	1-1/2	**KP30STM1221**	Price
22	1-5/8	**KP3032622**	Price	1-5/8	**KP504122MM**	Price	1-1/2	**KP30STM1222**	Price
23	1-5/8	**KP3032623**	Price	1-5/8	**KP504123MM**	Price	1-1/2	**KP30STM1223**	Price
24	1-5/8	**KP3032624**	Price	1-5/8	**KP504124MM**	Price	1-17/32	**KP30STM1224**	Price
25	1-5/8	**KP3032625**	Price	1-11/16	**KP504125MM**	Price	1-9/16	**KP30STM1225**	Price
26	1-3/4	**KP3032626**	Price	1-3/4	**KP504126MM**	Price	1-5/8	**KP30STM1226**	Price
27	1-3/4	**KP3032627**	Price	1-3/4	**KP504127MM**	Price	1-23/32	**KP30STM1227**	Price
28	1-3/4	**KP3032628**	Price	-	-	-	1-3/4	**KP30STM1228**	Price
29	1-3/4	**KP3032629**	Price	-	-	-	1-3/4	**KP30STM1229**	Price
30	1-3/4	**KP3032630**	Price	1-7/8	**KP504130MM**	Price	1-3/4	**KP30STM1230**	Price
32	1-3/4	**KP3032632**	Price	1-15/16	**KP504132MM**	Price	1-7/8	**KP30STM1232**	Price
36	2	**KP3032636**	Price	2	**KP504136MM**	Price	2-1/16	**KP30STM1236**	Price

3/4" Drive Standard Sockets, 12 Pt.

- Alloy Steel
- Chrome plated
- Lifetime warranty

MADE IN THE USA



Size (in.)	Wright Tool Approx. OAL (in.)	Wright Tool Order No.	Wright Tool Price	- Approx. OAL (in.)	- Order No.	- Price
3/4	2	KP506124	Price	2	KP30H1224	Price
13/16	2	KP506126	Price	2	KP30H1226	Price
7/8	2	KP506128	Price	2	KP30H1228	Price
15/16	2	KP506130	Price	2	KP30H1230	Price
1	2-1/32	KP506132	Price	2-1/16	KP30H1232	Price
1-1/16	2-1/16	KP506134	Price	2-1/8	KP30H1234	Price
1-1/8	2-1/8	KP506136	Price	2-3/16	KP30H1236	Price
1-3/16	2-1/8	KP506138	Price	2-1/4	KP30H1238	Price
1-1/4	2-3/16	KP506140	Price	2-1/4	KP30H1240	Price
1-5/16	2-1/4	KP506142	Price	2-5/16	KP30H1242	Price
1-3/8	2-1/4	KP506144	Price	2-5/16	KP30H1244	Price
1-7/16	2-5/16	KP506146	Price	2-3/8	KP30H1246	Price
1-1/2	2-5/16	KP506148	Price	2-1/2	KP30H1248	Price
1-9/16	2-7/16	KP506150	Price	2-5/8	KP30H1250	Price
1-5/8	2-1/2	KP506152	Price	2-5/8	KP30H1252	Price
1-11/16	2-1/2	KP506154	Price	2-3/4	KP30H1254	Price
1-3/4	2-21/32	KP506156	Price	2-3/4	KP30H1256	Price
1-13/16	2-13/16	KP506158	Price	2-7/8	KP30H1258	Price
1-7/8	2-7/8	KP506160	Price	3	KP30H1260	Price
2	3	KP506164	Price	3-1/8	KP30H1264	Price
2-1/16	3-1/32	KP506166	Price	3-1/8	KP30H1266	Price
2-1/8	3-1/16	KP506168	Price	3-1/4	KP30H1268	Price
2-3/16	3-1/16	KP506170	Price	3-1/4	KP30H1270	Price
2-1/4	3-1/16	KP506172	Price	3-3/8	KP30H1272	Price
2-3/8	3-1/4	KP506176	Price	3-5/8	KP30H1276	Price

3/4" Drive Deep Sockets, 6 Pt.

MADE IN THE USA



Size (in.)	Approx. OAL (in.)	Point - 6 Wright Tool Order No.	Wright Tool Price	Snap-On/Williams USA Order No.	Snap-On/Williams USA Price
3/4	3-1/2	KP506524	Price	-	-
13/16	3-1/2	KP506526	Price	-	-
7/8	3-1/2	KP506528	Price	KP30HD628	Price
15/16	3-1/2	KP506530	Price	KP30HD630	Price
1	3-1/2	KP506532	Price	KP30HD632	Price
1-1/16	3-1/2	KP506534	Price	KP30HD634	Price
1-1/8	3-1/2	KP506536	Price	KP30HD636	Price
1-3/16	3-1/2	KP506538	Price	-	-
1-1/4	3-1/2	KP506540	Price	KP30HD640	Price
1-5/16	3-1/2	KP506542	Price	KP30HD642	Price
1-3/8	3-1/2	KP506544	Price	KP30HD644	Price
1-7/16	3-1/2	KP506546	Price	KP30HD646	Price
1-1/2	3-1/2	KP506548	Price	KP30HD648	Price
1-5/8	3-1/2	KP506552	Price	KP30HD652	Price

CRESCENT 14 Pc. 3/4" Drive Mechanics Tool Set – SAE

Standard Features:

- 3/4" Drive ratchet with 24 teeth, quick release, knurled handle
- Extension bars (20): 4", 8"
- Swivel breaker bar
- 12 Pt sockets

Socket Sizes - SAE:
7/8, 15/16, 1, 1-1/8, 1-1/4, 1-7/16, 1-1/2, 1-5/8, 1-3/4, 2"



Order No.	Price
KW50CTK14SAE	Price

PROTO 3/4" Drive Deep Sockets Fractional-6 Point

MADE IN THE USA



- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage *New!*
- Chrome full polish

Size (in.)	OAL (in.)	Model No.	Order No.	Price
7/8	3-1/2	J5528HL	KP4204480	Price
15/16	3-1/2	J5530HL	KP4204500	Price
1	3-1/2	J5532HL	KP4204520	Price
1-1/16	3-1/2	J5534HL	KP4204535	Price
1-1/8	3-1/2	J5536HL	KP4204550	Price
1-1/4	3-1/2	J5540HL	KP4204575	Price
1-5/16	3-1/2	J5542HL	KP4204590	Price
1-3/8	3-1/2	J5544HL	KP4204605	Price
1-1/2	3-1/2	J5548HL	KP4204630	Price
1-5/8	3-1/2	J5552HL	KP4204650	Price
1-7/16	3-1/2	J5546HL	KP4204615	Price

TEKTON 21 Pc. 3/4 Drive Socket Sets

Fractional & Metric

- 1 Pc. 19-1/2" Reversible ratchet handle
- 1 Pc. 20" Flex breaker bar
- 2 Pc. 4" and 8" Extension bars
- 16 Pc. 3/4" Drive 6-point sockets
- Fractional set also has: 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-3/4, 1-13/16, 1-7/8, 2"
- Metric set also has: 19, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 41 42, 45, 46, 48, 50mm



Type	Order No.	Price
Fractional Socket Set	KP851115	Price
Metric Socket Set	KP851100	Price

29 Pc. 3/4" Drive Socket Set

MADE IN THE USA

Standard socket set chrome plated:
7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16,
1-1/2, 1-9/16, 1-5/8, 1-11/16, 1-3/4,
1-13/16, 1-7/8, 2, 2-1/8, 2-1/4, 2-3/8"



- 3", 8", 16" extensions
- Flex and sliding, "T" handle
- 20" Ratchet
- 1" Universal joint
- Sturdy tool box



Order No.	Price
KP30WSH29TB	Price

PROTO Extensions

MADE IN THE USA

New!

- Extensions help provide access to fasteners in areas that might otherwise be difficult to reach
- Made from alloy steel
- Heat treated for strength and durability

KP4240695



KP4240645



Finish - Black Oxide				
Drive (in.)	Approx OAL (in.)	Model No.	Order No.	Price
3/8	1-3/4	J5259B	**KP4240660**	Price
3/8	3	J5260B	**KP4240665**	Price
3/8	6	J5260-06B	**KP4240670**	Price
3/8	12	J5262B	**KP4240680**	Price
1/2	2-1/2	J5460B	**KP4240685**	Price
1/2	5	J5461B	**KP4240690**	Price
1/2	10	J5463B	**KP4240695**	Price

Finish - Full Polish				
Drive (in.)	Approx OAL (in.)	Model No.	Order No.	Price
1/4	2	J4759	**KP4240525**	Price
1/4	3	J4760	**KP4240530**	Price
1/4	6	J4761	**KP4240535**	Price
1/4	10	J4762	**KP4240545**	Price
1/4	14	J4763	**KP4240540**	Price
3/8	1-3/4	J5259	**KP4240560**	Price
3/8	3	J5260	**KP4240565**	Price
3/8	6	J5260-06	**KP4240570**	Price
3/8	8	J5261	**KP4240575**	Price
3/8	12	J5262	**KP4240580**	Price
3/8	17	J5263	**KP4240585**	Price
1/2	2-1/2	J5460	**KP4240600**	Price
1/2	5	J5461	**KP4240605**	Price
1/2	10	J5463	**KP4240610**	Price
1/2	20	J5464	**KP4240615**	Price
1/2	36	J5465	**KP4240620**	Price
3/4	4	J5660	**KP4240635**	Price
3/4	8	J5661	**KP4240640**	Price
3/4	16	J5663	**KP4240645**	Price
1	8	J5861	**KP4240650**	Price
1	17	J5863	**KP4240655**	Price

Extensions

MADE IN THE USA



WRIGHT TOOL | Snap-on INDUSTRIAL BRANDS | WILLIAMS

		Wright Tool		Snap-On/Williams USA	
Drive (in.)	Approx. Length (in.)	Order No.	Price	Order No.	Price
1/4	2	**KP502402**	Price	**KP30M102**	Price
1/4	4	**KP502404**	Price	**-**	-
1/4	6	**KP502406**	Price	**KP30M115**	Price
1/4	10	**KP502410**	Price	**KP30M110**	Price
3/8	1-1/2	**-**	-	**KP30B101**	Price
3/8	3	**KP503403**	Price	**KP30B108**	Price
3/8	6	**KP503405**	Price	**-**	-
3/8	6	**-**	-	**KP30B110**	Price
3/8	8	**KP503408**	Price	**-**	-
3/8	11	**-**	-	**KP30B115**	Price
3/8	12	**KP503412**	Price	**-**	-
3/8	18	**-**	-	**KP30B118**	Price
3/8	24	**KP503424**	Price	**-**	-
3/8	34	**KP503422**	Price	**-**	-
1/2	2	**-**	-	**KP30S102P**	Price
1/2	5	**KP504405**	Price	**KP30S110P**	Price
1/2	10	**KP504410**	Price	**KP30S115P**	Price
1/2	20	**KP504420**	Price	**KP30S121P**	Price
3/4	3-1/2	**KP506403**	Price	**-**	-
3/4	8	**KP506408**	Price	**-**	-
3/4	16	**KP506416**	Price	**-**	-

PROTO Wobble Extensions

New!

MADE IN THE USA

- Provides up to a 17° angle of operation
- Made from alloy steel
- Heat treated for strength and durability
- Rigid wobble extension



Drive (in.)	Approx OAL (in.)	Model No.	Order No.	Price
3/8	1-3/4	J5259W	**KP4240740**	Price
3/8	3	J5260W	**KP4240750**	Price
3/8	6	J5260-06W	**KP4240745**	Price
3/8	8	J5261W	**KP4240755**	Price
3/8	12	J5262W	**KP4240760**	Price
3/8	17	J5263W	**KP4240765**	Price
1/2	2-1/2	J5460W	**KP4240775**	Price
1/2	5	J5461W	**KP4240780**	Price
1/2	10	J5463W	**KP4240785**	Price

PROTO Locking Extensions

MADE IN THE USA



New!

- One piece extension design
- Provides positive socket retention
- Use where accidental socket disengagement may be a concern or safety hazard

Drive (in.)	OAL (in.)	Model No.	Order No.	Price
1/4	2	J4759L	**KP4240550**	Price
1/4	6	J4761L	**KP4240555**	Price
3/8	3	J5260-03L	**KP4240700**	Price
3/8	6	J5260-06L	**KP4240590**	Price
1/2	3	J5460-03L	**KP4240705**	Price
1/2	5	J5461L	**KP4240625**	Price
1/2	10	J5463L	**KP4240630**	Price

TEKTON Extension Sets



- Made of premium chrome vanadium steel with a mirror finish
- Spring-loaded ball bearing locks onto sockets
- Notches on extension lock onto ratchet drive

Drive	Set Includes	Order No.	Price
1/4	3, 6, 9"	**KP851596**	Price
1/4	12, 15, 18"	**KP8515605**	Price
1/2	3, 6, 8"	**KP851606**	Price

PROTO Extension Sets



- Perfect set to help provide access to fasteners in areas that might otherwise be difficult to reach
- Chrome finish

MADE IN THE USA

New!

Drive (in.)	No. of Pcs in Set	Lengths Included	Model Number	Order No.	Price
3/8	3	1-3/4, 3, 6, 12"	J52008	**KP4240470**	Price
1/2	4	2-1/2, 5, 10"	J54111	**KP4240465**	Price

PROTO Flexible Extensions

MADE IN THE USA



New!



- Flexible shaft extensions help reach around obstructions in low torque applications
- Made of heat-treated alloy steel

Drive (in.)	Approx OAL (in.)	Finish	Model No.	Order No.	Price
1/4	6	Full Polish	J4765	**KP4240730**	Price
3/8	8	Black Oxide	J5268	**KP4240770**	Price

Socket Extensions

- Adds length to access hard-to-reach fasteners
- Knurled band offers a nonslip grip for turning loosened fasteners by hand
- Spring-loaded detent ball securely latches onto sockets, preventing them from being dropped
- Detent notches in drive end lock onto ratchets and breaker bars
- Made of premium chrome vanadium steel with a mirror chrome finish

New!


KP8514209


KP3030003

TEKTON | Snap-on Industrial Brands | WILLIAMS

		Tekton		Snap-On/Williams	
Drive	OAL (in.)	Order No.	Price	Order No.	Price
1/4	3	**KP8514128**	Price	**KP3030003**	Price
1/4	6	**KP8514129**	Price	**KP3030004**	Price
3/8	1-3/4	**KP8514206**	Price	-	-
3/8	3	**KP8514207**	Price	**KP3031002**	Price
3/8	6	**KP8514208**	Price	**KP3031003**	Price
3/8	8	**KP8514209**	Price	-	-
3/8	10	**-**	-	**KP3031004**	Price
1/2	3	**KP8514265**	Price	**KP3032002**	Price
1/2	5	**KP8514266**	Price	-	-
1/2	10	**KP8514267**	Price	**KP3032004**	Price

Snap-on Williams is made Globally

TITAN 3 Pc. Socket Adapter Set

- Impact grade
- Adapts sockets to power drills and drivers
- 6" Overall length
- Detent ball for secure socket retention
- Includes: 1/4" Dr. & 3/8" drive;1/2" drive extension bar - 1/4" shank

New!



Set Includes	OAL (in.)	Shank (in.)	Order No.	Price
1/4, 3/8, 1/2" Drive	6	1/4	**KP8212086**	Price

TITAN 10 Pc. Accessory Set

Set Includes:

- Universal joints: 1/4, 1/2, 3/8"
- 3/8" Drive extensions: 1-1/2, 3, 6, 10"
- Reducer: 1/2 x 3/8" & 3/8 x 1/4"
- Adapter: 1/4 x 3/8"

New!



Order No.	Price
KP8218179	Price

PROTO Ell Handle

- 3/4" Drive
- 16" Overall length
- Satin finish

New!

MADE IN THE USA



Approx OAL (in.)	Drive (in.)	Model No.	Order No.	Price
16	3/4	J5686	**KP4240500**	Price

PROTO Flexible Socket

MADE IN THE USA

New!

Model No. J4764

- Flexible shaft for bending around obstructions in low torque applications



Approx OAL (in.)	Drive (in.)	Model No.	Order No.	Price
7	1/4	J4764	**KP4240375**	Price

PROTO Socket Driver

New!

- 1/4" Square female drive in handle



OAL (in.)	Model No.	Order No.	Price
6	J4769	**KP4240385**	Price

TEKTON 3 Pc. Power Socket Adapter Set

- Sand-blasted chrome vanadium steel
- For 1/4, 3/8 & 1/2" drive sockets



Order No.	Price
KP852902	Price

TITAN Flexible Hose Clamp Driver

- Use in hard to reach areas such as confined engine spaces & plumbing applications
- Flexible driver provides up to 90° access
- Rubber grip handle & flexible shaft increase leverage
- **Set includes:**
  (1) 1/4" drive x 11" flexible driver
  (2) 1/4" drive 6-point sockets: 1/4" & 5/16"

New!



Order No.	Price
KP8212229	Price

TITAN 4 Pc. 1/2" Dr. Accessory Set

- Set Includes: 1/2" Dr 3" & 6" extensions, drive adapter & universal joint
- Heat treated chrome vanadium steel construction
- Chrome plating resists rust and corrosion



Order No.	Price
KP8255085	Price

TITAN 3 Pc. Low Profile Adapter Set

- Impact grade
- Detent ball design
- Chrome-Molly construction

New!

Set includes:
1/4" to 3/8", 3/8" to 1/2", 1/2" to 3/4"



Order No.	Price
KP8230936	Price

PROTO 1/4", 1/2" & 3/8" Drive Universal Sockets - 12 Point

MADE IN THE USA



- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- Chrome full polish

New!

Drive Size (in.)	Drive (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
5/8	1/2	2-5/8	J5477A	**KP4211115**	Price
5/16	3/8	1-3/4	J5272A	**KP4210735**	Price
3/8	3/8	1-3/4	J5273A	**KP4210740**	Price
7/16	3/8	1-3/4	J5274A	**KP4210745**	Price
1/2	3/8	1-3/4	J5275A	**KP4210750**	Price
9/16	3/8	1-7/8	J5276HA	**KP4210815**	Price
9/16	3/8	2	J5276A	**KP4210755**	Price
3/4	3/8	1-7/8	J5279A	**KP4210770**	Price
1/4	1/4	1-1/4	J4771TA	**KP4210840**	Price
5/16	1/4	1-1/4	J4772TA	**KP4210845**	Price
3/8	1/4	1-1/4	J4773TA	**KP4210850**	Price
7/16	1/4	1-1/4	J4774TA	**KP4210855**	Price
1/2	1/4	1-1/4	J4775TA	**KP4210860**	Price

PROTO Universal Joints

- Push button locking mechanism
- Overmolded protection cap prevents dust & debris from jamming mechanism
- Full polish finish

MADE IN THE USA

New!



Drive (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/4	1-3/8	J4770A	**KP4210730**	Price
3/8	2	J5270A	**KP4240855**	Price
1/2	2-3/4	J5470A	**KP4210725**	Price
3/4	4	J5670	**KP4240840**	Price

Universal Joint Adapters

MADE IN THE USA



WRIGHT TOOL | Snap-on INDUSTRIAL BRANDS | WILLIAMS

Drive	Wright Tool		Snap-On/Williams†	
	Order No.	Price	Order No.	Price
1/4	**KP502475**	Price	**KP3030007**	Price
3/8	**KP503475**	Price	**KP3031006**	Price
1/2	**KP504475**	Price	**KP3032006**	Price
3/4	**KP506475**	Price	**-**	-

†Snap-on Williams is made globally

Drive Adapters

MADE IN THE USA

WRIGHT TOOL | Snap-on INDUSTRIAL BRANDS | WILLIAMS



Female	Male	Wright Tool		Snap-On/Williams†	
		Order No.	Price	Order No.	Price
1/4	3/8	**KP502453**	Price	**KP3030009**	Price
3/8	1/4	**KP503452**	Price	**KP3031008**	Price
3/8	1/2	**KP503454**	Price	**KP3031009**	Price
1/2	3/8	**KP504453**	Price	**KP3032008**	Price
1/2	3/4	**-**	-	**KP3032009**	Price
1/2	3/4	**-**	-	**KP30SH130**	Price

† Snap-on Williams is made Globally

PROTO Ratchet Adapters

MADE IN THE USA

- Converts standard handles to ratcheting handles
- Made from alloy steel
- Heat-treated for strength and durability
- Chrome plated

New!



Drive (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
3/8	2-1/2	J5247	**KP4240390**	Price
1/2	2-1/2	J5447	**KP4240410**	Price
3/4	3-3/4	J5647	**KP4240435**	Price

PROTO Locking Adapters

MADE IN THE USA

- Includes hex key for easy locking into drive tool
- Knurl locking ring
- Black oxide finish

New!



Drive	Model No.	Order No.	Price
1/4	J4759BLS	**KP4240795**	Price
3/8	J5260-02BLS	**KP4240800**	Price

TEKTON Universal Joints

- Works around obstructions to access hard-to-reach fasteners
- Spring-loaded detent ball securely latches onto sockets, preventing them from being dropped
- Detent notches in drive end lock onto ratchets and extensions
- Made of premium chrome vanadium steel with a mirror chrome finish

New!



Drive	Order No.	Price
1/4	**KP8514127**	Price
3/8	**KP8514210**	Price
1/2	**KP8514268**	Price

PROTO 6 Pc Adapter Set

New!

MADE IN THE USA

- Set includes socket bar and socket clips
- A variety of adapters are offered to meet most industrial applications
- Both Impact & Standard



Set Includes	Model No.	Order No.	Price
Adapters 3/8F x 1/4M, 1/4F x 3/8M, 3/8F x 1/2M Impact Adapters: 1/2F x 3/8M, 1/2F x 3/4M, 3/4F x 1/2M. Accessories: 6-1/4" Socket Bar, 6 Socket Clips, Drive Size 1/4, 3/8, 1/2, and 3/4"	J52006	**KP4280345**	Price

PROTO Drive Adapters

- Full polish finish

MADE IN THE USA

New!



Female	Male	Approx. OAL (in.)	Model No.	Order No.	Price
1/4	3/8	1	J5256	**KP4240825**	Price
3/8	1/4	1	J5255	**KP4240820**	Price
3/8	1/2	1-7/16	J5253	**KP4240810**	Price
1/2	3/8	1-3/8	J5254	**KP4240815**	Price
1/2	3/4	1-11/16	J5653	**KP4240835**	Price
3/4	1/2	1-7/8	J5453	**KP4240830**	Price
3/4	1	2-1/2	J5853	**KP4240845**	Price
1	3/4	2-7/8	J5854	**KP4240850**	Price

TEKTON Breaker Bars

- Breaks loose rusted or stuck nuts and bolts
- 180-Degree, chrome moly flex head lets you work at any angle
- Spring-loaded ball bearing retains sockets
- Forged and hardened chrome vanadium steel construction
- Smoothly contoured, round profile handle for a comfortable grip
- Corrosion-resistant chrome plated finish



New!

Drive	Approx OAL (in.)	Order No.	Price
3/8	11-3/4	**KP8515353**	Price
1/2	15-1/2	**KP8515355**	Price
1/2	25	**KP8515356**	Price

Hinge Handles



KP502435



KP503438



KP30S41AA

MADE IN THE USA

WRIGHT TOOL | Snap-on INDUSTRIAL BRANDS | WILLIAMS

Drive (in.)	Approx. Length (in.)	Handle	Wright Tool		Snap-On/Williams†	
			Order No.	Price	Order No.	Price
1/4	6	Knurled	**KP502435**	Price	**KP3030005†**	Price
3/8	10	Knurled	**-**	-	**KP3031005†**	Price
3/8	9-5/8	Nitrile Grip	**KP503438**	Price	**-**	-
1/2	10-7/16	Knurled	**-**	-	**KP30S40AA**	Price
1/2	15	Knurled	**-**	-	**KP3032005†**	Price
1/2	15-1/2	Knurled	**-**	-	**KP30S41AA**	Price
1/2	18	Knurled	**KP504435**	Price	**-**	-
1/2	18-1/64	Nitrile Grip	**KP504438**	Price	**-**	-
1/2	24	Knurled	**KP504434**	Price	**-**	-
3/4	22-1/8	Knurled	**KP506435**	Price	**KP30H41AA**	Price

†Snap-on Williams is made globally

PROTO Hinge Handles

MADE IN THE USA

- Head flexes 90° from horizontal
- Made of heat-treated alloy steel
- Chrome plated finish

New!



Drive (in.)	Approx OAL (in.)	Model No.	Order No.	Price
1/4	5-3/4	J4766	**KP4240380**	Price
3/8	8-1/2	J5265	**KP4240395**	Price
3/8	12-1/2	J5266	**KP4240405**	Price
1/2	10-1/2	J5466	**KP4240415**	Price
1/2	15	J5467	**KP4240420**	Price
1/2	18	J5468	**KP4240425**	Price
1/2	24	J5469	**KP4240430**	Price
3/4	20	J5668	**KP4240440**	Price
1	27	J5868	**KP4240450**	Price

PROTO Speed Handles

MADE IN THE USA

New!

- Made from alloy steel
- Heat treated for strength and durability



Drive (in.)	OAL Approx. (in.)	Model No.	Order No.	Price
1/4	15-1/2	J4780G	**KP4240360**	Price
3/8	17-1/2	J5280G	**KP4240365**	Price Price
1/2	18	J5480G	**KP4240370**	

Speed Handles



MADE IN THE USA

WRIGHT TOOL | Snap-on INDUSTRIAL BRANDS | WILLIAMS

Drive (in.)	Approx. Length (in.)	Wright Tool		Snap-On/Williams	
		Order No.	Price	Order No.	Price
1/4	15-1/2	**-**	-	**KP30M15A**	Price
3/8	18	**-**	-	**KP30B15**	Price
1/2	13-5/8	**-**	-	**KP30S10A**	Price
1/2	18-1/16	**KP504445**	Price	**KP30S15A**	Price

PROTO Sliding T-Handles

MADE IN THE USA

New!

- Made from alloy steel
- Heat-treated for strength and durability
- Full polish finish



Drive (in.)	OAL Approx. (in.)	Model No.	Order No.	Price
3/8	8	J5285	**KP4240485**	Price
1/2	13	J5485	**KP4240490**	Price
3/4	20	J5685	**KP4240495**	Price

Sliding T-Handles



MADE IN THE USA

WRIGHT TOOL | Snap-on INDUSTRIAL BRANDS | WILLIAMS

Drive (in.)	Approx. Length (in.)	Wright Tool		Snap-On/Williams†	
		Order No.	Price	Order No.	Price
1/4	4-1/2	**-**	-	**KP3030008†**	Price
3/8	7-3/4	**KP503443**	Price	**KP3031007†**	Price
1/2	12	**KP504443**	Price	**KP30S20A**	Price
1/2	15	**-**	-	**KP3032007†**	Price
3/4	19-1/4	**KP506443**	Price	**KP30HB20A**	Price

†Snap-on Williams is made globally

PROTO Black Hinge Handles

MADE IN THE USA

New!

- Head flexes 90° from horizontal
- Made of heat-treated alloy steel
- Black oxide finish



Drive (in.)	Approx OAL (in.)	Model No.	Order No.	Price
1/2	18	J5468BL	**KP4240460**	Price
3/4	20	J5668BL	**KP4240445**	Price

PROTO Pear Head Ratchets

New!

MADE IN THE USA

- Robust 24 tooth design with 15° arc swing
- Tool steel drive gear for strength and durability
- Low profile head for access in constricted areas
- Reversing lever design for quick, one handed operation
- Knurled slip-resistant grip





				Black Oxide			Full Polish			Satin		
Drive (in.)	Approx. OAL (in.)	Head Desc.	Reverse Lever	Model No.	Order No.	Price	Model No.	Order No.	Price	Model No.	Order No.	Price
1/4	5	Pear Head	Yes	J4749BL	**KP4240140**	Price	J4749	**KP4240105**	Price	-	-	-
3/8	5	Pear Head	Yes	-	-	-	J5248S	**KP4240210**	Price	-	-	-
3/8	7	Pear Head	Yes	J5249BL	**KP4240145**	Price	J5249	**KP4240110**	Price	-	-	-
3/8	11	Pear Head	Yes	J5250BL	**KP4240120**	Price	J5250	**KP4240115**	Price	-	-	-
1/2	10	Pear Head	Yes	J5449BL	**KP4240150**	Price	J5449	**KP4240125**	Price	-	-	-
1/2	16	Pear Head	Yes	J5450BL	**KP4240155**	Price	J5450	**KP4240130**	Price	-	-	-
3/4	20	Pear Head	Yes	J5649BL	**KP4240160**	Price	-	-	-	J5649	**KP4240135**	Price
1	26	Pear Head	Yes	-	-	-	-	-	-	J5849	**KP4240260**	Price

PROTO Small Pear Head Ratchets

MADE IN THE USA



- Small pear head design for access in tight, hard-to-reach work areas
- 45-Tooth gear provides balance between 8° articulation angle and high torque carrying capacity
- Sealed design helps prevent debris from entering ratchet mechanism reducing wear
- Low profile reversing lever design for quick, one-hand operation
- Contoured, knurled, ergonomically designed handle for comfort
- Field repairable

Finish - Black Oxide				
Drive (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/4	6-5/8	J4749XLBL	**KP4240085**	Price
3/8	8-1/2	J5249XLBL	**KP4240075**	Price
3/8	11	J5250XLBL	**KP4240065**	Price
1/2	10-1/2	J5449XLBL	**KP4240055**	Price
1/2	15	J5450XLBL	**KP4240045**	Price

Finish - Full Polish				
Drive (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/4	6-5/8	J4749XL	**KP4240090**	Price
1/4	6-5/8	J4749XLQR	**KP4240000**	Price
3/8	8-1/2	J5249XL	**KP4240080**	Price
3/8	8-1/2	J5249XLQR	**KP4240005**	Price
3/8	11	J5250XL	**KP4240070**	Price
1/2	10-1/2	J5449XL	**KP4240060**	Price
1/2	10-1/2	J5449XLQR	**KP4240015**	Price
1/2	15	J5450XL	**KP4240050**	Price
1/2	15	J5450XLQR	**KP4240010**	Price

STANLEY Pear Head Quick-Release™ Ratchets

- Forged from high-quality steel and finished in high-polish chrome
- Selected Stanley® high-torque ratchets have a Quick Release™ mechanism for one-handed use
- Stanley® Pear Head Ratchets have a slim profile and a small 7° arc-swing for accessing hard-to-reach fasteners
- Ratchet handles are ergonomically designed



Drive (in.)	OAL (in.)	Model No.	Order No.	Price
3/8	8	89-818	**KP435658**	Price
1/2	10-1/4	89-819	**KP435660**	Price
1/4	7-1/4	89-961	**KP435662**	Price
1/4	5-3/8	91-928	**KP435668**	Price
3/8	7-11/16	91-929	**KP435670**	Price
1/2	9-3/8	91-930	**KP435672**	Price

PROTO Ratchets

Round Head



- Round head ratchet mechanism allows for a compact head
- 72-Tooth = 5° swing arc
- Small head design and tight swing arc allow for fastener access in tight areas
- Full polish shaft with knurled grip for strong slip-resistant grip

Finish - Black Oxide				
Drive (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/4	4-1/2	J4752FBL	**KP4240305**	Price
3/8	7-1/2	J5252FBL	**KP4240320**	Price
1/2	9-1/2	J5452FBL	**KP4240335**	Price

Finish - Full Polish				
Drive (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/4	4-1/2	J4752F	**KP4240300**	Price
3/8	7-1/2	J5252F	**KP4240315**	Price
1/2	9-1/2	J5452F	**KP4240330**	Price
1/2	15	J5454F	**KP4240345**	Price

Finish - REPAIR KIT				
Drive (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/2	Repair Kit	J5452FRK	**KP4240285**	Price

PROTO Ratchets

MADE IN THE USA

Female • Pear Head



- Robust 24-tooth design with 15° arc swingAlloy steel drive gear for strength and durability
- Low profile head for access in constricted areas
- Reversing lever design for quick, one-hand operation
- Knurled slip-resistant grip
- Made of heat-treated alloy steel

Drive (in.)	OAL (in.)	Model No.	Finish	Order No.	Price
3/8	7	J5249FW	Full Polish	**KP4240215**	Price
3/4	20	J5649FW	Satin	**KP4240245**	Price

PROTO Ratchets

Flex Head



- 180° Flex
- 72-Tooth gear
- 5° Ratcheting angle
- Small head design and tight swing to allow access to fastener in a tight area
- Full polish shaft with knurled grip allows for a strong slip-resistant grip

Drive (in.)	OAL Approx. (in.)	Model No.	Order No.	Price
1/4	6-9/16	J4757F	**KP4240310**	Price
3/8	8-1/2	J5257F	**KP4240325**	Price
1/2	17	J5457F	**KP4240340**	Price

Snap-on Industrial Brands | Williams Ratchets

- Pear style operates as a 36-tooth action, with 4-1/2° arc swing
- Heat treated chrome plated vanadium steel
- Flex head features 180° swivel
- All ratchets are reversible
- Lifetime warranty



KP3030001

Drive (in.)	Approx. OAL (in.)	Head Type		Handle	Made In	Order No.	Price
1/4	5-1/4	Narrow Pear	36 Tooth Quick Release	Smooth	Global	**KP3030001**	Price
1/4	5-1/4	Narrow Head Design	36 Tooth Gear w/ 10° of Engagement	Smooth	USA	**KP30M52EHA**	Price
1/4	7	Flex Head	36 Tooth Gear w/ 10° of Engagement	Smooth	USA	**KP30M52EHFA**	Price
3/8	7-3/4	Narrow Pear	36 Tooth Quick Release	Finger Fit	Global	**KP3031001**	Price
3/8	9-3/4	Narrow Pear	36 Tooth Quick Release	Smooth	USA	**KP30B52EHFB**	Price
3/8	10-1/4	Narrow Head Design	36 Tooth Gear w/ 10° of Engagement	Smooth	USA	**KP30B52EHLA**	Price
1/2	9-7/8	Narrow Pear	Ultra Fine 60 Tooth w/ 6° Tooth Action	Finger Fit	Global	**KP3032011**	Price
1/2	9-7/8	Narrow Pear	40 Tooth Quick Release	Finger Fit	Global	**KP3032001**	Price
1/2	10-1/4	Narrow Head Design	36 Tooth Gear w/ 10° of Engagement	Smooth	USA	**KP30S52EHA**	Price
1/2	14-1/4	Flex Head	36 Tooth Gear w/ 10° of Engagement	Smooth	USA	**KP30S52EHFA**	Price
1/2	15	Narrow Head Design	36 Tooth Gear w/ 10° of Engagement	Smooth	USA	**KP30SB52EHLA**	Price
3/4	20-1/8	Narrow Pear	24 Tooth Gear w/ 15° of Engagement	Smooth Comfort Grip	USA	**KP30H51B**	Price

Wright Tool Ratchets

MADE IN THE USA

- Round style operates as an 82-tooth action, with 4-1/2° arc swing
- Heat treated chrome finish
- Flex head features 180° swivel
- All ratchets are reversible except where noted†
- Lifetime warranty



KP503400



KP503480



KP503428

Drive (in.)	Approx. OAL (in.)	Head Desc.	Feature	Handle	Order No.	Price
1/4	4-3/4	Round	45 Teeth, Swing Arc 3/4"	Contour	**KP502426**	Price
1/4	5-1/4	Round	45 Teeth, Swing Arc 1"	Contour	**KP502492**	Price
3/8	4-3/4	Compact Palm Size	45 Teeth, Swing Arc 3/4"	Contour	**KP503430**	Price
3/8	7-1/32	Round	41 Teeth, Swing Arc 1-1/4"	Nitrile Comfort Grip	**KP503400**	Price
3/8	7	Round	41 Teeth, Swing Arc 1-1/4"	Knurled Grip	**KP503426**	Price
3/8	7-1/32	Round	41 Teeth, Swing Arc 1-1/4"	Contour	**KP503490**	Price
3/8	7-7/8	Pear-Open	30 Teeth, Swing Arc 2-1/4"	Contour	**KP503480**	Price
3/8	9-11/16	Flex	41 Teeth, Swing Arc 1-1/2"	Knurled Grip	**KP503427**	Price
3/8	10	Round	41 Teeth, Swing Arc 1-3/4"	Long Contour	**KP503425**	Price
3/8	10-3/4	Flex	41 Teeth, Swing Arc 1-3/4"	Nitrile Comfort Grip	**KP503428**	Price
3/8	10-3/4	Bent Flex	41 Teeth, Swing Arc 1-3/4"	Nitrile Comfort Grip	**KP503429**	Price
1/2	10-1/4	Round	45 Teeth, Swing Arc 1-1/4"	Knurled	**KP504426**	Price
1/2	10-1/2	Round	45 Teeth, Swing Arc 1-1/4"	Nitrile Comfort Grip	**KP504400**	Price
1/2	10-1/2	Pear-Open	30 Teeth, Swing Arc 3-1/4"	Plain	**KP504480†**	Price
1/2	11	Round	45 Teeth, Swing Arc 1-1/4"	Knurled	**KP504490**	Price
1/2	15	Round	45 Teeth, Swing Arc 2"	Long Knurled	**KP504425**	Price
3/4	24	Round	45 Teeth	Knurled	**KP506400**	Price

PROTO Ratchet • Scaffolding

MADE IN THE USA

- Full polish finish
- Designed for working with scaffolding and other construction applications
- Socket retained with through hole and pin for safety
- Hammer tip reduces vibration and protects fasteners against distortion
- Hole in ratchet handle to be used with tether strap



Drive (in.)	OAL (in.)	Model No.	Order No.	Price
1/2	10	J5449SC	**KP4241075**	Price

Snap-on Industrial Brands | Williams 1/2" Drive Scaffolding Ratchets

- 1/2" Drive with pinned 7/8" 6-point socket
- 36 Tooth gear with 10 degree of engagement allows engagement in tight working areas
- Bronze hammer head reduces rebound
- Pry bar handle provide alignment option
- Easy access reversing lever allows user to change working direction quickly and easily with only one hand
- Tethering device attached to handle



OAL (in.)	Style	Head Type	Handle	Order No.	Price
14-3/8	With Pry Bar	Pear	Smooth	**KP30BS63B**	Price
14-3/8	Without Pry Bar	Pear	Smooth	**KP30BS62**	Price

TEKTON Ratchets

- Heat treated chrome
- Flex head features 180° swivel
- All ratchets are reversible
- Chrome plated
- Lifetime warranty


1492 Swivel


1486 Pear


1440 Round


1480 Pear


1460 Flex


14932 Oval

Drive (in.)	Approx. OAL (in.)	Head Desc.	Feature	Handle	Order No.	Price
1/4	6	Pear	72 Tooth 5° Swing arc	Molded Grip	**KP851486**	Price
1/4	6	Round	Built-in speed disc; Spring-loaded ball bearing	Polished	**KP851440**	Price
1/4	6	Swivel	72 Tooth 5° Swing arc; Quick release	Molded Grip	**KP851490**	Price
1/4	7	Pear	72 Tooth 5° Swing arc; Quick release	Molded Grip	**KP8514901**	Price
1/4	8-3/4	Oval Low Profile	72 Tooth 5° Swing arc	Polished	**KP8514931**	Price
1/4	9	Flex Oval	72 Tooth 5° Swing arc	Polished	**KP8514961**	Price
3/8	8	Oval	72 Tooth 5° Swing arc	Rubber Grip	**KP851457**	Price
3/8	8	Pear	72 Tooth 5° Swing arc	Molded Grip	**KP851487**	Price
3/8	9	Pear	72 Tooth 5° Swing arc; Quick release	Molded Grip	**KP8514902**	Price
3/8	9	Swivel	72 Tooth 5° Swing arc; Quick release	Molded Grip	**KP851491**	Price
3/8	7	Oval Low Profile	72 Tooth 5° Swing arc	Polished	**KP8514932**	Price
3/8	14-1/2	Flex Oval	72 Tooth 5° Swing arc	Polished	**KP8514962**	Price
3/8	16	Flex Oval	72 Tooth 5° Swing arc	Polished	**KP8514967**	Price
3/8	18	Oval	72 Tooth 5° Swing arc	Knurled	**KP8515010**	Price
1/2	10	Oval	72 Tooth 5° Swing arc	Rubber Grip	**KP851458**	Price
1/2	10	Pear	72 Tooth 5° Swing arc	Molded Grip	**KP851488**	Price
1/2	10	Round	Built-in speed disc; Spring-loaded ball bearing	Polished	**KP851442**	Price
1/2	12	Swivel	72 Tooth 5° Swing arc; Quick release	Molded Grip	**KP851492**	Price
1/2	13-3/8	Oval Low Profile	72 Tooth 5° Swing arc	Polished	**KP8514933**	Price
1/2	24	Oval	72 Tooth 5° Swing arc	Knurled	**KP8515013**	Price

PROTO Spud Handle Ratchet

New!

MADE IN THE USA

- Tapered handle for aligning bolt holes
- Spring loaded pellet in male drive plug
- Black oxide finish



Drive (in.)	OAL (in.)	Model No.	Order No.	Price
1/2	14	J5449-14BL	**KP4240355**	Price

PRM PRO Ratchets

- Round head
- Heat treated chrome
- All ratchets are reversible



Drive (in.)	Approx. OAL (in.)	Head Desc.	Handle Type	Order No.	Price
1/4	6	Round	Knurled	**KP8335014**	Price
3/8	7	Round	Knurled	**KP8335024**	Price
1/2	10	Round	Plain	**KP8335032**	Price

GEARWRENCH Gimbal Ratchets with Pivoting Mechanism

- Gimbal design allows ratchet to pivot in two directions for easier access
- 72 -Tooth ratcheting mechanism for 5° swing arc
- Anodized aluminum finish
- Easy to use forward / reverse lever





Drive (in.)	Order No.	Price
1/4	**KP6581027**	Price
3/8	**KP6581270**	Price

9 Pc. Combination Wobble Extension Bar Set

- Drop forged chrome vanadium steel
- Spring-loaded ball bearings hold sockets securely
- Tapered male end allows for 16° angle flexibility



Contents:

- 3 Pc. 1/4" Dr. Wobble extensions (SAE): 2", 4", 9" Length
- 3 Pc. 3/8" Dr. Wobble extensions (SAE): 3", 6", 9" Length
- 3 Pc. 1/2" Dr. Wobble extensions (SAE): 1-3/4", 5", 10" Length

Item	Drive	Order No.	Price
PRM PRO	1/4, 3/8 & 1/2	**KP8335290**	Price
TEKTON	1/4, 3/8, & 1/2	**KP851660**	Price

TITAN 1/4" Offset Micro Bit Drivers

- Includes 2 pc. mini ratches
- One ratchet will drive sockets and the other screw bits
- One free Phillip bit included
- 60 Teeth turn
- Used in tight area compartments; 43 lbs of torque
- CRV construction



Size (in.)	Order No.	Price
4 x 7 x 1	**KP8211203**	Price

PROTO

New!

MADE IN THE USA

Impact Socket Sets Fractional Standard and Deep

- • The TorquePlus™ design is a high-performance drive configuration which allows for quick and easy socket engagement to the fastener flats, and not the corners.
- • Available in 6 Pt.
- • Sets: Fractional and Metric
- • Side locking holes
- • Made from high Strength Steel



KP4280990



KP4280865



KP4281080



KP4281080



KP4280970



KP4281085



KP4280875

Style - Fractional							
No. of Pieces	Drive (in.)	Points	Type	Set Includes	Model No.	Order No.	Price
15	3/8	6	Standard	1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1", Socket Bar, 17", Socket Clip	J72106	**KP4280875**	Price
15	3/8	6	Deep	1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1", Socket Bar, 17", Socket Clip	J72116	**KP4280880**	Price
11	1/2	6	Standard	1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, Socket Bar, Socket Clip	J74102	**KP4281010**	Price
11	1/2	6	Deep	1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, Socket Bar, Socket Clip	J74112	**KP4281015**	Price
15	1/2	6	Standard	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4	J74104	**KP4280990**	Price
15	1/2	6	Deep	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4	J74114	**KP4280995**	Price
15	1/2	6	Deep-Thin Wall	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4	J74117	**KP4281040**	Price
19	1/2	6	Deep	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2", Accessories: 17" Socket Bar, 9" Socket Bar, Socket Clip	J74116	**KP4280980**	Price
10	3/4	6	Standard	3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16"	J07500-10	**KP4281090**	Price
15	3/4	6	Standard	3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-9/16, 1-5/8", Socket Bar 17", Socket Clip.	J73105	**KP4281085**	Price

Style - Metric							
No. of Pieces	Drive (in.)	Points	Type	Set Includes	Model No.	Order No.	Price
19	3/8	6	Standard	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm, 17" Socket Bar, Socket Clip	J72206	**KP4280865**	Price
19	3/8	6	Deep	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm, 17" Socket Bar, Socket Clip	J72216	**KP4280870**	Price
19	1/2	6	Standard	3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2", Accessories: 17" Socket Bar, 9" Socket Bar, Socket Clip	J74106	**KP4280975**	Price
15	1/2	6	Standard	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm, Socket Bar, Socket Clip	J74204	**KP4281000**	Price
15	1/2	6	Deep	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24mm, Socket Bar, Socket Clip	J74214	**KP4281005**	Price
25	1/2	6	Deep	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 36mm. Accessories: 17" Socket Bars w/Socket Clips.	J74216	**KP4280970**	Price
21	3/4	6	Standard	19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 40, 41mm	J72103M	**KP4281080**	Price

STANLEY

1/4" Drive Metric Deep Impact Socket Set - 6 Pt.

- Features Max-Drive™ design, a unique radius corner design that provides 15% more torque, making it easy to tighten fasteners and simplifying the turning of rounded corners
- Helps reduce fastener wear without contact with the outer 5% of the fastener
- Helps reduce slipping on frozen or rusted fasteners Impact sockets are made of alloy steel for strength and durability, then heat-treated to balance strength and hardness
- Socket wall thickness is optimized to provide strength while retaining ample access to restricted fasteners
- All sockets meet or exceed ANSI specifications



Model No.	Set Includes	Order No.	Price
97-126	6 Point Deep: 10, 11, 12, 13, 14, 16, 17, 19, 21, 22, 24 mm.	**KP435722**	Price

Snap-on INDUSTRIAL BRANDS | WILLIAMS

WRIGHT TOOL

TEKTON

Impact Socket Sets

Lifetime warranty

MADE IN THE USA



KP50415



KP3036902

Style - Fractional								
Pcs.Per Set	Drive (in.)	Points	Case	Set Includes (in.)	Brand Name	Made In	Order No.	Price
9	3/8	6	Clips & Rail	Standard: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4"	Williams	Global	**KP3036902**	Price
9	3/8	6	Clips & Rail	Deep: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4"	Williams	Global	**KP3036904**	Price
5	1/2	6	Storage Case	Deep: 1-3/16, 1-5/16, 1-3/8, 1-7/16, 1-1/2"	TEKTON	Global	**KP854886**	Price
13	1/2	6	Clips & Rail	Standard: 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4"	Wright Tool	USA	**KP50415**	Price
14	1/2	6	Clips & Rail	Shallow: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4"	Williams	USA	**KP30WS414**	Price
14	1/2	6	Clips & Rail	Standard: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4 & Clip Rail	Williams	Global	**KP3037904**	Price
14	1/2	6	Clips & Rail	Deep: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4"	Williams	USA	**KP30WS1414RC**	Price
14	1/2	6	Case	Deep: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4"	TEKTON	Global	**KP854880**	Price
14	1/2	12	Storage Case	Deep: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4"	TEKTON	Global	**KP854879**	Price
15	1/2	6	Clips & Rail	Deep: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4"	Williams	Global	**KP3037908**	Price
8	3/4	6	Storage Case	Shallow: 2-1/16, 2-1/8, 2-3/16, 2-1/4, 2-5/16, 2-3/8, 2-7/16"	TEKTON	Global	**KP854893**	Price
14	3/4	6	Clips & Rail	Standard:3/8, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8"	Williams	USA	**KP30WS614HA**	Price
22	3/4	6	Storage Case	Deep: 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-3/4, 1-13/16, 1-7/8, 2" , 1-pc. 13/16" Square socket, 2-pc. 3/4" Drive extensions: 5 & 10", 1-pc. 3/4" Drive 18" quick-release ratchet handle (24 tooth), 1-pc. 3/4" Drive 18" sliding T head breaker bar	TEKTON	Global	**KP8548995**	Price

Style - Metric								
Pcs.Per Set	Drive (in.)	Points	Case	Set Includes (in.)	Brand Name	Made In	Order No.	Price
10	3/8	6	Clips & Rail	Standard: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Williams	Global	**KP3036906**	Price
10	3/8	6	Clips & Rail	Deep: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Williams	Global	**KP3036908**	Price
10	1/2	6	Clips & Rail	Standard: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	Williams	Global	**KP3037910**	Price
14	1/2	6	Clips & Rail	Standard: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 24, 27mm	Williams	Global	**KP3037912**	Price
14	1/2	6	Case	Deep 11, 12, 13, 14, 15, 17, 18, 19, 21, 22, 24, 27, 30, 32mm	TEKTON	Global	**KP854885**	Price
14	1/2	12	Storage Case	Deep: 11, 12, 13, 14, 15, 17, 18, 19, 21, 22, 24, 27, 30, 32mm	TEKTON	Global	**KP854884**	Price
16	1/2	6	Clips & Rail	Shallow: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27mm	Williams	USA	**KP30MS416RC**	Price
16	1/2	6	Clips & Rail	Deep: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27mm	Williams	USA	**KP30MS1416RC**	Price
16	1/2	6	Clips & Rail	Deep: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27mm	Williams	USA	**KP30MS1416RC**	Price

TEKTON 4 Pc. 1/2" Drive Impact Flip Socket Set

- Covers six of the most common lugnut sizes
- Flank-drive socket design contacts only flat surfaces of fastener head, eliminating rounding off corners
- Drop forged, heat treated chrome molybdenum steel
- Color coded sockets for quick size selection
- Designed for use with impact tools



Set Includes (in.)		Order No.	Price
1- 3" Long 17mm by 19mm Red;1- 3" Long 13/16" by 3/4" Blue;1- 3" Long 21mm by 7/8" Yellow; 1- 3" Long 1/2" Dr Extension Bar	Storage Case	**KP854950**	Price

TEKTON 38 Pc. 3/8" & 1/2" Drive, Impact Socket Set

Contents:

- 13 Pc. 3/8" Dr. Shallow impact socket sizes:
  SAE: 3/8, 7/16, 1/2, 9/16, 11/16, 3/4"
  MM: 8, 9, 12, 13, 14, 16, 17mm
  Dual sizes: 5/16" (8mm), 7/16" (11mm), 5/8" (16mm), 3/4" (19mm)
- 11 Pc. 1/2" Dr. Shallow impact socket sizes:
  MM: 10, 11, 12, 13, 14, 15, 16, 17, 18, 21, 24mm
  Dual sizes: 11mm (7/16"), 16mm (5/8"), 24mm (15/16")
- 10 Pc. 1/2" Dr. Deep impact sockets sizes:
  SAE: 1/2, 9/16, 11/16, 3/4, 13/16, 7/8, 1, 1-1/16, 1-1/8, 1-1/4"
  Dual sizes: 3/4" (19mm), 7/8" (22mm), 1-1/16" (27mm), 1-1/4" (32mm)
- 1 Pc. 1/2" (F) x 3/8" (M) Adapter
- 1 Pc. 3/8" Dr. x 3" Extension bar
- 1 Pc. 1/2" Dr. x 3" Extension bar
- 1 Pc. Storage case
- Chrome vanadium steel
- Always guaranteed



Order No.	Price
KP854888	Price

PROTO

New!

MADE IN THE USA

Impact Individual Sockets-Fractional & Metric

- The TorquePlus™ design is a high-performance drive configuration which allows for quick and easy socket engagement to the fastener flats, and not the corners.
- Available in 6 & 12Pt.
- Size stamped on each socket for easy ID
- Side locking holes
- Made from high Strength Steel

3/8" Drive Impact Sockets - Fractional - 6 Point



Size (in.)	OAL (in.)	Model No.	Order No.	Price
5/16	1-3/32	J7210H	**KP4205465**	Price
3/8	1-3/32	J7212H	**KP4205495**	Price
7/16	1-3/32	J7214H	**KP4205520**	Price
1/2	1-3/32	J7216H	**KP4205545**	Price
9/16	1-3/32	J7218H	**KP4205560**	Price
5/8	1-3/32	J7220H	**KP4205570**	Price
11/16	1-3/32	J7222H	**KP4205575**	Price
3/4	1-3/32	J7224H	**KP4205580**	Price
13/16	1-7/32	J7226H	**KP4205715**	Price
7/8	1-7/32	J7228H	**KP4205720**	Price
15/16	1-11/32	J7230H	**KP4205725**	Price
1	1-11/32	J7232H	**KP4205730**	Price

3/8" Drive Impact Sockets - Metric - 6 Point



Size	OAL (in.)	Model No.	Order No.	Price
6mm	59/64	J7206M	**KP4205825**	Price
7mm	59/64	J7207M	**KP4205445**	Price
8mm	1-1/32	J7208M	**KP4205450**	Price
9mm	1-1/32	J7209M	**KP4205460**	Price
10mm	1-1/32	J7210M	**KP4205470**	Price
11mm	1-1/32	J7211M	**KP4205490**	Price
12mm	1-1/32	J7212M	**KP4205500**	Price
13mm	1-3/32	J7213M	**KP4205515**	Price
14mm	1-3/32	J7214M	**KP4205525**	Price
15mm	1-3/32	J7215M	**KP4205540**	Price
16mm	1-3/32	J7216M	**KP4205710**	Price
17mm	1-3/32	J7217M	**KP4205555**	Price
18mm	1-3/32	J7218M	**KP4205705**	Price
19mm	1-3/32	J7219M	**KP4205700**	Price
22mm	1-3/32	J7222M	**KP4205685**	Price
24mm	1-3/32	J7224M	**KP4205650**	Price

1/2" Drive Deep Impact Sockets - Fractional - 6 & 12 Point



		12			6		
Size (in.)	OAL (in.)	Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	3-1/4	J7312	**KP4206625**	Price	J7312H	**KP4205880**	Price
7/16	3-1/4	J7314	**KP4205900**	Price	J7314H	**KP4205905**	Price
1/2	3-1/4	J7316	**KP4205925**	Price	J7316H	**KP4205930**	Price
9/16	3-1/4	J7318	**KP4205950**	Price	J7318H	**KP4205955**	Price
5/8	3-1/4	J7320	**KP4205975**	Price	J7320H	**KP4205980**	Price
11/16	3-1/4	J7322	**KP4205995**	Price	J7322H	**KP4206000**	Price
3/4	3-1/4	J7324	**KP4206015**	Price	J7324H	**KP4206020**	Price
13/16	3-1/4	J7326	**KP4206040**	Price	J7326H	**KP4206045**	Price
7/8	3-1/2	J7328	**KP4206060**	Price	J7328H	**KP4206065**	Price
15/16	3-1/2	J7330	**KP4206075**	Price	J7330H	**KP4206080**	Price
1	3-1/2	J7332	**KP4206095**	Price	J7332H	**KP4206100**	Price
1-1/16	3-1/2	J7334	**KP4206110**	Price	J7334H	**KP4206115**	Price
1-1/8	3-1/2	J7336	**KP4206630**	Price	J7336H	**KP4206125**	Price
1-3/16	3-1/2	-	**-**	-	J7338H	**KP4206530**	Price
1-1/4	3-1/2	J7340	**KP4206640**	Price	J7340H	**KP4206535**	Price
1-5/16	3-1/2	-	**-**	-	J7342H	**KP4206540**	Price
1-3/8	3-1/2	-	**-**	-	J7344H	**KP4206545**	Price
1-7/16	3-1/2	-	**-**	-	J7346H	**KP4206550**	Price
1-1/2	3-1/2	-	**-**	-	J7348H	**KP4206555**	Price

3/8" Drive Deep Impact Sockets - Fractional - 6 Point



Size (in.)	OAL (in.)	Model No.	Order No.	Price
1/4	2-3/4	J7708H	**KP4205765**	Price
5/16	2-3/4	J7710H	**KP4205585**	Price
3/8	2-3/4	J7712H	**KP4205590**	Price
7/16	2-3/4	J7714H	**KP4205595**	Price
1/2	2-3/4	J7716H	**KP4205600**	Price
9/16	2-3/4	J7718H	**KP4205605**	Price
5/8	2-3/4	J7720H	**KP4205610**	Price
11/16	2-3/4	J7722H	**KP4205615**	Price
3/4	2-3/4	J7724H	**KP4205620**	Price
13/16	2-3/4	J7726H	**KP4205735**	Price
7/8	2	J7728H	**KP4205740**	Price
15/16	2-3/4	J7730H	**KP4205745**	Price

3/8" Drive Deep Impact Sockets - Metric - 6 Point



Size	OAL (in.)	Model No.	Order No.	Price
6mm	2-3/4	J7006M	**KP4205830**	Price
7mm	2-3/4	J7007M	**KP4205835**	Price
8mm	2-3/4	J7008M	**KP4205675**	Price
10mm	2-3/4	J7010M	**KP4205415**	Price
11mm	2-3/4	J7011M	**KP4205420**	Price
12mm	2-3/4	J7012M	**KP4205425**	Price
13mm	2-3/4	J7013M	**KP4205430**	Price
14mm	2-3/4	J7014M	**KP4205435**	Price
15mm	2-3/4	J7015M	**KP4205440**	Price
16mm	2-3/4	J7016M	**KP4205670**	Price
17mm	2-3/4	J7017M	**KP4205665**	Price
18mm	2-3/4	J7018M	**KP4205660**	Price
19mm	2-3/4	J7019M	**KP4205655**	Price

1/2" Drive Impact Sockets - Fractional - 6 & 12Point



		12			6		
Size (in.)	OAL (in.)	Model No.	Order No.	Price	Model No.	Order No.	Price
3/8	1-1/2	J7412	**KP4206560**	Price	J7412H	**KP4206155**	Price
7/16	1-1/2	J7414	**KP4206175**	Price	J7414H	**KP4206180**	Price
1/2	1-1/2	J7416	**KP4206200**	Price	J7416H	**KP4206205**	Price
9/16	1-1/2	J7418	**KP4206225**	Price	J7418H	**KP4206230**	Price
5/8	1-1/2	J7420	**KP4206250**	Price	J7420H	**KP4206255**	Price
11/16	1-1/2	J7422	**KP4206270**	Price	J7422H	**KP4206275**	Price
3/4	1-1/2	J7424	**KP4206295**	Price	J7424H	**KP4206300**	Price
13/16	1-5/8	J7426	**KP4206320**	Price	J7426H	**KP4206325**	Price
7/8	1-5/8	J7428	**KP4206345**	Price	J7428H	**KP4206350**	Price
15/16	1-3/4	J7430	**KP4206365**	Price	J7430H	**KP4206370**	Price
1	1-3/4	J7432	**KP4206385**	Price	J7432H	**KP4206390**	Price
1-1/16	1-3/4	J7434	**KP4206405**	Price	J7434H	**KP4206410**	Price
1-1/8	2	J7436	**KP4206420**	Price	J7436H	**KP4206425**	Price
1-3/16	2	J7438	**KP4206480**	Price	J7438H	**KP4206435**	Price
1-1/4	2	J7440	**KP4206485**	Price	J7440H	**KP4206440**	Price
1-5/16	2	-	**-**	-	J7442H	**KP4206510**	Price
1-7/16	2-15/64	J7446	**KP4206500**	Price	J7446H	**KP4206520**	Price
1-3/8	2-1/8	-	**-**	-	J7444H	**KP4206515**	Price
1-1/2	2-15/64	J7448	**KP4206505**	Price	J7448H	**KP4206525**	Price
1-9/16	2-1/4	-	**-**	-	J7450H	**KP4210140**	Price

PROTO

New!

MADE IN THE USA

Impact Individual Sockets-Magnetic Fractional & Metric

- ProtoGrip® Rare Earth magnet holds fastener tightly on socket driver
- The TorquePlus™ design is a high-performance drive configuration which allows for quick and easy socket engagement to the fastener flats, and not the corners.
- Available in 6, 8 & 12Pt.
- Sets: Fractional and Metric
- Side locking holes
- Made from high Strength Steel

3/8" Drive High Strength Magnetic Impact Sockets - 6 Point



Type - Fractional				
Drive Size	OAL (in.)	Model No.	Order No.	Price
5/16	1-3/32	J7210HF	**KP4209420**	Price
3/8	1-3/32	J7212HF	**KP4209445**	Price
7/16	1-3/32	J7214HF	**KP4209470**	Price
1/2	1-3/32	J7216HF	**KP4209490**	Price
9/16	1-3/32	J7218HF	**KP4209500**	Price

Type - Metric				
Drive Size	OAL (in.)	Model No.	Order No.	Price
10mm	1-9/64	J7210MHF	**KP4209425**	Price

1/4" Drive High Strength Magnetic Power Sockets - 6 Point



Type - Fractional				
Drive Size	OAL (in.)	Model No.	Order No.	Price
1/4	7/8	J6908PF	**KP4209350**	Price
3/8	15/16	J6912PF	**KP4209395**	Price
5/16	15/16	J6910PF	**KP4209370**	Price

Type - Metric				
Drive Size	OAL (in.)	Model No.	Order No.	Price
8mm	15/16	J6908MPF	**KP4209345**	Price
10mm	15/16	J6910MPF	**KP4209360**	Price
13mm	1	J6913MPF	**KP4209585**	Price

1/2" Drive High Strength Magnetic Power Sockets - 6 Point



Drive Size (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
3/8	1-1/2	J7412PF	**KP4209520**	Price
7/16	1-1/2	J7414PF	**KP4209535**	Price
1-1/8	5-3/4	J7336CPB	**KP4206120**	Price

Universal Impact Sockets - Fractional - 6 Point



Drive - 1/2				
Drive Size (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/2	2-1/2	J74275P	**KP4200355**	Price
9/16	2-1/2	J74276P	**KP4200360**	Price
5/8	2-1/2	J74277P	**KP4200365**	Price
11/16	2-1/2	J74278P	**KP4200370**	Price
3/4	2-1/2	J74279P	**KP4200375**	Price
13/16	2-1/2	J74280P	**KP4200380**	Price
7/8	2-1/2	J74281P	**KP4200385**	Price
15/16	2-7/8	J74282P	**KP4200390**	Price
1	2-7/8	J74283P	**KP4200395**	Price
1-1/16	3	J74284P	**KP4200400**	Price
1-1/8	3	J74285P	**KP4200405**	Price
1-1/4	3	J74287P	**KP4200415**	Price

Drive - 3/8				
Drive Size (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/2	2	J77275P	**KP4200315**	Price
9/16	2	J77276P	**KP4200320**	Price
5/8	2-5/64	J77277P	**KP4200325**	Price
3/4	3	J77279P	**KP4200335**	Price

1/2" Drive High Strength Magnetic Impact Sockets - 6 Point



OAL (in.)	Size (in.)	Model No.	Order No.	Price
1-1/2	1/2	J7416HF	**KP4209545**	Price

3/8" Drive High Strength Magnetic Power Sockets - 6 Point



Type - Fractional				
Drive Size	OAL (in.)	Model No.	Order No.	Price
5/16	1-3/32	J7210PF	**KP4209435**	Price
3/8	1-3/32	J7212PF	**KP4209455**	Price
7/16	1-3/16	J7214PF	**KP4209480**	Price
1/2	1-3/16	J7216PF	**KP4209495**	Price

Type - Metric				
Drive Size	OAL (in.)	Model No.	Order No.	Price
10mm	1-9/64	J7210MPF	**KP4209430**	Price
13mm	1-13/64	J7213MPF	**KP4209465**	Price

1" Drive Deep Impact Sockets - Fractional - 6 Point



Size (in.)	OAL (in.)	Model No.	Order No.	Price
1-13/16	4-1/16	J10029L	**KP4207910**	Price
1-15/16	4-1/4	J10031L	**KP4207935**	Price

Impact Drive Adapters

- To increase or decrease drive end size
- Made from froged steel



Input Dr. Female (in.)	Output Dr. Male (in.)	Model No.	Order No.	Price
3/8	1/2	J7650	**KP4240875**	Price
1/2	3/8	J7651	**KP4240880**	Price
1/2	3/4	J7652	**KP4240925**	Price
5/8	1/2	J7655	**KP4240930**	Price
5/8	3/4	J7656	**KP4240980**	Price
3/4	1/2	J7653	**KP4240885**	Price
3/4	1	J07655	**KP4241005**	Price
1	3/4	J07656	**KP4241010**	Price
1	1-1/2	J10004	**KP4241020**	Price
1-1/2	1	J15007	**KP4241025**	Price

3/8" Drive Impact Sockets — Standard Fractional • 6 Pt.



MADE IN THE USA | WRIGHT TOOL | Snap-on Industrial Brands | WILLIAMS

	Wright Tool			-		
Size (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
5/16	1-1/16	KP503810	Price	1	KP3036110	Price
3/8	1-1/16	KP503812	Price	1	KP3036112	Price
7/16	1-1/16	KP503814	Price	1	KP3036114	Price
1/2	1-3/32	KP503816	Price	1	KP3036116	Price
9/16	1-1/8	KP503818	Price	1-1/16	KP3036118	Price
5/8	1-1/8	KP503820	Price	1-1/16	KP3036120	Price
11/16	1-1/8	KP503822	Price	1-1/16	KP3036122	Price
3/4	1-3/64	KP503824	Price	1-1/8	KP3036124	Price

Snap-on Williams is made globally

3/8" Drive Impact Sockets — Standard Metric • 6 Pt.



MADE IN THE USA | WRIGHT TOOL | Snap-on Industrial Brands | WILLIAMS

	Wright Tool			-		
Size (mm)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
6mm	1-1/16	KP503806MM	Price	-	-	-
7mm	1-1/16	KP503807MM	Price	1	KP3036507	Price
8mm	1-1/16	KP503808MM	Price	1	KP3036508	Price
9mm	1-1/16	KP503809MM	Price	1	KP3036509	Price
10mm	1-1/16	KP503810MM	Price	1	KP3036510	Price
11mm	1-1/16	KP503811MM	Price	1	KP3036511	Price
12mm	1-1/16	KP503812MM	Price	1	KP3036512	Price
13mm	1-1/16	KP503813MM	Price	1	KP3036513	Price
14mm	1-1/16	KP503814MM	Price	1-1/16	KP3036514	Price
15mm	1-1/16	KP503815MM	Price	1-1/16	KP3036515	Price
16mm	1-1/16	KP503816MM	Price	1-1/16	KP3036516	Price
17mm	1-1/16	KP503817MM	Price	1-1/16	KP3036517	Price
18mm	1-1/16	KP503818MM	Price	1-1/16	KP3036518	Price
19mm	1-1/16	KP503819MM	Price	1-1/8	KP3036519	Price

Snap-on Williams is made globally

1/2" Drive Impact Sockets — Standard Fractional • 6 Pt.



MADE IN THE USA | WRIGHT TOOL | Snap-on Industrial Brands | WILLIAMS

	Wright Tool			-		
Size (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
3/8	1-15/32	KP504812	Price	1-1/2	KP3037112	Price
7/16	1-15/32	KP504814	Price	1-1/2	KP3037114	Price
1/2	1-15/32	KP504816	Price	1-1/2	KP3037116	Price
9/16	1-15/32	KP504818	Price	1-1/2	KP3037118	Price
5/8	1-15/32	KP504820	Price	1-1/2	KP3037120	Price
11/16	1-1/2	KP504822	Price	1-1/2	KP3037122	Price
3/4	1-1/2	KP504824	Price	1-1/2	KP3037124	Price
13/16	1-9/16	KP504826	Price	1-1/2	KP3037126	Price
7/8	1-5/8	KP504828	Price	1-1/2	KP3037128	Price
15/16	1-11/16	KP504830	Price	1-3/4	KP3037130	Price
1	1-23/32	KP504832	Price	1-3/4	KP3037132	Price
1-1/16	1-3/4	KP504834	Price	1-3/4	KP3037134	Price
1-1/4	1-15/16	KP504840	Price	1-3/4	KP3037140	Price
1-1/8	1-13/16	KP504836	Price	1-3/4	KP3037136	Price
1-3/16	-	-	-	1-3/4	KP3037138	Price
1-5/16	-	-	-	1-3/4	KP3037142	Price
1-7/16	-	-	-	1-3/4	KP3037146	Price

Snap-on Williams is made globally

1/2" Drive Impact Sockets — Standard Metric • 6 Pt.

1/2" Metric



MADE IN THE USA | WRIGHT TOOL | Snap-on Industrial Brands | WILLIAMS

	Wright Tool			-		
Size (mm)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
10mm	1-7/16	KP504810MM	Price	1-1/2	KP3037510	Price
11mm	1-7/16	KP504811MM	Price	1-1/2	KP3037511	Price
12mm	1-7/16	KP504812MM	Price	1-1/2	KP3037512	Price
13mm	1-7/16	KP504813MM	Price	1-1/2	KP3037513	Price
14mm	1-7/16	KP504814MM	Price	1-1/2	KP3037514	Price
15mm	1-7/16	KP504815MM	Price	1-1/2	KP3037515	Price
16mm	1-7/16	KP504816MM	Price	1-1/2	KP3037516	Price

Snap-on Williams is made globally

3/8" Drive Impact Sockets — Deep Fractional • 6 Pt.



WRIGHT TOOL | MADE IN THE USA | Snap-on Industrial Brands | WILLIAMS

	Wright Tool			-		
Size (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
5/16	2-1/4	KP503910	Price	2-1/2	KP3036310	Price
3/8	2-1/4	KP503912	Price	2-1/2	KP3036312	Price
7/16	2-1/4	KP503914	Price	2-1/2	KP3036314	Price
1/2	2-1/4	KP503916	Price	2-1/2	KP3036316	Price
9/16	2-1/4	KP503918	Price	2-1/2	KP3036318	Price
5/8	2-1/4	KP503920	Price	2-1/2	KP3036320	Price
11/16	2-5/16	KP503922	Price	2-1/2	KP3036322	Price
3/4	2-5/16	KP503924	Price	2-1/2	KP3036324	Price

Snap-on Williams is made globally

3/8" Drive Impact Sockets — Deep Metric • 6 Pt.



WRIGHT TOOL | MADE IN THE USA | Snap-on Industrial Brands | WILLIAMS

	Wright Tool			-		
Size (mm)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
6mm	2-1/4	KP503906MM	Price	-	-	-
7mm	2-1/4	KP503907MM	Price	2-1/2	KP3036707	Price
8mm	2-1/4	KP503908MM	Price	2-1/2	KP3036708	Price
9mm	2-1/4	KP503909MM	Price	2-1/2	KP3036709	Price
10mm	2-1/4	KP503910MM	Price	2-1/2	KP3036710	Price
11mm	2-1/4	KP503911MM	Price	2-1/2	KP3036711	Price
12mm	2-1/4	KP503912MM	Price	2-1/2	KP3036712	Price
13mm	2-1/4	KP503913MM	Price	2-1/2	KP3036713	Price
14mm	2-1/4	KP503914MM	Price	2-1/2	KP3036714	Price
15mm	2-1/4	KP503915MM	Price	2-1/2	KP3036715	Price
16mm	2-1/4	KP503916MM	Price	2-1/2	KP3036716	Price
17mm	2-1/2	KP503917MM	Price	2-1/2	KP3036717	Price
18mm	2-1/2	KP503918MM	Price	2-1/2	KP3036718	Price
19mm	2-1/2	KP503919MM	Price	2-1/2	KP3036719	Price

Snap-on Williams is made globally

1/2" Drive Impact Sockets — Deep Fractional • 6 Pt.



WRIGHT TOOL | MADE IN THE USA | Snap-on Industrial Brands | WILLIAMS

	Wright Tool			-		
Size (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
3/8	3-1/4	KP504912	Price	3-1/4	KP3037312	Price
7/16	3-1/4	KP504914	Price	3-1/4	KP3037314	Price
1/2	3-1/4	KP504916	Price	3-1/4	KP3037316	Price
9/16	3-1/4	KP504918	Price	3-1/4	KP3037318	Price
5/8	3-1/4	KP504920	Price	3-1/4	KP3037320	Price
11/16	3-1/4	KP504922	Price	3-1/4	KP3037322	Price
3/4	3-1/4	KP504924	Price	3-1/4	KP3037324	Price
13/16	3-1/4	KP504926	Price	3-1/4	KP3037326	Price
7/8	3-1/4	KP504928	Price	3-1/2	KP3037328	Price
15/16	3-1/4	KP504930	Price	3-1/2	KP3037330	Price
1	3-1/2	KP504932	Price	3-1/2	KP3037332	Price
1-1/16	3-1/2	KP504934	Price	3-1/2	KP3037334	Price
1-1/4	3-1/2	KP504940	Price	3-1/2	KP3037340	Price
1-1/8	3-1/2	KP504936	Price	3-1/2	KP3037336	Price

Snap-on Williams is made globally

1/2" Drive Impact Sockets — Deep Metric • 6 Pt.



MADE IN THE USA

WRIGHT TOOL | Snap-on Industrial Brands | WILLIAMS

	Wright Tool			-		
Size (mm)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
10mm	3-1/4	KP504910MM	Price	3-1/4	KP3014M610	Price
11mm	3-1/4	KP504911MM	Price	3-1/4	KP3014M611	Price
12mm	3-1/4	KP504912MM	Price	3-1/4	KP3014M612	Price
13mm	3-1/4	KP504913MM	Price	3-1/4	KP3014M613	Price
14mm	3-1/4	KP504914MM	Price	3-1/4	KP3014M614	Price
15mm	3-1/4	KP504915MM	Price	3-1/4	KP3014M615	Price
16mm	3-1/4	KP504916MM	Price	3-1/4	KP3014M616	Price

PROTO

New!

MADE IN THE USA

Impact Individual Sockets-Fractional & Metric

- The TorquePlus™ design is a high-performance drive configuration which allows for quick and easy socket engagement to the fastener flats, and not the corners.
- Available in 6, 8 & 12Pt.
- Size stamped on each socket for easy ID
- Side locking holes
- Made from high Strength Steel

1/2" Drive Impact Sockets - Metric 6 & 12 Point



		12			6		
Size	OAL (in.)	Model No.	Order No.	Price	Model No.	Order No.	Price
8mm	1-1/2	-	-	-	J7408M	**KP4206135**	Price
9mm	1-1/2	-	-	-	J7409M	**KP4206140**	Price
10mm	1-1/2	J7410MT	**KP4206675**	Price	J7410M	**KP4206145**	Price
11mm	1-1/2	J7411MT	**KP4206680**	Price	J7411M	**KP4206150**	Price
12mm	1-1/2	J7412MT	**KP4206685**	Price	J7412M	**KP4206160**	Price
13mm	1-1/2	J7413MT	**KP4206690**	Price	J7413M	**KP4206170**	Price
14mm	1-1/2	J7414MT	**KP4206695**	Price	J7414M	**KP4206185**	Price
15mm	1-1/2	J7415MT	**KP4206700**	Price	J7415M	**KP4206195**	Price
16mm	1-1/2	J7416MT	**KP4206705**	Price	J7416M	**KP4206210**	Price
17mm	1-1/2	J7417MT	**KP4206710**	Price	J7417M	**KP4206220**	Price
18mm	1-1/2	J7418MT	**KP4206715**	Price	J7418M	**KP4206235**	Price
19mm	1-1/2	J7419MT	**KP4206720**	Price	J7419M	**KP4206245**	Price
20mm	1-5/8	-	-	-	J7420M	**KP4206470**	Price
21mm	1-5/8	-	-	-	J7421M	**KP4206265**	Price
22mm	1-5/8	-	-	-	J7422M	**KP4206280**	Price
23mm	1-5/8	-	-	-	J7423M	**KP4206290**	Price
24mm	1-5/8	-	-	-	J7424M	**KP4206305**	Price
25mm	1-3/4	-	-	-	J7425M	**KP4206315**	Price
26mm	2	-	-	-	J7426M	**KP4206330**	Price
27mm	2	-	-	-	J7427M	**KP4206340**	Price
28mm	2	-	-	-	J7428M	**KP4206355**	Price
29mm	2	-	-	-	J7429M	**KP4206450**	Price
30mm	2	-	-	-	J7430M	**KP4206375**	Price
32mm	2	-	-	-	J7432M	**KP4206395**	Price
36mm	2	-	-	-	J7436M	**KP4206430**	Price
41mm	2-3/8	-	-	-	J7441M	**KP4210290**	Price

1/2" Drive Impact Sockets - Fractional - 8 Point



Size	OAL (in.)	Model No.	Order No.	Price
3/8	1-1/2	J7412S	**KP4206165**	Price
7/16	1-1/2	J7414S	**KP4206190**	Price
1/2	1-1/2	J7416S	**KP4206215**	Price
9/16	1-1/2	J7418S	**KP4206240**	Price
5/8	1-1/2	J7420S	**KP4206260**	Price
11/16	1-1/2	J7422S	**KP4206285**	Price
3/4	1-1/2	J7424S	**KP4206310**	Price
13/16	1-1/2	J7426S	**KP4206335**	Price
7/8	1-5/8	J7428S	**KP4206360**	Price
15/16	1-3/4	J7430S	**KP4206380**	Price
1	1-3/4	J7432S	**KP4206400**	Price

3/4" Drive Deep Impact Sockets - Fractional - 6 Point



Size (in.)	OAL (in.)	Model No.	Order No.	Price
1-7/16	3-1/2	J07523L	**KP4207205**	Price
1-1/16	3-1/4	J07517L	**KP4207055**	Price
1-3/16	3-1/4	J07519L	**KP4207100**	Price
1-5/16	3-1/4	J07521L	**KP4207150**	Price
1-9/16	3-13/16	J07525L	**KP4207250**	Price

1/2" Drive Deep Impact Sockets - Metric - 6 Point



Size	OAL (in.)	Model No.	Order No.	Price
22mm	3-1/2	J7322M	**KP4206005**	Price
24mm	3-1/2	J7324M	**KP4206025**	Price
27mm	3-1/2	J7327M	**KP4206455**	Price
30mm	3-1/2	J7330M	**KP4206085**	Price
32mm	3-1/2	J7332M	**KP4206475**	Price
34mm	3-1/2	J7334M	**KP4210305**	Price
36mm	3-1/2	J7336M	**KP4206130**	Price
10mm	3-1/4	J7310M	**KP4205870**	Price
11mm	3-1/4	J7311M	**KP4205875**	Price
12mm	3-1/4	J7312M	**KP4205885**	Price
13mm	3-1/4	J7313M	**KP4205895**	Price
14mm	3-1/4	J7314M	**KP4205910**	Price
15mm	3-1/4	J7315M	**KP4205920**	Price
16mm	3-1/4	J7316M	**KP4205935**	Price
17mm	3-1/4	J7317M	**KP4205945**	Price
18mm	3-1/4	J7318M	**KP4205960**	Price
19mm	3-1/4	J7319M	**KP4205970**	Price
20mm	3-1/4	J7320M	**KP4206465**	Price
21mm	3-1/4	J7321M	**KP4205990**	Price

PROTO 1/2" Drive Deep Universal Impact Sockets -Fractional - 6 Point

MADE IN THE USA

- Proto® 6 Point Impact Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials



Size	OAL (in.)	Model No.	Order No.	Price
3/4	3-1/2	J75279P	**KP4200175**	Price

1/2" Drive Deep Thin Wall Impact Sockets - Fractional - 6 Point



Size (in.)	OAL (in.)	Model No.	Order No.	Price
1-1/16	3-1/2	J7334HT	**KP4206620**	Price
1-1/2	3-1/2	J7348HT	**KP4209270**	Price
1-1/4	3-1/2	J7340HT	**KP4209250**	Price
1-1/8	3-1/2	J7336HT	**KP4209240**	Price
15/16	3-1/2	J7330HT	**KP4206610**	Price
7/8	3-1/2	J7328HT	**KP4206605**	Price
1/2	3-1/4	J7316HT	**KP4206575**	Price
3/4	3-1/4	J7324HT	**KP4206595**	Price
5/8	3-1/4	J7320HT	**KP4206585**	Price
9/16	3-1/4	J7318HT	**KP4206580**	Price

3/4" Drive Deep Thin Wall Impact Sockets - Fractional - 6 Point



Size (in.)	OAL (in.)	Model No.	Order No.	Price
15/16	4	J07515-LT	**KP4207010**	Price
1-1/8	4	J07518-LT	**KP4207075**	Price
1-1/4	4	J07520-LT	**KP4207125**	Price
1-5/16	3-1/4	J07521-LT	**KP4207145**	Price
1-7/16	3-1/2	J07523-LT	**KP4207200**	Price
1-1/2	3-1/2	J07524-LT	**KP4207225**	Price

1/2" Drive Standard Metric Impact Sockets — 6 Pt.

MADE IN THE USA

- High strength alloy steel
- Lifetime warranty
- Snap-on Williams is made globally



WRIGHT TOOL | Snap-on Industrial Brands | WILLIAMS

Size	Wright Tool			-		
	OAL	Order No.	Price	OAL	Order No.	Price
17mm	38.1mm	KP504817MM	Price	1-1/2	KP3037517	Price
18mm	38.1mm	KP504818MM	Price	1-1/2	KP3037518	Price
19mm	38.1mm	KP504819MM	Price	1-1/2	KP3037519	Price
20mm	39.69mm	KP504820MM	Price	-	-	-
21mm	39.69mm	KP504821MM	Price	1-1/2	KP3037521	Price
22mm	41.28mm	KP504822MM	Price	1-1/2	KP3037522	Price
23mm	42.46mm	KP504823MM	Price	-	-	-
24mm	42.86mm	KP504824MM	Price	1-3/4	KP3037524	Price
27mm	44.45mm	KP504827MM	Price	1-3/4	KP3037527	Price

3/4" Drive Standard Metric Impact Sockets — 6 Pt.

MADE IN THE USA

- High strength alloy Steel
- Lifetime warranty



WRIGHT TOOL | Snap-on Industrial Brands | WILLIAMS

Size	Wright Tool			-		
	OAL	Order No.	Price	OAL	Order No.	Price
19mm	48.41	KP506819MM	Price	1-5/8	KP306M619A	Price
20mm	48.41	KP506820MM	Price	1-5/8	KP306M620A	Price
21mm	50.80	KP506821MM	Price	-	-	-
22mm	50.80	KP506822MM	Price	1-5/8	KP306M622A	Price
23mm	50.80	KP506823MM	Price	-	-	-
24mm	50.80	KP506824MM	Price	1-5/8	KP306M624A	Price
26mm	50.80	KP506826MM	Price	-	-	-
27mm	53.98	KP506827MM	Price	1-5/8	KP306M627A	Price
28mm	53.98	KP506828MM	Price	-	-	-
29mm	53.98	KP506829MM	Price	-	-	-
30mm	53.98	KP506830MM	Price	1-5/8	KP306M630	Price
32mm	53.98	KP506832MM	Price	1-3/4	KP306M632	Price
33mm	53.98	KP506833MM	Price	-	-	-
35mm	57.15	KP506835MM	Price	2-1/4	KP306M635	Price
36mm	57.15	KP506836MM	Price	1-3/4	KP306M636	Price
38mm	57.15	KP506838MM	Price	1-3/4	KP306M638	Price
41mm	63.50	KP506841MM	Price	1-3/4	KP306M641	Price
42mm	65.10	KP506842MM	Price	-	-	-
43mm	66.68	KP506843MM	Price	-	-	-
46mm	66.68	KP506846MM	Price	1-3/4	KP306M646	Price
50mm	69.85	KP506850MM	Price	-	-	-

3/4" Drive Standard Impact Sockets — 6 Pt.

MADE IN THE USA

- High strength alloy Steel
- Lifetime warranty



WRIGHT TOOL | Snap-on Industrial Brands | WILLIAMS

Size (in.)	Wright Tool			-		
	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
3/4	2-3/32	KP506824	Price	2	KP306624A	Price
13/16	2-1/8	KP506826	Price	2	KP306626A	Price
7/8	2-1/8	KP506828	Price	2	KP306628A	Price
15/16	2-1/8	KP506830	Price	2	KP306630A	Price
1	2-1/8	KP506832	Price	2	KP306632A	Price
2	2-7/8	KP506864	Price	2-7/8	KP306664	Price
1-1/16	2-1/8	KP506834	Price	2	KP306634A	Price
1-1/2	2-1/2	KP506848	Price	2-1/4	KP306648	Price
1-1/4	2-1/8	KP506840	Price	2-1/8	KP306640	Price
1-1/8	2-1/8	KP506836	Price	2-1/8	KP306636	Price
1-11/16	2-5/8	KP506854	Price	2-9/16	KP306654	Price
1-13/16	2-5/8	KP506858	Price	2-5/8	KP306658	Price
1-3/16	2-1/8	KP506838	Price	2-1/8	KP306638	Price
1-3/4	2-5/8	KP506856	Price	2-9/16	KP306656	Price
1-3/8	2-1/4	KP506844	Price	2-1/4	KP306644	Price
1-5/16	2-1/8	KP506842	Price	2-1/8	KP306642	Price
1-5/8	2-1/2	KP506852	Price	2-3/8	KP306652	Price
1-7/16	2-1/4	KP506846	Price	2-1/4	KP306646	Price
1-7/8	2-3/4	KP506860	Price	2-3/4	KP306660	Price
1-9/16	2-1/2	KP506850	Price	2-3/8	KP306650	Price

Snap-on Industrial Brands | WILLIAMS 3/4" Drive 14 Pc. Impact Standard Socket Set, 6 Pt. - SAE

MADE IN THE USA

3/4" Drive: 3/8, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8"

Order No.	Price
KP30WS614HA	Price



1/2" Drive Deep Metric Impact Sockets — 6 Pt.

MADE IN THE USA

- High strength alloy steel
- Lifetime warranty



WRIGHT TOOL | Snap-on Industrial Brands | WILLIAMS

Size	Wright Tool			-		
	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
17mm	78.58mm	KP504917MM	Price	3-1/4	KP3014M617	Price
18mm	78.58mm	KP504918MM	Price	3-1/4	KP3014M618	Price
19mm	78.58mm	KP504919MM	Price	3-1/4	KP3014M619	Price
20mm	78.58mm	KP504920MM	Price	3-1/4	KP3014M620	Price
21mm	78.58mm	KP504921MM	Price	3-1/4	KP3014M621	Price
22mm	78.58mm	KP504922MM	Price	3-1/2	KP3014M622	Price
23mm	78.58mm	KP504923MM	Price	3-1/2	KP3014M623	Price
24mm	88.9mm	KP504924MM	Price	3-1/2	KP3014M624	Price
27mm	88.9mm	KP504927MM	Price	3-1/2	KP3014M627	Price
30mm	88.9mm	KP504930MM	Price	3-1/2	KP3014M630	Price
32mm	88.9mm	KP504932MM	Price	3-1/2	KP3014M632	Price
36mm	88.9mm	KP504936MM	Price	3-1/2	KP3014M636	Price

3/4" Drive Deep Length Impact Sockets — 6 Pt.

MADE IN THE USA

- High strength alloy steel
- Lifetime warranty
- Snap-on Williams is made globally



WRIGHT TOOL | Snap-on Industrial Brands | WILLIAMS

Size (in.)	Wright Tool			-		
	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
3/4	3-1/8	KP506924	Price	3	KP3016624	Price
13/16	3-1/8	KP506926	Price	3	KP3016626	Price
7/8	3-1/8	KP506928	Price	3	KP3016628	Price
15/16	3-1/8	KP506930	Price	3	KP3016630	Price
1	3-1/8	KP506932	Price	3	KP3016632	Price
2	-	-	-	3-3/4	KP3016664	Price
1-1/16	3-1/2	KP506934	Price	3	KP3016634	Price
1-1/2	3-1/2	KP506948	Price	3-1/2	KP3016648	Price
1-1/4	3-1/2	KP506940	Price	3-1/4	KP3016640	Price
1-1/8	3-1/2	KP506936	Price	3	KP3016636	Price
1-11/16	-	-	-	3-1/2	KP3016654	Price
1-13/16	-	-	-	3-3/4	KP3016658	Price
1-3/16	3-1/2	KP506938	Price	3-3/16	KP3016638	Price
1-3/4	-	-	-	3-1/2	KP3016656	Price
1-3/8	3-1/2	KP506944	Price	3-1/4	KP3016644	Price
1-5/16	3-1/2	KP506942	Price	3-1/4	KP3016642	Price
1-5/8	-	-	-	3-1/2	KP3016652	Price
1-7/16	3-1/2	KP506946	Price	3-1/2	KP3016646	Price
1-7/8	-	-	-	3-3/4	KP3016660	Price
1-9/16	-	-	-	3-1/2	KP3016650	Price

3/8" Swivel Impact Power Drive Socket

WRIGHT TOOL

MADE IN THE USA

- Alloy steel
- Black oxide



Size (in.)	Approx. OAL (in.)	Order No.	Price
3/8	2-1/32	KP503852	Price
7/16	2-1/32	KP503854	Price
1/2	2-5/32	KP503856	Price
9/16	2-5/32	KP503858	Price
5/8	2-9/32	KP503860	Price
11/16	2-9/32	KP503862	Price
3/4	2-9/32	KP503864	Price

Snap-on Industrial Brands | WILLIAMS 3/8" Drive Universal Impact Sockets, 6 Pt., SAE



- SUPERTORQUE® lobular openings for greater turning power without deforming the fastener
- Designed for maximum engagement on 6 point fasteners
- Suitable for use with pneumatic and electric impact wrenches
- Specially heat treated for impact use to provide long life, safety, and durability
- Drive end pin retention hole and groove
- Black oxide

Size (in.)	OAL (in.)	Order No.	Price
3/8	1	KP3036212	Price
7/16	1	KP3036214	Price
1/2	1	KP3036216	Price
9/16	1	KP3036218	Price
5/8	1	KP3036220	Price
11/16	1	KP3036222	Price
3/4	1	KP3036224	Price

3 Pc 3/8" Drive Impact Locking Extension Set

MADE IN THE USA

- Solid one-piece design helps prevent the locking components from becoming loose or disengaged
- Patented locking feature locks sockets to the extension with exceptional force
- Knurled shank provides a slip-resistant grip when hand-turning the extension

New!



Set Includes	Model No.	Order No.	Price
3", 6" 12" Locking Extensions	J7277L	**KP4280955**	Price

3 Pc.Locking Impact Extension Set

- Solid one-piece design helps prevent the locking components from becoming loose or disengaged
- Patented locking feature locks sockets to the extension with exceptional force
- Knurled shank provides a slip-resistant grip when hand-turning the extension

MADE IN THE USA

New!



Drive	Includes 1 of ea Length (in.)	Model No.	Order No.	Price
1/2	3, 5, 10	J7515	**KP4240865**	Price

Impact Locking Extensions

MADE IN THE USA

- Solid one-piece design helps prevent the locking components from becoming loose or disengaged
- Patented locking feature locks sockets to the extension with exceptional force
- Knurled shank provides a slip-resistant grip when hand-turning the extension

New!



Drive (in.)	OAL (in.)	Model No.	Order No.	Price
3/8	12	J7212L	**KP4240900**	Price
1/2	3	J7503	**KP4240935**	Price
1/2	5	J7505	**KP4240940**	Price
1/2	10	J7510	**KP4240945**	Price

Impact Universal Joints

MADE IN THE USA

- Features two through holes and a groove to accept a Proto® Retaining Ring or pin and O-ring to help secure the socket to the drive tool anvil
- Position at appropriate angle to turn fasteners where obstructions prevent a straight application
- Ball design which allows for a 30° working angle
- Smooth 360° rotation



Drive (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
3/8	2-1/2	J77270P	**KP4240870**	Price
1/2	2-1/2	J74470P	**KP4200345**	Price
3/4	3-1/2	J07570A	**KP4240975**	Price
1	4-1/2	J10670A	**KP4200640**	Price

1" Drive O Rings

- "O" ring for impact sockets with a 1" drive

MADE IN THE USA



For Use With	Model No.	Order No.	Price
Use with: J10012 thru J10023J10019M thru J10036MJ10012SS thru J10018SSJ100185, J10017-LT, J10020-LT, J10607, J10608, J10609	J10000R1	**KP4207675**	Price
Use with: J10024 thru J10072J10041M thru J10065MJ10024L thru J10044L-J10024LS, J10670, J10004, J10005	J10000R2	**KP4207680**	Price

1" Drive Retaining Pins

MADE IN THE USA

- Use for a variety of impact sockets and attachments



For Use With	Model No.	Order No.	Price
Use with: J10012 thru J10023J10019M thru J10036MJ10012SS thru J10018SSJ100185, J10017-LT, J10020-LT, J10607, J10608, J10609	J10000P1	**KP4207665**	Price
Use with: J10024 thru J10072J10041M thru J10065MJ10024L thru J10044L-J10024LS, J10670, J10004, J10005	J10000P2	**KP4207670**	Price

Impact Extensions

MADE IN THE USA

- Use extensions to gain access to fasteners in locations that would otherwise be difficult to reach
- Male square is oriented in-line with female squares for use with fixed head torque wrenches
- Full chamfer at drive opening (when applicable) for easy engagement with drive tools
- Drive end chamfer and four detents help provide quick positive engagement with drive tool on any of the socket drive walls
- Features two thru holes and a groove to accept a Proto retaining ring or pin or o-ring to help secure extension to the drive tool anvil



Drive (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
3/8	3	J7175P	**KP4240910**	Price
3/8	6	J7176P	**KP4240915**	Price
3/8	12	J7178P	**KP4240920**	Price
1/2	2	J7180P	**KP4240950**	Price
1/2	3	J7182P	**KP4240960**	Price
1/2	5	J7181P	**KP4240955**	Price
1/2	9	J7184P	**KP4240970**	Price
1/2	10	J7183-00	**KP4240965**	Price
3/4	7	J07567	**KP4240985**	Price
3/4	5	J07565	**KP4241000**	Price
3/4	10	J07568	**KP4240990**	Price
3/4	13	J07569	**KP4240995**	Price
1	7	J10607	**KP4241030**	Price
1	10	J10608	**KP4241035**	Price
1	13	J10609	**KP4241040**	Price

PROTO Retaining Rings

MADE IN THE USA



Standard Rings:
- Used to help secure sockets onto drive tools
- Not intended to bear any load
- The rotational forces are between the drive tool and the socket

Crush Gauge Rings:
- 3/4", 1" and 1-1/2" drive retaining rings are designed with a resin crush gauge to help identify when to replace worn sockets
- The resin crush gauge on the pin helps indicate when a socket is excessively worn and should be replaced
- Drive tool and socket should line up when in use and should not pinch the crush gauge
- One piece construction, no loose parts. Pin made of resin which allows the material to compress without breaking

Style - Crush						
Drive (in.)	Groove Dia. (in.)	Diameter (in.)	Height (in.)	Model No.	Order No.	Price
3/4	2-1/4	2-7/16	.187	JRR07536	**KP4210550**	Price
1	2-5/8	2-13/16	.210	JRR10042	**KP4210580**	Price
1-1/2	2-7/8	3-1/8	.250	JRR15046	**KP4210585**	Price
1-1/2	3-3/8	3-5/8	.250	JRR15054	**KP4210590**	Price
1-1/2	3-7/8	4-1/8	.250	JRR15062	**KP4210595**	Price
1-1/2	4-3/8	4-5/8	.250	JRR15070	**KP4210600**	Price

Style - Standard						
Drive (in.)	Groove Dia. (in.)	Diameter (in.)	Height (in.)	Model No.	Order No.	Price
1/2	51/64	15/16	.130	JRR50080	**KP4210480**	Price
1/2	7/8	1	.130	JRR50087	**KP4210485**	Price
1/2	61/64	1-1/16	.130	JRR50095	**KP4210490**	Price
1/2	1-1/16	1-3/16	.130	JRR50105	**KP4210495**	Price
1/2	1-5/32	1-1/4	.130	JRR50115	**KP4210500**	Price
1/2	1-5/16	1-7/16	.130	JRR50130	**KP4210505**	Price
1/2	1-7/16	1-9/16	.130	JRR50145	**KP4210510**	Price
1/2	1-19/32	1-3/4	.130	JRR50160	**KP4210515**	Price

TITAN 3 Pc. Locking Socket Adapter Set



- Impact grade
- 1/2" Drive, 3/8" Drive, 1/4"Drive
- 3" Length
- Locking socket
- Lifetime warranty against mfg. defect

Order No.	Price
KP8215210	Price

TITAN 5 Pc. Impact Wobble Adapter Set

- Size range: 1/4" - 3/8", 3/8" - 1/4", 3/8" - 1/2", 1/2" - 3/8", 1/2" - 3/4"
- Wobble allows you to get into tight spots for those hard to get fasteners
- Impact grade
- Lifetime warranty against mfg. defect



Order No.	Price
KP8216150	Price

Impact Drive Adapters

Snap-on Industrial Brands | WILLIAMS | WRIGHT TOOL

MADE IN THE USA

		Snap-On/Williams		Wright Tool	
Female	Male	Order No.	Price	Order No.	Price
3/8	1/2	**KP3024A**	Price	**KP503899**	Price
3/8	1/2	**KP3036004†**	Price	-	-
1/2	3/8	**KP3042F**	Price	-	-
1/2	3/8	**KP3037005†**	Price	**KP504900**	Price
1/2	3/4	**KP3046**	Price	**KP504902**	Price
3/4	1/2	**KP3064A**	Price	**KP506900**	Price
3/4	1	**KP3067**	Price	**KP506901**	Price
1	3/4	**KP3076**	Price	**KP508900**	Price



†Snap-on Williams is made globally

Snap-on Industrial Brands | WILLIAMS

Swivel Impact Joint Adapters

MADE IN THE USA



- Range of motion allows for easier access to fastener
- Alloy steel

Size (in.)	Order No.	Price
3/8	**KP3036001†**	Price
1/2	**KP3037001†**	Price
1/2	**KP304140B**	Price
3/4	**KP306140B**	Price

†Snap-on Williams is made globally

Snap-on Industrial Brands | WILLIAMS

Impact Extensions

MADE IN THE USA



- Specially heat treated for long life and durability
- Drive features pin retention hole and groove

Drive (in.)	Approx. Length (in.)	Order No.	Price
3/8	3	**KP302103A**	Price
3/8	6	**KP302106A**	Price
1/2	3	**KP304102**	Price
1/2	5	**KP304105A**	Price
1/2	10	**KP304110A**	Price
3/4	7	**KP306107**	Price
3/4	9-3/4	**KP306110**	Price
3/4	12-3/4	**KP306113**	Price

TEKTON Impact Socket Adapters



- Engineered for use with impact drivers
- Works around obstructions to access hard-to-reach fasteners
- Spring-loaded detent balls securely latch onto sockets, preventing them from being dropped
- Through-hole in drive ends locks onto drive tang
- Made of premium chrome vanadium steel with a protective black oxide finish

Input Drive Female (in.)	Output Drive Male (in.)	Order No.	Price
3/8	1/2	**KP8547821**	Price
1/2	3/8	**KP8547820**	Price
1/2	3/4	**KP8547822**	Price
3/4	1/2	**KP8547823**	Price

New!

WRIGHT TOOL Budd Wheel Impact Socket



- Square drive

Drive (in.)	Size (in.)	Order No.	Price
3/4	13/16 Square	**KP506893**	Price

MADE IN THE USA

TEKTON 21 Pc. 3/4" Drive Impact Socket Set

Specifications:
- Professional-grade, forged and hardened chrome vanadium steel construction
- Corrosion-resistant black phosphate finish
- 6 Point high torque socket design grips flat sides
- 18" 24-tooth oval head ratchet with quick release drive tang locks onto sockets
- Meets or exceeds ANSI specifications
- Opti-Drive™ Socket design contacts only flat surfaces of fastener head to eliminate rounding off corners

Contents:
- 1 Pc. 3/4" Drive 18" Ratchet handle
- 1 Pc. 3/4" Drive 18" Sliding T-head breaker bar
- 2 Pc. 3/4" Drive Extensions: 4" and 8"
- 16 Pc. 3/4" Drive impact sockets: 3/4, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-3/8, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2, 1-5/8, 1-3/4, 1-7/8, 2"
- Carrying case

Order No.	Price
KP854899	Price







Since 1882, Williams has met the harshest challenges of the most demanding and critical industries with high quality hand tools. Williams was among the first manufacturers in the world to offer mass produced drop-forged tools, a 15° angle wrench, and heavy-duty slugging wrenches.





Bahco, inventor of the original adjustable wrenches and a leader in ergonomic hand tools and cutting tools, has delivered innovative products and solutions since 1886. Bahco products are designed for professionals of various industries, such as aviation, oil & gas, metal cutting, building and construction, automotive, landscaping and vineyards. The vast majority of Bahco products are manufactured in our own factories located throughout Europe.





CDI manufactures and sells more professional grade torque products than anyone in the world. CDI's mechanical torque product lines include click type torque wrenches, dial indicating torque wrenches, torque limiting screwdrivers, calibration equipment and a number of special application torque products. CDI has long been a major innovator and a leader in electronic torque measurement and torque calibration equipment.

Snap-on Industrial Brands | CDI Torque Products Dual Scale Torque Wrenches with Micro-Adjustable Metal Handle

MADE IN THE USA



- Dual scale, calibrated dual direction
- Positive lock with spring loaded pull down lock ring
- Fast, accurate and easy to set
- Easy-to-read laser marked scales
- Most feature quick release buttons which provide good socket retention as well as easy socket removal
- Accuracy +/- 3% clockwise direction, from 20-100% full scale
- Meets or exceeds ASME B107.14M-1994, ISO 6789 standards
- Individually serialized with matching certificate of calibration traceable to NIST

Description - Foot Pound				
Sq. Dr.	Torque Range	Increments	Order No.	Price
3/8	5-75 ft/lbs	.5 ft/lbs	**KL45752MFRMH**	Price
3/8	10 - 100 ft/lbs	.5 ft/lbs	**KL451002MFRMH**	Price
1/2	20 - 150 ft/lbs	1 ft/lbs	**KL451503MFRMH**	Price
1/2	30 - 250 ft/lbs	1 ft/lbs	**KL452503MFRMH**	Price

Description - Inch Pound				
Sq. Dr.	Torque Range	Increments	Order No.	Price
1/4	10 - 50 in/lbs	1 in/lbs	**KL45501MRMH**	Price
1/4	20 - 150 in/lbs	1 in/lbs	**KL451501MRMH**	Price
3/8	20 - 150 in/lbs	1 in/lbs	**KL451502MRMH**	Price
3/8	30 - 200 in/lbs	1 in/lbs	**KL452002MRMH**	Price
3/8	30 - 250 in/lbs	1 in/lbs	**KL452502MRMH**	Price
3/8	100 - 750 in/lbs	5 in/lbs	**KL457502MRMH**	Price
3/8	150 - 1000 in/lbs	5 in/lbs	**KL4510002MRMH**	Price
1/2	300 - 2500 in/lbs	10 in/lbs	**KL4525003MRMH**	Price

Description - Newton Meter Scale				
Sq. Dr.	Torque Range	Increments	Order No.	Price
3/8	10 - 60 Nm	.5 Nm	**KL45602NMRMHSS**	Price
3/8	20 - 100 Nm	.5 Nm	**KL451002NMRMHSS**	Price
1/2	40 - 200 Nm	2 Nm	**KL452003NMRMHSS**	Price
1/2	60 - 340 Nm	2 Nm	**KL453403NMRMHSS**	Price

TEKTON Torque Wrenches, 3/8" & 1/2"



Tekton Specifications:

- Hear and feel wrench click when torque value is reached
- High contrast dual range scale is easy to read in low light
- Durable all steel construction wiht corrosion resistant finish
- Reversible drive chrome vanadium steel rachet head
- Knurled handle provide a sure, non-slip grip
- Complete with conversion table chart
- Storage case included

Drive (in.)	Torque Range	Increments	Length (in.)	Order No.	Price
1/4	20-200 in/lb, 2.25-22.6 Nm	1 in/lbs	10-7/8	**KP8524320**	Price
3/8	10-80 ft/lbs	1 in/lbs	14.4	**KP8524330**	Price
1/2	10-150 ft/lbs, 13.3-203.5 Nm	1 ft/lbs, 1.36 Nm	18-3/8	**KP8524335**	Price
1/2	25-250 ft/lb, 33.9-338.9 Nm	1 ft/lbs, 1.36 Nm	25	**KP8524340**	Price
3/4	50-300 ft/lbs	1 ft/lbs, 1.36 Nm	26.3	**KP8524350**	Price

Snap-on Industrial Brands | CDI Torque Products Micro-Adjustable Comfort-Grip Handle English Single Scale

MADE IN THE USA



- All the features of the micro-adjustable torque wrench plus the ergonomic comfort-grip

Description - Foot Pound				
Sq. Dr.	Torque Range	Increments	Order No.	Price
3/8	10 - 100 ft/lbs	.5 ft/lbs	**KL451002MFRPH**	Price
1/2	20 - 150 ft/lbs	1 ft/lbs	**KL451503MFRPH**	Price
1/2	30 - 250 ft/lbs	1 ft/lbs	**KL452503MFRPH**	Price

Description - Inch				
Sq. Dr.	Torque Range	Increments	Order No.	Price
1/4	20 - 150 in/lbs	1 in/lbs	**KL451501MRPH**	Price
3/8	30 - 250 in/lbs	1 in/lbs	**KL452502MRPH**	Price
3/8	150 - 1000 in/lbs	5 in/lbs	**KL4510002MRPH**	Price

Proto Ratcheting Head Micrometer Torque Wrenches - Ft. - Lbs.

MADE IN THE USA



- Calibrated to +/- 4% in clockwise direction and +/- 6% in counter clockwise direction
- Calibration is accomplished by mechanical loading of each wrench in a horizontal position, and performing a three click test at 20%, 60% and 100% of maximum instrument capacity
- Certification documents traceable to NIST. (National Institute of Standards and Technology). **CERT models only**

Type - Foot Pound							
Drive (in.)	Torque Range	Increments	OAL (in.)	Cert's Traceable	Model No.	Order No.	Price
3/8	16-80 ft/lbs	0.5 ft/lbs	15-1/32	No	J6006C	**KP4220845**	Price
3/8	16-80 ft/lbs	0.5 ft/lbs	15-1/32	Yes	J6006CX-CERT	**KP4220785**	Price
3/8	20-100 ft/lbs	0.5 ft/lbs	16-17/32	No	J6012C	**KP4220865**	Price
1/2	16-80 ft/lbs	0.5 ft/lbs	15-1/32	No	J6008C	**KP4220860**	Price
1/2	16-80 ft/lbs	0.5 ft/lbs	15-1/32	Yes	J6008CX-CERT	**KP4220790**	Price
1/2	30-150 ft/lbs	1 ft/lbs	20-43/64	No	J6016C	**KP4220915**	Price
1/2	50-250 ft/lbs	1 ft/lbs	26-17/64	No	J6014C	**KP4220840**	Price
1/2	50-250 ft/lbs	1 ft/lbs	26-17/64	Yes	J6014CX-CERT	**KP4220800**	Price
1/2	30-150 ft/lbs	1 ft/lbs	20-43/64	Yes	J6016CX-CERT	**KP4220795**	Price
3/4	60-300 ft/lbs	2 ft/lbs	32-3/4	No	J6018AB	**KP4220830**	Price
3/4	120-600 ft/lbs	2 ft/lbs	41-17/32	No	J6020AB	**KP4220835**	Price
3/4	120-600 ft/lbs	2 ft/lbs	41-17/32	Yes	J6020CX-CERT	**KP4220810**	Price
1	140-700 ft/lbs	2 ft/lbs	46-57/64	No	J6022B	**KP4220825**	Price

Type - Inch Pound							
Drive (in.)	Torque Range	Increments	OAL (in.)	Cert's Traceable	Model No.	Order No.	Price
1/4	10-50 in/lbs	1 in/lbs	9-1/2	No	J6060A	**KP4220820**	Price
1/4	40-200 in/lbs	1 in/lbs	11-7/8	No	J6062C	**KP4220890**	Price
1/4	40-200 in/lbs	1 in/lbs	11-7/8	Yes	J6062CX-CERT	**KP4220765**	Price
3/8	40-200 in/lbs	1 in/lbs	11-7/8	No	J6064C	**KP4220895**	Price
3/8	40-200 in/lbs	1 in/lbs	11-7/8	Yes	J6064CX-CERT	**KP4220770**	Price
3/8	200-1000 in/lbs	5 in/lbs	15-1/2	No	J6066C	**KP4220900**	Price
3/8	200-1000 in/lbs	5 in/lbs	15-1/2	Yes	J6066CX-CERT	**KP4220775**	Price
1/2	380-1800 in/lbs	10 in/lbs	21-1/1	No	J6068C	**KP4220905**	Price

Proto Fixed Head Micrometer Torque Wrenches



MADE IN THE USA

- Calibrated to +/- 4% in clockwise direction and +/- 6% counter clockwise direction at 20% to 100% of full scale
- Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance

Drive	Torque Range	Approx OAL (in.)	Model No.	Order No.	Price
1/4	40-200 in/lbs	12	J6061C	**KP4220750**	Price
3/8	16-80 ft/lbs	16	J6005C	**KP4220735**	Price
3/8	200-1000 in/lbs	15-1/2	J6065C	**KP4220760**	Price
1/2	30-150 ft/lbs	21-1/2	J6015C	**KP4220745**	Price
1/2	50-250 ft/lbs	27	J6013C	**KP4220740**	Price

Proto Fixed Head Micrometer Torque Wrench-with Extension Handles

MADE IN THE USA



- Includes an extension handle
- Packaged in a metal box for easy storage
- Calibrated ± 4% of torque reading clockwise and ±6% counter clockwise at 20% to 100% of full scale
- Certified wrenches to ±2% one direction are available upon request

Drive (in.)	Torque Range	Increments (ft/lbs)	OAL (in.)	Model No.	Order No.	Price
1	200-1000 ft/lbs	5	69	J6023	**KP4220725**	Price

Snap-on Industrial Brands | CDI Torque Products — Electronic Dial Torque Wrenches

MADE IN THE USA

The new Electronic Dial (ED) Torque Wrench features solid state electronics for accurate torque application and measurement. ED's design provides easy set-up and usage. Wrench features 3 indication lights and an audible buzzer

- 4 Units of measure - Ft. Lb., In. Lb., Nm, Kg. Cm.
- Accuracy: +/- 1% CW & CCW from 20% to 100% of full scale
- 3 Color LED visual signal system
  - Yellow light = Approaching Torque Target
  - Green light = Target Torque Reached
  - Red light = Over Torque Indicator
- Audible tone when desired torque reached
- Alarm tone sounds if wrench is overtorqued
- Display can be turned 180° to allow left hand usage
- Holds "Peak" torque reading for 10 seconds
- Constructed of special Capron® material for long life and durability
- Resistant to the majority used in industrial environments
- Battery saving auto-shutoff after two minutes
- Remembers last unit and torque setting selected
- NIST traceable certificate of calibration included
- Meets or exceeds ASME B107.28 - 2005

Torgue Range Ft-Lb	Torgue Range In-LB	Torgue Range Nm	Drive (in.)	Increments	Order No.	Price
.42- 4.17	5-50	.56 - 5.65	1/4	1	**KL45501EDCDI**	Price
2.08 - 20.83	25-250	2.82 - 28.25	3/8	1	**KL452502EDCDI**	Price
5 - 50 in/lbs	60-600	6.79 - 67.79	3/8	1	**KL456002EDCDI**	Price



PROTO — Dial Torque Wrenches, FT / LBS

MADE IN THE USA

- Accurate to ± 4% of torque reading in both directions at 20% to 100% of full scale
- High alloy torsion drive design
- Dual scale (English/Metric) with clockwise and counterclockwise operation
- Memory needles are standard
- Easy-to-read, high contrast scale
- Laser marked serial number for traceability
- NIST (National Institute of Standards and Technology) traceable CW certification supplied with each wrench
- J6133F includes 1 removable extension handle for easy force application



Drive (in.)	Torque Range	Increments	Approx OAL (in.)	Model No.	Order No.	Price
1/2	35-175 ft/lbs	5	21-1/2	J6121F	**KP4220960**	Price
3/4	70-350 ft/lbs	10	28	J6134F	**KP4220975**	Price
3/4	120 - 600 ft/lbs	10	46-1/2	J6133F	**KP4220970**	Price

Snap-on Industrial Brands | CDI Torque Products — Torque Multipliers with Handles

- Provides the operator with nut-turning power that requires only a fraction of the force required when using conventional tools
- Input and output rotation is in the same direction
- Reaction bar rotation is opposite to imput direction and must rest securely against a rigid object to withstand the generated reaction force
- By removing 4 screws, heads may be easily disassembled for inspection, cleaning, and lubrication



Input Female Sq.	Output Male Sq.	Max. Output Ft. Lbs.	Multiplication Ratio	Apprx. Ft. Lbs. Rq'd for Max Output	Head Height (in.)	Head Dia. (in.)	OAL (in.)	Order No.	Price
1/2	3/4	1000 max	3.6 - 1	275	3-9/32	3-1/2	22-1/2	**KL45TM750LW**	Price
3/4	1	2000 max	3.6 - 1	550	4-3/8	3-17/32	24	**KL45TM1000**	Price
1	1-1/2	4000 max	3.9 - 1	1150	6-1/8	5-3/16	28-7/8	**KL45TM1500**	Price
1	1-1/2	8000 max	4.6 - 1	1915	6-1/4	6-1/2	31	**KL45TM2000**	Price
1	2-1/2	12000 max	5.4 - 1	2200	7-1/4	7-1/4	30	**KL45TM2500**	Price

PROTO — Reaction Arm Torque Multipliers

MADE IN THE USA

- Standard torque accuracy is +/- 5% of reading
- Maximum rated input: 227 ft/lbs
- Maximum rated output: 750 ft/lbs
- Reaction system: tubular reaction bar
- Includes extra male plug



Input Drive (in.)	Output Drive (in.)	Torque Ratio	Head Depth (in.)	Head Length (in.)	Handle Length (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/2	3/4	1:3.33	3-3/32	2-13/16	5-1/4	8-1/2	J6202A	**KP4221095**	Price
1/2	3/4	1:6	4	3-15/16	14-1/8	19-1/2	J6212	**KP4221040**	Price
1/2	1	1:13.6	5-3/4	4-1/16	14-1/8	19-1/2	J6222	**KP4221050**	Price
1/2	1	1:18.5	6-1/2	4-1/16	14-1/8	19-1/2	J6232	**KP4221060**	Price

Snap-on Industrial Brands | CDI Torque Products — Multipliers with Planetary-Gear Mechansim

- Designed where high torques are necessary for fastening or breaking out stubborn fasteners
- Allows operator safe and easy means of producing torque for job requirements
- Precision planetary gear multiplies the operator's input from standard torque wrenches
- Can also multiply the torque from air-driven (non-impact) wrenches



Output Ft. Lbs.	Input Capacity	Gear Ratio	Torque Ratio	Input Female Sq.	Output Sq. Size	OAL (in.)	Head Height (in.)	Head Dia. (in.)	Order No.	Price
750 max	227	4:1	3:3:1	1/2	3/4	8-1/2	3-1/4	2-13/16	**KL45TM290**	Price
1200 max	200	6:3:1	6:0:1	1/2	3/4	19-39/64	4	3-15/16	**KL45TM391**	Price
2200 max	162	15:0:1	13:6:1	1/2	1	19-39/64	5-3/4	4-1/16	**KL45TM392**	Price
3200 max	173	20:25:1	18:5:1	1/2	1	19-39/64	6-1/2	4-1/16	**KL45TM393**	Price
5000 max	189	29:25:1	26:5:1	1/2	1-1/2	14-29/32	8-3/4	5-5/8	**KL45TM394**	Price
8000 max	154	60:1	52:0:1	1/2	1-1/2	15-13/64	10-3/4	5-13/16	**KL45TM395**	Price

Snap-on Industrial Brands | CDI Torque Products — Plate Reaction Torque Multipliers

- Input torque holding ratchet - holds multiplier in place during torquing
- Needle mearing construction for high efficiency
- Standard reaction plate meets most job applications
- Shearable output squares - to protect tool during overload
- 1/2" drive square female input



Max. Output Ft. Lbs.	Input Capacity	Gear Ratio	Torque Ratio	Output Male Sq.	OAL (in.)	Head Height (in.)	Head Dia. (in.)	Order No.	Price
2200	162	15:1	13:6:1	1	14	5-1/2	4-7/8	**KL45TM492**	Price
3200	173	20:25:1	18:5:1	1	14	6-7/16	4-7/8	**KL45TM493**	Price

Torque & Angle Electronic Torque Wrench

Specifically designed to meet the needs of the torque professional where torque and angle is required. Features three units of torque, Ft. Lbs., In. Lbs., and Newton meters as well as the angle mode. The Torque and Angle wrench allows the technician to apply a specific torque load, followed by the angle specification, and all in one convenient wrench

- Very accurate, +/- 2%, CW of indicated value
- Gyro chip senses 360° of movement, and is accurate to within +/-1°
- No maintenance, just change the battery at 80 hours
- Very easy to set up and use quickly
- 15° Flex ratchet head
- Ergonomic non-slip cushion grip
- 3 Step LED visual single system:
  Yellow light = Approaching torque target
  Green light = Torque target reached
  Red light = Over Torque Indicator
- Audible buzzer and tactile feel vibrating handle when torque value achieved
- NIST traceable certificate of calibration included
- Meets of exceeds ASME B107.28 - 2005

MADE IN THE USA



Drive (in.)	Torque Range Ft-Lb	Torque Range In-LB	Torque Range Nm	Increments	Order No.	Price
3/8	10 - 100 ft/lbs	120-1200	12.6 - 135.6	1	**KL451002TAACDI**	Price
1/2	25 - 250	300-3000	33.8 - 338	1	**KL452503TAACDI**	Price

Micro-Adjustable Flex Head

MADE IN THE USA

All the features of the micro adjustable torque wrench plus a flex head that pivots 15° in both directions



Torque Range	Sq. Dr.	Increments	Order No.	Price
10 - 80 ft/lbs	3/8	.5 ft/lbs	**KL45802MFRFMHSS**	Price

Computorq3

MADE IN THE USA

- 15° Flex ratcheting head
- Torques in both clockwise and counterclockwise directions
- Battery saving auto-shutoff after two minutes
- Audible sounds when set torque value is reached or exceeded
- 3 Color LED light bar - Yellow: Approaching desired torque; Green: Torque value is reached; Red: Overtorqued, loosen and retighten
- Push button socket release head
- Operates in any of four torque units, foot pounds, inch pounds, Newton meter or kilogram centimeter
- Accuracy: ±2% CW of readings from 20% to 100% of full scale ±3 CCW of readings from 20% to 100% of full scale
- NIST Traceable certificate of calibration included



Drive (in.)	Torque Range	in./lb.	Nm	Kg. Cm.	Order No.	Price
1/4	2 - 20 ft/lbs	24-240	2.71-27.10	27.6-276	**KL432401CI3**	Price
3/8	5 - 100 ft/lbs	120-1200	13.6-135.6	138-1382	**KL431002CF3**	Price
1/2	25 - 250 ft/lbs	300-3000	33.8-338	345-3456	**KL432503CF3**	Price

Dial Torque Wrenches, In / Lbs

MADE IN THE USA

- Accurate to ± 4% of torque reading in both directions at 20% to 100% of full scale
- Industrial all steel or aluminum torque transfer components
- High alloy torsion drive design — accuracy not effected by hand position
- Dual scale (English/Metric) with clockwise and counterclockwise operation — fewer wrenches needed to complete job
- Memory needles are standard on all wrenches except electric light models
- Easy-to-read, high contrast scale
- Laser marked serial number for traceability
- NIST (National Institute of Standards and Technology) traceable CW certification supplied with each wrench



Drive 9in.)	Torque Range	Increments	OAL (in.)	Model No.	Order No.	Price
1/4	6-30 in/lbs	0.5	10	J6168F	**KP4220990**	Price
3/8	50-250 in/lbs	5	10	J6177F	**KP4221000**	Price

Advanced Electronic Torque Wrench

MADE IN THE USA

- Durable all steel construction
- Programmable to torque fastener in desired sequence with up to 50 memory presets
- Electronic indicators include LED, audible beep and handle vibration when desired torque is achieved
- Calibration due indicator
- Reliable data trail time stamped for QC, Job Auditing and Torque Verification
- Stores up to 1,500 readings
- Qutput in Foot Pounds, Inch Pounds, Newton Meters and Kilogram Centimeters
- Accuracy +/- 2% CW and +/- 3% CCW



Drive (in.)	Ft. Lb.	In. Lb.	Nm	Order No.	Price
1/4	1-20	12-240	1.4-27.2	**KL452401CASG**	Price
3/8	5-100	60-1200	6.84-135.6	**KL451002CASG**	Price
1/2	12.5-250	150-3000	16.9-339	**KL452503CASG**	Price
3/4	30-600	360-7200	40.7-813.5	**KL456004CASG**	Price

Classic Series Dial Torque Wrenches-Single Scale

Designed for the automotive, nuclear and industrial markets in addition to military installations throughout the world. This series features sturdy torsion beam design of dependable long life and accuracy. The small frame model offers working ranges from 3 in. lbs. to 50 ft. lbs, in 1/4" and 3/8" drives. The large frame model continues from 100 ft. lbs. through 2,000 ft. lbs. with 1/2", 3/4", and 1" drives. Accuracy of both service of +/- 4% meets or exceeds ASME B107.14-1994, ISO 6789 bi-directionally from 20% to 100% of scale.

- Sturdy body construction insures maximum durability
- Easy to read laser marked single scale
- Large easy to read dial is shock resistant and protected by a tough metal guard
- Memory needle retains highest torque reading applied
- Accuracy: +/- 4% of indicated value, cw & ccw, from 20% to 100% of full scale
- Individually serialized with matching certificate of calibration traceable to NIST

MADE IN THE USA



Description - English Scale				
Drive Size (in.)	Torque Range	Increments	Order No.	Price
1/4	0 - 30 in/lbs	.5 in/lbs	**KL45301LDINSS**	Price
1/4	0 - 75 in/lbs	1	**KL45751LDINSS**	Price
3/8	0 - 50 ft/lbs	15	**KL45502LDFNSS**	Price
3/8	0 - 75 in/lbs	1	**KL45752LDINSS**	Price
3/8	0 - 300 in/lbs	5	**KL453002LDINSS**	Price
3/8	0 - 600 in/lbs	15	**KL456002LDINSS**	Price
1/2	0 - 100 ft/lbs	2	**KL451003LDFNSS**	Price
1/2	0 - 175 ft/lbs	5	**KL451753LDFNSS**	Price
3/4	0 - 350 ft/lbs	10	**KL453504LDFNSS**	Price
3/4	0 - 600 ft/lbs	10	**KL456004LDFESS**	Price
3/4	0 - 600 ft/lbs	10	**KL456004LDFNSS**	Price
1	0 - 1000 ft/lbs	20	**KL4510005LDFESS**	Price
1	0 - 1000 ft/lbs	20	**KL4510005LDFNSS**	Price
1	0 - 2000 ft/lbs	40	**KL4520005LDFESS**	Price

Description - Newton Meter Scale				
Drive Size (in.)	Torque Range-Metric	Increments	Order No.	Price
1/4	0 - 9 Nm	2	**KL4591NLDNSS**	Price
3/8	0 - 18 Nm	.5 in/lbs	**KL45182NLDNSS**	Price
3/8	0 - 30 Nm	.5 in/lbs	**KL45302NLDNSS**	Price
3/8	0 - 35 Nm	1	**KL45352NLDNSS**	Price
3/8	0 - 70 Nm	2	**KL45702NLDNSS**	Price
1/2	0 - 140 Nm	2.5	**KL451403NLDNSS**	Price
1/2	0 - 240 Nm	5	**KL452403NLDNSS**	Price
1/2	0 - 350 Nm	10	**KL453503NLDNSS**	Price
3/4	0 - 480 Nm	10	**KL454804NLDNSS**	Price
3/4	0 - 800 Nm	20	**KL458004NLDNSS**	Price
1	0 - 1400 Nm	25	**KL4514005NLDNSS**	Price

Snap-on Industrial Brands | CDI Torque Products Single Setting Torque Wrenches

MADE IN THE USA

- Featuring a durable, non-slip cushion grip
- Uses universal round shank heads
- Audible click and feel impulse torque control mechanism
- Tamper proof torque setting for production line use
- Torque values can be calibrated in english and metric setting
- Accuracy: +/- 3% of indicated value, in direction of torque indicator, from 20% to 100% of full scale
- Meets or exceeds ASME B107.14-2004, ISO 6789



Torque Range	Shank Style	OAL (in.)	Order No.	Price
10 - 50 in/lbs	J-(0.425)	6.5	**KL455TI**	Price
15 - 75 ft/lbs	J-(0.425)	11	**KL4550TI**	Price
30 - 150 ft/lbs	Y-(0.560)	19.5	**KL45100TI**	Price
40 - 200 ft/lbs	Y-(0.560)	23.5	**KL45200TI**	Price
50 - 250 in/lbs	J-(0.425)	10	**KL4510TI**	Price
60 - 300 in/lbs	J-(0.425)	6.2	**KL4510STI**	Price

Snap-on Industrial Brands | CDI Torque Products Ratcheting Square Drive Pre-Set Torque Heads

MADE IN THE USA



Drive (in.)	Shank Style	Order No.	Price
1/2	J-(0.425)	**KL45TCQJD16A**	Price

Snap-on Industrial Brands | CDI Torque Products Dial Torque Wrenches - Dual Scale

Dual Dial • Inch Pound / Newton Meter

MADE IN THE USA



- Sturdy body construction insures durability
- Easy to read laser marked dual scale
- Large easy to read dial is shock resistant and protected by a tough metal guard
- Cam-over torque limiting clutch
- Memory needle retains highest torque reading applied
- Calibrated in both clockwise and counter clockwise direction
- Accuracy +/– 3% of indicated value, CW & CCW, from 20-100% of full scale
- Individually serialized with matching certificate of calibration traceable to NIST

Drive (in.)	English Torque Range	Grads. English	Metric Torque Range	Grads. Metric	Order No.	Price
3/8	0 - 250 in/lbs	5 in/lbs	0 - 30 Nm	.5 Nm	**KL452502LDIN**	Price
3/8	0 - 600 in/lbs	10 in/lbs	0 - 70 Nm	2 Nm	**KL456002LDIN**	Price

PROTO 1/4" Drive Torque Screwdrivers

MADE IN THE USA

- Calibrated to ± 4% of torque reading, clockwise at 20% to 100% of full scale
- 1/4” Square to 1/4” hex adapter included for use with insert bits
- Industrial heavy duty design
- Aircraft grade aluminum
- Aircraft quality spring
- Positive self locking lock ring
- Floating three point reaction for repeatability
- Laser marked easy-to-read scale
- NIST (National Institute of Standards and Technology) traceable certification supplied with J6106ACERT (ONLY)
- Meets or exceeds ASME B10714M



7 - 36 in/lbs	Increments	Approx. OAL (in.)	Cert Tra-ceable	Model Number	Order No.	Price
20 - 100 in/oz	2 in/oz	6-1/2	No	J6104A	**KP4220215**	Price
7 - 36 in/lbs	1 in/lb	6-1/2	No	J6106A	**KP4220230**	Price
7 - 36 in/lbs	1 in/lb	6-1/2	Yes	J6106ACERT	**KP4220240**	Price

Snap-on Industrial Brands | CDI Torque Products Multitorq Torque & Data System

MADE IN THE USA

Multitorq portable electronic torque meter displays torque readings from sensors that attach between sockets and driver. Accuracy +/- 1% of reading, 10-100% of sensor range. Sensors are sold separately, available in eight ranges from 2-20 in ozs to 150-1500 ft lbs



Features:

- Soft touch keys: hi/lo alarm, zero tare, set-up, units, store/recall/clear, send, statistics, enter
- Units of measurement: ft. lb., in. lb., in. oz., Nm, dNm, mkg, and cmkg
- Data storage/recall: 3500 measurements
- Certificate of accuracy traceable to NIST supplied with each transducer

Description	Order No.	Price
1-10 in lb Sensor	**KL45101IMT**	Price
2-20 in. oz Sensor	**KL452010MT**	Price
5-50 in lb Sensor	**KL45501IMT**	Price
10-100 ft lb Sensor	**KL451002FMT**	Price
20-200 in lb Sensor	**KL452001IMT**	Price
25-250 ft lb Sensor	**KL452503FMT**	Price
60-600 ft lb Sensor	**KL456004FMT**	Price
150-1500 ft lb Sensor	**KL4515005FMT**	Price
Interface Cable: RS232 to PC	**KL45160020**	Price
Multitorq Unit with powerpack, charger, and case	**KL451600MT**	Price

PRM PRO Torque Screwdriver

- Used for applying specific torque amount when fastening screws
- Easy turning mechanism to locate desired torque amount
- Torque screwdriver range 10-60 inch pounds
- Includes 19 fastener bits phillips, slotted, star and square
- Socket bit holder, torque screwdriver and sturdy case



Order No.	Price
KL486060	Price

Snap-on Industrial Brands | CDI Torque Products Micro-Adjustable Torque Screwdrivers

MADE IN THE USA

- Positive locking pull down adjustment knob
- Trilobular comfort grip
- Universal 1/4” hex bit holder with strong rare earth magnet
- Cam-over torque limiting clutch
- Easy-to-read window scale
- Lightweight ease-of-use
- Automatic lock in counterclockwise direction
- Accuracy +/– 6% clockwise direction, from 20-100% of full scale
- Individually serialized with matching certificate of calibration traceable to NIST



Torque Range	Increments	Order No.	Price
3 - 15 in/lbs	.2 in/lbs	**KL45151SM**	Price
5 - 40 in/lbs	.5 in/lbs	**KL45401SM**	Price
10 - 80 cNm	1 cNm	**KL4561NSM**	Price
20 - 100 in/oz	1 in/oz	**KL4561SM**	Price
40 - 200 cNm	2 cNm	**KL45151NSM**	Price
50 - 450 cNm	5 cNm	**KL45401NSM**	Price

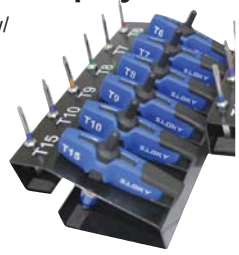
SLOKY® 13 Pc. TorxPlus® LT Combo Set



- LT Combo Set contains (1) blue LT handle, (6) torque adapters, and (6) 1" Torx Plus bits
- The sizes included are, 6IP, 7IP, 8IP, 9IP, 10IP, and 15IP, and the corresponding preset torques are 5.3, 8.0, 10.6, 12.4, 17.7, and 26.6 In-lb, which equal to 0.6, 0.9, 1.2, 1.4, 2.0, and 3.0 Nm
- The dimension of the T-type handle (LT) is 2 3/4" X 3/4" X 1 1/2" (L X W X H)
- The torque adapters which have the manufacturer defined torques are magnetized and color coded
- The high alloy steel bits are also magnetized and color coded with the hardness of 58-60 HRC

Order No.	Price
KL80STSIPLTS1	Price

SLOKY® 18 Pc. TorxPlus® LT Display Set



- LT Display Set contains (6) blue LT handles w/ torque adapters, (6) 1" Torx Plus bits, and (6) 2" Torx Plus bits in a steel stand.
- All the LT handles and steel stand are well marked with sizes.
- The sizes included are, 6IP, 7IP, 8IP, 9IP, 10IP, and 15IP, and the corresponding preset torques are 5.3, 8.0, 10.6, 12.4, 17.7, and 26.6 In-lb, which equal to 0.6, 0.9, 1.2, 1.4, 2.0, and 3.0 Nm.
- The dimension of the T-type handle (LT) is 2 3/4" X 3/4" X 1 1/2" (L X W X H).
- The torque adapters which have the manufacturer defined torques are magnetized and color coded.
- The high alloy steel bits are also magnetized and color coded with the hardness of 58-60 HRC.

Order No.	Price
KL80STSIPLTS4	Price

SLOKY® 20 Pc. TorxPlus® Twin Combo Set



- Twin Combo Set contains (1) blue LT and (1) small blue HD handles, (6) torque adapters, (6) 1" Torx Plus bits, and (6) 2" Torx Plus bits
- The sizes included are, 6IP, 7IP, 8IP, 9IP, 10IP, and 15IP, and the corresponding preset torques are 5.3, 8.0, 10.6, 12.4, 17.7, and 26.6 In-lb, which equal to 0.6, 0.9, 1.2, 1.4, 2.0, and 3.0 Nm
- The dimension of the T-type handle (LT) is 2-3/4" x 3/4" x 1-1/2" (L x W x H), and the small soft grip HD handle is 4" in length and 1-1/4" in diameter
- The torque adapters which have the manufacturer defined torques are magnetized and color coded
- The high alloy steel bits are also magnetized and color coded with the hardness of 58-60 HRC

Order No.	Price
KL80STSIPTWS1	Price

SLOKY® 13 Pc. Torx® LT Combo Set



- LT Combo Set contains (1) red LT handle, (6) torque adapters, and (6) 1" Torx bits
- The sizes included are, TX6, TX7, TX8, TX9, TX10, and TX15, and the corresponding preset torques are 5.3, 8.0, 10.6, 12.4, 17.7, and 26.6 In-lb, which equal to 0.6, 0.9, 1.2, 1.4, 2.0, and 3.0 Nm.
- The dimension of the T-type handle (LT) is 2-3/4" X 3/4" X 1-1/2" (L X W X H)
- The torque adapters which have the manufacturer defined torques are magnetized and color coded
- The high alloy steel bits are also magnetized and color coded with the hardness of 58-60 HRC

Order No.	Price
KL80STSTXLTS1	Price

SLOKY® 18 Pc. Torx® LT Display Set



- LT Display Set contains (6) red LT handles w/ torque adapters, (6) 1" Torx bits, and (6) 2" Torx bits in a steel stand
- All the LT handles and steel stand are well marked with sizes
- The sizes included are, TX6, TX7, TX8, TX9, TX10, and TX15, and the corresponding preset torques are 5.3, 8.0, 10.6, 12.4, 17.7, and 26.6 In-lb, which equal to 0.6, 0.9, 1.2, 1.4, 2.0, and 3.0 Nm
- The dimension of the T-type handle (LT) is 2 3/4" X 3/4" X 1 1/2" (L X W X H)
- The torque adapters which have the manufacturer defined torques are magnetized and color coded
- The high alloy steel bits are also magnetized and color coded with the hardness of 58-60 HRC

Order No.	Price
KL80STSTXLTS4	Price

SLOKY® 20 Pc. Torx® Twin Combo Set



- Twin Combo Set contains (1) red LT and (1) small red HD handles, (6) torque adapters, (6) 1" Torx bits, and (6) 2" Torx bits
- The sizes included are, TX6, TX7, TX8, TX9, TX10, and TX15, and the corresponding preset torques are 5.3, 8.0, 10.6, 12.4, 17.7, and 26.6 In-lb, which equal to 0.6, 0.9, 1.2, 1.4, 2.0, and 3.0 Nm
- The dimension of the T-type handle (LT) is 2 3/4" X 3/4" X 1 1/2" (L X W X H), and the small soft grip HD handle is 4" in length and 1 1/4" in diameter
- The torque adapters which have the manufacturer defined torques are magnetized and color coded
- The high alloy steel bits are also magnetized and color coded with the hardness of 58-60 HRC

Order No.	Price
KL80STSTXTWS1	Price

TITAN™ Digital Torque Adapter



- Converts any ratchet or breaker bar into a torque measuring tool
- Use to re-calibrate any type of torque wrench
- Includes calibrating block and (1) DC 3V, CR2032 battery

Drive	Torque Range	Order No.	Price
1/2	30-150 ft/lbs	**KP8223154**	Price

wiha Adjustable Torque Control Tools

Perfect for Carbide Insert Applications



- Improve productivity
- Reduce damaged tools & parts
- Improved quality control
- Certificates of Calibration included
- +/-6% Accuracy

Meets Specifications:

- ASME B107.14M
- BS EN 26789



Torque Range	Increments	Order No.	Price
5 - 10 in/lbs	.5 in/lbs	**KN5428502**	Price
10 - 50 in/lbs	2 in/lbs	**KN5428506**	Price
15 - 80 in/oz	2.5 in/oz	**KN5428501**	Price
20 - 70 in/lbs	2 in/lbs	**KN5428508**	Price

wiha TorxPlus® TorqueControl Blades



Description	Order No.	Price
IP5 x 175mm	**KN5428571**	Price
IP6 x 175mm	**KN5428572**	Price
IP7 x 175mm	**KN5428573**	Price
IP8 x 175mm	**KN5428574**	Price
IP9 x 175mm	**KN5428575**	Price
IP10 x 175mm	**KN5428576**	Price
IP15 x 175mm	**KN5428577**	Price
IP20 x 175mm	**KN5428578**	Price
IP25 x 175mm	**KN5428579**	Price

wiha Torque Control Adapters for Bits & Sockets

- Improve productivity
- Reduce damaged tools & parts
- Improved quality control
- Certificates of Calibration included
- +/-6% Accuracy







Meets Specifications

- ASME B107.14M
- BS EN 26789

Adapters	Order No.	Price
Adapter blade for precision microbits	**KN5428583**	Price
Bit holder for standard 1/4" bits	**KN5428581**	Price
Square Drive Adapter for 1/4" sockets	**KN5428582**	Price

wiha 53 Pc. Adjustable Torque Drive Bit Set in Storage Box

- Torque handle: 10-50 inch lbs
- 1/4" Bit holder: Non magnetic
- Slotted bit: 4.5, 5.5 ,6.5, 8.0mm
- Phillips bits: #0, #1, #2, #3
- Torx bits: T6, T7, T8, T9, T10, T15, T20, T25, T27, T30
- Hex bits Inch: 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16
- Hex bits Metric: 1.5, 2, 2.5, 3, 4, 5 ,6, 8mm
- Pozidriv bits: #0, #1, #2, #3
- Torq-Set bits: #4, #5, #6, #8
- Square bits: #1, #2, #3
- Tri Wing bits: #0, #1, #2, #3, #4



Order No.	Price
KN5428595	Price

Bondhus ClickSet™ Torque Limiting Device with Tuff-Kote™ Finish

- Wide range of factory preset torque limiting handles- no adjustment needed
- When preset torque level is reached, the mechanism slips and makes an audible "click"
- Protects from overtorquing
- Reduces fastener wear and stripping
- Reduces potential damage to carbide inserts



Torque Range	Order No.	Price
10.6 in/lbs - 1.2 Nm	**KN5350010**	Price
12.4 in/lbs - 1.4 Nm	**KN5350012**	Price
22.1 in/lbs - 2.5 Nm	**KN5350017**	Price
31 in/lbs - 3.5 Nm	**KN5350026**	Price

wiha 24 Pc. Adjustable Torque Control Micro Bit Set in Metal Box

Includes:

- Torque handle
- Micro bit holder
- Slotted bits
- Phillips bits
- Torx bits
- Hex bits inch
- 7.5 to 20 inch lbs
- Non magnetic
- 1.5, 2, 3, 4mm
- #00, #0, #1
- T6, T7, T8, T9, T10, T15, .05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32"



Order No.	Price
KN5428590	Price

wiha TorxPlus® Torque Control Set

- EN ISO 6798, BS EN 26789, ASME B107.14M
- 8 Pc. Set Includes: IP7, IP8, IP9, IP10, IP15, IP20
- Cushion grip handle range 10-50 inch lbs
- With certificate of calibration



Order No.	Price
KN5428598	Price

wiha 14 Pc. Adjustable Torque TORX® & TorxPlus® Set in Pouch

- Torque handle: 10-50 inch lbs
- Torx sizes: T7, 8, 9, 10, 15, 20
- Torx plus: IP7, 8, 9, 10, 15, 20
- In canvas storage pouch
- +/-6% Repeatable accuracy
- Includes certificate of calibration



Order No.	Price
KN5428599	Price

PROTO TEKTON Eklind BONDHUS wiha

Balldrivers & Hex Key Sets

- Sets come in plastic holder that firmly retains the keys in size marked holes
- Balldriver provides a 25° angle entry
- Heat treated steel-fractional & metric
- Wiha brand has Magic Ring has spring hardened steel ring in key that holds the screw on the tool for an exact fit and is hard chrome plated, all other brands are black oxide treated
- Available in long & short arm


KM5013222


KN5369637


KP4227010


KN5367099

Style - Fractional							
Pcs. Per Set	Driver Style	Arm Style	Set Includes	Made In	Brand Name	Order No.	Price
6	Hex	Long	Jumbo 3/8, 7/16, 1/2, 9/16, 5/8, 3/4	Global	TEKTON	**KP852535**	Price
7	Hex	Short Arm	Model #J4982 - 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	USA	Proto	**KP4227015**	Price
7	Hex	Long	5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	USA	Eklind	**KM5010207**	Price
11	Hex	Short Arm	Model #J4981- .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, Molded plastic holder	USA	Proto	**KP4227010**	Price
11	Balldriver	Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	USA	Eklind	**KM5013211**	Price
11	Hex	Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	USA	Eklind	**KM5010211**	Price
11	Hex	Short	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	USA	Eklind	**KM5010111**	Price
12	Balldriver	Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16	USA	Bondhus	**KN5310936**	Price
12	Hex	Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16	USA	Bondhus	**KN5312136**	Price
13	Balldriver	Long	3/64, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	Global	TEKTON	**KP8525262**	Price
13	Hex	Long	3/64, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	Global	TEKTON	**KP8525232**	Price
13	Double Ball	Stubby	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	USA	Bondhus	**KN5367037**	Price
13	Hex	Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	USA	Bondhus	**KN5312137**	Price
13	Balldriver	Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	USA	Bondhus	**KN5310937**	Price
13	Balldriver	Color Code Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	USA	Bondhus	**KN5369637**	Price
13	Hex	Short	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	USA	Eklind	**KM5010113**	Price
13	Hex	Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	USA	Eklind	**KM5010213**	Price
13	Balldriver	Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, in Metal Box	USA	Eklind	**KM5013213**	Price
13	Balldriver	Long	MagicRing Ball End Sizes: 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 Standard Ball End Sizes .050, 1/16, 5/64, 3/32, 7/64 Hard Chromed Finish In ErgoStar Holder	Germany	Wiha	**KN5466991**	Price
13	Hex	Color Code	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	Germany	Wiha	**KN5436986**	Price
13	Hex	Short Arm	Model #J4980 - Short Arm .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, Molded plastic holder	USA	Proto	**KP4227000**	Price
14	Hex	Long Arm	Model #J4987 - Long arm, .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 1/2, Metal storage box	USA	Proto	**KP4227035**	Price
16	Balldriver	Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8, in Metal Box	USA	Eklind	**KM5013216**	Price
18	Hex	Short Arm	Model #J4986 - .028, .035, .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8	USA	Proto	**KP4227005**	Price
18	Hex	Long & Short	9 Pc. Short Arm: .050, 1/16, 5/64, 3/32, 7/64, 1/8, 5/32, 3/16, 7/32; 9-Pc. Long Arm: 1/16, 5/64, 3/32, 1/8, 9/64, 5/32, 3/16, 1/4, 5/16	USA	Eklind	**KM5010018**	Price

Style - Fractional & Metric Combined							
Pcs. Per Set	Driver Style	Arm Style	Set Includes	Made In	Brand Name	Order No.	Price
18	Balldriver	Long	Contains KM5013211 & KM5013607	USA	Eklind	**KM5013218**	Price
22	Hex	Long	Contains KM5010213 and KM5010609	USA	Eklind	**KM5010222**	Price
22	Hex	Long & Short	Contains KM5010213 & KM5010509	USA	Eklind	**KM5010022**	Price
22	Balldriver	Color Code Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 and 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0mm	USA	Bondhus	**KN5369600**	Price
22	Balldriver	Long	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8-Inch and 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0, and 10.0mm	USA	Bondhus	**KN5320199**	Price
22	Hex	Long	Contains KN5312137 & KN5312199	USA	Bondhus	**KN5322199**	Price
22	Balldriver	Long	Set Standard & Metric	USA	Eklind	**KM5013222**	Price
25	Hex	Long & Short	25 pc Hex Key Set Includes SAE Sizes: 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 & 3/8 Long Arm and Metric 1.27, 1.5, 2, 2.5, 3, 4, 4.5, 5, 5.5, 6, 7, 8 & 10 mm Short Arm and Storage Holder	Global	Titan	**KP8212712**	Price
26	Hex	Long	3/64, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8; 1.27, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 8.0, 10.0mm	Global	TEKTON	**KP8525252**	Price
26	Balldriver	Long	(SAE) 3/64, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 1/4, 5/16, 3/8 (MM) 2.27, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 8.0, 10.0mm	Global	TEKTON	**KP8525282**	Price
30	Hex	Long & Short	15 Pc. Short Arm:.7, .9, 1.3, 1.5, 2.0, 2.5, 3.0, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 10.0mm; 15 Pc. Long Arm: .028, .035, .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	Global	TEKTON	**KP8525253**	Price

PROTO Eklind wiha Tools that work for you BONDHUS TEKTON

Metric Balldrivers & Hex Key Sets

- Sets come in plastic holder that firmly retains the keys in size marked holes
- Balldriver provides a 25° angle entry
- Heat treated steel- metric
- Wiha brand has Magic Ring has spring hardened steel ring in key that holds the screw on the tool for an exact fit and is hard chrome plated, all other brands are black oxide treated
- Available in long & short arm


KP4227030


KN5367099


KM5013609


KN5369699


KP8525272


KN5466990

Pcs. Per Set	Driver Style	Arm Style	Set Includes	Made In	Brand Name	Order No.	Price
6	Balldriver	Long	1.5, 2, 2.5, 3, 4, 5mm	USA	Bondhus	**KN5310946**	Price
6	Jumbo Hex	Long	8, 10, 12, 14, 17, 19mm	China	TEKTON	**KP852540**	Price
7	Balldriver	Long	1.5, 2, 2.5, 3, 4, 5, 6mm	USA	Eklind	**KM5013607**	Price
7	Hex	Long	1.5, 2, 2.5, 3, 4, 5, 6mm	USA	Eklind	**KM5010607**	Price
9	Balldriver	Long	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm	USA	Eklind	**KM5013609**	Price
9	Hex	Long	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm	USA	Eklind	**KM5010609**	Price
9	Balldriver	Long	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm	USA	Bondhus	**KN5310999**	Price
9	Double Ball	Long	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm	Global	Bondhus	**KN5367099**	Price
9	Hex	Color Code	1.5, 2, 2.5, 3, 4, 5, 6, 8, & 10mm	Germany	Wiha	**KN5436987**	Price
9	Balldriver	Long	MagicRing Ball End on 3, 4, 5, 6, 8, 10mm Standard Ball End On 1.5, 2, 2.5mm, Hard Chromed Finish In ErgoStar Holder	Germany	Wiha	**KN5466990**	Price
9	Balldriver	L-Wrench	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm	USA	Proto	**KP4227020**	Price
9	Ball End	Color Code Long	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm	USA	Bondhus	**KN5369699**	Price
9	Hex	Long	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm	USA	Bondhus	**KN5312199**	Price
9	Hex	Short	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm	USA	Eklind	**KM5010509**	Price
12	Balldriver	Long	1.5,2,2.5,3,4,4.5,5,5.5,6,7,8,10mm	Global	Proferred	**KV45T35005**	Price
13	Balldriver	Long	1.27, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 8, 10mm	Global	TEKTON	**KP8525272**	Price
13	Balldriver	Long	1.27, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 8, 10mm	Global	Generic	**KP8310315**	Price
13	Balldriver	Long	1.3, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10, 12, 14, 17mm, in Metal Box	USA	Eklind	**KM5013613**	Price
15	Hex	Short Arm	0.7, 0.9, 1.3 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10, 12, 14, 17.0mm	USA	Proto	**KP4227045**	Price

BONDHUS Individual Balldriver® Screwdrivers with new Ergo-handles

- Standard and Extra Long Lengths
- Protanium® steel
- Pro Guard™ dry finish
- Lifetime warranty

MADE IN THE USA



		Extra Long Blade		Regular Blade		
Hex Size (in.)	Blade Length (in.)	Order No.	Price	Blade Length (in.)	Order No.	Price
.050	3.2	-	-	3.2	**KN5310602**	Price
1/16	3.3	-	-	3.3	**KN5310603**	Price
5/64	5	**KN5310704**	Price	3.5	**KN5310604**	Price
3/32	5.5	**KN5310705**	Price	3.7	**KN5310605**	Price
7/64	5.9	**KN5310706**	Price	2.9	**KN5310606**	Price
1/8	6.4	**KN5310707**	Price	3.1	**KN5310607**	Price
9/64	6.9	**KN5310708**	Price	3.3	**KN5310608**	Price
5/32	7.4	**KN5310709**	Price	3.6	**KN5310609**	Price
3/16	7.9	**KN5310710**	Price	3.7	**KN5310610**	Price
7/32	8.4	**KN5310711**	Price	4.2	**KN5310611**	Price
1/4	8.9	**KN5310712**	Price	4.7	**KN5310612**	Price
5/16	9.5	**KN5310713**	Price	5.6	**KN5310613**	Price
3/8	9.9	**KN5310714**	Price	6.5	**KN5310614**	Price
7/16	7.6	-	-	7.6	**KN5310615**	Price
1/2	8.6	-	-	8.6	**KN5310616**	Price

BONDHUS Balldriver Hex Screwdriver Sets

- All sets come complete with pouch
- New Ergo handles


KN5310645

Style - Inch Sets			
Model No.	Description (in.)	Order No.	Price
BSX 7	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	**KN5310645**	Price
BSX 8	7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16	**KN5310633**	Price
BSX 11L	(Long Blades) 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	**KN5310737**	Price

Style - L-Wrench			
Model No.	Description (in.)	Order No.	Price
BLX13XL	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	**KN5310637**	Price

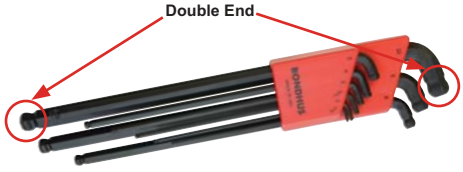
Style - Metric Sets			
Model No.	Description (in.)	Order No.	Price
BSX 6	1.5, 2, 2.5, 3, 4, 5mm	**KN5310686**	Price
BSX 8L	(Long Blades) 2, 2.5, 3, 4, 5, 6, 8, 10mm	**KN5310733**	Price
BSX 9	1.5, 2, 2.5, 3, 3.5, 4, 5, 6, 8, 10mm	**KN5310699**	Price

BONDHUS Double Sided Ball End L-Wrenches

- Much better leverage angle than ever before!
- Exclusive MaxTorque™ ball end delivers 50% more torque than conventional ball ends
- Short ball end inserts into screw and works at a 15° angle
- Standard Bondhus ball end on long arm inserts into screw and works at a 25° angle
- Lifetime warranty

No. of Pieces	Set Includes	Arm Style	Driver Style	Order No.	Price
9	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm	Long	Double Ball	**KN5367099**	Price
13	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8"	Long	Double Ball	**KN5367037**	Price





Eklind® & Import Individual Hex Keys - Long and Short Arm



- Made from heat treated alloy steel
- Black oxide

MADE IN THE USA

Type - Fractional Hex Key								
	Eklind				Quality Import			
	Long		Short		Long		Short	
Size	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
.028	-	-	KM5015101	Price	-	-	KN50001	Price
.035	KM5015202	Price	KM5015102	Price	-	-	KN50002	Price
.050	KM5015203	Price	KM5015103	Price	KN51103	Price	KN50003	Price
1/16	KM5015204	Price	KM5015104	Price	KN51104	Price	KN50004	Price
5/64	KM5015205	Price	KM5015105	Price	KN51105	Price	KN50005	Price
3/32	KM5015206	Price	KM5015106	Price	KN51106	Price	KN50006	Price
7/64	KM5015207	Price	KM5015107	Price	KN51107	Price	KN50007	Price
1/8	KM5015208	Price	KM5015108	Price	KN51108	Price	KN50008	Price
9/64	KM5015209	Price	KM5015109	Price	KN51109	Price	KN50009	Price
5/32	KM5015210	Price	KM5015110	Price	KN51110	Price	KN50010	Price
3/16	KM5015212	Price	KM5015112	Price	KN51112	Price	KN50012	Price
7/32	KM5015214	Price	KM5015114	Price	KN51114	Price	KN50014	Price
1/4	KM5015216	Price	KM5015116	Price	KN51116	Price	KN50016	Price
5/16	KM5015220	Price	KM5015120	Price	KN51120	Price	KN50020	Price
3/8	KM5015224	Price	KM5015124	Price	KN51124	Price	KN50024	Price
7/16	KM5015228	Price	KM5015128	Price	KN51128	Price	KN50028	Price
1/2	KM5015232	Price	KM5015132	Price	KN51132	Price	KN50032	Price
9/16	KM5015236	Price	KM5015136	Price	KN51136	Price	KN50036	Price
5/8	KM5015240	Price	KM5015140	Price	KN51140	Price	KN50040	Price
3/4	KM5015248	Price	KM5015148	Price	KN51148	Price	KN50048	Price
7/8	KM5015256	Price	KM5015156	Price	KN51156	Price	KN50056	Price
1	KM5015264	Price	KM5015164	Price	KN51164	Price	KN50064	Price

Type - Metric Hex Key						
	Eklind				Quality Import	
	Long		Short		Short	
Size	Order No.	Price	Order No.	Price	Order No.	Price
.7	-	-	KM5015500	Price	-	-
.9	KM5015601	Price	KM5015501	Price	-	-
1.3	KM5015602	Price	KM5015502	Price	-	-
1.5	KM5015603	Price	KM5015503	Price	KN60015	Price
2	KM5015604	Price	KM5015504	Price	KN60020	Price
2.5	KM5015605	Price	KM5015505	Price	KN60025	Price
3	KM5015606	Price	KM5015506	Price	KN60030	Price
4	KM5015608	Price	KM5015508	Price	KN60040	Price
5	KM5015610	Price	KM5015510	Price	KN60050	Price
6	KM5015612	Price	KM5015512	Price	KN60060	Price
8	KM5015616	Price	KM5015516	Price	KN60080	Price
10	KM5015620	Price	KM5015520	Price	KN60100	Price
12	KM5015624	Price	KM5015524	Price	KN60120	Price
14	KM5015628	Price	KM5015528	Price	KN60140	Price
17	KM5015634	Price	KM5015534	Price	KN60170	Price
19	KM5015638	Price	KM5015538	Price	KN60190	Price

Individual Ball Drivers Fraction & Metric



- Long arm
- Heat treated
- Eklind sold per box quantity only

MADE IN THE USA

Style - Fractional Keys					
		Bondhus		Eklind	
Size (in./mm)	Approx. Blade Length (in.)	Order No.	Price	Order No.	Price
.050	2-7/8	KN5310902	Price	KM5018203	Price
1/16	3	KN5310903	Price	KM5018204	Price
5/64	3-1/4	KN5310904	Price	KM5018205	Price
3/32	3-7/16	KN5310905	Price	KM5018206	Price
7/64	3-9/16	KN5310906	Price	KM5018207	Price
1/8	3-3/4	KN5310907	Price	KM5018208	Price
9/64	4	KN5310908	Price	KM5018209	Price
5/32	4	KN5310909	Price	KM5018210	Price
3/16	4-1/2	KN5310910	Price	KM5018212	Price
7/32	5	KN5310911	Price	KM5018214	Price
1/4	5-3/4	KN5310912	Price	KM5018216	Price
5/16	6	KN5310913	Price	KM5018220	Price
3/8	6-3/4	KN5310914	Price	KM5018224	Price
7/16	7-1/2	KN5310915	Price	-	-
1/2	8-1/4	KN5310916	Price	-	-
9/16	9	KN5310917	Price	-	-
5/8	9-3/4	KN5310918	Price	-	-
3/4	11-1/4	KN5310919	Price	-	-

Style - Metric Keys					
		Bondhus		Eklind	
Size (in./mm)	Approx. Blade Length (in.)	Order No.	Price	Order No.	Price
1.27	2-3/4	KN5310949	Price	-	-
1.5	3	KN5310950	Price	KM5018603	Price
2	3-3/4	KN5310952	Price	KM5018604	Price
2.5	3-1/2	KN5310954	Price	KM5018605	Price
3	3-3/4	KN5310956	Price	KM5018606	Price
3.5	4	KN5310958	Price	-	-
4	4-1/4	KN5310960	Price	KM5018608	Price
4.5	4-3/4	KN5310962	Price	-	-
5	5	KN5310964	Price	KM5018610	Price
5.5	5-1/2	KN5310966	Price	-	-
6	6	KN5310968	Price	KM5018612	Price
7	6	KN5310970	Price	-	-
8	6-3/4	KN5310972	Price	KM5018616	Price
9	7	KN5310974	Price	-	-
10	7-1/2	KN5310976	Price	KM5018620	Price
11	8	KN5310978	Price	-	-
12	8-3/4	KN5310980	Price	-	-
14	10	KN5310984	Price	-	-
17	11	KN5310986	Price	-	-
19	11-1/4	KN5310988	Price	-	-

PROTO® Hex Keys

MADE IN THE USA



- Heat-treated for durability
- Rust resistant, black oxide finish

Fractional - Long Arm				
Size	OAL	Model No.	Order No.	Price
.050	3	J46203	KP4227310	Price
1/16	3	J46204	KP4227315	Price
5/64	3-3/16	J46205	KP4227320	Price
3/32	3-3/8	J46206	KP4227325	Price
7/64	3-1/2	J46207	KP4227330	Price
1/8	3-3/4	J46208	KP4227335	Price
9/64	4	J46209	KP4227340	Price
5/32	4	J46210	KP4227345	Price
3/16	4-1/2	J46212	KP4227350	Price
7/32	5	J46214	KP4227355	Price
1/4	5	J46216	KP4227360	Price
5/16	6	J46220	KP4227365	Price
3/8	6-3/4	J46224	KP4227370	Price
7/16	7-1/2	J46228	KP4227375	Price
1/2	8	J46232	KP4227380	Price

Fractional - Short Arm				
Size	OAL	Model No.	Order No.	Price
.028	1-1/4	J46101	KP4227145	Price
.035	1-1/4	J46102	KP4227150	Price
.050	1-11/16	J46103	KP4227205	Price
1/16	1-3/4	J46104	KP4227210	Price
5/64	1-7/8	J46105	KP4227215	Price
3/32	2	J46106	KP4227220	Price
7/64	2-1/8	J46107	KP4227225	Price
1/8	2-1/4	J46108	KP4227230	Price
9/64	2-3/8	J46109	KP4227235	Price
5/32	2-1/2	J46110	KP4227240	Price
3/16	2-3/4	J46112	KP4227245	Price
7/32	3	J46114	KP4227250	Price
1/4	3-1/4	J46116	KP4227255	Price
5/16	3-3/4	J46120	KP4227260	Price
3/8	4-1/4	J46124	KP4227265	Price
7/16	4-3/4	J46128	KP4227140	Price
1/2	5-1/4	J46132	KP4227155	Price
9/16	5-3/4	J46136	KP4227160	Price
5/8	6-1/4	J46140	KP4227165	Price

Metric - Short Arm				
Size	OAL	Model No.	Order No.	Price
1.5mm	44mm	J46306	KP4227185	Price
2mm	49mm	J46308	KP4227270	Price
2.5mm	55mm	J46310	KP4227275	Price
3mm	62mm	J46312	KP4227280	Price
4mm	68mm	J46314	KP4227285	Price
5mm	78mm	J46316	KP4227290	Price
6mm	88mm	J46318	KP4227295	Price
8mm	98mm	J46320	KP4227300	Price
10mm	109mm	J46322	KP4227305	Price
12mm	122mm	J46324	KP4227190	Price
14mm	136mm	J46326	KP4227195	Price
17mm	156mm	J46328	KP4227200	Price

T-Handle Ball & Hex Driver Sets

- Cushioned grip
- Balldriver style turns 360° and up to a 25° angle
- Finished to resist rust

MADE IN THE USA



KN5433496



KM5060809



KN5313138

wiha Eklind BONDHUS

Style - Fractional								
			Wiha		Eklind		Bondhus	
Pcs. Per Set	Driver Style	Set Includes	Order No.	Price	Order No.	Price		
6	Balldriver	5/32, 3/16, 7/32, 1/4, 5/16, 3/8	-	-	-	-	**KN5313146**	Price
8	Balldriver	1/8†, 9/64†, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	**KN5433498**	Price	-	-	-	-
9	Balldriver	5/64, 3/32†, 7/64†, 1/8†, 9/64†, 5/32, 3/16, 7/32, 1/4	-	-	**KM5060809**	Price	-	-
10	Balldriver	3/32†, 7/64†, 1/8†, 9/64†, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, Stand	-	-	-	-	**KN5313190**	Price
10	Balldriver	3/32†, 7/64†, 1/8†, 9/64†, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	-	-	-	-	**KN5313138**	Price
11	Balldriver	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	-	-	**KM5060811**	Price	-	-
9	Hex	5/64, 3/32†, 7/64†, 1/8†, 9/64†, 5/32, 3/16, 7/32, 1/4	-	-	**KM5060909**	Price	-	-
11	Hex	5/64, 3/32†, 7/64†, 1/8†, 9/64†, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	-	-	**KM5060911**	Price	-	-

Style - Metric								
			Wiha		Eklind		Bondhus	
Pcs. Per Set	Driver Style	Set Includes	Order No.	Price	Order No.	Price	Order No.	Price
6	Balldriver	2, 2.5, 3, 4, 5, 6mm	-	-	**KM5064806**	Price	-	-
8	Balldriver	2, 2.5, 3, 4, 5, 6, 8, 10mm	-	-	**KM5064808**	Price	-	-
8	Balldriver	2†, 2.5†, 3, 4, 5, 6, 8, 10mm	**KN5433496**	Price	-	-	**KN5313187**	Price
6	Hex	2, 2.5, 3, 4, 5, 6mm	-	-	**KM5064906**	Price	-	-
8	Hex	2, 2.5, 3, 4, 5, 6, 8, 10mm	-	-	**KM5064908**	Price	-	-

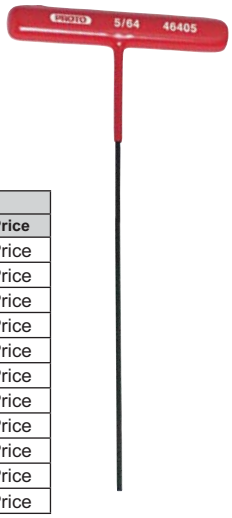
†Straight hex, not ball end

PROTO T-Handle Hex Keys

MADE IN THE USA

- T-handle design for greater torque
- Cushion grip handle provides added comfort
- Hex size printed on handle for easy size identification

New!



Fractional				
Size	OAL	Model No.	Order No.	Price
5/64	6	J46405	**KP4227385**	Price
3/32	6	J46406	**KP4227390**	Price
7/64	6	J46407	**KP4227395**	Price
1/8	6	J46408	**KP4227400**	Price
9/64	6	J46409	**KP4227405**	Price
5/32	6	J46410	**KP4227410**	Price
3/16	6	J46412	**KP4227415**	Price
7/32	6	J46414	**KP4227420**	Price
1/4	6	J46416	**KP4227425**	Price
5/16	6	J46420	**KP4227430**	Price
3/8	6	J46424	**KP4227435**	Price

Metric				
Size	OAL	Model No.	Order No.	Price
2mm	152mm	J46508	**KP4227465**	Price
2.5mm	152mm	J46510	**KP4227440**	Price
3mm	152mm	J46512	**KP4227445**	Price
4mm	152mm	J46514	**KP4227450**	Price
5mm	152mm	J46516	**KP4227455**	Price
6mm	152mm	J46518	**KP4227460**	Price

PROTO 11 Pc T-Handle Hex Key Set-Fractional

- T-handle design for greater torque
- Cushion grip handle provides added comfort



New!

MADE IN THE USA

Sizes Included	Model No.	Order No.	Price
5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	J4968	**KP4227060**	Price

PROTO 6 Pc T-Handle Hex Key Set-Metric

- T-handle design for greater torque
- Cushion grip handle provides added comfort
- Hex size printed on handle for easy size identification
- 6" Overall length

New!

MADE IN THE USA



Set Includes	Model No.	Order No.	Price
2.0, 2.5, 3.0, 43.0, 5.0, 6.0mm	J4969	**KP4227065**	Price

Eklind® Plain Style T-Handle Hex Key Sets with Stand

MADE IN THE USA



# of Keys	OAL (in.)	Key Sizes (in./mm)	Order No.	Price
8	6	2, 2.5, 3, 4, 5, 6, 8, 10mm	KM5036168	Price
8	9	2, 2.5, 3, 4, 5, 6, 8, 10mm	KM5036198	Price
10	6	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	KM5030160	Price
10	9	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	KM5030190	Price

Eklind® Cushion Grip T-Handle Hex Key Sets w/Stand

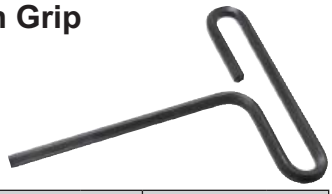
MADE IN THE USA



Arm Length (in./mm)	Key Sizes (in./mm)	Order No.	Price
6	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	KM5050160	Price
9	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	KM5050190	Price
6	2, 2.5, 3, 4, 5, 6, 8, 10mm	KM5056168	Price
9	2, 2.5, 3, 4, 5, 6, 8, 10mm	KM5056198	Price

Eklind® Individual Plain Grip T-Handle Hex Keys

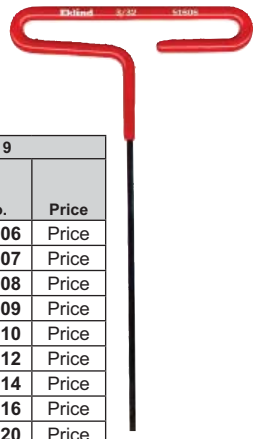
MADE IN THE USA



	3		6		9	
Hex Width (in.)-Across Flats	Order No.	Price	Order No.	Price	Order No.	Price
3/32	KM5031306	Price	KM5031606	Price	KM5031906	Price
7/64	KM5031307	Price	KM5031607	Price	KM5031907	Price
1/8	KM5031308	Price	KM5031608	Price	KM5031908	Price
9/64	KM5031309	Price	KM5031609	Price	KM5031909	Price
5/32	KM5031310	Price	KM5031610	Price	KM5031910	Price
3/16	KM5031312	Price	KM5031612	Price	KM5031912	Price
7/32	KM5031314	Price	KM5031614	Price	KM5031914	Price
1/4	KM5031316	Price	KM5031616	Price	KM5031916	Price
5/16	KM5031320	Price	KM5031620	Price	KM5031920	Price
3/8	KM5031324	Price	KM5031624	Price	KM5031924	Price

Eklind® Cushion Grip Individual T-Handle Hex Keys

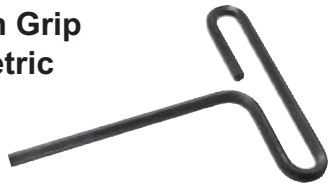
MADE IN THE USA



		6		9	
Hex Width (in.)-Across Flats	Handle Width (in.)	Order No.	Price	Order No.	Price
3/32	3	KM5051606	Price	KM5051906	Price
7/64	3	KM5051607	Price	KM5051907	Price
1/8	3	KM5051608	Price	KM5051908	Price
9/64	3	KM5051609	Price	KM5051909	Price
5/32	3	KM5051610	Price	KM5051910	Price
3/16	4	KM5051612	Price	KM5051912	Price
7/32	4	KM5051614	Price	KM5051914	Price
1/4	4	KM5051616	Price	KM5051916	Price
5/16	6	KM5051620	Price	KM5051920	Price
3/8	6	KM5051624	Price	KM5051924	Price

Eklind® Individual Plain Grip T-Handle Hex Keys—Metric

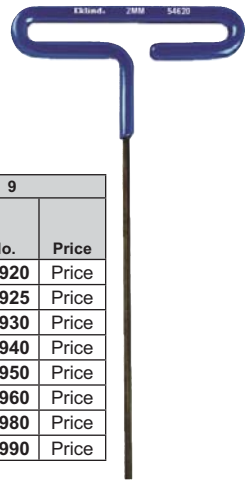
MADE IN THE USA



		6		9	
Hex Width (mm)	Handle Width (in.)	Order No.	Price	Order No.	Price
2	76mm (3 in.)	KM5034620	Price	KM5034920	Price
2.5	76mm (3 in.)	KM5034625	Price	KM5034925	Price
3	76mm (3 in.)	KM5034630	Price	KM5034930	Price
4	76mm (3 in.)	KM5034640	Price	KM5034940	Price
5	100mm (4 in.)	KM5034650	Price	KM5034950	Price
6	100mm (4 in.)	KM5034660	Price	KM5034960	Price
8	152mm (6 in.)	KM5034680	Price	KM5034980	Price
10	152mm (6 in.)	KM5034690	Price	KM5034990	Price

Eklind® Cushion Grip Individual T-Handle Hex Keys—Metric

MADE IN THE USA



		6		9	
Hex Width (mm)	Handle Width (in.)	Order No.	Price	Order No.	Price
2	76mm (3 in.)	KM5054620	Price	KM5054920	Price
2.5	76mm (3 in.)	KM5054625	Price	KM5054925	Price
3	76mm (3 in.)	KM5054630	Price	KM5054930	Price
4	76mm (3 in.)	KM5054640	Price	KM5054940	Price
5	100mm (4 in.)	KM5054650	Price	KM5054950	Price
6	100mm (4 in.)	KM5054660	Price	KM5054960	Price
8	152mm (6 in.)	KM5054680	Price	KM5054980	Price
10	152mm (6 in.)	KM5054690	Price	KM5054990	Price

Eklind® Plain Grip T-Handle Hex Key Set

6" or 9" Long in Vinyl Pouches

MADE IN THE USA



Arm Length (in./mm)	Key Sizes (in.)	Order No.	Price
6	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	KM5033168	Price
6	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	KM5033610	Price
9	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	KM5033198	Price
9	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	KM5033910	Price
6	2, 2.5, 3, 4, 5, 6, 8, 10mm	KM5035168	Price
6	2.5, 3, 4, 5, 6mm	KM5035165	Price
9	2, 2.5, 3, 4, 5, 6, 8, 10mm	KM5035198	Price
9	2.5, 3, 4, 5, 6mm	KM5035195	Price

PROTO Folding Hex Key Sets

- Black oxide bits are 1-1/2 to 2" long



KP4227120

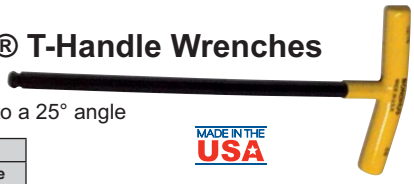

KP4227075


KP4227090

Keys in Set	Driver Style	Sizes Included	Case	Key Length	Model No.	Order No.	Price
5	Hex	3/16, 7/32, 1/4, 5/16, 3/8	Chrome Plated Steel Case - 5-1/4" Long	2-7/16 - 3-1/4	J4994	**KP4227110**	Price
6	Hex	3.0, 4.0, 5.0, 6.0, 8.0, 10.0mm	Chrome Plated Steel Case - 6-1/2" Long	5	J4973	**KP4227115**	Price
6	Hex	3.0, 4.0, 5.0, 6.0, 8.0, 10.0mm	Plastic Case - 6" Long	2-3/16 - 3-7/8	J4973CG	**KP4227120**	Price
6	Hex	5/32, 3/16, 7/32, 1/4, 5/16, 3/8	Plastic Case - 5-1/2" Long	1-7/16 - 2-3/4	J4996CG	**KP4227095**	Price
7	Hex	1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0mm	Chrome Plated Steel Case - 3-1/2" Long	3	J4974	**KP4227100**	Price
7	Hex	1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0mm	Plastic Case - 3" Long	3	J4974CG	**KP4227125**	Price
8	Hex	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32	Chrome Plated Steel Case - 3" Long	1-1/4 - 1-5/16	J4992	**KP4227085**	Price
8	Hex	3/32, 7,64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	Chrome Plated Steel Case - 5-1/4" Long	4	J4991	**KP4227105**	Price
8	Torx®	T8, T10, T15, T20, T25, T27, T30 & T40	Plastic Case	2-1/4 - 3-1/8	J4979TXCG	**KP4227135**	Price
8	Torx®	T9, T10, T15, T20, T25, T27, T30 & T40	Chrome Plated Steel Case	3	J4979TX	**KP4227130**	Price
9	Hex	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	Chrome Plated Steel Case - 3-5/8" Long	1-1/2 - 2	J4978	**KP4227070**	Price
9	Hex	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	Plastic Case - 3" Long	1-1/4 - 1-5/16	J4992CG	**KP4227090**	Price
9	Hex	5/64, 3/32, 7/64, 1/8, 9/64, 5/32,3/16, 7/32, 1/4	Chrome Plated Steel Case - 4-1/2" Long	1-7/16 - 2-3/4	J4993	**KP4227075**	Price
9	Hex	5/64, 3/32, 7/64, 1/8, 9/64, 5/32,3/16, 7/32, 1/4	Plastic Case - 4" Long	1 - 2	J4993CG	**KP4227080**	Price

BONDHUS Balldriver® T-Handle Wrenches

- Cushion grip
- Balldriver style turns 360° and up to a 25° angle



Style - Individual Inch Size			
Size	Length	Order No.	Price
3/32	6.1	**KN5313205†**	Price
7/64	6.8	**KN5313206†**	Price
1/8	7.6	**KN5313207†**	Price
9/64	8.3	**KN5313208†**	Price
5/32	9.1	**KN5313109**	Price
3/16	9.8	**KN5313110**	Price
7/32	10.3	**KN5313111**	Price
1/4	10.8	**KN5313112**	Price
5/16	11.4	**KN5313113**	Price
3/8	11.8	**KN5313114**	Price

Style - Individual Metric Size			
Size	Length	Order No.	Price
10	12.1	**KN5313176**	Price
2.5	6.8	**KN5313254†**	Price
3	7.7	**KN5313256†**	Price
4	8.7	**KN5313160**	Price
5	9.7	**KN5313164**	Price
6	10.5	**KN5313168**	Price
8	11.2	**KN5313172**	Price

†Balldriver feature unavailable for size

BONDHUS Pivot Head Hex Key Sets

HEX•PRO™

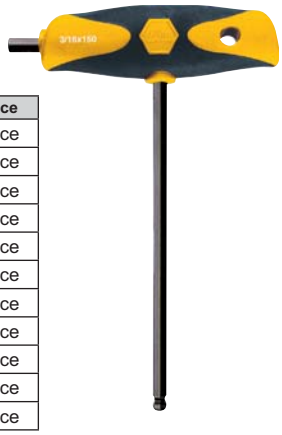
- Head pivots 180°
- Fits Inch and Metric screws
- Heat treated high quality industrial tool steel
- Long handles for extra reach
- Matte chrome finish to prevent corrosion


KN5300009


KN5300010

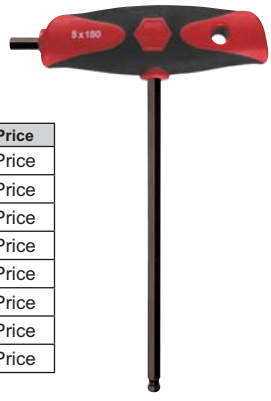
No. of Pieces	Set Includes	Order No.	Price
5	3/16, 7/32, 1/4, 5/16, 3/8"	**KN5300009**	Price
6	3, 4, 5, 6, 8, 10mm	**KN5300010**	Price
8	1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8"	**KN5300017**	Price

wiha Soft Grip Side Drive Balldriver T-Handles



Size (in.)	Style	Order No.	Price
5/64	Hex	**KN5433418†**	Price
3/32	Hex	**KN5433420†**	Price
7/64	Hex	**KN5433422†**	Price
1/8	Hex	**KN5433424†**	Price
9/64	Hex	**KN5433426**	Price
5/32	Ball End Hex	**KN5433428**	Price
3/16	Ball End Hex	**KN5433430**	Price
7/32	Ball End Hex	**KN5433432**	Price
1/4	Ball End Hex	**KN5433433**	Price
5/16	Ball End Hex	**KN5433439**	Price
3/8	Ball End Hex	**KN5433440**	Price

wiha Metric Soft Grip Side Drive Balldriver T-Handles



Size (mm)	Style	Order No.	Price
2	Hex	**KN5433442†**	Price
2.5	Hex	**KN5433444†**	Price
3	Hex	**KN5433446†**	Price
4	Ball End Hex	**KN5433448**	Price
5	Ball End Hex	**KN5433450**	Price
6	Ball End Hex	**KN5433452**	Price
8	Ball End Hex	**KN5433454**	Price
10	Ball End Hex	**KN5433458**	Price

†Balldriver feature unavailable for size
†Balldriver feature unavailable for size

STANLEY Hex Key Sets

- Durable composite construction
- Comfortable over-molded grips
- Compact self-storing tool
- Hex keys fold out and lock into place
- Unique design offers leverage in hand while in use

New!



No. of Pieces	Style	Set Includes	Model No.	Order No.	Price
9	Metric Folding	1.5mm, 2mm, 2.5mm, 3mm, 4mm, 4.5mm, 5mm, 5.5mm, 6mm	95-935	**KP431416**	Price
8	Metric Folding	1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm	STHT71800	**KP431418**	Price
9	Fractional Folding	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	STHT71801	**KP431420**	Price
8	Star Folding	SAE	STHT71802	**KP431422**	Price

Fold-Up Ball and Hex Key Sets-Fractional and Metric

MADE IN THE USA

Bondhus Gorilla Grip®
- Fold-up handle 40% stronger than steel
- Comfortable to hold and does not conduct heat or cold

Eklind
- Versatile tool with one-piece comfort grip handle

Wiha
- Push button key release
- Comfort grips
- Magic Ring screwholding design for exact fit

Texton
- Comfortable grip with fiberglass handle to help absorb vibrations
- Sharpened straight claw for prying, demolition and pulling nails

Description - Fractional						
Pcs. Per Set	Driver Style	Made In	Set Includes (in.)	Brand Name	Order No.	Price
5	Balldriver	USA	3/16, 7/32, 1/4, 5/16, 3/8	Eklind	**KM5020519**	Price
5	Balldriver	USA	3/16, 7/32, 1/4, 5/16, 3/8	Eklind	**KM5025519**	Price
5	Balldriver	USA	3/16, 7/32, 1/4, 5/16, 3/8	Bondhus	**KN5312894**	Price
7	Balldriver	USA	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32	Eklind	**KM5020719**	Price
9	Balldriver	USA	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	Eklind	**KM5020919**	Price
9	Balldriver	USA	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	Eklind	**KM5025919**	Price
9	Balldriver	Germany	Standard Ball End Sizes 5/64, 3/32, 7/64 MagicRing Ball End Sizes: 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	Wiha	**KN5436997**	Price
5	Hex	USA	3/16, 7,32, 1/4, 5/16, 3/8	Eklind	**KM5020511**	Price
6	Hex	USA	5/32, 3/16, 7/32, 1/4, 5/16, 3/8	Eklind	**KM5025611**	Price
8	Hex	USA	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32	Eklind	**KM5020811**	Price
8	Hex	USA	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	Eklind	**KM5020812**	Price
9	Hex	USA	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	Eklind	**KM5020912**	Price
9	Hex	USA	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	Eklind	**KM5025912**	Price
9	Hex	USA	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	Bondhus	**KN5312591**	Price
9	Hex	USA	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	Eklind	**KM5025911**	Price
9	Hex	USA	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	Bondhus	**KN5312589**	Price
9	Hex	USA	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	Eklind	**KM5020911**	Price
9	Hex	Global	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	TEKTON	**KP8525132**	Price

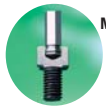
Description - Fractional/Metric/Star						
Pcs. Per Set	Driver Style	Made In	Set Includes (in.)	Brand Name	Order No.	Price
25	Hex	Global	5/64 thru 1/4; 1.5 thru 8mm; T9 thru T40	TEKTON	**KP8525152**	Price

Description - Metric						
Pcs. Per Set	Driver Style	Made In	Set Includes (in.)	Brand Name	Order No.	Price
5	Balldriver	USA	4, 5, 6, 8, 10mm	Eklind	**KM5025159**	Price
6	Balldriver	USA	2, 2.5, 3, 4, 5, 6mm	Eklind	**KM5025169**	Price
7	Balldriver	Germany	Standard Ball End Sizes 2mm, 2.5mm MagicRing Ball End Sizes 3, 4, 5, 6, 8mm	Wiha	**KN5436996**	Price
6	Hex	USA	3, 4, 5, 6, 8,10mm	Eklind	**KM5025161**	Price
6	Hex	USA	3, 4, 5, 6, 8, 10mm	Bondhus	**KN5314595**	Price
6	Hex	USA	3, 4, 5, 6, 8, 10mm	Eklind	**KM5021151**	Price
7	Hex	USA	1.5, 2, 2.5, 3, 4, 5, 6mm	Bondhus	**KN5314592**	Price
7	Hex	USA	1.5, 2, 2.5, 3, 4, 5, 6mm	Eklind	**KM5021171**	Price
7	Hex	USA	1.5, 2, 2.5, 3, 4, 5, 6mm	Eklind	**KM5025171**	Price
7	Hex	USA	2, 2.5, 3, 4, 5, 6, 8mm	Eklind	**KM5025172**	Price
7	Hex	USA	2, 2.5, 3, 4, 5, 6, 8mm	Eklind	**KM5021172**	Price
8	Hex	Global	1.5, 2, 2.5, 3, 4, 5, 6, 8mm	TEKTON	**KP8525142**	Price













Eklind Ergo & Classic Fold-up Torx Hex Key Sets



- Composite grip handle for superior ergonomics
- Soft cushion-grip provides comfort and slip resistance

Style - Classic Fold-up		
Sizes Included	Order No.	Price
T6, T7, T8, T9, T10, T15, T20	**KM5022572**	Price
T10, T15, T20, T25, T27, T30, T40	**KM5022571**	Price

Style - Ergo Fold-up		
Sizes Included	Order No.	Price
15Pc Inch 050 - 3/8 (sets 25912, 25611) 13pc Metric 1.5 - 10.0mm (sets 25171-25161) 8Pc Torx T8 - T40 (set 25581)	**KM5025036**	Price
9Pc Inch 5/64 - 1/4, 7Pc Metric 1.5 - 6.0mm	**KM5025016**	Price
T6, T7, T8, T9, T10, T15, T20, T25	**KM5025582**	Price
T8, T10, T15, T20, T25, T27, T30, T40	**KM5025581**	Price

Bondhus 30 Pc. Key Triple Pack

MADE IN THE USA

Inch & Metric Balldriver L-Wrench Sets & Torx Fold-up

Includes:
- BLX 13: .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8
- BLX9: 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0mm
- 12632 (Fold-up): T6, T7, T8, T9, T10, T15, T20, T25



Order No.	Price
KN5314132	Price

8 Pc. Gorilla Grip Fold-Up Torx® Set

Includes: T6, T7, T8, T9, T10, T15, T20, T25

Brand	Order No.	Price
Bondhus	**KN5312632**	Price
wiha	**KN5436237**	Price



Tools for Star Recessed Screws Including Torx®

wiha 7 Pc. Short Arm TORX® Key Set with Holder

- Includes: T6, T7, T8, T9, T10, T15, T20
- Highly reduces screw head cam-out
- High quality vanadium steel
- Made in Germany



Order No.	Price
KN5436392	Price

TEKTON 9 Pc. Star Key Set

- Heat treated chrome vanadium steel with black oxide finish
- Chamfered ends for reducing wear
- Black color coded housing for instant size identification



Set Includes	Order No.	Price
T10, T15, T20, T25, T27, T30, T40, T45, T50	**KP8525291**	Price

wiha 9 Pc. Short Arm TORX® L-Key Set with Holder

- Includes: T8, T9, T10, T15, T20, T25, T27, T30, T40
- Highly reduces screw head cam-out
- High quality vanadium steel
- Made in Germany



Order No.	Price
KN5436394	Price

wiha Long Arm TORX® L-Key Set

- Compact molded key holder
- CVM hardened tool steel
- Precision machined tips for exact fit
- Highly reduces screw head cam-out
- Made in Germany



No. of Pieces	Set Includes	Order No.	Price
13	T5, T6, T7, T8, T9, T10, T15, T20, T25, T27, T30, T40, T50	**KN5436699**	Price

Individual Long Arm Keys Available

wiha TORX® PocketStar Fold-Up Sets

- Push button key release
- Precision machined tips
- Ergo handle
- High quality vanadium steel
- Made in Germany

ISO 9001



Style - Fold Out		
Sizes Included	**Order No.**	**Price**
T7, T8, T9, T10, T15, T20, T25	**KN5436396**	Price
T9, T10, T15, T20, T25, T27, T30, T40	**KN5436398**	Price

PROTO 10 Pc. Torx® Key Set

- Torx® sizes: T10, T15, T20, T25, T27, T30, T40, T45, T50, T55
- Plastic pouch

New!

MADE IN THE USA



Model No.	Order No.	Price
J4961	**KP4227050**	Price

wiha 7 Pc. T-Handle TORX® Set

- Includes: T10, T15, T20, T25, T30, T40, T50 & metal stand
- Molded handle on to torx® driver
- High quality vanadium steel
- Hardened to 60 Rc
- Handy hang hole
- Made in Germany



Order No.	Price
KN5436490	Price

wiha 7 Pc. Wing Handle TORX® Set

- Includes: T6, T7, T8, T9, T10, T15, T20 & metal stand
- Precision fit tips
- Hardened steel
- Impact resistant flag handles
- Spinner knobs



Order No.	Price
KN5436590	Price

BONDHUS Pivot Head Star Wrench Sets

- Available in 4 sets with 24 various sizes to cover most fastener heads
- Heat treated high quality industrial tool steel
- Long handles for extra reach
- Matte chrome finish to prevent corrosion
- Heavy duty folding canvas pouch included
- Lifetime warranty



KN300015

No. of Pieces	OAL (in.)	Set Includes	Order No.	Price
5	8.5	T15, T20, T25, T27, T30	**KN5300019**	Price
5	9	T40, T45, T47, T50, T55	**KN5300018**	Price
6	9	T25 , T27, T30, T40, T45, T50	**KN5300015**	Price
10	9	T15, T20, T25, T27, T30, T40, T45, T47, T50, T55	**KN5300022**	Price

wiha Security Torx® PocketStar Fold-Up Sets

- Push button key release
- Precision machined tips
- Ergo handle
- High quality vanadium steel
- Made in Germany



Set Includes	Order No.	Price
T7S, T8S, T9S, T10S, T15S, T20S, T25S	**KN5436395**	Price
T9S, T10S, T15S, T20S, T25S, T27S, T30S, T40S	**KN5436397**	Price

Torx® is a registered trademark of Acument Global Technologies.

wiha TORX® Soft Grip Side Drive T-Handle Set

- Side drive feature for high torque requirements
- Handles made with ergonomic comfort grips
- High strength steel
- Lifetime warranty against manufacturer defects



No. of Pcs.	Size	Order No.	Price
7	T10, T15, T20, T25, T27, T30, T40	**KN5436497**	Price

wiha TORX® Soft Grip Side Drive T-Handles



KN5436482

Size	Order No.	Price
T10 x 100mm	**KN5436480**	Price
T15 x 100mm	**KN5436481**	Price
T20 x 100mm	**KN5436482**	Price
T25 x 150mm	**KN5436483**	Price
T27 x 150mm	**KN5436484**	Price
T30 x 150mm	**KN5436486**	Price
T40 x 150mm	**KN5436487**	Price

wiha 3 Pack TORX® & Hex L-Keys

Includes:

- TORX®: T6, T7, T8, T9, T10, T15, T20, T25, T27, T30
- Hex inch: .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8”
- Hex metric: 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm
- Black finish

New!



Order No.	Price
KN5436696	Price

Eklind 7 Pc. Torx® Hex Key Set

- Includes (1) of each: T10, T15, T20, T25, T27, T30, T40
- Black oxide finish

MADE IN THE USA



Order No.	Price
KM5010907	Price

Torx® T-Handle Drivers

- Handle molded on tool for maximum grip
- Exact fit tips
- High quality hardened steel
- Thru the handle side driver (KN70 generic series only)



KN5436410

KN7010010

Size	Approx. OAL (in.)	Wiha		PRM Pro	
		Order No.	Price	Order No.	Price
T9	4	**KN5436409**	Price	-	-
T10	4	**KN5436410**	Price	**KN7010010**	Price
T15	4	**KN5436415**	Price	**KN7010015**	Price
T15	6	**KN5436417**	Price	-	-
T20	4	**KN5436420**	Price	**KN7010020**	Price
T20	6	**KN5436422**	Price	-	-
T25	6	**KN5436427**	Price	**KN7010025**	Price
T27	6	**KN5436432**	Price	-	-
T30	6	**KN5436437**	Price	-	-

PRM PRO Torx® Long Arm L Key

- Exact fit machined tips
- S2 modified steel through hardness for maximum durability
- Lifetime warranty against mfg defect



Torx® Size	Blade OAL (in.)	Order No.	Price
T6	3.15	**KN7010206**	Price
T7	3.15	**KN7010207**	Price
T8	3.15	**KN7010208**	Price
T10	3.4	**KN7010210**	Price
T15	3.5	**KN7010215**	Price
T20	3.7	**KN7010220**	Price
T25	4	**KN7010225**	Price

Torx® Short Arm L Key

- Sure fit tips
- High quality steel



KN54306

		Wiha		PRM Pro	
Size	Appox. OAL (in.)	Order No.	Price	Order No.	Price
T6	1.65	**KN5436306**	Price	**KN7010106**	Price
T7	1.75	**KN5436307**	Price	**KN7010107**	Price
T8	1.85	**KN5436308**	Price	**KN7010108**	Price
T9	2	**KN5436309**	Price	**KN7010109**	Price
T10	2.1	**KN5436310**	Price	**KN7010110**	Price
T15	2.2	**KN5436315**	Price	**KN7010115**	Price
T20	2.35	**KN5436320**	Price	**KN7010120**	Price
T25	2.5	**KN5436325**	Price	**KN7010125**	Price
T27	2.75	**KN5436327**	Price	-	Price
T30	3	**KN5436330**	Price	**KN7010130**	Price

PRM PRO Torx® Flag Drivers

- Ideal for use with indexable carbide tooling
- High quality hardend steel
- Impact resistant flag, handle with spinner knob



KN7010306

Size	Aprox. OAL (in.)	Order No.	Price
T6	1.37	**KN7010306**	Price
T7	1.37	**KN7010307**	Price
T8	1.37	**KN7010308**	Price
T9	1.56	**KN7010309**	Price
T10	1.56	**KN7010310**	Price
T15	1.56	**KN7010315**	Price
T20	1.56	**KN7010320**	Price

Torx® Flag Driver Sets

TORX®

- Ideal for use with indexable carbide tooling
- High quality hardend steel
- Impact resistant flag, handle with spinner knob
- Ideal for use with indexable carbide tooling
- High quality hardend steel
- Impact resistant flag, handle with spinner knob



KN5437090

Brand	No. of Pcs.	Set Includes	Order No.	Price
PRM Pro	7	T6, T7, T8, T9, T10, T15, T20	**KN7010377**	Price
Wiha	7	T6, T7, T8, T9, T10, T15, T20	**KN5437090**	Price

Torx® is a registered trademark of Acument Global Technologies.

Torx® Screwdrivers

- Round blades
- Hardened steel for maximum durability
- Sure fit tips
- Soft handles



		Wiha		PRM Pro	
Size	Blade Aprox. OAL (in.)	Order No.	Price	Order No.	Price
T5	2.44	**KN5436264**	Price	**KN7010605**	Price
T6	2.44	**KN5436266**	Price	**KN7010606**	Price
T7	2.44	**KN5436268**	Price	**KN7010607**	Price
T8	2.44	**KN5436270**	Price	**KN7010608**	Price
T9	2.44	**KN5436272**	Price	**KN7010609**	Price
T10	3.18	**KN5436274**	Price	**KN7010510**	Price
T15	3.18	**KN5436276**	Price	**KN7010515**	Price
T20	4	**KN5436278**	Price	**KN7010520**	Price
T25	4	**KN5436280**	Price	**KN7010525**	Price
T30	4.62	**KN5436284**	Price	**KN7010530**	Price

Screwdriver Sets

- 3 Sets to choose from
- Soft handles
- Round blade
- Hardened steel
- Sure fit tips

TORX®



Brand	No. of Pcs.	Set Includes	Order No.	Price
Wiha	6	T6, T7, T8, T9, T10, T15	**KN5436291**	Price
PRM Pro	6	T10, T15, T20, T25, T30, T40	**KN7010666**	Price
Wiha	8	T6, T8, T10, T15, T20, T25, T27, T30	**KN5436294**	Price

PROTO DuraTek™ Torx® Screwdrivers

- Ergonomic quad-lobe handle
- Impact and chemical resistant four-sided handle design helps prevent "roll away"
- High-alloy steel shank and tip are heat-treated their entire length to help provide strength against twisting and bending.
- Screwdrivers meet ASME B107.15 standards



MADE IN THE USA

New!

Size	Blade Length (in.)	OAL (in.)	Model No.	Order No.	Price
T10	3-1/2	7	JT10314R	**KP4250270**	Price
T15	3-1/2	7	JT15314R	**KP4250275**	Price
T20	3-1/2	7	JT20314R	**KP4250280**	Price
T25	3-1/2	7	JT25314R	**KP4250285**	Price

CHANNELLOCK 5 Pc. Torx Screwdriver Set

- Acetate handles highly impact resistant and exceptional solvent resistance
- Custom heat-treated alloy steel blades
- Black oxide coated for corrosion resistance

MADE IN THE USA



Set Includes	Order No.	Price
T5, T6, T7, T8, T9	**LB50TP5A**	Price
T10, T15, T20, T25, T30	**LB50TS5A**	Price

wiha TorxPlus® T-Handle Set

7 Pc. Set Includes: IP8, IP10, IP15, IP20, IP25, IP30, IP40



Order No.	Price
KN5436299	Price

wiha TorxPlus® Wing Handle Set

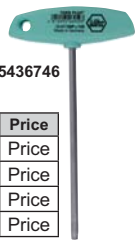
7 Pc. Set Includes: IP6, IP7, IP8, IP9, IP10, IP15, IP20



Order No.	Price
KN5436592	Price

wiha TorxPlus® T-Handles

Blade high alloy CVM steel, hardened, hard chromed



Description	Order No.	Price
IP9 x 100mm	**KN5436461**	Price
IP10 x 100mm	**KN5436463**	Price
IP15 x 100mm	**KN5436466**	Price
IP20 x 100mm	**KN5436469**	Price

Description	Order No.	Price
IP25 x 150mm	**KN5436472**	Price
IP27 x 150mm	**KN5436474**	Price
IP30 x 150mm	**KN5436476**	Price
IP40 x 150mm	**KN5436478**	Price

wiha TorxPlus® Short Arm L-Keys

- High alloy CVM steel, hardened, black finish
- 9 Pc. Set Includes: IP8, IP9, IP10, IP15, IP20, IP25, IP27, IP30, IP40



Description	Order No.	Price
IP6 x 39mm	**KN5436106**	Price
IP7 x 42mm	**KN5436107**	Price
IP8 x 45mm	**KN5436108**	Price
IP9 x 48mm	**KN5436109**	Price
IP10 x 51mm	**KN5436110**	Price
IP15 x 55mm	**KN5436115**	Price

Description	Order No.	Price
IP20 x 58mm	**KN5436120**	Price
IP25 x 63mm	**KN5436125**	Price
IP27 x 68mm	**KN5436127**	Price
IP30 x 73mm	**KN5436130**	Price
IP40 x 81mm	**KN5436140**	Price
9 Pc. Set	**KN5436199**	Price

wiha TorxPlus® Long Arm L-Keys

- High alloy CVM steel, hardened, black finish
- 9 Pc. Set Includes: IP8, IP9, IP10, IP15, IP20, IP25, IP27, IP30, IP40



Description	Order No.	Price
IP6 x 64mm	**KN5436606**	Price
IP7 x 68mm	**KN5436607**	Price
IP8 x 74mm	**KN5436608**	Price
IP9 x 78mm	**KN5436609**	Price
IP10 x 83mm	**KN5436610**	Price
IP15 x 88mm	**KN5436615**	Price

Description	Order No.	Price
IP20 x 94mm	**KN5436620**	Price
IP25 x 98mm	**KN5436625**	Price
IP27 x 107mm	**KN5436627**	Price
IP30 x 114mm	**KN5436630**	Price
IP40 x 118mm	**KN5436640**	Price
9 Pc. Set	**KN5436691**	Price

wiha TorxPlus® T-Handle Set

6 Pc. Set Includes: IP10, IP15, IP20, IP25, IP27, IP30



Order No.	Price
KN5436496	Price

Torx® and TorxPlus® is a registered trademark of Acument Global Technologies.

Snap-on Industrial Brands | Williams | Lisle | wiha Tools that work for you | TEKTON

Torx® & Star Driver Bit Sets

- 1/4", 3/8", 1/2" Drive
- Standard & tamper proof
- Drop forged steel
- Precision machined bits
- Black oxide bits, chrome plated s


KN5476191


KP3030908


KN6526550


KP854912


KN652600

Pcs. Per Set	Drive (in.)	Drive Style	Set Includes	Holder	Brand Name	Made In	Order No.	Price
6	1/4	Torx	T10, T15, T20, T25, T27, T30 Torx bits	Clips & Rail	Williams	Global	**KP3030908**	Price
7	1/4	Torx Plus	T10, T15, T20, T25, T27, T30, T40 Torx Bits	Neoprene sleeve	Lisle	USA	**KN6526000**	Price
10	1/4	Torx	T7, T8, T9, T10, T15, T20, T25, T27, T30, T40 Torx Bits	Clips & Rail	Wiha	Taiwan	**KN5476191**	Price
9	1/4 & 3/8	Torx	T10, T15, T20, T25, T27, T30, T40, T45, T50 Torx Bits	Neoprene Sleeve	Lisle	USA	**KN6526550**	Price
9	1/4 & 3/8	Torx	T10, T15, T20, T25, T27, T30, T40, T45, T50 SuperTorx Bits	Neoprene Sleeve	Lisle	USA	**KN6537600**	Price
13	1/4 & 3/8	Star	SD10, SD15, SD20, SD25, SD27, SD30, SD40, SD45, SD47, SD50, SD55, SD60 Star Bits; 1-Pc. 3/8 Dr Female x 1/4 Male Adapter	Clips & Rail	TEKTON	Global	**KP854912**	Price
9	3/8	Star	SD10, SD15, SD20, SD25, SD27, SD30, SD40, SD45, SD50 Star Bits	Clips & Rail	TEKTON	Global	**KP851351**	Price
7	3/8	Torx	T25, T27, T30, T40, T45, T47, T50 Torx Bits	Clips & Rail	Williams	Global	**KP3031912**	Price
8	3/8	Torx	T20, T25, T27, T30, T40, T45, T50, T55	Clips & Rail	Wiha	Germany	**KN5476396**	Price
8	3/8	Torx	T9, T10, T15, T20, T25, T27, T30, T40 Torx Bits	Clips & Rail	Wiha	Germany	**KN5476395**	Price
5	1/2	Torx	T40, T45, T50, T55, T60 Torx bits	Clips & Rail	Williams	Global	**KP3032908**	Price

Lisle 7 & 10 Pc. TORX® Socket Sets

For External Torx Bolts

- Made of heat-treated alloy steel
- Sockets come in a convenient vinyl holder



No. of Pcs.	Set Includes	Drive	Order No.	Price
7	T10, T15, T20, T25, T27, T30, T40 Torx Bits	1/4	**KN6526000**	Price
10	E-5, E-6, E-7, E-8, E-10, E-12, E-14, E-16, E-18 & E-20	1/4, 3/8 & 1/2	**KN6526280**	Price

Lisle 4 Pc. Super Torx Bit Set

New!

- 20% Stronger than one-piece torx bits
- Set includes 4 of the most popular larger torx sizes for automotive applications
- The 2 smaller bits are 3/8" drive & the 2 larger bits are 1/2" drive
- The set includes T-47, T-55, T-60 & T-70 in a convenient holder



Order No.	Price
KN6582300	Price

Titan 10 Pc. Impact Star Bit Socket Set

- Impact grade
- Includes rail storage rack
- Sizes include:
  1/4" Dr: T10, T15, T20, T25, T27, & T30
  3/8" Dr: T40, T45, T47, & T50



Order No.	Price
KP8216039	Price

wiha 13Pc TORX® Long Arm Hex Key Set

- Pacified zinc chromate finish
- Includes: T5, T6, T7, T8, T9, T10, T15, T20, T25, T27, T30, T40, T45

New!



Order No.	Price
KN5436693	Price

APEX Torx® Bits



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
T-6	1/4	1	440-TX-06X	**KW7060170**	Price
T-7	1/4	1	440-TX-07X	**KW7060175**	Price
T-8	1/4	1	440-TX-08X	**KW7060180**	Price
T-9	1/4	1	440-TX-09X	**KW7060185**	Price
T-10	1/4	1	440-TX-10X	**KW7060190**	Price
T-15	1/4	1	440-TX-15X	**KW7060195**	Price
T-20	1/4	1	440-TX-20X	**KW7060200**	Price
T-25	1/4	1	440-TX-25X	**KW7060205**	Price
T-27	1/4	1	440-TX-27X	**KW7060210**	Price
T-30	1/4	1	440-TX-30X	**KW7060215**	Price
T-40	1/4	1	440-TX-40X	**KW7060220**	Price
T-45	1/4	1-1/4	440-TX-45X	**KW7060225**	Price
T-50	1/4	1-1/4	440-TX-50X	**KW7060230**	Price
T-27	5/16	1-1/4	480-TX-27X	**KW7060235**	Price
T-30	5/16	1-1/4	480-TX-30X	**KW7060240**	Price
T-40	5/16	1-1/4	480-TX-40X	**KW7060245**	Price
T-45	5/16	1-1/4	480-TX-45X	**KW7060250**	Price
T-50	5/16	1-1/4	480-TX-50X	**KW7060255**	Price
T-55	5/16	1-1/4	480-TX-55X	**KW7060260**	Price

APEX Torx® Bits Power Drive

- Power bits are best used with quick-release (QR series) chucks



Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
T-6	1/4	1-15/16	49-TX-06	**KW7060300**	Price
T-7	1/4	1-15/16	49-TX-07	**KW7060305**	Price
T-8	1/4	1-15/16	49-TX-08	**KW7060310**	Price
T-8	1/4	3-1/2	49-B-TX-08	**KW7060270**	Price
T-9	1/4	1-15/16	49-TX-09	**KW7060315**	Price
T-10	1/4	1-15/16	49-TX-10	**KW7060320**	Price
T-10	1/4	3-1/2	49-B-TX-10	**KW7060275**	Price
T-15	1/4	1-15/16	49-TX-15	**KW7060325**	Price
T-20	1/4	1-15/16	49-TX-20	**KW7060330**	Price
T-20	1/4	2-3/4	49-A-TX-20	**KW7060265**	Price
T-20	1/4	3-1/2	49-B-TX-20	**KW7060280**	Price
T-20	1/4	6	49-C-TX-20	**KW7060290**	Price
T-25	1/4	1-15/16	49-TX-25	**KW7060335**	Price
T-27	1/4	1-15/16	49-TX-27	**KW7060340**	Price
T-30	1/4	1-15/16	49-TX-30	**KW7060345**	Price
T-30	1/4	3-1/2	49-B-TX-30	**KW7060285**	Price
T-30	1/4	6	49-C-TX-30	**KW7060295**	Price
T-40	1/4	1-15/16	49-TX-40	**KW7060350**	Price

APEX Square Drive Bits



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#1	1/4	1	950-1X	**KW7060775**	Price
#2	1/4	1	950-2X	**KW7060780**	Price
#3	1/4	1	950-3X	**KW7060785**	Price

APEX Square Drive Bits Power Drive

- Power bits are best used with quick-release (QR series) chucks



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#1	1/4	1-15/16	954-1X	**KW7060790**	Price
#2	1/4	1-15/16	954-2X	**KW7060795**	Price
#2	1/4	2-3/4	954-A-2X	**KW7060805**	Price
#2	1/4	3-1/2	954-B-2X	**KW7060810**	Price
#2	1/4	6	954-C-2X	**KW7060815**	Price
#3	1/4	1-15/16	954-3X	**KW7060800**	Price

APEX Torx® Plus Bits



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
10IP	1/4	1	440-10IPX	**KW7060355**	Price
15IP	1/4	1	440-15IPX	**KW7060360**	Price
20IP	1/4	1	440-20IPX	**KW7060365**	Price
25IP	1/4	1	440-25IPX	**KW7060370**	Price
27IP	1/4	1	440-27IPX	**KW7060375**	Price
30IP	1/4	1	440-30IPX	**KW7060380**	Price
40IP	1/4	1	440-40IPX	**KW7060385**	Price
30IP	5/16	1-1/4	480-30IPX	**KW7060390**	Price
40IP	5/16	1-1/4	480-40IPX	**KW7060395**	Price
45IP	5/16	1-1/4	480-45IPX	**KW7060400**	Price
50IP	5/16	1-1/4	480-50IPX	**KW7060405**	Price
55IP	5/16	1-1/4	480-55IPX	**KW7060410**	Price

APEX Torx Plus® Bits Power Drive

MADE IN THE USA

- Power bits are best used with quick-release (QR series) chucks



Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
10IP	1/4	1-15/16	49-10IPX	**KW7060465**	Price
10IP	1/4	2-3/4	49-A-10IPX	**KW7060420**	Price
10IP	1/4	3-1/2	49-B-10IPX	**KW7060510**	Price
15IP	1/4	1-15/16	49-15IPX	**KW7060470**	Price
15IP	1/4	2-3/4	49-A-15IPX	**KW7060425**	Price
15IP	1/4	3-1/2	49-B-15IPX	**KW7060515**	Price
20IP	1/4	1-15/16	49-20IPX	**KW7060475**	Price
20IP	1/4	2-3/4	49-A-20IPX	**KW7060430**	Price
20IP	1/4	3-1/2	49-B-20IPX	**KW7060520**	Price
25IP	1/4	1-15/16	49-25IPX	**KW7060480**	Price
25IP	1/4	2-3/4	49-A-25IPX	**KW7060435**	Price
25IP	1/4	3-1/2	49-B-25IPX	**KW7060525**	Price
27IP	1/4	1-15/16	49-27IPX	**KW7060485**	Price
27IP	1/4	2-3/4	49-A-27IPX	**KW7060440**	Price
27IP	1/4	3-1/2	49-B-27IPX	**KW7060530**	Price
30IP	1/4	1-15/16	49-30IPX	**KW7060495**	Price
30IP	1/4	2-3/4	49-A-30IPX	**KW7060445**	Price
30IP	1/4	3-1/2	49-B-30IPX	**KW7060535**	Price
40IP	1/4	1-15/16	49-40IPX	**KW7060415**	Price

APEX Socket Head Bits



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
5/64"	1/4	1	185-0X	**KW7060540**	Price
3/32"	1/4	1	185-1X	**KW7060550**	Price
7/64"	1/4	1	185-9X	**KW7060575**	Price
1/8"	1/4	1	185-2X	**KW7060555**	Price
9/64"	1/4	1	185-10X	**KW7060545**	Price
5/32"	1/4	1-5/16	185-3X	**KW7060560**	Price
3/16"	1/4	1-5/16	185-4X	**KW7060565**	Price
7/32"	1/4	1-5/16	185-5X	**KW7060570**	Price

APEX Socket Head Bits Power Drive

MADE IN THE USA

- Power bits are best used with quick-release (QR series) chucks



Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
1/16"	1/4	1-15/16	AM-02	**KW7060580**	Price
5/64"	1/4	1-15/16	AM-02-A	**KW7060585**	Price
3/32"	1/4	1-15/16	AM-03	**KW7060590**	Price
7/64"	1/4	1-15/16	AM-03-A	**KW7060595**	Price
1/8"	1/4	1-15/16	AM-04	**KW7060600**	Price
9/64"	1/4	1-15/16	AM-04-A	**KW7060605**	Price
5/32"	1/4	1-15/16	AM-05	**KW7060610**	Price
3/16"	1/4	1-15/16	AM-06	**KW7060615**	Price
1/8"	7/16	3-1/2	AN-04	**KW7060650**	Price
5/32"	7/16	3-1/2	AN-05	**KW7060655**	Price
3/16"	7/16	3-1/2	AN-06	**KW7060660**	Price
7/32"	7/16	3-1/2	AN-07	**KW7060665**	Price
1/4"	7/16	3-1/2	AN-08	**KW7060670**	Price
5/16"	7/16	3-1/2	AN-10	**KW7060675**	Price
3/8"	7/16	3-1/2	AN-12	**KW7060680**	Price

2", 3-1/2" & 6" TORX® Power Bits

- 3 Lengths to choose from
- Made with quality steel



			Irwin			Wiha			PRM Pro		
Size	Shank (in.)	OAL (in.)	Pkg. Qty.	Order No.	Price	Pkg. Qty.	Order No.	Price	Pkg. Qty.	Order No.	Price
T5	1/4	2	-	-		-	-	-	-	KN7020100	Price
T6	1/4	2	5	KW4093306	Price	10	KN5474511	Price	-	KN7020105	Price
T6	1/4	3-1/2	-	-		10	KN5474563	Price	-	KN7020160	Price
T7	1/4	2	5	KW4093309	Price	10	KN5474512	Price	-	KN7020110	Price
T7	1/4	3-1/2	-	-		10	KN5474565	Price	-	KN7020165	Price
T8	1/4	2	5	KW4093312	Price	10	KN5474513	Price	-	KN7020115	Price
T8	1/4	3-1/2	-	-		10	KN5474567	Price	-	KN7020170	Price
T9	1/4	2	5	KW4093315	Price	10	KN5474517	Price	-	KN7020120	Price
T9	1/4	3-1/2	-	-		10	KN5474569	Price	-	KN7020175	Price
T10	1/4	2	5	KW4093318	Price	10	KN5474519	Price	-	KN7020125	Price
T10	1/4	3-1/2	-	-		10	KN5474571	Price	-	KN7020180	Price
T10	1/4	6	-	-		10	KN5474586	Price	-	-	
T15	1/4	2	5	KW4093321	Price	10	KN5474521	Price	-	KN7020130	Price
T15	1/4	3-1/2	-	-		10	KN5474573	Price	-	KN7020185	Price
T15	1/4	6	-	-		10	KN5474587	Price	-	-	
T20	1/4	2	5	KW4093324	Price	10	-		-	KN7020135	Price
T20	1/4	3-1/2	-	-		10	KN5474575	Price	-	KN7020190	Price
T20	1/4	6	-	-		10	KN5474588	Price	-	-	
T25	1/4	2	5	KW4093327	Price	10	KN5474529	Price	-	KN7020140	Price
T25	1/4	3-1/2	-	-		10	KN5474577	Price	-	KN7020195	Price
T25	1/4	6	-	-		10	KN5474589	Price	-	-	
T27	1/4	2	5	KW4093330	Price	10	KN5474531	Price	-	KN7020145	Price
T27	1/4	3-1/2	-	-		10	KN5474579	Price	-	-	
T27	1/4	6	-	-		10	KN5474590	Price	-	-	
T30	1/4	2	5	KW4093333	Price	10	KN5474533	Price	-	KN7020150	Price
T30	1/4	3-1/2	-	-		10	KN5474581	Price	-	KN7020200	Price
T30	1/4	6	-	-		10	KN5474591	Price	-	-	
T40	1/4	2	5	KW4093336	Price	10	KN5474535	Price	-	KN7020155	Price
T40	1/4	3-1/2	-	-		10	KN5474583	Price	-	-	

Torx® Hex Insert Bits

MADE IN THE USA New!



- Not for use on impact applications

Size	Drive	OAL (in.)	Model No.	Order No.	Price
T6	1/4	1	J60500	KP4250990	Price
T7	1/4	1	J60502	KP4250995	Price
T8	1/4	1	J60504	KP4251000	Price
T9	1/4	1	J60506	KP4251005	Price
T10	1/4	1	J60508	KP4251010	Price
T15	1/4	1	J60510	KP4251015	Price
T20	1/4	1	J60512	KP4251020	Price
T25	1/4	1	J60514	KP4251025	Price
T27	1/4	1	J60516	KP4251030	Price
T30	1/4	1	J60518	KP4251035	Price
T40	1/4	1	J60520	KP4251040	Price
T40	5/16	1	J60562	KP4251060	Price
T45	5/16	1	J60564	KP4251055	Price

Torx® Tamper-Proof Hex Insert Bits

MADE IN THE USA New!



- Not for use on impact applications

Size	Drive (in.)	OAL (in.)	Model No.	Order No.	Price
T15	1/4	1	J60532	KP4251090	Price
T25	1/4	1	J60536	KP4251100	Price
T27	1/4	1	J60538	KP4251105	Price
T40	1/4	1	J60542	KP4251115	Price

11 Pc 1/4" and 3/8" Drive Torx® Bit Set

New!

Includes:
- T10 to T50 (full polish)
- 2 Bit holders
- Pouch

MADE IN THE USA

Note: Not for impact applications



Model No.	Order No.	Price
J5239P	KP4250875	Price

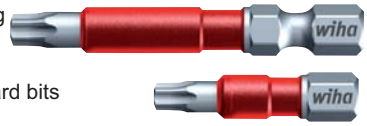
Torx Insert Bits



- Made with quality steel

			PRM Pro		Wiha	
Size	Aprox. OAL (in.)	Shank (in.)	Order No.	Price	Order No.	Price
T5	1	1/4	KN7020000	Price	-	-
T6	1	1/4	KN7020005	Price	KN5471506	Price
T7	1	1/4	KN7020010	Price	KN5471507	Price
T8	1	1/4	KN7020015	Price	KN5471508	Price
T9	1	1/4	KN7020020	Price	KN5471509	Price
T10	1	1/4	KN7020025	Price	KN5471510	Price
T15	1	1/4	KN7020030	Price	KN5471515	Price
T20	1	1/4	KN7020035	Price	KN5471520	Price
T25	1	1/4	KN7020040	Price	KN5471525	Price
T27	1	1/4	KN7020045	Price	KN5471527	Price
T30	1	1/4	KN7020050	Price	KN5471530	Price
T40	1	1/4	KN7020055	Price	KN5471540	Price
T45	1-3/8	5/16	-	-	KN5472545	Price
T50	1-3/8	5/16	-	-	KN5472550	Price
T55	1-3/8	5/16	-	-	KN5472555	Price

Terminator Impact Torx Bits



- Special energy absorbing dual material design
- Up to 30 times impact performance over standard bits
- Standard 1/4" drive
- Wiha enhanced bi-material torsion zone
- Precision heated treated & premium CVM tool steel
- Other styles and package size available - call for info

		Impact Insert Bit			Impact Power Bit		
Size	Packa-ge Qty.	Aprox. Length (in.)	Order No.	Price Per Pack	Aprox. Length (in.)	Order No.	Price Per Pack
T10	2	1-1/8	KN5476810	Price	2	KN5476853	Price
T15	2	1-1/8	KN5476811	Price	2	KN5476854	Price
T20	2	1-1/8	KN5476812	Price	2	KN5476855	Price
T25	2	1-1/8	KN5476813	Price	2	KN5476856	Price
T30	2	1-1/8	KN5476816	Price	2	KN5476858	Price
T40	2	1-1/8	KN5476817	Price	2	KN5476859	Price

Torx Plus Insert Bits



	Aprox.		Wiha		PRM Pro	
Size	OAL (in.)	Shank (in.)	Order No.	Price	Order No.	Price
IP6	1	1/4	KN5471606	Price	KN7030000	Price
IP7	1	1/4	KN5471607	Price	KN7030005	Price
IP8	1	1/4	KN5471608	Price	KN7030010	Price
IP9	1	1/4	KN5471609	Price	KN7030015	Price
IP10	1	1/4	KN5471610	Price	KN7030020	Price
IP15	1	1/4	KN5471615	Price	KN7030025	Price
IP20	1	1/4	KN5471620	Price	KN7030030	Price
IP25	1	1/4	KN5471625	Price	KN7030035	Price
IP30	1	1/4	KN5471630	Price	KN7030040	Price

PROTO Insert Bits

Phillips®

MADE IN THE USA New!



- Not for use on impact applications

Style - Phillips®					
Size	Length (in.)	Shank	Model No.	Order No.	Price
#1	1	1/4	J60002	**KP4250880**	Price
#2	1	1/4	J60008	**KP4250885**	Price
#3	1	1/4	J60020	**KP4250890**	Price
#1	1-1/4	5/16	J60050	**KP4250895**	Price
#2	1-1/4	5/16	J60052	**KP4250900**	Price
#3	1-1/4	5/16	J60054	**KP4250905**	Price

Style - Phillips® ACR®					
Size	Length (in.)	Shank	Model No.	Order No.	Price
#1	1	1/4	J60004	**KP4250915**	Price
#2	1	1/4	J60010	**KP4250920**	Price
#3	1	1/4	J60022	**KP4250925**	Price

PROTO Power Bits Phillips

MADE IN THE USA



- Not for use on impact applications

New!

Size	Approx Length (in.)	Model No.	Order No.	Price
#1	2	J60100	**KP4250940**	Price
#2	2	J60102	**KP4250945**	Price
#2	2-3/4	J60116	**KP4250950**	Price
#2	3-3/4	J60018	**KP4250935**	Price

PROTO Slotted Insert Bits

- Not for use on impact applications
- Keystone slotted

MADE IN THE USA New!



Tip Size (in.)	Drive Size (in.)	Length (in.)	Model No.	Order No.	Price
3/16	1/4	1	J60202	**KP4250960**	Price
7/32	1/4	1	J60204	**KP4250965**	Price
5/32	1/4	1	J60206	**KP4250970**	Price
9/32	1/4	1	J60208	**KP4250975**	Price
3/8 10F-12R	5/16	1-1/2	J60256	**KP4250980**	Price
3/8 14F-16R	5/16	1-1/2	J60262	**KP4250985**	Price

wiha ClicFix Quick Release Locking Insert Bit Holder



- Spring loaded
- 1/4" Shank
- One handed bit changer
- 2-1/2" OAL
- Qty. 1

Order No.	Price
KN5471490	Price

wiha 1/4" Magnetic Bit Holder with Non-Slip Grip



- 1/4" x 125mm (5")
- Overall length 8.9"
- Safe, non-slip high torque grip
- Holds standard 1/4" insert bits

Order No.	Price
KN5452650	Price

Phillips Insert Bits



- Irwin Hansen standard grade
- Irwin Hansen impact grade 3X longer life

			Irwin Hansen Standard		Irwin Hansen Impact	
Pt. Size	Shank (in.)	OAL (in.)	Order No.	Price	Order No.	Price
-	1/4	1	**KW4092001**	Price	-	-
#1	1/4	1	**KW4092005**	Price	**KW401837325**	Price
#2	1/4	1	**KW4092011**	Price	**KW401837330**	Price
#3	1/4	1	**KW4092019**	Price	**KW401837376**	Price

IRWIN Phillips Power Bits

TORSION 3X LIFE



- Irwin – high grade steel
- Wiha – hardened vanadium impact resistant steel
- Forged bit – heavy duty steel for higher torque output

				Irwin		Wiha	
Size	Approx. OAL (in.)	Shank (in.)	Pkg. Qty.	Order No.	Price	Order No.	Price
#1	2	1/4	10	**KW4093003**	Price	**KN5474103**	Price
#1	2-3/4	1/4	10	**KW4093017**	Price	**KN5474106**	Price
#1	3-1/2	1/4	10	**KW4093043**	Price	**KN5474109**	Price
#1	4.33	1/4	10	-		**KN5474111**	Price
#1	4	1/4	10	**KW4093023**	Price	-	
#1	5	1/4	10	**KW4093053**	Price	**KN5474113**	Price
#1	6	1/4	10	**KW4093063**	Price	**KN5474116**	Price
#2	2	1/4	10	**KW4093007**	Price	**KN5474112**	Price
#2	2-3/4	1/4	10	**KW4093019**	Price	**KN5474115**	Price
#2	3	1/4	10	**KW4093047**	Price	-	
#2	3-1/2	1/4	10	**KW4093025**	Price	**KN5474118**	Price
#2	4.33	1/4	10	-		**KN5474121**	Price
#2	5	1/4	10	**KW4093057**	Price	**KN5474123**	Price
#2	6	1/4	10	**KW4093067**	Price	**KN5474126**	Price
#3	2	1/4	10	**KW4093011**	Price	**KN5474124**	Price
#3	2-3/4	1/4	10	**KW4093021**	Price	**KN5474127**	Price
#3	3-1/2	1/4	10	**KW4093049**	Price	**KN5474130**	Price
#3	4.33	1/4	10	-		**KN5474131**	Price
#3	4	1/4	10	**KW4093029**	Price	-	
#3	5	1/4	10	**KW4093059**	Price	**KN5474133**	Price
#3	6	1/4	10	**KW4093069**	Price	**KN5474136**	Price

wiha Terminator Impact Phillips Bits



- Special energy absorbing dual material design
- Up to 30 times impact performance over standard bits
- Standard 1/4" drive
- Wiha enhanced bi-material torsion zone
- Precision heated treated

		-			Impact Power Bit		
Size	Package Qty.	Aprox. Length (in.)	Order No.	Price Per Pack	Aprox. Length (in.)	Order No.	Price Per Pack
#1	2	1-1/8	**KN5476801**	Price	2	**KN5476843**	Price
#2	2	1-1/8	**KN5476802**	Price	2	**KN5476844**	Price
#3	2	1-1/8	**KN5476803**	Price	2	**KN5476845**	Price

IRWIN Phillips Impact Power Bits



- Built for maximum durability and long life with impact drivers.
- Forged bit (vs. milled) for superior fitment, which reduces stripping and increases life of bit 3X
- Manufactured with heavy-duty, cold-forged, high-grade steel to withstand high torque output
- Black oxide finish resists corrosion and increases life of bit

Point Size	Shank Dia. (in.)	Length (in.)	Order No.	Price
#1	1/4	2	**KW401837436**	Price
#2	1/4	2	**KW401837455**	Price
#3	1/4	3	**KW401837463**	Price

APEX

Apex Bits meet the most stringent government and military specifications. The tolerances are up to 48% tighter than DIN standards and 35% tighter than ANSI requirements. Apex bits consistently and regularly out performs the competition; up to ten times longer lasting. The precision fit design eliminates “cam-outs” and premature bit failure.

- Proprietary steel and heat treat process yields greater strength and longer bit life
- Cutting-edge machining process results in tighter tolerances and superior product consistency
- Better and more consistent fit to fasteners resulting to better torque transfer

Available selections:

- Standard insert bits
- Power insert bits
- Adapters
- Bit Holders
- Chucks
- Nut Drivers
- Extensions






APEX Phillips Bits

MADE IN THE USA



Point Size	Drive Size	OAL (in.)	Heat Treat	Apex #	Order No.	Price
#1	1/4	1	Hard	440-1X	**KW7060015**	Price
#2	1/4	1	Hard	440-2X	**KW7060035**	Price
#2	1/4	1	Medium	440-2I	**KW7060030**	Price
#2	1/4	1-1/2	Hard	440-215X	**KW7060020**	Price
#2	1/4	2	Hard	440-22X	**KW7060025**	Price
#3	1/4	1	Hard	440-3X	**KW7060040**	Price
#4	1/4	1-5/16	Hard	440-4X	**KW7060045**	Price
#2	5/16	1-1/4	Hard	480-2X	**KW7060065**	Price
#3	5/16	1-1/4	Hard	480-3X	**KW7060075**	Price

APEX Phillip Bits Power Drive

MADE IN THE USA

- Power bits are best used with quick-release (QR series) chucks



Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#0	1/4	1-15/16	4910X	**KW7060085**	Price
#0	1/4	2-3/4	4910-AX	**KW7060080**	Price
#1	1/4	1-15/16	491X	**KW7060105**	Price
#1	1/4	2-3/4	491-AX	**KW7060090**	Price
#1	1/4	3-1/2	491-BX	**KW7060095**	Price
#1	1/4	6	491-CX	**KW7060100**	Price
#2	1/4	1-15/16	492X	**KW7060140**	Price
#2	1/4	2-3/4	492-AX	**KW7060120**	Price
#2	1/4	3-1/2	492-BX	**KW7060130**	Price
#2	1/4	6	492-CX	**KW7060135**	Price
#3	1/4	1-15/16	493X	**KW7060160**	Price
#3	1/4	2-3/4	493-AX	**KW7060150**	Price
#3	1/4	3-1/2	493-BX	**KW7060155**	Price
#3	1/4	1-15/16	4930X	**KW7060145**	Price

APEX Phillip Bits - Power Drive ACR® Anti-Camout Ribs

MADE IN THE USA

- ACR (Anti-Camout Rib) design reduces slippage for increased torque



Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#1	1/4	1-15/16	491-ACR1X	**KW7060165**	Price
#2	1/4	1-15/16	492-ACR2X	**KW7060115**	Price
#2	1/4	2-3/4	492-A-ACR2X	**KW7060110**	Price
#2	1/4	3-1/2	492-B-ACR2X	**KW7060125**	Price

APEX Pozidriv® Bits Power Drive

MADE IN THE USA

- Power bits are best used with quick-release (QR series) chucks



Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#2	1/4	1-15/16	492-PZDX	**KW7060490**	Price
#3	1/4	1-15/16	493-PZDX	**KW7060500**	Price

APEX Pozidriv® Bits



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#1	1/4	1	440-1-PZDX	**KW7060450**	Price
#2	1/4	1	440-2-PZDX	**KW7060455**	Price
#3	1/4	1	440-3-PZDX	**KW7060460**	Price

APEX Phillips Bits - ACR® Anti-Camout Ribs

MADE IN THE USA

- ACR (Anti-Camout Rib) design reduces slippage for increased torque

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#1	1/4	1	440-1-ACR1X	**KW7060000**	Price
#2	1/4	1	440-2-ACR2X	**KW7060005**	Price
#3	1/4	1	440-3-ACR3X	**KW7060010**	Price
#2	5/16	1-1/4	480-2-ACR2X	**KW7060060**	Price
#3	5/16	1-1/4	480-3-ACR3X	**KW7060070**	Price

APEX Phillips Bits - Limited Clearance



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#1	1/4	1	446-1X	**KW7060050**	Price
#2	1/4	1	446-2X	**KW7060055**	Price

IRWIN HANSON Slotted Power Bits





- Irwin – high grade steel

Pt. Size	OAL (in.)	Shank (in.)	Order No.	Price
3-4	2	1/4	**KW4093103**	Price
4-5	2	1/4	**KW4093105**	Price
5-6	2	1/4	**KW4093107**	Price
6-8	2	1/4	**KW4093109**	Price
8-10	2	1/4	**KW4093111**	Price
10-12	2	1/4	**KW4093113**	Price
12-14	2	1/4	**KW4093115**	Price

IRWIN HANSON Slotted Power Bits with Finder





Pt. Size	Shank (in.)	OAL (in.)	Order No.	Price
#5-6	1/4	2-5/32	**KW4093191**	Price
#6-8	1/4	2-5/32	**KW4093193**	Price
#10-12	1/4	2-5/32	**KW4093195**	Price

PROTO 7/16" Hex Shank Extension

MADE IN THE USA

- Made of forged steel
- Size stamped on tool for easy identification
- Not for use on impact applications



Input Hex Size (in.)	Drive (in.)	OAL (in.)	Style	Model No.	Order No.	Price
7/16	1/2	2-3/4	Pin	J7121	**KP4251160**	Price

PROTO Square Extensions

MADE IN THE USA



New!

- Made of forged steel
- Size stamped on tool for easy identification
- Not for use on impact applications

Input Hex Size (in.)	Output Dr Male (in.)	OAL (in.)	Style	Model No.	Order No.	Price
1/4	1/4	2	Pin	J61302	**KP4251165**	Price
1/4	3/8	6	Pin	J61406	**KP4251200**	Price
1/4	1/4	4	Pin	J61304	**KP4251175**	Price
1/4	3/8	2	Ball	J61502	**KP4251205**	Price
1/4	1/4	2	Ball	J61352	**KP4251185**	Price
1/4	3/8	2	Pin	J61402	**KP4251190**	Price
1/4	1/4	6	Pin	J61306	**KP4251180**	Price
1/4	3/8	4	Pin	J61404	**KP4251195**	Price

IRWIN HANSON Square Drive Socket Adapters



Sq. Drive (in.)	Lock Type	OAL (in.)	Order No.	Price
1/4	Pin	2	**KW4093758**	Price
3/8	Ball	1-5/8	**KW4093782**	Price
3/8	Ball	2	**KW4093784**	Price
3/8	Ball	3	**KW4093787**	Price
3/8	Pin	1-5/8	**KW4093781**	Price
3/8	Pin	3	**KW4093786**	Price
1/2	Ball	2	**KW4093795**	Price
1/2	Ball	3	**KW4093797**	Price

TEKTON 3 Pc. Magnetic Nut Setter

Fractional

- Sizes included (SAE): 1/4, 5/16, 3/8" x (2-9/16" OAL)
- Universal fit 1/4" hex shank
- Sandblasted chrome vanadium steel



Order No.	Price
KP852906	Price

PROTO 1/4" Drive Magnetic Bit Holders

MADE IN THE USA

New!

- Magnetic to hold the bit in place
- Black oxide



Length	Model No.	Order No.	Price
2-1/4	J61222	**KP4250830**	Price
2-1/4 (knurled)	J61234	**KP4250850**	Price
2-31/32	J61223	**KP4250835**	Price
4	J61224	**KP4250840**	Price
6	J61226	**KP4250845**	Price

IRWIN HANSON 1/4" Magnetic Hex Shank Bit Holders



Description	OAL (in.)	Order No.	Price
Knurled	2-15/16	**KW4093715**	Price
No C Ring	2-1/4	**KW4093714**	Price
No C Ring	2-31/32	**KW4093722**	Price
Standard With C Ring	2-1/4	**KW4093712**	Price
Standard With C Ring	2-31/32	**KW4093718**	Price

IRWIN HANSON Magnetic Power Nut Setters

Fractional



Hex Drive (in.)	Shank Dia. (in.)	Socket Body (in.)	OAL (in.)	Order No.	Price
1/4	1/4	7/16	1-7/8	**KW4094212**	Price
1/4	1/4	7/16	2-9/16	**KW4094312**	Price
5/16	1/4	1/2	1-7/8	**KW4094232**	Price
5/16	1/4	1/2	2-9/16	**KW4094332**	Price
3/8	1/4	9/16	1-7/8	**KW4094252**	Price
7/16	1/4	5/8	1-7/8	**KW4094272**	Price
7/16	1/4	5/8	2-9/16	**KW4094372**	Price

wiha Magnetic Bit Holders



Type - Magnetic Bit Holder with Retaining Rings				
Shank (in.)	OAL (in.)	Qty.	Order No.	Price
1/4	10	1	**KN5471441**	Price
1/4	2-1/2	1	**KN5471431**	Price
1/4	2-5/8	1	**KN5471433**	Price
1/4	4	1	**KN5471435**	Price
1/4	6	1	**KN5471437**	Price
1/4	7-3/4	1	**KN5471439**	Price

Type - Standard Magnetic Insert Bit Holder				
Shank (in.)	OAL (in.)	Qty.	Order No.	Price
1/4	3	-	**KN5471130**	Price
1/4	2-1/4	-	**KN5471131**	Price

IRWIN HANSON Lock-N-Load™ Powerbit Chuck and Extensions



KW4090101



KW4090106



KW4090112

Length	Order No.	Price
2" Quick Change Chuck	**KW4090102**	Price
6" Quick Change Extension	**KW4090106**	Price
12" Quick Change Extension	**KW4090112**	Price

Torx® is a registered trademark of Acument Global Technologies.

Individual Balldriver Power Bits



Type - Inch			
Hex	Blade Length (in.)	Order No.	Price
5/64	3	**KN5310804**	Price
3/32	3	**KN5310805**	Price
7/64	3	**KN5310806**	Price
1/8	3	**KN5310807**	Price
9/64	3	**KN5310808**	Price
5/32	3	**KN5310809**	Price
3/16	3	**KN5310810**	Price
7/32	3	**KN5310811**	Price
1/4	3	**KN5310812**	Price
5/16	3	**KN5310813**	Price
3/8	3	**KN5310814**	Price
1/2	3	**KN5310816**	Price

Type - Metric			
Hex	Blade Length (in.)	Order No.	Price
2mm	3	**KN5310852**	Price
2.5mm	3	**KN5310854**	Price
3mm	3	**KN5310856**	Price
4mm	3	**KN5310860**	Price
5mm	3	**KN5310864**	Price
6mm	3	**KN5310868**	Price
8mm	3	**KN5310872**	Price
10mm	3	**KN5310876**	Price
12mm	3	**KN5310880**	Price

Hex (Socket) Power Bits



			Irwin		Wiha	
Size (in.)	Shank (in.)	OAL (in.)	Order No.	Price	Order No.	Price
1/16	1/4	1-15/16	**KW4093403**	Price	-	-
5/64	1/4	1-15/16	**KW4093405**	Price	-	-
3/32	1/4	1-15/16	**KW4093407**	Price	-	-
7/64	1/4	1-15/16	**KW4093409**	Price	**KN5474312**	Price
1/8	1/4	1-15/16	**KW4093411**	Price	**KN5474313**	Price
9/64	1/4	1-15/16	**KW4093413**	Price	**KN5474314**	Price
5/32	1/4	1-15/16	**KW4093415**	Price	**KN5474315**	Price
3/16	1/4	1-15/16	**KW4093419**	Price	**KN5474316**	Price
7/32	1/4	1-15/16	**KW4093423**	Price	**KN5474317**	Price
1/4	1/4	1-15/16	**KW4093427**	Price	**KN5474318**	Price

Terminator Impact Square Bits

- Special energy absorbing dual material design
- Impact rated bits for longer life in impact applications
- Up to 30 times impact performance over standard bits
- Standard 1/4" drive
- Wiha enhanced bi-material torsion zone
- Precision heated treated & premium CVM tool steel
- Other styles and package qty available - call for info



KN5476879

KN5476839

		Impact Insert Bit			Impact Power Bit		
Size	Package Qty.	Aprox. Length (in.)	Order No.	Price Per Pack	Aprox. Length (in.)	Order No.	Price Per Pack
#1	2	1-1/8	**KN5476838**	Price	2	**KN5476878**	Price
#2	2	1-1/8	**KN5476839**	Price	2	**KN5476879**	Price
#3	2	1-1/8	**KN5476840**	Price	2	**KN5476880**	Price

Square Recess Power Bits



Size	Shank (in.)	OAL (in.)	Order No.	Price
#1	1/4	1-15/16	**KW4093203**	Price
#1	1/4	2-3/4	**KW4093211**	Price
#1	1/4	6	**KW4093230**	Price
#2	1/4	1-15/16	**KW4093205**	Price
#2	1/4	2-3/4	**KW4093213**	Price
#2	1/4	6	**KW4093231**	Price
#3	1/4	1-15/16	**KW4093207**	Price
#3	1/4	2-3/4	**KW4093215**	Price
#3	1/4	6	**KW4093232**	Price

Square Insert Bits

Phillips®

New!



- Not for use on impact applications

Size	Length (in.)	Model No.	Order No.	Price
#1	1	J61002	**KP4251070**	Price
#2	1	J61004	**KP4251075**	Price

1/2" Drive Link Sockets

- Made of heat-treated alloy steel
- Ball detent

New!



Size (in.)	OAL (in.)	Model No.	Order No.	Price
3/4	1-5/8	J5444A	**KP4204065**	Price
15/16	1-5/8	J5446A	**KP4204075**	Price

Socket Head Insert Bits

- Irwin – high grade steel
- Wiha – hardened vanadium impact resistant steel (Packaged quantity of 10)





Style - Fractional							
			Irwin		Wiha		
Pt. Size	Shank (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
.050	1/4	1-1/4	**KW4092407**	Price	-	-	-
1/16	1/4	1-1/4	**KW4092403**	Price	1	**KN5471326**	Price
5/64	1/4	1-1/4	**KW4092411**	Price	1	**KN5471328**	Price
3/32	1/4	1-1/4	**KW4092415**	Price	1	**KN5471330**	Price
7/64	1/4	1-1/4	**KW4092419**	Price	1	**KN5471333**	Price
1/8	1/4	1-1/4	**KW4092423**	Price	1	**KN5471336**	Price
9/64	1/4	1-1/4	**KW4092427**	Price	1	**KN5471339**	Price
5/32	1/4	1-1/4	**KW4092431**	Price	1	**KN5471342**	Price
3/16	1/4	1	**KW4092437**	Price	1	-	-
7/32	1/4	1-1/4	**KW4092443**	Price	1	**KN5471348**	Price
1/4	1/4	1-1/4	**KW4092451**	Price	1	**KN5471351**	Price
5/16	1/4	1-1/4	**KW4092467**	Price	1	**KN5471353**	Price
3/8	1/4	1-1/4	**KW4092483**	Price	1	**KN5471356**	Price

Style - Metric							
			Irwin		Wiha		
Pt. Size	Shank (in.)	OAL (in.)	Order No.	Price	OAL (in.)	Order No.	Price
1.5mm	1/4	-	-	-	1	**KN5471303**	Price
2mm	1/4	1-1/4	**KW4092507**	Price	1	**KN5471306**	Price
2.5mm	1/4	-	-	-	1	**KN5471308**	Price
3mm	1/4	1-1/4	**KW4092509**	Price	1	**KN5471309**	Price
4mm	1/4	1-1/4	**KW4092511**	Price	1	**KN5471312**	Price
5mm	1/4	1-1/4	**KW4092513**	Price	1	**KN5471315**	Price
6mm	1/4	1-1/4	**KW4092515**	Price	1	**KN5471318**	Price
8mm	1/4	1-1/4	**KW4092517**	Price	1	**KN5471321**	Price
10mm	1/4	-	-	-	1	**KN5471324**	Price

Square Insert Bits

- Irwin Hanson standard grade
- Irwin Hanson impact grade 3X longer life
- WIHA hardened vanadium steel

KW401837384



KN5471802



			Irwin Hansen Impact		Irwin Hansen		Wiha Torsion	
Pt. Size	Shank (in.)	OAL (in.)	Order No.	Price	Order No.	Price	Order No.	Price
#1	1/4	1	**KW401837380**	Price	**KW4092201**	Price	-	-
-	1/4	-	**KW401837384**	Price	**KW4092203**	Price	-	-
#2	1/4	1	**KW401837386**	Price	**KW4092205**	Price	**KN5471802**	Price
#3	1/4	1	-	-	**KW4092207**	Price	**KN5471803**	Price

APEX Socket Head Bits with Square Drive Adapters, SAE



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
1/8	3/8	2-1/4	SZ-10	**KW7060685**	Price
5/32	3/8	2-1/4	SZ-11	**KW7060690**	Price
3/16	3/8	2-1/4	SZ-12	**KW7060695**	Price
7/32	3/8	2-1/4	SZ-13	**KW7060700**	Price
1/4	3/8	2-1/4	SZ-14	**KW7060705**	Price
5/16	3/8	2-1/4	SZ-15	**KW7060710**	Price
3/8	3/8	2-1/4	SZ-16	**KW7060715**	Price
3/16	1/2	2-1/2	SZ-20	**KW7060720**	Price
7/32	1/2	2-1/2	SZ-21	**KW7060725**	Price
1/4	1/2	2-1/2	SZ-22	**KW7060730**	Price
5/16	1/2	2-1/2	SZ-23	**KW7060735**	Price
3/8	1/2	2-1/2	SZ-24	**KW7060740**	Price
5/32	1/2	2-1/2	SZ-41	**KW7060745**	Price
1/2	1/2	2-1/2	SZ-42	**KW7060750**	Price

APEX Socket Head Bits Power Drive - Metric

- Power bits are best used with quick-release (QR series) chucks



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
2mm	1/4	1-15/16	AM-2MM	**KW7060625**	Price
2.5mm	1/4	1-15/16	AM-2.5MM	**KW7060620**	Price
3mm	1/4	1-15/16	AM-3MM	**KW7060630**	Price
4mm	1/4	1-15/16	AM-4MM	**KW7060635**	Price
5mm	1/4	1-15/16	AM-5MM	**KW7060640**	Price
6mm	1/4	1-15/16	AM-6MM	**KW7060645**	Price

APEX Socket Head Bit, 7/16" Hex Drive Insert Only



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Heat Treated Level	Order No.	Price
1/8	7/16	1-3/8	SZ-10-A	**KW7061170**	Price
3/16	7/16	1-3/8	SZ-12-A	**KW7061175**	Price
7/32	7/16	1-3/8	SZ-13-A	**KW7061180**	Price
1/4	7/16	1-3/8	SZ-14-A	**KW7061185**	Price
5/16	7/16	1-3/8	SZ-15-A	**KW7061190**	Price
3/8	7/16	1-3/8	SZ-16-A	**KW7061195**	Price
1/2	5/8	1-9/16	SZ-31-A	**KW7061200**	Price

APEX Square Drive Bits Power Drive TURNED BODY

MADE IN THE USA

- Power bits are best used with quick-release (QR series) chucks



Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#1	1/4	1-15/16	1950-1X	**KW7060755**	Price
#2	1/4	1-15/16	1950-2X	**KW7060760**	Price
#2	1/4	3-1/2	1953-2X	**KW7060765**	Price
#3	1/4	3-1/2	1953-3X	**KW7060770**	Price

APEX Tri-Wing® Bits



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#2	1/4	1	TWD-2	**KW7060915**	Price
#3	1/4	1	TWD-3	**KW7060920**	Price
#4	1/4	1	TWD-4	**KW7060925**	Price
#5	1/4	1	TWD-5	**KW7060930**	Price
#6	1/4	1	TWD-6	**KW7060935**	Price

APEX Tri-Wing® Bits Power Drive

- Power bits are best used with quick-release (QR series) chucks



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Heat Treated Level	Order No.	Price
#2	1/4	1-1/4	TW-2	**KW7060890**	Price
#3	1/4	1-1/4	TW-3	**KW7060895**	Price
#4	1/4	1-1/4	TW-4	**KW7060900**	Price
#5	1/4	1-1/4	TW-5	**KW7060905**	Price
#6	1/4	1-1/2	TWB-6	**KW7060910**	Price

APEX Torq-Set® Bits



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#2	1/4	1	212-2	**KW7060830**	Price
#3	1/4	1	212-3	**KW7060835**	Price
#4	1/4	1	212-4	**KW7060840**	Price
#6	1/4	1	212-6	**KW7060845**	Price
#8	1/4	1	212-8	**KW7060850**	Price
#10	1/4	1	212-10	**KW7060825**	Price
1/4	1/4	1	212-1/4	**KW7060820**	Price

APEX Torq-Set® Bits Power Drive

- Power bits are best used with quick-release (QR series) chucks



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
#2	1/4	1-1/4	170-2	**KW7060865**	Price
#3	1/4	1-1/4	170-3	**KW7060870**	Price
#4	1/4	1-1/4	170-4	**KW7060875**	Price
#6	1/4	1-1/4	170-6	**KW7060880**	Price
#8	1/4	1-1/4	170-8	**KW7060885**	Price
#10	1/4	1-1/4	170-10	**KW7060860**	Price
1/4B	1/4	1-1/4	170-1/4B	**KW7060855**	Price

APEX Hex Drive Bit Holders



- Tools bit holders are made with high quality steel
- Magnetic bit holders keep the bit in driving position, even when working straight down.
- Time-wasting motions are eliminated when starting or working in hard-to-reach areas
- These bit holders are identified with a M- prefix
- Made from select raw materials and only high grade tool steel
- Tightest tolerances in the industry, closer tolerances mean a better fit and less cam-out or stripping.

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
1/4	1/4	2	M-490-2	**KW7060945**	Price
1/4	1/4	2-31/32	M-490	**KW7060940**	Price

APEX Hex Drive Bit Holder with Quick Release



- Proprietary steel and heat treat process yields greater strength and longer bit life
- Cutting-edge machining process results in tighter tolerances and supe-rior Product consistency
- Better and more consistent fit to fasteners resulting to better torque transfer
- Power bits are best used with quick-release (QR series) chucks

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
1/4	1/4	2-29/32	QR-M-490-A	**KW7060950**	Price

APEX Hex Drive Magnetic Nut Setters



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Style	Apex #	Order No.	Price
3/16	1/4	3	6 Point	M6N-0806-3	**KW7061015**	Price
1/4	1/4	2	6 Point	M6N-0808-2	**KW7061020**	Price
1/4	1/4	3	6 Point	M6N-0808-3	**KW7061025**	Price
5/16	1/4	3	6 Point	M6N-0810-3	**KW7061030**	Price
5/16	1/4	6	6 Point	M6N-0810-6	**KW7061035**	Price
3/8	1/4	3	6 Point	M6N-0812-3	**KW7061040**	Price
3/8	1/4	6	6 Point	M6N-0812-6	**KW7061045**	Price
7/16	1/4	3	6 Point	M6N-0814-3	**KW7061050**	Price
1/2	1/4	3	6 Point	M6N-0816-3	**KW7061055**	Price

APEX Hex Drive Magnetic Nut Setters Power Drive

MADE IN THE USA



- Used to drive sheet metal screws
- Power bits are best used with quick-release (QR series) chucks

Point Size	Drive Size	OAL (in.)	Style	Apex #	Order No.	Price
1/4	1/4	1-3/4	6 Point	MDA-08	**KW7061060**	Price
5/16	1/4	1-3/4	6 Point	MDA-10	**KW7061065**	Price
3/8	1/4	1-3/4	6 Point	MDA-12	**KW7061070**	Price
1/4	1/4	2-9/16	6 Point	MDB-08	**KW7061075**	Price
5/16	1/4	2-9/16	6 Point	MDB-10	**KW7061080**	Price
3/8	1/4	2-9/16	6 Point	MDB-12	**KW7061085**	Price
7/16	1/4	2-9/16	6 Point	MDB-14	**KW7061090**	Price

APEX Hex Extensions



- Pin lock feature provides best retention

Drive Size	OAL (in.)	Apex #	Order No.	Price
1/4	1-3/8	EX-250	**KW7061100**	Price
1/4	2	EX-250-2	**KW7061105**	Price
1/4	2	EX-370-2	**KW7061125**	Price
1/4	2	EX-500-2	**KW7061140**	Price
1/4	3	EX-250-3	**KW7061110**	Price
1/4	4	EX-250-4	**KW7061115**	Price
1/4	4	EX-370-4	**KW7061130**	Price
1/4	6	EX-250-6	**KW7061120**	Price
1/4	6	EX-370-6	**KW7061135**	Price

PROTO Power Bit Holders

MADE IN THE USA *New!*



- Not for use on impact applications

Input Drive (in.)	Insert Hex Size (in.)	OAL (in.)	Model No.	Order No.	Price
1/4	1/4	1	J6925	**KP4251125**	Price
3/8	1/4	1-3/4	J6931	**KP4251135**	Price
3/8	5/16	1-5/16	J6930	**KP4251130**	Price
1/2	5/16	1-1/2	J6935	**KP4251140**	Price

APEX Female Square Drive Quick Release Chucks - Non Magnetic

MADE IN THE USA



- Quick releasing chucks from Apex™
- Made from high grade tool steel
- Manufactured to the tightest tolerances in the industry
- Better fit and less cam-out or stripping

Drive Size	Point Size	OAL (in.)	Apex #	Order No.	Price
1/2	1/4"	2-1/8	QR-508	**KW7060990**	Price
1/4	1/4"	1-1/2	QR-108	**KW7060980**	Price
3/8	1/4"	1-3/4	QR-308	**KW7060985**	Price

APEX Square Drive Sockets - Magnetic 6 Pt

MADE IN THE USA



- High-carbon alloy steel and proprietary heat treat process yields greater strength and longer life
- Cutting-edge machining process allows Apex to meet or exceed licensor standards, resulting in tighter tolerances and superior product consistency
- Impact rated; meets or exceeds proof rorque requirement for impact standard ASME B107.111

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
1/4	1/4	7/8	MX-1108	**KW7061145**	Price
5/16	1/4	1	MX-1110	**KW7061150**	Price
3/8	1/4	1	MX-1112	**KW7061155**	Price

APEX Square Drive Bit Holder Adapter with Set Screw Pin



MADE IN THE USA

Point Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
1/4	3/8	1-1/2	SC-308	**KW7060995**	Price
7/16	3/8	1-3/8	SC-314	**KW7061000**	Price
7/16	1/2	1-5/8	SC-514	**KW7061005**	Price
5/8	1/2	1-1/2	SC-520	**KW7061010**	Price

APEX Female Square Drive Bit Holders



MADE IN THE USA

- Non-magnetic

Hex Insert Size	Drive Size	OAL (in.)	Apex #	Order No.	Price
1/4	1/4	1	825	**KW7060955**	Price
1/4	3/8	1-1/2	838	**KW7060965**	Price
1/4	1/2	1-3/4	858	**KW7060975**	Price
5/16	1/2	1-3/4	855	**KW7060970**	Price
5/16	3/8	1-1/2	835	**KW7060960**	Price

PROTO 28 Pc. Magnetic Screwdriver Bit Set

Set includes:
- Bits #0, #1, #2, #3 phillips, 3F-4R, 4F-5R, 7/32, 5/32, 9/32 slotted, T10, T15, T20, T25, T30, T40 Torx®, #0, #1, #2, #3 square recess, 1/8, 5/32 clutch, 5/64, 3/32, 1/8, 5/32, 3/16 socket head, magnetic bit holder, screwdriver magnetic bit holder
- Blow molded case

New!

MADE IN THE USA



Model No.	Order No.	Price
J61929	**KP4250795**	Price

PROTO 38 Pc. Insert - Power Bit Set

- Contains: #1, #2, #3 phillips®, #1, #2 pozidrive, 4F-5R, 6F-8R, 8F-10R, 10F-12R, 12F-14R, 14F-16R slotted, T6, T7, T8, T9, T10, T15, T20, T25, T30, T40 torx, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16 socket head, #0, #1, #2, #3 square recess, 1/8, 5/32, 3/16 clutch, magnetic bit holder, power bit holder
- Magnetic tray to help keep pieces in place
- Not for use on impact applications

MADE IN THE USA



Model No.	Order No.	Price
J61906	**KP4250865**	Price

STEELMAN PRO 50 Pc. Impact Grade Bit Set

New!

- Heat treated steel
- **Additional bits:** Two 2-1/2" PH2 and PH3, two 5" PH2, 2-1/2" slotted bit, 2-1/2" T10, T15, T20, T25, T27, T30, and T40, 5" T25, T27, T30, and T40, and 1/4, 5/16, and 3/8" socket drivers
- **5 Socket adapters:** 1/4" x 2-1/2", 3/8" x 2-1/2", 1/2" x 2", 1/4" x 6", and 3/8" x 6"
- Set includes a quick release bit holder in 2-1/2" (2), 3-1/2", and 6" lengths
- Easily indentify bits: sizes are laser etched and the standard and metric hex bits are different lengths for easy identification



Order No.	Price
KE5378633	Price

TEKTON 27 Pc. - Everybit Precision™ Tool Kit

- Specifically designed for popular mobile and electronic devices - hard-to-find bits fit laptops, mobile devices, game systems, and other precision items like wristwatches and eyeglasses
- Precision screwdriver bits are machined from chrome molybdenum steel and finished with sandblasted nickel
- Mini driver with spinning endcap for constant finger pressure while turning
- Convenient bit storage in handle
- 3-pc. Flat: 1, 1.5, 2.5mm - 4-pc. Phillips: #000, #00, #0, #1 - 3-pc. Star drive: T3, 4, 5 - 6-pc. Tamper-resistant star drive: TR6, 7, 8, 9, 10, 15 - 2-pc. Tri-Wing: TRI 0,TRI 1 - 2-pc. Pentalobe: TS1, 5 - 2-pc. Nut drivers: 4, 5mm - 1-pc. Precision driver - 1-pc. Spudger - 2-pc. Bit organizers - Storage case



Order No.	Price
KP852830	Price

TITAN 26 Pc. Precision Bit and Driver Set

New!

- One click release
- Rotatable tool tray
- Push button eject
- Color coded for easy identification
- Includes: (1) Aluminum bit driver (1) Magnetic bit holder (2) Pentalobe bits: TS1 & TS5 (4) Phillips bits: 000, 00, 0, 1 (5) Slotted bits: 1.0, 1.5, 2.0, 2.5, 3 (6) Star bits: T4 - T9 (7) Hex bits: 0.7, 0.9, 1.3, 1.5, 2.0, 2.5, 3



Order No.	Price
KP8216028	Price

TITAN 26 Pc. Ratcheting Screwdriver Set

- For use with a wide range of projects including automotive, engineering, & electronic applications
- Aluminum construction
- Comfort grip handle

Set Includes:
- (1) 5" Ratcheting driver,
- (1) 4-1/2" Extension bar
- (7) Phillips: PH000, (2) PH00, (2) PH0, PH1 & PH2
- (5) Slotted: 1/16", 5/64", 3/32", 1/8" & 5/32"
- (5) SAE hex: 1/16", 5/64", 3/32", 1/8" & 5/32"
- (5) Star: T5, T6, T7, T8 & T9
- (2) Tri-wing: 2mm & 3mm

New!



Order No.	Price
KP8216092	Price

TITAN 3 Pc. Finger Driver Set

- Knurled for easier grip
- Interchangeable bits

Includes:
- (1) 1/4" Slotted screwdriver bit
- (1) #2 Phillip screwdriver bit
- (1) 1/4" Socket adaptor



Order No.	Price
KP8232958	Price

TITAN 9 Pc. Star Precision Pocket Screwdriver Set

- Convenient bit storage in handle & handy pocket clip
- Anodized aluminum alloy handle is knurled for a secure grip
- Magnetic tip holds bits securely



Set Includes	Order No.	Price
T3, T4, T5, T6, T7, T8, T9 & T10	**KP8255073**	Price

IRWIN Impact Bit Drawer Sets

- These impact insert bits are built for maximum durability and long life with impact drivers
- They are forged bit (vs. milled) for superior fitments, which reduces stripping and increases life of bit 3X (Square and Phillips bits only)



KW401866985



KW401866987

No. of Pieces	Set Includes	Order No.	Price
31	1" Insert Bits: (2)Phillps PH1,(4)PH2, (2)PH2-Drywall, (2)PH3, (2)Square Drive SQ1, (4)SQ2, (2)SQ3, T10, T15, (2)T20, (4)T25,T27,(2)T30, T40. Impact Magnetic Bit Holder w/C-Ring 2-1/4"	**KW401866985**	Price
51	Insert Bits:Phillips-PH0, (3)PH1, (4)PH2, (3)PH3; Square Drive -SQ0, (2)SQ1, (4)SQ2, (3)SQ3; Slotted-4-5SL, 6-8SL,(2) 8-10SL, 10-12SL; TORX- T10, (2)T15, (2) T20 ,(2)T25,T27,(2) T30; Hex -5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16"; Pozidriv- PZ1, PZ2, PZ3; Spanner #3, #4, #6, #8, #10. Magnetic Bit Holder w/C-Ring 2-1/4	**KW401866987**	Price

Snap-on Industrial Brands | WILLIAMS 72 Pc. Tools Bits Set



Features:

- S2 material for higher torque, optimum durability and performance
- All parts are engineered and produced according to ANSI standard
- The set also includes a magnetic bit holder allowing for quick change of driving bits
- Folding case design is compact and robust with pivoting dual bit holders that allow for easy and quick access to the accessories
- Industrial case is made from a highly durable, plastic material

Set Includes	Order No.	Price
Bits included: Hex, Phillips, Square, Slotted, Pozi-Drive, Torx®, Nut Drivers, Magnetic Holder, Cones in 1 & 2" lengths	**KP3024900**	Price

PRM PRO Screwdriver Bit Sets

- S2 modified steel with a Rockwell hardness between 58-62 HRC
- 1/4" Drive with exact fit machined tips
- Lifetime warrenty against mfg defects

No. of Pcs.	Set Includes	Order No.	Price
31	Phillips #1, 2, 3 TORX 8, 10, 15, 20, 25, 27, 30, 40 Slotted 4-5, 6-8, 8-10 Hex 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 Square #1, 2, 3 Adapter 1/4" x 1/4" Quick Release Magnetic Bit Holder Sockets 1/4", 5/16", 3/8", 7/16", 1/2" 1/4" Bit Driving Ratchet	**KN7099031**	Price
50	Phillips #0, 1, 2, 3 Phillips ACR #0, 1, 2, 3 POZIDRIV #0, 1, 2, 3 TORX 5, 6, 7, 8, 9, 10, 15, 20, 25, 27, 30, 40 Slotted 3-4, 4-5, 5-6, 6-8, 8-10, 10-12, 12-14, 14-16 Hex 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 Square #0, 1, 2, 3 Adapter 1/4" x 1/4" Quick Release Magnetic Bit Holder	**KN7099050**	Price
100	Phillips #0, 1, 2, 2R, 3, 4 Phillips ACR #1, 2, 2R, 3 POZIDRIV #0, 1, 2, 3, 4 POZIDRIV ACR #1, 2, 3 TORX 6, 7, 8, 9, 10, 15, 20, 25, 27, 30, 40, 45, 50 Slotted 3-4, 5-6, 6-8, 8-10, 10-12, 12-14 Hex 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 Square #0, 1, 2, 3, 4 Clutch 5/32, 3/16, 1/4 Spline 4, 5, 6, 8 TORQ-SET 8, 10, 1/4, 5/16, 3/8 Spanner 4, 6, 8, 10, 12 TORX Tamper 6, 7, 8, 9, 10, 15, 20, 25, 27, 30, 40 Hex Tamper 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 TRI-WING 1, 2, 3, 4, 5 Adapter 1/4" x 1/4" x 1" Adapter 1/4" x 1/4" x 2" 1/4" Square Drive Bit Holder Y-Adapter 1/4" Magnetic Bit Holde	**KN7099100**	Price



Torx® is a registered trademark of Acument Global Technologies.

IRWIN Pocket Case Sets

- Compact, portable design allows for easy transport to and from the worksite and ease-of-use while on the job
- Molded ABS resin case holds up to rigors of daily use
- Easy-to-read size markings provide simple identification of set contents
- Convenient bit holder storage compartment incorporated into top of case (insert bit cases only)

No. of Pieces	Set Includes	Order No.	Price
5	2" Bulk Impact Insert Bits: #1PH, (3) #2 PH, #3PH	**KW401866977**	Price
10	1" Bulk Impact Insert Bits: #1PH, (2) #2PH, #3PH, #1SQ, (2) #2SQ, #3SQ, T25 & Magnetic Bit Holder No C-Ring 2-1/4"	**KW401866983**	Price
10	1" Bulk Impact Insert Bits: (2)#1PH, (5) #2PH, (2) #3PH & Magnetic Bit Holder No C-Ring 2-1/4"	**KW401866984**	Price



KW401866983



KW401866977



KW401866984

TITAN 148 Pc. Master Security Bit Set

- Contains an assortment of popular and hard-to-find 1/4 drive bits for many different applications
- Styles included: phillips, slotted, square dr, torx, pozidrive, inch, and metric hex, tamper resistant torx, tamper resistant hex, clutch dr, spline dr, spanner, tri-wing and quad-wing bits
- 1/4 Drive adapter
- Sturdy hard case for easy storage and carry
- Lifetime warranty against mfg. defect



Order No.	Price
KP8216148	Price

TITAN 61 Pc. Master Tool Bit Set

- Includes sixty driver bits for a huge variety of fastener sizes and styles
- 2-1/2" Magnetic bit holder, (6) phillips, (5) slotted, (13) torx, (6) pozidrive, (12) hex, (7) tamper resistant torx, (6) tamper resistant hex, (5) spanner
- Sturdy plastic storage case
- Also includes one magnetic 1/4" bit adapter
- Lifetime warranty against mfg. defect



Order No.	Price
KP8216061	Price

PROTO® Driver Bit Socket Sets

MADE IN THE USA

Proto® bits are offered in a broad range to accommodate production assembly applications

- Made of alloy steel



KP4280650



KP4280685



KP4280695



KP4280800



KP4280665

Type - Ball							
Drive (in.)	Pcs Per Set	Style	Set Includes	Case	Model No.	Order No.	Price
3/8	7	Fractional	1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8"	Socket Clip	J4900BD	**KP4280665**	Price

Type - Hex							
Drive (in.)	Pcs Per Set	Style	Set Includes	Case	Model No.	Order No.	Price
1/4	11	Fractional	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16"	Socket Clip	J4770-11	**KP4280500**	Price
1/4	6	Metric	2, 2.5, 3, 4, 5, 6mm	Socket Clip	J4770-6	**KP4280505**	Price
3/8	7	Fractional	1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8"	Socket Clip	J4900-7C	**KP4280670**	Price
3/8	13	Fractional & Metric	Inch: 1/4, 1/8, 3/16, 3/8, 5/16, 5/32, 7/32; Metric: 4, 5, 6, 7, 8, 10mm	Socket Clip	J4902A	**KP4201400**	Price
3/8	7	Metric	4, 5, 6, 7, 8, 9, 10mm	Socket Clip	J4990-SMA	**KP4280685**	Price
3/8 & 1/2	10	Metric	3/8" Drive: 4, 5, 6, 7, 8, 9, 10mm; 1/2" Drive: 12, 14, 17mm	Blow Molded	J4900MA	**KP4280700**	Price
3/8 & 1/2	10	Fractional	3/8" Drive: 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8". 1/2" Drive: 1/2, 9/16, 5/8"	Blow Molded	J4900A	**KP4280695**	Price
1/2	7	Fractional	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8"	Socket Clip	J5441-7	**KP4280805**	Price
1/2	6	Metric	6, 8, 10, 12, 14, 17mm	Socket Clip	J5441-SM	**KP4280810**	Price
1/2	10	Metric	6, 8, 10, 12, 13, 14, 15, 17, 18, 19mm	Socket Clip	J5441-MA	**KP4280795**	Price

Type - Hex-Extra Long							
Drive (in.)	Pcs Per Set	Style	Set Includes	Case	Model No.	Order No.	Price
3/8	7	Fractional	1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8"	Socket Clip	J4990-7XL	**KP4280655**	Price
3/8	6	Metric	4, 5, 6, 7, 8, 10mm	Socket Clip	J4990-SMXL	**KP4280660**	Price
1/2	6	Fractional	1/4, 5/16, 3/8, 1/2, 9/16, 5/8"	Socket Clip	J5441-6XL	**KP4280800**	Price

Type - Hex-Short							
Drive (in.)	Pcs Per Set	Style	Set Includes	Case	Model No.	Order No.	Price
3/8	7	Fractional	1/4, 1/8, 3/16, 3/8, 5/16, 5/32, 7/32"	Socket Clip	J4990-7ST	**KP4280680**	Price
3/8	7	Metric	4, 5, 6, 7, 8, 9, 10mm	Socket Clip	J4990-MST	**KP4280675**	Price

Type - Torx							
Drive (in.)	Pcs Per Set	Style	Set Includes	Case	Model No.	Order No.	Price
3/8	8	Torx	T15, T20, T25, T27, T30, T40, T45, T50	Socket Clip	J5239C	**KP4280650**	Price

BONDHUS® Prohold® Removable Hex Bits



MADE IN THE USA

- ProHold® Technology holds hex bit securely in socket
- Available in 2" and 6" lengths, fractional or metric, with or without socket
- No roll pins, no set screws, no loosening, non magnetic
- Sizes are printed on bits to promote a stronger bit, no steel marking impression which could weaken bit
- Fractional and Metric

Type - Fractional			
Size (in./mm)	Length (in.)	Order No.	Price
5/32	2	**KN5333209**	Price
3/16	2	**KN5333210**	Price
7/32	2	**KN5333211**	Price
1/4	2	**KN5333212**	Price
5/16	2	**KN5333213**	Price
5/16	6	**KN5333613**	Price
3/8	2	**KN5333214**	Price
3/8	6	**KN5333614**	Price
1/2	2	**KN5333216**	Price
1/2	6	**KN5333616**	Price
9/16	2	**KN5333217**	Price
9/16	6	**KN5333617**	Price
5/8	2	**KN5333218**	Price
5/8	6	**KN5333618**	Price

Type - Metric			
Size (in./mm)	Length (in.)	Order No.	Price
4mm	2	**KN5333260**	Price
4mm	6	**KN5333660**	Price
5mm	2	**KN5333264**	Price
5mm	6	**KN5333664**	Price
6mm	2	**KN5333268**	Price
6mm	6	**KN5333668**	Price
7mm	2	**KN5333270**	Price
7mm	6	**KN5333670**	Price
8mm	2	**KN5333272**	Price
8mm	6	**KN5333672**	Price
10mm	2	**KN5333276**	Price
10mm	6	**KN5333676**	Price
12mm	2	**KN5333280**	Price
14mm	2	**KN5333284**	Price
17mm	2	**KN5333286**	Price

BONDHUS® Prohold® Hex Bits with Sockets



MADE IN THE USA

- Includes socket and bit
- ProHold® Technology holds hex bit securely in socket
- Available in 2" and 6" lengths, Fractional or Metric
- No roll pins, no set screws, no loosening, non magnetic
- Sizes are printed on bits to promote a stronger bit, no steel marking impression which could weaken bit

Type - Fractional				
Size (in./mm)	Length (in.)	Socket Drive	Order No.	Price
5/32	2	3/8	**KN5343209**	Price
3/16	2	3/8	**KN5343210**	Price
7/32	2	3/8	**KN5343211**	Price
1/4	2	3/8	**KN5343212**	Price
5/16	2	3/8	**KN5343213**	Price
5/16	6	1/2	**KN5343613**	Price
3/8	2	3/8	**KN5343214**	Price
3/8	6	1/2	**KN5343614**	Price
1/2	2	1/2	**KN5343216**	Price
1/2	6	1/2	**KN5343616**	Price
9/16	2	1/2	**KN5343217**	Price
9/16	6	1/2	**KN5343617**	Price
5/8	2	1/2	**KN5343218**	Price
5/8	6	1/2	**KN5343618**	Price

Type - Metric				
Size (in./mm)	Length (in.)	Socket Drive	Order No.	Price
4mm	2	3/8	**KN5343260**	Price
4mm	6	3/8	**KN5343660**	Price
5mm	2	3/8	**KN5343264**	Price
5mm	6	3/8	**KN5343664**	Price
6mm	2	3/8	**KN5343268**	Price
6mm	6	3/8	**KN5343668**	Price
7mm	2	3/8	**KN5343270**	Price
7mm	6	3/8	**KN5343670**	Price
8mm	2	3/8	**KN5343272**	Price
8mm	6	3/8	**KN5343672**	Price
10mm	2	3/8	**KN5343276**	Price
10mm	6	3/8	**KN5343676**	Price
12mm	2	1/2	**KN5343280**	Price
14mm	2	1/2	**KN5343284**	Price
17mm	2	1/2	**KN5343286**	Price

PROTO Sockets with insert bits-Fractional, Metric Torx®

New!

- Two-piece design allows for replacement of worn bits
- Bit holder have a hex opening to hold bits; allowing the holder to take the full load of tourque
- Made of heat treated alloy steel
- Polished chrome socket holders

PROTO 3/8" Screwdriver Bits-Phillips & Slotted

MADE IN THE USA



Size	Approx. OAL (in.)	Type	Model No.	Order No.	Price
#2	2	Phillips® Standard	J5241	**KP4203005**	Price
#3	2	Phillips® Standard	J5242	**KP4203010**	Price
#4	2	Phillips® Standard	J5243	**KP4203015**	Price
1/4	2	Slotted Standard	J5246	**KP4203025**	Price
5/16	3	Slotted Standard	J5240A	**KP4200620**	Price

PROTO 1/2" Drive Screwdriver Bits-Phillips & Slotted

- Made of heat-treated alloy steel
- Ball detent

MADE IN THE USA



Type - Phillips® Standard				
Size	**OAL (in.)**	**Model No.**	**Order No.**	**Price**
#2	2-5/32	J5402	**KP4204310**	Price
#3	2-5/32	J5403	**KP4204315**	Price
#4	2-5/32	J5404	**KP4204320**	Price

Type - Slotted Standard				
Size	**OAL (in.)**	**Model No.**	**Order No.**	**Price**
7/16	3-5/32	J5407A	**KP4200625**	Price
1/2	3-5/32	J5408A	**KP4200630**	Price
5/8	3-5/32	J5409A	**KP4200635**	Price

PROTO 3/8" Drive Screwdriver Bits-Torx®

- Bit holders have a hex opening to hold the bit allowing the bit holder to take the full load of torque
- Made of heat-treated alloy steel
- Polished chrome finish

MADE IN THE USA



Size	Model No.	Order No.	Price
T10	J5239-10W	**KP4202955**	Price
T15	J5239-15W	**KP4202960**	Price
T20	J5239-20W	**KP4202965**	Price
T25	J5239-25W	**KP4202970**	Price
T27	J5239-27W	**KP4202975**	Price
T30	J5239-30W	**KP4202980**	Price
T40	J5239-40W	**KP4202985**	Price
T45	J5239-45W	**KP4202990**	Price
T50	J5239-50W	**KP4202995**	Price
T55	J5239-55W	**KP4203000**	Price

PROTO 3/8" Drive. Impact Hex Bit Sockets - Fractional and Metric

MADE IN THE USA

- Proto® Hex Bit Impact Sockets can be used on stubborn fasteners
- Tight tolerances for snug fit on fastener
- Hex bit impact sockets are used wherever powered drive tools are used to install or remove fasteners
- Hex bit impact sockets are designed to withstand the high torque and force associated with impact tools in repetitive application
- Side locking hole



Size	OAL (in.)	Model No.	Order No.	Price
1/8	2-23/32	J72901/8	**KP4203140**	Price
5/32	2-23/32	J72905/32	**KP4203145**	Price
3/16	2-23/32	J72903/16	**KP4203150**	Price
7/32	2-23/32	J72907/32	**KP4203155**	Price
1/4	2-23/32	J72901/4	**KP4203160**	Price
5/16	2-23/32	J72905/16	**KP4203165**	Price
3/8	2-23/32	J72903/8	**KP4203170**	Price
4mm	2-23/32	J7290-4M	**KP4203175**	Price
5mm	2-23/32	J7290-5M	**KP4203180**	Price
6mm	2-23/32	J7290-6M	**KP4203185**	Price
8mm	2-23/32	J7290-8M	**KP4203190**	Price
10mm	2-23/32	J7290-10M	**KP4203195**	Price

PROTO 1/2" Drive Hex Bit Impact Sockets - Fractional

MADE IN THE USA

- Proto® Hex Bit Impact Sockets can be used on stubborn fasteners
- Tight tolerances for snug fit on fastener
- Hex bit impact sockets are used wherever powered drive tools are used to install or remove fasteners
- Hex bit impact sockets are designed to withstand the high torque and force associated with impact tools in repetitive application
- Side locking hole



Size (in.)	OAL (in.)	Model No.	Order No.	Price
1/4	3-1/4	J74411/4	**KP4204325**	Price
5/16	3-1/4	J74415/16	**KP4204330**	Price
3/8	3-1/4	J74413/8	**KP4204335**	Price
7/16	3-1/4	J74417/16	**KP4204340**	Price
1/2	3-5/8	J74411/2	**KP4204345**	Price
9/16	3-5/8	J74419/16	**KP4204350**	Price
5/8	4	J74415/8	**KP4204355**	Price

PROTO 3/4" Drive Hex Bit Drive Sockets - Fractional

MADE IN THE USA

- Stamped size for easy reference
- Side locking hole



Size (in.)	OAL (in.)	Model No.	Order No.	Price
9/16	3-3/4	J075909/16	**KP4207455**	Price
5/8	3-27/32	J075905/8	**KP4207445**	Price
3/4	4-3/8	J075903/4	**KP4207440**	Price
7/8	4-3/4	J075907/8	**KP4207450**	Price
1	5-13/64	J075901	**KP4207435**	Price

Sockets with insert bits-Fractional and Metric

New!

- Two-piece design allows for replacement of worn bits
- Bit holder have a hex opening to hold bits; allowing the holder to take the full load of tourque
- Made of heat treated alloy steel
- Polished chrome socket holders

1/4" Drive Hex Bit Sockets-Fractional

MADE IN THE USA



Size (in.)	Approx. OAL (in.)	Model No,	Order No.	Price
1/16	2	J47701/16	**KP4202010**	Price
5/64	2	J47705/64	**KP4202045**	Price
3/32	2	J47703/32	**KP4202030**	Price
7/64	2	J47707/64	**KP4202055**	Price
1/8	2	J47701/8	**KP4202020**	Price
9/64	2	J47709/64	**KP4202060**	Price
5/32	2	J47705/32	**KP4202040**	Price
3/16	2	J47703/16	**KP4202025**	Price
7/32	2	J47707/32	**KP4202050**	Price
1/4	2	J47701/4	**KP4202015**	Price
5/16	2	J47705/16	**KP4202035**	Price

3/8" Hex & Ball Bit Sockets-Fractional



MADE IN THE USA

Type - Ball-End Hex Extra Long					
Size (in.)	Approx. OAL (in.)	Type	Model No.	Order No.	Price
5/32	6	Ball-End Hex Extra Long	J4905BD	**KP4203205**	Price
3/16	6	Ball-End Hex Extra Long	J4906BD	**KP4203210**	Price
1/4	6	Ball-End Hex Extra Long	J4908BD	**KP4203220**	Price
5/16	6	Ball-End Hex Extra Long	J4910BD	**KP4203225**	Price
3/8	6	Ball-End Hex Extra Long	J4912BD	**KP4203230**	Price

Type - Hex Extra Long					
Size (in.)	Approx. OAL (in.)	Type	Model No.	Order No.	Price
1/8	6	Hex Extra Long	J49901/8XL	**KP4202320**	Price
5/32	6	Hex Extra Long	J49905/32XL	**KP4202360**	Price
3/16	6	Hex Extra Long	J49903/16XL	**KP4202330**	Price
7/32	6	Hex Extra Long	J49907/32XL	**KP4202370**	Price
1/4	6	Hex Extra Long	J49901/4XL	**KP4202310**	Price
5/16	6	Hex Extra Long	J49905/16XL	**KP4202350**	Price
3/8	6	Hex Extra Long	J49903/8XL	**KP4202340**	Price

Type - Hex Short					
Size (in.)	Approx. OAL (in.)	Type	Model No.	Order No.	Price
1/8	2	Hex Short	J49901/8ST	**KP4203330**	Price
5/32	2	Hex Short	J49905/32ST	**KP4203325**	Price
3/16	2	Hex Short	J49903/16ST	**KP4203320**	Price
1/4	2	Hex Short	J49901/4ST	**KP4203310**	Price
5/16	2	Hex Short	J49905/16ST	**KP4203305**	Price
3/8	2	Hex Short	J49903/8ST	**KP4203300**	Price
7/32	2	Hex Short	J49907/32ST	**KP4203315**	Price

Type - Hex Standard					
Size (in.)	Approx. OAL (in.)	Type	Model No.	Order No.	Price
1/8	2-3/4	Hex Standard	J49901/8	**KP4202315**	Price
5/32	2-3/4	Hex Standard	J49905/32	**KP4202355**	Price
3/16	2-3/4	Hex Standard	J49903/16	**KP4202325**	Price
7/32	2-3/4	Hex Standard	J49907/32	**KP4202365**	Price
1/4	2-3/4	Hex Standard	J49901/4	**KP4202305**	Price
5/16	2-3/4	Hex Standard	J49905/16	**KP4202345**	Price
3/8	2-3/4	Hex Standard	J49903/8	**KP4202335**	Price

1/4" Drive Screwdriver Bit Sockets-Torx®

MADE IN THE USA



Size	OAL (in.)	Model No.	Order No.	Price
T10	1-1/2	J4739-10W	**KP4201935**	Price
T15	1-1/2	J4739-15W	**KP4201940**	Price
T20	1-1/2	J4739-20W	**KP4201945**	Price
T30	1-3/4	J4739-30W	**KP4201960**	Price

1/4" Drive Hex Bit Sockets-Metric

MADE IN THE USA



Size	Approx. OAL (in.)	Model No.	Order No.	Price
2mm	2	J4770-2M	**KP4201985**	Price
2.5mm	2	J4770-2.5M	**KP4201980**	Price
3mm	2	J4770-3M	**KP4201990**	Price
4mm	2	J4770-4M	**KP4201995**	Price
5mm	2	J4770-5M	**KP4202000**	Price
6mm	2	J4770-6M	**KP4202005**	Price

1/4" Drive Screwdriver Bit Sockets-Phillips

MADE IN THE USA



Size	OAL Approx. (in.)	Model No.	Order No.	Price
#1	1-1/4	J4737	**KP4201925**	Price
#2	1-1/4	J4738	**KP4201930**	Price

3/8" Drive Hex Bit Sockets-Metric

MADE IN THE USA



- Hex Extra Long				
Size	Approx. OAL (in.)	Model No.	Order No.	Price
4mm	6	J4990-4MXL	**KP4202260**	Price
5mm	6	J4990-5MXL	**KP4202270**	Price
6mm	6	J4990-6MXL	**KP4202280**	Price
8mm	6	J4990-8MXL	**KP4202300**	Price
10mm	6	J4990-10MXL	**KP4202250**	Price

- Hex Short				
Size	Approx. OAL (in.)	Model No.	Order No.	Price
5mm	1-3/4	J4990-5MST	**KP4203290**	Price
6mm	1-3/4	J4990-6MST	**KP4203235**	Price
10mm	1-3/4	J4990-10MST	**KP4203270**	Price

- Hex Standard				
Size	Approx. OAL (in.)	Model No.	Order No.	Price
4mm	2-3/4	J4990-4M	**KP4202255**	Price
5mm	2-3/4	J4990-5M	**KP4202265**	Price
6mm	2-3/4	J4990-6M	**KP4202275**	Price
7mm	2-3/4	J4990-7M	**KP4202285**	Price
8mm	2-3/4	J4990-8M	**KP4202295**	Price
9mm	2-3/4	J4990-9M	**KP4203265**	Price
10mm	2-3/4	J4990-10M	**KP4202245**	Price

1/2" Drive Standard Length Hex Bit Sockets, SAE

Snap-on Industrial Brands | Williams — Wright Tool — Made in the USA — Snap-on Industrial Brands | Williams

	Snap-On/Williams			Wright Tool			Snap-On/Williams USA		
Size (in.)	Length (in.)	Order No.	Price	Length (in.)	Order No.	Price	Length (in.)	Order No.	Price
1/4	2-13/32	**KP3035208**	Price	2-7/32	**KP504208**	Price	2-1/4	**KP30SA8A**	Price
5/16	2-13/32	**KP3035210**	Price	2-7/32	**KP504210**	Price	2-1/4	**KP30SA10A**	Price
3/8	2-13/32	**KP3035212**	Price	2-7/16	**KP504212**	Price	2-1/4	**KP30SA12A**	Price
7/16	2-13/32	**KP3035214**	Price	2-7/16	**KP504214**	Price	-	**-**	-
1/2	2-13/32	**KP3035202**	Price	2-7/16	**KP504216**	Price	2-1/4	**KP30SA16A**	Price
9/16	2-13/32	**KP3035203**	Price	2-7/16	**KP504218**	Price	2-1/4	**KP30SA18A**	Price
5/8	2-13/32	**KP3035204**	Price	2-7/16	**KP504220**	Price	2-1/4	**KP30SA20A**	Price
3/4	2-13/32	**KP3035206**	Price	-	**-**	-	-	**-**	-



3/8" Drive Standard Length Hex Bit Sockets, SAE

Snap-on Industrial Brands | Williams — Wright Tool — Made in the USA — Snap-on Industrial Brands | Williams

	Snap-On/Williams			Wright Tool			Snap-On/Williams USA		
Size (in.)	Length (in.)	Order No.	Price	Length (in.)	Order No.	Price	Length (in.)	Order No.	Price
3/32	-	**-**	-	-	**-**	-	1-27/32	**KP30BA3A**	Price
1/8	1-27/32	**KP3035100**	Price	1-7/8	**KP503204**	Price	1-7/8	**KP30BA4A**	Price
9/64	1-27/32	**KP3035101**	Price	-	**-**	-	-	**-**	-
5/32	1-27/32	**KP3035102**	Price	1-7/8	**KP503205**	Price	1-7/8	**KP30BA5A**	Price
3/16	1-27/32	**KP3035103**	Price	1-7/8	**KP503206**	Price	1-7/8	**KP30BA6A**	Price
7/32	1-27/32	**KP3035104**	Price	1-7/8	**KP503207**	Price	1-7/8	**KP30BA7A**	Price
1/4	1-27/32	**KP3035105**	Price	1-7/8	**KP503208**	Price	1-7/8	**KP30BA8A**	Price
5/16	1-31/32	**KP3035106**	Price	1-7/8	**KP503210**	Price	1-7/8	**KP30BA10A**	Price
3/8	1-31/32	**KP3035107**	Price	1-7/8	**KP503212**	Price	1-7/8	**KP30BA12A**	Price



Snap-on Industrial Brands | Williams — Extra Long Hex Bit Sockets 3/8 & 1/2 Drive

Made in the USA

		3/8		1/2		
Size (in.)	Length (in.)	Order No.	Price	Length (in.)	Order No.	Price
3/32	3-23/32	**KP30BA3LA**	Price	-	**-**	-
1/8	3-3/4	**KP30BA4LA**	Price	-	**-**	-
5/32	3-3/4	**KP30BA5LA**	Price	-	**-**	-
3/16	3-3/4	**KP30BA6LA**	Price	-	**-**	-
7/32	3-3/4	**KP30BA7LA**	Price	-	**-**	-
1/4	3-3/4	**KP30BA8LA**	Price	4-1/2	**KP30SA8LA**	Price
5/16	3-3/4	**KP30BA10LA**	Price	4-1/2	**KP30SA10LA**	Price
3/8	3-3/4	**KP30BA12LA**	Price	4-1/2	**KP30SA12LA**	Price
1/2	4-1/2	**-**	-	4-1/2	**KP30SA16LA**	Price
9/16	4-1/2	**-**	-	4-1/2	**KP30SA18LA**	Price
5/8	4-1/2	**-**	-	4-1/2	**KP30SA20LA**	Price



Snap-on Industrial Brands | Williams — Metric Standard Length Hex Bits, 3/8 & 1/2" Drive

		3/8		1/2		
Size (in.)	Length (in.)	Order No.	Price	Length (in.)	Order No.	Price
4	1-27/32	**KP3035170**	Price		**-**	-
5	1-27/32	**KP3035171**	Price		**-**	-
6	1-27/32	**KP3035172**	Price		**-**	-
7	1-27/32	**KP3035173**	Price		**-**	-
8	1-31/32	**KP3035174**	Price	2-13/32	**KP3035274**	Price
9	1-31/32	**KP3035175**	Price	-	**-**	-
10	1-31/32	**KP3035176**	Price	2-13/32	**KP3035275**	Price
12	2-13/32	**-**	-	2-13/32	**KP3035276**	Price
14	2-13/32	**-**	-	2-13/32	**KP3035277**	Price
17	2-13/32	**-**	-	2-13/32	**KP3035278**	Price
19	2-13/32	**-**	-	2-13/32	**KP3035279**	Price

†Made Globally



PROTO 1/2" Drive Hex Bit Sockets-Fractional

Made in the USA

Type - Hex Extra Long				
Size (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/4	4-1/2	J54411/4XL	**KP4204005**	Price
5/16	5-1/2	J54415/16XL	**KP4204025**	Price
3/8	5-1/2	J54413/8XL	**KP4204015**	Price
1/2	7	J54411/2XL	**KP4203995**	Price
9/16	7	J54419/16XL	**KP4204050**	Price
5/8	7	J54415/8XL	**KP4204035**	Price

Type - Hex Standard				
Size (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
1/4	3	J54411/4	**KP4204000**	Price
5/16	3	J54415/16	**KP4204020**	Price
3/8	3	J54413/8	**KP4204010**	Price
7/16	3	J54417/16	**KP4204040**	Price
1/2	3-1/2	J54411/2	**KP4203990**	Price
9/16	3-1/2	J54419/16	**KP4204045**	Price
5/8	4	J54415/8	**KP4204030**	Price
3/4	4	J54413/4	**KP4203260**	Price



New!

PROTO 1/2" Drive Hex Bit Sockets-Metric

Made in the USA

Type - Hex Extra Long				
Size	Approx. OAL (in.)	Model No	Order No.	Price
12mm	7	J5441-12MXL	**KP4203955**	Price
14mm	7	J5441-14MXL	**KP4203965**	Price
17mm	7	J5441-17MXL	**KP4203975**	Price

Type - Hex Standard				
Size	Approx. OAL (in.)	Model No	Order No.	Price
6mm	3	J5441-6M	**KP4203980**	Price
8mm	3	J5441-8M	**KP4203985**	Price
10mm	3	J5441-10M	**KP4203945**	Price
12mm	3	J5441-12M	**KP4203950**	Price
13mm	3-1/2	J5441-13M	**KP4203255**	Price
14mm	3-1/2	J5441-14M	**KP4203960**	Price
15mm	3-1/2	J5441-15M	**KP4203250**	Price
17mm	4	J5441-17M	**KP4203970**	Price
18mm	4	J5441-18M	**KP4203245**	Price
19mm	4	J5441-19M	**KP4203240**	Price



New!

Snap-on INDUSTRIAL BRANDS | WILLIAMS | TEKTON | wiha Tools that work for you | WRIGHT TOOL Perfecting Performance

1/4" & 3/8" Driver Bit Socket Sets

Specifications
- Balldrive, hex, phillips/slotted combo
- Fractional and metric
- Drop forged, heat treated, and chrome plated carbon steel sockets
- Includes slide rail or blow molded case
- Lifetime warranty



KN5471399









KP3031906



KP851361

KP50305

KP30WSBS7LRC

KP851362

Type - Ball Drive Set								
Drive (in.)	Style	Pcs. Per Set	Set Includes	Case	Made In	Brand Name	Order No.	Price
3/8	Fractional	8	1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, & 3/8	Clips & Rail	Global	Williams	**KP3031906**	Price

	Type - Bit Socket Set							
Drive (in.)	Style	Pcs. Per Set	Set Includes	Case	Made In	Brand Name	Order No.	Price
3/8	Fractional	8	1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	Clips & Rail	Germany	Wiha	**KN5471392**	Price

Type - Hex Drive Set								
Drive (in.)	Style	Pcs. Per Set	Set Includes	Case	Made In	Brand Name	Order No.	Price
1/4	Fractional	6	1/8, 5/32, 3/16, 7/32, 1/4, 5/16	Clips & Rail	Global	Williams	**KP3030902**	Price
1/4	Metric	6	3, 4, 5, 6, 7, 8mm	Clips & Rail	Global	Williams	**KP3030904**	Price
3/8	Fractional	7	1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	Blow Molded	USA	Wright Tool	**KP50305**	Price
3/8	Fractional	7	Extra Long 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	Clips & Rail	USA	Williams	**KP30WSBS7LRC**	Price
3/8	Fractional	7	Extra Long 1/8, 5/32, 3/16, 7/32, 5/16, 3/8	Plastic Box	Global	Generic	**KP8310505**	Price
3/8	Fractional	7	Extra Long 1/8, 5/32, 3/16, 7/32, 5/16, 3/8	Storage Case	Global	TEKTON	**KP851362**	Price
3/8	Metric	7	4, 5, 6, 7, 8, 9, 10mm	Clips & Rail	Global	Williams	**KP3031904**	Price
3/8	Metric	7	Extra Long 3, 4, 5, 6, 7, 8, 10mm	Plastic Box	Global	Generic	**KP8310506**	Price
3/8	Metric	7	Extra Long 3, 4, 5, 6, 7, 8, 10mm	Storage Case	Global	TEKTON	**KP851363**	Price
3/8	Fractional	8	1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	Clips & Rail	Global	Williams	**KP3031902**	Price
3/8	Metric	8	2, 2.5, 3, 4, 5, 6, 8, 10mm	Blow Molded	USA	Wright Tool	**KP50353**	Price

Type - Hex/Phillips/Slotted Combination								
Drive (in.)	Style	Pcs. Per Set	Set Includes	Case	Made In	Brand Name	Order No.	Price
3/8	Fractional	10	Hex Bits: 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, #2 Phillips, 1/4 Slotted Bit	Clips & Rail	Global	TEKTON	**KP851361**	Price
3/8	Metric	10	Hex Bits: 3, 4, 5, 5.5, 6, 8, 10mm; #2 Phillips, 1/4" Slotted Bit	Clips & Rail	Global	TEKTON	**KP851366**	Price

Type - Insert Bit								
Drive (in.)	Style	Pcs. Per Set	Set Includes	Case	Made In	Brand Name	Order No.	Price
1/4	Fractional & Metric	10	MAGIC-RING Bit Selector, Metric & Inch Insert Bits, No Ball End; Metric: 3, 4, 5, 6mm; Inch: 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	Storage Box	Germany	Wiha	**KN5471399**	Price

Type - Phillips & Slotted Combination								
Drive (in.)	Style	Pcs. Per Set	Set Includes	Case	Made In	Brand Name	Order No.	Price
3/8	Fractional	7	3 Pc. #1, 2, 3 Phillips & 4 Pc. 3/16, 1/4, 5/16, 3/8 Slotted Bits	Clips & Rail	Global	Williams	**KP3031908**	Price

PROTO 3/8" Drive Hex Impact Socket Sets - Fractional & Metric

MADE IN THE USA

New!

- Hex bit impact sockets are used wherever powered drive tools are used
- Hex bit impact sockets are designed to withstand the high torque and force
- Side locking hole



Set Includes	Model No.	Order No.	Price
1/4, 1/8, 3/16, 3/8, 5/16, 5/32, 7/32", Accessories: 9" Socket Bar, Socket Clips	J72152	**KP4280945**	Price
4, 5, 6, 8, 10mm, Accessories: 6-1/4" Socket Bar, Socket Clips	J72252	**KP4280950**	Price

PROTO 10 Pc 3/8" & 1/2" Drive Hex Bit Impact Socket Set

MADE IN THE USA

New!

- Drive end chamfer and four detents help provide quick positive engagement with drive tool on any of the socket drive walls
- Large clearance holes, concentric opening and nut end chamfer make it easy to position socket on fasteners.



Set Includes	Model No.	Order No.	Price
3/8 Drive: 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8; 1/2 Drive 1/2, 9/16, 5/8; Blow-Molded Case	J72156	**KP4280940**	Price

Snap-on INDUSTRIAL BRANDS | WILLIAMS | wiha Tools that work for you | WRIGHT TOOL Perfecting Performance

3/8" x 1/2" Driver Bit Socket Sets

- Drop forged, heat treated, and chrome plated carbon steel sockets
- Includes slide rail or blow molded case
- Lifetime warranty against manufacturing defects



KN5471996



KP3032902



KP50311



KP30WSSS6LRC

Style - Fractional								
Drive (in.)	Pcs. Per Set	Set Includes	Case	Made In	Type	Brand Name	Order No.	Price
3/8 & 1/2	10	7 Pc. 3/8" Drive: 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8; 3 Pc. 1/2" Drive: 1/2, 9/16, 5/8	Blow Molded	USA	Hex Drive Set	Wright Tool	**KP50311**	Price
1/2	4	1/2, 9/16, 5/8, 3/4	Clips & Rail	Global	Hex Drive Set	Williams	**KP3032902**	Price
1/2	6	1/4, 5/16, 3/8, 1/2, 9/16, 5/8	Clips & Rail	USA	Hex Drive Set	Williams	**KP30WSSS6RC**	Price
1/2	6	1/4, 5/16, 3/8, 1/2, 9/16, 5/8 Extra Long	Clips & Rail	USA	Hex Drive Set	Williams	**KP30WSSS6LRC**	Price
1/2	7	1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8	Blow Molded	USA	Hex Drive Set	Wright Tool	**KP50405**	Price

Style - Metric								
Drive (in.)	Pcs. Per Set	Set Includes	Case	Made In	Type	Brand Name	Order No.	Price
1/4 & 3/8	9	1/4" Drive: 1.5, 2, 2.5, 3, 4 ; 4 Pc. 3/8" Drive: 5, 6, 8, 10mm	Clips & Rail	Taiwan	Hex Drive Set	Wiha	**KN5471996**	Price
1/2	6	6, 8, 10, 12, 14, 17mm	Blow Molded	USA	Hex Drive Set	Wright Tool	**KP50453**	Price
1/2	6	8, 10, 12, 14, 17, 19mm	Clips & Rail	Global	Hex Drive Set	Williams	**KP3032904**	Price

3/8" & 1/2" Hand Impact Sets

- Heat treated steel bits
- Knurled handle
- Loosens screws or nuts that are rusted or over tightened
- Reversible to firmly tighten screws or nuts
- Lifetime warranty



KP4280960



KP852910



KN6529200

Item	Set Includes	Made In	Holder	Order No.	Price
PROTO	Driver - 5-1/2" OAL, Bits 1/4" Hex #1 PH, #2 PH, #3 PH, 3/16 Slotted, 9/32 Slotted; 5/16" Hex #1 PH, #2 PH, #3 PH, 10F-12R, 14F-16R Slotted, 1/4" Bit Holder, 5/16" Bit Holder	-	-	**KP4280960**	Price
Lisle	1/2" sq. drive impact tool & holder, #1, 2, 3, 4, Phillips impact bits & 3/8" slotted bit	USA	Blow Molded Case	**KN6530200**	Price
	3/8" sq. drive impact tool & holder, #1, 2, 3, 4, Phillips impact bits and 3/8" slotted bit	USA	Blow Molded Case	**KN6529200**	Price
TEKTON	1/2" sq. drive impact tool & holder, #2, 3, Flat 5/16", 3/8" Slotted bit impact bits	Global	Storage Case	**KP852910**	Price

PROTO 5 Pc 3/4" Drive Impact Hex Bit Set

MADE IN THE USA | New!

- Made of forged steel
- Size stamped on tool for easy identification
- Side locking hole



Set Includes	Model No.	Order No.	Price
Sizes: 9/16, 5/8, 3/4, 7/8, 1"; Socket Bar 9" with 5 Clips	J07595	**KP4281095**	Price

PROTO 1/2" Drive Hex Bit Impact Socket Sets - Fractional & Metric

MADE IN THE USA | New!

- Made of forged steel
- Size stamped on tool for easy identification
- Side locking hole



Set Includes	No. of Pieces	Model No.	Order No.	Price
Sockets: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8". Accessories: 9" Socket Bar with Socket Clip.	7	J74152	**KP4281070**	Price
Sockets: 6, 8, 10, 12, 14, 17mm. Accessories: 9" Socket Bar with Socket Clip	6	J74252	**KP4281075**	Price

IRWIN HANSON 10 Pc. Screw Extractor & Cobalt Drill Set



Set consists with either 5 left-handed (11119) or right hand (11117) jobber length cobalt drill bits matched with 5 corresponding screw extractors
- Metal Index
- #1-#5 (3/32-5/8) Screw extractors

NOTE: Use left-hand drill bits with reversible drills running in reverse only

Pieces in a set	Includes	Case Type	Order No.	Price
-	Left Hand Cobalt Drills	Metal Case	**EW5111119**	Price
10	Right Hand Cobalt Drills	Blister Pack	**EW5111117**	Price

IRWIN HANSON Spiral Screw Extractor Sets

MADE IN THE USA

- Designed to remove broken bolts, studs, screws and fittings
- Removes 3/32 to 5/8 range



Spiral Flute Extractors	Order No.	Price
#1 - #5	**EW5152435**	Price

IRWIN HANSON Screw Extractors

Left hand spiral for removing broken screws, bolts, studs and pipes



		Irwin		Quality Import	
Removes Screws (in.)	Use Drill Size (in.)	Order No.	Price	Order No.	Price
3/32 - 5/32	5/64	**EW5152401**	Price	**EW50EX1**	Price
5/32 - 7/32	7/64	**EW5152402**	Price	**EW50EX2**	Price
7/32 - 9/32	5/32	**EW5152403**	Price	**EW50EX3**	Price
9/32 - 3/8 & 1/8 Pipe	1/4	**EW5152404**	Price	**EW50EX4**	Price
3/8 - 5/8 & 1/4 Pipe	19/64	**EW5152405**	Price	**EW50EX5**	Price
5/8 - 7/8 & 3/8 Pipe	13/32	**EW5152406**	Price	**EW50EX6**	Price
7/8 - 1-1/8 & 1/2 Pipe	17/32	**EW5152407**	Price	**EW50EX7**	Price
1-1/8 - 1-3/8 & 3/4 Pipe	13/16	**-**	-	**EW50EX8**	Price
1-3/8 - 2 & 1 Pipe	1-1/16	**EW5152409**	Price	**EW50EX9**	Price
2-1/8 - 2-1/2 & 1-1/4 Pipe	1-15/16	**EW5152410**	Price	**EW50EX10**	Price

NATIONAL 5 Pc. Spiral Screw Extractor Set

WORLD CLASS QUALITY

- Consists of No. 1, 2, 3, 4, 5 screw extractors
- Removes screws from 3/32" to 5/8" and 1/8" and 1/4" pipe



Order No.	Price
EW50S35P	Price

TITAN 3 Pc. Damaged Screw Removal Set

New!

- For Phillips, slotted, star and square screws
- Hardened steel bits for secure bit
- 1/4" Hex shank fits drills, sockets and screwdrivers
- Sizes #1, #2 and #3 screw removers in handy storage case



Order No.	Price
KP8211214	Price

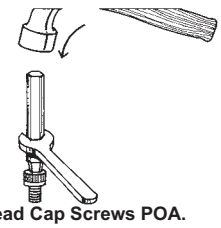
Socket-It-Out Socket Head Cap Screw Remover

MADE IN THE USA

Save Time! Save Money! Save Downtime!







Type - Metric		
Removes	Order No.	Price
M3, M4, M5, M6	**KS55MEB1**	Price
M6, M8, M10, M12, M14	**KS55MEB2**	Price
M16, M18, M20, M24	**KS55MEB3**	Price
Type - Standard		
Removes	Order No.	Price
#6, 8, 10, 1/4	**KS55DEB1**	Price
1/4, 5/16, 3/8, 7/16, 1/2	**KS55DEB2**	Price
5/8, 3/4	**KS55DEB3**	Price
7/8, 1	**KS55DEB4**	Price

Also Available for Set Screw, Flathead and Button Head Cap Screws POA.

TITAN 3 Pc. Damaged Screw Extractor Set

- For use with removing size 4-14 screws and bolts up to 5/16"
- Double sided extractor tips remove stripped screws and bolts
- Drill out, flip bit and extract screw



New!

Includes (3) double sided extractors:
- #1: Screw size 4-7, SAE bolt size 7/32", mm bolt size 5mm
- #2: Screw size 8-10, SAE bolt size 1/4", mm bolt size 6mm
- #3: Screw size 11-14, SAE bolt size 5/16", mm bolt size 8mm

Order No.	Price
KP8211215	Price

PROTO 5 Pc Screw Extractor Set

- Drive into end of broken pipe or fitting
- Use tap holder or wrench on extractor to turn out broken part
- Size stamped on extractor refers to drill bit size to be used with that extractor

MADE IN THE USA

New!



Set Includes	Model No.	Order No.	Price
1/8, 3/16, 7/32, 5/16, 3/8	J9500A	**KP4281215**	Price

PROTO 10 Pc Screw Extractor Set

MADE IN THE USA

- Drive into end of broken pipe or fitting
- Use tap holder or wrench on extractor to turn out broken part
- Size stamped on extractor refers to drill bit size to be used with that extractor

New!



Sizes Included	Model No.	Order No.	Price
1/8, 3/16, 7/32, 5/16, 3/8, 7/16, 17/32, 5/8, 3/4, 1"	J9500B	**KP4281220**	Price

Snap-on Industrial Brands | WILLIAMS 6 Pc. Screw Extractor Set

MADE IN THE USA

- Straight, tapered flutes preferred by users
- Designed for quick, easy removal of left or right-handed broken screws, bolts, studs or other threaded forms
- Drill bit sizes to be used are stamped on each extractor
- A hole is first drilled in the broken stem and the right size Williams extractor is then inserted



For Use on Bolt Size (in.)	Drill Size (in.)	Order No.	Price
1/4 - 5/16, 5/16 - 3/8, 3/8 - 7/16, 1/2 - 9/16, 9/16 - 5/8, 5/8 - 3/4	1/8, 3/16, 7/32, 5/16, 3/8, 15/32	**KP30EXS30**	Price

Snap-on Industrial Brands | WILLIAMS 10 Pc. Extractor Set

MADE IN THE USA

- Will remove broken screws, bolts, studs and pipes
- Will handle a range from 1/4" to 1-1/2"
- A space for the proper drill size has been molded in the case for your convenience



For Use on Bolt Size (in.)	Drill Size (in.)	Order No.	Price
1/4 - 5/16, 3/8, 7/16, 1/2 - 9/16, 5/8, 3/4, 7/8, 1 to 1-1/8, 1-1/4 to 1-3/8, 1-1/2	1/8, 3/16, 7/32, 5/16, 3/8, 15/32, 9/16, 21/32, 13/16, 1-1/16	**KP30EXS10**	Price

PROTO Screw Extractors

New!

MADE IN THE USA

- Drive into end of broken pipe or fitting
- Use tap holder or wrench on extractor to turn out broken part
- Size stamped on extractor refers to drill bit size to be used with that extractor



Screw Size (in.)	Drill to Use	Min Dia. - Max Dia. (in.)	OAL (in.)	Model No.	Order No.	Price
1/4, 5/16	1/8	1/8 to 3/16	2-5/16	J9521	**KP4265005**	Price
3/8	3/16	11/64 to 3/16	2-5/8	J9522	**KP4265035**	Price
7/16	15/64	13/64 to 1/4	2-7/8	J9523	**KP4265025**	Price
1/2, 9/16	5/16	19/64 to 5/16	3	J9524	**KP4265045**	Price
5/8	3/8	11/32 to 3/8	3-1/4	J9525	**KP4265040**	Price
3/4	15/32	1/8	3-7/8	J9525B	**KP4265020**	Price
7/8	9/16	1/2	4-1/4	J9526	**KP4265050**	Price
1, 1-1/8	21/32	19/32 to 5/8	4-7/8	J9527	**KP4265030**	Price
1-1/4, 1-3/8	13/16	23/32 to 3/4	5-3/8	J9528	**KP4265015**	Price
1-1/2	1-1/16	31/32 to 1	5-1/2	J9529	**KP4265010**	Price

Snap-on Industrial Brands | WILLIAMS Screw Extractors

MADE IN THE USA

- Straight, tapered flutes preferred by users
- Designed for quick, easy removal of left or right-handed broken screws, bolts, studs or other threaded forms
- Drill bit sizes to be used are stamped on each extractor
- A hole is first drilled in the broken stem and the right size Williams extractor is then inserted



Size on Bolt Size (in.)	Drill to Use (in.)	For Use End Size (in.)	Small Shank Size (in.)	Length of Flute (in.)	Extreme Length (in.)	Order No.	Price
1/4 - 5/16	1/8	3/32	3/16	1-3/16	2-13/32	**KP30EX21A**	Price
3/8	3/16	1/8	3/16	1-7/32	2-23/32	**KP30EX21B**	Price
7/16	15/64	1/8	1/4	1-23/32	3	**KP30EX22A**	Price
1/2 - 9/16	5/16	3/16	5/16	1-3/4	3-5/32	**KP30EX24A**	Price
3/4	15/32	9/32	7/16	1-13/16	3-7/8	**KP30EX25A**	Price
5/8	3/8	1/4	3/8	2	3-7/16	**KP30EX25B**	Price
7/8	9/16	11/32	1/2	2-23/32	4-1/2	**KP30EX26A**	Price
1- 1-1/8	21/32	11/32	5/8	2-23/32	4-1/2	**KP30EX28**	Price
1-1/4 - 1-3/8	13/16	17/32	3/4	2-1/4	5-1/2	**KP30EX29**	Price

IRWIN Screw Grip Impact Extractor Sets

- DoubleLok Technology™ ensures a single bit drills and extracts to easily remove stripped or damaged screws and small bolts
- Built for maximum durability and long life with impact drivers
- Tip of the drill end is designed to start fast, with minimal walking, and the tip of the extractor end is serrated for increased torque to easily remove even the toughest bolts and screws
- Black oxide finish resists corrosion and increases the life of the extractor



No. of Pieces	Removes Range	Includes	Order No.	Price
3	DE#1 (for screw sizes 4,5,6,7 and bolt sizes 10-12, 5mm), DE#2 (for screw sizes 8,9,10 and bolt sizes 1/4",6mm) DE#3 (for screw sizes 11,12,14 and bolt sizes 5/16", 8mm)	Includes one each DE#1 , DE#2 , DE#3 double ended drill/ extractors	**EW511876224**	Price
6	DE#1 (for screw sizes 4,5,6,7 and bolt sizes 10-12, 5mm), DE#2 (for screw sizes 8,9,10 and bolt sizes 1/4",6mm) DE#3 (for screw sizes 11,12,14 and bolt sizes 5/16", 8mm)	Includes one each #2PH, #2SQ, T25 2" power bits ; one each DE#1 , DE#2 , DE#3 double ended drill/ extractors	**EW511876225**	Price

WALTON "Reps" Pipe, Stud & Screw Extractor Sets

Furnished in sturdy plastic case

MADE IN THE USA



Contents	Order No.	Price
1 each: All 10 Sizes	**EX55210**	Price
1 each: No. 1 thru No. 5	**EX55205**	Price
1 each: No. 1 thru No. 6	**EX55206**	Price
1 each: No.1 thru No. 6 & No. 10	**EX55207**	Price

WALTON "Reps" Pipe, Stud & Screw Extractors

For quick removal of pipe, studs and screws

MADE IN THE USA



For Broken Pipe	For Broken Stud or Screw	Order No.	Price
1/8	3/8	**EX551**	Price
1/4	1/2	**EX552**	Price
3/8	5/8, 3/4	**EX553**	Price
1/2	-	**EX554**	Price
3/4	1-1/8, 1-1/4	**EX555**	Price
1	1-1/2, 1-3/4	**EX556**	Price
1-1/4	2	**EX557**	Price
1-1/2	2-1/4 or 2-1/2	**EX558**	Price
2	3, 3-1/2	**EX559**	Price
-	7/8, 1	**EX5510**	Price

IRWIN Screw Grip Impact Extractor

- Use a single bit to remove stripped, damaged, or rusted screws and small bolts in three easy steps: drill, flip bit, and extract
- Tip of drill end is designed to start fast with minimal walking, and tip of extractor end is serrated for increased torque to remove even the toughest bolts and screws
- Built for maximum durability and long life with impact drivers
- Black oxide finish resists corrosion and increases life of extractor



Removes Range	Order No.	Price
SAE Screw Sizes 11 thru 14 and Bolts 51/6"& 8mm	**EW511876223**	Price
SAE Screw Sizes 4 thru 7 and Bolt Sizes 10 thru 12 and 5mm	**EW511876221**	Price
SAE Screw Sizes 8 thru 10 and Bolt Sizes 1/4" and 6mm	**EW511876222**	Price

Alden Drill-Out® Sets

MADE IN THE USA

Remove Damaged Screws and Broken Bolts with Alden Drill-Powered Extractors

Used by professionals worldwide... easily extracts damaged screws and broken bolts with a variable speed, reversible 3/8" power-drill

Drill-Out®

- Self-centering tip, no walking
- High quality M2 high speed tool steel
- Drills up to grade 8 and 10.9 bolts
- Tempered 2 times for extra hardness



Alden Kit	Screws	SAE	Metric	Order No.	Price
4 Piece Drill-Out	N/A	1/4-1/2	6-12mm	**KS40P401**	Price
4 Piece Micro Grabit	#4 to #16	#5-1/4	3-6mm	**KS40P450**	Price
7 Piece Extractor Kit	#6 to #12	#5-1/2	3-12mm	**KS40P701**	Price
10 Piece Master Kit	#6 to #24	#5-1/2	3-12mm	**KS40P1001**	Price

Micro Grabit requires 1/8 power-drill. Inidvidual screw removers & bolt extractors also available. All products PATENTED by Alden Corporation.

IRWIN HANSON 5 Pc. Straight Flute Screw Extractor Set

#1-5 (3/32-5/8) screw extractors in plastic pouch

MADE IN THE USA



Order No.	Price
EW5152635	Price

IRWIN HANSON 10 Pc. Hex Head Multi-Spline Screw Extractor Set

- Complete in plastic case
- 1/8-13/32
- Ideal for broken bolts or screws
- Hex head may be used with socket or a wrench
- Allows for higher torquing



Order No.	Price
EW5153226	Price

IRWIN Hex Head Multi-Spline Extractor Set

- Designed to remove broken studs, bolts, socket screws and fittings for high torque applications
- Aggressive left hand spiral design for extra gripping power
- Hex head mutli-spline extractors 1/8" thru 7/8" in a blow molded plastic case to remove bolt diameter #12 and 1/4" through 1-11/16"



MADE IN THE USA

No. of Pieces	Removes Range	Includes	Order No.	Price
25	Bolt Diameters #12 and 1/4" through 1-11/16"	Hex Head Mutli-Spline Screw Extractor Sizes 1/8", 5/32", 3/16" 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 13/32" , 7/16", 15/32", 1/2", 17/32" , 9/16", 19/32", 5/8", 21/32", 11/16", 23/32", 3/4", 25/32", 13/16" 27/32" & 7/8"	EW5153227	Price

Lisle Triple Square Bolt Remover Set

- For head bolts, brake caliper bolts, door-handle screws, axle bolts and many other applications
- The three largest sizes are designed to work on tamper-proof applications
- Includes: 4mm, 5mm, 6mm, 8mm, 10mm, 12mm, 14mm, 16mm and 18mm



Order No.	Price
KN6560850	Price

Lisle Stud Remover

- Design allows tool to grip flush with mounting surface of the stud so it can grab studs that are broken off very close to the mounting surface
- Tool has two holes, 1/2 inch (14 mm) and 3/4 inch (19 mm) minimizing damage to threads

MADE IN THE USA



Order No.	Price
KN6571200	Price

PROTO 10 Pc. Bolt Extractor Socket Set

MADE IN THE USA

- Removes rusted, rounded or damaged nuts and bolts
- Helical shaped flute to help grip rounded fasteners
- Can be used with other drive tools (such as ratchets, adjustable wrenches, sockets or combination wrenches)
- Through-hole design helps gain access to fasteners at the end of long bolts or studs
- Fractional or metric fasteners
- 3/8" Drive size.
- Set contains: 7mm(1/4" 9/32"), 8mm(5/16"), 9mm(11/32"), 3/8", 10mm(13/32"), 11mm(7/16"), 12mm(15/32"), 13mm(1/2"),14mm(9/16"),15mm(16mm, 5/8")



Model No.	Order No.	Price
J69X00	KP4265000	Price

STEELMAN Tweezers

- Pull wires through tight areas
- Pick up small objects where fingers cannot reach

Item	Style	Length	Order No.	Price
	Cross Lock	6	KE5305603	Price
	Curved Sharp Serrated Point	6-3/4	KE5305605	Price
	Pointed	4-1/2	KE5305611	Price
	Serrated Blunt End	7	KE5305606	Price
	Sharp	4-1/2	KE5305610	Price
	Sharp Curved Point	6	KE5305601	Price
	Sharp Point Utility	6	KE5305602	Price
	Slide Lock	6	KE5305604	Price

STEELMAN 7 Pc. Tweezers Set

- Pull wires through tight areas
- Pick up small objects where fingers cannot reach
- Set contains:
  6" Heat Resistance, Sharp Curved Point
  6" Sharp Point, Plan End, Utility
  6" Round Serrated Point, Cross Lock
  6" Round Serrated Point, Slide Lock
  6-3/4" Curved Sharp Serrated Point
  4-1/2" Flat Rounded Spade Point
  4-1/2" Sharp Flat Serrated Point



Order No.	Price
KE5305600	Price

10 Pc. Tweezer Set

Contains one each of the following in a plastic pouch:

- 7" Curved point
- 6" Straight broad point
- AA 5" Long
- MM 5-1/8" Long
- 6" Curved point with pin
- 6-1/2" Self closing straight point
- 4-1/2" Curved point
- 4-1/2" Straight point
- 4-1/2" Side curved spade point
- 4-3/4" Self closing sharp point



Order No.	Price
NE60TS10	Price

IRWIN HANSON Bolt Extractors



- For removing rusted & rounded-off nuts & bolts
- Size ranges cover all of the popular sizes, metric and standard



EW5154125



EW5154113

Pieces in a set	For Use on Bolt Size	Order No.	Price
5	3/4 - 1 with 1/2 drive (19mm to 24mm)	**EW5154125**	Price
13	1/4 - 3/4 with 3/8 drive (8mm to 18mm)	**EW5154113**	Price

IRWIN HANSON Bolt-Grip™



- Removes bolts with any of the following tools: open end wrenches, impact socket tools, vise grips, socket wrenches
- Fits standard and metric sizes
- Made from hard carbon steel tougher than tool steel
- Left hand spiral flutes for maximum gripping power
- Fits hex sizes: 3/8, 7/16, 1/2, 9/16, 5/8 (10, 11, 12, 13, 14, 16mm)

Order No.	Price
EW51394001	Price

Snap-on Industrial Brands | WILLIAMS 3/8" Drive Turbosocket Salvage/Damaged Fastener Socket Sets



KP30TSMS3809



KP30TSMS3809



KP30TSMS3809

- Quickly and easily remove damaged or rounded nuts and bolts
- Grip on fastener tightens as more torque is applied
- No hammering is required to install socket over fastener
- Use on all types of standard nuts and bolts as well as studs, pipe nipples, and corroded auto and marine fasteners
- May be used for “best fit” on metric and fractional fasteners
- May be used with air or electric impact wrench for extra speed and turning power

No. of Pcs.	Removes Range	Holder	Order No.	Price
7	3/8 - 3/4	Clip & Rail	**KP30TSFS3807**	Price
9	10mm - 19mm	Clip & Rail	**KP30TSMS3809**	Price
13	3/8 - 3/4; 10mm - 17mm	Clip & Rail	**KP30TSCS3813**	Price

Snap-on Industrial Brands | WILLIAMS 3/8" Dr. Turbosocket Salvage Sockets



MADE IN THE USA

- Quickly and easily remove damaged or rounded nuts and bolts
- Grip on fastener tightens as more torque is applied
- No hammering is required to install socket over fastener
- Use on all types of standard nuts and bolts as well as studs, pipe nipples, and corroded auto and marine fasteners
- May be used for “best fit” on metric and fractional fasteners
- May be used with air or electric impact wrench for extra speed and turning power

Removes Range (in./mm)	Order No.	Price
3/8	**KP30TS38375**	Price
7/16	**KP30TS38437**	Price
1/2	**KP30TS38500**	Price
9/16	**KP30TS38562**	Price
5/8	**KP30TS38625**	Price
11/16	**KP30TS38687**	Price
3/4	**KP30TS38750**	Price
10mm	**KP30TS38394**	Price
12mm	**KP30TS38472**	Price
13mm	**KP30TS38512**	Price
14mm	**KP30TS38551**	Price
15mm	**KP30TS38591**	Price
17mm	**KP30TS38669**	Price

Snap-on Industrial Brands | WILLIAMS 1/2" Dr. Turbosocket Salvage Socket

MADE IN THE USA

- Quickly and easily remove damaged or rounded nuts and bolts
- Grip on fastener tightens as more torque is applied
- No hammering is required to install socket over fastener
- Use on all types of standard nuts and bolts as well as studs, pipe nipples, and corroded auto and marine fasteners
- May be used for “best fit” on metric and fractional fasteners
- May be used with air or electric impact wrench for extra speed and turning power

Removes Range (in./mm)	Order No.	Price
3/4	**KP30TS50750**	Price
13/16	**KP30TS50812**	Price
7/8	**KP30TS50875**	Price
15/16	**KP30TS50937**	Price
1	**KP30TS50100**	Price
14mm	**KP30TS51551**	Price
15mm	**KP30TS51591**	Price
16mm	**KP30TS51625**	Price
17mm	**KP30TS51669**	Price
18mm	**KP30TS51709**	Price
19mm	**KP30TS51750**	Price
21mm	**KP30TS51827**	Price



Snap-on Industrial Brands | WILLIAMS 1/2" Drive Turbosocket Salvage/Damaged Fastener Socket Set

- Quickly and easily remove damaged or rounded nuts and bolts
- Grip on fastener tightens as more torque is applied
- No hammering is required to install socket over fastener
- Use on all types of standard nuts and bolts as well as studs, pipe nipples, and corroded auto and marine fasteners
- May be used for “best fit” on metric and fractional fasteners
- May be used with air or electric impact wrench for extra speed and turning power



KP30TSFS5005

MADE IN THE USA



KP30TSFS5107

No. of Pcs.	Removes Range	Holder	Order No.	Price
5	3/4 - 1	Clip & Rail	**KP30TSFS5005**	Price
7	14m - 21m	Clip & Rail	**KP30TSMS5107**	Price

PROTO 5 Pc Magnetic Ratcheting Screwdriver Bit Set

MADE IN THE USA

New!

- Contains: bits, #1, #2 phillips, 3/16, 5/16 slotted, magnetic ratcheting screwdriver handle
- Gearless ratcheting screwdriver provides smooth operation, infinite ratcheting angle
- Convenient bit storage in handle



Model No.	Order No.	Price
J9320	**KP4250800**	Price

TITAN 6" High-Torque Ratcheting Driver

- High torque 250 in-lbs (3 kg/m)
- Flex-head, 20° angle
- Reversible ratcheting design
- Stainless steel bit holder
- Convenient bit storage in handle
- Bits made of S2 material
- Overall length: 6”

Set includes:

- (3) Phillips: #1,#2,and #3
- (4) Slotted: 5/32, 3/16, 1/4, and 9/32”
- (2) Star: T-15 and T-20
- (1) Square: SQ2
- (1) 1-1/4” Socket adapter



Order No.	Price
KP8212217	Price

STANLEY 12 Pc. Hi-Speed Ratcheting Screwdriver Set

New!

- 4:1 Gear Ratio: For increased speed
- Ratcheting Mechanism for forward or reverse driving
- Bit Storage in Handle: Holds 12 bits
- Bi-Material Handle



Model No.	Set Includes	Order No.	Price
STHT60240	Slotted 3/16, 1/4, 5/16"; Phillips P1, P2, P3; Square SQ1, SQ2, SQ3; Star T10, T15, T25	**KP435002**	Price

STANLEY 21 Pc. Multi Bit Ratcheting Screwdriver Set

New!

- Three-position switch enables clockwise and counter-clockwise ratcheting and locked position
- Bit storage in handle for quick and easy access
- Ergonomically designed handle
- Magnetic bit holder for speedy and secure changeover of bits



Model No.	Set Includes	Order No.	Price
62-574	14 Screwdriver Bits; 6 Nutdrivers; Storage Rack	**KP437346**	Price

PROTO 11 Pc Magnetic Ratcheting Screwdriver Bit Set

MADE IN THE USA

- Gearless ratcheting screwdriver provides smooth operation, infinite ratcheting angle
- Convenient bit storage in handle

New!



Includes:	Model No.	Order No.	Price
Bit 1/4 hex, #1 & #2 Ph, 3/16 & 5/16 Slotted, Nut Setters-Matnetic 3/16, 1/4, 9/32, 5/16, 11/32, 7/16, Screwdriver-Ratcheting - 8-3/4 OAL	J9322	**KP4250805**	Price

STANLEY 11 Pc. Multi Bit Ratcheting Screwdriver Set

New!

- Magnetic bit holder for secure storage of bits
- Internal bit storage for easy access and fast changeover of bits
- Three-position switch enables clockwise and counter-clockwise ratcheting and locked position
- Durable bi-material handles for comfortable grip



Model No.	Set Includes	Order No.	Price
68-010	Handle, 3/16 & 1/4" Standard Bit; 1 Pt. & 2 Pt. Phillips Bit; T15 & T20 Torx Bit; 1 Pt. & 2 Pt. Pozi Bit; 1 Pt. & 2 Pt. Square Bit; Storage Rack	**KP437482**	Price

STANLEY 12 Pc. Fatmax® Hi-Speed Ratcheting Screwdriver Set

New!

- 4:1 gear ratio for 4X faster driving than traditional screwdriver
- Store 12 bits in handle for fast bit changes
- Ratcheting mechanism with forward and reverse driving



Model No.	Set Includes	Order No.	Price
FMHT69236	Slotted 3/16, 1/4, 5/16"; Phillips P1, P2, P3; Square SQ1, SQ2, SQ3; Star: T10, T15, T25	**KP439294**	Price

STANLEY 23 Pc. Ratcheting Screwdriver Set

New!

- Three position switch enables clockwise and counter-clockwise ratcheting and locked position
- Ergonomically designed bi-material handle
- Nickel-plated bar for corrosion resistance



Model No.	Set Includes	Order No.	Price
STHT66507	6-1/4" Drive Sockets; 1/4, 5/16, 11/32, 3/8, 7/16, 1/2"; 15 Bits (2) 1 Pt., (2) 2 Pt., 3 Pt.; (2) 1/4", 9/32; T10, T15, T20, T25, T27; 1/8", 5/32"; 1/4" Adapter	**KP435004**	Price

STANLEY 29 Pc. Multi Bit Ratcheting Screwdriver Set

- Three-position switch enables clockwise and counter-clockwise ratcheting and locked position
- Ergonomically designed bi-material handle for comfort and control
- Nickel-plated bar for corrosion resistance

New!



Model No.	Set Includes	Order No.	Price
54-925	15 Bits: (2) Standard 1/4 & 9/32"; (2) 1 Pt. & (2) 2 Pt & 3 Pt. Phillips; T10, T15,T20, T25, T27 Torx; 1/8 & 5/32" Hex; 12 Driver Sockets 1/4, 5/16, 11/32, 3/8, 7/16 & 1/2", 5mm, 6mm, 7mm, 8mm, 9mm, 10mm; Handle; Adapter	**KP434606**	Price

TITAN 18" Ratcheting Screwdriver

- Reversible ratcheting design
- Hi-torque 250 in-lbs
- Overall length: 18”
- Bits made of S2 material
- Stainless steel holder
- Convenient bit storage in handle



Includes 11 Screwdriver Bits:

- (3) Phillips - #1, #2, #3
- (4) Slotted - 5/32, 3/16, 1/4, 9/32”
- (2) Star - T15, T20
- (1) Square #2
- (1) 1-1/4” Socket adapter

Order No.	Price
KP8212218	Price

TITAN Flexible Screwdriver & Bit Set

- Flexible spring shaft for hard to reach places
- Chrome vanadium blade
- Ergonomic cushioned handle
- Magnetized tip
- Includes 1 spring tube, 3 slotted bits, 3 phillips bits & 2 star bits



Order No.	Price
KP8212227	Price

TEKTON 45 Pc. Everybit Tech Rescue™ Kit

- Complete set of tools for repairing mobile phones, tablets, laptops, game systems, collectible toys, wristwatches, and eyeglasses
- Includes every size pentalobe (iPhone®, MacBook®), every size triangle bit (toys), and unique, 3-inch, long-reach bits not available



Set Includes:

- 3-pc. Flat: 1, 1.5, 2.5 mm
- 6-pc. Phillips: #000, #00, #0, #1, #0 x 3 in., #1 x 3 in.
- 3-pc. Star: T3, 4, 5
- 8-pc. Tamper-Resistant Star: TR6, 7, 8, 9, 10, 15, TR6 x 3 in., TR8 x 3 in.
- 2-pc. Tri-Wing: TRI 0, 1
- 3-pc. Pentalobe: PL 0.8, 1.2, 1.5 mm
- 4-pc. Triangle: TA18, 20, 23, 27
- 3-pc. Hex: 1.3, 1.5, 2 mm
- 5-pc. Nut Drivers: 3, 3.5, 4, 5, 6.5 mm (1/4 in.)
- 1-pc. Aluminum screwdriver
- 1-pc. ESD-safe tweezers
- 1-pc. Flexible metal spudger
- 1-pc. Nylon spudger/probe
- 1-pc. 3-corner spudger
- 1-pc. 35 mm suction cup
- 1-pc. Magnetic parts mat
- 1-pc. Zipper case



Order No.	Price
KP8528301	Price

PROTO 5-in1 Quick Bit change Screwdriver

- Integrated screwdriver/nut driver shaft holds 2 bits and converts to 1 nut driver size
- Comfort grip handle allows user to apply torque control
- Bit-phillips #1 & #2
- Bit-slotted 3/16 x 1/4”
- Hex nut driver bit 5/16”

New!

MADE IN THE USA



Model No.	Order No.	Price
J9351	**KP4250790**	Price

STANLEY 6-in-1 Screwdriver

New!

- Convenient and space-saving design reduces the number of tools users must carry
- Chrome-plated bar resists corrosion
- Black provides comfort



Model No.	Includes	Order No.	Price
68-012	1/4", 3/16" Standard, 1 PT. Phillips, 2 Pt. Phillips, 1/4" & 5/16" Nut Driver	**KP437484**	Price

TEKTON 6-in-1 Screwdriver

- Tough chrome vanadium steel bits with sandblasted finish
- Comfortable hextorque handle with non-slip rubber grips
- Corrosion-resistant chrome plated steel bit tube
- Six screwdrivers in one - Flat: 3/16 & 1/4” - Phillips: #1 and #2 - Nut Drivers: 1/4 & 5/16”



Order No.	Price
KP852796	Price

wiha Standard "BitFlip" 8-in-1 Screwdriver

Rapid Access Flip Out Eight Bit Tray
Available in standard or insulated models

- 3 Assortments to choose from
- With strong rare earth magnets
- Hardened tool steel shafts
- Precision machined 1/4” insert bits
- Bits storage in ergo cushion grip handle





No. of Pcs.	Set Includes	Order No.	Price
9	Bit Holding Screwdriver and Phillips # 0, 1, 2, 3 Slotted 4.5, 6.5 Square # 1 & #2 Bits	**KN5438026**	Price
9	Bit Holding Screwdriver and Phillips # 1 & 2 Slotted 4.5 & 6.5 Torx® T10, T15, T20 & T25	**KN5438027**	Price
9	Bit Holding Screwdriver and Torx® T8, T10, T15, T20, T25, T27, T30 & T40 Bits	**KN5438028**	Price

LANG 5 Pc. Fine Tooth Bit Wrench Set

- Use with any 1/4” drive bit as a ratcheting screwdriver or a 1/4” adapter enablling use of a 1/4” socket
- Readily accessible reversing lever for one-hand use
- Raised knurl design allows fingertip control for loose screws
- 5° Ratchet increment for increased accessibility

MADE IN THE USA



Order No.	Price
KL405221	Price

STANLEY 9-Way Screwdriver Set

- Interchangeable bars maximize versatility
- Reduces the number of tools user needs to carry
- Storage case included

New!



Model No.	Set Includes	Order No.	Price
62-511	1/8", 3/16", 1/4" Standard Bars; 0 Pt, 1 Pt. 2 Pt. Phillips Bar; 1 Tack Puller; 1 Brad Awl, 1 Hook Driver, Handle	**KP437338**	Price

wiha 6 Pc. Slotted Set

Includes: 1.5, 2.0, 2.5, 3.0, 3.5, 4.0mm

- Chrome-vanadium steel
- Precision fit type
- Tapered shaped handles





Order No.	Price
KN5426090	Price

wiha 7 Pc. Slotted & Phillips Set

Includes:
Slotted Sizes: 1.5, 2.0, 2.5, 3.0mm
Phillips Sizes: 00, 0, 1

- Chrome-vanadium steel
- Precision fit type
- Tapered shaped handles



Order No.	Price
KN5426190	Price

STANLEY 4 Pc. Fatmax® Precision Screwdriver Set

- Wobble free design for precision and control
- Easy spin – quick use
- Color coded – easy self selection
- Screw storage in cap & dash; No loss of tiny screws while doing your work



Model No.	Set Includes	Order No.	Price
FMHT62285	(2) Phillips Drivers PH0, PH1; (2) Slotted 3/32, 1/8"	KP439288	Price

PRM PRO Precision Screwdriver Set

6 pc. Set includes:

- Flat: 1.4mm x 1", 2.0mm x 1", 2.4mm x 1-1/8", 3.00 x 1-1/4"
  Phillips: #0 x 1-1/8", #1 x 1-1/8"
  Complete with organizer case
- Lifetime warranty



16 Pc. Set Includes:

- Flat: 1mm x 1/2", 1.4mm x 3/4", 2mm x 7/8", 2.4mm x 1", 3mm x 1-1/4", 3.8mm x 1-1/4"
  Phillips: #2 x 1", #0 x 1", #1 x 1-1/8", #1 x 1-1/4"
  Hex Drive: 1.5mm, 2mm, 2.5mm
  Nut Drive: 3mm, 4mm, 5mm
- Lifetime warranty

No. of Pieces	Order No.	Price
6	KP8310706	Price
16	KP8310730	Price

PROTO Offset Screwdrivers

- Black oxide finish
- Designed for use in tight spaces

New!



Tip Size	Style	OAL (in.)	Model No.	Order No.	Price
1/4	Keystone Slotted	4-5/8	J361/4	KP4250500	Price
3/8	Keystone Slotted	6-1/8	J363/8	KP4250505	Price
#1, #2	Phillips®	4-3/4	J341/4	KP4250490	Price
#3, #4	Phillips®	6-1/8	J343/8	KP4250495	Price

Snap-on Industrial Brands | BAHCO TORX® Screwdrivers

- Ergo handles for comfort and grip
- Black oxide tips prevent chipping of surface finishes which reduces possible contamination at work location



Size	Approx. Blade Length (in.)	Order No.	Price
T6	2	KL30BE8906	Price
T7	2-5/32	KL30BE8907	Price
T8	2-3/8	KL30BE8908	Price
T9	2-3/8	KL30BE8909	Price
T10	2-1/2	KL30BE8910	Price
T15	2-3/4	KL30BE8915	Price
T20	3-1/8	KL30BE8920	Price
T25	3-1/8	KL30BE8925	Price
T27	4	KL30BE8927	Price
T30	4	KL30BE8930	Price
T40	5	KL30BE8940†	Price
T45	5	KL30BE8945†	Price

†Dual grip handle for two-handed operation provides extra torque when necessary

wiha TORX® Blade



Size	Blade Length	Order No.	Price
T6	40mm	KN5426706	Price
T7	40mm	KN5426707	Price
T8	40mm	KN5426708	Price
T9	50mm	KN5426709	Price
T10	50mm	KN5426710	Price
T15	60mm	KN5426715	Price
T20	60mm	KN5426720	Price

wiha Phillips Blades



Size	Blade Length (in.)	Order No.	Price
#0	50mm (2.0)	KN5426105	Price
#00	40mm (1.6)	KN5426100	Price
#000	40mm (1.6)	KN5426102	Price
#1	60mm (2.4)	KN5426110	Price

wiha Standard Blades



Size (mm/in.)	Blade Length	Order No.	Price
1.5mm (1/16)	1.6	KN5426015	Price
1.8mm (.070)	1.6	KN5426018	Price
2.0mm (5/64)	1.6	KN5426020	Price
2.0mm (5/64)	2	KN5426022	Price
2.5mm (3/32)	2	KN5426025	Price
3.0mm (1/8)	2	KN5426030	Price
3.0mm (1/8)	2.4	KN5426032	Price
3.5mm (9/64)	2.4	KN5426035	Price
4.0mm (5/32)	2.4	KN5426040	Price

wiha Hex Blade



Size (in.)	Blade Length (in.)	Order No.	Price
.028	1.6	KN5426307	Price
.035	1.6	KN5426309	Price
.050	1.6	KN5426313	Price
1/16	2	KN5426316	Price
5/64	2	KN5426320	Price
3/32	2.4	KN5426323	Price
7/64	2.4	KN5426327	Price
1/8	2.4	KN5426331	Price

PROTO® DuraTek™ Slotted Screwdrivers

- Ergonomic quad-lobe handle
- Impact and chemical resistant four-sided handle design helps prevent “roll away”
- High-alloy steel shank and tip are heat-treated their entire length to help provide strength against twisting and bending.
- Screwdrivers meet ASME B107.15 standards

MADE IN THE USA



Size	Blade Length (in.)	OAL (in.)	Blade Shape	Tips	Model No.	Order No.	Price
1/8	2	4	Round	Cabinet	JCP1802R	**KP4250200**	Price
1/8	3	5	Round	Cabinet	JCP1803R	**KP4250075**	Price
1/8	4	6	Round	Cabinet	JCP1804R	**KP4250080**	Price
1/8	6	8	Round	Cabinet	JCP1806R	**KP4250085**	Price
1/8	8	10	Round	Cabinet	JCP1808R	**KP4250090**	Price
3/16	3	6	Round	Cabinet	JC31603R	**KP4250100**	Price
3/16	4	7	Round	Cabinet	JC31604R	**KP4250105**	Price
3/16	4	7	Square	Cabinet	JK31604S	**KP4250110**	Price
3/16	5	8	Round	Cabinet	JC31605R	**KP4250115**	Price
3/16	6	9	Round	Cabinet	JC31606R	**KP4250120**	Price
3/16	8	11	Round	Cabinet	JC31608R	**KP4250125**	Price
3/16	10	13	Round	Cabinet	JC31610R	**KP4250130**	Price
1/4	1-1/2	3-1/2	Round	Keystone	JK14112R	**KP4250140**	Price
1/4	4	8	Round	Keystone	JK1404R	**KP4251310**	Price
1/4	4	8-1/2	Round-Bolster	Keystone	JKB1404RP	**KP4251315**	Price
1/4	6	10	Round	Keystone	JK1406R	**KP4250150**	Price
1/4	10	14	Round	Keystone	JC1410R	**KP4250155**	Price
5/16	6	10-3/8	Round	Keystone	JK51606R	**KP4251325**	Price
5/16	6	10	Square	Keystone	JK51606S	**KP4250175**	Price
5/16	8	12-3/8	Round	Keystone	JK51608R	**KP4250180**	Price
3/8	8	13	Round	Keystone	JK3808R	**KP4251335**	Price
3/8	8	13	Square	Keystone	JK3808S	**KP4250185**	Price
3/8	10	15	Round	Keystone	JK3810R	**KP4251345**	Price
3/8	12	17	Square	Keystone	JK3812S	**KP4250195**	Price

wiha® Heavy Duty Screw Drivers with Non-Slip Grip Handles

MicroFinish Slotted

- Blades chrome vanadium molybdenum, hardened tool steel (58/60RC)
- Exact fit precision machined tips



Blade Dia. (in.)	Blade Length (in.)	Order No.	Price
3/16	3-1/2	**KN5453310**	Price
7/32	4	**KN5453315**	Price
1/4	5	**KN5453320**	Price
5/16	6	**KN5453325**	Price
3/8	7	**KN5453330**	Price

wiha® Slotted Tip Round Blade Soft Grip Drivers

- Ergonomic molded-on soft grip handles
- Wiha special high performance CVM tool steel
- Soft grip handle



Size (in.)	Blade Length (in.)	OAL (in.)	Order No.	Price
1/8	4	8	**KN5430205**	Price
9/64	4	8	**KN5430210**	Price
5/32	4	8-3/8	**KN5430215**	Price
7/32	5	9-3/8	**KN5430220**	Price
1/4	6	10-9/16	**KN5430225**	Price
5/16	7	11-3/4	**KN5430230**	Price
3/8	8	12-3/4	**KN5430235**	Price
1/2	10	14-3/4	**KN5430236**	Price

Snap-on Industrial Brands | BAHCO | ergo®

Slotted Screwdrivers

- Three component Ergo handle that provides comfort and maximum grip
- Ergo handles and dual grip
- Some larger sizes have bolster feature for use with wrenches
- Slotted with bolster



Tip Width (in.)	Blade Length (in.)	OAL (in.)	Order No.	Price
3/32	2	6	**KL30BE8010**	Price
3/32	3	7	**KL30BE8210**	Price
1/8	2	6	**KL30BE8020**	Price
1/8	3	6	**KL30BE8020L**	Price
1/8	5	9	**KL30BE8220**	Price
9/64	3	7-3/4	**KL30BE8030**	Price
9/64	5	9-3/4	**KL30BE8230**	Price
5/32	4	8-3/4	**KL30BE8040**	Price
5/32	7	11-3/4	**KL30BE8240**	Price
7/32	4	8-3/4	**KL30BE8150**	Price
7/32	6	10-3/4	**KL30BE8250**	Price
1/4	4	8-3/4	**KL30BE8144**	Price
1/4	5	9-3/4	**KL30BE8155**	Price
1/4	6	10-3/4	**KL30BE8255**	Price
5/16	5	9-3/4	**KL30BE8160†**	Price
5/16	7	11-3/4	**KL30BE8260†•**	Price
5/16	7	13-1/2	**KL30BE8865†**	Price
3/8	7	13-1/2	**KL30BE8870†**	Price
1/2	8	14-1/2	**KL30BE8880†**	Price
9/16	8	14-1/2	**KL30BE8890†•**	Price

†Includes Bolster Blade • Includes Dual Grip Handle

Snap-on Industrial Brands | WILLIAMS® Slotted Screwdrivers with Comfort Grip

- Bi-mold handles provide comfortable grip, reducing hand fatigue
- Handle end shows size and style for easy identification



Blade Dia. (in.)	Blade Length (in.)	Order No.	Price
3/8	8	**KP3024241**	Price

PROTO DuraTek™ Phillips Screwdrivers

- Ergonomic quad-lobe handle
- Impact and chemical resistant four-sided handle design helps prevent "roll away"
- High-alloy steel shank and tip are heat-treated their entire length to help provide strength against twisting and bending.
- Screwdrivers meet ASME B107.15 standards

MADE IN THE USA



Size	Blade Length (in.)	OAL (in.)	Model No.	Order No.	Price
#0	3	5-3/4	JPP0003R	**KP4250315**	Price
#1	3	6-5/16	JP0103R	**KP4250220**	Price
#1	8	11-3/4	JP0108R	**KP4250210**	Price
#2	4	8	JP0204R	**KP4250225**	Price
#2	4	8-1/2	JPB0204RP	**KP4250310**	Price
#2	8	12	JP0208R	**KP4250230**	Price
#2	12	16	JP02112R	**KP4250215**	Price
#3	6	10-3/4	JP0306R	**KP4250250**	Price
#4	8	13	JP0408R	**KP4250260**	Price

Snap-on Industrial Brands | WILLIAMS Phillips Screwdrivers

- Bi-molded handle provides comfortable grip, reducing hand fatigue
- Handle end shows size and style for easy identification
- Hole in handle for hanging lanyard attachment



Size	Blade Length (in.)	Order No.	Price
#1	3	**KP3024249**	Price
#2	1-1/2	**KP3024251**	Price
#2	4	**KP3024253**	Price
#2	8	**KP3024257**	Price
#3	6	**KP3024259**	Price

Snap-on Industrial Brands | BAHCO | ergo®

Phillips Screwdrivers

- Three component ergonomic handle that provides comfort and maximum grip
- Ergo handles and dual grip
- Some larger sizes have bolster feature for use with wrenches



Point Size	Blade Length (in.)	OAL (in.)	Order No.	Price
#0	2-1/2	6.5	**KL30BE8600**	Price
#1	3	7.75	**KL30BE8610**	Price
#1	8	12-3/4	**KL30BE8610L**	Price
#2	4	8-3/4	**KL30BE8620**	Price
#2	8	12-3/4	**KL30BE8620L**	Price
#3	6	10-3/4	**KL30BE8630†**	Price
#4	8	14-1/4	**KL30BE8640†•**	Price

†Includes Bolster Blade •Includes Dual Grip Handle

wiha Phillips Tip Round Blade Soft Grip Drivers

- Ergonomic molded-on soft grip handles
- Wiha special high performance CVM tool steel
- Soft grip handle



Size	Blade Length (in.)	OAL (in.)	Order No.	Price
#0	2-5/16	6.5	**KN5431105**	Price
#1	3	7.5	**KN5431110**	Price
#1	200mm (8.0)	12.3	**KN5431112**	Price
#1	12	16.2	**KN5431114**	Price
#2	4	8.6	**KN5431115**	Price
#2	200mm (8.0)	12.5	**KN5431117**	Price
#2	12	16.5	**KN5431118**	Price
#3	6	10.8	**KN5431120**	Price
#4	200mm (8.0)	12.7	**KN5431125**	Price

Snap-on Industrial Brands | WILLIAMS Phillips Screwdrivers

- Comfort grip handle with thumb stop allow for added turning power without discomfort or slippage
- Hi-polished chrome blades prevent corrosion and can be easily cleaned
- Vapor-blasted tips grip fastners and prevent chipping, extending tool life
- Blades are made from special alloy steel for extra strength

MADE IN THE USA



Size	Blade Length (in.)	Order No.	Price
#1	3	**KP30SDP13**	Price
#2	4	**KP30SDP24**	Price
#3	6	**KP30SDP36**	Price
#4	6	**KP30SDP46**	Price

wiha Heavy Duty Screw Drivers with Non-Slip Grip Handles

MicroFinish Phillips

- Blades chrome vanadium molybdenum, hardened tool steel (58/60RC)
- Exact fit precision machined tips



Size	Blade Length (in.)	Order No.	Price
#1	3	**KN5453405**	Price
#2	4	**KN5453410**	Price
#3	6	**KN5453425**	Price

PROTO Soft Grip Phillips & Slotted Screwdrivers

MADE IN THE USA

- Precision tips for tight tolerance and fastener fit
- Custom designed handles - hard center core for strength with cushion grip for comfort and control

New!



Tip Size	Blade Length (in.)	Approx OAL (in.)	Style	Model No.	Order No.	Price
3/16	3	6-3/4	Keystone Slotted	J9403	**KP4251355**	Price
5/16	6	10-1/2	Keystone Slotted	J9406	**KP4251360**	Price
3/8	8	13-1/2	Keystone Slotted	J9408	**KP4251365**	Price
#1	3	6-3/4	Phillips®	J9482	**KP4250515**	Price
#2	4	8-1/2	Phillips®	J9484	**KP4250520**	Price

STANLEY Phillips Screwdriver Sets

- 100% acetate handle stands up to heavy-duty industrial use
- Precision cold formed
- Black oxide
- Durable alloy steel blade withstands repeated usag
- Precision-ground tip ensures a secure fit
- Chrome-plated to resist corrosion

New!



No. of Pieces	Model No.	Order No.	Price
7	66-157-A	**KP437430**	Price
8	66-158-A	**KP437432**	Price

TEKTON 4 Pc. Screwdriver Set

- Unique three-sided handle combines maximum power with smooth speed
- Premium alloy steel blade has a precisely sized tip for an exact fit in fasteners
- Protective black oxide finish can't flake off like plated finishes
- Size marking on butt end is easy to identify in tool belt or drawer
- Handle profile resists rolling on inclines up to 20 degrees



Set Includes:
- 2-pc. Slotted: 3/16 x 4 in., 1/4 x 4 in.
- 2-pc. Phillips: #1 x 4 in., #2 x 4 in.

Order No.	Price
KP8526753	Price

wiha 5 Pc. Philips® and Slotted Screwdriver Set

- Inside steel striking cap blade made from chrome vanadium molybdunum steel
- Marked Ergo-finished non-slip handles
- Set includes: Slotted round: 1/8 x 4", 9/64 x 4", 3/16 x 5", 1/4 x 6"; Phillips® round: #1 x 3", #2 x 6"
- Comes in vinyl pouch
- Made in Germany



Order No.	Price
KN5453390	Price

STANLEY 6 Pc. Fatmax® Diamond Tip Screwdriver Set

New!

- Industrial grade simulated diamond tip for tip toughness
- Ergonomic quad-lobe design for maximum tip torque
- Magnetic tip for secure grip in fasteners
- Color coded for easy tip identification



Model No.	Set Includes	Order No.	Price
FMHT62060	(2) Slotted 1/4 x 4", 5/16 x 6"; (2) Phillips 1 Pt. x 3", 2 Pt. x 4"; (1) Square 2 x 4"; (1) Torx T25 x 4"	**KP439286**	Price

STANLEY 2 Pc. Fatmax® Diamond Tip Screwdriver Set

New!

- Industrial grade simulated diamond tip for tip toughness
- Ergonomic quad-lobe design for maximum tip torque
- Magnetic tip for secure grip in fasteners
- Color coded for easy tip identification



Model No.	Set Includes	Order No.	Price
FMHT62059	1 Slotted/ 1 Phillips, 1/4 x 4", Phillip Head 2 Pt. x 4"	**KP439284**	Price

PROTO DuraTek™ 4 Pc Precision Combination Screwdriver Set

MADE IN THE USA

New!

- Ergonomic quad-lobe handle
- Impact and chemical resistant four-sided handle design helps prevent "roll away"
- High-alloy steel shank and tip are heat-treated their entire length to help provide strength against twisting and bending.
- Screwdrivers meet ASME B107.15 standards



Included	Model Nio.	Order No.	Price
Slotted Cabinet Round 1/8, 3/16 x 3", Phillips Round #0, #1 x 3"	J1204SC	**KP4250060**	Price

STANLEY 6 Pc. Fatmax® Screwdriver Set

- Magnetic black oxide tips for secure grip on fasteners
- Chrome-plated bars for corrosion resistance
- Ergonomic quad-lobe handle design for torque and comfortable hold
- Color-coded handles for easy screwdriver selection

New!



Model Number	Set Includes	Order No.	Price
FMHT62516	Standard 3/16 x 4", 1/4 x 4", 5/16 x 6", Phillips 1 Pt. x 3", 2 Pt. x 4", 3 Pt. x 6"	**KP439292**	Price

STANLEY 6 Pc. Fatmax® Diamond Tip Screwdriver Set

New!

- Industrial grade simulated diamond tip for tip toughness
- Ergonomic quad-lobe design for maximum tip torque
- Magnetic tip for secure grip in fasteners
- Color coded for easy tip identification



Model No.	Set Includes	Order No.	Price
FMHT62052	(3) Standard Edges 1 Pt. x 3", 2 Pt. x 4", 3 Pt. x 6"; (3) Phillips Head 3/16 x 4", 1/4 x 4", 5/16 x 6"	**KP439282**	Price

Snap-on Industrial Brands | WILLIAMS

6 Pc. Slotted Screwdriver Set

Features:
- Bi-Mold handles provide comfortable grip, reducing hand fatigue
- Set packed in a vinyl pouch
- Handle end shows size and style for easy identification
- Chrome blades prevent corrosion and can be easily cleaned

Sizes include:
3-7/8 OAL x 1-1/2 BL x 3/16 Tip
7-3/4 OAL x 4 BL x 3/16 Tip
3-7/8 OAL x 1 BL x 1/2 1/4 Tip
8-1/4 OAL x 4 BL x 1/4 Tip
10-9/16 OAL x 6 BL x 5/16 Tip
12-9/16 OAL x 8 BL x 3/8 Tip



Order No.	Price
KP3024004	Price

Snap-on Industrial Brands | WILLIAMS

MADE IN THE USA

6 Pc. Phillips® Screwdriver Set

Features:
- Comfort-grip handle with thumb stop allow for added turning power without discomfort or slippage
- Chrome blades prevent corrosion
- Blades are made from special alloy steel
- Vapor-blasted tips grip fasteners and prevent chipping, extending tool life
- Hex bolsters on shafts allow a wrench to be used for extra turning power

Sizes included:
6-1/8 OAL x 3 BL x 3/16 Tip
7-7/8 OAL x 4 BL x 1/4 Tip
10-11/16 OAL x 6 BL x 5/16 Tip
12-11/16 OAL x 8 BL x 3/8 Tip
14-3/410 OAL x 10 BL x 3/8 Tip
17-13/16 OAL x 12 BL x 7/16 Tip



Order No.	Price
KP30100P6PD	Price

wiha Tools that work for you

20 Pc. Phillips and Slotted Screwdriver Set

- Tips precision ground for exact fit
- Size marked ergo-finished, non-slip handles
- Set includes: Slotted tips: 1/8, 5/32, 7/32, 1/4, 5/16" Phillips® tips: #0, #1, #2; Pozi: #1, #2; Square: #1, #2, #3; TORX: T6, 8, 10, 15, 20, 25, T30



Order No.	Price
KN5430299	Price

CHANNELLOCK

6 Pc. Screwdriver Set

MADE IN THE USA

New!

- Acetate handles highly impact resistant and exceptional solvent resistance
- High polished alloy steel blades that are heat treated for exceptional strength and durability
- Precision machined vapor blast tips



Set Includes	Finish	Order No.	Price
#1 x 3, # 2x 4, #2 x 6 Phillips; 3/16 x 3, 1/4 x 4, 1/4 x 6 Slotted	Chrome	**LB50SD6A**	Price

PROTO

DuraTek™ 6 Pc Combination Screwdriver Set

MADE IN THE USA

- Ergonomic quad-lobe handle
- Impact and chemical resistant four-sided handle design helps prevent "roll away"
- High-alloy steel shank and tip are heat-treated their entire length to help provide strength against twisting and bending.
- Screwdrivers meet ASME B107.15 standards



Included	Model No.	Order No.	Price
Slotted Keystone Round 3/16 x 3, 1/4 x 4, 5/16 x 6; Phillips Round #1 x 3, #2 x 4, #3 x 6	J1206SCP	**KP4250020**	Price

PROTO

DuraTek™ 6 Pc Phillips Screwdriver Set

MADE IN THE USA

- Ergonomic quad-lobe handle
- Impact and chemical resistant four-sided handle design helps prevent "roll away"
- High-alloy steel shank and tip are heat-treated their entire length to help provide strength against twisting and bending.
- Screwdrivers meet ASME B107.15 standards



Includes	Model No.	Order No.	Price
Phillips Round #0 x 3, #1 x 3, #2 x 1-1/2, #2 x 4, #3 x 6, #4 x 8	J1206SP	**KP4250035**	Price

PROTO

DuraTek™ 6 Pc Slotted Screwdriver Sets

MADE IN THE USA

- Ergonomic quad-lobe handle
- Impact and chemical resistant four-sided handle design helps prevent "roll away"
- High-alloy steel shank and tip are heat-treated their entire length to help provide strength against twisting and bending.
- Screwdrivers meet ASME B107.15 standards



Includes	Model No.	Order No.	Price
Cabinet Round Slotted 3/16 x 4, Keystone Round Slotted 1/4 x 1-1/2, 1/4 x 4, 5/16 x 6, 3/8 x 8, 3/8 x 10	J1206SRF	**KP4250045**	Price
Keystone Round Slotted 1/4 x 1-1/2, Keystone Square Slotted 3/16 x 4, 1/4 x 4, 5/16 x 6, 3/8 x 8, 3/8 x 12	J1206SSF	**KP4250040**	Price

STANLEY 8 Pc. 100 Plus® Vinyl Grip Screwdriver Set

- Large, deep fluted acetate handle stands up to heavy-duty industrial use
- Flanges on the blade inside the handle provides a solid, twist-resistant blade
- Bars are fully ground and polished, then chrome plated for corrosion resistance
- Bars are made of alloy steel and heat-treated for strength and durability
- Preferred by electricians for its versatility



Set Includes	Model No.	Order No.	Price
Keystone 1/4 x 1-1/2", 1/4 x 4", 5/16 x 6", 3/8 x 8"; Phillips #2 x 1-1/2", #1 x 3", #2 x 4", #3 x 6"	66-568	**KP437478**	Price

PROTO 8 Pc. Duratek™ Screwdriver Set

MADE IN THE USA

- Ergonomic quad-lobe handle
- Impact and chemical resistant four-sided handle design helps prevent "roll away"
- High-alloy steel shank and tip are heat-treated their entire length to help provide strength against twisting and bending.
- Screwdrivers meet ASME B107.15 standards



Set Includes	Model No.	Order No.	Price
Slotted Cabinet : 3/16 x 3, 3/16 x 4, 3/16 x 5; Slotted Keystone: 1/4 x 4, 5/16 x 6; Phillips: #1 x 3. #2 x 4, #3 x 6	J1208SC	**KP4250010**	Price

TEKTON 8 Pc. Screwdriver Set

- In stubby- and full-length sizes, unique three-sided handles give you the leverage to generate more torque
- Premium alloy steel blades have precisely sized tips for an exact fit in fasteners
- Protective black oxide finish can't flake off like plated finishes
- Size marking on butt ends is easy to identify in tool belt or drawer
- Handle profile resists rolling on inclines up to 20 degrees

Contents

- 4 Pc. Slotted: 1/8 x 4 in., 3/16 x 4 in., 1/4 x 1-1/2 in., 1/4 x 4 in.
- 4 Pc. Phillips: #0 x 4 in., #1 x 4 in., #2 x 1-1/2 in., #2 x 4 in.



Order No.	Price
KP8526755	Price

STANLEY 8 Pc. Cushion Grip Screwdriver Set

- Bi-material handle for comfort and control
- Smooth-domed end for fast spinning action
- Black oxide tips for precise fit into fasteners
- Magnetic tips for secure grip on fasteners
- Chrome-plated bars for corrosion resistance
- Tip identification on handles for easy selection



Set Includes	Model No.	Order No.	Price
Standard 1/8" x 6", 3/16 x 4", 1/4" x 4", 5/16" x 6"; Phillips 0 Pt. x 4", 1 Pt. x 4", 2 Pt. x 6", 3 Pt. x 6"	91-541	**KP435000**	Price

wiha 6 Pc. Phillips & Slotted Screwdriver Set

- Highly polished and brightly chrome plated blade – precision ground tips for truer fastener fit, ergo soft handles
- Set includes: Slotted round: 3.0mm, 4.5mm, 5.5mm, 6.5mm; Phillips® round: #1, #2; Vinyl pouch
- Made in Germany



Order No.	Price
KN5446094	Price

Snap-on INDUSTRIAL BRANDS | WILLIAMS 8 Pc. Phillips & Slotted Screwdiver Set Hi-Vis

- Hi-vis comfort grip orange plastic handles are easy to locate and resist most solvents
- Bolstered blade heat treated
- High chrome blades
- Set includes: Phillips®: #1 x 3", #2 x 4", #3 x 6"; Slotted: 4", 6", 8"; Electrician's round: 3", 6"; Vinyl pouch

MADE IN THE USA



Order No.	Price
KP30100P8MD	Price

wiha 8 Pc. Phillips and Slotted Screwdriver Set

- Tips precision ground for exact fit
- Size marked ergo-finished, non-slip handles
- Set includes: 1/8 x 3", 5/32 x 4", 7/32 x 5", 1/4 x 6", 5/16 x 7" 4-Slotted round; #1 x 3-1/2", #2 x 4", #3 x 6" Phillips®
- Made in Germany



Order No.	Price
KN5430298	Price

Snap-on INDUSTRIAL BRANDS | WILLIAMS 12 Pc. Phillips, Slotted & Torx Drive Screwdriver Set

- Heat treated steel bi-mold handles, comfortable grip, reducing hand fatigue
- Handle end shows size and style for easy identification
- Set includes: Slotted tips: 3/16 x 1-1/2", 3/16 x 4", 1/4 x 1-1/2", 1/4 x 4", 1/4 x 6", 5/16 x 6"; Phillips® tips: #1 x 3", #2 x 1-1/2", #2 x 4", #3 x 6"; Torx drive: T15 x 4", T25 x 4"



Order No.	Price
KP3024008	Price

PROTO 19 Pc Combination Screwdriver Set

MADE IN THE USA



- Ergonomic quad-lobe handle
- Impact and chemical resistant four-sided handle design helps prevent “roll away”
- High-alloy steel shank and tip are heat-treated their entire length to help provide strength against twisting and bending.
- Screwdrivers meet ASME B107.15 standards

Sizes Included:	Model No.	Order No.	Price
Keystone Slotted Round Shank 1/4 x 1-1/2", Keystone Slotted Square Shank 1/4 x 4", 3/16" x 4, 3/8 x 8", 3/8 x 12", 5/16 x 6", Cabinet 3/16 x 4", 3/16 x 8, 1/8 x 3", 1/8 x 4", 1/8 x 8", Phillips #0 x 3", #1 x 3", #1 x 8", #2 x 1-1/2", #2 x 4", #2 x 8", #3 x 6", #4 x 8"	J1219SC	**KP4250005**	Price

STANLEY 10 Pc. Standard Fluted Screwdriver Set



- Color coded handle makes choosing the right driver from your tool pouch an easy task
- Ergonomically designed handle with slip-resistant textured grip for comfortable hold
- Heat-treated alloy steel bars hold up to repeated use
- Nickel-plated bar resists corrosion

Set Includes	Model No.	Order No.	Price
1/8 x 2" & 1/4 x 6" Standard; 1/4" Stubby Standard; 3/16 x 3" & 3/16 x 6" Cabinet; 0 Pt. x 2", 1 Pt. x 4" Phillips; 2 Pt. Stubby Phillips; Storage Rack	60-100	**KP437328**	Price

TEKTON Torx Screwdrivers

MADE IN THE USA



- Unique three-sided handle combines maximum power with smooth speed
- Premium alloy steel blade has a precisely sized tip for and exact fit in fasteners
- Protective black oxide finish can’t flake off like plated finishes
- Size marking on butt end is easy to identify in tool belt or drawer

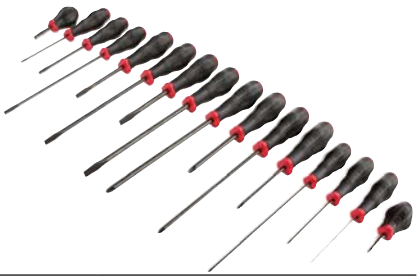
Size	Blade Length	Overall Length	Order No.	Price
T10	4	8.75	**KP8526801**	Price
T15	4	8.75	**KP8526802**	Price
T20	4	8.75	**KP8526803**	Price
T25	4	8.75	**KP8526804**	Price
T27	4	8.75	**KP8526805**	Price
T30	4	8.75	**KP8526806**	Price
6 Pc. Set	4	-	**KP8526905**	Price

TEKTON 16 Pc. Screwdriver Set

- In stubby- and full-length sizes, unique three-sided handles give you the leverage to generate more torque
- Premium alloy steel blades have precisely sized tips for an exact fit in fasteners
- Protective black oxide finish can’t flake off like plated finishes
- Size marking on butt ends is easy to identify in tool belt or drawer
- Handle profile resists rolling on inclines up to 20 degrees

Set Includes

- 8-pc. Slotted: 1/8 x 4 in., 3/16 x 4 in., 3/16 x 8 in., 1/4 x 1-1/2 in., 1/4 x 4 in., 1/4 x 8 in., 5/16 x 4 in., 5/16 x 8 in.
- 8-pc. Phillips: #0 x 4 in., #1 x 4 in., #1 x 8 in., #2 x 1-1/2 in., #2 x 4 in., #2 x 8 in., #3 x 4 in., #3 x 8 in.



Order No.	Price
KP8526759	Price

STANLEY 11 Pc. Cushion Grip Screwdriver Set



- Bi-Material handle for comfort and control
- Smooth domed end for fast spinning action
- Black oxide tip for precise fit in fasteners
- Chrome plated bar for corrosion resistance
- Tip identification on every handle for easy selection

Set Includes	Model No.	Order No.	Price
Standard 3/16 x 3", 1/4 x 4", 5/16 x 6", 1/4 x 1-3/4", 1/8 x 3"; Phillips 0 Pt. x 2-3/8", 1 Pt. x 3", 2 Pt. x 1-3/4", 2 Pt. x 4", 3 Pt. x 6"; Z-Offset	STHT66513	**KP435006**	Price

GEARWRENCH Ergo Screwdriver



- Speed zone for turning in lower torque applications
- Black oxide non-slip magnetic tip
- Ergo handle for balance power and comfort
- Meets of exceeds ASME B107.15

Size	Blade Length (in.)	Style	Order No.	Price
#1	3	Phillips	**KP6580001**	Price
#1	6	Phillips	**KP6580004**	Price
#2	1-1/2	Phillips	**KP6580005**	Price
3/16	6	Cabinet Tip Slot	**KP6580018D**	Price
Set	-	#1 x 3", #1 x 6", #2 x 1-1/2" Phillips & 3/16" x 6" Cabinet Tip Slot	**KP658000S**	Price

PROTO DuraTek™ 9 Pc Torx® Screwdriver Set

New!

MADE IN THE USA



- Ergonomic quad-lobe handle
- Impact and chemical resistant four-sided handle design helps prevent “roll away”
- High-alloy steel shank and tip are heat-treated their entire length to help provide strength against twisting and bending.
- Screwdrivers meet ASME B107.15 standards

Includes:	Model No.	Order No.	Price
T8,T10, T15, T20, T25 x 3-1/4 OAL, T27, T30 x 4 OAL, T40, T45 x 6 OAL	J1209ST	**KP4250050**	Price

PROTO DuraTek™ Nut Drivers & Sets-Fractional & Metric

MADE IN THE USA



- Precision formed, heat-treated hex openings
- Blue handle for easy metric identification

Size	OAL (in.)	Shaft Style	Model No.	Order No.	Price
3/16	7	Hollow	JN31604R	**KP4250395**	Price
1/4	7-3/8	Hollow	JN1404R	**KP4250400**	Price
5/16	7-5/8	Hollow	JN51604R	**KP4250405**	Price
3/8	7-5/8	Hollow	JN3804R	**KP4250415**	Price
7mm	7-5/8	Hollow	JN0704RM	**KP4250450**	Price
10mm	7-7/8	Hollow	JN1004RM	**KP4250465**	Price
7 Pc Set 3/16 - 1/2	8-1/2 - 9	Hollow	J1207SND	**KP4250385**	Price
12Pc Set 4-14mm	8-1/2 - 9	Hollow	J1212MND	**KP4250390**	Price

Snap-on Industrial Brands | WILLIAMS 7 Pc. Nutdriver Set in Carrying Caddy

- Sizes include: 3/16, 1/4, 5/16, 3/8, 7/16, & 1/2
- Hollow shaft accomodates long bolts or studs
- Precision machined socket end
- Cushion grip handle for comfort
- Size imprinted on color coded ends for easy identification



Order No.	Price
KP3024050	Price

CODE BLUE CHANNELLOCK 7 Pc. Round Hollow Shaft Nut Driver Set

Channellock Blue® 7 Pc. nutdriver set with 3-Sided code blue grips



- Go-thru steel blades
- Full hollow shaft
- High torque, 3-Sided code blue grips for added strength
- Laser etched steel caps for easy identification
- **Fractional sizes:** 1/4, 3/16, 3/8, 5/16, 7/16, 11/32, 1/2

Order No.	Price
LB50ND7CB	Price

wiha Fractional Solid Shaft SoftGrip Nut Drivers



Size (in.)	OAL (in.)	Order No.	Price
5/32 x 5	238mm (9.4)	**KN5434135**	Price
9/64 x 5	238mm (9.4)	**KN5434134**	Price
3/16 x 5	238mm (9.4)	**KN5434136**	Price
7/32 x 5	238mm (9.4)	**KN5434137**	Price
1/4 x 5	247mm (9.7)	**KN5434138**	Price
5/16 x 5	247mm (9.7)	**KN5434139**	Price
11/32 x 5	247mm (9.7)	**KN5434140**	Price
3/8 x 5	247mm (9.7)	**KN5434141**	Price
7/16 x 5	247mm (9.7)	**KN5434142**	Price
1/2 x 5	247mm (9.7)	**KN5434143**	Price
9/16 x 5	247mm (9.7)	**KN5434144**	Price
5/8 x 5	247mm (9.7)	**KN5434145**	Price

PROTO Nut Driver Sets

- Precision formed, heat-treated hex openings
- Color coded handles for easy identification
- One piece shaft design for greater strength and durability

MADE IN THE USA



No. of Pieces	Sizes Included	Model No.	Order No.	Price
7	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8	J9200C	**KP4281105**	Price
11	3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8	J9200DB	**KP4281110**	Price
7	5, 5.5, 6, 7, 8, 9, 10mm	J9230M	**KP4281120**	Price
11	4, 5, 5.5, 6, 7, 8, 9, 10, 11, 13, 14mm	J9201MB	**KP4281115**	Price

PROTO 3 Pc. Nut Setter Set - 1/4" Hex Shank

MADE IN THE USA



- Proto® TorquePlus™ design is a high performance drive configuration which allows for quick and easy engagement to the fastener flats, not the corners
- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage
- The TorquePlus™ internal design minimizes fastener rounding, helps to extend fastener life, and allows the user to more easily turn worn, rounded, or rusted fasteners
- Magnets feature enhanced holding power to help improve fastener retention, helping to increase productivity
- Distinctive gold finish

Sizes Included	Model No.	Order No.	Price
1/4, 5/16, 3/8	J61909HS	**KP4250720**	Price

PROTO Soft Face Hammers - No Tips

MADE IN THE USA

- Fiberglass handle with ergonomic, non-slip grip



New!

Face Dia. (in.)	Head Length (in.)	OAL (in.)	Model No.	Weight	Order No.	Price
1	2	12	JSF105	9 oz	**KP4255110**	Price
1-1/2	2-3/8	13-1/2	JSF150	1 lb	**KP4255145**	Price
1-1/2	2-3/8	13-1/2	JSF155	1.25 lb	**KP4255150**	Price
2	2-1/2	15	JSF200	1.5 lb	**KP4255190**	Price
2	2-1/2	15	JSF205	2.25 lb	**KP4255195**	Price
2-1/2	3-1/4	16-1/2	JSF250	2.5 lb	**KP4255230**	Price

No-Mar® "Press-on Tip" Hammers

MADE IN THE USA

- Designed for recoilless blows with maximum impact
- Toughest urethane tips
- Replaceable press-on tips
- Non-rusting head, precision balanced, machined steel.
- Fiberglass handle with synthetic rubber grip



Approx. Weight	Head Dia. (in.)	Head Length (in.)	Handle Length (in.)	Order No.	Price
4-1/2 oz	3/4	2-1/2	10	**SE64701F**	Price
8 oz	1	3-1/4	11	**SE64705F**	Price
12 oz	1-1/4	3-1/4	13	**SE64707F**	Price
20 oz	1-1/2	4	13	**SE64717F**	Price

Replacement tips available upon request.

wiha Split Head Mallets

- Malleable cast iron heads
- Color coded faces
- Hickory handles



Face	Face Dia. (in.)	Weight	Order No.	Price
Hard/Soft	1.2	10.2 oz	**KN5483230**	Price
Hard/Soft	1-1/2	1.4 lbs	**KN5483240**	Price
Hard/Soft	2	2.4 lbs	**KN5483250**	Price
Hard/Soft	2.4	3.7 lbs	**KN5483260**	Price
Med./Hard	3.1	6.5 lbs	**KN5483280**	Price

wiha Replacement Split Head Mallet Faces

- Color coded faces
- Available in soft, medium or hard
- Comes in pairs



		Hard Face		Medium Face		Soft Face	
Face Dia. (in.)	Fits	Order No.	Price	Order No.	Price	Order No.	Price
1-1/4	KN5483230	**KN5483235**	Price	**KN5483233**	Price	**KN5483231**	Price
1-1/2	KN5483240	**KN5483245**	Price	**KN5483243**	Price	**KN5483241**	Price
2	KN5483250	**KN5483255**	Price	**KN5483253**	Price	**KN5483251**	Price
2.4	KN5483260	**KN5483265**	Price	**KN5483263**	Price	**KN5483261**	Price
3-1/8	KN5483280	**KN5483285**	Price	**KN5483282**	Price	-	-

PROTO Surface Protectant Hammer Tips

- Resistant to oil, gasoline, and common industrial chemicals
- Helps eliminate sting, vibration, and rebound
- Non-combustible
- Color coded for degree of hardness for easy identification



MADE IN THE USA

New!

Face Dia. (in.)	Hardness	Color	Model No.	Order No.	Price
1	Hard	Black	JSF10H	**KP4255115**	Price
1	Medium	Red	JSF10M	**KP4255120**	Price
1	Medium Hard	Cream	JSF10MH	**KP4255125**	Price
1	Soft	Brown	JSF10S	**KP4255130**	Price
1	Tough	Green	JSF10T	**KP4255135**	Price
1	Extra Hard	Yellow	JSF10XH	**KP4255140**	Price
1-1/2	Hard	Black	JSF15H	**KP4255155**	Price
1-1/2	Medium	Red	JSF15M	**KP4255160**	Price
1-1/2	Medium Hard	Cream	JSF15MH	**KP4255165**	Price
1-1/2	Tough	Green	JSF15T	**KP4255180**	Price
1-1/2	Extra Hard	Yellow	JSF15XH	**KP4255185**	Price
2	Hard	Black	JSF20H	**KP4255200**	Price
2	Medium	Red	JSF20M	**KP4255205**	Price
2	Medium Hard	Cream	JSF20MH	**KP4255210**	Price
2	Soft	Brown	JSF20S	**KP4255215**	Price
2	Tough	Green	JSF20T	**KP4255220**	Price
2	Extra Hard	Yellow	JSF20XH	**KP4255225**	Price
2-1/2	Hard	Black	JSF25H	**KP4255235**	Price
2-1/2	Medium	Red	JSF25M	**KP4255240**	Price
2-1/2	Medium Hard	Cream	JSF25MH	**KP4255245**	Price
2-1/2	Extra Hard	Yellow	JSF25XH	**KP4255255**	Price

wiha Dead Blow Recoilless Hammers

- Steel or wood handle
- All steel rugged body
- Cushion grip handle on steel
- Replaceable press-on tips
- Med hard polyurethane
- Recoilless rugged design
- Steel shot filled



				Steel		Wood	
Approx. Weight	Approx. Head Dia. (in.)	Head Length (in.)	Approx. OAL Length (in.)	Order No.	Price	Order No.	Price
18 oz	1	4-1/4	11-1/4	**KN5480225**	Price	**KN5480025**	Price
19 oz	1-1/4	4-1/2	11-1/2	**KN5480230**	Price	**KN5480030**	Price
22 oz	1-7/16	4-5/8	11-3/4	**KN5480235**	Price	**KN5480035**	Price
26 oz	1-5/8	5	12	**KN5480240**	Price	**KN5480040**	Price
30 oz	1-3/4	5	12-1/4	**KN5480245**	Price	**KN5480045**	Price
40 oz	2	5	14-1/2	**KN5480250**	Price	**KN5480050**	Price
72 oz	2-1/4	6	14-3/4	**KN5480260**	Price	**KN5480060**	Price
97 oz	2-3/4	6-1/4	15	**KN5480270**	Price	**KN5480070**	Price

wiha Replacement Tips for Dead Blow Recoilless Hammers



Approx Head Dia. (in.)	Order No.	Price
1	**KN5480200**	Price
2	**KN5480210**	Price
1-1/4	**KN5480202**	Price
1-3/4	**KN5480208**	Price
1-5/8	**KN5480206**	Price
1-7/16	**KN5480204**	Price
2-1/4	**KN5480213**	Price
2-3/4	**KN5480216**	Price

Garland Manufacturing Company SINCE 1866 Non-Marring Mallets

MADE IN THE USA

Economical Selected Hickory Handles

Gar-Dur Plastic Mallet



Type - Gar-Dur Plastic Mallet				
Dia. (in.)	Head Length (in.)	Weight	Order No.	Price
1-3/4	3-7/8	9 oz	**KY60P3†**	Price
2-1/8	4-1/2	14 oz	**KY60P4†**	Price
2-1/2	4-7/8	19 oz	**KY60P5†**	Price
2-3/4	5	24 oz	**KY60P6†**	Price

Type - Hardwood Mallet				
Dia. (in.)	Head Length (in.)	Weight	Order No.	Price
2-1/4	5	14 oz	**KY60W2**	Price
2-1/2	5-1/2	19 oz	**KY60W3**	Price
2-3/4	6	22 oz	**KY60W4**	Price
3	6	27 oz	**KY60W5**	Price

Rawhide Mallet



Type - Rawhide Mallet				
Dia. (in.)	Head Length (in.)	Weight	Order No.	Price
1	2	2 oz	**KY60M0**	Price
1-1/4	2-1/2	4 oz	**KY60M1**	Price
1-1/2	3	6 oz	**KY60M2**	Price
1-3/4	3-1/8	9 oz	**KY60M3**	Price
2	3-1/2	11 oz	**KY60M4**	Price
2-3/4	4-1/4	22 oz	**KY60M5**	Price
2-3/4	4-3/4	24 oz	**KY60M6**	Price

†Will NOT mar or spark—easy to clean

VAUGHAN Soft Face Hammers

- Forged steel head lends force to blows
- Supplied with two faces - soft (red) & hard (yellow)
- Flame treated hickory handle
- Sure-lock wedged
- 6 oz. & 12 oz. head weights



Approx. Handle Length	Weight	Order No.	Price
10-1/2	6 oz	**KV50SF6**	Price
12-1/2	12 oz	**KV50SF12**	Price

VAUGHAN Rubber Mallet

MADE IN THE USA

- Forged steel head provides extra driving power
- Replaceable 2" diameter rubber tips, one white for "clean work", one black
- Flame treated hickory handle, "Sure-Lock" wedged in tapered eye



Head	Length (in.)	Order No.	Price
24 oz	14	**KV50RM24**	Price

VAUGHAN Replacement Tips for Soft Face Hammers



Tip	Color	Order No.	Price
Hard	Yellow	**KV50SF12H**	Price
Hard	Yellow	**KV50SF6H**	Price
Soft	Red	**KV50SF12S**	Price
Soft	Red	**KV50SF6S**	Price

VAUGHAN Replacement Heads for Rubber Mallet



Color	Order No.	Price
Black	**KV50RM24TB**	Price
White	**KV50RM24TW**	Price

PROTO Soft Face Hammers with Tips

- Each hammer comes with one medium and one hard tip installed
- Fiberglass handle with ergonomic, non-slip grip



KP4255090

New!

MADE IN THE USA



KP4255035

- Hammer w/Tips						
Approx. Weight	Approx Head Dia.	OAL (in.)	Hardness	Model No.	Order No.	Price
.81 lbs	1-3/16	13-21/64	Medium	J1360	**KP4255035**	Price
1.05 lbs	1-11/32	13-15/32	Medium	J1362	**KP4255050**	Price
2.06 lbs	1-11/16	14-53/64	Medium	J1364	**KP4255055**	Price
.60 lbs	1	13	Medium/Hard	JSF105HM	**KP4255085**	Price
.79 lbs	1-1/2	13-1/2	Medium/Hard	JSF150HM	**KP4255090**	Price
2.06 lbs	2	14	Medium/Hard	JSF205HM	**KP4255100**	Price

- Replacement Tip			
Hardness	Model No.	Order No.	Price
Medium/ Tough	J1360T	**KP4255045**	Price
Hard	J1384M	**KP4255070**	Price



NATIONAL Chipping Hammer

WORLD CLASS QUALITY

- All purpose, durable
- Comes with shock-proof steel spring handle
- Hardened and tempered head



Order No.	Price
KS60HMC218	Price

CAMILLUS Les Stroud SK Vigor Hatchet with Hard Ballistic Nylon Sheath and Firestarter

- 5" Blade length
- Hollow ground edge
- Fire starter bonded blade
- Hammer and chisel capabilities



OAL (in.)	Blade Length	Order No.	Price
18	5	**LA5719120**	Price

PRM PRO Deadblow Hammers

- Non-marring, non-sparking
- Hot cast polyurethane construction
- Outlasts rawhide, rubber, lead and other plastic type heads by 10-20 times
- Shot filled canister provides dead blow action for sustained impact, maximum power and striking force

MADE IN THE USA

New!



Weight	Approx Head Diameter	Approx Handle Length (in.)	Order No.	Price
13 oz	1-1/4	10	**KY4050013**	Price
21 oz	1-3/4	11	**KY4050021**	Price
26 oz	2	13	**KY4050026**	Price
45 oz	2-1/4	14-1/2	**KY4050045**	Price
53 oz	2-3/4	15	**KY4050053**	Price
5.5 lb	2-3/4	20	**KY4050088**	Price
9 lb	2-3/4	30	**KY4050144**	Price
10.5 lb	3-1/4	30	**KY4050168**	Price
12 lb	3-1/4	36	**KY4050192**	Price

PROTO Dead Blow Hammers

New!

MADE IN THE USA

- Spark-resistant for safe use near combustible materials
- Head contains steel shot to help prevent rebound and vibration
- Fiberglass handle



Weight	Approx Head Dia (in.)	Head Length (in.)	Approx Handle Length	Approx OAL (in.)	Model No.	Order No.	Price
1 lb	1-5/8	4	10	12	J1429DB	**KP4255370**	Price
2 lbs	2	4-3/8	10-1/2	12-5/8	J1430DB	**KP4255375**	Price
3 lbs	2-1/2	4-5/8	11	14	J1432DB	**KP4255385**	Price
4 lbs	2-7/8	5	11	14	J1431DB	**KP4255380**	Price

PROTO Rubber Mallet

Model No. J1368

New!

MADE IN THE USA



- Soft but tough, flake-resistant neoprene head prevents damage
- Hickory handle

Approx. Weight	Approx Head Dia. (in.)	Approx. Head Length (in.)	Approx. Handle Length (in.)	OAl (in.)	Handle	Order No.	Price
22 oz	2-1/4	4	11	13-1/2	Hickory	**KP4255365**	Price

Dead Blow Hammers

- Use whenever danger of sparks or marring exists
- Steel shot-filled head combines with cushioned face to add extra force to hammer blows without rebound
- Steel handle encased in a high-impact, rubberized plastic to prevent marring
- Handle has a flanged end for more secure grip (except KY52 series)
- Lifetime warranty against manufacturing defect
- Hi-vis in KP85 & KP30 series
- JH Williams USA made



MADE IN THE USA

			Quality Import		Tekton		Snap-On/Williams	
Approx. Weight	Approx. Head Dia. (in.)	Approx. OAL Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price
10 oz	1	10	**KY52CH0**	Price	**-**	-	**-**	-
16 oz	1-1/2	10	**KY52CH1**	Price	**KP8530703**	Price	**KP30JHW16**	Price
24 oz	1-3/4	12	**-**	-	**KP8530704**	Price	**KP30JHW24**	Price
28 oz	2	12-1/2	**KY52CH3**	Price	**-**	-	**-**	-
32 oz	2	11-1/2	**-**	-	**KP8530705**	Price	**KP30JHW32**	Price
48 oz	2-5/8	11-1/2	**KY52CH5**	Price	**KP8530706**	Price	**KP30JHW48**	Price
56 oz	2-1/2	16	**-**	-	**-**	-	**KP30JHW56**	Price
64 oz	2-5/8	11-1/2	**-**	-	**KP8530707**	Price	**-**	-

PROTO Compo-Cast® Dead Blow Hammers

MADE IN THE USA

New!



- Top welded handle-to-head assembly adds extra durability and safety
- Urethane composition provides shape-retaining faces even after repeated striking
- Handle is reinforced with solid steel shaft for greater strength
- Dual head design (slim-line heads)

Weight	Approx Head Dia. (in.)	Approx Head Length (in.)	Approx. OAL (in.)	Model No.	Order No.	Price
15 oz	1 & 1-1/4	3-3/4	10-3/8	J57-530	**KP4255000**	Price
21 oz	1-1/4 & 1-35/64	4-1/2	11-5/8	J57-531	**KP4255005**	Price
28 oz	1-11/32 & 1-45/64	5	13	J57-532	**KP4255010**	Price
48 oz	1-45/64 & 2-3/32	5-3/4	14	J57-533	**KP4255015**	Price
56 oz	1-61/64 & 2-13/32	6-1/4	16	J57-534	**KP4255020**	Price

TEKTON Rubber Mallets

With Fiberglass Handles

New!



- Double-faced solid rubber head delivers a softened positive strike
- High-strength fiberglass handle core helps absorb vibrations
- Exterior poly jacket protects handle core from missed strikes
- Soft, nonslip rubber grip is a directly integrated piece of the handle that can never pull loose
- Made for construction, woodworking, and automotive applications

Weight	Approx. Handle Length	Color	Approx Head Diameter	Order No.	Price
16 oz	11	Black	2	**KP8530603**	Price
16 oz	10-3/4	White*	2	**KP8530653**	Price
16 oz	10-1/2	Black/White*	2	**KP8530683**	Price
32 oz	11	Black	2-1/2	**KP8530605**	Price

*** White is non-marking**

Garland Manufacturing Company SINCE 1866 Split Head Hammers

Rawhide or Nylon Faces



- Will strike heavy, controlled blows without harm to materials or finishes
- The split head construction makes it especially easy to change faces. Just loosen nut under head

		Rawhide Hammer with Faces		Rawhide Hammer Replacement Faces (Pair)		Nylon Hammer with Faces		Nylon Hammer Replacement Faces (Pair)		Replacement Hammer Handle	
		Rawhide		Rawhide		Nylon		Nylon		Wood	
Face Dia. (in.)	Weight	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1-1/4	1.5 lbs	**KY50R1**	Price	**KY50F1**	Price	**KY50N1**	Price	**KY50NF1**	Price	**KY50M1H**	Price
1-1/2	2 lbs	**KY50R2**	Price	**KY50F2**	Price	**KY50N2**	Price	**KY50NF2**	Price	**KY50M2H**	Price
1-3/4	2.75 lbs	**KY50R3**	Price	**KY50F3**	Price	**KY50N3**	Price	**KY50NF3**	Price	**KY50M3H**	Price
2	4 lbs	**KY50R4**	Price	**KY50F4**	Price	**KY50N4**	Price	**KY50NF4**	Price	**KY50M4H**	Price
2-3/4	6.5 lbs	**KY50R5**	Price	**KY50F5**	Price	**KY50N5**	Price	**KY50NF5**	Price	**KY50M5H**	Price

Garland Manufacturing Company SINCE 1866 36" Sledge Hammer

Rawhide or Nylon Faces



- 36" Solid hickory wood handle
- Split head construction for easy head changes
- 8 lbs, 2-3/4" Face

Description	Order No.	Price
Replacement Handle for 36" Rawhide Hammer	**KY5035365**	Price
Replacement Handle Only	**KY5053365**	Price
tNylon	**KY50N536**	Price
Rawhide	**KY50R536**	Price

Drilling Hammers

- Drop forged, heat treated steel head
- Square, double-faced striking surface
- Polished striking face
- Contoured rubber grip for a comfortable hold
- 50% Fiberglass handle is lighter and stronger than conventional wood
- Limited lifetime warranty



31203



20678

VAUGHAN Replacment Sledge Hammer Handles

Length (in.)	Description	Order No.	Price
16	2-4 lb Oval Eye Blacksmith & Sledge	**KV5063402**	Price
32	6-16 lb Sledge	**KV5067321**	Price
36	20 lb Sledge	**KV5067391**	Price

Item	Handle Length (in.)	Weight	Order No.	Price
Snap-on Industrial Brands / Williams	10	2 lbs	**KP3020678**	Price
TEKTON	13-1/2	3 lbs	**KP8531203**	Price
PRM PRO	13-1/2	3 lbs	**KP8311302**	Price

PROTO Double-Faced Sledge Hammers

- Designed for striking metal, concrete, and stone
- Strong fiberglass handle with smooth, slip-resistant cushion grip

New!



MADE IN THE USA

Weight	Approx Head Dia. (in.)	Head Length (in.)	Approx.Handle Length (in.)	OAL (in.)	Model No.	Order No.	Price
2.5 lbs	1-5/8	3	14	15-1/2	J1433G	**KP4255420**	Price
3 lbs	1-7/8	4-1/2	14	16	J1434G	**KP4255425**	Price
4 lbs	2	5	14	16	J1435G	**KP4255430**	Price
6 lbs	2-1/4	5-3/4	32	34/	J1436G	**KP4255435**	Price
8 lbs	2-3/8	6-1/2	32	34-1/2	J1437G	**KP4255440**	Price
10 lbs	2-1/2	7-1/2	32	34-1/2	J1438G	**KP4255445**	Price
12 lbs	2-3/4	7-3/8	32	35	J1439G	**KP4255450**	Price

Sledge Hammers

Wood and Fiberglass Handles

Specifications:

- Drop forged, heat treated steel heads
- Octagonal, doublefaced striking surface
- Polished striking face
- Hardwood hickory handles

MADE IN THE USA



KY5584H02



KP30SH8



KY5584FHG03

			Quality Import			Generic USA			Snap-On/Williams		
Weight	Approx. Face Dia. (in.)	Approx. Handle Length (in.)	Handle	Order No.	Price	Handle	Order No.	Price	Handle	Order No.	Price
2 lbs	1-1/2	15	Ergonomic Synthetic	**KY5584FHG02**	Price	Hardwood Hickory	**KY5584H02**	Price	-	-	-
3 lbs	1-5/8	15	Ergonomic Synthetic	**KY5584FHG03**	Price	Hardwood Hickory	**KY5584H03**	Price	-	-	-
4 lbs	1-3/4	15	Ergonomic Synthetic	**KY5584FHG04**	Price	Hardwood Hickory	**KY5584H04**	Price	Hickory	**KP30SH4**	Price
6 lbs	2	32	Ergonomic Synthetic	**KY5584FHG06**	Price	Hardwood Hickory	**KY5584H06**	Price	Hickory	**KP30SH6**	Price
8 lbs	2-1/4	32	Ergonomic Synthetic	**KY5584FHG08**	Price	Hickory Wood	**KY5584H08**	Price	Hickory	**KP30SH8**	Price
10 lbs	2-1/2	34	Ergonomic Synthetic	**KY5584FHG10**	Price	Hardwood Hickory	**KY5584H10**	Price	Hickory	**KP30SH10**	Price
12 lbs	2-5/8	34	Ergonomic Synthetic	**KY5584FHG12**	Price	Hickory Wood	**KY5584H12**	Price	Hickory	**KP30SH12**	Price
16 lbs	2-7/8	34	Ergonomic Synthetic	**KY5584FHG16**	Price	Hardwood Hickory	**KY5584H16**	Price	-	-	-
20 lbs	3	36	Ergonomic Synthetic	**KY5584FHG20**	Price	Hickory Hickory	**KY5584H20**	Price	-	-	-

TITAN 5 Pc. General Hammer Set

- Comfortable, textured handles for handling ease



Set Includes	Order No.	Price
(1) 16 oz and (1) 32 oz Ball Pein Hammer (1) 32 oz Rubber Mallet (1) 3 lb Sledge Hammer (1) 3 lb Cross Pein Hammer	**KP8263125**	Price

PROTO Two-Way Hammer

MADE IN THE USA

- Has a combined forged steel and replaceable rubber head
- Hickory handle



Face Dia. (in.)	Head Length (in.)	OAL (in.)	Model No.	Order No.	Price
2-1/16 & 1-1/2	5-1/2	16	J1448A	**KP4255400**	Price

PROTO Drilling Hammers

MADE IN THE USA

New!

- Well-balanced, drop-forged steel head with a hardened face
- Designed for use with chisels, punches, star drills, and hardened nails
- Fiberglass handle with ergonomic, non-slip grip



Weight	Face Dia. (in.)	Head Length (in.)	Approx. Handle Length (in.)	OAL (in.)	Model No.	Order No.	Price
2 lbs	1-3/8	4-1/8	10	11-3/8	J1442G	**KP4255455**	Price
3 lbs	1-1/2	4-3/8	10	11-1/2	J1443G	**KP4255460**	Price
4 lbs	1-2	4-3/4	10	12	J1444G	**KP4255465**	Price

Engineer's Hammers

MADE IN THE USA

- Available in wood or fiberglass handles
- Drop forged, heat treated steel heads
- Octagonal, double-faced striking surface
- Polished striking face
- Epoxy wedge holds head firmly
- Contoured rubber grip fiberglass handles (Tekton)
- Flame treated Hickory handle



KP8531303



KV50S32

Item	Approx. Weight	Approx. Handle Length (in.)	Handle	Order No.	Price
TEKTON	3 lbs	13-1/2	Fiberglass	**KP8531303**	Price
VAUGHAN	2 lbs	14-1/2	Hickory	**KV50S32**	Price
	2.5 lbs	15-1/2	Hickory	**KV50S40**	Price
	3 lbs	16	Hickory	**KV50S48**	Price

PROTO Cross Pein Hammers

MADE IN THE USA

- For use with unhardened metals
- Pein is designed for shaping and bending metals
- Strong fiberglass handle with slip-resistant cushion grip

New!



Weight	Model No.	Order No.	Price
2.5 lb	J1440G	**KP4255390**	Price
4 lb	J1441G	**KP4255395**	Price

WILTON Unbreakable HI-VIS Sledge Hammers

- Unbreakable™ Technology steel core eliminates breaking during strikes
- Safety plate secures head to handle
- No-slip ergonomic handle
- Lanyard hole
- Flat head conveniently designed to stand upright for easy reach
- Anti-vibe neck
- Available in 30 or 46 Rockwell hardness

B.A.S.H UNBREAKABLE HAND TOOLS



Hardness Rockwell "C" Scale - 30			
Head Size (lbs)	Handle Length (in.)	Order No.	Price
2.5	12	**HZ4140212**	Price
4	16	**HZ4140416**	Price
6	36	**HZ4140636**	Price
8	36	**HZ4140836**	Price
10	36	**HZ4141036**	Price
12	36	**HZ4141236**	Price
14	36	**HZ4141436**	Price

Hardness Rockwell "C" Scale - 46			
Head Size (lbs)	Handle Length (in.)	Order No.	Price
2.5	12	**HZ4120212**	Price
4	16	**HZ4120416**	Price
6	36	**HZ4120636**	Price
8	36	**HZ4120836**	Price
10	36	**HZ4121036**	Price
12	36	**HZ4121236**	Price
14	36	**HZ4121436**	Price
20	36	**HZ4122036**	Price

Machinist & Double Face Hammers

MADE IN THE USA

- Available in wood or fiberglass handles
- Drop forged, heat treated
- Octagonal, double-faced striking surface
- Fully polished head
- "Sure-Lock" wedged in tapered eye (Vaughan)



Item	Approx. Weight	Approx. Handle Length (in.)	Handle	Order No.	Price
PRM PRO	3 lbs	16	Fiberglass	**KP8311303**	Price
	3 lbs	13-3/4	Fiberglass	**KP8531103**	Price
VAUGHAN	2-1/2 lbs	15-1/2	Wood	**KV50SDF40**	Price
	3 lbs	16	Wood	**KV50SDF48**	Price

PROTO Ball Pein and Ball Pein Anti-Vibe® Hammers

Ball Pein:
- Tough drop-forged head with hardened face and pein
- Face, chamfer, cheeks and pein are polished and have a protective coating of clear lacquer
- Hardwood handles have contoured shape with red lacquer grip
- Fiberglass handle provides maximum overstrike protection

Anti-Vibe®:
- Patented Anti-Vibe® technology delivers greater vibration dampening effect than traditional one-piece steel hammer
- Molded textured rubber grip provides a slip-resistant grip and increased control

New!


KP4255295


KP4255300


KP4255335

- Ball Pein Handle - Wood Handle			
Approx. Weight	Model No.	Order No.	Price
4 oz	J1304PD	**KP4255275**	Price
8 oz	J1308PD	**KP4255285**	Price
12 oz	J1312PD	**KP4255295**	Price
16 oz	J1316PD	**KP4255310**	Price
24 oz	J1324PD	**KP4255325**	Price
32 oz	J1332PD	**KP4255340**	Price
40 oz	J1340PD	**KP4255355**	Price

- Ball Pein Handle - Fiberglass Handle			
Approx. Weight	Model No.	Order No.	Price
12 oz	J1312PGD	**KP4255300**	Price
16 oz	J1316PGD	**KP4255315**	Price
24 oz	J1324PGD	**KP4255330**	Price
32 oz	J1332PGD	**KP4255345**	Price

- Anti-Vibe Ball Pein Handle - Molded Textured Rubber Grip			
Approx. Weight	Model No.	Order No.	Price
4 oz	J1304AVP	**KP4255270**	Price
8 oz	J1308AVP	**KP4255280**	Price
12 oz	J1312AVP	**KP4255290**	Price
16 oz	J1316AVP	**KP4255305**	Price
24 oz	J1324AVP	**KP4255320**	Price
32 oz	J1332AVP	**KP4255335**	Price
40 oz	J1340AVP	**KP4255350**	Price
48 oz	J1348AVP	**KP4255360**	Price

Ball Pein Hammers

MADE IN THE USA

Hickory Handle
- Ideal for driving punches, chisels and other metal work
- Wooden handles, which are made form white hickory and clear lacquered, are permanently wedged into the heads
- Hammer heads are drop-forged from specially selected steel and carefully heat treated for dependable strength, hardness, and uniformity

Fiberglass Handle
- Fiberglass handle has a cushion grip for greater comfort and safety
- Hammer heads are drop-forged from specially selected steel and carefully heat treated for dependable strength, hardness, and uniformity


KV50TC2012


KV5011498


KP8530403


KZ5011426

Snap-on Industrial Brands | WILLIAMS | Plumb | VAUGHAN

		Snap-On/Williams		Plumb		Vaughan	
Approx. Weight	Approx. Handle Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4 oz	10-1/2	**KP30HBP50A**	Price	**KZ5011494**	Price	**KV50TC504**	Price
8 oz	11-1/2	**KP30HBP30A**	Price	**KZ5011496**	Price	**KV50TC308**	Price
12 oz	11-1/2	**KP30HBP20A**	Price	**KZ5011497**	Price	**KV50TC2012**	Price
16 oz	13	**KP30HBP0A**	Price	**KZ5011498**	Price	**KV50TC016**	Price
20 oz	14	**-**	-	**KZ5011499**	Price	**KV50TC120**	Price
24 oz	15	**KP30HBP2A**	Price	**KZ5011520**	Price	**KV50TC224**	Price
32 oz	15-1/2	**KP30HBP4A**	Price	**KZ5011521**	Price	**KV50TC432**	Price
40 oz	15-1/2	**KP30HBP6A**	Price	**KZ5011522**	Price	**KV50TC640**	Price
48 oz	16	**-**	-	**-**	-	**KV50TC848**	Price

TEKTON | Plumb

		Tekton		Plumb	
Approx. Weight	Approx. Handle Length	Order No.	Price	Order No.	Price
12 oz	10	**KP8530402**	Price	**-**	-
16 oz	11-3/4	**KP8530403**	Price	**KZ5011426**	Price
24 oz	15	**KP8530404**	Price	**KZ5011428**	Price
32 oz	15	**KP8530405**	Price	**KZ5011429**	Price
48 oz	15	**KP8530406**	Price	**-**	-

STANLEY Wood Handle Ball Pein Hammers

New!

- Ideal for striking chisels and punches or riveting, shaping and bending metal
- Hickory handle for durability
- Polished face and pein



Head Weight	Description	Model No.	Order No.	Price
12 oz	7/8" Ball Pein, 3-11/16" Head Length	54-012	**KP437212**	Price
16 oz	1" Ball Pein, 4-1/8" Head Length	54-016	**KP437214**	Price
24 oz	1-1/8" Ball Pein, 4-3/4" Head Length	54-024	**KP437216**	Price
32 oz	1-5/16" Ball Pein, 4-15/16 Head Length	54-032	**KP437218**	Price

PROTO Ball Pein Anti-Vibe® Hammer Set

- Patented Anti-Vibe® technology delivers greater vibration dampening effect than traditional one-piece steel hammer
- Molded textured rubber grip provides a slip resistant grip and increase control
- Rim tempered striking surface adds extra durability and safety
- Includes 1 of each: 8, 12, 16 and 24 ounce

New!



Model No.	Order No.	Price
J1304AVPS	**KP4255265**	Price

Plumb® Claw Hammers

- Patent pending anti-vibration technology
- One piece solid steel construction
- Co-molded contoured handle
- High luster full polish finish
- Magnetic nail starter



Weight	Description	Order No.	Price
16 oz	Curved Claw, Smooth Face Hammer	**KZ50SS16C**	Price
16 oz	Rip Claw, Smooth Face Hammer	**KZ50SS16R**	Price
20 oz	Rip Claw, Smooth Face Hammer	**KZ50SS20R**	Price
22 oz	Rip Claw, Checkered Face Hammer	**KZ50SS22RCF**	Price

VAUGHAN Solid Steel Nail Hammer

MADE IN THE USA

- Full polished head with octagon neck and round face
- Forged steel from head to heel
- Exclusive, Shock-Blok plug in head absorbs shock
- Non-slip cushioned PVC grip is molded to handle



Head	Length (in.)	Order No.	Price
20 oz	16	**KV50R999L**	Price

VAUGHAN Claw Hammers

- Fully polished head with octagon neck and face
- Top quality, full octagon hickory handles
- Triple wedged for “Sure-Lock®” handle tightness



Type - Curved Claw Hammer			
Head	**Length (in.)**	**Order No.**	**Price**
13 oz	12-1/2	**KV50S13**	Price
16 oz	13	**KV50S16**	Price
20 oz	14	**KV50S20**	Price

Type - Straight Claw Hammer			
Head	**Length (in.)**	**Order No.**	**Price**
16 oz	13	**KV50S16R**	Price

VAUGHAN Replacement Claw Hammer Handles

MADE IN THE USA

- Top of the line hickory with weather resistant clear lacquer finish
- Density 48 lbs per cubic foot or more



Length (in.)	Description	Order No.	Price
12	5-10 oz Claw	**KV5061072**	Price
14	20 oz Claw	**KV5061202**	Price
16	20 oz Claw and Framing	**KV5060202**	Price
17	24 oz Claw and Framing	**KV5061242**	Price
18	28 oz Claw and Framing	**KV5061282**	Price
13-1/2	13-16 oz Claw	**KV5060162**	Price

VAUGHAN Replacment Ball Pein Hammer Handles

Length (in.)	Description	Order No.	Price
11	4-6 oz Ball Pien	**KV5062062**	Price
14	12-16 oz Ball Pien	**KV5062162**	Price
15	20-24 oz Ball Pien & 32 oz Blacksmith	**KV5062201**	Price
16	20-24 oz Ball Pien & 32 oz Flat Eye Blacksmith	**KV5062242**	Price
12-1/2	8 oz Ball Pien	**KV5062082**	Price
16-1/2	32-40 oz Ball Pien & 40-48 oz Flat Eye Blacksmith	**KV5062402**	Price

TEKTON® Hammers

- High strength fiberglass handle
- Soft, comfortable rubber grip provides sure, non-slip control
- Permanent head-to-handle epoxy bond will not loosen over time
- Sharpened claw generates maximum nail-pulling leverage
- Mag head on models noted have magnetic slot that holds nail so you can start it and drive it with one hand



Weight	Description	Order No.	Price
16 oz	Claw - Mag Head	**KP8530323**	Price
20 oz	Rip - Mag Head	**KP8530324**	Price
22 oz	Rip Mag Head	**KP8530325**	Price
16 oz	Claw	**KP8530123**	Price
20 oz	Rip Hammer	**KP8530124**	Price

STANLEY Curved Claw Wood Handle Nailing Hammers

- Forged high-carbon steel head
- Fully heat-treated and polished bell face



New!

Head Weight	Description	Model No.	Order No.	Price
7 oz	4-3/8" Head Length, Smooth Face	51-613	**KP437204**	Price
16 oz	5-1/4" Head Length, Smooth Face	51-616	**KP437206**	Price

STANLEY Rip Claw Hammers

- Fiberglass core adds strength and durability in the handle, reduces vibrations
- Ergonomic comfort grip features a ribbed surface and flared end to provide a firm grip
- Forged High-Carbon Steel Head



New!

Head Weight	Handle (in.)	Descrip-tion	Type	Model No.	Order No.	Price
16 oz	5-1/2	Smooth	Fiberglass Rip Claw	STHT51511	**KP437502**	Price
20 oz	-	Smooth	Fiberglass Nailing	STHT51539	**KP437506**	Price

STANLEY Fatmax® Anti-Vibe® Rip Claw Framing Hammers

- AntiVibe® technology minimizes vibration
- Magnetic Nail Start feature for extended reach for one-handed nailing
- Forged, one-piece steel
- Slip-resistant handle
- Precision balanced



New!

Head Weight	Handle (in.)	Description	Model No.	Order No.	Price
22 oz	6	Checkered Face	51-167	**KP439318**	Price
28 oz	16	Checkered Face	51-169	**KP439320**	Price

STANLEY 20 oz. Fatmax® Anti-Vibe® Rip Claw Nailing Hammers

- 75% larger strike face
- AntiVibe® technology
- Slip-resistant handle for a secure grip and comfort
- Precision balanced



New!

Description	Model No.	Order No.	Price
13-1/8" OAL, Smooth Face	51-163	**KP439314**	Price
13-3/4" OAL, Smooth Face	51-165	**KP439316**	Price

Brass Hammer with Wood Handle

MADE IN THE USA

- Hickory handles
- Finished heads
- Both made in USA


SE64753


KY51B2

HACKETT BRASS FOUNDRY COMPANY

No-Mar®

			Hackett Brass		No-Mar	
Approx. Weight	Approx. Head Dia. (in.)	Approx. Handle Length (in.)	Order No.	Price	Order No.	Price
1/2 lbs	7/8	11	**KY51B1**	Price	**SE64750**	Price
1 lbs	1	12	**KY51B2**	Price	**SE64751**	Price
1-1/2 lbs	1-1/4	12	**KY51B3**	Price	**SE647511**	Price
2 lbs	1-1/4	13	**KY51B4**	Price	**SE64752**	Price
3 lbs	1-1/2	15	**KY51B5**	Price	**SE64753**	Price
4 lbs	1-7/8	15	**KY51B6**	Price	**SE64754**	Price
5 lbs	1-3/4	15	**KY51B7**	Price	**SE64755**	Price
10 lbs	2	21	**-**	-	**SE647510**	Price

Copper Hammers with Fiberglass Handle



- 99.9% Pure copper
- Fiberglass handles
- Non-sparking, non-magnetic

Approx. Weight	Approx Head Dia. (in.)	Approx. Handle Length (in.)	Order No.	Price
1/2 lbs	.88	11	**KY5110005**	Price
1 lbs	1	12	**KY5110010**	Price
1-1/2 lbs	1-1/4	12	**KY5110015**	Price
2 lbs	1-1/4	13	**KY5110020**	Price
3 lbs	1-1/2	15	**KY5110025**	Price
4 lbs	1-3/4	15	**KY5110030**	Price
5 lbs	1-3/4	15	**KY5110035**	Price
10 lbs	2	21	**KY5110040**	Price

PROTO Brass Hammers

MADE IN THE USA

- Mar-resistant soft brass head helps absorb impact and helps reduce work damage
- Spark-resistant for safe use near combustible materials
- Fiberglass handle with ergonomic, non-slip grip


New!

Approx. Weight	OAL (in.)	Model No.	Order No.	Price
1.5 lbs	13-1/2	J1430G	**KP4255405**	Price
2.5 lbs	13-3/4	J1432G	**KP4255415**	Price
3.5 lbs	14-3/4	J1431G	**KP4255410**	Price

PRM PRO Brass Hammers

MADE IN THE USA

- Non-marring, soft brass
- Non-sparking
- Available in wood hickory or fiberglass handle
- Lifetime warranty against manufacturing defect



Handle Style - Fiberglass				
Head Weight	Approx. Head Dia. (in.)	Approx. OAL (in.)	Order No.	Price
1 lbs	1-1/4	12	**KY401001**	Price
2 lbs	1-1/2	14	**KY401002**	Price
3 lbs	1-5/8	14	**KY401003**	Price
4 lbs	1-3/4	14	**KY401004**	Price
5 lbs	1-7/8	14	**KY401005**	Price
8 lbs	2-3/8	36	**KY401008**	Price
10 lbs	2-1/2	36	**KY401010**	Price

Handle Style - Wood				
Head Weight	Approx. Head Dia. (in.)	Approx. OAL (in.)	Order No.	Price
1 lbs	1	12	**KY402001**	Price
1-1/2 lbs	1-1/4	14	**KY402015**	Price
2 lbs	1-1/2	14	**KY402002**	Price
3 lbs	1-5/8	14	**KY402003**	Price
4 lbs	1-3/4	17	**KY402004**	Price
5 lbs	1-7/8	17	**KY402005**	Price
8 lbs	2-3/8	36	**KY402008**	Price
12 lbs	2-1/2	36	**KY402010**	Price

Brass Hammers with Fiberglass Handle

MADE IN THE USA

- Brass safety hammers for non-sparking applications
- Meets Government specifications
- Non-slip grips
- Lifetime warranty against mfg. defect


KY401004


KP30HSB15


SE64750F


KP8530905

TEKTON | Snap-on Industrial Brands | WILLIAMS | No-Mar® | PRM PRO

			Generic		TEKTON		Williams		No-Mar		PRM Pro	
Approx. Weight	Approx Head Dia. (in.)	Approx. Handle Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/2 lbs	7/8	11	-	-	-	-	-	-	**SE64750F**	Price	-	-
1 lbs	1	10	-	-	**KP8530903**	Price	-	-	-	-	-	-
1 lbs	1	12	**KP8311616**	Price	-	-	-	-	**SE64751F**	Price	-	-
1 lbs	1-1/4	10	-	-	-	-	-	-	-	-	**KY401001**	Price
1-1/2 lbs	1-1/4	13	**KP8311624**	Price	**KP8530904**	Price	**KP30HSB15**	Price	**SE647511F**	Price	-	-
2 lbs	1-1/2	12	-	-	-	-	-	-	-	-	**KY401002**	Price
2 lbs	1-1/4	13	**KP8311632**	Price	**KP8530905**	Price	-	-	**SE64752F**	Price	-	-
2-1/2 lbs	1-1/4	10-1/8	-	-	-		**KP30HSB26A**	Price	-	-	-	-
3 lbs	1-1/2	13	-	-	-	-	-	-	**SE64753F**	Price	-	-
3 lbs	1-5/8	12	-	-	-	-	-	-	-	-	**KY401003**	Price
4 lbs	1-5/8	9-7/8	-	-	-	-	**KP30HSB38A**	Price	-	-	-	-
4 lbs	1-3/4	12	-	-	-	-	-	-	-	-	**KY401004**	Price
4 lbs	1-3/4	14	-	-	-	-	-	-	**SE64754F**	Price	-	-
5 lbs	1-7/8	12	-	-	-	-	-	-	-	-	**KY401005**	Price
5 lbs	1-3/4	14	-	-	-	-	-	-	**SE64755F**	Price	-	-
8 lbs	2-3/8	32	-	-	-	-	-	-	-	-	**KY401008**	Price
10 lbs	2	21	-	-	-	-	-	-	**SE647510F**	Price	-	-
10 lbs	2-1/2	32	-	-	-	-	-	-	-	-	**KY401010**	Price

PRM PRO Pinch Bars

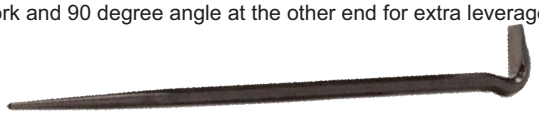
- Line-up pry bars are used for moving and adjusting metal or wood



Length (in.)	Order No.	Price
14	**LC715031**	Price
18	**LC717794**	Price
20	**LC715032**	Price
24	**LC717795**	Price

PRM PRO Roll Bars

- Rolling head pry bars feature long pointed taper at one end for lining up work and 90 degree angle at the other end for extra leverage



Length (in.)	Order No.	Price
16	**LC715029**	Price
18	**LC715030**	Price

PRM PRO 4 Pc. Pinch & Roll Bar Set

- 16" & 18" Rolling head bars
- 14" & 20" Line up bars



Order No.	Price
LC715028	Price

PROTO 4 Pc Pry & Rolling Head Bars Set

- Set includes rolling head and aligning bars
- Black oxide finish to help prevent rust corrosion; extending tool life and performance

MADE IN THE USA

New!



Set Includes	Model No.	Order No.	Price
18 & 24" Aligning Bars, 12 & 16" Rolling Head Bars	J2100	**KP4281200**	Price

Snap-on Industrial Brands | WILLIAMS 4 Pc. Pinch & Roll Bar Set

Mfg. from Alloy Steel

MADE IN THE USA

Set incudes 1 each of the following: KP30C80A, KP30C82A, KP30C715, KP30C718



Order No.	Price
KP30PBS7	Price

PROTO Aligning Pry Bars

MADE IN THE USA

- Application: for prying, positioning, and aligning applications
- Black oxide finish to help prevent rust corrosion; extending tool life and performance

New!



Length (in.)	Shank Width (in.)	Model No.	Order No.	Price
16	1/2	J2116	**KP4260650**	Price
18	5/8	J2120	**KP4260655**	Price
24	3/4	J2124	**KP4260660**	Price
30	7/8	J2125	**KP4260665**	Price
38	7/8	J2127	**KP4260700**	Price
42	1	J2128	**KP4260705**	Price
60	1-1/4	J2129	**KP4260710**	Price

PROTO Rolling Head Pry Bars

- Pry and aligning bar with a pointed taper and 90° rolling head for leverage
- High alloy steel is heat treated the entire length and black oxide treated for added strength and durability

New!

MADE IN THE USA



Cut Width (in.)	Stock Size (in.)	Length (in.)	Model No.	Order No.	Price
1/2	1/2	12	J2126	**KP4260635**	Price
5/8	5/8	16	J2130	**KP4260640**	Price
3/4	3/4	21	J2134	**KP4260645**	Price

Snap-on Industrial Brands | WILLIAMS Pinch Bars

MADE IN THE USA

- Used for aligning, prying and positioning applications



Stock Size	Square Cut	Length	Order No.	Price
1/2	1/2	14	**KP30C80**	Price
5/8	3/4	16	**KP30C82**	Price
3/4	7/8	18	**KP30C82A**	Price
3/4	7/8	19-5/8	**KP30C83**	Price
3/4	7/8	24	**KP30C80A**	Price
7/8	1	30	**KP30C84**	Price

Pinch Point Lining Bar

MADE IN THE USA



Type	Stock	Length	Weight	Order No.	Price
Pinch Point Lining Bar	1-1/4	60	18 lbs	**KS5017700**	Price
Wedge Point Lining Bar	1-1/4	60	18 lbs	**KS5018900**	Price

Straight and Offset Pinch Bar

MADE IN THE USA



Stock	Length	Weight	Order No.	Price
1	36	10 lbs	**KS501309**	Price

Snap-on Industrial Brands | Williams Roll Bars

MADE IN THE USA

Aligning and pry bar with long tapered body and 90° rolling head. Lifetime warranty



Stock Size	Length	Order No.	Price
3/8	9	**KP30C709**	Price
1/2	16	**KP30C715**	Price
5/8	18	**KP30C718**	Price

Mayhew Line-Up Pry Bar

- Long, tapered end for aligning and adjusting metal or wood
- Angled chisel end for extra leverage when prying
- Variety of lengths for work in hard-to-reach spots and more leverage
- Black oxide finish for additional rust protection



Stock Size (in.)	Length (in.)	Order No.	Price
1/2	14	**KS50468**	Price
3/4	20	**KS50471**	Price
3/4	24	**KS50472**	Price
5/8	16	**KS50469**	Price
7/8	30	**KS50473**	Price

Mayhew Ladyfoot Pry Bar

- Rocking head used for prying in small areas, other end used to align
- Solid forged head for superior strength
- Black oxide finish for additional rust protection

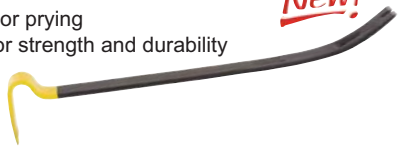


Stock Size (in.)	Length (in.)	Order No.	Price
7/16	12	**KS5040150**	Price

Stanley 21" Wonder Bar® Pry Bar

New!

- Ideal for pulling nails, lifting or prying
- Forged, high-carbon steel for strength and durability
- 21" long for reach and leverage
- High-visibility, powder-coated finish



Model No.	Order No.	Price
55-526	**KP437256**	Price

Forge Die Setter Bar

MADE IN THE USA

A practical shop tool for quick separation of punch and die holder



Stock	Length	Order No.	Price
5/8	18	**KS517035**	Price
3/4	30	**KS517037**	Price

4 Pc. Pry Bar Set - Solid Steel

Specifications:

- Drop forged, heat treated steel for maximum strength
- Pointed head, tapered design is ideal for aligning
- Slipper foot end for extra leverage when lifting or prying

KP853346



Item	Length (in.)	Order No.	Price
PRM PRO	6, 12, 16 & 20	**KP8311841**	Price
TEKTON	6, 12, 16, & 20	**KP853346**	Price

Proto 4 Pc Large Handle Pry Bar Set

MADE IN THE USA

New!

- Impact resistant, extruded Acetate handles are four-sided with broad but shallow flutes
- Resistant to most harsh chemicals
- Four-sided handle design helps prevent "roll away" from the work surface
- High alloy steel shanks are heat treated



Set Includes	Model No.	Order No.	Price
14, 18, 28, and 32"	J2156S	**KP4281210**	Price

Proto Large Handle Pry Bars

- Large four-sided handle for a better grip and added comfort

MADE IN THE USA

New!

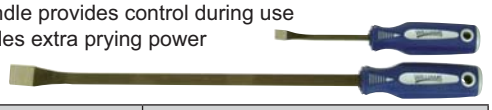


Approx. Length (in.)	Cut Width (in.)	Model No.	Order No.	Price
14	5/8	J2140	**KP4260685**	Price
18	5/8	J2142	**KP4260680**	Price
28	3/4	J2146	**KP4260675**	Price
32	3/4	J2148	**KP4260670**	Price
36	5/8	J2150	**KP4260690**	Price
42	5/8	J2152	**KP4260695**	Price

Snap-on Industrial Brands | Williams 2 Pc. Pry Bar Set

Bi Mold Comfort Grip Handles

- Bi-mold handles provide comfortable grip, reducing hand fatigue
- Thumb stop on handle provides control during use
- Fulcrum end provides extra prying power
- Lifetime warranty



Order No.	Price
KP3021661	Price

PRM PRO 4 Pc. Mechanic's Pry Bar Set

- HI-VIS Handles
- Drop forged, fully heat treated



Length (in.)	Order No.	Price
8, 12, 18 & 24	**KP8311845**	Price

PRM PRO 5 Pc. Pry Bar Set

Specifications:

- Hardened and tempered steel construction
- Oversized handles for a comfortable grip
- Hardened, sharpened blade tips
- Hi-Visibility orange handles are easy to locate in toolbox or work area
- Curved slipper foot for maximum leverage (rolling bar)
- 16" Is a rolling nose pry bar



Length (in.)	Order No.	Price
8, 12, 16, 18 & 24	**KP8311855**	Price

Exxo 4 Pc. Demolition Set

- 4 Pc. set consists of 12ng or pryingForged, high-carbon steel for strength and durability21" long for reach and leverageHigh-visibility, powder-coated finish



Order No.	Price
HY50P6064	Price

STANLEY 12-3/4" Wonder Bar Pry Bar

- Contoured bar for pulling nails, prying and lifting
- Forged, high-carbon steel for strength and durability
- Polished and beveled cutting edges
- Beveled nail slot at both ends
- High-visibility, powder-coated finish



Length (in.)	Model No.	Order No.	Price
12-3/4	55-515	**KP437252**	Price

STANLEY FatmaxᵾWrecking Bars

- Ideal for heavy demolition work
- High-carbon steel for strength and durability
- Tri-lobe design helps provide a secure grip for ease of use
- High-visibility, powder-coated finish
- Slotted claw and beveled ends for functionality and performance



OAL (in.)	Model No.	Order No.	Price
24	55-102	**KP439340**	Price
36	55-104	**KP439342**	Price

STANLEY 3 Pc. Light-Duty Pry Bar Set

- Three sizes of bars for versatility and multiple applications
- Stamped one-piece steel construction for strength & durability
- Tear-drop nail pullers for easy nail removal
- Lightweight design for easy carrying in tool belt or box
- High visibility power-coated finish for easy carrying in tool belt or box

Set Includes:

- 5”, 7”, 12” Bar



Model No.	Order No.	Price
STHT55135	**KP437512**	Price

STANLEY 9" Scraper Bar



- Multi-level design makes nail pulling easier
- One-piece steel construction for increased strength & durability
- Precision sharpened ends for scraping away materials
- Tear-drop nail puller for easy nail removal
- Lightweight design for easy carrying in tool belt or box

Length (in.)	Model No.	Order No.	Price
9	STHT55530	**KP431108**	Price

PONY TOOLS 15" Utility Flat Pry Bar

- Great for prying, lifting and scraping
- Forged from high-carbon steel
- 15” Flat shaped
- Limited lifetime warranty



Length (in.)	Weight (lbs.)	Order No.	Price
15	1 lb	**SE7039300**	Price

While supplies last.

TEKTON Pry Bars

- Thin, sharpened chisel tips slide easily into the tightest cracks and crevices
- Three nail slots lets you get at nails from any angle
- High-strength forged and heat treated steel construction



Length (in.)	Order No.	Price
7-1/2	**KP853305**	Price
15	**KP853318**	Price

VAUGHAN SUPERBAR®—The Original

MADE IN THE USA

PRIES! LIFTS! PULLS!

- Use it to pry, scrape, pound and pull nails
- Forged, spring tempered steel for heavy duty uses
- Beveled nail slots, polished, sharp blades for easy insertion



Length	Weight	Order No.	Price
15	24 oz	**KV50B215**	Price

STANLEY Claw Bars

- Ideal for precision nail pulling and prying
- Polished, beveled claws for precise penetration
- Flat striking face allows claw to be driven under deeply embedded nails
- Forged, high-carbon alloy steel for long life
- Tempered to help reduce chipping



OAL (in.)	Model No.	Order No.	Price
8	55-113	**KP437232**	Price
10	55-114	**KP437234**	Price
12	55-115	**KP437236**	Price

GEARWRENCH Indexable Nail Puller

- Head or pry bar has 14 locking settings for 180° of use
- Exceeds ANSI requirements for proven strength
- Indexible to over 180° for greater leverage
- Grooved foot for added traction
- Fits nails 14° to 10½



Length (in.)	Order No.	Price
12	**KP6582212**	Price

Forge Gooseneck Wrecking Bars

MADE IN THE USA

U-Shapped on one end with offset chisel opposite. High carbon steel hexagon steel, painted finish



Stock	Length (in.)	Weight (lbs.)	Order No.	Price
7/8	42	8.75 lbs	**KS50GWB42**	Price
1	36	8.25 lbs	**KS50GWB36**	Price
1	48	12.5 lbs	**KS50GWB48**	Price
1	60	15.5 lbs	**KS50GWB60**	Price

CHANNELLOCK 4 Pc. Hook & Pick Set

- Consists of 1 each; awl screwdriver, 90 pick 180 hook, small probe
- All measure .063 blade diameter, 2-3/4 blade length and 5-1/4 overall length
- Heat treated alloy blades
- High torque acetate handle for superior durability and solvent resistance

New! MADE IN THE USA



Order No.	Price
LB50HP4A	Price

PROTO 4 Pc. Standard Pick Set

- High alloy steel 1/4" shanks are heat treated their entire length and black oxide treated for added strength and durability
- Contains 1 of each: pick w/45 degree hook, pick, cotter pin puller, pick w/ 90 degree hook, pick w/curved hook, tool roll

MADE IN THE USA New!



Model No.	Order No.	Price
J2384S	KP4282650	Price

PROTO Cotter Pin Puller

- Precision formed curves provide excellent leverage in prying out cotter pins quickly and easily
- Large plastic handle
- Overall length 7-3/4"
- Blade length 3-7/16"

MADE IN THE USA New!



Model No.	Order No.	Price
J2306	KP4270130	Price

Snap-on Industrial Brands | WILLIAMS 4 Pc. Mini Pick & Hook Set

Bi-Mold Comfort Grip Handles



- Bi-mold handles provide comfortable grip, reducing hand fatigue
- Use for scribing, alignment, o-ring removal, and parts cleaning
- Small size makes them ideal for hard to reach work surfaces
- **Contents:** straight pick, 45° bent tip pick, 90° bent tip pick, full semi-circular hook
- Lifetime warranty

Order No.	Price
KP3040201	Price

Snap-on Industrial Brands | WILLIAMS 4 Pc. Utility Tool Set

Bi Mold Comfort Grip Handles



- Bi-mold handles provide comfortable grip, reducing hand fatigue
- Blades are chrome plated to resist rust
- Ideal general purpose shop tool set
- **Contents:** gasket scraper, scratch awl, cotter pin puller, hose removal tool
- Lifetime warranty

Order No.	Price
KP3040251	Price

Lisle 5 Pc. Hose Remover Set

- Contains long & short, standard & offset hooks
- Can be used to remove hoses, moldings, clips, clamps, seals, 0-rings, cotter pins, gaskets, etc.
- Long pullers are 13" long
- Handles are dual durometer material for comfort and grip
- Rods are heat-treated for durability



New!

Order No.	Price
KN6580380	Price

GENERAL 3 Pc. Probe Set

- Great for picking, marking and cleaning
- Each probe has an extended-length aluminum body with kruled grip and a hexagonal head to prevent rolling
- Overall length - 6-1/2"



Order No.	Price
NE50862	Price

TITAN Pick & Hook Set

- Comfortable TPR sure-grip handles
- Chrome plated shafts
- Includes 4 picks: curved, 90 degree, offset & straight
- 16" Overall length



New!

Order No.	Price
KP8217221	Price

PRM PRO 4 Pc. Precision Pick & Hook Set

- Heat treated, chrome vanadium steel shafts
- Cushioned, non-slip grips for extra control
- Knurled shaft grip area for precise work
- **Contents:**
  1 Pc. full hook
  1 Pc. 45°
  1 Pc. 90°
  1 Pc. straight pick



No. of Pieces	Order No.	Price
4	KP8346400	Price

MAYHEW Cold Chisel

MADE IN THE USA



Cut Width (in.)	Hex Stock (in.)	OAL (in.)	Order No.	Price
1/4	1/4	4-3/4	**KS50101**	Price
5/16	1/4	5	**KS50102**	Price
3/8	5/16	5-1/4	**KS50103**	Price
7/16	3/8	5-1/2	**KS50104**	Price
1/2	3/8	6	**KS50105**	Price
5/8	1/2	6-1/2	**KS50106**	Price
3/4	5/8	7	**KS50107**	Price
7/8	3/4	7-1/2	**KS50108**	Price
1	7/8	8	**KS50109**	Price

TEKTON Cold Chisels

MADE IN THE USA

- Forged and machined from premium, high carbon steel
- Rough ground after forging, a second sharpening after heat treating produces a high-performance cutting edge
- Individual heat treatment allows the right balance of a hardened edge with a softer striking end
- Classic natural finish has a dry-touch, rust-preventative coating



Cut (in.)	Hex Stock (in.)	OAL (in.)	Order No.	Price
1/4	1/4	4-1/2	**KP8566001**	Price
5/16	5/16	4-1/2	**KP8566002**	Price
3/8	5/16	5-1/4	**KP8566003**	Price
7/16	3/8	5-1/2	**KP8566004**	Price
1/2	3/8	6	**KP8566005**	Price
5/8	1/2	6-1/2	**KP8566006**	Price
3/4	5/8	7	**KP8566007**	Price
7/8	3/4	7-1/2	**KP8566008**	Price
1	7/8	8	**KP8566009**	Price

MAYHEW Extra Long & Heavy Duty Cold Chisel

MADE IN THE USA



Cut Width/ Point Size (in.)	Body Size (in.)	Body Type	OAL (in.)	Order No.	Price
5/8	1/2	Hex	12	**KS50110**	Price
3/4	5/8	Hex	12	**KS50115**	Price
7/8	3/4	Hex	12	**KS50116**	Price
7/8	3/4	Hex	18	**KS50112**	Price
1	3/4	Hex	12	**KS50113**	Price
1	3/4	Hex	18	**KS50114**	Price

MAYHEW Rivet Buster



MADE IN THE USA

Cut Width/ Point Size (in.)	Body Size (in.)	Body Type	OAL (in.)	Order No.	Price
3/4	5/8	Hex	6-1/4	**KS50119**	Price

STANLEY Cold Chisels



New!

- Ideal for cutting/shaping wrought iron, cast-iron, steel, brass, bronze, copper, aluminum, bolts, nuts and rivets
- One-piece construction forged for strength
- Hardened, quenched and tempered for long life and durability
- Powder-coated finish for easy visibility

OAL (in.)	Model No.	Order No.	Price
3/8 x 5-9/16	16-286	**KP431022**	Price
1/2 x 6	16-287	**KP431024**	Price
5/8 x 6-3/4	16-288	**KP431026**	Price
3/4 x 6-7/8	16-289	**KP431028**	Price
7/8 x 8	16-290	**KP431030**	Price
1 x 12	16-291	**KP431032**	Price
1-1/4 x 12	16-292	**KP431034**	Price

PROTO Cold Chisels

MADE IN THE USA

- Designed to cut wrought iron, cast iron, steel, brass, bronze, copper, aluminum, bolts, nuts and rivets
- Modified parabolic striking end to help reduce mushrooming and chipping
- Material: Steel or Heat Treated S2

New!



Type - Steel					
Cut Width (in.)	Shank Size (in.)	Length (in.)	Model No.	Order No.	Price
1/4	3/16	4-7/8	J86A3/16	**KP4260115**	Price
5/16	1/4	5-1/8	J86A1/4	**KP4260130**	Price
3/8	5/16	5-3/8	J86A5/16	**KP4260125**	Price
7/16	3/8	5-9/16	J86A3/8	**KP4260140**	Price
1/2	7/16	6	J86A7/16	**KP4260110**	Price
1/2	7/16	12	J86A7/16X12	**KP4260090**	Price
5/8	1/2	6-3/4	J86A1/2	**KP4260135**	Price
5/8	1/2	12	J86A1/2X12	**KP4260095**	Price
3/4	5/8	6-7/8	J86A5/8	**KP4260145**	Price
3/4	5/8	12	J86A5/8X12	**KP4260100**	Price
7/8	3/4	8	J86A3/4X8	**KP4260160**	Price
7/8	3/4	12	J86A3/4X12	**KP4260105**	Price
1	7/8	8-1/2	J86A7/8X8	**KP4260120**	Price
1	7/8	12	J86A7/8X12	**KP4260080**	Price
1	7/8	18	J86A7/8X18	**KP4260085**	Price
1-3/16	1	8-1/4	J86A1X8	**KP4260150**	Price

Type - S2 Heat-Treated Steel					
Cut Width (in.)	Shank Size (in.)	Length (in.)	Model No.	Order No.	Price
1/4	3/16	4-7/8	J86A3/16S2	**KP4260020**	Price
5/16	1/4	5-1/8	J86A1/4S2	**KP4260010**	Price
3/8	5/16	5-3/8	J86A5/16S2	**KP4260040**	Price
7/16	3/8	5-9/16	J86A3/8S2	**KP4260035**	Price
1/2	7/16	6	J86A7/16S2	**KP4260055**	Price
5/8	1/2	6-3/4	J86A1/2S2	**KP4260000**	Price
3/4	5/8	6-7/8	J86A5/8S2	**KP4260045**	Price
3/4	5/8	12	J86A5/8X12S2	**KP4260050**	Price
7/8	3/4	8	J86A3/4X8S2	**KP4260030**	Price
7/8	3/4	12	J86A3/4X12S2	**KP4260025**	Price
1	7/8	8	J86A7/8X8S2	**KP4260075**	Price
1	3/4	12	J86A7/8X12S2	**KP4260065**	Price

PROTO Super Duty Cold Chisels

MADE IN THE USA

- Black oxide finish
- 20% Larger striking surface than standard chisels directs the power to the cutting edge
- Longer shank features a knurl for better grip and easy positioning
- Hand ground cutting edge to the exact angle for cutting through tough metals
- Material: Steel Heat Treated S2

New!



Cut Width (in.)	Shank Width (in.)	Blade Length (in.)	Striking End Dia. (in.)	Striking End Length (in.)	OAL (in.)	Model No.	Order No.	Price
3/8	5/16	2	5/8	1-1/4	6	J86038	**KP4260185**	Price
1/2	7/16	2-1/8	1/2	1-1/4	6-13/16	J86012	**KP4260190**	Price
5/8	1/2	2-1/4	5/8	1-3/8	7-5/8	J86058	**KP4260195**	Price
3/4	5/8	2-1/2	3/4	1-1/8	8-7/16	J86034	**KP4260200**	Price
7/8	3/4	3-1/8	7/8	-	9-1/4	J86078	**KP4260205**	Price
1	7/8	3-5/16	31/32	1-3/8	10-1/16	J86001	**KP4260210**	Price

PROTO Punch & Chisel Holder

MADE IN THE USA

Model No. J2108

New!



- Holds punches and chisels up to 1" diameter reducing the risk of injury
- Nylon insert absorbs shock
- Large 4-sided handle

Order No.	Price
KP4260240	Price

PROTO Cape Chisels

MADE IN THE USA

New!

- Hand ground cutting edge to the exact angle for cutting through tough metals
- Modified parabolic striking end to help reduce mushrooming and chipping
- Black oxide finish to help prevent rust corrosion; extending tool life and performance



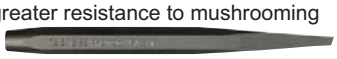
Hex Stock (in.)	Cut Width (in.)	OAL (in.)	Model No.	Order No.	Price
1/4	3/16	4-5/8	J721/4	**KP4260230**	Price
3/8	1/4	5-1/2	J723/8	**KP4260725**	Price

PROTO Diamond Point Chisels

New!

MADE IN THE USA

- Used to cut V-grooves and clean out inside corners
- Modified parabolic striking end for greater resistance to mushrooming and chipping
- Material: Steel or Heat Treated S2



Type - Steel					
Cut Width (in.)	Shank Width (in.)	Length (in.)	Model No.	Order No.	Price
1/4	3/8	5-5/8	J763/8	**KP4260165**	Price
3/16	5/16	5	J765/16	**KP4260155**	Price
3/8	5/8	6-1/2	J765/8	**KP4260170**	Price
5/16	1/2	6	J761/2	**KP4260175**	Price
5/32	1/4	4-1/2	J761/4	**KP4260180**	Price

Type - S2 Heat-Treated Steel					
Cut Width (in.)	Shank Width (in.)	Length (in.)	Model No.	Order No.	Price
1/4	3/8	5-5/8	J763/8S2	**KP4260255**	Price
3/16	5/16	5	J765/16S2	**KP4260260**	Price
5/32	1/4	4-1/2	J761/4S2	**KP4260250**	Price

PROTO Cold Chisel Sets

MADE IN THE USA

New!



- Modified parabolic striking end to help reduce mushrooming and chipping.
- Hand-ground cutting edge to the exact angle for cutting through tough metals
- Black oxide finish
- A polished identification panel on one of the flats is marked with the tool number and size in a black inlay
- Includes a pouch for convenient storage solution
- Material: Steel Heat Treated S2

No. of Pieces	Tip Widths Included	Model No.	Order No.	Price
5	5/16, 3/8, 7/16, 1/2, 5/8	J86CS2	**KP4281145**	Price
7	5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8	J86BS2	**KP4281140**	Price

PROTO 5 Pc Cold Chisel Sets

MADE IN THE USA

New!



- 20% Larger striking surface than standard chisels directs the power to the cutting edge.
- Hand-ground cutting edge to the exact angle for cutting through tough metals
- Black oxide finish
- A polished identification panel on one of the flats is marked with the tool number and size in a black inlay
- Includes a pouch for convenient storage solution
- Material: Steel Heat Treated S2

End Sizes Included	Type	Model No.	Order No.	Price
5/16, 3/8, 7/16, 1/2, 5/8"	Standard	J86C	**KP4281790**	Price
3/8, 1/2, 5/8, 3/4, 7/8"	Longer Shank	J86000	**KP4281150**	Price

STANLEY Cold Chisel Set

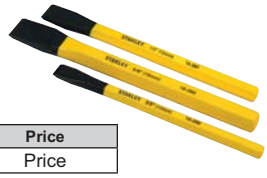
- Accessible packaging enables the customer to easily evaluate products in store
- One-piece construction forged for strength

Set Includes:

- 3/8 x 5-9/16", 1/2 x 6" and 5/8 x 6-3/4"

- Hardened, quenched and tempered for long life and durability
- Powder-coated finish for easy visibility

New!



Model No.	Order No.	Price
16-298	**KP431046**	Price

PROTO 7 Pc Chisel Set

MADE IN THE USA



- Modified parabolic striking end to help reduce mushrooming and chipping.
- Hand-ground cutting edge to the exact angle for cutting through tough metals
- Black oxide finish to help prevent rust corrosion; extending tool life and performance
- Set offers a wide range of sizes to handle a variety of jobs
- Includes a pouch for convenient storage solution

New!

Tip Widths Included	Model No.	Order No.	Price
5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8	J86B	**KP4281785**	Price

MAYHEW Chisels Hard Cap



- Impact disc efficiently transfers blow
- Reinforced polymer by DuPont reduces noise by up to 80%
- Cap-and-cushion grip reduces the amount of shock by up to 90%
- Striking surface enlarged by 2-1/2 times
- Eliminates flying metal fragments
- Reduces glancing blows
- Reduces hammer kickback and trauma to wrist and elbow

Cut (in.)	Hex Stock (in.)	OAL (in.)	Order No.	Price
1/2	3/8	7	**KS5066104**	Price
3/4	5/8	11	**KS50122**	Price
3/4	5/8	8	**KS5066106**	Price
7/8	5/8	8-1/2	**KS5066107**	Price
1	3/4	11	**KS50124**	Price

GENERAL Revolving Punch Plier

- A convenient spring tension, self-opening tool for punching round holes in leather, plastic, rubber, canvas, cardboard and similar materials
- Made of plated steel with six tapered and hollow, hardened steel punches
- Replacement punch sizes available



Order No.	Price
NE5072	Price

PONY TOOLS 4" Brick Chisel



- Used for scoring, cutting, and trimming brick or
- Alloy steel for hardness and durability
- Precision ground cutting edge
- Rust preventative coating applied to steel for additional protection

Cut (in.)	Hex Stock (in.)	OAL (in.)	Order No.	Price
4	7/8	9	**SE7031307**	Price

STANLEY 12 Pc. Punch & Chisel Set



- Accessible packaging enables the customer to easily evaluate products in store
- One-piece construction forged for strength
- Hardened, quenched and tempered for long life and durability
- Powder-coated finish for easy visibility

New!

Set Includes:

- 1/4, 5/16, 3/32, 1/16, 1/8, 5/32, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8"

Model No.	Order No.	Price
16-299	**KP431048**	Price

PROTO | Snap-on Industrial Brands | WILLIAMS | MAYHEW

Punch & Chisel Sets

- Drop forged heat treated steel
- Pin punches—for driving out and removing already loosened pins and keys after initial movement by a solid punch
- Solid punches—for loosening fozen or tight pins and keys or knocking out rivets
- Long taper punches—desinged for aligning the holes in metal piece, through which rivets, bolts & screws will be inserted
- Prick punch—for scribing lines into metal before cutting
- Center punch—marks work for starting point in different type materials
- Cold chisel—designed for cutting, sharpening and removing metal softer than the chisel
- Lifetime warranty



KS505RC



KS5014RC



KP4281760



KP4281770

Pcs. Per Set	Description	Added Features	Pin Punch (in.)	Solid Punch (in.)	Long Taper Punch (in.)	Center Punch (in.)	Cold Chisel (in.)	Made In	Case	Brand	Model No.	Order No.	Price
6	Punch & Chisel Set	-	1/8 x 4-3/4, 3/16 x 5-1/4	3/16 x 5	-	3/16 x 5	1/2 x 6, 5/8 x 6-1/2	USA	Vinyl Pouch	Mayhew	61005	**KS505RC**	Price
6	Chisel Set	-	-	-	-	-	1/4 x 5, 5/16 x 5, 3/8 x 5-1/2, 1/2 x 6, 5/8 x 6-1/2, 3/4 x 7	USA	Vinyl Pouch	Mayhew	60560	**KS5015RC**	Price
8	Punch & Chisel Set	-	1/8 x4-3/4, 3/16 x 5-1/4, 1/4 x 5-3/4	3/16 x 5	-	3/16 x 5	3/8 x 5-1/2, 1/2 x 6, 5/8 x 6-1/2	USA	Vinyl Pouch	Mayhew	61025	**KS509RC**	Price
9	Chisel Set	-	-	-	-	-	1/4 x 4-3/4; 3/8 x 5-1/4; 5/8 x 6-1/2, 7/8 x 7-1/2, 1-1/8 x 8, 5/16 x 5, 1/2 x 6, 3/4 x 7, 1 x 8	USA	Vinyl Pouch	Williams	9284617	**KP30CS9**	Price
12	Punch & Chisel Set	5/16 Cape Chisel, 3/16 Diamond Pt Chisel, 1/16, 1/8, 3/16, Starting Punches	3/32, 1/8, 3/16 Drive Pin Punches,	-	-	3/8	5/16, 7/16, 1/2	USA	Vinyl Pouch	Proto	J2	**KP4281760**	Price
12	Punch & Chisel Set	7/32 Cape Chisel, 3/16 Diamond Pt Chisel, 3/32, 1/8, 3/16 Starting Punches	1/16, 1/8, 3/16	-	-	3/8	5/16, 7/16, 1/2	USA	Vinyl Pouch	Proto	J2S2	**KP4281125**	Price
14	Punch & Chisel Set	Includes 3/8 x 4-1/2 Prick Punch	3/32 x 4-1/2, 1/8 x4-3/4, 5/32 x 5, 3/16 x 5-1/4, 1/4 x 5-3/4	1/8 x 5, 3/16 x 5	-	3/8 x 5	1/4 x 5, 3/8 x 5-1/2, 1/2 x 6, 5/8 x 6-1/2, 3/4 x 7	USA	Vinyl Pouch	Mayhew	61044	**KS5014RC**	Price
16	Punch & Chisel Set	Includes Punch Gauge	3/32 x 4-1/2, 1/8 x 4-3/4, 5/32 x 5, 3/16 x 5-1/4, 1/4 x 5-3/4	-	3/32 x 5-1/4, 1/8 x 4-3/4, 5/32 x 5, 3/16 x 5-1/4, 1/4 x 5-3/4	1/8 x 5, 3/16 x 6	3/8 x 5-1/2, 1/2 x 6, 5/8 x 6-1/2	Global	Box with Tray	Generic	45016	**KP8345016**	Price
17	Punch & Chisel Set	Includes 1/2 x 6 Prick Punch	1/8 x 5, 3/16 x 5-1/2, 1/4 x 7	1/8 x 4-1/2, 5/32 x 5, 3/16 x 5	5/32 x 8-1/2, 1/4 x 11	3/8 x 5	5/16 x 5, 3/8 x 5-1/4, 1/2 x 6, 5/8 x 6-1/2, 3/4 x 7, 1/4 x 5 Cape chisel, 3/8 x 6-1/2 Diamond pt	USA	Vinyl Pouch	Williams	9285003	**KP30PC17**	Price
26	Punch & Chisel Set	3/32, 1/8, 5/32, 3/16, 7/32, 1/4 Starting Punches; 1/8, 3/16, 1/4 Drift Punches	3/32, 1/8, 3/16, 7/32, 1/4	-	-	3/8, 1/2	1/4, 3/8, 5/16, 1/2, 5/8, 3/4, 7/8, 1, 1-3/16	USA	Vinyl Pouch	Proto	J46	**KP4281770**	Price
26	Punch & Chisel Set	3/32, 1/8, 3/16, 7/32, 1/4 Starting Punches; 1/8, 3/16, 1/4 Drift Punches	3/32, 1/8, 5/32, 3/16, 7/32, 1/4	-	-	3/8, 1/2	1/4, 3/8, 5/16, 1/2, 5/8, 3/4, 7/8, 1, 1-3/16	USA	Vinyl Pouch	Proto	J46S2	**KP4281135**	Price
27	Punch & Chisel Set	Punch & Chisel Holder	3/32 x 4-3/4, 1/8 x 5, 5/32 x 5-1/4, 3/16 x 5-1/2, 1/4 x 7, 5/16 x 7	3/32 x -1/2,1/8 x 4-1/2, 5/32 x 5, 3/16 x 5, 1/4 x 6	5/32 x 8-1/2, 3/16 x 9, 1/4 x 11	3/8 x 5, 1/2 x 6	1/4 x 4-3/4, 3/8 x 5-1/4, 5/8 x 6-1/2, 7/8 x 7-1/2, 1-1/8 x 8, 5/16 x 5, 1/2 x 6, 3/4 x 7, 1 x 8	USA	Vinyl Pouch	Williams	9327000	**KP30PC27**	Price

GENERAL Pocket Scribers

- Replaceable hardened and centerless ground point
- Point reverses into knurled body for safety
- Conforms to government specifications GGG-S-131e



Type - Pocket Scribers				
Body Dia. (in.)	Blade Length (in.)	OAL (in.)	Order No.	Price
1/4	1-7/16	4-15/16	**NE5083**	Price
3/8	2	6	**NE5081**	Price

For Use With	OAL (in.)	Order No.	Price
NE5083	5.35	**NE5083P**	Price
NE5081	6.40	**NE5081P**	Price

GENERAL Fixed Two Point Scriber

- This scriber consists of hardened and ground steel straight and 90° bent points which fixed to a knurled body
- Overall length 8-7/16”



Order No.	Price
NE5080	Price

Utility Punch/Scriber

- Hardened point
- Ideal for punching holes or scribing on sheet metal



Order No.	Price
KS60HMC137	Price

GENERAL Hardwood Handle Scratch Awl



- Alloy steel blade runs through the handle and is securely fastened to both the plated steel ferrule and the cap
- Hardwood fluted handle is contoured for comfortable grip
- Overall length is 6-1/2” with 2-3/4” blade

Order No.	Price
NE50818	Price

GENERAL Three Point Scriber

- Aluminum knurled body, with three inter-changeable threaded points: short straight, short bent and long bent



Order No.	Price
NE50380A	Price

GENERAL Tungsten Carbide Point Scriber

- Tungsten carbide tip marks stainless steel, copper, ceramics and glass
- Screw chuck for reversing tungsten carbide point when not in use
- Replacement Point no. 88P
- Measures 5-5/16” overall



Type	Order No.	Price
Point Scriber	**NE5088**	Price
Replacement Point	**NE5088P**	Price

GENERAL Replaceable Needlepoint Scriber

- Four extra points are stored under cap
- Replacement Point No. 84P (Package of 12)



Type	Order No.	Price
Needlepoint Scriber	**NE5084**	Price
Replacement Point	**NE5084P**	Price

GENERAL Magnetic Scriber

Alnico permanent magnet picks up small parts and retrieves steel chips from hard to reach places



Type	Order No.	Price
Magnetic Scriber	**NE5088CM**	Price
Replacement Point	**NE5088P**	Price

GENERAL 5 Pc. Center Punch Set



- Points are ground to size for maximum strength and penetration
- Stamped with size for quick identification
- Knurled body

Order No.	Price
NE50SPC74	Price

TESA TECHNOLOGY | brown & sharpe Single & Double End Scribers

- Double end supplied with straight & right angle point
- Ideal for crisp marking of a wide range of material
- Single end has retractable point



Description	Order No.	Price
Double End Scriber	**MV4546391**	Price
Replacement Point	**MV4544585**	Price
Retractable Carbide Pt. Scriber	**MV4544584**	Price
Right-Angle Replacement Point	**MV4546477**	Price
Straight Replacement Point	**MV4546425**	Price

Starrett Improved Scribers

- Handle and points have knurled grip
- Length of scriber with short bent point is 9 inches and with long bent point, 12 inches
- Points screw into handle and will fit either end
- Knurled handle is nickel plated



Description	Order No.	Price
Extra Long Bent Point	**MV7071557**	Price
Extra Short Bent Point	**MV7071556**	Price
Extra Straight Point	**MV7071555**	Price
Scriber with 2 Points (1-Straight, 1-Short Bent)	**MV7050317**	Price
Scriber with 3 Points (1-Straight, 1-Short Bent, 1-Long Bent)	**MV7050316**	Price

NATIONAL Scribers & Scrapers



Tip	Type	Order No.	Price
Carbide	Scriber	**NE60CS1**	Price
Hardened	2 Point Scriber	**NE60S80**	Price
Hardened	Scriber	**NE60S381**	Price
-	3-Pc. Scriber Set	**NE603S**	Price

NATIONAL 3 Pc. Scriber Set

Includes 1 Pc. each: S80, S381 and single point heavy duty scriber



Order No.	Price
NE603S	Price

Fowler Heavy Duty Transfer Punch Set

- 1/2 - 1” range in 1/64”
- 36 Piece set includes 3 master punches and 33 individually sized sleeves
- Each sleeve and punch is clearly laser etched with its size
- Simply select the sleeve for the size required, place it on one of the master punches for that range and it is ready to use
- Punches and sleeve ranges are color coded for easy pairing
- Heavy duty for larger applications
- Punch tips are hardened to 48-55 HrC
- Master punches are 4-7/8” in length and sleeves are 1” in length
- 1/4 of the weight of a conventional transfer punch set with this range (approximately 4.5 lbs)
- Supplied in a fitted, shop hardened case



Order No.	Price
NA55724820400	Price

Fowler Heavy Duty Automatic Center Punch



- Knurled steel handle
- Moveable components made of hardened steel
- Point easily removed for sharpening
- Features adjustable compression for marking a variety of materials

Order No.	Price
NA5552500290	Price

GENERAL Steel Automatic Center Punches

- General's automatic center punches are a precise means of punching center holes for drilling in layout work
- Spring tension cap can be adjusted for light to heavy strokes
- Ball Bearing center punch has a lightweight aluminum body
- Heavy Duty center punch has a hardened steel point and shaft
- Steel Center punch has an all steel replaceable hardened steel point and shaft





Length (in.)	Body Dia. (in.)	Type	Order No.	Price
5	1/2	Steel Center Punch	NE5079	Price
5	5/8	Ball Bearing Automatic Center Punch	NE5077	Price
6	5/8	Heavy Duty Steel Automatic Center Punch	NE5078	Price
-	-	#79 Replacement Point	NE5079P	Price

MAYHEW Roll Pin Punch Set

- Includes: 1/8, 5/32, 3/16, 7/32, 1/4 and 5/16"
- Polished gray tools in vinyl pouch

MADE IN THE USA



Order No.	Price
KS50306RC	Price

NATIONAL 5 Pc. Extra Long Drive Pin Punch Set

- 8" Long pin punching set includes: 1/8, 3/16, 1/4, 5/16 and 3/8"
- All punches 8" OAL



Order No.	Price
KS60HMC016	Price

NATIONAL 5 Pc. Premium Alloy Center Punch Set

Set Includes: 1/16, 5/64, 3/32, 9/64 and 5/32"



Order No.	Price
KS60HMC001	Price

NATIONAL 8 Pc. Drive Pin Punch Set

- Set Includes: 1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4 and 5/16"
- All punches 4" OAL



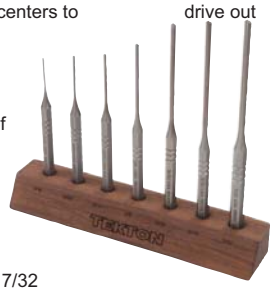
Order No.	Price
KS60HMC022	Price

TEKTON 7 Pc. Roll Pin Punch Set 1/16" - 7/32"

MADE IN THE USA

New! drive out

- Reverse taper with guide ball tip accurately self centers to or insert hollow pins without deforming them or sticking in workpiece
- Straight and true, tip is precisely machined to meet exacting tolerances
- Individual heat treatment allows careful control of tip hardness and temper of striking end
- Classic natural finish has a dry-touch, rust-preventative coating
- Solid walnut bench block keeps punches organized and generously spaced so they are easy to grasp
- Sizes included: 1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32



No. of Pieces	Order No.	Price
7	KP8566536	Price

MAYHEW Punch Sets

- 3 Styles to choose from
- Hot forged high grade steel
- Pilot point

MADE IN THE USA



Pcs. Per Set	Description	Set Includes	Order No.	Price
3	Alignment Punch Set	3/16 x 12, 1/4 x 14, & 5/16 x 16	KS503RC	Price
5	Extra Long Pin Punch Set	1/8 x 4-3/4, 5/32 x 5, 3/16 x 5-1/4, 1/4 x 5-3/4, 5/16 x 6	KS5045RC	Price
12	Regular & Long Pin Punch Set	1/16 pt. x 2-3/4; 3/16 pt. x 3-1/4; 3/16 pt. x 3-1/2;5/32 pt. x 4-1/2; 3/16 pt. x 4-1/2; 7/32 pt. x 5, 1/4 pt. x 5-1/2, 5/16 pt. x 6, 3/8 pt. x 6, 7/16 pt. x 6, 1/2 pt. x 6,	KS50210RC	Price

MAYHEW Hard Cap Punch and Chisel Sets

- Unbreakable, reinforced polymer cap, 2-1/2 times the striking surface of a standard chisel, eliminate flying chips and mushrooming of the chisel head
- Comfortable grip reduces shock by up to 90%
- Noise level reduced by up to 80%
- Hammer kickback and wrist-elbow trauma is minimized

MADE IN THE USA

Pcs. Per Set	Size (in.)	Description	Order No.	Price
3	1/32 x 6, 1/16 x 6, 3/32 x 6	Nail Punch Set	KS5066475	Price
4	1/8 x 7, 5/32 x 7, 3/16 x 7, 1/4 x 7	Pin Punch Set	KS5066901	Price
4	Starter 1/8 x 7, Center 7/32 & 1/4 x 7 , Prick Punch 7/32 x 7	Punch	KS5066902	Price
3	3/16 x 12, 1/4 x 12, 5/16 x 12	Alignment Punch Set	KS5066907	Price
4	1/2 x 7, 3/4 x 8, 7/8 x 8-1/2, 1 x 8-1/2	Cold Chisel Set	KS5066900	Price



KS5066901

NATIONAL 13 Pc. Drive Pin Punch Set

- **Consists of**
- 5 Pcs. - Extra long drive punches: 1/8, 3/16, 1/4, 5/16 and 3/8" and
- 8 Pcs - Standard length drive pin punches: 1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 5/16"

WORLD CLASS QUALITY



Order No.	Price
KS60HMC013	Price

GENERAL Drive Pin Punches



- Tool steel punches are uniformly heat treated and centerless ground to withstand the hardest use.
- 4” long with knurled bodies.
- Ends are ground square for accurate pin driving.
- Conform to federal specifications GGG-P-831E.

Punch Dia. (in.)	Lgth. (in.)	Order No.	Price
1/16	4	**NE5075A**	Price
3/32	4	**NE5075B**	Price
1/8	4	**NE5075C**	Price
5/32	4	**NE5075D**	Price
3/16	4	**NE5075E**	Price
7/32	4	**NE5075F**	Price
1/4	4	**NE5075G**	Price
5/16	4	**NE5075H**	Price

GENERAL Drive Pin Punch Set



- Set contains eight punches, one of each size, 1/16, 3 3/16, 7/32, 1/4, 5/16
- Plastic case

Order No.	Price
NE50SPC75	Price

GENERAL Extra Long Drive Pin Punches



- Made of tool steel, hardened and centerless ground.
- Knurled body is 4-1/2” long & the drive pin section is 3-1/2” long.
- For use on work not accessible with shorter punches.

Punch Dia. (in.)	Body Dia. (in.)	Lgth. (in.)	Order No.	Price
1/8	7/16	8	**NE5076A**	Price
3/16	1/2	8	**NE5076B**	Price
1/4	1/2	8	**NE5076C**	Price
5/16	1/2	8	**NE5076D**	Price
3/8	9/16	8	**NE5076E**	Price

GENERAL General Extra Long Drive Pin Punch Set



- Set contains five punches, one of each size, 1/8, 3/16, 1/4, 5/16, 3/8
- Vinyl case

Order No.	Price
NE50SPC76	Price

TEKTON Automatic Center Punch



MADE IN THE USA

New!

- Marks workpiece with a dimple, creating a starting pont that prevents screws and drills for wandering
- Delivers and automatic spring-driven strike when pressed against surface
- Adjustable cap regulates striking force
- Brass body has a deeply knurled surface for non-slip control

Approx. OAL(in.)	Body Dia. (in.)	Order No.	Price
5	1/2	**KP856580**	Price

GENERAL Pocket Automatic Center Punch

Punches, marks, scribes and starts nail or screw holes

Order No.	Price
NE5087	Price



Starrett Automatic Center Punches



- When handle is pressed down, built-in mechanism strikes blow
- Force of blow is regulated by turning knurled cap
- Constant spring tension assures uniform depth and size of center marking for each setting of cap
- Point removes for regrinding
- Punches strike heavier blows in proportion to sizes as listed below

Length (in.)	Dia. (in.)	Style	Order No.	Price
4	7/16	18AA	**MV7050119**	Price
5	9/16	18A	**MV7050120**	Price
5-1/4	11/16	18C	**MV7056757**	Price

Starrett Automatic Center Punch Handle



- Lightweight aluminun handle
- No hammer required
- Can be adjusted for striking light or heavy indentations

Length (in.)	Dia. (in.)	Order No.	Price
5	5/8	**MV7053048**	Price

NATIONAL Automatic Center Punch



- Long-wearing steel construction
- 5” Overall length
- All steel threaded point is replaceable

Type	Order No.	Price
Automatic Center Punch	**KS60HMC014**	Price
Replacement Point	**KS60HMC015**	Price

Starrett Center Punches with Round Shank - 117 Series



- Hardened on both ends and tempered to prevent head from fracturing
- Points are ground to proper angle for maximum service, and tips accurately centered

Model No.	Dia. at Top of Tapered Point (in.)	Dia. of Body (in.)	Order No.	Price
117AA	1/16	3/16	**MV7050482**	Price
117A	5/64	9/32	**MV7050483**	Price
117B	3/32	19/64	**MV7050484**	Price
117C	1/8	5/16	**MV7050485**	Price
117D	5/32	3/8	**MV7050486**	Price
117E	1/4	1/2	**MV7050487**	Price
S117PC	Set of Five (AA, A, B, C, D) in Case	-	**MV7050488**	Price

Brass & Steel Punch Sets



- Order No. NB406300008: 4” Long drive pin punch
- Order No. NB406301058: 8” Long drive pin punch

No. of Pieces	Material	Sizes (in.)	Order No.	Price
5	Steel	1/8, 3/16, 1/4, 5/16, & 3/8	**NB406301058**	Price
8	Brass	1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, & 5/16	**NB406300008B**	Price
8	Steel	1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, & 5/16	**NB406300008**	Price

MAYHEW Punches

MADE IN THE USA

- Hot forged, high grade hexagon steel
- Heat treated for hardness
- Polished taper bevels and heads

Each Punch has a pilot point that fits the hollow center of the pin holding the driving shoulder of the punch in perfect contact position. Pins are quickly and easily removed without damage to wall of hole or pin

Pin Punch



MADE IN THE USA

Point Size (in.)	Body Size (in.)	Body Type	Taper Length (in.)	OAL (in.)	Order No.	Price
1/16	1/4	Hex	3/4	4	**KS50301**	Price
3/32	5/16	Hex	7/8	4-1/2	**KS50302**	Price
1/8	5/16	Hex	1	4-3/4	**KS50304**	Price
5/32	5/16	Hex	1	5	**KS50305**	Price
3/16	3/8	Hex	1-1/4	5-1/4	**KS50306**	Price
1/4	3/8	Hex	1-1/4	5-3/4	**KS50309**	Price
5/16	1/2	Hex	1-1/4	6	**KS50312**	Price
3/8	1/2	Hex	1-1/4	6	**KS50313**	Price

Prick Punch



MADE IN THE USA

Cut Width/ Point Size (in.)	Body Size (in.)	Body Type	OAL (in.)	Order No.	Price
3/32	1/4	Hex	4	**KS50269**	Price
3/8	3/8	Hex	5	**KS50271**	Price
1/2	1/2	Hex	6	**KS50273**	Price

PROTO Starting Punches

New!

MADE IN THE USA

- Similar to drift punches, but have wider points and heavier, shorter body
- Designed for installing pins and rivets and for starting their removal
- Modified parabolic striking end for greater resistance to mushrooming and chipping
- Material: Steel or Heat Treated S2



Type - Steel					
Tip Dia. (in.)	Body Dia. (in.)	OAL (in.)	Model No.	Order No.	Price
1/16	1/4 (Hex)	4-1/8	J503/16	**KP4260740**	Price
3/32	1/4	5	J501/4	**KP4260760**	Price
1/8	5/16	5-1/8	J505/16	**KP4260815**	Price
3/16	3/8	5-5/8	J503/8	**KP4260820**	Price
7/32	7/16 (Hex)	6	J507/16	**KP4260770**	Price
1/4	1/2	6-1/2	J501/2	**KP4260745**	Price

Type - S2 Heat-Treated Steel					
Tip Dia. (in.)	Body Dia. (in.)	OAL (in.)	Model No.	Order No.	Price
3/32	1/4	5	J501/4S2	**KP4260510**	Price
1/8	5/16	5-1/8	J505/16S2	**KP4260525**	Price
3/16	3/8	5-5/8	J503/8S2	**KP4260520**	Price
1/4	1/2	6-1/2	J501/2S2	**KP4260505**	Price

PROTO Prick Punches

MADE IN THE USA

- Application: sheet metal work for scribing and for punching starting holes for sheet metal screws
- One-piece design for strength and durability
- Reverse taper to help prevent binding
- Modified parabolic striking end to help reduce mushrooming and chipping
- A polished identification panel on one of the flats is marked with the tool number and size in a black inlay

New!



Type - Steel				
Body Dia. (in.)	Length (in.)	Model No.	Order No.	Price
1/4	4-3/4	J441/4	**KP4260810**	Price
5/16	5	J445/16	**KP4260790**	Price
3/8	5-1/4	J443/8	**KP4260855**	Price

Type - S2 Heat-Treated Steel				
Body Dia. (in.)	Length (in.)	Model No.	Order No.	Price
3/8	5-1/4	J443/8S2	**KP4260495**	Price

PROTO Pin Punches

MADE IN THE USA

- Two-piece design allows the tip to be hard for durability, while allowing it to be produced straight to help prevent binding
- Reverse taper to help prevent binding
- Made from S2 steel and heat-treated
- Modified parabolic striking end to help reduce mushrooming and chipping
- Black oxide finish
- A polished identification on flats marked with the tool number

New!



Type - Individual Punch						
Tip Dia. (in.)	Blade Length (in.)	OAL (in.)	Shank (in.)	Model No.	Order No.	Price
1/16	3/4	4-3/8	1/4	J471/4X1/16	**KP4260300**	Price
3/32	1-5/16	4-3/4	1/4	J471/4X3/32	**KP4260305**	Price
1/8	1-3/16	5-3/16	5/16	J475/16X1/8	**KP4260315**	Price
5/32	1-7/16	5-9/16	5/16	J475/16X5/32	**KP4260320**	Price
3/16	1-5/8	5-7/8	3/8	J473/8X3/16	**KP4260310**	Price
7/32	1-7/8	6-3/8	3/8	J477/16X7/32	**KP4260325**	Price
1/4	2-1/8	6-3/4	3/8	J471/2X1/4	**KP4260295**	Price

Type - Set			
OAL (in.)	Model No.	Order No.	Price
7 Pc.	J47A	**KP4281160**	Price

PROTO Pin Punches - Super Duty

New!

MADE IN THE USA

- Reverse taper to help prevent binding
- Modified parabolic striking end to help reduce mushrooming and chipping
- Black oxide finish to help prevent rust corrosion; extending tool life and performance
- A polished identification panel on one of the flats is marked with the tool number and size in a black inlay
- Material: steel or heat-treated S2



Type - S2 Heat-Treated Steel					
Tip Dia. (in.)	Body Dia. (in.)	Length (in.)	Model No.	Order No.	Price
5/32	3/8	8	J48532LS2	**KP4260285**	Price
7/32	7/16	8	J48732LS2	**KP4260290**	Price
1/4	1/2	8	J48014LS2	**KP4260270**	Price
5/16	1/2	8	J48516LS2	**KP4260280**	Price

Type - Steel					
Tip Dia. (in.)	Body Dia. (in.)	Length (in.)	Model No.	Order No.	Price
1/16	1/4	4-1/8	J48116	**KP4260330**	Price
3/32	1/4	4-1/2	J48332	**KP4260335**	Price
1/8	5/16	4-3/4	J48018	**KP4260340**	Price
5/32	5/16	5	J48532	**KP4260345**	Price
5/32	3/8	8	J48532L	**KP4260845**	Price
3/16	3/8	5-1/4	J48316	**KP4260350**	Price
3/16	3/8	8	J48316L	**KP4260835**	Price
7/32	7/16	5-1/2	J48732	**KP4260355**	Price
7/32	7/16	8	J48732L	**KP4260850**	Price
1/4	7/16	5-3/4	J48014	**KP4260360**	Price
1/4	1/2	8	J48014L	**KP4260830**	Price
5/16	1/2	6-1/4	J48516	**KP4260365**	Price
5/16	1/2	8	J48516L	**KP4260840**	Price
3/8	5/8	6-1/2	J48038	**KP4260370**	Price

STANLEY Pin Punches



- Ideal for starting drill holes
- One-piece construction forged for strength
- Hardened, quenched and tempered for long life and durability
- Powder-coated finish for easy visibility

Tip Dia. (in.)	OAL (in.)	Model No.	Order No.	Price
1/16	6	16-230	**KP431010**	Price
1/8	6	16-231	**KP431012**	Price
3/16	6	16-233	**KP431014**	Price
1/4	6	16-234	**KP431016**	Price
5/16	6	16-235	**KP431018**	Price

STANLEY 6 Pc. Pin Punch Set

New!



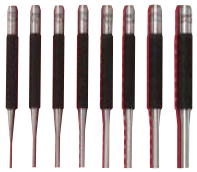
- Ideal for marking metal or making indentations for starting drill holes
- One-piece construction forged for strength
- Hardened, quenched and tempered for long life and durability
- Powder-coated finish for easy visibility

Set Includes:

- 1/16, 1/8, 5/32, 3/16, 1/4, 5/16”

Order No.	Price
KP431002	Price

Starrett® Drive Pin Punches



- Specially selected tool steel
- Well proportioned, hardened, is highly polished and has a knurled finger grip
- Size of the punch is stamped on the head of each set

Dia. Punch (in.)	Dia. Body (in.)	Order No.	Price
1/16	19/64	**MV7052578**	Price
3/32	19/64	**MV7052579**	Price
1/8	19/64	**MV7052580**	Price
5/32	19/64	**MV7052581**	Price
3/16	5/16	**MV7052582**	Price
7/32	25/64	**MV7052583**	Price
1/4	25/64	**MV7052584**	Price
5/16	29/64	**MV7052585**	Price

Starrett® Drive Pin Punch Sets

Tip Dia. (in.)	Case	Order No.	Price
Set of 8 Drive Pin Punches (1 of each size) 1/16 to 5/16	Protective Case	**MV7052587**	Price
Set of 8 Drive Pin Punches (1 of each size) 1/16 to 5/16	Round Plastic Box	**MV7052586**	Price

Starrett® Extra Long Drive Pin Punches



Bodies are 4-1/2” and drive pin sections 3-1/2” long

Dia. Punch (in.)	Dia. Body (in.)	Order No.	Price
1/8	7/16	**MV7051181**	Price
3/16	1/2	**MV7051182**	Price
1/4	1/2	**MV7051183**	Price
5/16	1/2	**MV7051184**	Price
3/8	9/16	**MV7051185**	Price

Starrett® Extra Long Drive Pin Punch Set

Tip Dia. (in.)	Case	Order No.	Price
Set of 5 Drive Pin Punches (1 of each size) 1/8 to 3/8	Plain Box	**MV7051187**	Price
Set of 5 Drive Pin Punches (1 of each size) 1/8 to 3/8	Protective Case	**MV7051186**	Price

PROTO 7 Pc Super - Duty Pin Punch Set

MADE IN THE USA

New!



- Made from S2 steel and specially heat-treated for greater strength and durability
- One-piece design for strength and durability
- Reverse taper to help prevent binding
- Modified parabolic striking end to help reduce mushrooming and chipping
- Black oxide finish
- A polished identification panel on one of the flats is marked with the tool number and size in a black inlay
- Includes a pouch for convenient storage solution

Tip Dia. Included	Model No.	Order No.	Price
1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4"	J48007	**KP4281165**	Price

PROTO 7 Pc Roll Pin Punch Sets

MADE IN THE USA

New!



- One-piece design for strength and durability
- Reverse taper to help prevent binding
- Modified parabolic striking end to help reduce mushrooming and chipping
- Black oxide finish
- A polished identification panel on one of the flats is marked with the tool number and size in a black inlay
- Includes a pouch for convenient storage solution

Tip Diameter	Material	Model No.	Order No.	Price
1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	Alloy	J49007	**KP4281800**	Price
1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4	S2 (Heat-Treated)	J49007S2	**KP4281180**	Price

PROTO 5 Pc Long Pin Punch Set

MADE IN THE USA

New!



- Made from S2 steel and specially heat-treated for greater strength and durability
- One-piece design for strength and durability
- Reverse taper to help prevent binding
- Modified parabolic striking end to help reduce mushrooming and chipping
- Black oxide finish
- A polished identification panel on one of the flats is marked with the tool number and size in a black inlay
- Includes a pouch for convenient storage solution

Tip Diameters Included	Model No.	Order No.	Price
5/32, 3/16, 7/32, 1/4, 5/16"	J48005L	**KP4281795**	Price

PROTO 5 Pc Long Drive Pin Punch Set

MADE IN THE USA

New!



- Made from S2 steel and specially heat-treated for greater strength and durability
- One-piece design for strength and durability
- Reverse taper to help prevent binding
- Modified parabolic striking end to help reduce mushrooming and chipping
- Black oxide finish
- Includes a pouch for convenient storage solution
- All sizes 8” overall length

Tip Dia. Included	Model No.	Order No.	Price
5/325, 3/16, 7/32, 1/4, 5/16	J48005LS2	**KP4281155**	Price

PROTO 7 Pc Drift Punch Set

MADE IN THE USA

New!



- One-piece design for strength and durability
- Reverse taper to help prevent binding
- Modified parabolic striking end to help reduce mushrooming and chipping
- Black oxide finish
- Tool pouch

Tip Dia. Included	Model No.	Order No.	Price
3/32, 1/8, 3/16, 7/32, 1/4, 5/16, 3/8"	J96A	**KP4281775**	Price

MAYHEW Punches

MADE IN THE USA

- Hot forged, high grade hexagon steel
- Heat treated for hardness
- Polished taper bevels and heads

Each Punch has a pilot point that fits the hollow center of the pin holding the driving shoulder of the punch in perfect contact position. Pins are quickly and easily removed without damage to wall of hole or pin

Alignment Punch



MADE IN THE USA

Point Size (in.)	Body Size (in.)	Body Type	Taper Length (in.)	OAL (in.)	Order No.	Price
1/8	5/16	Hex	3-1/2	12	**KS50231**	Price
5/32	3/8	Hex	4-1/2	12	**KS50232**	Price
3/16	1/2	Hex	5	15	**KS50233**	Price

Solid Punch

MADE IN THE USA



Point Size (in.)	Body Size (in.)	Body Type	Taper Length (in.)	OAL (in.)	Order No.	Price
1/16	3/8	Hex	1-1/2	5	**KS50201**	Price
3/32	3/8	Hex	1-1/2	5	**KS50202**	Price
1/8	3/8	Hex	1-1/2	5	**KS50204**	Price
5/32	3/8	Hex	1-1/2	5	**KS50205**	Price
3/16	3/8	Hex	1-1/2	5	**KS50207**	Price
1/4	3/8	Hex	1-1/2	5	**KS50209**	Price
5/16	1/2	Hex	2	5	**KS50210**	Price

TEKTON Long Alignment Punches

MADE IN THE USA

- A gradually tapered self-centering nose aligns holes in multiple parts, positioning them for accurate assembly
- Made from premium high-carbon steel
- Tips are tapered and precisely machined to meet exacting tolerances
- Heat-treated
- Classic natural finish has a dry-touch rust-preventative coating

New!



Tip Dia. (in.)	Approx. Length (in.)	Hex Stock	Order No.	Price
3/16	12	3/8	**KP8566275**	Price
1/4	16	5/8	**KP8566277**	Price
5/16	18	3/4	**KP8566278**	Price

PROTO Long Aligning Punches

MADE IN THE USA

- To align holes in two or more pieces of metal through which a bolt or screw is to be inserted
- One-piece design for strength and durability
- Reverse taper to help prevent binding
- Modified parabolic striking end to help reduce mushrooming and chipping
- Black oxide finish to help prevent rust corrosion; extending tool life and performance
- A polished identification panel on one of the flats is marked with the tool number and size in a black inlay

New!



Tip Dia. (in.)	Shank (in.)	Strking End Dia. (in.)	Blade Length (in.)	OAL (in.)	Type	Model No.	Order No.	Price
3/16	5/8	9/16	8	t16	Heat-Treated Steel	J155/8S2	**KP4260455**	Price
3/16	5/8	9/16	8	16	Steel	J155/8	**KP4260715**	Price

PROTO Drift Punches

MADE IN THE USA

- For installing and removing pins and shafts
- Used to align holes in two or more pieces of metal through which a bolt or screw is to be inserted
- Modified parabolic striking end for resistance to mushrooming and chipping
- Material = Steel & S2 Heat Treated

New!



Type - S2 Heat-Treated Steel					
Tip Dia. (in.)	Body Dia. (in.)	OAL (in.)	Model No.	Order No.	Price
3/32	1/4	10	J961/4S2	**KP4260380**	Price
1/8	5/16	10	J965/16S2	**KP4260395**	Price
3/16	3/8	10	J963/8S2	**KP4260390**	Price
1/4	1/2	10	J961/2S2	**KP4260375**	Price
3/8	3/4	10	J963/4S2	**KP4260385**	Price

Type - Steel					
Tip Dia. (in.)	Body Dia. (in.)	OAL (in.)	Model No.	Order No.	Price
3/32	1/4	10	J961/4	**KP4260730**	Price
1/8	5/16	10	J965/16	**KP4260750**	Price
3/16	3/8	10	J963/8	**KP4260755**	Price
7/32	7/16	10	J967/16	**KP4260735**	Price
1/4	1/2	10	J961/2	**KP4260785**	Price
5/16	5/8	10	J965/8	**KP4260720**	Price
3/8	3/4	10	J963/4	**KP4260765**	Price

PROTO Brass Drift Punches

MADE IN THE USA

- Spark-resistant, mar-resistant
- Designed to help prevent damage to the object being struck
- Modified parabolic striking end to help reduce mushrooming and chipping

New!



Body Dia.	Length (in.)	Model No.	Order No.	Price
1/2	7	J9612B	**KP4260540**	Price
1/2	8	J49920	**KP4260535**	Price

PROTO Center Punches

MADE IN THE USA

- Used in metal working layout
- Provides a broad dent in marking intersecting center lines, hole locations and pilot drill starting points
- Modified parabolic striking end for greater resistance to mushrooming and chipping
- Material: steel or heat-treated S2

New!



Type - S2 Heat-Treated Steel				
Body Dia. (in.)	Length (in.)	Model No.	Order No.	Price
1/4	4-3/4	J411/4S2	**KP4260465**	Price
5/16	4-5/8	J415/16S2	**KP4260475**	Price
3/8	4-7/8	J413/8S2	**KP4260470**	Price
7/16	5-1/4	J417/16S2	**KP4260485**	Price
1/2	5-5/8	J411/2S2	**KP4260460**	Price
5/8	6-1/4	J415/8S2	**KP4260480**	Price

Type - Steel				
Body Dia. (in.)	Length (in.)	Model No.	Order No.	Price
1/4	4-3/4	J411/4	**KP4260795**	Price
5/16	4-5/8	J415/16	**KP4260800**	Price
3/8	4-7/8	J413/8	**KP4260780**	Price
7/16	5-1/4	J417/16	**KP4260805**	Price
1/2	5-5/8	J411/2	**KP4260775**	Price
5/8	6-1/4	J415/8	**KP4260825**	Price

Punches

- Hot forged, high grade hexagon steel
- Heat treated for hardness
- Polished taper bevels and heads
- Each punch has a pilot point that fits the hollow center of the pin holding the driving shoulder of the punch in perfect contact position.
- Pins are quickly and easily removed without damage to wall of hole or pin

Heavy Duty Solid Punch



Point Size (in.)	Body Size (in.)	Body Type	Taper Length (in.)	OAL (in.)	Order No.	Price
1/4	3/4	Hex	7-1/4	12	**KS50220**	Price
5/16	5/8	Hex	7-1/4	12	**KS50221**	Price
3/8	3/4	Hex	8	15	**KS50225**	Price

Center Punch



Cut Width/ Point Size (in.)	Body Size (in.)	Body Type	OAL (in.)	Order No.	Price
3/32	1/4	Hex	4	**KS50249**	Price
5/32	5/16	Hex	4-1/2	**KS50250**	Price
5/16	1/2	Hex	6	**KS50254**	Price
3/8	3/8	Hex	5	**KS50251**	Price
3/8	5/8	Hex	6-1/4	**KS50256**	Price

Roll Pin Punch





Cut Width/ Point Size (in.)	Body Size (in.)	Body Type	Pin Length (in.)	OAL (in.)	Order No.	Price
1/16	3/16	Round	1	2-3/4	**KS50601**	Price
5/64	3/16	Round	1-1/2	3-1/4	**KS50602**	Price
3/32	3/16	Round	1-1/2	3-1/2	**KS50603**	Price
1/8	1/4	Round	2	4	**KS50604**	Price
5/32	1/4	Round	2-1/2	4-1/2	**KS50605**	Price
3/16	3/8	Round	2-1/2	4-1/2	**KS50606**	Price
1/4	7/16	Round	3-1/2	5-1/2	**KS50608**	Price
5/16	7/16	Round	4	6	**KS50609**	Price
7/16	5/8	Round	4	6	**KS50611**	Price

Roll Pin Punches

New!



- One-piece design for strength and durability
- Reverse taper to help prevent binding
- Modified parabolic striking end to help reduce mushrooming and chipping
- Material: steel or heat-treated S2

Type - S2 Heat-Treated Steel					
Tip Dia. (in.)	Body Dia. (in.)	Length (in.)	Model No.	Order No.	Price
1/16	1/4	3-3/4	J49116S2	**KP4260430**	Price
1/8	5/16	4-3/4	J49018S2	**KP4260420**	Price
1/4	7/16	6-7/16	J49014S2	**KP4260415**	Price
3/8	1/2	7-1/2	J49038S2	**KP4260425**	Price

Type - Steel					
Tip Dia. (in.)	Body Dia. (in.)	Length (in.)	Model No.	Order No.	Price
1/16	1/4	3-3/4	J49116	**KP4260860**	Price
3/32	1/4	4-1/4	J49332	**KP4260870**	Price
1/8	5/16	4-3/4	J49018	**KP4260895**	Price
3/16	3/8	5-7/16	J49316	**KP4260865**	Price
7/32	3/8	5-7/8	J49732	**KP4260880**	Price
1/4	7/16	6-7/16	J49014	**KP4260890**	Price
3/8	1/2	7-1/2	J49038	**KP4260900**	Price

Hard Cap Punches

- Impact disc efficiently transfers blow
- Reinforced polymer by DuPont reduces noise by up to 80%
- Cap-and-cushion grip reduces the amount of shock by up to 90%
- Striking surface enlarged by 2-1/2 times
- Eliminates flying metal fragments
- Reduces glancing blows
- Reduces hammer kickback and trauma to wrist and elbow

Center & Pin Punch Hard Cap



Point Size (in.)	Body Size (in.)	Taper Length (in.)	OAL (in.)	Order No.	Price
1/4	1-1/2	7/16	7	**KS50427**	Price
1/4	7/16	2	7	**KS50414**	Price
1/8	5/8	1-1/2	7	**KS50422**	Price
3/8	3/8	1-1/2	7	**KS50423**	Price
3/8	3/8	1-1/2	7	**KS50424**	Price
7/32	3/8	1-1/2	7	**KS50412**	Price

Prick Punch Hard Cap



Point Size (in.)	Body Size (in.)	Taper Length (in.)	OAL (in.)	Order No.	Price
3/8	3/8	2-1/4	7	**KS50435**	Price

Align Punch Hard Cap



Point Size (in.)	Body Size (in.)	Taper Length (in.)	OAL (in.)	Order No.	Price
1/4	7/16	3-1/2	10	**KS50441**	Price
3/8	3/8	3-1/2	9	**KS50440**	Price
7/16	5/8	4-1/4	11	**KS50442**	Price

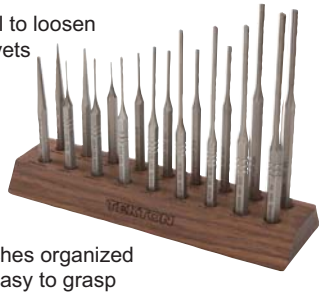
Start Punch Hard Cap



Point Size (in.)	Body Size (in.)	Taper Length (in.)	OAL (in.)	Order No.	Price
1/8	3/8	2	7	**KS50401**	Price

TEKTON 18 Pc. Gunsmith Punch Set

- Pin and Roll Pin Punches smoothly drive out or insert solid pins, hollow pins, and springs and are reverse tapered so they won't stick in workpieces
- Solid Punches are stout and powerful to loosen rusted or frozen pins and drive out rivets
- Center Punch has a sharp point that marks cast iron, mild steel, brass, aluminum, and wood with a dimpled starting spot for drilling
- All punches have a classic natural finish with a dry-touch, rust-preventative coating
- Solid walnut bench block keeps punches organized and generously spaced so they are easy to grasp



Set Contains	Order No.	Price
(7pc) Pin punches: 1/16, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4" (8pc) Roll pin punches: 1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4 (2pc) Solid punches: 1/16, 3/32" (1pc) Center punch: 5/16", Walnut Bench Block	**KP8566564**	Price

Center Punches

- Ideal for marking metal or making indentations for starting drill holes
- One-piece construction forged for strength
- Hardened, quenched and tempered for long life and durability
- Powder-coated finish for easy visibility



New!

OAL (in.)	Tip Dia. (in.)	Model No.	Order No.	Price
4	1/4	16-227	**KP431004**	Price
4-1/2	5/16	16-228	**KP431006**	Price

Transfer Punch Set

With Indexed Stand
1/2” thru 1” by 64ths • 33 Punches



- Heat treated tempered steel
- Black oxide finish

Consists of one (1) each of punch sizes in indexed stand

Order No.	Price
KH55NTP33	Price

† Available in sets only

Transfer Punch Set

With Indexed Stand
3/32” thru 1/2” by 64ths Plus 17/32” • 28 Punches



- Heat treated tempered steel
- Black oxide finish

Consists of one (1) each of punch sizes in indexed stand

Order No.	Price
KH55NTP	Price

SPELLMACO Blind Hole “Spotters”

MADE IN THE USA

- When holes do not extend through material (such as holes for dowel pins, perforating punches, etc.), Spellmaco blind hole spotters get the job done simply
- Correct size “spotter” can be used in threaded, drilled or reamed holes
- Packaged 6 of one (1) size in plastic



Style - Fractional		
Size (in./no.)	Order No.	Price
1/8	KJ50008	Price
9/64	KJ50009	Price
5/32	KJ50010	Price
11/64	KJ50011	Price
3/16	KJ50012	Price
13/64	KJ50013	Price
7/32	KJ50014	Price
15/64	KJ50015	Price
1/4	KJ50016	Price
17/64	KJ50017	Price
9/32	KJ50018	Price
19/64	KJ50019	Price
5/16	KJ50020	Price
21/64	KJ50021	Price
11/32	KJ50022	Price
23/64	KJ50023	Price
3/8	KJ50024	Price
25/64	KJ50025	Price
13/32	KJ50026	Price
27/64	KJ50027	Price
7/16	KJ50028	Price
29/64	KJ50029	Price
15/32	KJ50030	Price
31/64	KJ50031	Price
1/2	KJ50032	Price
33/64	KJ50033	Price
17/32	KJ50034	Price
9/16	KJ50036	Price

Style - Fractional		
Size (in./no.)	Order No.	Price
37/64	KJ50037	Price
19/32	KJ50038	Price
5/8	KJ50040	Price
41/64	KJ50041	Price
21/32	KJ50042	Price
11/16	KJ50044	Price
23/32	KJ50046	Price
3/4	KJ50048	Price
49/64	KJ50049	Price
25/32	KJ50050	Price
13/16	KJ50052	Price
27/32	KJ50054	Price
7/8	KJ50056	Price
29/32	KJ50058	Price
15/16	KJ50060	Price
31/32	KJ50062	Price
1	KJ50100	Price

Style - Wire Gage		
Size (in./no.)	Order No.	Price
No. 3	KJ50103	Price
No. 6	KJ50106	Price
No. 7	KJ50107	Price
No. 8	KJ50108	Price
No. 10	KJ50110	Price
No. 16	KJ50116	Price
No. 20	KJ50120	Price
No. 21	KJ50121	Price
No. 25	KJ50125	Price
No. 29	KJ50129	Price
No. 30	KJ50130	Price

SPELLMACO Blind Hole Spotter Sets

MADE IN THE USA

- Order No. KJ5011 features 11 sizes Contains 66 spotters, 11/16” thru 1” x 32nds. Packed in a sturdy steel storage case
- Order No. KJ5018 features 18 sizes Contains 108 spotters 1/8” thru 21/32” x 32nds. Packed in a sturdy steel storage case. Convenient storage rack enables quick identification and use



Size (in.)	Order No.	Price
1/8 - 21/32 x 32nds	KJ5018	Price
11/16 - 1 x 32nds	KJ5011	Price

SPELLMACO Transfer Punch Sets

- Precision made from finest tool steels
- All punches are heat treated and tempered to highest Spellmaco standards
- All punches are 4-7/8” long
- All sets supplied in metal indexed stand

MADE IN THE USA



Pcs. Per Set	Tip Dia.	Order No.	Price
25	1 - 13mm x .5mm	KH5025	Price
26	A - Z Letter Size	KH50AZ	Price
28	3/32 - 1/2 x 64th Plus 17/32	KH50317	Price
33	1/2 - 1 x 64ths	KH5033	Price
60	Number 1 - 60 Wire Gage	KH50S60	Price

SPELLMACO Individual Transfer Punches

MADE IN THE USA

Fractional

Dia. (in.)	Order No.	Price
1/16	KH50004	Price
5/64	KH50005	Price
3/32	KH50006	Price
7/64	KH50007	Price
1/8	KH50008	Price
9/64	KH50009	Price
5/32	KH50010	Price
11/64	KH50011	Price
3/16	KH50012	Price
13/64	KH50013	Price
7/32	KH50014	Price
15/64	KH50015	Price
1/4	KH50016	Price
17/64	KH50017	Price
9/32	KH50018	Price
19/64	KH50019	Price
5/16	KH50020	Price
21/64	KH50021	Price
11/32	KH50022	Price
23/64	KH50023	Price
3/8	KH50024	Price
25/64	KH50025	Price
13/32	KH50026	Price
27/64	KH50027	Price
7/16	KH50028	Price
29/64	KH50029	Price
15/32	KH50030	Price
31/64	KH50031	Price
1/2	KH50032	Price
33/64	KH50033	Price
17/32	KH50034	Price
35/64	KH50035	Price
9/16	KH50036	Price
37/64	KH50037	Price
19/32	KH50038	Price
39/64	KH50039	Price
5/8	KH50040	Price
41/64	KH50041	Price
21/32	KH50042	Price
43/64	KH50043	Price

Dia. (in.)	Order No.	Price
11/16	KH50044	Price
45/64	KH50045	Price
23/32	KH50046	Price
47/64	KH50047	Price
3/4	KH50048	Price
49/64	KH50049	Price
25/32	KH50050	Price
51/64	KH50051	Price
13/16	KH50052	Price
53/64	KH50053	Price
27/32	KH50054	Price
55/64	KH50055	Price
7/8	KH50056	Price
57/64	KH50057	Price
29/32	KH50058	Price
59/64	KH50059	Price
15/16	KH50060	Price
61/64	KH50061	Price
31/32	KH50062	Price
63/64	KH50063	Price
1	KH50064	Price
1-1/32	KH50066	Price
1-1/16	KH50068	Price
1-3/32	KH50070	Price
1-1/8	KH50072	Price
1-3/16	KH50076	Price
1-1/4	KH50080	Price
1-5/16	KH50081	Price
1-3/8	KH50082	Price
1-7/16	KH50083	Price
1-1/2	KH50084	Price
1-9/16	KH50085	Price
1-5/8	KH50086	Price
1-11/16	KH50087	Price
1-3/4	KH50088	Price
1-13/16	KH50089	Price
1-7/8	KH50090	Price
1-15/16	KH50091	Price
2	KH50092	Price

PRM PRO Transfer Screws

6 Per Set



Size & Pitch	Order No.	Price
4-48	**KJ4000448**	Price
5-40	**KJ4000540**	Price
5-44	**KJ4000544**	Price
6-32	**KJ4000632**	Price
8-32	**KJ4000832**	Price
10-24	**KJ4001024**	Price
10-32	**KJ4001032**	Price
1/4-20	**KJ4000420**	Price
1/4-28	**KJ4000428**	Price
5/16-18	**KJ4000518**	Price
5/16-24	**KJ4000524**	Price
3/8-16	**KJ4000616**	Price

Size & Pitch	Order No.	Price
3/8-24	**KJ4000624**	Price
7/16-14	**KJ4000714**	Price
7/16-20	**KJ4000720**	Price
1/2-13	**KJ4000813**	Price
1/2-20	**KJ4000820**	Price
9/16-12	**KJ4000912**	Price
9/16-18	**KJ4000918**	Price
5/8-11	**KJ4001011**	Price
5/8-18	**KJ4001018**	Price
3/4-10	**KJ4001210**	Price
3/4-16	**KJ4001216**	Price

NOTE: Price Per Set

PRM PRO Metric Transfer Screws

6 Per Set

Size & Pitch	Order No.	Price
M4 x .70	**KJ40M04070**	Price
M5 x .80	**KJ40M05080**	Price
M6 x 1.0	**KJ40M06100**	Price
M8 x 1.25	**KJ40M08125**	Price
M10 x 1.50	**KJ40M10150**	Price

Size & Pitch	Order No.	Price
M12 x 1.75	**KJ40M12175**	Price
M16 x 2.0	**KJ40M16200**	Price
M20 x 2.5	**KJ40M20250**	Price
M24 x 3.0	**KJ40M24300**	Price

NOTE: Price Per Set

PRM PRO 4 Size Combination Sets

4-Pieces Per Set - Inch Thread Set		
Size	**Order No.**	**Price**
4-40, 6-32, 8-32, 10-24	**KJ4033040**	Price
1/4-20, 5/16-18, 3/8-16, 7/16-14	**KJ4033000**	Price
1/2-13, 9/16-12, 5/8-11, 3/4-10	**KJ4033020**	Price

4-Pieces Per Set - Metric Thread Set		
Size	**Order No.**	**Price**
M3 x .50, M4 x .70, M5 x .80, M6 x 1.0	**KJ40M33060**	Price
M6 x 1.0, M8 x 1.25, M10 x 1.5, M12 x 1.75	**KJ40M33080**	Price
M14 x 2.0, M16 x 2.0, M20 x 2.5, M24 x 3.0	**KJ40M33100**	Price

NOTE: Price Per Set

Nielsen Case-Hardened Transfer Screw Sets

Self-aligning to eliminate guess work and wasted time. Easy to use. Insert transfer screws in holes to be transferred and tighten with wrench. Apply new material and strike a sharp blow. True center and drill circle penetrate new steel to a depth of .010" to .015", duplicating original holes. Transfer screws are case hardened for a long life. Made with uniform shoulder height .200"

Each set contains a total of twelve (12) screws; four (4) screws in each size listed, mounted on index plate



Size	Order No.	Price
10-24, 10-32, 1/4-20	**KJ510**	Price
1/4-20, 5/16-18, 3/8-16	**KJ511**	Price
5/16-18, 3/8-16, 1/2-13	**KJ512**	Price
7/16-14, 1/2-13, 5/8-11	**KJ513**	Price
1/2-13, 5/8-11, 3/4-10	**KJ514**	Price

Neilsen Individual Transfer Screws

Twelve (12) screws mounted on index plate sold only in dozen lots

Thread Size	Order No.	Price
10-24	**KJ5101C**	Price
10-32	**KJ5101F**	Price
1/4-20	**KJ5104C**	Price
1/4-28	**KJ5104F**	Price
5/16-18	**KJ5105C**	Price
5/16-24	**KJ5105F**	Price
3/8-16	**KJ5106C**	Price
3/8-24	**KJ5106F**	Price

Thread Size	Order No.	Price
7/16-14	**KJ5107C**	Price
7/16-20	**KJ5107F**	Price
1/2-13	**KJ5108C**	Price
1/2-20	**KJ5108F**	Price
5/8-11	**KJ5110C**	Price
5/8-18	**KJ5110F**	Price
3/4-10	**KJ5112C**	Price
3/4-16	**KJ5112F**	Price

GENERAL 7 Pc. Arch Punch Set

Includes: 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, and 1" packaged in a plastic roll



Order No.	Price
NE501271ST	Price

GENERAL Individual Arch Punches

- For punching holes in leather, rubber, gasket material and soft metals
- Inside taper for clearance
- Heat treated sheffield forged steel



Size (in.)	Order No.	Price
1/4	**NE501271A**	Price
3/8	**NE501271C**	Price
1/2	**NE501271E**	Price
5/8	**NE501271G**	Price
3/4	**NE501271I**	Price
13/16	**NE501271J**	Price

Size (in.)	Order No.	Price
7/8	**NE501271K**	Price
1	**NE501271M**	Price
1-1/2	**NE501271Q**	Price
1-1/4	**NE501271O**	Price
1-1/8	**NE501271N**	Price
1-3/8	**NE501271P**	Price

MAYHEW 16 Pc. Hollow Punch Set (SAE)

Set Includes:

- Handle and centering point
- 1/8" Hollow punch
- 3/16" Hollow punch
- 1/4" Hollow punch
- 5/16" Hollow punch
- 3/8" Hollow punch
- 7/16" Hollow punch
- 1/2" Hollow punch
- 9/16" Hollow punch
- 5/8" Hollow punch
- 3/4" Hollow punch
- 7/8" Hollow punch
- 1" Hollow punch
- 1-1/16" Hollow punch
- 1-1/8" Hollow punch
- 1-3/16" Hollow punch
- Plastic case



Order No.	Price
KS5066000	Price

LANG 11 Pc. Gasket Hole Punch Set

- Designed to cut holes and internal radii in gaskets and other soft material (i.e., rubber, lead foil, linoleum, felt fiber)
- Contains long driving mandrel
- Ten punch sizes: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"



Order No.	Price
KL40950	Price

Young Bros. Machine Made - Set of Letters

Each stamp has one thumb groove. Fine quality steel, special heat treatment gives three distinct hardness zones. Sharp characters in gothic style insure deep, clear impressions. Crown hammer end. More marks per dollar

Consists of 27 characters, the complete alphabet plus a period. Set includes wood box



Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/16	1/4	2-3/8	**KF5001271**	Price
3/32	1/4	2-3/8	**KF5002271**	Price
1/8	1/4	2-3/8	**KF5003271**	Price
3/16	5/16	2-7/16	**KF5005271**	Price
1/4	3/8	2-5/8	**KF5006271**	Price
3/8	1/2	2-7/8	**KF5008271**	Price
1/2	5/8	3-3/8	**KF5009271**	Price

Young Bros. Machine Made—Set of Figures

Consists of 9 characters, 0 to 8, the 6 being used for the 9. Sets include wood box



Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/16	1/4	2-3/8	**KF5001091**	Price
3/32	1/4	2-3/8	**KF5002091**	Price
1/8	1/4	2-3/8	**KF5003091**	Price
3/16	5/16	2-7/16	**KF5005091**	Price
1/4	3/8	2-5/8	**KF5006091**	Price
3/8	1/2	2-7/8	**KF5008091**	Price
1/2	5/8	3-3/8	**KF5009091**	Price

Young Bros. Machine Made

Individual Characters (Specify)

Order Nos. shown are for the letter “A”. Please specify the character when ordering

Character Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/16	1/4	2-3/8	**KF50MM116A**	Price
3/32	1/4	2-3/8	**KF50MM332A**	Price
1/8	1/4	2-3/8	**KF50MM18A**	Price
3/16	5/16	2-7/16	**KF50MM316A**	Price
1/4	3/8	2-5/8	**KF50MM14A**	Price
3/8	1/2	2-7/8	**KF50MM38A**	Price
1/2	5/8	3-3/8	**KF50MM12A**	Price

TEKTON 36 Pc. Letter & Number Punch Set

- Heat treated chrome vanadium steel punches
- 36 Punches marked A-Z & 0-9
- Ideal for stamping metal, plastic, leather, or wood
- Available in sets only



Type Size	Width (in.)	OAL (in.)	Order No.	Price
5/32	1/4	2-3/8	**KP856610**	Price

Young Bros. Machine Made Combination Sets

Letters & Figures

MADE IN THE USA



Style - Heavy Duty Combination Sets

Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/32	1/4	2-3/8	**KF5000363**	Price
1/16	1/4	2-3/8	**KF5001363**	Price
3/32	5/16	2-1/2	**KF5002363**	Price
1/8	5/16	2-1/2	**KF5003363**	Price
5/32	3/8	2-3/4	**KF5004363**	Price
3/16	3/8	2-3/4	**KF5005363**	Price
1/4	7/16	3	**KF5006363**	Price
5/16	1/2	3	**KF5007363**	Price
3/8	9/16	3-1/8	**KF5008363**	Price
1/2	3/4	3-3/4	**KF5009363**	Price

Style - Machine Made Letter & Figures

Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/16	1/4	2-3/8	**KF5001361**	Price
3/32	1/4	2-3/8	**KF5002361**	Price
1/8	1/4	2-3/8	**KF5003361**	Price
3/16	5/16	2-7/16	**KF5005361**	Price
1/4	3/8	2-5/8	**KF5006361**	Price
3/8	1/2	2-7/8	**KF5008361**	Price
1/2	5/8	3-3/8	**KF5009361**	Price

Young Bros. Heavy Duty Reversed Steel Stamps

Set of Letters

Consists of 27 characters, the complete alphabet plusa period. Sets include wood box



Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/32	1/4	2-3/8	**KF5000274**	Price
1/16	1/4	2-3/8	**KF5001274**	Price
3/32	5/16	2-1/2	**KF5002274**	Price
1/8	5/16	2-1/2	**KF5003274**	Price
5/32	3/8	2-3/4	**KF5004274**	Price
3/16	3/8	2-3/4	**KF5005274**	Price
1/4	7/16	3	**KF5006274**	Price
5/16	1/2	3	**KF5007274**	Price
3/8	9/16	3-1/8	**KF5008274**	Price
1/2	5/8	3-3/8	**KF5009274**	Price

Young Bros. Heavy Duty Reversed Steel Stamps

Set of Figures

Consists of 9 characters, 0 to 8, the 6 being used for the 9. Sets include wood box



Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/32	1/4	2-3/8	**KF5000094**	Price
1/16	1/4	2-3/8	**KF5001094**	Price
3/32	5/16	2-1/2	**KF5002094**	Price
1/8	5/16	2-1/2	**KF5003094**	Price
5/32	3/8	2-3/4	**KF5004094**	Price
3/16	3/8	2-3/4	**KF5005094**	Price
1/4	7/16	3	**KF5006094**	Price
5/16	1/2	3	**KF5007094**	Price
3/8	9/16	3-1/8	**KF5008094**	Price
1/2	5/8	3-3/8	**KF5009094**	Price

Young Bros. Heavy Duty Stamps

Set of Letters



Each stamp has three deep grooves across thumb side of stamp giving quick identification as well as an index mark to place stamp right side up. Also have character identification and size marked on side

Consists of 27 characters, the complete alphabet plus a period. Sets include wood box

Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/32	1/4	2-3/8	**KF5000273**	Price
1/16	1/4	2-3/8	**KF5001273**	Price
3/32	5/16	2-1/2	**KF5002273**	Price
1/8	5/16	2-1/2	**KF5003273**	Price
5/32	3/8	2-3/4	**KF5004273**	Price
3/16	3/8	2-3/4	**KF5005273**	Price
1/4	7/16	3	**KF5006273**	Price
5/16	1/2	3	**KF5007273**	Price
3/8	9/16	3-1/8	**KF5008273**	Price
1/2	3/4	3-3/4	**KF5009273**	Price
5/8	7/8	3-3/4	**KF5010273**	Price

Young Bros. Heavy Duty Stamps

Set of Figures



Consists of 9 characters, 0 to 8, the 6 being used for the 9. Sets include wood box

Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/32	1/4	2-3/8	**KF5000093**	Price
1/16	1/4	2-3/8	**KF5001093**	Price
3/32	5/16	2-1/2	**KF5002093**	Price
1/8	5/16	2-1/2	**KF5003093**	Price
5/32	3/8	2-3/4	**KF5004093**	Price
3/16	3/8	2-3/4	**KF5005093**	Price
1/4	7/16	3	**KF5006093**	Price
5/16	1/2	3	**KF5007093**	Price
3/8	9/16	3-1/8	**KF5008093**	Price
1/2	3/4	3-3/4	**KF5009093**	Price
5/8	7/8	3-3/4	**KF5010093**	Price

Young Bros. Heavy Duty Stamps

Individual Characters (Specify)

Order Nos. shown are for the letter “A”. Please specify the character when ordering

Character Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/32	1/4	2-3/8	**KF50HD132A**	Price
1/16	1/4	2-3/8	**KF50HD116A**	Price
3/32	5/16	2-1/2	**KF50HD332A**	Price
1/8	5/16	2-1/2	**KF50HD18A**	Price
5/32	3/8	2-3/4	**KF50HD532A**	Price
3/16	3/8	2-3/4	**KF50HD316A**	Price
1/4	7/16	3	**KF50HD14A**	Price
5/16	1/2	3	**KF50HD516A**	Price
3/8	9/16	3-1/8	**KF50HD38A**	Price
1/2	3/4	3-3/4	**KF50HD12A**	Price
5/8	7/8	3-3/4	**KF50HD58A**	Price

Young Bros. Reversed Individual Characters

Order Nos. shown are for the letter “A”. Please specify the character when ordering

Character Size (in.)	Size of Sq. (in.)	OAL (in.)	Order No.	Price
1/32	1/4	2-3/8	**KF50RE132A**	Price
1/16	1/4	2-3/8	**KF50RE116A**	Price
3/32	5/16	2-1/2	**KF50RE332A**	Price
1/8	5/16	2-1/2	**KF50RE18A**	Price
5/32	3/8	2-3/4	**KF50RE532A**	Price
3/16	3/8	2-3/4	**KF50RE316A**	Price
1/4	7/16	3	**KF50RE14A**	Price
5/16	1/2	3	**KF50RE516A**	Price
3/8	9/16	3-1/8	**KF50RE38A**	Price
1/2	3/4	3-3/4	**KF50RE12A**	Price

Young Bros. Round Face Full Character

The cutting edge of the characater is 1/32" radius, with a 40° bevel. Rounded character stamp makes low stress impressions suitable for use anywhere metal strength is crtitcal. The aircraft, missile, oil supply and nuclear power industries depend on these stamps to avoid risk of fracture from too sharp an imprint. Characater indentification and size, three thumb grooves



- Letter set-27 characters
- Figure set-9 characters
- Combo set-36 characters

When ordering individual stamps, use size plus figure or letter
Example: KF50RF181 for #1 1/8 size; KF50RF18A for A 1/8 size

Style - Round Face-Full Character Sets (Combination Set)				
Size (in.)	Size of Square (in.)	OAL (in.)	Order No.	Price
1/8	5/16	2-1/2	**KF5003365**	Price
3/16	3/8	2-3/4	**KF5005365**	Price
1/4	7/16	3	**KF5006365**	Price

Style - Round Face-Full Character Sets (Figure)				
Size (in.)	Size of Square (in.)	OAL (in.)	Order No.	Price
1/8	5/16	2-1/2	**KF5003095**	Price
3/16	3/8	2-3/4	**KF5005095**	Price
1/4	7/16	3	**KF5006095**	Price

Style - Round Face-Full Character Sets (Letter)				
Size (in.)	Size of Square (in.)	OAL (in.)	Order No.	Price
1/8	5/16	2-1/2	**KF5003275**	Price
3/16	3/8	2-3/4	**KF5005275**	Price
1/4	7/16	3	**KF5006275**	Price

Young Bros. Industrial Strength Steel Stamps

MADE IN THE USA

- Larger striking area
- Shanks twice the square size of machine grade stamps
- Longer in length; easier to hold; more accurate hammer strike



Description	Order No.	Price
1/8 Figure Set	**KF503098**	Price
1/8 Letter Set	**KF503278**	Price
1/4 Figure Set	**KF506098**	Price
1/4 Letter Set	**KF506278**	Price
3/16 Figure Set	**KF505098**	Price
3/16 Letter Set	**KF505278**	Price

RHINO The Rhino™ 5200 Hard Case Kit

- Exclusive, one-touch "hot keys" automatically size, space and format label text for electrical and patch panels, terminal and 110 blocks, wire and cable flags, horizontal and vertical wraps, vertical and fixed-length applications
- Prints Code 39 and Code 128 bar codes on 3/4" (19 mm) wide labels
- Uses DYMO Industrial labels with chemical-, heat- and UV-resistant materials; also prints heat-shrink tubes and non-adhesive labels
- On-screen Smart Alerts prevent mistakes, wasted time and wasted labels
- Last-label memory; storage for up to 100 of the labels you use most
- Runs on six (6) AA alkaline batteries (not included) or optional quick-charging lithium-ion battery



Order No.	Price
KX531756589	Price

RHINO RhinoPRO Labels

- Labels are resistant to chemicals, solvents, grease, heat, moisture and other hard elements
- Easy to peel labels available in split back and dry edge varieties
- Permanent adhesive results every time

				3/8		1/2		3/4	
Surface Applications	Material	Color	Label Length (ft.)	Order No.	Price	Order No.	Price	Order No.	Price
Flat/Smooth/Textured	Polyester	Metallized	18	**KX5318485**	Price	**KX5318486**	Price	**KX5318487**	Price
Flat/Smooth/Textured	Polyester	White	18	**KX5318482**	Price	**KX5318483**	Price	**KX5318484**	Price
Wire & Cable-Curved/Smooth	Flexible Nylon	White	11.5	-	-	**KX5318488**	Price	**KX5318489**	Price
Wire & Cable-Curved/Smooth	Flexible Nylon	Yellow	11.5	-	-	**KX5318490**	Price	**KX5318491**	Price
Wire & Cable-Curved/Smooth	Vinyl	Orange	-	-	-	**KX5318435**	Price	**KX5318436**	Price
Wire & Cable-Curved/Smooth	Vinyl	White	18	**KX5318443**	Price	**KX5318444**	Price	**KX5318445**	Price
Wire & Cable-Curved/Smooth	Vinyl	-	18	-	-	**KX5318432**	Price	**KX5318433**	Price



Young Bros. Round Face Dot Design

The cutting edge of the character is 1/32" radius, with a 40° bevel. For use in aircraft, missile, oil supply and nuclear power industries and other applications where lowest stress impressions are critical. Round face-dot design eliminates risk of fracture form too sharp an impression. Character indentification and size, three thumb grooves

MADE IN THE USA



- Letter set-27 characters
- Figure set-9 characters
- Combo set-36 characters

When ordering individual stamps, use size plus figure or letter.
Example: KF50RFD181 for #1 1/8 size; KF50RFD18A for A 1/8 size

Style - Round Face-DOT Design Sets (Combination Set)					
Size (in.)	Weight (lbs.)	Size of Square (in.)	OAL (in.)	Order No.	Price
1/8	3	5/16	2-1/2	**KF5003366**	Price
3/16	1	3/8	2-3/4	**KF5005366**	Price
1/4	1-1/2	7/16	3	**KF5006366**	Price

Style - Round Face-DOT Design Sets (Figure)					
Size (in.)	Weight (lbs.)	Size of Square (in.)	OAL (in.)	Order No.	Price
1/8	3/4	5/16	2-1/2	**KF5003096**	Price
3/16	1	3/8	2-3/4	**KF5005096**	Price
1/4	1-1/2	7/16	3	**KF5006096**	Price

Style - Round Face-DOT Design Sets (Letter)					
Size (in.)	Weight (lbs.)	Size of Square (in.)	OAL (in.)	Order No.	Price
1/8	2-1/4	5/16	2-1/2	**KF5003276**	Price
3/16	3	3/8	2-3/4	**KF5005276**	Price
1/4	4-1/2	7/16	3	**KF5006276**	Price

Young Bros. Metal Stamp Holder

MADE IN THE USA

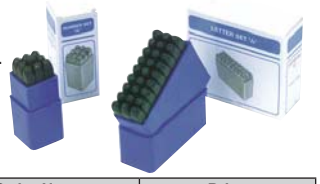
- Protects your hand from accidental hammer blow
- Rugged steel with some grip
- Locking mechanism holds stamp firmly into place



Order No.	Price
KF5009997	Price

PRM PRO 36 Pc. Letter and Number Punch Sets

- Hardened to give a solid impression
- Shiny black oxidized finish
- Numbers consist of 9 stamps 0-8, No. 6 is inverted to make No. 9
- Letters consist of 27 pcs A to Z
- Combination set consists of 36 stamps (27 letters and 9 numbers)



Size of Character (in.)	Order No.	Price
1/8	**NE601836**	Price
1/4	**NE601436**	Price

RITE-MARK Complete Marking Kit

Kit includes 2 each of: B, C, D, F, G, H, J, K, M, P, T, W, X, Dash, Slash Mark, Period and Comma; 1 each of: Q, V, Y, Z, Ampersand; 3 each of: A, I, L, N, O, R, S, U, 0, 3, 5, 6, 7, 8, 9; 4 each of: E, 1, 2, 4; Spacers & Holders.



To Order Rite-Mark Individual Character Steel Type Specify Order No. & Character
Example: 116A is a 1/16 character, Letter A

Size (in.)	No. Pcs. & Holder	Order No.	Price
1/16	112	**KF5510116**	Price
3/32	112	**KF5510332**	Price
1/8	112	**KF5510018**	Price
3/16	106	**KF5510316**	Price
1/4	106	**KF5510014**	Price
3/8	106	**KF5510038**	Price

C.H. HANSON Brass Adjustable Stencils

An inexpensive and flexible method of marking goods and making signs. Simple to use, all the characters engage each other by sliding adjacent grooves together

MADE IN THE USA



Gothic Style Stencil Sets
Figures Only: 15 pieces as follows — 12345678900; 1 Beginner; 1 Plain Ender; 1 Period; 1 Dash

Letters Only: 33 pieces as follows — ABCDEFGHIJKLMNOPQRSTU-VWXYZ& 1 Beginner; 1 Period Ender; 1 Space; 1 Period; 1 Comma; 1 Dash

Letters & Figures: 92 pieces as follows — AAA BB CC DD EEEE FF GG HH III JJ KK LL MM NNN OOO PP Q RRSSS TT UU VV WW XX YY ZZ && 111 22 33 4455 66 77 88 99 000; 1 Beginner; 1 Period Ender; 1 Plain Ender; 1 Comma; 1 Dash; 3 Spacers; 2 Periods

Character Size (in.)	Figures		Letters		Letters & Figures	
	Order No.	Price	Order No.	Price	Order No.	Price
1/2	**KG5010006**	Price	**KG5010026**	Price	**KG5010146**	Price
3/4	**KG5010007**	Price	**KG5010027**	Price	**KG5010147**	Price
1	**KG5010008**	Price	**KG5010028**	Price	**KG5010148**	Price
2	**KG5010011**	Price	**KG5010031**	Price	**KG5010151**	Price
3	**KG5010013**	Price	**KG5010033**	Price	**KG5010153**	Price
4	**KG5010014**	Price	**KG5010034**	Price	**KG5010154**	Price
5	**KG5010015**	Price	**KG5010035**	Price	**KG5010155**	Price
6	**KG5010016**	Price	**KG5010036**	Price	**KG5010156**	Price
1-1/2	**KG5010009**	Price	**KG5010029**	Price	**KG5010149**	Price
2-1/2	**KG5010012**	Price	**KG5010032**	Price	**KG5010152**	Price

Individual stencils are available. Call for prices.

C.H. HANSON All Purpose Number Checks

Brass: 1" diameter; #18 gauge brass with sunk, black enamel-filled number on a single side; 3/16" hole
Aluminum: 1-1/4" diameter; #18 gauge aluminum with black filled numbers on single side that won't chip out; 3/16" hole



Series	Aluminum		Brass	
	Order No.	Price	Order No.	Price
1-25	**KG5040073**	Price	**KG5040064**	Price
1-50	**KG5040072**	Price	**KG5040063**	Price
1-75	**KG5040071**	Price	**KG5040062**	Price
1-100	**KG5040070**	Price	**KG5040061**	Price
1-200	**KG5040074**	Price	**KG5040060**	Price

Available numbered 1 to 25, 1 to 50, 1 to 75, etc., up to 200 in unbroken series. Other combinations available P.O.A.

RITE-MARK Large 6" Steel Type Holder for Full Hand Grip

MADE IN THE USA

- A holder holds several sizes of type
- Sets up in any combination of letters, figures, dates or part codes
- Perfect character alignment
- Holder weighs 1-3/4 pounds



Type Size (in.)	Holder Capacity (in.)	Order No.	Price
1/4	6	**KF5510040**	Price
3/8	6	**KF5510057**	Price
1/16, 3/32, 1/8, 3/16	24 (1/16), 16 (3/32), 12 (1/8), 8 (3/16)	**KF5510039**	Price

C.H. HANSON Individual Blank Steel Type

To order Blank type use Order No alone. (Example: 1/16 spacer would read 116) To order Individual Stamps, specify Order No. and character. (Example: 116 character, letter A would read 116A)



Type Size (in.)	Order No.	Price
1/16	**KG50116**	Price
1/8	**KG5018**	Price
3/16	**KG50316**	Price
1/4	**KG5014**	Price
3/8	**KG5038**	Price

Individual stamps available.

C.H. HANSON Steel Type Holders

- Furnished with threaded pin to hold the notched type
- Also included is an Allen wrench and a screw to lock the type together
- The type is sharp faced gothic



Type Size (in.)	Holder Capacity	Order No.	Price
1/16	10	**KG5027600**	Price
1/16	16	**KG5027601**	Price
1/8	12	**KG5027621**	Price
1/8	15	**KG5027624**	Price
1/8	8	**KG5027620**	Price
3/16	10	**KG5027604**	Price
3/16	15	**KG5027605**	Price
1/4	12	**KG5027609**	Price
1/4	8	**KG5027608**	Price
3/8	10	**KG5027611**	Price
3/8	6	**KG5027610**	Price
1/2	4	**KG5027612**	Price
1/2	6	**KG5027613**	Price

C.H. HANSON Blank Metal Checks, Tags and Plates

Sold in pkgs. of 100
For your own stamping



Blank Description	Hole Size (in.)	Aluminum		Brass	
		Order No.	Price	Order No.	Price
1" Round	3/16	**KG5040019**	Price	**KG5040006**	Price
1" Square	3/16	**KG5040014**	Price	**KG5040001**	Price
1-1/2" Round	3/16	**KG5040023**	Price	**KG5040011**	Price
1-1/4" Octagon	3/16	**KG5040017**	Price	**KG5040004**	Price
1-1/4" Round	3/16	**KG5040021**	Price	**KG5040008**	Price
1-1/4" Square	3/16	**KG5040015**	Price	**KG5040002**	Price
1-1/64" Octagon	3/16	**KG5040016**	Price	**KG5040003**	Price
1-3/32" Round	3/16	**KG5040020**	Price	**KG5040007**	Price
1-3/8" Round	3/16	**KG5040022**	Price	**KG5040009**	Price
2" Round	3/16	**KG5040024**	Price	**KG5040012**	Price
3/4 x 1-11/32" Oval	3/32	**KG5040018**	Price	**KG5040005**	Price

Etch-O-Matic Starter Kit

MADE IN THE USA

10 Volts — 2 Amps

Kit contains: Etch-O-Matic Marker (head size 7/8" × 1-3/4"); electric cord; ground plate; 2 oz electrolyte solution; 10 stencils; neutralizer & deep etching adapter clip



Order No.	Price
JT50EMI	Price

Etch-O-Matic Super Etch-O-Matic Heavy Duty Kit

MADE IN THE USA

For Use On Production Line Able To Mark Up To 2" x 4"

Kit contains: 1-15 Volt 10 Amp marker with transformer; adapter clip for deep etching; Ground plate; 8 oz. General purpose electrolyte; 8 oz. neutralizer; pak felt pads; 100 stencils & carrying case



Order No.	Price
JT50EMIS	Price

Etch-O-Matic Super Industrial Kit

MADE IN THE USA

Kit contains: super & regular Etch-O-Matic; adapter clip for deep etching; ground plate; 8 oz general purpose & stainless steel electrolyte; 2-100 pak stencils; 4 oz ea. electrolyte for aluminum, black oxide, brass, copper & bronze; large 2" × 4" grid; pak of large felt pads, pak of large stencils; 8 oz neutralizer; 2 neutralizer; 2 powder pak & 1 regular grid



Order No.	Price
JT50SIK	Price

DREMEL Model 290 Electric Engraver

- Writes like a pencil on material from hardened steel to glass
- Stroke adjustment regulates depth of engraving, fine line to deep marks



Type	Style	Order No.	Price
Engraver	Pencil Style	PH50290	Price
Engraver Point	Carbide	PH509924	Price
Engraver Point	Diamond	PH509929	Price

GENERAL Cordless Precision Engraver

- 20,000 RPM motor
- Engraves metal, glass, ceramic and plastic
- 3/32" Diamond tip bit included
- 2 AAA batteries included



Order No.	Price
NE50505	Price

Etch-O-Matic Electrolyte Solution

MADE IN THE USA

Hazard Code: 58

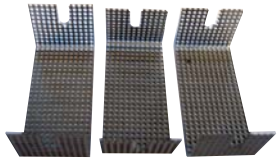


	Aluminum		Black Oxide		Brass	
Size	Order No.	Price	Order No.	Price	Order No.	Price
16 oz	JT50AR16	Price	JT50ER16BO	Price	JT50ER16B	Price

	General Purpose		Stainless Steel	
Size	Order No.	Price	Order No.	Price
16 oz	JT50ER16	Price	JT50ER16S	Price

Etch-O-Matic Grid

MADE IN THE USA



Description	Order No.	Price
7/8 x 1-7/8	JT50GP	Price

Etch-O-Matic Neutralizer

Hazard Code: 58

MADE IN THE USA



Size	Order No.	Price
16 oz	JT50NC16	Price
Powder Pak	JT50NP	Price

Etch-O-Matic Pad Refill Kit

MADE IN THE USA



Size	Order No.	Price
19 Regular	JT50FP1	Price

Etch-O-Matic Stencils

MADE IN THE USA



Stencil Size (in.)	Etching Area (in.)	Pkg. Qty.	Order No.	Price
2-1/4 x 3	7/8 x 1-7/8	50	JT50S50	Price
2-1/4 x 3	7/8 x 1-7/8	100	JT50S100	Price
3-1/2 x 4-1/4	2 x 2-1/4	100	JT50M100	Price
4-1/2 x 4-1/2	2 x 4	100	JT50L100	Price

RIDGID Heavy Duty Pipe Wrenches

- Sturdy, ductile-iron housing and I-beam handle with full floating forged hook jaw, featuring self-cleaning threads with replaceable hook and heel jaws.
- Heavy-duty pipe wrenches comply with federal specifications GGG-W65IE, Type II, Class A



OAL (in.)	Capacity (in.)	Weight (lbs.)	Order No.	Price
6	3/4	.45	**KR5031000**	Price
8	1	.80	**KR5031005**	Price
10	1-1/2	1.74	**KR5031010**	Price
12	2	2.58	**KR5031015**	Price
14	2	3.62	**KR5031020**	Price
18	2-1/2	5.79	**KR5031025**	Price
24	3	9.55	**KR5031030**	Price
36	5	19.62	**KR5031035**	Price
48	6	30.50	**KR5031040**	Price
60	8	51	**KR5031045**	Price

RIDGID Aluminum Handle Straight Pipe Wrenches

- Professional strength in lightweight aluminum
- Offers the same durability and ease-of-use found in all RIDGID heavy-duty wrenches



OAL (in.)	Ref No.	Capacity (in.)	Weight (lbs.)	Order No.	Price
10	810	1-1/2	1.15	**KR5031090**	Price
14	814	2	2.33	**KR5031095**	Price
18	818	2-1/2	3.50	**KR5031100**	Price
24	824	3	6	**KR5031105**	Price
36	836	5	10.50	**KR5031110**	Price
48	848	6	18.60	**KR5031115**	Price

IRWIN VISE-GRIP Adjustable Cast Iron Pipe Wrench

- Rugged cast iron housing
- Forged jaw with hardened teeth for incredible bite
- Easy spin action nut for fast setting



OAL (in.)	Pipe Capacity (in.)	Order No.	Price
8	1	**KX50274105**	Price
10	1-1/2	**KX50274101**	Price
12	2	**KX50274106**	Price
14	2	**KX50274102**	Price
18	2-1/2	**KX50274103**	Price
24	3	**KX50274104**	Price
36	5	**KX50274107**	Price
48	6	**KX50274108**	Price

RIDGID Heavy Duty Chain Wrenches

- Featues a double fast jaw which gives fast, ratchet-like action in either direction
- Heavy duty model has replaceable alloy steel jaws



Ref No.	Capacity (in.)	Chain Lgth. (in.)	Weight (lbs.)	Order No.	Price
C-12	Rated 2/Actual 4	15-3/4	2	**KR5031310**	Price
C-14	Rated 2/Actual 5	18-1/2	2.7	**KR5031315**	Price
C-18	Rated 2-1/2/Actual 5	20-1/4	5.8	**KR5031320**	Price
C-24	Rated 3/Actual 5	20-1/4	8.2	**KR5031325**	Price

PROTO Pipe Wrenches



Heavy Duty Cast Iron

- Forged steel jaw provides outstanding strength
- Full floating hook jaw, provides instant grip, easy release
- Large knurl and power threads provide fast, positive jaw adjustment

New!

OAL (in.)	Maximum Opening (in.)	Model No.	Order No.	Price
6	3/4	J806HD	**KP4263320**	Price
8	1	J808HD	**KP4263325**	Price
10	1-1/2	J810HD	**KP4263330**	Price
12	2	J812HD	**KP4263335**	Price
14	2	J814HD	**KP4263340**	Price
18	3-1/2	J818HD	**KP4263345**	Price
24	4	J824HD	**KP4263350**	Price
36	5	J836HD	**KP4263355**	Price

PROTO Pipe Wrenches

New!

Aluminum



- Light weight aluminum for less job fatigue
- Standard handle lengths with wide gripping surface for increased comfort and one hand operation
- Forged steel jaw provides outstanding strength.
- Large knurl and power threads provide fast, positive jaw adjustment.
- Graduation markings on hook jaw

OAL (in.)	Maximum Opening (in.)	Model No.	Order No.	Price
10	1-1/2	J810A	**KP4263300**	Price
12	2	J812A	**KP4263305**	Price
14	2	J814A	**KP4263310**	Price
18	3-1/2	J818A	**KP4263315**	Price
24	4	J824A	**KP4263285**	Price
36	5	J836A	**KP4263290**	Price
48	6	J848A	**KP4263295**	Price

IRWIN VISE-GRIP Cast Aluminum Pipe Wrenches

- 40% lighter than our cast iron pipe wrenches
- Drop forged jaws
- Hammerhead for flat surface hammering



OAL (in.)	Capacity (in.)	Order No.	Price
10	1-1/2	**KX502074110**	Price
12	2	**KX502074112**	Price
14	2	**KX502074114**	Price
18	2-1/2	**KX502074118**	Price
24	3	**KX502074124**	Price
36	5	**KX502074136**	Price
48	6	**KX502074148**	Price

Snap-on Industrial Brands | WILLIAMS Aluminum Pipe Wrenches

- High quality; lightweight cast aluminum body
- Jaws are made of hardened alloy steel
- Heavy-duty adjustable ring



OAL (in.)	Pipe Capacity (in.)	Order No.	Price
8	1-5/16	**KP3013500**	Price
10	1-5/8	**KP3013502**	Price
12	2-1/8	**KP3013504**	Price
14	2-9/16	**KP3013506**	Price
18	3-1/8	**KP3013508**	Price
24	3-3/4	**KP3013510**	

Set Includes (in.)	Order No.	Price
8, 12, 18"	**KP3013542**	Price

RIDGID Heavy Duty & 4-Wheel Pipe Cutters





Style - 4-Wheel				
Ref. No.	Capacity (in.)	Weight (lbs.)	Order No.	Price
42-A	3/4 thru 2	6-3/4	**KR5032870**	Price
44-S	2-1/2 thru 4	20	**KR5032880**	Price

Style - Heavy-Duty				
Ref. No.	Capacity (in.)	Weight (lbs.)	Order No.	Price
2-A	1/8 thru 2	7	**KR5032820**	Price

RIDGID Tubing Cutters











Style - C-Style				
Ref. No.	Capacity (in.)	Weight (lbs.)	Order No.	Price
10	1/8 thru 1 O.D.	7/8	**KR5032910**	Price
15	3/16 thru 1-1/8 O.D.	1-1/4	**KR5032920**	Price
20	5/8 thru 2-1/8 O.D.	1-3/4	**KR5032930**	Price
30	1 thru 3-1/8 O.D.	3-1/2	**KR5032940**	Price
150	1/8 thru 1-1/8 O.D.	7/8	**KR5031622**	Price

Style - Midget				
Ref. No.	Capacity (in.)	Weight (lbs.)	Order No.	Price
103	1/8 thru 5/8 O.D.	1/6	**KR5032975**	Price
104	1/8 thru 15/16 O.D.	1/4	**KR5032985**	Price

Style - Professional				
Ref. No.	Capacity (in.)	Weight (lbs.)	Order No.	Price
151	1/4 thru 1-5/8 O.D.	.88	**KR5031632**	Price
152	1/4 thru 2-5/8 O.D.	1.88	**KR5031642**	Price
154	1-7/8 thru 4-1/2 O.D.	3	**KR5031652**	Price
156	4 thru 6-5/8 O.D.	4.13	**KR5031662**	Price
151-P	1/8 thru 1-1/4 O.D.†	.88	**KR5031637**	Price
152-P	1/4 thru 2 O.D.†	1.88	**KR5031647**	Price
154-P	1-1/2 thru 4 O.D.†	3	**KR5031657**	Price
156-P	4 thru 6-1/2 O.D.†	4.13	**KR5031667**	Price

†Nominal Plastic Pipe Size

RIDGID Die Heads Complete with Dies

(Specify NPT or Straight NPSM Threads) Set of Pipe Dies Only, Head Not Included

- Exposed ratchet drop head threaders (00R, 12R): Die heads lock into ratchet and handle assembly. Heads are easily removed when reversible ratchet knob is pulled out
- Complete ratchet set available
- All dies listed are NPT, Alloy, Right Hand. Optional L.H. dies and High Speed dies available



	Die Head Complete (With Dies)		Pipe Die Only (Head Not Included)	
Size (in.)	Order No.	Price	Order No.	Price
1/8	**KR5037375**	Price	**KR5037810**	Price
1/4	**KR5037380**	Price	**KR5037815**	Price
3/8	**KR5037385**	Price	**KR5037820**	Price
1/2	**KR5037390**	Price	**KR5037825**	Price
3/4	**KR5037395**	Price	**KR5037830**	Price
1	**KR5037400**	Price	**KR5037835**	Price
1-1/4	**KR5037405**	Price	**KR5037840**	Price
2	**KR5037415**	Price	**KR5037850**	Price
1-1/2	**KR5037410**	Price	**KR5037845**	Price

PROTO Tubing Cutter

New!

MADE IN THE USA

- Cuts metal tubing from 1/8 to 1-1/8 OD quickly and cleanly
- Features heat-treated alloy steel cutting blade, special rollers, heavy-duty screw mounted in durable steel frame
- Large screw-knob and retractable tubing reamer



Description	Model No.	Order No.	Price
Tubing Cutter	J350	**KP4263415**	Price
Replacement Blade	J350C	**KP4263645**	Price

RIDGID Tristand Chain Vise

- Designed for portability
- Light weight-perfect for service applications
- Available in 1/8"—2-1/2" (Model 425) and 1/8"—6" capacity (Model 460)
- Model 460 has wide rear pipe support
- Improved tool holders to avoid slippage
- 425 is 25° lighter than 460
- 460 has a 40% larger working area than 425
- Full lifetime warranty



Description	Order No.	Price
2 1/2" Tristand-Model 425	**KR5016703**	Price

Pipe & Tube Cutter Wheels

- Extra cutting wheel for Pipe & Tube Cutters
- Pipe cutting wheels



Wheel for cast iron pipe



Standard Thin Wheel



Heavy Duty Wheel

Type - Pipe Cutter Wheels				
Ref. No.	Type/For Cutting	For Ridgid Pipe Cutter	Order No.	Price
F-3	Heavy Duty/Steel Cutting	1-A, 2-A, 42-A	**KR5033105**	Price
F-119	Cast Iron/Cast Iron Cutting	1-A, 2-A, 42-A	**KR5033115**	Price
F-229	Heavy Duty/Steel Cutting	3-S, 4-S, 44-S	**KR5033125**	Price

Type - Tube Cutter Wheels				
Ref. No.	Type/For Cutting	For Ridgid Pipe Cutter	Order No.	Price
E-1240	Heavy Duty/Steel & Stainless Cutting	10, 15, 20	**KR5033165**	Price
E-2191	Heavy Duty/Steel Cutting	30, 40, 154, 156	**KR5033175**	Price
E-2558	Thin/Aluminum & Copper Cutting	30, 40, 154, 156	**KR5033170**	Price
E-3469	Thin/Aluminum & Copper Cutting	103, 104, 150, 151, 152	**KR5033185**	Price
E-4546	Heavy Duty/Steel & Stainless Cutting	151, 152	**KR5033190**	Price
F-158	Thin/Aluminum & Copper Cutting	10, 15, 20	**KR5033160**	Price

PROTO 3-Pc Tube Cutting and Flaring Set



- Cuts tubing from 1/8" through 1-1/8" OD and puts 45° flare on tubing 3/16" through 5/8"
- Includes tubing cutter, flaring block, flaring yoke

New! MADE IN THE USA

Model No.	Order No.	Price
J349	**KP4263410**	Price

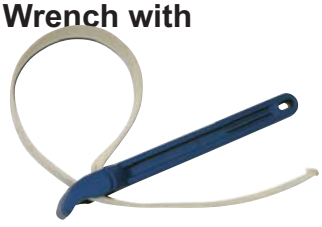
TITAN Ratcheting PVC Pipe Cutter



- Cuts PVC or rubber pipe up to 1-5/8 (41mm) diameter
- Stainless steel blade
- Flip catch holds handles closed for safety

Order No.	Price
KP8215063	Price

Snap-on Industrial Brands | WILLIAMS Strap Wrench with Aluminum Handle



- Forged strong I-Beam handle
- Designed for working in confined areas when regular pipe wrenches will not fit, excellent for pipe fittings
- Portable and lightweight can be used for overhead and underground work

Size (in.)	Finish	Pipe Capacity (in.)	Order No.	Price
12	Blue Aluminum	8	**KP3040221**	Price

Snap-on Industrial Brands | WILLIAMS Pipe Chain Wrench



- Forged strong I-Beam handle
- Designed for working in confined areas when regular pipe wrenches will not fit, excellent for pipe fittings
- Portable and lightweight can be used for overhead and underground work

Chain Length	Handle Length	Finish	Pipe Capacity (in.)	Order No.	Price
16	12	Chrome	4	**KP3040222**	Price
19	15	Chrome	5	**KP3040223**	Price
23	24	Chrome	6	**KP3040224**	Price

RIDGID Lever-Type Tube Benders



MADE IN THE USA

5 Sizes for Soft or Hard Copper, Brass, Aluminum, Steel and Stainless Steel Tube

Forming head shows angle of bend in 22-1/2° increments from 0 to 180°

Ref No.	Cap. (in.) Tube/Radius	Weight (lbs)	Order No.	Price
403	3/16 O.D. / 5/8	1-1/2	**KR5036117**	Price
404	1/4 O.D. / 5/8	1-1/2	**KR5036122**	Price
405	5/16 O.D. / 15/16	2-1/2	**KR5036092**	Price
406	3/8 O.D. / 15/16	2-1/2	**KR5036097**	Price
408	1/2 O.D. / 1-1/2	5-1/2	**KR5036132**	Price

Lisle Combination Flaring Tool

This set includes all the adapters and tools necessary for single and double flaring (standard and metric) plus the ISO (bubble) flare. Works on aluminum, copper, and soft steel tubing. Not recommended for stainless steel. The set is packed in a plastic molded storage case with complete instructions. Shipping weight 3 lb 8 oz



Set Includes:

- 3/8" Adapter
- 3/16" Adapter
- 1/4" Adapter
- 5/16" Adapter
- 1/2" Adapter
- 6mm Adapter
- 10mm Adapter
- 4.75 ISO Adapter
- 6mm ISO Adapter
- 8mm ISO Adapter
- 10mm ISO Adapter

Order No.	Price
KN6556150	Price

RIDGID Flaring Tools

MADE IN THE USA

One Intergral Unit..... Parts Can't Get Lost



- Recommended for soft materials such as aluminum and soft copper
- Ref. Nos. 454-W, 455 and 375 will also flare steel, stainless steel, hard copper and brass
- Ref No. 454-W will also flare plastic water tube

Ref. No.	Flare	Capacity (in.)	Weight (lbs.)	Order No.	Price
375	37°	1/2, 5/8, 3/4, 7/8, 1	6-3/4	**KR5041285**	Price
377	37°	3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4	3-1/2	**KR5041162**	Price
455	45°	1/2, 5/8, 3/4, 7/8, 1	6-3/4	**KR5041300**	Price
454-W	45°	3/8, 1/2, 3/4, 1	6-1/4	**KR5041295**	Price

RIDGID Plastic Pipe & Tube Cutter



Ref. No.	Capacity (in.)	Weight (lbs.)	Order No.	Price
138	1/8 thru 1-1/2 O.D.	1-1/4	**KR5091125**	Price

RIDGID Strap Wrenches

- Use on polished pipe and tubing-protects nickel and chrome finish
- Strong-beam handle and solid head, all one piece. Handy hang-up hook
- Two models available for plastic pipe; polyurethane-coated strap prevent marring of pipe

MADE IN THE USA



Ref No.	Pipe Strap Capacity (in.)	Wrench Wd & Lgth (in.)	Wgt. (lbs.)	Order No.	Price
1	1/8 thru 2	1/2 x 17	1-1/4	**KR5031335**	Price
2	1/8 thru 2	1-1/8 x 17	1-3/4	**KR5031340**	Price
5	1 thru 5	1-3/4 x 29-1/4	2	**KR5031360**	Price

RIDGID Replacement Straps

MADE IN THE USA

Ref No.	Order No.	Price
1	**KR5031990**	Price
2	**KR5032015**	Price
5	**KR5032050**	Price

STANLEY Hobby Knife

- Precision hobby knife available with a strong, yet lightweight aluminum body
- Great for home, office, studio, or workshop
- Positive metal barrel blade locks
- Works with standard hobby and craft blades

New!



OAL (in.)	Model No.	Order No.	Price
5	10-401	**KP431928**	Price

GENERAL Precision Hobby Knives

- Aluminum Handle construction



NE501901



NE501902

Knife Weight	Order No.	Price
Light Duty	**NE501901**	Price
Medium Duty	**NE501902**	Price
Heavy Duty	**NE501903**	Price



NE501903

CAMILLUS Les Stroud SK Path Fixed Saw



- Triple ground edge
- Includes hard ballistic nylon sheath and firestarter

OAL (in.)	Blade Length (in.)	Order No.	Price
13	8	**LA5719121**	Price

CAMILLUS 18" Carnivore Z Machete

- Titanium bonded
- Full tang with 440 Stainless Steel and a multi-grind blade with an ABS handle
- Blade features chisel, cutting, sawing, digging, and wire cutting capabilities
- Ballistic nylon sheath included



OAL (in.)	Blade Length	Order No.	Price
18	12	**LA5719074**	Price

STANLEY Self Retracting Safety Blade Utility Knife

New!



- Spring-loaded blade retracts automatically when pressure on slide button is released
- Machine screw firmly holds knife body together - screwdriver required for blade change
- Contoured handle and textured die-cast body for slip-resistance
- Accepts standard round-point utility blades
- Integrated blade storage in handle
- Lanyard hang hole for easy transportation and storage.
- Replacement Blades: 11-987, 11-988, 11-800, 11-700, 11-938, 11-921

OAL (in.)	Model No.	Blade Length (in.)	Order No.	Price
6	10-189C	2-1/8	**KP431918**	Price

STANLEY Safety Knife

- Spring-loaded blade retracts automatically when pressure on slide button is released
- Chemical-resistant metal barrel
- Accepts standard round-point utility blades
- Integrated blade storage in handle
- Lanyard hang hole for easy transportation and storage

New!



OAL (in.)	Model No.	Blade Length (in.)	Order No.	Price
6-1/2	STHT10193	2-7/16	**KP432046**	Price

STANLEY Fatmax® Safety Knife

New!



- Pressure-sensitive blade automatically retracts once disengaged from cutting surface
- Shrink wrap cutter pivots up and down, sits in a depression flush with the knife
- Metal body with ergonomic, slip-resistant bi-material grip for durability, comfort, and control
- Quick, toolless blade change
- Tape splitter at the base of the handle
- Accepts standard round-point utility blades
- Integrated blade storage in handle
- Lanyard hang hole for easy transportation and storage
- Replacement Blades: 11-987, 11-988, 11-800, 11-700, 11-938, 11-914, 11-921

OAL (in.)	Model No.	Blade Length (in.)	Order No.	Price
6-1/2	FMHT10242	2-7/16	**KP439130**	Price

CAMILLUS 6-1/2" Carbonitride Titanium Marlin Spike Folding Knife

- G10 Handle, Marlin Spike and VG-10 Japanese steel
- Carbonitride titanium won't flake, blister, chip or peel and is up to 10x harder than untreated steel so the blades stay sharper, longer
- 2.75" Drop point blade
- Locking blade and spike
- Lifetime warranty



OAL (in.)	Blade Length (in.)	Order No.	Price
6-1/2	2-3/4	**LA5718670**	Price

CAMILLUS 6-3/4" Carbonitride Titanium Pristine™ Folding Knife

- Features a G10, stainless handle and VG-10 Japanese steel blade
- Carbonitride titanium won't flake, blister, chip or peel and is up to 10x harder than treated steel so the blades stay sharper, longer
- 3" Drop point blade
- Lifetime warranty



OAL (in.)	Blade Length (in.)	Order No.	Price
6-3/4	3	**LA5718671**	Price

STANLEY Ergonomic Fixed Blade Utility Knife

- Easy blade change
- Durable, simple and comfortable shape
- Narrow nose ideal for accurate cutting applications
- Blade storage in handle



OAL (in.)	Blade Length (in.)	Model No.	Order No.	Price
5-1/2	2-7/16	10-705	**KP431940**	Price

STANLEY Swivel-Lock® Utility Knife

New!

- Large, 7" handle design is comfortable for extended use
- Swivels open for cleaning and blade changes
- Interlocking nose secures together knife halves for safety
- Aluminum body for lighter weight



OAL (in.)	Blade Length (in.)	Model No.	Order No.	Price
7	2-7/16	10-989	**KP431952**	Price

STANLEY Retractable Utility Knife



- Interlocking nose to hold blade securely
- Three-position retractable blade
- Contoured handle with diagonal ribs for a slip-resistant grip Contoured handle with diagonal ribs for a slip-resistant grip
- Blade storage in handle

New!

OAL (in.)	Blade Length (in.)	Model No.	Color	Order No.	Price
5-7/8	2-7/16	10-079	Gray	**KP431904**	Price
5-7/8	2-7/16	10-179	High-Visibility Green	**KP431916**	Price

Snap-on Industrial Brands | WILLIAMS Utility Knife with Autoload Quick Blade

New!



- Heavy-duty .025" thick 2-notch blades
- Autoload knife features quick blade change and loading with no disassembly
- Replacement blades fit all standard utility knives

Order No.	Price
KP3040052	Price

STANLEY Instantchange™ Retractable Blade Utility Knife



- Strong, durable construction combines a cast metal core with bi-material soft panels for a sure grip
- Tool-free push-button blade change
- Curved handle design for comfort, control and balance
- Swing-out blade storage for easy blade access
- Integrated string cutter for use even when blade is retracted
- Large hang hole for pegboard storage
- Padded thumb rest for comfort
- Stores up to 10 blades in handle

New!

OAI (in.)	Blade Length (in.)	Model No.	Order No.	Price
6-1/2	2-7/16	10-788	**KP431946**	Price

STANLEY Fatmax® Retractable Twin Blade Knife

- 2 knives in 1 - new twin blade design allows the user to alternate between 2 blades without carrying more than 1 knife
- InstantChange™ feature allows the user to replace dull blades in seconds
- Holds up to 9 blades
- Interlocking blade sliders so that only 1 blade is extended at a time
- Rubber comfort grip minimizes fatigue and reduces slippage
- Total blade storage capacity - 11 (9 storage + 2 in use)



New!

OAL (in.)	Blade Length (in.)	Model No.	Order No.	Price
7	2-7/16	10-789	**KP439102**	Price

IRWIN Industrial Tools Utility Knives



Self-Retracting Safety Knife (2088600)

- Self-retracting spring action returns blade safely into the housing when not in use
- Features 2 blade positions: 2mm extension for box cutting & full extension for general use. Includes 1 Irwin Bi-Metal Safe Utility Blade

Standard Fixed Utility Knife (2081101)

- Optimized cutting angle for reduced fatigue
- Smooth, three-position slide exposes variable blade lengths
- Magnetic Nose for easy blade changes
- Inside Storage for 5 blades, includes 1 Irwin Blue Blade



Standard Retractable Utility Knife (2082101)

- Optimized cutting angle for reduced fatigue
- Magnetic nose for easy blade changes
- Inside Storage for 5 blades, includes 1 Irwin Blue Blade Bi-Metal Utility Blade



Style		OAL (in.)	Color	Order No.	Price
Self-Retracting Safety Knife	2-3/8	5-3/4"	Red	**KX502088600**	Price
Standard Fixed Utility Knife	2-3/8	5-1/2" with blade not extended 6-1/8" with blade extended	Gray (unpainted)	**KX502081101**	Price
Standard Rectractable Utility Knife	2-3/16	6-3/4" with blade not extended 7-1/8" with blade extended	Gray (unpainted)	**KX502082101**	Price

STANLEY Fatmax® Fixed Blade Knife

- Soft touch panels/grips allow control, fewer slips
- Blade clamp eliminates blade wobble, gives control
- Pop-up blade dispenser for easy access and fast changeover
- Cartridge holds up to 5 blades
- Supplied with FATMAX® blades
- Dual blade position in nose for versatility



OAL (in.)	Model No.	Order No.	Price
6	10-780	**KP439100**	Price

STANLEY Fatmax® Retractable Utility Knife

- Blade wiper removes excess dirt and helps protects knife
- Blade clamp eliminates blade wobble for precise cutting
- Ergonomic design for ease of use
- Soft touch grips for control
- Pop-up blade dispenser for easy access to blades
- Push-button blade change for easy tool-free blade changeover
- Supplied with FATMAX® blades



New!

OAI (in.)	Blade Length (in.)	Model No.	Order No.	Price
6-1/2	2-7/16	10-778	**KP439098**	Price

STANLEY InstantFeed™ Retractable Knife

- Auto Load Knife Automatically loads a new blade
- Intuitively Functions as a Regular Utility Blade: For quick and easy loading
- Die-Cast Design: With soft grip handle
- Accepts All Utility Blades: Does not require special blade packs

New!



OAI (in.)	Blade Length (in.)	Model No.	Order No.	Price
6	2-7/16	STHT10237	**KP432050**	Price

IRWIN Industrial Tools Pro Touch Fixed Utility Knife

- Includes 6 Irwin blue blades
- Optimized cutting angle for reduced fatigue
- Easy tool-free entry
- Pro Touch ergonomic grip
- Inside storage for 5 blades



Order No.	Price
KX501774103	Price

IRWIN Industrial Tools Pro Touch Retractable Utility Knife

- Smooth, three-position slide exposes variable blade length
- Quick change blade removal
- One-touch easy tool-free entry for blade storage
- Includes 6 unbreakable bi-metal blue blades
- Pro Touch ergonomic grip



Order No.	Price
KX501774106	Price

IRWIN Industrial Tools Hi-Vis Retractable Knife

- Includes 3 Irwin blue blades
- Optimized cutting angle for reduced fatigue
- Smooth, three-position slide exposes variable blade length
- Inside storage for 5 blades



Order No.	Price
KX502082300	Price

LUTZ Heavy Duty Industrial Quality Retractable Utility Knife

MADE IN THE USA

- Heavy duty die cast zinc handle comes with 3 heavy duty .025 blades
- Zinc retractor for smoother operation-cutting positions
- Vertical recessed ribs for a better, more comfortable grip



Color	Order No.	Price
Black	**FS5082B**	Price
Orange	**FS5082O**	Price
Yellow	**FS5082Y**	Price

GENERAL Side Lock Utility Knife

- Opens instantly to any one of three cutting positions
- Blade retracts into handle for safety
- Has five replaceable heavy-duty alloy steel blades in handle



Order No.	Price
NE50855	Price

PROTO Electrician's Knife

MADE IN THE USA

- Spear blade
- Self-locking combination screwdriver and insulation cutter
- Closed position length: 3-3/4”
- Open position length: 7”

New!



Blade Length (in.)	Model No.	Order No.	Price
3	J18500	**KP4231090**	Price

STANLEY Pocket Knife



New!

- Powder-coated, epoxy handle
- Safety blade lock
- Replaceable stainless-steel blade
- Blade folds into handle for safe storage

OAl (in.)	Blade Length (in.)	Model No.	Order No.	Price
4-1/4	2-7/16	10-049	**KP431902**	Price

STANLEY Fatmax® Fixed Blade Utility Knife

New!



- Durable aluminum handle with belt clip
- Quick change blade mechanism
- One-hand opening operation
- Folds to convenient carrying size
- Works with most standard utility blades, except 11-931

OAL (in.)	Blade Length (in.)	Model No.	Order No.	Price
6-3/4	2-7/16	10-036	**KP431900**	Price

STANLEY Fatmax® Fixed Folding Knife

New!

- Easy access button for quick blade change
- Thumb ridge for one-handed opening and closing
- Flip-open blade storage stores up to 3 extra blades
- Side opening which allows users to see if they have extra blades in storage without opening the knife
- Tape cutter for use when knife is closed
- All metal design for long tool life



OAL (in.)	Blade Length (in.)	Model No.	Order No.	Price
6-1/4	2-7/16	FMHT10827	**KP439142**	Price

STANLEY Folding Utility Knife



New!

- One-handed open/close
- Tool-free blade changes
- Aluminum design for durability and light weight
- Stainless-steel belt clip for convenience
- Accepts standard utility and hook blades

OAL (in.)	Blade Length (in.)	Model No.	Order No.	Price
5-3/4	2-7/16	10-855	**KP431950**	Price

BESSEY Utility Knife

New!



- Soft grip
- Folds & locks like a pocket knife
- Uses standard utility blades
- Quick release button
- 6” open, 4” closed

Order No.	Price
SG75DBKPH	Price

PROTO Electrician's Knife w/Stripping Blade

New!

MADE IN THE USA

- Spear blade
- Stripping blade
- Self-locking combination screwdriver, insulation cutter and wire scraper blade
- Closed position length 3-3/4”
- Open position length 7”



Blade Length (in.)	Model No.	Order No.	Price
3	J18535	**KP4231095**	Price

PROTO Pruning Knife

- Curved blade for precision cutting and stripping
- Closed length: 4-3/4”
- Open length 9”

MADE IN THE USA

New!



Blade Length (in.)	Model No.	Order No.	Price
4	J18505	**KP4231115**	Price

GERBER Folding Knives

- Mini fast draw-one handed opening. Blade is unlocked by strategically placed side button
- Presto 3.0-attractive aluminum handle. Safety protects when blade is open or closed
- EVO jr.-finger flip opening. Titanium nitrade-coated blade. Anodized alum cutout handle
- Mini Covert-tactical pocketknife. One-hand opening. Low-glare blade coating.
- Double take-serrated & fine edge blade. Thumbstud single liner lock engages both blades
- SuperKnife-folding utility knife with belt clip on attachment. Uses standard utility blade



LA552241492



LA552241493



LA5545864

Blade Type	Closed (in.)	Open (in.)	Description	Order No.	Price
Fine	3-5/8	6-3/8	EVOJr	**LA552241492**	Price
Serrated	3-5/8	6-3/8	EVOJr	**LA552241493**	Price
Serrated	4-3/32	7	AR3.0	**LA5545864**	Price

LEATHERMAN Crater C33 Folding Pocket Knife

MADE IN THE USA

- Stainless steel
- Blade launcher
- 420HC Blade 2.6" length
- Carabiner/bottle opener
- Locking blade



Order No.	Price
LA608600140	Price

LEATHERMAN Crater C33T Folding Pocket Knife

MADE IN THE USA

- Stainless steel
- Blade launcher
- 420HC Blade 2.6" length
- Carabiner/bottle opener
- Phillips screwdriver
- 1/4" Flat screwdriver



Order No.	Price
LA608602140	Price

Red Devil Retractable Razor Blade Scraper

- Push/pull locks blade in place
- Contains 5 extra blades



Order No.	Price
FS533222	Price

Red Devil Single Edge Razor Blades



Pkg. Qty.	Order No.	Price
10	**FS533270**	Price
100	**FS533272**	Price

OLFA Extra Heavy Duty, 25MM Ratchet-Lock Cutter



- Ratchet blade lock
- Heavy duty snap-off blade; 7 cutting edges, ultra sharp
- Anti-slip handle, acetone resistant
- Cuts with ease- leather, rubber, rope, carpet and more

Model	Order No.	Price
XH-1	**FS601071858**	Price
XH-AL	**FS601104189**	Price

OLFA SK-4 Safety Knife



- Features self-retracting blade, stainless steel blade channel, right or left-handed use
- Uses Olfa® SKB or RSKB replacement blades

Model	Order No.	Price
SK-4	**FS6040062**	Price

OLFA 180 Cutter



All steel economy cutter

Model	Order No.	Price
180	**FS6010018**	Price

OLFA SVR Cutters

SVR-1 Stainless steel cutter is perfect for moist environments. Includes Stainless steel snap-off blade. Slide lock and pocket clip/blade snapper



New SVR-2 similar to above with auto-locking blade mechanism and is designed for right or left hand use.
Use OLFA ABS, ABB, A-SOL Replacement blades

Model	Order No.	Price
SVR-2	**FS605019**	Price
SVR-1	**FS6010014**	Price

OLFA L-1 18mm Heavy-Duty Snap-off Blade Cutter



- Features ABS handle, full length stainless steel blade channel
  Ratchet wheel blade lock
- Use OLFA LB, LBB, L-SOL replacement blades

Model	Order No.	Price
L-1	**FS605003**	Price

STANLEY Fatmax® Snap-Off Knives

New!

- Stainless-steel barrel is durable and rust resistant
- Comfortable bi-material slider with soft grip
- Removable blade snapper for removal of a worn segment
- Thumb dial clamps down on blade to minimize blade movement for control
- Instant blade release functionality for quick blade changes



OAL (in.)	Size	Model No.	Order No.	Price
7	18mm	10-481	**KP439092**	Price
7	25mm	10-486	**KP439094**	Price

STANLEY Instantchange™ Snap-Off Knife

New!

- Load blades through traditional method or through front loading quick change function
- Dial wheel functions as locking mechanism during use and blade release mechanism when changing blades
- Comfortable one-piece elastomer plastic body
- Durable, smooth stainless steel barrel
- Chemical resistant handle



OAL (in.)	Model No.	Order No.	Price
7-1/2	STHT10187	**KP432044**	Price

STANLEY Fatmax® All Metal Snap-Off Cartridge Knife



- Die cast all metal construction stands up to the most extreme job site conditions
- Blade knob to lock blade in place for heavy duty applications
- Diamond shaped texturing provides a sure grip
- Textured die cast finish for positive slip-resistant grip
- Stainless steel 4 blade cartridge

New!

OAL (in.)	Model No.	Order No.	Price
8	10-817	**KP439104**	Price

STANLEY Retractable Pocket Cutter

New!

- Light-duty, retractable cutter with Quick-Point™ Snap-Off Blades
- Blade sections snap off providing a fresh, sharp cutting point



OAI (in.)	Model No.	Order No.	Price
6	10-143P	**KP431908**	Price

STANLEY Quick Point® Knives

New!

- Light-duty, retractable knife with Quick-Point® Snap-off blades
- Blade sections snap off providing fresh, sharp cutting points
- Removable blade snapper included in cap of knife
- Points on Blade: 8



OAL (in.)	Size	Model No.	Order No.	Price
5-1/8	9mm	10-150	**KP431910**	Price
6-1/8	18mm	10-151	**KP431912**	Price

OLFA® Replacement Blades

- OLFA snap-off utility knife blades are made of the finest quality tool grade steel
- Ground, then specially honed for maximum cutting performance
- The snap-off segment is then angled to a precise 59°
- Designed by OLFA, the 59° angle, has become the international standard for the snap-off blade
- The premium UltraSharp Black blades are double honed for superior sharpness and durability
- Fit OLFA and most other brand snap-off blade knives

Blade Length - 18 MM Snap-Off Blade. 8 Segments Per Blade			
Used With Cutting Knife	**Pkg. Qty.**	**Order No.**	**Price**
L-1	Ultra Sharp Black Blade. 10 Pack	**FS609070**	Price
L-1	10 Pack	**FS605009**	Price
L-1	50 Pack	**FS605016**	Price
L-1	Ultra Sharp Black Blade. 50 Pack	**FS609069**	Price

Blade Length - 25 MM Snap-Off Blade. 7 Segments Per Blade			
Used With Cutting Knife	**Pkg. Qty.**	**Order No.**	**Price**
HB-5B	5 Pack	**FS605008**	Price

Blade Length - 9 MM Snap-Off Blade. 13 Segments Per Blade			
Used With Cutting Knife	**Pkg. Qty.**	**Order No.**	**Price**
180, SVR-1, SVR-2	Stainless Steel. 10 Pack	**FS609281**	Price
180, SVR-1, SVR-2	Ultra Sharp Black Blade. 10 Pack	**FS609148**	Price
180, SVR-1, SVR-2	10 Pack	**FS605010**	Price
180, SVR-1, SVR-2	50 Pack	**FS605015**	Price
180, SVR-1, SVR-2	Ultra Sharp Black Blade. 50 Pack	**FS609149**	Price

Blade Length - Safety Knife Replacement Blade: Model SK-4			
Used With Cutting Knife	**Pkg. Qty.**	**Order No.**	**Price**
SK-4	10 Pack	**FS609613**	Price
SK-4	50 Pack	**FS609614**	Price

STANLEY Quick-Point™ Snap-Off Utility Blades

- Replacement blade with 13 cutting points - Model No. 11-300
- Replacement blade with 8 cutting points - Model No. 11-301, 11-301L, 11-301T
- Fits most 9mm snap-off blade knives

New!



Model No.	Blade Length (in.)	Blade Thickness (in.)	Pkg. Qty.	Order No.	Price
11-300	3-1/4	.017	3	**KP431966**	Price
11-301	4-1/4	.020	3	**KP431968**	Price
11-301T	4-1/4	.020	10 with Dispenser	**KP431972**	Price
11-301L	4-3/4	.020	50	**KP431970**	Price

STANLEY Fatmax® Snap-Off Utility Blades

- Heat treated for strength and induction hardened for longevity
- Ideal for cutting drywall, styrofoam, insulation, foam backed carpet, reinforced carpet, linoleum, cork, tar paper, house wrap
- 75% longer life
- 35% sharper
- 20% stronger
- Points on Blade: 8 - Model No. 11-718, 11-718L, 11-718T
- Points on Blade: 7 - Model No. 11-725, 11-725L

New!



Model No.	Blade Length (in.)	Blade Thickness (in.)	Pkg. Qty.	Order No.	Price
11-718	4-1/4	.020	5	**KP439114**	Price
11-718T	4-1/4	.020	10	**KP439118**	Price
11-725L	5-1/2	.020	50	**KP439122**	Price

STANLEY Regular Duty Utility Blades



- Regular-duty utility blade for light sheet materials, paper and cardboard
- Fits most standard utility knives

Model No.	Blade Length (in.)	Blade Thickness (in.)	Pkg. Qty.	Order No.	Price
11-911	2-7/16	.017	5	**KP431992**	Price
11-911A	2-7/16	.025	100	**KP431994**	Price

STANLEY Fatmax® Utility Blades



- Induction-hardened edge offers 75% longer-lasting blade life
- 20% stronger blade is heat treated for flexibility
- Blade edge remains 35% sharper

Model No.	Blade Length (in.)	Blade Thickness (in.)	Pkg. Qty.	Order No.	Price
11-700	2-7/16	.024	5	**KP439106**	Price
11-700T	2-7/16	.024	10	**KP439112**	Price
11-700L	2-7/16	.024	50	**KP439110**	Price
11-700A	2-7/16	.024	100	**KP439108**	Price

STANLEY Extra Heavy Duty Utility Blade



- Cuts thick, dense sheet materials
- Designed for use in fixed blade knives only

Model No.	Blade Length (in.)	Blade Thickness (in.)	Pkg. Qty.	Order No.	Price
11-931	2-7/16	.035	1	**KP432010**	Price

STANLEY Heavy Duty Utility Blades



- For general purpose cutting
- Precision-honed edge for consistent and long cutting life
- Fits most standard utility knives

Model No.	Blade Length (in.)	Blade Thickness (in.)	Pkg. Qty.	Order No.	Price
11-921	2-7/16	.024	5	**KP431996**	Price
11-921T	2-7/16	.024	10 with Dispenser	**KP432006**	Price
11-921L	2-7/16	.024	50 with Dispenser	**KP432004**	Price
11-921A	2-7/16	.024	100 with Dispenser	**KP431998**	Price
11-921B	2-7/16	.024	400	**KP432002**	Price

STANLEY Fatmax® Carbide Heavy Duty Utility Blades



- Blade stays sharper 10X longer
- Steel body allows flexibility to help to prevent breaking
- Laser deposited carbide lines edge delivering a long lasting blade for the job site

Model No.	Blade Length (in.)	Blade Thickness (in.)	Pkg. Qtry.	Order No.	Price
11-800	2-7/16	.025	5	**KP439124**	Price
11-800T	2-7/16	.025	10	**KP439128**	Price
11-800L	2-7/16	.025	50	**KP439126**	Price

STANLEY Carbon Round Point Utility Blades



- Rounded edges help reduce risk of accidental cuts
- Blade is used in applications where safety is a concern and for preventing damage to carton contents when opening boxes
- Made of high carbon steel
- Fits most standard utility knives

Model No.	Blade Length (in.)	Blade Thickness (in.)	Pkg. Qty.	Order No.	Price
11-987	2-13/64	.024	5	**KP432036**	Price
11-988	2-13/64	.024	100	**KP432038**	Price

IRWIN Industrial Tools The Irwin Blue Blade

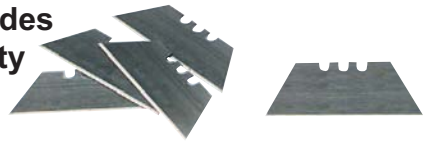
MADE IN THE USA



- Revolutionary unbreakable utility blade
- Patented bi-metal technology sets new standards of performance by providing an unbreakable blade that stays sharp three times longer than the next best utility blade
- Further enhanced by the quick & easy functionality of the Irwin Utility Knives

Utility Knife Bi-Metal Blade	Order No.	Price
5 Pack	**KX502084100**	Price
20 Pack	**KX502084200**	Price
50 Pack	**KX502084300**	Price

GENERAL Knife Blades for Side Lock Utility Knife



Style - Heavy-Duty Blades			
Thickness (in.)	Pkg. Qty.	Order No.	Price
.025	100 Pack	**NE50852100**	Price

U.S. BLADE Manufacturing Company Inc. Heavy Duty .025 Thick Utility Blades



FS5511209



FS5511219

Pkg. Qty.	Order No.	Price
20 Packs of 5	**FS5511209**	Price
20 Packs of 5	**FS5511219**	Price

STANLEY Large Hook Utility Blades

New!



- Edge protection blade for cutting and trimming roofing materials, linoleum, carpet, fabric, cartons and sheet materials
- Blade shape helps prevent damage to materials beneath cutting surface
- Fits most standard utility knives

Model No.	Blade Length (in.)	Blade Thickness (in.)	Pkg. Qty.	Order No.	Price
11-983	1-7/8	.024	5	**KP432028**	Price
11-983L	1-7/8	.024	50 with Dispenser	**KP432032**	Price
11-984	1-7/8	.024	100	**KP432034**	Price

GENERAL Hobby Knife Blades



NE501920



NE501922



NE501923



NE501924

Replacement For	Order No.	Price
1901	**NE501920**	Price
1902, 1903, 1905	**NE501922**	Price
1902, 1903, 1905	**NE501923**	Price
1902, 1903, 1905	**NE501924**	Price

STANLEY Hobby Knife Utility Blade

New!



- For fine angle cutting
- Fits Stanley® 10-401 Hobby Knife

Model No.	Blade Length (in.)	Blade Thickness (in.)	Pkg. Qty.	Order No.	Price
11-411	1-9/16	.020	3	**KP431978**	Price

FISKARS® Bent Shears

- Effective on heavier materials
- Oversized handle improves comfort and operations
- Adjustable rivet allows you to adjust tension



OAL (in.)	Order No.	Price
9-1/2	**LA5594416297**	Price

OLFA® HD Stainless Steel Scissors

More effective than scissors costing much more!

- One blade is serrated for maximum material control
- Effective on extremely tough materials such as composites
- Made in Japan



OAL (in.)	Order No.	Price
5-1/4	**FS601096876**	Price
5	**FS6040040**	Price
7	**FS6040041**	Price

Clauss 8" Ultraflex Straight Shears

- Stainless steel blade
- Comfortable and lightweight Ultraflex handles
- Extra large lower bow for gloved hands
- Adjustable
- Straight



OAL (in.)	Blade Length (in.)	Order No.	Price
11	8	**LA5615313**	Price

Clauss 8" Left Hand Bent Shears

- Heavy duty shears
- Thick stainless steel blades
- Long-lasting edges will withstand use
- Ergonomic nylon handles designed for comfort
- Adjustable



OAL (in.)	Blade Length (in.)	Order No.	Price
8	3	**LA5618320**	Price

Clauss 5" Titanium Non-Stick Pointed Shears

- Made using the very latest technology
- Thru-hardened Titanium Bonded cutlery-grade steel is combined with a breakthrough Non-Stick formula
- Blades that stay sharper longer and resist adhesives from tapes, glues and Velcro® that can interfere with performance
- Precision ground blades
- Cushioned ribgrip handles



OAL (in.)	Blade Length (in.)	Order No.	Price
7	5	**LA5618541**	Price

Clauss 10" Titanium Bonded UltraFlex Shears

- Titanium bonded blades are 3x harder than stainless steel so they stay sharper longer
- Blades will resist corrosion & adhesives
- Bent, heavy-duty shear
- Comfortable ultraflex handles with extra-large finger bows
- Adjustable tension
- Oversized blades with knife edges



OAL (in.)	Order No.	Price
12-1/2	**LA5618517**	Price

Clauss Extreme Edge Shears

- Titanium bonded blades are 3x harder than stainless steel so they stay sharper longer
- Blades will resist corrosion snd adhesives
- Bent, ergonomic glass-filled nylon handles
- Cuts multiple layers of material
- Includes hex key tool for adjusting tension depending on the type of material you need to cut
- Industrial strength shear, constructed for durability



OAL (in.)	Blade Length (in.)	Order No.	Price
9	4-1/4	**LA5618078001**	Price
8	3-1/2	**LA5618091**	Price

FISKARS® 9-1/2" Titanium Shop Shears

- High carbon, serrated stainless steel blades
- Blades are coated with titanium nitride to resist wear,nicke, scrathches and damage from corrosive material
- Handy notch in blade for cutting cord, rope and light wire
- Oversized handles for comfort and control
- Blades can be resharpened



OAL (in.)	Order No.	Price
9-1/2	**LA5596536984J**	Price

Clauss 8" Titanium Shears

- Made using the very latest technology
- Thru-hardened titanium bonded cutlery-grade steel is combined with a breakthrough non-stick formula
- Blades stay sharper longer and resist adhesives from tapes, glues and Velcro® that can interfere with performance
- Precision ground blades
- Cushioned rib grip handles

New!



OAL (in.)	Blade Length (in.)	Order No.	Price
8	2-1/2	**LA5619592**	Price
9-3/4	8	**LA5618543**	Price

Clauss 5-1/4" Kevlar Shears

- Designed to cut Kevlar® materials, electrical tape and more
- Glass-filled nylon ergonomic handle
- High carbon alloy steel
- Hollow ground and thru-hardened serrated blades
- Molybdenum and vanadium blades for industrial strength



OAL (in.)	Blade Length (in.)	Order No.	Price
5-1/2	5-1/4	**LA5618074**	Price

Wiss Heavy Duty Industrial Shears

- Hot drop-forged polished blades, made of quality cutlery steel
- Black handles



OAL (in.)	Blade Length (in.)	Order No.	Price
10	4-3/4	**LA5020**	Price
12	6-1/8	**LA5022**	Price

Wiss Bent Trimmers Industrial Shears

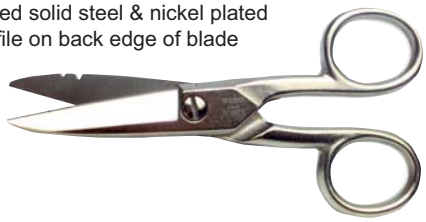
- Made of high carbon steel
- Black handle
- Hot drop-forged nickel-plated blades



OAL (in.)	Blade Length (in.)	Order No.	Price
8-1/8	3-3/4	**LA50428**	Price

Wiss Electrician's Scissors

- Double stripping notch for 19 gauge (.035) and 23 gauge (.022) wire
- Hot drop-forged solid steel & nickel plated
- Scraper and file on back edge of blade



OAL (in.)	Blade Length (in.)	Order No.	Price
5	1-7/8	**LA50175E5**	Price

FISKARS Quick Release Multi-Snip

- High carbon steel blades ground for long-lasting sharpness
- Contoured, spring loaded handles for reduced hand fatigue
- Cuts vinyl, light sheet metals and screen



Order No.	Price
LA5502322402	Price

Wiss Industrial Thread Nippers

- Hot drop-forged cutlery steel
- Self-opening spring-action assures fast, effortless cutting
- Fully nickel plated



OAL (in.)	Blade Length (in.)	Order No.	Price
4-3/4	1-1/8	**LA50TC1**	Price

Wiss ERGO Shears

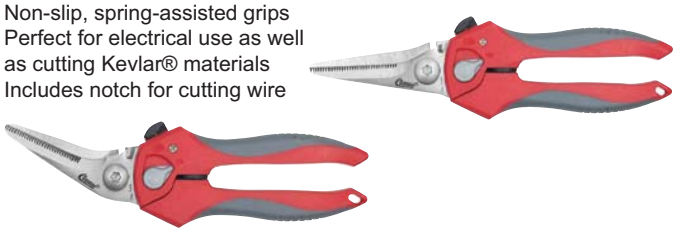
- W7T Shear wider blades for extra strength
- W10TM Adjustable pivot for easy turns
- Titanium coating is 3X harder than steel for longer life
- Precision ground blades for smooth cutting
- Stainless steel blades for corrosion resistance
- Adjustable pivot allows for fine-tuning to most comfortable setting
- Ergonomic handle design for maximum comfort
- Cuts paper, fabric, cardboard, plastic, and more



OAL	Description	Order No.	Price
7"	Utility Shears	**LA50W7T**	Price
10"	Shop Shears	**LA50W10TM**	Price

Wire Cutting Notch Snips

- Industrial stainless steel snip designed to cut plastic, wire, rope, rubber, cardboard and more
- Precision ground blades with serration for grip & cut performance
- Handles and tension are adjustable
- Non-slip, spring-assisted grips
- Perfect for electrical use as well as cutting Kevlar® materials
- Includes notch for cutting wire



OAL (in.)	Cut	Order No.	Price
10	Straight	**LA5618085**	Price
11	Bent	**LA5618086**	Price

FISKARS Softouch Multi-Purpose Scissors

- A flat bottom allows shears to slide smoothly across cutting surface
- Strong, capable blades cut multiple layers of fabric, string, cardboard, etc.
- Easy slide-lock
- Adjustable pivot screw



OAL (in.)	Order No.	Price
8	**LA5599116297**	Price

Wiss Easy Snip Utility Shears

- Soft touch co-moulded handle
- Thumb latch for secure storage
- Lightweight wire cutting notch in lower blade
- 4" Spring-loaded , corrosion restistant 420 stainless steel blades
- 8-1/2" Overall length



Order No.	Price
LA50WEZSNIP	Price

STANLEY 4-1/2" Mini Hot Melt Glue Gun



- Built-in stand
- Uses mini hot melt or dual temperature glue
- Trigger-feed mechanism controls glue flow
- Uses standard .28” mini hot melt sticks
- Uses GS10DT Mini Glue Sticks

Order No.	Price
KP433914	Price

STANLEY 8-1/2" Heavy Duty Hot Melt Glue Gun



- Quality engineered for reliable performance
- Trigger-feed mechanism controls glue flow
- Heats up quickly and bonds within 60 seconds
- Uses standard hot melt sticks
- Fold-out stand for safe, handy storage while in use
- Uses Standard .45” Size Glue Sticks: GS15DT, GS20DT, GS25DT, GS230DT, GS260A, GS264BK, GS500, GS500BK glue sticks
- Sleek ergonomic design
- Built in Stand

Model No.	Order No.	Price
GR20	**KP433918**	Price

STANLEY 8-1/2" Trigger Feed Standard Dual-Melt Glue Gun



- Offers the versatility of high and low-temperature gluing in one gun
- Uses standard dual-temperature glue on both settings and hot-melt formulas on high setting
- Heats up quickly and bonds within 60 seconds
- Fold-out stand for handy storage while in use
- Uses Standard .45” Size Glue Sticks: GS15DT, GS20DT, GS25DT, GS230S, GS260A GS264BK, GS500, GS500BK glue sticks

Model No.	Order No.	Price
GR25-2	**KP433922**	Price

STANLEY Glue Sticks



- For use in hot melt or dual melt glue guns
- Sensitive materials as well as general applications
- For use in standard hot-melt, low-temperature and dual-temperature glue guns
- Excellent for bonding heat-sensitive materials, as well as general applications
- Standard diameter .45” glue sticks in 4” and 10” lengths
- Used by GR20, GR25-2 and GR100 Glue Guns

Style	Size (in.)	Pkg. Qty	Model No.	For Use With	Order No.	Price
Dual Temp Mini	1/4 x 4	24	GS10DT	GR10 Glue Gun	**KP433924**	Price
Formula II-Super Strength	4	6	GS500	GR20, GR25-2 & GR100	**KP433934**	Price
Dual Temperature	7/16 x 10	12	GS25DT	GR20, GR25-2 & GR100	**KP433932**	Price
Dual Temperature	7/16 x 4	24	GS20DT	GR20, GR25-2 & GR100	**KP433928**	Price
All Purpose	7/16 x 4	6	GS230S	GR20, GR25-2 & GR100	**KP433930**	Price
Duel Temperature	7/16 x 4	6	GS15DT	GR20, GR25-2 & GR100	**KP433926**	Price

All-Purpose Glue Sticks



- Best choice for bonding metal, glass and wood

Size (in.)	Order No.	Price
1/2 x 10 G/P Glue Sticks-24 Pak	**PH5522911ZIP24**	Price
1/2 x 4 G/P Glue Sticks-30 Pak	**PH5522914ZIP30**	Price

STANLEY 6-1/5" Trigger Feed Hot Melt Glue Gun Kit



- Heats up fast and bonds within 60 seconds
- Trigger feed mechanism for glue flow control
- Uses .45” glue sticks

Model No.	Order No.	Price
GR20K	**KP433920**	Price

STANLEY 8-1/2" DualMelt Pro™ Glue Gun Kit



- Delivers industrial performance with consumer appeal
- Exclusive auto shutoff light
- Dual heater provides outstanding glue output
- Temperature switch for both high- and low-temperature
- On/off light and protected nozzle for added safety
- Cushion grip for comfortable, slip-resistant trigger action
- Interchangeable nozzle capability
- Fold-out stand for safe, handy storage while in use
- Uses Standard .45” Size Glue Sticks: GS15DT, GS20DT, GS25DT, GS230S, GS260A GS264BK, GS500, GS500BK glue sticks
- Includes: 1 DualMelt Pro™ Glue Gun, 1 Spreader Tip, 1 Extender Tip, 6 Dual Temp Glue Sticks- 4” x 0.45”, 6 Glue Sticks- 4” x 0.45”, 5 Super Strength Glue Sticks- 4” x 0.45”



Model No.	Order No.	Price
GR100	**KP433916**	Price

ARROW TR550 Heavy Duty Hot Melt Glue Gun

- Professional quality easy squeeze automatic lever feed for extra control and tireless operation
- Unique design keeps heat flow away from handle so it does not get hot as others do
- Clutch mechanism prevents glue backup
- Interchangeable nozzle
- Check valve controls glue flow



Order No.	Price
KX6000002	Price

All-Purpose Glue Sticks



- All-Purpose clear for crafts, hobbies and general repairs
- For woodworking, ceramics, leather, canvas, fabrics, cardboard plastics, metal, etc.
- Press surface together within 15 seconds. Sets in 30 to 60 seconds

Size (in.)	Pkg. Quantity	Order No.	Price
1/2 x 10	12-Pc. Pack	**KX6000011**	Price
1/2 x 4	24-Pc. Pack	**KX6000010**	Price

Pro-100 Glue Gun Nozzles



3607 3608 3619

Description	Order No.	Price
Flat Spreader Nozzle - 1/4" Ribbon Bead	**PH553608**	Price
Hypodermic Needle Nozzle - 1/8" OD x 1/2"L Tip	**PH553607**	Price
Standard Cone Nozzle - .070 Tip	**PH553619**	Price

STANLEY SharpShooter® Heavy Duty Staple Gun

- Easy-squeeze handle reduces hand fatigue
- Anti-jam mechanism saves time on the job
- High-visibility yellow color easy to spot in a toolbox or workshop
- Durable aircraft-aluminum housing withstands heavy use
- Delivers high power and deep penetration
- Easy-slide full-stick staple load
- Uses Stanley® SharpShooter® TRA700; T-50® heavy duty staples

New!



Model No.	Order No.	Price
TR150	**KP433968**	Price

STANLEY Heavy Duty Chrome Plated Steel Staple Gun

- Chrome-plated all steel construction for durability
- Bottom load staples for quick and easy reloading
- Handle lock for convenient storage
- For everyday stapling needs around the home or office
- Uses TRA700 Series; T50 Staples from 1/4" to 9/16"

New!



Model No.	Order No.	Price
TR110	**KP433966**	Price

ARROW #T-50 Heavy Duty Staple Guns

- One squeeze shoots a staple wherever a nail can be driven into the hardest wood, plywood, composition board, plastic and even light metals
- Jam-resistant mechanism with hardened steel working parts
- Uses T50 staples

New!



Order No.	Price
KX6000050	Price

STANLEY Heavy-Duty Hammer Tacker

- Used for fast installation of carpeting, roofing materials or insulation
- Full-rubber grip absorbs shock and helps protects hand
- Heavy-duty steel construction for durability
- Loads two full sticks of Stanley® TRA700 or T-50; heavy duty staples from 1/4" to 3/8"

New!



Model No.	Description	Order No.	Price
PHT150C	Staples, 1/4, 5/16, 3/8"	**KP433540**	Price

ARROW Hammer Tacker

MADE IN THE USA

Professional Grade

- Drives a heavy .050 Arrow staple with every strike
- Widely used for insulation, roofing felt, carpet padding, display materials, and other applications where speed and ease of operation are more important than precise staple placement
- Use T50 staples



Order No.	Price
KX6000053	Price

STANLEY 3/8" Heavy Duty Narrow Crown Staples

- For heavy duty stapling jobs such as insulation, carpet under laying and roofing felt
- Color-coded packaging makes size and product selection a cinch
- Sturdy plastic packaging reduces staple breakage
- Heavy Duty; Narrow Crown; Fits TR100, TR200, TRE500 Series, PHT150, PHT250; T-50

New!



Model No.	Order No.	Price
TRA706T	**KP434016**	Price

ARROW Staples

MADE IN THE USA

- No. T50 staples (1,250/pack)
- For use with: T50P, T50PBN, ETF50P, and HT50P staple guns

Item	Staple Type	Size (in./mm.)	Order No.	Price
504	T50	1/4 / 6 mm	**KX6050014**	Price
505	T50	5/16 / 8 mm	**KX6050516**	Price
506	T50	3/8 / 10 mm	**KX6050038**	Price
508	T50	1/2 / 12 mm	**KX6050012**	Price
50CT	T50 Ceiltile	17/32 / 13 mm	**KX6050000**	Price

PROTO 2 & 3 Jaw Gear Pullers

MADE IN THE USA

- Acme thread screw reduces thread angle for more pulling power
- Non-crushing jaw
- Reversible jaws

New!


KP4266235


KP4266270


KP4266290


KP4266285


KP4266295

Type	Rating	Maximum Reach	Maximum Spread	Model No.	Order No.	Price
2 or 3-Jaw Adj. Gear Puller, Rev. Jaws	2 Ton	3-1/4	4	J4034	**KP4266270**	Price
2-Jaw Adj. Gear Puller, Rev. Jaws	2 Ton	3-1/4	4	J4033	**KP4266265**	Price
2-Jaw Adj. Gear Puller, Rev. Jaws	5 Ton	5-1/2	6	J4035	**KP4266275**	Price
3-Jaw Gear Puller, Reversible	5 Ton	3-1/4	7	J4046	**KP4266295**	Price
2 or 3-Jaw Adj. Gear Puller, Rev. Jaws	5 Ton	5-1/2	7	J4036	**KP4266280**	Price
3-Jaw Gear Puller, Reversible	7 Ton	5	10-1/2	J4047	**KP4266305**	Price
2-Jaw Adj. Gear Puller	7 Ton	5-1/2	9-1/2	J4037	**KP4266285**	Price
2 or 3-Jaw Adj. Gear Puller	7 Ton	8-3/4	9-1/2	J4038	**KP4266290**	Price

Snap-on Industrial Brands | WILLIAMS Two & Three Jaw Pullers

MADE IN THE USA



- Anvil Hex Head allows for use of a hammer to jar loose stubborn parts
- Spring loaded cover place securely holds jaws in place and allows for easier
- Spring Tensioned and self-locking jaws
- Interchangeability- Different jaws can be used with yoke
- Jaws are forged for maximum strength
- Curved Jaw design- This allows for a secure grip
- Reversible Jaws can be reversed in a simple operation
- Yoke is forged and precisely heat-treated
- Yoke is compatible with both slide hammer or pressure screw
- The centering point directs power to help prevent cocking of the puller

No. Jaw of Pullers	Cap. (Ton)	Max. Reach (in.)	Max Inside Spread (in.)	Max. Outside Spread (in.)	Order No.	Price
2	2 ton	2-1/2	3-1/4	3	**KP3087001**	Price
2	2 ton	3-1/2	3-3/4	4	**KP3087002**	Price
2	6 ton	3	3-1/2	4-1/2	**KP3087005**	Price
2	10 ton	5-1/2	7-1/2	8-1/2	**KP3087008**	Price
2	10 ton	8-3/4	8	10	**KP3087009**	Price
2	10 ton	15	11-1/2	13-3/4	**KP3087012**	Price
2	20 ton	9-1/2	10	12	**KP3087014**	Price
2	20 ton	14-3/8	13	16	**KP3087015**	Price

No. Jaw of Pullers	Cap. (Ton)	Max. Reach (in.)	Max Inside Spread (in.)	Max. Outside Spread (in.)	Order No.	Price
3	2-1/2 ton	2-1/2	3-1/4	3	**KP3087003**	Price
3	2-1/2 ton	3-1/2	3-3/4	4	**KP3087004**	Price
3	6 ton	6	8	NR	**KP3087006†**	Price
3	7-1/2 ton	3	3-1/2	4-1/2	**KP3087007**	Price
3	12-1/2 ton	5-1/2	7-1/2	8-1/2	**KP3087010**	Price
3	12-1/2 ton	8-3/4	8	10	**KP3087011**	Price
3	12-1/2 ton	15	11-1/2	13-3/4	**KP3087013**	Price

† Not recommended - designed as an inside puller only.

POSI LOCK PULLER, INC. Two & Three General Purpose Puller

MADE IN THE USA



Features and Benefits:

- Safety Cage® controls jaws at all times
- T-handle locks jaws precisely where you set them
- Slim tapered jaws allow for easier gripping and better access to tight spots
- Nut recessed to avoid mushrooming and disfiguration form impact
- Up front leverage provides a positive lock on work force surface and no slippage
- Rolled threads for less effort when applying torque
- Safe and easy to use
- Complete tool, fully assembled - NO PARTS TO LOSE
- Optional long jaws are available to maximize reach and spread (Call for pricing)

Jaws	Capacity	Reach (in.)	Spread	Order No.	Price
2	1 ton	2-1/4	.25" to 3.25"	**KL52202**	Price
2	2 ton	3	1/4 to 4-1/2"	**KL52203**	Price
2	2 ton	4	1/2 to 5"	**KL52204**	Price
2	6 ton	6	1/2 to 7"	**KL52206**	Price
2	12 ton	8	3/4 to 12"	**KL52208**	Price
2	14 ton	9.67	1 to 15"	**KL52210**	Price
2	25 ton	12	2-1/2 to 18"	**KL52213**	Price
2	35 ton	14	3 to 25"	**KL52216**	Price

Jaws	Capacity	Reach (in.)	Spread	Order No.	Price
3	1 ton	2-1/4	1/4 to 3-1/4"	**KL52102**	Price
3	2 ton	3	1/4 to 4-1/2"	**KL52103**	Price
3	5 ton	4	1/2 to 5"	**KL52104**	Price
3	10 ton	6	1/2 to 7"	**KL52106**	Price
3	17 ton	8	3/4 to 12"	**KL52108**	Price
3	20 ton	9-5/8	1 to 15"	**KL52110**	Price
3	30 ton	12	2-1/2 to 18"	**KL52113**	Price
3	40 ton	14	3 to 25"	**KL52116**	Price

PROTO 10 Ton Proto-Ease™ 2-Way Straight Jaw Puller Set

MADE IN THE USA

- Pullers are made using alloy steel for maximum strength and durability
- Spreading capacity ranges from 4" to 11"
- Rated capacity of 2 to 10 Tons
- Puller applications include gear, alternator, transmission and more
- 10 Ton Proto-Ease 2-Way Straight Jaw puller set
- Reach: 2-15/16-inch, 4-11/16-Inch, 7-1/8-inch (18-Inch with jaws bolted together)



Max Reach (bolted together)	Pcs in Set	Model No.	Order No.	Price
12"	9	J4232SJ	**KP4266120**	Price
18"	12	J4234B	**KP4266125**	Price

POSI LOCK PULLER, INC. Manual Puller Set – PM4

MADE IN THE USA

Set of 4 Pullers

- (1) Model 104: 3 Jaw 4” 5 Ton
- (1) Model 106: 3 Jaw 6” 10 Ton
- (1) Model 206: 2 Jaw 6” 6 Ton
- (1) Model 110: 3 Jaw 10” 20 Ton
- (1) P4: Tip protector
- (2) P6: Tip protectors
- (1) P10: Tip protector
- (1) Tool board & accessories
- Tool board size: 16” x 26” (406mm x 660mm)



Order No.	Price
KL52PM4	Price

POSI LOCK PULLER, INC. Internal Puller Set – PM16

MADE IN THE USA

- (1) Model 105: 3 Jaw internal puller, Reach: 3”, Spread 9/16” to 4”
- (1) Model 10561: Slide rod, length: 24”
- (1) Model 10562: 2.5 lb Hammer
- (1) Model L5: Set of 3 Long jaws, Reach: 13”, Spread 1” to 5-1/4”
- (1) Tool board & accessories
- Tool board size: 16” x 26” (406mm x 660mm)



Order No.	Price
KL52PM16	Price

POSI LOCK PULLER, INC. Manual Puller Set – PMW

Set of Mini Pullers

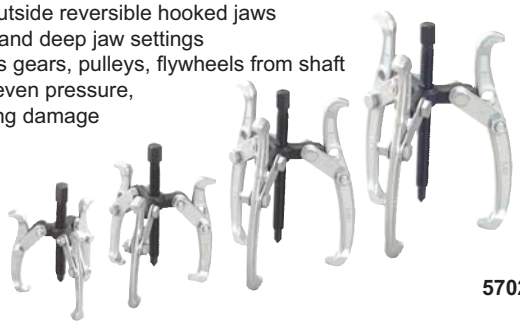
- (1) Model 102: 3 Jaw 2.25” 1 Ton
- (1) Model 202: 2 Jaw 2.25” 1 Ton
- (1) Model 103: 3 Jaw 3” 2 Ton
- (1) Model 203: 2 Jaw 3” 2 Ton
- (1) Tool board & accessories
- Tool board size: 12” x 22” (305mm x 559mm)



Order No.	Price
KL52PMW	Price

PRM PRO 4 Pc. Gear Puller Set 3", 4", 6" & 8"

- Drop forged, heat treated steel jaws
- Hardened and tempered, precision-machined steel center screws are black oxide finished
- Inside/Outside reversible hooked jaws
- Shallow and deep jaw settings
- Removes gears, pulleys, flywheels from shaft
- Applies even pressure, preventing damage



No. of Pieces	Order No.	Price
4	**KP8349300**	Price

Snap-on Industrial Brands | WILLIAMS Medium Duty Combo Puller Set

- 2 and 3 Jaw pullers
- 6 and 7-1/2 Ton capacity
- Components assemble to form 6 different pullers
- Puller gears up to 8” diameter
- Slide hammer screw 5/8-18 x 18-1/16”
- Pressure screw 5/8-18 x 6-7/8”

MADE IN THE USA



Order No.	Price
KP3087020	Price

PROTO 6 Ton Proto-Ease™ 2-Way Straight Jaw Puller

- Designed for pulling machine parts, gears
- Covers most maintenance applications
- Steel storage box

New!

MADE IN THE USA



No. of Jaw Pieces	Reach (in.)	Spread (in.)	Model No.	Order No.	Price
4	2" & 4"	6	J4212SJB	**KP4266070**	Price

PROTO Reversible Jaw Slide Hammer Puller

- Versatile puller which will accomplish many pulling jobs involving gears, bearings, etc
- Either two or three puller jaws may be used to handle “inside” pulling jobs such as bearing cups as well as regular “outside” pulling jobs
- The 5 lb slide hammer can be removed and used independently
- 2-Jaw spread 1-1/4 - 3-1/2 inside; 1” - 4-1/2 outside
- 3-Jaw spread 1-1/2 - 4-1/4 inside; 1-1/2 - 4-1/2 outside
- Jaws included

MADE IN THE USA

PRM PRO New!



Model No.	Order No.	Price
J5049	**KP4266150**	Price

PROTO 6 Ton Standard Puller Set

- Makes over 20 of the most often used pullers including internal, external, slide hammer, rear axle, harmonic balancer, etc

MADE IN THE USA

Includes;

- (1) T-Handle slide rod 24”
- (1) 2-1/2 lb slide hammer
- (1) Reversible adjusting nut
- (2 Total 1 of each) 2-jaw and 3-jaw yoke
- (1) Slotted crossarm 2-way/3-way
- (6 Total - 3 of each) 4” reach & 6” reach reversible jaws
- (2) Inside jaw 2” reach
- (3) Jaw pivot pin
- (1) Inside hook jaw
- (1) Forcing screw
- (1) Standard detachable tip
- (3) Capscrew 3/8-16 x 3
- (3) Capscrew 3/8-24 x 3
- (3) Capscrew 3/8-16 x 4
- (1) 5 lb slide hammer
- (1) Short slide rod - 12-3/4” long
- (1) Rear axle flange foot
- (1) Set puller blind bearing
- (1) Gear and bearing separator
- (1) Blow-molded case

New!

MADE IN THE USA



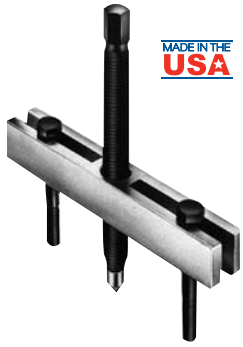
Model No.	Order No.	Price
J4290B	**KP4266005**	Price

PROTO 6 Ton 2-Way Threaded Part Puller

- Slotted crossarm puller used to remove a universal joint flange

New!

MADE IN THE USA



Span (in.)	Bolt Size	Model No.	Order No.	Price
1-1/4 - 6-1/4	3/8-16 x 3	J4214	**KP4266260**	Price

PROTO 10 Ton Jaw Block Assembly

Model No. J4231A

MADE IN THE USA

New!

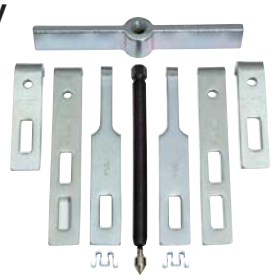


Order No.	Price
KP4266090	Price

PROTO 11 Pc 10 Ton 2-Way Straight Jaw Puller Set

- Reach: 2-15/16”, 4-11/16” and 7-1/8” (18” with jaws bolted together)

New!



Spread (in.)	Model No.	Order No.	Price
10	J4234	**KP4266100**	Price

PROTO 10 Ton Proto-Ease™ Wide Puller Set

MADE IN THE USA

- Required for large parts with heavy press-fits
- Makes 10 different adjustable and straight jaw pullers

New!

Includes:

- (1) Forcing Screw
- (1) Standard Tip
- (1) 2-Way Crossarm, 11” Long
- (1) 3-Way Crossarm, 11” Long
- (3) Adjustable Jaw Block Assembly
- (3) Dual Reach Jaw
- (3) Cap Screw Jaw
- (3) Long Narrow Jaw
- (3) Spring Clip
- (1) Bearing Separator
- (1) Blow-Molded Case



Reach (in.)	Spread (in.)	Model No.	Order No.	Price
12	11	J4292B	**KP4266015**	Price

Economy Hacksaw Frame

- Frame adjusts to 10” or 12” blade
- 10” blade included



Order No.	Price
KZ507	Price

General Purpose Hacksaw Frame

- Adjustable for 10” or 12” blades
- Adust 90° for vertical or horizontal cuts
- 10” blade included



Order No.	Price
KZ509	Price

Heavy Duty Hacksaw Frame

- Sturdy nickle plated steel frame
- 45° Blade adjustment
- Fully adjustable for 10”, 12” blades
- 10” blade included



Order No.	Price
KZ5010	Price

12" High Tension Hacksaw Frame

- Rugged lightweight frame built for professionals
- Blade included



Order No.	Price
KZ5012	Price

Pro Series 4 Saws in 1 Hand Saw

Comes with 1 Nicholson® Bi-Metaloy® HSS edge 18 tooth 12” hacksaw blade and 1 Nicholson® HSS Bi-metal 8” x 3/4” .035 reciprocal saw blade

- Standard 90° for general use
- 45° Angle for flush cuts
- Low profile position for tight spaces
- Jab saw configuration for a variety of inside cuts
- High tension for tightening the blade up to 30,000 psi
- Cushion grip handle for better control and comfort
- Magnetic blade storage inside frame



Order No.	Price
KZ5080975	Price

12" Rubber Grip Hacksaw

New!

- Robust, all-metal frame for durability
- Full grip, bi-material handle helps protect knuckles
- Compact frame for comfort and control
- 225 lbs of blade tension is 65% higher than standard hacksaws
- 90° and 180° adjustable blade angles allowing flush cuts
- Large tensioning knob for ease of use



Model No.	Order No.	Price
STHT20139L	KP434602	Price

Ergonomic Hand Hacksaw Frame

ergo®

- Designed according to Bahco 11-point scientific ergonomic program
- Two rubber coated hand grips for comfort and control
- A tensioning lever designed for fast and safe blade changes
- Highest blade tensioning results in a straight cut
- Supplied with Bahco 12 inch bi-metal blade for safety and efficiency



Order No.	Price
FX84325	Price

Heavy Duty Frame with Blade Storage

- Allows very high blade tension for accurate and fast cuts
- Strong rectangular back section for blade storage with easy-to-handle retaining screws
- Can also be used as a compass saw
- Alternative 55° blade mounting for flush cutting
- Supplied with reliable and shatterproof 12” bi-metal blade, 24 TPI



Order No.	Price
KL30225PLUS	Price

Jab Saw

Pro Touch Jab Saw: Ergonomic ProTouch Handle, Thick Body Blade, Aggressive Tri-ground Teeth for Close Quarter Sawing



KX502014100

Standard Jab Saw: Hardwood Handle, Ridgid Blade, Bi-Ground Teeth, For close quarter Sawing



KX502014102

Pro Touch Multi-Saw: Ergonomic ProTouch Handle, Includes Two Blades for Metal and Wood. Accepts Standard Reciprocating Blade or Hacksaw Blade



KX502015100

Type	Blade Length (in.)	Order No.	Price
Pro Touch Jab Saw	6-1/2	KX502014100	Price
Pro Touch Multi-Saw	10	KX502015100	Price
Standard Jab Saw	6-1/2	KX502014102	Price

Snap-on Industrial Brands | BAHCO Bi-Metal Hand Hacksaw Blades

- Precision ground teeth for all kinds of metal sawing
- Blade back made of strong, flexible spring steel with a tooth line of high-alloyed super high speed steel
- Bi-Metal construction guarantees the blade to keep its sharpness for a long time
- Combine extreme cutting performance and wear resistance with a high degree of flexibility
- Vastly superior to all-hard high speed blades or conventional, flexible blades





Length (in.)	Width (in.)	Thickness (in.)	TPI	Blades/Pkg.	Order No.	Price
10	1/2	.025	18	100	**KL3025018100**	Price
10	1/2	.025	24	100	**KL3025024100**	Price
10	1/2	.025	32	100	**KL3025032100**	Price
12	1/2	.025	14	100	**KL3030014100**	Price
12	1/2	.025	18	10	**KL303001810P**	Price
12	1/2	.025	18	100	**KL3030018100**	Price
12	1/2	.025	18	2	**KL30300182P**	Price
12	1/2	.025	18, 24, 32	3	**KL303003P**	Price
12	1/2	.025	24	10	**KL303002410P**	Price
12	1/2	.025	24	100	**KL3030024100**	Price
12	1/2	.025	24	5	**KL30300245P**	Price
12	1/2	.025	32	10	**KL303003210P**	Price
12	1/2	.025	32	100	**KL3030032100**	Price
12	1/2	.025	32	2	**KL30300322P**	Price
12	1/2	.025	32	5	**KL30300325P**	Price

Snap-on Industrial Brands | BAHCO Tungsten Carbide Hacksaw Blade

Metal Cutting

- Anti-corrosion treated, carbon steel blade back
- Tungsten carbide grit toothing
- Fits all 12” metal saw frames



Blade Length (in.)	Order No.	Price
12	**KL303816300**	Price

Starrett® Bi-Metal Unique High Speed Steel Hand Hacksaw Blades

Safe-Flex

- Best for tough materials and conditions of all types
- Welded cutting edge of high-speed steel with a tough, alloy steel back
- 1/2” Wide x .025 thick
- 10 Blades per pack



		Bluestripe®	
Length (in.)	TPI	Order No.	Price
10	18	**FV60BS1018**	Price
10	24	**FV60BS1024**	Price
12	18	**FV60BS1218**	Price
12	24	**FV60BS1224**	Price
12	32	**FV60BS1232**	Price

Hand Hacksaw Blades

- High speed steel
- 1/2” Wide
- .025” Thick
- Quantity discounts - 200 pc. - 10%, 500 pc. - 15% (quantities of one part number)



Length (in.)	TPI	Order No.	1 pair	200 pair	500 pair
10	18	**FV51HS1018**	Price	Price	Price
10	24	**FV51HS1024**	Price	Price	Price
10	32	**FV51HS1032**	Price	Price	Price
12	18	**FV51HS1218**	Price	Price	Price

Packing: 100 blades per box - 10 blades per bundle.

STANLEY Fatmax® 15" Handsaw

- SharpTooth™ Saw Technology uses three cutting surfaces to cut 50% faster than conventional STANLEY® Hand Saws
- Induction-hardened teeth stay sharp up to 5X longer than standard teeth
- Thick, ergonomically designed grip helps reduce slipping and adds comfort
- Back of saw can be used to mark 45° and 90° angles

New!



Size (in.)	Model No.	Order No.	Price
15	20-045	**KP439260**	Price

STANLEY Fatmax® Jab Saw

- SharpTooth™ technology cuts on push and pull strokes and is up to 50% faster than traditional tooth designs
- Comfortable, slip-resistant, bi-material handle is designed for strength and durability
- Sharpened tip punches through drywall with ease

New!



Blade Length (in.)	Model No.	Order No.	Price
6-1/4	20-556	**KP439276**	Price

STANLEY Surform® Pocket Plane

- Designed for one-handed use
- Ideal for end-grain work, sheetrocking and smoothing edges of laminates
- Manufactured with a metallic gray, die-cast alloy body
- Includes thumbscrew blade tension for quick blade replacement
- Fitted with a replaceable (5-1/2”/140mm) fine cut blade
- Use replacement blade 21-291

New!



Size (in.)	Model No.	Order No.	Price
6 x 1-1/2	21-399	**KP432374**	Price

3 Pc. 8" Second Cut Engineering File Set

Set contains three 8” Engineering files with Ergo® handles:

- Hand second
- Half round second
- Round second
- Roll-up Pouch



Order No.	Price
KL3014730622	Price

5 Pc. 8" Bastard Engineering File Set

Set contains five 8” Engineering files with Ergo® handles:

- Hand bastard
- Hand second
- Square bastard
- Half round bastard
- Round bastard
- Roll-up pouch



Order No.	Price
KL3014780812	Price

6 Pc. 4" Smooth Engineering File Set

Set contains six 4” Engineering files with plastic handles:

- Hand smooth
- Warding smooth
- Square smooth
- Three square smooth
- Half round smooth
- Round smooth
- Plastic pouch



Order No.	Price
KL3014760432	Price

3 Pc. 6" File Set

Consists of 1 each:

- 6” Slim taper file
- 6” Round file
- 6” Mill bastard file
- Fitted plastic pouch



Type	Order No.	Price
File Set-Ergo Handles	FR5022015H	Price
File Set-No Handles	FR5022015	Price

5 Pc. General Purpose File Set

Consists of 1 each:

- 10” Half-round bastard file
- 10” Mill bastard file
- 8” Mill bastard file
- 8” Mill smooth file
- 6” Slim taper file
- Fitted plastic pouch



Type	Order No.	Price
Ergo Handle	FR5022040H	Price
No Handle	FR5022040	Price

8 Pc. Machinist File Set

Consists of 1 each:

- 10” Mill bastard file
- 10” Half-round bastard file
- 10” Flat bastard file
- 10” Flat smooth file
- 10” Square bastard file
- 10” Round bastard file
- 7” Slim taper file
- 10” File card cleaner
- Fitted plastic pouch



Order No.	Price
FR5022025	Price

9 Pc. Maintenance File Set

Consists of 1 each:

- 12” Mill bastard
- 10” Flat bastard
- 10” Mill bastard
- 10” Half-round bastard
- 10” Round bastard
- 8” Flat bastard
- 8” Half-round bastard
- 6” Slim taper
- 6” XX Slim



Type	Order No.	Price
Maintenance File Set-Ergo Handles	FR5022030H	Price
Maintenance File Set-No Handles	FR5022030	Price

3 Pc. Paddle Handle File Sets

Consists of 1 each:

- 10” Mill bastard
- 10” Flat Multi-Kut®
- 10” Flat bastard
- Fitted cloth roll pouch and hand file



Type	Order No.	Price
Black Maxi Paddle Handle File Set	FT407275888	Price

5 Pc. 8" General Purpose File Set

Consists of 1 each:

- 8” Mill bastard
- 8” Round bastard
- 8” Square bastard
- 8” Half-round
- 8” Flat Multi-Kut®
- Fitted cloth roll pouch
- File handles included



Order No.	Price
FT407275879	Price

5 Pc. Black Maxi-Sharp® File Set

Consists of 1 each:

- 8” Mill bastard
- 8” Multi-Kut®
- 8” Half-round bastard
- 8” Round bastard
- 8” Square bastard



Order No.	Price
FT40758790	Price

Snap-on Industrial Brands | BAHCO | SIMONDS INTERNATIONAL | NICHOLSON

Mill Files

Excellent for a wide range of applications such as sharpening, draw filing, lathe work and general shop use. Mill Files are single cut on the sides and edges, and taper towards the point in width

- Bastard file, a coarse file designed for fast removal of stock material
- 2nd cut file, a medium file designed for moderate stock removal
- Smooth file, a fine file designed for making an almost smooth surface



Cut - 2nd Cut						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	-	-	-	-	KL3011430420	Price
6	FR5008385	Price	FT407314350	Price	KL3011430620	Price
8	FR5008529	Price	FT407314600	Price	KL3011430820	Price
10	FR5008673	Price	FT407314800	Price	KL3011431020	Price
12	FR5008768	Price	FT407315000	Price	KL3011431220	Price

Cut - Bastard						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5008243	Price	FT407314050	Price	KL3011430410	Price
6	FR5008354	Price	FT407314300	Price	KL3011430610	Price
8	FR5008497	Price	FT407314550	Price	KL3011430810	Price
10	FR5008642	Price	FT407314750	Price	KL3011431010	Price
12	FR5008737	Price	FT407314950	Price	KL3011431210	Price
14	FR5008832	Price	FT407315150	Price	-	-
16	FR5008925	Price	-	-	-	-

Cut - Smooth						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5008306	Price	FT407314150	Price	KL3011430430	Price
6	FR5008416	Price	FT407314400	Price	KL3011430630	Price
8	FR5008560	Price	FT407314650	Price	KL3011430830	Price
10	FR5008704	Price	FT407314850	Price	KL3011431030	Price
12	FR5008799	Price	FT407315050	Price	KL3011431230	Price
14	FR5008894	Price	FT407315250	Price	-	-

Flat Files

Excellent for “Hogging” or rapid stock removal. Flat Files are double cut on both sides, single cut on the edges and taper toward the point in width



Cut - 2nd Cut						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	-	-	-	-	KL3011100420	Price
6	FR5003500	Price	FT407323000	Price	KL3011100620	Price
8	FR5003599	Price	FT407323250	Price	KL3011100820	Price
10	FR5003698	Price	FT407323450	Price	KL3011101020	Price
12	FR5003797	Price	FT407323650	Price	KL3011101220	Price
14	FR5003896	Price	-	-	-	-

Cut - Bastard						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5003367	Price	FT407322700	Price	KL3011100410	Price
6	FR5003467	Price	FT407322950	Price	KL3011100610	Price
8	FR5003566	Price	FT407323200	Price	KL3011100810	Price
10	FR5003665	Price	FT407323400	Price	KL3011101010	Price
12	FR5003764	Price	FT407323600	Price	KL3011101210	Price
14	FR5003863	Price	FT407323800	Price	KL3011101410	Price
16	FR5003980	Price	-	-	-	-

Cut - Smooth						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5003434	Price	FT407322800	Price	KL3011100430	Price
6	FR5003533	Price	FT407323050	Price	KL3011100630	Price
8	FR5003632	Price	FT407323300	Price	KL3011100830	Price
10	FR5003731	Price	FT407323500	Price	KL3011101030	Price
12	FR5003830	Price	FT407323700	Price	KL3011101230	Price
14	FR5003929	Price	FT407323900	Price	-	-

SIMONDS INTERNATIONAL "Red Tang" Files

Warding Files



Cut - 2nd Cut		
Size (in.)	Order No.	Price
4	FT407347950	Price
6	FT407348150	Price
8	FT407348300	Price

Cut - Bastard		
Size (in.)	Order No.	Price
4	FT407347900	Price
6	FT407348100	Price
8	FT407348250	Price

Cut - Smooth		
Size (in.)	Order No.	Price
4	FT407348000	Price
6	FT407348200	Price
8	FT407348350	Price

NICHOLSON Lathe Files



Flat Long Angle

Size (in.)	Order No.	Price
10	FR5007657	Price
12	FR5007688	Price
14	FR5007719	Price

NICHOLSON Chainsaw Files

- Double-cut teeth to remove more material and sharpen faster
- Precisely manufactured from high quality steel to produce a keen, sharp edge



Size (in.)	Order No.	Price
6 x 5/32	FR5002145	Price

Taper Files

- Designed for filing all types of saws with 60º angle teeth
- Taper Saw Files are triangular in shape, have cut edges, and taper toward the point in width and thickness



	Extra Slim				Regular				Slim			
	Nicholson		Simonds		Nicholson		Simonds		Nicholson		Simonds	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
4	**FR5014547**	Price	**FT407354750**	Price	**FR5013727**	Price	**-**	-	**FR5014106**	Price	**FT407353550**	Price
5	**FR5014599**	Price	**-**	-	**FR5013772**	Price	**-**	-	**FR5014162**	Price	**FT407353650**	Price
6	**FR5014665**	Price	**FT407354950**	Price	**FR5013807**	Price	**FT407353050**	Price	**FR5014224**	Price	**FT407353700**	Price
7	**FR5014698**	Price	**FT407355000**	Price	**-**	-	**-**	-	**FR5014255**	Price	**FT407353750**	Price
8	**FR5014729**	Price	**FT407355050**	Price	**FR5013875**	Price	**FT407353150**	Price	**FR5014290**	Price	**FT407353800**	Price
10	**-**	-	**-**	-	**FR5013930**	Price	**-**	-	**FR5014341**	Price	**FT407353850**	Price

Knife Files

For use on slots, keyways and acute angles. Knife Files are double cut on the “knife edge” with a safe (uncut) back and taper toward the point in width and thickness

- **Bastard file,** a coarse file designed for fast removal of stock material
- **2nd cut file,** a medium file designed for moderate stock removal
- **Smooth file,** a fine file designed for making an almost smooth surface



Cut - 2nd Cut				
	Nicholson		Simonds	
Size (in.)	Order No.	Price	Order No.	Price
4	**FR5006742**	Price	**FT407349900**	Price
6	**FR5006836**	Price	**FT407350050**	Price
8	**FR5006930**	Price	**FT407350200**	Price
10	**FR5007023**	Price	**FT407350350**	Price

Cut - Bastard				
	Nicholson		Simonds	
Size (in.)	Order No.	Price	Order No.	Price
4	**FR5006711**	Price	**FT407349850**	Price
6	**FR5006804**	Price	**FT407350000**	Price
8	**FR5006898**	Price	**FT407350150**	Price
10	**FR5006992**	Price	**FT407350300**	Price

Cut - Smooth				
	Nicholson		Simonds	
Size (in.)	Order No.	Price	Order No.	Price
4	**FR5006773**	Price	**FT407349950**	Price
6	**FR5006867**	Price	**FT407350100**	Price
8	**FR5006961**	Price	**FT407350250**	Price
10	**FR5007054**	Price	**FT407350400**	Price

Milled Tooth (Vixen) Files—Standard

- Ideal for fast filing on aluminum, brass, copper, and hard rubber. Flat with Tang Files come in standard cut on both sides with safe (uncut) edges
- Files have teeth on both sides with safe (uncut) edges. When used with the proper holder, Flexible Files can be adjusted to the concave and convex, as well as flat, surfaces





	Flat Flexible File		Flat Flexible w/Tang File	
Size (in.)	Order No.	Price	Order No.	Price
8	**-**	-	**FR5020239**	Price
10	**-**	-	**FR5020291**	Price
12	**FR5020138**	Price	**FR5020342**	Price
14	**FR5020189**	Price	**FR5020393**	Price

Flat Machinist's Files

- Obtain almost any required finish simply by changing the feed pressure
- Flat Machinist’s Files are single-cut coarse tooth files that taper toward the point in width
- Multi-Kut and Magicut allow for fast stock removal while leaving a smooth finish
- So versatile, the files combine the performance of Flat and Mill Files



	Nicholson		Simonds	
Size (in.)	Order No.	Price	Order No.	Price
8	**FR5007894**	Price	**FT407324300**	Price
10	**FR5007917**	Price	**FT407324350**	Price
12	**FR5007941**	Price	**FT407324400**	Price
14	**FR5007965**	Price	**FT407324450**	Price

John Bedford & Sons Limited Swiss Pattern Needle Files

- Same quality as name brands, if not better
- All are ø cut
- Two sizes to choose from
- Made in England



Shape	Order No.	Price
Half Round	**FT60006**	Price
Warding	**FT60002**	Price

Snap-on INDUSTRIAL BRANDS | BAHCO | SIMONDS INTERNATIONAL | NICHOLSON

Round Files

Intended for enlarging and rounding out circular openings or concave surfaces. Round Files are double cut and taper toward the point in width and thickness. (Round Files are often referred to as “Rat Tail” Files)

- Bastard file, a coarse file designed for fast removal of stock material
- 2nd cut file, a medium file designed for moderate stock removal
- Smooth file, a fine file designed for making an almost smooth surface



Cut - 2nd Cut						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5011559	Price	FT407339350	Price	KL3012300420	Price
6	FR5011748	Price	FT407339650	Price	KL3012300620	Price
8	FR5011936	Price	FT407339900	Price	KL3012300820	Price
10	FR5012051	Price	FT407340100	Price	KL3012301020	Price
12	FR5012166	Price	FT407340300	Price	KL3012301220	Price

Cut - Bastard						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5011526	Price	FT407339300	Price	KL3012300410	Price
6	FR5011716	Price	FT407339600	Price	KL3012300610	Price
8	FR5011904	Price	FT407339850	Price	KL3012300810	Price
10	FR5012019	Price	FT407340050	Price	KL3012301010	Price
12	FR5012134	Price	FT407340250	Price	KL3012301210	Price
14	FR5012248	Price	-	-	-	-

Cut - Smooth						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5011592	Price	FT407339400	Price	KL3012300430	Price
6	FR5011781	Price	FT407339700	Price	KL3012300630	Price
8	FR5011969	Price	FT407339950	Price	KL3012300830	Price
10	FR5012084	Price	FT407340150	Price	KL3012301030	Price
12	FR5012199	Price	FT407340350	Price	KL3012301230	Price

Square Files

Created for slots, keyways, square holes or general surface filing. Square Files are double cut and taper toward the point in width and thickness

- Bastard file, a coarse file designed for fast removal of stock material
- 2nd cut file, a medium file designed for moderate stock removal
- Smooth file, a fine file designed for making an almost smooth surface



Cut - 2nd Cut						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	-	-	FT407342550	Price	KL3011600420	Price
6	FR5013000	Price	FT407342850	Price	KL3011600620	Price
8	FR5013114	Price	FT407343050	Price	KL3011600820	Price
10	FR5013229	Price	FT407343250	Price	KL3011601020	Price
12	FR5013343	Price	-	-	KL3011601220	Price

Cut - Bastard						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5012790	Price	FT407342500	Price	KL3011600410	Price
6	FR5012967	Price	FT407342800	Price	KL3011600610	Price
8	FR5013081	Price	FT407343000	Price	KL3011600810	Price
10	FR5013196	Price	FT407343200	Price	KL3011601010	Price
12	FR5013310	Price	FT407343400	Price	KL3011601210	Price
14	FR5013425	Price	-	-	-	-

Cut - Smooth						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5012857	Price	FT407342600	Price	KL3011600430	Price
6	FR5013033	Price	FT407342900	Price	KL3011600630	Price
8	FR5013147	Price	FT407343100	Price	KL3011600830	Price
10	FR5013262	Price	-	-	KL3011601030	Price
12	FR5013376	Price	-	-	-	-
14	-	-	-	-	-	-

Half Round Files

Superb for rounding out holes, corners and crevices. Half Round Files are double cut on both sides



Cut - 2nd Cut						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5004729	Price	FT407331550	Price	KL3012100420	Price
6	FR5004828	Price	FT407331750	Price	KL3012100620	Price
8	FR5004927	Price	FT407331950	Price	KL3012100820	Price
10	FR5005026	Price	FT407332150	Price	KL3012101020	Price
12	FR5005125	Price	FT407332350	Price	KL3012101220	Price
14	FR5005225	Price	FT407332550	Price	-	-

Cut - Bastard						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5004695	Price	FT407331500	Price	KL3012100410	Price
6	FR5004795	Price	FT407331700	Price	KL3012100610	Price
8	FR5004896	Price	FT407331900	Price	KL3012100810	Price
10	FR5004995	Price	FT407332100	Price	KL3012101010	Price
12	FR5005094	Price	FT407332300	Price	KL3012101210	Price
14	FR5005194	Price	FT407332500	Price	KL3012101410	Price
16	FR5005307	Price	-	-	-	-

Cut - Smooth						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	FR5004762	Price	FT407331600	Price	KL3012100430	Price
6	FR5004861	Price	FT407331800	Price	KL3012100630	Price
8	FR5004960	Price	FT407332000	Price	KL3012100830	Price
10	FR5005059	Price	FT407332200	Price	KL3012101030	Price
12	FR5005158	Price	FT407332400	Price	KL3012101230	Price
14	FR5005258	Price	-	-	-	-

Three Square Files

Excellent for cleaning out corners or for use on cutters, taps and flat surfaces. Three Square Files are double cut and taper toward the point in width and thickness

- Bastard file, a coarse file designed for fast removal of stock material
- 2nd cut file, a medium file designed for moderate stock removal
- Smooth file, a fine file designed for making an almost smooth surface



Cut - 2nd Cut						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
6	FR5015958	Price	FT407351700	Price	KL3011700620	Price
8	FR5016069	Price	FT407351850	Price	KL3011700820	Price
10	-	-	FT407352000	Price	KL3011701020	Price

Cut - Bastard						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
6	-	-	FT407351650	Price	KL3011700610	Price
8	FR5016036	Price	FT407351800	Price	KL3011700810	Price
10	-	-	FT407351950	Price	KL3011701010	Price

Cut - Smooth						
	Nicholson		Simonds		Snap-On/Bahco	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4	-	-	-	-	KL3011700430	Price
6	FR5015991	Price	FT407351750	Price	KL3011700630	Price
8	FR5016102	Price	FT407351900	Price	KL3011700830	Price
10	-	-	FT407352050	Price	KL3011701030	Price

The Premium line of hand files! Specially treated with a black oxide coating, Simonds Black Maxi-Sharp® Files last longer due to increased resistance to loading and rust

Black Maxi-Sharp® Files
All Purpose Files

The Premium line of hand files! Specially treated with a black oxide coating, Simonds Black Maxi-Sharp® Files last longer due to increased resistance to loading and rust



Size (in.)	Order No.	Price
8	**FT407818760**	Price
10	**FT407818810**	Price

Mill-Single Cut Files



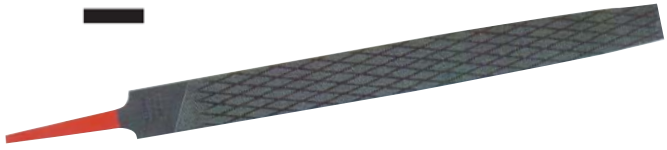
	2nd Cut		Bastard		Smooth	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
6	**FT407814360**	Price	**FT407814310**	Price	**FT407814410**	Price
8	**FT407814610**	Price	**FT407814560**	Price	**FT407814660**	Price
10	**FT407814810**	Price	**FT407814760**	Price	**FT407814860**	Price
12	**-**	-	**FT407814960**	Price	**FT407815060**	Price

Flat Files



	Bastard		Smooth	
Size (in.)	Order No.	Price	Order No.	Price
8	**FT407823210**	Price	**FT407823310**	Price
10	**FT407823410**	Price	**FT407823510**	Price
12	**FT407823610**	Price	**FT407823710**	Price
6	**FT407822960**	Price	**FT407823070**	Price

Multi-Kut® Flat Files



Size (in.)	Order No.	Price
8	**FT407824310**	Price
10	**FT407824360**	Price

Half Round Files



	Bastard		Smooth	
Size (in.)	Order No.	Price	Order No.	Price
6	**FT407831710**	Price	**FT407831810**	Price
8	**FT407831910**	Price	**FT407832010**	Price
10	**FT407832110**	Price	**FT407832210**	Price
12	**FT407832310**	Price	**-**	-

Taper Saw Files



Size (in.)	Cut	Order No.	Price
6	Regular	**FT407853060**	Price
6	Slim	**FT407853710**	Price
6	X-Slim	**FT407854960**	Price
6	XX-Slim	**FT407856210**	Price

Three Square Files

Size (in.)	Order No.	Price
6	**FT407851660**	Price
8	**FT407851870**	Price



Multi-Kut® Half Round Files

Order No.	Price
FT407832860	Price



Round Files

MADE IN THE USA

	Bastard		Smooth	
Size (in.)	Order No.	Price	Order No.	Price
6	**FT407839610**	Price	**FT407839710**	Price
8	**FT407839860**	Price	**FT407839960**	Price



Half Round Shape Swiss Needle Files

- Made of high quality steel
- Round knurled handles aid gripping
- For precise finishing on small surfaces

Size (in.)	Cut	Order No.	Price
4	0 Cut	**GF2031516**	Price
4	2 Cut	**GF2031517**	Price
5-1/2	2 Cut	**GF203152**	Price
6-1/4	2 Cut	**GF2031527**	Price
7-3/4	0 Cut	**GF2031531**	Price
7-3/4	2 Cut	**GF2031533**	Price



Swiss Needle File Sets

Contains one each: hand, flat, half-round, round, three square, square, oval, crossing, barrette, slitting, round-edge joint, marking and knife flag

New!

Size	Cut	Order No.	Price
5-1/2	0 Cut	**GF2031675**	Price
5-1/2	2 Cut	**GF2031676**	Price



Snap-on Industrial Brands | BAHCO

12 Pc. Swiss Pattern Needle File Sets

Set of 12 files in a snap-shut plastic wallet and contains one handle. Contains one each: hand, flat, half-round, round, three square, square, oval, crossing, barrette, slitting, round-edge joint, marking and knife flag



Size (in.)	Cut	Order No.	Price
5-1/2	2 Cut - Smooth	**KL3024721420**	Price
6-1/4	0 Cut - Bastard	**KL3024721600**	Price
6-1/4	1 Cut - 2nd	**KL3024721610**	Price

GROBET USA

Half Round Shape Swiss Needle Files

- Made of high quality steel
- Round knurled handles aid gripping
- For precise finishing on small surfaces



New!

Size (in.)	Cut	Order No.	Price
4	0 Cut	**GF2031516**	Price
4	2 Cut	**GF2031517**	Price
5-1/2	2 Cut	**GF2031520**	Price
6-1/4	2 Cut	**GF2031527**	Price
7-3/4	0 Cut	**GF2031531**	Price
7-3/4	2 Cut	**GF2031533**	Price

Snap-on Industrial Brands | BAHCO

Half Round Swiss Pattern Files

- Designed to provide the finest cut available
- Used for delicate detailed work
- Surfaces taper to a point
- Flat and convex surfaces double cut



Size (in.)	Cut	Order No.	Price
5-1/2	0 Cut-Bastard	**KL3023041400**	Price
6-1/4	0 Cut-Bastard	**KL3023041600**	Price
5-1/2	2 Cut-Smooth	**KL3023041420**	Price
6-1/4	2 Cut-Smooth	**KL3023041620**	Price

GROBET USA

Round Shape Swiss Needle Files

- Made of high quality steel
- Round knurled handles aid gripping
- For precise finishing on small surfaces



New!

Length (in.)	Cut	Order No.	Price
4	0 Cut	**GF2031582**	Price
6-1/4	2 Cut	**GF2031593**	Price
7-3/4	0 Cut	**GF2031597**	Price

Snap-on Industrial Brands | BAHCO

Round Swiss Pattern Files

- Designed to provide the finest cut available
- Used for delicate detailed work
- Surfaces taper to a point
- Double cut



Size (in.)	Cut	Order No.	Price
5-1/2	0 Cut-Bastard	**KL3023071400**	Price
6-1/4	0 Cut-Bastard	**KL3023071600**	Price
6-1/4	1 Cut-2nd	**KL3023071610**	Price
5-1/2	2 Cut-Smooth	**KL3023071420**	Price
6-1/4	2 Cut-Smooth	**KL3023071620**	Price

GROBET USA Three Square Shape Swiss Needle Files

New!

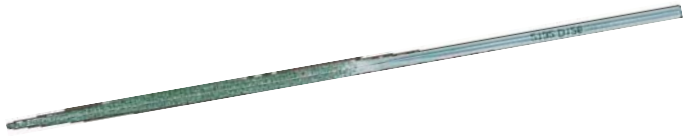
- Made of high quality steel
- Round knurled handles aid gripping
- For precise finishing on small surfaces



Size	Cut	Order No.	Price
4	0 Cut	**GF2031630**	Price
4	2 Cut	**GF2031631**	Price
5-1/2	0 Cut	**GF2031633**	Price
5-1/2	2 Cut	**GF2031634**	Price
6-1/4	0 Cut	**GF2031638**	Price
7-3/4	2 Cut	**GF2031647**	Price

Snap-on Industrial Brands | BAHCO Three Square Swiss Pattern Files

- Designed to provide the finest cut available
- Used for delicate detailed work
- Triangular, surfaces taper to a point
- Surfaces double cut



Size (in.)	Cut	Order No.	Price
5-1/2	0 Cut-Bastard	**KL3023021400**	Price
6-1/4	1 Cut-2nd	**KL3023021610**	Price
5-1/2	2 Cut-Smooth	**KL3023021420**	Price
6-1/4	2 Cut-Smooth	**KL3023021620**	Price
7	2 Cut-Smooth	**KL3023021820**	Price
5-1/2	4 Cut-Dead Smooth	**KL3023021440**	Price

GROBET USA Square Shape Swiss Needle Files

- Made of high quality steel
- Round knurled handles aid gripping
- For precise finishing on small surfaces

New!



Size	Cut	Order No.	Price
5-1/2	2 Cut	**GF2031616**	Price
6-1/4	0 Cut	**GF2031620**	Price
7	2 Cut	**GF203162503**	Price
7-3/4	0 Cut	**GF2031626**	Price

Snap-on Industrial Brands | BAHCO Square Swiss Pattern Files

- Designed to provide the finest cut available
- Used for delicate detailed work
- Surface taper to a point
- Surfaces double cut

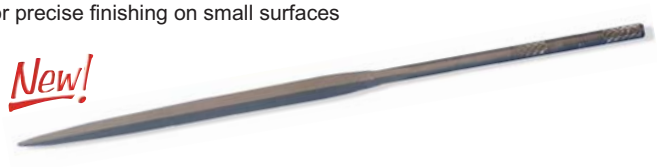


Size (in.)	Cut	Order No.	Price
6-1/4	0 Cut-Bastard	**KL3023031600**	Price
6-1/4	1 Cut-2nd	**KL3023031610**	Price
6-1/4	2 Cut-Smooth	**KL3023031620**	Price

GROBET USA Barrette Shape Swiss Needle Files

- Made of high quality steel
- Round knurled handles aid gripping
- For precise finishing on small surfaces

New!



Length (in.)	Cut	Order No.	Price
4	0 Cut	**GF2031450**	Price
4	2 Cut	**GF2031451**	Price
6-1/4	0 Cut	**GF2031459**	Price
6-1/4	2 Cut	**GF2031461**	Price
7-3/4	0 Cut	**GF2031466**	Price
7-3/4	2 Cut	**GF2031468**	Price

Snap-on Industrial Brands | BAHCO Hand Swiss Pattern Needle Files

- Edges and surfaces parallel
- Surfaces double cut, edges single cut



Size (in.)	Description	Cut	Order No.	Price
5-1/2	Bastard	0 Cut-Bastard	**KL3023001400**	Price
6-1/4	Bastard	0 Cut-Bastard	**KL3023001600**	Price
5-1/2	Smooth	2 Cut-Smooth	**KL3023001420**	Price
6-1/4	Smooth	2 Cut-Smooth	**KL3023001620**	Price

Knife Shape Swiss Needle Files

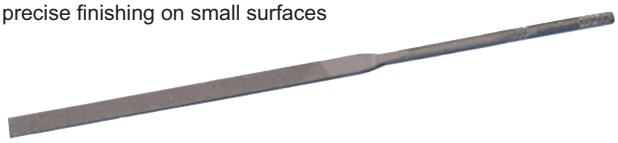
- Made of high quality steel
- Round knurled handles aid gripping
- For precise finishing on small surfaces



Length (in.)	Cut	Order No.	Price
6-1/4	0 Cut	**GF2031558**	Price
6-1/4	2 Cut	**GF2031559**	Price

Equaling Shape Swiss Needle Files

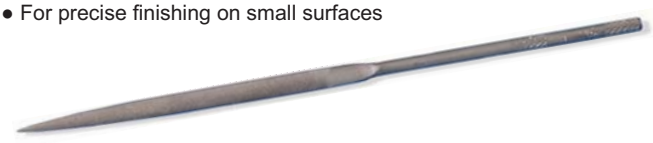
- Made of high quality steel
- Round knurled handles aid gripping
- For precise finishing on small surfaces



Length (in.)	Cut	Order No.	Price
4	0 Cut	**GF2031498**	Price
4	2 Cut	**GF2031499**	Price
5-1/2	0 Cut	**GF2031501**	Price
5-1/2	2 Cut	**GF2031502**	Price
6-1/4	0 Cut	**GF2031505**	Price
6-1/4	2 Cut	**GF2031508**	Price
7-3/4	2 Cut	**GF2031513**	Price

Crossing Shape Swiss Needle Files

- Made of high quality steel
- Round knurled handles aid gripping
- For precise finishing on small surfaces



Length (in.)	Cut	Order No.	Price
6-1/4	0 Cut	**GF2031490**	Price
6-1/4	2 Cut	**GF2031491**	Price
6-1/4	4 Cut	**GF2031492**	Price

Crossing Swiss Pattern Needle Files

- Two convex surfaces of different radius, tapering to a point
- Surfaces double cut



Size (in.)	Description	Cut	Order No.	Price
6-1/4	Smooth	2 Cut-Smooth	**KL3023061620**	Price

Warding Shape Swiss Needle Files

- Made of high quality steel
- Round knurled handles aid gripping
- For precise finishing on small surfaces

New!



Size	Cut	Order No.	Price
6-1/4	0 Cut	**GF2031663**	Price

Flat Swiss Pattern Needle Files

- Surfaces parallel, edges taper to a point
- Surfaces double cut, edges single cut



Size (in.)	Description	Cut	Order No.	Price
5-1/2	Smooth	2 Cut-Smooth	**KL3023011420**	Price

Thread Restorer Files

- Restores damaged external threads, any diameter, right or left hand
- Select the proper number of threads per inch or millimeters per thread
- Files are highly tempered for strength and durability

No. of Pcs.	Repairs Threads per Inch	Order No.	Price
1	.75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00mm	**KL402670**	Price
1	11,12 ,13, 14, 16, 18, 20, 24	**KL402665**	Price
1	9, 10, 12, 16, 20, 27, 28, 32	**KL402666**	Price
3 Pc. Set	9, 10, 12, 16, 20, 27, 28, 32 & .75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00mm	**KL402573**	Price

KL402573



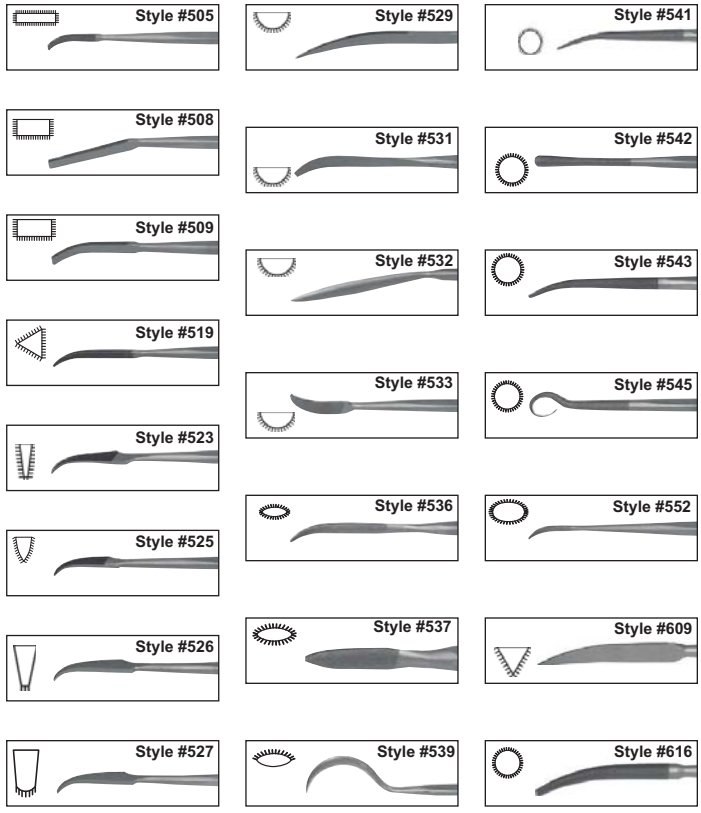
Rifflers

New!

- Grobet Die Sinker's rifflers are available with a wide range of differently shaped heads
- Double-ended tools designed to file in tight, irregularly shaped spaces.
- Contoured to make difficult-to-reach areas readily accessible
- Swiss pattern
- Chrome alloy steel

		0 Cut		2 Cut		4 Cut	
Size (in.)	Description	Order No.	Price	Order No.	Price	Order No.	Price
6	Style # 505	-	-	**GF2031851**	Price	-	-
6	Style # 508	**GF2031862**	Price	**GF2031863**	Price	-	-
6	Style # 509	**GF2031865**	Price	**GF2031866**	Price	-	-
6	Style # 519	**GF2031896**	Price	**GF2031897**	Price	-	-
6	Style # 523	-	-	**GF2031907**	Price	-	-
6	Style # 525	**GF2031917**	Price	**GF2031918**	Price	-	-
6	Style # 526	-	-	**GF2031922**	Price	-	-
6	Style # 529	-	-	**GF2031933**	Price	-	-
6	Style # 531	**GF2031939**	Price	**GF2031940**	Price	-	-
6	Style # 532	**GF2031943**	Price	-	-	-	-
6	Style # 533	**GF2031946**	Price	**GF2031947**	Price	-	-
6	Style # 536	**GF2031957**	Price	**GF2031958**	Price	**GF2031959**	Price
6	Style # 541	**GF2031972**	Price	**GF2031973**	Price	**GF2031974**	Price
6	Style # 543	**GF2031979**	Price	**GF2031980**	Price	-	-
6	Style # 545	**GF2031986**	Price	**GF2031987**	Price	-	-
6	Style # 552	-	-	-	-	**GF2032012**	Price
7	Style # 609	-	-	**GF2031805**	Price	-	-
7	Style # 616	**GF2031818**	Price	-	-	-	-

***Except style 609 and 616 which is 7"**



12 Pc. Riffler Set

New!

- 0 Cut
- Includes: 525, 526, 527, 529, 532, 533, 536, 537, 539, 541, 542 and 631



Size (in.)	Description	Order No.	Price
6	12Pc Set 6RIF	**GF2032020**	Price

PRM PRO 6-1/2" Die Sinker Riffler Sets

WORLD CLASS QUALITY



No. of Pieces	Cut No.	Order No.	Price
12	0	**FT60SS3120**	Price
12	2	**FT60SS3122**	Price

PRM PRO 5-1/2" Needle File Sets

Round handle needle files are used principally by jewelers, diemakers, watchmakers and fine toolmakers. Sets come with 6 or 12 different shapes

WORLD CLASS QUALITY

No. of Pieces	Cut	Order No.	Price
6	0	**FT60131062**	Price
12	0	**FT60130062**	Price





Severance Carbide Hand Files

MADE IN THE USA

Hand Files are great for many applications such as:
Filing • Deburring • Shaping • Forming • Chamfering • Sharpening • Smoothing • Beveling • De-Flashing • Trimming • De-Scaling



Type - Curved Tooth In-Line Carbide Hand File						
Cut	Teeth Per Inch	Stroke	Cutting Area	OAL (in.)	Order No.	Price
Coarse	16	6	3/4 x 6	11-3/4	**BC54FJC7W**	Price
Medium	25	6	3/4 x 6	11-3/4	**BC54FJC5W**	Price
Medium Coarse	20	6	3/4 x 6	11-3/4	**BC54FJC6W**	Price
Medium Fine	31	6	3/4 x 6	11-3/4	**BC54FJC4W**	Price

Type - Rasp Tooth In-Line Carbide Hand File						
Cut	Teeth Per Inch	Stroke	Cutting Area	OAL (in.)	Order No.	Price
Coarse	16	6	3/4 x 6	11-3/4	**BC54FJR7W**	Price

Type - Standard In-Line Carbide Hand File						
Cut	Teeth Per Inch	Stroke	Cutting Area	OAL (in.)	Order No.	Price
Coarse	16	6	3/4 x 6	11-3/4	**BC54FJ7W**	Price
Fine	40	6	3/4 x 6	11-3/4	**BC54FJ3W**	Price
Medium	25	6	3/4 x 6	11-3/4	**BC54FJ5W**	Price
Medium Coarse	20	6	3/4 x 6	11-3/4	**BC54FJ6W**	Price
Medium Fine	31	6	3/4 x 6	11-3/4	**BC54FJ4W**	Price

Type - Standard Offset Handle Carbide Hand File						
Cut	Teeth Per Inch	Stroke	Cutting Area	OAL (in.)	Order No.	Price
Coarse	16	3	3/4 x 3	8-3/4	**BC54FZ7W**	Price
Fine	40	3	3/4 x 3	8-3/4	**BC54FZ3W**	Price
Medium	25	3	3/4 x 3	8-3/4	**BC54FZ5W**	Price
Medium Fine	31	3	3/4 x 3	8-3/4	**BC54FZ4W**	Price

Type - Standard Plain Carbide Hand File						
Cut	Teeth Per Inch	Stroke	Cutting Area	OAL (in.)	Order No.	Price
Coarse	16	3	3/4 x 3	8-3/4	**BC54FS7W**	Price
Fine	40	3	3/4 x 3	8-3/4	**BC54FS3W**	Price
Medium	25	3	3/4 x 3	8-3/4	**BC54FS5W**	Price
Medium Coarse	20	3	3/4 x 3	8-3/4	**BC54FS6W**	Price
Medium Fine	31	3	3/4 x 3	8-3/4	**BC54FS4W**	Price

Snap-on Industrial Brands BAHCO Industrial File Handles

Ergonomically shaped bi-molded plastic handle provides soft, textured grip
- 9484 series for small files
- 9485 series for flat files
- 9486 series for shaped files

Style 9484 (for small files)



Style 9485 (for flat files)



Style 9486 (for shaped files)



File Length (in.)	Style	Order No.	Price
4	Square, Three Square	**KL309484321P**	Price
4	Warding Flat, Half Round, Round	**KL309484521P**	Price
6	Square, Half Round, Round	**KL309486041P**	Price
6	Three Square, Warding Flat, Mill-Flat, Knife	**KL309486051P**	Price
8	Warding Flat, Mill-Flat	**KL309485061P**	Price
8 - 14	Mill-Flat, Half Round, Knife	**KL309485091P**	Price
12 - 14	Half Round, Half Round	**KL309485131P**	Price

PROTO Gasket and Carbon Scrapers

- Angled blade for access into tight areas
- Ideal for removing gaskets and carbon
- Comfortable, four sided handle

MADE IN THE USA



Blade Width (in.)	OAL (in.)	Model No.	Order No.	Price
1-1/16	11	J2338	**KP4270050**	Price
1-1/2	12	J2336	**KP4270045**	Price

File Card

Sharp steel bristles dig and quickly remove filings from grooves of files to restore their clean cutting capacity



Item	Description	Order No.	Price
Snap-on Industrial Brands BAHCO	File Cleaner	**KL3094670000**	Price
LUTZ	File Card with Brush	**FS5020**	Price
	Heavy Duty File Card	**FS5010**	Price

LUTZ Wood File Handle

Long Ferrule Shown; Short Ferrule and Skrooz-on
- Threaded insert also available
- Waxed white birch handles
- Zinc plated ferrule



Type - Long Ferule Wood File Handle		
Fits File Size (in.)	Order No.	Price
3 - 6	**FT50L001**	Price
6 - 8	**FT50L002**	Price
10 - 12	**FT50L003**	Price
12 - 14	**FT50L004**	Price
16 - 20	**FT50L005**	Price

Type - Short Ferule Wood File Handle		
Fits File Size (in.)	Order No.	Price
3 - 4	**FT50001**	Price
4 - 6	**FT50002**	Price
6 - 8	**FT50003**	Price
8 - 10	**FT50004**	Price
10 - 14	**FT50005**	Price

Type - Skrooz-on Wood File Handle		
Fits File Size (in.)	Order No.	Price
4	**FT50SK002**	Price
5	**FT50SK003**	Price
6	**FT50SK004**	Price
8	**FT50SK005**	Price
10	**FT50SK006**	Price
12	**FT50SK007**	Price
14	**FT50SK008**	Price
Small	**FT50SK001**	Price

NICHOLSON File Handles

- Interchangeable cushion inserts, designed to fit most popular files
- Available in standard or ergonomic



Style	Order No.	Price
Ergonomic	**FR5021474H**	Price

OLFA Multi-Purpose Sharp-Edge Scraper

- These handy scrapers feature high-quality honed stainless steel blades, and strong, acetone resistant handles
- Stainless steel blade offers better protection against rusting for longer use
- Excellent for removing gaskets, caulk, tiles and more

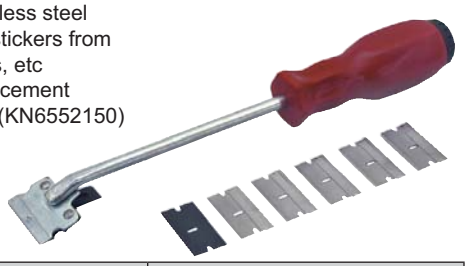


Model	Order No.	Price
SCR-L 2-1/3"	**FS601086530**	Price
SCR-S 1"	**FS601086562**	Price

Lisle Razor Blade Scraper

MADE IN THE USA

- Designed to reach into tight places
- Also comes with a plastic blade for use on safety plastic laminated windshields to prevent scratching
- Spring-release allows easy interchange of blades. Reverse blade in holder for storage. Hollow handle stores all blades when not in use
- Comes with five stainless steel blades for removing stickers from windshields, bumpers, etc
- Stainless Steel Replacement Blades 100 Pc. pack (KN6552150)



Order No.	Price
KN6552000	Price

Red Devil General Purpose Scrapers

- Contoured, non-slip textured handles
- Sturdy light-weight red polypropylene handle with 2-edge, high carbon steel blades



	2-Edge Scraper		Replacement Blade	
Blade Width (in.)	Order No.	Price	Order No.	Price
1	**FS533110**	Price	**FS533166**	Price
1-1/2	**FS533140**	Price	**FS533167**	Price
2-1/2	**FS533150**	Price	**FS533168**	Price

Red Devil Heavy Duty Scrapers

- Heavy duty black polypropylene contoured handles, easy grip knob
- Ground 4-edge, high carbon steel blades last through tough jobs



	4-Edge Scraper		Replacement Blade	
Blade Width (in.)	Order No.	Price	Order No.	Price
2-1/2	**FS533160**	Price	**FS533162**	Price
3	**FS533170**	Price	**FS533169**	Price

Red Devil Putty Knives

Black polypropylene wide handles are shatterproof and solvent resistant for safety



Width (in.)	Blade Type	Order No.	Price
1-1/4	Chisel	**FS534231**	Price
1-1/4	Flex	**FS534202**	Price
1-1/4	Stiff	**FS534201**	Price
1-1/2	Flex	**FS534204**	Price
1-1/2	Stiff	**FS534203**	Price
2	Flex	**FS534206**	Price
2	Stiff	**FS534205**	Price
3	Flex	**FS534210**	Price
3	Stiff	**FS534209**	Price
4	Flex	**FS534214**	Price

Red Devil Zip-A-Way 5-in-1 Tool

5 Uses in 1 Tool!
1. Gouger, 2. Scraper, 3. Putty remover, 4. Spreader and 5. Roller cleaner



Order No.	Price
FS534251	Price

Machinist's Scrapers

- Extremely useful for scraping, trimming and deburring metals and tubing
- Blades are hardened and tempered



NE601281



NE601283



NE601282

Blade Length (in.)	Style	Order No.	Price
4	Flat	**NE601282**	Price
4	Half Round	**NE601283**	Price
4	Triangular	**NE601281**	Price
6	Flat	**NE601285**	Price
6	Half Round	**NE601286**	Price
6	Triangular	**NE601284**	Price
8	Flat	**NE601288**	Price
8	Half Round	**NE601289**	Price
8	Triangular	**NE601287**	Price
10	Flat	**NE601291**	Price
10	Half Round	**NE601292**	Price
10	Triangular	**NE601290**	Price

Nicholson Machinist's Scrapers

MADE IN THE USA

- Note that the three square shape is supplied in Hollow Ground with 60° angle
- Overall length of these tools including handle is approximately 8”



Type	Blade Width (in.)	Order No.	Price
Blunt Nose	4 x 3/8 x 8	**FS524B**	Price
Pointed	3-1/4 x 3/8 x 8	**FS5215**	Price

Hollow Ground Triangular Scraper

- Beveled point for small work



Blade Size (in.)	OAL (in.)	Order No.	Price
3-1/4 x 1/2	8	**NE60MS15**	Price

OLFA 8” Heavy Duty Scrapers

- 4” dual edge blade with protective storage cover
- Die cast head with malleable handles
- Tool free blade change
- Soft Grip for comfort
- Optional 2-1/2” Flex Blade for extra leverage for floor tile, skid tape and other Tough materials



Type	Model	Order No.	Price
Heavy Duty Scraper	BSR200	**FS60BSR200**	Price
Replacement Blade	BS10B	**FS60BS10B**	Price

Tether-Ready DuraTek™ Screwdrivers

MADE IN THE USA

- Ergonomic quad-lobe handle design with 360° texture for additional grip
- Designed to meet demanding heavy-duty needs of industrial maintenance and assembly applications
- Screwdrivers meet ASME B10715 standards



Size	Blade Length (in.)	OAL (in.)	Style	Model No.	Order No.	Price
1/4	4	8	Slotted Keystone	JK1404R-TT	**KP4276095**	Price
5/16	6	10-3/8	Slotted Keystone	JK51606R-TT	**KP4276100**	Price
#1	3	6-3/4	Phillips® Round Bar	JP0103R-TT	**KP4276120**	Price
#2	4	8	Phillips® Round Bar	JP0204R-TT	**KP4276130**	Price
#3	6	10-3/8	Phillips® Round Bar	JP0306R-TT	**KP4276135**	Price

Tether-Ready Groove Joint Pliers

- Key-ring tether attachment point in handle
- Jaws are milled with deep self-gripping pipe wrench style teeth
- Flush fastener allows pliers to lay flat in the work place
- Flush fastener can easily be adjusted by the end user in the field

MADE IN THE USA

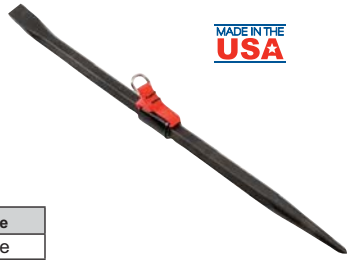


OAL (in.)	Capacity (in.)	Jaw Width (in.)	Model No.	Order No.	Price
10	1-49/64	1-19/32	J260SGXL-TT	**KP4275945**	Price

Tether-Ready 24" Aligning Pry Bar

- Black oxide finish to help prevent rust corrosion; extending tool life and performance

MADE IN THE USA



Model No.	Order No.	Price
J2124-TT	**KP4276780**	Price

Tethered D-Ring Lift Bucket

- Ballistic nylon material
- Zipper closer to hold in tools
- Swivel triple lock carabiner
- Internal picket for nuts, bolts, and smaller items
- Six D-Ring tether attachment points
- Measures 13” dia. x 15” deep
- Max. tool weight: 300 lbs.



Model No.	Order No.	Price
JBUCK300LBZP	**KP4274310**	Price

Tether-Ready Self-Retracting Safety Blade Utility Knife

- Key-ring tether attachment point in knife body
- Machine screw firmly holds knife body together
- Die-cast body for slip resistance
- Interlocking nose design helps secure blade and helps prevent body separation
- Auto-retracting blade: spring-loaded. Retracts when slide button is released
- Blades included (11-987): 1
- Works with most standard utility blades



Model No..	Order No.	Price
10-189C-TT	**KP4276175**	Price

Tether-Ready Heavy-Duty Pistol Grip Grease Gun

- Tether-ready with heat shrink loop attachment
- 3-Way filling: bulk, cartridge, or filler pump
- 16 oz Bulk fill
- 14 oz Standard cartridge
- Aluminum head reduces weight
- Heavy-duty flexible 18” nylon hose and 6” metal spout for easy use
- Output pressure: 3,600 PSI



Model No.	Order No.	Price
JFC33HD-TT	**KP4276165**	Price

Tether Cinch Loop





Description	Model No.	Order No.	Price
Plastic Tether Cinch Loop 6"	T-TETHCNCHLP	**KP4273420**	Price
Swivel Tether Cinch Loop	T-TETHCNCHLPSW	**KP4273425**	Price

Glove Tethers

- Keep gloves at arms reach
- Reduce the cost of lost gloves and time spent searching for PPE
- Attach to belt loops or any convenient location
- 50 per package, priced per each





Description	Model No.	Order No.	Price
Standard	JPPEGLV	**KP4273970**	Price
With Pouch to Hold Ear Protection	JPPEGLVPOU	**KP4273965**	Price

Sealing Tape - For use with D-Ring Web Tethers

- 1” by 36’
- For use with D-Ring web tethers

MADE IN THE USA



Model No.	Order No.	Price
JMOL36RFOR	**KP4276420**	Price

SkyHook™ Tool Kits



- The SkyHook™ switch connector tethers to the tool on a short lanyard and provides secure tool transfers, a free range of motion, and positive tool control at the worksite
- Mechanism is made from Dupont Delrin®, stainless steel springs and brass rivets for strength, durability and corrosion-resistance
- The SkyDock™ attachment securely anchors the SkyHook™ to wrist, belt, apron or station
- The SkyDock™ wrist strap securely anchors the SkyHook™ to the wrist
- Just “Swipe to Switch”. Hand-to-hand, hand-to-belt, person-to-person or person-to-station, the transfer is the same

Includes	Model No.	Order No.	Price
(1) SkyHook™ (1) SkyDock™ and (1) SkyDock™ Wrist Strap	JPS1	**KP4273000**	Price
(2) SkyHooks™ (2) SkyDocks™ and (2) SkyDock™ Wrist Straps	JPS2	**KP4273005**	Price
(4) SkyHooks™ (4) SkyDocks™ and (2) SkyDock™ Wrist Straps	JPSSCAFF4	**KP4273025**	Price
(5) SkyHooks™ (5) SkyDocks™ and (2) SkyDock™ Wrist Straps	JPSSCAFF5	**KP4273015**	Price

SkyHook™ Components

- The SkyHook™ switch connector tethers to the tool on a short lanyard and provides secure tool transfers, a free range of motion, and positive tool control at the worksite
- Mechanism is made from Dupont Delrin®, stainless steel springs and brass rivets for strength, durability and corrosion-resistance
- Just “Swipe to Switch”. hand-to-hand, hand-to-belt, person-to-person or person-to-station, the transfer is the same







Includes	Model No.	Order No.	Price
(1) SkyDock™ Three Dock Pouch and (3) SkyHook™ switch connectors	JPSTLPKT3	**KP4273075**	Price
Storage Attachment	JPSDOCK	**KP4273020**	Price
Switch Connector	JPS	**KP4273030**	Price

SkyHook™ Hammer/Ratchet Kit



- The SkyHook™ switch connector tethers to the tool on a short lanyard and provides secure tool transfers, a free range of motion, and positive tool control at the worksite
- Mechanism is made from Dupont Delrin®, stainless steel springs and brass rivets for strength, durability and corrosion-resistance.
- The SkyDock™ attachment securely anchors the SkyHook™ to wrist, belt, apron or station
- Just “Swipe to Switch” Hand-to-hand, hand-to-belt, person-to-person or person-to-station, the transfer is the same

Includes	Model No.	Order No.	Price
Holder for Hamme with (1) Sky-hook™ Switch Connector	JPSHS	**KP4273040**	Price

SkyHook™ Three Dock Pocket Kit



- Holds up to 15 pounds
- Made of elastic material

Length (in.)	Includes	Max. Tool Wgt. (lbs.)	Model No.	Order No.	Price
32 - 48"	(1) Screw Gate Carabiner	15	JLAN15LBSSRP	**KP4273095**	Price

Double-Up™ Tool Retractor - Splitting



- 48” Wire cord

MADE IN THE USA

Model No.	Order No.	Price
T-RETDUBL	**KP4274370**	Price

D-Ring Webbing

MADE IN THE USA



- Tether with carabiner connect securely and easily to D-rings
- For use with sealing tape
- Stainless steel D-ring

Width (in.)	Length (in.)	Type	Model No.	Order No.	Price
1/2	2-1/2	Standard	JDRSMOR	**KP4273250**	Price
1	3-1/2	Heavy-Duty	JDRHDOR	**KP4273245**	Price

Tool Lanyard-Postive Control

MADE IN THE USA

- High strength nylon webbing
- Positive control gate

Length (in.)	Max. Tool Weight	Model No.	Order No.	Price
12	10 lbs.	T-SGS12OR	**KP4273820**	Price

Split Rings



- Installs easily to manufacturers pre-drilled tether holes
- Fits tools of significant geometry
- Create a tether ring on the fly
- Weight rated - max tool weight 2 lbs
- Semi-permanent attachment of tools to lanyards
- For use with tethers of 12" or less

MADE IN THE USA

Diameter (in.)	Model No.	Order No.	Price
.040	JSR04	**KP4273360**	Price
1	JSR1	**KP4273370**	Price
1-1/4	JSR125	**KP4273375**	Price
1-1/2	JSR15	**KP4273380**	Price
2	JSR2	**KP4273385**	Price

Heat Shrink Loops



- For use with tool lanyards and tethers
- Installation method heat gun

MADE IN THE USA

Length (in.)	Width (in.)	Max. Tool Wgt. (lbs.)	Model No.	Order No.	Price
1-3/4	3/4	4	JP2R34X175LPOR	**KP4273140**	Price
1-3/4	1.1	5	JP2R1X175LPOR	**KP4273145**	Price
2	1-1/2	10	JP2R15X2LPOR	**KP4273125**	Price
2	2	15	JP2R2X2LPOR	**KP4273135**	Price
2	2-3/4	20	JP2R275X2LPOR	**KP4273130**	Price
4	2	25	JP2R2X4LPOR	**KP4273155**	Price
4	2-3/4	25	JP2R275X4LPOR	**KP4273150**	Price
4	4	25	JP2R4X4LPOR	**KP4273160**	Price

Wrist Lanyard



- No metal components
- Adjustable hook & loop wrist strap
- EZ clean plastic
- Max. tool weight: 3 lbs.

Model No.	Order No.	Price
T-EZLYWSORPL	**KP4274045**	Price

Hard Hat Lanyards - Red



- The Proto® hard hat lanyard is a great way to prevent your hard hat from becoming a dropped object. It can be used with almost any hard hat, and is a comfortable alternative to the traditional "chin strap"
- While keeping your helmet secure, the patented lanyard, attaches to an outer garment never impeding on the comfort or use of the hard hat
- All Proto® Hard Hat lanyards feature an "easy release" where you may disengage the side release buckle, leaving one piece secured to the hard hat, and the other still attached to an outer garment. When ready to use the hard hat again, simply reengage the side release buckle
- * Hard hat not included

Description	Model No.	Order No.	Price
-	T-LNYHRDLG	**KP4273565**	Price
10 Pack Qty.	JLANHATRD10	**KP4273555**	Price
100 Pack Qty.	JLANHATRD	**KP4273550**	Price

Tool Collar® & Loop



- High mechanical strength and rigidity
- Highly resistant to impacts
- Resistant to moisture, gasoline and most solvents
- Metal ring

Description	Model No.	Order No.	Price
For Tools .156 to .250 in Diameter	JPCL2SS	**KP4273330**	Price
For Tools .219 to .313 in Diameter	JPCL3SS	**KP4273335**	Price
For Tools .313 to .438 in Diameter	JPCL4SS	**KP4273340**	Price
For Tools .400 to .540 in Diameter	JPCL5SS	**KP4273345**	Price
For Tools .790 to 1.000 in Diameter	JPCL7SS	**KP4273355**	Price

Pen/Pencil Lanyards - Red



- Fits most pens, pencils and Sharpies
- Tubular knit fabric
- Can be used for small tools and pen lights

Type	Model No.	Order No.	Price
Pen/Pencil Lanyard	T-LYATT2RED	**KP4274155**	Price
Large Pen/Pencil Lanyard	T-LYATT2LGRED	**KP4274170**	Price

Economy Tool Lanyard

- EZ clean
- Color is orange
- \Maximum tool weight: 3 lbs.
- No metal parts

MADE IN THE USA

Model No.	Order No.	Price
T-ECOLNY1EZOR	**KP4274075**	Price

Tool Lanyards-JLAN Series



- Elastic Lanyard					
Attachment(s)	**Length**	**Max Tool Weight (lbs.)**	**Model No.**	**Order No.**	**Price**
(1) Triple Lock Carabiner	32 to 48"	15	JLAN15LB3LK	**KP4273090**	Price
(1) Screw Gate Stainless Steel Carabiner	32 to 48"	15	JLAN15LBSSCAR	**KP4273085**	Price
(2) Screw Gate Stainless Steel Carabiners	32 to 48"	15	JLAN15LBDSS	**KP4273100**	Price
(2) Screw Gate Stainless Steel Carabiners	45 to 118"	25	JLAN25LBDSS	**KP4273105**	Price

- Web Lanyard					
Attachment(s)	**Length**	**Max Tool Weight (lbs.)**	**Model No.**	**Order No.**	**Price**
(2) Triple Lock Carabiners	4 ft	40	JLAN40LBD3LK	**KP4273115**	Price

Fluids



Adhesives & Sealants G51-G56
Anaerobics. G51-G52
Cleaners G46-G48
Coolants G7-G10
Cutting & Machining Fluids G2-G12
Grease. G31-G36
Ink & Dye. G57-G58
Lubrication & Equipment G35-G38
Machine Lubricants & Oils G5, G13-G14, G41
Markers G58-G60
Misting Systems G24-G26
Pumps & Accessories G15-G19
Paint & Coatings G61-G62
Parts Washers. G50
Penetrants G40
Skimmers. G28-G30

Hazardous Code Key

Code	Ship Method	Instructions and Additional Charges
02 & 03	UPS Ground	No Additional Shipping Charges
	UPS Air	Additional Charge
	Commercial Truck	Call for Shipping Charges
04	UPS Ground	Additional Charge
	UPS Air	Additional Charge
	Commercial Truck	Call for Shipping Charges
05	UPS Ground	No Additional Shipping Charges
	UPS Air	Cannot Ship Air
	Commercial Truck	Call for Shipping Charges
06	UPS Ground	Commercial Truck Only, Call for Charges
	UPS Air	Commercial Truck Only, Call for Charges
	Commercial Truck	Commercial Truck Only, Call for Charges
07	UPS Ground	Customer Must Pick-Up From Stocking Location
	UPS Air	Customer Must Pick-Up From Stocking Location
	Commercial Truck	Drop Ship Direct From Vendor
08	UPS Air	Cannot Ship Air, forbidden by DOT/IATA
27	UPS Ground	4 pcs. Max per box - No additional charges
	UPS Air	Cannot Ship Air
	Commercial Truck	Call for Shipping Charges
57	UPS Ground	No Additional Shipping Charges
	UPS Air	No Additional Shipping Charges
	Commercial Truck	Call for Shipping Charges
58	UPS Ground	No Additional Shipping Charges - Cannot ship into Canada
	UPS Air	No Additional Shipping Charges - Cannot ship into Canada
	Commercial Truck	Call for Shipping Charges - Cannot ship into Canada
64	UPS Ground	Additional Charge
	UPS Air	Cannot Ship Air
	Commercial Truck	Call for Shipping Charges

Hazardous Materials Service

Shipments of hazardous material must comply with Department of Transportation Hazardous Materials Regulations, Title 49 of the Code of Federal Regulations, and UPS Hazardous Materials Service guidelines. Therefore, all shipments of chemicals and fluids are subject to special packaging, labeling, controls, or restrictions depending on the chemical content and quantities. The Hazardous Code Key identifies the shipping methods allowed and the additional handling charges that apply. These charges are in addition to the UPS freight charge and are subject to change . Multiple boxes may be required based on size, weight, and chemical content restrictions. All small package shipments containing Chemicals and Fluids with a Hazardous Code will be shipped via UPS prepaid and add. No collect or 3rd Party billing.

Monroe Fluid Technology Cool-Tool II® Cutting Tapping Fluid

- Excellent performance on: Aluminum, Inconel, Titanium, Stainless Steel, Certain Plastics
- Not to be mixed with water



Size	Hazard Code	Order No.	Price
4 oz.	HAZ57	**LK5003004**	Price
16 oz. Aerosol	HAZ03	**LK5003017**	Price
1 Pint	HAZ57	**LK5003016**	Price
1 Gallon	HAZ57	**LK5003102**	Price
5 Gallon	HAZ58	**LK5003050**	Price
50 Gallon	HAZ06	**LK5003500†**	Price

†All 50 Gallon Drums FOB Factory

LPS Tapmatic® TriCut

- Excellent for stainless steel, not recommended for aluminum
- Provides smooth, accurate cutting action
- Flows directly to cutting edge
- Extends tool life
- Improves surface finish, reduces friction, suitable for high & low speed applications
- Non-corrosive to steel
- Allows increased removal rates
- Synthetic oil-based



Size	Hazard Code	Order No.	Price
16 oz	HAZ57	**LJ6005316**	Price
1 Gallon	HAZ57	**LJ6005328**	Price

LPS Tapmatic® #1 Gold

- Great on all metals
- Excellent for low speed, high pressure applications
- Minimizes cutting torque
- Does not contain chlorinated paraffins, water, solvents or inactive fillers
- Safe on all metals
- Aerosol provides a pinpoint stream with foaming action that is ideal for vertical applications



Size	Hazard Code	Order No.	Price
11 oz Aerosol	HAZ03	**LJ6040312**	Price
1 Pint	HAZ57	**LJ6040320**	Price
1 Gallon	HAZ57	**LJ6040330**	Price
5 Gallon	HAZ58	**LJ6040340**	Price

ASHBURN CHEMICAL TECHNOLOGIES Mike-O-Cut No. 87 Extreme Duty Tapping Fluid

MIKE-O-CUT 87 is an extreme duty drilling and tapping fluid. It does not contain 1,1,1 Tri-chloro-ethane and is considered environmentally safe. It is thick like honey and will stick to your taps

Advantages:

- Direct equivalent to Morse Cutting & Tapping Fluid
- Does not contain 1,1,1 Trichloroethane
- Extended tool life
- Improves finish and size
- Will not evaporate
- Non-toxic



Size	Hazard Code	Order No.	Price
16 oz	HAZ57	**LK70D133216**	Price
1 Gallon	HAZ57	**LK70D133311**	Price
5 Gallon	HAZ58	**LK70D133405**	Price
55 Gallon	HAZ06	**LK70D133555†**	Price

†All 55 Gallon Drums FOB Factory

TAP MAGIC Tap Magic Pro Tap™

- Effective for all cuts, all metals
- Original biodegradeable formula



Size	Hazard Code	Order No.	Price
4 oz	HAZ57	**LJ5030004P**	Price
1 Pint	HAZ57	**LJ5030016P**	Price
1 Gallon	HAZ57	**LJ5030128P**	Price
5 Gallon	HAZ58	**LJ5030640P**	Price
30 Gallon	HAZ06	**LJ5033840P†**	Price
55 Gallon	HAZ06	**LJ5037040P†**	Price

† All 30 & 55 Gallon Drums FOB Factory

TAP MAGIC Tap Magic with EP Xtra

- Ozone-friendly for any cut on any metal
- Without equal on hard metals



Size	Hazard Code	Order No.	Price
4 oz	HAZ57	**LJ5010004E**	Price
16 oz	HAZ57	**LJ5010016E**	Price
1 Gallon	HAZ57	**LJ5010128E**	Price
5 Gallon	HAZ58	**LJ5010640E**	Price
30 Gallon	HAZ06	**LJ5013840E†**	Price
55 Gallon	HAZ06	**LJ5017040E†**	Price

† All 30 & 55 Gallon Drums FOB Factory

Monroe Fluid Technology Astro-Cut SYN

- Heavy-duty oil free synthetic cutting and grinding fluid concentrate
- Superior machining lubrication on most metals except magnesium, excellent on cast iron
- Very low foam
- Water extendable
- Nitrite free and Phenol free
- Resistant to damage from tramp oil
- Long tank life



Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK500030105**	Price
55 Gallon	HAZ06	**LK500030155†**	Price

† All 55 Gallon Drums FOB Factory

ASHBURN CHEMICAL TECHNOLOGIES Ozone Safe Tapping Fluid

MIKE-O-CUT

A solvent-based tapping and drilling fluid designed to replace 1,1,1 trichloroethane-based tapping fluids

- Evaporates quickly
- Leaves no residue
- Superior finish and size
- Not considered an ozone-depleting agent



Size	Hazard Code	Order No.	Price
16 oz	HAZ08	**LK70D110216**	Price
1 Gallon	HAZ08	**LK70D110311**	Price
5 Gallon	HAZ58	**LK70D110405**	Price
55 Gallon	HAZ06	**LK70D110555†**	Price

†All 55 Gallon Drums FOB Factory

HANGSTERFER'S CC-22 Cutting Oil

New!



- CC 22 designed for light and medium duty metal cutting and metal forming operations
- Economically formulated oil is manufactured under the same quality control standards set for all Hangsterfer's products
- Superior lubrication for the machine tool as well as the cutting and forming operations
- CC 22 provides benefits in productivity, equipment life and environmental compliance

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**NH101085**	Price
55 Gallon	HAZ06	**NH101084**	Price

HANGSTERFER'S Hard-Cut 5418 All-Around Cutting Oil

New!



- Hard-Cut 5418, an outstanding all-around cutting oil, can be used in swiss style automatics, milling machines or light stamping
- Improved tool life and surface qualities by as much as 300%
- In addition to the lubricity provided at the cutting zone, our cutting oils provide excellent lubrication for the machine's slides, guide bushings, bearings, and spindles

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**NH101191**	Price
55 Gallon	HAZ06	**NH101187**	Price

HANGSTERFER'S Hard-Cut 5618 Straight Cutting Oil

New!



- Highly recommended for use on stainless steels, hardened steels, high nickel alloys, titanium and aircraft aluminums
- Formulated in various viscosities and with various levels of Extreme Pressure (EP) additives
- Reduced smoke, cleaner machines, low odor and non-irritating are just some of the benefits
- Ultra-light viscosity oil that is best used on the machining of small parts
- Useful in grinding applications where other light oils have been used, especially applications using a CBN or diamond wheel

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**NH101200**	Price
55 Gallon	HAZ06	**NH101199**	Price

HANGSTERFER'S PC 20 & 45 Polar Cutting Oil

New!



- Very high flash point chemistry
- Speeds and feeds are maximized
- Polar cutting technology
- Especially suited for diamond and ceramic tools
- Chlorine and hydrocarbon free
- Renewable green chemistry
- Non-irritating and non-toxic
- Excellent oxidation stability

Size	For Cutting	Hazard Code	Style	Order No.	Price
5 Gallon	5/8" & Below	HAZ58	PC20	**NH101319**	Price
55 Gallon	5/8" & Below	HAZ06	PC20	**NH101318**	Price
5 Gallon	5/8" & Above	HAZ58	PC45	**NH101325**	Price
55 Gallon	5/8" & Above	HAZ06	PC45	**NH101324**	Price

Master Fluid Solutions TRIM® MicroSol® 685

High Lubricity Semi-Synthetic Metalworking Fluid

- Excellent alternative to chlorinated soluble oils
- Reduces oil mist and residues often associated with high-lubricity alternatives
- Contains no nitrites, triazines, phenols, or sulfurized EP additives
- Provides superior corrosion inhibition on all ferrous and nonferrous metals
- Forms stable micro-emulsion in hard water environments
- Used with aluminum, magnesium and copper alloys, cast iron, steels, stainless steels, and many plastics and composites
- Keeps machines very clean for reduced maintenance
- Has exceptional sump life without the use of tank side additives
- Requires no special disposal or recycling techniques

New!



Container Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**MS656320**	Price
5 Gallon	HAZ58	**MS656325**	Price
54 Gallon	HAZ06	**MS656330†**	Price

† All 54 Gallon Drums FOB Factory

Master Fluid Solutions TRIM® E206

New!

Long Life Emulsion



- Versatile product works in heavy-duty broaching, gear hobbing, surface and centerless grinding, and replacing straight oil on some types of screw machineS
- Contains highly effective extreme-pressure additives to control built-up edge
- Compatible with all ferrous and nonferrous materials
- Extremely stable emulsion to reduce carry-off and to facilitate getting the fluid to the point of cut
- Rejects tramp oil to help extend sump life and increase recycling options
- Leaves a soft fluid film to prevent sticky ways, chucks, tool holders, and fixtures
- Coolant residue is easily removed with water, working solution, or aqueous cleaners
- Easy recycling or disposal with conventional techniques and equipment

Container Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**MS656000**	Price
5 Gallon	HAZ58	**MS656005**	Price
54 Gallon	HAZ06	**MS656010†**	Price

† All 54 Gallon Drums FOB Factory

Master Fluid Solutions TRIM® MicroSol® 585XT

Extended Life Non-Chlorinated Semi-Synthetic

- Extends useful life without the need for tank-side biocides or fungicides
- Low foaming ideal for high-pressure, high-volume applications
- Compatible with cast iron, steels, copper, titanium, and aluminum alloys, plastics and composites
- Cooling and lubricity for titanium machining applications
- Corrosion inhibition on cast iron and eliminates "hot chip" and clinkering problems
- Excellent alternative to chlorinated soluble oils on high-silica aluminum alloys
- Contains no nitrites, triazines, phenols, chlorinated, or sulfurized EP additives
- Provides superior corrosion inhibition on all ferrous and nonferrous metals
- Keeps machines very clean for reduced maintenance
- Requires no special disposal or recycling techniques

New!



Container Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**MS656240**	Price
5 Gallon	HAZ58	**MS656245**	Price
54 Gallon	HAZ06	**MS656250†**	Price

† All 54 Gallon Drums FOB Factory

Rustlick™ RTD Premium Reaming, Tapping & Drilling Fluid

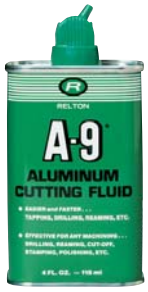


- Compatible with coolants; actually fortifies coolants with additional lubricity
- Silicone free; no-solvents
- Boosts tool life
- Does not leave sticky residue
- Contains chlorine and sulfur

Size	Temperature Range	Hazard Code	Order No.	Price
12 oz	212°F (FlashPoint)	HAZ57	**LK6069016**	Price
1 Gallon	212°F (FlashPoint)	HAZ57	**LK6069001**	Price
5 Gallon	212°F (FlashPoint)	HAZ58	**LK6069005**	Price

A-9® A-9 Alumnum Cutting Oil

All 30 & 55 gallon drums F.O.B. factory.



- Eases all operation on aluminum: milling, broaching, drilling, threading, tapping reaming, sawing, etc
- Contains anti-mist component for a healthier work environment
- Contains a scientific blend of chemicals that attach themselves to aluminum surfaces, forming an extreme-pressure boundary lubricant between tool and work surface

Size	Hazard Code	Order No.	Price
4 oz	HAZ57	**LJ5504ZA9**	Price
16 oz	HAZ57	**LJ55PNTA9**	Price
1 Gallon	HAZ57	**LJ5501GA9**	Price
5 Gallon	HAZ58	**LJ5505GA9**	Price
55 Gallon	HAZ06	**LJ5555GA9†**	Price

† All 55 Gallon Drums FOB Factory

Rapid Tap All Metal Cutting Fluid and Paste



- Greatly extended tool life
- Super-fine machined finish in operation after operation
- Anti-mist protection for a healthier work environment
- No special labeling or reporting
- Excels in tough materials
- Contains no 1, 1, 1-trichloroethane or other ozone-depleting chemicals

Size	Hazard Code	Order No.	Price
4 oz	HAZ57	**LJ5504ZNRT**	Price
8 oz	HAZ57	**LJ5508ZNRTP**	Price
16 oz	HAZ57	**LJ55PNTNRT**	Price
1 Gallon	HAZ57	**LJ5501GNRT**	Price
5 Gallon	HAZ58	**LJ5505GNRT**	Price
55 Gallon	HAZ06	**LJ5555GNRT†**	Price

†All 55 Gallon Drums FOB Factory

Tap Magic® Aluminum



- The most effective cutting fluid you can use for work on aluminum

Size	Hazard Code	Order No.	Price
4 oz	HAZ57	**LJ5020004A**	Price
16 oz	HAZ57	**LJ5020016A**	Price
1 Gallon	HAZ57	**LJ5020128A**	Price
5 Gallon	HAZ58	**LJ5020640A**	Price
30 Gallon	HAZ06	**LJ5023840A†**	Price
55 Gallon	HAZ06	**LJ5027040A†**	Price

† All 30 & 55 Gallon Drums FOB Factory

HANGSTERFER'S Super All-Tap Cutting Oil



New!

- Recognized as the ultimate in high quality tapping compounds
- Heavy-duty compound used for severe thread cutting and thread forming operations
- Offers superior lubrication for the tool provides benefits in productivity and tool life
- Non-toxic formulation is designed for operator safety
- Due to its ability to emulsify into water this product is excellent for machines using coolants since it will easily wash off into the coolant system

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**NH101415**	Price
5 Gallon	HAZ58	**NH101414**	Price

Accu-Lube® #10 Perfect Tapping Oil



- Recommended for tapping operations on all metals
- Its thickness allows the tap to cut several holes before recoating is required
- Environmentally safe and biodegradable

Size	Hazard Code	Order No.	Price
8 oz	HAZ57	**LK607583**	Price
1 Gallon	HAZ57	**LK607584**	Price

Tap Magic® Xtra®-Foamy



- New high-visibility foam formula let you visually gauge application rate and fluid presence
- Highly effective for hard metals up to 45 RC
- Virtually eliminates work hardening
- Extended cling time

Size	Hazard Code	Order No.	Price
17 oz	HAZ03	**LJ50800017FL**	Price

Monroe Fluid Technology Prime Cut®



- Water soluble
- Contains chlorine
- Extremely effective on aluminum

MADE IN THE USA

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK5006050**	Price
55 Gallon	HAZ06	**LK5006550†**	Price

†All 55 Gallon Drums FOB Factory

ASHBURN 9000

Water Soluble Cutting Oil

APEX HIGH PERFORMANCE COOLANTS

A moderate to heavy duty water soluble machining and grinding fluid with extreme pressure additives to produce excellent lubricity and finish. Designed to resist bacteria and fungal attack. This produces a healthier environment and minimizes foul odors



Advantages:

- Superior sump life
- Superior lubricity
- Superior corrosion protection
- Pleasant smell
- Non-foaming
- Superior wheel and tool life
- Resists tramp oil

MADE IN THE USA

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK70A411311**	Price
5 Gallon	HAZ58	**LK70A411405**	Price
55 Gallon	HAZ06	**LK70A411555†**	Price

†All 55 Gallon Drums FOB Factory

RIDGID Thread Cutting Oil-Dark

MADE IN THE USA



- Finest quality, special purpose sulphurlard cutting oil that cools, speeds metal removal, produces smooth, clean threads, prevents chips from welding to dies
- An exactly formulated combination of petroleum oils and special additives, including an odorless germicide that is antiseptic, reducing the risk of infection
- Will not congeal at 20°F
- Comparative tests prove the superiority of RIDGID Thread Cutting Oil
- Excellent for drilling, turning and other metal cutting operations but should not be used for lubricating
- Available in Dark and Nu-Clear

				Dark		Nu-Clear	
Size	Hazard Code	Cans to Case	Case Weight	Order No.	Price	Order No.	Price
1 qt	HAZ57	12	28 lbs	**KR5041590**	Price	-	-
1 Gallon	HAZ57	6	51-1/2 lbs	**KR5070830**	Price	**KR5070835**	Price
5 Gallon	HAZ58	1	42 lbs	**KR5041600**	Price	**KR5041575**	Price
55 Gallon	HAZ06	1	465 lbs	**KR5041610†**	Price	**KR5041585†**	Price

†All 55 Gallon Drums FOB Factory

ASHBURN EP Cutting Oil MIKE-O-DRILL DH 60

A heavy duty, light viscosity cutting oil with sulfurized and chlorinated extreme pressure additives. It is a high performance product for use in deep hole drilling, heavy cutting, sawing, and other difficult operations.



- Drilling/deep hole drilling
- Superior EP and lubricity additives
- Low viscosity
- Excellent chip removal
- Increases blade and tool life

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK70E225314**	Price
5 Gallon	HAZ58	**LK70E225405**	Price
55 Gallon	HAZ06	**LK70E225555†**	Price

†All 55 Gallon Drums FOB Factory

Accu-Lube LB-5000 Lubricant - Moderate Duty

New!

1 Gallon Container



- Moderate duty general machining, sawing and cutting
- Post-heat treating aluminum
- Vegetable-based, biodegradable lubricant
- Non-staining, burns off cleanly in post heat treating
- For ferrous & nonferrous metals
- Clean with soap and water

Order No.	Price
LK60LB5000	Price

Accu-Lube LB-6000 Lubricant - Moderate to Heavy Duty

New!

1 Gallon Container



- Moderate to heavy-duty
- Aluminum machining, cutting and sawing
- Moderate-duty milling, drilling, tapping and punching
- Replacing “mist” type lubricant and tooling
- Aluminum applicatons with post heat-treating
- Thru-tool applications

Order No.	Price
LK60LB6000	Price

Accu-Lube LB-6100 Lubricant - Heavy Duty

New!



- Heavy-duty minimum quantity lubricant
- Moderate-duty milling, drilling, tapping, stamping and punching
- Heavy-duty machining, sawing and cutting
- Sawing large diameter solids
- Large diameter tapping
- Deep hole drilling
- Operations that generate a lot of heat
- Thru-tool applications

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK60LB6100**	Price
55 Gallon	HAZ06	**LK60LB6155**	Price

Accu-Lube LB-1000 Lubricant - Heavy Duty

New!

1 Gallon Container



- Heavy duty machining, sawing and cutting
- Difficult steel & hardened metal operations
- Large diameter tapping
- Deep hole drilling
- High heat operations
- Sawing large diameter solids

Order No.	Price
LK60LB1000	Price

Rustlick WS-11

Non-Chorlinated Water Soluble Oil



- Economical soluble oil
- General purpose, medium-duty applications
- Can be used as a light film rust preventative

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK6074013**	Price
5 Gallon	HAZ58	**LK6074053**	Price
55 Gallon	HAZ06	**LK6074553†**	Price

† All 55 Gallon Drums FOB Factory

Monroe Fluid Technology Water Extendable Astro-Cut A®

- Biostable water soluble cutting and grinding fluid concentrate
- Chlorine free



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK5034104**	Price
5 Gallon	HAZ58	**LK5034050**	Price
55 Gallon	HAZ06	**LK5034550†**	Price

†All 55 Gallon Drums FOB Factory

Monroe Fluid Technology Water Extendable Astro-Cut B®

- Heavy duty biostable semi-synthetic cutting and grinding fluid concentrate
- Chlorine free



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK5035104**	Price
5 Gallon	HAZ58	**LK5035050**	Price
55 Gallon	HAZ06	**LK5035550†**	Price

†All 55 Gallon Drums FOB Factory

Ashburn Chemical Technologies Mike-O-Thread Dark and Light

Premium quality thread cutting oils which provide smooth, clean and accurate thread cutting on all metals

Advantages:

- Superb cutting ability
- Fats and sulphur remain high
- Penetrates quickly
- Rapidly cools dies
- Provides an excellent finish on threads



		Dark		Light	
Size	Hazard Code	Order No.	Price	Order No.	Price
1 Gallon	HAZ57	**LK70E300311**	Price	**LK70E200311**	Price
5 Gallon	HAZ58	**LK70E300405**	Price	**LK70E200405**	Price
55 Gallon	HAZ06	**LK70E300555†**	1,092.00	**LK70E200555†**	Price

†All 55 Gallon Drums FOB Factory

LPS Edge Creme

- Excellent for vertical applications, biodegradable
- Can be applied to cutting tools before tapping or reaming
- Squeeze tube allows easy application
- For use when drilling, tapping blind holes, forming, bending, pre-coating fasteners and lubricating rubber seals
- Ecological and economical
- Safe on all metals



Size	Order No.	Price
10 oz	**LJ6043100**	Price

Tap Magic Xtra Thick Cutting Fluids

- Extreme performance, heavy weight fluid for the hardest metals
- Highly effective up to 45 RC
- Virtually eliminates work hardening
- Extended cling time



Size	Hazard Code	Order No.	Price
16 oz	HAZ57	**LJ5070016T**	Price
1 Gallon	HAZ57	**LJ5070128T**	Price
5 Gallon	HAZ58	**LJ5070640T**	Price

Tap Magic Formula 2 Eco-Oil

- Earth-friendly
- Low-smoke
- Low-odor formula with EP-X3™
- For use on all metals



Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LJ5060012CL**	Price
16 oz	HAZ57	**LJ5060016C**	Price
1 Gallon	HAZ57	**LJ5060128C**	Price
5 Gallon	HAZ58	**LJ5060640C**	Price
30 Gallon	HAZ06	**LJ5063840C†**	Price
55 Gallon	HAZ06	**LJ5067040C†**	Price

† All 30 & 55 Gallon Drums FOB Factory

Tap Magic Formula 1-Aqueous™

- Earth-friendly
- Aqueous-base with EP-X3™ performance booster
- For use on all metals



Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LJ5050012QL**	Price
16 oz	HAZ57	**LJ5050016Q**	Price
1 Gallon	HAZ57	**LJ5050128Q**	Price
5 Gallon	HAZ58	**LJ5050640Q**	Price
30 Gallon	HAZ06	**LJ5053840Q†**	Price
55 Gallon	HAZ06	**LJ5057040Q†**	Price

† All 30 & 55 Gallon Drums FOB Factory

Crown Cutting Oil

- Provides maximum lubricity for ferrous and non-ferrous machining
- Reduces downtime and increases tool life



Size	Hazard Code	Order No.	Price
10.5 oz	HAZ03	**LP507020**	Price

Tapmatic® Dual Action #2

- Provides superior extreme pressure lubricity in machining aluminum and its alloys
- Reduces friction and eliminates chip welding
- Improves surface finish and extends tool life
- Designed especially for machining aluminum



Size	Hazard Code	Order No.	Price
1 Pint	HAZ57	**LJ6040220**	Price
1 Gallon	HAZ57	**LJ6040230**	Price

Tapmatic® Natural

- Nontoxic and nonhazardous, biodegradable
- USDA BioPreferred
- Does not contain sulfur, chlorine, chlorinated solvents, water, mineral oil or inactive fillers
- Great for steel and aluminum
- High performance lubricating ability eliminates galling and seizing
- Safe on all metals



Size	Hazard Code	Order No.	Price
1 Pint	HAZ57	**LJ6044220**	Price
1 Gallon	HAZ57	**LJ6044230**	Price
5 Gallon	HAZ58	**LJ6044240**	Price

TCO-14 Thread-Cutting Oil - Dark

- Ready to cut clean, smooth threads on all pipe materials
- Extreme-pressure additive for anti-weld characteristics
- Excellent protection of tools and machined parts against corrosion
- Contains anti-mist component for a healthier work environment



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LJ5501GTCO14**	Price
5 Gallon	HAZ58	**LJ5505GTCO14**	Price
55 Gallon	HAZ06	**LJ5555GTCO14†**	Price

†All 55 Gallon Drums FOB Factory

TCO-16 Thread-Cutting Oil - Light

- Ready to cut clean, smooth threads on all pipe materials
- Extreme-pressure additive for anti-weld characteristics
- Excellent protection of tools and machined parts against corrosion
- Contains anti-mist component for a healthier work environment



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LJ5501GTCO16**	Price
5 Gallon	HAZ58	**LJ5505GTCO16**	Price
55 Gallon	HAZ06	**LJ5555GTCO16†**	Price

†All 55 Gallon Drums FOB Factory

Ashburn Aerosol Tapping Fluid

TD FOAMY

An extreme duty tapping and drilling fluid desgined for ease of application. Can be applied before or during the cutting operation. It's excellent foaming action penetrates deep into the cut to extend tap life and promote a superior finish

- Superior finish and threads
- Extends tool life
- Excellent foaming action
- Use on all metals
- Does not contain 1,1,1 Trichloroethane



Size	Hazard Code	Order No.	Price
20 oz	HAZ03	**LK70D150220**	Price

Master Fluid Solutions TRIM® MicroSol® 690XT

High Lubricity Low Foam Premium Semi-Synthetic Coolant



- Extends useful life without the need for tank-side biocides or fungicides
- Low foaming ideal for high-pressure, high-volume applications
- No nitrites, triazines, phenols, chlorinated, sulfurized EP additives; boron, halogen free
- Compatible with titanium, high nickel alloys, steels, copper, and aluminum alloys
- Excellent alternative to chlorinated soluble oils on high-silica aluminum alloys
- Provides superior corrosion inhibition on all ferrous and nonferrous metals
- Keeps machines very clean for reduced maintenance
- Requires no special disposal or recycling techniques

New!

Container Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**MS656360**	Price
5 Gallon	HAZ58	**MS656365**	Price
54 Gallon	HAZ06	**MS656370†**	Price

† All 54 Gallon Drums FOB Factory

Master Fluid Solutions TRIM® SOL®

New!

General Purpose Emulsion Coolant



- Proven to be highly effective in controlling built-up edge (BUE)
- Soluble oil (emulsion) coolant concentrate
- Used for production surface and centerless grinding, heavy-duty broaching, gear hobbing, and replacing straight oil on some types of screw machines
- Leaves a fluid, non-gumming film to prevent sticky ways, chucks, tool holders, and fixtures
- Coolant residue is easily removed with either water, working solution, or aqueous cleaners
- Easy recycling or disposal with conventional techniques and equipment

Container Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**MS656900**	Price
5 Gallon	HAZ58	**MS656905**	Price
54 Gallon	HAZ06	**MS656910†**	Price

† All 54 Gallon Drums FOB Factory

Master Fluid Solutions TRIM® C270CG

New!

High Performance Synthetic Coolant



- Compatible with a very wide range of materials including: cast iron, steels, and copper alloys, as well as plastics and composites
- Provides excellent corrosion inhibition on all common ferrous alloys
- Used when form grinding, drilling, tapping, and reaming operations without chlorine or sulfur-based EP additives
- Extremely low carry-off for very low total operation costs
- Very low foam and mist & very low initial ordor
- Leaves machines clean while leaving a soft, fluid film that protects the bare metal parts
- Residual film is easily resoluble in coolant working solution to facilitate easy machine cleaning
- Exceptional sump life and very good tramp oil rejection

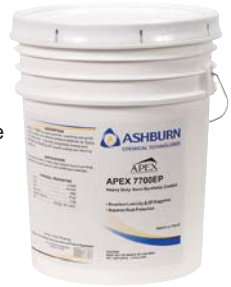
Container Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**MS657720**	Price
5 Gallon	HAZ58	**MS657725**	Price
54 Gallon	HAZ06	**MS657730†**	Price

† All 54 Gallon Drums FOB Factory

ASHBURN 7700EP

APEX MADE IN THE USA

Heavy Duty Semi-Synthetic Coolant



- Extreme pressure lubricity for extended tool life
- Clean fluid – leaves no sticky deposits on machine or parts
- Excellent corrosion protection
- Stable emulsion in hard and soft water
- Resilient fluid with excellent microbial resistance
- Heavy duty semi-synthetic water soluble metalworking fluid
- For use on ferrous and most nonferrous metals including cast iron and aluminum
- Suitable for turning, milling, drilling, sawing and grinding in individual sumps or central systems

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK70A770405**	Price
55 Gallon	HAZ06	**LK70A770455†**	Price

†All 55 Gallon Drums FOB Factory

ASHBURN 6000

APEX

Heavy Duty Synthetic Coolant



- Excellent lubricity
- Excellent tool life and finish
- Provides long sump life
- Superb corrosion protection
- Non-foaming
- Transparent
- Does not contain nitrites, chlorine or sulfur

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK70A600311**	Price
5 Gallon	HAZ58	**LK70A600405**	Price
55 Gallon	HAZ06	**LK70A605555†**	Price

ASHBURN 7090

APEX MADE IN THE USA

Semi-Synthetic Coolant



- Excellent lubricity
- Good foam control
- Good corrosion protection
- Long sump life
- Rejects tramp oil

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK70A709005**	Price
55 Gallon	HAZ06	**LK70A709055†**	Price

ASHBURN 7000

APEX MADE IN THE USA

Semi-Synthetic Coolant



- For use on ferrous and nonferrous materials
- Excellent lubricity
- Superior tramp oil rejection
- Superb corrosion protection
- Good foam control
- Excellent sump life

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK70A470505**	Price
55 Gallon	HAZ06	**LK70A475555†**	Price

†All 55 Gallon Drums FOB Factory

HANGSTERFER'S S-787 Semi-Synthetic Coolant



- Chlorine-free, vegetable based micro-emulsion semi-synthetic coolants that represents the Next Generation® in technology
- Semi-synthetics allow for excellent results high-pressure applications with exotic aerospace and medical alloys
- Natural translucent formula provides good work piece visibility, very low consumption, and often reduces coolant consumption by more than 20%

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**NH101404**	Price
55 Gallon	HAZ06	**NH101403**	Price

ASHBURN 6500

APEX MADE IN THE USA

High Performance Synthetic Machining and Grinding Fluid



- Increased lubricity vs conventional synthetic coolants
- Superior rust and corrosion protection
- Very low carry-off reduces coolant consumption
- Works well on ferrous and nonferrous metals

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK70A650005**	Price
55 Gallon	HAZ06	**LK70A650055†**	Price

†All 55 Gallon Drums FOB Factory

ASHBURN AQUA COOL

General Purpose Soluble Oil



- Water soluble
- General purpose
- Good lubricity
- Excellent corrosion protection
- Cost effective
- Long sump life

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK70A400314**	Price
5 Gallon	HAZ58	**LK70A400405**	Price
55 Gallon	HAZ06	**LK70A400555†**	Price

† All 55 Gallon Drums FOB Factory

VAUGHAN Chemical FC-100 & Omni Cut Coolant

MADE IN THE USA

FC-100 Cutting Cream



- Water-soluble sulphurized oil emulsion used as a coolant in ferrous metal cutting
- Provides high heat absorption, excellent lubrication and corrosion protection during machining operations
- Designed for extreme pressure applications
- Non-flammable

Omni-Cut

- The harder the job –the harder it works!
- Premiuim synthetic metal cutting fluid for use on any metal except magnesium

		FC-100 Cutting Cream		Omni-Cut Coolant	
Size	Hazard Code	Order No.	Price	Order No.	Price
1 Gallon	HAZ57	**LK55F1**	Price	**LK55O1**	Price
5 Gallon	HAZ58	**LK55F5**	Price	**LK55O5**	Price
55 Gallon	HAZ06	**LK55F55†**	Price	**LK55O55†**	Price

† All 55 Gallon Drums FOB Factory

Rustlick Powerchip 2000

Heavy-Duty Synthetic Coolant



- High performance for heavy duty machining, grinding and sawing
- Non-chlorinated EP package provides extended tool life
- Provides excellent lubricity rust protection and low foaming
- Superior way-lube rejection, leading to cleaner coolant and longer sump life
- Safe for most metals (except magnesium)
- Suitable in hard water applications

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK6076305**	Price
55 Gallon	HAZ06	**LK6076355†**	Price

† All 55 Gallon Drums FOB Factory

Rustlick Ultracut® Aero Aluminum and Titanium Coolant

Chlorine Free



- EP additives chlorine free
- Special formulation to meet Aerospace OEI requirements
- Recommended for aluminum, nickel alloys, stainless steel and titanium
- Easty to maintain, long-sump life, superior corrosion protection
- Does not leave oily-residue

Size	Temperature Range	Hazard Code	Order No.	Price
5 Gallon	220°F (FlashPoint)	HAZ58	**LK6074405**	Price
55 Gallon	220°F (FlashPoint)	HAZ06	**LK6074455†**	Price

† All 55 Gallon Drums FOB Factory

Rustlick Vytron-N

General Purpose Synthetic Fluid



- High level of rust protection
- Long sump life prevents rancidity
- Safe on most metals including titanium

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK6075014**	Price
5 Gallon	HAZ58	**LK6075054**	Price
55 Gallon	HAZ06	**LK6075554†**	Price

† All 55 Gallon Drums FOB Factory

Hangsterfer's S-500 Coolant

New!



- A Boeing approved product for general machining of all metals
- Due to its extreme pressure (EP) properties, outstanding results have been generated on all metals, including nickel alloys, stainless steels and aluminum alloys
- Chlorine free with specially formulated anti-weld and anti-wear compounds for use on ferrous and non-ferrous metals especially aluminum alloys
- Water soluble

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**NH101373**	Price
55 Gallon	HAZ06	**NH101372**	Price

TRICO Advanced Synthetic Coolant for Spray and Flood Applications



Tri-Cool's advanced formulation incorporates synthetic additives that allow faster speeds and feeds while remaining completely free of oil fumes

- Rapid cooling — advanced synthetic formula provides highly efficient heat absorption
- Biodegradable — contains no oil, sulfurs, phenols, chlorines or nitrites
- Corrosion resistant —gives excellent rust protection at high dilutions

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**NW5030656**	Price
5 Gallon	HAZ58	**NW5030657**	Price
55 Gallon	HAZ06	**NW5030658†**	Price

† All 55 Gallon Drums FOB Factory

Monroe Fluid Technology Astro-Cut BCL



- Heavy-duty biostable semi-synthetic general purpose metal working coolant
- Designed for the machining and grinding of virtually all metals except magnesium
- Contains chlorine as an extreme pressure additive for greater lubricity

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK500037105**	Price
55 Gallon	HAZ06	**LK500037155†**	Price

†All 55 Gallon Drums FOB Factory

Ashburn 9500

Heavy Duty Soluble Oil

APEX

MADE IN THE USA



A heavy duty water soluble oil. It is designed to be effective in a wide variety of machining and grinding applications. This product resists tramp oil contamination and has excellent resistance to bacteria and fungus. Can be used on ferrous and nonferrous materials

- Excellent sump life
- Superb lubricity and EP properties
- Good tramp oil rejection
- Provides good rust and corrosion protection

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK70A950111**	Price
5 Gallon	HAZ58	**LK70A950205**	Price
55 Gallon	HAZ06	**LK70A950355†**	Price

†All 55 Gallon Drums FOB Factory

Rustlick WS-5050

Heavy-Duty Soluble Oil



- Effective chlorinated EP additive provides excellent tool life
- Can be used on all metals except titanium
- Compatible with CNC machining

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK6074016**	Price
5 Gallon	HAZ58	**LK6074056**	Price
55 Gallon	HAZ06	**LK6074556†**	Price

† All 55 Gallon Drums FOB Factory

Rustlick Powersaw

Synthetic Sawing Coolant



- High level of rust protection and low foaming
- Non-chlorinated E.P. additive
- Designed for band sawing applications
- Can be used with most metals except magnesium

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK6076205**	Price
55 Gallon	HAZ06	**LK6076255†**	Price

† All 55 Gallon Drums FOB Factory

Rustlick SS-405L

Semi-Synthetic Coolant



- General Purpose, for machining and grinding
- Provides excellent lubricity and protects machines and parts from rust
- Can be used on many different metals including aluminum

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK6078405**	Price
55 Gallon	HAZ06	**LK6078410†**	Price

† All 55 Gallon Drums FOB Factory

Rustlick Ultracut 375R

Biostable Semi-Synthetic Coolant



- Provides finer finishes and longer tool life
- Provides long sump life due to exceptional biostability and rust protection
- Good rust protection for cast iron
- Suitable for milling, drilling, turning, and grinding
- For all metals & some grades of aluminum
- Compatible with CNC Machining
- Consolidate to one universal fluid

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK6074905**	Price
55 Gallon	HAZ06	**LK6074955†**	Price

† All 55 Gallon Drums FOB Factory



CIMCOOL Cimstar® 10-D5

- Semi-synthetic, light to moderate duty, chlorine free
- Multi-metal safe - has been used on ferrous, non-ferrous & yellow metals
- Good sump life

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ57	**LL5001294P**	Price
55 Gallon	HAZ06	**LL5001294D†**	Price

†All 55 Gallon Drums FOB Factory

CIMCOOL Cimstar® 10-D6

- Semi-synthetic, moderate duty, chlorine containing
- Multi-metal safe
- Light residue characteristics make it a good choice for cast iron
- Good sump life

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LL5001296P**	Price
55 Gallon	HAZ06	**LL5001296D†**	Price

†All 55 Gallon Drums FOB Factory

CIMCOOL Cimstar® 10-D8

- Semi-synthetic, moderate to heavy duty chlorinated
- Has the cleanliness of a semi and lubricity of a soluble oil
- Versatile - can grind and saw

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ05	**LL5001293P**	Price
55 Gallon	HAZ06	**LL5001293D†**	Price

†All 55 Gallon Drums FOB Factory

CIMCOOL Cimstar® 40B

- Semi-synthetic recommended for moderate-duty machining and grinding of ferrous metals and some non-ferrous metals
- The oily residue keeps machine tools and work-piece materials free of corrosion and staining
- Good rancidity and foam control

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LL5100893P**	Price
55 Gallon	HAZ06	**LL5100893D†**	Price

†All 55 Gallon Drums FOB Factory

CIMCOOL Cimstar® 55

- Semi-synthetic for general-purpose machining and grinding of ferrous and nonferrous metals
- Light to moderate duty machining and grinding applications
- Should not be used on magnesium alloys

Size	Haz Code	Order No.	Price
5 Gallon	HAZ58	**LL5100626P**	Price
55 Gallon	HAZ06	**LL5100626D†**	Price

†All 55 Gallon Drums FOB Factory

CIMCOOL Cimstar® 60

- Semi-synthetic, general-purpose fluid for machining and grinding aluminum, iron and steel
- Good lubricity - physical, chemical and extreme pressure lubricant agents provide good machining and grinding ability

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LL5100024P**	Price
55 Gallon	HAZ06	**LL5100024D†**	Price

† All 55 Gallon Drums FOB Factory

Rustlick™ EDM250 Low-Viscosity Dielectric Fluid



- Universal low viscosity dielectric fluid
- Excellent flusing and finish characteristics
- Safe for use with all filter types

Size	Temperature Range	Hazard Code	Order No.	Price
5 Gallon	200°F (FlashPoint)	HAZ58	**LK6072050**	Price

Rustlick™ EDM500 Premium Synthetic Dielectric Fluid



- Low viscosity
- Withstands up to 400 amps
- Eliminates skin irriation
- For use on all ferrous metals, alumimu, brass, bronze and copper

Size	Temperature Range	Hazard Code	Order No.	Price
5 Gallon	200°F (FlashPoint)	HAZ58	**LK6072055**	Price

CIMCOOL® Cimtech® 95 Metal Working Fluid

- Extremely low foaming, clear, biostable synthetic
- Recommended for grinding of ferrous metals
- Designed for light duty grinding applications such as surface, double disc and Blanchard grinding operations

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ04	**LL5100189P**	Price
55 Gallon	HAZ06	**LL5100189D†**	Price

†All 55 Gallon Drums FOB Factory

CIMCOOL® Cimtech® 310 Metal Working Fluid

- Boeing approved
- Synthetic recommended for machining and grinding operations, including creep feed grinding, on non-ferrous or ferrous metals
- Unique, low pH synthetic fluid designed for the aerospace industry

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LL5100155P**	Price
55 Gallon	HAZ06	**LL5100155D†**	Price

†All 55 Gallon Drums FOB Factory

CIMCOOL® Cimtech® 500 Heavy Duty Synthetic Fluid

- Synthetic recommended for machining and grinding operations of ferrous materials, where a heavy-duty synthetic fluid is desired
- Heavy-duty machining operations
- Moderate-duty grinding operations
- Rejects tramp oil to keep product clean extending sump life
- Very good synthetic honing fluid

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LL5100271P**	Price
55 Gallon	HAZ06	**LL5100271D†**	Price

†All 55 Gallon Drums FOB Factory

Rustlick™ EDM 30, 250 & 500



RUSTLICK™ EDM-30–Dielectric Oil
- High quality oil offers low viscosity for fast settling
- Use with paper cartridge filters

RUSTLICK™ EDM-250–Dielectric Oil
- Low viscosity for excellent flushing and finishing
- Resists thermal degradation from high amperage application up to 400 Amps
- Good for all types of filters

RUSTLICK™ EDM-500–Synthetic Dielectric Oil
- Cosmetic-grade formulation virtually eliminates skin irritation
- Formulated from base chemicals so highly refined and purified that additional additives are not necessary. The result is faster cutting, higher quality finishes and long fluid life
- Resists thermal degradation from high amperage application up to 400 Amps
- High dielectric strength
- Good for all types of filters

Description	Size	Hazard Code	Order No.	Price
EDM-30	5 Gallon	HAZ58	**LK6072052**	Price
EDM-30	55 Gallon	HAZ06	**LK6072552†**	Price
EDM-250	55 Gallon	HAZ06	**LK6072550†**	Price
EDM-500	55 Gallon	HAZ06	**LK6072555†**	Price

†All 55 Gallon Drums FOB Factory



CIMCOOL® Cimperial® 1060CF

- Soluble oil recommended for moderate-to-heavy-duty machining and grinding operations
- Chlorine free
- Excellent rust protection

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LL5100034P**	Price
55 Gallon	HAZ06	**LL5100034D†**	Price

† All 55 Gallon Drums FOB Factory

CIMCOOL® Cimperial® 1070 Premium

- Soluble oil recommended for heavy-duty machining and grinding operations
- Can be used on virtually any operations on a variety of metals

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LL5100102P**	Price
55 Gallon	HAZ06	**LL5100102D†**	Price

†All 55 Gallon Drums FOB Factory

Master Fluid Solutions TRIM® SC520

New!

General Purpose Semi-Synthetic



- Good sump life in "stand-alone" machines
- Low odor and mist
- Effective in most grinding, sawing, drilling, and CNC turning and milling operations by varying concentrations
- Provides sufficient lubricity to do down-the-hole operations in aluminum, cast iron, and most steels, including many stainless steels
- Compatible with cast iron, steels, copper, and aluminum alloys, as well as, most plastics and composites
- Rejects tramp oils rapidly for easy recycling with good sump life
- Easily recycled or disposed of using conventional techniques and equipment

Container Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**MS656800**	Price
5 Gallon	HAZ58	**MS656805**	Price
54 Gallon	HAZ06	**MS656810†**	Price

† All 54 Gallon Drums FOB Factory

Rustlick Ultracut® 380R Heavy-Duty Bio-Resistant Semi-Synthetic Coolant

Chlorine Free



- EP additives chlorine free
- Recommended for ferrous and non-ferrous metals (including titanium and nickel alloys)
- Easy to maintain, long-sump life, superior corrosion protection
- Does not leave oily-residue

Size	Temperature Range	Hazard Code	Order No.	Price
5 Gallon	200°F (FlashPoint)	HAZ58	**LK6076005**	Price
55 Gallon	200°F (FlashPoint)	HAZ06	**LK6076055†**	Price

† All 55 Gallon Drums FOB Factory

Rustlick Ultracut® PROCF Heavy-Duty Bio-Resistant Water-Soluble Oil

Chlorine Free



- EP additives chlorine-free
- Recommended for ferrous and non-ferrous metals (including titanium and nickel alloys)
- Low foaming, rejects tramp oil
- Provides excellent residual corrosion protection
- Easy to maintain, superior-sump life and bio-stability

Size	Temperature Range	Hazard Code	Order No.	Price
5 Gallon	200°F (FlashPoint)	HAZ58	**LK6083305**	Price
55 Gallon	200°F (FlashPoint)	HAZ06	**LK6083355†**	Price

† All 55 Gallon Drums FOB Factory

Rustlick Ultracut®Pro Heavy-Duty Bio-Resistant Water-Soluble Oil

Includes Chlorine



- EP additive includes chlorine
- Recommended for ferrous and most non-ferrous metals (excluding titanium and nickel alloys)
- Low foaming; rejects tramp oil, provides excellent residual corrosion protection
- Easy to maintain, superior-sump life and bio-stability

Size	Temperature Range	Hazard Code	Order No.	Price
5 Gallon	200°F (FlashPoint)	HAZ58	**LK6084405**	Price
55 Gallon	200°F (FlashPoint)	HAZ06	**LK6084455†**	Price

† All 55 Gallon Drums FOB Factory

Hangsterfer's R-100 Grinding Synthetic Coolant

New!



- Excellent grinding synthetic, especially useful in Blanchard grinders and deburring tumblers
- R-100 is a full synthetic machining and grinding coolant
- Transparent biostable formula offers extended sump life, reduced coolant consumption and minimal waste
- Free of oil and grease while remaining transparent in both hard and soft water
- Unique cleaning action to help reduce wheel loading and leaves behind a thin corrosion inhibiting film

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**NH101328**	Price
55 Gallon	HAZ06	**NH101327**	Price



CIMCOOL CIMSTAR® 60LF Metal Cutting Fluid

- Clean, completely water soluble, silicone free, semi-synthetic product that contains an extreme pressure lubricant for superior machining and grinding capability
- Recommended for aluminum, iron and steel
- Moderate to heavy duty operations

Size	Haz Code	Order No.	Price
5 Gallon	HAZ58	**LL5100026P**	Price
55 Gallon	HAZ06	**LL5100026D†**	Price

†All 55 Gallon Drums FOB Factory

CIMCOOL CIMSTAR® 540 Metal Cutting Fluid

- Moderate duty, semi-synthetic product with good rust control and excellent rancidity control
- Biostable metalworking fluid that controls biological growth without bactericides. It uniquely blends the newest technological advances to deliver superior performance
- Can be used on a variety of metals and operations

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ57	**LL5100045P**	Price
55 Gallon	HAZ06	**LL5100045D†**	Price

†All 55 Gallon Drums FOB Factory

CIMCOOL CIMSTAR® Qual Star LF Grinding Fluid

- Boeing approved
- Semi-synthetic recommended for general purpose machining and grinding of ferrous metals
- Blends the technological advantages of synthetic fluids with the performance capabilities of soluble oils without the use of extreme pressure lubricants
- Designed to be low foaming in soft water (less than 125 ppm total hardness)

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LL5100038P**	Price
55 Gallon	HAZ06	**LL5100038D†**	Price

†All 55 Gallon Drums FOB Factory

Accu-Lube Accu-Lube Paste

- The industry standard for horizontal applications
- Brush it on for tapping, reaming or drilling
- Environmentally safe and biodegradable



Size	Hazard Code	Order No.	Price
8 oz	HAZ57	**LK6079030**	Price

Accu-Lube Accu-Lube Stick Lubricants

- Reduce heat build-up in belt, disc or wheel grinding operations
- Apply the ready-to-use stick to the tool before start-up
- Environmentally safe and biodegradable





Size	Hazard Code	Order No.	Price
2.02 oz Push-up Stick	HAZ57	**LK6079042**	Price
13 oz Tube	HAZ57	**LK6079045**	Price

Accu-Lube Accu-Lube Pump Spray

- The precise nozzle allows you to apply only where needed
- Ideal for drilling, tapping, reaming
- Environmentally safe and biodegradable



Size	Hazard Code	Order No.	Price
8 oz	HAZ57	**LK6079026**	Price

Mobil Mobilmet 426 Series Multi-Purpose Cutting Oils

- Mobilmet 426 is recommended for critical machining of non-ferrous metals and automatic operations on materials having a Brinell hardness up to about 300
- Excellent machining performance
- Promotes longer tool life and reduced downtime for tool changes and wheel dressing
- Improved surface finish and dimensional accuracy resulting in fewer rejects and better quality finished products
- Light transparent color provides clear view of work area at all times



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK45CUT426**	Price

ASHBURN Honing Oil MIKE-O-HONE

- Excellent penetration
- Promotes flow of fines
- High sulfur content
- Provides excellent surface finish
- A superior fluid for use in industrial and automotive operations



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK70E622311**	Price
5 Gallon	HAZ58	**LK70E622405**	Price

COILHOSE PNEUMATICS Air Compressor Oil

- Napthenic-based rust and oxidation inhibitor non-detergent
- 30 Wt. high grade oil
- Recommended to be changed after every 1000 hours of service or once annually whichever comes first



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**NV50ACL130**	Price
1 qt	HAZ57	**NV50ACL032**	Price

Ingersoll Rand All-Season T30-Air Compressor Oil

- Eliminates carbon build-up, allows compressor to run cooler, extends compressor life and service intervals
- T30-Select® performs four (4) times longer than mineral based lubricant SAE Grade 20W40



Size	Hazard Code	Order No.	Price
1 qt	HAZ57	**PR5532318875**	Price

Mobil Rarus 427 Series Compressor Oil

- A line of premium performance ashless air compressor oils designed to lower maintenance costs, improve valve performance, reduce the wear of rings & cylinders, and reduce deposits of sludge in discharge lines
- Has excellent water separability, improves filter life and is very effective in the protection of rust & corrosion
- Reciprocating air compressor crankcases and cylinders
- Rotary screw compressors
- Compressors used in stationary and mobile applications
- Rotary vane compressors
- ISO Viscosity Grade: 100



Size	Hazard Code	Order No.	Price
1 qt	HAZ57	**LK4542716**	Price
1 Gallon	HAZ57	**LK454271**	Price

Accu-Lube® LB-3000

- Medium duty machining: sawing, solids and tubing drilling and tapping small holes, stamping, rolling
- Economical high performance natural base cutting oil
- Environmentally friendly and worker safe
- Must be cleaned off prior to post heat treating
- Good for all metals



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK60LB3000**	Price
55 Gallon	HAZ06	**LK60LB3055†**	Price

†All 55 Gallon Drums FOB Factory

Accu-Lube® LB-6800

- Aluminum sawing lubricant
- Designed for aluminum extruders
- Non-staining and easily burns off during post heat treat processes
- Environmentally safe, biodegradable and non-toxic



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK60LB6800**	Price
55 Gallon	HAZ06	**LK60LB6855†**	Price

†All 55 Gallon Drums FOB Factory

Accu-Lube® LB-2000

- Medium to heavy duty machining
- For use in general machinery, drilling and tapping small diameter holes
- High performance natural base oil
- Environmentally friendly and worker safe
- Good for all metals



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK60LB2000**	Price
55 Gallon	HAZ06	**LK60LB2055†**	Price

†All 55 Gallon Drums FOB Factory

Accu-Lube® Power Stamp II

- For the stamping industry or any heavy-duty application that requires excellent chemical and base lubricity
- Light viscosity clean lubricant, won't gum up
- Non-chlorinated EP package
- Safe for post heat treating of non-ferrous metal
- Water washable



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK60LBSTII01**	Price
55 Gallon	HAZ06	**LK60LBSTII55†**	Price

†All 55 Gallon Drums FOB Factory

Accu-Lube® Synthetic II Stamping Lubricant

- Water-based organic stamping lubricant
- Boron and chlorine free with superior lubricity
- For near dry stamping/machining of ferrous, non-ferrous metals and aluminum
- Provides excellent corrosion protection
- Clean before heat treating with rinse water



Size	Temperature Range	Hazard Code	Order No.	Price
1 Gallon	212°F (FlashPoint)	HAZ57	**LK60LBSY201**	Price
55 Gallon	212°F (FlashPoint)	HAZ06	**LK60LBSY255†**	Price

†All 55 Gallon Drums FOB Factory

Monroe Fluid Technology Water Extendible Astro-Grind A®

- Astro-Grind A is a heavy duty biostable semi-synthetic grinding fluid concentrate
- Chlorine free



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK5047104**	Price
5 Gallon	HAZ58	**LK5047050**	Price
55 Gallon	HAZ06	**LK5047550†**	Price

†All 55 Gallon Drums FOB Factory

LPS Tapmatic® AquaCut

- Water-based formula
- Excellent in high speed cooling applications
- Nonflammable, non hazardous
- Does not contain sulfur, chlorinated solvents, chlorine or oils
- Safe on all metals, except magnesium
- Corrosion inhibitors prevent flash rusting
- Provides fine finishes, cinnamon scent



Size	Hazard Code	Order No.	Price
16 oz	HAZ57	**LJ6001216**	Price
1 Gallon	HAZ57	**LJ6001228**	Price

Rustlick™ G-25-J

Synthetic Grinding Fluid

- High level of rust prevention, non-foaming, transparent
- Enables the rapid settling of residues, which eliminates wheel build-up and ensures finer finishes

New!



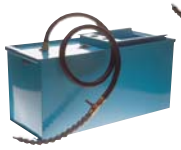
Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK6075012**	Price
5 Gallon	HAZ58	**LK6075052**	Price
55 Gallon	HAZ06	**LK6075552†**	Price

† All 55 Gallon Drums FOB Factory

LittleGIANT Machine Tool Coolant Units – "Flood Type"

MADE IN THE USA







- Coolant units for any machine tool operation
- The flow of coolant liquids can be regulated to any desired amount or completely shut off without harmful effects to the motor
- Centrifugal pumps are used in all machine tool coolant units
- Five gallon tanks are poly-ethylene, ten gallon tanks are heavy gauge steel. Screen and chip collector are easily removable for fast cleaning

HP	Tank Cap.	Size (in.)	Weight	GPH	Replacement Pump	Order No.	Price
1/50	5 Gallon	8 x 10-15/16 x 16-9/16	16 lbs	40	NK-1	**NX501MC5**	Price
1/40	5 Gallon	8 x 10-15/16 x 16-9/16	19 lbs	64	NK-2	**NX502MC5**	Price
1/15	5 Gallon	8 x 10-15/16 x 16-9/16	23 lbs	113	3E-12N	**NX503MC5**	Price

LittleGIANT Replacement Pumps

HP	Amps	Watts	Size	Order No.	Price
1/150	1.1	70	4-9/16 x 4-1/8 (D)	**NX50NK1**	Price
1/40	1.7	100	4-9/16 x 4-1/8 (D)	**NX50NK2**	Price
1/15	3.2	200	5-1/2 x 4-1/2 x 7	**NX503E12N**	Price
1/12	3.5	210	5-1/2 x 4-1/2 x 7	**NX504E34N**	Price
1/6	5	380	7-3/4 x 4-5/16 x 6-1/16	**NX505MSP**	Price

LittleGIANT Dual Purpose Pumps for Submersible or Open Air, Closed Line System

Item	Description	GPH	Shut off	Order No.	Price
	Epoxy coated; cast aluminum housing with 1/4" FNPT intake and 1/2" MNPT discharge	1'-500 / 3'-435 / 5'-337 GPH	17.3 ft	**NX503E12N**	Price
	Epoxy coated; cast aluminum housing with 1/4" FNPT intake and 1/2" MNPT discharge	1'-670 / 3'-650 / 5'-575 GPH	22.6 ft	**NX503E12NR**	Price
	Epoxy coated; cast aluminum housing with 3/8" FNPT intake and 1/4" MNPT discharge	1'-300 / 3'-255 / 5'-205 GPH	11.8 ft	**NX502E38N**	Price

LittleGIANT Small Submersible Pump

Item	Description	GPH	Shut off	Order No.	Price
	Cast aluminum housing. 1/4" MNPT discharge and hooded intake.	1'-300 / 3'-255 / 5'-205 GPH	11.8 ft	**NX502EN**	Price
	Polyester case. 1/4" MNPT discharge and side intake.	1'-170 / 3'-140 / 5'-100 GPH	7 ft	**NX50PE1**	Price
	For use either submerged or in-line if fluid is gavity fed to pump intake. No screen included. Has both 1/2" MNPT and 1/4" FNPT intakes.	1'-170 / 3'-140 / 5'-100 GPH	7 ft	**NX501EA42**	Price

LittleGIANT Submersible Parts Washer Pumps

Item	Description	GPH	Shut off	Order No.	Price
	Cast aluminum housing, 1/4" MNPT discharge, and 6' cord with Master Builders Fitting.	1'-205 / 3'-168 / 5'-120 GPH	7.4 ft	**NX501YS**	Price
	Diecast aluminum housing, hooded intake, 1/4" MNPT outlet, and 1/2" MNPT conduit fitting.	1'-300 / 3'-255 / 5'-205 GPH	11.8 ft	**NX502ENYS**	Price

LittleGIANT Submersible Sump Pump



- Permanent split capacitor (PSC) motor with thermal
- Polypropylene base material
- Overload protection
- Designed for continuous duty
- Energy-saving low amp draw
- Cooler running motor
- 1-1/2" FNPT discharge (38 mm)
- Handles up to 1/2" (12.7 mm) solids
- 140 °F (60 °C) liquid temperature rating cCSAus listed

Order No.	Price
NX50506807	Price

LittleGIANT Submersible Sump and Effluent Pumps

Automatic



- 1-1/2 FNPT discharge
- 1-1/4" FNPT hose adapter included
- 1/3 HP
- Diaphragm operated automatic switch
- On level 7" - 10"/Off level 1" - 4"
- Epoxy coated cast iron housing
- 2760 GPH @ 5', 18' shut off

Order No.	Price
NX506CIA	Price

LittleGIANT Submersible Water Wizard® Pump

Manual



- Cast aluminum housing
- 1200 GPH @ 5', 26.3' shut off
- Bottom, sump-type pick up
- 1" FNPT discharge with garden hose adapter
- 10' Power cord with 3-prong plug 1/6 HP
- UL Listed
- Removable plastic intake screen

Order No.	Price
NX505MSP	Price

LittleGIANT Submersible Sump and Effluent Pumps

Manual



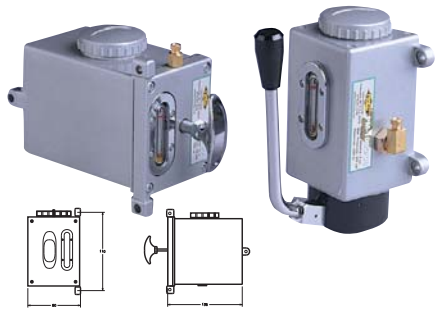
- Handles liquid and solid waste materials up to 3/4" diameter
- 1-1/2" FNPT discharge
- 4/10 HP
- Epoxy Cast iron housing and cover
- 80 GPM @ 5' / 32' shut off

Order No.	Price
NX509ENCIM	Price

TRICO Manual Cyclic Pumps

Applications:
- PM Series pumps are used in applications where a fixed output of lubricant is desired
- With the PM-10 series, the leverage of the pump handle enables the unit to deliver a higher pressure than most models, providing the ability to lubricate points having some back pressure
- With the PM-20 series, lubricant output takes place upon release of the handle using spring discharge to assure the correct amount of lubricant is applied
- These pumps are commonly used with meter units in single or multiple point applications

Features:
- Aluminum die cast reservoir provides long life
- Outputs to 8 cc/stroke
- Sight gauge provides liquid level observation
- Large fill port for easy adding of lubricant
- Drop-in fill port keeps oil clean



Model No.	Type of Operation	CC Output Per Stroke	Discharge Pressure P.S.I.	Reservoir Capacity	Mount Position	Order No.	Price
PM-1000-08	Manual Piston Pump	8	200	450 cc	Vertical	**NW50PM100008**	Price
PM-2000-L	Spring Discharge Piston Pump	8	50	550 cc	Left Horizontal	**NW50PM2000L**	Price
PM-2000-R	Spring Discharge Piston Pump	8	50	550 cc	Right Horizontal	**NW50PM2000R**	Price

TRICO Automatic Cyclic Pumps

Applications:
- The PE-20 series pumps are designed for automatic cyclic systems with fewer than 50 points

PE-20 Series Features:
- Adjustable interval time between lubrications cycles of 0-60 minutes
- Heavy duty plastic reservoir simplifies oil level viewing
- Choice of 6cc or 15cc output per cycle

PE-22 and PE-24 Series Features:
- Adjustable interval time between lubrication cycles of 0-60 minutes
- Heavy duty plastic reservoir simplifies oil level viewing
- Low level switch with alarm
- Pressure gauge

Specifications:
- Reservoir Capacity: 2 Liters
- Motor Voltage: 110-1-50/60 Standard • 220-1-50/60 Optional
- Maximum Pressure: PE-20, 22 Series: 100 PSI; PE-24 Series: 70 PSI
- Output Connection: 5/16-24 (f)



Output	Interval Time Between Cycles	Min. Output (cc/hour)	Low Level Switch	Low Level Alarm and Press. Gauge	Model No.	Order No.	Price
15 cc/cycle	0 - 60 min	15	Yes	No	PE-2002-15	**NW50PE200215**	Price
15 cc/cycle	0 - 60 min	15	Yes	Yes	PE-2202-15	**NW50PE220215**	Price
3.33 cc/sec	0 - 180 min	1.1	Yes	Yes	PE-2402-15	**NW50PE2402**	Price
6 cc/cycle	0 - 60 min	6	Yes	No	PE-2002-06	**NW50PE200206**	Price
6 cc/cycle	0 - 60 min	6	Yes	Yes	PE-2202-06	**NW50PE220206**	Price

***Variable delivery time of 0-180 seconds**

TRICO Automatic Cyclic Pumps

Applications:
- For use in heavy duty applications requiring a timed delivery of lubricant
- These durable pumps provide long life and trouble-free service
- These pumps are used with meter units in multiple point applications

Features:
- Transparent 2 liter reservoir simplifies viewing oil level
- PE 12 series has low level switch to signal when lubricant level is low
- Adjustable output range of 3 to 6 cc/cycle, or 3 to 120 cc/hour
- Convenient drop-in filter in fill port keeps oil clean

Specifications:
- Reservoir Capacity: 2 Liters
- Motor Voltage: 110-1-50/60 Standard; 220-1-50/60 Optional
- Maximum Pressure: 40 PSI
- Output Connection: 5/16-24 (f)



Interval Time Between Cycles	Low Level Switch	Output (cc/cycle)	Min. Output (cc/hour)	Max. Output (cc/hour)	Model No.	Order No.	Price
3 min	No	Adjustable 3-6	60	120	PE-1002-03	**NW50PE100203**	Price
3 min	Yes	Adjustable 3-6	60	120	PE-1202-03	**NW50PE120203**	Price
5 min	No	Adjustable 3-6	36	72	PE-1002-05	**NW50PE100205**	Price
5 min	Yes	Adjustable 3-6	36	72	PE-1202-05	**NW50PE120205**	Price
10 min	No	Adjustable 3-6	18	36	PE-1002-10	**NW50PE100210**	Price
10 min	Yes	Adjustable 3-6	18	36	PE-1202-10	**NW50PE120210**	Price
15 min	No	Adjustable 3-6	12	24	PE-1002-15	**NW50PE100215**	Price
15 min	Yes	Adjustable 3-6	12	24	PE-1202-15	**NW50PE120215**	Price
30 min	No	Adjustable 3-6	6	12	PE-1002-30	**NW50PE100230**	Price
30 min	Yes	Adjustable 3-6	6	12	PE-1202-30	**NW50PE120230**	Price
60 min	No	Adjustable 3-6	3	6	PE-1002-60	**NW50PE100260**	Price
60 min	Yes	Adjustable 3-6	3	6	PE-1202-60	**NW50PE120260**	Price

Graymills Centrifugal Replacement Pumps For Imported Machine Tools

- 3450 RPM motors
- Sealed bearings
- 5/16" Diameter flange mounting holes
- 1/8 & 1/4 HP Plastic impeller
- 1/2, 3/4 & 1 HP Aluminum impeller

MADE IN THE USA



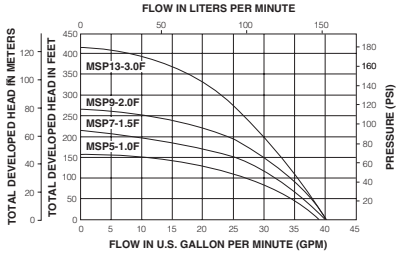
Type - Immersion Pumps									
HP	Motor	Pump Depth (in.)	OAL (in.)	GPM	Discharge (in.)	Flange Dia. (in.)	Bolt Circle (in.)	Order No.	Price
1/8	115/230V, 1PH	6	11-13/16	10 GPM	3/8	5 x 5	5	**LC55IMV08E**	Price
1/8	230/460V, 3PH	6	11-13/16	10 GPM	3/8	5 x 5	5	**LC55IMV08F**	Price
1/4	115/230V, 1PH	7	14-13/16	20 GPM	1/2	6-13/16 x 6-13/16	6-3/8	**LC55IMV25E**	Price
1/4	230/460V, 3PH	7	14-13/16	20 GPM	1/2	6-13/16 x 6-13/16	6-3/8	**LC55IMV25F**	Price
1/2	115/230V, 1PH	9-1/2	18-5/16	35 GPM	3/4	7-1/2 x 7-1/2	6-3/4	**LC55IMV50E**	Price
1/2	230/460V, 3PH	9-1/2	18-5/16	35 GPM	3/4	7-1/2 x 7-1/2	6-3/4	**LC55IMV50F**	Price
3/4	230/460V, 3PH	11	21-1/16	45 GPM	1	7-1/2 x 7-1/2	7-5/16	**LC55IMV75F**	Price
1	230/460V, 3PH	11	21-1/16	50 GPM	1	7-1/2 x 7-1/2	7-5/16	**LC55IMV100F**	Price

Type - Suction Pumps									
HP	Motor	Pump Depth (in.)	OAL (in.)	GPM	Discharge (in.)	Flange Dia. (in.)	Bolt Circle (in.)	Order No.	Price
1/8	115/230V, 1PH	6	7-3/16	10 GPM	3/8	5-1/2 x 5-1/2	5-1/2	**LC55IMS08E**	Price
1/8	230/460V, 3PH	6	7-3/16	10 GPM	3/8	5-1/2 x 5-1/2	5-1/2	**LC55IMS08F**	Price
1/4	115/230V, 1PH	7	9-1/2	20 GPM	3/4	7-3/8 x 7-3/8	7-1/4	**LC55IMS25E**	Price
1/4	230/460V, 3PH	7	9-1/2	20 GPM	3/4	7-3/8 x 7-3/8	7-1/4	**LC55IMS25F**	Price
1/2	115/230V, 1PH	9-1/2	11-11/32	32 GPM	3/4	7-3/8 x 7-3/8	8-1/2	**LC55IMS50E**	Price
1/2	230/460V, 3PH	9-1/2	11-11/32	32 GPM	3/4	7-3/8 x 7-3/8	8-1/2	**LC55IMS50F**	Price
3/4	230/460V, 3PH	11	11-13/16	43 GPM	1	8 x 8	8-1/2	**LC55IMS75F**	Price
1	230/460V, 3PH	11	11-13/16	48 GPM	1	8 x 8	8-1/2	**LC55IMS100F**	Price

Graymills Multi-Stage Centrifugal Pump

Pumps for through-the-tool coolant drilling, boring, grinding and other machining operations requiring high pressure coolant delivery. These pumps are designed to meet the requirements where high pressure and flow are required to accomplish chip removal in addition to dissipate heat and lubrication

MADE IN THE USA





- Steady, pulsation-free coolant delivery
- Prevents thermal shock to cutting tool
- Permits greatly increased feed rates
- Substantially lengthens tool life
- Variable capacity: centrifugal pump design allows flow adjustment by installing valve in pump discharge line
- Abrasion resistant impellers and diffusers: high strength glass filled thermoplastic
- Mounts vertically or horizontally without loss of performance

HP	Stages	Order No.	Price
1	5	**LC55MSP5F**	Price
1.5	7	**LC55MSP7F**	Price
2	9	**LC55MSP9F**	Price
3	13	**LC55MSP13F**	Price

Graymills OEM Machine Tool Pumps

- Direct Factory Replacement for Fadal Machining Centers and many other US machine tool brands
- Durable cast iron construction
- 8" Immersion depth and narrow body provide fast, drop-in installation
- Horizontal discharge above integral mounting flange

MADE IN THE USA



HP	Flow	Order No.	Price
1/8	15 GPM	**LC55FM68HA**	Price
1/4	20 GPM	**LC55FM78HA**	Price

WESCO Coolant Pumps

- **Replacement Motor and Pump only**
- Used by many manufacturers as a standard accessory on their machine tools

MADE IN THE USA



HP	Motor	Pump Depth (in.)	GMP	Order No.	Price
1/20	115V, 60Hz, 1PH	5	6 GPM	**NY501022**	Price
1/20	115V, 60Hz, 1PH	8	6 GPM	**NY501023**	Price
1/3	115/230V, 60Hz, 1PH	8	16 GPM	**NY501026**	Price
1/2	115/230V, 60Hz, 1PH	8	24 GPM	**NY501027**	Price

Graymills Industrial Grade Coolant Pumping Systems for Machine Tools

MADE IN THE USA

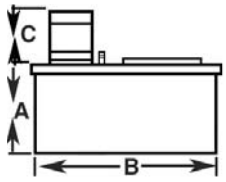
6 Gallon Pump & Tank Systems
- 18 Gauge metal construction with durable powder coated finish
- Screen bowl chip collector
- Removable recessed lid design contains spills and allows easy access
- Includes 4' flexible hose, metal flush nozzle, and flow control valve

10 Gallon Pump & Tank Systems
- 18 Gauge metal construction with durable powder coated finish
- Built-in baffle in tank to help settle out debris
- Screen bowl chip collector
- Removable recessed lid design contains spills and allows easy access
- Includes 4' flexible hose, metal flush nozzle, and flow control valve

17 Gallon Pump & Tank Systems
- 16 Gauge metal construction with durable powder coated finish
- Dual built-in tank baffles to help settle out debris
- Chip collection basket tTo catch debris
- Recessed lid design contains spills and allows easy access

21 Gallon Pump & Tank Systems
- 16 Gauge metal construction with durable powder coated finish
- Dual built-in tank baffles to help settle out debris
- Chip collection basket to catch debris
- Recessed lid design contains spills and allows easy access





Tank Cap.	HP	Motor	GPM	NPT Discharge (in.)	Max. Viscosity	A (in.)	B (in.)	C (Max.)	Width (in.)	Order No.	Price
6 Gallon	1/25	115V, 60Hz, 1PH	10 GPM	3/8	150 SSU	9	18	7-3/8	9-1/2	**LC556HR35A**	Price
6 Gallon	1/6	115V, 60Hz, 1PH	15 GPM	1/2	500 SSU	9	18	7-3/8	9-1/2	**LC556HR45A**	Price
10 Gallon	1/25	115V, 60Hz, 1PH	10 GPM	1/2	150 SSU	11-3/8	25	8-1/2	10	**LC5511HR35A**	Price
10 Gallon	1/6	115V, 60Hz, 1PH	15 GPM	1/2	500 SSU	11-3/8	25	8-1/2	10	**LC5511HR45A**	Price
17 Gallon	1/4	115/230V, 60Hz, 1PH	35 GPM	3/4	500 SSU	11-1/2	28	11-1/2	14	**LC55X17TN33E**	Price
17 Gallon	1/6	115V, 60Hz, 1PH	15 GPM	1/2	500 SSU	11-1/2	28	11-1/2	14	**LC55X17FM68HA**	Price
21 Gallon	1/2	115/230V, 60Hz, 1PH	50 GPM	1	500 SSU	9-3/4	36	10	16	**LC55X21TN41E**	Price
21 Gallon	1/4	115/230V, 60Hz, 1PH	35 GPM	3/4	500 SSU	9-3/4	36	10	16	**LC55X21TN31E**	Price

Graymills 10 Gallon Pump and Tank System

MADE IN THE USA

- 1/8 HP cast iron pump
- 10 Gallon per minute flow rate
- 16 Gauge steel tank with removable lid
- Screen bowl, chip collector
- 115/230V, 60Hz, 1PH
- 500 SSU Maximum viscosity
- Tank: 24"L x 10"W x 11"H



Includes	Order No.	Price
Pump	**LC5510IMV**	Price
Pump & Kit	**LC5510IMVS**	Price

Graymills 21 Gallon Portable Pump and Tank Systems

MADE IN THE USA

- OEM Equipment on early Haas Machine Tools
- 1/8HP Pump delivers up to 10GPM
- Chip collection basket to catch debris
- Casters allow ease of movement and positioning
- Removable recessed, multi-lid design contains spills and allows easy access
- 16 Gauge metal construction with durable powder coated finish
- Tank: 44"L x 16"W x 10"H
- 115/230V, 60Hz, 1PH



Order No.	Price
LC55X21IMVO9E	Price

ASHBURN Premixer/Proportioner

- Simple and accurate premixing method
- Easily changeable metering tips (for selection ratio)
- No moving parts = no maintenance
- Designed to premix your Ashburn coolant concentrate with water at the correct proportion



Description	Order No.	Price
Premixer #6	**LK70C105006**	Price

Graymills Coolant Pump and Tank Package

- Ideal for Drill Presses, Small Grinders, Lathes, Bench Mills and Cut-Off Saws
- Heavy duty pump delivers up to 10GPM
- 5 Gallon metal container
- Abrasion resistant impeller
- Chip basket to collect debris
- Includes flexible metal hose with flow control valve
- 115V Continuous duty motor w/ on-off switch

MADE IN THE USA



Order No.	Price
LC555HR35A	Price

ASHBURN Coolant Coalescer

- One step coolant maintenance
- Keeps coolant clean
- Removes tramp oil 24/7
- Keeps coolant aerated
- Provides continuous cleaning and circulation of coolant in a machine tool sump
- A skimmer head pulls dirty coolant from the sump
- It then passes through a coalescer cartridge which separates the tramp oil from the coolant and returns clean coolant to the sump



Order No.	Price
LK70C300015†	Price

ASHBURN Coolant Rejuvenator

- Ashburn Coolant Rejuvenator is a sump-side additive designed to prevent rancidity and prolong the life of your coolant
- It is a concentrated additive and is normally added at 12 oz per 50 gallons of coolant



Size	Hazard Code	Order No.	Price
16 oz	HAZ57	**LK70B415216**	Price
1 Gallon	HAZ57	**LK70B415311**	Price
5 Gallon	HAZ58	**LK70B415405**	Price

WESCO Coolant Pumps and Units

Wesco Coolant Pumping Units

MADE IN THE USA



- 1/20th HP pumping units recommended for I50 SSU soluble oil and lightweight cutting oil only
- Order No. NY501025 Shown

HP	Volt	Cycle	Phase	Size	Tank Dim.	Motor Height (in.)	GPM 5 ft. Hd.	Compl. Unit in Tank	Order No.	Price
1/20	115	60	1	10 Gallon	24" L, 12-1/2" W, 9-1/2" H	5	6 GPM	Rectangle	**NY501021**	Price
1/20	115	60	1	5 Gallon	12" Dia. x 13" H	5	6 GPM	Round	**NY50521**	Price
1/3	115/220	60	1	10 Gallon	24" L, 12-1/2" W, 9-1/2" H	8	16 GPM	Rectangle	**NY501025**	Price
1/3	115/220	60	1	20 Gallon	30" L, 16" W, 10" H	8	16 GPM	Rectangle	**NY501030**	Price
1/3	115/220	60	1	36 Gallon	36" L, 18" W, 13" H	8	16 GPM	Rectangle	**NY501036**	Price
1/2	115/220	60	1	20 Gallon	30" L, 16" W, 10" H	8	24 GPM	Rectangle	**NY501035**	Price
1/2	115/220	60	1	36 Gallon	36" L, 18" W, 13" H	8	24 GPM	Rectangle	**NY501040**	Price

220 Volts, 3 phase motors also available. FOB Detroit, Michigan

WESCO Hose Assemblies



MADE IN THE USA

Description	Order No.	Price
Flex and Valve Only	**NY50WPL2**	Price
Hose Assembly with Flex and Valve	**NY50WPL1**	Price
Hose Only	**NY50WPL3**	Price

ASHBURN Dragin Pump Kit



- Designed to recover liquid from lathes, mills, grinders, sumps, etc
- Easy attachment of the pump, hose, air supply and suction hose
- Comes with: pump, 8 ft. hose, male & female camlocks, rodhose adapter, extension wand, floor tool and crevice tool

Description	Order No.	Price
Attaches to 55 Gallon Drum	**PC70DPK200**	Price

NATIONAL National Coolant Pumps

3 Gallon and 10 Gallon Flood Type



- Cast iron pump housing
- 3 Gal. – 11" round x 14-1/2"H
- 10 Gal. – 24" x 12" x 8"
- 1/8 HP 1720 RPM
- 6.75 GPM @ 3'
- Steel tank
- **Order No. NW55CP3 Shown**

WORLD CLASS QUALITY

Tank Cap.	Order No.	Price
3 Gallon	**NW55CP3**	Price
10 Gallon	**NW55CP10**	Price

ASHBURN Mist Coolant



- A heavy duty synthetic mist coolant designed for use in all mist applicators
- It keeps the cutting tool cool and provides excellent lubricity during machining operations on ferrous or non-ferrous materials
- Excellent lubricity and EP properties
- Extends tool life
- Non-irritating
- Excellent corrosion protection

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK70A609011**	Price
5 Gallon	HAZ58	**LK70A609105**	Price
55 Gallon	HAZ06	**LK70A609255†**	Price

†All 55 Gallon Drums FOB Factory

TRICO Li'L Mister® Spray System



- Compact size and 1 quart reservoir is ideal for tool room or other light duty machining applications
- Easy to mount on equipment, only needs shop air to become operational
- Nozzle mounting hardware and bracket are included for complete installation

MADE IN THE USA

Tank Capacity	Line Length	Line Material	Order No.	Price
1 Quart	1-5'	Plastic	**NW5030540**	Price

TRICO SprayMaster®

MADE IN THE USA



- Siphon-type spray coolant system for medium to heavy-duty machining operations
- One gallon capacity unit is equipped with a new large orifice nozzle built around a tough crosslinked, polyethylene housing
- Easy to read liquid level indicator, and is easy to refill

Tank Capacity	Line Length	Line Material	Order No.	Price
1 Gallon	1-5'	Armored	**NW5030542**	Price
1 Gallon	2-5'	Armored	**NW5030543**	Price

TRICO SprayMaster® Unit With Stainless Steel Tank

MADE IN THE USA



- All-welded heavy duty, 20 gauge stainless steel coolant tank with visual coolant level indicator
- Flexible, non-kinking brass armored sheeting protects the inner lines from hot chips and the nozzle can be positioned exactly where you want it
- Easy access air and liquid valves
- Molded cover has a removable cap for easy filling
- 5' Line Length

Tank Capacity	No. of Outlets	Order No.	Price
1 Gallon	1 Line	**NW5030548**	Price
1 Gallon	2 Line	**NW5030549**	Price

TRICO SprayMaster II® For NC/CNC Applications

MADE IN THE USA



- The premiere siphon system today
- Modern tooling techniques require that coolant be delivered to the cutting tool before it enters the workpiece
- Fast acting solenoids responds instantly to the command, and can easily be interfaced with NC/CNC controls for automatic operation
- Foot, remote or limit switch accessories are also available for ease of operation

Tank Capacity	Line Length	Line Material	Order No.	Price
1 Gallon	1-5'	Armored	**NW5030458**	Price
1 Gallon	2-5'	Armored	**NW5030459**	Price

TRICO MistMatic® Coolant System

MADE IN THE USA



- Allows for a wide range of coolant delivery
- Air only needed to operate pump
- HV-3100 control valve with 7" segmented plastic nozzle
- One or two outlet, brass armored lines
- Independently adjusted air and coolant allows for balancing coolant delivery
- Easy reading sight gauge
- Reservoir bracket for easy mounting directly to machining application

Tank Capacity	No. of Outlets	Line Length	Order No.	Price
1 Gallon	1 Line	5'	**NW5030600**	Price
1 Gallon	2 Line	5'	**NW5030601**	Price

LOC-LINE®

Modular Coolant Hose & Components 1/4" ID System

Designed to Mate with LOC-LINE Hoses & Accessories Only

- Loc-LINE® will stay in position without any spring back
- Since LOC-LINE® has a ball and socket design, bending doesn't decrease the inside diameter and won't kink like copper tubing. Also, there is no internal positioning rod that can break or restrict fluid flow
- Loc-LINE® is electrically non-conductive. It's ideal for use as an EDM flushing hose
- Loc-LINE® is designed for low pressure applications. The following maximum flow rates are recommended to avoid hose jetting 1/4" LOC-LINE® – 250 gallons/hour
- Hose Kit includes hose (approx. 13"), 1/8, 1/4" NPT connectors, 1/16, 1/8, 1/4" nozzles

1/4" ID System Nozzles

Item	Description	Pkg. Qty	Order No.	Price
	1/16" 90 Degree Nozzle	4	**LV5541470**	Price
	1/16" 90 Degree Nozzle	20	**LV5549439**	Price
	1/4" Elbow	2	**LV5541415**	Price
	1/16" Round Nozzle	4	**LV5541402**	Price
	1/4" Elbow	20	**LV5549435**	Price
	1/16" Round Nozzle	50	**LV5549422**	Price
	1/4" T Fitting	2	**LV5541416**	Price
	1/4" T Fitting	20	**LV5549436**	Price
	1/8" 90 Degree Nozzle	4	**LV5541471**	Price
	1/8" 90 Degree Nozzle	20	**LV5549440**	Price
	1/8" Round Nozzle	4	**LV5541403**	Price
	1/8" Round Nozzle	50	**LV5549423**	Price
	1/4" 90 Degree Nozzle	4	**LV5541472**	Price
	1/4" 90 Degree Nozzle	20	**LV5549441**	Price
	1/4" 90 Degree Spray Bar Nozzle	2	**LV5541473**	Price
	1/4" 90 Degree Spray Bar Nozzle	20	**LV5549442**	Price
	1/4" Round Nozzle	4	**LV5541404**	Price
	1/4" Round Nozzle	50	**LV5549424**	Price
	1/4" Swivel Nozzle-40	2	**LV5541481**	Price
	1/4" Swivel Nozzle-40	20	**LV5549449**	Price
	1/4" Swivel Nozzle-60	2	**LV5541482**	Price
	1/4" Swivel Nozzle-60	20	**LV5549450**	Price
	1" Flare Nozzle	2	**LV5541407**	Price
	1" Straight Flow Nozzle	2	**LV5541489**	Price
	1" Straight Flow Nozzle	20	**LV5549456**	Price
	2-1/2" Swivel Nozzle-75	2	**LV5541488**	Price
	2-1/2" Swivel Nozzle-75	20	**LV5549455**	Price

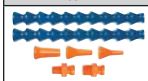
1/4" ID System-Valves, Fittings & Connectors

Item	Description	Pkg. Qty	Order No.	Price
	1/8" BSPT Fitting	4	**LV5541417**	Price
		50	**LV5549437**	Price
	1/8" NPT Connector	4	**LV5541405**	Price
		50	**LV5549425**	Price
	1/4" BSPT Fitting	4	**LV5541418**	Price
		50	**LV5549438**	Price
	1/4" Double Socket	4	**LV5541409**	Price
		20	**LV5549429**	Price
	1/4" Female NPT Valve	2	**LV5521193**	Price
		10	**LV5529453**	Price
	1/4" Flare Nut Adaptor	4	**LV5541414**	Price
	1/4" In-Line Check Valve	2	**LV5521191**	Price
		10	**LV5529451**	Price
	1/4" In-Line Valve	2	**LV5521194**	Price
		10	**LV5529454**	Price
	1/4" Male NPT Valve	2	**LV5521192**	Price
		10	**LV5529452**	Price
	1/4" NPT Connector	4	**LV5541406**	Price
		50	**LV5549426**	Price
	1/4" SAE Flare Nut Adaptor	20	**LV5549434**	Price
	1/4" Socket to 1/8" FNPT	4	**LV5541411**	Price
		20	**LV5549431**	Price
	1/4" Y Fitting	2	**LV5541408**	Price
		20	**LV5549428**	Price
	3/8" Flare Nut Adaptor	4	**LV5541412**	Price
		20	**LV5549432**	Price

1/4" ID System Hoses

Item	Description	Pkg. Qty	Order No.	Price
	1/4" Extended Elbows	4	**LV5541491**	Price
		20	**LV5549457**	Price
	1/4" Hose Segment	2	**LV5541401**	Price
		5 ft/Coil	**LV5549419**	Price
		25 ft/ Box	**LV5549420**	Price
		50 ft/Coil	**LV5549421**	Price

1/4" ID System Kits

Item	Description	Pkg. Qty.	Order No.	Price
	1/4" Hose Assembly Kit - 13" Hose w/ Fittings	1	**LV5540413**	Price
	1/4" Flared Tubing Replacement Pack	21	**LV5540452**	Price
	1/4" 90 Degree Nozzle Kit (Pack of 4)	4	**LV5541474**	Price
	1/4" Nozzle-Rama Pack	16	**LV5541490**	Price

LOC-LINE®

Modular Coolant Hose & Components
1/2" & 3/4" ID System
Designed to Mate with LOC-LINE®
Hoses & Accessories Only

- Loc-LINE® will stay in position without any spring back
- Since LOC-LINE® has a ball and socket design, bending doesn't decrease the inside diameter and won't kink like copper tubing. Also, there is no internal positioning rod that can break or restrict fluid flow
- Loc-LINE® is electrically non-conductive. It's ideal for use as an EDM flushing hose
- Loc-LINE® is designed for low pressure applications. The following maximum flow rates are recommended to avoid hose jetting
  1/2" LOC-LINE® – 478 gallons/hour
  3/4" LOC-LINE® – 1,140 gallons/hour

1/2" ID System:
Hose Kit includes hose (approx. 13") with 3/8, 1/2" NPT connectors, 1/4, 1/2, 3/8" nozzles
3/4" ID System:
Hose Kit includes hose (approx. 14") with 3/4 NPT connector, 3/4 and 5/8" nozzles

1/2" ID System- Kits

Item	Description	Pkg. Qty	Order No.	Price
	1/2" 90 Degree Nozzle Kit (Pack of 4)	4	**LV5551832**	Price
	1/2" Extended Elbow Kit	8	**LV5550872**	Price
	1/2" Extended Elbows & Clamp (Pack of 4)	4	**LV5550874**	Price
	1/2" Hose Kit Contains Hose - 13", Nozzles - 3/8", 1/2", 1/4", NPT Male Connectors - 3/8", 1/2"	6	**LV5550813**	Price
	1/2" Nozzle-Rama Pack	16	**LV5551849**	Price

3/4" ID System- Kit

Item	Description	Pkg. Qty	Order No.	Price
	3/4" Hose Kit Contains Hose - 14", Nozzles - 5/8", 3/4", NPT Male Connector - 3/4"	4	**LV5560513**	Price

1/2" ID System- Nozzles

Item	Description	Pkg. Qty	Order No.	Price
	1/4" Round Nozzle	4	**LV5551806**	Price
		50	**LV5559866**	Price
	3/8" Round Nozzle	4	**LV5551802**	Price
		50	**LV5559862**	Price
	1/2" Round Nozzle	4	**LV5551803**	Price
		50	**LV5559863**	Price
	1/4" 90 Degree Nozzle	20	**LV5559878**	Price
		4	**LV5551828**	Price
	3/8" 90 Degree Nozzle	20	**LV5559879**	Price
		4	**LV5551829**	Price
	1/2" 90 Degree Nozzle	20	**LV5559880**	Price
		4	**LV5551830**	Price
	1/2" Spray Bar Nozzle	2	**LV5551831**	Price
		20	**LV5559881**	Price
	1/2" Elbow	2	**LV5551824**	Price
	1-1/4" Flare Nozzle	2	**LV5551807**	Price
		20	**LV5559867**	Price
	2-1/2" Flare Nozzle	2	**LV5551809**	Price
		20	**LV5559871**	Price
	1-1/4" Straight Flow Nozzle	2	**LV5551847**	Price
		20	**LV5559897**	Price
	1-5/8" Straight Flow Nozzle	2	**LV5551848**	Price
		20	**LV5559898**	Price
	2-1/2" Swivel Nozzle-75	2	**LV5551845**	Price
		20	**LV5559895**	Price

3/4" ID System- Nozzles

Item	Description	Pkg. Qty	Order No.	Price
	5/8" Round Nozzle	4	**LV5561503**	Price
		50	**LV5569543**	Price
	3/4" Round Nozzle	4	**LV5561502**	Price
		50	**LV5569542**	Price
	3" Flare Nozzle	2	**LV5561507**	Price
		20	**LV5569547**	Price

1/2" ID System- Hoses

Item	Description	Pkg. Qty	Order No.	Price
	1/2" Extended Elbow	4	**LV5551896**	Price
		20	**LV5559899**	Price
	1/2" Hose Segment	2	**LV5551801**	Price
		5 ft/ Coil	**LV5559859**	Price
		25 ft/ Box	**LV5559860**	Price
		50 ft/ Coil	**LV5559861**	Price

3/4" ID System- Hoses

Item	Description	Pkg. Qty	Order No.	Price
	3/4" Hose Kit Contains Hose - 14", Nozzles - 5/8", 3/4", NPT Male Connector - 3/4"	4	**LV5560513**	Price
	3/4" Hose Segment	2	**LV5561501**	Price
		5 ft/ Coil	**LV5569539**	Price
		25 ft/ Box	**LV5569540**	Price
		50 ft/ Coil	**LV5569541**	Price

1/2" ID System- Valves, Fittings & Connectors

Item	Description	Pkg. Qty	Order No.	Price
	3/8" BSPT Connector	4	**LV5551826**	Price
		50	**LV5559876**	Price
	1/2" BSPT Connector	4	**LV5551827**	Price
		50	**LV5559877**	Price
	3/8" NPT Connector	4	**LV5551804**	Price
		50	**LV5559864**	Price
	1/2" NPT Connector	4	**LV5551805**	Price
		50	**LV5559865**	Price
	3/8" SAE Flare Nut Adapter	4	**LV5551823**	Price
		20	**LV5559873**	Price
	1/2" Double Socket	4	**LV5551811**	Price
		20	**LV5559872**	Price
	1/2" Female NPT Valve	2	**LV5532093**	Price
		10	**LV5539853**	Price
	1/2" Male NPT Valve	1	**LV5532092**	Price
		10	**LV5539852**	Price
	1/2" Fixed Mount	2	**LV5551895**	Price
		20	**LV5559896**	Price
	1/2" In-Line Check Valve	2	**LV5532091**	Price
	1/2" In-Line Valve	2	**LV5532094**	Price
		10	**LV5539854**	Price
	1/2" Y Fitting	2	**LV5551808**	Price
		20	**LV5559868**	Price
	1/2" to 1/4" Adapter	2	**LV5551821**	Price
		20	**LV5559869**	Price
	1/2" to 1/4" Y Reducer	2	**LV5551822**	Price
		20	**LV5559870**	Price
	1/2" Magnetic Base	1	**LV5551846**	Price

3/4" ID System- Valves, Fittings & Connectors

Item	Description	Pkg. Qty	Order No.	Price
	3/4" BSPT Connector	4	**LV5561509**	Price
		50	**LV5569549**	Price
	3/4" Double Socket	4	**LV5561514**	Price
		20	**LV5569554**	Price
	3/4" Elbow Fitting	2	**LV5561515**	Price
		20	**LV5569555**	Price
	3/4" Female NPT Valve	2	**LV5561517**	Price
		10	**LV5569557**	Price
	3/4" Male NPT Valve	2	**LV5561516**	Price
		10	**LV5569556**	Price
	3/4" NPT Connector	4	**LV5561505**	Price
		50	**LV5569545**	Price
	3/4" In-Line Valve	2	**LV5561518**	Price
		10	**LV5569558**	Price
	3/4" Y Fitting	2	**LV5561511**	Price
		20	**LV5569551**	Price
	3/4" to 1/2" Adapter	2	**LV5561508**	Price
		20	**LV5569548**	Price
	3/4" to 1/2" Y Reducer	2	**LV5561512**	Price
		20	**LV5569552**	Price

LOC-LINE® Extended Elements & Clamps

Clamps Tighten over Socket to Reduce Mobility of Joints

Extended elements and clamps can be used together to run longer lengths of Loc-Line and resist dynamic motion at higher pressures

- Extended elements 3-1/2" Long
- Ball and sockets are interchangeable with standard Loc-Line parts
- Clamps tighten with Torx T-15 screwdriver

Hose ID - 1/4				
Item	Description	Pkg. Qty	Order No.	Price
	1/4" Element Clamp	4	LV5541477	Price
		20	LV5549446	Price
	1/4" Extended Element	4	LV5541476	Price
		20	LV5549445	Price
	Kit - 4 Extended Elements with Clamps	1	LV5541475	Price
	1/4" Mixed Element Kit - 2 Extended Elbows, 2 Extended Elements, 4 Element Clamps, 1/8" & 1/4" NPT Connectors, 1/4", 1/8", 1/16" Nozzles	1	LV5540473	Price

Hose ID - 1/2				
Item	Description	Pkg. Qty	Order No.	Price
	1/2" Element Clamp	4	LV5551834	Price
		20	LV5559884	Price
	1/2" Extended Element	4	LV5551833	Price
		20	LV5559883	Price
	1/2" Extended Element Kit - 4 Extended Elements with Clamps	1	LV5551835	Price
	1/2" Mixed Element Kit - 2 Extended Elbows, 2 Extended Elements, 4 Element Clamps, 3/8" & 1/2" NPT Connectors, 1/2", 3/8", 1/4" Nozzles	1	LV5550873	Price

LOC-LINE® Modular Coolant Hose Assembly Pliers

Designed to mate with Loc-Line® hoses and accessories only

			Coolant Hose System Component	
Item	Description	Pkg. Qty	Order No.	Price
	1/4" Assembly Plier	1	LV5578001	Price
	1/2" Assembly Plier	1	LV5578002	Price
	3/4" Assembly Plier	1	LV5578004	Price
	1/4" & 1/2" Assembly Pliers	2	LV5578003	Price

LOC-LINE® Total Flow Control Manifolds

Modular Coolant Hose Systems

- 1/4" Turn shut off valves allow flow control to modular manifold and individual lines
- Allow flexibility to shut off unneeded coolant lines
- Comes complete with 3 pcs "T" fittings, elbow, mounting bracket, 3 pcs screws and 5 pcs in-line valves

Item	Description	Order No.	Price
	1/4" Total Flow Control Manifold	LV5521198	Price
	1/2" Total Flow Control Manifold	LV5532098	Price

LOC-LINE® Quick- Set™ Shields

All Quick-Set Shield Kits include a 14" adjustable 3/4" Loc-Line arm, magnetic base and fitting for fixed mounting.

Type - Kit				
Item	Description	Pkg. Qty	Order No.	Price
	6" x 8" Quick Set Small Shield Kit	1	LV5560525	Price
	7-1/2" x 10"Quick Set Medium Shield Kit	1	LV5560526	Price
	8-1/2" x 1/2" Quick Set Large Shield Kit	1	LV5560527	Price

Type - Mounting Component				
Item	Description	Pkg. Qty	Order No.	Price
	3/4" Fixed Mount	2	LV5560533	Price
	3/4" Fixed Mount	20	LV5569563	Price
	3/4" Magnetic Base	1	LV5560532	Price
	Shield Mounting Elbow	2	LV5560531	Price

Type - Replacement Sheild				
Item	Description	Pkg. Qty	Order No.	Price
	6" x 8" Replacement Shield Small	1	LV5560528	Price
	7-1/2" x 10" Replacement Shield Medium	1	LV5560529	Price
	8-1/2" x 12" Replacement Shield Large	1	LV5560530	Price

LOC-LINE® Circle Flow Nozzles

Adjustable Coolant Hose Systems- 1/4" & 1/2" ID

Circle Flow Nozzle Kit are assembled with (15) Side flow nozzles and (1) End cap allowing the user to completely encircle the cutter.

- Side flow nozzles can be added or subtracted to accommodate different diameter cutters
- Can be precisely aimed to help remove chips
- Can be shaped into a variety of configurations to accommodate specific applications

Hose ID - 1/4				
Item	Description	Pkg. Qty	Order No.	Price
	1/4" Circle Flow Nozzle Kit - 15 Side Flows with End Cap	1	LV5541479	Price
	1/4" End Cap	4	LV5541480	Price
		20	LV5549447	Price
	1/4" Side Flow Nozzle	4	LV5541478	Price
		20	LV5549443	Price

Hose ID - 1/2				
Item	Description	Pkg. Qty	Order No.	Price
	1/2" Circle Flow Nozzles with 15 Side Flows & End Caps (Pack of 1)	1	LV5551837	Price
	1/2" End Cap	4	LV5551838	Price
		20	LV5559885	Price
	1/2" Side Flow Nozzle	4	LV5551836	Price
		20	LV5559889	Price

LOC-LINE Magnetic Base Manifolds

Create Custom Coolant Solutions

Magnetic manifolds allow distribution of coolant through 4 seperate opening from one source. Can be mounted on the spindle or work table for convienient access

Magnetic Base Manifold Super Kit

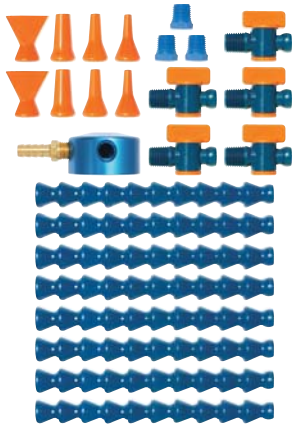
- 8 - 1/4" Segments
- 5 - 1/4" MNPT valves
- 2 - 1" Flare nozzle
- 2 - 1/4" Round nozzle
- 2 - 1/8" Round nozzle
- 2 - 1/16" Round nozzle
- 2 -1/4" Plug
- 1 - 1/4" Barb fitting
- 1 - Mag. base manifold

40463 Magnetic Manifold Kit

- 1 - Mag. base manifold
- 2 - 1/4" Segments
- 3 - 1/4" NPT plug
- 1 - 1/4" MNPT valve
- 1 - 1" Flare nozzle
- 1 - 1/4" Round nozzle
- 1 - 1/8" Round nozzle
- 1 - 1/16" Round nozzle
- 1 - 1/4" Barb fitting

40400 Magnetic Base Manifold

- 1 - Mag. base manifold
- 3 - 1/4" Plugs
- 1 - 1/4" Barb fitting



Description	Order No.	Price
1/4" Magnetic Base Manifold Kit with 2 segments, valve, nozzle	**LV5540463**	Price
1/4" Magnetic Base Manifold Kit with 5 ports with plugs & barbs	**LV5540400**	Price
Magnetic Base Manifold Super Kit (25 Pcs.)	**LV5540480**	Price

CEDARBERG Magna-Flow

Efficient Air/Liquid Flow Control that Delivers Air/Liquid Where it's Needed



Features:

- Two models available
- Fully assembled with 9″ hose lengths and 1/8″ nozzles
- Magnetic base (38 lb/pull) holds unit firmly in position
- Flow control valve allows convenient air/coolant adjustment near work
- Barbed connection easily adapts to regulated shop air or machine coolant pump
- Made of high quality non-corrosive materials

Benefits:

- Eliminates awkward hose support and adjustment
- Quick set-up, tear-down, and transfer to other machines
- Flexible hose can be easily directed
- Delivers air/coolant to those hard-to-reach places
- Extends tool life with precise coolant delivery
- Clears chips from work place for easier visual inspection
- Stays in position



Size	Order No.	Price
9" Double	**LV508525263**	Price
9" Single	**LV508525262**	Price

wiha MaxiFlex Coolant Hose System

- Non-conductive
- For low pressure coolant flow applications
- Won't kink, maintains even flow rates
- Now in single unit packs, buy only what you need!

Item	Hose ID (in.)	Style	Order No.	Price
	1/4	1/4" Hose Kit 13" Length w/ fittings 7/32", 1/8", 1/16", Nozzles 1/4" & 1/8" NPT connectors	**KN5434490**	Price
	1/4	1/4" Hose 11" Length (22 Segments)	**KN5434402**	Price
	1/4	1/8" Nozzle	**KN5434406**	Price
	1/4	1/8" NPT Connector	**KN5434426**	Price
	1/4	1/4" NPT Connector	**KN5434428**	Price
	1/2	1/2" Hose Kit 13" Length w/ fittings Straight, 90° & Spray Bar 1/2" & 3/8" NPT connectors	**KN5434090**	Price

NATIONAL Mist Coolant Hose Assembly

with Magnetic Base

- 100 lb Magnetic pull
- 2-1/4″ Flexible coolant hoses
- On/off magnetic base



Order No.	Price
NW55H54	Price

NOGA Vari High Pressure Cool Arm

- Long articulated arms provide full axis rotation
- Sturdy tightening fixtured for total stability
- Includes CA1010 hex key and CA1004 nozzle 4mm standard



Size	Order No.	Price
238mm OAL, 1/4" NTP thread	**LV40CA3000**	Price

NOGA Mini-Cool Cutting Fluid Applicator

For maximum heat dissipation and extended tool life

- Strong popeye magnetic base
- Separate on/off air and fluid controls
- Stainless steel armored siphon hose and air hose
- Nozzle connected via Loc-Line® flexible hose



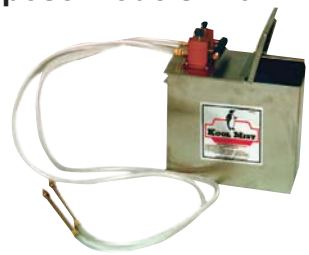
Description - Double Line Unit				
Air Hose Length (in.)	Siphon Hose Length (in.)	Spary Line Length	Order No.	Price
40	40	10"	**LV40MC3000**	Price
40	40	13"	**LV40MC3100**	Price
40	40	18-1/2"	**LV40MC3200**	Price

Description - Single Line Units				
Air Hose Length (in.)	Siphon Hose Length (in.)	Spary Line Length	Order No.	Price
40	40	10"	**LV40MC1700**	Price
40	40	13"	**LV40MC1800**	Price
40	40	18-1/2"	**LV40MC2000**	Price

Kool Mist General Purpose Models with Stainless Steel Tanks

- All models have 4' long braided nylon reinforced coolant lines with 6" long brass nozzle

MADE IN THE USA



Tank Capacity	No. of Outlets	Order No.	Price
1 Gallon	1 Line	**NZ50100N**	Price
1 Gallon	2 Line	**NZ50102N**	Price
3 Gallon	1 Line	**NZ50350N**	Price
3 Gallon	2 Line	**NZ50352N**	Price

Mist Coolant Unit

- Powered by shop air. Min. 60 psi; Max 125 psi
- Individual air and liquid valves for full control of mist from a fine fog to a drenching spray
- Braided fabric cover protects suction tube
- Powerful magnet base holds fast to any flat steel surface
- Spout swivels 360°



Order No.	Price
LW50270A	Price

Kool Kit LITE Starter Special

- One Model 100N mist coolant system with one gallon stainless steel tank
- One adjustable magnetic nozzle positioner
- One gallon Formula 78 concentrated coolant
- One sample Formula 77 concentrated coolant

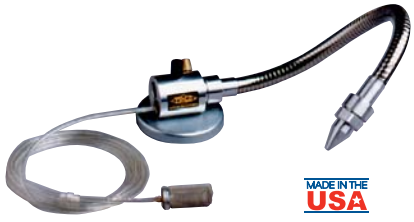
MADE IN THE USA



Hazard Code	Order No.	Price
HAZ57	**NZ50500**	Price

TRICO DL Magnum Spray Cooling System

- Designed to deliver efficient cutting tool cooling performance
- Advanced nozzle design offers increased chip clearing power and reduced overspray
- Independent liquid and air controls allows maximum control
- Heavy duty 1/4 NPT metal nozzle conduit for maximum durability



MADE IN THE USA

- 60 Pound mounting magnet stays in place while offering maximum mounting flexibility
- Check valve minimizes delay of fluid delivery upon start-up
- Pick up filter prevents clogging

Includes	PSI	Flow Rate	Order No.	Price
DL Magnum	60-120	0-20 cc/min	**NW5030632**	Price
DL Magnum plus 1 Quart Tri-Cool	60-120	0-20 cc/min	**NW5030633**	Price

TRICO Type DL Spray Unit with quart of Tri-Cool® Coolant – FREE!

- 7" Segmented plastic nozzle
- Solid brass valve body
- 60-pound magnetic base
- 7' Siphon line with stainless steel filter
- Offers all the advantages of spray cooling without a tank
- Simple to use
- Easy to assemble

MADE IN THE USA



Order No.	Price
NW5030655	Price

Kool Kit LITE Light Duty Coolant System

- 2' Long nylon einforced coolant line with 4" long brass nozzle & 4' long siphon line
- Includes mounting bracket & magnetic nozzle positioner
- No coolant take furnished

MADE IN THE USA



Size	Includes	Order No.	Price
24"	Mounting Bracket	**NZ5080S**	Price
24"	Mounting Bracket & Magnetic Nozzle Positioner	**NZ5080SM**	Price

Kool Mist Automatic Mist Coolant Systems without tanks

- Equipped with 4' long braided nylon reinforced coolant line with 6" long brass nozzle
- Units have 4' long siphoning line and ball check strainer for use with customer's own tank

MADE IN THE USA



Type	Order No.	Price
Single Line Misting Unit	**NZ50100AP**	Price

Kool Mist PORTaMIST Units Without Tanks

- Portable, quick set-up magnetic unit with 12" LOC-LINE® Nozzle Positioner
- Unit equipped with nylon reinforced air line and 4' long siphoning line

MADE IN THE USA



Size	Order No.	Price
12"	**NZ5060M**	Price
18"	**NZ5060M18**	Price

Kool Mist Mist Coolant Generator

MADE IN THE USA

- Comes equipped with dovetail mounting bracket and one 4' metal braid covered coolant line with adjustable nozzle plus your choice of straight, 45° or 90° x 6" long brass probe
- Provides for addition of three more coolant lines as you need them
- K-75K contains everything required to add additional outlets to K-75 unit



Description	Order No.	Price
Extra Outlet Kit	**NZ50K75K**	Price
Mist Coolant Generator	**NZ50K75**	Price

Kool Mist Replacement Coolant Lines

MADE IN THE USA

Size	Style	Order No.	Price
2 qt	Light Duty	**NZ50SCL2**	Price
3 qt	Heavy Duty	**NZ50MCL3**	Price
4 qt	Heavy Duty	**NZ50MCL4**	Price
4 qt	Light Duty	**NZ50SCL4**	Price

Kool Kit LITE

MADE IN THE USA

Kit Contains:

- One Model 80S mist coolant system
- One Model 200 adjustable magnetic nozzle positioner
- One gallon Formula 78 concentrated coolant
- One sample Formula 77 concentrated coolant
- Hazard Code: 58



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**NZ50580**	Price

Noga-Cool Manifold Spray unit

- Strong popeye magnetic base
- 12-1/2″ Loc-line® flex hose
- Supplied with 3 nozzles 1/16″, 1/8″, 1/4″
- Working pressure (30-50 psi)



Order No.	Price
LV40MC1601	Price

Monroe Fluid Technology X-15 Misting Unit®

- Flexible tube
- Powerful magnetic base
- For boring, milling, grinding or drilling



Order No.	Price
LK5084500	Price

Kool Mist PORTaMIST Kit

MADE IN THE USA

Kit contains:

- One PORTaMIST Model 60M Unit including air and coolant hoses, heavy duty magnetic base, simple single knob control, and 12" flexible LOC-LINE® positioner
- One gallon Kool Mist Formula 78 concentrated coolant
- One sample Formula 77 concentrated coolant (4 oz)
- Anti syphon check valve
- Adjustable nozzle for light to heavy spray
- Single air-coolant mixture control
- Air hose Fitting



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**NZ50560**	Price

Kool Mist Mist or Flood Coolants

- Safe for your people
- Safe for your materials
- Safe for the environment
- Safe for your machines
- **Formula 78:** For light duty. Is a chemical base mist coolant that dissolves in water to a clear solution. Can be used on any metal or alloy.
- **Formula 77:** For tougher service. Is highly recommended for mist cooling any metal or alloy where tougher machining condition requires greater lubricity.



		Formula 77 Coolants		Formula 78 Coolants	
Size	Hazard Code	Order No.	Price	Order No.	Price
1 Gallon	HAZ57	**NZ50771**	Price	**NZ50781**	Price
5 Gallon	HAZ58	**NZ50775**	Price	**NZ50785**	Price
55 Gallon	HAZ06	**NZ507755†**	1982.00	**NZ507855†**	Price

†All 55 Gallon Drums FOB Factory

Rustlick Coolant Change-Over Kit

Includes:

- 16 oz Triadine20® Micro-biostat treats bacteria and fungus in coolants (for coolant treatment before and after recharge)
- 1 Gal Kleenzol®DY General purpose sump & shop cleaner (for cleaning of empty sump before recharge)
- 12 oz Rustlick® 606 Moisture-absorbing rust preventative



Temperature Range	Order No.	Price
Triadine 20: 266°F (FlashPoint), 606 Aerosol: Neg 156°F (FlashPoint), KleenzolDY: 200°F(FlashPoint)	**LK6078000**	Price

Kool Mist Nozzle Positioners - Magnetic

- Magnetic nozzle
- For portable use

MADE IN THE USA



Description	Order No.	Price
Magnetic Nozzle, for Portable Use	**NZ50205**	Price
Non-Magnetic Nozzle for Permanent Mounting	**NZ50305**	Price

UNIST Coolube® Lubricants

Coolube® 2210:
- USDA Certified Biobased Product
- Cutting fluid improves performance and increases life of cutting tools, taps, and saw blades
- Machining oil is good for metals, wood, rubber, and most plastics
- Especially effective on aluminum and other non-ferrous metals
- Great for wearpoint lubrication
- Extreme temperature environments (-20°F to 400°F)



Coolube® 2210AL:
- Provides specific benefits when machining aluminum
- Derived from natural vegetable oils, environmentally friendly and there are no VOC's
- Mild odor
- Clear appearance
- Insoluble water solubility
- >199°F (93°C) flash point

Coolube® 2210EP:
- Special formulation ideal for ferrous metals
- Works with all non-ferrous metals except copper
- Does not contain any ingredients currently recognized as hazardous by OSHA, IARC or NIP
- Formulated from cosmetic grade raw materials and is entirely worker and environmentally safe
- Improves performance and increases life of cutting tools, taps and saw blades
- Extreme temperature environments (-20°F to 400°F)

Description - Metal cutting oil and lubricant for metals, wood, rubber, and most plastics. 100% Natural vegetable based. Worker and environmentally safe.			
Size	**Hazard Code**	**Order No.**	**Price**
1 Gallon	HAZ57	**UN102210**	Price
(4) 1 Gallon	HAZ57	**UN1022104**	Price
5 Gallon	HAZ58	**UN1022105**	Price

Description - MQL lubricant formulated specifically for Aluminum. It features enhanced lubricity with all grades of Aluminum and longer stability under load. No odor and does not cause skin, eye, or throat irritation.			
Size	**Hazard Code**	**Order No.**	**Price**
1 Gallon	HAZ57	**UN102210AL**	Price
(4) 1 Gallon	HAZ57	**UN102210AL4**	Price
5 Gallon	HAZ58	**UN102210AL5**	Price

Description - Special formulation ideal for ferrous metals. Its 100% natural base with extreme pressure additives will not oxidize. Worker and environmentally safe.			
Size	**Hazard Code**	**Order No.**	**Price**
1 Gallon	HAZ57	**UN102210EP**	Price
(4) 1 Gallon	HAZ57	**UN102210EP4**	Price
5 Gallon	HAZ58	**UN102210EP5**	Price

F.O.B. Factory

Accu-Lube Applicators

- Eliminate Food Coolant with the Accu-Lube® Minimum Quantity Lubrication (MQL) System for Near Dry Machining
- The Accu-Lube® True MQL System utilizes a precision positive-displacement pump to apply micro amounts of organic-based lubricants directly to the cutting tool edge (completely eliminating mist or fog created by common spray mist systems)
- Provides superior tool life vs. flood coolants and mist systems
- Specialty nozzles are available for various machining/cutting applications.
- After market-service and replacement parts available



	1 Nozzle		2 Nozzle	
Description	**Order No.**	**Price**	**Order No.**	**Price**
Advantage	**LK6001C0STD**	Price	**LK6002C0STD**	Price
Aluminum Electric	**LK6001A1STD**	Price	**LK6002A1STD**	Price
Aluminum Manual	**LK6001A0STD**	Price	**LK6002A0STD**	Price
Band Saw Junior Applicator	**LK6001D0SAW**	Price	-	-
Junior Applicator	**LK6001D0STD**	Price	**LK6002D0STD**	Price
With Magnetic Mounts	**LK6001A0DMO**	Price	**LK6002A0DMO**	Price

TRICO MD-1200 Micro-Drop® Dispensers

Features:
- Offers higher material removal rates, improved part finish, longer tool life and tighter dimensional tolerances
- Positive pressure design gives instant fluid delivery
- Nozzle design eliminates fogging for greater chip clearing, faster feeds & speeds
- Independent line adjustment allows for two operations at the same time
- Individual, high resolution, air and liquid controls offer flexibility
- Solenoid versions offer interface capability for CNC and other automated applications
- Relative liquid scale allows repeatable setups and saves time in adjusting flow rate



		Copper Nozzle		Loc-Line Nozzle	
No. of Outlets	**Description**	**Order No.**	**Price**	**Order No.**	**Price**
1 Line	Manual On/Off	**NW5030813**	Price	**NW5030801**	Price
1 Line	Solenoid On/Off	**NW5030817**	Price	**NW5030805**	Price
2 Line	Manual On/Off	**NW5030814**	Price	**NW5030802**	Price
2 Line	Solenoid On/Off	**NW5030818**	Price	**NW5030806**	Price

TRICO Advanced Lubricant Micro-Drop® System

MADE IN THE USA

- Non-drying formula
- A high lubricity factor that minimizes friction
- Using as little as one ounce per nozzle for an eight-hour shift
- Long shelf life
- Won't attack metal, plastic or paint
- Eliminates disposal and cleanup - problems
- Zero toxicity



Style - Synthetic Lubricant			
Size	**Hazard Code**	**Order No.**	**Price**
1 Gallon	HAZ57	**NW5030659**	Price
5 Gallon	HAZ58	**NW5030662**	Price
55 Gallon	HAZ06	**NW5030663†**	Price

† All 55 Gallon Drums FOB Factory

MQL Applicators



Minimum Quantity Lubrication(MQL) Systems for near dry machining. Systems use a precision positive displacement pump to apply minute amounts of vegetable/organic-based lubricants directly to the cutting tool or saw blade edge. Eliminate mist or fog from common spray mist systems while providing the best possible tool life. All applicators should use Unist Coolube lubricants only.

Coolubricator JR Single Point Portable Lubricator



- Continuous precision output
- Reduces fluid use and increases tool life
- Separate air and fluid control
- Includes 15' coaxial polyurethane hose and 16 oz. reservoir
- Lifetime pump warranty*

No. of Nozzles	Nozzle Type	Enclosure Type	Mounting	On/Off	Order No.	Price
1	12" Semi-Rigid Copper	None	Magnet	Manual	**UN10CJ1M161512C**	Price
1	18" Flexible Plastic	None	Magnet	Manual	**UN10CJ1M161518P**	Price
2	18" Flexible Plastic	None	Magnet	Manual	**UN10CJ2M161518P**	Price

*** Must be used with recommended Unist Coolube to qualify for warranty**

Coolubricator - Minimum Quality Lubrication



- For milling, turning, broaching, routing, drilling, tapping, and CNC machining
- Continuous precision output
- Reduces fluid use and increases tool life
- Separate air and fluid control
- Includes 15' coaxial polyurethane hose and 16 oz. reservoir
- Lifetime pump warranty*

No. of Nozzles	Nozzle Type	Enclosure Type	Mounting	On/Off	Order No.	Price
1	12" Semi-Rigid Copper	Standard	Direct	Manual	**UN10L1EM161512C**	Price
1	18" Flexible Plastic	Lockable	Magnet	Solenoid	**UN10CK1M161518P**	Price
1	12" Semi-Rigid Copper	Standard	Direct	Solenoid	**UN10L1ES161512C**	Price
2	12" Semi-Rigid Copper	Standard	Direct	Manual	**UN102EM161512C**	Price
2	18" Flexible Plastic	Lockable	Magnet	Manual	**UN10CK2M161518P**	Price
2	12" Semi-Rigid Copper	Standard	Direct	Solenoid	**UN102ES161512C**	Price

*** Must be used with recommend Unist Coolube to qualify for warranty**

Bandsaw Lubricator - Up to 2" Band Width



- Continuous precision output
- Lubricates blade and gullet
- Reduces fluid use and increases tool life
- Separate air and fluid control
- Includes 15' single line coiled and 16 oz. reservoir
- Lifetime pump warranty*

No. of Nozzles	Nozzle Type	Enclosure Type	Mounting	On/Off	Order No.	Price
1	Collapsible	Standard	Direct	Manual	**UN101EM1615COL**	Price
1	Collapsible	Standard	Direct	Solenoid	**UN10L1ES1615COL**	Price
2	Collapsible & Guide	Standard	Direct	Manual	**UN102EM1615COGU**	Price
2	Collapsible & Guide	Standard	Direct	Solenoid	**UN102ES1615COGU**	Price

*** Must be used with recommended Unist Coolube to qualify for warranty**

3" Bat Nozzle Saw Blade Lube System for Circular Saw



- Continuous precision output
- Lubricates blade and gullet
- Reduces fluid use and increases tool life
- Separate air and fluid control
- Includes 15' single line coiled and 16 oz. reservoir
- Lifetime pump warranty*

No. of Nozzles	Nozzle Type	Enclosure Type	Mounting	On/Off	Order No.	Price
1	3" Bat Nozzle	Standard	Direct	Manual	**UN10L1EM16153S3**	Price
1	3" Bat Nozzle	Standard	Direct	Solenoid	**UN10L1ES16153S3**	Price
1	3" Bat Nozzle	None	Magnet	Manual	**UN10J1EM16153S3**	Price

*** Must be used with recommend Unist Coolube to qualify for warranty**

Zebra Skimmers Original Disk Skimmer

MADE IN THE USA

- Removes tramp oils from coolant sump
- **Lifetime warranty** on disk and wipers
- Continuous-duty, fan cooled motor with **two year warranty**
- Shipping weight: 9 lbs.
- Easy to mount
- 5 Gallon per hour capacity



Size (in.)	Removal Rate	Reach	Order No.	Price
12	7 RPM	4.5	**NY40LH300**	Price
18	7 RPM	7.5	**NY40LH460**	Price

Zebra Skimmers Smart Disk Skimmer with Patented Diverter™

- Saves $300 a year over normal disk skimmers in lost coolant costs
- Patented gravity separator separates tramp oils from coolant and returns coolant to sump
- Continuous-duty, fan cooled motor with **two year warranty**
- Rugged steel construction
- Unbreakable disk and wipers with **lifetime warranty**
- Shipping weight: 10 lbs

MADE IN THE USA



Size	Removal Rate	Reach	Order No.	Price
1" x 12"	7 RPM	4-1/2	**NY40GS4H300**	Price
18	7 RPM	7.5	**NY40GS4H460**	Price

ABANAKI OIL SKIMMERS EconoMixer™ 100 & 200

- Blends coolant and water to desired percentages
- System designed to eliminate costly waste
- EconoMixer ™100 includes inserts for desired ratios
- EconoMixer ™100 ranges 400:1 to 4.5:1 EconoMixer ™200 includes brass/metal construction pipe that extends to the bottom of drum
- EconoMixer ™200 mix range 15:1 up to 45:1

MADE IN THE USA

NY45EMIX200



NY45EMIX100



Flow Rate	Order No.	Price
3 GPM, 3/8" FPT Inlet, 1/2" MPT Outlet	**NY45EMIX200**	Price
GPM @ 40 PSI: 4.8	**NY45EMIX100**	Price

ABANAKI OIL SKIMMERS Mighty Disk™ Tramp Oil Skimmer

MADE IN THE USA

- Capped troughs and wiper standoffs prevent oil drips
- High oil removing boomerang blades
- Rugged powder coated steel construction
- Continuous duty fan cooled motor
- Heavy duty 1/2" thick disk



Size	Removal Rate	Reach	Order No.	Price
1/2 x 12	1.5 Gallons per hour	4-1/2	**NY45SMD12**	Price
1/2 x 18	1.5 Gallons per hour	7	**NY45SMD18**	Price
1/2 x 24	1.5 Gallons per hour	9-1/2	**NY45SMD24**	Price

ABANAKI OIL SKIMMERS Cool Disk Skimmer

- Continuous duty fan cooled motor
- Corrosion resistant polymer housing
- High oil removing boomerang wipers

MADE IN THE USA



Size (in.)	Removal Rate	Reach	Order No.	Price
1/2" x 12"	1.5 Gallons per hour	4-1/2	**NY45SCD12**	Price

Zebra Skimmers Machinist's Mixer for Drums, Totes and Pails

MADE IN THE USA

- Perfectly mixed coolant ends emulsion guesswork
- Dispenses coolant at rate of 3 gallons per minute
- Check valve insures proper mixture, eliminating waste
- Separate water shut-off valve
- Machined from solid bronze casting
- Tamper resistant lockout available
- Maximum viscosity of 500 SUS
- 40" discharge tube included (max length for delivery)
- Recommended Installation: Water regulator for precise results every use
- No parts to lose
- **Comes with iron-clad Zebra Lifetime Guarantee**







Type	Range	GPM	Order No.	Price
Mixer	0-7%	3	**NY40MIX0327**	Price
Mixer	0-7%	10	**NY40MIX1027**	Price
Mixer	0-25%	3	**NY40MIX03725**	Price
Mixer	0-25%	10	**NY40MIX10725**	Price
Lockout for Mixer	-	-	**NY40MIXXLOCK**	Price

Zebra® Z17 Coalescer

MADE IN THE USA

- Patent-pending Flexor™ concentrates separated oil for improved oil-only discharge
- Automatically aerates to prevent bacterial growth
- Improved-flow, submersible pump
- New external solids filtration
- New stronger coalescing tank and ports



Includes	Order No.	Price
115v Submersible pump, Floating Sumpster oil intake attachment, 0.5 ft3 media, Flexor surface skimmer	**NY40FZ17F1**	Price
115v Submersible pump, Hammerhead oil intake attachment, 0.5 ft3 media, Flexor surface skimmer	**NY40FZ17H1**	Price
115v Submersible pump, Recept oil intake attachment, 0.5 ft3 media, Flexor surface skimmer	**NY40FZ17R1**	Price
115v Submersible pump, Sumpster oil intake attachment, 0.5 ft3 media, Flexor surface skimmer	**NY40FZ17S1**	Price

Sidewinder™ Tube Skimmer – Skims Anywhere

MADE IN THE USA

- Installs in seconds
- Skims underneath conveyors, enclosed sumps, and hard-to-access areas
- Only requires 1/2” by 3” opening
- Industrial-grade skim tube uses ceramic scraper
- Large oil discharge port
- Fan-cooled continuous-duty motor
- Rated at 1 quart per hour
- **Two year warranty**



Type	Reach (in.)	Max. Temp.	Order No.	Price
Sidewinder Oil Skimmer	11	90°F	**NY40ZVA811**	Price
Sidewinder Oil Skimmer	14	90°F	**NY40ZVA814**	Price
Sidewinder Oil Skimmer	17	90°F	**NY40ZVA817**	Price
Sidewinder Oil Skimmer	8	90°F	**NY40ZVA808**	Price
Skimmer Tube & Cartridge Only	8	90°F	**NY40ZXCART808**	Price

Diverter™ Static Oil Separator

- Separates coolant clinging to disk, tube or belt, returning coolant to sump
- Saves up to $300 yearly in lost coolant costs
- Can be installed on most skimmers
- Rugged, heavy-duty, steel construction
- Discharge pipes and mounting hardware included

MADE IN THE USA



Order No.	Price
NY40BGST4	Price

Coolescer™ Coolant Refresher

- Removes floating surface oils
- Aerates and refreshes coolant
- Works while machine is running
- Coalescing media never needs to be replaced
- Floating pickup head handles fluctuating fluid levels effortlessly
- 1 Year warranty



MADE IN THE USA

Order No.	Price
NY45CLRB	Price

Economy Mixer

MADE IN THE USA

- 14 Metering tips included for concentrations of 1% to 20% (ratios 4:1 to 99:1)
- Maximum viscosity of 500 SUS
- 48” Discharge tube included
- Check valve for precise mixing
- Works on barrels or totes
- Capacity: 4.8 gallons per minute
- Weight 5 lbs
- 30 Day warranty



Order No.	Price
NY40MIX05120	Price

Aerators

MADE IN THE USA

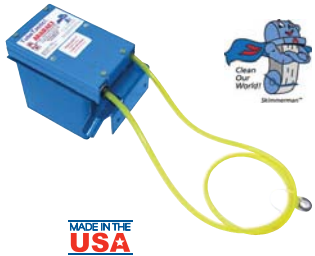
- Quick set up
- Prevents anaerobic bacteria from building up and spreading
- Extends coolant life
- Puts an end to stagnant coolant
- Includes air diffuser to disperse air evenly



Size	Order No.	Price
1200 cc/min	**NY45AA1250**	Price
5000 cc/min	**NY45AA5000**	Price

TubeTastic!™ Tube Oil Skimmer

- Fan cooled, continuous duty motor
- Works in places other skimmers can’t
- No overhead room needed
- Durable drive and 3/8” diameter tube construction for long lasting construction
- Can be used on machining centers with little or no access to the coolant sump from above
- This unit can skim oil from chip conveyors or even totally enclosed machining centers



MADE IN THE USA

Reach	Max. Temp.	Removal Rate	Order No.	Price
8	120 °F	1.5 Gallons per hour	**NY45STUBE108**	Price
12	120 °F	1.5 Gallons per hour	**NY45STUBE112**	Price
18	120 °F	1.5 Gallons per hour	**NY45STUBE118**	Price
24	120 °F	1.5 Gallons per hour	**NY45STUBE124**	Price
30	120 °F	1.5 Gallons per hour	**NY45STUBE130**	Price

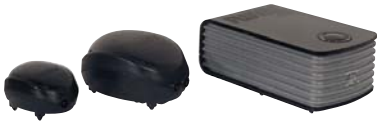
Zebra Skimmers Belt Skimmer



- Improves coolant performance and life
- Heavy-duty steel, powder coated construction
- Removable, easy-to-clean collection tray
- Self-tensioning belt on fixed lower pulley
- Dual wiper set with **lifetime warranty**
- Continuous-duty, 28 rpm fan-cooled motor
- 2" Diameter minimum access required
- Recommended accessory: Zebra Diverter™
- **Two year warranty** on all other parts (except steel belts)

Size (in.)	Material	Max. Temp.	Order No.	Price
8	Polyurethane	80°F	**NY40BPF108**	Price
8	Stainless Steel	212°F	**NY40BSF108**	Price
12	Polyurethane	80°F	**NY40BPF112**	Price
12	Stainless Steel	212°F	**NY40BSF112**	Price
18	Polyurethane	80°F	**NY40BPF118**	Price
18	Stainless Steel	212°F	**NY40BSF118**	Price
24	Polyurethane	80°F	**NY40BPF124**	Price
24	Stainless Steel	212°F	**NY40BSF124**	Price

Zebra Skimmers Oxygenator™



- Extend coolant life
- Eliminates odors
- Heavy-duty tubing and industrial-grade bronze air diffuser
- Injecting oxygen into coolant maximizes performance by killing the anaerobic bacteria, which spoils coolant, and encouraging the good aerobic bacteria

Size	For Use With	No. of Outlets	Order No.	Price
Large	51-100 Gallon Coolant	1	**NY40XBUB8000**	Price
Medium	26-50 Gallon Coolant	2	**NY40XBUB5000**	Price

Odor Control Tablets



- Safe and easy-to-use
- Eliminate and prevent odors such as hydrogen sulfide (rotten eggs)
- Contains no formaldehyde or harmful chemicals
- Safer and more economical than biocides
- Use one tablet per 25 gallons of coolant per week
- Designed for small sumps, usually of 200 gallons or less
- 15 Tablets per tube

Brand Name	Order No.	Price
Abanaki	**NY45CMINTS**	Price
Zebra Skimmers	**NY40XOCT25**	Price

Rustlick Triadine 20

Bactericide and Fungicide



- Protects simultaneously against bacteria and fungi
- Microbiostat that is easy and economical to use
- Formulated as a fast acting sump side additive
- Registered - For use in metalworking, cutting, cooling and lubricating fluids

Size	Hazard Code	Order No.	Price
16 oz	HAZ58	**LK6077116**	Price
1 Gallon	HAZ58	**LK6077101**	Price

Abanaki Oil Skimmers Li'l Blue Skimmer™



- Continuous duty fan cooled motor
- Both sides of belt wiped for better efficiency
- Engineered polymer base and housing
- Removable trough for easy cleaning
- Compact; use almost anywhere even through a 2" diameter bung hole
- Spring loaded stablizer barContinuous duty fan cooled motor
- Both sides of belt wiped for better efficiency
- Engineered polymer base and housing
- Removable trough for easy cleaning
- Compact; use almost anywhere even through a 2" diameter bung hole
- Spring loaded stablizer bar

Reach	Removal Rate	Max. Temp.	Order No.	Price
12	1 Gallon per hour	140 °F	**NY45SLB12**	Price
18	1 Gallon per hour	140 °F	**NY45SLB18**	Price
24	1 Gallon per hour	140 °F	**NY45SLB24**	Price

Abanaki Oil Skimmers Mighty Mini SST™ Belt Oil Skimmer



- 304 Stainless steel construction
- Fan cooled continuous duty gear motor
- 24 hr intergrated timer / 15 min intervals
- Spring loaded stabilizer pulley bar
- Removable trough for easy cleaning
- 1 year warranty

Reach	Removal Rate	Max. Temp.	Order No.	Price
6	1 Gallon per hour	140 °F	**NY45SMMS106E**	Price
18	1 Gallon per hour	140 °F	**NY45SMMS118E**	Price
24	1 Gallon per hour	140 °F	**NY45SMMS124E**	Price

ProCheck Refractometers



- Lightweight aluminum construction
- Ergonomic, comfortable & easy operation
- Anti-slip, rugged body with durable & hygienic grip
- Translucent viewing colored background
- Hard plastic portable carrying case with sampler included
- Comfortable eyepiece for easy viewing
- Available in 0-10 & 0-32 Brix scale
- Lifetime warranty against manufacturer defects
- Features auto temperature compensation (ATC) for shops with varying temperatures

Brix Scale	Order No.	Price
0-10	**NZ6040000**	Price
0-32	**NZ6040005**	Price

Basic Refractometer



- For everyday use
- Prism aperture lets in lots of light
- Diamond-knurled sleeve for good grip
- Carrying case with sampler included
- Comfortable eyepiece with adjustable focus for easy reading
- Auto temperature compensation for shop with varying temperature

Brix Scale	Brand Name	Order No.	Price
0-10	Zebra Skimmers	**NY40OPT10**	Price
0-32	Ashburn	**LK70CRHB32**	Price
0-32	Zebra Skimmers	**NY40OPT32**	Price

Sprayon Dry Moly Lube

New!

- EZ TOUCH® standard nozzle
- Penetrates pores of substrate and bonds to surface for long-lasting lubrication
- High-pressure, high-solids molybdenum disulfide coating
- Withstands pressures up to 50,000 PSI
- Non-conductive
- Air dries in 5-10 minutes; cures in 2 hours at room temperature
- Maintains effectiveness under high temperatures (650°F constant and 750°F intermittent)
- Works as a boundary lube as cold as -200°F



Order No.	Hazard Code	Price
LP4000200	9.55	Price

Stay & Spray Gel

New!

- 12x longer lasting lubrication
- Prevents rust for up to 1 year
- No drip, no mess
- Ideal for vertical surfaces
- HAZ08



Container Size	Hazard Code	Order No.	Price
10 oz	HAZ08	**LS50300103**	Price

White Lithium Multi-Purpose White Grease

- Rapidly forms into a pure white grease that will not melt or wash away
- PTFE additives for superior lubrication
- NGLI grade: number 2
- Provides maximum lubrication
- Rust and oxidation inhibitors protect metal
- Pure white color allows easy visual inspection
- Heat and water resistant



Size	Hazard Code	Order No.	Price
10 oz	HAZ03	**LJ6003816**	Price

White Lithium Grease

- Multi-purpose heavy duty lubricant that will not wash off, melt or freeze
- Grade 2 white lithium grease
- Excellent EP characteristics
- Provides tough, high viscosity film

MADE IN THE USA



Size	Hazard Code	Order No.	Price
10 oz	HAZ03	**LR5003080**	Price

Protective White Lithium Grease

- Long lasting, lubricating coating
- Won't freeze, melt or run off
- Rust inhibiting barrier
- Smart Straw for precise application
- 50 State VOC compliant



Size	Hazard Code	Order No.	Price
10 oz	HAZ08	**LS50300040**	Price

LUBRIPLATE

'The Original White Lubricant'

- General purpose white grease
- Used on milling machine heads



Size	Hazard Code	Order No.	Price
1.75 oz	HAZ57	**RL351183147**	Price

CIMCOOL CENTER SAVER

- Waterproof grease
- Designed as a lubricant for centers on lathes, grinders, hobbing machines, etc
- Also lubricates and waterproofs bearings, pumps, and tools



Size	Hazard Code	Order No.	Price
2 oz	HAZ08	**LL5100400**	Price

Moly-Graph® Extreme Pressure Multi-Purpose Lithium Grease

- Handles heavy loads, water attack and shock loads
- Contains rust and oxidation inhibitors and extreme pressure additives
- NLGI #2 Grease

MADE IN THE USA



Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LR50SL3330**	Price

Cut-Ease® Metal Cutting Lubricant

- For high speed sawing and cutting where circulating lubricants are not used
- Outstanding on band saws
- Provides smooth, cool-cutting for non-ferrous metals and plastics
- Won't stain aluminum
- Extends tool life, cleaner/faster cut
- Stops binding and prevents burring
- **Typical Applications:** Use Cut-Ease on metals, plastics and other materials involving sawing, grinding, spinning, tapping, drilling and milling

MADE IN THE USA



Size	Hazard Code	Order No.	Price
1 lb	HAZ57	**LK40CE16**	Price

Ashburn Wax Stick

- Effectively lubricates and removes heat
- Environmentally safe



Size	Order No.	Price
1 lb	**LK70E600111**	Price

High Temperature Grease

- High temperature lubrication (drop point 625°F)
- Outstanding performance under heavy mechanical loads
- Excellent corrosion protection

New!



Container Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LS50300394**	Price

Heavy-Duty Extreme Pressure Grease

- Extreme pressure lubrication
- Outstanding surface protection against heavy load and wear
- Excellent corrosion protection

New!



Container Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LS50300400**	Price

202 Moly-Lith

- Lithium based grease
- Contains micro-fine molybdenumdi sulfide (MoS2) particles to enhance carrying and low friction characteristics
- Highly adhesive, pumpable and stable
- Service rating: 0°F to 300°F

MADE IN THE USA



Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LM6533050**	Price

ThermaPlex® Multi-Purpose Bearing Grease

- Long life
- Excellent load carrying properties
- Extends re-lubrication periods
- Prolongs bearing life, good corrosion resistance
- Ideal for lubricating all types of bearings
- Reduces grease consumption



Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LJ6070614**	Price

Temp Guard Synthetic Grease

- Extreme high temperature grease
- Contains molybdenum disulfide and graphite for low friction and extreme pressure capabilities
- No petroleum based oils or additives
- Highly resistant to oxidation
- Service rating: 0°F to 600°F

MADE IN THE USA



Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LM6531850**	Price

Marine Grade Grease

New!

- Excellent water wash-out performance
- Outstanding rust and corrosion protection
- Maximum lubrication for extreme marine applications



Container Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LS50300417**	Price

Edge Lube

- White, solid, waxy bar, biodegradable
- Excellent for belt, wheel or disc grinding, and sawing applications
- Eliminates heat build-up and belt loading
- Does not contain any hazardous chemicals
- Extends grinding wheel life
- Low toxicity, safe on all metals



Size	Hazard Code	Order No.	Price
13 oz	HAZ57	**LJ6043200**	Price

Belt-Magic™ for Coated Abrasive Belts

- Special high-temperature formulation clings to abrasive belts, discs, and grinders with minimal throw-off
- Won't build up behind the wheel
- Provides smoother finish to workpiece and can increase belt life by 30%
- Apply 1 lb stick directly to abrasive surface
- Excellent for ferrous and non-ferrous applications
- Size: 1/2"D x 4-3/8"L

MADE IN THE USA



Size	Hazard Code	Order No.	Price
1 lb Stick	HAZ57	**LK40BT16**	Price

Stick-Kut™ Lubrication Stick Wax

- Safe and effective lubricant for grinding wheels, sanding belts and saw blades
- Eliminates heat build up and belt loading
- Extends wheel life
- Provides smooth, cool cutting
- Reduces loading, stop binding, and prevents burring



Size	Hazard Code	Order No.	Price
15 oz	HAZ57	**LJ5515SK**	Price

Stick Form Tap-Ease®

MADE IN THE USA

- Use like a crayon on taps and dies for smoother, faster cut while extending tool life
- Replaces liquid tapping fluids with undesirable chlorinated solvents and other VOC's
- Works on aluminum, brass, magnesium, ferrous and non-ferrous materials
- Won't stain the workpiece



Size	Order No.	Price
.43 oz	**LK40TA2**	Price

ISOFLEX NBU/NCA 15 Lubricating Greases



- The thickener system offers excellent resistance to coolants and high load carrying capabilities
- Isoflex NCA 15 is very similar to the Isoflex NBU 15 with the exception that it is formulated with a calcium complex thickener which may provide reduced run-in time
- Synthetic ester/mineral blend
- Service temp. range (°C): -40 to 130
- NLGI class: 2

Size	Thickener Type	Speed Factor nDm (mm/min)	Hazard Code	Order No.	Price
400 gm Cartridge	Barium complex soap	1,000,000	HAZ57	**LM62NBU15**	Price
400 gm Cartridge	Calcium complex	1,200,000	HAZ57	**LM62NCA15**	Price

Multi-Purpose Food Grade Grease



- An aluminum complex, Grade 2 grease
- NSF® H1 registered
- Highly resistant to moisture and water wash-out
- For use in food production and processing industries

MADE IN THE USA

Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LR50SL35600**	Price

AP-1 Hi-Temp Multi-Purpose Grease



- Formulated from bentone clays
- Chemically and mechanically stable, water resistant, highly adhesive, and have superior storage life
- Service rating: 0°F to 550°F

MADE IN THE USA

Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LM6531550**	Price

Sta-Plex™ Extreme Pressure Premium Red Grease



- An NLGI #2 lithium complex premium grease
- Provides superior rust protection and oxidation resistance
- Tackiness additive prevents grease from slinging-off bearings at high rpms

MADE IN THE USA

Size	Hazard Code	Order No.	Price
14 oz	HAZ58	**LR50SL3190**	Price

Lithium General Purpose Grease



- Economical general purpose grease designed for light duty applications
- Highly water resistant
- Will not break down or run out
- NLGI #2 Lithium-12 based

MADE IN THE USA

Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LR50SL3310**	Price

Mini Grease Gun Cartridges



- Mini cartridge multi-purpose grease
- 4 Per bag

Size	Hazard Code	Order No.	Price
3 oz	HAZ57	**LM6011312**	Price

Mobilgrease Lubricating Grease XHP 222

NLGI Grade - 2

Thickener Type Li-Complex



An exteded service lithium complex grease intended for a wide variety of applications and severe operating conditions

- Superb resistance to water washout and spray-off
- Highly adhesive and cohesive structure
- Excellent rust and corrosion resistance
- Extended grease life and enhanced bearing protection in high temperature applications
- Very good anti-wear

Size	Hazard Code	Order No.	Price
13.7 oz	HAZ57	**LK45121929**	Price
35 lb	HAZ58	**LK45XHP22235**	Price

Superior Performance True Multi-Purpose Grease



- Long-lasting corrosion protection extends the life of your equipment
- Outperforms in all 3 features: temperature, pressure & water wash-out
- Compatible with WD-40 Specialist Lithium Complex greases
- Always refer to OEM when switching grease types

Container Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LS50300424**	Price

AP-5 Hi-Temp Multi-Purpose Grease



- Formulated from bentone clays
- Chemically and mechanically stable, water resistant, highly adhesive, and superior storage life
- Contains molybdenum disulfide and has a high film strength
- Service rating: 0°F to 550°F

MADE IN THE USA

Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LM6525050**	Price

CB-2 Super-Lith Multi-Purpose Grease



- Lithium based grease
- Offers resistance to the effects of heat, water, oxidation, and heavy loads
- Highly adhesive to metal
- Excellent as a chassis grease
- Service rating: 0°F to 300°F

MADE IN THE USA

Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LM6531050**	Price

Marine MP Multi-Purpose Grease



- Lithium soap grease for economy and performance
- Water resistant and highly tenacious
- Excellent resistance to salt spray, heat, water, and oxidation
- Service rating: 0°F to 325°F

MADE IN THE USA

Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LM6563050**	Price

CROWN All 4 Moisture Displacing Lubricant

- Displaces moisture
- Cleans and penetrates
- Prevents rust
- Lubricates



Size	Hazard Code	Order No.	Price
10 oz	HAZ03	**LP507340**	Price

CRC Technical Grade 3-36®

- Plastic safe
- Multi-purpose lubricant, penetrant and corrosion inhibitor
- Penetrates, lubricates and seals out moisture with micro-thin film
- No VOC's
- NSF® H2 registered



Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LR5003003**	Price

CRC Power Lube®

- Provides maximum protection against friction, wear, and corrosion
- Contains no 1,1,1 Trichloroethane or any other chlorinated solvent
- Contains PTFE for long lasting protection

MADE IN THE USA



Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LR5003045**	Price

JET-LUBE CC LUBE™ Synthetic Lubricant

- Clear, clean, colorless, non-staining synthetic lubricant with Teflon®, is unsurpassed in reducing friction, extending life and preventing the formation of rust and corrosion
- Safe on metals, plastics, rubber, vinyl, etc.
- For many food processing, industrial, marine, and automotive applications

MADE IN THE USA



Size	Hazard Code	Order No.	Price
14 oz	HAZ57	**LM6570550**	Price

LOCTITE Anti-Seize Lubricant

- Protects equipment from seizing with its two-part epoxies formula
- That provides the superior wear that is expected in harsh environments
- **41205**: Heavy Duty Anti-seize paste in semisolid form
- **37729**: Copper Anti-seize paste in semisolid form that has the same trusted performance characteristics as the Loctite® C5-A®
- **37230**: Silver Anti-seize paste in semisolid form

Item	Color	Container	Size	Order No.	Price
	Copper	Stick	20gm	**LM5037229**	Price
	Black	Stick	20gm	**LM5041205**	Price
	Silver	Stick	20gm	**LM5037230†**	7.19

SYNCO Multi-Purpose Synthetic Lubricant with PTFE

- Contains PTFE in suspension
- Non-toxic, non-staining
- Operating temp -45°F to +450°F
- Impervious to salt water & road salt
- Safe in potable water
- USDA H1 rated for incidental food contact



Type - Lubricant Kit		
Size	**Order No.**	**Price**
Sportmans Kit	**LM5211520**	Price

Type - Super Lube® Aerosol		
Size	**Order No.**	**Price**
11 oz Multi-Purpose	**LM5231110**	Price
11 oz Dri-Film	**LM5211016**	Price

Type - Super Lube® Grease - Ratings: NLGI #2, GC-LB		
Size	**Order No.**	**Price**
3 oz Tube	**LM5221030**	Price
14.1 oz Jar	**LM5241160**	Price
14.1 oz Cartridge	**LM5241150**	Price
5 lb Tub	**LM5241050**	Price
30 lb Pail	**LM5241030**	Price

Type - Super Lube® Oil - PTFE		
Size	**Order No.**	**Price**
.25 oz Precision Oiler	**LM5251010**	Price
4 oz Air Tool	**LM5212004**	Price
32 oz Gear	**LM5254200**	Price
32 oz Spray	**LM5251600**	Price
1 Gallon	**LM5251040**	Price

Starrett All Purpose Lubricant

MADE IN THE USA

- **Penetrates —** Deep-down penetration works quickly to free frozen nuts, bolts and metal parts
- **Lubricates —** This product is free of any silicone, making it an excellent year-round lubricant
- **Prevents rust —** Protects metal against rust and corrosion damage by providing a molecular shield that locks to the metal
- **Cleans —** Removes grease and grime from metal parts.
- **Displaces moisture —** M1 is "wetter than water"; is not soluble in water so it can get under moisture to lift it away from the surface to be protected
- **Non-conductive —** Prevents short circuits in high moisture environments, halts electrical leakage from wet ignition wires



M112



M101



M105



M153



M115

Size	Packed Per Case	Hazard Code	Order No.	Price
12 oz	12	HAZ03	**LS60M112**	Price
1 Gallon	4	HAZ57	**LS60M101**	Price
5 Gallon	1	HAZ58	**LS60M105**	Price
53 Gallon	1	HAZ06	**LS60M153†**	Price
Spray Applicator- Holds 1 Pint (16 oz)	4	-	**LS60M115**	Price

† All 53 Gallon Drums FOB Factory

PRM PRO Heavy Duty Lever Grease Gun & Accessories

- Heavy duty lever type model with 3 way loading
- Cast head incorporates bulk loader and air bleeder valve
- Capacity 14 oz develops up to 9000 PSI
- Comes with steel extension and 4 jaw coupler



Description	Order No.	Price
Lever Handle Grease Gun	**LC725028**	Price
Grease Gun Holder	**LC727668**	Price
12" Flexible Hose	**LC727657**	Price
18" Flexible Hose	**LC727658**	Price

PROTO Heavy-Duty Pistol Grip Grease Gun

- 3-Way filling: bulk, cartridge, or filler pump
- 16 oz. Bulk fill.
- 14 oz Standard cartridge
- Heavy-duty 1.7mm thick seamless barrel to avoid dents
- Aluminum head reduces weight
- Heavy-duty flexible 18” nylon hose and 6” metal spout for easy use
- Output pressure: 3,600 PSI
- Hose diameter: .41”
- Fitting diameter: .54”
- Socket diameter: .56”



Model No.	Order No.	Price
JFC33HD	**KP4270265**	Price

Legacy Workforce™ Mini Grease Gun

- Rigid and flexible extension
- 3 oz cartridge loading
- Die-cast head
- Chrome finish

New!

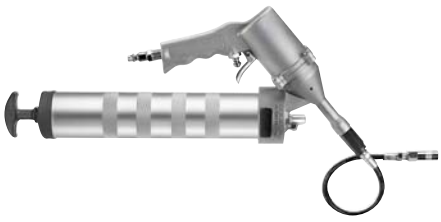


Order No.	Price
LX55L1305	Price

Legacy Workforce Air Operated Grease Gun

- 12” Flexible extension and 6” rigid extension included
- Heavy duty die cast head construction
- 3-way loading: bulk, filler pump and cartridge
- Bleeder valve for purging unwanted air
- Durable follower rod and spring for consistant priming
- Positive-grip follower handle
- 4-jaw coupler for better grip and longer service life
- Non-slip knurled barrel

New!



Order No.	Price
LX55L1455	Price

Legacy Lock-n-Load™ Workforce-Pro Quick Connect Grease Gun

- Designed for heavy-duty service with high quality features that make it durable and easy to use
- **Lock-n-Load™ threadless quick connect barrel Automatic bleeder**
- **12” Flexible extension**
- **Heavy duty cast aluminum pump head**
- **Heavy gauge knurled steel barrel**
- **4-Jaw Coupler**
- **Ergonomic handle design**



Order No.	Price
LX55L1175L	Price

Legacy Lock-n-Load™ Mega Boost Quick Connect Grease Gun

Features threadless quick connect barrels that significantly reduces downtime when tightening and un-tightening conventional grease gun barrels. Never worry about crossing threads on your barrel again! Simply slide the Lock-n-Load™ switch to disengage or reconnect the barrel.

Reloading grease is TWICE as fast compared to the competition!

- **Delivers 10,000 PSI**
- **Dual mode switch**
- **Automatic bleeder**
- **Heavy duty cast aluminum pump head**
- **Heavy gauge knurled steel barrel**
- **High pressure super grip 4-jaw coupler**
  capable of bearing the high pressures that the MEGABOOST® produces



Order No.	Price
LX55L1185L	Price

Legacy 4-Jaw Grease Gun Couplers

- High pressure (10,000 PSI) grease couplers for manual and air operated equipment
- These couplers are equipped with ball check; 1/8” ends



Order No.	Price
LX55L2010	Price

Legacy Thermoplastic Grease Hoses

- High quality hose with 1/8” NPT male fittings at each end



Length (in.)	Order No.	Price
12	**LX55L2270**	Price
18	**LX55L2275**	Price

Legacy Air Operated Grease System

Rugged reliability is built-in to every Performance™ series 55:1 ratio grease pump. Used in either mobile or stationary systems for grease distribution, these versatile high pressure grease pumps can handle all types of mineral and synthetic greases up to and including NLGI 2 directly form 35 lb. and 400 lb. grease containers. Performance™ series grease pumps are constructed using corrosion resistant parts including aluminum, alloy steel and nitride seals for longer life and trouble-free operation. Backed by outstanding service and a 5-year extended warranty, you can't buy more reliable efficient pumps!

Grease System for 35 lb Pail Includes:
L6005: Pump
DC5: Drum cover
DD5: Drum dolly
LCG1-01: Booster gun
GFP1: Follower plate
LH1414414: Grease hose

Grease System for 120 lb Pail Includes:
L6105: Pump
DC16: Drum cover
DD16: Drum dolly
LCG1-01: Booster gun
GFP2: Follower plate
LH1414414: Grease hose



Type	Order No.	Price
Air Operated Grease System for 35 lb Pails	**LX55L6000**	Price
Air Operated Grease System for 120 lb Pails	**LX55L6100**	Price

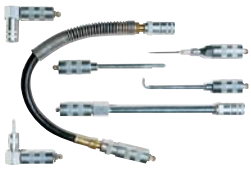
Legacy Grease Products

LubeLink™ grease accessories are designed for general purpose, automotive and for heavy duty contractor lubricating jobs. Housed in a durable space-saving carrying case, LubeLink™ kits can be stored in the drawer of a tool chest. Each accessory has a dedicated compartment so the kit can be easily sight checked for missing accessories

General Purpose Grease Accessory Kit Includes:
L2206SP: 12" Steel braid rubber grease hose with spring guard and 4-jaw coupler
L2105: Hypodermic type grease injector needle with quick-connect coupler
L2140: 3" Straight needlepoint coupler
L2144: 90° 3" Straight needlepoint coupler
L2160: Right angle needlepoint coupler
L2162: Low profile right angle coupler
L2165: 8" Push-on type coupler



Automotive Grease Accessory Kit Includes:
L2206SP: 12" Steel braid rubber grease hose with spring guard and 4-jaw coupler
L2105: Hypodermic type grease injector needle with quick-connect coupler
L2140: 3" Straight needlepoint coupler
L2144: 90° 3" Straight needlepoint coupler
L2160: Right angle needlepoint coupler
L2162: Low profile right angle coupler
L2163: Tight tolerance right angle coupler
L2165: 8" Push-on type coupler



Type	Order No.	Price
Automotive Grease Accessory Kit	**LX55L2551**	Price
General Purpose Grease Accessory Kit	**LX55L2550**	Price

Legacy GreatFunnels™

- Unique system of funnels features screw-on caps that seal out harmful contaminants that cause damage to mechanical systems

Color	Size	Length (in.)	Spout (in.)	Order No.	Price
Bright Red	1.5 qt	17	.50 O.D.	**LX55CF415**	Price
Dark Blue	1.25 qt	10.5	.75 O.D.	**LX55CF320**	Price
Green	1.5 qt	12.25	1 O.D.	**LX55CF428**	Price
Orange	1 Pint	8.5	.50 O.D.	**LX55CF115**	Price
Red	1.6 qt	14	1.5 O.D.	**LX55CF438**	Price
Yellow	1.5 qt	14.25	.75 O.D.	**LX55CF420**	Price



Legacy Funnel Kit



Description	Order No.	Price
Kit includes CF115, CF320, CF415 AND CF428	**LX55CFA1**	Price

Lisle Offset Funnel

New!

With Cap and Lid

- 10" tall translucent funnel with a 6-3/4" offset from center of mouth to center of spout for hard-to-reach applications
- Useful for adding brake fluid to master cylinders, gear lube to differentials, fluid to DEF reservoirs and more
- Includes lid and spout cap to keep contaminant free
- Adapter for transmission and other dipstick tubes



Order No.	Price
KN6518232	Price

Lisle Right Angle Funnel

New!

- 10" tall translucent funnel with a 6-3/4" offset from center of mouth to center of spout for hard-to-reach applications
- Useful for adding brake fluid to master cylinders, adding gear lube to differentials, filling the DEF reservoir on GM Duramax diesels as well as other applications
- The funnel mouth is 3-1/2" OD and the spout is .7" OD

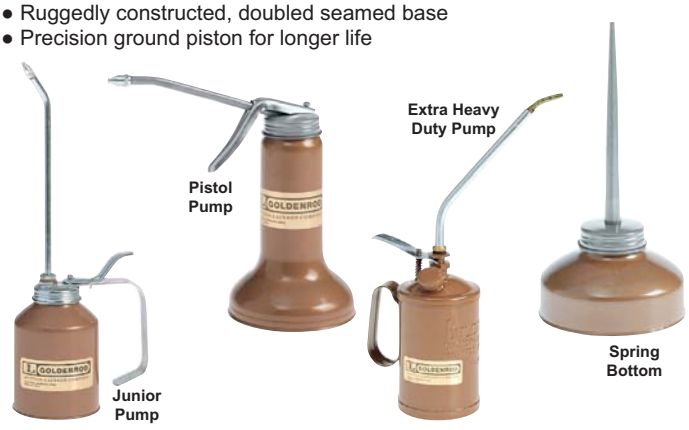


Order No.	Price
KN6517223	Price

DUTTON-LAINSON COMPANY Oilers

MADE IN THE USA

- Ruggedly constructed, doubled seamed base
- Precision ground piston for longer life



Style - Extra Heavy Duty Pump				
Spout Type	Spout Length (in.)	Oiler Cap.	Order No.	Price
Angle	10	1.5 Pint	**LH50120B2**	Price
Angle	12	1 qt	**LH50120A2**	Price
Flex	12	1.5 Pint	**LH50120B3**	Price
Flex	15	1 qt	**LH50120A3**	Price
Straight	10	1.5 Pint	**LH50120B1**	Price
Straight	12	1 qt	**LH50120A1**	Price

Style - Junior Pump				
Spout Type	Spout Length (in.)	Oiler Cap.	Order No.	Price
Angle	8	12 oz	**LH50720**	Price
Flex	8	12 oz	**LH50707**	Price
Rigid	8	12 oz	**LH50700**	Price

Style - Pistol Pump				
Spout Type	Spout Length (in.)	Oiler Cap.	Order No.	Price
Rigid	5	5 oz	**LH50600S**	Price
Rigid	5	6 oz	**LH50600**	Price
Rigid	5	10 oz	**LH50625**	Price
Rigid	6	20 oz	**LH50630**	Price
Flex	6	10 oz	**LH50626**	Price
Flex	6	20 oz	**LH50636**	Price
Spray Tip	6	20 oz	**LH50631**	Price

Style - Spring Bottom				
Spout Type	Spout Length (in.)	Oiler Cap.	Order No.	Price
Tapered	4-1/2	12 oz	**LH50510**	Price
Tapered	4-1/2	6 oz	**LH50505**	Price
Flex	7	12 oz	**LH50507**	Price
Flex	7	6 oz	**LH50506**	Price

PRM PRO Oilers

- Metal body can with brass pump mechanism for smooth operation fitted with one rigid and one flexible spout



Size	Style	Order No.	Price
6 oz	Pistol Type	**LC725220**	Price
10 oz	Lever Type	**LC727802**	Price
16 oz	Lever Type	**LC727804**	Price
24 oz	Lever Type	**LC727805**	Price

Lisle 8 Qt. Dispenser with Lid and Cap

- 8 Quart dispenser with a spout cap and lid to keep out dirt, dust and other contaminants
- Many large trucks, cars and machines now require more oil
- Works great to transport bulk oil
- Translucent polyethylene material enables the user to read the oil level on the container up to 8 quarts and is marked in both quarts and liters
- Flexible, removable 8” pouring spout enables easy transfer of liquid



Order No.	Price
KN6519702	Price

TITAN Fluid Syringe

- For use with all types of fluids
- Transparent design allows viewing volume & fluid condition
- Detachable tube with cap disassembles for easy cleaning
- Corrosion resistant seals
- Units of measure: QT/CC
- Max capacity .21 QT/200 CC



Order No.	Price
KP8251884	Price

TITAN Vacuum Brake Fluid Bleeder

- 3/8” NPT
- Maximum capacity 1L (33oz)
- Working pressure 71-113 PSI
- Uses standard workshop air supply
- Universal rubber fitting holds securely on brake bleed screw
- Convenient hanging hook & locking trigger



Order No.	Price
KP8251885	Price

Red Devil Caulking Gun

- 1/10 Gallon, half barrel
- Holds most standard cartridges
- Use for simple application of glazing, sealants and caulks



Order No.	Price
FS533985	Price

Grease Fittings – Zerks

Features:
- Ball check at surface to prevent entry dirt
- Case hardened to prevent wear at the tip
- Zinc plated yellow or stainless steel
- SAJ534, DIN 71412 and BS 1486
- 10 Pcs. per pack-priced per pack


201610


211637

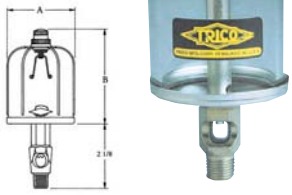

211613

Style	Size (in.)	Order No.	Price
45° Hydraulic	1/4-28	**LM63211637**	Price
45° Hydraulic	1/8-27 PTF	**LM63211688**	Price
90° Hydraulic	1/4-28	**LM63211911**	Price
90° Hydraulic	1/8-27 PTF	**LM63211613**	Price
Straight Hydraulic	1/4-18 PTF	**LM63201627**	Price
Straight Hydraulic	1/4-28	**LM63201641**	Price
Straight Hydraulic	1/8-27 PTF	**LM63201610**	Price
Straight Hydraulic	M6 x 1 STR	**LM63608601**	Price
Straight Hydraulic Drive Fit with Serrated Shank	1/4 Drive available-no check valve	**LM63201743**	Price
Straight Hydraulic Drive Fit with Serrated Shank	3/16 Drive	**LM63201728**	Price
Straight Hydraulic Drive Fit with Serrated Shank	3/16 Drive STR-NO CHECK VALVE	**LM63201633**	Price

TRICO "KG" Glass Gravity Feed Oilers

Designed for heavy-duty, high temperature lubricating applications. The oil feed rate is adjustable. A lock ring maintains the setting

- Three position toggle switch provides easy to use on-off control, and a flushing option to avoid dry start-ups
- Vented sight chamber ensures proper operation when used with tight or high speed bearings
- Copper brazing of all steel connections provides long life and leak-proof design
- Nickel plating offers superior corrosion resistance
- Oil sight for visual indication of oil flow

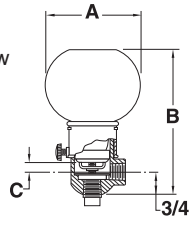


Capacity	Connection (NPT) (in.)	Dim. A (in.)	Dim. B (in.)	Order No.	Price
2-1/2 oz	1/4	2-1/8	4	**NW5037014**	Price
5 oz	1/8	2-5/8	4-5/8	**NW5037015**	Price
5 oz	1/4	2-5/8	4-5/8	**NW5037016**	Price
5 oz	3/8	2-5/8	4-5/8	**NW5037017**	Price
10 oz	1/4	3-1/8	5-3/8	**NW5037018**	Price
10 oz	3/8	3-1/8	5-3/8	**NW5037019**	Price

TRICO OPTO-MATIC® Constant Level Oilers

Glass Reservoir Models

- Provides a constant level of oil in a pump bearing housing, gear box, or other wet sump applications
- Glass reservoir provides long life in corrosive environments
- Different reservoir capacities allow use in many applications



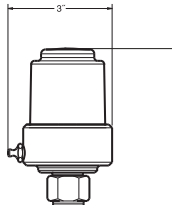


Capacity	Connection (NPT) (in.)	Dim. A (in.)	Dim. B Min. (in.)	Dim. B Max. (in.)	Dim. C Min. (in.)	Dim. C Max. (in.)	Order No.	Price
4 oz	1/4	2-11/16	5	5-3/4	9/32	1	**NW5030003**	Price
8 oz	1/4	3-3/16	5-15/16	6-11/16	9/32	1	**NW5030005**	Price
16 oz	1/4	4-1/8	6-13/16	7-9/16	9/32	1	**NW5030010**	Price

TRICO Grease Lubricators

Applications:
These spring type lubricators control and dispense grease automatically, to take the guesswork out of manual lubrication, and extend bearing life

GL-P Features:
- Anodized aluminum base resists corrosion and works well in high vibration applications
- Clear, polycarbonate reservoir for easy viewing of grease level
- Supplied with 3 different spring sizes for maximum versatility



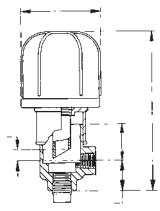


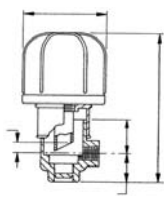
Style - GL-P Grease Lubricators					
Capacity	NPT (in.)	Spring Force	Dim. (in.) A	Order No.	Price
2-1/2 oz	1/8	Light, medium and heavy spring included with each model	4-1/2	**NW5033301**	Price
2-1/2 oz	1/4	Light, medium and heavy spring included with each model	4-5/8	**NW5033302**	Price
2-1/2 oz	3/8	Light, medium and heavy spring included with each model	4-5/8	**NW5033303**	Price

TRICO OPTO-MATIC® Constant Level Oilers

Plastic Reservoir Models (Economy)

- High strength, transparent, ribbed plastic reservoir provides long life and impact resistance
- Adjustable level setting allows use in many applications
- Multiple air vent slots provide for proper functioning at all times
- Style E side connection only
- Style EB side and bottom connections for simplified installation







Style - E								
Cap.	Conn. (NPT) (in.)	Dim. A (in.)	Dim. B Min. (in.)	Dim. B Max. (in.)	Dim. C Min. (in.)	Dim. C Max. (in.)	Order No.	Price
4 oz	1/4	2-5/16	4-9/16	5-1/16	1/4	3/4	**NW5030054**	Price
8 oz	1/4	2-5/8	5-11/16	6-3/16	1/4	3/4	**NW5030058**	Price

Style - EB								
Cap.	Conn. (NPT) (in.)	Dim. A (in.)	Dim. B Min. (in.)	Dim. B Max. (in.)	Dim. C Min. (in.)	Dim. C Max. (in.)	Order No.	Price
4 oz	1/4	2-5/16	4-9/16	5-1/16	1/4	3/4	**NW5030064**	Price
8 oz	1/4	2-5/8	5-11/16	6-3/16	1/4	3/4	**NW5030068**	Price

CROWN Dry Moly Lubricant

- Use for most demanding conditions
- Performs at pressures up to 100,000 PSI and temperatures up to 700°F
- Forms a dry thin black film imparting anti-friction and anti-seize properties



Size		Order No.	Price
11.6 oz	HAZ03	**LP506080**	Price

JET-LUBE Moly Mist™ Dry Film Lubricant

- Instantly bonds dry form Molybdenum DiSulfide (MoS2) to ferrous and non-ferrous metals, plastics, glass, rubber, wood, etc. without heating or baking
- Lowers friction, prevents galling and metal to metal contact
- Excellent "running-in" lubricant on new equipment
- Color: black

MADE IN THE USA



Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LM6516041**	Price

CRC 3-36 Multi-Purpose Lubricant

- Multi-purpose lubricant, penetrant and corrosion inhibitor
- Displaces and seals out moisture
- Lubricates without leaving a sticky residue
- VOC compliant
- NSF® H2 registered



Size	Hazard Code	Order No.	Price
5 oz	HAZ03	**LR5003004**	Price
11 oz	HAZ03	**LR5003005**	Price
1 Gallon	HAZ57	**LR5003006**	Price
5 Gallon	HAZ58	**LR5003009**	Price
55 Gallon	HAZ06	**LR5003011†**	Price

† All 55 Gallon Drums FOB Factory

CROWN Silicone Lubricant General Purpose

- Lubricates from -100°F to 500°F without freezing or oxidizing
- Withstands pressures less than 2000 PSI
- Eliminates carbonaceous, lacquer deposits



Size	Hazard Code	Order No.	Price
10.5 oz	HAZ03	**LP508034**	Price

LOCTITE Maxi-Coat™

- Heavy-duty coating provides long-term protection for metal parts, equipment, and machinery
- Forms a protective, waxy film which seals out moisture, air, acid and other corrosive elements
- Great for protecting parts in storage
- Removable



Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LM5051211**	Price

LPS Force 842® Dry Moly Lubricant

- Fortified with molybdenum disulfide
- Provides a quick drying, thin film
- For assembly and break-in lubrication
- Works under high temperatures up to 842°F (450°C) and pressures — 100,000 psi (6890 Bars)
- Resists dust and dirt build up
- Prevents seizure of parts
- High adhesion, water and chemical resistant



Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LJ6002516**	Price

LPS 2® Heavy Duty Lubricant

- Strong, multi-purpose lubricant and penetrant with added corrosion protection
- Provides a nondrying, light, oily film for use on indoor/outdoor equipment
- Reduces wear caused by friction and corrosion
- Displaces moisture
- Loosens rusted or frozen parts
- Provides up to one year of protection
- Non-conductive
- Safe on paint and most plastics
- Inverta spray valve lets you spray in an upright or inverted position
- NSF® H2 registered



Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LJ6000216**	Price
1 Gallon	HAZ57	**LJ6002128**	Price
5 Gallon	HAZ58	**LJ6000205**	Price

LPS 1® Premium Lubricant

- Provides a dry, thin lubricating film
- Resists oil, dust and dirt build-up
- Fast acting penetration, non-conductive
- Displaces moisture
- Loosens rusted or frozen parts
- Provides a short term, light corrosion resistant barrier
- Ideal for delicate mechanisms
- Used worldwide in aviation
- Safe on paint and most plastics
- Inverta spray valve lets you spray in an upright or inverted position
- NSF® H2 registered



Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LJ6000116**	Price
1 Gallon	HAZ57	**LJ6001128**	Price
5 Gallon	HAZ58	**LJ6000105**	Price

LPS Heavy Duty Silicone Lubricant

- Meets FDA regulation for incidental food contact
- Meets NSF requirements for H1
- Silicone-rich formula, water-based formula
- Colorless, odorless and non staining
- Ideal for rubber and plastic surfaces
- Eliminates sticking, binding and squeaking
- Does not contain chlorinated solvents
- Safe on most surfaces
- NSF® H1 registered



Size	Hazard Code	Order No.	Price
13 oz	HAZ03	**LJ6001516**	Price

LPS Dry Film PTFE Lubricant

- Dry film will not attract dust or dirt
- Provides excellent lubrication
- Excellent for releasing molded parts
- Colorless, thin film
- Nonflammable
- Excellent for high temperature applications up to 500°F (260°C)
- Does not contain chlorinated solvents
- Petroleum base



Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LJ6002616**	Price

TKX® All Purpose Penetrant Lubricant, and Protectant



- Displaces moisture
- All purpose, value lubricant which displaces moisture, loosens rusted or frozen parts and protects metal against corrosion
- High flash point of 175°F (79°C)
- Does not contain chlorinated solvents or silicones
- Safe to use on most surfaces
- Inverta spray valve lets you spray in an upright or inverted position
- NSF® H2 registered

Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LJ6002016**	Price

JET-LUBE Food Grade Silicone



- Convenient aerosol stops sticking, squeaking, and binding of moving parts
- Clear film is moisture resistant, long wearing, odorless, colorless, and non staining
- Will not gum up or become rancid
- For use on bottling equipment, slicers, ovens, knives, saws, etc

MADE IN THE USA

Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LM6550641**	Price

WD-40 SPECIALIST Water Resistant Silicone Lubricant Spray



- Waterproofs and protects
- Quick drying with no messy residue
- Safe on metal, rubber, vinyl, and plastic
- Smart Straw for precise application
- 50 State VOC Compliant

Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LS50300011**	Price

CROWN Dry Graphite Lubricant & Parting Compound



- Temperature range -100°F to 1000°F
- Use where petroleum products must be avoided
- Contains no oils or moisture based diluents

Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LP508078**	Price

CROWN Penetrating Oil

Penetrates metal pores

Releases rust fast



- Only a few drops needed
- Effective against saltwater corrosion
- Contains no acids

Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LP506030**	Price

ASHBURN CHEMICAL TECHNOLOGIES Penetrating Lube



MADE IN THE USA

- Non-flammable
- Penetrates and displaces moisture
- Quickly displaces moisture, penetrates to loosen rust and corrosion, cleans, and lubricates moving parts
- Nonflammable and nonconductive up to 30,000 volts

Size	Hazard Code	Order No.	Price
18 oz	HAZ03	**LK70M25500**	Price
1 Gallon	HAZ57	**LK70M27231**	Price
5 Gallon	HAZ58	**LK70M27235**	Price
55 Gallon	HAZ06	**LK70M27237†**	Price

† All 55 Gallon Drums FOB Factory

WD-40

Will Not Harm Paint, Plastics, Rubber or Fabrics. Does Not Contain Silicones or Chlorofluorocarbons

MADE IN THE USA



Lubricates—WD-40 will not oxidize and cause delicate mechanisms to gum as will normal lubricants. **Penetrates**—WD-40 is used to free binding and corrosion frozen parts. **Displaces moisture** —WD-40 displaces moisture and has a "drying out" effect. **Prevents rust/corrosion** —WD-40 stops rust and corrosion. It deposits its inhibitors within the metal. Light rust and corrosion can be wiped off within minutes after application

Size	Hazard Code	Order No.	Price
8 oz Smart Straw	HAZ08	**LS5149002**	Price
11 oz Smart Straw	HAZ08	**LS5149004**	Price
12 oz Smart Straw	HAZ08	**LS5149005**	Price
16 oz	HAZ08	**LS5149008**	Price
1 Gallon	HAZ05	**LS5149011**	Price
5 Gallon	HAZ05	**LS5149012**	Price
Spray Applicator (empty)	-	**LS5010000**	Price

WD-40 EZ-Reach™



New!

- 8" Flexible straw
- Straw bends and keeps its' shape
- Sprays 2 Ways™
- 50-State VOC compliant

Container Size	Hazard Code	Order No.	Price
14.4 oz	HAZ08	**LS50490194**	Price

LPS 3® Premium Rust Inhibitor



- Forms a transparent, soft, waxy film for protection and lubrication
- Inhibits rust and corrosion, protects steel parts indoors for up to two years
- Penetrates to displace moisture
- Does not contain chlorinated solvents or silicone
- Non-conductive
- Safe on most surfaces
- Stops rust and corrosion
- Provides non-sling lubrication
- Provides anti-seize coating
- Safe to use on rubber, fabric, plastics and paints
- Inverta spray valve lets you spray in an upright or inverted position (16 oz)
- NSF® H2 registered

Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LJ6000316**	Price
1 Gallon	HAZ03	**LJ6003128**	Price
5 Gallon	HAZ64	**LJ6000305**	Price

Rustlick 631

Rust Preventative Moisture Displacing



- Spreads into scratches and pores to displace moisture, leaving a light, oily film
- Designed for indoor storage
- Designed for long-term use in environments, which may include acid and salt vapors

Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LK6071101**	Price
1 Gallon	HAZ05	**LK6071011**	Price
5 Gallon	HAZ05	**LK6071051**	Price

Way Oil Series

MADE IN THE USA

Coolant Compatible Slide Way Lubricants

Our slide way lubricating oils are formulated to provide excellent machine tool performance.They offer superior slide way adherence and stick-slip friction characteristics



- Way Lube 15: Bridgeport style machines, lathes, surface grinders, general purpose equivalent to Mobil Vactra 1
- Way Lube 30: CNC VNC type machines equivalent to Mobil Vactra 2
- Way Lube 60: CNC machining centers
- Color: brown

		Way Lube 15		Way Lube 30		Way Lube 60	
Size	Hazard Code	Order No.	Price	Order No.	Price	Order No.	Price
1 Gallon	HAZ57	**RB5046201**	Price	**RB5046203**	Price	**RB5046205**	Price
5 Gallon	HAZ58	**RB5046202**	Price	**RB5046204**	Price	**RB5046206**	Price

ASHBURN CHEMICAL TECHNOLOGIES Premium Hydraulic Oils

MADE IN THE USA

ASHBURN ANTI-WEAR 32/46/68

- Formulated to perform trouble-free in high pressure, high output industrial circuits
- Contain thermally stable Zinc and anti-wear additives



Type - Anti-Wear 32		
Size	Order No.	Price
1 Gallon	**LK70F832211**	Price
5 Gallon	**LK70F832305**	Price
55 Gallon	**LK70F832455†**	Price



Type - Anti-Wear 46		
Size	Order No.	Price
1 Gallon	**LK70F846211**	Price
5 Gallon	**LK70F846305**	Price
55 Gallon	**LK70F846455†**	Price



Type - Anti-Wear 68		
Size	Order No.	Price
1 Gallon	**LK70F868211**	Price
5 Gallon	**LK70F868305**	Price
55 Gallon	**LK70F868455†**	Price

† All 55 Gallon Drums FOB Factory

HANGSTERFER'S Way Oil #2

New!

- Superior slideway adherence, stick-slip friction characteristics and complete water-soluble coolant separation
- Formulated with high quality additives, resulting in products that meet or exceed international specifications established for slideway oils
- Meets the International Standards Organization (ISO) viscosity requirements for machine lubricants



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**NH101436**	Price
5 Gallon	HAZ58	**NH101435**	Price
55 Gallon	HAZ06	**NH101434**	Price

ASHBURN CHEMICAL TECHNOLOGIES Premium Way Oils ASHBURN WAY OILS 68/220

- Way Oil 68 is designed for use when a medium viscosity slideway lubricant is required
- Way Oil 220 is designed for slideways that specify a heavy viscosity slideway lubricant

MADE IN THE USA



Type - Way Oil 220			
Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK70F800805**	Price
55 Gallon	HAZ06	**LK70F800955†**	Price

Type - Way Oil 68			
Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK70F800411**	Price
5 Gallon	HAZ58	**LK70F800505**	Price
55 Gallon	HAZ06	**LK70F800655†**	Price

† All 55 Gallon Drums FOB Factory

Mobil Vactra Numbered Series 2 & 4 Way Oil

- Helps eliminate chatter and stick-slip of slides and ways
- Improves finish and quality of parts
- Helps reduce wear and keeps sliding surfaces smooth, lubricated and clean
- Mobil Vactra Oil No. 2 is recommended for horizontal slideways on small to medium size machine tools. It is also suitable for flood application in large machines
- Mobil Vactra Oil No. 4 is the normal recommendation for large machines where way pressures are high or good precision is required. It is also recommended for vertical and inclined slideways where drain-down cohesion can be a problem



Type - Vactra No. 2 Way Oil			
Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK45VACTRA21**	Price
5 Gallon	HAZ58	**LK45VACTRA25**	Price

Type - Vactra No. 4 Way Oil			
Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK45VACTRA41**	Price
5 Gallon	HAZ58	**LK45VACTRA45**	Price

Mobil DTE 20 Series Hydraulic Oil

- Supreme performance anti-wear
- Designed to satisfy a wide range of hydraulic equipment requirements
- Works with systems operating under severe conditions where high levels of antiwear and film strength protection are needed
- HAZ58



Type - DTE24 ISO 32 Hydraulic Oil			
Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK45DTE241**	Price
5 Gallon	HAZ58	**LK45DTE245**	Price

Type - DTE25 ISO 46 Hydraulic Oil			
Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK45DTE251**	Price
5 Gallon	HAZ58	**LK45DTE255**	Price

Type - DTE26 ISO 68 Hydraulic Oil			
Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK45DTE261**	Price
5 Gallon	HAZ58	**LK45DTE265**	Price

Mobil Velocite Oil

Spindle and Hydraulic Oils

- Premium performance
- Primarily designed for the lubrication of high-speed spindles in machine tools where high speeds and fine clearances are involved
- They are also used in some critical hydraulic, circulation systems and air line oilers where the appropriate viscosity grade is selected



Size	Type	Hazard Code	Order No.	Price
1 Gallon	VEL101 Spindle Oil	HAZ57	**LK45VEL101**	Price
1 Gallon	VEL61 Spindle Oil	HAZ57	**LK45VEL61**	Price
5 Gallon	VEL105 Spindle Oil	HAZ58	**LK45VEL105**	Price
5 Gallon	VEL35 Spindle Oil	HAZ02	**LK45VEL35**	Price
5 Gallon	VEL65 Spindle Oil	HAZ58	**LK45VEL65**	Price

HARIG Way Lubricant

- Assures free & smooth table operation of any surface grinder. Recommended for Harig grinders and other fine surface grinders

MADE IN THE USA



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**RB4016211245**	Price

CROWN Rust Inhibitor



- Contains fortified lanolin for moisture absorption
- Penetrates deep, absorbs moisture and neutralizes corrosive acids
- Waxy, elastic film removes easily with any paint solvent

Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LP506007**	Price

3-IN-ONE® 3-IN-ONE®



- Five-inch extendable spout,
- Gets at hard-to-reach places
- Small mechanisms
- Hinges
- Any hard-to-reach area

Size	Hazard Code	Order No.	Price
4 oz	HAZ57	**LS5010034**	Price

WD-40 SPECIALIST Rust Release Penetrant



- Advanced formula penetrates quickly to free rusted bolts and loosen stuck parts
- Fast acting, low-odor formula
- Also great for removing grease and grime
- Directed aerosol stream helps penetrate quickly and break up rust
- Professional high-performance formula

Size	Hazard Code	Order No.	Price
11 oz	HAZ57	**LS50300004**	Price

WD-40 SPECIALIST Rust Remover Soak



- Highly effective and non-hazardous formula
- No fumes, biodegradable, non-corrosive, non-flammable
- WD-40 Specialist technology uses no acids
- Only attacks the rust - Surrounding surface areas are left intact
- Won't remove paint or damage plastic or rubber

Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LS50300042**	Price

ASHBURN CHEMICAL TECHNOLOGIES Metal Protective Coating TACKY FINISH



MADE IN THE USA

- Prevents rust & corrosion
- For all metallic surfaces
- Self-healing tacky finish
- Fast drying solvent based coating and rust preventative
- May be easily removed with solvents
- Ready to use product for use on pipes, metal parts, equipment and machinery
- Excellent for short or long term storage and for general protection of metallic surfaces

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ05	**LK70M27115**	Price

CROWN Formula 101 Corrosion Suppressant



- Petroleum based with excellent chemical resistance
- Penetrates surface and forms transparent film that lasts until you want it removed

Size	Hazard Code	Order No.	Price
10.5 oz	HAZ03	**LP506013**	Price

JET-LUBE RUST GUARD™ Corrosion Inhibitor



- Dry, waxy film seals out moisture for long term protection from rust and corrosion on metal and alloy surfaces
- Excellent on tubing, machined parts and a multitude of industrial, marine, and aviation applications
- Color: blue/green

MADE IN THE USA

Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LM6513241**	Price
1 Gallon	HAZ57	**LM6513233**	Price

CROWN Tool and Die Saver



- Protects stored tools and dies from moisture during storage
- Heavy, non-oily film is easy to remove when equipment is returned to service
- Ideal for long term storage or long distance shipments

Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LP503090**	Price

CROWN Kleer Kote



- Crystal clear acrylic protects and waterproofs
- Provides lasting protection against wear, handling, and oxidation
- Prevents bleaching or fading from sunlight as well as tarnishing

Size	Hazard Code	Order No.	Price
15 oz	HAZ03	**LP506004**	Price

Starrett Tool & Instrument Oil



- Maximum protection and lubrication of measuring tools, precision instruments and light machinery
- Guard highly finished tools, parts, machine surfaces against rust

Size	Hazard Code	Order No.	Price
4 oz	HAZ57	**MV7053216**	Price

ASHBURN CHEMICAL TECHNOLOGIES RPL #2 Dry Film Rust Preventative



- Dry film residue
- Superior rust prevention
- Water displacing
- Evaporative, water displacing and non-staining rust preventative that leaves behind a relatively dry film
- Will provide short-term outdoor rust protection and intermediate-term salt spray rust protection

MADE IN THE USA

Size	Hazard Code	Order No.	Price
17 oz	HAZ03	**LK70L25100**	Price
1 Gallon	HAZ03	**LK70L251014**	Price
5 Gallon	HAZ03	**LK70L251105**	Price
55 Gallon	HAZ06	**LK70L251255†**	Price

† All 55 Gallon Drums FOB Factory

CIMCOOL FLUID TECHNOLOGY CIMGUARD® 10



- General purpose solvent based corrosion preventive
- Can be applied to wet or dry parts
- Neutralizes fingerprint residues and protects ferrous and non-ferrous materials from corrosion

MADE IN THE USA

Size	Haz Code	Order No.	Price
9 oz	HAZ03	**LL5100302**	Price
5 Gallon	HAZ58	**LL5100400P**	Price

PB B'laster

- Breaks free rusted joints and frozen parts by removing surface tension
- Powerful penetrating catalyst
- Non-evaporating lubricant
- Protects against further rust and corrosion



Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LR71IPB16**	Price
1 Gallon	HAZ05	**LR71128PB**	Price
16 oz Empty Spray Bottle	HAZ03	**LR7116PB**	Price

KB-88 The Ultimate Penetrant

- The world's best penetrant
- Formulated to attack and quickly release rusted and corroded nuts, bolts, hinges and other frozen components
- High KB solvency value of 151 and low surface tension
- Penetrates faster and deeper than most other similar products in the market place
- Meets many local, state and federal VOC regulations such as CARB keeping the cusomter within VOC regulatory guidelines



Size	Hazard Code	Order No.	Price
13 oz	HAZ03	**LJ6002316**	Price
1 Gallon	HAZ57	**LJ6002301**	Price

Extreme Duty Silicone

- High temperature, high pressure lubricant
- Effective on all metallic and non-metallic surfaces
- High grade release and parting agent
- Clear, non-staining odorless film

MADE IN THE USA



Size	Hazard Code	Order No.	Price
10 oz	HAZ03	**LR5003030**	Price

606® Rust Inhibitor Fluid

- Penetrates into hard to reach nooks and crannies aborbing water and moisture
- Easy application by dipping or brushing
- Non-conductive and non-flammable
- Can be used on wet-parts with blind holes
- Clear-transparent film provides long-term indoor rust

Size	Temperature Range	Hazard Code	Order No.	Price
12 oz	Neg 156°F (FlashPoint)	HAZ03	**LK6071102**	Price
5 Gallon	175°F (FlashPoint)	HAZ05	**LK6071052**	Price

Brite Galvanize Coating

- A restorative coating fortified with zinc for preventing rust and corrosion on ferrous metal surfaces with one coat application
- A glistening coating with 65% pure zinc in dry film
- Stops rust and corrosion on any iron or steel surface for protection equal to or better than hot dipped galvanizing
- Restores galvanized surfaces to the bright look of hot dipped galvanizing
- Meets performance requirements of ASTM A-780
- Good film integrity after 336 hours salt spray (ASTM B-117)
- **Applications:** repair of welds, handrails, rims, guardrails, metal chain fences, pipes, corrugated metal building, or anywhere the bright look of hot-dipped surfaces is desired



Size	Hazard Code	Order No.	Price
13 oz	HAZ03	**LP507707**	Price

LST Penetrant

- Attacks rust and corrosion to free frozen parts
- Powerful foaming action provides complete surface coverage
- Displaces moisture
- Lubricates and protects metal surfaces
- Flash point of 175°F (79°C)
- No chlorinated solvents



Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LJ6001916**	Price

Knock'er Loose® Penetrating Solvent

- NSF® H2 registered for use in meat and poultry plants
- Specially formulated to dissolve rust, varnish, gum and corrosion
- Loosens rusted and corroded nuts, bolts and frozen components
- Lubricating residue prevents corrosion
- VOC compliant

MADE IN THE USA



Size	Hazard Code	Order No.	Price
8 oz Spout	HAZ57	**LR5003025**	Price
13 oz	HAZ03	**LR5003020**	Price
1 Gallon	HAZ57	**LR5003021**	Price
5 Gallon	HAZ58	**LR5003022**	Price

Screwloose® Super Penetrant

- A penetrant that attacks corrosion and frees corroded parts
- Frees and lubricates seized or binding mechanisms
- VOC compliant
- NSF® H2 registered



Size	Net Weight	Hazard Code	Order No.	Price
11 oz	16 oz	HAZ03	**LR5003060**	Price

SP-350™ Corrosion Inhibitor

- Long term indoor protection for all metals
- Protects up to 2 years indoors
- Thin, non-drying film

MADE IN THE USA



Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LR5003262**	Price
5 Gallon	HAZ58	**LR5003266**	Price
55 Gallon	HAZ06	**LR5003268†**	Price

† All 55 Gallon Drums FOB Factory

SP-400™ Corrosion Inhibitor

- Long term outdoor protection (up to 2 years)
- Firm, transparent waxy film
- Highly resistant to humidity and salt spray

MADE IN THE USA



Size	Hazard Code	Order No.	Price
10 oz	HAZ03	**LR5003282**	Price
5 Gallon	HAZ02	**LR5003286**	Price
55 Gallon	HAZ06	**LR5003288†**	Price

† All 55 Gallon Drums FOB Factory

Cold Galvanizing Compound

- 93% Zinc-rich coating is electro-chemically fused to iron and steel
- Equal to hot dip galvanizing
- Keeps corrosion off the protected surface



Size	Hazard Code	Order No.	Price
13 oz	HAZ03	**LP507007**	Price

CROWN Anti-Seize Compound

- Provides an anti-friction shield that will not wash, scrape, or burn off
- Prevents seizure and corrosion to 1000°F



Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LP509105**	Price

JET-LUBE 550® Moly Anti-Seize

- Non-metallic anti-seize compound
- Contains moly and graphite
- Color: black
- To 1800°F (982°C)
- Metal free
- Lead free
- Exceeds MIL-A-907E

MADE IN THE USA

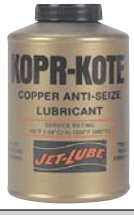


Description	Hazard Code	Order No.	Price
1/2 lb Brush Top	HAZ57	**LM6515502**	Price
1 lb Brush Top	HAZ57	**LM6515504**	Price

JET-LUBE KOPR KOTE® Copper Anti-Seize

- Contains both copper and graphite
- Metalizes under pressure
- Color: bronze
- To 1800°F (982°C)
- High film strength
- Lead free
- Exceeds MIL-A-907E

MADE IN THE USA



Description	Hazard Code	Order No.	Price
1/2 lb Brush Top	HAZ57	**LM6510002**	Price
12 oz Aerosol	HAZ03	**LM6510041**	Price
1 lb Brush Top	HAZ57	**LM6510004**	Price

JET-LUBE NIKAL® Pure Nickel

- Contains pure nickel for extreme temperature applications
- Will not contaminate catalyst beds
- Color: silver
- Acid and chemical resistant
- To 2600°F (1427°C)
- Chemically resistant
- Lead free
- Exceeds MIL-A-907E

MADE IN THE USA



Description	Hazard Code	Order No.	Price
1/2 lb Brush Top	HAZ57	**LM6513602**	Price
1 lb Brush Top	HAZ57	**LM6513604**	Price

JET-LUBE SS-30® Pure Copper

- Recommended for electrical connections
- Color: copper
- To 1800°F (982°C)
- Lead free
- Graphite free
- Exceeds MIL-A-907E

MADE IN THE USA



Description	Hazard Code	Order No.	Price
1/2 lb Brush Top	HAZ57	**LM6512502**	Price
1 lb Brush Top	HAZ57	**LM6512504**	Price

JET-LUBE WHITE KNIGHT™ Anti-Seize

- Metal free, USDA H-1 authorize food grade anti-seize

MADE IN THE USA



Size	Hazard Code	Order No.	Price
1 lb Brush Top	HAZ57	**LM6516404**	Price

LOCTITE Heavy Duty Anti-Seize

- Excellent lubricity
- Metal-free formulation provides outstanding lubrication to all metals including stainless steel, aluminum and soft metals up to 2400°F



Size	Hazard Code	Order No.	Price
1 lb 2 oz Brush Top	HAZ57	**LM5051606**	Price

LOCTITE Food Grade Anti-Seize

- Metal-free formulation to protect assemblies exposed directly or indirectly to fresh and salt water
- Works especially well in high humidity conditions
- Excellent lubricity, superior water wash-out and water resistance
- Prevents seizure, galling, and friction in stainless steel and other metal parts up to 750°F (400°C)
- NSF H1 approved for incidental food contact



Size	Hazard Code	Order No.	Price
8 oz Brush Top	HAZ57	**LM5051168**	Price

LOCTITE Nickel Anti-Seize Thread Compound

- Nickel content stays intact up to 2400°F
- Recommended for use on stainless steel



Size	Hazard Code	Order No.	Price
1 lb Brush Top	HAZ57	**LM5077164**	Price

LOCTITE Silver Grade Anti-Seize

- Heavy-duty, temperature-resistant, petroleum-based compound fortified with graphite, metallic flake
- Will not evaporate or harden – even under extreme heat or cold conditions – for use in assemblies up to 1600°F
- 767 Loc-Tite equivalent



Size	Hazard Code	Order No.	Price
4 oz Brush Top	HAZ57	**LM5080209**	Price
1 lb Brush Top	HAZ57	**LM5076764**	Price

LPS All-Purpose Anti-Seize

- Prevents seizure up to 1800°F (982°C)
- Moly fortified and lead free
- Protects against seizure, heat-freeze, galling, rust and corrosion
- Lowers friction; reduces wrench torque
- Reduces maintenance costs
- Not affected by contraction, expansion or vibration
- Will not run, drip or settle out, steel blue color



Size	Hazard Code	Order No.	Price
8 oz	HAZ57	**LJ6004108**	Price

CRC Nickel Anti-Seize

- Sta-Lube Nickel Anti-Seize is a nickel based formula that is free of copper, lead, sulfides and chlorides
- This premium quality lubricant has extremely high temperature resistivity and excellent chemical resistance
- Applications: catalyst beds, reaction chambers, special alloy fittings
- May be used on fittings, bushings, flanges, headers, nuts, screws, studs, threaded surfaces, pipes, plugs, and manifolds to prevent seizing and galling of surfaces



Size	Hazard Code	Order No.	Price
8 oz Brush Top	HAZ57	**LR50SL35911**	Price
16 oz Brush Top	HAZ57	**LR50SL35913**	Price

HDX Heavy Duty Degreaser



- Removes oil, grease, wax, dirt, moisture, tar, brake fluid, and other contaminants
- Nonflammable
- Fast evaporating
- Low odor
- Quick penetration
- No residue, non-conductive
- NSF® K1 registered

Size		Order No.	Price
19 oz	HAZ08	**LJ6001020**	Price

Instant Super Degreaser



- Heavy-duty performance
- Power blast spray
- Nonflammable
- Removes oil, greases, dirt and tar
- Non-chlorinated, non-conductive
- Fast evaporating
- No residue, no rinsing
- Safe on all metals
- NSF® C1 registered
- Canadian Food Inspection Agency (CFIA) approved

Size		Order No.	Price
20 oz	HAZ03	**LJ6000720**	Price

PreSolve® Orange Degreaser



- High performance industrial cleaner that cleans on contact
- Ideal for removing grease, tar, oil and adhesives
- Fast acting , deep penetration
- Natural based
- Does not contain chlorinated solvents
- Flash point above 100°F (38°C)
- Non-conductive
- Low residue
- Safe on all metals and most plastics
- Inverta spray valve lets you spray in an upright or inverted position (15 oz)
- NSF® C1 registered

Size		Order No.	Price
15 oz	HAZ03	**LJ6001420**	Price
1 Gallon	HAZ05	**LJ6001428**	Price

Zero Tri® Heavy Duty Degreaser



- Fast evaporating
- Instant degreasing action
- Safe to use on most surfaces
- Ideal for degreasing metals
- Does not contain chlorinated solvents
- No residue
- Inverta spray valve lets you spray at any angle

Size		Order No.	Price
15 oz	HAZ03	**LJ6003520**	Price

Precision Clean Multi-Purpose Cleaner/Degreaser



- Water-based and biodegradable
- Removes tough, stubborn stains and soils such as grease and oil
- Nonflammable, rinses clean
- pH Concentrate = 13
- pH Ready-to-Use = 12.5
- Does not contain chlorinated or petroleum solvents, bleach, ammonia, abrasives or butyl
- Alkaline formula inhibits flash rusting
- Safe on all surfaces except magnesium
- NSF® C1 registered

Size		Order No.	Price
28 oz	HAZ57	**LJ6002728**	Price
1 Gallon	HAZ57	**LJ6002701**	Price

CRC T-Force® Degreaser



- Non-conductive, non-corrosive, non-staining and has no flash point
- Revolutionary formula –does not contain TCE, Perc, or nPB
- Reduced VOC formula
- Fast evaporating, leaves no residue
- High dielectric strength of 39,000 volts
- Contains No Class I or Class II ozone depleting chemicals
- NSF® K1 registered
- Not for use in California, Delaware, New Hampshire or parts of Utah

Size	Order No.	Price
20 oz	**LR5003115**	Price

CRC Hydro Force® 20 oz. Super Citrus™ Degreaser

MADE IN THE USA



- NSF® C1 registered
- For solvent strength cleaning and degreasing
- Wipes off easily and leaves no residue
- Pleasant citrus scent

Size	Order No.	Price
20 oz	**LR5014440**	Price

CRC Heavy Duty Degreaser II

MADE IN THE USA



- Non-chlorinated degreaser
- High flash point and non-ozone depleting
- Controlled evaporation for enhanced cleaning
- Use caution on plastics

Size	Order No.	Price
20 oz	**LR5003120**	Price

Ashburn Enviro-Green EXTREME Degreaser Concentrated

MADE IN THE USA



- Heavy duty cleaner and degreaser
- Good replacement for petroleum solvents
- Excellent for use in automatic parts washers, pressure washing, and immersion cleaning operations
- Contains corrosion inhibitors to provide in-process rust protection

Size		Order No.	Price
1 Gallon	HAZ57	**LK70M02701**	Price
5 Gallon	HAZ58	**LK70M02705**	Price
55 Gallon	HAZ06	**LK70M02707†**	Price

† All 55 Gallon Drums FOB Factory

CRC Citrus Degreaser

MADE IN THE USA

- New low VOC formula
- Removes grease, oil and lubricants with no water wash-off
- Controlled evaporation and leaves no residue
- Pleasant citrus scent
- NSF C1 registered
- For use on air tools, mechanical brakes, clutches, chains, wire ropes, motors, dies, molds, parts, bearings, generators & compressors



Size	Hazard Code	Order No.	Price
20 oz	HAZ03	**LR5014170**	Price

CRC Food Grade Silicone

MADE IN THE USA

- Multi-purpose silicone spray for food processing and handling applications
- Forms a colorless, odorless, non-staining film
- Eliminates binding and sticking in most metal to non-metal applications
- Meets FDA Regulation CFR 21-178.3570. NSF H1 Registered



Size	Hazard Code	Order No.	Price
16 oz	HAZ03	**LR5003040**	Price

CRC Super-Soy™ Degreaser

- A non-flammable, low odor, biodegradable precision cleaner for use in electrical and industrial applications
- Effectively removes dirt, light oils and other contaminants from electrical and electronic equipment
- Formulated with soybean and corn based solvents, which are renewable resources

MADE IN THE USA



Size	Hazard Code	Order No.	Price
15 oz	**HAZ03**	**LR5003135**	Price

LOCTITE® ODC-Free Cleaner & Degreaser

- Excellent cleaning performance
- No ozone depleting compounds
- Pleasant citrus scent
- Nonflammable, no residue
- 1-2 minutes evaporation rate (when wiped)
- Compatible with most plastics and metals



Size	Hazard Code	Order No.	Price
15 oz	HAZ03	**LM5022355**	Price

CROWN Safety Solvent Degreaser

- Dissolves grease fast, leaves surfaces clean and dry
- Contains no CFC's or Class I or II O.D.C.'s
- Eliminates lubrication build up
- Evaporates quickly and leaves no powdery or oily residues

AEROVOE



Size	Hazard Code	Order No.	Price
20 oz	**HAZ03**	**LP508060N**	Price

ASHBURN Enviro-Green All Purpose Cleaner and Degreaser with ion-Z Concentrated

MADE IN THE USA

- Biodegradable, non-toxic cleaner and degreaser with a wide range of applications
- Environmentally safe alternative to solvents and hazardous chemicals
- Pleasant scent
- Additional handling charges may apply



Size	Order No.	Price
1 Quart	**LK70M02559**	Price
1 Gallon	**LK70M02551**	Price
5 Gallon	**LK70M02555**	Price
55 Gallon	**LK70M02557†**	Price

† All 55 Gallon Drums FOB Factory

ASHBURN Machine Cleaner and Degreaser

- Formulated water soluble designed for machine tool not sump cleaning
- Superior cleaning and sterilizing
- Easily removes grease and oil
- Breaks down sludge
- Will not harm paint at proper dilutions

MADE IN THE USA



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK70H740314**	Price
5 Gallon	HAZ58	**LK70H740405**	Price

simple green Crystal Simple Green

Features:

- Industrial formulation
- No color and no added scent
- Non-toxic and biodegradable
- Non-abrasive and non-flammable
- A4 and A8 USDA ratings
- Mild 9.3-9.5 pH

Product Applications:

- Equipment and machinery degreasing
- Parts washers and dip tanks
- Mechanized applicators: Floor scrubbers, pressure washers, steam cleaners, etc



Size	Hazard Code	Order No.	Price
24 oz	HAZ57	**LN5019024**	Price
1 Gallon	HAZ57	**LN5019128**	Price
5 Gallon	HAZ58	**LN5019005**	Price

CROWN Dry Film Lubricant

- Industrial strength dry PTFE lubricant that is ideal whenever silicone products are not accessible, and higher temperatures or pressure performance is required
- Durable up to 500°F (260°C) for extended periods
- Will not interfere with post-finishing operations
- Reduces clean-up labor time
- Unique, dry lubricating qualities; will not collect dust
- For use in manufacturing facilities
- **Applications:** rubber, wood, metals, glass; any situation where reduced friction and drag is desired. Do not use on electrical equipment or machinery while in operation

AEROVOE



Size		Order No.	Price
10.5 oz	HAZ03	**LP506075**	Price

CRC Trigger Bottle Applicator

- Empty applicator
- 24 Oz. design
- Level II flourination provides durability
- Features blank lines for product information



Order No.	Price
LR5014021	Price

NoFlash® Electro Contact Cleaner



- Nonflammable, nonconductive
- Fast evaporating
- Quick penetration, no residue
- Superior wetting action
- Safe to use on most surfaces
- Inverta spray valve lets you spray in an upright or inverted position

MADE IN THE USA

Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LJ6004016**	Price

CFC Free NU Contact Cleaner



- No chlorinated solvents
- Fast evaporating, leaves no residue
- Safe on plastics
- NSF® Certified: K2 Registration # 142024
- Penetrating action removes dirt, flux, moisture, dust, oxides, and other contaminants
- Ideal for cleaning electronic and fine parts

Size	Hazard Code	Order No.	Price
11 oz	HAZ03	**LJ605416**	Price

QD® Contact Cleaner



- Cleans sensitive electronics and electrical equipment without leaving residue
- Aggressively cleans and is plastic safe
- Evaporates quickly
- Ideal for applications where lower flash point solvents can be used
- NSF® K2 registered

MADE IN THE USA

Size	Order No.	Price
16 oz	**LR5003130**	Price
5 Gallon	**LR5003131**	Price

Crown Off-Line Contact Cleaner



- Contains no CFC's or chlorinated solvents
- Evaporates quickly and leaves no residue
- Safe on some plastics and flammable

AEROVOE

Size	Hazard Code	Order No.	Price
10.9 oz	HAZ03	**LP508276**	Price

Ashburn Electronic Contact & Equipment Cleaner Aerosol



- A highly effective blend of solvents that is fast drying, non-conductive, and safe to use on plastics, rubber and metal
- Does not contain CFC's or HCFC's and is ozone safe
- Use to remove dirt, grease, oil and grime from electric motors, electrical equipment, circuit boards, computers, magnetic tapes, printed circuits, gauges, switches and relays

MADE IN THE USA

Size	Hazard Code	Order No.	Price
14 oz	HAZ03	**LK70M05140**	Price

Ashburn Cleaner and Degreaser Non-Flammable Aerosol



- A highly concentrated solvent desgined to remove grease, oil, dirt and grime form metallic and non-metallic surfaces
- Non-flammable and non-conductive
- For use on machinery and equipment of all types, including electric motors even while running, electronic equipment, ignition systems, generators, power tools etc

Size	Hazard Code	Order No.	Price
16 oz	HAZ08	**LK70M05120**	Price

CRC Contact Cleaner 2000®



- Effective alternative to 141b-based cleaners when sensitive plastics are not a concern
- Evaporates quickly, leaves no residue
- Has no flash or fire point and contains no Class I or Class II ozone depleting chemicals
- Can be used on contacts, metal switches, motors, relays, generators, edge connectors, buss bars, circuit breakers, scales & sensors
- Not recommended for use on LEXAN®, Noryl®, or polycarbonate-type plastics

MADE IN THE USA

Size	Order No.	Price
16 oz	**LR5003150**	Price

CRC Graffiti Remover



- Removes spray paints, marking inks, crayons, scuff marks, lipstick, lacquers, and varnish
- Contains no methylene chloride
- For use on brick and concrete walls, road signs, trucks, trains, buses, bus stops, seats, desks, lockers, counters, light posts, bathroom partitions, etc

MADE IN THE USA

Size	Hazard Code	Order No.	Price
16 oz	HAZ03	**LR5003194**	Price

Crown Anti Vandal Spray



AEROVOE

- Clear spray blend of solvents that removes lipstick, pencil, ink, crayon, and spray paint from a variety of hard surfaces
- Safe for use on most hard, unpainted surfaces, including concrete, brick, wood, fiberglass, ceramic tile, Formica, and some plastics
- Eliminates the need to sandblast and grind marks off concrete and brick surfaces

Size		Order No.	Price
14 oz	HAZ03	**LP505062**	Price

Crown All Purpose Cleaner



- Water and ammonia based cleaner
- Provides a low foaming action cleaner for breaking up grime
- Cuts through grease
- Cleans and polishes
- Excellent on granite surfaces
- **Applications**: for hard to clean spots on wood, metal, tile, procelain, plastic and chrome

Size	Hazard Code	Order No.	Price
15 oz	HAZ03	**LP505055**	Price

CROWN Glass and Surface Cleaner

- Fast working - cuts through dirt, grease and grime
- Cleans all glass and baked enamel objects
- Non-streaking
- Retards fog, contains no ammonia

AEROVOE



Size		Order No.	Price
19 oz	HAZ03	**LP50860**	Price

LPS TriFree Brake Cleaner

- Heavy-duty performance
- Instant degreasing action, no residue
- Improves brake performance
- Does not contain chlorinated solvents
- Helps stop disc brake squeal
- Fast evaporation, powerful jet spray
- Compliant to California VOC regulations



Size		Order No.	Price
15 oz	HAZ03	**LJ6003620**	Price

CRC Gasket Remover

- Removes baked on fiber gaskets, gasket adhesives and sealants
- Dissolves and aids removal of paints, lacquers, adhesives, and varnish
- Contains no methylene chloride

MADE IN THE USA



Size	Hazard Code	Order No.	Price
16 oz	HAZ03	**LR5003017**	Price

CRC HF™ Contact Cleaner

- Economical with a high flash point
- Removes dirt, dust, grease, light oil, and fingerprints
- Slow drying
- Zero VOC's
- Leaves no residue
- Safe on most plastics

MADE IN THE USA



Size	Hazard Code	Order No.	Price
16 oz	HAZ03	**LR5003125**	Price
5 Gallon	HAZ58	**LR5003126**	Price

LOCTITE Natural Blue™ CLEANER & DEGREASER

Environmentally User Friendly

- No hazardous ingredients
- Nonflammable, biodegradable
- No chlorinated, petroleum solvents, butyls, phosphate or caustic chemicals
- U.S.D.A. authorized

Effective

- Industrial formula rapidly cuts oil, grease and grime
- Highly concentrated, multi-use dilutes to meet specific cleaning needs
- Safe for all metals and washable surfaces, rinses clean



Size	Hazard Code	Order No.	Price
24 oz Spray Bottle	HAZ57	**LM5082249**	Price
1 Gallon	HAZ57	**LM5082251**	Price
5 Gallon	HAZ57	**LM5082253**	Price

CRC Hydroforce® Glass Cleaner

- Cuts through dirt, dust, fingerprints and haze deposits
- Provides streak-free glass cleaning even on delicate glass surfaces
- Biodegradable, ready to use
- For use on glass, fiberglass, mirrors, stainless steel, polished metals, plastic, chrome & linoleum

MADE IN THE USA



Size	Order No.	Price
20 oz	**LR5014412†**	Price
32 oz	**LR5014411**	Price

† Aerosol can

CRC Hydroforce® Germicidal Foam Cleaner

- Cleans, disinfects and deodorizes in one easy step
- Clings to tough vertical or inverted surface soils without runs or drips
- Powerful cleaning agents instantly lift-off and eliminate dirt, dust, grease and grime
- Bactericidal, virucidal and fungicidal

MADE IN THE USA



Size	Order No.	Price
20 oz	**LR5014430**	Price

Sure Shot

- All metal, air pressurized sprayer
- Adjustable spray nozzle
- Use with bulk solvent and your air



Container Size	Color	Order No.	Price
32 oz	Green	**LR501000**	Price

TITAN Spot Spray Non-Aerosol Sprayer

- 80-150 PSI operating pressure (max pressure: 200 PSI)
- Refillable
- Not for use with paint products
- Color coded for easy recognition
- Eliminates dangerous, harmful propellants
- No more disposal issues
- Eco friendly



Container Size	Description	Order No.	Price
32 oz	Single - Blue	**KP8219424**	Price
32 oz	Single - Red	**KP8219419**	Price
32 oz Each	Twin Pack - Red and Blue	**KP8219421**	Price

TITAN Siphon Feed Detail Spray Gun

- Fully adjustable 1.5mm fluid nozzle
- 200ml Cup capacity
- Great for detailing, touch up & small repair work



Order No.	Price
KP8219417	Price

Master Fluid Solutions STAGES™ Whamex ™

Machine Tool Sump and System Cleaner

- Quickly breaks down and lifts off insoluble scum deposits hidden in lines and difficult to reach
- Very hard water tolerant allowing it to be effective in raw water or used coolant
- Compatible with most waste treatment (including ultrafiltration) and will not degrade when used as directed
- Will remove heavy soils from machines without affecting paints, coatings, seals, hoses, or skirting, and it won't leave a slippery residue
- Short-term corrosion inhibitors prevent flash rusting of machine surfaces and ways



New!

Container Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**MS655700**	Price
5 Gallon	HAZ58	**MS655710**	Price
54 Gallon	HAZ06	**MS655705†**	Price

† All 54 Gallon Drums FOB Factory

Master Fluid Solutions STAGES™ Whamex XT™

Low Foam Machine Tool Sump and System Cleaner

New!

- Quickly breaks down and lifts off insoluble scum deposits hidden in lines and difficult to reach areas
- Low foam, safe, fast-acting, concentrated formula that will save machine cleaning downtime
- Very hard water tolerant allowing it to be effective in raw water or used coolant
- Removes oily residues, scums, and insoluble soap deposits that reduce coolant life.
- Will remove heavy soils from machines without affecting paints, coatings, seals, hoses, or skirting
- Short-term corrosion inhibitors prevent flash rusting of machine surfaces and ways



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**MS655720**	Price
5 Gallon	HAZ58	**MS655725†**	Price
54 Gallon	HAZ06	**MS655730**	Price

† All 54 Gallon Drums FOB Factory

CIMCOOL CIMCLEAN® 30

- General purpose machine cleaner recommended for cleaning individual machine tanks and central systems
- Effectively removes bio-films, dirt, grit, chip deposits, insoluble soaps and oils
- For ferrous metals



Size	Hazard Code	Order No.	Price
5 Gallon	HAZ57	**LL5100609P**	Price
55 Gallon	HAZ06	**LL5100609D†**	Price

† All 55 Gallon Drums FOB Factory

Rustlick Klenzol DY

Water Soluble Alkaline Cleaner

- Nonflammable, non-toxic and biodegradable
- Quickly penetrates and dislodges grimy build-ups of chips and oil residues



Size	Hazard Code	Order No.	Price
1 Gallon	HAZ57	**LK6076012**	Price
5 Gallon	HAZ58	**LK6076052**	Price
55 Gallon	HAZ06	**LK6076552†**	Price

†All 55 Gallon Drums FOB Factory

Graymills Aquatene® Biodegradable Cleaning Solutions

Aquatene 330
General purpose detergent cleaner in liquid form. Mix 1 part to 4—9 parts water. May be used at room temperature or heated up to180°F for faster cleaning action

Aquatene 571
Specially formulated for cleaning aluminum and other non-ferrous metals. Powdered detergent mixes 3 to 8 oz. per gallon of water. Use heated up to 180°F for faster cleaning

Aquatene 390
Ideal for Spray Cabinet Washers
Heavy duty formula contains rust inhibitor and no phosphates or silicones. Should be used heated 115˚F - 150˚F. Not for use with non-ferrous metals



Style - GM330 - For General Purpose				
Size	**Weight**	**Hazard Code**	**Order No.**	**Price**
5 Gallon Pail	45 lbs	HAZ58	**LC56GM330C5**	Price
55 Gallon	530 lbs	HAZ06	**LC56GM330C55†**	Price

Style - GM390 - Low Foam Concentrate				
Size	**Weight**	**Hazard Code**	**Order No.**	**Price**
5 Gallon Pail	45 lbs	HAZ64	**LC56GM390C5**	Price

Style - GM571 - For Non-Ferrous Metals				
Size	**Weight**	**Hazard Code**	**Order No.**	**Price**
25 lb Powder	25 lbs	HAZ64	**LC56GM57125**	Price

†All 55 Gallon Drums FOB Factory

Graymills Parts Cleaning Solvent

- Rapidly dissolves grease, oil & residue
- Hand-Ease® contains cosmetic grade lanolin, reducing irritation and chapping
- Super Agitene with 105°F flash point or Super Agitene 141 with flash point of 141°F
- Requires no water rinse



Type - Super Agitene 141 Non-Hazardous Solvent				
	Weight	**Hazard Code**	**Order No.**	**Price**
5 Gallon	35 lbs	HAZ05	**LC56M5005141**	Price

Type - Super Agitene Solvent				
	Weight	**Hazard Code**	**Order No.**	**Price**
5 Gallon	35 lbs	HAZ05	**LC56M5005**	Price
50 Gallon	365 lbs	HAZ06	**LC56M8400†**	Price

† All 50 Gallon Drums FOB Factory

NATIONAL Parts Washer



- Designed for use in shops ranging from mechanic's garage to heavy industry
- Features a 115V fully enclosed pump, seamless construction
- 20 Gallon tank dimensions: 29-7/8" L x 20-3/4" W x 10-51/64" D
- Pump output through hose, 50GPH

WORLD CLASS QUALITY

Capacity	Order No.	Price
3.5 Gallons (Portable Style)	**NW551991035**	Price
20 Gallons (Heavy Duty Style)	**NW551991020**	Price

Graymills Economy Parts Washer



- Works with as little as 2-1/2 gallons of solvent — 5 gallon maximum capacity
- Abrasive resistant pump delivers 720GPH
- Practical work shelf
- Fire safety lid
- Flexible metal flush hose
- 115V, 60Hz, 1 PH
- Use Agitene® cleaning fluids

MADE IN THE USA

Order No.	Price
LC55HK150A	Price

Graymills Handi-Kleen® Solvent Parts Washers



- Durable 14-gauge steel construction with powder-coated finish
- Abrasive resistant pump delivers 720GPH
- Removable metal work shelf and parts basket
- Generous soaking area holds up to 15 gallons
- Adjustable metal hose for directing flow
- Fire safety lid
- Easy clean out with bottom drain
- Tank dimensions: 36"L x 22"W x 16"D

MADE IN THE USA

Capacity	HP	Motor	Order No.	Price
10-15 Gallons	1/15	115V, 60Hz, 1PH	**LC55PL36A**	Price

Graymills Drum Mount Solvent Parts Washer



- Durable 16-gauge steel construction with powder-coated finish
- Flexible metal flush hose
- Built-in pump delivers 170GPH
- Deluxe model has work light and patented retractable pump for easy fluid changes
- Fire Safety Lid
- 115V, 60Hz, 1PH

MADE IN THE USA

Style	Capacity	L (in.)	W (in.)	D (in.)	Weight	Order No.	Price
Deluxe	16 Gallons	32	18	9	70 lbs	**LC55DMD232**	Price
Deluxe	30 Gallons	36	20	9	96 lbs	**LC55DMD236**	Price
Standard	16 Gallons	32	18	9	65 lbs	**LC55DMS232**	Price
Standard	30 Gallons	36	20	9	91 lbs	**LC55DMS236**	Price

Graymills Bioremediation Parts Washer

New!



- Uses hydrocarbon converting microbes to reduce solid waste and virtually eliminate fluid disposal
- Thermostatically controlled 1,400 watt heater delivers heated solution up to 110°F (44°C)
- Rugged thermosplastic corrosion-resistant construction (5 year warranty)
- Flow-thru brush, flexible stay-put nozzle - brush or flush away soil with 300 GPH pump
- Low liquid level shuts off heater in event liquid level drops below a set point
- GFI shuts down entire unit in event of electrical short
- 9" Soak depth tank, molded bottom ridges allow soaking parts with detergent circulation while parts sit above sludge
- Removable stainless steel work shelf for way postiioning of parts while hand cleaning
- cETL certified

Capacity	L (in.)	W (in.)	D (in.)	Order No.	Price
30 Gallons	35	21-1/2	15	**LC55BIO922**	Price

Graymills Aqueous Parts Washer

New!



- Ability to convert from soak to sink and back again
- Thermostatically controlled 1,400 watt heater delivers heated solution up to 110°F (44°C)
- Rugged thermosplastic corrosion-resistant construction (5 year warranty)
- Flow-thru brush, flexible stay-put nozzle - brush or flush away soil with 300 GPH pump
- Low liquid level shuts off heater in event liquid level drops below a set point
- GFI shuts down entire unit in event of electrical short
- 9" Soak depth tank, molded bottom ridges allow soaking parts with detergent circulation while parts sit above sludge
- Removable stainless steel work shelf for way postiioning of parts while hand cleaning
- cETL certified

Capacity	L (in.)	W (in.)	D (in.)	Order No.	Price
30 Gallons	35	21-1/2	15	**LC55PH922A**	Price

Graymills Flow-Thru Parts Brushes

Round and Flat Angular Parts Cleaning Brushes



- Easily added to any parts washer
- Flushes part as it cleans
- Ergonomic angular design
- Flow through design includes 27" hose

Style	Order No.	Price
Flat	**LC557A**	Price
Round	**LC558A**	Price
Straight	**LC556A**	Price

ASHBURN CHEMICAL TECHNOLOGIES Parts Washer and Degreaser



- Superior cleaning
- Evaporates quickly
- High flash point >140° F
- Will not harm paint
- Solvent-based parts cleaner
- Designed to remove oils and greases from metal parts and surfaces

MADE IN THE USA

Size	Hazard Code	Order No.	Price
5 Gallon	HAZ58	**LK70H700405**	Price
55 Gallon	HAZ06	**LK70H700555†**	Price

†All 55 Gallon Drums FOB Factory

LOCTITE® Threadlockers

- Prevents loosening from shock and vibration
- Seals threads
- Stops rust and corrosion
- **222™** Low strength, for small fasteners and components requiring occasional adjustments.
- **242™** Medium strength, for fasteners 1/4" to 3/4". Has controlled lubricity for accurate clamp loads. parts can be removed using a hand tool.
- **243™** Medium strength that is primerless, no need to pre-clean or prime before use. 1/4" thru 3/4"
- **248™** Medium strength same as 242™ but comes in Stick form.
- **262™** Med to high strength a permanent applied threadlocker for fasteners up to 3/4". Excellent where fasteners are exposed to chemicals. Heat and hand tool needed to separate parts.
- **263™** High strength that is primerless, no need to pre-clean or prime most fasteners before use. For fasteners up to 1"
- **277™** High strength for permanent locking and sealing of fasteners.
- **290™** High strength a low viscosity threadlocker for pre-assembled bolts up to 1/2" to secure them in place. Penetrates threads by capillary action. Seals welds and porous metal parts.
- **640™** High strength to secure slip and press fit assemblies.
- **680™** High viscosity retaining compound for joining fitted cylindrical pa rts.
- **2760™** High strength fast cure threadlocker that sets up quick, eliminating the need for primers; develops usual strength within 1 hour. Used for heavy-duty projects.

Item	Loctite No.	Strength	Color	Container	Size	Order No.	Price
	222	Low	Purple	Bottle	10ml	**LM5022221**	Price
	222	Low	Purple	Bottle	50ml	**LM5022231**	Price
	242	Medium	Blue	Bottle	10ml	**LM5024221**	Price
	242	Medium	Blue	Bottle	50ml	**LM5024231**	Price
	242	Medium	Blue	Bottle	250ml	**LM5024241**	Price
	243	Medium-Primerless	Blue	Bottle	10ml	**LM501329837**	Price
	243	Medium-Primerless	Blue	Bottle	50ml	**LM501329467**	Price
	243	Medium-Primerless	Blue	Bottle	250ml	**LM501329505**	Price
	248	Med-Semisolid	Blue	Tube	9gm	**LM5037684**	Price
	248	Med-Semisolid	Blue	Tube	19gm	**LM5037087**	Price
	262	Med-high Permanent	Red	Bottle	10ml	**LM5026221**	Price
	262	Med-high Permanent	Red	Bottle	50ml	**LM5026231**	Price
	262	Med-high Permanent	Red	Bottle	250ml	**LM5026241**	Price
	263	High-Primerless	Red	Bottle	10ml	**LM501330583**	Price
	263	High-Primerless	Red	Bottle	50ml	**LM501330585**	Price
	263	High-Primerless	Red	Bottle	250ml	**LM501330335**	Price
	268	High Strength	Red	Tube	9gm	**LM5037685**	Price
	268	High Strength	Red	Tube	19gm	**LM5037686**	Price
	277	High	Red	Bottle	250ml	**LM5027741**	Price
	290	High	Green	Bottle	10ml	**LM5029021**	Price
	290	High	Green	Bottle	50ml	**LM5029031**	Price
	290	High	Green	Bottle	250ml	**LM5029041**	Price
	640	Low	Green	Bottle	50ml	**LM50135520**	Price
	680	High	Green	Bottle	50ml	**LM501835201**	Price
	680	High	Green	Bottle	250ml	**LM501835196**	Price
	2760	High-Fast cure	Red	Bottle	10ml	**LM5032526**	Price
	2760	High-Fast cure	Red	Bottle	50ml	**LM5032525**	Price

LOCTITE® Thread Sealants

- Prevents leaks, corrosion and galling in threads
- Seals and secures metal pipes and fittings.
- **540™** Thixotropic sealant
- **545™** Hydraulic/pneumatic fitting sealant that contains no fillers or particles that could contaminate systems. Suitable for fittings up to 2”
- **561™** Low pressure sealing in a semisolid stick formula, perfect for overhead applications.
- **565™** Controlled strength sealer that cures rapidly so as to provide immediate low pressure sealing.

Item	Loctite No.	Application	Color	Container	Size	Order No.	Price
	540	Cylindrical Metal Assemblies	Blue	Bottle	250ml	**LM5054041**	Price
	545	Hydraulic/ Pneumatic	Purple	Bottle	50ml	**LM5054531**	Price
	561	Pipe Fittings	White	Tube	19gm	**LM5037127**	Price
	565	Pipe Fittings	White	Tube	6ml	**LM5056507**	Price
	565	Pipe Fittings	White	Tube	50ml	**LM5056531**	Price
	565	Pipe Fittings	White	Tube	250ml	**LM5056541**	Price

LOCTITE® Retaining Compound

- Increases the shear strength of cylindrical non-threaded assemblies.
- An industry standard for assembling press and slip-fitted parts.
- **609™** Press fit general purpose compound that is designed to bond gap distance Up to .005”
- **660™** Quick Metal® retaining creamy non-running gel that is used onto cylindrical parts to fill surface imperfections and repair worn areas
- **668™** QuickStix® high temperature compound in a semisolid formula. No mess application, ideal for gaps up to .005”. Withstands temperatures up to 400°F.

Item	Loctite No.	Application	Color	Container	Size	Order No.	Price
	609	Cylindrical Assembly, Retaining metal parts	Green	Bottle	10ml	**LM5060921**	Price
	609	Cylindrical Assembly, Retaining metal parts	Green	Bottle	50ml	**LM5060931**	Price
	609	Cylindrical Assembly, Retaining metal parts	Green	Bottle	250ml	**LM5060941**	Price
	620	For high temperature retaining of parts with a clearance or interference fit	Green	Bottle	10ml	**LM5062015**	Price
	620	For high temperature retaining of parts with a clearance or interference fit	Green	Bottle	50ml	**LM5062040**	Price
	638	Recommended for slip fit parts with larger gaps	Green	Bottle	10ml	**LM501835937**	Price
	638	Recommended for slip fit parts with larger gaps	Green	Bottle	50ml	**LM501835936**	Price
	648	Best performance for clearance of interferance fit parts	Green	Bottle	10ml	**LM501835922**	Price
	648	Best performance for clearance of interferance fit parts	Green	Bottle	50ml	**LM501835920**	Price
	660	For repair of worn machinery parts	Silver	Tube	6ml	**LM5066010**	Price
	660	For repair of worn machinery parts	Silver	Tube	50ml	**LM5066040**	Price
	668	General high temp use	Green	Stick	19gm	**LM5039148**	Price

LOCTITE® Anaerobics 7649™ Primer N™

- Solvent-based primer that features very long on-part life
- Use to speed the cure of all Loctite® Anaerobic Products and ensure proper cure on inactive metals
- Ideal for cure conditions below room temperature



Container Size	Hazard Code	Order No.	Price
4.5 oz Aerosol Can	HAZ03	**LM5021348**	Price

LOCTITE® Thread Sealant with Teflon®

- General purpose sealant with the added lubricity of Teflon® for metal pipes
- Allows easy disassembly
- Resists common shop fluids



Size	Hazard Code	Order No.	Price
1 Pint Brush Bottle	HAZ03	**LM5030561**	Price

Vibra-TITE® VC3 Threadmate

- Adjustable, removeable, reusable
- Prevents fasteners from loosening due to shock and vibration
- Locks and seals threaded fasteners of virtually any size
- Works with metal, wood, nylon, PE and PP plastics



Size	Hazard Code	Order No.	Price
30cc Bottle	HAZ58	**LM4521330**	Price

Vibra-TITE® Medium Strength Threadlocker

- Use Vibra-Tite 121 when fasteners need to be removed with standard hand tools
- For fasteners with a diameter between 1/4 and 3/4”



Size	Hazard Code	Order No.	Price
10ml Bottle	HAZ57	**LM4512110**	Price
50ml Bottle	HAZ57	**LM4512150**	Price
250ml Bottle	HAZ58	**LM4512125**	Price

Vibra-TITE® Permanent Strength Threadlocker

- Vibra-Tite 13110 to provide medium-high strength thread-locking where controlled torque / tension is required
- Material lubricates during assembly, securing parts with medium-high strength retention allowing disassembly when required
- Only use on permanent applications.
- Not recommended for use with most plastics as stress cracking can occur



Size	Hazard Code	Order No.	Price
10ml Bottle	HAZ57	**LM4513110**	Price
250ml Bottle	HAZ57	**LM4513125**	Price
35ml Pump	HAZ57	**LM4513535**	Price
50ml Bottle	HAZ57	**LM4513150**	Price

LOCTITE® 404™ Quick Set™ Instant Adhesive

- General purpose clear no mix adhesive
- Designed for bonding rubber and plastic where fast fixturing is required



Size	Hazard Code	Order No.	Price
.333 oz	HAZ57	**LM5046551**	Price

LOCTITE® 380™ Black Max® Toughened Instant Adhesive

- The original elastomer modified instant adhesive
- Bonds metal, rubber and plastic
- Excellent peel, impact and shear strength



Size	Hazard Code	Order No.	Price
1 oz Bottle	HAZ57	**LM5038050**	Price

LOCTITE® 435™ Prism® Instant Adhesive

- Clear, surface insensitive, elastomer-modified instant adhesive
- Faster fixture times over traditional toughened adhesives with exceptional bond and peel strength on metals, plastics and rubbers



Size	Hazard Code	Order No.	Price
16 oz Bottle	HAZ05	**LM5040995**	Price
20 gm Bottle	HAZ57	**LM5040994**	Price

LOCTITE® Super Bonder 409 Industrial Grade Gel Instant Adhesive

- Used for general purpose bonding
- Gel consistency prevents adhesive flow even on vertical surfaces
- High viscosity



Size	Hazard Code	Order No.	Price
300 gm Cartridge	HAZ57	**LM5018030**	Price

LOCTITE® 454™ Prism® Surface Insensitive Instant Adhesive Gel

- A general purpose, no-run clear gel
- Can be applied to vertical surfaces
- Ideal for porous substrates and rough surfaces



MADE IN THE USA

Size	Hazard Code	Order No.	Price
3 gm Tube	HAZ57	**LM5045404**	Price
20 gm Tube	HAZ57	**LM5045440**	Price

LOCTITE® 495™ Super Bonder® Instant Adhesive

- Strong bonds to metal, rubber, and plastic parts
- Can bond parts with caps to .004”
- Works in seconds
- HAZ57



Size	Order No.	Price
1 oz Bottle	**LM5049550**	Price
3 gm Tube	**LM5049504**	Price

LOCTITE® Contact Adhesive

- Fast drying, neoprene-based adhesive
- Bonds porous materials
- Sets to a tack-free surface in 3-4 minutes
- Allows repositioning of parts after initial contact



Size	Hazard Code	Order No.	Price
5 oz Tube	HAZ03	**LM5030537**	Price

3M™ Hi-Strength 90 Spray Adhesive

- Creates a high strength fast tack bond to concrete, wood, MDF, laminates, polypropylene or polyethylene
- Excellent moisture resistance



Size	Hazard Code	Order No.	Price
24 oz	HAZ03	**LF53300233**	Price

3M™ Super 77™ Multi-Purpose Spray Adhesive

- High tack, high coverage and fast drying
- Use for permanently attaching foils, carpeting, lightweight foams, paper, cardboard, felt and cloth to painted or unpainted metals, wood and hardboard
- Bonds quickly in 15 seconds



Size	Hazard Code	Order No.	Price
24 oz	HAZ03	**LF53212109**	Price

LOCTITE® QuickTite®

- General purpose, clear gel
- Bonds to metal, plastic and porous surfaces in seconds
- Features precision flow control applicator
- Can be applied to vertical surfaces



Size	Hazard Code	Order No.	Price
.14 oz Bottle	HAZ57	**LM5039202**	Price

Vibra-TITE 354 Surface Insensitive Super Glue

- Ideal for porous surfaces
- Can be applied to vertical surfaces
- Clear adhesive gel



Size	Hazard Code	Order No.	Price
3 gm	HAZ57	**LM4535403**	Price
20 gm	HAZ57	**LM4535420**	Price

Vibra-TITE 388 Toughened Super Glue

- Superior shock and thermal resistance
- Bonds metal, rubber and plastic
- Good for close fitting parts



Size	Hazard Code	Order No.	Price
1 oz Bottle	HAZ57	**LM4538828**	Price

Vibra-TITE 395 General Purpose Super Glue

- Strong bonds to metal, rubber and plastic parts
- Works in seconds



Size	Hazard Code	Order No.	Price
1 oz Bottle	HAZ57	**LM4539528**	Price

LOCTITE® Max Strength Spray Adhesive

- Designed for bonding foam, fabrics, rubber, plastic, etc
- Resistant to extreme conditions
- Water resistant
- Sprays on clear



Size	Hazard Code	Order No.	Price
17 oz Aerosol	HAZ03	**LM5037312**	Price

LOCTITE® All-Purpose Spray Adhesive

- High strength, clear formula
- Bonds porous or nonporous surfaces
- Permanent and repositionable bonds
- Won’t bleed through
- Resists water and humidity
- Contains no CFCs harmful to environment



Size	Hazard Code	Order No.	Price
10.5 oz Aerosol	HAZ03	**LM5030544**	Price

3M™ Scotch-Weld™ Epoxy Adhesive DP100

- A clear, rigid, two-part epoxy adhesive
- 1:1 Mix ratio
- 5 Minute worklife and handing strength in approximately 20 minutes
- Bonds to a variety of materials such as, metals, ceramics, wood and many plastics
- 3M™ Scotch-Weld™ EPX™ Plus II applicator and mix nozzles are required (not included)



Size	Order No.	Price
1.7 oz	**LF53226489**	Price

3M™ Scotch-Weld™ Epoxy Adhesive DP420

- Toughened, two-part epoxy adhesive
- 2:1 Mix ratio
- 20 minute work life and handling strength in approximately 2 hours
- Bonds extremely well to many surfaces, such as metals, ceramics, wood and some plastics
- 3M™ Scotch-Weld™ EPX™ Plus II applicator and mix nozzles are required (not included)



Size	Hazard Code	Order No.	Price
1.25 oz	HAZ03	**LF53822360**	Price

3M Neoprene High Performance Rubber and Gasket Adhesive 1300

- Adheres neoprene, SBR, butyl, and other types of rubbers to other various substrates
- Excellent moisture and heat resistance and will perform up to up to 300°F/148°C
- Can be used as a contact or wet-bond adhesive



New!

Hazard Code	Order No.	Price
HAZ03	**LF53198687**	Price

LOCTITE® Pipe Joint Compound

- Seals pipes to 5000 PSI
- Prevents galling and corrosion
- Outperforms Teflon® tape
- Won't shred
- Non-hardening



Size	Hazard Code	Order No.	Price
16 oz Brush Top Bottle	HAZ03	**LM5030557**	Price

LOCTITE® 518™ Gasket Eliminator® Flange Sealant

- Forms a flexible, solvent-resistant seal that will not tear or decay
- Seals to 300°F and fills gaps to .050"
- Can be used on flexible metal assemblies, including aluminum surfaces
- HAZ57



Container Size	Order No.	Price
6 ml	**LM5051817**	Price
50 ml	**LM5051831**	Price

LOCTITE® Fixmaster® Fast Cure Epoxy Mixer Cups

- Premeasured epoxy mixer cups
- Bonds in 5-15 minutes
- Excellent chemical resistance
- Fills porosities and can be used to build up worn parts
- Ideal for bonding glass, hard plastics, rubber and metal
- Ten cups per package
- HAZ57



Size	Order No.	Price
4 gm	**LM5021425**	Price

LOCTITE® Fixmaster® Fast Cure PoxyPak™

- High strength permanent bonds on metal, ceramic, concrete, wood, glass, and plastic
- Handling strength in 5 minutes
- May be drilled, sanded, machined, and painted
- Pre-measured 1 oz syringe
- HAZ03



Size	Order No.	Price
1 oz	**LM5081120**	Price

LOCTITE® Fixmaster® Metal Magic Steel™

- Hand kneadable, no measure, gray epoxy putty
- Bonds a variety of surfaces and metals in minutes
- Can be used for wet or dry surfaces
- Cures under water



Size	Order No.	Price
4 oz Stick	**LM5098853**	Price

The World's Finest Cold Weld Compound



- J-B Weld contains a specific mixture of fine steel in a liquid base
- Super strength chemical used for a carrier and activator that causes the super hard finish after the curing process
- J-B Weld etches other materials that helps the metalizing process to bond tighter and adhere forever
- This etching allows J-B Weld to co-mingle with other materials causing a near perfect weld
- Many machine shops use J-B Weld for repairing cracked motor blocks and other castings, because of its tougher qualities and it will not shrink and is not affected by gasoline, oil, water and most other chemicals
- Now available in shop size

Size	Order No.	Price
Two (2) 1 oz Tube	**LM508265S**	Price
Two (2) 5 oz Tube	**LM508280**	Price

ClearWeld™ Syringe



- Quick setting multi-purpose two part epoxy
- Provides a strong and lasting bond on most surfaces including tile, most plastics, ceramic, glass, wood and metals
- Designed to cure with a clear, transparent bond when used in thicknesses of less than 15 mil
- 1:1 Mixing ratio, sets in 5 minutes and cures in 1 hour
- Tensile strength of 4400 PSI

New!

Order No.	Price
LM5050112	Price

PlasticBonder™ Syringes



- Quick-setting two-part urethane adhesive system that provides strong and lasting repairs and works on thermoset carbon fiber composites, thermoplastics, coated metals, concrete & more
- 1:1 Mixing ratio, sets in 15 minutes and can be sanded after 30 minutes
- Tensile strength of 3770 PSI
- Choice of tan or black

New!

Color	Order No.	Price
Black	**LM5050139**	Price
Tan	**LM5050133**	Price

MarineWeld™ Twin Tube



- Specially formulated two-part Cold-Weld™ system that provides strong lasting repairs for bonding different or similar surfaces such as aluminum, metal, composites, fiberglass and others
- Sets in 4-6 hours at room temperature
- At full cure (15-24 hours), color is dark grey, it may be then shaped, tapped, filed, sanded and drilled retaining full strength above or below the water's surface
- 1:1 Mixing ratio
- Tensile strength of 3960 PSI

New!

Order No.	Price
LM508272	Price

PlasticWeld™ Syringe



- Specially formulated two-part adhesive and epoxy filler system thae provides for strong, long-lasting repairs
- Will bond a variety of surfaces, such as metal, composites, fiberglass and others
- Sets in 5 minutes at room temperature and is fully cured in one hour
- Using a 1:1 mixing ratio, PlasticWeld combines tp a tensile strength of 3200 PSI and cures to an off-white color

New!

Order No.	Price
LM5050132	Price

WaterWeld™ Epoxy Putty



- Will plug or seal leaks and patch holes and cracks in almost anything
- Ideal for repairing plumbing, fuel tanks, pools, spas and potable water tanks, setup occurs even under water
- After curing, it can be drilled tapped, filed, sanded and painted
- Set time of 15 to 25 minutes and sets hard in 1 hour
- Cures to off-white color
- Tensile strength of 900 PSI and will withstand temperatures up to 300°F

New!

Order No.	Price
LM508277	Price

KwikWeld™ Syringe



- Fast setting version of the Original J-B Weld two-part epoxy Cold-Weld™ system that provides strong lasting repairs to metal and multiple other surface tyoes
- Sets in 6 minutes, fully cured in 4-6 hours
- Cures to a dark grey color
- Tensile strength of 2424 PSI
- Can withstand temperatures up to 300°F

New!

Order No.	Price
LM5050176	Price

LOCTITE® Gasket Sealant No. 1 & 2

- No. 1 dries fast and sets hard for permanent or rigid assembly
- No. 2 dries slowly and sets to a pliable film for sealing semi-permanent or flexible assemblies



Size	Hazard Code	Order No.	Price
1.5 oz Tube	HAZ57	**LM5030513**	Price
7 oz Tube	HAZ57	**LM5030512**	Price
7 oz Tube	HAZ57	**LM5030515**	Price

LOCTITE® 587™ Blue RTV Gasket Maker

- Makes formed-in-place gaskets
- Superior oil resistance
- Bonds to oil contaminated surfaces
- Noncorrosive



Size	Hazard Code	Order No.	Price
70 ml Tube	HAZ57	**LM5058730**	Price
8 oz Pressurized Can	HAZ03	**LM5030567**	Price
13 oz Cartridge	HAZ57	**LM5058775**	Price

LOCTITE® Instant Gasket

- Blowout resistant and out performs precut gaskets
- Protects against leaks caused by vibration and thermal expansion
- Effective to 550°F in continuous operating environments, 600°F intermittent
- Superior oil resistance, non-corrosive, non-slumping
- One 7 oz can yields approximately 672 linear inches of gasket material, compared to 54 linear inches of typical cut gasket



Size	Hazard Code	Order No.	Price
7 oz Dispenser	HAZ03	**LM5030507**	Price

LOCTITE® High Tack Gasket Sealant

- Holds gaskets in place during assembly
- Remains tacky indefinitely
- Seals gaskets to 500°F
- Contains no CFCs



Size	Hazard Code	Order No.	Price
9 oz Aerosol	HAZ03	**LM5030526**	Price

LOCTITE® Aviation Gasket Sealant

- Seals all types of solid gaskets
- Dries slowly, sets to pliable film
- Applies easily with brush or roller



Size	Hazard Code	Order No.	Price
16 oz Brush Top Bottle	HAZ03	**LM5030516**	Price

LOCTITE® Chisel® Gasket Remover

- Quickly removes baked-on gaskets, sealants and adhesives
- Works on silicone, weather-strip, carbon deposits, dried oil, grease or paint
- Prepares metal parts for new gaskets and assembly



Size	Hazard Code	Order No.	Price
18 oz Aerosol	HAZ08	**LM5079040**	Price

LOCTITE® 5699™ Gray RTV Silicone Gasket Maker

- Remains flexible and withstands vibration
- Designed for high torque applications
- Outstanding oil and shop fluid resistance
- Withstands temps.–75° to 625°



Size	Hazard Code	Order No.	Price
70 ml Tube	HAZ57	**LM5018718**	Price
300 ml Cartridge	HAZ57	**LM5018581**	Price

LOCTITE® SuperFlex® Blue RTV Silicone

- Insulates electrical wiring
- Adheres to wood, glass, metal, plastic, ceramics, leather, tile, fabric, vinyl, rubber and concrete
- Stops leaks, seals joints and caulk
- Dries tough and flexible



Size	Hazard	Order No.	Price
80 ml Tube	HAZ57	**LM5030560**	Price
7.25 oz Aerosol	HAZ03	**LM5030541**	Price
12 oz Tube	HAZ57	**LM5030518**	Price

LOCTITE® SuperFlex® Red Hi-Temp RTV Silicone

- Makes formed-in-place gaskets of any size or shape
- Withstands temps to 600°F
- Fills voids and remains flexible
- Room temperature cure



Size	Hazard	Order No.	Price
3 oz Tube	HAZ57	**LM5059630**	Price
8 oz Pressurized Can	HAZ03	**LM5030564**	Price
11 oz Cartridge	HAZ57	**LM5059675**	Price
12 oz Tube	HAZ57	**LM5082279**	Price

LOCTITE® SuperFlex® RTV Silicone

- For gasketing, sealing, bonding and caulking
- Room temperature cure
- Remains flexible
- Works to 500°F
- Fills voids



Color - Black			
Size	**Hazard Code**	**Order No.**	**Price**
3 oz Tube	HAZ57	**LM5059330**	Price
11 oz Cartridge	HAZ57	**LM5059375**	Price

Color - Clear			
Size	**Hazard Code**	**Order No.**	**Price**
80 ml Tube	HAZ57	**LM5059530**	Price
7.25 oz Pressurized Can	HAZ03	**LM5030562**	Price
11 oz Cartridge	HAZ57	**LM5059575**	Price

CROWN Prussian Blue High Spot Indicator



- For quick identification of high spots on surfaces and for mating components in assembly operations

AERVOE

Size	Hazard Code	Order No.	Price
6 oz	HAZ03	**LP506090**	Price

DYKEM Layout Fluids



- Dykem® Steel Blue® is the world's leading layout fluid
- It prevents glare, dries to the touch in minutes, leaves a uniform, deep blue color and gives scribed lines a clear, precise appearance
- Hazard Code: 03

	Steel Blue		Steel Red	
Size	Order No.	Price	Order No.	Price
2 oz Felt Tip	**LL6080200**	Price	**LL6080296**	Price
4 oz Brush In Cap	**LL6080300**	Price	**LL6080396**	Price
8 oz Brush In Cap	**LL6080400**	Price	**LL6080496**	Price
12 oz Aerosol	**LL6080000**	Price	**LL6080096**	Price
31 oz (930 ml)	**LL6080600**	Price	**LL6080696**	Price

DYKEM Cross-Check™



- Provides for identifying vibrating, loose or tampered with fasteners
- Highly visible- broken marks easily shown
- Hazard Code: 03

Color	Size	Order No.	Price
Orange	1 oz Tube	**LL6083314**	Price
Green	1 oz Tube	**LL6083315**	Price
Red	1 oz Tube	**LL6083316**	Price
Yellow	1 oz Tube	**LL6083317**	Price
Blue	1 oz Tube	**LL6083318**	Price

CROWN Fault Finder Inspection Kit 1070

Group 1



- **Kit Contains:** 4 - #1071 Cleaner; 2 - #1072 Penetrant; 2 - #1073 Developer Advantages: portability, accuracy, versatility, simplicity, availability
- Group 1 is Certified
- Kit contains no chlorine or sulfur-bearing solvents
- Because of its carrier solvents, Group 1 is our least flammable system
- Hazard Code: 03

Description	Size	Order No.	Price
Fault Finder Inspection Kit	Kit	**LP501070**	Price
Developer for Fault Finder Kit	7.5 oz	**LP501073**	Price
Penetrant for Fault Finder Kit	7.5 oz	**LP501072**	Price
Cleaner for Fault Finder Kit	8.5 oz	**LP501071**	Price

DYKEM Hi-Spot Blue



- Used for locating high spots on bearing and gear surfaces
- It is non-drying and non-hardening and transfers clearly from one surface to another

Size	Hazard Code	Order No.	Price
.55 oz	HAZ57	**LL6083307**	Price

ASHBURN Layout Ink MIKE-O-BLUE



- Provides a smooth, dark, non-glare coating to metal surfaces
- Dries quickly and uniformly for creating high visible, precision scribe lines and cutting surfaces
- Easily removed with Ashburn Layout Ink Remover
- Uniformity of film
- Non-glare
- Dries in seconds
- Heat resistant
- Acid-free

MADE IN THE USA

Size	Hazard Code	Order No.	Price
16 oz	HAZ03	**LK70G500116**	Price

ASHBURN Layout Ink Remover



- Contains a special solvent for the removal of layout inks and fluids
- Fast acting
- Safe on most durfaces
- No-residue
- Non-corrosive
- Also effective as a solvent/degreaser

MADE IN THE USA

Size	Hazard Code	Order No.	Price
16 oz	HAZ03	**LK70G500916**	Price
5 Gallon	HAZ64	**LK70G5008105**	Price
55 Gallon	HAZ06	**LK70G5008255†**	Price

† All 55 Gallon Drums FOB Factory

CROWN Tan Cover-Up Ink



- Dry to touch in 3 minutes; allows for fast handling in production lines
- Complete coverage in one application
- Will not smear or smudge
- Hot or cold applications
- Waterproof
- Excellent outdoor color retention
- Apply to virtually any porous or non-porous surface
- Matched to Fed Std. 595 colors
- Meets MIL-A-A-208A

AERVOE

Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LP502811**	Price

CROWN Stencil Ink



- 11 oz Aerosol
- This waterproof ink saves time and money; won't smear or smudge

Color	Hazard Code	Order No.	Price
Black	HAZ03	**LP507080**	Price
White	HAZ03	**LP507083**	Price

PRECISION BRAND Tool Black®



- Fast, inexpensive alternative to black oxide
- Imparts a tough, dull black protective finish to ferrous metal parts
- Ideal for prototypes, repair parts and general machine work
- No special ventilating system required
- PREVENT® is ozone safe
- One quart of TOOL BLACK® covers 50 to 75 square feet
- Kit includes: One pint of each: Tool Black®, Prevent® and Cleaner-Degreaser

Size	Description	Hazard Code	Order No.	Price
1 Pint	Metal Polish/Cleanser	HAZ57	**MA5245106**	Price
1 Pint	Tool Black Liquid	HAZ03	**MA5245112**	Price
1 Pint	Prevent	HAZ57	**MA5245116**	Price
1 Pint	Complete Tool Black Liquid Kit	HAZ03	**MA5245126**	Price
1 Qt	Tool Black	HAZ08	**MA5245110**	Price

CROWN Toolmaker's Ink Blue



- Specially formulated blue layout fluid is used in tool and die making, pattern making, machining and other related applications
- Dries instantly; will not peel, flake, or rub off
- Excellent adhesion to all metals, aluminum and glass
- Easily removed with #6095 Toolmaker's Ink Remover
- Heat resistant, non-corrosive formula
- **Applications:** tool and die making, pattern making, machining, templates, machined parts, and maintenance mechanicals

Size	Hazard Code	Order No.	Price
12 oz	HAZ03	**LP506001**	Price

DYKEM Remover, Cleaner & Thinner



- Surface preparation is the key in making your fluid adhere and form a uniform coating
- All oils, grease and dirt must be removed prior to application of Dykem® products
- Dykem® Remover, Cleaner & Thinner may also be used for removing all types of layout fluids
- Use on all metals, most plastics, most fabrics and glass

Size	Hazard Code	Order No.	Price
16 oz	HAZ03	**LL6082038**	Price
1 Gallon	HAZ27	**LL6082738**	Price
5 Gallon	HAZ64	**LL6082838**	Price

DYKEM Staining Colors



- Use Dykem® staining colors to identify parts requiring instant, visual identification
- Resistant to oils and solvents
- Fast drying
- Thin (.002") coating won't interfere with part operation

		White		Yellow	
Size	Hazard Code	Order No.	Price	Order No.	Price
8 oz Brush In Cap	HAZ03	**LL6081427**	Price	**LL6081405**	Price
1 Gallon	HAZ27	**LL6081727**	Price	**LL6081705**	Price

†† Several other colors are avilable

CROWN Toolmaker's Ink Remover



- **Dissolves all layout fluids**
- Special solvents remove inks without bothersome residues
- Can also be used as a paintstripper
- Safe and convenient aerosol application

Size	Hazard Code	Order No.	Price
13 oz	HAZ03	**LP506095**	Price

DYKEM Fountain Brush & Bottle

A soft hair brush with hollow handle attached to a clear squeezable bulb. Ideal for brushing layout fluids



Order No.	Price
LL6089157	Price

DYKEM Brite-Mark® Jumbo Paint Marker



- Write on virtually any surface
- Quick drying, oil-based paint withstands indoor and outdoor conditions
- The mark remains true and will notfade, chip or lose opacity
- HAP's (Hazardous Air Pollutants) free makes them a smart alternative to aerosol spray paint and stencil applications
- Designed to write broad mark visible from the long distatnce, the marks are over 0.5 inch wide
- Valve action mechanism prevents paint in barrel from drying when cap is left off.
- Heavy duty aluminum barrel retains its shape
- Felt tips are reversible and replaceable to assure complete use of paint in each marker
- Normal Drying Time: 2 minutes
- HAZ03

Color	Order No.	Price
Black	**LL6077002**	Price
Blue	**LL6077001**	Price
Green	**LL6077007**	Price
White	**LL6077003**	Price
Yellow	**LL6077004**	Price
Orange	**LL6077005**	Price
Red	**LL6077006**	Price

Markal B® Paintstik® Multi-purpose Permanent Solid Paint Crayon



- Real paint for long-lasting, highly visible marks
- Superior marking on rough, rusty, or dirty surfaces
- Solid paint marker eliminates replacement tips, sharpening or priming, increasing productivity

Color	Order No.	Price
Black	**LH5280223**	Price
Blue	**LH5280225**	Price
Green	**LH5280226**	Price
Orange	**LH5280224**	Price
Red	**LH5280222**	Price
White	**LH5280220**	Price
Yellow	**LH5280221**	Price

Markal Ball Paint® Marker



- Ball size 1/8" lead-free
- Marks are weather and water resistant
- In unbreakable plastic bottle with durable metal tip
- Marks on almost any metal surface
- Plastic cap keeps tip clean between jobs
- HAZ03

Color	Order No.	Price
Blue	**LH5284625**	Price
Orange	**LH5284624**	Price
Red	**LH5284622**	Price
White	**LH5284620**	Price
Yellow	**LH5284621**	Price

Markal Dura-Ball® Tube Paint Marker



- Mark, identify, color code withreal lead free paint
- Ball size 1/8"
- Paint dries in minutes
- Marks on metal, plastic, rubber
- Long lasting, weather and fade-resistant marks
- Marking range: -50°F to 150°F
- HAZ03

Color	Order No.	Price
White	**LH5296652**	Price
Yellow	**LH5296653**	Price

DYKEM Brand Rinz® Off & Sudz® Off Markers

- Temporary markers allow you to make marks on untreated metal and remove them
- Rinz Off® can be removed with water, and Sudz Off® can be removed with a detergent of pH10 or higher. Ideal for quality control, part assembly, identification, site inspection and more
- Both have a drying time of 45-60 seconds
- HAZ03



Type - Rinz Off® Medium Markers		
Color	**Order No.**	**Price**
Black	**LL6091109**	Price
Blue	**LL6091105**	Price
Green	**LL6091108**	Price
Red	**LL6091106**	Price

Type - Sudz Off® Medium Markers		
Color	**Order No.**	**Price**
Black	**LL6091985**	3.55
Blue	**LL6091938**	3.55
Green	**LL6091371**	3.55
Red	**LL6091939**	3.55
White	**LL6091146**	3.55
Yellow	**LL6091694**	3.55

DYKEM Brand Texpen® & Dalo® Markers

- Smaller version of the Dykem® Dalo®
- Writes through oil, grease and even under water
- Stainless steel-ball tip won't wear out before the paint is gone, even if you are writing on rough concrete or rusty metal
- Withstand extreme weather conditions without losing legibility or brightness
- Dry time: 25-35 minutes
- HAZ03



	Dalo® Medium Markers		Texpen® Medium Markers	
Color	**Order No.**	**Price**	**Order No.**	**Price**
Black	**LL6026033**	Price	**LL6016033**	Price
Blue	**LL6026013**	Price	**LL6016013**	Price
Green	**LL6026043**	Price	**LL6016043**	Price
Orange	**LL6026103**	Price	**LL6016103**	Price
Red	**LL6026023**	Price	**LL6016023**	Price
White	**LL6026083**	Price	**LL6016083**	Price
Yellow	**LL6026063**	Price	**LL6016063**	Price

Markal® Pro-Line® Microline Marker

- Xylene-free for less odor
- Self-storing cap; integrated pocket clip
- Ergonomic design for comfortable extended use
- Marking range: -50°F to 150°F (-46°C to 66°C)
- HAZ03



Color	Order No.	Price
Black	**LH5296890**	Price
Red	**LH5296891**	Price
White	**LH5296888**	Price
Yellow	**LH5296889**	Price

Markal® DURA-INK® 15 Fine Bullet Tip Permanent Ink Marker

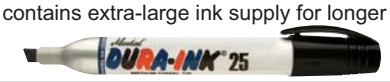
- Industrial-strength ink is smear- and water-resistant for longer lasting marks
- Extra-tough tip will not spread or mush
- Durable plastic barrel reduces breakage on the jobsite or in-plant
- HAZ57



Color	Order No.	Price
Black	**LH5296023**	Price
Blue	**LH5296025**	Price
Red	**LH5296022**	Price

Markal® DURA-INK® 25 Medium Chisel Tip Permanent Ink Marker

- The versatile chisel tip can make both fine or broad marks for flexible marking needs
- Smear- and water-resistant industrial ink allows for long-lasting marks
- Heavy-duty metal barrel contains extra-large ink supply for longer marking life
- HAZ57



Color	Order No.	Price
Black	**LH5296223**	Price
Red	**LH5296222**	Price

Markal® QUIK STIK® Fast-drying Solid Paint Marker

MADE IN THE USA

- Solid paint marker advances and retracts by turning twist-up knob
- Fast-drying, vibrant paint marks dry in 5 to 7 minutes
- Marks on virtually any surface: wet, smooth, rough, or hot
- HAZ57



Color	Order No.	Price
Black	**LH5261050**	Price
Blue	**LH5261070**	Price
Red	**LH5261049**	Price
White	**LH5261051**	Price
Yellow	**LH5261053**	Price

Markal® PRO-MAX® Extra - Large Liquid Paint Marker



- Largest marks available (up to 9/16", 14 mm) in an industrial paint marker
- Valve-actuated tip releases paint on-demand for smooth, continuous use
- Xylene-free paint reduces user health risks
- HAZ03

Color	Order No.	Price
Black	**LH5290903**	Price
Blue	**LH5290905**	Price
Orange	**LH5290904**	Price
Red	**LH5290902**	Price
White	**LH5290900**	Price
Yellow	**LH5290901**	Price

DYKEM Brand High Purity Markers

- Contains trace amounts of halogens, low melting metals and low in chlorides
- Can be used on surfaces where degradation, contamination or adverse effects are not desired
- Stainless steel-ball tip and valve action felt tip allow for easy writing
- Dry time: 20-30 minutes
- The Texpen® Medium has a stainless steel-ball tip, the AM 44 has a felt tip
- HAZ03



	AM 44 Marker		Texpen® Medium Marker	
Color	**Order No.**	**Price**	**Order No.**	**Price**
Black	**LL6044404**	Price	**LL6017473**	Price
Blue	**LL6044534**	Price	**-**	-
Red	**LL6044301**	Price	**-**	-
White	**LL6044729**	Price	**LL6017463**	Price
Yellow	**LL6044916**	Price	**-**	-

Sharpie® PROFESSIONAL

- Permanent on most hard-to-mark surfaces such as: wet & oily surfaces, sandpaper, concrete, bricks, glass, metal, plastic, wood, etc.
- Stronger professional chisel tip lasts 50% longer than a standard Sharpie chisel tip
- Reinforced oval shaped barrel designed to resist dents and will not roll off flat surfaces
- Two distinctive line widths: broad or fine



Color	Order No.	Price
Black	**LH5134801SH**	Price

DYKEM Brand BRITE-MARK Paint Markers



- General purpose marker that writes on almost any surface with a clear, bold marking
- Oil-based paint marker withstand indoor and outdoor conditions, including acid and alkaline rain
- A valve action mechanism prevents paint in the barrel from drying when cap is left off
- Writes on metal, rubber, plastic, glass, concrete, leather, stone, wood, vinyl, and more
- Dry time: 25-35 seconds
- HAZ03

Color	Order No.	Price
Black	**LL6084002**	Price
Blue	**LL6084001**	Price
Gold	**LL6084051**	Price
Green	**LL6084007**	Price
Light Blue	**LL6084008**	Price
Orange	**LL6084005**	Price
Pink	**LL6084009**	Price
Red	**LL6084006**	Price
Silver	**LL6084050**	Price
Violet	**LL6084019**	Price
White	**LL6084003**	Price
Yellow	**LL6084004**	Price

DYKEM Brand Tuff Guy™



- Felt tip, valve action ink marker
- Quickly dries in 25 - 35 seconds
- Writes on plastic, glass, rubber, metal, wood, leather, vinyl, shrink wrap, nursery tags and more
- Resists hot or cold degreasing solvents
- Clear, crisp, smudge resistant markings
- Resists mild acids, alkaline solutions, alcohol, gasoline, lubricating & mineral oils
- UV and weather resistant
- Withstands salt spray, soils and petroleum products
- HAZ03

Color	Order No.	Price
Black	**LL6044203**	Price
Blue	**LL6044179**	Price
Green	**LL6044177**	Price
Red	**LL6044819**	Price
White	**LL6044175**	Price
Yellow	**LL6044401**	Price

DYKEM Brand High Temp Markers



- Dykem® High Temperature Markers have a heavy viscosity, oil-based paint that is specially formulated for nonporous surfaces that reach temperatures of up to 2000˚F/1093˚C. Marks become permanent and fused when heated
- Perfect for marking on glass, metal and ceramic parts
- High Temp Texpen dries within 25-35 minutes, and High Temp 44 dries within 45-60 seconds

Type - AM 44 Markers				
Color	Hazard Code	Temp. Range	Order No.	Price
Black	HAZ03	2000°F (1093°C)	**LL6044250**	Price
Blue	HAZ03	2000°F (1093°C)	**LL6044094**	Price
Green	HAZ03	1800°F (982°C)	**LL6044266**	Price
White	HAZ03	1550-1650°F (843-899°C)	**LL6044219**	Price
Yellow	HAZ03	800-900°F (426-482°C)	**LL6044424**	Price

Type - Texpen® Medium Markers				
Color	Hazard Code	Temp. Range	Order No.	Price
White	HAZ03	800-900°F (426-482°C)	**LL6017083**	Price
Yellow	HAZ03	800-900°F (426-482°C)	**LL6017063**	Price

Markal® Valve Action® Liquid Paint Marker

- Fast-drying, permanent paint for immediate handling reduces work downtime
- Dura-Nib medium bullet tip resists wear to provide long marking life
- Xylene-free paint reduces user health risks
- HAZ57



Color	Order No.	Price
Aluminum	**LH5296832**	Price
Black	**LH5296823**	Price
Blue	**LH5296825**	Price
Brown	**LH5296809**	Price
Gold	**LH5296827**	Price
Green	**LH5296826**	Price
Light Blue	**LH5296835**	Price
Light Green	**LH5296828**	Price

Color	Order No.	Price
Orange	**LH5296824**	Price
Pink	**LH5296830**	Price
Purple	**LH5296817**	Price
Red	**LH5296822**	Price
White	**LH5296820**	Price
Yellow	**LH5296821**	Price

Markal® PRO-LINE® HP Liquid Paint Marker for Oily Surfaces

- Unique paint formula resists spreading and dries quickly through oily surfaces to leave precise, permanent marks
- Durable metal barrel and nib reduce breakage for longer marking life.
- Xylene-free paint reduces user health risks
- HAZ57



Color	Order No.	Price
Black	**LH5296963**	Price
Blue	**LH5296965**	Price
Green	**LH5296966**	Price
Orange	**LH5296964**	Price
Red	**LH5296962**	Price

Color	Order No.	Price
Silver	**LH5296967**	Price
White	**LH5296960**	Price
Yellow	**LH5296961**	Price

Markal® PRO-LINE® Fine and Micro

- Available in fine and micro tip sizes for precise, permanent paint marking.
- Offered in 2 sizes: fine 1/16" (1.5 mm) and micro 1/32" (1 mm)
- Xylene-free paint reduces user health risks
- HAZ57



Color	Order No.	Price
Black	**LH5296873**	Price
Blue	**LH5296875**	Price
Green	**LH5296876**	Price
Light Green	**LH5296879**	Price
Orange	**LH5296877**	Price

Color	Order No.	Price
Red	**LH5296874**	Price
White	**LH5296871**	Price
Yellow	**LH5296872**	Price

Markal® PRO-WASH® Removable Liquid Paint Marker



- Fast-drying paint easily removes, leaving surfaces free of mark ghosting or paint residue
- PRO-WASH W marks can be removed simply and quickly with water
- PRO-WASH D marks can be removed with detergent solutions that have a pH level of 10 or above
- HAZ03

	Pro Wash Marker D		Pro Wash Marker W	
Color	Order No.	Price	Order No.	Price
Black	**LH5297013**	Price	**LH5297033**	Price
Blue	**LH5297015**	Price	**LH5297035**	Price
Green	**LH5297016**	Price	**LH5297036**	Price
Red	**LH5297012**	Price	**LH5297032**	Price
White	**LH5297010**	Price	**LH5297030**	Price
Yellow	**LH5297011**	Price	**LH5297031**	Price

Solvent-Based Striping Paint



- Solvent-based striping paint adheres to a variety of surfaces, including asphalt and concrete
- Not recommended for turf surfaces
- Fast drying - 5 minutes to touch
- Durable, long-lasting stripe
- High-visibility colors
- VOC compliant and lead-free
- Non-clogging spray tip
- Excellent resistance to traffic, oil and gasoline
- One case of aerosol paint will yield a 4-inch stripe approximately 700 linear feet
- **Applications:** parking lots, warehouse aisles, school yards, tennis courts, and factory safety aisles
- HAZ03

Color	Size	Order No.	Price
Traffic Blue	18 oz	**LP50750**	Price
Traffic Red	18 oz	**LP50730**	Price
Traffic White	18 oz	**LP50710**	Price
Traffic Yellow	18 oz	**LP50720**	Price

Survey Marking Paint



- Superior upside-down marking paint that is designed for survey marking
- Provides the best quality paint in terms of color visibility and retention, durability, and a lasting mark of up to six months
- HAZ03

Color	Size	Order No.	Price
Blue	17 oz	**LP50203**	Price
Fluorescent Pink	17 oz	**LP50229**	Price
Fluorescent Red	17 oz	**LP50220**	Price
White	17 oz	**LP50207**	Price
Fluorescent Orange	17 oz	**LP50222**	Price

All Purpose Marking Paint



- Designed to provide a very cost-effective approach to marking
- Provides good visibility for a two-month range
- HAZ03

Color	Size	Order No.	Price
Blue	15 oz	**LP501383**	Price
Fluorescent Orange	15 oz	**LP501392**	Price
Fluorescent Pink	15 oz	**LP501399**	Price
Red	15 oz	**LP501381**	Price
White	15 oz	**LP501387**	Price

Spot Marker & Marking Stick

- Spot marker overall length - 10”
- Marking stick approximate length - 32”
- Single - hand operation, excellent can balance
- Convenient trigger actuator





Type	Order No.	Price
Marking Stick-Paint Delivery Handle	**LP50245**	Price
Spot Marker-Paint Delivery Handle	**LP50244**	Price

Vers-A-Striper

- A lightweight, heavy-duty applicator for Aervoe aerosol striping paint
- Stripe widths up to 4-inches
- For use on hard surfaces such as asphalt and concrete



Order No.	Price
LP50800	Price

Quik-Mark™ Inverted Marking Paints

- High solids formulation for bold, bright, visible markings
- Fast-drying, high-solids formula penetrates and adheres to hot surfaces
- Convenient Spray-Thru™ cap and non-clogging spray tip
- VOC compliant, free-of-lead hazards
- HAZ03

Description - Solvent Based			
Color	**Size**	**Order No.**	**Price**
Blue	20 oz	**LP40S03621**	Price
Bright Orange	20 oz	**LP40S03731**	Price
Fluorescent Hot Pink	20 oz	**LP40S03622**	Price
Fluorescent Neon Green	20 oz	**LP40S03614**	Price
Fluorescent Orange	20 oz	**LP40S03702**	Price
Fluorescent Red/Orange	20 oz	**LP40AT3701**	Price
High Visibility Yellow	20 oz	**LP40S03821**	Price
Red	20 oz	**LP40S03611**	Price
Safety Yellow (Lead Free)	20 oz	**LP40S03823**	Price
Utility White	20 oz	**LP40S03900**	Price



Description - Water Based			
Color	**Size**	**Order No.**	**Price**
Brilliant Red	20 oz	**LP40S03911**	Price
Brilliant White	20 oz	**LP40S03901**	Price
Clear (extends wear & fading)	20 oz	**LP40S03500**	Price
Fluorescent Caution Blue	20 oz	**LP40S03620**	Price
Fluorescent Caution Green	20 oz	**LP40S03630**	Price
Fluorescent Orange	20 oz	**LP40S03700**	Price
Fluorescent Pink	20 oz	**LP40S03612**	Price
Fluorescent Red/Orange	20 oz	**LP40S03650**	Price
Fluorescent Safety Red	20 oz	**LP40S03610**	Price
Utility Yellow (Lead Free)	20 oz	**LP40S03801**	Price



Quik-Mark™ Inverted Marking Chalks

- For use on common indoor and outdoor surfaces, including roads, pavements, gravel, soil, grass, etc
- Can be removed from hard surfaces with wire brush & water
- Lasts up to 30 days
- VOC compliant
- Uses: Communication lines, electrical installations, athletic fields, utilities marking, surveys, construction, excavation, ground marking
- HAZ03



Color	Size	Order No.	Price
APWA Blue	20 oz	**LP40KWBC03504**	Price
APWA Green	20 oz	**LP40KWBC03506**	Price
APWA Orange	20 oz	**LP40KWBC03501**	Price
APWA Red	20 oz	**LP40KWBC03503**	Price
APWA White	20 oz	**LP40KWBC03505**	Price
APWA Yellow	20 oz	**LP40KWBC03502**	Price

Zynolyte Spray Paint

- Quick drying
- Economical
- Provides a tough, durable finish on most interior and exterior surfaces
- **Applications:** wood, metal, aluminum, wrought iron, hard plastic, and drywall
- HAZ03



Color	Size	Order No.	Price
Aluminum	10 oz	**LP50S180**	Price
Flat Black	10 oz	**LP50S186**	Price
Flat White	10 oz	**LP50S188**	Price

Interior/Exterior Industrial Maintenance Paints

- The most asked-for spray paint in the industrial marketplace
- Superior performance, both indoors and outdoors
- VOC-compliant acrylic lacquer formula, free of lead hazards
- Hard, protective, durable finish
- High amount of solids assures maximum coverage with excellent adhesion
- Dries fast; in just 12 minutes to the touch
- Tough, high-gloss finish
- Uniform coverage
- No recoat window, recoat anytime
- HAZ03
- Uses: Any metal or wood surface, including motors, tools, pipelines, conduit, ducts, drums, cabinets, furniture and for color coding steel and lumber

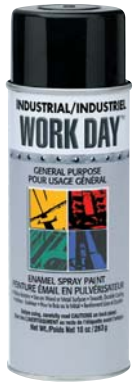


Color	Size	Order No.	Price
Almond	16 oz	**LP40K1506**	Price
Black Primer	16 oz	**LP40K1316**	Price
Brown Primer	16 oz	**LP40K1317**	Price
Cherry Red	16 oz	**LP40K2101**	Price
Emerald Green	16 oz	**LP40K2016**	Price
Flat White	16 oz	**LP40K1502**	Price
Gloss Black	16 oz	**LP40K1601**	Price
Gloss White	16 oz	**LP40K1501**	Price
Gray Primer	16 oz	**LP40K1318**	Price
Hunter Green	16 oz	**LP40K2001**	Price
Khaki	16 oz	**LP40K2504**	Price
Leather Brown	16 oz	**LP40K2501**	Price
OSHA Blue	16 oz	**LP40K1910**	Price
Pewter Gray	16 oz	**LP40K1606**	Price
Platinum Primer	16 oz	**LP40K1314**	Price
Purple	16 oz	**LP40K1913**	Price
Regal Blue	16 oz	**LP40K1901**	Price
Semi-Flat Black	16 oz	**LP40K1613**	Price
Semi-Gloss White	16 oz	**LP40K1508**	Price
Shadow Gray	16 oz	**LP40K1604**	Price
Smoke Gray	16 oz	**LP40K1608**	Price
Stone Gray	16 oz	**LP40K1605**	Price
Sun Yellow	16 oz	**LP40K1806**	Price
Untra Flat Black	16 oz	**LP40K1602**	Price
White Primer	16 oz	**LP40K1315**	Price

WORK DAY™ Aerosol Enamel Paints

- An economical solution to marking, color coding and miscellaneous spray paint needs where long term quality and durability are not required
- Economical
- Dries to touch in 12 minutes
- HAZ03

Color	Size	Order No.	Price
Aluminum	16 oz	**LP40A04457**	Price
Blue	16 oz	**LP40A04403**	Price
Brown	16 oz	**LP40A04431**	Price
Clear	16 oz	**LP40A04414**	Price
Dark Gray	16 oz	**LP40A04420**	Price
Flat Black	16 oz	**LP40A04412**	Price
Flat White	16 oz	**LP40A04422**	Price
Gloss Black	16 oz	**LP40A04402**	Price
Gloss Pink	16 oz	**LP40A04407**	Price
Gloss Red	16 oz	**LP40A04404**	Price
Gloss White	16 oz	**LP40A04401**	Price
Gold	16 oz	**LP40A04410**	Price
Gray	16 oz	**LP40A04405**	Price
Gray Primer	16 oz	**LP40A04418**	Price
Green	16 oz	**LP40A04408**	Price
Orange	16 oz	**LP40A04413**	Price
Oyster White	16 oz	**LP40A04437**	Price
Red Primer	16 oz	**LP40A04419**	Price
Sky Blue	16 oz	**LP40A04409**	Price
True Blue	16 oz	**LP40A04456**	Price
Yellow	16 oz	**LP40A04406**	Price



Zynolyte Multipurpose Primer

- High quality, non-lifting primer ensures good adhesion with the top coat finish
- Fast drying - to touch in 10 minutes
- Tough, sealing primer
- Bonds extremely well to bare metal surfaces
- Fills in grain and surface imperfections on wood surfaces
- Prevents rust and corrosion
- Enhances the quality of any finish
- **Applications:** metal, wood, rigid plastic, machinery, motors, shelving, bicycles, appliances, furniture, and automotive body parts
- HAZ03



Color	Size	Order No.	Price
Black	11 oz	**LP50Z8078**	Price
Dark Gray	11 oz	**LP50Z8070**	Price
Gray	11 oz	**LP50Z8072**	Price
Green	11 oz	**LP50Z8077**	Price
Red Oxide	11 oz	**LP50Z8074**	Price
White	11 oz	**LP50Z8076**	Price

Tough Coat® Acrylic Enamel

- Tough, protective coating resists chipping and peeling
- Smooth, even coverage
- Fast-drying, dries to the touch in 15 minutes
- Ideal for light-to heavy-duty painting projects, both indoors and outdoors
- HAZ03



Color		Order No.	Price
Aluminum Gloss	16 oz	**LP4001760**	Price
Cherry Red Gloss	16 oz	**LP4001101**	Price
Machinery Dark Gray Gloss	16 oz	**LP4000325**	Price
Max Flat Black	16 oz	**LP4003727**	Price
Medium Gray Gloss	16 oz	**LP4001615**	Price
OSHA Black Gloss	16 oz	**LP4001770**	Price
OSHA Blue Gloss	16 oz	**LP4001510**	Price
OSHA Orange Gloss	16 oz	**LP4001210**	Price
OSHA Red Gloss	16 oz	**LP4001110**	Price
OSHA White Gloss	16 oz	**LP4001800**	Price
OSHA Yellow Gloss	16 oz	**LP4001310**	Price
Semi-Flat Black	16 oz	**LP4003725**	Price

Rust Proof Any-Way Paint

- High quality industrial maintenance enamel coating formulated for light to moderate interior/exterior industrial exposures
- Offers lasting protection against corrosion, light abrasion, weathering, and mild chemical fumes
- Adheres to any surface (even vinyl and plastic)
- Sprays in any direction
- Primer is not required but recommended over bare steel
- **Applications:** Non-galvanized metal, wood, hard plastic, and other common surfaces, including machinery, motors, tools, cabinets, toolboxes, steel bars and railings, pipelines, drums, conduit, ducts, furniture, electrical equipment. Ideal for marking hazard areas and color coding steel. Also effective on steel, concrete, masonry and aluminum
- HAZ03



Color	Size	Order No.	Price
Brown	12 oz	**LP50314**	Price
Flat Black	12 oz	**LP50312**	Price
Flat White	12 oz	**LP50313**	Price
Forest Green	12 oz	**LP50320**	Price
Light Blue	12 oz	**LP50318**	Price
Meter Gray	12 oz	**LP50349**	Price
Royal Blue	12 oz	**LP50319**	Price
Safety Black	12 oz	**LP50306**	Price
Safety Blue	12 oz	**LP50303**	Price
Safety Green	12 oz	**LP50304**	Price
Safety Orange	12 oz	**LP50305**	Price
Safety Red	12 oz	**LP50301**	Price
Safety White	12 oz	**LP50307**	Price
Safety Yellow	12 oz	**LP50302**	Price

Plant & Safety



Absorbents H94-H96
Brooms & Brushes H97-H98
Electrical Plugs & Connectors H70-H72
Extension Cords H75-H76
Eye Wash H15-H16
Eye Wear H2-H14
Fall Protection H28-H29
Fans & Heaters H72-H74
First Aid H14
Flashlights & Batteries H55-H65
Floor Mats H83-H86
Fluorescent Safety Vests H27
Gloves H35-H54
Hand Cleaners H106
Head & Face Protection H14, H26
Hearing Protection H21-H25
Ladders H93
Lights H55-H69, H77-H81
Locks H116-H118
Magnifiers H81-H82
Mirrors H92
Mopping H100-H101
Protective Apparel H26, H31-H32
Rags, Towels, & Wipes H107-H109
Respirators H17-H20
Safety Shields H87-H88
Safety Cans H115
Shipping Supplies H111-H112
Shop Vacuums H103-H105
Signs & Tags H119-H120
Surge Protectors H76
Tape H110-H113
Waste Bags & Containers H101
Welding & Supplies H89-H92
Work Lights H66-H69

Lens Color Chart

Lens Color	Used for these applications	Lens Color	Used for these applications
3.0 IR Filter	For welding sites, light brazing or cutting.	Green Filter	Torch Soldering
5.0 IR Filter	For welding sites, medium to heavy cutting or gas welding.	Indoor/Outdoor Mirror	Back and forth inside and outside use, frequently used by forklift drivers.
Amber	Indoor, low light applications. Enhances contrast.	Mirror	Commonly used in construction or outdoors where sunlight and glare cause eyestrain and fatigue.
Blue	Indoor where there is an excessive amount of yellow or sodium vapor light. Offers a high level of contrast.	Mirror Blue	Gray polycarbonate lens with blue mirror coating. Reduces glare used in outdoor applications.
Blue Infinity	Indoor where there is an excessive amount of yellow or sodium vapor light. Offers a high level of contrast.	Mirror Ice blue	Gray polycarbonate lens with a double layer of silver and blue mirror coatings. Commonly used in outdoor applications.
Blue Light	Reduces glare from artificial light such as halogen and fluorescent.	Mirror Silver	Commonly used in construction or outdoors where sunlight and glare cause eyestrain and fatigue.
Bronze Sandstone	Definition and contrast increased, enhanced ground level contours in most settings.	Polarized Espresso	Reduction of reflected light, enhances contrast and depth perception, minimizes eye fatigue.
Clear	General purpose for indoor applications that require impact protection.	Polarized Mirror Blue	Reduction of reflected light, enhances contrast and depth perception, minimizes eye fatigue.
Clear Anti-Fog	Anti-fogging lens allows a majority of light to pass through the lens while not distorting the visible color spectrum.	Polarized Mirror Fire	Gray polycarbonate lens with a double layer of silver and red mirror coatings. Commonly used in outdoor applications.
CSP	Indoor/Outdoor with platinum® coating for fog protection	Polarized Grey	Commonly used in outdoor applications. Contains a special filter that blocks intense reflected light, reducing glare and eye fatigue.
Espresso	Commonly used in construction or outdoors where sunlight and glare cause eyestrain and fatigue.	Polarized Smoke	Commonly used in outdoor applications. Contains a special filter that blocks intense reflected light, reducing glare and eye fatigue.
ESP	Indoor/Outdoor mirror	Smoke	Commonly used in construction or outdoors where sunlight and glare cause eyestrain and fatigue.
Gray	Commonly used in outdoor applications. Offers protection from excessive glare.	Yellow	Excellent for maximum contrast enhancement, particularly in low light situations.

Provoq®

- Economical lightweight glasses offer superior protection
- Soft nose piece provides comfort fit
- Rubber temples provide non-slip comfort





Lens	Frame	Order No.	Price
Clear	Clear	**KB54S7210S**	Price
Gray	Black	**KB54S7220S**	Price

Bear Kat® Soft Nose Pad

- Strong yet lightweight design
- Single lens design with integral side shields for unobstructed view*
- Non-slip soft temple material



Lens	Frame	Order No.	Price
Clear	Clear	**KB85BK310**	Price
Clear Anti-Fog	Clear	**KB85BK310AF**	Price

*** 99.9% UV Ray protection**

PMXSLIM®

Slim Fit For Smaller Facial Features

- Dual injected temple design includes soft rubber tips for a non-slip fit
- Soft, adjustable nose piece generates a cushion for all day comfort
- Wrap-around, single lens design performs with an incredible 10-base curve*



Lens	Frame	Order No.	Price
Clear	Clear	**KB54SB7110S**	Price
Clear Anti-Fog	Black Temples	**KB54SB7110ST**	Price

*** 99.9% UV Ray protection**

3M™ SecureFit™

- 3M Pressure diffusion technology allows temple to naturally adjust to individual head sizes
- Secure, snug fit keeps eyewear in place without slippage even when in motion
- Polycarbonate lenses*



Lens	Frame	Order No.	Price
Clear Anti-Fog	Clear Polycarbonate	**KB3565717**	Price

*** 99.9% UV Ray protection**

3M™ Virtua™ AP

- Sleek unisex style
- Lightweight comfort
- Integral sideshields
- Anti-Fog polycarbonate lens*



Lens	Frame	Order No.	Price
Clear Anti-Fog	Clear Polycarbonate	**KB3511818**	Price

*** 99.9% UV Ray protection**

Visitor Safety Spectacles®

- General purpose for indoor applications*
- UV-A and UV-B rays
- CE EN 166 Certified



Lens	Frame	Order No.	Price
Clear	Clear	**KB54S510S**	Price

*** 99.9% UV Ray protection**

3M™ Tour-Guard™ V Visitor Spectacles

- Polycarbonate construction
- Integral sideshields
- Large lens fits over prescription eyewear
- Meets the requirements of CSA Z94.3-2007 and the high impact
- Minimum order of 20 Pcs. in a ready-to-use wall dispenser





Lens	Frame	Order No.	Price
Clear	Clear Polycarbonate	**KB3556390**	Price

Meets or Exceeds ANSI Z87.1-2003 High Impact Requirements

MCR Visitor Spectacles

- Comfortable spatula temple design
- Near total seal of eye orbit assures the highest level of protection
- Universal nose bridge comfortably fits larger user audience



CL010



CK118

Style - Checklite			
Lens	**Frame**	**Order No.**	**Price**
Clear Anti-Fog	Clear	**KB85CL110AF**	Price
Clear Uncoated	Clear	**KB85CL010**	Price
Silver Mirror	Gray	**KB85CL117**	Price

Style - Checkmate			
Lens	**Frame**	**Order No.**	**Price**
Clear Coated	Clear	**KB85CK110**	Price
Clear Uncoated	Gray	**KB85CK100**	Price
Gray	Clear	**KB85CK112**	Price
Rainbow Mirror	Clear	**KB85CK118**	Price

MCR Law® 2



- Dielectric, no metal parts
- Single lens design with integral side shields for greater orbital seal
- Hybrid temple design
- Thermal plastic rubber (TPR) temple inserts and nose pads enhance grip and comfort
- Rugged polycarbonate lens filters 99.9% of harmful UV rays

Lens	Frame	Order No.	Price
Green Filter 3.0	Green	**KB85LW2130**	Price
Green Filter 5.0	Green	**KB85LW2150**	Price

Edge Zorge Welding

- Universal blade style black frame
- Fog and scratch resistant lenses



Lens	Frame	Order No.	Price
Green IR3	Black	**KB53DZ11IR3**	Price
Green IR3	Black	**KB53DZ11IR5**	Price

Pyramex Alair®

- Straight temples and integrated nose piece fits all facial sizes
- Superior scratch resistant frame and lens



Lens	Frame	Order No.	Price
Clear	Clear	**KB54S3210S**	Price
Clear Anti-Fog	Clear	**KB54S3210ST**	Price
Gray	Gray	**KB54S3220S**	Price
Light Blue	Blue	**KB54S3260S**	Price
Mirror†	Mirror	**KB54S3280S**	Price

† Indoor or outdoor

3M™ Virtua™



- Virtua clear hard coat lens
- Clear temples
- Polycarbonate construction
- Hard coat, scratch-resistant lens
- Comfortable, contoured fit with high wrap-around coverage

Lens	Frame	Order No.	Price
Clear Anti-Fog	Clear Polycarbonate	**KB3511329**	Price
Clear Hard Coat	Clear Polycarbonate	**KB3511326**	Price

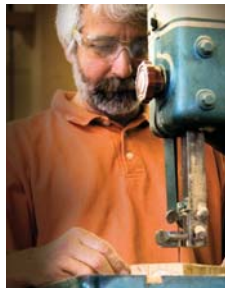
MCR Bear Kat®



- Non-slip temple sleeves
- Single wrap-around lens design with integral side shields

Lens	Frame	Order No.	Price
Clear Uncoated	Clear	**KB85BK010**	Price
Indoor/Outdoor Mirror	Clear	**KB85BK119**	Price
Light Blue	Light Blue	**KB85BK113**	Price
Clear	Clear	**KB85BK110**	Price
Clear Anti-Fog	Clear	**KB85BK110AF**	Price
Gray	Gray	**KB85BK112**	Price

Pyramex Cortez®



- Single lens design for maximum protection
- Ribbed, cushioned nose piece to fit a wide range of noses
- Scratch resistant



Lens	Frame	Order No.	Price
Clear	Orange	**KB54SO3610S**	Price
Clear	Black	**KB54SB3610S**	Price

Pyramex Intruder®



- Economical lightweight glass that offers superior protection
- Lenses are coated for superior scratch protection

Lens	Frame	Order No.	Price
Clear	Clear	**KB54S4110S**	Price
Gray	Gray	**KB54S4120S**	Price

Pyramex Integra®



- Single lens with adjustable temples
- Scratch resistant
- 99% Effective against UV rays

Lens	Frame	Order No.	Price
Clear	Black	**KB54SB410S**	Price
Clear	Red/White/Blue	**KB54SNWR410S**	Price

Meets or Exceeds ANSI Z87.1-2003 High Impact Requirements

carhartt Billings®

- The Billings® provides a great economical option, without sacrificing style
- Lightweight, frameless design
- Economical option



Lens	Frame	Order No.	Price
Clear	Clear Temples	**KB54CH110S**	Price
Gray Anti-Fog	Gray Temples	**KB54CH120ST**	Price
Sandstone Bronze	Sandstone Bronze Temples	**KB54CH118S**	Price

PYRAMEX Fortress

- Lightweight sports styling contours to face
- Straight back rubber coated temple tips
- Aerodynamic design prevents fogging
- Scratch resistant



Lens	Frame	Order No.	Price
Clear	Gray	**KB54SG3710D**	Price
Clear	Silver	**KB54SS3710D**	Price

Honeywell UVEX Protégé®

- Expandable, floating unilens design with wraparound brow and cushioned temples
- Has soft, flexible molded rubber nosepiece



Lens	Frame	Order No.	Price
Clear Anti-Fog	Metallic Black	**LF50S4200X**	Price

PYRAMEX Itek®

- Commonly used where it is required to move between indoor applications to outdoor applications
- First class optical lens provides unrestricted vision
- Offers protection from excessive glare
- Provides 99% protection from harmful UV-A and UV-B rays





Lens	Frame	Order No.	Price
Blue Mirror	Gray Temples	**KB54S5875S**	Price
Clear	Clear Temples	**KB54S5810S**	Price
Clear Anti-Fog	Clear Temples	**KB54S5810ST**	Price
Gray	Gray Temples	**KB54S5820S**	Price
Indoor/Outdoor	Mirror Temples	**KB54S5880S**	Price

SAS NSX Turbo™

- High-impact polycarbonate lens
- 99.9% UV protection
- Anti-fog coating on lens
- Scratch resistant coating
- Single lens design
- Lightweight wrap-around lens
- Meets ANSI Z87.1-2015



Lens	Frame	Order No.	Price
Clear	Clear	**LF705330**	Price
Gray	Clear	**LF705331**	Price

bollé RUSH

- Upper protection
- Adjustable non-slip bridge
- Non-slip temples



New!

Lens	Frame	Order No.	Price
Clear	Clear	**BO1540070**	Price
Smoke	Smoke	**BO1540071**	Price
Twilight	Twilight	**BO1540072**	Price
HD Hydrophobic	Clear	**BO1540113**	Price

bollé SILIUM

- Metal frame
- 160% Flex temples
- Non-slip TIPGRIP temples
- Adjustable non-slip pads
- Anti-static

New!



Lens	Frame	Order No.	Price
Clear	Silver Metal	**BO1540073**	Price
Smoke	Silver Metal	**BO1540074**	Price

MCR SAFETY Deuce®

- Contemporary, wrap-around lens design
- Dielectric (no metal parts)
- Soft, secure gel nose piece
- Non-slip temple sleeves for grip and comfort



Lens	Frame	Order No.	Price
Clear	Blue	**KB85DC120**	Price
Clear	Smoke	**KB85DC110**	Price

MCR SAFETY Storm®

- Adjustable, 5-position, ratchet-action temples
- Single wrap-around lens design with integral sideshields
- Ergonomically curved temples, improved non-slip fit



Lens	Frame	Order No.	Price
Clear	Black	**KB85ST110**	Price
Clear	Navy	**KB85ST120**	Price

bollé SILIUM+

- PLATINUM® anti-scratch & anti-fog coating
- Ultra lightweight
- Non-slip adjustable bridge
- Flexible ergonomic temples
- 180° undistorted viewing

New!



Lens	Frame	Order No.	Price
Clear	Dark Gunmetal & Black	**BO1540237**	Price
Smoke	Dark Gunmetal & Black	**BO1540238**	Price
CSP Lt. Brn	Dark Gunmetal & Black	**BO1540239**	Price

Meets or Exceeds ANSI Z87.1-2003 High Impact Requirements

Honeywell UVEX Genesis®



- Dual 9 base wraparound lenses
- Features shock asborbing brow-guard and a ventilation channel to prevent fogging
- Unilens design, flexible nose pads, adjustable temple length, and lens angle adjustment

Lens	Frame	Order No.	Price
Clear	Black	**LF50S3200**	Price
Clear Anti-Fog	Black	**LF50S3200X**	Price

Honeywell UVEX Genesis XC®



- Dual 9 base wraparound lenses
- Features shock absorbing brow-guard and a ventilation channel to prevent fogging
- Unilens design, flexible nose pads, adjustable temple length, and less angle adjustment
- Provides 20% more coverage for extra protection

Lens	Frame	Order No.	Price
Clear	Black	**LF50S3300X**	Price

Pyramex Rendezvous®



- Lens/frame design allows air to flow freely up away from lens to prevent fogging
- Temples adjust to four different lengths
- Crafted from high grade polycarbonate which allows the material to form to shape

Lens	Frame	Order No.	Price
Clear	Black	**KB54SB2810S**	Price
Clear	Crystal Blue	**KB54SCB2810S**	Price
Clear Anti-Fog	Black	**KB54SB2810ST**	Price
Mirror	Black	**KB54SB2880S**	Price

Pyramex Venture II®



- 9.75 Base curved lens
- Nose bud provides soft easy fit
- Scratch resistant
- 99% Effective against UV rays

Lens	Frame	Order No.	Price
Amber	Black	**KB54SB1830S**	Price
Clear	Black	**KB54SB1810S**	Price
Clear Anti-Fog	Black	**KB54SB1810ST**	Price
Gray	Black	**KB54SB1820S**	Price
Light Blue	Black	**KB54SB1860S**	Price

MCR Safety Inertia®



- Unique lightweight design
- Dielectric (no metal parts)
- Rugged polycarbonate lens filters 99.9% of harmful U.V. rays
- Non-slip wrap around TPR temple sleeve
- Soft, secure TPR nose pads

Lens	Frame	Order No.	Price
Clear	Black	**KB85IA110**	Price
Clear Anti-Fog	Black	**KB85IA110AF**	Price

bollé COBRA



- 180° Panoramic vision
- Pouch included to store glasses
- Black and grey frames
- HD: High-def for sharp clear view
- CSP: Brown lens, wearers' eyes can be seen by others

Lens	Coating	Frame	Usage	Order No.	Price
Clear	Anti-Fog & Scratch	Black & Grey	Indoor	**BO1540037**	Price
Smoke	Anti-Fog & Scratch	Black & Grey	Outdoor	**BO1540038**	Price
HD	Anti-Reflective & Scratch	Black & Grey	Indoor	**BO1540040**	Price
Contrast	Anti-Fog & Scratch	Black & Grey	Indoor	**BO1540041**	Price
ESP-Mirror In/Out	Anti-Water Repl & Scratch	Black & Grey	Indoor/ Outdoor	**BO1540042**	Price
Clear	Anti-Fog & Scratch	Strap and Foam	Indoor	**BO1540091**	Price
Twilight	Anti-Fog & Scratch	Black & Grey	Outdoor	**BO1540112**	Price
CSP Lt. Brn	Anti-Fog & Scratch	Black & Grey	Indoor/ Outdoor	**BO1540291**	Price

bollé CONTOUR





- Lightweight
- Non-slip bridge
- Non-slip TIPGRIP temples
- Anti-static

Lens	Frame	Order No.	Price
Clear	Dark Gunmetal	**BO1540044**	Price
Smoke	Dark Gunmetal	**BO1540045**	Price
Yellow	Dark Gunmetal	**BO1540046**	Price
ESP-Mirror In/Out	Dark Gunmetal	**BO1540047**	Price
Polarized Smoke	Dark Gunmetal	**BO1540048**	Price

Pyramex PMXTREME®



- Optimal style in safety eyewear, with clean lines and sports appeal
- Includes black lanyard cord with rubber tips for extra security while wearing
- Built-in rubber nose piece provides all day comfort

Lens	Frame	Order No.	Price
Clear	Black	**KB54SB6310SP**	Price
Indoor/Outdoor Mirror	Black	**KB54SB6380SP**	Price

Honeywell UVEX Protégé®



- With HydroShield™ anti-fog coating
- Floating lens design and secure wrap-around brow offers increased flexibiltiy
- Ultra lightweight with soft flexible nose pads
- Offers highest available impact protection
- Hardcoat anti-scratch lens coating
- Dual action HydroShield™ provides up to 60X longer lasting fog free performance

Lens	Frame	Order No.	Price
Clear HydroShield Anti-Fog	Black	**LF50S4200HS**	Price
Gray HydroShield Anti-Fog	Black	**LF50S4201HS**	Price

MCR Safety Klondike® Plus



- 5 Position ratchet temples
- Gel nose piece for long wearing comfort
- Duramass® scratch-resistant coating
- Strong, lightweight polycarbonate lens with 11° base curve

Lens	Frame	Order No.	Price
Clear	Black	**KB85KD310**	Price

Meets or Exceeds ANSI Z87.1-2003 High Impact Requirements

bollé IRI-s



New!



- Universal safety spectacle that is modular and infinitely adaptable to every individual thanks to the B-Flex shape memory bridge.
- Pivoting, non slip & ergonomic temples
- Clear version with reading area
- PLATINUM® anti-fog/anti-scratch coating

Lens	Frame	Order No.	Price
Twilight	Black & Grey	**BO1540120**	Price
Smoke	Black & Grey	**BO1540182**	Price
Clear	Black & Red	**BO1540223**	Price
Clear	Silver Metal	**BO1540273**	Price

Honeywell UVEX Genesis® With HydroShield® Anti-Fog Coating



- Dual 9 base wraparound lenses
- Features shock asborbing brow-guard and a ventilation channel to prevent fogging
- Unilens design, flexible nose pads, adjustable temple length, and lens angle adjustment
- Dual action HydroShield provides up to 60X longer lasting fog free performance

Lens	Frame	Order No.	Price
Clear HydroShield Anti-Fog	Black	**LF50S3200HS**	Price
Gray HydroShield Anti-Fog	Black	**LF50S3300HS**	Price

PYRAMEX Ever-Lite®



- Soft nose piece for snug fit
- Semi-frame & slim co-material temple design for lightweight spectacle - 22 gm
- Offers a clear panoramic view without obstruction
- 8 base wraparound lens provides full front side protection
- Scratch-resistant, polycarbonate lens provide 99.9% of UV protection

Lens	Frame	Order No.	Price
Clear	Black	**KB54SB8610D**	Price
Clear Anti-Fog	Black	**KB54SB8610DT**	Price
Gray	Black	**KB54SB8620D**	Price
Sky Blue Mirror	Black	**KB54SB8665D**	Price

PYRAMEX V2 Metal®



- 9.75 Base curved lens provides full side protection
- Scratch resistant

Lens	Frame	Order No.	Price
Clear	Gun Metal	**KB54SGM1810S**	Price

MCR Safety Rubicon®



- Close orbital seal provides maximum comfort and protection
- Cord & case included
- Soft, secure gel nose piece



Lens	Frame	Order No.	Price
Clear Anti-Fog	Metal	**KB85T4110AF**	Price
Light Blue Anti-Fog	Metal	**KB85T4113AF**	Price

MCR Safety Dallas®



- Strong, lightweight polycarbonate Duramass® lens
- Full length non-slip temple sleeves
- Bayonet temples reduce pressure on mastoid bone
- Unique nosebridge comfortably fit a wide variety of users
- Blocks 99.9% of ultraviolet radiation

Lens	Frame	Order No.	Price
Clear	Black Polycarbonate	**KB85DL110AF**	Price
Gray	Black Polycarbonate	**KB85DL112AF**	Price
Gray	Nuclear Orange Polycarbonate	**KB85DL212AF**	Price

MCR Safety Klondike Metal®





- Soft, secure adjustable "twin-bridge" nose piece
- Spring hinge temples and non-slip rubberhead grips
- Exclusive Duramass® scratch-resistant coating

Lens	Frame	Order No.	Price
Clear	Metal	**KB85KD210**	Price
Light Blue	Metal	**KB85KD213**	Price

MCR Safety LAW®



- Non-slip gel temple pads
- Universal nose bridge comfortably fits large user audience
- Comtemporary, wrap-around lens design

Lens	Frame	Order No.	Price
Clear	Clear	**KB85LW110**	Price
Gray	Gray	**KB85LW112**	Price

PYRAMEX Ztek®



- Soft, non-slip rubber temple
- Integrated nose piece
- Scratch resistant
- Mini style is for a smaller shaped face

Lens	Frame	Order No.	Price
Blue Mirror	Blue	**KB54S2575**	Price
Clear	Clear	**KB54S2510S**	Price
Clear Anti-Fog	Clear	**KB54S2510ST**	Price
Clear Ztek Mini	Clear	**KB54S2510SN**	Price
Gray	Gray	**KB54S2520S**	Price
Indoor/Outdoor Mini	Indoor/Outdoor	**KB54S2580SN**	Price

PYRAMEX Avante®





- Lightweight sport styling
- Built-in rubber nose pad
- Vented frame
- 99% Effective against UV rays

Lens	Frame	Order No.	Price
Amber	Black	**KB54SB4530D**	Price
Blue Mirror	Black	**KB54SB4575D**	Price
Clear	Black	**KB54SB4510D**	Price
Clear	Black/Silver	**KB54SSB4510D**	Price
Gray	Black	**KB54SB4520D**	Price
Ice Blue Mirror	Silver	**KB54SS4585D**	Price
Infinity Blue	Black	**KB54SB4560D**	Price
Silver Mirror	Black	**KB54SB4570D**	Price

Meets or Exceeds ANSI Z87.1-2003 High Impact Requirements

bollé TRYON

- Sporty design, co-injected FLEX 160° temples
- Adjustable and non-slip bridge
- PLATINUM® anti-scratch/ anti-fog coating



Lens		Order No.	Price
Clear	Black & Blue	**BO1540301**	Price
Smoke	Black & Blue	**BO1540302**	Price
Smoke with Blue Flash	Black & Blue	**BO1540304**	Price
CSP Lt. Brn	Black & Blue	**BO1540305**	Price

MCR VL™

- Athletic inspired design
- Streamlined 5-point ratcheting temple
- Bayonet temples
- Comfortable TPR nosepiece



Lens	Frame	Order No.	Price
Clear	Red/White/Blue	**KB85VL120**	Price
Clear Anti-Fog	Red/White/Blue	**KB85VL120AF**	Price
Silver Mirror	Red/White/Blue	**KB85VL127**	Price

Edge Kirova

- Fog and scratch resistant lenses



Lens	Frame	Order No.	Price
Anti-Reflective	Black	**KB53AB111AR**	Price
Clear	Black	**KB53AB111**	Price
Smoke	Black	**KB53AB116**	Price
Yellow	Black	**KB53AB112**	Price

MCR Hellion®

- Extended brow guard and side panels
- Gasket like seal inside with TPR rubber surrounding 80% of lens
- Exclusive Duramass® scratch resistant coating with anti-fog
- Non-slip co-injected soft temple material
- Soft secure TPR nose pad



Lens	Frame	Order No.	Price
Clear Anti-Fog	Hi-Vis	**KB85HL120AF**	Price

Honeywell UVEX Instinct™

- Provides high-performance protection with a sleek design and lightweight frame, featuring a variety of adjustability features for a comfortable, customized fit
- Equipped with a dual, 7-base wraparound lens for uncompromised peripheral vision, with a fully integrated, cushioned browguard to comfortably diffuse and deflect impact energy



Lens	Frame	Order No.	Price
Blue Mirror	Matte Black	**LF50S2823**	Price
Clear Anti-Fog	Matte Black	**LF50S2820XP**	Price
Gray Anti-Fog	Matte Black	**LF50S2821XP**	Price

bollé HUSTLER

- Water-repellent
- BO1540151 also repels heat, providing optimum protection and reducing glare
- Side shields
- Non-slip bridge
- Non-slip temples



Lens	Frame	Order No.	Price
Smoke	Shiny Black	**BO1540149**	Price
Polarized Smoke	Shiny Black	**BO1540150**	Price
Polarized Blue	Shiny Black	**BO1540151**	Price

bollé SOLIS

- Non-slip bridge
- Non-slip TIPGRIP temples



Lens	Frame	Order No.	Price
Clear	Shiny Black	**BO1540062**	Price
Smoke	Shiny Black	**BO1540063**	Price
Blue Flash	Shiny Black	**BO1540064**	Price
Polarized Grey	Shiny Black	**BO1540065**	Price

Carhartt Spokane®

- Spokane® is ideal for the active lifestyle
- Flexible rubber nosepiece
- Unique half-frame design



Lens	Frame	Order No.	Price
Clear	Black Frame	**KB54CHB310D**	Price
Gray	Black Frame	**KB54CHB320D**	Price
Sandstone Bronze	Black Frame	**KB54CHB318D**	Price

SAS VX9

- High-impact polycarbonate lens
- 99.9% UV protection
- Anti-fog coating on lens
- Scratch resistant coating
- Sporty wrap-around frame design
- Non-slip nose piece and temples
- ANSI Z87.1-2015



Lens	Frame	Order No.	Price
Clear	Black	**LF70551001**	Price
Gray	Black	**LF70551002**	Price
Mirror	Black	**LF70551004**	Price
Yellow	Black	**LF70551003**	Price

Honeywell UVEX Livewire™

- Sealed eyewear that delivers the fit, comfort, performance and protection you won't find anywhere else
- Available in a prescription frame option to outfit even more of your team
- Precision-designed fit, best-in-class anti-fog lens coating and comfort-engineered materials built into the frame



Lens	Frame	Order No.	Price
Clear Anti-Fog	Matte Black	**LF50S2600XP**	Price
Espresso Anti-Fog	Matte Black	**LF50S2601XP**	Price
SCT Gray Anti-Fog	Matte Black	**LF50S2605XP**	Price

Meets or Exceeds ANSI Z87.1-2003 High Impact Requirements

bollé RUSH+ New!



- Upper protection
- Non-slip adjustable bridge
- PLATINUM® anti-scratch/anti-fog coating
- Co-injected ultra-flexible temples
- Bi-colored temples

Lens	Frame	Order No.	Price
Smoke	Black & Grey	**BO1540208**	Price
CSP Lt. Brn	Black & Grey	**BO1540209**	Price
Twilight	Black & Grey	**BO1540225**	Price
Clear	Yellow & Black	**BO1540243**	Price
Smoke	Yellow & Black	**BO1540244**	Price
CSP Lt. Brn	Yellow & Black	**BO1540245**	Price
Clear	Blue & Green	**BO1540256**	Price
Smoke	Blue & Green	**BO1540257**	Price
Clear	Black & Phosphorus Green	**BO1540292**	Price
CSP Lt. Brn	Grey	**BO1540294**	Price
Clear	Black & Red	**BO1541080**	Price
-	Foam and Strap Kit	**BO1540293**	Price

bollé RUSH+ Small



- Upper protection
- Non-slip adjustable bridge
- PLATINUM® anti-scratch/anti-fog coating
- Co-injected ultra-flexible temples
- Smaller size for narrow faces

New!

Lens	Frame	Order No.	Price
CSP Lt. Brn	Pink & White	**BO1540249**	Price
Clear	Yellow & Black	**BO1540250**	Price
Smoke	Yellow & Black	**BO1540253**	Price
Clear	Pink & White	**BO1540254**	Price

MCR Swagger®



- Non-slip co-injected soft temple material
- Wider temples for better side protection
- Soft secure TRP nose pad
- Rugged polycarbonate lens filters 99.9% UV rays
- Exclusive Duramass® scratch resistant coating
- Breakaway cord included

Lens	Frame	Order No.	Price
Amber	Black	**KB85SR114**	Price
Blue Mirror	Clear	**KB85SR148B**	Price
Clear	Polished Black	**KB85SR110**	Price
Clear	Red	**KB85SR130**	Price
Clear	White	**KB85SR120**	Price
Clear Anti-Fog	Clear	**KB85SR140AF**	Price
Fire Mirror	Red	**KB85SR13R**	Price
Gray	Black	**KB85SR112**	Price
Gray Anti-Fog	White	**KB85SR122AF**	Price
Gray Polarized	Black	**KB85SR112Z**	Price

Available in Polarized.

Honeywell UVEX Hypershock™

- Delivers the ultimate combination of high-performance protection and aggressive sport inspired styling
- The full frame design offers high impact protection, with streamlined padded temples and a molded nosepiece for a secure, comfortable fit



S2940XP



S2949

Lens	Frame	Order No.	Price
Blue Mirror	Matte Black	**LF50S2945**	Price
Clear Anti-Fog	Black	**LF50S2940XP**	Price
Clear Anti-Fog	Clear	**LF50S2970XP**	Price
Espresso Polarized	Matte Black	**LF50S2949**	Price
Gray Anti-Fog	Black	**LF50S2941XP**	Price
Reflect 50	Matte Black	**LF50S2943**	Price

carhartt Carbondale®

- Two toned frame
- Flexible temples



CHB210DT

Lens	Frame	Order No.	Price
Clear Anti-Fog	Black/Tan Frame	**KB54CHB210DT**	Price
Gray Anti-Fog	Black/Tan Frame	**KB54CHB220T**	Price
Sandstone Bronze	Black/Tan Frame	**KB54CHB218D**	Price

SAS Dry Forest Camo



- High-impact polycarbonate lens
- 99.9% UV protection
- Anti-fog and scratch resistant coating on lenses
- Full frame with wide temple arms
- EVA foam padding on nose piece, brow guard and around the lenses
- Meets ANSI Z87.1-2015

Lens	Frame	Order No.	Price
Clear	Camo	**LF70555001**	Price
Gray	Camo	**LF70555002**	Price
Yellow	Camo	**LF70555003**	Price

PYRAMEX Furix®

- Lightweight, contemporary frame is comfortable for both working environments and recreational activities
- Wrap-around, sunglass style fits all facial sizes
- First class optical lens provides unrestricted vision
- Provides 99.9% protection against harmful UV rays



SB8515DT



SW8757DT

Lens	Frame	Order No.	Price
Blue Mirror Anti-Fog	Black	**KB54SB8575DT**	Price
Blue Mirror Anti-Fog	White	**KB54SW8757DT**	Price
Clear Anti-Fog	Black	**KB54SB8510DT**	Price
Coffee Anti-Fog	Black	**KB54SB8515DT**	Price
Gray Anti-Fog	Black	**KB54SB8520DT**	Price
Gray Anti-Fog	White	**KB54SW8520DT**	Price

PYRAMEX ACCURIST®



- Sporty design for on and off the job
- Inner foam padding is flame resistant
- Built-in rubber nose piece
- Durable frame features dual-injected straightback temples
- Anti-fog lenses
- Scratch resistant polycarbonate lens provides 99% UVA/B/C protection

Lens	Frame	Order No.	Price
Clear Anti-Fog	Black	**KB54SB8710DTP**	Price
Clear Anti-Fog	Red/Black	**KB54SBR8710DTP**	Price

Honeywell UVEX Mercury™



S1505

- Wraparound dual lens design offers a 180° field of vision with additional side protection
- Soft, flexible nose piece conforms to almost any nasal profile to reduce slippage while soft, padded temples provide secure, no-slip fit

Lens	Frame	Order No.	Price
Blue Mirror	Black/Gray	**LF50S1505**	Price
Clear	Black/Gray	**LF50S1500H5**	Price

Meets or Exceeds ANSI Z87.1-2003 High Impact Requirements

Dakura



- Patented black soft touch available on polarized only
- Soft Megol temple tips
- Vapor shield anti-fog available: military grade, absolutely impervious to fog



Lens	Frame	Order No.	Price
Amber	Black	**KB53SW114**	Price
Clear Anti-Fog	Black	**KB53SW111AF**	Price
Clear Vapor Shield	Black	**KB53SW111VS**	Price
Polarized Smoke	Black	**KB53TSM216**	Price
Smoke	Black	**KB53SW116**	Price
Smoke Vapor Shield	Black	**KB53SW116VS**	Price

GTR™

- High-impact polycarbonate lens
- 99.9% UV protection
- Anti-fog coating on lens
- Scratch resistant coating
- Wrap-around design hugs the face
- Non-slip rubber nose piece and temples
- Meets ANSI Z87.1-2015



Lens	Frame	Order No.	Price
Clear	Charcoal	**LF705420300**	Price
Gray	Charcoal	**LF705420301**	Price
Purple Haze	Charcoal	**LF705420309**	Price

Ztek® Reader

- Economical wrap around single lens provides full panoramic view
- Lens insert strategically placed out of user's direct line of vision
- Soft, non-slip rubber temple tips provide non-binding fit
- Lenses are coated for superior scratch resistance and provides 99.9% protection from harmful UV rays



Lens	Frame	Magnification	Order No.	Price
Clear	Clear Temples	+1.50	**KB54S2510R15**	Price
Clear	Clear Temples	+2.00	**KB54S2510R20**	Price
Clear	Clear Temples	+2.50	**KB54S2510R25**	Price

Klondike® Reader

- Bi-focal magnifier lenses
- 5 Position ratchet spatula temples
- Strong, lightweight polycarbonate polarized lens with 11° base curve



Lens	Frame	Magnification	Order No.	Price
Clear	Black	+1.00	**KB85K3H10**	Price
Clear	Black	+1.50	**KB85K3H15**	Price
Clear	Black	+2.00	**KB85K3H20**	Price
Clear	Black	+2.50	**KB85K3H25**	Price

IRI-s

With Dioptric Corrective Lenses

New!

- Universal safety spectacle that is modular and infinitely adaptable to every individual thanks to the B-flex shape memory bridge
- Pivoting, non slip & ergonomic temples
- Clear version with reading area
- PLATINUM® anti-fog/anti-scratch coating



Lens	Frame	Order No.	Price
Clear +1.5 Diopter	Black & Red	**BO1540187**	Price
Clear +2.0 Diopter	Black & Red	**BO1540188**	Price
Clear +2.5 Diopter	Black & Red	**BO1540189**	Price
Clear +3.0 Diopter	Black & Red	**BO1540190**	Price

V2® Reader

- Different magnification available to keep you safe in any lighting
- 9.75 Base curve lens provides full side protection
- Strategic placement of lens insert is out of user's direct line of vision



Lens	Frame	Magnification	Order No.	Price
Clear	Black	+1.00	**KB54SB1810R10**	Price
Clear	Black	+1.50	**KB54SB1810R15**	Price
Clear	Black	+2.00	**KB54SB1810R20**	Price
Clear	Black	+2.50	**KB54SB1810R25**	Price
Clear	Black	+3.00	**KB54SB1810R30**	Price

3M™ BX™ Protective Eyewear with Readers

- Clear choice for workers who have difficulty reading small print or who are engaged in small detail work
- BX protective reader eyewear features three magnifying diopters to choose from
- Lightweight, polycarbonate lenses with adjustable soft-tip temples, and a soft nose-bridge
- Curved lens side protection



Lens	Frame	Magnification	Order No.	Price
Clear Anti-Fog	Silver	+1.50	**KB3511374**	Price
Clear Anti-Fog	Silver	+2.00	**KB3511375**	Price
Clear Anti-Fog	Silver	+2.50	**KB3511376**	Price

Intruder® Reader

- Economical lightweight glass offers superior comfort and fit
- Lens insert is strategically placed out of user's direct line of vision
- Lightweight, frameless protections is ideal for all-day wear
- Coated lens provides excellent side protection and 99.9% protection against harmful UV rays



Lens	Frame	Magnification	Order No.	Price
Clear	Clear Temples	+1.50	**KB54S4110R15**	Price
Clear	Clear Temples	+2.00	**KB54S4110R20**	Price
Clear	Clear Temples	+2.50	**KB54S4110R25**	Price

Meets or Exceeds ANSI Z87.1-2003 High Impact Requirements

bollé SAFETY TRYON OTG

New!

Over the Glasses Version

- Pouch included to store glasses
- 160° Flex temples relieves pressure of the RX glasses worn underneath
- Black and Grey frames



Lens	Coating	Usage	Order No.	Price
Clear	Anti-Fog & Scratch	Outdoor	**BO1540306**	Price

MCR SAFETY Law® OTG (Over the Glasses)

- Oversized frame and lens to fit over prescription glasses
- Dielectric design, no metal parts
- 5 Position ratchet action temple allows lens angle adjustment
- Thermal plastic rubber temple inserts
- Filters 99% of UV radiation



Lens	Temple	Temple Sleeve Color	Order No.	Price
Clear Anti-Fog	Silver	Black	**KB85OG110AF**	Price

PYRAMEX OTS®

- Designed to better fit over today's prescription eyewear
- Lightweight nylon temples that adjust length and pitch
- Scratch resistant





Lens	Frame	Order No.	Price
Clear	Black	**KB54S3510SJ**	Price

MCR SAFETY Blackjack®

- Durable alloy temples with non-slip rubber head grips





Lens	Frame	Order No.	Price
Clear Anti-Fog	Chrome	**KB85S2110AF**	Price
Clear	Chrome	**KB85S2110**	Price

PYRAMEX Pathfinder®

- Metal frames feature traditional aviator style
- Lenses are coated for superior scratch resistance
- Soft, adjustable nose pads



Lens	Frame	Order No.	Price
Clear	Metal	**KB54SG310A**	Price

3M™ Light Vision™ 2

- LightVision™ is industrial safety eyewear designed with integral hands-free lighting
- Designed for work in low light or dark environments with bright, adjustable LEDs on temples
- Lights swivel for directional convenience, and long-lasting batteries provide up to 50 hours of continuous use



Lens	Frame	Order No.	Price
Clear Anti-Fog	Gray	**KB3511476**	Price

PYRAMEX PMXTREME® LED

- Rubber temple tips keep eyewear secure for the active worker
- Ventilated, straight-back flexible temples provide cool, pressure-free fit
- Super bright led bulb lets you see in dark places
- Built in rubber nose piece provides all day comfort
- Scratch resistant polycarbonate lenses provide maximum vision protection



Lens	Frame	Order No.	Price
Clear	Black	**KB54SB6310SPLED**	Price

MCR SAFETY Stratos®

- One piece polycarbonate lens with integral side shield
- Lightweight nylon frame for added comfort and balance
- Exclusive Duramass® scratch-resistant coating





Lens	Frame	Order No.	Price
Clear	Black	**KB85SS110**	Price
Clear	Blue	**KB85SS120**	Price
Clear	Red/White/Blue	**KB85SS130**	Price

Meets or Exceeds ANSI Z87.1-2003 High Impact Requirements

bollé COVERALL

- Adjustable strap
- Fits over prescription glasses

New!



Lens	Frame	Style	Order No.	Price
Clear	Translucent Blue	Coverall-Ventilated	**BO1540099**	Price
Clear	Translucent Blue	Coverall-Sealed	**BO1540100**	Price
Clear	White TPR	Coverall-Autoclave	**BO1540101**	Price

MCR General Purpose Goggles

- PVC body permits a comfortable fit over prescription eyewear
- Options available to protect against impact, small particles and debris
- Rugged polycarbonate lens filters 99.9% of UV rays
- Exclusive Duramass® scratch resistant coating



Size	Style	Order No.	Price
Small	Perforated	**KB852120**	Price
Regular	Perforated	**KB852220**	Price

3M™ Safety Impact Goggle 332AF

- One of the most economical goggle options available
- Fits over most prescription eyewear
- Direct venting designed to help minimize fogging
- Polycarbonate lens absorbs 99.9% UV



Lens	Order No.	Price
Clear Anti-Fog	**KB3540651**	Price

Goggles

- **Lens:** Clear – General purpose for indoor applications that require impact protection
- Provides 99% protection from harmful UV-A and UV-B rays.
- **G201**: Perforated, provides excellent ventilation
- **G204 & G204T:** Chemical splash goggle features vent caps to restrict influx of liquids. Anti-fog lens.
- **G704T & G724T:** Low profile, modern sport design with anti-glare frame
- **GB1810ST:** Foam padding forms a perfect seal to keep out dust and airborne particles
- **GG504T** Goggle incorporated with removable shield provides full face protection. 4 ventilation holes provide appropriate airflow. Ratchet shield allows user to open or close in 3 positions for adjustment.
- 9.75 Base curved anti-fog lens provides full side protection
- Headband features quick fit retainer



Lens	Style	Order No.	Price
Clear	General Purpose	**KB54G204**	Price
Clear	Foam Padded	**KB54GB1810ST**	Price
Clear Anti-Fog	Chemical Splash	**KB54G204T**	Price
Clear Anti-Fog & Scratch Resistant	General Purpose	**KB54GG504T**	Price
Clear Perforated	General Purpose	**KB54G201**	Price

bollé NITRO

New!

- Has spherical lens that offers brilliant optics and peripheral vision
- Ultra low-profile
- Large adjustable strap



Lens	Frame	Order No.	Price
Clear	Translucent	**BO1540095**	Price

3M™ Lexa™ Dust GoggleGear™

- Aspheric lens provides expansive coverage and a virtually unobstructed viewing range
- Foam flange seals entire lens perimeter
- Top and bottom vent channels to increase airflow
- Flame retardant, elastic headstrap
- Polycarbonate lens absorbs 99.9% UV



Size	Lens	Frame	Order No.	Price
Medium	Clear Anti-Fog Hard Coat	Black	**KB3562330**	Price
Large	Clear Anti-Fog Hard Coat	Black	**KB3562331**	Price

bollé PILOT

- Excellent field of vision
- Very flexible PP/TPR frame
- Adjustable strap
- Fits over prescription glasses
- PLATINUM® anti-scratch & anti-fog coating

New!



Lens	Frame	Order No.	Price
Clear	Black & Grey	**BO1540274**	Price
CSP Lt. Brn	Black & Grey	**BO1540275**	Price

MCR Stryker®

- Stryker™ includes an updated stylish option
- Duramass® AF4 anti-fog coating
- Indirect vent and chemical protection
- Easy adjusting strap design offers each user a personal fit





Lens	Order No.	Price
Clear	**KB852310AF**	Price

I-Force®

- The thermal system provides anti-fog protection in the worst weather conditions or extreme-temperature working environments
- Sporty, lightweight design eliminates the bulkiness and weight of a goggle
- Quick release interchangeable temples and an elastic strap
- Indirect vented foam carriage provides maximum dust protection
- Vented foam carriage provides sufficient airflow outlet for heat



Lens	Frame	Order No.	Price
Clear	Black	**KB54SB7010SDT**	Price

bollé RUSH+ Goggles



- RUSH + has an ultra-sporty design with its highly flexible, co-injected and customizable temples!

New!

Lens	Frame	Order No.	Price
Clear	Black & Red	**BO1540252**	Price
Twilight	Black & Grey	**BO1540258**	Price
Smoke	Black & Grey	**BO1540259**	Price
CSP Lt. Brn	Black & Grey	**BO1540284**	Price

Honeywell UVEX Seismic® Sealed Eyewear



- Contemporary style that can be worn with temples or headband
- Provides protection against impact, sun, wind, and debris
- Ideal for high-particulate environments such as grinding, chipping and sanding

Lens	Frame	Order No.	Price
Clear Anti-Fog	Black	**LF50S0600X**	Price

MCR Safety Reaper®



- Removable foam gasket blocks debris and small particles
- Hook and loop adjustable strap for a secure fit
- Soft, secure TPR nose pad
- Exclusive Duramass® scratch resistant coating
- Filters 99.9% of UV radiation

Lens	Frame	Order No.	Price
Clear Anti-Fog	Black	**KB85RP210AF**	Price
Clear Anti-Fog Indoor/Outdoor Mirror	Black	**KB85RP219AF**	Price
Gray	Black	**KB85RP212AF**	Price

Pyramex Proximity®



- 9-1/2" Base curve lens provides excellent side protection
- Flame resistant foam padding in a lightweight spectacle - 26.3gm
- Slim co-injected temples for snug, secure fit
- Scratch resistant polycarbonate lens provides 99% UVA/B/C protection

Lens	Frame	Order No.	Price
Clear Anti-Fog	Black	**KB54SB9310ST**	Price
Indoor/Outdoor Anti-Fog	Black	**KB54SB9380ST**	Price

Honeywell UVEX Tirade™



- Offers protection in high particulate environments where dust, dirt and debris present the risk of eye injury
- Features a large unilens design for a wide field of unobstructed peripheral vision, and a soft foam subframe to ensure a comfortable gap-free fit
- Cost-effective solution for indoor and outdoor environments requiring sealed eyewear protection.

Lens	Frame	Order No.	Price
Clear Anti-Fog	Gloss Black Frame	**LF50S4040**	Price
Gray	Gloss Black Frame	**LF50S4041**	Price
Reflect 50	Gloss Black Frame	**LF50S4044**	Price

bollé TRACKER



New!

- Upper protection
- Removable foam reinforcement with indirect ventilation
- Lower protection
- Removable adjustable strap
- Side ventilation
- Optional single-vision Rx lens insert (BO1540090)



Lens	Frame	Order No.	Price
Clear	Black & Grey	**BO1540085**	Price
Smoke	Black & Grey	**BO1540086**	Price
Yellow	Black & Grey	**BO1540087**	Price
Twilight	Black & Grey	**BO1540088**	Price
Welding Shade 5	Black & Grey	**BO1540089**	Price

bollé BAXTER



New!

- Increased protection
- Wrap-around frame
- Waterproof foam and removable strap
- PLATINUM® anti-fog/anti-scratch coating

Lens	Frame	Order No.	Price
Clear	Blue & Black	**BO1540276**	Price
Smoke	Blue & Black	**BO1540277**	Price
CSP Lt. Brn	Blue & Black	**BO1540278**	Price

Pyramex Highlander®



- Lightweight sports styling
- Dual lens provides maximum protection
- Inner lens clip provides soft foam for comfort fit and extreme styling
- Can be worn with inner foam for additional dust protection or without, it is up to the wearer



Lens	Frame	Order No.	Price
Clear Anti-Fog	Black	**KB54SBB5010DT**	Price

bollé ULTIM8



- PLATINUM® anti-fog/anti-scratch coating
- TPR waterproof foam
- PC/TPR pivoting temples
- Removable adjustable strap
- Rated D3/D4/D5 when worn with retainer strap

New!



Lens	Frame	Order No.	Price
Clear	Black & Red	**BO1540299**	Price
Smoke	Black & Red	**BO1540300**	Price

Meets or Exceeds ANSI Z87.1-2003 High Impact Requirements

bollé 180°

- PLATINUM® anti-fog/anti-scratch coating
- Compatible with a half-mask respirator
- Fits over spectacles
- Indirect ventilation
- Large adjustable strap

New!



Order No.	Price
BO1540279	Price

bollé COBRA Goggles

- With its easy-to-clean neoprene strap and its built-in TPR foam, this goggle kit is especially suitable for clean industries and the agro-food industry
- Low profile goggle provides extreme comfort along with: D3 Rating for liquid splash protection, D4 Rating for dust protection, D5 Rating for fine dust protection

New!



Lens	Frame	Order No.	Price
Clear	Strap and Foam	**BO1540246**	Price
CSP Lt. Brn	Strap and Foam	**BO1540248**	Price

Honeywell UVEX Carbonvision™

- Wide-vision goggles with a soft, flexible body and frame conform to your face for excellent fit
- Nonvented
- Neoprene strap
- Stratch resistant



Lens	Frame	Order No.	Price
Clear Anti-Fog	Black	**LF50S1650D**	Price

Honeywell UVEX Stealth® Goggles

- Soft, flexible elastomer seal conforms to facial contours
- Quick adjust headband clips
- Indirect venting



Lens	Frame	Order No.	Price
Clear Anti-Fog	Gray	**LF50S3960C**	Price

Honeywell UVEX Stealth® OTG Goggles

- Pivoting headband clip and wide adjustable-slide headband to be used comfortably with hard hats and prescription eyewear
- Indirect venting



Lens	Frame	Order No.	Price
Clear Anti-Fog	Blue	**LF50S3970D**	Price

PYRAMEX Low Profile Goggles

- Indirect vent chemical splash goggle
- Lightweight goggle performs with superior protection
- Low profile, modern sport design with anti-glare frame



Lens	Frame	Order No.	Price
Clear Anti-Fog	Clear	**KB54G704T**	Price
Gray Anti-Fog	Gray	**KB54G724T**	Price

bollé CHRONOSOFT

- Double lens (inner lens = acetate/outer lens = polycarbonate)
- For extreme temperatures
- Large adjustable strap

New!





Lens	Frame	Order No.	Price
Clear	Black	**BO1540102**	Price
-	Translucent RX Insert ONLY	**BO1540103**	Price
-	Strap and Retainer	**BO1540165**	Price

bollé DUO

- Panoramic field of vision
- TPR frame
- Anti-scratch, anti-fog coatings
- Equalizer technology
- Indirect lower vents

New!



40098



40161

Lens	Frame	Order No.	Price
Clear	Frosted	**BO1540097**	Price
Smoke	Frosted	**BO1540098**	Price
Clear	Frosted	**BO1540161**	Price

MCR SAFETY Rattler® Magnifier Goggles

- Interchangeable 3-position ratcheting bayonet temples & an adjustable head band with each pair
- Head band with hook and loop closure to adjust with one hand while wearing
- Full length, non-slip TPR temple sleeves for comfort and grip
- Closed cell foam seal provides optimum protection from small particles and debris
- Duramass® scratch-resistant coating



Lens	Frame	Magnification	Order No.	Price
Clear Anti-Fog	Black	+1.00	**KB85RTH10AF**	Price
Clear Anti-Fog	Black	+1.50	**KB85RTH15AF**	Price
Clear Anti-Fog	Black	+2.00	**KB85RTH20AF**	Price
Clear Anti-Fog	Black	+2.50	**KB85RTH25AF**	Price

MCR SAFETY Reaper® Goggles

- Removable foam gasket blocks small particles and debris
- Hook and loop adjustable strap for a secure fit
- Soft, secure TPR nose pad
- Exclusive Duramass® scratch resistant coating
- Filters 99.9% of UV radiation



Lens	Frame	Order No.	Price
Clear Anti-Fog	Black	**KB85RP110AF**	Price
Gray	Black	**KB85RP112AF**	Price

bollé ATOM

New!

- Extremely compact and comfortable
- TPR frame


40093


40197

Lens	Frame	Style	Order No.	Price
Clear	Neoprene	Dual Vented Goggles	**BO1540197**	Price
Blue	Blue	Shield Accessory	**BO1540093**	Price

bollé SUPERBLAST

New!

- Rated D3/D4/D5 for protection from liquid splash dust particles and fine dust particles
- PLATINUM® anti-scratch/ anti-fog coating



Lens	Frame	Description	Order No.	Price
Clear	Blue	Vented Goggles	**BO1540295**	Price
Clear	Blue	Sealed Goggles	**BO1540296**	Price
Blue	Blue	Shield	**BO1540298**	Price

3M™ H8A Ratchet Headgear & WP96 Faceshield

- High strength thermoplasic crown
- Adjustable ratchet suspension
- Five position crown strap
- Molded faceshield provides impact protection
- Clear polycarbonate faceshield
- Requires protective eyewear, sold separately
- Meets ANSI Z87.1-2003 requirements



Style	Order No.	Price
Headgear/Faceshield	**KB3582783**	Price
Headgear	**KB3582501**	Price
Faceshield	**KB3582701**	Price

3M™ H18 Cap Mount Hard Hat

- Mounts to 3M H-700 hard hats via accessory slots
- Can be used with any 3M faceshield
- High-strength thermoplastic crown provide impact resistance
- Meets ANSI Z87.1-2010 requirements



Order No.	Price
KB3582502	Price

Capstone Shields for Grinding

- Available in anti-fog clear for grinding
- Capstone goggle incorporated with removable shield provides full face protection
- Four ventilation holes provide appropriate airflow
- Indirect-vent frame provides protection against splash and dust
- High impact resistance against flying particles
- Fully adjustable elastic band
- Polycarbonate lens filters out more than 99.9% of harmful UV radiation



Lens	Frame	Order No.	Price
Clear	Gray	**KB54GG504TS**	Price

Honeywell High Performance® Headgear & Faceshields

- Crowns made of advanced, heat-resistant Noryl® material
- Headgear has tough, 3C ratchet suspension
- Faceshield headgear has quick change system for safe, rapid face protection transfer
- Faceshields are made from durable .060” thick propionate
- Meets ANSI Z87.1 standards and certified to CSA Z94.3


F400

Style	Order No.	Price
8" x 16-1/2" Faceshield	**LF504178CL**	Price
9-3/4" x 19" Faceshield	**LF504199CL**	Price
Headgear	**LF50F400**	Price

Ratchet Headgear and Faceshields

- Constructed from durable nylon
- Ratchet style adjustments for easy fit
- Universal pegs will accommodate a wide variety of faceshields
- Pivoting action allows user to lift faceshield while wearing
- HHAB is dielectic constructed
- Faceshields have universal hole pattern
- Faceshield size: 5 x 15”/ .040 thick



Type	Style	Order No.	Price
Hard Hat Adapter	Aluminum	**KB54HHAA**	Price
Hard Hat Adapter	Dielectric Constructed	**KB54HHAB**	Price
Faceshield	Clear Polyethylene	**KB54S1010**	Price
Faceshield	Clear Polycarbonate	**KB54S1020**	Price
Faceshield	Clear Polycarbonate Aluminum Bound	**KB54S1040**	Price

Faceshield & Headgear

- Headgear has locking cams
- Clear polycarbonate faceshield windows are sold separately





Size	Style	Order No.	Price
8 x 15-1/2 x .040 thick	Clear PETG Face Shield	**KB85181640**	Price
10 x 15-1/2 x .040 thick	Clear Polycarbonate Face Shield	**KB85101640**	Price
Hat sizes 6-1/2 to 7-3/4	Ratchet Take-Up Headgear	**KB85103**	Price

Honeywell UVEX Bionic® Faceshield

- A revolutionary face shield designed for rugged jobs
- Extremely lightweight and highly adjustable for all-day comfort it’s perfect for workers exposed to impact, chemical splash, and airborne debris
- Anti-fog/hardcoat visor
- Black matte shell



Style	Order No.	Price
Clear Polycarbonate	**LF50S8510**	Price

PYRAMEX Lens Cleaning Towelettes



- For plastic, glass and polycarbonate lenses
- Anti-fog, anti-static formula
- Perfect for safety goggles and glasses
- 100 Individually packaged towelettes

Order No.	Price
KB54LCT100	Price

BAUSCH + LOMB Pre-Moistened Lens Cleaning Tissues



- Non-silicone based, anti-fog, anti-static, individually-packaged tissues treated with special surfactants clean all glass and plastic lenses.
- Easy, convenient to use. Perfect for home, light industrial, office, toolbox, glove box, car or truck
- Excellent for computer screens, automobile mirrors and more
- 100 Tissues per box

Order No.	Price
KA408574GM	Price

BAUSCH + LOMB FogShield XP™ Lens Cleaning Station



- Anti-fog fluid suitable for all glass or plastic lenses
- Created for extreme temperatures; performs well in extreme hot or cold
- For use on safety glasses, face shields, goggles, and prescription glasses
- Front access allows for easy hanging in tight corners and dispensing from countertops with minimal space required

Order No.	Price
KA408577	Price

PYRAMEX Lens Cleaning Stations

- **LS20 Includes:** 16 oz. bottle, anti-fog/static cleaning solution and 1200 tissues
- **LS10 Includes:** 8 oz. bottle, anti-fog/static cleaning solution and 600 tissues
- Can be attached to wall, after use throw it away



LCS10



LCS20

Size	Order No.	Price
8 oz	KB54LCS10	Price
16 oz	KB54LCS20	Price

BAUSCH + LOMB Lens Cleaning Station - Wet



- With 16 oz. silicone anti-fog lens cleaning fluid and 1520 large tissues
- **Box size:** 8-1/2″ x 4-1/2″ x 8-1/8″

Order No.	Price
KA408565	Price

Honeywell Fendall Pureflow 1000® Eyewash Station



- 7 Gallon tank capacity
- Eye wash is activated by pull tray
- Can be mounted on the wall or a cart
- Includes mounting bracket and sign
- Self contained unit requires saline catridge LF50321050 (sold separately)
- Meets ANSI Z358.1-2009
- Additional handling charges may apply

Type	Order No.	Price
Eyewash Station	LF5032001000	Price
2 Pc Sterile Saline Cartridges	LF50321050H5	Price

Honeywell Fendall 2000™ Eyewash Station



- Compact self-contained 100% sterile unit
- 6.87 Gallon tank capacity
- Eye wash is activated by pull tray
- Can be wall, stand or cart mounted
- Includes intergal alarm, mounting bracket, sign, 9V battery, installation instructions and tamper seal
- Replacement cartridge LF5032ST2050 sold seperately
- Meets ANSI Z358.1-2009

Type	Order No.	Price
Eyewash Station	LF5032002000	Price
Sterile Saline Cartridge	LF5032ST2050	Price

Guardian Aquaguard Gravity-Flow Portable Eyewash



- Uses gravity to deliver water through dual spray heads
- Delivers over eight gallons (30 liters) of water for fifteen minutes, thus complying with with the provisions of ANSI Z358.1-2014 for eyewashes
- Has a rugged plastic tank that can be installed in a wide variety of locations
- Is ideal for use where a continuous supply of portable water is not available
- **Tank:** 16 gallon capacity safety green polyethylene tank. Tank has built-in carrying handle
- **Discharge Time:** Eyewash delivers over .5 gallons per minute for 15 minutes
- **Weight:** 13 lbs. (5.9 kg.) empty, 158 lbs. (71 kg.) full

Type	Order No.	Price
Bacteriostatic Additive	KB56G1540BA	Price
Eyewash Unit	KB56G1540	Price

Honeywell Eyesaline® Eyewash Stations



- High-visibility backplate is easy to find in an emergency
- Mounting hardware is included

Style	Order No.	Price
Double Eyewash Station	LF5032000465	Price
Single Eyewash Station	LF5032000461	Price
16 oz Refill Bottle	LF50320454H5	Price
32 oz Refill Bottle	LF5032000455	Price

Guardian Wall Mounted Eyewash Stations



New!



- Valve: 1/2" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals.
- Bowl: 11-1/2" diameter
- Mounting: Heavy duty cast aluminum wall bracket with corrosion resistant powder coated finish.
- Supply: 1/2" NPT female inlet.
- Waste: 1-1/4" NPT female outlet.
- Quality Assurance: Furnished with ANSI-compliant identification sign. Unit is completely assembled and water tested prior to shipment.

Size	Style	Order No.	Price
14 x 14 x 13"	Plastic Bowl	**KB56G1814P**	Price
16 x 15 x 14"	Stainless Steel Bowl	**KB56G1814BC**	Price

Guardian Wall Mounted Eye / Face Wash Stations



- Valve: 1/2" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals.
- Bowl: 11-3/4" diameter
- Mounting: Heavy duty cast aluminum wall bracket with corrosion resistant powder coated finish.

New!

- Supply: 1/2" NPT female inlet.
- Waste: 1-1/4" NPT female outlet.
- Quality Assurance: Furnished with ANSI-compliant identification sign. Unit is completely assembled and water tested prior to shipment.

Style	Order No.	Price
Plastic Bowl	**KB56G1750P**	Price
Stainless Steel Bowl	**KB56G1750**	Price

Guardian Laboratory Swing-Away Eyewash



- Valve: 1/2" IPS plug-type valve with PTFE coated O-ring seals. Swinging head assembly from storage to operational position opens orifice and activates water flow. Unit remains in operation until head assembly is returned to storage position.
- Strainer: Unit is furnished with in-line strainer to protect valve and spray heads from debris in water line.
- Mounting: Unit is mounted on right side of sink. Furnished with mounting shank, positioning lugs, locknut and washer for securing unit to counter.
- Construction: Polished chrome plated brass.

New!

- Supply: 1/2" NPT female inlet.
- Quality Assurance: Furnished with ANSI-compliant identification sign. Unit is completely assembled and water tested prior to shipment.

Order No.	Price
KB56G1805	Price

Guardian Faucet Mounted Unit



- **Application:** Eye Safe™ faucet-mount eye washes convert any faucet into an emergency eye wash station without interfering with normal faucet operation
- **Outlet Heads:** Angle of heads is adjustable to permit full coverage & avoid splashing
- **Valve:** Forged brass diverter valve. Pull knob to activate eye wash; water pressure holds eye wash operation, leaving user's hands free
- **Outlet:** Furnished with removable aerator on bottom

Order No.	Price
KB56G1100	Price

Guardian Pedestal Mounted Eyewash



- Valve: 1/2" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals.
- Bowl: 11-3/4" diameter orange ABS plastic.
- Pipe and Fittings: Schedule 40 galvanized steel. Furnished with orange polyethylene pipe covers for high visibility and corrosion resistance.

New!

- Supply: 1/2" NPT female inlet.
- Waste: 1-1/4" NPT female outlet.
- Quality Assurance: Furnished with ANSI-compliant identification sign. Valve, bowl and spray head assembly is factory assembled and water tested prior to shipment.

Order No.	Price
KB56G1825P	Price

Guardian Wall Mounted Eyewash

With Drench Hose



New!

- Spray Head Assembly: Two GS-Plus™ spray heads mounted side-by-side. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from the water flow.
- Valve: Forged brass squeeze valve activated by stainless steel lever handle. Valve has replaceable stainless steel seat for exceptional durability. Locking clip engages when handle is depressed, providing "hands free" operation. Valve stays open until locking clip is released.
- Hose: 8' reinforced PVC hose. 275 PSI maximum working pressure.
- Mounting: Bracket with spring clips to hold unit on wall. Clips position spray heads and handle to face forward at all times.
- Supply: 3/8" NPT male swivel-type inlet.
- Quality Assurance: Furnished with ANSI-compliant identification sign. Unit is completely assembled and water tested prior to shipment.

Order No.	Price
KB56G5026	Price

Guardian Deck Mounted Eyewash

With Drench Hose



New!

- Spray Head Assembly: Two GS-Plus™ spray heads mounted side-by-side. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from the water flow.
- Valve: Forged brass squeeze valve activated by stainless steel lever handle. Valve has replaceable stainless steel seat for exceptional durability. Locking clip engages when handle is depressed, providing "hands free" operation. Valve stays open until locking clip is released.
- Hose: 8' reinforced PVC hose. 275 PSI maximum working pressure.
- Mounting: Bracket with spring clips to hold unit on wall. Clips position spray heads and handle to face forward at all times.
- Supply: 3/8" NPT male swivel-type inlet.
- Quality Assurance: Furnished with ANSI-compliant identification sign. Unit is completely assembled and water tested prior to shipment.

Order No.	Price
KB56G5022	Price

Guardian Horizontal Emergency Shower



- Shower Head: 10" diameter orange ABS plastic with 20 GPM flow control.
- Valve: 1" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals. Furnished with stainless steel actuating arm and 29" stainless steel pull rod.
- Pipe and Fittings: 1" IPS galvanized steel nipple and street elbow.

New!

- Supply: 1" NPT female inlet.
- Sign: ANSI-compliant identification sign.

Order No.	Price
KB56G1643	Price

Nuisance Dust Mask



- Adjustable metal nose piece shapes easily to face
- Single strap elastic head band
- Reduces the irritating effects from non-toxic particles
- Sold per box of 50 masks (priced per each mask)

Order No.	Price
LF702985	Price

R95 Particulate Respirator



- 95% filter efficiency level effective against particulate aerosols free of oil; time use restrictions may apply
- Lightweight construction for greater comfort
- Maintenance-free construction
- Adjustable nose bridge with foam strip to reduce the potential for eyewear to fog
- Latex-free stapled head strap
- NIOSH Approved
- Min. 20 per box

Order No.	Price
LF708620	Price

3M™ Particulate Respirator 8210V, N95



- Proprietary 3M™ CoolFlow™ valve helps keep wearer cool
- Cushioning nose foam
- Adjustable noseclip helps provide a custom fit and secure seal
- Min. 10 per box

Order No.	Price
KB3549711	Price

N95 Valved Particulate Respirator



- 95% Filter efficiency level effective against particulate aerosols free of oil; time use restrictions may apply
- Maintenance-free construction
- Exhalation for easy breathing
- Adjustable nose bridge with foam strip to reduce the potential for eyewear to fog
- Latex-free stapled fixed head strap
- NIOSH approved
- Min. 10 per box sold

Order No.	Price
LF708611	Price

3M™ Particulate Welding Respirator, 8212, N95, with Faceseal



- 3M™ Cool Flow™ exhalation valve
- Comfortable foam face seal
- Cake-resistant filter media
- Flame resistant as demonstrated per modified ASTM D2859
- Adjustable noseclip
- Fully adjustable headstraps for secure fit
- Suggested applications: welding, torch cutting, brazing, soldering, metal pouring
- Min. 10 per box

Order No.	Price
KB3554141	Price

3M™ Particulate Respirator 8210, N95



- N95 Respirator
- Adjustable nose clip
- Cushioning nose foam
- Great for grinding, bagging, sanding, sweeping and other dusty operations
- Min. 20 per box

Order No.	Price Ea.
KB35464573	Price

N95 Particulate Respirator



- 95% Filter efficiency level effective against particulate aerosols free of oil; time use restrictions may apply
- Maintenance-free construction
- Adjustable nose bridge with foam strip to reduce the potential for eye-wear to fog
- Latex-free stapled fixed head strap
- NIOSH approved
- Min. 20 per box

Order No.	Price
LF708610	Price

Sold in Box Only

R95 Valved Particulate Respirator



- 95% filter efficiency level effective against particulate aerosols free of oil; time use restrictions may apply
- Exhalation valve for easy breathing
- Lightweight construction for greater comfort
- Maintenance-free construction
- Adjustable nose bridge with foam strip to reduce the potential for eye-wear to fog
- Latex-free stapled fixed head strap
- NIOSH Approved
- Min. 20 per box

Order No.	Price
LF708621	Price

Prices are per piece. Minimum box required.

P100 Valved Particulate Respirator

- 99.97% filter efficiency level effective against all particulate aerosols
- Soft foam face cushion eliminates pressure points for added comfort and fit
- Exhalation valve for easy breathing
- Latex-free adjustable straps
- NIOSH Approved
- Min. 2 per box



Order No.	Price Per Box
LF708641	Price

3M™ Particulate Respirator 8511, N95

- Intended applications include grinding, sanding, sweeping, and other dusty/hot operations
- Features the Cool Flow™ exhalation valve with adjustable M-nose clip for custom fit and secure seal
- Min. 10 per box



Order No.	Price Ea.
KB35543438	Price

N95 Particulate Respirator

- 95% filter efficiency level effective against particulate aerosols free of oil; time use restrictions may apply
- Maintenance-free construction
- Soft seal cushion nose foam provides exceptional comfort
- Latex-free stapled fixed head strap
- NIOSH Approved
- Min. 20 per box



Order No.	Price Ea.
LF708710	Price

3M™ Particulate Respirator 8247, R95

with Nuisance Level Organic Vapor Relief

- Designed to help provide comfortable protection against certain oil and non-oil based particles including those present with nuisance levels of organic vapors, such as solvents, degreasers, and resins
- Min. 20 per box



Order No.	Price Ea.
KB358247	Price

3M™ Aura™ Particulate Respirator 9211+/37193 (AAD)

- N95 Approved filtering facepiece particulate respirator
- The Aura™ Series is designed to control airflow to help reduce eyewear fogging
- 3M™ Cool Flow™ Valve keeps wearer cool
- Comfortable braided headbands help keep respirator securely in place and minimizes pulling of hair
- Min 10 per Box



Order No.	Price
KB3599716	Price

3M™ Aura™ Particulate Respirator 9211+, N95

- Designed to direct exhaled air away which reduces eyewear fogging
- 3M™ CoolFlow™ Valve keeps wearer cool
- Comfortable braided headband
- Curved low profile design allows more room for eyewear
- Soft inner materials
- Adjustable nose clip helps provide a custom secure seal
- Min. 10 per box



Order No.	Price Ea.
KB3537193	Price

N95 Valved Particulate Respirator

- 95% Filter efficiency level effective against particulate aerosols free of oil; time use restrictions may apply
- Covered with active carbon pre-filter against nuisance organic vapor below PEL (Permissible Exposure Limit)
- Exhalation valve for easy breathing
- Maintenance-free construction
- Soft seal cushion nose foam provides exceptional comfort
- Latex-free stapled
- NIOSH approved
- Sold per box of 10 only (priced per each)



Order No.	Price Ea.
LF708712	Price

Dust/Mist/Fume Limited Use Respirator

- Features a patented coaxial valve system
- Approved for respiratory protection against dusts, fumes and mists having a time-weighted average not less than 0.05 milligrams per cubic
- Fits easily under a welding helmet
- Fully Certified by NIOSH/MSHA 42CFR84



Order No.	Price Ea.
KB407190N99	Price

Replacement Filter Order No. KB4071909N99A

3M™ Half Facepiece Reusable Respirators 6000 Series

- Thermoplastic Elastomer facepiece
- Low maintenance – spare parts available
- Low profile design gives workers better visibility
- Light weight
- NIOSH/MSHA approved
- Cartridges sold separately
- Includes reclosable storage bag



Size	Order No.	Price
Small	**KB356100**	Price
Medium	**KB356200**	Price
Large	**KB356300**	Price

3M™ Dual Cartridge Disposable Respirators Assembly Organic Vapor/P95

- Ideal for short term use, such as with spray paint or pesticides
- Low-profile design allows for better comforter, for use with protective glasses
- NIOSH approved
- Lightweight and comfortable
- Organic vapor cartridge permanently attached
- Six pack replacement pre-filters Order # KB355P71



52P71



53P71

Size	Order No.	Price
Medium	**KB3552P71**	Price
Large	**KB3553P71**	Price

North 7700 Series Half Mask Respirators

- Lightweight, low profile design for greater worker acceptance
- Facepiece is made of soft hypoallergenic silicone rubber
- Yoke and cradle suspension does not allow slipping
- Direct cartridge to facepiece seal
- Fully certified by NIOSH/MSHA
- Cartridge must be ordered separately



Size	Order No.	Price
Small	**KB40770030S**	Price
Medium	**KB40770030M**	Price
Large	**KB40770030L**	Price

3M™ Half Facepiece Reusable Respirators 7500 Series

- For cool, dry comfort
- Made from a durable silicone and can be used with any of the 3M Filters and cartridges, series 2000, 5000, 6000 and 7093 (sold separately)
- Dual mode head harness assembly



Size	Order No.	Price
Medium	**KB357502**	Price
Large	**KB357503**	Price

3M™ Ultimate FX Full Facepiece Reusable Respirators FF-400 Series

- 3M's unique Scotchgard™ protector helps resist dirt, some paint and stains, and makes it easier to clean
- Cool flow valve reduces heat and moisture build up inside the facepiece
- Features a soft, silicone nose cup and large lens for superior peripheral vision



Size	Order No.	Price
Medium	**KB3589421**	Price
Large	**KB3589424**	Price

3M™ Full Facepiece Reusable Respirators 6000 Series

- The facepiece is made of a thermoplastic elastomer, making it extraordinarily comfortable, soft and lightweight
- Large lens that provides the user a wide, unobstructed view
- Cartridges sold separately



Size	Order No.	Price
Medium	**KB356800**	Price
Large	**KB356900**	Price

North 7600 Series Full Facepiece Respirator

- 100% Medical grade silicone sealing area with dual flange for superior fit and comfort. Speech diaphragm and oral/nasal cups are standard equipment
- Hard coated polycarbonate lens provides over 200° field of vision meets ANSI Z-87.1-1989 for impact and penetration resistance
- Fully certified by NIOSH/MSHA
- Cartridge must be ordered separately



Order No.	Price
KB4076008A	Price

Full facemask for small faces available - special order

3M Filter & Cartridges for 3M™ Reusable Respirators

All items sold in pairs unless otherwise indicated

- **KB355N11 & KB355P71 -** (Sold in boxes of 10 Pcs.) Must be used in conjunction with KB356001, KB356003, or KB356006 filter cartridge and KB35501 prefilter retainers
- **KB352091 -** Can be used alone or in conjunction with KB356001, KB356003, KB356006 when you add the KB35502 prefilter adapter

Item	Description	Approved For	Order No.	Price
	P100 Filter / Prefilter (Disc Type)	At least 99.97% efficient against solid and liquid particles, including those containing oil. Adapter (sold separately) required when used with cartridges. Manufacturer's time-use restrictions apply when oil is present.	**KB352091**	Price
	P100 Filter / Nuisance Level Organic Vapor Relief	At least 99.97% efficient against certain oil and non oil-based particles. Adapter (sold separately) required when used with cartridges. Manufacturer's time-use restrictions apply when oil is present.	**KB352097**	Price
	Multi-Gas / Vapor Cartridges	Certain Organic vapors, chlorine, hydrogen chloride, sulfur dioxide, hydrogen fluoride, chlorine dioxide, hydrogen sulfide, ammonia/methylamine and formaldehyde.	**KB356006**	Price
	Organic Vapor Cartridges	Certain Organic Vapors	**KB356001**	Price
	Organic Vapors / Acid Gas Cartridges	Certain Organic vapors, chlorine, hydrogen chloride, sulfur dioxide or hydrogen sulfide or hydrogen fluoride.	**KB356003**	Price
	Multi-Gas / Vapor with P100 Filter	Certain Organic vapors, chlorine, hydrogen chloride, sulfur dioxide, hydrogen fluoride, chlorine dioxide, hydrogen sulfide, ammonia/methlyamine and formaldehyde. Particulates (at least 99.97% efficient against solid & liquid particles including those containing oil). Manufacturer's time-use restrictions apply when oil is present.	**KB3560926**	Price
	Organic Vapors / P100 Combination Cartridge	Certain Organic vapors. Particulates (at least 99.97% efficient against solid & liquid particles, including those containing oil). Manufacturer's time-use restrictions apply when oil is present.	**KB3560921**	Price
	Organic Vapors / Acid Gas / P100 Combination Cartridge	Certain Organic vapors, chorine, hydrogen chloride, sulfur dioxide or hydrogen sulfide or hydrogen fluoride. Particulates (at least 99.97% efficient against solid and liquid particles, including those containing oil). Manufacturer's time-use restrictions apply when oil is present.	**KB3560923**	Price
	3M[a] Particulate Pre-Filter 5P71, P95 10/Box	Particulates (At least 95% efficient against solid and liquid particles, including those containing oil).	**KB355P71**	Price
	3M[a] Particulate Pre-Filter 5N11, N95 10/box	Particulates (At least 95% efficient against solid and liquid particles, excluding those containing oil).	**KB355N11**	Price
	Adapter for P100 Disc Pre-Filter	-	**KB35502**	Price
	Prefilter Retainer	-	**KB35501**	Price

Honeywell NORTH N-Series Cartridges



- Sold in carton quantities only

Description	NIOSH/MSHA Approval No. - Half Mask	NIOSH/MSHA Approval No. - Full Mask	Carton Qty.	Order No.	Price
Organic Vapor Cartridge	TC-23C-49	TC-23C-180	2	**KB40N75001A**	Price
Organic Vapor/Acid Gases Cartridge with P100 Particulate Filter	TC-84A-0599	TC-84A-0600	2	**KB407583P100A**	Price

Many other cartridges available - please advise if you want additional SKUs/Descriptions.

Honeywell NORTH N-Series Particulate Filter



- Provides protection from a variety of contaminants
- N95 Non-oil particulate filter
- 95% Minimum filter efficiency

Description	NIOSH/MSHA Approval No.	Order No.	Price
Highly Toxic Particulates Filter	-	**KB407580P100A**	Price
N95 Dust, Paint, Mist Prefilters Box of 10	TC-84A-1122	**KB407506N95**	Price

Honeywell NORTH Respirator Refresher Wipe Pads



- Individually sealed pads remove perspiration, body oils, and other unwanted materials from the sealing flange of a wearer's respirator
- Available in wall mountable dispenser box
- 100 Packs per dispenser

Order No.	Price
KB407003	Price

Reusable Earplugs

- Three flanges of silicone form cozy seals for all size ear canals
- All three styles meet ANSI S3.19 specifications





NRR	Qty. Per Box	Order No.	Price
23 dB	100 pr	**KB54RP2001**	Price

Disposable Earplugs

- Taper fit made of polyurethane material
- Plug gently expands and self adjusts to all size ear canals

DP1000





DP1001



NRR	Style	Qty. Per Box	Order No.	Price
31 dB	Disposable / Corded	100 pr	**KB54DP1001**	Price
31 dB	Disposable / Uncorded	200 pr	**KB54DP1000**	Price

Disposable Foam Earplugs

- Pre-assembled respirator eliminates cartridge and filter attachment hassles
- Face piece construction is flexible, lightweight and form fitting to ensure a comfortable fit
- Low profile cartridges designed for better vision and balance
- Filters offer low breathing resistance
- Better comfort and fit for protection from airborne hazards
- NIOSH N95 Approved



6100B



6100

Description	NRR	Qty. Per Box	Order No.	Price
Disposable Corded Earplugs	30 dB	100	**LF706101B**	Price
Disposable Earplugs	30 dB	200	**LF706100**	Price

Earplug Dispenser

- Convenient dispenser holds 500 disposable earplugs
- This economical choice for dispensing earplugs provides quick and easy use for workers
- Durable plastic design has easy twist knob and catch basin to prevent plugs from falling to the ground
- 500 Pair DP1000 earplugs included with dispenser
- Replacement bag of 500 earplugs is available for easy refill

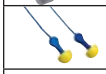


PD500

Description	NRR	Order No.	Price
Bulk Bag of 500 Replacement Earplugs	31 dB	**KB54PD500R**	Price
Earplug Dispenser includes 500 pair of Disposable Earplugs	31 dB	**KB54PD500**	Price

3M Earplugs

- Soft foam seals the earcanal comfortably
- Fits wide range of earcanals
- Can be used with other hearing protection devices
- Disposable and Reusable
- Technical Information: Class AL (CSA Z94.2-94), Grade 4 (CSA Z94.2-02)
- Test compatible with 3M™ E-A-Rfit™ Validation System

Item	Box Min. Qty.	Description	NRR	Order No.	Price
	200	3M™ E-A-R™ Push-Ins™ Corded Earplugs, 318-1003 in Poly Bag 2000 PR/Case	28 dB	**KB3518003**	Price
	200	3M™ Disposable Foam Earplugs, Uncorded	29 dB	**KB351100**	Price
	200	3M™ E-A-R™ E-A-Rsoft™ Yellow Neon Blasts Uncorded Earplugs, Hearing Conservation 312-1252 in Poly Bag Regular Size 2000 PR/Case	33 dB	**KB353121252**	Price
	200	3M™ E-A-Rsoft™ Yellow Neons™ Earplugs, Uncorded	33 dB	**KB3512063**	Price
	200	3M™ EAR™ Classic™ Foam Earplugs NRR 29 dB Corded	29 dB	**KB353121201**	Price
	100	3M™ E-A-R™ UltraFit™ Corded Earplugs, Reusable	25 dB	**KB3540002**	Price
	200	3M™ E-A-R™ Push-Ins™ Uncorded Earplugs 318-1008, with Grip Rings 2000 PR/Case	30 dB	**KB353181008**	Price
	100	3M™ Disposable Foam Earplugs, Corded	29 dB	**KB351110**	Price
	100	3M™ E-A-R™ UltraFit™ Reusable Earplugs, Corded	25 dB	**KB3540051**	Price
	200	3M™ E-A-Rsoft™ Yellow Neons™ Earplugs, Corded	33 dB	**KB3511033**	Price
	100	3M™ E-A-R™ Pistonz™ Earplugs P1401, Corded	29 dB	**KB3593402**	Price
	100	E-A-R Express™ Pod Plugs ™ 311-1115 w/ Asst Grips, Corded	25 dB	**KB35311115**	Price
	120	3M™ Skull Screw™ Earplugs P1301, Corded	32 dB	**KB3592952**	Price
	50	3M™ E-A-R™ UltraFit™ Corded Earplugs, Hearing Conservation 340-4002 in Carrying Case 200 PR/Case	25 dB	**KB353404002**	Price
	200	3M™ E-A-R™ Push-Ins™ with Grip Rings Corded Earplugs, Hearing Conservation 318-1009 in Poly Bag 2000 PR/Case	30 dB	**KB353181009**	Price
	200	3M™ E-A-R™ E-A-Rsoft™ Yellow Neon Blasts Corded Earplugs, Hearing Conservation 311-1252 in Poly Bag Regular Size 2000 PR/Case	33 dB	**KB353111252**	Price
	1	3M™ E-A-Rcaps™ Model 200 Banded Hearing Protector	17 dB	**KB3521001**	Price
	500	3M™ E-A-Rsoft™ Yellow Neon™ Earplug Replacement Bottle	33 dB	**KB3591004†**	Price

†The NRR may overestimate the protection provided during typical use. 3M recommends reducing the NRR by 50% for estimating the amount of noise reduction provided. See packaging for details.

Honeywell HOWARD LEIGHT

Max Lite® Foam Earplugs

- Ideal for people with smaller ear canals
- Self adjusting polyurethane foam expands to fit virtually every wearer
- Contoured T-shape for easy insertion and wear
- Smooth, soil-resistant closed cell foam skin prevents dirt build-up

Item	NRR	Style	Box Min. Qt.	Order No.	Price Ea.
	30	Corded Earplug	100	**LF50LPF30**	Price
	30	Uncorded Earplug	200	**LF50LPF1**	Price
	30	Uncorded Earplug Refill	500	**LF50LPF1D**	Price

Honeywell HOWARD LEIGHT

Max® Disposable Foam Earplugs

- The world's most used polyurethan foam earplug
- Bell shaped for maximum in ear comfort
- Improved design resists back out

Item	NRR	Style	Box Min. Qty.	Order No.	Price Ea.
	33	Corded Earplug	100	**LF50MAX30**	Price
	33	Uncorded Earplug	200	**LF50MAX1**	Price

Honeywell HOWARD LEIGHT

SmartFit® Reusable Earplugs



- Conforming Material Technology™ adapts to the shape of the surrounding ear canal when in your ear, and returns the earplug to its original shape when removed
- Delivers superior comfort and a truly individual fit
- Simplifies inventory control - a single product can fit almost every wearer
- Includes detachable cord and HearPack® reusable case

NRR	Style	Box Min. Qty.	Order No.	Price Ea.
25	Corded Earplug	100	**LF50SMF30**	Price

Honeywell HOWARD LEIGHT

Multi Max® Disposable Foam Earplugs



- Two-in-One
- Pill shaped polyurethane foam with soil-resistant skin
- Two sizes in one design improves individual fit

NRR	Style	Box Min. Qty.	Order No.	Price Ea.
31	Uncorded Earplug	200	**LF50MM1**	Price

Honeywell HOWARD LEIGHT

Laser Lite® Disposable Foam Earplugs

- Low pressure polyurethane foam earplugs offer long term comfort
- Nonallergic material conforms to fit any ear canal
- Contoured T-shape for easy insertion and wear
- Self-adjusting foam expands to fit virtually every wearer

Item	NRR	Style	Box Min. Qty.	Order No.	Price Ea.
	32	Corded Earplug	100	**LF50LL30**	Price
	32	Uncorded Earplug	200	**LF50LL1**	Price
	32	Uncorded Earplug Refill	500	**LF50LL1D**	Price

Honeywell HOWARD LEIGHT

Quiet® Reusable Earplugs

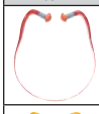
- Built-in flexible stem in these patented earplugs eases insertion and provides immediate comfort
- Earplugs' smooth, non-irritating skin is easy to clean up with soap and water for extended wear
- Contoured shape foam earplug
- Buit-in foam stem makes it easier to spot during visual earplug checks

Item	NRR	Style	Box Min. Qty.	Order No.	Price Ea.
	26	Corded Earplug	100	**LF50QD30**	Price
	26	Uncorded Earplug	100	**LF50QD1**	Price

Honeywell HOWARD LEIGHT

Banded Earplugs

- **Ear Pod:** QB1 HYG® (Inner-Aural), QB2 HYG® (Supra-Aural), QB3 HYG® (Semi-Aural)
- Patented band design prevents ear pods from contamination
- Supplied in resealable polybag
- Compliance: CSA Class B

Item	NRR	Style	Box Min. Qty.	Order No.	Price Ea.
	23	Banded Earplug	10	**LF50QB3HYG**	Price
	25	Banded Earplug	10	**LF50QB2HYG**	Price
	25	QB2HYG Replace-ment Pods pods	50	**LF50QB200HYG**	Price
	27	Banded Earplug	10	**LF50QB1HYG**	Price

Honeywell HOWARD LEIGHT

LS500 Earplug Dispensers



- Aluminum and plastic construction
- Holds 500 pairs
- Provides workers with easy access to hearing protection
- Wall mount or table top
- Refills sold separately
- Accomodates Howard Leight's most popular earplugs: Max-Lite®, Max®, Laser Lite®, Multi Max™
- Ear plugs not included

Style	Box Min. Qty.	Order No.	Price Ea.
Aluminum Earplug Dispenser	1	**LF50LS500**	Price

Honeywell HOWARD LEIGHT

Fusion® Reusable Earplugs



- Patented dual material design
- Unique detachable cord system
- Includes HearPack® hard plastic kidney shaped case
- SoftFlange® design delivers unmatched comfort and attenuation
- Sold by box of 100 pair only (priced per each pair)

NRR	Color	Description	Qty. Per Box	Order No.	Price Ea.
27	Green	Small Size	100	**LF50FUS30SHP**	Price
27	Blue	Regular Size	100	**LF50FUS30HP**	Price

Honeywell HOWARD LEIGHT

QM24+® Noise Blocking Earmuff



- Ultra lightweight design
- Multi-position headband allows wearer to select position, over-the-head, behind-the-head or under-the-chin
- Dielectric construction suitable for electrical environments

NRR	Order No.	Price
25 dB	**LF50QM24**	Price

PYRAMEX

General Purpose



- Durable nylon headband
- Soft foam ear cups
- Meets ANSI S3.19 requirements

NRR	Order No.	Price
22 dB	**KB54PM2010**	Price

Honeywell HOWARD LEIGHT

Leightning L3 Earmuff



- Padded foam headband delivers long-wearing comfort with minimal pressure on the head better, consistent attenuation
- Light-weight, heavy duty hearing protection
- Provides a custom fit for any size or shape head
- Offers easy adjustments for a personalized fit

NRR	Order No.	Price
30 dB	**LF501010924**	Price

Honeywell HOWARD LEIGHT

Thunder® T2 & T3 Dielectric



- Dielectric construction suitable for all workplaces, especially electrical environments
- Uniform headband pressure for all head sizes, providing better comfort for long-term wear
- Inner-ventilated headband minimizes pressure on the head, breathes easier in warm/humid climates
- Quick-Click height adjustment remains fixed during wear
- Features patented Air Flow Control™ technology, delivering optimal attenuation across all frequencies without increasing earcup size or weight

NRR	Order No.	Price
28 dB	**LF501010929**	Price
30 dB	**LF501010970**	Price

Honeywell HOWARD LEIGHT

Leightning® L1 Earmuff



- Robust steel headband withstands demanding use, especially in tough environments
- Snap-in ear cushions make replacement quick and easy
- Padded foam headband delivers long-wearing comfort with minimal pressure on the head
- Three attenuation levels allow for targeted attenuation for a variety of applications
- Telescopic height adjustment remains fixed during use
- Delivers high degree of comfort; ideal for situations where compact earmuffs and reliable Noise-Blocking protection are required

NRR	Order No.	Price
25 dB	**LF501010922**	Price

PYRAMEX

Soft Padded



- Large soft foam ear cups
- Durable padded nylon headband
- Meets ANSI S3.19 requirements

NRR	Order No.	Price
27 dB	**KB54PM3010**	Price

3M

3M™ Peltor™ Optime™ 101 Over-The-Head



- Protection up to 101 dBA in loud noise areas where even minimal exposure can result in hearing damage
- Bring harmful noise levels down to a safe level so you can work longer with less danger
- Over-the-Head earmuffs give you the most protection and offer all day comfort

NRR	Order No.	Price
27 dB	**KB35H7A**	Price

Honeywell HOWARD LEIGHT

Leightning® L0F Folding



- Features patented Air Flow Control™ technology, delivering optimal attenuation across all frequencies without increasing earcup size or weight
- Padded foam headband delivers long-wearing comfort with minimal pressure on the head
- Robust steel headband withstands demanding use, especially in tough environments
- Snap-in ear cushions make replacement quick and easy
- Telescopic height adjustment remains fixed during use
- Ultraslim, lightweight earcups can be worn with welding shields, hard hats and other PPE
- Folds for convenient storage

NRR	Order No.	Price
23 dB	**LF501013461**	Price

3M™ Peltor™ Optime™ 98 Over-the-Head

- **Body Material:** liquid/foam filled ear cushions



NRR	Order No.	Price
25 dB	**KB35H9A**	Price

3M™ Peltor™ Optime™ 95

- Fits around the back of the neck for use under welding helmets, sandblasting hoods, hard caps and fire helmets
- Protects ears against noise and welding spatter to the ear and earcanal



NRR	Order No.	Price
21 dB	**KB35H6BV**	Price

3M™ Peltor™ Optime™ 105 Earmuff, Over-the-Head

- Suitable for noise levels up to 105 dBA
- Wide, softly padded headband and soft foam-filled ear cushions provide a comfortable fit



NRR	Order No.	Price
30 dB	**KB35H10A**	Price

3M™ Peltor™ Optime™ Hi-Viz

- Hi-Viz color for workers in low light conditions
- Ideal for workers in busy area's, road construction, airports and utilities
- Twin-Cup® headband distributes weight for low-pressure fit
- Patented Twin-Cup® design has soft, foam-filled ear cushions



NRR	Order No.	Price
30 dB	**KB35H10AHV**	Price

Honeywell HOWARD LEIGHT

Viking® V2 & V3 Multi Position Dielectric

- Multiple-position headband allows wearer to select position over the head, behind the head or under the chin
- Alternative to cap-mounted earmuffs – wear with hard hats, face shields, respirators and other PPE
- Features patented Air Flow Control™ technology, delivering optimal attenuation across all frequencies without increasing earcup size or weight
- Inner-ventilated headband minimizes pressure on the head, breathes easier in warm/humid climates



Style	NRR	Order No.	Price
V2	27 dB	**LF501010926**	Price
V3	29 dB	**LF501010927**	Price

Honeywell HOWARD LEIGHT

Sync Stereo

- Volume Management Technology™ manages output volume from portable audio devices at 82 dBA
- Provides ideal protection from most low to medium hazardous noise levels
- No batteries required – just plug in and go!
- Includes 3.5mm input cable, plugs into most MP3 players, mobile phones, and other personal audio device
- Technologically advanced acoustical bass chamber



NRR	Order No.	Price
25 dB	**LF501030110**	Price

Honeywell HOWARD LEIGHT

Clarity® Headband

- Uniform attenuation allows wearer to hear co-workers, instructions, and other important sounds more naturally while blocking out harmful noise
- Dielectric construction suitable for all workplaces, especially electrical environments
- Uniform headband pressure for all head sizes, providing better comfort for long-term wear
- Inner-ventilated headband minimizes pressure on the head, breathes easier in warm/humid climates



NRR	Order No.	Price
27 dB	**LF501011146**	Price

3M™ Peltor™ X5A Over-the-Head

- Provides very high noise reduction as a result of specially formulated foam in earcups
- Remains relatively lightweight with excellent balance and comfort



NRR	Order No.	Price
31 dB	**KB3593727**	Price

Honeywell Howard Leight Sync Digital AM/FM Radio



- High digital quality AM/FM radio reception
- Radio and audio volume does not exceed 82 dB
- 10 Station memory presets
- Audio input jack; 3.5 mm cable included
- Lightweight cushioned design provides all-day comfort
- Reinforced fork slides for easy and comfortable fit
- Features patented Airflow Control Technology - snap-in ear cushions make replacement quick and easy
- 111 Hour battery life from two (2) AA batteries included
- Lifetime warranty against mfg defects

NRR	Order No.	Price
25 dB	**LF501030331**	Price

Honeywell Howard Leight Impact Headband Electronic Sound Amplification



- Amplifies ambient sound to safe 82 dB – response technology revert to passive hearing protector when noise reaches 82 dB
- Inner-ventilated headband minimizes pressure on the head, breathes easier in warm/humid climates
- Non-deforming outer headband withstands rough treatment in the toughest workplaces
- Quick-Click height adjustment remains fixed during wear
- Snap-in ear cushions make replacement quick and easy
- Sound amplification allows wearers to hear important communication – alarms/warning signals, co-workers' voices
- Directionally placed stereo microphones amplify and enhance sound for more natural hearing
- Includes 2 AA batteries for 700 hours of use

NRR	Order No.	Price
23 dB	**LF501010376**	Price

Honeywell Howard Leight Thunder® T1H Cap Mounted Noise Blocking



- Features a unique dual-headband for better positioning and breathability, and non-deforming outer headband that minimizes pressure on the head
- Dielectric construction withstands use and abuse, while protecting workers in electrical environments
- Patented Air Flow Control™ delivers optimal attenuation across all frequencies, without increasing earcup size or weight
- Robust ABS plastic headband construction does not conduct electricity
- Suitable for virtually all workplaces, especially electrical and mining environments
- Hard hat not included

NRR	Order No.	Price
23 dB	**LF501011601**	Price

3M™ Peltor™ X5P3E Cap-Mount



- Very high noise reduction
- Newly designed spaces, specially formulated foam liners and innovative foam contained in the cushion

NRR	Order No.	Price
31 dB	**KB3593732**	Price

Hard hat not included

3M™ Peltor™ Optime™ 101, Helmet Attachable



- Liquid/foam filled ear cushions
- For noise levels to 101dBA
- Easily attaches to fit most helmets & caps
- RoHS Compliant: NA
- Color: green

NRR	Order No.	Price
24 dB	**KB35H7P3E**	Price

3M™ Peltor™ Optime™ 105, Helmet Attachable



- Developed for the ultimate protection in the most demanding noise environments
- A unique "double-shell" earcup design (two cups connected via a foam inner layer to reduce structural resonsances)
- When assessed noise levels reach up to 105 dBA

NRR	Order No.	Price
27 dB	**KB35H10P3E**	Price

3M™ Peltor™ Optime™ 105 Series, Behind-the-Head



- Recommended for noise levels up to 105 dBA
- Designed with wide, softly padded headband and stainless steel headband wires
- Liquid and foam filled cushions for a better seal and low surface pressure

NRR	Order No.	Price
29 dB	**KB35H10B**	Price

Pyramex Cap Mounted



- Fits most hard hats
- Flips up or down when needed
- Soft, foam filled cushions sit comfortably on your ear

NRR	Order No.	Price
27 dB	**KB54CM6010**	Price

Hard Hats Cap & Full Brim Style

Cap Style:
- Shell constructed from high density polyethylene materials
- Rain trough on side and back of helmet channels moisture away
- Universal accessory slots fit cap-mounted ear muffs and chin straps
- Soft brow pad is washable and replaceable

Full Brim Style:
- Shell constructed from high density polyethylene materials
- Soft brow pad is washable and replaceable
- Ratchet suspension is easy to adjust allows wearer to modify the fit while wearing


Full Brim


Cap Style

Helmet Type - Ratchet					
		Cap Style		Full Brim	
Suspension	Color	Order No.	Price	Order No.	Price
4 Pt. Ratchet	Blue	**KB54HP14160**	Price	**KB54HP24160**	Price
4 Pt. Ratchet	Green	**KB54HP14135**	Price	**KB54HP24135**	Price
4 Pt. Ratchet	Orange	**KB54HP14140**	Price	**KB54HP24140**	Price
4 Pt. Ratchet	Red	**KB54HP14120**	Price	**KB54HP24120**	Price
4 Pt. Ratchet	White	**KB54HP14110**	Price	**KB54HP24110**	Price
4 Pt. Ratchet	Yellow	**KB54HP14130**	Price	**KB54HP24130**	Price

Helmet Type - Snap Lock			
		Cap Style	
Suspension	Color	Order No.	Price
4 Pt. Snap Lock	Blue	**KB54HP14060T**	Price
4 Pt. Snap Lock	Orange	**KB54HP14040T**	Price
4 Pt. Snap Lock	Red	**KB54HP14020T**	Price
4 Pt. Snap Lock	White	**KB54HP14010T**	Price
4 Pt. Snap Lock	Yellow	**KB54HP14030T**	Price

Meets ANSI A89.1-2003 standards, Type 1–Class C, G, and E

Hard Hats Cap & Brim Style


E2RW2


E2RW1

- Smooth crown design contains an advanced suspension with eight load bearing points to stabilize and balance the hard hat
- Full brim adds an extra margin of protection from hazardous sun rays and hazardous substances falling
- 8 Pt. ratchet suspension

	Color	Style	Order No.	Price
8 Pt. Ratchet	Yellow	Cap	**LF50E2RW2**	Price
8 Pt. Ratchet	White	Cap	**LF50E2RW1**	Price
8 Pt. Ratchet	White	Full Brim	**LF50E1RW1**	Price

3M™ H-700 Series with UVicator™ Sensor



- UVicator™ indicates when to replace hard hat due to UV exposure
- Suspension sits lower on head to reduce pressure and increase security
- Smooth, easy turning ratchet suspension

Color	Order No.	Price
White	**KB3565550**	Price
Yellow	**KB3565551**	Price

3M™ H706-R Series with UVicator™ Sensor



- UVicator™ indicates when to replace hard hat due to UV exposure
- Suspension sits lower on head to reduce pressure and increase security
- Smooth, easy turning ratchet suspension

Order No.	Price
KB3565654	Price

Bump Caps


BC867 BC861


BC862

- Low hazard bump cap that is well ventilated and lightweight
- Ideal for food industry, mechanics and truck drivers
- Not approved; do not use where ANSI or CSA head protection is required

Color	Order No.	Price
Blue	**LF50BC867**	Price
White	**LF50BC861**	Price
Yellow	**LF50BC862**	Price

Value Crown Hard Hat



- Versatile and dependable design, with grooved HDPE outer shell, rain trough and accessory slots
- 4 Point suspension, with pin lock adjustment

Color	Order No.	Price
White	**LF50A79R**	Price

3M™ Vented Hard Hats with UVicator™ Sensor



- UVicator™ indicates when to replace hard hat due to UV exposure
- Suspension sits lower on head to reduce pressure and increase security
- Smooth, easy turning ratchet suspension
- Venting encourages air flow

Color	Order No.	Price
White	**KB3565555**	Price
Yellow	**KB3565556**	Price

Skullerz® 8950 Bump Cap


23370

- Removable impact-resistant ABS plastic shell
- Thermo-formed foam cushioning
- Unique flanged shell design for a comfortable fit and air flow
- Nylon Taslan cap construction with reflective accents
- Strategically placed side and rear mesh venting panels
- EN 812: 2012 Certified

Color	Order No.	Price
Black	**LF6523340**	Price
Navy	**LF6523343**	Price

Skullerz® 8960 Bump Cap with LED Lighting Technology


23370

- Removable impact-resistant ABS plastic shell
- Thermo-formed foam cushioning
- Nylon Taslan cap construction with reflective accents
- Strategically placed side and rear mesh venting panels
- Patented LED lighting technology
- Two ultra-bright LEDs in the brim fpr illumination up to 50ft
- Four replacable CR2032 long life lithium batteries (included)
- EN 812: 2012 Certified

Color	Order No.	Price
Black	**LF6523370**	Price
Navy	**LF6523373**	Price

GloWear® 8010HL Non-Reflective Vests

- Hook & loop closure
- Polyester mesh (2.6 oz.)
- One size fits all



Color	Order No.	Price
Lime Green	**LF658010HLL**	Price
Orange	**LF658010HLO**	Price

GloWear® 8205 Class 2 Super Econo Vests

- 2" Level 2 ANSI-compliant tape
- ANSI-compliant polyester mesh (3.3 oz.)



Style - Hook & Loop				
	Lime		Orange	
Size	Order No.	Price	Order No.	Price
Small/Medium	**LF6520973**	Price	**LF6520963**	Price
Large/X-Large	**LF6520975**	Price	**LF6520965**	Price
2X-Large/3X-Large	**LF6520977**	Price	**LF6520967**	Price
4X-Large/5X-Large	**LF6520979**	Price	**LF6520969**	Price

Style - Zipper				
	Lime		Orange	
Size	Order No.	Price	Order No.	Price
Small/Medium	**LF6520993**	Price	**LF6520983**	Price
Large/X-Large	**LF6520995**	Price	**LF6520985**	Price
2X-Large/3X-Large	**LF6520997**	Price	**LF6520987**	Price
4X-Large/5X-Large	**LF6520999**	Price	**LF6520989**	Price

GloWear® 8210HL Econo Vests

- Hook & loop closure
- ANSI-certified polyester mesh
- 2" Level 2 ANSI-certified tape
- Tape specs: (1) 360°, (2) vertical
- Standards: ANSI 107-class 2



	Lime Green		Orange	
Size	Order No.	Price	Order No.	Price
Large/X-Large	**LF658210HLLLXL**	Price	**LF658210HLOLXL**	Price
2X-Large/3X-Large	**LF658210HLL2X3X**	Price	**LF658210HLO2X3X**	Price

For chest measurement of 44" to 52"— please order L/XL
For chest measurement of 52" to 58"—please order 2XL/3XL

GloWear® 8220L/8220Z Standard Vests

- Zipper closure
- ANSI compliant polyester mesh or solid
- 2" Level 2 ANSI compliant tape (3M™ Scotchlite™)
- Tape specs: (1) 360°, (2) vertical
- Pockets: one inside
- Standard: ANSI 107-Class 2



	Lime Green		Orange	
Size	Order No.	Price	Order No.	Price
Large/X-Large	**LF658220ZLLXL**	Price	**LF658220ZOLXL**	Price
2X-Large/3X-Large	**LF658220ZL2X3X**	Price	**LF658220ZO2X3X**	Price

For chest measurement of 44" to 52"— please order L/XL
For chest measurement of 52" to 58"—please order 2XL/3XL

PRM PRO Universal Safety Vest

- Hi-vis lime mesh with silver strips
- Velcro closure
- One size fits most



Order No.	Price
KB38SV8099	Price

PRM PRO Class 2 Hi-Vis Safety Vests

- Class 2
- Reflective tape
- Zipper front closure



	Zipper and Inside Pocket		Zipper and Outside Pockets	
	Yellow/Orange/Silver		Yellow/Silver	
Size	Order No.	Price	Order No.	Price
Medium	**KB38SV8100**	Price	**KB38SV8030**	Price
Large	**KB38SV8105**	Price	**KB38SV8035**	Price
X-Large	**KB38SV8110**	Price	**KB38SV8040**	Price
2X-Large	**KB38SV8115**	Price	**KB38SV8045**	Price
3X-Large	**KB38SV8120**	Price	**KB38SV8050**	Price

PRM PRO Class 2 Hi-Vis DOT Stripe Safety Vests

- Hi-vis lime 100% polyester solid front, mesh material on back
- DOT stripe
- Zipper front closure
- 6 Pockets





Size	Order No.	Price
Medium	**KB38SV8065**	Price
Large	**KB38SV8070**	Price
X-Large	**KB38SV8075**	Price
2X-Large	**KB38SV8080**	Price
3X-Large	**KB38SV8085**	Price

RVZ Surveyors' Class 2/Level 2 Hi-Vis Safety Vest

- Hi-vis lime lightweight polyester solid material on front, mesh material on back
- Lightweight mesh polyester back material
- 2 inch silver reflective material with contrasting color trim
- Zipper front closure
- 8 Pockets: 5 outside, 3 inside, 2 mic holder loops



Size	Order No.	Price
Medium	**KB54RVZ2410M**	Price
Large	**KB54RVZ2410L**	Price
X-Large	**KB54RVZ2410XL**	Price
2X-Large	**KB54RVZ24102X**	Price
3X-Large	**KB54RVZ24103X**	Price
4X-Large	**KB54RVZ24104X**	Price
5X-Large	**KB54RVZ24105X**	Price

2 Pc. Fleece/Neoprene Balaclava



- Polyester fleece with neoprene face mask attached by hook and loops
- 1mm Neoprene with one side nylon and one side fleece for additional comfort
- Long length
- Reflective accents help keep workers safe and seen
- Unique hook and loop suspensions to attach cap to a hard hat for better stability

Order No.	Price
LF656827	Price

N-Ferno® 6823 Wind-Proof Hinged Balaclava



- Fleece with wind-protectant fabric at the most vulnerable places protects against a variety of elements
- Unique hinged design
- 3-panel construction with flat lock stitching for a comfortable "just made for you" fit
- Reflective accents to help keep you safe and seen
- Long length

Order No.	Price
LF656823	Price

N-Ferno® 6821 Fleece Balaclava



- Long length
- Single wash FR treated
- Polyester
- Stretch fleece for comfort

Order No.	Price
LF656821	Price

One Size Fits All

N-Ferno® Winter Liner 6850/6852 Econo 2-Layer Poly/Fleece





- Regular (6850)/ Shoulder (6852) Length
- Shell: 100% cotton twill
- Lining: 100% poly fleece
- Hook & loop or chin strap
- Elastic gap control
- Single wash FR treated

Style	Order No.	Price
Regular	**LF656850**	Price
Shoulder	**LF656852**	Price

One Size Fits All

Honeywell MILLER

T-BAK™ Tie-Back Personal Fall Limiter



- 7.5' (2.3m) Working capacity
- User-Rated to 400-lbs. (181kg) capacity
- Cost-effective alternative to tie-back shock-absorbing lanyards
- All-in-one, self-retracting lifeline/anchorage connector design reduces equipment required on the job site
- Designed for anchoring below a user's harness back D-ring for greater safety
- Integrated shock absorber especially designed for tie-back applications with load indicator device
- Meets all applicable OSHA, ANSI, CSA and CE standards, including the ANSI Z359.1 requirement that states only 24-inches (.62m) or less of lifeline extends out of the housing when the unit is fully retracted
- The new patented pending Miller Twin Turbo™ D-Ring Connector easily adapts two Miller Turbo T-BAK PFLs for continuous 100% tie-off fall protection

Order No.	Price
LF50MFLT275FT	Price

Honeywell MILLER

TwinTurbo™ Fall Protection System



- Patented pending Twin Turbo D-Ring Connector easily adapts two (2) lightweight Miller TurboLite Personal Fall Limiters (PFLs) for continuous 100% tie-off fall protection
- Replacement for double-legged shock-absorbing lanyards
- Innovative design that easily connects to the back D-ring of many fall protection harnesses with non-coated metallic back D-rings increases worker productivity and versatility with freedom of movement – less restrictive than other units on the market
- Permits TurboLite PFLs to swivel in multiple directions for greater mobility; the swivel action prevents webbing from twisting and binding inside of the unit
- Webbing payout smoothly extends/retracts without interruption
- Easy-to-use and assemble/disassemble
- Adapts to most Miller TurboLite PFL models

Order No.	Price
LF50MFLB	Price

Honeywell MILLER

Anchoring Products

Item	Type	Description	Order No.	Price
	Cross-Arm Strap	6 ft length, 1 - 2". D-ring and 1- 3". D-ring, green	**LF5081836FTGN**	Price
	D-Bolt Anchor	D-Bolt Anchor for up to 4-inch working thickness; Includes a 5/8" diameter bolt with lockwasher and nut	**LF50416**	Price
	Friction Bolt Anchor	3/4" Miller Grip Fall Protection Anchorage Connector for Concrete; 5,000 lb tensile strength	**LF50496**	Price
	Shadow Beam Anchor	Stainless Steel and Aluminum; Connects horizontally to I and H beam flanges; Fits flange sizes 4 to 12"; Slides along the beam with the worker to provide increased safety, mobility and productivity	**LF50881412**	Price

Honeywell MILLER

Titan™ II Hi-Viz Harness

- Increased worksite safety with Hi-Viz color webbing and ANSI Z359.11 compliance
- Easier vertical adjustability that stays in place
- Slip resistant back D-ring pad and forward positioned side D-rings, keeping your tool bags in the right place
- Oversized ID tags provide quick and easy harness size identification
- Back strap increases safety by preventing roll out in the event of a fall
- Rated for a 400-lbs. (181.4 kg) worker
- Meets all applicable OSHA, ANSI and CSA requirement



Order No.	Price
LF50T4500UAK	Price

Honeywell MILLER

HP™ Harness

- Pull-Up adjustment back D-ring, tool belt loops, mating buckle chest and leg straps - universal (L/XL) size
- Comfort-touch back d-ring pad is designed with woven, breathable material for cooler extended wear comfort; orients harness for quick tangle free donning
- Self-contained label pack encapsulates labels minimizing damage and loss.
- Integrated and oversized pull-free lanyard rings
- Bright colors make the HP harnesses readily visible and easy to inspect



Order No.	Price
LF50650TUGK	Price

Honeywell MILLER

Miller Revolution™ Harness

- **Web Finials:** clip-on design safely organizes webbing after proper adjustment
- **PivotLink™ Connection:** unique rotary design provides greater comfort in bending/mobility
- **ErgoArmor™ Back Shield:** semi-flexible back shield minimizes impact from sharp/heavy snap hooks and self-retracting lifelines
- **Cam Buckles:** easy, one-hand adjustment/release allows simultaneous adjustment of shoulder straps
- **Self-Contained Label Pack:** integrated pack encapsulates labels minimizing damage and loss
- **Integrated Accessory System:** modular attachment design provides connection points for belts/tools/accessories



Order No.	Price
LF50RDTQCUBK	Price

Honeywell MILLER

Relief Step™ Safety Device

- Relief step safety devise in bulk quantity 36 pcs.
- Helps prevent suspension trauma
- Alleviates the effects of orthostatic intolerance
- Provides support and enhances blood circulation



Order No.	Price
LF50909936BULK	Price

Honeywell MILLER

DuraFlex® Harnesses

- Maximize Comfort: DuraFlex Harnesses conform to the shape of the worker, stretching with every movement, so there is no bunching, binding or kinking
- Improve Safety: With comfort unsurpassed, DuraFlex Harnesses offer wider end-user acceptance. And, a comfortable harness is worn properly, enhancing compliance and safety on the jobsite
- Increase Productivity: Because DuraFlex Harnesses are stretchable, the worker has greater mobility with less fatigue
- Specially-formulated elastomer webbing that stretches to provide greater comfort, improved safety and increased productivity
- Soft and flexible D-ring back pad further enhances comfort
- Self-contained label pack encapsulates labels minimizing damage and loss.
- Integrated and oversized pull-free lanyard rings



E650QCUGN



E6504UGN

Leg Strap Buckle	Chest Strap Buckle	Order No.	Price
Quick Connect	Quick Connect	LF50E650QCUGN	Price
Tongue Buckle	Mating	LF50E6504UGN	Price

Honeywell MILLER

Titan II ReadyWorker™ Fall Protection Kit

- New, improved harness webbing for greater comfort
- Titan harnesses include value-added safety features not found on many competitive brands:
  - Back strap and sub-pelvic strap for greater safety and increased comfort
  - Sliding back D-ring to adjust harness correctly
  - Easy adjustment for proper fit
  - Pull-free lanyard rings for convenience and added safety
- Fall protection for a variety of working-at-height applications
- Includes a waterproof storage container for convenience



Order No.	Price
LF50TFPK5U6FTAK	Price

Back Support

- Made of lightweight, cool, washable polyester
- Four plastic stays for flexible, contoured support
- Tapered design promotes better movement for proper back support
- Two sets of dual elastic stretch-bands for maximum, adjustable support


7161-7165


7261-7265

	Back Support		Hi-Vis Back Support	
Size	Order No.	Price	Order No.	Price
Small (28"-32")	LF707161	Price	LF707261	Price
Medium (32"-38")	LF707162	Price	LF707262	Price
Large (38"-47")	LF707163	Price	LF707263	Price
X-Large (46"-56")	LF707164	Price	LF707264	Price
2X-Large (54"-58")	LF707165	Price	LF707265	Price

ProFlex® 1650 Economy Back Supports

- Adjustable two-stage closure
- Single layer 5" elastic cinch strap
- Adjustable 1-1/2" knit elastic suspenders
- Detachable suspenders



Size	Order No.	Price
Medium	LF651650M	Price
Large	LF651650L	Price
X-Large	LF651650XL	Price
2X-Large	LF651650XXL	Price

ProFlex® 100 Economy Back Supports

- Durable 280D spandex
- Rubber-tracked webbing
- Adjustable two-stage closure
- Adjustable 1-1/4" knit elastic suspenders are detachable



Size	Order No.	Price
Medium	LF65100M	Price
Large	LF65100L	Price
X-Large	LF65100XL	Price
2X-Large	LF65100XXL	Price

ProFlex® 1100 Standard Back Supports

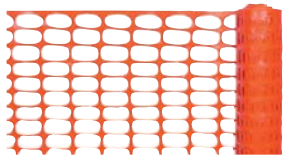
- Patented non-conductive Sticky Fingers® stays
- Durable 280D spandex body cloth
- Adjustable two-stage closure
- 1-1/4" Knit elastic suspenders
- Patented Power Panel™ positioners



Size	Order No.	Price
Medium	LF651100M	Price
Large	LF651100L	Price
X-Large	LF651100XL	Price
2X-Large	LF651100XXL	Price

Cortina 4'x100' Lightweight Barrier Fence

- Excellent temporary barrier for construction sites



Order No.	Price
LF45902	Price

Cortina Injection Molded Traffic Cone

- Most recognized traffic control device
- Consistent quality & weight
- PVC construction for long life
- Available with 4" & 6" reflective collars



Type	Height (in.)	Order No.	Price
Cone	28	LF4550007	Price
Cone with reflective collars	28	LF4550010	Price

Cortina 18" Colored Cones

- Injection molded polyethylene
- Provides excellent visual warning


50039 50041 50042 50040 50037 50038

Color	Order No.	Price
Blue	LF4550039	Price
Fluorescent Lime	LF4550041	Price
Fluorescent Orange	LF4550042	Price
Forest Green	LF4550040	Price
White	LF4550037	Price
Yellow	LF4550038	Price

Safety Cones

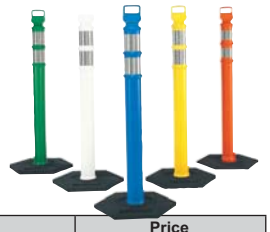
- 100% PVC injection molded cone
- Bright fluorescent red-orange with UV inhibitor
- Cleated base allows firm grip to the road
- Superior flexibility in any kind of adverse weather condition



Height (in.)	Type	Order No.	Price
18	Safety Cone	LF70750018	Price
18	Safety Cone with Reflective Bar	LF70750118	Price
28	Safety Cone	LF70750028	Price
28	Safety Cone with Refective Bar	LF70750128	Price

Cortina 51" Colored Delineator Posts

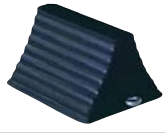
- EZ-Grab™ handle provides portability
- (2) 3" Hi-Intensity reflective collars
- 100% Recycled rubber base
- Excellent safety hazard marking device
- Base weight: 10 lbs.



Color	Order No.	Price
Blue	LF45747BRBC	Price
Forest Green	LF45747GRBC	Price
Orange	LF45747RBC	Price
White	LF45747WRBC	Price
Yellow	LF45747YRBC	Price

Cortina Wheel Chock

- Loading docks, warehouses, etc.
- Available with 12" chain
- Weight: 9 lbs.



Contents	Order No.	Price
1 Chock	LF452048WC	Price
1 Chock with 12' Chain	LF452048WCC	Price

PROLOCK 2-in-1 Non-Marring Knee Pads



- Removable K-Resin hard outer shell redirects pressure from your knees
- Custom-molded EVA foam disperses body weight and conforms to your knees to provide maximum stability
- Single strap design and fits any size leg from 10.5 to 30-inches around
- Lightweight construction
- Both K-Resin outer shell and foam pad will not leave marks or scratches

Order No.	Price
KE5393176	Price

PROLOCK Foam Knee Pads



- Superior abrasion resistance
- Custom-molded EVA foam disperses bodyweight
- Twist-to-lock thumbscrew and anchor system allows attachment of optional protective caps
- Adjustable truss system fits any size calf to help prevent strained muscles and ligaments
- Pull tabs on the straps allow easy adjustment while wearing gloves

Order No.	Price
KE5393180	Price

ProFlex® 335 Slip Resistant Knee Pads



- Slip-resistant design
- Tough-as-nails 840D nylon
- 12mm NBR foam treatment
- Wicked™ treated
- Anti-bacterial foam padding
- Velcro or buckle closure
- **One size fits all**
- Price per set

Style	Order No.	Price
Buckle Closure	**LF65335B**	Price
Velcro Closure	**LF65335V**	Price

ProFlex® 350 Gel Knee Pad



- 12mm NBR gel padding & 20mm EVA padding
- Cut-resistant, abrasion-resistant, and non-marring 420D nylon & Hypalon® rubber composite pad
- Slip-resistant durable nylon-rubber
- 1680D ballistic nylon outer shell
- Breathable neoprene stretch strap
- **One size fits all**
- Price per set

Order No.	Price
LF65350	Price

PROLOCK Gel Knee Pads



- Superior abrasion resistance
- Lightweight compression gel absorbs hard impacts and delivers greater comfort
- Twist-to-lock thumbscrew and anchor system allows attachment of optional protective caps
- Adjustable truss system fits any size calf to help prevent strained muscles and ligaments
- Pull tabs on the straps allow easy adjustment while wearing gloves

Order No.	Price
KE5393181	Price

PROLOCK Foam Knee Pads PLUS



- Polyethylene outer shell and 1680D polyester inner lining construction
- Custom-molded EVA foam disperses body weight and provides maximum stability
- Straps are fully adjustable and fit any leg size from as small as 12.5-inches around to 29-inches around
- Combination elastic/neoprene/buckle thigh and calf straps comfortably hold knee pad in place without cutting off circulation
- Built-in pencil/ruler holder offers added storage for essential tools

Order No.	Price
KE5393182	Price

ProFlex® Gel Knee Pads



- Non-slip rubber cap grips kneeling surface
- Elastic straps

Style	Material	Order No.	Price
Short Cap	Lightweight Gel + EVA foam	**LF6518457**	Price
Extra Long Cap	Injected Gel + PU Foam	**LF6518442**	Price

SAS Deluxe Knee Pads



Hard Cap:
- Plastic cap over tough nylon fabric with soft foam rubber core
- Water and abrasion resistant
- Easy-to-use hook-and-loop closures

Gel:
- Super-thick 1/2" high density closed-cell foam
- Large, low-profile cap designed to prevent "roll over"
- Anti-compression air injected gel
- Easy-to-use hook-and-loop closures



Style	Order No.	Price
Gel	**LF707105**	Price
Hard Cap	**LF707102**	Price

ProFlex® 300 Round Cap Knee Pads



- Rounded cap allows for swiveling and pivoting
- 840D nylon fabric
- 12mm NBR foam padding
- Velcro or buckle closure
- Woven elastic straps
- Anti-bacterial treatment
- **One size fits all**
- Price per set

Style	Order No.	Price
Buckle Closure	**LF65300B**	Price
Velcro Closure	**LF65300V**	Price

PROLOCK Hard Caps for Knee Pads



- Interchangeable cap to give your Prolock Kneepads added versatility
- Twist-to-lock thumbscrew and anchor system ensures your cap stays put
- Smooth plate surface allows for quick-pivoting and side-to-side movements
- Lightweight construction won't add unnecessary weight

Order No.	Price
KE5393178	Price

PROLOCK Non-Marring Caps for Knee Pads



- Interchangeable cap to give your Prolock Kneepads added versatility
- Flexible copolymer construction is non-marring and shields working surfaces from damage
- Twist-to-lock thumbscrew and anchor system ensures your cap stays put
- Lightweight construction won't add unnecessary weight

Order No.	Price
KE5393179	Price

PROLOCK Gel Knee Pads PLUS



- Polyethylene outer shell and 1680D polyester inner lining construction
- Lightweight TPE compression gel absorbs hard impacts and delivers greater comfort and stability
- Straps are fully adjustable and fit any leg size from as small as 12.5-inches around to 29-inches around
- Combination elastic/neoprene/buckle thigh and calf straps comfortably hold knee pad in place without cutting off circulation
- Built-in pencil/ruler holder offers added storage for essential tools

Order No.	Price
KE5393183	Price

PROLOCK Wet Surface Knee Pads



- Perfect for wet and dirty jobs
- Accordion-flex top keeps debris off your clotheswalking
- Single strap design is easy to put on, avoids bunching, and won't retain moisture
- Single rubber strap is waterproof and helps avoid painful bunching and fits any size leg from 11 to 25" around
- Waterproof, flexible PVC outer shell and closed cell EVA inner foam

Order No.	Price
KE5393177	Price

ProFlex® 670 Ambidextrous Single Strap Wrist Supports



- Supplemental support to help relieve stress associated with repetitive strain and overuse injuries
- Ambidextrous
- Reversible hook & loop strap
- Neoprene

Size	Order No.	Price
Medium	LF6516613	Price
Large	LF6516614	Price
X-Large	LF6516615	Price

ProFlex® 500 Elbow Supports



- Durable construction for tough environments
- Provides wide base of support
- Effective relief from pain and discomfort
- Nylon-laminated neoprene sleeve
- Adjustable cinch strap for exact fit

Size	Order No.	Price
Medium	LF65500M	Price
Large	LF65500L	Price
X-Large	LF65500XL	Price

ProFlex® 4000 Wrist Supports



- Limits downward wrist movements
- Fully-adjustable for an exact fit
- Patented Open-Center Stay™ reduces pressure on the median nerve
- Anti bacterial treatment interior fabric
- Two-stage hook & loop closure
- Exclusive "red line" indicator
- Sold individually

	Left		Right	
Size	Order No.	Price	Order No.	Price
Medium	LF654000LM	Price	LF654000RM	Price
Large	LF654000LL	Price	LF654000RL	Price

PRM PRO Protective Vinyl Apron Blue – Die cut neck hold



- High Quality 6mil virgin vinyl apron
- Resistance to acids, alkalis, solvents, chemical oils, fats, grease, and salts
- Inexpensive way to protect body and clothing
- 35" W x 54" L
- Die cut around neck
- No strings attached, fastening ties part of apron
- Sold 12 Per Pack

Order No.	Price Per Pack
KB38Z1005	Price

PRM PRO Protective Vinyl Apron Blue- Die Cut neck hold



- High Quality 6mil virgin vinyl apron
- Resistance to acids, alkalis, solvents, chemical oils, fats, grease, and salts
- Inexpensive way to protect body and clothing
- 35" W x 48" L
- White strings included for neck and body tying
- Sold by dozen only

Order No.	Price
KB38Z1000	Price

PROTO 2-Pocket Waist Apron

- Heavy duty water resistant #10 canvas material
- Triple-stitched bindings and waist ties

New!

MADE IN THE USA



Model No.	Order No.	Price
J95350	**KP4292655**	Price

Professional Denim Apron

- General purpose denim apron is unbeatable around the shop or home
- Overall length 35-1/2”
- Large neck strap and waist ties
- 1 Small bib pocket, 1 larger waist pocket
- Color: blue denim

WORLD CLASS QUALITY



Order No.	Price
LM55LS500	Price

PRM PRO Machinist's Aprons

- Great for many applications: maintenance, manugacturing, construction
- Multiple pocket configurations
- Available in cotton, polyester & denim
- Colors: navy, tan, white & black

New!



No. of Pockets	Size	Material	Color	Order No.	Price
3-Pocket	28" x 38"	Denim	Blue	**KB391015**	Price
3-Pocket	29" x 38"	Cotton	Tan	**KB391020**	Price
5-Pocket	35" x 27"	Polyester	Navy	**KB391000**	Price
5-Pocket	35" x 27"	Polyester	Tan	**KB391005**	Price
5-Pocket	35" x 27"	Polyester	White	**KB391010**	Price

MCR SAFETY Heavy Duty Work Apron

- PVC Polyester blended material .45mm
- Flame retardant ASTMD6413
- Adjustable strap and double welded seams for sturdy universal fit
- Good resistance to acids, chemicals and caustics



Size (in.)	Order No.	Price
35 x 48	**KB51368R5**	Price

STEINER Leather Bib Apron

- Stitched with Kevlar
- Rivet reinforced stress points
- Adjustable nylon straps with quick release buckle
- Bib style aprons have 2-compartment chest pocket
- Weld-Rite aprons are quality crafted from four or less split cowhide pieces providing fewer seams and more comfort

Great For Welding!



Size (in.)	Order No.	Price
24 x 36	**RT5892165**	Price

WESTCHESTER Disposable Protective Coveralls

Microporous film technology

- Breathable advantage
- Protection against dry particulate and light liquid sprays
- Anti-static
- Meets ASTM 1670 for protection against blood born pathogens
- Meets ANSI sizing standards for wide range of motion
- Color: white

Proprietary SMMMS technology

- Three layers of melt blown polypropylene
- Breathable with protection against dry particulate, light liquid sprays and splashes
- Anti-static
- Color: white

Case Qty. 25



Style - Collar, Zipper Front, Elastic Wrist & Ankle				
	Micropourus		SMMMS	
Size	Order No.	Price per Case	Order No.	Price per Case
Large	**KP883602L**	Price	**KP88C3802L**	Price
X-Large	**KP883602XL**	Price	**-**	-
2X-Large	**KP8836022XL**	Price	**KP88C3802XXL**	Price
3X-Large	**KP8836023XL**	Price	**-**	-

Style - Collar, Zipper Front, Open Wrist				
	Micropourus		SMMMS	
Size	Order No.	Price per Case	Order No.	Price per Case
Large	**KP883600L**	Price	**KP88C3800L**	Price
X-Large	**KP883600XL**	Price	**KP88C3800XL**	Price
2X-Large	**KP8836002XL**	Price	**KP88C3800XXL**	Price
3X-Large	**KP8836003XL**	Price	**-**	-

Style - Hood, Zipper Front, Elastic Wrist & Ankle				
	Micropourus		SMMMS	
Size	Order No.	Price per Case	Order No.	Price per Case
Large	**KP883606L**	Price	**KP88C3806L**	Price
X-Large	**KP883606XL**	Price	**-**	-
2X-Large	**KP8836062XL**	Price	**KP88C3806XXL**	Price
3X-Large	**KP8836063XL**	Price	**-**	-

Style - Hood, Zipper Front, Elastic Wrist Attached Boots				
	Micropourus		SMMMS	
Size	Order No.	Price per Case	Order No.	Price per Case
Large	**KP883609L**	Price	**-**	-
X-Large	**KP883609XL**	Price	**-**	-
2X-Large	**KP8836092XL**	Price	**KP88C3809XXL**	Price
3X-Large	**KP8836093XL**	Price	**KP88C3809XXXL**	Price

WESTCHESTER Flame Resistant Disposable Protective Coveralls

- Used as a secondary level of protection over higher priced FR garments
- Anti-static
- Meets NFPA 701 standards for flame resistance
- Meets ANSI sizing standards for wide range of motion
- Color: blue

Sold in case quantity - 25 per case



Style - Collar, Zipper Front, Open Wrist		
Size	Order No.	Price per Case
Large	**KP883100L**	Price
X-Large	**KP883100XL**	Price
2X-Large	**KP8831002XL**	Price
3X-Large	**KP8831003XL**	Price

Style - Hood, Zipper Front, Elastic Wrist & Ankle		
Size	Order No.	Price per Case
Large	**KP883106L**	Price
X-Large	**KP883106XL**	Price
2X-Large	**KP8831062XL**	Price
3X-Large	**KP8831063XL**	Price

Style - Hood, Zipper Front, Elastic Wrist Attached Boots		
Size	Order No.	Price per Case
Large	**KP883109L**	Price
X-Large	**KP883109XL**	Price
2X-Large	**KP8831092XL**	Price
3X-Large	**KP8831093XL**	Price

Chill-Its® 6615 High-Performance Dew Rags

- Hi Cool® moisture management performance fabric
- Comfortable to wear under hats, helmets or alone
- Absorbent terry headband
- Elastic band for a great fit



Color	Order No.	Price
Blue	**LF6512481**	Price
Camo	**LF6512478**	Price
Flames	**LF6512485**	Price
Hi-Vis Lime	**LF6512476**	Price
Navy Western	**LF6512480**	Price
Red Western	**LF6512479**	Price
Stars & Stripes	**LF6512477**	Price

Chill-Its® 6710CT Evaporative Cooling Triangle Hat & 6700CT Bandana

- Advanced PVA material activates easily and quickly when run under water for one minute
- Re-usable: just soak in water to reactivate
- Super-evaporative cooling process helps keep you cool
- Lightweight and low profile: perfect for under hard hats
- Tie closure
- Patented design







	Bandana Headband		Triangle Hat	
Color	Order No.	Price	Order No.	Price
Blue	**LF656700CTB**	Price	**LF656710CTB**	Price
Camo	**LF656700CTC**	Price	**LF656710CTC**	Price
Flames	**LF656700CTF**	Price	**LF656710CTF**	Price
Stars & Stripes	**LF656700CTSS**	Price	**LF656710CTSS**	Price

Backscratcher Magnetic Pick Up Tool

- Stainless steel shaft
- 5 Section
- Nickle plated claw
- 8-1/4" to 27"
- Dipped handle

New!



Order No.	Price
KP8232913	Price

Chill-Its® Evaporative Cooling Towels

- Advanced PVA cooling technology
- Super-evaporative, feels significantly cooler than ambient air
- Activates fast and easy- run under cold water for one minute
- Wear for hours or for quick relief
- Simply re-wet to reactivate
- Machine washable



Color	Size	Order No.	Price
Blue	13" x 30"	**LF6512420**	Price
Hi-Viz Lime	13" x 30"	**LF6512439**	Price
Pink	13" x 30"	**LF6512442**	Price

Chill-Its® 6700 Bandana/Headband & 6710 Triangle Tie Hat

- Evaporative cooling process keeps you cool all day, reduces the effects of heat stress, and fights fatigue
- Lightweight, comfortable cotton construction
- Super absorbent acrylic polymer activates easily and quickly when soaked in cold water 2-5 minutes
- Remains hydrated, providing cool comfort for up to 4 hours
- Reusable, just resoak






Camo


Navy Blue


Navy Western


Red Western


Stars & Stripes

	Bandana Headband		Triangle Hat	
Color	Order No.	Price	Order No.	Price
Camo	**LF656700C**	Price	**LF656710C**	Price
Navy Blue	**LF656700B**	Price	-	-
Navy Western	**LF656700N**	Price	**LF656710B**	Price
Red Western	**LF656700R**	Price	**LF656710R**	Price
Stars & Stripes	**LF656700SS**	Price	**LF656710SS**	Price

Coveralls

KLEENGUARD® XP:

- Better than Tyvek® at an everyday value price
- Passes NFPA 99 criteria for anti-static materials
- Better liquid and particulate barrier than Tyvek®

MICRO-MAX®:

- Can be used in any non-hazardous enviroment
- Use where dirt, spills and splashes, and grime is present
- Lightweight and breathable for work comfort



		Kimberly-Clark Professional				Lakeland	
		Coverall White		White Coverall with Elastic/Wrist & Ankle		Coverall White	
Size	Pack	Order No.	Price	Order No.	Price	Order No.	Price
Large	25	**LM5544303**	Price	**LM5544313**	Price	**KB51CTL412L**	Price
X-Large	25	**LM5544304**	Price	**LM5544314**	Price	-	-
2X-Large	25	**LM5544305**	Price	**LM5544315**	Price	**KB51CTL4122XL**	Price
3X-Large	25	-	-	-	-	**KB51CTL4123XL**	Price

Cut-Resistant Rating Standards (prior 2016)



Buying and wearing the correct glove is the most critical factor in proper hand protection. It's even more important to understand cut resistant gloves and the features they hold. Cut-resistant gloves come in various fabrics offering different level of cut resistance. It's important to consider the requirements of a particular work environment when choosing a glove material. The ASTM ANSI standard measures the amount of pressure one can apply to a razor blade while moving the blade across a fabric without cutting through the fabric for at least 0.8 inch. Not all gloves are tested and have ratings as of this print. We have indicated over the next few glove pages those gloves that have been tested and have a ratings; they have a rating symbol such as this ANSI 5. For the exact definition of the ASTM standards for gloves please research ASTM F 1790 '05, ASTM F 1790 '97 and ISO 13997. If you're not sure of what type of glove you need for an application, please contact our customer service department for assistance to assure you purchase gloves that will best protect you in the environment you're working in.

ANSI 5 Extreme cut exposure: heavy metal stamping, plate glass handling, meat and poultry, some pulp and paper applications

ANSI 4 High cut exposure: metal stamping, sheet metal handling, glass handling, food service

ANSI 3 Moderate cut exposure: light metal stamping, light-duty glass handling applications

ANSI 2 Low cut exposure: construction, automotive assembly, packaging, some masonry applications

ANSI 1 Nuisance cut exposure: paper cuts, automotive maintenance, parts assembly, material handling

These recommendations are of a general nature and are not specific to everyone's needs. Always ensure your selected glove complies with the mandated safety standard recommended for your application.

ANSI/ISEA 105 (2005/2011)		ANSI/ISEA 105 (2016)	
Old Cut Level Rating	Weight (grams) needed to cut thru material*: **ASTM F1790-97 or ASTM F1790-05**	Weight (grams) needed to cut thru material**: **ASTM F2992/F2992M-15 (20mm of blade travel)**	**NEW Cut Level Rating**
0	**< 200**	**n/a**	**n/a**
1	**≥ 200**	**≥ 200**	**A1**
2	**≥ 500**	**≥ 500**	**A2**
3	**≥ 1000**	**≥ 1000**	**A3**
4	**≥ 1500**	**≥ 1500**	**A4**
5	**≥ 3500**	**≥ 2200**	**A5**
n/a	**n/a**	**≥ 3000**	**A6**
n/a	**n/a**	**≥ 4000**	**A7**
n/a	**n/a**	**≥ 5000**	**A8**
n/a	**n/a**	**≥ 6000**	**A9**
* 25mm (1.0 in.) of blade travel – ASTM F1790-97 20mm (0.8 in.) of blade travel – ASTM F1790-05		** 20mm (0.8 in.) of blade travel	

ANSI A1 **ANSI A2** **ANSI A3** **ANSI A4** **ANSI A5** **ANSI A6** **ANSI A7** **ANSI A8** **ANSI A9**

Updated ANSI/ISEA cut rating standards* (as of 3/2016)

ANSI/ISEA cut resistance standards are based on a more specific range of testing system; ASTM F2992-15, only implemented on one type of machine the TDM 100. Testing samples are cut along a straight path using a straight-edged blade under applied force. The European ISO 13997 test method will also only use the TDM 100; known as the EN388 standard. This new F2992 standard utilizes a measured cut ranking from ANSI A1 thru ANSI A9 (ANSI/ISEA 2016) which utilizes almost twice the scale measurements from the **1-5** (ISEA 105-2011) scale ranking which has been used since 2011. The European EN 388 guidelines will continue to use newtons.

*This is a shorten construed version of cut rating standards, please contact your glove supplier for an exacting definition of the above-mentioned standards prior to choosing gloves for your application; this to assure the best safety environment for your working application, and for the unabridged description of glove cut ratings standards.

SHOWA 406

- Protects hands down to -30°C for short or intermittent contact
- Water repellent surface combined with thermal liner keeps hands warm and dry
- Aerated material reduces heat loss via conduction and eliminates convection by trapping warm air inside the glove
- Engineered liner and foam latex dissipates sweat and moisture to prevent hands getting cold
- Coating technology enhances high level of flexibility and reduces fatigue
- Seamless liner prevents irritation
- Rough textured finish to palm coating
- **Coating:** latex
- **Liner:** acrylic/nylon/polyester
- **Color:** orange/black

New!



Size	Order No.	Price
Medium	**SG2504185**	Price
Large	**SG2504190**	Price
X-Large	**SG2504195**	Price
2X-Large	**SG2504200**	Price

MCR 9665 Memphis™ Nylon

- 13 Gauge white nylon shell
- White PU coated palm and fingertips
- Good tactile sensitivity, dexterity and abrasion resistant
- Made without silicone
- CE score 2121



Size	Order No.	Price
Medium	**KB519665M**	Price
Large	**KB519665L**	Price
X-Large	**KB519665XL**	Price

MCR 9688 Flex Tuff® II

- Improves grip
- Natural rubber provides abrasion resistance
- Excellent comfort and fit
- Textured palm latex for extra grip and durability
- 10 Gauge



Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB519688M**	Price	Price	Price
Large	**KB519688L**	Price	Price	Price
X-Large	**KB519688XL**	Price	Price	Price

KleenGuard® Protective Apparel G40 Latex Coated

- Crinkled latex for excellent grip
- Highest tear rating of 4 out of 4 (EN388)
- Breathable cotton back
- **Caution**: this product contains natural rubber latex, which may cause allergic reactions
- Color: gray & black
- Priced per pair



Size	Order No.	Price
7 - Small	**LM5597270**	Price
8 - Medium	**LM5597271**	Price
9 - Large	**LM5597272**	Price
10 - X-Large	**LM5597273**	Price
11 - 2X-Large	**LM5597274**	Price

MCR 9680 Flex Tuff® Premium Latex Coated Strings

- Blue textured latex palm & fingertips dipped
- 10 Gauge
- 50% Cotton / 50% polyester shell
- Maximum flexibility
- CE Score 2142

ANSI 2



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB519680L**	Price	Price	Price
X-Large	**KB519680XL**	Price	Price	Price

MCR N9680 Ninja® Flex

- 15 Gauge red
- Crinkle latex coating providing superb flexibility, elasticity and duarbility
- Excellent for dry gripping
- Treated with Actifresh® to kill bacteria and promote freshness
- Component materials comply with all relevant federal regulations for food contact



Size	Order No.	1 pair	12 pair	144 pair
Small	**KB51N9680S**	Price	Price	Price
Medium	**KB51N9680M**	Price	Price	Price
Large	**KB51N9680L**	Price	Price	Price
X-Large	**KB51N9680XL**	Price	Price	Price

SHOWA S-TEX300

- High abrasion resistance
- Optimal wet & dry grip
- Breathable, ventilated back
- Increased visibility in low light
- **Coating:** natural rubber
- **Liner:** Hagane Coil®/polyester/stainless steel
- **Color:** fluorescent yellow/black palm

ANSI A4

New!



Size	Order No.	Price
Small	**SG2503315**	Price
Medium	**SG2503320**	Price
Large	**SG2503325**	Price
X-Large	**SG2503330**	Price

SHOWA Atlas® 451

- Quick drying
- Excellent wet & dry grip
- Breathable
- Good mechanical resistance
- Insulated, high warmth
- Ergonomic design
- **Coating:** natural rubber
- **Liner:** polyester/cotton/acylic
- **Color:** light gray/gray palm

New!



Size	Order No.	Price
Small	**SG2502730**	Price
Medium	**SG2502735**	Price
Large	**SG2502740**	Price
X-Large	**SG2502745**	Price

SHOWA Atlas®300

- Excellent wet & dry grip
- No irritating seams
- Ergonomic design reduces hand fatigue
- Machine washable
- **Coating:** natural rubber
- **Liner:** polyester, cotton, 10-gauge
- **Color:** gray

New!



Size	Order No.	Price
Small	**SG2501855**	Price
Medium	**SG2501860**	Price
Large	**SG2501865**	Price
X-Large	**SG2501870**	Price
2X-Large	**SG2501875**	Price

Honeywell NORTH NorthFlex Red™

- Lightweight, 15 gauge nylon glove with foam PVC coating on palm and fingertips, no coating on back of hand for added ventilation
- Color: red nylon and black PVC



Size	Order No.	Price
Medium	**KB65NF118M**	Price
Large	**KB65NF119L**	Price
X-Large	**KB65NF1110XL**	Price

MCR SAFETY N9696 Ninja® Lite



- Polyurethane coated palms and fingertips
- 18 Gauge athletic grade nylon shell
- Feather-light second skin feeling
- 30% Lighter for extreme tactile sensitivity
- CE score 4131

Size	Order No.	Price
Small	**KB51N9696S**	Price
Medium	**KB51N9696M**	Price
Large	**KB51N9696L**	Price
X-Large	**KB51N9696XL**	Price

SHOWA 240

New!

ANSI A4



- Forged with flame and cut-resistant materials
- 13-Gauge seamless knit liner reinforced
- **Coating:** neoprene
- **Liner:** Kevlar®/modacrylic/fiberglass
- **Color:** gray/black palm

Size	Order No.	Price
Small	**SG2503965**	Price
Medium	**SG2503970**	Price
Large	**SG2503975**	Price
X-Large	**SG2503980**	Price
2X-Large	**SG2503985**	Price

SHOWA Atlas® 341



New!

- Improved coating for even more enhanced grip
- Breathable knit & coating
- Superior flexibility & softness
- Mimics the curvature of the hand to reduce fatigue
- **Coating:** natural rubber
- **Liner:** polyester, cotton, 13-gauge
- **Color:** blue/black palm

Size	Order No.	Price
Small	**SG2502005**	Price
Medium	**SG2502010**	Price
Large	**SG2502015**	Price
X-Large	**SG2502020**	Price

Honeywell WorkEasy® Lite Gloves



- Ultra-lightweight allowing for excellent dexterity
- 18 Gauge
- Polyurethane palm coating
- Nylon shell
- Color: blue/gray

Size	Order No.	Price
Medium	**KB65WE50M**	Price
Large	**KB65WE50L**	Price
X-Large	**KB65WE50XL**	Price

MCR SAFETY 92723PU Cut Pro™ Cut Resistant



ANSI 2

- Salt and Pepper 13 gauge HPPE shell
- Black polyurethane coated palm & fingers
- CE score 4343
- Seamless shell is comfortable, cool, and easy to wear

Size	Order No.	Price
Medium	**KB5192723PUM**	Price
Large	**KB5192723PUL**	Price
X-Large	**KB5192723PUXL**	Price

WESTCHESTER PROTECTIVE GEAR 720DGU Cut Resistant



ANSI 2

- High dexterity polyurethane palm
- Black/gray speckle hides dirt for longer wear
- Silicone free

Size	Order No.	Price
Medium	**KP8872000**	Price
Large	**KP8872005**	Price
X-Large	**KP8872010**	Price
2X-Large	**KP8872015**	Price

WELLS LAMONT Industrial Y9277 FlexTech™ Synthetic Knit Shell with PU Palm

New!



ANSI 2

- FlexTech high performance polyethylene fibers (HPPE) and gray nylon blend with gray palm coating
- Provides a good balance of comfort, dexterity and cut resistance
- Polyurethane palm coating provides excellent grip and tactility
- Perfect for general assembly and applications in which cut resistance is required
- Launderable for a longer wear life

Size	Order No.	Price
Small	**LW0110735**	Price
Medium	**LW0110740**	Price
Large	**LW0110745**	Price
X-Large	**LW0110750**	Price
XX-Large	**LW0110755**	Price

WELLS LAMONT Industrial Y9275 FlexTech™ HPPE Shell with PU Palm



New!

ANSI 2

- FlexTech™ high performance polyethylene fibers (HPPE) and gray nylon blend with gray palm coating
- Provides a good balance of comfort, dexterity and cut resistance
- Polyurethane palm coating provides excellent grip and tactility
- Perfect for general assembly and applications in which cut resistance is required
- Launderable for a longer wear life

Size	Order No.	Price
X-Small	**LW0110695**	Price
Small	**LW0110700**	Price
Medium	**LW0110705**	Price
Large	**LW0110710**	Price
X-Large	**LW0110715**	Price
XX-Large	**LW0110720**	Price

WESTCHESTER PROTECTIVE GEAR PU Coated General Purpose



- Lightweight polyester shell
- Polyurethane palm for increased tactile sensitivity and dexterity
- General purpose glove for a variety of applications
- Silicone free

	13 Gauge		15 Gauge	
	Gray		Gray / Black	
Size	Order No.	Price	Order No.	Price
Medium	**KP8872065**	Price	**KP8872090**	Price
Large	**KP8872070**	Price	**KP8872095**	Price
X-Large	**KP8872075**	Price	**KP8872100**	Price
2X-Large	**KP8872080**	Price	**KP8872105**	Price

PRM PRO All-Purpose Foam Coated



- Black nitrile coated palm glove
- Made for comfort and easy dexterity
- Use in many industrial applications
- 13 Gauge nylon shell
- Color: black

Size	Order No.	1 pair	12 pair	144 pair
Small	**KB38600S**	Price	Price	Price
Medium	**KB38600M**	Price	Price	Price
Large	**KB38600L**	Price	Price	Price
X-Large	**KB38600XL**	Price	Price	Price

PRM PRO Multi-Purpose Nitrile



- 100% Gray nitrile dipped fingers and palms
- Outstanding comfort and fit
- Superior tactile sensitivity
- 13 Gauge nylon shell

Size	Order No.	1 pair	12 pair	144 pair
Small	**KB38625S**	Price	-	-
X-Small	**KB38625XS**	Price	-	-
Medium	**KB38625M**	Price	Price	Price
Large	**KB38625L**	Price	Price	Price
X-Large	**KB38625XL**	Price	Price	Price

SHOWA Atlas® 380



- Strong grip on wet & dry surfaces
- Open back reduces perspiration
- Extended-cuff for added protection
- Mimics the curvature of a human hand to reduce fatigue
- Optimal dexterity and comfort
- Lint-free liner
- **Coating:** foam nitrile
- **Liner:** seamless knit, 13-gauge
- **Color:** blue/black palm

New!

Size	Order No.	Price
Small	**SG2502300**	Price
Medium	**SG2502305**	Price
Large	**SG2502310**	Price
X-Large	**SG2502315**	Price

Honeywell Pure Fit™ General Purpose Gloves



- Lightweight 13 gauge nylon liner is abrasion-resistant, low-lining and provides excellent tactile sensitivity
- Foam nitrile coating is breathable, is excellent in oily work applications and helps to reduce incidental cuts
- Palm dipped design helps reduce hand fatigue and offers great dexterity and tactile sensitivity
- Color: black

Size	Order No.	Price
Medium	**KB65393M**	Price
Large	**KB65393L**	Price
X-Large	**KB65393XL**	Price
2X-Large	**KB65393XXL**	Price

KleenGuard® G40 Blue Nitrile Foam Coated



- Exclusive Nitrile Glove Technology
- 25% Better productivity than leather
- Abrasion rating of 4 out of 4 (EN388 Standards)
- Color: blue & black

Size	Order No.	Price
7 - Small	**LM5540225**	Price
8 - Medium	**LM5540226**	Price
9 - Large	**LM5540227**	Price
10 - X-Large	**LM5540228**	Price
11 - 2X-Large	**LM5540229**	Price

WELLS LAMONT Y9289 FlexTech™ Synthetic Knit Shell with Full NBR Coating and Nitrile Palm



- Light weight synthetic knit shell with double coating
- Sandy nitrile coated palm and fingertips affords excellent gripping
- Full NBR coating provides an extra layer of protection against liquids
- Offers great flexibility and dexterity
- Water resistant

ANSI 1

New!

Size	Order No.	Price
X-Small	**LW0110790**	Price
Small	**LW0110795**	Price
Medium	**LW0110800**	Price
Large	**LW0110805**	Price
X-Large	**LW0110810**	Price
XX-Large	**LW0110815**	Price

SHOWA Atlas® 370B



- Excellent dry grip
- High flexibility & dexterity
- Breathable, ventilated back
- Designed for easy movement & continuous wear
- Machine washable
- **Coating:** Nitrile
- **Liner:** nylon, 13-gauge

New!

Size	Order No.	Price
Small	**SG2502250**	Price
Medium	**SG2502255**	Price
Large	**SG2502260**	Price
X-Large	**SG2502265**	Price
2X-Large	**SG2502270**	Price

SHOWA 377



- Excellent wet & oil grip
- Liquid-resistant to knit wrist
- Warmth, protection and comfort
- Splash protection against wide range of chemical substances
- Mimics the curvature of a human hand to reduce fatigue
- **Coating:** nitrile, foam nitrile
- **Liner:** seamless knit, 13-gauge
- **Color:** blue/black palm
- Sold per case - 12 dozen per case

New!

Size	Order No.	Price
Small	**SG2502170**	Price
Medium	**SG2502175**	Price
Large	**SG2502180**	Price
X-Large	**SG2502185**	Price
2X-Large	**SG2502190**	Price

Honeywell NORTH NorthFlex-Oil Grip™ Gloves



- Lightweight, 13 gauge nylon seamless knit glove
- Foam nitrile coating features microscopic pockets that disperse fluid away from the surface for excellent grip and control
- Handling of fine products in a greasy or damp atmosphere
- Color: green/black

Size	Order No.	Price
Medium	**KB65NF358M**	Price
Large	**KB65NF359L**	Price
X-Large	**KB65NF3510XL**	Price

WESTCHESTER 715SNFTP Nitrile Micro Foam



- 15 Gauge lightweight nylon shell
- Black foam nitrile coating
- Micro capillaries channel oil from glove surface
- Excellent abrasion with superior gripping ability
- Anti bacterial, silicone free

ANSI 1

Size	Order No.	Price
Medium	**KP8872020**	Price
Large	**KP8872025**	Price
X-Large	**KP8872030**	Price
2X-Large	**KP8872035**	Price

SHOWA CHMY



- Comfortable, flexible & tactile sensitive
- Embossed tractor-tread grip that encourages run off of fluids
- Good resistance to a broad range of chemicals
- Wear indicator over-dip
- **Thickness:** 22 mil
- **Coating:** neoprene over natural rubber
- **Liner:** unsupported cotton-clock

New!

Size	Order No.	Price
Small	**SG2501100**	Price
Medium	**SG2501105**	Price
Large	**SG2501110**	Price
X-Large	**SG2501115**	Price

WELLS LAMONT Industrial Y9294 Vis-Tech™ Cut Resistant PU Palm Dipped Gloves



- Lightweight and breathable cut resistant shell provides all-day comfort and protection
- Soft and flexible PU palm coating delivers excellent grip and dexterity
- Hi-vis orange
- Launderable for a longer wear life

ANSI 4

New!

Size	Order No.	Price
Small	**LW0110825**	Price
Medium	**LW0110830**	Price
Large	**LW0110835**	Price
X-Large	**LW0110840**	Price
XX-Large	**LW0110845**	Price

SHOWA 541



- Protects from oils & grease
- Resistance to abrasion & tears
- Lightweight, breathable liner
- Dark color extends number of wears
- Fully launderable
- **Coating:** polyurethane
- **Liner:** HPPE
- **Color:** gray/gray palm

New!

ANSI A2

Size	Order No.	Price
Small	**SG2503470**	Price
Medium	**SG2503475**	Price
Large	**SG2503480**	Price
X-Large	**SG2503485**	Price
2X-Large	**SG2503490**	Price

MCR SAFETY 9676 UltraTech® Dyneema®



- 13 Gauge Dyneema® shell
- Black polyurethane coating on palm and fingertips
- CE Score 4343

ANSI 3

Size	Order No.	1 pair	12 pair	144 pair
Small	**KB519676S**	Price	Price	Price
Medium	**KB519676M**	Price	Price	Price
Large	**KB519676L**	Price	Price	Price
X-Large	**KB519676XL**	Price	Price	Price

WESTCHESTER PROTECTIVE GEAR High Visibility



- High visibility yellow back creates awareness
- Orange foam nitrile palm provides excellent grip
- Silicone free
- Cut Resistant

ANSI 4

Size	Order No.	Price
Medium	**KP8872040**	Price
Large	**KP8872045**	Price
X-Large	**KP8872050**	Price
2X-Large	**KP8872055**	Price

SHOWA 306



- Enhanced grip and abrasion resistance
- Ergonomic design replicates a hand's natural curvature
- Enhanced breathability and reduced perspiration
- Premium fit and soft comfort
- Impermeability defies liquids
- Engineered coating for maximum flexibility
- No irritation from seams on skin
- **Coating:** natural rubber
- **Liner:** polyester/cotton/13-gauge
- **Color:** blue/black palm

New!

Size	Order No.	Price
Small	**SG2501940**	Price
Medium	**SG2501945**	Price
Large	**SG2501950**	Price
X-Large	**SG2501955**	Price
2X-Large	**SG2501960**	Price

WELLS LAMONT Industrial Y9287 FlexTech™ Synthetic Knit Shell with PU Palm



- Black synthetic knit shell with gray polyurethane palm coating which provides excellent grip and tactility
- Black fibers hide dirt and grime
- Features a colored cuff for easy size identification
- Seamless design offers increased dexterity and flexibility for electronic assembly and component and small parts handling

New!

ANSI 1

Size	Order No.	Price
Small	**LW0110765**	Price
Medium	**LW0110770**	Price
Large	**LW0110775**	Price
X-Large	**LW0110780**	Price
XX-Large	**LW0110785**	Price

MCR SAFETY 9672 Dyneema®



- 13 Gauge, Dyneema® / nylon / spandex blended salt-n-pepper shell with gray Polyurethane coated palm and fingertips
- Breathable & lint free
- One of the most distinguishing Dyneema® characteristics is its cool-to-touch property

ANSI 3

Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB519672M**	Price	Price	Price
Large	**KB519672L**	Price	Price	Price
X-Large	**KB519672XL**	Price	Price	Price
2X-Large	**KB519672XXL**	Price	Price	Price

Honeywell WorkEasy® Cut-Resistant Gloves



- HPPE fiber blend cut-resistant glove features ANSI cut level 3 protection
- Lightweight, 13 gauge seamless knit shell is comfortable and provides excellent tactile sensitivity
- Polyurethane coating
- Color: gray/white

ANSI 3

Size	Order No.	Price
Medium	**KB65WE300M**	Price
Large	**KB65WE300L**	Price
X-Large	**KB65WE300XL**	Price

SHOWA 381



- Oil-resistant coating
- Exceptional grip in all conditions
- Maximum tactility and dexterity
- Extended-cuff for added protection
- Mimics the curvature of a human hand to reduce fatigue
- **Coating:** foam nitrile
- **Liner:** microfiber, nylon, 13-gauge
- **Color:** gray/black palm

New!

Size	Order No.	Price
Small	**SG2502320**	Price
Medium	**SG2502325**	Price
Large	**SG2502330**	Price
X-Large	**SG2502335**	Price

SHOWA S-TEX376

New!

ANSI 4



- Abrasion, cut & liquid resistant
- Liquid-proof to end of coating
- Optimal grip in wet & oily conditions
- Breathable, ventilated back
- Ultra-flexible & durable
- **Coating:** Nitrile
- **Liner:** Hagane Coil®/polyester/stainless steel
- **Color:** gray/blue/black palm
- Sold per case - 6 dozen per case

Size	Order No.	Price
Small	**SG2503375**	Price
Medium	**SG2503380**	Price
Large	**SG2503385**	Price
X-Large	**SG2503390**	Price

SHOWA 477

ANSI A4

New!



- Ultra-tactile grip
- Superior flexibility and durability
- Fixed acrylic terry liner
- Longer reinforced knit cuff
- Impermable to end of coating
- Full hand protection
- Long-lasting warmth and comfort
- Resistant to abrasion and tearing
- **Coating:** foam nitrile
- **Liner:** polyester/cotton/acylic
- **Color:** blue coating/black palm

Size	Order No.	Price
Medium	**SG2502800**	Price
Large	**SG2502805**	Price
X-Large	**SG2502810**	Price
2X-Large	**SG2502815**	Price

MCR SAFETY 9683 UltraTech® Nitrile Coated



- Nitrile palm & fingers dip
- 100% Nylon shell
- 13 Gauge
- Dexterity, cut and puncture protection
- Nitrile provides superior grip, abrasion resistance

Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB519683M**	Price	Price	Price
Large	**KB519683L**	Price	Price	Price
X-Large	**KB519683XL**	Price	Price	Price

MCR SAFETY N96785 Ninja® BNF Nitrile Foam



- Lightweight 18-gauge gray nylon/spandex shell
- 1st Coating is red full flat nitrile coating
- 2nd Coating is black BNF over the knuckle
- Waterproof
- Excellent wet or dry grip
- CE score 4131

Size	Order No.	Price
Medium	**KB51N96785M**	Price
Large	**KB51N96785L**	Price
X-Large	**KB51N96785XL**	Price

MCR SAFETY 9673 UltraTech® Foam



- 13 Gauge gray nylon shell
- Black foam nitrile coating on palm and fingertips

Size	Order No.	1 pair	12 pair	144 pair
Small	**KB519673S**	Price	Price	Price
Medium	**KB519673M**	Price	Price	Price
Large	**KB519673L**	Price	Price	Price
X-Large	**KB519673XL**	Price	Price	Price

WELLS LAMONT Industrial Y9296 Vis-Tech™ Cut Resistant Nitrile Palm Dipped Gloves

ANSI 4

New!



- Lightweight and breathable cut resistant shell provides all-day comfort and protection
- Sandy nitrile palm coating delivers improved grip in wet and oily applications
- Hi-vis orange shell improves visibility and worker compliance
- Launderable for a longer wear life

Size	Order No.	Price
X-Small	**LW0110850**	Price
Small	**LW0110855**	Price
Medium	**LW0110860**	Price
Large	**LW0110865**	Price
X-Large	**LW0110870**	Price
XX-Large	**LW0110875**	Price

WELLS LAMONT Industrial Y9216 FlexTech™ Machine Knit with Nitrile Palm

New!

ANSI A7



- Seamless machine knit cut resistant shell provides all-day comfort and protection
- Sandy nitrile palm coating delivers improved grip in wet and oily applications
- Machine washable for longer wear life

Size	Order No.	Price
X-Small	**LW0110880**	Price
Small	**LW0110885**	Price
Medium	**LW0110890**	Price
Large	**LW0110895**	Price
X-Large	**LW0110900**	Price
XX-Large	**LW0110905**	Price

MCR SAFETY N96970 Ninja® BNF Nitrile Foam



- Nylon/spandex shell
- Breathable Nitrile Foam (BNF) coating on palm, fingers, and over knuckles
- Great dexterity, flexibility, and movement
- Ergonomic design for minimum hand fatigue
- Excellent wet or dry grip
- 15 Gauge CE score 4141

Size	Order No.	Price
Small	**KB51N96790S**	Price
Medium	**KB51N96790M**	Price
Large	**KB51N96790L**	Price
X-Large	**KB51N96790XL**	Price
2X-Large	**KB51N96790XXL**	Price

MCR SAFETY G9674 Ninja® X



- 15 Gauge black nylon/spandex shell
- Black Bi-Polymer coating on palm and fingertips
- Treated with Actifresh® to kill bacteria and promote freshness
- Silicone free

Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB51G9674M**	Price	Price	Price
Large	**KB51G9674L**	Price	Price	Price
X-Large	**KB51G9674XL**	Price	Price	Price

MCR SAFETY N96783 Ninja® BNF Nitrile Foam



- Lightweight 18-gauge gray nylon/spandex shell
- 1st Coating red 3/4 over the knuckle flat nitrile coating
- 2nd Coating black BNF palm and finger
- Water and oil resistant palm
- Excellent wet or dry grip
- CE score 4131

Size	Order No.	Price
Medium	**KB51N96783M**	Price
Large	**KB51N96783L**	Price
X-Large	**KB51N96783XL**	Price

MCR 9780 Predalite® Nitrile Coated

- Palm coated
- Knit wrist
- Lightweight nitrile (NBR)
- Thinner coating on 100% cotton interlock lining for a greater sense of touch and dexterity



Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB519780M**	Price	Price	Price
Large	**KB519780L**	Price	Price	Price
X-Large	**KB519780XL**	Price	Price	Price

MCR 9751 Predator® Nitrile Coated

- Nitrile fully coated
- Nitrile (NBR) rubber coating for cut, abrasion, snag and puncture resistance
- 100% Cotton jersey lining for comfort, even at cool temperatures
- Treated with Actifresh™

ANSI 2



Size	Cuff Style	Order No.	1 pair	12 pair	144 pair
Large	Knit Wrist	**KB519751**	Price	Price	Price
Large	2-1/2" Safety Cuff	**KB519761**	Price	Price	Price

MCR 92723NF Cut Pro™ Cut Resistant

- 13 Gauge HPPE/Synthetic Salt & Pepper shell
- Black nitrile foam coated palm & fingers
- CE score 4342
- Seamless shell is comfortable, cool, and easy to wear

ANSI 2



Size	Order No.	Price
Medium	**KB5192723NFM**	Price
Large	**KB5192723NFL**	Price
X-Large	**KB5192723NFXL**	Price

MCR 92720NF Cut Pro™ Cut Resistant

- 10 gauge black HPPE /steel shell
- Black soft nitrile foam on palm and fingers
- Seamless shell is comfortable, cool, and easy to wear

ANSI 6



Size	Order No.	Price
Medium	**KB5192720NFM**	Price
Large	**KB5192720NFL**	Price
X-Large	**KB5192720NFXL**	Price

SHOWA S-TEX350

- High abrasion & puncture resistance
- Effective long lasting grip in oil
- Breathable, ventilated back
- Increased visibility in low light
- **Coating:** Nitrile
- **Liner:** Hagane Coil®/polyester/stainless steel
- **Color:** fluorescent yellow/green palm

New!

ANSI A4



Size	Order No.	Price
Small	**SG2503355**	Price
Medium	**SG2503360**	Price
Large	**SG2503365**	Price
X-Large	**SG2503370**	Price

WELLS LAMONT Industrial Y9256 FlexTech™ Kevlar Shell with Foam Nitrile Palm

ANSI 2

- Light weight stretch Kevlar® with black foam nitrile palm coating
- Stretchy Kevlar/Lycra® blend provides high level of dexterity and comfort
- Foam nitrile palm provides excellent grip and resistance to snags and abrasions
- Excellent for general assembly, automotive industry, sharp/pointy small parts, component and glass handling

New!



Size	Order No.	Price
X-Small	**LW0110665**	Price
Small	**LW0110670**	Price
Medium	**LW0110675**	Price
Large	**LW0110680**	Price
X-Large	**LW0110685**	Price
XX-Large	**LW0110690**	Price

SHOWA 4561

New!

- Cut resistant
- Sponge nitrile palm with Zorb-IT technology
- 15-Gauge seamless knit made Kevlar®

ANSI A4



Size	Order No.	Price
Small	**SG2503155**	Price
Medium	**SG2503160**	Price
Large	**SG2503165**	Price
X-Large	**SG2503170**	Price
2X-Large	**SG2503175**	Price

MCR 9718NFO Memphis® Orange Kevlar

- Patent-protected, high visibility orange DuPont™ Kevlar® engineered yarn
- High Visibility orange enhances safety awareness
- Light weight seamless shell provides dexterity and comfort
- Orange nitrile foam coating allows for tacky grip and sense of touch
- Touch screen friendly

ANSI 4



Size	Order No.	Price
Medium	**KB519178NFOM**	Price
Large	**KB519178NFOL**	Price
X-Large	**KB519178NFOXL**	Price

MCR 9693 UltraTech® - Kevlar®

Cut Protection Plus Dexterity

- DuPont™ Kevlar® brand fiber for high tensile strength relative to its weight-up to five times stronger than steel
- Seamless Knit creates a high comfort level
- Allows manual dexterity



ANSI 2

Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB519693M**	Price	Price	Price
Large	**KB519693L**	Price	Price	Price
X-Large	**KB519693XL**	Price	Price	Price

PRM PRO Acti-Seal Disposable Nitrile

- Ambidextrous design fits right or left hand
- Loose fit around wrist for comfort
- Textured finish for wet or dry conditions
- 4 Mil blue industrial grade - 100 per box
- 5 Mil black industrial grade - 100 per box
- 8 Mil blue medical grade - 50 per box
- Made from materials that comply with FDA regulations







	Powdered		Powder Free					
	4 Mil		8 Mil		5 Mil		4 Mil	
	Blue		Blue		Black		Blue	
Size	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
Small	**KB389011S**	Price	**-**	-	**KB389012S**	Price	**KB389021S**	Price
Medium	**KB389011M**	Price	**KB389008M**	Price	**KB389012M**	Price	**KB389026M**	Price
Large	**KB389011L**	Price	**KB389008L**	Price	**KB389012L**	Price	**KB389031L**	Price
X-Large	**KB389011XL**	Price	**KB389008XL**	Price	**KB389012XL**	Price	**KB389036XL**	Price
2X-Large	**-**	-	**-**	-	**KB389012XXL**	Price	**KB389011XXL**	Price

SHOWA 7500PF

- Latex-free
- Competitively-priced
- Retains tactility
- Rolled cuff keeps debris out
- **Thickness:** 4 mil
- **Material:** nitrile
- **Color:** blue
- 100 Gloves per box

New!



Size	Order No.	Price
X-Small	**SG2500400**	Price
Small	**SG2500405**	Price
Medium	**SG2500410**	Price
Large	**SG2500415**	Price
X-Large	**SG2500420**	Price
2X-Large	**SG2500425**	Price

SHOWA 8500PF

- Latex-free
- Competitively-priced
- Retains tactility
- Rolled cuff keeps debris out
- **Thickness:** 8 mil
- **Material:** nitrile
- **Color:** blue
- 50 Gloves per box

New!



Size	Order No.	Price
Small	**SG2500430**	Price
Medium	**SG2500435**	Price
Large	**SG2500440**	Price
X-Large	**SG2500445**	Price

MCR SAFETY Nitrishield® 6015, 6020, 6025, 6030 Disposable Nitrile

- Chlorinated
- Textured finish for better grip
- Latex free
- Resistance to a wide variety of chemicals

4 Mil Thickness

- 6015 Powder free nitrile
- 6020 Powdered nitrile
- 100 Gloves per box
- 10 Boxes per case

8 Mil Thickness

- 6025 Powdered nitrile
- 6030 Powder free nitrile
- 50 Gloves per box
- 20 Boxes per case



	Powdered						Powder Free					
	8 Mil			4 Mil			8 Mil			4 Mil		
Size	Order No.	1 Box	10 Boxes	Order No.	1 Box	10 Boxes	Order No.	1 Box	10 Boxes	Order No.	1 Box	10 Boxes
Medium	**KB516025M**	Price	Price	**KB516020M**	Price	Price	**KB516030M**	Price	Price	**KB516015M**	Price	Price
Large	**KB516025L**	Price	Price	**KB516020L**	Price	Price	**KB516030L**	Price	Price	**KB516015L**	Price	Price
X-Large	**KB516025XL**	Price	Price	**KB516020XL**	Price	Price	**KB516030XL**	Price	Price	**KB516015XL**	Price	Price

SHOWA 6112PF

- Performs same as non-EBT nitrile disposable gloves 100% biodegradable
- Decreased risk of allergies
- High performance of protection
- Second-skin fit & feel
- **Thickness:** 4 mil
- **Coating:** nitrile with EBT
- **Color:** black
- 100 Gloves per dispenser

New!



Size	Order No.	Price
Small	**SG2500095**	Price
X-Small	**SG2500090**	Price
Medium	**SG2500100**	Price
Large	**SG2500110**	Price
X-Large	**SG2500115**	Price
2X-Large	**SG2500120**	Price

SHOWA 6110PF

- Performs same as non-EBT nitrile disposable gloves
- 100% biodegradable
- Low-modulus formulation
- Decreased risk of allergies
- High performance of protection
- Second-skin fit & feel
- **Coating:** nitrile with EBT, low-modulus
- **Color:** green
- 100 Gloves per dispenser

New!



Size	Order No.	Price
Small	**SG2500375**	Price
X-Small	**SG2500370**	Price
Medium	**SG2500380**	Price
Large	**SG2500385**	Price
X-Large	**SG2500390**	Price
2X-Large	**SG2500395**	Price

Prices Per Box

MCR SAFETY SensaGuard® 5055, 5060 Disposable Latex



- 5055 Powder free latex, double chlorinated
- 5060 Powdered latex, chlorinated
- 5 Mil thickness
- Priced and sold per box of 100

	Powder Free			Powdered		
Size	Order No.	1 Box	10 Boxes	Order No.	1 Box	10 Boxes
Small	**KB51505504**	Price	Price	**KB515060S**	Price	Price
Medium	**KB51505505**	Price	Price	**KB515060M**	Price	Price
Large	**KB51505506**	Price	Price	**KB515060L**	Price	Price
X-Large	**KB51505507**	Price	Price	**KB515060XL**	Price	Price

MCR SAFETY Durashield® 6001 Industrial/Food Service Grade Nitrile



- Powder free nitrile
- Puncture, abrasion resistant
- Ambidextrous
- Textured grip
- 4 Mil thickness
- Priced and sold per box of 100

Size	Thickness	Description	Order No.	1 Box	10 Boxes
Medium	4 Mil	Powder Free	**KB516001M**	Price	Price
Large	4 Mil	Powder Free	**KB516001L**	Price	Price
X-Large	4 Mil	Powder Free	**KB516001XL**	Price	Price

KleenGuard® G10 Blue Nitrile



- Latex-free
- 9.5” Length
- Approved for food handling
- Color: blue
- 100 Gloves per pack
- Price per pack

Size	Order No.	Price
6 - X-Small	**LM5557370**	Price
7 - Small	**LM5557371**	Price
8 - Medium	**LM5557372**	Price
9 - Large	**LM5557373**	Price
10 - X-Large	**LM5557374**	Price

†Caution: This product contains natural rubber latex, which may cause allergic reactions.

SHOWA 727 Flock-Lined



- Chemical-resistant
- Made from a special nitrile compound that is resistant to a broad range of solvents oils, animal fats and other chemicals
- Grip makes wet work easier and safer
- **Coating:** Nitrile
- **Color:** light green
- **Length:** 13”

New!

Size	Order No.	Price
X-Small	**SG2501245**	Price
Small	**SG2501250**	Price
Medium	**SG2501255**	Price
Large	**SG2501260**	Price
X-Large	**SG2501265**	Price
2X-Large	**SG2501270**	Price

MCR SAFETY 9782 Predaknit® Nitrile Coated



- 12” Gauntlet
- Lightweight supported nitrile
- Rough finish
- 100% cotton interlock lining

Size	Order No.	1 pair	12 pair	144 pair
Large	**KB519782L**	Price	Price	Price
X-Large	**KB519782XL**	Price	Price	Price

MCR SAFETY NitriShield Stealth 6060,6062 Industrial/Food Service Grade Nitrile



- Powder free black nitrile
- Puncture and tear resistant
- Ambidextrous
- Textured grip
- Priced and sold per box of 100

	6 Mil		3 Mil	
Size	Order No.	Price	Order No.	Price
Medium	**KB516062M**	Price	**KB516060M**	Price
Large	**KB516062L**	Price	**KB516060L**	Price
X-Large	**KB516062XL**	Price	**KB516060XL**	Price

MCR SAFETY 6010 NitriShield® Color Fusion Nitrile Disposable Gloves



6010G

- Nitrile
- Disposable
- Medical grade
- Powder free
- 4 Mil
- Priced and sold per box of 100

	Green		Orange		Pink	
Size	Order No.	Price	Order No.	Price	Order No.	Price
Small	**KB516010GS**	Price	**KB516010OS**	Price	**KB516010PS**	Price
Medium	**KB516010GM**	Price	**KB516010OM**	Price	**KB516010PM**	Price
Large	**KB516010GL**	Price	**KB516010OL**	Price	**KB516010PL**	Price
X-Large	**KB516010GXL**	Price	**KB516010OXL**	Price	**KB516010PXL**	Price

PRM PRO Seamless Nitrile



- Seamless nitrile economy rubber gloves with straight cuff
- Nitrile gloves are three times more puncture resistant than rubber
- Features diamond embossed grip on palm and fingers
- Flock lined for extra comfort and protection
- Used in many industries and wet application

Size	Order No.	1 pair	12 pair	144 pair
Small	**KB38700S**	Price	Price	Price
Medium	**KB38700M**	Price	Price	Price
Large	**KB38700L**	Price	Price	Price
X-Large	**KB38700XL**	Price	Price	Price

SHOWA 730



- Chemical-resistant
- Made from a special nitrile compound that is resistant to a broad range of solvents oils, animal fats and other chemicals
- Grip makes wet work easier and safer
- **Coating:** Nitrile
- **Color:** light green
- **Length:** 13”

New!

Size	Order No.	Price
X-Small	**SG2501275**	Price
Small	**SG2501280**	Price
Medium	**SG2501285**	Price
Large	**SG2501290**	Price
X-Large	**SG2501295**	Price
2X-Large	**SG2501300**	Price

MCR SAFETY 5319 Nitri-Chem® Unsupported Nitrile



- 15 Mil
- Flock-lined or unlined
- 13” Length

	Nitrile / Flock-lined				Nitrile / Unlined			
Size	Order No.	1 pair	12 pair	144 pair	Order No.	1 pair	12 pair	144 pair
8	**KB515318L**	Price	Price	Price	**KB515318U**	Price	Price	Price
9	**KB515319L**	Price	Price	Price	**KB515319U**	Price	Price	Price
10	**KB515320L**	Price	Price	Price	**KB515320U**	Price	Price	Price
11	**KB515321L**	Price	Price	Price	**KB515321U**	Price	Price	Price

SHOWA NSK24



- Excellent protection from a wide array of solvents, oils and acids
- Double nitrile coating and a rough textured finish
- 26” Sleeve
- **Coating:** Nitrile
- **Liner:** cotton/polyester
- **Approximate Length:** 14”

New!

Size	Order No.	Price
Medium	**SG2501490**	Price
Large	**SG2501495**	Price
X-Large	**SG2501500**	Price
2X-Large	**SG2501505**	Price

SHOWA 660ESD



- Aids in preventing a spark caused by Static Electricity which helps avoid accidental explosions
- Coating provides extra oil and abrasion resistance, as well as increased durability
- Surface resistivity 10(8) to 10(9) ohms
- Absorbs perspiration, for ultra comfortable extended wear
- **Coating:** PVC
- **Liner:** anti-static
- **Approximate Length:** 13”

New!

Size	Order No.	Price
Large	**SG2503990**	Price
X-Large	**SG2503995**	Price

SHOWA 3415



- Flexible, consistent film coating
- Protection against a wide range of chemicals, including acids, caustics, solvents, grease & oil
- Seamless liner prevents irritation
- Tactile non-slip grip
- **Coating:** neoprene
- **Liner:** seamless knit
- **Approximate Length:** 14”

New!

Size	Order No.	Price
Small	**SG2501050**	Price
Medium	**SG2501055**	Price
Large	**SG2501060**	Price
X-Large	**SG2501065**	Price

MCR SAFETY Economy Dipped PVC



- 2 Styles to choose from 10” or 14” Gauntlet
- Fully coated
- Rough and sandy finish
- Generous sizing
- Jersey lining

Size	Liner Style	Order No.	1 pair	12 pair	144 pair
Large	10" Gauntlet	**KB516521SJ**	Price	Price	Price
Large	14" Gauntlet	**KB516524SJ**	Price	Price	Price

MCR SAFETY N9690 Ninja® Ice 15 Gauge Black



- Acrylic terry liner for insulation / warmth
- Latex Palm coating repels liquids while providing strong wet or dry grip
- Coating remains soft in temperatures as low as -58 F
- Nylon/Acrylic
- CE 3232

Size	Order No.	Price
Medium	**KB51N9690M**	Price
Large	**KB51N9690L**	Price
X-Large	**KB51N9690XL**	Price

MCR SAFETY 6885 PlyFlex™



- Textured rubber coating
- Excellent gripping power even when wet
- Features Actifresh® to prevent bacterial build-up
- 12” Length
- Interlock lining

Size	Order No.	1 pair	12 pair	144 pair
Small	**KB516885S**	Price	Price	Price
Medium	**KB516885M**	Price	Price	Price
Large	**KB516885L**	Price	Price	Price
X-Large	**KB516885XL**	Price	Price	Price

MCR SAFETY 9786 Predalite® Nitrile



- 2-1/2” PVC safety cuff
- Thinner coating on 100% cotton interlock lining for a greater sense of touch and dexterity
- Lightweight nitrile (NBR)

Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB519786M**	Price	Price	Price
Large	**KB519786L**	Price	Price	Price
X-Large	**KB519786XL**	Price	Price	Price

SHOWA 379



- Excellent grip performance and prevents slipping
- Flexible, robust glove
- Great dexterity and good resistance to abrasion
- Waterproof
- Protection from chemicals, oils, hydrocarbons, benzimes, grease & hexavalent chromium found in concrete
- Mimics the curvature of a human hand to reduce fatigue
- **Coating:** nitrile
- **Liner:** polyester/seamless knit
- **Approximate Length:** 12-1/2”

New!

Size	Order No.	Price
Large	**SG2501535**	Price
X-Large	**SG2501540**	Price
2X-Large	**SG2501545**	Price

PRM PRO Heavy-Duty Latex Coated



- Premium textured latex palm coated
- Cotton/polyester knit shell
- Gripped pattern
- Color: blue

Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB38675M**	Price	Price	Price
Large	**KB38675L**	Price	Price	Price
X-Large	**KB38675XL**	Price	Price	Price

MCR SAFETY 9682 Latex Coated Strings



- Blue latex palm & fingers dip
- 13 Gauge
- Cotton/polyester shell

Size	Order No.	1 pair	12 pair	144 pair
Large	**KB519682**	Price	Price	Price

Gloves Sold In Pairs

PRM PRO Economy Workmen's

- Gray split cowhide leather palm glove with canvas back
- Clute pattern and knit cuff
- Fleece palm lining
- Color: gray



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB38250L**	Price	Price	Price

MCR SAFETY 1040 Economy Shoulder Split Cow

- Clute pattern knit wrist, palm lined
- Low cost leather protection



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB51TC7B**	Price	Price	Price

PRM PRO Cotton Canvas

- For comfort and breathability in general purpose applications
- Cotton canvas multipurpose gloves with knit wrist
- Absorbent



Size	Color	Description	Order No.	1 pair	12 pair	144 pair
Large	Natural	Straight Thumb	**KB38400L**	Price	Price	Price

MCR SAFETY 8000I Cotton Jersey

- Reversible
- 8 oz. Jersey for general purpose work



Size	Order No.	1 pair	12 pair	144 pair
Small	**KB518002I**	Price	Price	Price
Large	**KB518000I**	Price	Price	Price

MCR SAFETY 8100C Cotton Canvas

- Straight or wing thumb
- Clute pattern
- 8 oz. Cotton canvas
- 8100A Knit wrist



Size	Thumb Style	Order No.	1 pair	12 pair	144 pair
Large	Straight Thumb	**KB51CF**	Price	Price	Price
Large	Wing Thumb	**KB518100A**	Price	Price	Price

PRM PRO Cotton Dotted Canvas

- Woven cotton canvas with PVC dots
- Clute pattern and straight thumb
- Ideal for general purpose applications, keep hands clean and cool
- Color: white



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB38300L**	Price	Price	Price

WELLS LAMONT Industrial 1881 Metalguard® Heavyweight Gloves w/PVC Dots

ANSI A6

- Highest level of cut protection within the Metalguard® line
- Additional reinforcement in the thumb crotch area increases wear life
- Continuous knit conforms to the hand, ensuring a close, secure fit
- Black PVC dots
- Ambidextrous; prewashed, preshrunk

New!



Size	Order No.	Price
Small	**LW0110060**	Price
Medium	**LW0110065**	Price
Large	**LW0110070**	Price
X-Large	**LW0110075**	Price

MCR SAFETY 9668 Cotton/Polyester

- Regular weight
- PVC dotted both sides
- Improves grip
- Provides abrasions resistance
- Natural, hemmed



Size	Order No.	1 pair	12 pair	144 pair
Small	**KB519668S**	Price	Price	Price
Large	**KB519668L**	Price	Price	Price

MCR SAFETY 93847, 93867 Hero™ Kevlar®/ Stainless Steel PVC Dotted Palm

93847

- Kevlar®/stainless steel shell
- Made with FDA-accepted materials for use in food processing applications
- High comfort level, great manual dexterity
- PVC dots on palms provide additional grip and abrasion resistance

ANSI 6



	13 Gauge		7 Gauge	
Size	Order No.	Price	Order No.	Price
Medium	**KB5193847M**	Price	**KB5193867M**	Price
Large	**KB5193847L**	Price	**KB5193867L**	Price
X-Large	**KB5193847XL**	Price	**KB5193867XL**	Price

MCR SAFETY 8808 Cotton Dotted Canvas

- 8 oz. Dotted canvas material





Size	Order No.	1 pair	12 pair	144 pair
Large	**KB51DG**	Price	Price	Price

3203 Unlined Driver's

- Straight thumb
- Intermediate grade
- Full leather
- Slip-on cuff
- Greater dexterity



Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB513203M**	Price	Price	Price
Large	**KB513203L**	Price	Price	Price
X-Large	**KB513203XL**	Price	Price	Price

3120 Split Leather Driver's

- Cow split leather
- Straight thumb
- Regular grade
- Slip-on cuffs
- Unlined styles
- Shirred elastic backs
- Color-coded hem to identify size



Size	Order No.	1 pair	12 pair	144 pair
Small	**KB513120S**	Price	Price	Price
Medium	**KB513120M**	Price	Price	Price
Large	**KB513120L**	Price	Price	Price
X-Large	**KB513120XL**	Price	Price	Price

3213 Unlined Driver's

- Keystone thumb
- Intermediate grade
- Full leather
- Slip-on cuff
- Greater dexterity



Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB513213M**	Price	Price	Price
Large	**KB513213L**	Price	Price	Price
X-Large	**KB513213XL**	Price	Price	Price

3601 Goatskin Driver's

- Grain kid goatskin
- Exceptional durability
- Greater softness for sense of touch
- Excellent tensile strength



Size	Order No.	Price
Medium	**KB513601M**	Price
Large	**KB513601L**	Price
X-Large	**KB513601XL**	Price

1178 Grips® Ball & Tape Driver

- Grips® ball & tape driver
- Cowhide leather
- Straight thumb
- Fabric bound hem

New!



Size	Order No.	Price
Small	**LW0110220**	Price
Medium	**LW0110225**	Price
Large	**LW0110230**	Price
X-Large	**LW0110235**	Price
XX-Large	**LW0110240**	Price

PRM PRO Gray Cotton / Polyester Blend

- General hand protection in light duty applications
- Reversible pattern
- Provides comfort and warmth
- Use as gloves or glove liners
- Color: gray



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB38440L**	Price	Price	Price

PRM PRO Standard Cotton Jersey

- Clute pattern
- General purpose
- Breathable material
- Color: brown



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB38350L**	Price	Price	Price

PRM PRO Brown Jersey / Dotted Palm

- Breathable and absorbent
- Clute cut, knit wrist
- Mini dot pattern
- For comfort and breathability in general purpose applications



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB38450L**	Price	Price	Price

7800 Jersey with Plastic Dots

- Clute pattern
- Breathable
- Absorbent



Size	Order No.	1 pair	13 pair	144 pair
Large	**KB517800L**	Price	Price	Price

7100 Cotton Jersey

- Jersey 9 oz.
- Clute pattern
- For general purpose work



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB51BJ**	Price	Price	Price

Gloves Sold In Pairs

PRM PRO Economy Driver's



- Regular grade split cowhide leather
- Elastic back for comfortable fit around wrist
- Straight thumb pattern
- Color: russet

Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB38800M**	Price	Price	Price
Large	**KB38800L**	Price	Price	Price
X-Large	**KB38800XL**	Price	Price	Price

WESTCHESTER 991K Goatskin Driver's



- Grain goatskin drivers style glove
- Remains soft and comfortable in all conditions
- Keystone thumb for maximum flexibility

Size	Order No.	Price
Small	**KP8899100**	Price
Medium	**KP8899105**	Price
Large	**KP8899110**	Price
X-Large	**KP8899115**	Price

WESTCHESTER 990KOT Hi-Vis Cowhide Drivers



- Grain cowhide leather drivers style glove
- Hi visibility orange fingertips for awareness
- "Watch Your Hands" safety statement imprinted on back of hand
- Orange fabric passes EN533 limited flame spread index Level 1L
- Keystone thumb for maximum flexibility

Size	Order No.	Price
Small	**KP8899000**	Price
Medium	**KP8899005**	Price
Large	**KP8899010**	Price
X-Large	**KP8899015**	Price
2X-Large	**KP8899020**	Price

WESTCHESTER 990K Cowhide Driver's



- Grain cowhide driver style glove
- Cowhide provides great protection in a variety of applications
- Keystone thumb for maximum flexibility

Size	Order No.	Price
Small	**KP8899025**	Price
Medium	**KP8899026**	Price
Large	**KP8899027**	Price
X-Large	**KP8899028**	Price
2X-Large	**KP8899029**	Price

WELLS LAMONT Industrial Y0062 Thermal Leather Driver



- Economy fleece lined grain cowhide driver
- Keystone thumb
- Fabric bound hem

New!

Size	Order No.	Price
Small	**LW0110515**	Price
Medium	**LW0110520**	Price
Large	**LW0110525**	Price
X-Large	**LW0110530**	Price

WELLS LAMONT Industrial Y0135 Grain Leather Driver



- Grain cowhide leather economy driver
- Straight thumb
- Fabric bound hem

New!

Size	Order No.	Price
Small	**LW0110340**	Price
Medium	**LW0110345**	Price
Large	**LW0110350**	Price
X-Large	**LW0110355**	Price

WELLS LAMONT Industrial Y0107 Grain Goatskin



- Grain goatskin driver
- Keystone thumb
- Fabric bound hem

New!

Size	Order No.	Price
Small	**LW0110270**	Price
Medium	**LW0110275**	Price
Large	**LW0110280**	Price
X-Large	**LW0110285**	Price

WELLS LAMONT Industrial Y0145 Grain Leather Driver



- Cowhide
- Hi-vis fingertips and safety slogan "Watch Your Hands"
- Straight thumb
- Fabric bound hem

New!

Size	Order No.	Price
Small	**LW0110325**	Price
Medium	**LW0110320**	Price
Large	**LW0110315**	Price
X-Large	**LW0110330**	Price
XX-Large	**LW0110335**	Price

WELLS LAMONT Industrial Y0122 Grain Cowhide Driver



- Grain cowhide leather economy driver
- Straight thumb
- Fabric bound hem

New!

Size	Order No.	Price
Small	**LW0110245**	Price
Medium	**LW0110250**	Price
Large	**LW0110255**	Price
X-Large	**LW0110260**	Price
XX-Large	**LW0110265**	Price

WELLS LAMONT Industrial Y0103 Leather Driver w/Cut Resistant Liner



- Grain goatskin driver with cut resistant liner
- Keystone thumb
- Fabric bound hem

New!

Size	Order No.	Price
Small	**LW0110290**	Price
Medium	**LW0110295**	Price
Large	**LW0110300**	Price
X-Large	**LW0110305**	Price
XX-Large	**LW0110310**	Price

PRM PRO Seamless String

- Reversible pattern
- Provides comfort and warmth
- Use as gloves or glove liners
- Color: natural



Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB38425M**	Price	Price	Price
Large	**KB38425L**	Price	Price	Price

MCR SAFETY 9636 String Knit

- 7 Gauge
- Regular weight
- Cotton/polyester blend



Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB519636M**	Price	Price	Price
Large	**KB519636L**	Price	Price	Price

MCR SAFETY 9637 Gray String Knit

- 7 Gauge
- Regular weight
- Cotton/polyester blend



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB519637L**	Price	Price	Price

MCR SAFETY 8600C Inspector's

- Breathable fabric helps hands cool
- Comfortable and light weight
- Color coded hems for easy size identification
- Sold in minimum 12 Pcs.





Size	Order No.	1 pair	13 pair	145 pair
Large	**KB518600C**	Price	Price	Price

MCR SAFETY 9362L Kevlar®

- KEVLAR outside
- Cotton inside
- 7 Gauge knit
- Regular weight
- DuPont KEVLAR® brand fiber for high tensile strength relative to its weight–up to five times stronger than steel
- Use as glove liners

ANSI 2



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB519362L**	Price	Price	Price

WELLS LAMONT Industrial 7750 MechPro® Lined

- MechPro® basic shell with C70 Thinsulate™ liner for colder climates
- Heavy duty ribbed knit fabric
- Synthetic leather palm and fingertips
- Elastic cuff with Feeltite™ hook and loop adjustable wrist closure

New!



Size	Order No.	Price
Small	**LW0110555**	Price
Medium	**LW0110560**	Price
Large	**LW0110565**	Price
X-Large	**LW0110570**	Price
XX-Large	**LW0110575**	Price

WELLS LAMONT Industrial 636 Lined/Unlined Terry Glove

- Jomac® brown & white gauntlet cuff
- Extra heavy weight terry cloth
- 5” Gauntlet cuff
- Protects up to 450°F

New!



	Lined		Unlined	
Size	Order No.	Price	Order No.	Price
X-Large	**LW0110655**	Price	**LW0110650**	Price

WELLS LAMONT Industrial Kevlar®/Nomex® Seamless Glove

- Protects up to 500°F
- Kevlar®/Nomex® outer shell provides excellent thermal properties, allowing wearer to handle hot objects
- Fully lined with cotton for softness
- Ambidextrous; knit; continuous cuff
- ANSI cut level A3

MADE IN THE USA

New!



Size	Order No.	Price
Small	**LW0110630**	Price
Medium	**LW0110635**	Price
Large	**LW0110640**	Price
X-Large	**LW0110645**	Price

MCR SAFETY 9686 Grip Sharp™ Kevlar®

- 100% Kevlar® brand fiber shell
- Split leather palm
- CE Score 4444
- Will not melt, ignite or conduct electricity

ANSI 3



Size	Order No.	Price
Medium	**KB519686M**	Price
Large	**KB519686L**	Price
X-Large	**KB519686XL**	Price

MCR SAFETY 93840, 93860 Hero™ Kevlar®/Stainless Steel/Nylon Fiber

- DuPont™ Kevlar®brand fiber for high tensile strength
- Allows manual dexterity
- Made with FDA accepted materials for use in food processing

ANSI 4



	13 Gauge		7 Gauge	
Size	Order No.	Price	Order No.	Price
Medium	**KB5193840M**	Price	**KB5193860M**	Price
Large	**KB5193840L**	Price	**KB5193860L**	Price
X-Large	**KB5193840XL**	Price	**KB5193860XL**	Price

PRM PRO Multi-Use Worker's

- Split shoulder leather palm glove
- Full feature gunn pattern
- 2-1/2" Rubberized safety cuff
- All-purpose applications requiring scrape protection



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB38150L**	Price	Price	Price
X-Large	**KB38150XL**	Price	Price	Price

PRM PRO Medium-Duty Worker's

- Made with select shoulder leather
- 2-1/2" or 4-1/2" Rubberized safety cuff, wing thumb, gunn pattern, canvas back
- Leather knuckle strap, fleece lined palm
- Color: gray



Size	Cuff Size (in.)	Order No.	1 pair	12 pair	144 pair
Large	2-1/2	**KB38200L**	Price	Price	Price
Large	4-1/2	**KB38205L**	Price	Price	Price

PRM PRO Hardwearing Workers

- Heavy-duty side split leather palm
- 2-1/2" Rubberized safety cuff, wing thumb, gunn pattern
- Canvas back with leather knuckle strap



Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB38100M**	Price	Price	Price
Large	**KB38100L**	Price	Price	Price
X-Large	**KB38100XL**	Price	Price	Price

WESTCHESTER PROTECTIVE GEAR 558 Shoulder Cowhide

- Standard shoulder leather
- Full featured gunn cut wing thumb construction
- Leather knuckle strap and fingertips
- Rubberized safety cuff
- Classic blue and red stripe fabric back



Size	Order No.	Price
Large	**KP8855800**	Price
X-Large	**KP8855805**	Price
2X-Large	**KP8855810**	Price

MCR SAFETY 1200 Split Shoulder Leather Palm

- Gunn pattern
- 2-1/2" Rubberized safety cuffs



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB511200L**	Price	Price	Price
X-Large	**KB511200XL**	Price	Price	Price

WELLS LAMONT Industrial Y3407 Leather Palm with Safety Cuff

- Standard shoulder split leather palm
- Fabric back with premium leather knuckle strap
- Wing thumb
- Safety cuff
- Fabric bound hem

New!



Size	Order No.	Price
Large	**LW0110505**	Price
X-Large	**LW0110510**	Price

WELLS LAMONT Industrial Y3201/Y3202 Standard Shoulder Split Leather Palm

- Fabric back with premium leather knuckle strap
- Wing thimb
- Safety or gauntlet cuff
- Fabric bound hem

New!



	Gauntlet Cuff-Y3202		Safety Cuff-Y3201	
Size	Order No.	Price	Order No.	Price
Large	**LW0110500**	Price	**LW0110495**	Price

WELLS LAMONT Industrial Y3106/Y3107 Select Shoulder Split Leather Palm

- Fabric with premium leather knuckle strap
- Wing
- Safety or gauntlet cuff
- Fabric bound hem

New!



	Gauntlet Cuff-Y3107		Safety Cuff-Y3106	
Size	Order No.	Price	Order No.	Price
Small	**LW0110475**	Price	**LW0110455**	Price
Medium	**LW0110480**	Price	**LW0110460**	Price
Large	**LW0110485**	Price	**LW0110465**	Price
X-Large	**LW0110490**	Price	**LW0110470**	Price

MCR SAFETY 1417A -A Select Shoulder Leather Palm

- Select shoulder leather
- Full leather back
- 2-1/2" Plasticized safety cuff



Size	Order No.	Price
Medium	**KB511417M**	Price
Large	**KB511417L**	Price
X-Large	**KB511417XL**	Price

MCR SAFETY 1965 Artic Jack®

- Premium grain pigskin
- Full sock Thermosock® lined for warmth
- 2-1/2" Rubberized safety cuff



Size	Order No.	Price
Medium	**KB511965M**	Price
Large	**KB511965L**	Price
X-Large	**KB511965XL**	Price

WELLS LAMONT Industrial Y2008/Y2009 Grain Cowhide Leather Palm

- Premium grain cowhide leather palm
- Safety or gauntlet cuff
- Wing thumb

New!



	Gauntlet Cuff-Y2009		Safety Cuff-Y2008	
Size	Order No.	Price	Order No.	Price
Small	**LW0110380**	Price	**LW0110360**	Price
Medium	**LW0110385**	Price	**LW0110365**	Price
Large	**LW0110390**	Price	**LW0110370**	Price
X-Large	**LW0110395**	Price	**LW0110375**	Price

MCR SAFETY 1300 Select Shoulder Split Cow

- Blue fabric with red stripe
- Full feature gunn pattern
- Rubberized cuffs for durability



Size	Cuff Size (in.)	Order No.	1 pair	12 pair	144 pair
Large	2-1/2	**KB51TC5**	Price	Price	Price
Large	4-1/2	**KB51TC8**	Price	Price	Price

WELLS LAMONT Industrial Y3014/Y3015 Kevlar® -Sewn Leather Palm

- Premium quality split cowhide
- Wing thumb
- Safety or gauntlet cuff
- Fabric bound hem

New!



	Gauntlet Cuff-Y3015		Safety Cuff-Y3014	
Size	Order No.	Price	Order No.	Price
Medium	-	-	**LW0110430**	Price
Large	**LW0110445**	Price	**LW0110435**	Price
X-Large	**LW0110450**	Price	**LW0110440**	Price

WELLS LAMONT Industrial 625 Kevlar® Duck Gauntlet Glove

- Kevlar® duck gauntlet
- 100% Kevlar® outer shell
- Fully lined with virgin wool
- 5" Flame resistant duck gauntlet
- Protects up to 700°F

New!



Size	Order No.	Price
X-Large	**LW0110625**	Price

MCR SAFETY 1700 Big Jake®

- Heavy select chrome tanned side split leather
- Sewn with super-strong, heat resistant DuPont™ Kevlar® thread
- Heavy duty gloves for heavy duty work
- Generously cut with full feature gunn pattern
- All Big Jake® styles have CE approval



Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB511700M**	Price	Price	Price
Large	**KB511700L**	Price	Price	Price
X-Large	**KB511700XL**	Price	Price	Price

MCR SAFETY 16010 Heavy Duty Side Split

- Full feature gunn
- 2" Safety cuff
- Heavy side split cow leather
- Rich chrome tanned for durability
- Sewn with DuPont™ KEVLAR®
- Protective rubberized cuff
- 100% Cotton palm lined



Size	Order No.	1 pair	12 pair	144 pair
Medium	**KB5116010M**	Price	Price	Price
Large	**KB5116010L**	Price	Price	Price
X-Large	**KB5116010XL**	Price	Price	Price

WESTCHESTER PROTECTIVE GEAR 500-AAA Premium Split Cowhide

- Premium side split cowhide
- Full featured gunn cut wing thumb construction
- Leather knuckle strap and fingertips
- Cotton lined palm, kevlar sewn
- Rubberized safety cuff
- Heavy white fabric back is comfortable and long lasting



Size	Order No.	Price
Large	**KP8850020**	Price
X-Large	**KP8850025**	Price

WELLS LAMONT Industrial Y3118 Premium Side Split Leather with Whizard® Liner

- Fabric with premium leather knuckle strap
- Wing thumb
- Gauntlet cuff
- Fabric bound hem

New!



Size	Order No.	Price
Medium	**LW0110410**	Price
X-Large	**LW0110420**	Price
Large	**LW0110415**	Price
XX-Large	**LW0110425**	Price

WELLS LAMONT Industrial Y3024 Premium Side Split Leather with Whizard® Liner

- Fabric with premium leather knuckle strap
- Wing thumb
- Safety cuff
- Fabric bound hem

New!



Size	Order No.	Price
Large	**LW0110400**	Price
X-Large	**LW0110405**	Price

500Y Premium Select Split Cowhide



- Premium select split cowhide
- Full featured gunn cut wing thumb construction
- Leather knuckle strap and fingertips
- Cotton lined palm
- Rubberized safety cuff
- Yellow fabric back is comfortable and long lasting

Size	Order No.	Price
Large	**KP8850000**	Price
X-Large	**KP8850005**	Price
2X-Large	**KP8850010**	Price
3X-Large	**KP8850015**	Price

500DP-A Double Leather Palm



- Premium select split cowhide
- Double leather palm for extra protection and wear
- Cotton lined palm
- Rubberized safety cuff
- Classic green and pink strip fabric back

Size	Order No.	Price
Large	**KP8850030**	Price

7701 MechPro®



New!

- MechPro® synthetic leather palm
- Heavy duty ribbed knit fabric
- Synthetic leather palm and fingertips
- Elastic cuff with Feeltite™ hook and loop adjustable wrist closure

Size	Order No.	Price
Small	**LW0110535**	Price
Medium	**LW0110540**	Price
Large	**LW0110545**	Price
X-Large	**LW0110550**	Price

Box Handler™



- Special Diamonclad™ tacky palm provides a superior grip for handling boxes and slippery materials
- Terry cloth thumb to wipe your brow without removing gloves
- Breathable yet durable materials mold to your hands
- Adjustable wrist closure
- Shipping weight: 1 lb./per pair
- Color: black

Size	Order No.	Price
Medium	**KX54BHG03**	Price
Large	**KX54BHG04**	Price
X-Large	**KX54BHG05**	Price

Ranchworx™



- Made with genuine Bullwhip™ leather – highly durable yet soft, breathable and washable – you can wear these gloves all day
- This glove is loaded with features: 4x4 vented rubber knuckle protection, padded palms and Kevlar® reinforced thumb and saddle
- The double-layered Rolltop™ fingertips have NO SEAMS, for excellent dexterity and sensiblity
- Ideal for landscaping, forestry, construction, search and rescue, and of course, all ranch work
- Color: tan/black
- Shipping weight: 1 lb./per pair

Size	Order No.	Price
Medium	**KX54RWG03**	Price
Large	**KX54RWG04**	Price
X-Large	**KX54RWG05**	Price

Whizard® Metal Mesh



New!

- Stainless steel, ergonomically designed gloves provide superior cut and puncture protection
- All Whizard® mesh gloves come with a metal serial number tag, which helps with reissuance and sizing information
- Made with 4 mm ring using 0.5 mm wire
- Ambidextrous
- Easy to clean

Size	Order No.	Price
Small	**LW0110010**	Price
Medium	**LW0110015**	Price
Large	**LW0110020**	Price
X-Large	**LW0110025**	Price

1878 Whizard® Metalguard® Medium Weight Gloves



New!

- Highest level of cut protection within the Metalguard® line
- Additional reinforcement in the thumb crotch area increases wear life
- Continuous knit conforms to the hand, ensuring a close, secure fit
- Ambidextrous; prewashed, preshrunk

Size	Order No.	Price
Small	**LW0110100**	Price
Medium	**LW0110105**	Price
Large	**LW0110110**	Price
X-Large	**LW0110115**	Price

1880 Metalguard® Heavyweight Gloves



New!

- High strength all-day fiber provides superior snag, tear and abrasion resistance
- Made from recycled water bottles, free from harsh dye and chemicals
- Inner cotton layer for added comfort
- Elastic on both ends allows sleeve to stay in place
- Latex free

Size	Order No.	Price
Small	**LW0110040**	Price
Medium	**LW0110045**	Price
Large	**LW0110050**	Price
X-Large	**LW0110055**	Price

1880LP Whizard® Metalguard® Leather Palm Gloves



New!

- Highest level of cut protection within the Metalguard® line
- Premium leather palm for extra abrasion and puncture protection
- Continuous knit conforms to the hand, ensuring a close, secure fit
- Ambidextrous; prewashed, preshrunk

Size	Order No.	Price
Small	**LW0110080**	Price
Medium	**LW0110085**	Price
Large	**LW0110090**	Price
X-Large	**LW0110095**	Price

ProFlex® Certified Lightweight Anti-Vibration



- Unique chloroprene rubber palm pad
- Lightweight, breathable 7 gauge cotton/nylon seamless knit construction
- Pre-curved design provides comfort, dexterity and flexibility
- Elastic cuff for secure fit
- ANSI S2.73/ISO 10819:1996/EN388/EN420 Certified

Size	Order No.	Price
Medium	**LF6516453**	Price
Large	**LF6516454**	Price
X-Large	**LF6516455**	Price

SHOWA 377IP



- Excellent grip in wet and greasy conditions
- The flat nitrile layers help protect against contaminants
- Flexible and durable TPR shields provide impact protection to the back of the fingers and hand
- Great dexterity and with high abrasion resistance
- Designed for easy movement and continuous wear
- No irritation by seams in contact with the skin
- Wrist well protected
- **Coating:** nitrile/nitrile foam/TPR impact zones
- **Liner:** cotton/polyester
- **Color:** white/blue/black/green

New!

Size	Order No.	Price
Medium	**SG2504155**	Price
Large	**SG2504160**	Price
X-Large	**SG2504165**	Price
2X-Large	**SG2504170**	Price

WESTCHESTER R2 RIGRUNNER Impact



- TPR on back of hand and finger to reduce impact
- Reinforced fingertips to reduce pinches
- Flexible 4 way spandex on back with Hi Visibility
- Synthetic leather dotted palm resists oils and liquids
- Color: yellow / orange

Size	Order No.	Price
Large	**KP8887000**	Price
X-Large	**KP8887010**	Price
2X-Large	**KP8887020**	Price

WESTCHESTER R2 RIGACE Impact



- TPR on back of hand and finger to reduce impact
- Reinforced fingertips to reduce pinches
- Flexible 4 way spandex on back with hi visibility
- Synthetic leather with silicone palm resists oils and liquids
- Excellent grip in wet applications
- Reinforced kevlar thumb saddle
- Color: yellow / orange

Size	Order No.	Price
Large	**KP8887110**	Price
X-Large	**KP8887115**	Price

WELLS LAMONT Industrial I2449T Thermal Hi-Vis Impact Glove



- Seamless knit palm coated glove with impact pads
- Gray shell / black palm / orange TPR
- Blend of high performance fibers and steel
- Brushed fleece lining
- Sandy nitrile palm

New!

ANSI A3

Size	Order No.	Price
Small	**LW0110600**	Price
Medium	**LW0110605**	Price
Large	**LW0110610**	Price
X-Large	**LW0110615**	Price
XX-Large	**LW0110620**	Price

MCR SAFETY PD2901 Predator HI-VIS



- Textured PU coated synthetic leather palm
- Hi-vis lime 2 way spandex back
- Full patent pending tire tread TPR on back of hand
- Reinforced thumb crotch
- Hook and loop closure with ID panel
- Synthetic leather fourchettes for breathability and comfort

Size	Order No.	Price
Medium	**KB51PD2901M**	Price
Large	**KB51PD2901L**	Price
X-Large	**KB51PD2901XL**	Price

ergodyne Proflex® 920 Nitrile-Dipped Dorsal Impact Reducing Gloves



- Molded TPR armor for impact protection, pinch injury prevention and blow deflection
- Finger TPR extends to fingertips; sewn for maximum durability and wear
- Armor “flex zones” for high dexterity
- EN 420; EN 388; 4121

Size	Order No.	Price
Large	**LF65920L**	Price
Medium	**LF65920M**	Price
X-Large	**LF65920XL**	Price
2X-Large	**LF65920XXL**	Price

WELLS LAMONT Industrial I2459 Impact Glove



- Seamless knit palm coated glove with impact pads
- Gray shell / black palm / orange TPR
- Blend of high performance fibers and steel
- Sandy nitrile palm

New!

ANSI A7

Size	Order No.	Price
Medium	**LW0110580**	Price
Large	**LW0110585**	Price
X-Large	**LW0110590**	Price
XX-Large	**LW0110595**	Price

MCR SAFETY PD2902 Predator Synthetic Leather Palm



ANSI 2

- Synthetic leather palm
- Polymer pads on fingertips, palm, and thumb crotch
- Red 2 way spandex back
- Full Patent Pending tire tread TPR on back of hand
- Hook and loop closure with ID panel
- Synthetic leather fourchettes for breathability and comfort

Size	Order No.	Price
Medium	**KB51PD2902M**	Price
Large	**KB51PD2902L**	Price
X-Large	**KB51PD2902XL**	Price

WESTCHESTER High Visibility with Back Hand Protection



- TPR on back of hand for impact resistance
- Orange foam nitrile palm provides excellent grip
- Kevlar patch in thumb saddle
- Hi visibility yellow back creates awareness
- Silicone free
- Cut resistant

ANSI 4

Size	Order No.	Price
Medium	**KP8877710**	Price
Large	**KP8877715**	Price
X-Large	**KP8877720**	Price
2X-Large	**KP8877725**	Price

4500 Split Cow Welder's

- Select shoulder
- Gunn pattern
- Double reinforced palm & thumb
- Welted in high stress areas
- Full stock lining, in-sewn at all fingertips
- Size large (generous)
- Turned leather hem
- One piece leather back
- Sewn with KEVLAR®



Size	Order No.	1 pair	12 pair	144 pair
Large	**KB514500**	Price	Price	Price

Blue B-Series Welder's

- Side split cowhide
- Foam insulated back and palm with full cotton lining
- Wing thumb
- Reinforced thumb and palm patch
- Fully welted



Size	Order No.	Price
Large	**RT582519B**	Price

4600 Blue Beast® Welder's

- Select heavy side leather
- Full sock lining, in-sewn at all finger tips
- All seams fully welted
- Turned leather hems
- Flame-resistant sleeves
- Extra-large die cut, gunn pattern
- Sewn with super-strong, heat-resistant DuPont™ Kevlar® thread



Size	Order No.	1 pair	12 pair	144 pair
X-Large	**KB514600XL**	Price	Price	Price
2X-Large	**KB514600XXL**	Price	Price	Price

High Temperature Worker's

08314

- Aramid (Kevlar) fibers and fiberglass blend
- Withstands exposure up to 600° Fahrenheit
- Full 11 oz. wool insulated lining
- Superior abrasion and cut resistance

07114

- Treated fiberglass, 35 oz. highly texturized Silica yarn
- Withstands temperatures up to 2000° Fahrenheit
- Full 11 oz. wool insulated lining
- Superior abrasion and cut resistance



Max. Temperature Resitance	Order No.	Price
600° Fahrenheit	**RT5808314**	Price
2000° Fahrenheit	**RT5807114**	Price

Grip N® Hot Mill

- Protect workers' hands in temperatures up to 400°F
- Ambidextrous design
- Glove provides secure grip minimizes hand fatigue
- Cotton/polyester blend protects in material handling and casting applications
- Unique N-Tread offers secure grip
- Seamless string knit construction assures superior comfort
- Launderable with minimal shrinkage
- Color: cream/red



Size	Order No.	Price
One Size	**KB65517147**	Price

Grip N® Kevlar® Hot Mill

- Handling of very hot objects with a good grip and comfort
- 100% Knitted Kevlar glove lined with cotton glove double face coating of nitrile dots
- Ambidextrous
- Color: yellow/red



Size	Order No.	Price
X-Large	**KB65527457**	Price

MCR SAFETY 9218M13 Cut Pro™ Cut Resistant Sleeve

- 18", 13 gauge HPPE/ synthetic sleeve
- Allows excellent manual dexterity
- Abrasion and cut resistance, CE 4342 and ANSI Cut 2
- Seamless shell is comfortable, cool, and easy to wear



ANSI 2

Order No.	Price
KB519218M13	Price

*** HPPE: High performance polyurethane**

MCR SAFETY 9318K13 Hero™ Kevlar®/Stainless Steel Sleeve

- DuPont™ 13 Gauge Kevlar®/stainless steel sleeve
- 18" Length
- High comfort level, great manual dexterity



ANSI A6

Order No.	Price
KB519318K13	Price

PRM PRO Welder's

- Grain cowhide MigTig Welder
- Gunn pattern, wing thumb, 4-1/2" split leather gauntlet cuff
- Sewn with Dupont Kevlar thread
- Ideal for welding and heat applications



Size	Order No.	1 pair	12 pair	144 pair
Medium	KB38500M	Price	Price	Price
Large	KB38500L	Price	Price	Price

STEINER TIG Ironflex Welder's

- Premium grain kidskin
- Steiner gloves give you the protection and feel you need to get the job done
- Nomex back
- Velcro cuff



Size	Order No.	Price
Small	RT580260S	Price
Medium	RT580260M	Price
Large	RT580260L	Price
X-Large	RT580260X	Price
2X-Large	RT5802602X	Price

MCR SAFETY 4952 Mustang® Mig/Tig Welder's

- Select grade grain cow palm and back
- Wing thumb
- 4-1/2" Gauntlet split cow cuff
- Premium grade leather
- Sewn with DuPont® KEVLAR® thread
- Enhanced dexterity



Size	Order No.	1 pair	12 pair	144 pair
Medium	KB514952M	Price	Price	Price
Large	KB514952L	Price	Price	Price

WELLS LAMONT Industrial All Day Sleeves

- High strength all-day fiber provides superior snag, tear and abrasion resistance
- Made from recycled water bottles, free from harsh dye and chemicals
- Inner cotton layer for added comfort
- Elastic on both ends allows sleeve to stay in place
- Latex free



ANSI 2

New!

	With Thumbhole		Without Thumbhole	
Size (in.)	Order No.	Price	Order No.	Price
14	-	-	LW0110120	Price
18	LW0110130	Price	LW0110125	Price
24	LW0110140	Price	LW0110135	Price

WELLS LAMONT Industrial Kevlar® Sleeves

- 2-Ply knit sleeve
- Flame resistant



New!

ANSI A3

	With Thumb Tack		With Thumbhole		Without Thumbhole	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
10	-	-	-	-	LW0110145	Price
14	-	-	LW0110155	Price	LW0110150	Price
16	-	-	-	-	LW0110160	Price
18	LW0110175	Price	LW0110170	Price	LW0110165	Price
24	-	-	LW0110185	Price	LW0110180	Price

WELLS LAMONT Industrial S-20MS Terry Cloth Sleeve

- Medium weight terry cloth seamless sleeve with elastic top and bottom
- Natural white
- Loop-in terrycloth
- Protects up to 200°F



New!

Size	Order No.	Price
17	LW0110660	Price

WELLS LAMONT Industrial SKC Cut-Resistant Sleeves

- Unique knit sleeve made from a patented combination of high performance materials and flame resistant fibers
- Blousy fit allows for superior comfort and breathability
- Elastic on both ends keeps sleeve in place
- ANSI cut level A3



ANSI A3

MADE IN THE USA

New!

	With Thumbhole		Without Thumbhole	
Size	Order No.	Price	Order No.	Price
10	-	-	LW0110190	Price
14	-	-	LW0110195	Price
18	LW0110205	Price	LW0110200	Price
24	LW0110215	Price	LW0110210	Price

MCR SAFETY 9378E, 9378TE Sleeves

- KEVLAR® brand fiber
- Double ply
- 18" Sleeves
- Also available in 10" through 20" lengths
- DuPont KEVLAR® brand fiber for high tensile strength relative to its weight–up to five times stronger than steel



ANSI 3

Size	Order No.	1 Ea.	12 Ea.	144 Ea.
18" with Thumb Slot	KB519378TE	Price	Price	Price
18" without Thumb Slot	KB519378E	Price	Price	Price

RAYOVAC 2AAA LED Tactical Pen Light



- **Bulb:** LED
- **Run time:** 23 hours
- **Lumens:** 18
- **Body:** Machined aluminum
- **Battery:** 2 AAA (included)
- **Size:** .710 x 3-3/4 x 8”
- **Features:** LED lens cover prevents dirt and dust from inhibiting the LED area. Tacitcal style push button on/off
- Lifetime warranty

Order No.	Price
KA30FL035	Price

RAYOVAC Industrial 2AA LED Pocket Clip Light



- **Bulb:** CREE LED
- **Run time:** 6 hours
- **Lumens:** 60
- **Body:** Durable plastic
- **Battery:** 2 AA (included)
- **Size:** 1-3/4 x 3.8 x 8”
- **Features:** Interchangeable colored lenes : red, green and blue. Impact, chemical, water and corrosion resistant. Holster with lens storage included.
- Lifetime warranty

Order No.	Price
KA30ICLIPB	Price

*** Available while supplies last**

TITAN Inspector’s Light



- **Bulb:** 1 Watt LED bulb, 90 lumens
- **Run time:** 6-1/2 hours
- **Battery:** 2 AAA (included)
- **Size:** 5-5/8” long 5/8” diameter
- **Features:** powerful 90 lumens bright bulb, long run time, push button bottom switch, lightweight aluminum shock resistant body and lens

Order No.	Price
KP8236006	Price

STREAMLIGHT Stylus® LED Penlights

Style, Convenience and a 100,000-Hour Bulb!



- **Bulb:** High intensity 5mm LED, 11 lumens
- **Run time:** Max. up to 60 hours of continuous use
- **Body:** Anodized machined aluminum housing
- **Battery:** 3 AAAA (included)
- **Size:** 6-1/4”
- **Features:** Non-slip grip, waterproof, individually serialized, pocket clip, and glare guard protector

Bulb	Order No.	Price
Blue	**KA5765022**	Price
Green LED	**KA5765020**	Price
Red LED	**KA5765006**	Price
White	**KA5765018**	Price

MAGLITE® XL50® LED Flashlights



- **Bulb:** LED
- **Lumens:** 200, 224m beam distance
- **Run time:** 6 hrs. 45 min./ high; 25 hours/ low
- **Body:** Anodized alumimum alloy with tactile knurl grip
- **Battery:** 3 AAA (included)
- **Size:** 4.8” long
- **Features:** 3 selectable modes using the QuickClik™ system, compact pocket size design,water resistant, 1m drop resistant
- **Part # KA705030** tactical pack includes lens holder, anti roll device, color lens set and pocket clip

Color	Order No.	Price
Black	**KA705025**	Price
Black	**KA705030**	Price
Gray	**KA705215**	Price

MAGLITE® Mini-Maglite®



M2A03H



M3A016

- **Run time:** Max. 2 hours, 15.6 lumens (AAA) Max. 5 hours, 15.6 lumens (AA)
- **Body:** Rugged machined aluminum with knurled grip
- **Battery:** 2 AAA or 3 AAA (included)
- **Extras:** AA comes with holster pack, AAA comes with pocket clip
- **Size:** AA 5-3/4” length; AAA 5” length
- **Features:** High intensity adj. spot to flood, converts quickly to free standing candle mode, corrosion resistant, water & shock resistant, spare lamp safely secured inside the tailcap.

Size	Color	Batteries Used	Order No.	Price
5	Black	AAA	**KA57M3A016**	Price
5-3/4	Black	AA	**KA57M2A01H**	Price
5-3/4	Blue	AA	**KA57M2A11H**	Price
5-3/4	Red	AA	**KA57M2A03H**	Price

NIGHTSTICK Intrinsically Safe LED Penlight



- **Bulb:** CREE® LED
- **Run time:** 18 hrs
- **Lumens:** 30
- **Battery:** 2 AAA (included)
- **Size:** 5.8”
- **Cert:** cETLus, ATEX, IECEX, INMETRO and MSHA certified, Class I, Div 1 A-G
- Waterproof
- Limited lifetime warranty

Order No.	Price
KE58XPP5410G	Price

MAGLITE® Solitare LED Flashlight



- **Bulb:** LED
- **Run time:** 1 hour 45 min.
- **Lumens:** 47
- **Body:** Anodized aluminum alloy
- **Battery:** 1 AAA (included)
- **Size:** 3” long
- **Features:** Adjustable spot to flood, weather resistant, 1m drop resistant, keychain lanyard

Color	Order No.	Price
Black	**KA705000**	Price
Gray	**KA705190**	Price

STREAMLIGHT Stylus Pro® LED Flashlight



- **Bulb:** C4 LED Technology 48 Lumens
- **Runtime:** 6 hrs. 15 min.
- **Body:** Type II MIL-SPEC aircraft aluminum
- **Battery:** 2 AAA (included)
- **Size:** 5.3” Long
- **Features:** Tailcap switch for momentary on/off. O-ring sealed, shock proof and drop-tested construction. Water resistant per IPX4; in accordance with specification EN 60529:1992. Tear resistant nylon holster. Unbreakable pocket clip.

Order No.	Price
KA5766118	Price

STEELMAN PRO Rechargeable Pen Lights

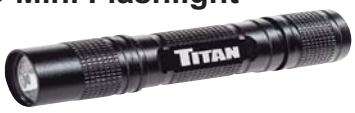
New!



- **Bulb:** LED
- **Run time:** 1 hour 15 minutes
- **Lumens:** 70
- **Body:** anodized aluminum
- **Battery:** Lithium ion
- **Features:** mini USB wall adapter which can recharge it’s lithium ion battery up to 300 times

Color	Order No.	Price
Black	**KE5378609**	Price
Red	**KE5378733**	Price
Green	**KE5378734**	Price
Blue	**KE5378735**	Price
Orange	**KE5378736**	Price
Silver	**KE5378737**	Price

TITAN 60 Lumen LED Mini Flashlight



- **Bulb:** 1 Watt Lux-C LED
- **Lumens:** 60
- **Battery:** 1 AA (included)
- **Size:** 3.4” long
- **Features:** Durable aluminum housing with water resistant seals. Push button switch

Order No.	Price
KP8236016	Price

STEELMAN® 24" Aluminum LED Pro Bend-A-Light



- **Bulb:** LED bulb rated at 50,000 hours of continuous use
- **Run time:** Up to 10 hrs
- **Lumens:** 8
- **Body:** Aluminum
- **Battery:** 3 AA (included)
- **Size:** 24”
- **Features:** High intensity flexible light bends and holds position which provides bright light in tight spaces; Protective cover can be used for an extension

Order No.	Price
KE5396285	Price

STEELMAN® Bend-A-Light Replacement Bulbs

Fits Model No.	Order No.	Price
05100A, 05180A	KE535515	Price
10150A, 16102	KE5312100	Price
15150A	KE5312110	Price

MAGLITE® Mini-Maglite® LED Flashlights



- **Bulb:** LED
- **Run time:** 2 hours 45 minutes
- **Lumens:** 100
- **Beam distance:** 104m
- **Body:** Anodized aluminum alloy with diamond knurled grip
- **Battery:** 2 AAA (included)
- **Size:** 5” Length
- **Features:** Adjustable spot to flood, weather resistant, 2m drop resistant, includes steel clip

Color	Order No.	Price
Black	KA705005	Price
Gray	KA705195	Price

MAGLITE® MAG-TAC® LED Tactical 3 Mode Flashlights



- **Bulb:** LED, 310 lumens, 182m beam distance
- **Run time:** 4 hours/ high, 17 hours/ low
- **Body:** Anodized aluminum alloy
- **Battery:** (2) CR123 included
- **Size:** 5.2” long
- **Features:** Aggressive knurled design that is water resistant and 2m drop resistant, detachable pocket clip with para cord hole, three modes: full power, power save and momentary all selectable through QuickClick™ mode selector

Color	Order No.	Price
Black	KA705045	Price
Urban Gray	KA705230	Price

MAGLITE® MAG-TAC® LED Rechargeable System



- **Bulb:** LED
- **Lumens:** 533, 178m beam distance
- **Run time:** 2 hrs. 30 min./high, 4 hrs. 15 min./ low
- **Body:** Anodized aluminum alloy with agressive knurled grip
- **Battery:** Lithium iron phosphate-LiFePO4 (included)
- **Size:** 5.8” long
- **Features:** Water resistant, 2m drop resistant, 3 modes and 4 function setting using QuickClik™ mode selctor, includes USB power mountable charging base, 12v adapter 120v converter or any USB 2.0 standard, detachable pocket clip with para cord hole

Order No.	Price
KA705090	Price

PRM PRO® COB Wide Beam Pen Flashlight



- **Bulb:** COB (chips on board)
- **Lumens:** 400 High & 160 Low
- **Run Time:** 4.5 Hours - High, 15 Hours - Low, 40 Hours Blinking
- **Switch:** Button
- **Battery:** 3 AA (included)
- **Size:** 10 x 3.25 x 1.25
- **Features:** Powerful lighting that illuminates your work area, magnet on bottom allows for your hands to be completely free, anodized aluminum hosing is both water and impact resistant, high beam, low beam & red blinking for emergency

Order No.	Price
KP9199171	Price

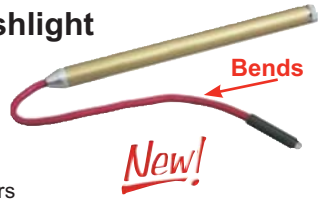
STEELMAN® Bend-A-Lights

- 3/16″ Diameter bulb provides amazing brightness for tight situations
- Protective cover can be used for an extension
- On/off switch
- Bulb & batteries included



Length (in.)	Description	Order No.	Price
11	Bend-A-Pro 5" Flexible Brass alloy shaft, 3/16 dia.	KE5316102	Price
16	Bend-A-Micro Pro Flexible light, 1/8" dia.	KE5310250A	Price
16	Bend-A-Pro 10" Flexible Brass alloy shaft, 3/16 dia.	KE5310150A	Price
24	Bend-A-Light 15" Flexible Brass alloy shaft,3/16" dia.	KE5315150A	Price

Lisle LED Flexible Flashlight



- Flexible wire works around obstructions & holds the shape you give it
- White light brightly illuminates even the tightest work area
- Uses 3 AAA batteries, not included
- LED Bulb lasts for up to 100,000 hours

Order No.	Price
KN6535900	Price

STEELMAN® PRO LED Rechargeable Headlamp Combo Kit



- **Bulb:** 3 watt Q3 CREE LED bulb
- **Run time:** 4 hrs
- **Lumens:** 120
- **Body:** Durable anodized aluminum
- **Battery:** Two rechargeable 16340 3.7v 700mAh (included)
- **Features:** 2-Mode switch- high or infinite dimmer,70 meter beam distance with versatile design removable headband, magnetic base with flexible holder, weather-resistant o-rings

Order No.	Price
KE5396784	Price

PRM PRO® LED Flashlight With Magnetic Pick-Up Tool



- Super bright 6-LED flashlight
- 19” Telescoping magnetic pick-up tool retrieves dropped fasteners and tools up to 3 lbs
- Knurled non-slip handle grip
- Uses (4) LR44 button cell batteries (included)

Size	Order No.	Price
19" Telescoping	KP8349810	Price

STREAMLIGHT MicroStream® Flashlight



- **Bulb:** C4 LED Technology
- **Run time:** 2 hrs. 15 min.
- **Lumens:** 28 Lumens
- **Body:** Type II MIL-SPEC aircraft aluminum
- **Battery:** 1 AAA (included)
- **Size:** 3.5” Long
- **Features:** Tailcap switch for momentary on/off. O-ring sealed, shock proof and drop-tested construction. Water resistant per IPX4; in accordance with specification EN 60529:1992. High Strength “Break Away” safety lanyard. Unbreakable pocket / hat clip

Order No.	Price
KA5766318	Price

STREAMLIGHT Protac Tactical Flashlight



- **Bulb:** C4® LED technology for extreme brightness
- **Run time:** Up to 2.5 hours of run time (high, 180 lumens)
- **Body:** 6000 series machined aircraft aluminum with an anodized finish, and it has an O-ring sealed, impact-resistant tempered glass lens
- **Battery:** Powered by two CR123A lithium (included)
- **Size:** 4.68” Length, Barrel Width .77”
- **Features:** Compact and powerful with high and low intensity modes, a strobe mode. The combination of its small size and high output, results in one of the brightest tactical personal carry lights for its size. Waterproof to 1 meter for 30 minutes

Order No.	Price
KA5788031	Price

STREAMLIGHT Scorpion® HL Flashlight



- **Bulb:** C4® LED
- **Run time: High** - 1.25 hrs, 600 lumens, 16,000 candela **Low** - 18 hrs, 33 lumens, 800 candela **Strobe** - 2.5 hrs
- **Body:** Durable, anodized aluminum construction with enhanced rubber armored sleeve; textrued for sure grip and o-ring sealed glass lens
- **Size:** 5.46”
- **Battery:** Two 3V CR123A lithium (included)
- **Features:** Ten-Tap® programming: three selectable programs high/strobe/low; high only; low/high, IPX7 waterproof to 1 meter for 30 minutes, 1 meter impact resistance tested

Order No.	Price
KA5785400	Price

NIGHT STICK LED Mini-TAC Flashlight



- **Bulb:** CREE® LED
- **Run time:** Up to 1.5 hours
- **Lumens:** Up to 140
- **Battery:** 2 AA (inculded)
- **Body:** Aircraft grade 6061-T6 aluminum
- **Features:** Non-slip grip, IP-X4 water-resistant impact and chemical resistant, removable pocket clip included
- Limited lifetime warranty

Lumens	Run Time	Length	Batteries Used	Color	Order No.	Price
100	Up to 1.5 hrs	5.4	2-AAA (included)	Blue	**KE58MT100BL**	Price
100	Up to 1.5 hrs.	5.4	2-AAA (included)	Black	**KE58MT100**	Price
140	Up to 1.5 hrs.	3.9	2-AA (included)	Black	**KE58MT120**	Price

STREAMLIGHT StylusPro® USB Rechargeable LED Penlight



- **Bulb:** C4® LED white: 630 candela
- **Run time:** 3.5 hrs
- **Lumens:** 70
- **Battery:** Lithium ion battery fully recharges in-product in 2.5 hours up to 300 times
- **Features:** Charge indication LED: LED red- charging; LED green- charged, rechargeable using supplied USB cord or optional AC wall adapter. Fully regulated output for consistent lumen performance over the battery life

Order No.	Price
KA5766133	Price

STEELMAN 2AA LED Penlight



- **Bulb:** 1W Cree XP-E LED
- **Lumens:** 90 high and 50 low
- **Body:** Anodized aluminum casing
- **Battery:** 2 AA Akaline
- **Size:** 1/2” Dia. x 6” L
- **Features:** Soft touch switch mode toggles between high and low modes; steel pocket clip included

Order No.	Price
KE5395863	Price

STREAMLIGHT ProTac® 2 AA Flashlight



- **Bulb:** C4® LED
- **Run time: High** - 2 hrs**,** 155 lumens, 3,300 candela peak beam intensity **Low** - 36 hrs 11 lumens, 200 candela peak beam intensity **Strobe -** 4 hrs
- **Body:** Durable, anodized aluminum construction with impact resistant tempered glass lens
- **Size:** 6.14”
- **Battery:** 2 AA alkaline (included)
- **Features:** Ten-Tap® programming: three selectable programs high/strobe/low; high only; low/high, IPX7 waterproof to 1 meter for 30 minutes, 2 meter impact resistance, nylon holster included

Order No.	Price
KA5788033	Price

BAYCO Innovation Made Better™ 115 Lumen Adjustable Beam Flashlight NIGHT STICK



- **Bulb:** CREE® LED
- **Run time:** NSP410: 1 hour, NSP430: 1.5 hours
- **Lumens:** NSP410: 115 NSP430: 275
- **Battery:** NSP410: 1-AA (included) NSP430: 2-AA (included)
- **Size:** NSP410: 4.25” NSP430: 5.8”
- **Features**: tail switch, momentary and constant-on functionality; waterproof

New!

NSP410 NSP430

Lumens	Order No.	Price
115	**KE58NSP410**	Price
275	**KE58NSP430**	Price

BAYCO Innovation Made Better™ Tactical Xtreme Lumens LED Rechargeable Flashlight NIGHT STICK



- **Bulb:** CREE® LED
- **Run time:** Up to 8.75 hours
- **Lumens:** High-800, Med.-350, Low-140
- **Battery:** Rechargable Li-Ion or 2 x CR-123
- **Size:** 6.25”
- **Features:** Super bright xtreme lumens design, high/medium/low/stobe modes, effective beam distance of 672+ feet, IP-X7 waterproof, impact and chemical resistant
- Limited lifetime warranty

Order No.	Price
KE58TAC560XL	Price

STREAMLIGHT Jr. LED Flashlight



- **Bulb:** C4 LED Technology 85 Lumens, 3,800 Candela
- **Run time:** 4 hrs
- **Body:** Anodized machined aluminum housing
- **Battery:** 2 AA (included)
- **Size:** 6-1/2”
- **Features:** Push button tail switch - momentary or constant on operation shock-resistant / water-resistant; includes black nylon flapless holster

Order No.	Price
KA5771500	Price

MAGLITE® PRO+® Mini LED Flashlights

- **Bulb:** LED
- **Run time:** 2 hours 15 min./ high, 27 hours/ low
- **Lumens:** 245, 150m beam distance
- **Body:** Anodized aluminum alloy
- **Battery:** 2 AA (included)
- **Size:** 6.6" long
- **Features:** Water resistant, 1m drop resistant, diamond knurled grip, adjustable beam - spot to flood, high/low modes, includes holster sleeve



Color	Order No.	Price
Black	**KA705020**	Price
Gray	**KA705210**	Price

MAGLITE® PRO® LED Mini Flashlights

- **Bulb:** LED
- **Lumens:** 272, 163m beam distance
- **Run time:** 2 hours 30 min.
- **Body:** Anodized aluminum alloy with diamond knurled grip
- **Size:** 6.6"
- **Battery:** 2 AA (included)
- **Features:** Water resistant, 1m drop resistant, adjustable beam - spot to flood, includes holster sleeve



Color	Order No.	Price
Black	**KA705015**	Price
Gray	**KA705205**	Price

MAGLITE® AA LED Flashlight

- **Bulb:** LED
- **Run time:** 11 hours/ high, 32 hours / low
- **Lumens:** 97, 145m beam distance
- **Body:** Anodized aluminum alloy with diamond knurled grip
- **Battery:** 2 AA (included)
- **Size:** 6.6" long
- **Features:** Water resistant, 1m drop resistant, 4 modes: high, low, signal, SOS, multi-mode electronic switch, includes holster



Color	Order No.	Price
Black	**KA705010**	Price
Gray	**KA705200**	Price

NIGHTSTICK Mini TAC Pro Flashlight

- **Blub:** CREE® LED
- **Run time:** 1-1/2 hrs. High, 4 hrs. Med, 6 hrs. Low
- **Lumens:** 200 High, 90 Med, 45 Low
- **Battery:** 2 AA (included)
- **Size:** 6"
- **Body:** Aircraft grade 6061-T6 aluminum
- **Features:** 4 Mode - high/med/low/strobe, non-slip grip, sharp focused flashlight beam, IP-X7 waterproof, impact and chemical resistant, removable pocket clip
- Limited lifetime warranty



Order No.	Price
KE58MT220	Price

NIGHTSTICK LED Tactical Flashlight

- **Bulb:** CREE® LED
- **Run time:** Up to 4.5 hours
- **Lumens:** High-800, Med.-350, Low-140
- **Batteries:** 2 CR-123 Lithium
- **Size:** 6.25"
- **Features:** Super bright xtreme lumens design, high/medium/low/stobe modes, effective beam distance of 672+ feet, non-slip grip, large textured tail switch, IP-X7 waterproof, impact and chemical resistant
- Limited lifetime warranty



Order No.	Price
KE58TAC540XL	Price

BAYCO Tactical Dual-Light™ FLashlight

USB Rechargeable



New!

- **Bulb:** CREE® LED
- **Run time:** 2, 2.5 /9 hours
- **Lumens:** 850 / 550 / 180
- **Batteries:** (2) CR-123 lithium (not included)
- **Size:** 6-3/4"
- **Features:** USB rechargeable, flashlight/floodlight/dual light, strobe, IP-X7 waterproof

NIGHTSTICK

Order No.	Price
KE58NSR9854XL	Price

BAYCO Multi-Function Tactical Dual-Light™ Flashlight

NIGHTSTICK



- **Bulb:** CREE® LED
- **Run time:** 1.5 / 4 / 6.5 hours
- **Lumens:** 650 / 250 / 150
- **Batteries:** (2) CR-123 lithium
- **Size:** 6-3/4"
- **Features:** USB rechargeable, flashlight/floodlight/dual light, strobe, IP-X7 waterproof

New!

Order No.	Price
KE58NSP9842XL	Price

STREAMLIGHT Twin-Task® Laser Combo LED Flashlight



- **Bulb:** C4® power with 5 LED bulbs
- **Run time:** 3 lighting modes: C4 LED 180 Lumens, 26 hours runtime 6 LED 80 Lumens, 48 hours runtime, 3 LED 50 Lumens, 72 hours runtime
- **Body:** Machined aluminum case with non-slip knurled grip and a matte black anodized finish
- **Battery:** 3 AAA Alkaline (not included)
- **Size:** 5.38"
- **Output:** Laser rating: 650 nM wavelength, Class IIIa (3R), greater than 5 mW laser output power. Usable range of 100 yards (+) when using laser pointer only. Usable range of 100 feet (+) when in Laser/C4® LED combo position
- **Features:** IPX4 rated for water resistant operation. All openings o-ring sealed. 1 meter impact resistance tested.

Order No.	Price
KA5751043	Price

STREAMLIGHT ProTac HL® 3 Flashlight



- **Bulb:** C4® LED
- **Run time: High** 1.5 hrs,1,100 lumens, 36,000 candela **Low** 36 hrs, 35 lumens, 1,200 candela **Strobe** 1.5 hrs
- **Body:** Durable, anodized machined aircraft aluminum construction with o-ring sealed glass lens
- **Size:** 7.10"
- **Battery:** 3V CR123A lithium (included)
- **Features:** Ten-Tap® programming: three selectable programs high/strobe/low; high only; low/high, IPX7 waterproof to 1 meter for 30 minutes, 2 meter impact resistance, nylon holster included

Order No.	Price
KA5788047	Price

STREAMLIGHT 4AA ProPolymax® Flashlight



- **Bulb:** C4® LED
- **Run time**: **High** - 2.75 hrs, 300 lumens, 17,000 candela; **Low** - 24 hrs, 50 lumens, 2,500 candela; **Strobe -** 6 hrs
- **Body:** High performance, anti-static, thermoplastic material resistant to chemicals and solvents
- **Size:** 7"
- **Battery:** 4 AA (included)
- **Features:** Ten-Tap® programming: three selectable programs high/strobe/low; high only; low/high; IP67 rated for dust-tight and waterproof to 1 meter for 30 minutes, IPX4 for water spray, 3 meter impact resistance tested; O-ring sealed, dust proof, water-tight enclosure; Sealed switch to protect from corrosion caused by battery leakage

Color	Order No.	Price
Black	**KA5768821**	Price
Yellow	**KA5768820**	Price

Worksafe LED Flashlights

MADE IN THE USA

New!

- **Bulb:** LED
- **Lumens:** 15720: 60 lumens, 15460: 80 lumens
- **Run Time:** 15720: 250 hrs., 15460: 200 hrs.
- **Battery:** 15720: (3) D Alkaline, 15460: (2) D Alkaline
- **Size:** 15720: 10.2 x 2.3", 15460: 8.1 x 2.3"
- **Features:** For use in hazardous situations, intrinsically safe, waterproof, anti-roll tube



Lumens	Order No.	Price
60	**KN0115720**	Price
80	**KN0115460**	Price

Polytac LED Flashlights

- **Bulb:** C4 LED Technology, 5,200 Candela
- **Lumens:** 275/high, 14/low
- **Run time:** 3 hours/ high, 65 hours/low
- **Body:** High impact super tough nylon polymer
- **Battery:** (2) 3V CR123A lithium
- **Size:** 5.22" Long; 4.1 oz.
- **Features:** Virtually indestructible, super-bright, nylon polymer, LED tactical light



Order No.	Price
KA5788850	Price

LED Dual-Light Flashlight with Dual Magnets

- **Bulb:** CREE® LED with built in end cap magnet for hands free use
- **Run time:** 10-1/2 hrs
- **Lumens:** 130 flashlight, 110 floodlight, 235 Dual
- **Body:** Rugged polymer housing
- **Battery:** 3 AA (included)
- **Size:** 7"
- **Features:** Waterproof, 2 integrated magnets for hands-free use, impact and chemical resistant, sharp focus beam, limited lifetime warranty



Order No.	Price
KE58NSP2422R	Price

Rechargeable Dual-Light™ Flashlight

- **Bulb:** CREE® LED
- **Run time:** 6 - 12 hours, depending on mode
- **Flashlight lumens:** 250
- **Floodlight lumens:**140
- **Dual light lumens:** 350
- **Size:** 7-1/4"
- **Batteries:** rechargeable lithium-ion
- **Features:** waterproof, impact & chemical resistant, includes wall/ vehicle mountable charger, AC/DC power supplies & removable lanyard, dual integrated hands-free magnet



Order No.	Price
KE58NSR2522RM	Price

Dual-Light™ Flashlight

- **Bulb:** CREE® LED
- **Run time:** 4.5 - 17.5 hours, depending on mode
- **Flashlight lumens:** 120
- **Floodlight lumens:** 120
- **Dual light lumens:** 240
- **Size:** 7-1/4"
- **Batteries:** 3 AA batteries (not included)
- **Features:** waterproof, impact and chemical resistant, integrated magnets for hands-free use, built in pocket/belt clip



Order No.	Price
KE58XPR5522GM	Price

Razor LED

New!

- **Bulb:** LED
- **Run time:** 24 Hours
- **Lumens:** 125
- **Batteries:** 3 AA batteries (not included)
- Intrinsically safe
- **Features:** high output LED, fully waterproof to one meter, floats, weighs just 7 ounces, tactical, tail cap slot for optional lanyard or s-biner. extremely lightweight, super tough nylon construction, limited lifetime warranty



MADE IN THE USA

Color	Order No.	Price
Black	**KN0160100**	Price
Hi Vis Green	**KN0160101**	Price
Orange	**KN0160102**	Price

Intrinsically Safe Flashlight

New!

- **Bulb:** CREE® LED
- **Run time:** Up to 14 hours
- **Lumens:** 210
- **Battery:** AA (not included)
- **Size:** 7"
- **Features:** ANSI IP-67 dustproof / waterproof, cETLus, ATEX, and IECEx listed, sharp focused beam



Order No.	Price
KE58XPP5420GX	Price

2AA ProPolymer® LED Flashlight

- **Bulb:** .5 Watt high flux LED
- **Run time:** 20 hours
- **Lumens:** 20, 2,300 candela
- **Body:** High impact super tough nylon offering exceptional durability, rubber coated facecap resistant to impact and shock, unbreakable polycarbonate lens with scratch resistant coating
- **Battery:** 2 AA (included)
- **Size:** 6.3"
- **Features:** IP57 rated design; dust and water ingress protected; waterproof to 1M for 1 hour; O-ring sealed construction; Push button tail switch



Color	Order No.	Price
Yellow	**KA5767101**	Price

Lux ProPolymer® LED Flashlight

- **Bulb:** LED
- **Lumens:** 42 Lumens
- **Run time:** 6 hours
- **Body:** polymer
- **Battery:** 4 AA (included)
- **Size:** Dia. 1.45 x 7" long
- **Features:** fixed focus lamp, durable high performance flashlight



Order No.	Price
KA5768244	Price

Intrinsically Safe Dual-Light Flashlight

- **Body:** Polymer
- **Battery:** 3-AA (not included)
- **Size:** 7"
- **Features:** flashlight/floodlight/dual-light, Flashlight: 210 L / 14 hrs, Floodlight: 130 L / 20 hrs, Dual-Light: 285 L / 10 hrs. cETLus, ATEX, IECEx rated Class I, Div 1 A-G. 2 magnets, HD pocket clip, Waterproof



Order No.	Price
KE58XPP5422GMX	Price

Responder Vision

MADE IN THE USA



Model No. 19124

New!

- **Bulb:** LED
- **Lumens:** 300
- **Run time:** 5 Hours
- **Batteries:** Lithium ion battery pack, 120V AC charger
- **Features:** super-tough nylon w/ TPE lens: polycarbonate tube, nylon belt clip and lanyard, waterproof, rear pushbutton switch, pre-focused spot beam, self venting, weighs just 6.3 oz.

Order No.	Price
KN0119124	Price

TITAN High Output Flashlight



- **Bulb:** LED, 150 lumens, up to 100,000 hours of continous service
- **Run time:** 4 hours
- **Battery:** 3 AAA (included)
- **Size:** 8.8" long
- **Features:** Tough anodized aluminum case for durabiltiy and shatter resistant lens. Water and corrosion resistant.

Order No.	Price
KP8236015	Price

RAYVAS 220 Lumen Tactical LED Flashlight



- **Bulb:** High performance CREE XPG LED with spot to flood adjustment
- **Lumens:** High 220; Low 90
- **Run time:** 3 lighting modes: High 2 hours; Low 4-1/2 hours; Strobe 8 hours
- **Body:** Aircraft grade aluminum
- **Battery:** 3 AAA (included)
- **Size:** 2 x 5-7/8 x 8-3/4"
- **Features:** 479 ft beam distance. Water resistant. Includes holster

Order No.	Price
KA30RNT3AAAB	Price

STEELMAN 700 Lumens Rechargable LED Flashlight





- **Run time:** 1 hr 30 min at 700 lumens, 3 hrs at 150 lumens, 3 hrs 30 min at strobe mode
- **Body:** Anodized aluminum casing for durability
- **Battery:** Li-ion battery provides long and trouble free run time
- **Size:** 6-3/4"
- **Features:** rotating collar conceals built-in charging port; tail cap switch with 3 modes -max/low/strobe; charging time: 2-1/2 hrs

Order No.	Price
KE5396792	Price

MAGLITE ML300L™ LED Flashlights



- **Bulb:** LED
- **Run time:** 2D- 6 hrs. 30 min/high, 20 hrs./low, 69 hrs./eco; 3D- 16 hrs./high, 77 hrs./low, 117 hrs./eco
- **Lumens:** 2D- 524/ high; 3D-625/high
- **Body:** Anodized aluminum alloy with diamond knurled grip
- **Battery:** 2D or 3D alkaline (not included)
- **Size:** 2D 9-1/4" long; 3D 11-3/4" long
- **Features:** 3 mode settings and 4 function settings using QuickClick™ system, water resistant, 1m drop resistant

	2-D		3-D	
Color	Order No.	Price	Order No.	Price
Black	**KA705070**	Price	**KA705075**	Price
Gray	**KA705255**	Price	**KA705260**	Price

STREAMLIGHT Twin-Task® LED Titanium Flashlight



- **Bulb:** C4® power LED & Xenon
- **Run time:** Xenon 2 hrs. 15 min, LED 80 hrs.
- **Lumens:** 275 high; 15 low
- **Body:** Machined aluminum case with non-slip knurled grip and a matte black anodized finish
- **Battery:** 3 AAA (included)
- **Size:** 9.02"
- **Features:** PX4 rated for water resistant operation; 1m impact resistance tested; choice between super bright light with the xenon bulb, and a long run time with the LEDs, unbreakable polycarbonate lens

Order No.	Price
KA5751038	Price

STREAMLIGHT Twin-Task® 3C C4 LED Flashlight



- **Bulb:** C4® power LED
- **Run time:** 3 lighting modes: C4 LED 180 Lumens, 26 hours runtime 6 LED 80 Lumens, 48 hours runtime, 3 LED 50 Lumens, 72 hours runtime
- **Body:** Machined aluminum case with non-slip knurled grip
- **Battery:** 3C (not included)
- **Size:** 8.54"
- **Features:** Textured reflector provides an even beam, along with piercing hotspot for distance, 50,000 hour lifetime, 1 meter impact resistance tested, includes a wrist lanyard

Order No.	Price
KA5751039	Price

MAGLITE LED 2 and 3 Cell Flashlights



- **Bulb:** LED
- **Run time:** 6 hrs. 45 min.- 2D; 80 hrs. - 3D
- **Lumens:** 168, 412m beam distance
- **Body:** Anodized aluminum alloy with diamond knurled grip
- **Battery:** 2D or 3D alkaline (not included)
- **Size:** 2D 10" long; 3D 12-1/2" long
- **Features:** Adjustable beam - spot to flood, water resistant, 1m drop resistant

	2-D		3-D	
Color	Order No.	Price	Order No.	Price
Black	**KA705050**	Price	**KA705055**	Price
Gray	**KA705235**	Price	**KA705240**	Price

MAGLITE MagLite® Flashlights



- **Bulb:** White star® Krypton lamp
- **Run time:** 9-1/2 hours (2D model – 37 lumens) (4D model – 122 lumens), (6D model – 162 lumens)
- **Body:** Rugged machined aluminum with knurled grip
- **Battery:** 2D, 4D, or 6D batteries (not included) based on model style
- **Size:** 2D 10" long, 4D 14-23/32" long , 6D 19-1/2" long
- **Features:** High intensity adj. spot to flood used by police and fire departments all over the world. Corrosion resistant, water & shock resistant. Spare lamp safely secured inside the tailcap.

Batteries Used	Size	Order No.	Price
2-D Cell	10	**KA57S2D016**	Price
4-D Cell	14-23/32	**KA57S4D016**	Price
6-D Cell	19-1/2	**KA57S6D016**	Price

MAGLITE ML300LX™ LED Flashlights



- **Bulb:** LED
- **Run time:** 2D- 6 hrs. 30 min/high, 20 hrs./low, 69 hrs./eco; 3D- 16 hrs./high, 77 hrs./low, 117 hrs./eco
- **Lumens:** 2D- 524/ high; 3D-625/high
- **Body:** Anodized aluminum alloy with aggresive knurled grip
- **Battery:** 2D or 3D alkaline (not included)
- Size: 2D-9.2" long; 3D-11.75" long
- **Features:** 3 mode settings and 4 function settings using QuickClick™ system, water resistant, 1m drop resistant

	2-D		3-D	
Color	Order No.	Price	Order No.	Price
Black	**KA705080**	Price	**KA705085**	Price
Urban Gray	**KA705265**	Price	**KA705270**	Price

STEELMAN PRO Command Post™ Modular Light Kit Rechargeable Base

New!



- Includes: 550 Lumen head, 500 Lumen Slim-Lite head, and LED Bend-A-Light
- Qwik-Loc Collar allows quick and easy swapping of light heads
- Magnetic tail cap for hands-free use
- Rechargeable Li-ion battery
- Durable canvas zip-around case with convenient storage pockets
- Weather resistant

Order No.	Price
KE5379057	Price

MAGLITE® Mag Charger® LED Rechargeable System



- **Bulb:** LED
- **Run time:** 4 hours/high, 17 hours/low, 37 hours/eco
- **Lumens:** 643 high/ 148 low/ 66 eco; 407m beam distance/ high
- **Body:** Anodized aluminum alloy with diamond knurl grip
- **Battery:** NiMH (included)
- **Size:** 12-3/4" long
- **Features:** 4 Feature settings, adjustable beam - spot to flood in 1/4 turn of the head, water resistant, 1m drop resistant, includes charging cradle, 120v converter and 12v adapter

Order No.	Price
KA705095	Price

MAGLITE® ML125® LED Rechargeable System



- **Bulb:** LED
- **Lumens:** 186 NiMH, 193 Alkaline
- **Run time:** 8 hrs. 30 min./high, 30 hrs./low - NiMH, 25 hrs./ high, 72 hrs./low - Alkaline
- **Body:** Anodized aluminum alloy with diamond knurl grip
- **Battery:** NiMH (included) or 3C Alkaline (not included)
- **Size:** 11.1" long
- **Features:** 5 Modes using QuickClik™ system, 4 function settings, water resistant, 1m drop resistant, includes charging cradle and AC adapter

Order No.	Price
KA705100	Price

BAYCO LED Mini-TAC Googeneck Flashlight

NIGHT STICK



- **Bulb:** CREE® LED
- **Run time:** 1-1/2 hours
- **Lumens:** 140
- **Battery:** 2 AA (included)
- **Body:** Aircraft grade 6061-T6 aluminum
- **Size:** 5.6" x 15.6" overall length
- **Features:** Sharp forcused flashlight beam, non-slip grip, IP-X4 water-resistant impact and chemical resistant, removable magnetic holder included
- Limited lifetime warranty

Order No.	Price
KE58MT130	Price

STREAMLIGHT Stylus Pro Reach™ Pen Light



- **Bulb:** C4® LED technology,38 Lumens
- **Run time:** 8 hours
- **Body:** Machined aluminum alloy case. Type II MIL-Spec anodized finish
- **Battery:** Rechargeable NiCd battery pack (included) or 4 AA (not included)
- **Size:** 9.20" High, Width: 2.85", Thickness: 2.75"
- **Features:** Dual C4 LED technology for extreme brightness. Full 360 degree rotation head with 210° of articulation. IPX4 rated for water resistant operation. All openings o-ring sealed. 2 meter impact resistance tested. Removable magnet with 135 lb. pull strength. Serialized for positive identification.

Order No.	Price
KA5766418	Price

BRIGHT STAR Industrial 2618 Flashlights

MADE IN THE USA

New!



- **Bulb:** 10500: PR2, 11500: LED
- **Run Time:** 10500: 15 hrs., 11500: 200 hrs.
- **Lumens:** 10500: 10,000 cp, 11500: 60 lumens
- **Battery:** (2) D not included
- **Size:** 8.1 x 2.3"
- **Features:** Deep ribbed case for non-slip grip, Anti-roll tube, Unbreakable lens

Bulb	Order No.	Price
Incandescent	**KN0110500**	Price
LED	**KN0111500**	Price

RAYOVAC Industrial 2D Magnet Flashlight



- **Bulb:** Krypton, 58 meter beam distance
- **Run time:** 12 hours
- **Lumens:** 72
- **Body:** Durable polypropylene construction - 7ft drop tested
- **Battery:** 2D (not included)
- **Size:** 2.3 x 5 x 10"
- **Features:** Smooth krypton beam with prism relector. Spare bulb holder and extra tough handing ring. Water, chemical , oil and grease resistant. Strong magnet attaches to furnace, fuse box, refrigerator, etc.
- Lifetime warranty

Color	Order No.	Price
Yellow	**KA30FL010**	Price

RAYOVAC 9 LED Flashlight with Laser



- **Bulb:** 9 LED plus laser LED
- **Run time:** 7 hours
- **Lumens:** 22
- **Body:** Machined aluminum
- **Battery:** 3 AAA (included)
- **Size:** 1.35 x 3-7/8 x 7"
- **Features:** FDA IIIa approved laser great for presentation highlighting and focusing points. LEDs never needs replacing
- Lifetime warranty

Color	Order No.	Price
Silver	**KA30FL040**	Price

RAYOVAC Brite Essentials™ Flashlight

New!



- **Bulb:** 3 LED
- **Run time:** 23 hours
- **Lumens:** 25
- **Body:** 3 ft drop tested
- **Battery:** 2AA (included)
- **Features:** Soft comfort grip, easy push on/off switch
- Lifetime warranty

Order No.	Price
KA30FL020	Price

RAYOVAC Sportsman 2AA LED Flashlight



- **Bulb:** High performance LED lasts 100,000 hours
- **Run time:** 8 hours (high), 24 hours (low)
- **Lumens:** 110 (high), 18 (low)
- **Body:** Anodized aluminum body and silicon rubber comfort handle
- **Battery:** 2 AA (included)
- **Size:** 1.28 x 6 x 9-1/2"
- **Features:** Water resistant. Holster included. Beam distance 87 meters (high), 33 meters (low)
- Lifetime warranty

Color	Order No.	Price
Olive/Black	**KA30SP2AABA**	Price

Vision 600 Lantern

Model No. 07712

MADE IN THE USA

New!

LIGHTHAWK



- **Bulb:** LED
- **Lumens:** 600
- **Run time:** 6.25 Hours
- **Size:** 9.5 x 3.12 x 5.12”
- **Batteries:** Lithium ion battery pack (rechargeable), 120V AC charger
- **Features:** Wall/vehicle mountable, microprocessor controlled, super tough nylon construction, LED charge status indicator, non-slip rubber bottom and handle, low battery indicator, high visibility flashing LED tail light. waterproof, floats, weighs 1.9 lbs.

Order No.	Price
KN0107712	Price

LED Lighthawk Gen II Lanterns

New!

LIGHTHAWK



- **Bulb:** LED
- **Lumens:** 300 high / 125 low
- **Batteries:** lithium ion-rechargeable
- **Run time:** 7 hours high/ 14 hours low
- **Beam distance:** 447M
- **Size:** 9.5 x 3.12 x 5.12”
- **Switch:** Toggle
- Intrinsically safe
- **Features:** wall and vehicle mountable, dual mode main beam, super tough nylon construction, LED charge status indicator, non-slip rubber bottom and handle, low battery indicator, easily adjustable articulated head, quick release shoulder strap, dual mode-high visibility tail light, waterproof, floats, weighs just 1.9 pounds, limited lifetime warranty

Incudes:	Color	Order No.	Price
LI battery, 4 Cell, AC Charger	Orange	**KN0107610**	Price
LI battery, 4 Cell, AC & DC Chargers	Orange	**KN0107610U**	Price
LI battery, 4 Cell, AC Charger	Black	**KN0107611**	Price
LI battery, 4 Cell, AC & DC Chargers	Black	**KN0107611U**	Price
LI battery, 4 Cell, AC Charger	Yellow	**KN0107612**	Price
LI battery, 4 Cell, AC & DC Chargers	Yellow	**KN0107612U**	Price
LI battery, 4 Cell, DC Charger	Orange	**KN0107630**	Price
LI battery, 4 Cell, DC Charger	Black	**KN0107631**	Price
LI battery, 4 Cell, DC Charger	Yellow	**KN0107632**	Price
LI battery, 4 Cell, 220V AC Charger	Orange	**KN0107650**	Price
LI battery, 4 Cell, 220V AC Charger	Black	**KN0107651**	Price
LI battery, 4 Cell, 220V AC Charger	Yellow	**KN0107652**	Price
LI battery, 4 Cell, Direct Wire	Orange	**KN0107670**	Price
LI battery, 4 Cell, Direct Wire	Black	**KN0107671**	Price
LI battery, 4 Cell, Direct Wire	Yellow	**KN0107672**	Price

Value Bright Floating Lantern



- **Bulb:** Krypton
- **Run time:** 4-1/2 hours
- **Lumens:** 75
- **Body:** Durable plastic
- **Battery:** 6 Volt (Included)
- **Size:** 7-1/8 x 4-5/8 x 7-1/2”
- **Features:** 741 feet beam distance. Comes in red, blue or yellow randomly chosen.
- Lifetime warranty

Order No.	Price
KA30EFL6VBA	Price

Waypoint® Pistol Grip Spotlight



- **Bulb:** C4® LED technology
- **Body:** High impact polycarbonate housing, rubberized lens ring, and cushioned-grip handle
- **Battery:** (44900) 4C alkaline (not included), (44910) Lithium ion battery with on-board safety control circuit, rechargeable up to 800 times
- **Size:** Length: 6.75”, Height: 7.14”, Head Diameter: 3.50”
- **Features:** (44900) LED Solid-State power regulation for maximum light output. IPX4; water resistant/1 meter impact resistance tested, integrated stand. Operation using battery or 12V DC power cord, (44910) High and low intensity modes, emergency signal mode, spotlight provides portability and long run time. IPX8 rated design; water proof to 2 meters. Light floats if dropped into water.

Lumens	Run Time	Order No.	Price
210 - High , 20 - Low	10 Hrs. - High - 82 Hrs.- Low	**KA5744900**	Price
300 Lumes, 80,000 Candela-High-25 Lumes, 6,100 Candela- Low	5 Hrs.-High - 50 Hrs.-Low	**KA5744910**	Price

20V MAX LED Hand Held Worklight

New!



- **Bulb:** LED
- **Run Time:** up to 27 hrs.
- **Lumens:** 160 lumens
- **Battery:** 20 volt
- **Size:** 3.5 x 9.5 x 6.5”
- **Features:** Kick stand, belthook, hanging, hands free, Head rotates 360 degrees and pivots, Cordless

Order No.	Price
PD20DCL044	Price

Responder Right Angle Rechargeable

MADE IN THE USA

New!



- **Bulb:** LED
- **Lumens:** 205
- **Run time:** 4 Hours
- **Batteries:** Lithium ion battery pack
- **Size:** 9.5 x 3.12 x 5.12”
- Intrinsically safe
- **Features:** waterproof, weighs just 15 oz., charge indicator, impact resistant to 1 meter, emergency light feature, low profile design

Includes:	Order No.	Price
LI battery, 120V AC Charger	**KN01510221**	Price
LI battery, AC and DC Chargers	**KN01510221U**	Price

Responder Right Angle

Model No. 510304

New!

MADE IN THE USA



- **Bulb:** LED
- **Run time:** 17 Hours
- **Lumens:** 220
- **Batteries:** 6 AA batteries (not included)
- **Size:** 2.5 x 3.0 x 7.0”
- Intrinsically safe
- **Features:** upgradeable to lithium ion recharge-able power source (not included), easily switch from rechargeable to alkaline, wide-eye lens, oversized pushbutton switch, stainless steel clip, low profile, waterproof, weighs 15 oz.

Order No.	Price
KN01510304	Price

RAYOVAC Indestructible 3D Lantern



- **Bulb:** High performance LED, 13 meter beam distance
- **Run time:** 10 hours
- **Lumens:** 530
- **Body:** Rubber head
- **Battery:** 6 AA (included)
- **Size:** 4.3 x 4 x 10”
- **Features:** Shatterproof lens and reflector - 15 foot drop tested. ANSI IP7X waterproof submersible. Includes convenient handle. 3 Light modes: high, medium, low
- Lifetime warranty

Order No.	Price
KA30FL050	Price

RAYOVAC Indestructible 6AA Spotlight



- **Bulb:** High performance LED, 360 meter beam distance
- **Run time:** 10 hours
- **Lumens:** 500
- **Body:** Rubber head
- **Battery:** 6 AA (included)
- **Size:** 3-3/4 x 7 x 9.12”
- **Features:** Shatterproof lens and reflector - 15 foot drop tested. ANSI IP7X waterproof submersible. Includes handy wrist strap. 3 Light modes: high, medium, low
- Lifetime warranty

Order No.	Price
KA30FL055	Price

Energizer INDUSTRIAL Industrial LED Headlamp

150 Lumens



- 100 - 249 Lumens range (high/medium/low)
- 150 Lumens maximum output
- 8 Hour run time
- 40m Beam distance
- Uses 3 AAA alkaline batteries (included)

New!

Order No.	Price
KA56HDBIN32E	Price

STREAMLIGHT Enduro® Headlamp



- **Bulb:** Ultra-bright, the Enduro sports a 0.5 watt LED
- **Run time:** Max. up to 24 hours of continuous use
- **Body:** Impact resistant polycarbonate
- **Battery:** 3 AAA batteries
- **Features:** 2 Lighting modes, lightweight, excellent bright light illumination, waterproof up to 1 meter for up to an hour

Order No.	Price
KA5761400	Price

STEELMAN PRO Slim Profile Performance Headlamp

Rechargeable

New!



- **Bulb:** LED
- **Run time:** 3, 4.5, or 20+ hours depending on setting
- **Lumens:** settings for 200, 100 or 22 lumens of light
- **Body:** ABS plastic
- **Battery:** Li-Ion
- **Features:** hands free activation, built in clips, pivoting head, adjustable straps, rear safety light

Order No.	Price
KE5379236	Price

BRIGHT STAR Vision LED Headlamp

Model No. 200501



New!

- **Bulb:** LED
- **Run time:** up to 20 hours spotlight / up to 140 hours floodlight
- **Spotlight lumens:** 65/185
- **Floodlight lumens:** 10/20
- **Batteries:** 3 AAA batteries (not included)
- **Features:** 4 light modes, large push button switch, lightweight polymer housing design, adjustable mount for greater vision, multi-use adjustable strap securely adheres to helmets, hardhats and heads, rated water-resistant design suitable for outdoor use in wet environment

Order No.	Price
KN01200501	Price

NIGHTSTICK LED Waterproof Headlamp

Model NSP-4603B:



NSP4603B

- **Battery:** 3 AAA (included)
- **Features:** works as a spotlight and a floodlight; single switch on top of light; non-slip band; lightweight and durable; adjustable ratchet tilt head; impact and chemical resistant; limited lifetime warranty

Model NSP-4608B:



NSP4608B

- **Bulb**: 2 White CREE® LED
- **Battery:** 3 AAA (included)
- **Features:** works as a spotlight and a floodlight; dual push button control; non-slip band; lightweight and durable; adjustable ratchet tilt head; impact and chemical resistant; limited lifetime warranty

Max Lumens	Run Time	Order No.	Price
100/60	5/13.5 Hrs.	KE58NSP4608BC†	Price
70 - 120	Up to 14 Hrs.	KE58NSP4603B	Price
50 - 180	Up to 13.75 Hrs.	KE58NSP4608B	Price

† Includes integrated stainless steel clip to attach to hard hat

STREAMLIGHT Trident® Headlamp



- **Bulb:** 3 LED
- **Lumens:** 80/high, 35/med, 11/low
- **Run time:** 5 Hrs./ high, 10 Hrs./med., 53 Hrs./ low
- **Body:** Water resistant thermoplastic
- **Battery:** 3 AAA (included)
- **Size:** 2-1/2” x 2.53”, 4.64 oz.
- **Features:** 90° Tilting head, elastic and rubber strap included, water resistant, three settings, lightweight

Order No.	Price
KA5761050	Price

STEELMAN PRO Tri-Color Headlamp

- **Bulb:** CREE LED
- **Run time: high** - 3 hrs, **medium** - 4 hrs. 30 mins, **low** - 9 hrs
- **Lumens:** 300 lumens / 200 lumens CREE LED / 100 lumens COB area light
- **Body:** ABS plastic
- **Battery:** 3 AAA (included)
- **Features:** tri-color COB area light, white, red and green illumination, rear safety light, emergency whistle, 60 degree articulating bracket, polycarbonate lens, soft push mode buttons

New!



Order No.	Price
KE5379233	Price

BAYCO Multi-Function Dual-Light™ Headlamp

NIGHTSTICK

- **Bulb:** CREE® LED
- **Run time:** 3 - 15 hours, depending on mode
- **Spotlight lumens:** 150 / 75
- **Floodlight lumens:**150 / 75
- **Dual light lumens:** 300 / 175
- **Batteries:** 3 AAA (included)
- **Features:** low profile design, dual switches, total internal reflection lens designed to optimize lumen output & beam pattern, IP-X7 waterproof, impact & chemical resistant

New!



Order No.	Price
KE58NSP4614B	Price

STEELMAN PRO Multi-Mode LED Rechargeable Headlamp

Focusing Adjustable

New!

- **Bulb:** LED with 4 auxiliary lights
- **Run time:** 2,3, or 9 hours depending on setting
- **Lumens:** settings for 260, 200 or 60lumens of light
- **Body:** ABS plastic
- **Battery:** Li-Ion
- **Features:** hands free activation, built in clips, pivoting head, adjustable straps, rear safety light



Order No.	Price
KE5379379	Price

BAYCO Dual-Light™ Headlamp

NIGHTSTICK

With Hard Hat Clip and Mount

New!

- **Bulb:** CREE® LED
- **Run time:** 3.5 - 16.75 hours, depending on mode
- **Spotlight lumens:** 115/60
- **Floodlight lumens:** 120/60
- **Dual light lumens:** 160
- **Batteries:** 3 AAA batteries (included)
- **Features:** multi-position tilt head design, includes an integrated stainless clip & adhesive hard hat mounting bracket, waterproof, impact and chemical resistant



Order No.	Price
KE58XPP5454GC	Price

BAYCO Dual-Light™ Headlamp

NIGHTSTICK

- **Bulb:** CREE® LED
- **Run time:** 3.5 - 10.5 hours, depending on mode
- **Spotlight lumens:** 250/125
- **Floodlight lumens:**250/125
- **Dual light lumens:** 450/250
- **Batteries:** 3 AA (included)
- **Features:** low profile design, dual switches, total internal reflection lens designed to optimize lumen output & beam pattern, IP-X7 waterproof, impact & chemical resistant

New!



Order No.	Price
KE58NSP4616B	Price

STEELMAN PRO Dual Mode Performance LED Headlamp

Rechargeable

New!

- **Bulb:** 24 integrated LED
- **Run time:** up to 3 hours on full power and 8.5 hours on low power setting
- **Lumens:** 3 light stages for 200, 100 or 20 lumens of illumination
- **Body:** ABS plastic
- **Battery:** Lithium ion
- **Features:** hands-free activaton, water-resistant, IP65 rating, pivoting head, rear safety light, built in hat clips



Order No.	Price
KE5379384	Price

STREAMLIGHT Argo® Headlamp

- **Bulb:** C4® LED
- **Run time:** 3 Output modes: **High** for maximum output and long-range beam distance: 3 hrs, 150 lumens, 9,250 candela, 190m beam distance; **Medium** for intense brightness and longer run time, 4.5 hrs, 100 lumens, 6,375 candela, 160m beam distance; **Low** for extended run times and when less intense light is needed, 30 hrs, 45 lumens, 2,750 candela,103m beam distance
- **Battery:** 3 AAA alkaline (included)
- **Features:** Low level battery indicator: recessed push-button switch; elastic head strap and rubber hard hat strap; 90° tilting head; IPX4 rated for water resistance; 2 meter impact resistance tested



Order No.	Price
KA5761301	Price

STREAMLIGHT Septor® Headlamp

- **Bulb:** 7 white 5mm LEDs
- **Run time:** 3 lighting modes: **7 LEDs** for a soft flood light for tasks at arm's length, 3.5 hrs, 120 lumens, 900 candela; **3 LEDs** for light without the glare and longer run times, 10 hrs, 45 lumens, 375 candela; **1 LED** for extended run times and when a less intense beam is ideal, 55hrs, 13 lumens, 100 candela
- **Battery:** 3 AAA alkaline (included) Low level battery indicator
- **Features:** Recessed push-button switch, low level battery indicatior, elastic head strap and rubber hard hat strap, 90° tilting head, IPX4 rated for water resistance; 2 meter impact resistance tested



Order No.	Price
KA5761052	Price

BAYCO Intrinsically Safe Multi-Function Dual-Light™ Headlamp

- **Bulb:** CREE® LED
- **Run time:** Spotlight-5 hrs/H, 16.25 hrs/L; Floodlight-5.25 hrs/H, 16.75 hrs/L; Dual light-3-1/2 hrs
- **Lumens:** Spotlight- 115 H, 60 L Floodlight- 120 H, 60 L Dual- 160
- **Battery:** 3 AAA (included)
- **Size:** 2.1"
- **Features:** Dual control buttons for spot beam and floodlight, adjustable ratchet tilt head on a non-slip elastic head strap, heavy duty rubber strap for hard hat application, IP-X7 water proof, impact chemical resistant
- Limited lifetime warranty

NIGHTSTICK



Order No.	Price
KE58XPP5454G	Price

STEELMAN PRO Rechargeable Headlamp

Focusing Adjustable

New!

- **Bulb:** LED with 4 auxiliary lights
- **Run time:** 2,3, or 9 hours depending on setting
- **Lumens:** settings for 260, 200 or 60 lumens of light
- **Body:** ABS plastic
- **Battery:** Li-Ion
- **Features:** hands free activation, built in clips, pivoting head, adjustable straps



Order No.	Price
KE5379235	Price

Energizer INDUSTRIAL Alkaline & Lithium Batteries RAYOVAC

- **Alkaline:** Designed to provide long-lasting, dependable power for the everyday devices you use most. Energizer and Rayovac Alkaline are Mercury Free.
- **Extra Strength Batteries:** Provides more power for your critical devices when you need it most. Rayovac Fusion alkaline is the industry's longest lasting battery, up to 35% longer then it's competition. Energizer Lithium has up to 8x's the power of an alkaline when used in a digital camera.
- **Alkaline Bulk Batteries:** Rayovac delivers outstanding performance and reliability, even after 10 years of storage. Rayovac bulk batteries are individually date coded to ensure freshness. Energizer and Rayovac offer economical bulk packaging.
- **Lantern Batteries:** Rayovac Alkaline lantern batteries last up to 2x as long as zinc-carbon batteries and provide an extra measure of leakage resistance for critical applications. Rayovac is date coded to ensure freshness, bulk packaging, and long shelf life.
- **Specialty – Button/Coin/Photo Batteries:** Designed for applications with a high current pulse and continuous drain. Very high power, energy density, and excellent rate capability. Up to 4x the power of alkaline batteries. Wide operating temperatures, excellent shelf life.
- **Rayovac Rechargeable Batteries:** Provides a reusable power source for frequent-use and high-drain devices. Get 500 uses out of each battery. NiMH chemistry has no memory effect.



EN914



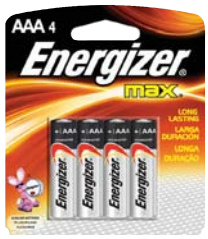
8244F

Energizer Max® Blister Packed Alkaline

Size	Qty./Pk.	Energizer Model No.	Order No.	Price Per Pack
AA	12	E91BP-12	**KA56E91BP12**	Price
AA	4	E91BP-4	**KA56E91BP4**	Price
AAA	4	E92BP-4	**KA56E92BP4**	Price
AAAA	2	E96BP-2	**KA56E96BP2**	Price
C	8	E93BP-8	**KA56E93BP8**	Price
D	4	E95BP-4	**KA56E95BP4**	Price
D	8	E95BP-8	**KA56E95BP8**	Price
6V	1	1209	**KA561209†**	3.85

Rayovac Blister Packed Alkaline

Size	Qty./ Pk.	Rayovac Model No.	Order No.	Price
6V	1	6VHD	**KA306VHD**	Price
6V	1	806	**KA30FL060**	Price
7.5V	1	803	**KA30FL065**	Price
9V	2	A1604-42F	**KA309V005**	Price
9V	4	A1604-4CTF2	**KA309V010**	Price
AA	4	815-4F	**KA30AA010**	Price
AA	8	815-8CF	**KA30AA015**	Price
AAA	4	824-4F	**KA30AAA10**	Price
AAA	8	824-8CF	**KA30AAA15**	Price
AAAA	2	KE825-2	**KA30AAAA5**	Price
C	4	814-4F	**KA30C0005**	Price
C	8	814-8CF	**KA30C0010**	Price
D	4	813-4F	**KA30D0005**	Price
D	8	813-8CF	**KA30D0010**	Price



E92BP4



8244TFUS



L92BP4

Energizer® E2 Lithium Battery

Size	Qty./Pk.	Energizer Model No.	Order No.	Price Per Pack
AA	4	L91BP-4	**KA56L91BP4**	Price
AA	8	L91BP-8	**KA56L91BP8**	Price
AAA	2	L92BP-2	**KA56L92BP2**	Price

Rayovac Fusion Blister Packed Alkaline

Size	Qty./ Pk.	Rayovac Model No.	Order No.	Price
AA	4	815-4TFUS	**KA30AA005**	Price
AAA	4	824-4TFUS	**KA30AAA05**	Price



A16042F

Energizer® Industrial Packed Alkaline

Size	Qty./ Pk.	Energizer Model No.	Order No.	Price Per Each
AA	4	EN91	**KA56EN914**	Price
AAA	4	EN92	**KA56EN924**	Price
C	12	EN93	**KA56EN9312**	Price
9V	12	EN22	**KA56EN2212**	Price

Rayovac Ultra Pro Bulk Alkaline

Size	Qty./ Pk.	Rayovac Model No.	Order No.	Price
9V	12	AL9V-12F	**KA309V020**	Price
AA	24	ALAA-24F	**KA30AA020**	Price
AAA	24	ALAAA-24F	**KA30AAA20**	Price
C	12	ALC-12F	**KA30C0015**	Price
D	12	ALD-12F	**KA30D0015**	Price



EN9312

Energizer Max® Coin/Cell

Size	Qty./ Pk.	Energizer Model No.	Order No.	Price
1.5V	1	A76BP	**KA56A76BP**	Price
1.5V	3	357	**KA56357BP3**	Price
3V	1	ECR2025BP	**KA56ECR2025BP**	Price
3V	1	ECR2016BP	**KA56ECR2016BP**	Price
3V	1	ECR2032	**KA56ECR2032**	Price
3V	1	EL1CR2BP	**KA56EL1CR2BP**	Price
3V	1	ECR2450BP	**KA56ECR2450BP**	Price

Rayovac Coin/Cell

Size	Qty./ Pk.	Rayovac Model No.	Order No.	Price
1.5V	1	301	**KA30V2030110111**	Price
1.5V	1	303/357	**KA30CN005**	Price
1.5V	1	389	**KA30V2038910111**	Price
1.5V	3	303/357	**KA30CN010**	Price
12V	1	23A	**KA3012V05**	Price
3V	1	123	**KA30L0005**	Price
3V	1	2025	**KA30CN015**	Price
3V	1	2032	**KA30CN020**	Price
3V	1	223A	**KA30L00015**	Price
3V	1	CR 1/3 N	**KA30V6131101401**	Price
3V	1	CR2	**KA30L00020**	Price
3V	2	2450	**KA30CN025**	Price



357BP3



3033573ZMA

†Priced Per Pack. KA561209 is heavy duty not Alkaline.

ILLUMINATOR 3-in-1 LED Clamp Light

Rechargeable

- Rechargeable LED lamp provides up to 1.5-hours of constant light
- 6 SMD LEDs rated up to 180 lumens to help brighten any office or craft area
- 18-inch flexible shaft helps customize light to any work space
- Micro USB charging port with charge level indicator for added convenience
- Magnetic base attaches to any metal surface for hands-free use
- One year limited warranty



New!

Order No.	Price
KE5393119	Price

STEELMAN PRO Slim-Lite Flashlight with UV Mode

New!

Rechargeable

- 1/4-inch thick Slim-Lite head gets into tight spaces
- 12 SMD LEDs provide 400 Lumens of illumination
- 6 UV LEDs provide a wavelength of 390-410 nm, perfect for leak detection
- Runtime: 2.5 Hours (High), 8 Hours (Low)
- Battery: Li-ion rechargeable



Order No.	Price
KE5378952	Price

STEELMAN PRO LED Underhood Bump Lite

1200 Lumens

- Ultra-durable light helps illuminate any space
- 24 SMD LED lights rated up to 1200 lumens
- Nylon cage and TPR bumpers give this light impact resistance and durability
- Fold-away hooks and magnetic holders ensure you can hang the light from anywhere
- Includes 25-foot SJTOWQ 18/2 cord



New!

Order No.	Price
KE5396879	Price

STEELMAN PRO Dura-Wedge Work Light

Rechargeable

- **Bulb:** 24 integrated LED
- **Run time:** up to 3 hours on full power and 8.5 hours on low power setting
- **Lumens:** 1000 and dimmable to 80 lumens
- **Body:** TPR overmolded housing
- **Battery:** 5200mah TWIN-CELL
- **Features:** 3 1/4-20 mounting ports, water and impact resistant

New!



Order No.	Price
KE5379232	Price

STEELMAN PRO LED Bump Lite

500 Lumen

- Durable nylon reinforced body assists with heat dissipation
- 10 SMD LEDs are rated up to a powerful 500 lumens
- Impact absorbing TPR bumpers provide additional protection against accidental impacts
- 25-foot long power cord
- 1 year limited manufacturer's warranty
- Additional features: Built-in fold-away hanging hook and magnetic clip holder

New!



Order No.	Price
KE5396877	Price

STEELMAN PRO Rechargeable LED Bump Lite

500 Lumen

New!

- **Bulb:** 10 SMD LED
- **Run time:** up to 2 hours on full power and 4.5 hours on low power setting
- **Lumens:** up tp 500
- **Body:** aluminum
- **Battery:** li-ion
- **Features:** aluminum body helps dissipate heat, TPR bumpers make it impact-resistant, light is portable with weather-resistant nylon cage



Order No.	Price
KE5378740	Price

STEELMAN PRO Power Station with Detachable Work Light

- **Bulb:** LED
- **Run time:** 1 hour 15 minutes
- **Lumens:** up to 500
- **Body:** ABS plastic
- 10 Outlets
- **Features:** detachable light, handle mount for the work light can be rotated 270 degrees, 15 amp circuit breaker, cord storage, anti-skid feet, magnetic light mounts, polycarbonate lens

New!



GFCI (Circuit Interupter)	Order No.	Price
No	KE5392661	Price
Yes	KE5392662	Price

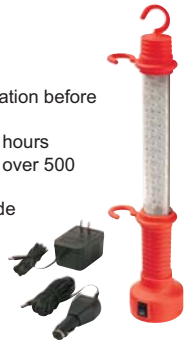
BAYCO LED Xtreme Lumens™ Multi-Purpose Rechargeable Work Light



- **Bulb:** LED
- **Run time:** 4-1/2 hrs High, 12-1/2 hrs Low
- **Lumens:** 600 High, 225 Low
- **Battery:** Rechargeable Lithium-ion
- **Features:** X-treme lumens™ design, three intergraded magnets for hands free use, magnetic hook, IP-X4 water-resistant, AC and DC charger included, 6 hour charge time
- 1 Year limited warranty

Order No.	Price
KE58SL2168B	Price

PRM PRO 12-Volt Cordless LED Work Light



- 8" 30-LED Light Head focuses light directly into work area
- 2-Position Switch (30-LED/10-LED) for longer battery life
- Up to 3 Hrs. (30-LED) or 5 Hrs. (10 LED) continuous operation before recharging
- LED bulbs never need replacing–each lasts over 100,000 hours
- Powerful nickel-metal Hydride batteries can be recharged over 500 times
- Stand-up Magnetic Base and back, Top Hook, and two Side Hooks make it easy to secure work light in any position in work area
- All-purpose work light is ideal for use in the garage, on construction sites, camp sites, and for roadside or household emergencies
- 25' Cord
- Flex head to direct light where needed
- **Contents:** 1 Pc. Work Light, 1 Pc. AC Charging Adapter, 1 Pc. DC Charging Adapter/Power Cord, 2 Pcs. Removable Hanging Hooks

Size (in.)	Order No.	Price
8	KP8349812	Price

PRM PRO 36 LED 2-in-1 Worklight/Flashlight



Specifications:
- 2-in-1 design: Compact telescoping housing extends from standard flashlight (6 LED) to worklight (30 LED)
- Rugged ABS construction
- Soft-coated non-slip housing
- Hex-shaped light head prevents rolling on flat surfaces
- Power: 3.6 Volts
- Battery Pack: Rechargeable, 3.6 V, 1.0 Ah, Ni-MH
- Run Time: 3 hours (30 LEDs), 8 hours (6 LEDs)

Contents
- 1-pc. 36 LED Light
- 1-pc. AC Charging Adapter (Input: 110-120 VAC, Output: 6 VDC, 300 mA)
- 1-pc. DC Charging Adapter (Input: 12 VDC, Output: 12 VDC)

Size	Order No.	Price
10" Flashlight, Extends to 14.25"	KP8349814	Price

BAYCO 26 Watt Double Bright Fluorescent Work Light



- 2 Cool running 13w 10,000 hour rated bulbs included
- Equivalent to 125w incandescent bulb with natural daylight illumination-7000 kelvin
- Polarized plug with 12amp grounded receptacle & independent rocker on/off switches
- Hands-free hook
- High-impact lamp protector with high-gloss reflector
- Clear chemical & UV resistant lamp protector
- 25', 16/3 SJT cord

Order No.	Price
KE58SL975	Price

DEWALT Stackable Corded/Cordless LED Area Light with Tool Connect™ & Built-In Charger



- AC outlets provides flexibility and convenience to daisy chain lights or power for corded tool
- On-board charger with door lock option for security
- Right and left sides can be used toether or separately to illuminate specific areas
- Remotely turn light on/off and program light with scheduled times using Tool Connect™ app
- Stack lights for easy storage and convenience on the job
- Instant on/off with no warm-up, dimming as low as 500 lumens
- Brightness: Up to 7,000 Lumens
- Lumens: 5,001 - 10,000
- (1) 6.0Ah Battery
- (1) Charger

New!

Order No.	Price
PD20DCL070T1	Price

NIGHTSTICK Multi-Purpose Rechargeable Work Light



- **Bulb:** premium LEDs - 60 LED work light - 6 LED spotlight
- **Run time:** 4 hours work light, 18 hours spotlight
- **Body:** rugged engineered polymer
- **Battery:** internal NiMH rechargeable
- **Size:** 14.3" length and weighs 9.5oz.
- **Features:** bright white LEDs - 35,000 hour life, heavy duty rocker switch, impact/chemical/moisture resistant, magnet in body & top, hands-free hook on top, home and car chargers included
- 1 Year warranty

Order No.	Price
KE58SLR2166	Price

NIGHTSTICK LED Under Hood Rechargeable Work Light



- **Bulb:** LED
- **Run time:** 4-1/2hrs High, 8-1/2 hrs Low
- **Lumens:** 1,200 High, 650 Low
- **Battery:** Rechargeable Lithium-ion
- **Size:** 48.5" L x 4.4" W x 6.5" D
- **Features:** Dual spring-loaded bracket w/ 48"-77" capacity built into the cradle, light bar can rotate 360° in cradle or be removed, handle has 3 magnets, intergrated hook, AC & DC charger included, 6 hour recharge time
- 1 Year limited warranty

Order No.	Price
KE58SLR2120	Price

BAYCO LED High Lumens Multi Purpose Work Light



- Floodlight lumens: 1,500 / 750
- Two built in magnets, one at tip, one at mid point of light
- Magnetic hook
- 25' 18/2 SVT Cord

Order No.	Price
KE58SL2135	Price

BAYCO 60 LED Work Light



- Tapered work light for easy access into tight places
- Super bright LED wand provides broad even lighting for the best close-in illumination
- 60 Premium LED's that never burn out, 120 lumens
- LED's are cool to the touch, 35,000 hour life
- Chemical/moisture/impact resistant housing
- Magnet in body, top and hook for hands-free lighting
- Dual-position magnet hook hangs vertically or horizontally
- 25', 18/2 (SJT) Cord

Order No.	Price
KE58SL2125	Price

BAYCO Standard Trouble Light



- Heavy-duty utility light, with hang hook
- Reflective metal lamp shield with hang hook
- Uses up to 75 watt incandescent bulb (not included)
- Yellow polypropylene handle
- Durable push on/off switch
- 16/3 (SJT) Cord
- Polarized plug with 2 Amp grounded receptacle

Cord	Order No.	Price
25'	**KE58SL425A**	Price
50'	**KE58SL426A**	Price

Incandescent Magnetic Stand Light



- Attaches to any ferrous surface
- Height: 9.85"
- Magnetic pull: 110 lbs.
- On/off switch
- Uses 60 watt bulb (not included)

Order No.	Price
KE766251240	Price

Prolite 8-1/2" Aluminum Shade, Heavy Duty Clamp Lamp



- 8-1/2" Diameter aluminum reflector
- Heavy duty multi-adjustable spring clamp with protective covering
- Heavy duty construction offers additional clamping hold
- Max 150 watt lamp (not included)
- Push-thru on/off switch
- 12', 18/2 (SPT) cord

Order No.	Price
KE60HRL12MC	Price

BAYCO Fluorescent Work Light with Spot Work Light



- Cool running 13w 10,000 hour rated bulb (Included)
- Equivalent to 75w incandescent bulb with natural daylight illumination-7000 Kelvin
- Polarized plug with 12 Amp grounded receptacle & rocker On/Off switch
- Clear polycarbonate top for spot-lighting
- High-impact lamp protector with high-gloss
- Convenient & versatile nylon-tipped double hang hook
- 25' Cord

Order No.	Price
KE58SL935	Price

BAYCO Metal Shield Incandescent Utility Light on Metal Reel



- Heavy-duty metal retractable reel
- Galvanized metal lamp shield with rubber tipped hang hook
- Durable push on/off switch
- Up to 75 watt incandescent (bulb not included)
- Mounting brackets (included)
- 50',18/3 (SVT) Cord

Order No.	Price
KE58SL851	Price

CEDARBERG Opti-Light



- Durable lighting with all the unique features of the Cedarberg Snap-Loc Systems
- Adjustable length
- Choose model for power supply and need
- Magnetic base holds position
- Dual voltage
- 20' Cord

Bulb	Watts	Mount Type	Order No.	Price
Halogen Light Pac	12/115V	Magnetic	**LV508702075**	Price
Halogen Work Light Pac	115 V	Magnetic	**LV508702078**	Price
Replacement Bulb	20W /12V	-	**LV506360021**	Price

STEELMAN 30' Retractable Cord Reels



- Heavy-duty, metal reel (16 gauge) with 360° rotating ceiling mount
- 10" Cord hang down
- 3-Prong outlet T-Tap plug

Cord	Type	Order No.	Price
16/3 with cord relief	SJTW	**KE5398477**	Price

BAYCO Single 20 Watt LED Work Light with Magnetic base



- 20w LED bulb with 2,200 lumens rated at 50,000 hrs of life
- Powerful magnetic base for hands free operation
- Tempered glass lens
- Comfort grip padded handle
- Multi-angle tilt and swivel fixture design
- Single sealed push button switch
- Durable powder coat finish
- 18/3 SVT cord with grounded plug
- 12' Cord

Order No.	Price
KE58SL1514	Price

BAYCO Single 20 Watt Head LED Work Light



- 20w LED bulb with 2,200 lumens rated at 50,000 hrs of life
- Tempered glass lens
- Comfort grip padded handle
- Multi-angle tilt and swivel fixture design
- Single sealed push button switch
- Durable powder coat finish
- 18/3 SVT cord with grounded plug
- 6' Cord

Order No.	Price
KE58SL1512	Price

BAYCO 30' Heavy Duty Cord Reel 3-Tap "T" Style



- 30' 14/3 cord, (SJT)
- Heavy-duty metal retractable reel
- Polarized plug with three 13 Amp grounded receptacles
- Brackets for wall or ceiling mounting (Included)
- LED Power status light

Order No.	Price
KE58SL801	Price

BAYCO 50' Heavy Duty Cord Reel Triple-Tap "T" Style



- 50' Heavy-duty 14/3 cord, (SJTW)
- Tri (3) Polarized plug with four 13 Amp grounded receptacles
- 40% Larger cord reel with smooth glide rewind
- Resettable 13 Amp circuit breaker
- LED power status light
- Mounting brackets (included)

Order No.	Price
KE58SL8903	Price

BAYCO LED Area Lights with Magnetic Base Rechargeable NIGHTSTICK

New!



- **Floodlight lumens:** 1000/500
- **Run time:** 4/8 hours
- **Power source:** rechargeable lithium-ion battery
- **Features:** magnetic base, includes AC and DC power supplies, 6' cord
- **Note:** NSR-1514C includes a tripod and carrying case and can be charged via USB
- IP-X7 waterproof

Includes	Order No.	Price
With Case	KE58NSR1514C	Price
Without Case	KE58NSR1514	Price

BAYCO Dual 20 Watt Head Convertible Tripod Stand Work Light



- 6' Telescoping tripod with adjustable leg for leveling on uneven surface
- 2 x 20w LED lights - combined lumens 4,400 and 50,000 hours of life
- Each fixture has its own sealed push button switch
- Tempered glass lens
- Removable light fixture base for low angle illumination
- Multi-angle tilt and swivel fixure design
- Comfort grip handles
- 18/3 SVT cord with grounded plug
- 6' Cord

Order No.	Price
KE58SL1522	Price

BAYCO 30' Heavy Duty Cord Reel 3-Tap Straight Plug



- 30' 16/3 (SJT)
- Polarized plug with three 10 Amp grounded receptacles
- Heavy-duty metal retractable reel
- Brackets for wall or ceiling mounting (included)
- LED Power status light

Order No.	Price
KE58SL800	Price

BAYCO 50' Cord Reel with Quad-Tap Plug



- 50' Heavy-duty 12/3 cord, (SJTW)
- Quad (4) polarized plug with four 15 Amp grounded receptacles
- 40% Larger cord reel with smooth glide rewind
- Resettable 15 Amp circuit breaker
- LED power status light
- Mounting brackets (included)

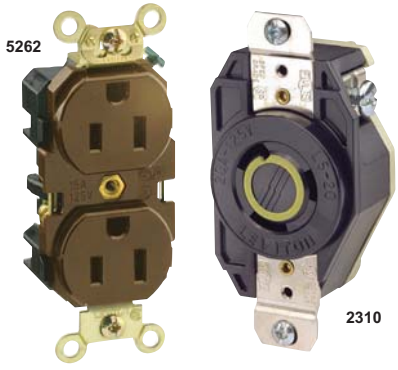
Order No.	Price
KE58SL8904	Price

LEVITON Black & White Industrial Grade Plugs and Connectors

Features:

- Super Tough Nylon construction resists damage from severe impact, abrasion and chemical attack
- Ergonomically designed fluted body with radial gripping ridge - provides an ideal surface for gripping and pulling
- Dead-front solid contaminant barrier - prevents accidental contact with internal parts
- Internal wiring chambers that isolate individual conductors - prevents flashover, arcing and excessive heat build-up
- Positive contact plates in wiring chamber maximize surface contact with stranded wire resulting in improved termination
- NEMA configuration (where applicable) and device ratings molded into face for easy identification
- Catalog number permanently marked on cord clamp
- Speed drive screws on device face for faster assembly





Type - Flush Mount Locking Receptacle								
Amperage Rating (AMP)	NEMA Configuration	Voltage	Phase	Wire Size Range	No. of Poles	No. of Wires	Order No.	Price
20	L5-20R	125	1	8-14	2	3	**LV102310**	Price
20	L14-20R	125/250	1	8-14	3	4	**LV102410**	Price
30	L5-30R	125	1	8-14	2	3	**LV102610**	Price
30	L14-30R	125/250	1	8-14	3	4	**LV102710**	Price
30	L6-30R	250	1	8-14	2	3	**LV102620**	Price

Type - Locking Connector								
Amperage Rating (AMP)	NEMA Configuration	Voltage	Phase	Wire Size Range	No. of Poles	No. of Wires	Order No.	Price
15	L5-15R	125	1	10-18	2	3	**LV104729C**	Price
20	L5-20R	125	1	10-18	2	3	**LV102313**	Price
20	L14-20R	125/250	1	10-18	3	4	**LV102413**	Price
20	L6-29R	250	1	10-18	2	3	**LV102323**	Price
30	L14-30R	125/250	1	10-18	3	4	**LV102713**	Price

Type - Locking Plug								
Amperage Rating (AMP)	NEMA Configuration	Voltage	Phase	Wire Size Range	No. of Poles	No. of Wires	Order No.	Price
15	L5-15P	125	1	10-18	2	3	**LV104720C**	Price
15	L6-15P	250	1	10-18	2	3	**LV104570C**	Price
20	L5-20P	125	1	10-18	2	3	**LV102311**	Price
20	L14-20P	125/250	1	10-18	3	4	**LV102411**	Price
20	L6-20P	250	1	10-18	2	3	**LV102321**	Price
30	L14-30P	125/250	1	10-18	3	4	**LV102711**	Price

Type - Single Locking Receptacle								
Amperage Rating (AMP)	NEMA Configuration	Voltage	Phase	Wire Size Range	No. of Poles	No. of Wires	Order No.	Price
15	L5-15R	125	1	10-18	2	3	**LV104710**	Price

Type - Straight Blade Connector								
Amperage Rating (AMP)	NEMA Configuration	Voltage	Phase	Wire Size Range	No. of Poles	No. of Wires	Order No.	Price
15	5-15R	125	1	10-18	2	3	**LV105269C**	Price
20	6-20R	250	1	10-18	2	3	**LV105469C**	Price

Type - Straight Blade Extra Heavy Duty Duplex Receptacle								
Amperage Rating (AMP)	NEMA Configuration	Voltage	Phase	Wire Size Range	No. of Poles	No. of Wires	Order No.	Price
15	L5-15R	125	1	10-14	2	3	**LV105262**	Price
20	5-20R	125	1	10-14	2	3	**LV105362**	Price

Type - Straight Blade Plug								
Amperage Rating (AMP)	NEMA Configuration	Voltage	Phase	Wire Size Range	No. of Poles	No. of Wires	Order No.	Price
15	5-15P	125	1	10-18	2	3	**LV105266C**	Price
20	6-20P	250	1	10-18	2	3	**LV105466C**	Price

Type - Wetguard Connector								
Amperage Rating (AMP)	NEMA Configuration	Voltage	Phase	Wire Size Range	No. of Poles	No. of Wires	Order No.	Price
15	5-15R	125	1	10-18	2	3	**LV1015W47**	Price
15	6-15R	250	1	10-18	2	3	**LV1015W49**	Price

Type - Wetguard Plug								
Amperage Rating (AMP)	NEMA Configuration	Voltage	Phase	Wire Size Range	No. of Poles	No. of Wires	Order No.	Price
15	5-15P	125	1	10-18	2	3	**LV1014W47**	Price
15	6-15P	250	1	10-18	2	3	**LV1014W49**	Price

LEVITON Duplex Receptacle



USB Duplex Receptacle

- Smart chip recognizes and optimizes the charging requirements of individual devices
- Fits in a standard wallbox, is compatible with standard wallplates and can be multi-ganged with other devices
- Easy to install. Can replace existing outlets

Straight Blade Wiring Devices

- Impact-resistant thermoplastic nylon cover and body
- Four corner latches securely fasten face
- Backed by a limited 10-year warranty

Type - Straight Blade Wiring Device					
Amperage Rating (AMP)	Voltage	Wire Size Range	Color	Order No.	Price
20	125	14-10 AWG	Almond	**LV105362ST**	Price
20	125	14-10 AWG	Black	**LV105362SE**	Price
20	125	14-10 AWG	Blue	**LV105362SBU**	Price
20	125	14-10 AWG	Brown	**LV105362S**	Price
20	125	14-10 AWG	Gray	**LV105362GYS**	Price
20	125	14-10 AWG	Ivory	**LV105362SI**	Price
20	125	14-10 AWG	Orange	**LV105362SO**	Price
20	125	14-10 AWG	Red	**LV105362SR**	Price
20	125	14-10 AWG	White	**LV105362SW**	Price

Type - USB Duplex Receptacle					
Amperage Rating (AMP)	Voltage	Wire Size Range	Color	Order No.	Price
15	125	14-12 AWG	Almond	**LV10T5632T**	Price
15	125	14-12 AWG	Black	**LV10T5632E**	Price
15	125	14-12 AWG	Brown	**LV10T5632B**	Price
15	125	14-12 AWG	Gray	**LV10T5632GY**	Price
15	125	14-12 AWG	Ivory	**LV10T5632I**	Price
15	125	14-12 AWG	White	**LV10T5632W**	Price
20	125	14-12 AWG	Almond	**LV10T5832T**	Price
20	125	14-12 AWG	Black	**LV10T5832E**	Price
20	125	14-12 AWG	Gray	**LV10T5832GY**	Price
20	125	14-12 AWG	Ivory	**LV10T5832I**	Price
20	125	14-12 AWG	White	**LV10T5832W**	Price

LEVITON Lev-Loc® Toggle Switches



- Devices constructed with impact-resistant thermoplastic nylon cover and body
- Four corner latches securely fasten device's face to body
- Solid brass locking pins for strong, secure connection between device and wiring module
- Backed by a limited 10-year warranty
- Amperage Rating (AMP): 20
- NEMA Configuration: WD-1, WD-6
- 14-#10 AWG back wired: #14-#12 side wired

		Single Pole		Three-Way	
Voltage	Color	Order No.	Price	Order No.	Price
120/277	Almond	**LV101221ST**	Price	**LV101223ST**	Price
120/277	Brown	**LV101221S**	Price	**LV101223S**	Price
120/277	Gray	**LV101221SGY**	Price	**LV101223SGY**	Price
120/277	Ivory	**LV101221SI**	Price	**LV101223SI**	Price
120/277	Red	**LV101221SR**	Price	**LV101223SR**	Price
120/277	White	**LV101221SW**	Price	**LV101223SW**	Price

LEVITON SmartlockPro® Self-Test GFCI Receptacle



- Provides continuous ground fault protection – detects and trips on actual ground fault even when self-test is being conducted
- Status Indicator Light provides simple, intuitive feedback on power and protection status as well as indication of line/load reversal
- Reduced depth makes it easier to install in any electrical box, even shallow ones
- Terminals allow for easy wiring options – back and side wire capable
- UL Fed Spec WC-596 rated.

Amperage Rating (AMP)	NEMA Configuration	Voltage	Wire Size Range	Color	Order No.	Price
20	5-20R	125	14-10 AWG	Almond	**LV10GFNT2T**	Price
20	5-20R	125	14-10 AWG	Black	**LV10GFNT2E**	Price
20	5-20R	125	14-10 AWG	Brown	**LV10GFNT2**	Price
20	5-20R	125	14-10 AWG	Gray	**LV10GFNT2GY**	Price
20	5-20R	125	14-10 AWG	Ivory	**LV10GFNT2I**	Price
20	5-20R	125	14-10 AWG	Red	**LV10GFNT2R**	Price
20	5-20R	125	14-10 AWG	White	**LV10GFNT2W**	Price

LEVITON Decora® Digital Control with Bluetooth® Technology

The next generation of lighting control technology is here. Decora Digital Controls with Bluetooth® technology provide local control within a 30 foot* range.

Exciting features for today's lifestyle Decora Digital Dimmer & Timer App delivers smart dimming and timing functionality.

- Compatible with Apple and Android smartphones or tablets
- Uses simple, intuitive on-screen menu options
- Individually control and program dimmers and switches within the home
- Each device can be uniquely named for easy identification
- Flexibility to program timed events weekdays, weekends or any combination of days at set or random times
- Astronomical clock automatically adjusts to local sunrise/sunset times
- Automatic daylight saving time adjustment
- Countdown sleep timer can be set for up to 12 hours
- LED locator light can be turned off via app
- Dimmer brightness display can be turned off via app
- Single pole or 3-way/multi-location control with Decora Digital remote (sold separately)
- Comes packaged in White, Ivory and Light Almond to match any decor
- Limited 5-year warranty



Type	Order No.	Price
Decora Digital Dual Voltage Matching Dimmer Remote	**LV10DD00RDLZ**	Price
Decora Digital Dual Voltage Matching Switch Remote	**LV10DD0SRDLZ**	Price
Decora Digital Switch with Bluetooth Technology, Dual Voltage	**LV10DDS15BDZ**	Price

*** 30ft Bluetooth range: Range may vary depending on specific conditions of installation, configuration of walls, obstacles and other factors**

LEVITON PowerSwitch™ DS30-AX Non-Fused, Enclosed Safety Disconnect Switches

Features:
- Designed for easy installation
- Bottom-hinged enclosure
- IP67, Watertight
- 4 Mounting feet
- 7 Conduit entry points
- Integral ground plate
- One factory-installed auxiliary contact
- Hub sold separately

DS60AX:
- HP Rating - 20HP - 120/208V to 240V; 40HP - 480V to 600V

DS30AX:
- HP Rating - 2HP - 120V; 5HP - 208/240V; 10HP - 208/240V & 480V, 3PH; 20HP - 480V 3PH; 25HP - 600V, 3PH


DS60AX


DS30AX

Amperage Rating (AMP)	NEMA Configuration	Voltage	No. of Poles	Color	Type	Order No.	Price
30	3R, 4X, 12K	600	3	Gray	Non-Fused	**LV10DS30AX**	Price
60	3R, 4X, 12K	600	3	Gray	Non-Fused	**LV10DS60AX**	Price

LEVITON Industrial Grade Manual Motor Disconnects

Features:
- All molded parts are thermoplastic
- Cam-driven mechanism enhances fast-make / slow-break
- Silver-Alloy contacts for maximum conductivity and service live
- External clamps accept back and side wiring
- Insulating barrier between terminals provide isolation between phases
- Nickel-plated brass mounting yoke for superior strength and corrosion resistance
- Oversized toggle provides positive actuation, even with gloved hand
- NEMA Configuration: WD-1, WD-6
- Backed by a Limited 10 Year Warranty

Type 3R





Type 1

					Type 1		Type 3R	
AMP	Voltage	No. of Poles	Wire Size Range	Color	Order No.	Price	Order No.	Price
30	600	2	8-10	Gray	**LV10N1302DS**	Price	**LV10N3302DS**	Price
30	600	3	8-10	Gray	**LV10N1303DS**	Price	**-**	-
30	120	3	8-10	Gray	**-**	-	**LV10N3303DS**	Price

airmaster Portable Ceramic Heater

120 Volt • 3 Settings

New!

- 120V, 60Hz, 1.5KW
- 3 Settings
- Portable structure
- Tip-over safety switch
- Thermostat maintains desired room temperature



Model No.	BTU	Amps	Order No.	Price
PCH03	5120	12.5	**PS5071552**	Price

TPI CORPORATION Indoor/Outdoor Electric Infrared Heater

- Frosted quartz element included
- 60° Symmetrical heat pattern
- Indoor/outdoor rated for "totally exposed" applications
- Comes with 2 ft long mounting chains and S-hooks
- 15 Amp / 120V / ground plug



	BTU	Amps	Watts	Settings	Order No.	Price
Infrared	5120	12.5	1500	1	**PS30485975**	Price

TPI CORPORATION Milk House Style Fan Forced Portable Heater

- Temperature control thermostat fan forced air
- 2 Heat settings
- Tip over safety switch
- Automatic reset limit control
- Thermal cut-off device
- 6' Long 3 conductor cord
- 15 Amp / 120V / Grd plug



	BTU	Amps	Watts	Order No.	Price
Portable	5120	12.5/10.8	1500/1300	**PS30800419**	Price

TPI CORPORATION Electric Radiant Forced Portable Heater

- Combination radiant and forced heat
- Dual safety settings - tip over switch and manual reset type limit control
- 3 Heat settings
- Temperature control thermostat
- Catchers mask look
- 15 Amp / 120V / Grd plug



	Amps	Watts	Order No.	Price
Portable	12.5/7.5/5	1500/900/600	**PS3045092**	Price

TPI CORPORATION Ceramic Fan Forced Portable Heater

- Charcoal filter air cleaner included
- Automatic reset type limit control
- Thermal cut-out device
- Temperature control thermostat
- 2 Heat settings
- Easy carry handle
- 15 Amp / 120V / Grd plug



	BTU	Amps	Watts	Order No.	Price
Portable	5120	12.5/1.1	1500/950	**PS30445931**	Price

TPI CORPORATION Dual Heat Fan Forced Portable Heater

- 2 Stage heating
- Manual reset type limit control
- Temperature control thermostat
- Can be used on bench or floor
- Will heat up to 400 sq ft.
- 6' Long 3 conductor cord
- 20 Amp plug (6-20P)
- 240 Volt
- Width: 16" x Height: 16" x Depth: 8-1/2"



BTU	Amps	Watts	Settings	Order No.	Price
13652	8.3/16.6	2000/4000	2	**PS30446181**	Price

airmaster Commercial Air Circulators



Provides comfortable cooling for schools, factories, farm buildings, warehouses, large offices and similar applications

- 115V, 1/4 HP, non-oscillating, 1 PH, 3 speed, totally enclosed air over ball bearing motor
- Pedestal model is adjustable 43”-63”
- Wall/ceiling mount includes safety cable kit
- Adjustable motor tilt models available in 24” and 30” sizes
- Galvanized steel propellers
- 15’ Supply cord and three prong plug
- UL/CUL listed
- 2 Year warranty
- UPS dimensional weight charges apply, ships in one box

				Adjustable Floor			Wall / Ceiling Mount		
Blade Size (in.)	CFM High/Med/Low	RPM High/Med/Low	Motor HP	Shipping Weight	Order No.	Price	Shipping Weight	Order No.	Price
24	4400/3460/2460	1100/800/600	1/4	82 lbs	**PS50CA24AP**	Price	42 lbs	**PS50CA24WC**	Price
30	6100/4400/2700	1100/800/600	1/4	87 lbs	**PS50CA30AP**	Price	49 lbs	**PS50CA30WC**	Price

airmaster Industrial Pivot Stand Air Circulators



- Available in 12” and 18” blade dia. sizes
- 115V , 1 Phase, 3 speed, Open drip proof, ball bearing motor
- Aluminum props
- Easy reach switch
- Chrome plated tubular steel base
- 10’ Three conductor power cord and plug
- High stand and yoke mount adjusts 360°
- Nickel chrome guards meet OSHA regulations
- UL listed
- 1 Year commercial warranty

					Floor Fan		Rolling Fan	
Blade Size (in.)	CFM High/Med/Low	RPM High/Med/Low	Motor HP	Shipping Weight	Order No.	Price	Order No.	Price
12	1448/1165/953	1500/1350/1180	1/16	10 lbs	**PS50C12LS**	Price	**-**	-
18	2966/2437/2013	1600/1350/1180	1/8	15 lbs	**PS50C18LS**	Price	**-**	-
18	2966/2437/2013	1600/1350/1180	1/8	23 lbs	**-**	-	**PS50C18HS**	Price

airmaster Direct Drive 4-in-1® Fans



- Available in 30” & 36” sizes
- The direct drive 4-in-1 is one fan with four easy-to-assemble mountings shipped in the same box
- Features of the tiltable 4-in-1 fan include 115V, 1 phase, totally enclosed air over motors; guards, barrel and mountings epoxy coated
- One fan with four mountings: hanging mount, ceiling mount, wall mount, portable. All mountings shipped in one box
- UL/CUL listed

Blade Size (in.)	CFM High/Low	RPM High/Low	Motor HP	Speed	Shipping Weight	Order No.	Price
30	5670/4590/3410	1110/810/600	1/4	3	97 lbs	**PS50DD3041**	Price
36	11200/8090	830/600	1/2	2	119 lbs	**PS50DD3641**	Price

airmaster 42" Belt Drive High Volume MANCOOLER®



- 1/2 HP/1PH/115V 2 speed ODP motor
- 42” Diameter barrel with wheels
- 3 Blade aluminum propeller
- 42” Blade size
- 14000/8000 CFM High/Low
- 540/400 RPM High/Low
- Epoxy coated steel spiral guards and barrel
- Two speed rocker switch
- 10’ Three conductor cord and plug
- 8” Steel wheels
- Fully assembled
- UL/CUL listed
- Shipping weight 120 lbs
- 2 Year warranty

Blade Size (in.)	CFM High/Low	RPM High/Low	Shipping Weight	Order No.	Price
42	14000/8000	540/400	120 lbs	**PS50EMC42D**	Price

Ships by Truck F.O.B. Warren, MI

airmaster 36" Belt Drive Portable Tilt MANCOOLER®



- Tiltable
- Two speed rocker switch
- Epoxy coated barrel
- Epoxy coated, steel spiral, resilient mounted guards
- Steel wheels with rubber tires
- Easy grip handle with cord wrap
- 10’ Cord and three prong plug

Blade Size (in.)	CFM High/Low	RPM High/Low	Motor HP	Speed	Shipping Weight	Order No.	Price
36	7800/5300	660/450	115V, 1 Phase, 1/2HP	2	121 lbs	**PS50BDMC36C**	Price

AirKing Industrial Products 1/4 HP Industrial Grade Pedestal Fan



- Ideal for plants, warehouses, large offices, and other industrial spaces that require powerful air circulation
- Motor: 3-speed, 1/4 HP, 120V, 1 phase, totally enclosed, ball bearing, permanently lubricated, permanent split capacitor
- Controls: rear mounted pull cord switch
- Power cord: black, 10', 3-conductor, SJT type
- Coating: blade, guard, and mounts are powder coated steel
- Compliance: ETL, OSHA

				Oscillating Pedestal Fan			Pedestal Fan		
Size (in.)	HP	CFM	RPM	Shipping Weight	Order No.	Price	Shipping Weight	Order No.	Price
24	1/4	5130/4490/3670	1060/925/745	76.1 lbs	**PS559125**	Price	73.5 lbs	**PS559124**	Price
30	1/4	7400/6360/4980	1040/902/860	82.6 lbs	**PS559135**	Price	80 lbs	**PS559130**	Price

AirKing Industrial Products 1/3 HP Industrial Grade Pedestal Fan

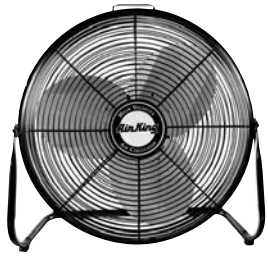


- Ideal for plants, warehouses, large offices, and other industrial spaces that require powerful air circulation
- Motor: 3-speed, 1/3 HP, 120V, 1 phase, totally enclosed, ball bearing, permanently lubricated, permanent split capacitor
- Controls: rear mounted pull cord switch
- Power cord: black, 10', 3-conductor, SJT type
- Coating: blade, guard, and mounts are powder coated steel
- Compliance: ETL, OSHA

Size (in.)	HP	CFM	RPM	Shipping Weight	Type	Order No.	Price
24	1/3	5770/5250/4270	1054/869/673	76.1 lbs	Oscillating Pedestal Fan	**PS559174**	Price
30	1/3	8780/7480/5570	1075/925/800	80 lbs	Pedestal Fan	**PS559170**	Price

AirKing Industrial Products Industrial Grade Small Floor Fans

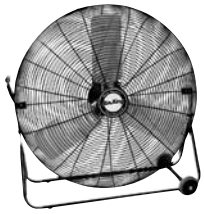
- Ideal for use in offices, stores, garages, warehouses and any other industrial space that needs powerful air circulation
- **Motor 9220, 9219, 9218:** 3-speed, 1/6 HP, 120V, 1 phase, totally enclosed, ball bearing, permanently lubricated, permanent split capacitor
  Motor 9212: 3-speed, 1/25 HP, 120V, 1 phase, open motor, sleeve bearing, permanent split capacitor
- Controls: rear mounted rotary switch
- Power cord: black, 10', 3-conductor, SJT type
- Coating: blade, guard, and mounts are powder coated steel
- Compliance: ETL, OSHA



Size (in.)	HP	CFM	RPM	Shipping Weight	Order No.	Price
12	1/25	1360/1170/1010	1500/1200/900	12.1 lbs	**PS559212**	Price
18	1/6	3190/2970/2660	1500/1300/1100	21.4 lbs	**PS559218**	Price
18	1/6	3190/2970/2660	1500/1300/1100	27.9 lbs	**PS559219**	Price
20	1/6	3670/3330/2940	1500/1310/1050	24 lbs	**PS559220**	Price

AirKing Industrial Products 1/4 HP Industrial Grade Large Floor Fans with Roller Wheels

- Industrial grade floor fans with roller wheels, are ideal for use in offices, stores, garages, warehouses
- Motor: 3-speed, 1/4 HP, 120V, 1 phase, totally enclosed, ball bearing, permanently lubricated, permanent split capacitor
- Controls: rear mounted rotary switch
- Power cord: black, 10', 3-conductor, SJT type
- Coating: blade, guard, and mounts are powder coated steel
- Compliance: ETL, OSHA



Size (in.)	CFM	RPM	Shipping Weight	Order No.	Price
24	5130/4490/3670	1060/925/745	41.8 lbs	**PS559224**	Price
30	7400/6360/4980	1040/902/860	48.3 lbs	**PS559230**	Price

AirKing Industrial Products Pivoting Blowers



- Pivoting High Velocity Blower 9555: The Pivoting High Velocity Blower features a pivoting head to direct air flow where you need it along with a type SO, GFCI power cord with test and reset buttons
- Pivoting Utility Blower 9550: The Pivoting Utility Blower features a pivoting head to direct air flow where you need it
- The 1/16 HP blower delivers just the amount of air flow you need

FPM (High/Med./Low)	RPM (High/Med./Low)	Motor	Order No.	Price
1468/1235/1120	1442/1297/1143	4 Speed 1/13 HP	**PS559555**	Price
1468/1235/1120	1475/1275/950	3 Speed 1/16 HP	**PS559550**	Price

shop-vac Industrial Air Mover™ Portable

Features:

- Designed to quickly dry wet carpets, floors, ceilings and walls
- Three speed air flow control
- Units are stackable for easy storage
- Lightweight and portable
- Sound level: quiet
- 1 Year warranty
- **Model # 1032000 / 1030400:** Features three operating positions, built in outlets along with a circuit breaker, top carry transport handle for easy mobility, 10' power cord and onboard cord wrap
- **Model # 1030100:** Features two operating positions, collapsible handle and rear wheels, 30' power cord and onboard cord wrap







Model	CFM	Motor	Order No.	Price
1030100	1800	120V, 60Hz, 1.4 Amps	**PC601030100**	Price
1030400	1000	120V, 60Hz, 3.5 Amps	**PC601030400**	Price
1032000	500	120V, 60Hz, 1.5 Amps	**PC601032000**	Price

Woods® Outdoor Round Vinyl Extension Cords



- Wood's outdoor cords are manufactured with stranded and cabled copper conductors and solid plugs for longer life
- 300 volt SJTW cords resist deterioration from moisture and abrasion
- Outer jackets won't mark floors or walls

Duty - Medium							
Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
15'	16/3	13A	Orange	1	300	**KD600266**	Price
25'	16/3	13A	Orange	1	300	**KD600267**	Price
50'	16/3	13A	Orange	1	300	**KD600268**	Price
100'	16/3	10A	Orange	1	300	**KD600269**	Price

Duty - Heavy							
Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
25'	14/3	15A	Orange	1	300	**KD600625**	Price
50'	14/3	15A	Orange	1	300	**KD600626**	Price
100'	14/3	13A	Orange	1	300	**KD600627**	Price

Duty - Extra Heavy							
Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
25'	12/3	15A	Orange	1	300	**KD600528**	Price
50'	12/3	15A	Orange	1	300	**KD600529**	Price
100'	12/3	15A	Orange	1	300	**KD600530**	Price

Duty - Industrial Extra Heavy Duty							
Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
50'	10/3	15A	Yellow	1	300	**KD600517**	Price
100'	10/3	15A	Yellow	1	300	**KD600518**	Price

CCI Polar/Solar® Outdoor Cold Weather Extension Cords

T*Prene® Insulated All-Purpose Cord with Power Indicator Light



Features:

- America's premier extension cord
- Lightweight and stays flexible to -67°F
- Rugged T*Prene insulation provides superior resistance to abrasion, ozone, oil, grease and chemicals
- Reinforced blades help prevent accidental bending or breaking
- Heavy-duty strain relief protects electrical connections resulting in longer cord life
- Outer jacket is flame retardant and water resistant
- Power indicator light in the female receptacle to show that the power is on UL Listed & CSA Certified outdoor use cord set
- Meets OSHA requirements for outdoor use

Duty - Heavy Duty							
Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
25'	14/3	15A	Yellow	1	UL / 125V	**KD6001487**	Price
50'	12/3	15A	Yellow	1	UL / 125V	**KD6001688**	Price
50'	14/3	15A	Yellow	1	UL / 125V	**KD6001488**	Price
100'	14/3	13A	Yellow	1	UL / 125V	**KD6001489**	Price

Duty - Extra Heavy Duty							
Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
25'	12/3	15A	Yellow	1	UL / 125V	**KD6001687**	Price
100'	12/3	15A	Yellow	1	UL / 125V	**KD6001689**	Price

Woods® Powerlite™ Extension Cords

Contractor Grade



- Yellow Jacket® cords are 3 times as abrasion resistant as a standard vinyl cord SJTW
- Powerlite™ indicator plug glows when the cord has power
- Single molded plugs are clear, rugged, durable and oversized
- Power block stands up to heat, cold and rough use on jobsites
- Yellow Jacket® cord features exclusive high-gloss, extra durable super flexible wire SJTW

Duty - Heavy							
Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
25'	14/3	15A	Yellow	1	125	**KD602886**	Price
50'	14/3	15A	Yellow	1	125	**KD602887**	Price
100'	14/3	13A	Yellow	1	125	**KD602888**	Price

Duty - Extra Heavy							
Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
25'	12/3	15A	Yellow	1	125	**KD602883**	Price
50'	12/3	15A	Yellow	1	125	**KD602884**	Price

Woods® 3-Outlet Power Blocks

- Made with solid molded 3-outlet plugs
- 300 volt SJTW cords
- The conveniently designed 3-outlet plugs eliminate clutter and extra cost associated with having to run two cords



Duty - Heavy Duty							
Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
25'	14/3	15A	Orange	3	300	**KD608825**	Price
50'	14/3	15A	Orange	3	300	**KD608826**	Price
100'	14/3	13A	Orange	3	300	**KD608827**	Price

Duty - Extra Heavy Duty							
Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
50'	12/3	15	Orange	3	300	**KD608819**	Price
100'	12/3	15	Orange	3	300	**KD608820**	Price

LEVITON Weather Resistant GFCI Covers

- Ruggedly constructed to seal out moisture dust, debris and insects, while providing easy access to receptacles
- Sturdy, gasketed covers mount vertically or horizontally
- Color: gray



4990



4992

Style	Order No.	Price
Horizontal	**LV104990**	Price
Vertical	**LV104992**	Price

Woods® Industrial Surge Protector



- 15' Cord with circuit breaker
- 6 outlets
- Cord Length:15 foot Hi-vis 14/3
- Color: black & yellow
- Joule Rating: 1050
- UL Rating: 330V UL Clamping Voltage @ 500 Amps
- Metal housing rated for indoor use

Order No.	Price
KD605138	Price

Woods® Surge Protectors

- 4 Transformer outlets
- Surge protection indicator
- Ground indicator
- Right angle plug
- Blu-Bar "Power-On" indicator
- Lit reset on/off power and 15A circuit breaker switch
- Sliding safety covers
- EMI / RFI noise filtration
- UL/cUL listed



041650



041651

Cord Length	No. of Outlets	Joules	Style	Features	Order No.	Price
6'	9	2000	Home or Office Use	Standard	**KD60041650**	Price
6'	9	3000	Multi-Use	Satellite, Cable, Phone, Fax, DSL Surge Protection	**KD60041651**	Price

LEVITON Surge Protection Strip

- Can be used individually or as part of a coordinated application strategy, to protect sensitive electronic equipment, in industrial, commercial and residential locations, from the stress and degradation inflicted by voltage transients
- Compliant with UL 1449 Standards
- Transients are diverted away from sensitive micro circuitry, providing protection against catastrophic failure, costy downtime and data distruptions



				6 Plug		9 Plug	
AMP	NEMA Configuration	Voltage	Color	Order No.	Price	Order No.	Price
15	5-15R	120	Beige	**LV10S1000PS**	Price	**LV10S2000PS**	Price

Woods® 3-Outlet Power Blocks with Powerlite™

Extra Heavy Duty



Length	Wire Gauge	125V Rating	Color	Outlet	UL Rating / Volt	Order No.	Price
2'	12/3	15A	Yellow	3	600	**KD602882**	Price
50'	12/3	15A	Yellow	3	300	**KD602827**	Price
100'	12/3	15A	Yellow	3	300	**KD602820**	Price

LEVITON Portable GFCI Device

- Portable GFCI Device are sleeker and rugged
- Fully OSHA compliant



Amperage Rating (AMP)	NEMA Configuration	Voltage	No. of Poles	No. of Wires	Order No.	Price
15	5-15P	120	2	3	**LV10GFA153TC**	Price

Woods® Yellow Jacket® Lighted 3-Outlet

With in-line GFCI



- Provides maximum safety
- Powerlite® glows when power is on
- Has either male plug or in-line ground fault circuit interrupter

Gauge/ Cond.	Wire Type	Cord Length	Cord Color	125V Rating	Power Lite	Order No.	Price
12/3	SJTW	2'	Yellow	15 A	Yes	**KD6082816**	Price

Woods® Yellow Jacket® Ground Fault Circuit Interrupters



- Yellow Jacket GFCI cords have either a male plug or an in-line ground fault circuit interrupter
- Provides maximum safety
- Manual test-reset buttons
- Powerlite™ plug glows when the cord has power
- UL Listed

Gauge/ Cond.	Wire Type	Cord Length	Cord Color	Power Lite	Description	No. of Outlets	Order No.	Price
12/3	SJTW	2'	Yellow	No	Single outlet with right angle male plug	Single	**KD602877**	Price
12/3	SJTW	2'	Yellow	Yes	Lighted 3-outlet power lock with right angle male plug	Lighted 3-outlet	**KD602814**	Price
14/3	SJTW	6'	Yellow	No	Single outlet with right angle male plug	Single	**KD602879**	Price

Woods® Yellow Jacket® Adapter with Cord Locks



- 5 Grounded outlets
- Color: yellow
- UL Rating: 125 Volt 15A
- Industry's only outdoor rated adapter, features two cord locks to secure cords
- An outlet adapter that converts a single outlet into 5 grounded outlets

Order No.	Price
KD60997362	Price

BAYCO Extension Cord Holders

- **K100:** Crank operated reel with stand, (stores 150' 16/3 • 125' 14/3 • 100' 12/3 cord)
- **K150:** Handheld holder to wrap an extension cord or rope



Cord Reel



Cord Wrap

Type	Order No.	Price
Cord Reel	**KE58K100**	Price
Cord Wrap	**KE58K150**	Price

Cords not included.

ELECTRIX 22" Reach LED Task Lamp With Clamp-On Base



- 22" Dust free vinyl coated industrial strength flexible gooseneck
- 3 x 3" Compact metal construction shade
- 7 Watt LED is equivalent to 50 watt incandescent
- 9' Grounded cord and plug
- 25,000 Hour life
- Color: gray

MADE IN THE USA

Order No.	Price
KC513001	Price

ELECTRIX 25" LED Task Lamp



- Retains 100% of lumen output through its 40,000 hour life
- 5 Watt LED produces same light output as 20 watt halogen lamp
- Annual energy cost can be reduced by 80%
- Constructed to withstand heavy machine vibration while retaining its position
- Flexible steel gooseneck delivers brilliant white light exactly where needed
- Compact cool-touch shade measures 3" x 3"
- Epoxy coated durable all metal construction
- 9' Grounded cord & plug
- Color: black

Mount Type	Order No.	Price
Clamp	**KC517904BLK**	Price
Magnetic Base	**KC517905BLK**	Price

ELECTRIX 30" LED Gooseneck Task Lamps



- Bulb: LED
- 30" Overall length
- 120 Volt
- 3" Lamp
- 7' Cord

MADE IN THE USA

Mount Type	Order No.	Price
Adjustable Clamp	**KC517432BLACK**	Price
Direct Mount	**KC517433BLACK**	Price
Magnetic Mount	**KC517430BLACK**	Price

MOFFATT INC Direct Multi-Lamp

"Cool to Touch"



- Cool to-the-touch, double wall shade allows adjustment while in use and eliminates risk of injury
- Bright conical reflector puts the 100-watt capacity illumination where you need it (Bulb not included)
- Innovative, finned aluminum heat sink keeps toggle switch cool for a long switch life
- 18" & 24" Flexarm
- Direct mount screw down base with mounting hardware included
- Color: black

Arm Length	Order No.	Price
18	**KE5095049**	Price
24	**KE5095050**	Price

DAZOR Ecoflex II LED Spot Lights



- 7 LEDs with optical lensing to produce intense white light where you need it
- Dust-proof and water protected fully enclosed head with glass lens cover
- 7' Cord with 24V AC/DC inline switching power supply
- Multiple mounting options for machine work enviroment
- UL listed

OAL (in.)	Arm Style	Mount	Order No.	Price
17	Flexible	Desk	**KC50LFA35DBBK**	Price
17	Flexible	L-Bracket	**KC50LFA35LBBK**	Price
17	Flexible	Magnetic	**KC50LFA35MMBK**	Price
24	Floating	Clamp	**KC50LCA27CMBK**	Price
25	Flexible	Clamp	**KC50LFA35CMBK**	Price
34	Floating	Clamp	**KC50LCA37CMBK**	Price

DAZOR Machine LED Spot Lights



- Focused beam of white, cool light, right where you need it
- No bulbs to break or replace
- No forward heat on UV emission in light path
- Multiple mounting options for machine work environment
- Protective glass shield resists fluids

OAL (in.)	Arm Style	Mount	Order No.	Price
24	Floating	Clamp	**KC50LEDCA24CM**	Price
25	Flexible	Clamp	**KC50LEDFA25CM**	Price
25	Flexible	Magnetic	**KC50LEDFA25MM**	Price
34	Floating	Clamp	**KC50LEDCA34CM**	Price

DAZOR High Power LED Spot Light



- Features latest LED technology which produces twice the light output as a halogen bulb
- Dustproof and water protected fully enclosed head with 22° optical beam spread
- 7' Cord length with 12V AC/DC inline switching power supply
- 5 Year limited warranty
- UL, cUL, CE

MADE IN THE USA

OAL (in.)	Arm Style	Mount	Order No.	Price
19	Floating	Clamp	**KC50LSL34CMBK**	Price
25	Flexible	Clamp	**KC50LSL25CMBK**	Price
25	Flexible	Desk	**KC50LSL25DBBK**	Price
25	Flexible	L-Bracket	**KC50LSL25LBBK**	Price
25	Flexible	Magnetic	**KC50LSL25MMBK**	Price

MOFFATT INC Machinery Lamp

18" & 24" Flexarm



- Use on milling machines, lathes, drill presses, grinders, workbenches and molding presses
- Bright conical reflector
- Shade rotation
- Use up to 100W standard bulb (bulb not included)
- Heavy duty flexible arm-vinyl covering
- 6', 3-wire grounded SJT0 cord
- Models 06183 & 06243 include 3 different mounts — 2 studs & brackets
- Color: black

	18		24	
Mount Type	Order No.	Price	Order No.	Price
2" Grip C-Clamp	**KE5095030**	Price	**KE5095031**	Price
2-Thread Studs & Bracket	**KE5006183**	Price	**KE5006243**	Price
Magnetic Base 100 lb pull	**KE5095020**	Price	**KE5095021**	Price

ELECTRIX Swivel Head Work Lights

Articulating Arm

- 2800 Lumens
- 120 Volt
- 5' Cord
- 20 Watts
- Direct mount



Arm Length	Order No.	Price
18	**KC518700**	Price
32	**KC518701**	Price

PRM PRO LED Industrial Work Light

- Light output: 540 total lumens
- No heat high intensity spot light
- High output energy efficient 9W LED
- Two 8.7" arms w/shade and transformer
- IP 65 - dustproof, waterproof up to moderate jets
- AC/DC 24V



New!

Description	Order No.	Price
Lamp	**KE75JWL5514L**	Price
Bulb 14W	**KE75JW55LED**	Price

O.C. White Co. IP67 Waterproof Worklights

- Heavy duty die cast aluminum body/zinc
- Slim die cast aluminum bezel
- IP67 Rated with tempered safety glass front
- Built-in dimmer switch

MADE IN THE USA

New!





- Articulating							
Bulb	Cord Length	Cord	OAL (in.)	Watts	Mount Type	Order No.	Price
(12) LED	12'	24V DC Direct Wire	30	15	C-Clamp to Bench	**KC5330ARM24V**	Price
(12) LED	6'	100-240v Autoswitchable Transformer	30	15	C-Clamp to Bench	**KC5330ARM120V**	Price
(12) LED	12'	24V DC Direct Wire	43	15	C-Clamp to Bench	**KC5343ARM24V**	Price
(12) LED	6'	100-240v Autoswitchable Transformer	43	15	C-Clamp to Bench	**KC5343ARM120V**	Price

- Magnetic Gooseneck							
Bulb	Cord Length	Cord	OAL (in.)	Watts	Mount Type	Order No.	Price
(12) LED	12'	24V DC Direct Wire	12	15	Magnetic; Permanent Screw In	**KC53MG1224V**	Price
(12) LED	6'	100-240v Autoswitchable Transformer	12	15	Magnetic; Permanent Screw In	**KC53MG12120V**	Price
(12) LED	12'	24V DC Direct Wire	18	15	Magnetic; Permanent Screw In	**KC53MG1824V**	Price
(12) LED	6'	100-240v Autoswitchable Transformer	18	15	Magnetic; Permanent Screw In	**KC53MG18120V**	Price

- Magnetic Swivel Stand							
Bulb	Cord Length	Cord	OAL (in.)	Watts	Mount Type	Order No.	Price
(12) LED	12'	24V DC Direct Wire	8	15	Magnetic; Permanent Screw In	**KC53SS24V**	Price
(12) LED	6'	100-240v Autoswitchable Transformer	8	15	Magnetic; Permanent Screw In	**KC53SS120V**	Price

ELECTRIX LED-R Gooseneck Task Lamps

- Industrial grade gooseneck arm remains where placed for perfect workspace illumination
- 6" Diameter ventilated spun aluminum shade allowing a cool operation
- 9' grounded cord and plug

MADE IN THE USA

New!



Reach (in.)	Watts	Mount Type	Order No.	Price
22	9	Adjustable Clamp	**KC517300LEDR**	Price
22	9	Direct Mount	**KC517292LEDR**	Price
22	9	L Bracket	**KC517290LEDR**	Price
22	9	Magnetic Mount	**KC517303LEDR**	Price
22	9	Vertical Direct Mount	**KC517294LEDR**	Price
33	9	Direct Mount	**KC517293LEDR**	Price

ELECTRIX LED Gooseneck Task Lamp

- Constructed to withstand heavy machine vibration while retaining its position and providing powerful clean LED light
- High output luminaire head measures 6-1/2 x 4"
- Zinc-cast swivel vise clamp is durable and adjustable for versatile placement
- 9' Cord

MADE IN THE USA

New!



Reach (in.)	Watts	Order No.	Price
27	7	**KC517397LED**	Price

ELECTRIX Articulating Arm Task Lamps

Adjustable Clamp Base

- Spring tension articulating arm remains where placed for perfect workspace illumination
- Zinc-cast swivel vise clamp is durable and adjustable for versatile placement

MADE IN THE USA

New!



Reach (in.)	Type	Head	Cord Length	Watts	Order No.	Price
45	LED-R	6" Spun Aluminum Shade	8'	9	**KC512246LEDR**	Price
45	LED	19 x 4"-High Output	9'	7	**KC512069LED**	Price
45	LED	6-1/2 x 4"-High Output	8'	7	**KC517398LED**	Price

tensor LED Portable Gooseneck Lamp

- 3 Watt intergraded LED bulb
- Adjustable gooseneck for maximum versatility
- Toggle on/off switch
- Black finish
- Inline on/off
- Switch on cord



OAL (in.)	Mount Type	Color	Order No.	Price
19	Clamp	Black	**KC5110C003**	Price
19	Clamp	Silver	**KC5110C004**	Price
20	Weighted Base	Silver	**KC5110C002**	Price

Fowler LED Universal Magnetic Mini Flex Bar Light

- Ideal for focused applications in industrial and automotive
- 14 LED ultra-bright flashlight
- Powerful, low-profile magnetic base
- Slim, articulating flex bar allows easy and accurate positioning
- Quick release mounting bracket clamp
- Batteries included



Order No.	Price
NA5552630451	Price

tensor LED Architect Deck Lamp

- 5 Watt intergraded LED bulb
- Adjustable architect arms for maximum versatility
- Inline on/off switch on cord
- Color: black



OAL (in.)	Mount Type	Order No.	Price
19	Weighted Base with Clamp	KC5110C005	Price
20	Weighted Base	KC5110C007	Price

DAZOR Broad Area LED Light

- Optimal LED design produces twice the light output as a 2 bulb fluorescent fixture with 30% power savings
- DiffuseTec™ Light management produces broad area diffused light output without multi-shadowing
- 7' Cord length with 28V AC/DC inline universal power converter
- 5 Year limited warranty
- UL, cUL, CE
- Color: black



OAL(in.)	Arm Style	Mount	Order No.	Price
31	Floating	Clamp	KC50LNVM24CMBK	Price
31	Floating	Desk	KC50LNVM24DBBK	Price
41	Floating	Clamp	KC50LNVM34CMBK	Price

ELECTRIX Portable Dual LED Strip Gooseneck Desk Light

- 120 Volt integrated driver
- 2 LED strips, 1492 lumens and 40,000 hour life
- 12" Long flexible lamp reach
- 18-1/2" Wide Cycolac™ shade with inner reflector distributes generous amount of bright, cool, white light over work surface
- 7" Diameter metal base
- 9' Grounded cord and plug
- Color: black



Order No.	Price
KC512068	Price

ELECTRIX LED Articulating Arm Task Lamp

Portable Base

- Bulb: LED
- Lumens 370
- 22" Reach
- 6 Watts
- Industrial grade gooseneck arm designed to withstand machine vibrations while remaining exactly where placed
- Bright, clear LED light for a portable luminaire is ideal for maximizing workspace illumination



Order No.	Price
KC517844BLACK	Price

tensor LED Dual Reach Lamp

LED:

- Adjustable architect arms
- Clamp attachment included for maximum versatility
- Touch on/off switch
- Adjustable color temperature control
- Full range dimming

Halogen:

- Dual reach
- 3 Way rotary switch on base
- Adjustable balance arms
- Shade adjustable bar
- Includes G4 20 watt bulb



OAL (in.)	Bulb	Watt	Mount Type	Order No.	Price
20	Halogen Type G	20	Weighted Base	KC5110C001	Price
22	Intergrated LED	8	Weighted Base with Clamp	KC5110C009B	Price

Fluorescent Work Lamp

- C-clamp base
- Uses two 15 watt fluorescent bulbs
- Bulb part number KC50F15T8DL
- Ballast in base
- 36"/920mm Arm length
- Color: black



Order No.	Price
KE768540603	Price

ELECTRIX Portable LED 30" Reach Lamp

- 30" Professional reach
- 2 LED strips with 50,000 hour life
- 7 Watt LED provide 690 lumens of cool, bright, white light equivalent to a 60 watt incandescent bulb
- Portable 7" diameter metal base
- 7' grounded cord and plug
- Energy saving
- Color: black



Order No.	Price
KC517399	Price

ELECTRIX LED Slim Foldable Desk Lamp

- Hinged arms allow for adjustable light placement
- Linear luminaire for efficient workspace lighting
- Rectangular stand provides balanced placement
- 330 Lumens



New!

Reach (in.)	Cord	Watts	Order No.	Price
15	5'	10	**KC5110C016**	Price

ELECTRIX LED Slim-Line O Foldable Floor Lamp

- Hinged arms allow for adjustable light placement
- Circular compact luminaire for efficient workspace lighting
- Circular stand provides balanced placement
- 970 Lumens



New!

Reach (in.)	Cord	Watts	Order No.	Price
18	6'	12.5	**KC5110C013**	Price

ELECTRIX LED Slim-Line O Foldable Desk Lamp

- Hinged arms allow for adjustable light placement
- Circular compact luminaire for efficient workspace lighting
- Circular stand provides balanced placement
- 900 Lumens



New!

Reach (in.)	Cord	Watts	Order No.	Price
14	6'	12	**KC5110C012**	Price

ELECTRIX LED Linear High Bay Light

- Up to 75% energy savings compared in incandescent
- Ideal for large indoor spaces, including warehouses, distribution centers and industrial areas
- Recommended for medium to high ceilings: 12' - 40' high
- 50,000 hour liefetime makes for an ideal replacement of traditional fixtures
- Glass-free design avoids the need for extra guards or cages
- Adjustable cable and hardware included for fast and simple installation



New!

Height (in.)	Watts	Order No.	Price
22	150	**KC519004**	Price

ELECTRIX LED Slim-Line Z Foldable Desk Lamp

- Hinged arms allow for adjustable light placement
- Linear luminaire evenly illuminates workspace
- Linear stand for balanced placement
- 930 Lumens



New!

Reach (in.)	Cord	Watts	Order No.	Price
18	6'	12.5	**KC5110C011**	Price

ELECTRIX LED Slim-Line Z Foldable Floor Lamp

- Hinged arms allow for adjustable light placement
- Linear luminaire for efficient workspace lighting
- Rectangular stand provides balanced placement
- 900 Lumens



New!

Reach (in.)	Cord	Watts	Order No.	Price
18	6'	12.5	**KC5110C014**	Price

ELECTRIX Knuckle Mount Flood Lights

- Rugged aluminum housing with UV resistant powder coat finish offers outstanding corrosion protection
- Exceptional energy savings of up to 75% in compariosn to metal halide fixtures
- 114 lumens per watt max light output exceeds industry efficiency standards
- Long lasting 50,000 hour lifespan
- Knuckle mount can be positioned for any application



New!

Size	Watts	Order No.	Price
10	35	**KC519306**	Price
10	45	**KC519307**	Price

DAZOR Replacement Bulbs for Lamps & Magnifiers



F15T8DL



18W35
18WFSB



13W51FSB



600010



5HG1018



FC8T9CW
FC8T9FSB

Watts	Lumens	Life Hours	Color	Order No.	Price
13	900	10000	Full Spectrum Bulb	**KC5013W51FSB**	Price
15	700	7500	Daylight Bulb	**KC50F15T8DL**	Price
18	10000	1200	Cool White Bulb	**KC5018W35**	Price
18	1200	10000	Full Spectrum Bulb	**KC5018WFSB**	Price
20	2000	350	Warm White Bulb	**KC50600010**	Price
22	12000	1100	Cool White Bulb	**KC50FC8T9CW**	Price
22	925	12000	Full Spectrum Bulb	**KC50FC8T9FSB**	Price
50	2000	600	Warm White Bulb	**KC505HG1018**	Price

ELECTRIX Machine Tube Lights

MADE IN THE USA

- Bulb: LED
- 9' Cord
- 120 Volt



OAL (in.)	Material	Watts	Order No.	Price
11	Glass	7.2	**KC517746GLASS**	Price
11	Acrylic	7.2	**KC517746LED**	Price
20	Glass	7.2	**KC517748GLASS**	Price
20	Acrylic	7.2	**KC517748LED**	Price
24	Glass	9	**KC517749GLASS**	Price
24	Acrylic	9	**KC517749LED**	Price

O.C.White Co IP67 Waterproof LED 19" Linear Machine Lights

MADE IN THE USA

American Made Since 1883

Features:

- (72) Angled LED bulbs
- Heavy duty die cast aluminum body designed for added quality and strength to increase the longevity of the product
- IP67 Rated with tempered safety glass front
- Swivels 90° from left to right for increased light concentration
- Each unit ships complete with (4) Rare-earth Neodymium magnets
- 24v DC standard or 100-240v (50/60hz) transformer
- Power up to (3) linear lights off of a single power source



Warranty

- 1 Year unconditional warranty on electrical and mechanical defects
- 5 year / 50,000 hour prorated warranty

Cord - 100V-240V Autoswitchable Transformer		
Includes	**Order No.**	**Price**
LED Machine Light , 100-240V (50-60HZ) Transformer	**KC531936120V**	Price
(2) LED Machine Lights, (1) 100-240V (50-60HZ) Transformer, (1) Interconnect Cable	**KC5319362120V**	Price
(3) LED Machine Lights, (1) 100-240V (50-60HZ) Transformer, (2) Interconnect Cable	**KC5319363120V**	Price

Cord - 24V DC Direct Wire		
Includes	**Order No.**	**Price**
LED Machine Light , 24V DC Input Cable	**KC53193624V**	Price
(2) LED Machine Lights, (1) 24V DC Input Cable, (1) Interconnect Cable	**KC531936224V**	Price
(3) LED Machine Lights, (1) 24V DC Input Cable, (2) Interconnect Cable	**KC531936324V**	Price

DAZOR Handheld Lighted Magnifiers

- Clear and distortion-free viewing
- 2.5X magnification level
- Choice of 12 or 24 bright-white high output LED'S
- Convenient "kick-stand" for hands-free use
- Sturdy storage case for easy portability



Magnification	Batteries Used	Bulb	Order No.	Price
2.5X	4-AAA Batteries (not included)	24 - 0.5W Hi Brigthness LEDs	**KC50J203HHM**	Price
2.5X	4-AAA Batteries (not included)	12 - 0.5W Hi Brigthness LEDs	**KC50JMINI**	Price

O.C.White Co Green-Lite® LED Magnifier 43" Reach with Table Edge C-Clamp

MADE IN THE USA

American Made Since 1883

Features:

- Highest lumen output LED magnifier with standard 4 diopter (2X) lens
- Reduced glare, heat and energy consumption
- Low voltage (15v) power
- Energy efficient by design, using only 8 watts on high
- Built in optional auto shut off at 4 hour intervals
- High quality die cast aluminum shades
- Heavy duty extruded aluminum arms and stamped steel plates for extreme abuse





Warranty:

- 5 Years or 50,000 hours pro-rated LED warranty
- 5 Year mechanical warranty...best in the business

	7" x 5-1/4" Rectangle		7-1/2" Round	
Color	**Order No.**	**Price**	**Order No.**	**Price**
Black	**KC53824004B**	Price	**KC53624004B**	Price
Blaze Red	**KC53824004BR**	Price	**KC53624004BR**	Price
Brilliant Orange	**KC53824004BO**	Price	**KC53624004BO**	Price
Racing Green	**KC53824004RG**	Price	**KC53624004RG**	Price
Shadow White	**KC53824004**	Price	**KC53624004**	Price
Spectre Blue	**KC53824004SB**	Price	**KC53624004SB**	Price
USA Flag graphic	**KC53824004USA**	Price	**-**	-

ELECTRIX LED Portable Inspection Lamp With 3 Diopter Magnifier Lens

- 3 Diopter magnifying lens: +1.75 magnification, 13" focal length, 5" viewing area
- 13" Long flexible lamp reach
- 14" Reach magnifier
- 7 Watt, 525 lumen LED provides 40 degrees of bright, cool, white light equivalent to 50 watt halogen
- 7" Diameter base
- 2-7/8" Diameter metal construction shade



Order No.	Price
KC517311	Price

tensor LED Magnetic Desk Lamp

- 3 Diopeter (1.75X) magnification
- Intergrated LED energy efficient light source
- Inline on/off switch on 5' cord
- Adjustable gooseneck for maximum versatility in adjustment



Lens Shape	Arm Length (in.)	Mount Type	Order No.	Price
Circular	20	Weighted Base	**KC5110C006**	Price
Circular	22	Clip	**KC5110C008**	Price

DAZOR Circline LED Inspection Magnifiers

- Circline magnifier produces 1500 lumens of dimmable diffuse LED light for shadow free viewing
- Floating arm stays in position with touch of finger—doesn't bounce like spring arm models
- Clamp mounts to tables, workbenches, etc.
- Flicker free instant on/off
- Low voltage and energy efficient
- UL listed
- All heavy-duty metal construction
- 5 Year warranty

New!

MADE IN THE USA



Diopter - 3				
Mount	Magnification	Reach (in.)	Order No.	Price
Bench Clamp	+1.75	28	**KC50LMC150BK**	Price
Bench Clamp	+1.75	42	**KC50LMC200BK**	Price
Desk Base	+1.75	28	**KC50LMC100BK**	Price

Diopter - 5				
Mount	Magnification	Reach (in.)	Order No.	Price
Bench Clamp	+2.25	28	**KC50LMC1505BK**	Price
Bench Clamp	+2.25	42	**KC50LMC2005BK**	Price
Desk Base	+2.25	28	**KC50LMC1005BK**	Price

Diopter - 11				
Mount	Magnification	Reach (in.)	Order No.	Price
Bench Clamp	+3.75	28	**KC50LMC15011BK**	Price
Bench Clamp	+3.75	42	**KC50LMC20011BK**	Price
Desk Base	+3.75	28	**KC50LMC10011BK**	Price

Diopter - 16				
Mount	Magnification	Reach (in.)	Order No.	Price
Bench Clamp	+5.00	28	**KC50LMC15016BK**	Price
Bench Clamp	+5.00	42	**KC50LMC20016BK**	Price
Desk Base	+5.00	28	**KC50LMC10016BK**	Price

DAZOR "HiLighter" Floating Arm Inspection LED Magnifiers

- Floating arm stays in position, doesn't bounce like external spring arms
- LED design highlights small details on irregular surfaces
- High quality distortion free crown optical glass lens
- 750 Lumens of dimmable diffuse light
- Low voltage and energy efficient
- Up to 40" arm reach
- UL listed
- 5 Year warranty

New!

MADE IN THE USA



Diopter - 3				
Magnification	Reach (in.)	Mount	Order No.	Price
+1.75	28	Desk Base	**KC50LMG400BK**	Price
+1.75	28	Bench Clamp	**KC50LMG450BK**	Price
+1.75	40	Bench Clamp	**KC50LMG500BK**	Price

Diopter - 5				
Magnification	Reach (in.)	Mount	Order No.	Price
+2.25	28	Desk Base	**KC50LMG4005BK**	Price
+2.25	28	Bench Clamp	**KC50LMG4505BK**	Price
+2.25	40	Bench Clamp	**KC50LMG5005BK**	Price

Rectangular Magnifier Lamp

- 3 Diopter, 1.75x power lens 120/230 Volt
- 7.5" x 6.2" Rectangular lens
- Uses two 9 watt, H-shaped fluorescent bulbs
- Bulb part number: KE76PL9WBULB
- Single on/off button
- 32"/800mm Arm length
- 2-1/2" Adjustable clamp
- Color: black



Order No.	Price
KE768540103	Price

ELECTRIX LED Circleline Illuminated Magnifiers

- Diopter lens magnification while lit with a clear, bright LED light
- Spring tension articulating arm holds placement steady against machine vibrations equipped with zinc-cast swivel vise clamp base
- Scratch resistant polycarbonate housing holds the distortion-free glass lens and circline LED that provides 360° of shadow-free light
- 3-position switch offers high or low lumen output light

New!



Diopter	Arm Style	OAL (in.)	Watts	Mount Type	Order No.	Price
3	30" Articulating	40	Low: 11/ High: 18	Weighted Base	**KC517125LED**	Price
5	30" Articulating	40	Low: 11/ High: 18	Weighted Base	**KC517126LED**	Price
5	32" Articulating	37	6.3	Adjustable Clamp	**KC5110C010**	Price
3	45" Articulating	40	Low: 11/ High: 18	Adjustable Clamp	**KC517121LED**	Price
5	45" Articulating	40	Low: 11/ High: 18	Adjustable Clamp	**KC517122LED**	Price

ELECTRIX LED Illuminated Magnifiers

- Diopter lens provides magnification while lit with a clear, bright LED light
- Spring tension articulating arm holds placement steady against machine vibrations equipped with zinc-cast swivel vise clamp base
- Scratch resistant polycarbonate housing holds the distortion-free glass lens and integrated LED strips provides sufficient light to reduce eye fatigue

MADE IN THE USA

New!



Diopter	Arm Style	OAI (in.)	Watts	Mount Type	Order No.	Price
3	30" Articulating	37	7	Weighted Base	**KC517428LED**	Price
5	30" Articulating	37	7	Weighted Base	**KC5174285LED**	Price
3	45" Articulating	37	7	Adjustable Clamp	**KC517426LED**	Price
3	45" Articulating	52	47	Adjustable Clamp	**KC517462LED**	Price
5	45" Articulating	37	7	Adjustable Clamp	**KC5174265LED**	Price

ELECTRIX Portable 30" Reach Wide View LED Illuminated Magnifier With Weighted Base

- 3 Diopter magnifying lens: +1.75 magnification, 13" focal length, 7" viewing area
- 30" Long spring balanced articulating arm
- 2 Energy saving LED strips with 50,000 hour life provides 690 lumens
- Two 7 watt LED strips each light equivalent to 60 watt incandescent
- 10" Diameter metal base



Order No.	Price
KC517460	Price

Round Magnifier Lamps

- 3 Diopter, 1.75x power lens
- 120/230 Volt
- Color: black



Lens Shape	Bulb	Watts	Arm Length (in.)	Mount Type	Order No.	Price
5" Round	Fluorescent	22	24	Weighted Base	**KE768540583**	Price
5" Round	Fluorescent	22	36	Adjustable Clamp Base	**KE768540503**	Price

PRM PRO 9/16" Diamond Comfort Mats

- Industrial grade anti-fatigue mat
- Economical solution for improving workers' comfort and productivity
- Surface resists common fluids
- Manufacturer's 4 year limited warranty against wear and delamination
- Beveled edges on all mats





	Black		Black/Yellow	
Size (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6610200**	Price	**RV6610205**	Price
2 x 75	**RV6610210†**	Price	**RV6610215†**	Price
3 x 5	**RV6610230**	Price	**RV6610235**	Price
3 x 10	**RV6610220**	Price	**RV6610225**	Price
3 x 75	**RV6610240†**	Price	**RV6610245†**	Price
4 x 75	**RV6610250†**	Price	**RV6610255†**	Price

† Ships FOB Factory

PRM PRO 11/16" Diamond Comfort Mats

- Durable PVC diamond surface bonded to a flexible base
- Manufacturer's 4 year limited warranty against wear and delamination
- Beveled edges on all mats





	Black		Black/Yellow	
Size (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6610260**	Price	**RV6610265**	Price
2 x 75	**RV6610270†**	Price	**RV6610275†**	Price
3 x 5	**RV6610290**	Price	**RV6610295**	Price
3 x 10	**RV6610280**	Price	**RV6610285**	Price
3 x 75	**RV6610300†**	Price	**RV6610305†**	Price
4 x 75	**RV6610310†**	Price	**RV6610315†**	Price

† Ships FOB Factory

PRM PRO 15/16" Diamond Comfort Mats

- Thickest version of diamond foot
- 3/4" Flexible foam provides the ultimate comfort
- Manufacturer's 4 year limited warranty against wear and delamination
- Beveled edges on all mats





	Black		Black/Yellow	
Size (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6610320**	Price	**RV6610325**	Price
2 x 75	**RV6610330†**	Price	**RV6610335†**	Price
3 x 5	**RV6610350**	Price	**RV6610355**	Price
3 x 10	**RV6610340**	Price	**RV6610345**	Price
3 x 75	**RV6610360†**	Price	**RV6610365†**	Price
4 x 75	**RV6610370†**	Price	-	-

† Ships FOB Factory

PRM PRO 1/2" Diamond Anti Fatigue Mats

- Ergonomically styled anti-fatigue matting designed to provide comfort and relief for aching feet and legs
- 1/2" Deluxe thickness for light to moderate standing environments
- Available in the industry favorite diamond deckplate durable surface pattern
- 100% Closed-cell PVC foam
- Recommended for dry to moist environments
- Beveled edges for increased safety

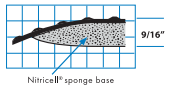



	Black		Black/Yellow	
Size (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6610500**	Price	**RV6610515**	Price
3 x 5	**RV6610510**	Price	**RV6610520**	Price
3 x 12	**RV6610505**	Price	**RV6610525**	Price

WEARWELL 9/16" Diamond Plate SpongeCote®

#1 Choice among Standing Workers





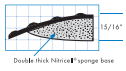
- Diamond-Plate SpongeCote® revolutionized the anti-fatigue market
- Super resilient, Nitricell® sponge base enhances employee productivity and relieves fatigue like no other
- 9/16" overall with optional colored borders and beveled safety edges
- GREEN RATING= 50% Post Industrial Material
- 4 Year Warranty

	Black		Black/Yellow	
Sizes (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6024640**	Price	**RV6024641**	Price
3 x 5	**RV6024652**	Price	**RV6024642**	Price
3 x 75	**RV6020056**	Price	**RV6020059**	Price
4 x 75	**RV6020104**	Price	**RV6020111**	Price
5 x 75	**RV6062070**	Price	**RV6061691**	Price
6 x 75	**RV6061500**	Price	**RV6061490**	Price

Special custom cuts are available and priced PLF (per linear foot). Call for pricing.

WEARWELL 15/16" UltraSoft Diamond Plate

#1 Selling Premium Dry Area Anti-Fatigue Mat



- Double-thick Nitricell® sponge base is PVC loaded with Nitrile rubber for exceptional comfort, rebound and long life
- Popular Diamond-Plate surface is ideal for heavily trafficked work areas
- Resists chemical and abrasion
- All edges safety beveled
- GREEN RATING= 50% Post Industrial Material
- 4 Year Warranty

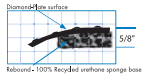
	Black		Black/Yellow	
Sizes (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6026127**	Price	**RV6026151**	Price
3 x 5	**RV6026208**	Price	**RV6026232**	Price
3 x 75	**RV6026235**	Price	**RV6026259**	Price
4 x 75	**RV6026289**	Price	**RV6026313**	Price
5 x 75	**RV6082771**	Price	**RV6062121**	Price
6 x 75	**RV6062314**	Price	**RV6062310**	Price

Special custom cuts are available and priced PLF (per linear foot). Call for pricing.

WEARWELL 5/8" SMART Diamond-Plate

Your money goes a lot further when you buy SMART





- For the price of an ordinary sponge mat, get an abrasion resistant surface and a recycled urethane sponge base
- The 100% recycled urethane composite sponge base keeps on springing back
- Wears at least 5 times longer than ordinary sponge mats
- Extremely economical compared to any other Diamond-Plate mats
- GREEN RATING = 80% Post Industrial/ Post Consumer materials

	Black		Black/Yellow	
Size (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6024823**	Price	**RV6024923**	Price
3 x 5	**RV6024835**	Price	**RV6024935**	Price
3 x 75	**RV6024837**	Price	**RV6024937**	Price

PRM PRO 3/8" Soft Comfort Mats

Safety Yellow/Black

MADE IN THE USA



- Ergonomically styled anti-fatigue mats that provide comfort and relief to aching feet and legs
- Great for light to moderate standing environments
- Yellow safety borders increase visibility to make work areas safer and have beveled edge to reduce tripping
- Economical solution for improving workers' comfort and productivity
- 100% Closed-cell PVC foam

Size (ft.)	Order No.	Price
2 x 3	**RV6612150**	Price
3 x 5	**RV6612155**	Price
3 x 60	**RV6612160†**	Price
4 x 60	**RV6612165†**	Price

† Ships FOB Factory

PRM PRO 3/8" Soft Comfort Mats

Pebble Emboss or Standard Rib



- Ergonomically styled anti-fatigue mats that provide comfort and relief to aching feet and legs
- Great for light to moderate standing environments
- Economical solution for improving workers' comfort and productivity
- 100% Closed-cell PVC foam



Pebble



Ribbed

MADE IN THE USA

	Pebble Emboss/Closed Cell		Standard Ribbed/Closed Cell	
Size	Order No.	Price	Order No.	Price
2' x 3'	**RV6612070**	Price	**RV6612075**	Price
2' x 60'	**RV6612080†**	Price	**RV6612085†**	Price
27" x 36"	**RV6612090**	Price	**RV6612095**	Price
27" x 60"	**RV6612100**	Price	**RV6612105**	Price
3' x 5'	**RV6612110**	Price	**RV6612115**	Price
3' x 60'	**RV6612120†**	Price	**RV6612125†**	Price
4' x 60'	**RV6612130†**	Price	**RV6612135†**	Price
6' x 60'	**RV6612140†**	Price	**RV6612145†**	Price

† Ships FOB Factory

PRM PRO 1/2" Bubble Air Pocket Mats

- Innovative air-pocket "bubble" design provides exceptional comfort
- Sturdy rubber design withstands compression and extends the life of the mat
- Beveled edges increase safety by reducing tripping and slipping
- Grease-resistant
- Black molded rubber

MADE IN THE USA





Size (ft.)	Order No.	Price
2 x 3	**RV6610700**	Price
3 x 4	**RV6610705**	Price

PRM PRO 1/2" Durable Ergo Mats

Extreme Resilience Anti-Fatigue Matting



- Specially formulated, enhanced foam structure provides superior resilience and comfort
- Outlasts traditional foam matting three to one
- Handles most common fluids and stays buoyant even at low temperatures
- Aggressive pebble-emboss provides durability and traction

MADE IN THE USA

	Black/Yellow		Solid Black	
Size (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6612005**	Price	**RV6612000**	Price
2 x 60	**RV6612015†**	Price	**RV6612010†**	Price
3 x 5	**RV6612035**	Price	**RV6612030**	Price
3 x 10	**RV6612025**	Price	**RV6612020**	Price
3 x 60	**RV6612045†**	Price	**RV6612040†**	Price
4 x 60	**RV6612055†**	Price	**RV6612050†**	Price

† Ships FOB Factory

PRM PRO 5/8" Solid Deck Matting



- Built in interlocking connections designed to secure one or more sections to cover large areas
- Solid deck provides durable platform for workers to stand on as well as provide comfort
- 3' x 3' Sections are smaller for easier handling and cleaning
- Available in grease-proof black with mineral grit coating and grease-resistant black

MADE IN THE USA

Size (ft.)	Color	Mat Top Finish	Order No.	Price
3 x 3	Black	Grease Resistant	**RV6610030**	Price

PRM PRO 11/16" Traction Anti Fatigue Mats

- Durable "rubberized" PVC industrial pyramid surface bonded to a flexible sponge bottom
- Revolutionary "rubberized" surface provides improved traction
- "Rubberized" wear surface outlasts other wear surfaces
- Will resist most common chemicals
- Significant increase in slip-resistance (8%) dry and (5%) wet versus the best wear surfaces in the industry
- 4 Year limited warranty against wear and delamination
- Beveled edges on all mats and rolls



MADE IN THE USA





	Black		Black/Yellow	
Size (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6612170**	Price	**RV6612175**	Price
2 x 60	**RV6612180†**	Price	**RV6612185†**	Price
3 x 5	**RV6612200**	Price	**RV6612205**	Price
3 x 10	**RV6612190**	Price	**RV6612195**	Price
3 x 60	**RV6612210†**	Price	**RV6612215†**	Price
4 x 60	**RV6612220†**	Price	**RV6612225†**	Price

† Ships FOB Factory

PRM PRO 1/2" Drainage Mats

- Molded beveled edges to increase safety and reduce tripping
- Lighter weight for easier handling and cleaning
- Cushion support reduces fatigue and helps prevent accidents
- Grit coating enhances traction


Red (Grease Proof)

Black (Grease Proof)

Black w/Grit (Grease Proof)

MADE IN THE USA

	Grease Proof		Grease Resistant		Grit Coated Grease Resistant	
	Red		Black		Black	
Size (ft.)	Order No.	Price	Order No.	Price	Order No.	Price
3 x 5	**RV6610070**	Price	**RV6610065**	Price	**RV6610090**	Price
3 x 10	**RV6610040**	Price	**RV6610035**	Price	**RV6610075**	Price
3 x 15	**RV6610050**	Price	**RV6610045**	Price	**RV6610080**	Price
3 x 20	**RV6610060**	Price	**RV6610055**	Price	**RV6610085**	Price

PRM PRO 5/8" Drainage Mats

- Interlocking connectors designed to secure one or more sections to cover area needed
- Drainage holes allow fluids or debris to pass through
- 3' x 3' Sections are smaller for easier handling and cleaning
- Grease-Resistant Black or Grit Covereted Black and 100% Nitrile Rubber for harsh petroleum products
- 100% Nitrile beveled borders available for 100% Nitrile mats only







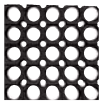
MADE IN THE USA

Size (ft.)	Color	Mat Top Finish	Order No.	Price
3 x 3	Black	100% Nitrile Rubber	**RV6610000**	Price
3 x 3	Black	Grease Resistant	**RV6610015**	Price
3 x 3	Black	Grit Coated	**RV6610025**	Price
3 x 3	Red	Grease Proof	**RV6610020**	Price
3.25 x 3	Yellow	100% Nitrile Rubber	**RV6610010**	Price
3.25 x 3	Yellow	100% Nitrile Rubbler	**RV6610005**	Price

PRM PRO 7/8" Wet/Dry Mats

- Heavy-duty 7/8'' thick rubber construction eases workers fatigue and increases productivity
- Drainage holes allow liquids and waste to pass through
- Great for wet and dry work environments
- Grease-resistant black





MADE IN THE USA

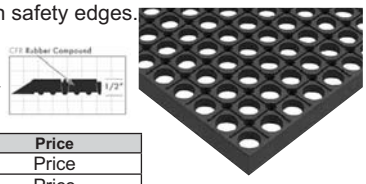
Size (ft.)	Order No.	Price
3 x 5	**RV6610840**	Price
3 x 10	**RV6610825**	Price
3 x 15	**RV6610830**	Price
3 x 20	**RV6610835**	Price

WEARWELL 1/2" WorkRite

MADE IN THE USA

Comfortable and lightweight, easy to maintain

- Perfect for wet commercial or industrial areas
- Effective drainage and molded-in safety edges. 1/2" thick
- CFR Gray – resistant to mineral oil based cutting fluids and other industrial fluids



Sizes (ft.)	Order No.	Price
3 x 5	**RV6053801**	Price
3 x 10	**RV6053660**	Price
3 x 20	**RV6053603**	Price

WEARWELL 5/8" 24/Seven®

Total Comfort and Versatility

- 3' x 3' with a hidden interlocking system, connects on all 4 sides
- 24/Seven® Solid is Grease Resistant for use in mostly dry areas
- 24/Seven® Drainage Mats for wet areas
- Available in: Grease-Resistant, or CFR with Gritworks!® – CFR is resistant to mineral oil based cutting fluid and other industrial fluids


5703636


5723636


5763636

Size	Color	Coating / Surface	Order No.	Price
3' x 3'	Black	Drainage All Purpose	**RV605723636**	Price
3' x 3'	Black	Drainage with GritWorks	**RV605763636**	Price
3' x 3'	Black	Solid All Purpose	**RV605703636**	Price
3' x 39"	Yellow	All Purpose Female Edging	**RV60572339F**	Price
3' x 39"	Yellow	All Purpose Male Edging	**RV60572339M**	Price

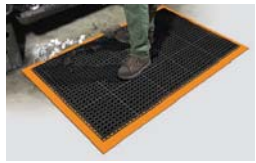
NOTE: Female edging snaps onto the protruding mat knobs. Male edging snaps into the underside of mat.

PRM PRO 7/8" Safety Wet/Dry Mats

- Heavy-duty 7/8" thick rubber construction is durable in high traffic areas
- Anti-fatigue matting for wet and dry areas
- Mat elevated to drain away fluids
- Available with mineral grit coating that is impervious to fluids
- Manufacturer's 4 year limited warranty







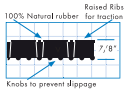
MADE IN THE USA

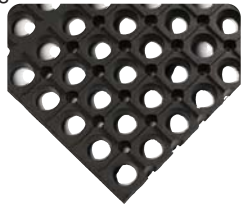
	Black/Orange		Black/Yellow	
Size (in.)	Order No.	Price	Order No.	Price
28 x 40	**RV6610785**	Price	**RV6610790**	Price
40 x 52	**RV6610805**	Price	**RV6610810**	Price
40 x 64	**RV6610815**	Price	**RV6610820**	Price
40 x 124	**RV6610795**	Price	**RV6610800**	Price

WEARWELL Worksafe 7/8"

- Excellent for wood shavings or other debris
- Use around water, mild chemicals and detergent solutions
- 3' x 5' Mats in ends, centers and singles for creating long runners

MADE IN THE USA



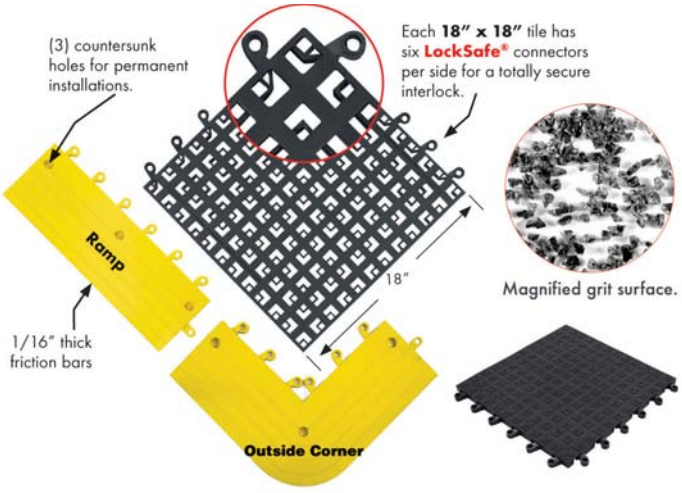


Size	Description	Order No.	Price
3' x 5'	100% Natural Rubber	**RV6030568**	Price

WEARWELL® ErgoDeck®

MADE IN THE USA

- ErgoDeck tiles create a comfortable, ergonomic floor above a floor
- The super-sized 7/8" thick, 18" x 18" tiles quickly and securely interlock for a seamless installation that will withstand heavy use
- Tiles can be unlocked and repositioned when work flow changes
- Substantial design provides comfort for all standing workers whether they work in one spot or frequently move from one work center to another
- Covers up floor imperfections and safety hazards
- Optional 6" side safety ramps and corners
- Original Solid and Original Open tiles are also available in blue, orange, green, yellow or red. Please call for more information



ErgoDeck Product Name	Wet Areas	Slippery Fluids	Dry Areas	Overspray	Heavy Carts	Extra Comfort
Original Open	●		●		●	
Original Open w/GritWorks!	●	●			●	
Original Solid			●		●	
Original Solid w/GritWorks!	●	●		●	●	
Comfort Open	●		●			●
533	●	●				●
Comfort Solid			●			●
552	●	●		●		●

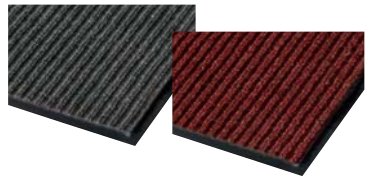
Type - Edging					
Size (in.)	Color	Style	Sold By	Order No.	Price
6 x 15 x 15	Yellow	ErgoDeck "Super Sized" Ergonomic Outside Corners	Case 4	**RV6051833**	Price
6 x 18	Yellow	ErgoDeck "Super Sized" Ergonomic Ramps	Case 10	**RV6051175**	Price

Type - Floor Tiles					
Size (in.)	Color	Style	Sold By	Order No.	Price
18 x 18	Black	Original Open	Case 10	**RV6051015**	Price
18 x 18	Black	Original Open w/ GritWorks!®	Case 10	**RV6051020**	Price
18 x 18	Black	Original Solid w/ GritWorks!®	Case 10	**RV6051010**	Price
18 x 18	Black	Original Solid	Case 10	**RV6057007**	Price
18 x 18	Charcoal	SOFT Open	Case 10	**RV6051030**	Price
18 x 18	Charcoal	SOFT Open w/ GritWorks!®	Case 10	**RV6051035**	Price
18 x 18	Charcoal	SOFT Solid w/ GritWorks!®	Case 10	**RV6051025**	Price
18 x 18	Charcoal	SOFT Solid	Case 10	**RV6078721**	Price

PRM PRO® Rib Carpet Entry Mat

MADE IN THE USA

- Attractive linear rib construction traps dirt as well as absorbs water in recessed areas
- Coarse fibers scrape dirt and debris from shoes
- Cost-effective and durable
- Easy-to-clean and dries quickly

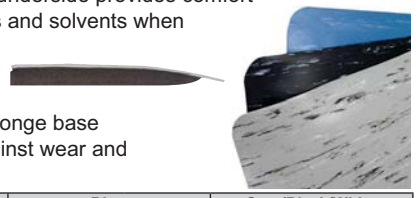


	Pepper		Red	
Size (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6610545**	Price	**RV6610550**	Price
3 x 4	**RV6610595**	Price	**RV6610600**	Price
3 x 5	**RV6610620**	Price	**RV6610625**	Price
3 x 10	**RV6610570**	Price	**RV6610575**	Price
4 x 6	**RV6610645**	Price	**RV6610650**	Price
4 x 8	**RV6610670**	Price	**RV6610675**	Price

PRM PRO® 1/2" Marble Pattern Mats

MADE IN THE USA

- Attractive, long-lasting, durable surface
- Resilient, ergonomic foam underside provides comfort
- Resists common chemicals and solvents when cleaned regularly
- Beveled edges for safety
- Easy to clean
- Utilizes ergonomic foam sponge base
- 4 Year limited warranty against wear and delamination



	Black/White		Blue		Gray/Black/White	
Size (ft.)	Order No.	Price	Order No.	Price	Order No.	Price
2 x 3	**RV6610715**	Price	**-**	-	**RV6610720**	Price
3 x 5	**RV6610745**	Price	**RV6610740**	Price	**RV6610750**	Price
3 x 60	**-**	-	**-**	-	**RV6610765†**	Price
4 x 60	**RV6610775†**	Price	**RV6610770†**	Price	**RV6610780†**	Price

† Ships FOB Factory

WEARWELL® Diamond Plate with GritWorks®

MADE IN THE USA

- Now Diamond-Plate SpongeCote® is also available with Gritworks!® – a carbide grit that increases traction by over 50%, while also increasing the chemical resistance and durability of the surface
- This grit surface is ideal for primarily dry areas with slight overspray or where grease and oil are tracked onto mat
- Available 9/16" and 15/16" thick (UltraSoft)
- GREEN RATING= 50% Post Industrial Material
- 4 Year Warranty



	9/16		15/16	
Sizes (ft.)	Order No.	Price	Order No.	Price
2 x 3	**RV6041708**	Price	**RV6041606**	Price
3 x 5	**RV6041630**	Price	**RV6041663**	Price

Special custom cuts are available and priced PLF (per linear foot). Call for pricing.

WEARWELL® Comfort2Go™ Portable Anti-Fatigue Mat

- 17" x 30" x 7/8" Thick
- Large enough to stand on, compact enough to kneel on
- Designed for mechanics, engineers, and office workers
- 100% Vinyl surface double-thick Nitricell®
- Simply hang it on a tool cart or carry it with easy grip handle
- GREEN RATING= 50% Post Industrial Material
- Color: black
- Ships UPS: 3.5 lbs.
- 3 Year Warranty

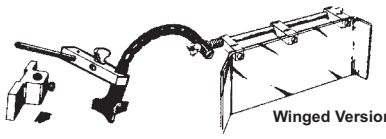
MADE IN THE USA



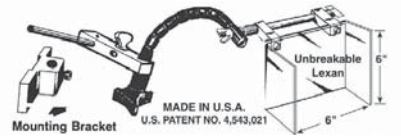
Order No.	Price
RV60518	Price

VISORGUARD™

- Arm permits setting of Visorguard at the correct height and angle for each setup
- Flip shield up to load part and down for machining
- Special spring-loaded shaft makes shield stay put - no springback
- Wing-shaped shield protects workers at adjacent machines
- Flexbar locks rigid; has stainless aircraft grade tension cable
- Can be installed in minutes on CNC mills, conventional milling machines, drill chucks, etc.


Winged Version

MADE IN THE USA




Square Version

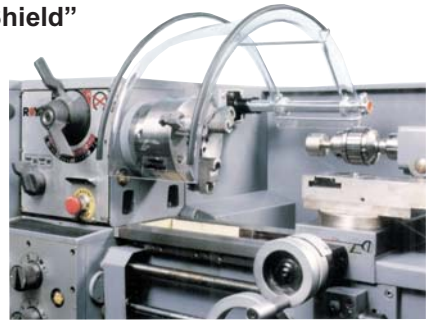
		10" Reach		40" Reach	
Style	Shield Size (in.)	Order No.	Price	Order No.	Price
Square	6W x 4H	**GG4513032**	Price	**GG4513032L**	Price
Winged	16W x 8H	**GG4513055**	Price	**GG4513050**	Price

Replacement Shields

Style	Shield Size (in.)	Order No.	Price
Square / Visorguard	6W x 6H	**GG4513033**	Price
Winged / Visorguard	16W x 8H	**GG4513054**	Price

Latheguard Clear Lexan®, Semi-Circular Wrap-a-Round Guards

"Neither Razor-Sharp Chips Nor Broken Tool Bits Will Penetrate the Lexan® Shield"



- Heavy duty cast mounting bracket supplied
- Heavy duty chrome-plated extension tube and hardware
- Ready to mount; all you do is affix mounting bracket with two screws
- Back of shield is reinforced with plated wire-form housing
- Locks in swing away or functional positions
- Accepts 3 or 4-jaw chucks
- Rib reinforced
- Robust construction
- Light in weight
- Swings away easily
- Latheguard shield complete with hardware & mounting bracket no. 13070
- Exceeds OSHA requirements

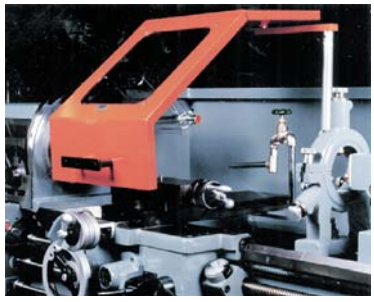
Shield Size (H x W x L) (in.)	Tube Length (in.)	Use With	Order No.	Price
6 x 6 x 12	10	6 to 12 Lathe / Up to 8" Dia Chucks	**GG4513060**	Price
8 x 8 x 16	11-1/2	12 to 16 Lathe / Up to 12" Dia Chucks	**GG4513061**	Price
10 x 8 x 19.70	13-1/2	16 to 20 Lathe / Up to 16" Dia Chucks	**GG4513062**	Price
13 x 8 x 24	13-1/2	20 to 24 Lathe / Up to 20" Dia Chucks	**GG4513064**	Price

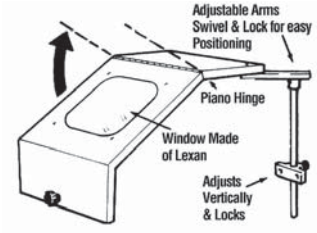
Replacement Shields

Shield Size (H x W x L) (in.)	Order No.	Price
6 x 6 x 12	**GG4513065**	Price
8 x 8 x 16	**GG4513066**	Price
10.25 x 8 x 19.70	**GG4513063**	Price
12 x 8 x 24	**GG4513067**	Price

Cross Slide Type

For Lathes, Grinding Machines, Etc.
Travels With Cross Slide Operator Protection Wherever Tool Is Cutting

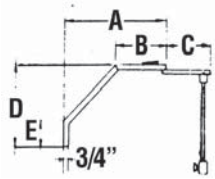


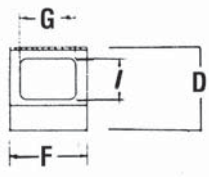


- Easy to mount on cross slide (tool compound)
- Fully adjustable in all directions—forward & frontward
- Heavy steel construction with thick lexan window
- Frame is 3/4" construction made of heavy gauge steel with high quality painted finish
- Front panel is hinged and can be lifted for quick access to machine

Specifications:

Order No.	A	B	C	D	E	F	G	H	I
13086	16"	8"	7-3/4"	13"	4"	11-7/8"	8-1/2"	20-1/2"	8-1/2"
13087	22-3/4"	10-1/2"	9-3/4"	14-1/2"	5-5/8"	14"	9-3/4"	20-1/2"	10-3/4"





Use With	Order No.	Price
20" Maximum Chucks	**GG4513086**	Price
28" Maximum Chucks	**GG4513087**	Price

The Lexan Flex-Shield

- Protects your eyes against chip & liquid burns
- Safety shield on Flexbar® universal positioning arm
- Quick cam action locking
- Shield swivels 360° and locks positively where placed
- Overall height of Flexbar® stand: 14”
- Super power disc mag. base: 3.16” dia.
- C-Clamp capacity: 1-3/8”, throat to center of screw 11/16”
- Base mount for permanent mounting on machine

MADE IN THE USA



Flexbar Universal Cam-Lock Arm



Base Mount



C-Clamp Mount

Style - Concave Shield						
	Base Mount		C-Clamp Mount		Magnetic Base	
Shield Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
6 x 8	**GG4513313B**	Price	**GG4513313C**	Price	**GG4513313**	Price
8 x 10	**GG4513314B**	Price	**GG4513314C**	Price	**GG4513314**	Price
10 x 12	**GG4513315B**	Price	**GG4513315C**	Price	**GG4513315**	Price

Style - Flat Shield						
	Base Mount		C-Clamp Mount		Magnetic Base	
Shield Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
6 x 8	**GG4513316B**	Price	**GG4513316C**	Price	**GG4513316**	Price
8 x 10	**GG4513317B**	Price	**GG4513317C**	Price	**GG4513317**	Price
10 x 12	**GG4513318B**	Price	**GG4513318C**	Price	**GG4513318**	Price

Flex-Shield Replacement Shields

Sold in Carton Quantities of 3



	Lexan / Concave Replacement Shields		Lexan / Flat Replacement Shields	
Shield Size (in.)	Order No.	Price	Order No.	Price
6 x 8	**GG4513093L**	Price	**GG4513120L**	Price
8 x 10	**GG4513094L**	Price	**GG4513121L**	Price
10 x 12	**GG4513095L**	Price	**GG4513122L**	Price

The Chipguard™ Deflectors

with Polycarbonate Shields Made of Lexan® (3/16” thick)

- Swivel base device affords incredible variety of instantaneous shield positioning
- Shield will swivel 360° in two planes and 180° in 3rd plane
- Cantilever design enables room for shield to cover work
- 80 lbs. Full magnetic base (2-5/8)

MADE IN THE USA



Shield Size (in.)	Order No.	Price
4 x 6	**GG4513010**	Price
6 x 8	**GG4513011**	Price
8 x 12	**GG4513012**	Price

tensor Safety Protection Shields

- Protect your eyes from chips and liquids
- Flat polycarbonate safety shield
- 1/8” Thick
- 22” reach flexible gooseneck attachment
- 3 Year warranty



	Clamp		Direct		Magnetic	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
8W x 8H	**KC511038**	Price	**KC511028**	Price	**KC511008**	Price
10W x 10H	**KC511030**	Price	**KC511020**	Price	**KC511010**	Price
12W x 12H	**KC511032**	Price	**KC511022**	Price	**KC511012**	Price

PANELGUARD™ Basic 4-Panel Set

- Provides complete flexibility and can be used for a variety of applications
- Creating machine safety areas
- Perimeter guarding
- Temporary guarding
- Machines having large parts or cutting tools
- Reducing machine noise
- Blocking off out of service machines or areas undergoing maintenance
- Create a custom machine guarding system or safety area by adding modular expansion panels
- Sliding together optional panels and accessories creates a complete machine enclosure with access doors and interlocks
- Folds to 18”W x 71”L x 4”H and weighs under 50 lbs.
- Has four modular panels 16”W x 71”H and opens 66” across
- The upper half of each panel has crystal clear high impact resistant Lexan®, which gives operator protection and a full view of guarded machines or areas





Order No.	Price
GG4513035	Price

PRM PRO®



P4000 Torch (1000A maximum)

Description	Mfr #	Order No.	Price
P4000 Torch with 7 ft cable	61-082-008	**WE1061082008G**	Price

P4000 Replacement Parts

Description	Mfr #	Order No.	Price
Insulator Assembly	94-433-183	**WE1094433183**	Price
Valve & Bonnet	94-104-016	**WE1094104016**	Price
Insulating Boot	94-105-014	**WE1094105014**	Price
Head & Screw	94-378-368	**WE1094378368**	Price



Pointed Carbons



Size	Mfr #	Qty	Order No.	Price
3/16" x 12"	22-033-003	50	**WE1022033003**	Price
1/4" x 12"	22-043-003	50	**WE1022043003**	Price
5/16" x 12"	22-053-003	50	**WE1022053003**	Price
3/8" x 12"	22-063-003	50	**WE1022063003**	Price

Sold in package qty only.

Jointed Carbons



Size	Mfr #	Qty	Order No.	Price
3/8" x 17"	24-064-003	100	**WE1024064003**	Price
1/2" x 17"	24-084-003	100	**WE1024084003**	Price

Sold in package qty only.

160 Amp MIG Guns — 160A @ 60% Duty Cycle With Mixed Gas

Wire Size	LG	Machine Connector	Trigger Connector	Order No.	Price
.030"-.035" (0.8mm-0.9mm)	10'	Tweco®	4 Pin	**WE10135103035T**	Price
.030"-.035" (0.8mm-0.9mm)	10'	Miller®	4 Pin	**WE10135103035M**	Price

280 Amp MIG Guns — 280A @ 60% Duty Cycle With Mixed Gas

Wire Size	LG	Machine Connector	Trigger Connector	Order No.	Price
.035"-.045" (0.9mm-1.2mm)	15'	Tweco®	4 Pin	**WE10250153545T**	Price
.030"-.035" (0.8mm-0.9mm)	15'	Miller®	4 Pin	**WE10250153035M**	Price

400 Amp MIG Guns — 400A @ 60% Duty Cycle With CO_2

Wire Size	LG	Machine Connector	Trigger Connector	Order No.	Price
.035"-.045" (0.9mm-1.2mm)	15'	Tweco®	4 Pin	**WE10400153545T**	Price
.035"-.045" (0.9mm-1.2mm)	15'	Miller®	4 Pin	**WE10400153545M**	Price

9 Series TIG Torch Packages — 125 Amp Air-cooled

Description	Mfr #	Order No.	Price
Flex Torch Package with Valve, 12.5' Rubber	9FV-12-R	**WE109FV12R**	Price
Torch Package Includes: Torch, Handle, Power Cable, Insulator and Long Back Cap			

17 Series TIG Torch Packages — 150 Amp Air-cooled

Description	Mfr #	Order No.	Price
Flex Torch Package with Valve, 12.5' Rubber	17FV-12-R	**WE1017FV12R**	Price
Flex Torch Package with Valve, 25' Rubber	17FV-25-R	**WE1017FV25R**	Price
Torch Package with Valve, 25' Rubber	17V-25-R	**WE1017V25R**	Price
Torch Package Includes: Torch, Handle, Power Cable, Insulator and Long Back Cap			

26 Series TIG Torch Packages — 200 Amp Air-cooled

Description	Mfr #	Order No.	Price
Flex Torch Package with Valve, 25' Rubber	26FV-25-R	**WE1026FV25R**	Price
Flex Torch Package with Valve, 25' 2 Piece	26FV-25-2	**WE1026FV252**	Price
Torch Package Includes: Torch, Handle, Power Cable, Insulator and Long Back Cap			

20 Series TIG Torch Packages — 250 Amp Water-cooled

Description	Mfr #	Order No.	Price
Torch Package, Rubber 12.5'	20-12-R	**WE102012R**	Price
Torch Package, Vinyl 25'	20-25	**WE102025**	Price
Torch Package, Rubber 25'	20-25-R	**WE102025R**	Price
Flex Torch Package, Rubber 25'	20F-25-R	**WE1020F25R**	Price
Torch Package Includes: Torch, Handle, Power Cable, Water & Gas Hoses, Insulator and Long Back Cap			

18 Series TIG Torch Packages — 350 Amp Water-cooled

Description	Mfr #	Order No.	Price
Torch Package, Rubber 25'	18-25-R	**WE101825R**	Price
Torch Package Includes: Torch, Handle, Power Cable, Water & Gas Hoses, Insulator and Long Back Cap			

MIG Guns

Tweco® Style Front-End Consumables



TIG Torches

9 Series Torches

Description	Mfr #	Order No.	Price
Flex Torch Body	9F	**WE109F**	Price
Flex Torch Body with Valve	9FV	**WE109FV**	Price



17 Series Torches

Description	Mfr #	Order No.	Price
Flex Torch Body	17F	**WE1017F**	Price
Flex Torch Body with Valve	17FV	**WE1017FV**	Price
Flex Torch Body with Valve	17FVMT	**WE1017FVMT**	Price
Torch w/Valve	17V	**WE1017V**	Price

26 Series Torches

Description	Mfr #	Order No.	Price
Flex Torch Body with Valve	26FV	**WE1026FV**	Price



20 Series Torches

Description	Mfr #	Order No.	Price
Torch Body	20	**WE1020**	Price
Flex Torch Body	20F	**WE1020F**	Price

18 Series Torches

Description	Mfr #	Order No.	Price
Torch Body	18	**WE1018**	Price

PRM PRO®

Tweco® Contact Tips



Standard Guns: Mini®, No.1

Size	Mfr #	Qty.	Order No.	Price*
.023"	11-23	10	**WE101123**	Price
.030"	11-30	10	**WE101130**	Price
.035"	11-35	10	**WE101135**	Price
.045"	11-45	10	**WE101145**	Price



Tapered Guns: Mini®, No.1

Size	Mfr #	Qty.	Order No.	Price*
.035"	11T-35	10	**WE1011T35**	Price



Standard Guns: No.2, No.3, No.4

Size	Mfr #	Qty.	Order No.	Price*
.035"	14-35	10	**WE101435**	Price
.045"	14-45	10	**WE101445**	Price
.052"	14-52	10	**WE101452**	Price
1/16"	14-116	10	**WE1014116**	Price



Heavy Duty Guns: No.2, No.3, No.4

Size	Mfr #	Qty.	Order No.	Price*
.035"	14H-35	10	**WE1014H35**	Price
.045"	14H-45	10	**WE1014H45**	Price
.052"	14H-52	10	**WE1014H52**	Price
1/16"	14H-116	10	**WE1014H116**	Price



Tapered Guns: No.2, No.3, No.4

Size	Mfr #	Qty.	Order No.	Price*
.035"	14T-35	10	**WE1014T35**	Price
.045"	14T-45	10	**WE1014T45**	Price
1/16"	14T-116	10	**WE1014T116**	Price

Tweco® Insulators



Guns:	Mfr #	Qty.	Order No.	Price*
No.2	32	5	**WE1032**	Price
No.4	34A	5	**WE1034A**	Price

Tweco® Nozzles



Self-Insulated Guns: Mini®, No.1

Dia.	Description	Mfr #	Qty.	Order No.	Price*
1/2"	1/8" Recess	21-50	2	**WE102150**	Price
5/8"	1/8" Recess	21-62	2	**WE102162**	Price



Slip-on Guns: No.2

Dia.	Description	Mfr #	Qty.	Order No.	Price*
1/2"	Adjustable	22-50	2	**WE102250**	Price
5/8"	Adjustable	22-62	2	**WE102262**	Price
5/8"	1/8" Recess	22-62-SS	2	**WE102262SS**	Price



Self-Insulated Guns: No.2, No.3, No.4

Dia.	Description	Mfr #	Qty.	Order No.	Price*
3/8"	1/8" Recess	23T-37	2	**WE1023T37**	Price
1/2"	1/8" Recess	23-50	2	**WE102350**	Price
5/8"	1/8" Recess	23-62	2	**WE102362**	Price
5/8"	1/8" Recess	23H-62	2	**WE1023H62**	Price

Tweco® Wire Conduit



Guns	Wire Size	LG	Mfr #	Order No.	Price
Mini®	.030"-.035"	15'	35-40-15	**WE10354015**	Price
No.1&2	.030"-.035"	15'	42-3035-15	**WE1042303515**	Price
	.040"-.045"	15'	42-4045-15	**WE1042404515**	Price
No.3&4	.035"-.045"	15'	44-3545-15	**WE1044354515**	Price
	1/16"	15'	44-116-15	**WE104411615**	Price

Tweco® Nozzles



Slip-on Guns: No.4

Dia.	Description	Mfr #	Qty.	Order No.	Price*
1/2"	Adjustable	24A-50	2	**WE1024A50**	Price
5/8"	Adjustable	24A-62	2	**WE1024A62**	Price
5/8"	1/8" Recess	24A-62-SS	2	**WE1024A62SS**	Price



Coarse Thread Guns: No.4

Dia.	Description	Mfr #	Qty.	Order No.	Price*
1/2"	1/8" Recess	24CT-50S	2	**WE1024CT50S**	Price
5/8"	1/8" Recess	24CT-62S	2	**WE1024CT62S**	Price
—	Insulator	34CT	2	**WE1034CT**	Price

Tweco® Gas Diffusers



Guns	Wire Size	Mfr #	Qty.	Order No.	Price*
Mini®	.023"-.045"	35-50	5	**WE103550**	Price
No.2	.030"-.045"	52	5	**WE1052**	Price



Guns	Wire Size	Mfr #	Qty.	Order No.	Price*
No.2	All	52FN	5	**WE1052FN**	Price



Guns	Description	Mfr #	Qty.	Order No.	Price*
No.2&4	Brass	54A	5	**WE1054A**	Price

TREGASKISS® Mig Consumables

Tregaskiss® Contact Tips



Heavy Duty

Size	Mfr #	Qty.	Order No.	Price*
.035"	403-1-35	10	**WE10403135**	Price
.045"	403-1-45	10	**WE10403145**	Price
1/16"	403-1-116	10	**WE104031116**	Price



For HD Contact Tips

Mfr #	Qty.	Order No.	Price*
404-3	5	**WE104043**	Price

Tregaskiss® Wire Conduit



Wire Size	LG	Mfr #	Order No.	Price
.035"-.045"	15'	415-35-15	**WE104153515**	Price
.045"-1/16"	15'	415-116-15	**WE1041511615**	Price

Tregaskiss® Shock Washers



WE104025



WE104027

Mfr #	Qty.	Order No.	Price*
402-5	2	**WE104025**	Price
402-7	2	**WE104027**	Price

Tregaskiss® Nozzles



Standard

Dia.	Description	Mfr #	Qty.	Order No.	Price*
1/2"	1/8" Recess	401-4-50	2	**WE10401450**	Price
5/8"	1/8" Recess	401-4-62	2	**WE10401462**	Price

Heavy Duty

Size	Description	Mfr #	Qty.	Order No.	Price*
5/8"	1/4" Recess	401-5-62	2	**WE10401562**	Price
3/4"	1/4" Recess	401-5-75	2	**WE10401575**	Price
5/8"	1/8" Recess	401-6-62	2	**WE10401662**	Price

***Priced each. Sold in Pack Qty.**

PRM PRO®

Bernard® Contact Tips



4235 & 4635 Diffusers

Size	Mfr #	Qty.	Order No.	Price*
.035"	1589	10	**WE101589**	Price
.045"	1590	10	**WE101590**	Price
1/16"	1591	10	**WE101591**	Price



4335 Diffuser

Size	Mfr #	Qty.	Order No.	Price*
.035"	4281	10	**WE104281**	Price
.045"	4282	10	**WE104282**	Price



4335 & 4435 Diffusers

Size	Mfr #	Qty.	Order No.	Price*
.035"	7489	10	**WE107489**	Price
.045"	7490	10	**WE107490**	Price
1/16"	7491	10	**WE107491**	Price
.052"	7498	10	**WE107498**	Price

Bernard® Gas Diffusers



Use with	Mfr #	Qty.	Order No.	Price*
7400 & 4200 tips	4335	5	**WE104335**	Price



Guns	Mfr #	Qty.	Order No.	Price*
7400 Tips	4435	5	**WE104435**	Price
1500 Tips	4635	5	**WE104635**	Price

Bernard® Wire Conduit



Wire Size	LG	Mfr #	Order No.	Price
.035"-.045"	15'	43115	**WE1043115**	Price
.035"-.045"	15'	44115	**WE1044115**	Price
.045"-.062"	15'	44215	**WE1044215**	Price

Bernard® Nozzles



Tapered

Dia.	Material	Mfr #	Qty.	Order No.	Price*
3/8"	Brass	4295	2	**WE104295**	Price



Standard

Dia.	Material	Mfr #	Qty.	Order No.	Price*
5/8"	Brass	4391	2	**WE104391**	Price
1/2"	Brass	4392	2	**WE104392**	Price



Heavy Duty

Dia.	Material	Mfr #	Qty.	Order No.	Price*
9/16"	Brass	4492	2	**WE104492**	Price
9/16"	Copper	4592	2	**WE104592**	Price

Bernard® Insulators



Guns:	Mfr #	Qty.	Order No.	Price*
200-300A	4323R	2	**WE104323R**	Price
350-500A	4423R	2	**WE104423R**	Price

Miller® MIG Consumables

Miller® Contact Tips



Standard Guns: M15, M25/25M, M40/40AL

Size	Mfr #	Qty.	Order No.	Price*
.023"	087-299	10	**WE1087299**	Price
.030"	000-067	10	**WE1067**	Price
.035"	000-068	10	**WE1068**	Price
.045"	000-069	10	**WE1069**	Price

Miller® Diffusers



Guns: M25/25M, M40/40AL

Mfr #	Qty.	Order No.	Price*
169-728	5	**WE10169728**	Price



Guns: M15

Mfr #	Qty.	Order No.	Price*
169-716	5	**WE10169716**	Price

Miller® Wire Conduit



Guns: M10, M15, M25/25M, M40/40AL

Wire Size	LG	Mfr #	Order No.	Price
.030"-.035"	15'	194-011	**WE10194011**	Price
.035"-.045"	15'	194-012	**WE10194012**	Price

Miller® Nozzle Retainer



Guns: M25/25M, M40/40AL

Mfr #	Qty.	Order No.	Price*
169-729	5	**WE10169729**	Price

Miller® Nozzles



Guns: M10, M15

Dia.	Description	Mfr #	Qty.	Order No.	Price*
1/2"	Flush	169-715	2	**WE10169715**	Price



Guns: M25/25M, M40/40AL

Dia.	Description	Mfr #	Qty.	Order No.	Price*
1/2"	1/8" Recess	169-724	2	**WE10169724**	Price
5/8"	1/8" Recess	169-725	2	**WE10169725**	Price
5/8"	Flush	169-726	2	**WE10169726**	Price

***Priced each. Sold in Pack Qty. Only.**

PRM PRO®



Standard Set-up for 17, 18, 26 Series TIG (A)

		1/16" Electrode - #6 (3/8") Nozzle Size			3/32" Electrode - #7 (7/16") Nozzle Size			1/8" Electrode - #8 (1/2") Nozzle Size		
#	Description	Mfr#	Order No.	Price	Mfr#	Order No.	Price	Mfr#	Order No.	Price
1	Gasket Insulator	18CG	**WE1018CG**	Price	18CG	**WE1018CG**	Price	18CG	**WE1018CG**	Price
2	Collet	10N23	**WE1010N23**	Price	10N24	**WE1010N24**	Price	10N25	**WE1010N25**	Price
3	Collet Body	10N31	**WE1010N31**	Price	10N32	**WE1010N32**	Price	10N28	**WE1010N28**	Price
4	Alumina Nozzle Standard	10N48	**WE1010N48**	Price	10N47	**WE1010N47**	Price	10N46	**WE1010N46**	Price

Medium Gas Lens Set-up for 17, 18, 26 Series TIG (B)

		1/16" Electrode - #6 (3/8") Nozzle Size			3/32" Electrode - #7 (7/16") Nozzle Size			1/8" Electrode - #8 (1/2") Nozzle Size		
#	Description	Mfr#	Order No.	Price	Mfr#	Order No.	Price	Mfr#	Order No.	Price
5	Gasket Insulator	54N01	**WE1054N01**	Price	54N01	**WE1054N01**	Price	54N01	**WE1054N01**	Price
6	Gas Lens Collet Body	45V25	**WE1045V25**	Price	45V26	**WE1045V26**	Price	45V27	**WE1045V27**	Price
7	Alumina Nozzle Standard	54N16	**WE1054N16**	Price	54N15	**WE1054N15**	Price	54N14	**WE1054N14**	Price

Large Gas Lens Set-up for 17, 18, 26 Series TIG (C)

		1/16" Electrode - #6 (3/8") Nozzle Size			3/32" Electrode - #7 (7/16") Nozzle Size			1/8" Electrode - #8 (1/2") Nozzle Size		
#	Description	Mfr#	Order No.	Price	Mfr#	Order No.	Price	Mfr#	Order No.	Price
8	Gasket Insulator	54N63	**WE1054N63**	Price	54N63	**WE1054N63**	Price	54N63	**WE1054N63**	Price
9	Gas Lens Collet Body	-	**-**	-	45V64	**WE1045V64**	Price	995795	**WE10995795**	Price
10	Alumina Nozzle Standard	57N75	**WE1057N75**	Price	-	**-**	-	57N74	**WE1057N74**	Price

PRM Pro offers a complete line of air-cooled and water-cooled TIG torches and related consumable and accessories! Please contact us with any request you may have.



Standard Set-up FOR 9, 20 Series TIG (A)

		1/16" Electrode - #6 (3/8") Nozzle Size			3/32" Electrode - #7 (7/16") Nozzle Size			1/8" Electrode - #8 (1/2") Nozzle Size		
#	Description	Mfr#	Order No.	Price	Mfr#	Order No.	Price	Mfr#	Order No.	Price
1	Gasket Insulator	598882	**WE10598882**	Price	598882	**WE10598882**	Price	598882	**WE10598882**	Price
2	Collet	13N22	**WE1013N22**	Price	13N23	**WE1013N23**	Price	13N24	**WE1013N24**	Price
3	Collet Body	13N27	**WE1013N27**	Price	13N28	**WE1013N28**	Price	13N29	**WE1013N29**	Price
4	Alumina Nozzle Standard	13N10	**WE1013N10**	Price	13N11	**WE1013N11**	Price	13N12	**WE1013N12**	Price

Small Gas Lens Set-up (B)

		1/16" Electrode - #6 (3/8") Nozzle Size			3/32" Electrode - #7 (7/16") Nozzle Size			1/8" Electrode - #8 (1/2") Nozzle Size		
#	Description	Mfr#	Order No.	Price	Mfr#	Order No.	Price	Mfr#	Order No.	Price
5	Gas Lens Collet Body	45V43	**WE1045V43**	Price	45V44	**WE1045V44**	Price	45V45	**WE1045V45**	Price
6	Alumina Nozzle Standard	53N60	**WE1053N60**	Price	53N61	**WE1053N61**	Price	53N61S	**WE1053N61S**	Price









	E3®			Pure			1.5% Lanthanated			2% Ceriated		
Size	Mfr #	Order No.	Price	Mfr #	Order No.	Price	Mfr #	Order No.	Price	Mfr #	Order No.	Price
1/16"x7"	116-7E3	**WE101167000**	Price	116-7G	**WE101167G**	Price	116-7GL	**WE101167GL**	Price	116-7GC2	**WE101167GC2**	Price
3/32"x7"	332-7E3	**WE103327000**	Price	332-7G	**WE103327G**	Price	332-7GL	**WE103327GL**	Price	332-7GC2	**WE103327GC2**	Price
1/8"x7"	18-7E3	**WE10187000**	Price	18-7G	**WE10187G**	Price	18-7GL	**WE10187GL**	Price	18-7GC2	**WE10187GC2**	Price

PRM Pro offers a complete line of Tungsten Electrodes, many other diameters and lengths are available.

PRM PRO®

Power Cables 9, 17 Series



Description	Mfr #	Order No.	Price
12.5' Rubber	57Y01R	**WE1057Y01R**	Price
25' Rubber	57Y03R	**WE1057Y03R**	Price

Cable Covers



Size	Mfr #	Order No.	Price
3"X10'	CC-3-10	**WE10CC310**	Price
3"X22'	CC-3-22	**WE10CC322**	Price

Standard Accessory Kits



Torches:	Mfr #	Order No.	Price
17, 18, 26	AK-2	**WE10AK2**	Price
17, 18, 26	AK-3	**WE10AK3**	Price
20, 9, 22, 25	AK-4	**WE10AK4**	Price

Machine Connectors 9, 17 Series



#	Description	Mfr #	Order No.	Price
1	Dinse 50mm, with 24" Aux. Hose	DA-917F	**WE10DA917F**	Price
2	Dinse 50mm, in-line	DI-917F	**WE10DI917F**	Price
3	Power Cable Adapter	105Z57	**WE10105Z57**	Price

Machine Connectors 18, 20 Series



Description	Mfr #	Order No.	Price
Dinse 50mm, w/24" Aux. Hose	DA-1820L	**WE10DA1820L**	Price

Power Cables 26 Series



Description	Mfr #	Order No.	Price
25' Rubber	46V30R	**WE1046V30R**	Price



Description	Mfr #	Order No.	Price
25' 2 Piece	46V30-2	**WE1046V302**	Price

Water Hoses 20 Series



Description	Mfr #	Order No.	Price
12.5' Rubber 20, 20P	45V07R	**WE1045V07R**	Price
25' Rubber 20, 20P	45V08R	**WE1045V08R**	Price
25' Rubber 20F, 20M	45V08RM	**WE1045V08RM**	Price
25' Vinyl 20, 20P	45V08	**WE1045V08**	Price

Water Hoses 18 Series



Description	Mfr #	Order No.	Price
25' Rubber	41V32R	**WE1041V32R**	Price

Handle 20 Series



Description	Mfr #	Order No.	Price
Smooth	53N06	**WE1053N06**	Price

Handles 18 Series



Description	Mfr #	Order No.	Price
Smooth	H-200	**WE10H200**	Price

Back Caps 17, 18, 26 Series



#	Des.	Mfr #	Qty	Order No.	Price
1	Long	57Y02	2	**WE1057Y02**	Price
2	Short	57Y04	2	**WE1057Y04**	Price

Power Cables 20 Series



Description	Mfr #	Order No.	Price
12.5' Rubber	45V03R	**WE1045V03R**	Price
25' Rubber	45V04R	**WE1045V04R**	Price
25' Vinyl	45V04	**WE1045V04**	Price

Gas Hoses 20 Series



Description	Mfr #	Order No.	Price
12.5' Rubber	45V09R	**WE1045V09R**	Price
25' Rubber	45V10R	**WE1045V10R**	Price
25' Vinyl	45V10	**WE1045V10**	Price

Power Cables 18 Series



Description	Mfr #	Order No.	Price
25' Rubber	41V29R	**WE1041V29R**	Price

Gas Hoses 18 Series



Description	Mfr #	Order No.	Price
25' Rubber	41V30R	**WE1041V30R**	Price

Handles 26 Series



Description	Mfr #	Order No.	Price
Ribbed	H-200R	**WE10H200R**	Price

Handles 17 Series



Description	Mfr #	Order No.	Price
Ribbed	H-100R	**WE10H100R**	Price

Back Caps 9, 20 Series



#	Des.	Mfr #	Qty	Order No.	Price
1	Long	41V24	2	**WE1041V24**	Price
2	Medium	41V35	2	**WE1041V35**	Price
3	Short	41V33	2	**WE1041V33**	Price

42-4E Medium Duty Cutting Torch

For use iwth all fuel gases

- Medium duty straight cutting torch designed to use all fuel gases
- Lightweight, has a solid forged head, brazed triangular tubes and a solid forged brass cutting lever
- UL® listed
- One Year Warranty

New!



Capacity	Length	Weight	Head Angle	Mfg. No.	Order No.	Price
6"/152.4mm	17"	2.4 lbs.	90°	1001218	**HR7010000**	Price

72-3 Cutting Attachment

New!

For use with all fuel gases

- Stainless steel tubes, make it light in weight while still providing exceptional strength and rigidity
- Features a fold forward cutting lever allowing easier connection, even with gloves on
- Ease-on cutting valve provides smoother controlled starts
- UL® listed
- One Year Warranty

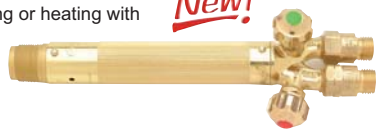


Capacity	Length	Head Angle	Mfg. No.	Order No.	Price
5"/127.0mm	9-1/2"	90°	1300380	**HR7010010**	Price

85 Medium Duty Combination Handle

New!

- Designed for welding, brazing, cutting or heating with acetylene or alternate fuels
- Features twin-tube silver-brazed connections for safety and durability
- UL® listed



Capacity	Length	Weight	Mfg. No.	Order No.	Price
Welds to 1/2" cuts to 5"	8-1/2"	1 lb.	1401340	**HR7010020**	Price

801 Compact General Purpose

- Designed to be a medium duty regulator, perfect for most industrial cutting and welding applications
- Features 2" gauges that are easy to read and an ergonomic adjusting knob for precise operation and a longer service life

New!



Gas	Max. Inlet PSIG	Pressure Range PSIG	Outlet Connection	Mfg. No.	Order No.	Price
ACETYLENE	500	0 - 15	9/16" - 18 LH	3002193	**HR7010080**	Price
OXYGEN	3000	0 - 125	9/16" - 18 RH	3002194	**HR7010090**	Price

301AR/CD Shielding Gas Kit

New!

- Kit include 10' of 3⁄16" ID approved hose with inert fittings
- Features the Harris time proven 301 flowgauge regulators to give precise control of the most common welding shielding gases up to 60 SCFH.



Gas	Flow Capacity	Max. Inlet PSIG	Outlet Connection	Mfg. No.	Order No.	Price
Ar + Mixes	60	3000	5/8" - 18 RH (F)	4400229	**HR7010100**	Price

6290AC Heavy Preheat 2-Pc. Tips

New!



- Acetylene tip with a heavy preheat to facilitate cutting steel that is painted, rusted or has a heavily scaled surface.

Size	Depth of Cut	02 PSIG	Total 02 SCFH	Acetylene Fuel PSIG	Fuel SCFH	Cutting Drill Size	Mfg. No.	Order No.	Price
OAC	3/8" - 5/8"	20 - 35	45 - 73	8 - 15	9 - 18	NO. 60	1502171	**HR7010030**	Price
1AC	5/8" - 1"	30 - 50	73 - 128	8 - 15	18 - 36	NO. 56	1502172	**HR7010040**	Price
2AC	1" - 2"	40 - 65	161 - 252	8 - 15	18 - 36	NO. 53	1502173	**HR7010050**	Price

355-2 Compensated Shielding Gas Kits

- Designed to control argon and or argon CO2 mix shielding gases
- Supplied with a 3/16" x 10' approved inert gas hose

New!



Gas	Flow Capacity	Max. Inlet PSIG	Outlet Connection	Mfg. No.	Order No.	Price
Ar + Mixes	60	3000	5/8" - 18 RH (F)	4400235	**HR7010110**	Price

HMD Medium Duty Acetylene Outfits

New!

- Includes one-piece encapsulated seats for longer service life, and a 7 year warranty
- Features twin-tube, silver-brazed connections for safety and durability when welding, brazing, cutting or heating with acetylene
- Brazed triangular stainless steel tubes makes it light in weight while providing exceptional strength and rigidity



Capacity	Mfg. No.	Order No.	Price
Cuts up to 5" plate with optional tips, welds to 1/2" plate with optional tips	4400366	**HR7010120**	Price

Classic Port-A-Torch®

- Cuts up to 1" plate, welds up to 1/16" plate with supplied tips.
- Cuts up to 4" plate, welds up to 1/2" plate with larger tips and Acetylene cylinder.

New!



Mfg. No.	Order No.	Price
4403211	**HR7010130**	Price

Regulator & Torch Flashback Arrestors

- Prevents reverse flow of gases with built-in check valves
- Extinguishes flashback fire with stainless steel sintered element
- 9/16"-18 connections CGA "B" size
- 100 Micron inlet filter helps keep dust and dirt out

New!



Model No.	Mfg. No.	Order No.	Price
Model 88-5FBR (R&L)	4301651	**HR7010140**	Price
Model 88-5FBT (R&L)	4302202	**HR7010150**	Price

OSHA Compliant Oxygen-Fuel Quick Connectors

- Long-lasting stainless steel pin connection
- Automatic gas cut-off feature to positively shut off the gas supply when disconnected
- 9/16" - 18 "B" connection
- Helps prevent theft by making it easier to take down and put away equipment

New!



Model No.	Mfg. No.	Order No.	Price
26-QCR (R&L)	4301653	**HR7010160**	Price
26-QCT (R&L)	4301654	**HR7010170**	Price

TEN GAUGE™ Self-Shielding

- Self shielding (no shielding gas needed) welding wire with exceptional arc stability, low spatter and excellent operator appeal
- Can be used in most carbon steel applications and welds especially well on galvanized sheet



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Spool
.030" - 2# SPOOL	E71TGSE2	**HR7120000**	Price	Price
.030" - 10# SPOOL	E71TGSE5	**HR7120010**	Price	Price
.035" - 2# SPOOL	E71TGSF2	**HR7120020**	Price	Price
.035" - 10# SPOOL	E71TGSF5	**HR7120030**	Price	Price

ER70S-6 (GMAW) Mig

- General purpose welding wire for fabrication of mild steel
- Contains more deoxidizers than ER70S-3
- Additional deoxidizers also provide better wetting, giving a flatter bead shape and the capability of faster travel speeds
- Usually used with 75/25 (argon/CO2) shielding gas or with higher contents of argon, such as 90/10



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Spool
.030" - 2# SPOOL	E70S6E2	**HR7120040**	Price	Price
.030" - 11# SPOOL	E70S6E5	**HR7120050**	Price	Price
.030" - 33# SPOOL	E70S6E8	**HR7120060**	Price	Price
.035" - 2# SPOOL	E70S6F2	**HR7120070**	Price	Price
.035" - 33# SPOOL	E70S6F8	**HR7120080**	Price	Price
.045" - 33# SPOOL	E70S6H8	**HR7120090**	Price	Price

6011 Mild Steel Electrodes

- Versatile, deep penetrating steel electrode with smooth, stable arc characteristics
- Used for the welding of mild steels, galvanized and some low alloy steels
- The coating produces a forceful, spray-type arc, resulting in deep penetrating welds



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Pack
3/32" x 12" - 5# PKG	6011505	**HR7120100**	Price	Price
1/8" x 14" - 5# PKG	6011605	**HR7120110**	Price	Price
5/32" - 5# PKG	6011705	**HR7120120**	Price	Price
3/32" x 12" - 10# PKG	60115010	**HR7120130**	Price	Price
1/8" x 14" - 10# PKG	60116010	**HR7120140**	Price	Price
5/32" - 10# PKG	60117010	**HR7120150**	Price	Price

6013 Mild Steel Electrodes

- General purpose electrode for mild steel which produces a smooth, quiet, medium penetrating arc that is readily maintained with minimal spatter loss
- This quick freezing slag gives optimum performance in vertical-down welding
- Ideally suited for general purpose welding, even with small AC power sources having low open-circuit voltage



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Pack
5/32" - 5# PKG	6013705	**HR7120170**	Price	Price
3/32" - 10# PKG	60135010	**HR7120180**	Price	Price
1/8" - 10# PKG	60136010	**HR7120190**	Price	Price

7014 Mild Steel Electrodes

- All position electrode for mild and low alloy steels with an iron powder covering
- The iron powder yields a high deposition rate
- The welds reflect smooth beads with fine ripples



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Pack
3/32" - 5# PKG	7014505	**HR7120200**	Price	Price
1/8" - 5# PKG	7014605	**HR7120210**	Price	Price
5/32" - 5# PKG	7014705	**HR7120220**	Price	Price
1/8" - 10# PKG	70146010	**HR7120230**	Price	Price

7018 Mild Steel Electrodes

- High deposition electrode for low and medium carbon steels
- It is an efficient, iron powder, low hydrogen electrode with excellent mechanical properties; crack resistance; and X-ray quality welds
- This electrode offers a quiet, stable, low penetration, spatter-free arc



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Pack
3/32" x 12" - 5# PKG	7018505	**HR7120240**	Price	Price
1/8" x 14" - 5# PKG	7018605	**HR7120250**	Price	Price
5/32" - 5# PKG	7018705	**HR7120260**	Price	Price
3/32" x 12" - 10# PKG	70185010	**HR7120270**	Price	Price

MIG 308L

- Similar usage as 308, but the 0.03% maximum carbon content increases resistance to intergranular corrosion



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Spool
.030" - 2# SPOOL	0308LE2	**HR7120290**	Price	Price
.035" - 2# SPOOL	0308LF2	**HR7120300**	Price	Price
.035" - 10# SPOOL	0308LF5	**HR7120310**	Price	Price

MIG 309L

- Used for welding similar alloys in wrought or cast form
- Occasionally used for welding 18-8 base metals when severe corrosion conditions exist, and, at times, welding dissimilar steels. Packaged for portable welding machines.



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Spool
.030" - 2# SPOOL	0309LE2	**HR7120320**	Price	Price
.035" - 2# SPOOL	0309LF2	**HR7120330**	Price	Price
.035" - 10# SPOOL	0309LF5	**HR7120340**	Price	Price

MIG 316L

- Used for welding steels alloyed with molybdenum



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Spool
.030" - 2# SPOOL	0316LE2	**HR7120350**	Price	Price
.035" - 2# SPOOL	0316LF2	**HR7120360**	Price	Price
.035" - 10# SPOOL	0316LF5	**HR7120370**	Price	Price

Alloy 4043 (MIG)

- Most often used to weld the 6XXX series of alloys



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Spool
.030" - 1# SPOOL	04043E1	**HR7120380**	Price	Price
.035" - 1# SPOOL	04043F1	**HR7120390**	Price	Price
.035" - 16# SPOOL	04043F6	**HR7120400**	Price	Price
3/64" - 1# SPOOL	0404321	**HR7120410**	Price	Price
3/64" - 16# SPOOL	0404327	**HR7120420**	Price	Price

Alloy 5356 (MIG)

- Very good all purpose wire
- Most widely used of all aluminum fillers metals



New!

Size	Mfg. No.	Order No.	Price Per Lb.	Price Per Spool
.030" - 1# SPOOL	05356E1	**HR7120430**	Price	Price
.035" - 1# SPOOL	05356F1	**HR7120440**	Price	Price
.035" - 16# SPOOL	05356F6	**HR7120450**	Price	Price
3/64" - 1# SPOOL	0535621	**HR7120460**	Price	Price
3/64" - 16# SPOOL	0535627	**HR7120470**	Price	Price

Fiberglass Welding Blankets

- Toughguard 18 oz. fiberglass
- Resists heat up to 1000°
- Effective protection in light to medium duty applications
- Blankets are grommeted on all four sides
- Can be used as heat stress blanket



Size	Color	Order No.	Price
4' x 6'	Tan	**RT5837246**	Price
6' x 8'	Tan	**RT5837286**	Price
8' x 10'	Tan	**RT5837208**	Price

Goldenglass 28 oz. Fiberglass Blankets

- Coated fiberglass resists heat to 1000°
- Heavy duty fiberglass has an acrylic coating on both sides for increased burn through protection
- Blankets are grommeted on all four sides



Size	Color	Order No.	Price
4' x 6'	Yellow	**RT5837446**	Price
6' x 8'	Yellow	**RT5837486**	Price
8' x 10'	Yellow	**RT5837408**	Price

Velvet Shield Carbonized Fiber Welding Blankets

- Developed from Nasa technology
- High performance blankets are amazingly soft and lightweight
- Provides excellent protection against spark & spatter
- Resists heat up to 1800°F



Size	Order No.	Price
4' x 6'	**RT5831646**	Price
6' x 6'	**RT5831666**	Price
6' x 8'	**RT5831686**	Price
8' x 10'	**RT5831608**	Price
18" x 18"	**RT5831618**	Price

Protect-O-Screens

- Protects workers from hazards of welding sparks, spatter and UV flash
- Can be used individually or joined together to form multiple panel enclosures
- Features sturdy 18 gauge steel frame and your choice of 12 oz. olive duck or orange transparent vinyl curtain. Other material and sizes are available.



Size	Color	Material	Order No.	Price
6' x 6'	Yellow	Transparent Vinyl	**RT5853466**	Price
6' x 8'	Yellow	Transparent Vinyl	**RT5853486**	Price
6' x 6'	Olive Drab Cotton	Cotton Duck	**RT5850166**	Price
6' x 6'	Orange Transparent Vinyl	Transparent Vinyl	**RT5853866**	Price
6' x 8'	Olive Drab Cotton	Cotton Duck	**RT5850186**	Price
6' x 8'	Orange Transparent Vinyl	Transparent Vinyl	**RT5853886**	Price

Protect-O-Screen Accessories

Accessories	Order No.	Price
Casters (4 required per screen)	**RT5854600**	Price
Panel Connector (2 per box)	**RT5854202**	Price

Welding Curtain Rolls

- Ideal for instant curtains needed for maintenance projects and used widely in robotic welding areas where large curtains are needed to enclose the perimeter of a welding area
- Protects against welding spark and UV flash
- Curtains are grommetted on one side every 12”
- Simply roll out the curtain needed and cut it with scissors



Size	Color	Order No.	Price
60" x 25 Yds	Gray	**RT5863225**	Price
60" x 25 Yds	Orange	**RT5863825**	Price
60" x 25 Yds	Yellow	**RT5863425**	Price

Flame Retardant Cotton Jackets

- Cotton fabric is processed and treated to be permanently flame retardant, and maintaining it for as many as 50 home washings or 25 commercial washings
- Cooler, lighter, economical solution for light exposure to sparks and spatter
- Weldmite™ 9 oz. FR cotton
- Snap front and wrist closure
- Relaxed full cut fit
- Large inside pocket
- Black anodized non-reflective snaps
- Leather reinforced snaps





				Black		Green	
Size	Chest	Sleeve (in.)	Length (in.)	Order No.	Price	Order No.	Price
Medium	44 to 46"	34-3/8	30	**RT581160M**	Price	**RT581030M**	Price
Large	48 to 50"	35	30	**RT581160L**	Price	**RT581030L**	Price
X-Large	52 to 54"	35-3/8	30	**RT581160X**	Price	**RT581030X**	Price
2X-Large	56 to 58"	35-3/4	30	**RT5811602X**	Price	**RT5810302X**	Price

Honeywell
FIBRE-METAL

Tigerhood Welding Helmets

Tigerhood Futura®:

- Innovative, streamlined design combined with high-performance materials
- Lightweight helmet and free floating headgear for added comfort



Tigerhood™ Classic:

- Unique welding helmet design provides extended throat protection while blocking fumes and smoke from the face
- Molded-in colors eliminate chipping, peeling, and fading
- Smooth, seamless shell deflects sparks and spatter reducing the risk of burn through



Window Width (in.)	Window Height (in.)	Lens Shade	Window Style	Color		Order No.	Price
4-5/16	4-5/16	9-13	Fixed Front	Silver	Futura	**LF502090X**	Price
4-1/2	2	10	Lift Front	Gray	Classic	**LF5000906**	Price

SHOP IRON Solar Powered Auto Dark Welding Helmets

- Durable, lightweight material is corrosion resistant and flame retardant
- Ultra high performance filters protect against UV and IR
- Returns to normal when welding stops w/ dark to clear adjustments available
- Special turnover headband mechanism allows for greater comfort and reduces fatigue
- Utilizes high performance solar cells with 2 built-in 3V lithium batteries as power back-up
- Viewing area: 3.86” x 2.17”

Item	Style	Order No.	Price
	Eagle / Flag	**KP8241265**	Price
	Flames	**KP8241266**	Price
	Forge Skull	**KP8241289**	Price
	Gearhead	**KP8241290**	Price
	Motorcycle Pin Up Girl	**KP8241295**	Price
	Pin Up Girl	**KP8241288**	Price
	Skull and Pipewrench	**KP8241283**	Price
	Skull and Pistols	**KP8241282**	Price
	Skull Wrecker	**KP8241279**	Price

TITAN Auto Darkening Welding Helmet

- Durable, light weight nylon material
- Protects against UV and infrared radiation in variable shades from DIN9 to DIN1
- Lens automatically darkens when arc is struck and returns to normal when welding stops
- Powered by solar cells with battery back-up
- 3.85” x 1.70” Viewing area
- Switching time: Light to Dark 0.000033 seconds



Helmet Graphics	Order No.	Price
Standard Red	**KP8241260**	Price

bollé SAFETY FUSION+

Welding Helmet & Accessories



- Four independent sensors
- Super fast reaction time
- Blocking of the cell to clear state for grinding
- Fine adjustment and progressive sensitivity
- Auto recovery delay adjustment
- Solar power
- Variable tint 5-8 / 9-13
- Low battery indicator
- Replaceable battery

New!

Description	Order No.	Price
Welding Helmet	**BO1540121**	Price
Electro-Optic Weld Filter	**BO1540122**	Price
Ext. Coverplate	**BO1540123**	Price
Int. Coverplate	**BO1540124**	Price
Adjustable Headband	**BO1540125**	Price
Sweatband	**BO1540126**	Price

Honeywell Welding Helmets

HW100



HW200

HW100:

- Easy ratchet adjustment system for personalized fit
- Replaceable, padded sweatband
- Accommodates many safety eyewear and respiratory products
- Operating temperature range: +23°F to +131°F

HW200:

- Grind mode functionality that ensures the ADF will not darken when used during clean-up work
- Sensitivity adjustment that gives the wearer the option to adjust the filter’s sensitivity
- Easy ratchet adjustment system for personalized fit
- Replaceable, padded sweatband
- Operating temperature range: +14°F to +131°F

Window Width (in.)	Window Height (in.)	Lens Shade	Window Style	Color	Order No.	Price
3.8	1.7	10	Fixed Front	Black	**LF50HW100**	Price
3.8	1.9	9-13	Fixed Front	Black	**LF50HW200**	Price

PYRAMEX Welding Helmet



- Adjusts from IR shade #9-13 lens shade (sensitivity adjustment)
- Fully adjustable lightweight thermoplastic shell
- WHP100 has no darkening adjustment feature or accessories
- 2’ x 4-1/4” Lift Front viewing area
- Fitted with IR shade #10 welding filter, optically balanced
- Uses 2 AAA batteries included
- ANSI Z87.1 2003

Helmet Color	Lens Shade	Order No.	Price
Black	10	**KB54WHP100**	Price

3M™ Welding Helmet 10



- Features user-selectable dark shades 10 through 12, with light state of Shade 3
- Lightweight - approx. 13.8 oz including auto-darkening welding filter
- Viewing area: 3.66” x 1.73”

101121

Description	Order No.	Price
Welding Filter 10V	**KB35100013**	Price
Welding Helmet 10 with Headband	**KB35101121**	Price

TITAN™ Clear Protective Welding Helmet Replacement Lens

- Clear cover safety welding lenses
- Includes both inner and outer lens
- Protect shaded lens from spatter and debris



Fits	Viewing Area	Order No.	Price
KP8241260	2" x 4"	**KP8241261**	Price
KP82-41265 & KP82-41266	2.125" x 4"	**KP8241264**	Price

SOLDER•IT INCORPORATED Cordless Pro-150 Automatic Ignition Soldering Kit

- Soldering iron is equivalent to a power range of 30-125 Watts
- Torch function produces 2400° F blue flame
- Cordelss and portable, simple operation anywhere
- Ready to use 15 seconds after ignition
- Works in cold weather
- LEC Patented filter system eliminates clogging
- Safest multi-function tool on the market
- Makes for a more trouble-free tool & containers fuel for up to 120 minutes of use

Includes:

- Safety cap
- (2) LEC-8 Fuel cells
- PS-1 1.6mm Conical tip
- PS-4 3.2mm Chisel tip
- PS-10 Heat Blower
- S-30 Heat Reflector
- PS-14 Spare orifice
- Tip cleaning sponge
- Tube of solder
- **All Solder•It products ship empty with no fuel.**



Order No.	Price
RT52PRO150K	Price

SOLDER•IT INCORPORATED Cordless Multi-Function Butane Heat Tool Kit

- Automatic Piezo ignition
- Complete portability
- Visible fuel tank
- Rapid tip heat-up
- Up to 4 hours burntime per fill
- 30W - 120W Power range
- Tank is shipped empty



Order No.	Price
RT52PRO120K	Price

SOLDER•IT INCORPORATED Workbench Torches/ Heat Gun

- Automatic Piezo ignition
- Complete portability
- Comfortable rubber grip
- Separate controls for fuel and air
- Unparalleled safety features
- 4 Hours burn time per fill
- Removable safety stand included
- Shipped empty with no fuel



Order No.	Price
RT52PT200	Price

Weller® Professional Solder Gun Kit

- Dual-heat gun produces 260 or 200 watts
- Pistol grip design
- Fingertip trigger selects high (1st trigger position) or low output (2nd trigger position)
- Ready to use in 6 seconds
- Twin Lights illuminate work
- **Kit contains:** Dual-Heat gun, 1 soldering tip, 1 smoothing tip, 1 cutting tip, flux brush, soldering aid tool and a coil of lead free solder.



Description	Order No.	Price
Pistol Grip Soldering Kit	**RT50D550PK**	Price
Standard Soldering Tool Replacement Tip	**RT507250N**	Price

Weller® Pro-Series Soldering Iron

- Heats up to working temperatures in under 15 seconds
- White LED light illuminates working surface
- Dual power (hi/lo) indicated by red and green LEDs
- Co-molded grip for a comfortable feel
- Protective safety cap turns off power when placed on tool
- Over 150 intermittent solder joints with fresh batteries
- Perfect for field service repair on small parts and components
- Includes iron, 2 tips, 4 AA batteries, lead-free solder, and tip wrench



Order No.	Price
RT50BP860MP	Price

Weller® Marksman Soldering Irons and Replacement Tips

- Heat and impact resistant handle
- Excellent for a variety of applications
- On/Off indicator light
- UL and cUL listed



		Soldering Iron		Soldering Tool Replacement Tip	
Wattage	Tip Temp.	Order No.	Price	Order No.	Price
25	750° F	**RT50SP23**	Price	**RT50MT1**	Price
40	900° F	**RT50SP40**	Price	**RT50MT10**	Price
80	900° F	**RT50SP80**	Price	**RT50MTG20**	Price
120	900° F	**RT50SP120**	Price	**RT50MTG30**	Price
175	900° F	**RT50SP175**	Price	**RT50MTG40**	Price

Lisle® Magnetic Soldering Clamp

- Offers an extra pair of hands when soldering
- Alligator clamps firmly hold wire and small parts
- Flexible design promotes different holding positons
- Clips and base are magnetic .
- Arms are magnetic and can be removed and used without the base
- Base is hex shape to fit in a vise

MADE IN THE USA



Order No.	Price
KN6555000	Price

Weller® Controlled Output Soldering Station and Replacement Tips

- Utilizes a unique closed loop method of controlling maximum tip temperature
- A ferromagnetic temperature sensor in the tip controls tip temperature
- Lighted switch
- ESD safe to protect sensitive components
- Tips available in 3 temperature ranges 600°, 700°, & 800° F
- UL and cUL listed



Description	Tip Type	Order No.	Price
Replacement Tip	600°	**RT50PTA6**	Price
Replacement Tip	700°	**RT50PTA7**	Price
Replacement Tip	800°	**RT50PTA8**	Price
Soldering Station	-	**RT50WTCPT**	Price

Protective Welding Sleeves





- Flame retardant sleeves fit easily into welding glove cuffs to protect upper arms from light welding sparks and burns
- Carbonized Fiber models have added protection against sparks, flames, and splatter
- Choice of 18” or 23” length
- Elastic Sleeves on top and wrist area
- Sold in pairs

Size (in.)	Material	Color	Order No.	Price
18	Cotton	Green	**RT5810345**	Price
18	Carbonized Fiber	Black	**RT5813118**	Price

High Temperature Worker's



08314
- Aramid (Kevlar) fibers and fiberglass blend
- Withstands exposure up to 600° Fahrenheit
- Full 11 oz. wool insulated lining
- Superior abrasion and cut resistance

07114
- Treated fiberglass, 35 oz. highly texturized Silica yarn
- Withstands temperatures up to 2000° Fahrenheit
- Full 11 oz. wool insulated lining
- Superior abrasion and cut resistance

Max. Temperature Resitance	Order No.	Price
600° Fahrenheit	**RT5808314**	Price
2000° Fahrenheit	**RT5807114**	Price

WEARWELL Anti-Fatigue Floor Mats and Safety Matting



- Designed specifically for spot welding applications
- Super resilient Nitricell® sponge base for extra comfort
- Elevated melt point = 285ºF
- All edges are safety beveled
- 9/16” Overall thickness
- 3 Year Warranty

MADE IN THE USA

Size	Order No.	Price
2' x 3'	**RV6024774**	Price
3' x 5'	**RV6024783**	Price

Se-Kure Domes & Mirrors, Inc. Rountangle Convex Mirrors



- 20% Brighter than glass
- Hardware - (1) telescoping bracket is included
- 120° Viewing angle
- Less distortion
- Great for low ceilings and restricted spaces
- Reinforced vinyl trim

MADE IN THE USA

Size	Style	Order No.	Price
12 x 18	Acrylic Lens w/ Galvanized Back	**KB2520360**	Price
12 x 18	Acrylic Lens w/ Plastic Back	**KB2520305**	Price
18 x 26	Acrylic Lens w/ Galvanized Back	**KB2520365**	Price
18 x 26	Acrylic Lens w/ Plastic Back	**KB2520310**	Price
24 x 36	Acrylic Lens w/ Galvanized Back	**KB2520380**	Price
24 x 36	Acrylic Lens w/ Plastic Back	**KB2520330**	Price

Se-Kure Domes & Mirrors, Inc. Convex Mirrors



- 20% Brighter than glass
- Hardware included
- 120° Viewing angle
- Less distortion longer lasting

MADE IN THE USA

Style - Indoor Convex Mirrors			
Dia. (in.)	**Mount Included**	**Order No.**	**Price**
18	Single Z Bracket	**KB2520010**	Price
26	1 Telescoping Bracket	**KB2520025**	Price
26	Single Z Bracket	**KB2520020**	Price
36	1 Telescoping Bracket	**KB2520040**	Price

Style - Outdoor Galvonized Metal Back Convex Mirrors			
Dia. (in.)	**Mount Included**	**Order No.**	**Price**
18	2 Telescoping Brackets	**KB2520230**	Price
26	3 Telescoping Brackets	**KB2520250**	Price
36	3 Telescoping Brackets	**KB2520280**	Price

Style - Outdoor Plastic Back Convex Mirrors			
Dia. (in.)	**Mount Included**	**Order No.**	**Price**
18	2 Telescoping Brackets	**KB2520720**	Price
26	3 Telescoping Brackets	**KB2520740**	Price
36	3 Telescoping Brackets	**KB2520770**	Price

Ships from Michigan

Se-Kure Domes & Mirrors, Inc. Domevex Wide View Mirrors



- 20% Brighter Than Glass
- Hardware Included
- Special 180° Wide Viewing Angle
- Less Distortion Longer Lasting
- Great For T Intersections

MADE IN THE USA

Style - Indoor Domevex Wide View			
Dia. (in.)	**Mount Included**	**Order No.**	**Price**
16	Single Z Bracket	**KB2520055**	Price
24	1 Telescoping Bracket	**KB2520070**	Price
32	1 Telescoping Bracket	**KB2520075**	Price

Style - Outdoor Domevex Wide View			
Dia. (in.)	**Mount Included**	**Order No.**	**Price**
16	2 Telescoping Brackets	**KB2520150**	Price
24	3 Telescoping Brackets	**KB2520170**	Price
32	3 Telescoping Brackets	**KB2520175**	Price

Se-Kure Domes & Mirrors, Inc. Full 360° Domes



- 20% Brighter than glass
- Hardware included
- 360° Viewing angle
- Lightweight and shatter resistant

MADE IN THE USA

Dia. (in.)	Mount Included	Order No.	Price
18	Chain Set With S Hooks	**KB2520390**	Price
26	Chain Set With S Hooks	**KB2520395**	Price
36	Chain Set With S Hooks	**KB2520405**	Price
48	Chain Set With S Hooks	**KB2520410**	Price

Se-Kure Domes & Mirrors, Inc. 180° Half Domes



- 20% Brighter than glass
- Hardware included
- 180° Viewing angle
- Lightweight and shatter resistant

MADE IN THE USA

Dia. (in.)	Mount Included	Order No.	Price
18	Screws & Anchors	**KB2521030**	Price
26	Screws & Anchors	**KB2521035**	Price
36	Screws & Anchors	**KB2521045**	Price

Ships from manufacturer

The Little Giant Ladder System® Type 1A is more durable than ordinary ladders. The Little Giant is available in heavy-wall aluminum (6005-T5), or non-conductive fiberglass (see selection below).



Little Giant Type 1A:
- Tip & Glide™ Wheel System for easy moving
- 24 Ladders in One™ triple-locking hinge
- 300 Duty Rated – exceeds OSHA & ANSI standards
- Industrial – extra duty (has been tested to withstand 4x's as much weight)

Safety Step:
- 300 Duty rated Wide, slip-resistant treads
- 2, 3, or 4 Step available
- Lightweight and portable

Pro Series:
- Finished with black anodized armor
- OSHA & ANSI Certified
- Tool tracking serial number 300 Duty rated

Skyscrapers:
- Designed to reach high places
- Replaces platforms and lifts
- Safe to use on uneven surfaces, like staircases, curbs or docks
- OSHA & ANSI Certified
- 300 Duty rated

Style	Size	Material	Extended Height	Step-Ladder Height	Storage Size	Workbench Height	Warranty	Ship Wt.	Order No.	Price
2-Step	18"	Aluminum	N/A	18"	31-1/2" x 4.7"	N/A	1 Year	17 lbs	**PS6510210B††**	Price
3-Step	27"	Aluminum	N/A	27"	44" x 4.7"	N/A	1 Year	25 lbs	**PS6510310B††**	Price
4-Step	36"	Aluminum	N/A	36"	56" x 4.7"	N/A	1 Year	31 lbs	**PS6510410B††**	Price
SkyScraper	17'	Aluminum	9'-17'	N/A	9' 7"	N/A	5 Year	86 lbs	**PS6510110**	Price
SkyScraper	21'	Aluminum	11'-21'	N/A	11' 7"	N/A	5 Year	109 lbs	**PS6510121**	Price
Type 1A	17'	Aluminum	9'-15'	4' 7"	4' 7"	3'	Lifetime	46 lbs	**PS6510102LGW**	Price
Type 1A	22'	Aluminum	11'-19'	5' 9"	5' 7"	3'	Lifetime	55 lbs	**PS6510103LGW**	Price

††Ladders are shipped by UPS except for Skyscrapers Ladders, which are shipped by common carrier. Please note ladders that are shipped UPS will ship at the oversized rate, except for the step ladders.

Cotterman Ladders Model 1000 Ladders

- One piece, all welded, steel mobile platform ladders meet or exceed OSHA standards
- 1" OD steel tubing
- Ladders with 1-4 steps have 2" spring loaded casters
- Ladders with 5-11 steps have a "safe-lock" lower step to prevent movement while in use
- Gray powder coat finish
- Meet OSHA 1910.29 and ANSI A14.7 standards
- 450 Lb. load capacity
- Ship via truck



No. of Steps	Platform Height (in.)	Overall Height (in.)	Width at Top (in.)	Base (W x L) (in.)	Shipping Weight (lbs.)	Order No.	Price
2	20	20	18	18 x 19	22 lbs	**PS601002N1818†**	Price
3	30	60	18	20 x 26	41 lbs	**PS601003R1820**	Price
3	30	60	26	30 x 26	47 lbs	**PS601003R2630**	Price
4	40	70	18	20 x 31	53 lbs	**PS601004R1820**	Price
4	40	70	26	30 x 31	59 lbs	**PS601004R2630**	Price
5	50	80	18	20 x 38	62 lbs	**PS601005R1820**	Price
5	50	80	26	30 x 38	74 lbs	**PS601005R2630**	Price
6	60	90	18	24 x 46	90 lbs	**PS601006R1824**	Price
6	60	90	26	30 x 46	109 lbs	**PS601006R2630**	Price
7	70	100	26	30 x 53	119 lbs	**PS601007R2630**	Price
8	80	110	26	32 x 58	112 lbs	**PS601008R2632**	Price
9	90	120	32	32 x 65	183 lbs	**PS601009R3232**	Price
10	100	130	32	32 x 72	187 lbs	**PS601010R3232**	Price

F.O.B. Croswell, MI, Atlanta, GA, Bakersfield, CA, Arlington, TX • †Does not include hand rails

TILTNROLL® Ladders



- Specially balanced design allows it to tilt easily to rolling position when pulled towards the user
- Two 4" diameter wheels
- Gray powder coat finish
- One piece welded construction
- Meets OSHA 1910.29 and ANSI 14.7 standards
- 450 Lb. load capacity

Type - 1 (Single) Top Steps 24" W x 10" D					
No. of Steps	Top Step Height (in.)	Base (W x L) (in.)	Shipping Weight (lbs.)	Order No.	Price
2	20	28 x 24	39 lbs	**PS602TR26**	Price
3	30	28 x 30	50 lbs	**PS603TR26**	Price
4	40	28 x 37	61 lbs	**PS604TR26**	Price
5	50	28 x 43	75 lbs	**PS605TR26**	Price

Type - 2 (Double) Top Steps 24" W x 20" D					
No. of Steps	Top Step Height (in.)	Base (W x L) (in.)	Shipping Weight (lbs.)	Order No.	Price
2	20	28 x 34	56 lbs	**PS602TR26E4**	Price
3	30	28 x 41	67 lbs	**PS603TR26E4**	Price
4	40	28 x 47	77 lbs	**PS604TR26E4**	Price
5	50	28 x 54	92 lbs	**PS605TR26E4**	Price

F.O.B. Croswell, MI, Atlanta, GA, Bakersfield, CA, Arlington, TX

Safety Stepstool

Extra large treaded top and expanded step. Big 16" diameter base for added stability and safety. Tough, one-piece construction comes assembled, anti-skid bottom assures extra safety. Retractable rubber casters, easy rolling.



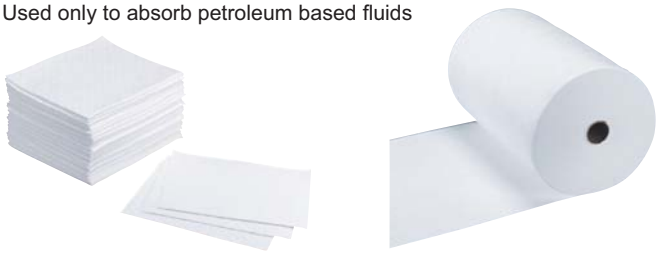
- Size: 16" Dia. × 13"H
- Available in Black
- Supports up to 350 lbs.

Order No.	Price
RZ55252302	Price

OIL-DRI Smart Oil Only Pad & Roll

Melt-Blown polypropylene

- The smart buy when you're on a tight budget
- Ideal in low-traffic areas, underneath hoses and next to leaky equipment
- Used only to absorb petroleum based fluids



Description	Size	Box Quantity	Weight	Order No.	Price
Oil-Dri Smart Pads	15" W x 19" L	100	13 lbs	**LD60L90904**	Price
Oil-Dri Smart Roll	30" W x 150' L	1	20 lbs	**LD60L90781**	Price

OIL-DRI Resorb Granular Absorbent

- Made from 100% recycled paper products
- Absorb oil, grease, coolants, lubricants, paint, water and more
- 100% Incinerable product reduces disposal costs
- Maintains hardness and does not break down into a mushy mess like traditional cellulose absorbents



Order No.	Price
LD60L92889G65	Price

OIL-DRI Sanded Sweeping Compound - 50 lbs

- Traps dust & dirt within compound
- Prevents irritable dust from becoming an airborne inhalation hazard
- Leaves behind a clean, polished sheen



Order No.	Price
LD60L91050MR	Price

OIL-DRI Non-Sanded Sweeping Compound - 50 lbs

- Traps dust & dirt within compound
- Prevents irritable dust from becoming an airborne inhalation hazard
- Leaves behind a clean, polished sheen



Order No.	Price
LD60L91050RR	Price

3M™ Maintenance Sorbent Pad, High Capacity

- Has a scrim on one side to increase strength and help eliminate linting
- This sized pad allows the user to quickly spread sorbent on and in the path of a spill



Size	Package Qty.	Weight	Order No.	Price
7.5" x 20.5"	100/Case	13 lbs	**KB3507165**	Price

3M™ Petroleum Sorbent Pad

- Features a low profile design for easy placement in tight areas
- Conveniently sized pads allow the user to quickly spread sorbent over and in the path of a spill



Size	Package Qty.	Weight	Order No.	Price
17" x 19"	100/Case	22 lbs	**KB3516050**	Price
17" x 19"	200/Case	21 lbs	**KB3516049**	Price
34" x 38"	50/Case	40 lbs	**KB3516051**	Price

3M™ Chemical Sorbent Pad, High Capacity

- Designed with quick and easy response in mind
- Packaged in convenient dispenser boxes



Size	Color	Package Qty.	Weight	Order No.	Price
9.25" x 14.5"	Yellow	25 Pad/Box, 6 Box/Case	2 lbs	**KB3529096**	Price
11" x 13"	Yellow	50 Pad/Box, 4 Box/Case	4 lbs	**KB3517593**	Price

3M™ Chemical Sorbent Particulate

- Used in packaging applications where breakage of a container release hazardous liquid
- May also be sprinkled over a spill or over a large area



Color	Package Qty.	Weight	Order No.	Price
Yellow	1 Bag	14 lbs	**KB3517598**	Price

3M™ Maintenance Sorbent Folded, High Capacity

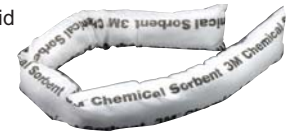
- Has a scrim on one side to increase strength and help eliminate linting
- Dispenses from a carrying/dispenser box in the form of a continuous roll
- Perforated every 16"
- Can be used as a pillow, pad, roll or boom



Size	Package Qty.	Weight	Order No.	Price
5" x 50'	3/Case	6 lbs	**KB3507172**	Price

3M™ Chemical Sorbent Mini Boom

- Typically used to encircle hazardous liquid spills and to contain leaks
- 3” Diameter scrim on the outside of the boom identifies the application



Size	Sorbs Approx.	Package Qty.	Weight	Order No.	Price
3" x 4"	12 Gallon per Case	12/Case	2 lbs	**KB3517596**	Price
3" x 8"	12 Gallon per Case	6/Case	2.5 lbs	**KB3521343**	Price
3" x 12"	12 Gallon per Case	4/Case	3 lbs	**KB3521344**	Price

Oil-Dri General Sock

Sock skin with recycled cellulose filler

- Use socks to prevent non-aggressive leaks and spills from spreading on the floor



Size	Package Qty.	Weight	Order No.	Price
3" D x 10' L	10	26 lbs	**LD60L90936**	Price
3" D x 4' L	12	12 lbs	**LD60L90790**	Price
3" D x 4' L	40	37 lbs	**LD60L90890**	Price
3" D x 6' L	18	31 lbs	**LD60L90934**	Price

3M™ Maintenance Sorbent Roll, High Capacity

- Pad has a scrim on one side to increase the strength and help eliminate linting
- Available in a convenient width of 38”
- Perfect for lining drawers, covering workbenches or masking larger areas from mist and overspray



Size	Color	Package Qty.	Weight	Order No.	Price
38" x 150'	White	1 Case	30 lbs	**KB3507167**	Price

3M™ Petroleum Sorbent Roll

- Covers large or small surfaces, can be cut and easily placed in tight areas
- Ideal for cleaning small spills and wiping down contaminated areas



Size	Absorbs Gal. Per Case	Package Qty.	Weight	Order No.	Price
19" x 144'	42 Gallons per Case	1/Case	20 lbs	**KB3521648**	Price
38" x 144'	84 Gallons per Case	1/Case	40 lbs	**KB3516047**	Price

3M™ Chemical Sorbent Rolls, High Capacity

- Can be easily cut to cover small areas or fit tight corners
- Rolls of sorbent material are used for large spill management or in areas where spills may occur
- May be used to cover bench tops in prep for a spill or as a work surface



Size	Color	Package Qty.	Weight	Order No.	Price
15.25" x 150'	Yellow	1 Case	13 lbs	**KB3529097**	Price
38" x 150'	Yellow	1 Case	27 lbs	**KB3529098**	Price

3M™ Maintenance Sorbent Mini-Boom

- Can be placed around the base of equipment to help contain fluids that may leak or spill
- One gallon capacity per 4’ mini-boom



Size	Package Qty.	Weight	Order No.	Price
3" x 4'	12/Case	2 lbs	**KB3521526**	Price
3" x 8'	6/Case	2.5 lbs	**KB3521527**	Price
3" x 12'	4/Case	3 lbs	**KB3521528**	Price

Oil-Dri Poly Sock

Melt-Blown polypropylene

- Poly Socks handle petroleum-based fluids in industrial and marine applications and tight areas



Size	Package Qty.	Weight	Order No.	Price
3" D x 4' L	12	13 lbs	**LD60L90898**	Price
3" D x 6' L	6	12 lbs	**LD60L90897**	Price

Oil-Dri Camouflage Roll

Melt-Blown polypropylene

- Hide the grime with Oil-Dri’s popular heavy weight camouflage rolls



Size	Package Qty.	Weight	Order No.	Price
15" W x 150' L	1	18 lbs	**LD60L90820**	Price
30" W x 150' L	1	36 lbs	**LD60L90821**	Price

Oil-Dri Universal Bonded Products

Treated, chemically inert polypropylene

- Universal bonded pads and rolls are extra durable to handle non-aggressive leaks and spills in high-traffic areas, tool cribs and routine industrial applications
- Bonded layers build strength and allow fluid to spread quickly through the material



Description	Size	Package Qty.	Weight	Order No.	Price
Bonded SMF Middle Weight Roll	30" W x 150' L	1	22 lbs	**LD60L91002**	Price
Heavy Weight Bonded SMF Pads	15" W x 19" L	100	17 lbs	**LD60L90902**	Price
Bonded SMF Heavy Weight Roll	30" W x 150' L (Perforated: 15" x 18")	1	25 lbs	**LD60L90540**	Price
Heavy Weight Bonded SMF Pads	16" W x 20" L	50	9 lbs	**LD60L90907**	Price
Bonded SMF Heavy Weight Roll	30" W x 150' L	1	25 lbs	**LD60L90901**	Price
Heavy Weight Bonded SMF Pads	15" W x 19" L	100	13 lbs	**LD60L91001**	Price

OIL-DRI Lightweight Oil Only Pads

Melt-blown polypropylene

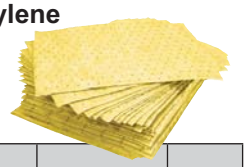


- The smart buy when you're on a tight budget
- Ideal in low-traffic areas, underneath hoses and next to leaky equipment
- Used only to absorb petroleum based fluids

Description	Size	Package Qty.	Weight	Order No.	Price
Oil-Dri Pads LW100	15" W x 19" L	100	9 lbs	**LD60L90856**	Price

OIL-DRI Haz Mat Pads

Treated, Chemically Inert polypropylene



- Use haz mat pads to absorb both aggressive and non-aggressive fluids

Description	Size	Package Qty.	Weight	Order No.	Price
Oil-Dri Haz Mat Pads in Dispenser Box	15" W x 19" L	100	11 lbs	**LD60L90834**	Price

breg Pillow and Snake Style Absorbents

Sponge Suck it up! Styles:

- **Basic Products:** Features a tough, needle-punched polypropylene skin for immediate wicking action. The casing is engineered to continually draw fluid to the center to maximize absorption. Filled with recycled, pre-consumer cellulose. Eco-friendly, economical and highly absorbent. Cellulose filler can absorb twice as much fluid than polypropylene. Absorbs water, oils, inks and other non-aggressive fluids.
- **Hazmat Products:** Features recycled, 100% polypropylene fill which has been treated with surfactant to ensure it will not react to corrosive fluids. Flexible spunbond polypropylene cover provides a larger surface area for faster wicking action. The skin and filler combination is extremely durable. Pillows and sock feature hand-sewn loops that make them easy to retrieve. Absorbs both aggressive and non-aggressive fluids.
- **Oil-Only Products:** Features tough, durable absorbents that repel water and float indefinitely even when fully saturated. Absorbs hydrocarbons, petroleum's and other oil-based fluids while repelling water based fluids. Durable spunbond skins are filled with recycled polypropylene for maximum absorbency. Will not rot or mildew. Pillows and sock feature hand-sewn loops that make them easy to retrieve.

Sponge Pillows Features:

- Sewn seams for increased durability
- Divided into three sections to maintain even distrbution of the filler
- Unique channel design aids in retention of absorbed fluids





Sponge Snakes Features:

- Sewn seams for increased durability
- Firm, yet pliable can be easily molded to fit around machinery
- Fluid is drawn into the center of snake for maximum absorption and retention

Style - Pillows						
Absorbs Gal. Case	Item Description	Case Size (in.)	Qty.	Weight	Order No.	Price
27.5	Hazmat	17 x 17	16	18 lbs	**LD60BHP1717**	Price
21.6	Oil-Only	17 x 17	16	17 lbs	**LD60BOP1717**	Price
28	Basic	17 x 17	18	23 lbs	**LD60BBP1717**	Price

Style - Snakes						
Absorbs Gal. Case	Item Description	Case Size (in.)	Qty.	Weight	Order No.	Price
15	Universal	3 x 48	12	11 lbs	**LD60BHS12**	Price
12.9	Oil-Only	3 x 48	12	11 lbs	**LD60BOS12**	Price
25	Basic	3 x 48	20	17 lbs	**LD60BBS20**	Price
50	Basic	3 x 48	40	34 lbs	**LD60BBS40**	Price

OIL-DRI Spill Kits

- Be prepared with a spill control plan that can be implemented with absorbent products readily available, either to use in case of an emergency, or to control daily leaks and spills that may occur

Item	Size	Style	Contents	Weight	Order No.	Price
	5 Gallon	Bucket Spill Kit	2 Universal Socks, 10 Universal Perf. Pads, 1 Pair Protective Gloves, 1 Disposal Bag with Tie (5 gal.)	5 lbs	**LD60L90435**	Price
	20 Gallon	Haz Mat Spill Kit	6 Haz Mat Sock (48" L), 7 Haz Mat Pillows, 20 Yellow Haz Mat Bonded Pads, Protective Gloves, Light Stick, 3 Disposal Bags with Ties, Emergency Response Guide Book, Overpack (20 gal.)	18 lbs	**LD60L90894**	Price
	20 Gallon	Universal Spill Kit	4 Universal Socks (48" L), 1 Universal Sock (120" L), 2 Universal Pillows, 10 Universal Bonded Pads, 3 Disposal Bags with Ties, Emergency Response Guide Book, Overpack (20 gal.)	28 lbs	**LD60L90410**	Price
	35 Gallon	Resorb Spill Kit	4 Universal Sock (120" L), 2 Universal Sock (48" L), 4 Universal Pillows, 50 Universal Resorb Pads, 2 lb. Bag Loose Recycled Cellulose Asorbent, 3 Disposal Bags with Ties, Corrogated GreenDrum (35 gal.)	36 lbs	**LD60L92435**	Price
	65 Gallon	Haz Mat Spill Kit	12 Haz Mat Socks (48" L), 6 Haz Mat Pillows, 75 Yellow Haz Mat Bonded Pads, Protective Gloves, Goggles, 6 Disposal Bags with Ties, Emergency Response Guide Book, Overpack (65 gal.)	75 lbs	**LD60L90765**	Price
	65 Gallon	Universal Spill Kit	20 Universal Socks (48" L), 6 Universal Pillows, 75 Universal Bonded Pads, 6 Disposal Bags with Ties, Emergency Response Guide Book, Overpack (65 gal.)	75 lbs	**LD60L90965**	Price

PRM PRO Indoor & Outdoor Push Broom Heads

Smooth to Semi-Smooth Surfaces:
- Sweeps fine debris from smooth to semi-smooth surfaces such as floors, constuction areas or aggregate textured surfaces
- Natural, heat-resitant Tampico bristles are suitable for high temperature surfaces or medium debris

Medium to Rough Surfaces:
- Sweeps mid-weight debris from medium to rough surfaces such as asphalt, concrete or wood
- Tampico wire has two rows of steel wire bristles surrounded by natural, heat-resistant Tampico bristles

Rough Surfaces:
- Sweeps heavy debris from rough surfaces such as parking lots, machine shops, driveways, landscaping or roofing job sites





672412
Synthetic



322412
Tampico



712412
Palmyra

Size	Surface Use	Where to Use	Block Type	Handle Connection	Enviroment	Material	Trim (in.)	Order No.	Price
24	Smooth	Indoor	Premium Maple Hardwood	Brace	Dry	Synthetic	3	**LD55222412**	Price
24	Smooth	Indoor	Lacquered Hardwood	Unbreakable	Dry	Synthetic	3	**LD55124512**	Price
24	Semi-Smooth	Indoor	Lacquered Hardwood	Unbreakable	Wet/Dry	Synthetic	3	**LD55142612**	Price
24	Semi-Smooth	Outdoor	Premium Maple Hardwood	Brace	Wet/Dry	Synthetic	3	**LD55672412**	Price
18	Medium To Rough	Outdoor	Premium Maple Hardwood	Brace	Wet/Dry	Synthetic	3-1/8	**LD55731812**	Price
24	Medium To Rough	Outdoor	Premium Maple Hardwood	Brace	Wet/Dry	Synthetic	3-1/8	**LD55732412**	Price
24	Medium To Rough	Indoor/Outdoor	Premium Maple Hardwood	Brace	Dry	Synthetic	3	**LD55342412**	Price
24	Medium To Rough	Indoor/Outdoor	Premium Maple Hardwood	Brace	Dry	Tampico	3	**LD55322412**	Price
24	Medium To Rough	Outdoor	Premium Maple Hardwood	Brace	Wet/Dry	Synthetic	3-1/8	**LD55792412**	Price
24	Medium To Rough	Indoor/Outdoor	Lacquered Hardwood	Unbreakable	Wet/Dry	Synthetic	3	**LD55143412**	Price
24	Rough	Outdoor	Lacquered Hardwood	Unbreakable	Dry	Palmyra	4	**LD55143612**	Price
24	Rough	Outdoor	Lacquered Hardwood	Unbreakable	Wet/Dry	Synthetic	4	**LD55143512**	Price
24	Rough	Outdoor	Premium Maple Hardwood	Brace	Dry	Palmyra	3	**LD55712412**	Price
24	Rough	Outdoor	Premium Maple Hardwood	Brace	Wet/Dry	Synthetic	4-1/8	**LD55942412**	Price
24	Rough	Indoor/Outdoor	Premium Maple Hardwood	Brace	Dry	Tampico/Wire	3	**LD55542412**	Price

Broom handle not included.

PRM PRO Push Broom Handles

- All handles are lacquered hardwood
- Powder coated steel brace is needed on all premium maple hardwood brooms from 18" - 36"
- LD55554FL handle has soft comfort grip
- LD5585HP handle has a steel bolt on connector



*Shown brace handle
871 & 85HP



*Shown with unbreakable connector
554FL

Style	Size	Connection	Block Type	Order No.	Price
Steel Brace	-	Brace	For use on premium maple hardwood block	**LD55871**	Price
Wood Handle	60" x 1-1/8"	Brace	For use on premium maple hardwood block	**LD5585HP**	Price
Wood Handle	60" x 1-1/8"	Unbreakable	For use on lacquered hardwood block	**LD55554FL**	Price

***Broom heads not included**

WEILER Perma Sweep™ Brooms

- These rugged Perma-Sweeps™ have 2-3 times the life of ordinary sweeps
- Tough synthetic block will not split, crack, or warp
- The synthetic fill is chemical and solvent resistant
- Wet or dry application



				Perma Sweep		Perma Sweep Broom w/Handle	
Size (in.)	Use	Color	Trim (in.)	Order No.	Price	Order No.	Price
18	Fine	Green	3	**LD5342163**	Price	**LD53GR18H**	Price
18	Heavy	Maroon	3	**LD5342167**	Price	**LD53MA18H**	Price
18	Medium	Yellow	3	**LD5342165**	Price	**LD53YE18H**	Price
24	Fine	Green	3	**LD5342164**	Price	**LD53GR24H**	Price
24	Heavy	Maroon	3	**LD5342168**	Price	**LD53MA24H**	Price
24	Medium	Yellow	3	**LD5342166**	Price	**LD53YE24H**	Price

Rubbermaid Commercial Products Lobby Broom

- Good for small areas and hard to reach spots
- Polypropylene bristles
- Will trap wet and dry particles



Order No.	Price
RZ556374	Price

WEILER Fine Sweeping



- Lacquered hardwood block
- Two threaded handle hold
- For sweeping smooth surfaces, tile, wood, linoleum and smooth concrete

Size (in.)	Trim (in.)	Material	Order No.	Price
24	3	Synthetic	**LD5342042**	Price
24	3	Tampico Fibre	**LD5342002**	Price

Handles Sold Separately

WEILER Medium Sweeping



- Oil resistant
- Lacquered hardwood block
- Two threaded handle holes
- For sweeping semi-rough floors, wood, concrete or brick

Size (in.)	Trim (in.)	Material	Order No.	Price
18	3	Synthetic Fill / Oil Resistant	**LD5325234**	Price
24	3	Horse Hair	**LD5342017**	Price
24	3	Synthetic Fill / Oil Resistant	**LD5325235**	Price
24	3	Tampico	**LD5342008**	Price

Handles Sold Separately

WEILER Coarse Sweeping



- Non-absorbent - oil resistant - wash easily
- Wet or dry sweeping
- Lacquered hardwood block
- Two threaded handle holes

Size (in.)	Trim (in.)	Material	Order No.	Price
18	3-1/4	Synthetic Fill / Oil Resistant	**LD5325238**	Price
24	3	Tampico	**LD5342135**	Price
24	3-1/4	Synthetic Fill / Oil Resistant	**LD5325239**	Price

Handles Sold Separately

WEILER Garage Brush



- Stiff Palmyra fiber is highly recommended for wet or dry sweeping on rough concrete or wood floors
- Lacquered hardwood block
- Two threaded handle holes

Size (in.)	Trim (in.)	Material	Order No.	Price
24	4	Palmyra	**LD5342023**	Price

Handles Sold Separately

WEILER Street Broom



- Wide flared ends for sweeping close to curbs and walls
- Hardwood block
- Two tapered handle holes

Size	Trim	Material	Order No.	Price
16	5-1/4	Synthetic	**LD5342033**	Price

Handles Sold Separately

WEILER Upright Brooms

- Fiber brooms are for rough surfaces and corn brooms are for smooth
- Both can be used in wet or dry applications

Trim (in.)	Material	Order No.	Price
7-1/2 - 6	Plastic Angled	**LD5344305**	Price
10	Palmyra	**LD5344007**	Price
15	Corn Fiber	**LD5344009**	Price
18	Corn Fiber	**LD5344008**	Price



Rubbermaid Brooms

36" - Fine Floor Sweeps - Designed to pick up the finest debris
- Available in flagged polypropylene for removing the finest dirt and dust
- Ideal for highly polished or waxed floors
- Accepts threaded handle (sold separately) on either side for even wear

24" - Medium Floor Sweeps - Designed to round up heavier dirt from multiple floor surface
- Long lasting, multi-surface polyproylene and natural tampico bristles are ideal for light to medium debris on both smooth and rough floor surfaces
- Accepts threaded handle (sold separately) on either side for even wear

24" - Heavy-Duty Floor Sweeps - Reliability for every industrial-strength job
- Heavy-duty polypropylene bristles resists stains and odors and are designed for use in the most demanding industrial applications
- Accepts threaded handle (sold separately) on either side for even wear







Model No.	Size (in.)	Style	Order No.	Price
9B04	36	Fine	**RZ559B04**	Price
9B11	24	Medium	**RZ559B11**	Price
9B17	24	Heavy Duty	**RZ559B17**	Price

WEILER Floor Brush Handles

- Lacquered hardwood
- Standard threads


Metal Thread


Perma-Flex Thread

Size (ft.)	Material	Order No.	Price
5	Perma-Flex Thread	**LD5344301**	Price
5	Steel Thread	**LD5344300**	Price
5	Wood Thread	**LD5344018**	Price

WEILER Steel Brace

For Broom Handles

- Fits All Sizes†
- Reinforces and Locks
- Handle To Block



Order No.	Price
LD5344021†	Price

†Not For Perma-Flex™ Handle

Rubbermaid Broom Handles

- Wood handles
- Available in threaded and tapered tips


6357


6362


6364

Handle Style - Tapered					
Model No.	Color	Material	Size (in.)	Order No.	Price
6362	Natural	Wood	60 x 1.13	**RZ556362**	Price

Handle Style - Threaded Metal Tip					
Model No.	Color	Material	Size (in.)	Order No.	Price
6357	Black	Wood	60 x 1.06	**RZ556357**	Price
6364	Lacquered	Wood	60 x 1.06	**RZ556364**	Price

Rubbermaid Brooms

Angle Brooms - Ideal for cleaning hard-to-reach areas.
- Cut and shaped for easy sweeping
- Long lasting stain resistant polypropylene bristles
- Permanent fusion-set bristles won't pull out

Corn Brooms - Designed for rugged indoor/ outdoor cleaning.
- 100% Natural broom corn fibers for long life and effective pick up
- Remove fine dirt from even or rough surfaces
- Hand selected, heavy duty lacquered pine handles


6375


6381

Model No.	Material	Color	Handle Style	Order No.	Price
6375	Polypropylene	Gray	1" Dia. Vinyle Coated Metal Handle	**RZ556375**	Price
6381	Corn	Red	1" Dia. Stained/ Lacquered Handle	**RZ556381**	Price

Heavy Duty/Industrial Dust Pans

- Heavy gauge steel construction
- Double-riveted tubular steel handle lifts heavy loads
- Hi-visibility cushioned handle grip
- Durable electroplate finish resists rust and corrosion


46700


2005


2531

Item	Size (in.)	Material	Style	Order No.	Price
PRM PRO	16	Steel	Industrial Shop Dust Pan	**KP8346700**	Price
Rubbermaid Commercial Products	12-1/4"L x 2-5/8"D x 8-1/4"W	Plastic	Heavy Duty Dust Pan with Smooth Lip	**RZ552005**	Price
	12.8"L x 5"H x 11.3"W	Plastic	Heavy Duty Dust Pan with Aluminum Upright Handle	**RZ552531**	Price

Counter Dusters



- Tampico and synthetic dusters are 8" long with 2-1/2" fill in a wood block
- Orange duster is 9" long with 2-1/2" fill in a durable structural plastic block

Style	Trim Length (in.)	Material	Size (in.)	Order No.	Price
General	2-1/2	Black Tampico	8	**LD5325251**	Price
Oil / Water Resistant	2	Orange Synthetic	9	**LD5342213**	Price
Oil / Water Resistant	2-1/2	Black Synthetic	8	**LD5325252**	Price

WEILER Block Type Brushes

- For heavy duty cleaning and scrubbing


44024


44023


25212

Size (in.)	Trim Length (in.)	Bristle Material	Order No.	Price
7-1/4 x 2-1/4	1-5/8	.012 Round Wire	**LD5025212**	Price
8	1-1/8	White Tampico	**LD5044024**	Price
9	1-1/8	White Tampico	**LD5044023**	Price

WEILER Industrial Scrub Brushes


25263


25262

Size (in.)	Trim Length (in.)	Material	Order No.	Price
8	2	Tampico	**LD5025262**	Price
20	2	Tampico	**LD5025263**	Price

WEILER Truck Wash Brush



- Protective bumper
- Foam block
- Two handle holes (one for tapered handles, the other for threaded or fountain tube)
- Handles NOT included, order handles separately

Size (in.)	Trim Length (in.)	Material	Order No.	Price
9-1/2 x 2-3/4	2-1/2	Flagged White Polystyrene	**LD5344510**	Price

Acid Brushes

Possible Uses:

- Application of glues, cements, fluxes, solder, paints, stains, paint remover
- Also dust/clean hard to reach areas such as phones, keyboards, calculators, etc.



Handle (in.)	Trim Length (in.)	Width (in.)	Size (in.)	Material	Order No.	Price
Tin	3/4	1/2	5-3/4	Horsehair	**LD50AB5**	Price

Flat Oil & Chip Brushes

- Black China bristle, flat trim, steel ferrule
- For cleaning machine or bench



Style - Plastic Handle Material - Black Bristle				
Width (in.)	Thickness (in.)	Trim (in.)	Order No.	Price
1/2	1/4	1-5/8	**LD50F1P**	Price
1	5/16	1-5/8	**LD50F2P**	Price
2	5/16	1-5/8	**LD50F4P**	Price
3	3/8	1-3/4	**LD50F6P**	Price
1-1/2	5/16	1-5/8	**LD50F3P**	Price
2-1/2	3/8	1-3/4	**LD50F5P**	Price

Style - Wood Handle Material - White Bristle				
Width (in.)	Thickness (in.)	Trim (in.)	Order No.	Price
1/2	1/4	1-3/4	**LD50F1W**	Price
1	5/16	1-3/4	**LD50F2W**	Price
2	5/16	1-3/4	**LD50F4W**	Price
3	3/8	1-3/4	**LD50F6W**	Price
1-1/2	5/16	1-3/4	**LD50F3W**	Price
2-1/2	3/8	1-3/4	**LD50F5W**	Price

Oval Chip Cleaning & Paint Brushes

- Black China bristle, lacquered round sash handle, chisel trim, bright metal seamless ferrule
- Used as parts cleaning brush, application of adhesives and grease, painting (oil based paint), mold cleaning and chip brush



Size (in.)	Bristle Length (in.)	Order No.	Price
1-1/16 x 3/4	2-3/8	**LD508**	Price
1-3/16 x 15/16	2-3/8	**LD5010**	Price
1-3/8 x 1	2-5/8	**LD5012**	Price
1 x 5/8	2-1/8	**LD506**	Price
1/2 x 3/8	1-5/8	**LD502**	Price
13/16 x 8/16	1-7/8	**LD504**	Price

Hand Scratch Brushes

- Hand scratch brushes are used for removing paint, rust, scale solder, chips and dirt, and for cleaning metal parts, threads, files, castings, etc.
- Wood handle
- Carbon wire is for general purpose use
- Use stainless steel for resistance to corrosion and high temperatures
- Brass wire creates static-free cleaning and nylon is chemical resistant


SH1


BH1


BH37B, BH37N, BH37

Material	Size (in.)	Trim (in.)	Brush Rows (in.)	Order No.	Price
Brass	1 x 7-7/8	1/2	3 x 7	**LD50BH37B**	Price
Nylon	1 x 7-7/8	1/2	3 x 7	**LD50BH37N**	Price
Stainless Steel	1 x 7-7/8	1/2	3 x 7	**LD50BH37**	Price
Tempered Steel	5-1/2 x 10	1-1/8	4 x 16	**LD50SH1**	Price
Tempered Steel	6 x 14	1-1/8	3 x 19	**LD50BH1**	Price

WEILER Truck Wash Brush Handle

- Material: metal



Size	Handle Style	Order No.	Price
60"	Continuous Water Flow	**LD5344319**	Price

Brute® Rim Caddy



- Snaps securely onto BRUTE® Rim (44 Gal), RZ552643
- Bottles, wet-floor sign, and other tools stay in place when bag is unloaded in either a fully-tipped position or upright position
- Integrated bag straps allow for easy poly-liner attachment
- Ergonomic handle improves maneuverability and minimizes contact with refuse
- Durable plastic construction with smooth surfaces for easy cleaning
- Tools and waste container sold separately

Order No.	Price
RZ559W87	Price

Cleaning Cart



- Collect waste and transport tools for efficient cleaning.
- Smooth, easy-to-clean surface
- Zippered bag for easy trash removal
- Front platform holds mop bucket or up to a 32-gallon BRUTE® container

Order No.	Price
RZ55FG617388B	Price

WaveBrake® 35 Qt. High Performance Mopping Systems



- Enhanced features for greater performance
- Lasts 58 times longer than comparable wringers†
- Tested to exceed 50,000 wringing cycles; average wringers† perform approximately 860 cycles
- Premium tubular steel and structural web molded plastic
- Accepts optional dirty water bucket
- Buckets are made of tough structural web molded plastic for durability
- 35 qt. capacity
- 28 lbs.
- Up to 24 oz. wringer capacity

Type	Order No.	Price
WaveBrake® Down Press Combo	**RZ557577**	Price
WaveBreake® Side Press Combo	**RZ557580**	Price
WaveBrake® Dirty Water Bucket	**RZ559C74**	Price

† Injection-molded

Brute® Buckets

Heavy-duty thick walled construction



- BRUTE® buckets have molded-in graduations for accurate measuring
- Corrosive-resistant bails with comfortable plastic grip
- 10 & 14 Qt. round buckets

Capacity	Size (in.)	Order No.	Price
10 Quart	10.5 D x 10.25 H	**RZ552963**	Price
14 Quart	12 D x 11.25 H	**RZ552614**	Price

Economy Cotton Cut-End Wet Mops



- Cotton mop for general, all-purpose cleaning
- Available in narrow and wide headbands (1" & 5")
- Recycled content: 100% post-industrial cotton
- Shipped as compact mop packages

Mop Size	Headband Size (in.)	Order No.	Price
#16	1	**RZ55V116**	Price
#16	5	**RZ55V156**	Price
#20	1	**RZ55V117**	Price
#20	5	**RZ55V157**	Price
#24	1	**RZ55V118**	Price
#24	5	**RZ55V158**	Price

Wet Mop Heads

High Durability, Absorbency

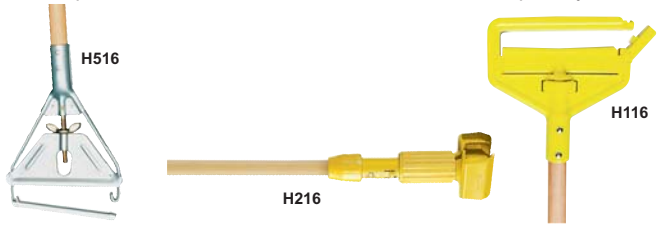


Material	Weight	Order No.	Price
Cotton	16 oz	**RZ5512691**	Price
Cotton	24 oz	**RZ5512693**	Price

Mop head and handle are purchased separately.

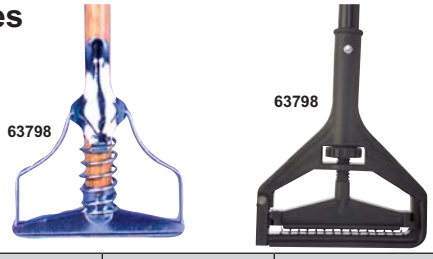
Wet Mop Handles

- Invader® Side Gate Handle's thumb wheel clamps the mop firmly in place; should be used with 5" headband mops
- Gripper® Clamp Style Handles hold mop firmly between the jaws of the mop handle; should be used with 1" headband mops only



Length (in.)	Style	Order No.	Price
54	Invader Side Gate	**RZ55H116**	Price
60	Easy Change	**RZ55H516**	Price
60	Gripper Clamp	**RZ55H216**	Price

Wet Mop Handles



Style	Length (in.)	Order No.	Price
Spring	54	**RZ5563798**	Price
Wing Nut	60	**RZ5529080**	Price

Floor Squeegees









Material - Aluminum			
Size (in.)	Style	Order No.	Price
24	Curved	**LD532824**	Price
24	Straight	**LD532724**	Price

Material - Steel			
Size (in.)	Style	Order No.	Price
24	Heavy Duty / Curved	**LD532524**	Price
24	Heavy Duty / Straight	**LD532024**	Price

Floor Squeegee Handle

60” Length



Order No.	Price
LD535005	Price

Butt Cans

- Excellent for designated smoking areas
- Practical container for cigarette, cigar butts and matches
- Promotes safety and good housekeeping
- Quickly extinguish burning butts
- Spout O.D. is 1-3/4”

MADE IN THE USA





Capacity	Dia. (in.)	Height (in.)	Weight	Color	Order No.	Price
5 Quart	15-1/4	37-3/4	7 lbs	Gray	**LC501206GRAY**	Price
5 Gallon	12-1/2	32	7 lbs	Yellow	**LC501205**	Price

Rubberman Floor Safety Signs

- Lightweight caution, warning signs
- Multi-language



6112



627687

Type	Height (in.)	Order No.	Price
Wet Floor Sign	24	**RZ556112**	Price
Caution Cone Sign	36	**RZ55627687**	Price

GroundsKeeper® Smoking Management Reseptacle

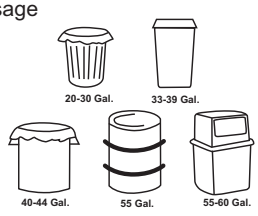
- Classic style, all-weather solution to an unsightly environmental problem
- Hygienic, easy-to-service steel canister
- Restricted opening shields waste from view, weather, and flow of oxygen
- Galvanized steel inner canister holds large quantities of cigarette waste
- Steel base plate adds stability and discourages theft



Order No.	Price
RZ552570	Price

PRM PRO Trash Can Liners

- Available trash can liners: clear & black or blue recycling bags
- Stronger and more durable then old style bags
- Available in standard or heavy duty
- Perforated coreless roles for efficient storage and usage
- 70% Post consumer recycled content
- Meets EPA and LEED standards





Clear



Black

Style - Trash Can Liner								
					Black		Clear	
Capacity	Size	Style	Thickness	Bags Per Box	Order No.	Price	Order No.	Price
20-30 (gal)	30" W x 36" H	Standard	0.95 mil	250	**TB353036BS**	Price	**TB353036CS**	Price
33-39 (gal)	33" W x 44" H	Heavy	1.25 mil	150	**TB353344B**	Price	**TB353344C**	Price
40-44 (gal)	37" W x 50" H	Heavy	0.95 mil	150	**TB353750BS**	Price	**-**	-
40-44 (gal)	37" W x 50" H	Standard	1.25 mil	100	**-**	-	**TB353750C**	Price
40-44 (gal)	37" W x 50" H	Heavy	1.25 mil	100	**TB353750B**	Price	**-**	-
40-50 (gal)	40" W x 46" H	Heavy	1.25 mil	100	**TB354046B**	Price	**TB354046C**	Price
55 (gal)	43" W x 48" H	Heavy	1.25 mil	100	**TB354348B**	Price	**TB354348C**	Price
55-60 (gal)	38" W x 58" H	Heavy	1.25 mil	100	**TB353858B**	Price	**TB353858C**	Price

Style - Recycling Bag								
					Blue		Clear	
Capacity	Size	Style	Thickness	Bags Per Box	Order No.	Price	Order No.	Price
40-50 (gal)	40" W x 46" H	Heavy	1.25 mil	100	**TB354046BLREC**	Price	**TB354046CREC**	Price

Brute® Round Containers Without Lids

- Durable, heavy-duty containers for a variety of uses
- All plastic, professional-grade construction will not rust, chip or peel and resists dents
- Certified to NSF® standard #2 and #21
- Normally ship common carrier



2610G 2620G 2643V

Capacity	Size (in.)	Color	Order No.	Price
10 Gallon	15-5/8 x 17-1/8	Gray	**RZ552610G**	Price
20 Gallon	19-1/2 x 22-7/8	Gray	**RZ552620G**	Price
44 Gallon	24 x 31.5 H	Gray	**RZ552643V**	Price

Brute® Lids & Tops

- All plastic, professional-grade construction will not rust, chip or peel and resists dents
- Lids (flat) are strong and snap-on to provide secure, stable stacking
- Tops (domed) are strong and snap-on



264788 261960 2645

Description	Size (in.)	Color	Order No.	Price
Domed Top for Brute® 2643 Container	24-13/16 Dia	Gray	**RZ55264788**	Price
Lid for Brute® 2620 Container	19-7/8 Dia	Gray	**RZ55261960**	Price
Lid for Brute® 2643 Container	24-1/2" Dia	Gray	**RZ552645**	Price

Brute® Recycling Container Without Lid

- Easy-to-maneuver
- Can serve as central collection containers or shipping containers, reducing the amount of handling
- Transport recyclable waste with ease and efficiency
- Dollies sold separately (RZ552640)
- Containers come standard with a permanent hot stamp of the universal recycle symbol



Capacity	Size	Color	Order No.	Price
32 Gallon	27-1/4 H x 22 D	Blue	**RZ55263273B**	Price

Brute® Dolly

- Easy mobility and maneuverability of heavy loads
- Heavy duty 3” swivel casters



Order No.	Price
RZ552640	Price

Deskside Wastebasket

- Space-efficient and economical
- Rolled rims add strength and are easy to clean
- Won’t chip, rust or dent
- Designed for convenient desk side waste management



Size (in.)	Color	Capacity	Order No.	Price
11.38 x 8.25 x 12.13	Black	13-5/8 Quart	**RZ552955B**	Price
14.38 x 10.25 x 15	Black	28-1/8 Quart	**RZ552956B**	Price

Deskside Recycling Containers

- An easy and effective way to recycle paper
- Designed to be used in systems with existing office containers and accessories
- Placed beside traditional wastebaskets
- Easy to separate waste paper
- Permanent hot-stamped universal recycling logo



Capacity	Size	Color	Order No.	Price
13-5/8 Quart	11.4 x 8-1/4 x 12-1/8	Blue	**RZ55295573**	Price

Brute® Rollout Containers With Lid

- Easy mobility for general refuse collection and material handling
- Heavy-duty, 8” (20.3 cm) wheels provide easy mobility, even over steps or curbs
- Attached hinged lid fits tightly; swings back and locks
- Molded-in axle retainer adds strength
- Molded-in catch bar is compatible with automated lift systems
- Meets ANSI Z245.30-1999 for types B & G Rollout carts
- Inset wheel position helps prevent damage to walls and doorways
- Available in gray & blue



9W2773B



9W27G

Capacity	Size (in.)	Color	Order No.	Price
50 Gallon	28.5 x 33.40 x 36.5	Blue	**RZ559W2773B**	Price
50 Gallon	28.5 x 33.40 x 36.5	Gray	**RZ559W27G**	Price

shop-vac INDUSTRIAL HIPPO Portable Handheld Vac

Dry Pickup Only

- Combines dependable power with lightweight portability
- Perfect for HVAC applications, machinery, computer equipment, and any tight areas
- Dual-filter system keeps the exhaust area clean
- Can also be converted to a blower

Accessories Include:
- 6' x 1-1/4" Hose, extension wand
- 6" Master nozzle, 18' power cord
- Crevice tool, round brush, conversion unit
- 2-1/2" Hose coupling, shoulder strap



Size	Tank	Horse Power	CFM††	SP†	Electrical Rating	Filters	Weight	Order No.	Price
1 qt	Plastic	1.5 HP	1100	50	120V, 60Hz, 6.8 Amps	Bag, Secondary Filter	10 lbs	**PC6099919**	Price

shop-vac INDUSTRIAL Industrial Backpack Vac

- Secures to your back for increased mobility and reach
- Cord Length: 25"
- Hose Size: 1-1/4" Diameter
- Adjustable harness
- Easy reach on/off switch
- Tool storage on harness belt
- Dry pick up only

Accessories Include:
- 1-1/4" Dia. x 4' LockOn hose with hand grip and airflow control
- (2) 1-1/4" Metal extension wands with positive-lock
- Dual surface nozzle with positive-lock
- Small cartridge filter and high efficiency disposable filter bag
- 1 Year Warranty



Tank	Horse Power	CFM††	SP†	Electrical Rating	Weight	Order No.	Price
Poly	6.5	210	60	120V, 60 Hz, 12 Amps	18 lbs	**PC602860010**	Price

DEWALT 20V MAX 1/2 Gallon Wet/Dry Portable Vac Kit

- Gore™ HEPA wet/dry filter traps 99.97% of dust at 0.3 microns
- 1/2 gallon tank with heavy-duty latch
- Heavy-duty rubber hose provides durability and flexibility
- Runs off of 20V MAX DeWalt battery packs
- Dual clean-up modes allow for debris removal with either the front utility nozzle or extendable rubber hose
- Washable filter; Tap or water rinse to clean
- Large on/off switch
- DCB204 Battery
- DCB115 Charger



New!

Order No.	Price
PD20DCV517M1	Price

shop-vac INDUSTRIAL Industrial Economy 4.5 HP Wet/Dry Vacs

- Equipped with a high-performance industrial bypass motor for greater pickup power
- Designed for use in facilities requiring rugged-duty equipment at a modest cost
- Rust-resistant epoxy phenolic-coated steel tanks
- Converts to a powerful blower

Accessories Include:
- 7' x 1-1/4" Crush proof hose
- (2) 1-1/4" Extension wands
- 1-1/4" Round brush, 1-1/4" crevice tool, 1-1/4" gulper nozzle
- 12" Wet and dry floor nozzle w/ brush and squeegee inserts
- 6' x 2-1/2" Crush proof hose
- (2) 2-1/2" Extension wands
- 8" Utility nozzle
- 4-Wheel dolly





Size	Tank	Horse Power	CFM††	SP†	Electrical Rating	Filters	Weight	Order No.	Price
10 Gallon	Stainless Steel	4.5	170	62	120V, 60Hz, 9 Amps	Cartridge Filter, Foam Sleeve	25 lbs	**PC606002110**	Price

shop-vac INDUSTRIAL Industrial Ultra Pump Vacs

- Pumps water up to heights of 60' using any standard garden hose
- Includes a powerful 6.5 Peak HP motor that's quieter than standard motors
- No-tip caster design with smooth glide, top carry handles, extra long power cords, large tank drain and blower port
- Easily converts to a dry vac

Accessories Include:
- 6' x 2-1/2" Lock on hose
- (2) 2-1/2" Wands, 14" floor nozzle
- 8" Utility nozzle, 2-1/2 crevice tool
- 14" Squeegee insert, elbow grip, hose holder
- 8' x 1-1/4" Lock on hose, (2) 1-1/4" wands
- 10" Combination wet/dry nozzle
- 2-1/2" Contractor nozzle



9604710

96099

Size	Tank	Horse Power	CFM††	SP†	Electrical Rating	Filters	Weight	Order No.	Price
20 Gallon	Poly with Tool Storage	6.5	200	60	12.0 Amps	Foam Sleeve, Cartridge, High Efficiency Filter Bag	37 lbs	**PC609604710**	Price
14 Gallon	Stainless Steel	6.5	200	60	120V, 60Hz, 12 Amps	Foam Sleeve, Cartridge, High Efficiency Filter Bag	43 lbs	**PC6096099**	Price

Contractor Two Stage Vac

2.5 Peak HP

- 10 Gallon capacity
- Powerful two-stage motor is powerful enough for any operation
- Stainless steel tank

Accessories Included:

- 12' Lock-On® hose
- (2) Metal extension wands
- 14" metal wet/dry floor nozzle with brush and squeegee inserts
- 6" Utility nozzle
- Crevice tool
- Round brush
- 1-1/2" Adapter
- Ultra-Web® cartridge filter
- Foam sleeve
- Filter bag

New!



CFM	Electrical Rating	Cord	SP	Weight	Order No.	Price
100	120V, 60Hz, 9.5 Amps	35'	90	42 lbd	**PC609624010**	Price

Contractor Two Stage Vac

2.0 Peak HP

- 10 Gallon capacity
- Powerful two-stage motor is powerful enough for any operation
- Stainless steel tank

Accessories Included:

- 12' Lock-On® hose
- (2) Metal extension wands
- 14" metal wet/dry floor nozzle with brush and squeegee inserts
- Cartridge filter
- Foam sleeve

New!



CFM	Electrical Rating	Cord	SP	Weight	Order No.	Price
100	120V, 60Hz, 8.5 Amps	18'	80	31 lbs	**PC606107010**	Price

The Heavy Duty Portable Vac

- Easy to carry
- 20' Cord length
- Operation sound level: Quiet
- Hand held design

Accessories Include:

- 1-1/2" Dia x 7' Lock On® hose
- Claw utility nozzle
- 16" Blow molded crevice tool
- Ultra web cartridge filter
- 4 Year warranty



Size	Tank	Horse Power	CFM††	SP†	Electrical Rating	Filters	Weight	Order No.	Price
5 Gallon	Plastic	6.0	195	59	120V, 60Hz, 11.5 Amps	Small Ultra Web Cartridge Filter	17 lbs	**PC605872810**	Price

Right Stuff Wet/Dry Vacs

Accessories Include:

- 1-1/2" x 12' Hose with curved end
- (2) 1-1/4" Wands
- 10" Wet/Dry nozzle
- Crevice tool
- Claw nozzle
- 120 Volt, 60 Hz
- 18' Power cord
- (1) Filter bag & web cartridge filter
- Cord wrap, side handles, rollers coasters
- 1 Year Warranty



9625510



9625010

Size	Tank	Peak Horse Power	CFM††	SP†	Filters	Order No.	Price
10 Gallon	Poly	4.0	173	59	Ultra Web cartridge filter, and drywall collection bag	**PC609625010**	Price
10 Gallon	Stainless	6.5	195	60	Cartridge & Drywall	**PC609625510**	Price
16 Gallon	Poly	6.0	190	60	Ultra Web cartridge filter, and drywall collection bag	**PC609625210**	Price
18 Gallon	Poly	6.5	195	60	Ultra Web cartridge filter, and drywall collection bag	**PC609625310**	Price
22 Gallon	Poly	6.5	195	60	Ultra Web cartridge filter, and drywall collection bag	**PC609625410**	Price

Multi-Purpose Wet / Dry Vac

18-Gallon Includes:

- 10' x 2-1/2" Locking hose
- (2) 2-1/2" Extension wands
- 14" Floor nozzle with brush
- 8" Utility nozzle
- 2-1/2" Crevice tool
- 2-1/2" Round elbow brush
- 2-1/2" Blower nozzle
- 2-1/2" Concentrator nozzle
- Elbow grip
- Hose holder



Size	Tank	Horse Power	CFM††	SP†	Electrical Rating	Filters	Weight	Order No.	Price
18 Gallon	Plastic	12 Amps	250	75	120V, 60Hz, 12A	Foam Sleeve, High-Quality Collection Bag,Ultra Web Cartridge Filter	35 lbs	**PC609541810**	Price

Industrial Heavy Duty Vacs

Accessories Included:
- 12' x 1-1/2" hose
- (2) Interlocking master extension wands
- 14" Metal master nozzle
- 14" Squeegee
- Rug shoe
- Brush shoe
- Squeegee shoe





Size	Tank	SP†	CFM††	Weight	Electrical Rating	Filters	Order No.	Price
10 Gallon	Stainless Steel	100	105	51 lbs	120V, 60Hz, 11.0 Amps	Foam, Collection Bag, Full Polyester Filter	**PC6097002**	Price
20 Gallon	Stainless Steel	100	105	62 lbs	120V, 60Hz, 11.0 Amps	Foam, Collection Bag, Full Polyester Filter	**PC6097004**	Price

Industrial Super Heavy Duty Two Stage Vac

3.0 Peak HP

- Used for the most difficult maintenance problems where wet and dry pickup is involved
- Powerful two-stage motor is powerful enough for any operation
- Steel tank has high-visibility safety colors with rust-resistant epoxy phenolic-coated interiors for long life

Accessories Included:
- 12' x 1-1/2" Crushproof hose with right angle connector
- Claw utility nozzle



97005



9700610

Description	SP†	CFM††	Weight	Electrical Rating	Filters	Order No.	Price
Assembly Head For 55 Gallon Drum	105	109	29 lbs	120V, 60Hz, 11.0 Amps	Ultra-Web Cartridge	**PC609700610**	Price
55 Gallon Drum	105	109	84 lbs	120V, 60Hz, 11.0 Amps	Ultra Web Cartridge	**PC6097005**	Price

†SP (Sealed Pressure) represents how far up a glass tube a vacuum will lift a column of water. This function is measured in inches. ††CFM (Cubic Feet Per Minute) is a measure of the quantity of air moved by the vacuum motor at a maximum system load.

Replacement Filters & Accessories

Item	Description	Order No.	Price
	12-20 Gallon Tear Resistant HEPA Bag Pack of 2	**PC609021833**	Price
	5-10 Gallon Tear Resistant HEPA Bag Pack of 2	**PC609021733**	Price
	Drain Unclogger	**PC609193400**	Price
	1-1/4" Crevice Tool for Shop Vac	**PC6090616**	Price
	1-1/2" Crevice Tool for Shop Vac	**PC6090645**	Price
	2-1/2" Crevice Tool	**PC6090678**	Price
	1-1/4" Round Brush for Shop Vac	**PC6090615**	Price
	1-1/2" Round Brush for Shop Vac	**PC6090644**	Price
	2-1/2" Round Brush for Shop Vacuums	**PC6090679**	Price
	2-1/2" x 10' Hose for Shop Vac	**PC6090134**	Price
	7' x 1-1/4" Crushproof Hose for Shop Vac	**PC6090501**	Price
	12' x 1-1/2" Crushproof Hose	**PC6090625**	Price
	Cartridge Filter	**PC6090304**	Price
	Foam Filter for Shop Vac Vacuums	**PC6090585**	Price

Item	Description	Order No.	Price
	Full Cloth Filter 11-1/4" Tank II	**PC6090637**	Price
	Full Cloth Filter 14" Tank II	**PC6090638**	Price
	Full Cloth Filter 16" Tank II	**PC6090639**	Price
	For 16-22 Gallon Tanks	**PC6090673**	Price
	For 15-22 Gallon Tanks	**PC6090672**	Price
	For 5-8 Gallon Tanks	**PC6090671**	Price
	Hippo Replacement Bags Pack of 5	**PC6090146**	Price
	Pre-filter Cartridge Filter Pack of 5	**PC6090349**	Price
	Reusable Disc Filter for Shop Vac	**PC6090137**	Price
	Special HEPA Filter	**PC6090340**	Price
	Universal Tool Adapter for Shop Vac	**PC6090687**	Price

GOJO Medium & Heavy Duty Hand Cleaners



- GOJO offers a complete line of practical, daily use lotion and crème-style hand cleaners for a variety of work environments
- Effective against a full range of medium- and heavy-duty soils, these cleaners are available in smooth and pumice formulas to help keep skin conditioned with ingredients such as aloe and vitamin E
- Hazard code: 58

Description	Size	Order No.	Price
Paint and Stain Lotion Hand Cleaner	22 oz. Tube	**LP55101806**	Price
Lemon Hand Creme Cleaner with Pumice	4.5 lb	**LP55091506**	Price
Original Formula Creme Hand Cleaner-For use with 1204 dispenser	4.5 lb	**LP55111506**	Price
Natural Orange Smooth Hand Cleaner with Pump Dispenser	1 Gallon	**LP55094504**	Price
Natural Orange Lotion Pumice Hand Cleaner with Pump Dispenser	1 Gallon	**LP55095502**	Price

GOJO Cherry Gel Pumice Hand Cleaner



- Spreads evenly over hands & arms for easy cleaning of heavy dirt, grease and oil
- Clings to hands so it's not washed down the drain
- Pleasant cherry fragrance eliminates soil odors

	1/2 Gallon		1 Gallon	
	Order No.	Price	Order No.	Price
Cherry Gel Pumice with Pump Dispenser	**LP55235602**	Price	**LP55235802**	Price

Lava Hand Soap



- Tough on dirt but soft on hands, formulated with moisturizers
- Same dirt and grime fighting soap that's been used since 1893
- Works on grease, grime, dirt, ink paint and rubber cement on your hands

Bar Size	Order No.	Price
5.75 oz.	**LS5010185**	Price

GOJO Skin Lotion



- Keeping skin healthy and well-conditioned is easy with dermatologist-tested GOJO brand hand lotion and skin conditioners
- A non-greasy moisturizing lotion containing allantoin, aloe and vitamin E to help condition skin, silicone-free
- Hazard code: 58

Description	Order No.	Price
5 Fl oz Tube Medicated Skin Lotion, Silicone Free	**LP55814024**	Price

GOJO PRO™ TDX SERIES Heavy Duty Hand Cleaner

Durable, high-capacity dispensing



- Rugged, high-capacity PRO Series dispensers offer Lifetime guarantee
- Sanitary-sealed, bag-in-box refills are easy to load, store and handle
- A fresh dispensing valve with each refill ensures no leaks or clogs
- One-hand push operation reinforces dispenser mounting with each push
- Portion control dispensing can significantly reduce total cost per wash
- Hazard Code: 58

	2000mL		5000mL	
Description	Order No.	Price	Order No.	Price
Cherry Gel Pumice Hand Cleaner	**LP55729004**	Price	**LP55759002**	Price
Multi-Green Hand Cleaner with Pumice	**LP55726504**	Price	**LP55756502**	Price
Natural Orange Hand Cleaner with Pumice	**LP55725504**	Price	**LP55755602**	Price
Pro-TDX Dispenser Gray	**LP55720001**	Price	**LP55750001**	Price
SUPRO MAX Hand Cleaner	**LP55727204**	Price	**LP55757202**	Price

GOJO Hand Medic Foam Soap Systems



- Specifically formulated for professional technicians for use in their work environments
- Quickly absorbs, with no greasy after-feel. Use before work, after handwashing and at night to maintain skin's natural protective barrier
- Silicone and fragrance-free
- Hazard code: 58

Style - Refill Size - 500mL		
Description	Order No.	Price
Hand Medic Professional Skin Conditioner	**LP55824206**	Price

Style - Tube Size - 5 oz		
Description	Order No.	Price
5 oz Tube Hand Medic Foam Soap	**LP55815012**	Price

GOJO Foam Soap Systems



- Luxury foam handwash comes in a multitude of formulas and fragrances
- GOJO FMX™ Dispensers offer durable construction and easy-to-load refills
- GOJO TFX™ Dispensers offer touch free, trouble free dispensing
- Hazard Code: 58

	2000mL		1250mL	
Description	Order No.	Price	Order No.	Price
FMX-12™ Dispenser Black	-	-	**LP55515506**	Price
Luxury Foam Antibacterial Handwash	**LP55526202**	Price	**LP55516203**	Price
Luxury Foam Hair & Body Wash	**LP55526302**	Price	**LP55516303**	Price
Luxury Foam Handwash	**LP55526102**	Price	**LP55516103**	Price

TORK Heavy Duty Paper Wipers



- Heavy-duty paper wiper is our toughest multi-purpose paper wiper
- Absorbs both oil and water efficiently
- Strong and durable, won't tear easily
- Soft cloth-like feel makes it a good choice for wiping solid surfaces or hands and faces
- This product has NSF P1 certification and is Health Canada certified
- Single ply

Color	Size	Pack	Description	Order No.	Price
Blue	800' x 11-1/2" unfolded	800 Wipers	Giant Roll	**LM48450304**	Price
White	13" x 12.5" unfolded	56 Wipers	Poly Pack	**LM48192136**	Price
White	16.3" x 9.3" folded	90 Wipers	Pop Up Box	**LM48450175**	Price

TORK Paper Plus Wipers



- Paper Wiper Plus is a multi-purpose paper towel that is ideal for picking up liquid and hand wiping
- Strong and durable, won't tear easily
- This product is NSF P1 certified, HAACP International certified (FZS)
- Contains 85% paper content (80% recycled, 20% post industrial) and 15% synthetic emulsion
- Single ply
- Dispenser part # for "Top Pack" **LM486540281**

Pack	Size	Description	Order No.	Price
100 Wipers	16.5" x 9.5" unfolded	Pop Up Box	**LM48192127**	Price
150 Wipers	16.3" x 13.6" folded	Top Pack	**LM48430178**	Price
90 Wipers	13" x 12.5" unfolded	Poly Pack	**LM48430150A**	Price

TORK Industrial Paper Wipers



- Multi-purpose paper based wiper that is ideal for janitorial and industrial wiping tasks
- Excellent oil and water absorption, easily lifts grease and grime
- Durable and strong for heavy-duty wiping tasks, while gentle to use on hands and face
- Particularly good for cleaning glass - does not leave any lint or streaks on surfaces
- Four ply
- This product is ECOLOGO® certified
- Dispenser part # **LM486540281**

Pack	Description	Order No.	Price
180 Wipers	Handy Box	**LM4813247501**	Price
90 Wipers	Top Pack	**LM48440278**	Price

TORK Industrial Cleaning Cloths



- Industrial Cleaning Cloth is a solid general use wiper for janitorial and industrial cleaning applications
- Strong texture for excellent oil and water absorption
- Reusable, strong, durable wiper - excellent rental towel and rag replacement
- CLEAN™ technology – for a fast professional cleaning result
- This product is Health Canada certified
- Single ply
- Dispenser part # **LM486540281**

Color	Size	Pack	Description	Order No.	Price
Gray	5.9" x 6.5" unfolded	140 per package	Top Pack	**LM48520378**	Price
Gray	5.9" x 6.5" unfolded	280 per box	Handy Box	**LM48520371**	Price

Kimberly-Clark Professional WYPALL X60 Wipers

- Replaces lightweight rags
- Absorb 5Xs their weight

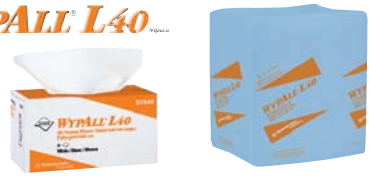


Description	Size (in.)	Pack	Weight	Order No.	Price
WypAll X60 Wipers, Pop-Up Box	9.1 x 16.8	126	22.7 lbs	**LM5534790**	Price
WypAll X60 Wipers, Jumbo Roll	12.5 x 13.4	1100	17.65 lbs	**LM5534955**	Price
WypAll X60 Wipers, Brag Box	12.5 x 16.8	180	4.2 lbs	**LM5534015**	Price

®Registered Trademark of Kimberly-Clark Worldwide, Inc.
©2004 KCWW. All Rights Reserved

Kimberly-Clark Professional WYPALL L40 Wipers

- General purpose wiper
- Excellent for large liquid spills and leaks



Description	Size (in.)	Pack	Weight	Order No.	Price
WypAll L40 Wipers, Pop-Up Box	10.8 x 10	90	1.5 lbs	**LM553046**	Price
WypAll L40 Wipers, 1/4 Fold	12.5 x 14.4	672/CS	16.4 lbs	**LM555776**	Price

®Registered Trademark of Kimberly-Clark Worldwide, Inc.
©2004 KCWW. All Rights Reserved

Kimberly-Clark Professional WYPALL X80 Towels

- Designed to feel like cloth and work even better
- Our thickest and strongest wiper
- Absorbs faster than rags and shop towels



Description	Size (in.)	Pack	Weight	Order No.	Price
WypAll X80 Towels, Pop-Up	9.1 x 16.8	80	12.4 lbs	**LM5505930**	Price
WypAll X80 Towels, Jumbo Roll	12.5 x 13.4	475	14 lbs	**LM5541043**	Price
WypAll X80 Towel, Brag Box	12.5 x 16.8	160	6.3 lbs	**LM5541041**	Price

®Registered Trademark of Kimberly-Clark Worldwide, Inc.
©2004 KCWW. All Rights Reserved

Kimberly-Clark Professional WYPALL L30 Wipers

- High performance value disposable wiper
- Soft enough for use on face and hands



Description	Size (in.)	Pack	Weight	Order No.	Price
WypAll L30 Wipers, 1/4 Fold	12.5 x 14.4	1080/CS	15 lbs	**LM5505812**	Price
WypAll L30 Wipers, Jumbo Roll	12.5 x 13.4	900	12.5 lbs	**LM5505841**	Price
WypAll L30 Wipers, Pop-Up Box	10 x 11.2	120	14 lbs	**LM5503086**	Price
WypAll L30 Wipers, Pop-Up Box	16.4 x 9.8	120	2.4 lbs	**LM5505816**	Price

®Registered Trademark of Kimberly-Clark Worldwide, Inc.
©2004 KCWW. All Rights Reserved

Low Lint Cleaning Cloth

- Perfect for working with sensitive applications like surface preparation before painting due to low-lint properties
- Tough cloth designed for use with industrial solvents and cleaners - will stand up to harsh chemical use
- Soft drapable feel to get into tight spaces
- This product is Health Canada certified
- Single ply
- Dispenser part # **LM486540281**



Color	Size	Pack	Order No.	Price
Aqua	16.4" x 13.5" folded	100 per package	**LM48192479**	Price
Blue	16.4" x 13.5" folded	80 per package	**LM48192578**	Price

Universal C-Fold Hand Towels

- Perfect combination of quality, performance and value
- Embossing enhances hand feel and maximum absorbency
- High wet strength designed to please your most demanding users
- Made from 100% recycled fiber provides environmental benefits, and a positive image builder
- ECOLOGO® certified
- Dispenser part # **LM4873TR**



Color	Size	Order No.	Price
White	10.1" x 12.8" unfolded (3.7" folded)	**LM48CB530**	Price

Universal Multifold Hand Towels

- Provides the right combination of quality, performance and value
- Multifold design offers quality and value for high traffic rest rooms and provides for less towel consumption leading to source reduction, storage space savings, and lower overall costs
- High wet strength designed
- Fast absorbency helps to control usage, so you save on reduced waste and maintenance time
- "No touch" hand towel service provides sanitary conditions
- ECOLOGO® and Green Seal™ certified



Color	Size	Order No.	Price
Natural	9.1" x 9.5" unfolded	**LM48MK520A**	Price
White	9.1" x 9.5" unfolded	**LM48MB540A**	Price

Advanced Intuition / Matic Towel Rolls

- Developed for easy maintenance in high traffic washrooms
- This towel saves time and controls consumption by one-at-a-time sheet dispensing
- Embossing enhances hand feel and maximum absorbency, allowing fewer towels used per hand dry
- Provides 884 towels/roll for the Tork Matic, 1,050 towels/roll with Intuition 8" setting to meet high capacity needs
- Single ply
- Dispenser part # **LM485510282** or **LM485511281**



Size	Color	Order No.	Price
7.8" x 9" x 7.7"	Natural	**LM48290088**	Price
7.8" x 9" x 7.7"	White	**LM48290089**	Price

Universal Hand Towel Rolls

- Easy to load and maintain for ease of use
- Embossing enhances hand feel and maximum absorbency with fewer towels used per hand dry
- Long-lasting rolls minimize maintenance costs while maximizing service
- Large roll size of 800 linear feet for high capacity dispensers
- ECOLOGO® certified, Green Seal™ certified, EPA compliant
- Single ply
- Dispenser part # **LM4884TR**



Size	Color	Order No.	Price
7.8" x 9" x 7.7"	Natural	**LM48RK8002**	Price
7.8" x 9" x 7.7"	White	**LM48RB8002**	Price

Professional Shop Towels

- Traditional 100% cotton shop towels are perfect for use in garages, industry, shop and home
- Each towel is approximately 15 x 15" in size and is machine washable and reusable



Pack	Size (in.)	Order No.	Price
25	15 x 15	**LM55LS1225**	Price
50	15 x 15	**LM55LS1250**	Price

Sold in package quantity only.

PRM PRO Cloth Wipers

- Flannel t-shirts & sweatshirts
- Colored and white
- Pure white T's
- Cotton terrycloth







Description	25 lbs Order No.	25 lbs Price	50 lbs Order No.	50 lbs Price
Colored sweat shirt wipers soft, absorbent, for polishing and wiping	**LM582020625**	Price	**LM582020650**	Price
Colored t-shirt wipers soft, absorbent, for polishing and wiping	**LM582020225**	Price	**LM582020250**	Price
Cotton terrycloth wipers absorbent reclaimed remnants assorted color/sizes	**LM582020825**	Price	**LM582020850**	Price
Flannel wipers soft, absorbent shirt/pajama material 100% cotton	**LM582020425**	Price	**LM582020450**	Price
Pure white T-shirt wipers new lint free absorbent material	**LM581010025**	Price	**LM581010050**	Price
White reclaimed t-shirt wipers authentic non-synthetic material	**LM582030525**	Price	**LM582030550**	Price

Waterless Cleaning Towels & Wipes

WYPALL Features:
- Dual texture wiper is smooth for wiping one side and tough for scrubbing on the other

ROUGH TOUCH SCRUBS IN-A-BUCKET Features:

Waterless Hand Cleaner Towels
- Heavy duty hand cleaner towels with proven pumice performance
- Loosens, dissolves & absorbs dirt, grease, oil, paint, adhesive, tar, caulk & more
- Antibacterial, contains Triclosan

Graffiti & Spray Paint Remover Towels
- One step graffiti removal system
- Abrasive, non-scratching removers
- Great for use on lockers, signs, doors, elevators and phone booths
- **Hazard Code: 03**

GoJo Scrubbing Wipes:
- Removes tough grease, tar and adhesives
- Extra large wipes contain skin conditioners to help prevent dryness and irritation.
- 72 or 170 count available



91371



901030



422C072



639802



639606

Item	Description	Pack	Order No.	Price
WYPALL	WypAll Waterless Wiper/ Scrubber	75	**LM5591371**	Price
SCRUBS Brand	Graffiti & Spray Paint Remover Towels	30	**LM54901030**	Price
	SCRUBS in-a-Bucket®	72	**LM54422C072**	Price
GOJO	Scrubbing Wipes in a Bucket	170	**LP55639802**	Price
	Scrubbing Wipes in a Canister	72	**LP55639606**	Price

WYPALL Jumbo Wall Mount Wiper Dispenser

- Jumbo roll dispenser, wall mount (towel roll not included)
- Efficient dispensing reduces waste
- Dispenser for Jumbo Rag-On-A-Roll system (roll not included)
- Measures 16-3/4"L x 8-3/4"W x 8-3/4"H
- Color: black



Order No.	Price
LM5580579	Price

TORK Dispensers

- The right combination of dispenser and wiper will boost productivity, while reducing your overall cost-in-use
- Translucent cover allows for "at a glance" inspection for refills
- Smooth cover is easy to clean
- Wall mounted dispensers will save valuable floor space

Item	Style	Size	Color	Order No.	Price
	Elevation Centerfeed Hand Towel Dispenser	14.39H x 9.42W x 8.95D	Smoked	**LM48559028A**	Price
	Elevation Matic Hand Towel Roll Dispenser	14.65H x 13.2W x 8.1D	Smoked	**LM485510282**	Price
	Elevation Matic Hand Towel Roll Dispenser with Intuition Sensor	14.6H x 13.2W x 33.53D	Smoked	**LM485511281**	Price
	Lever Auto Transfer Hand Towel Roll Dispenser	15.5H x 12.94W x 9.25D	Smoked	**LM4884TR**	Price
	Performance Folded Wiper / Cloth Dispenser	15.51H x 16.81W x 8.11D	Red/Black	**LM486540281**	Price
	Twin Jumbo Bath Tissue Roll Dispenser	11.83H x 19.29W x 5.51D	Smoked	**LM4856TR**	Price

TORK Universal Perforated Roll Towel

When you want to wipe up water and other spills, perforated roll towels offer a soft and high bulk solution.



- High absorbency and superb spill holding reduces the number of towels you need to use
- Strong enough for wiping all surfaces
- ECOLOGO® certified
- Two ply
- 12 Rolls per case, 210 Sheets per roll, 157.5 ft. long. Priced per case.

Size	Order No.	Price
11" x 5.5" x 9"	**LM48HB1995A**	Price

TORK 2-Ply Bath Tissue





- Easy start tail seal to prevent waste
- Each roll is elegantly wrapped ensuring sanitary protection while delivering quality, value, and performance
- Bath tissue has rapid breakup, ideal for all plumbing systems
- This product contains 20% post-consumer fiber providing an environmental benefit and a positive image builder
- EPA compliant for reduced environmental impact
- Dispenser part # **LM4856TR**

Description	Pack	Order No.	Price
Premium 2 Ply Ultra Soft Embossed	460 sheets x 48 rolls	**LM48TM6512**	Price
Universal 2 Ply Soft Embossed	500 sheets x 96 rolls	**LM48TM1616S**	Price

513 Utiltiy Grade Masking Tape



- Natural color with aggressive natural rubber adhesive
- Designed as an all-purpose product for non-critical applications
- Applications include: light duty bundling, packaging, industrial, manufacturing, splicing and tabbing

Size	Order No.	Price
1/2" x 60 yds	**LF52MT1**	Price
3/4" x 60 yds	**LF52MT2**	Price
1" x 60 yds	**LF52MT3**	Price
1-1/2" x 60 yds	**LF52MT4**	Price
2" x 60 yds	**LF52MT5**	Price
3" x 60 yds	**LF52MT6**	Price

3M™ Masking Tape 201



- General use for light to medium holding and bundling
- Rubber based adhesive sticks to a variety of surfaces
- Smooth conformable crepe paper backing is easy to handle, apply and remove in one piece
- Withstands temperatures up to 200°F

Size	Color	Order No.	Price
3/4" x 60 yds	Natural	**LF5364739**	Price
1" x 60 yds	Natural	**LF5364740**	Price
1-1/2" x 60 yds	Natural	**LF5364741**	Price
2" x 60 yds	Natural	**LF5364742**	Price

3M™ Specialty High Temperature Masking Tape 501



- Designed for super sharp paint lines and critical paint masking applications
- High-temperature adhesive quickly sticks to most surfaces while removing cleanly in one piece
- Extra strong tan crepe paper backing conforms to irregular surfaces and resists bleed through from most industrial paints
- Withstands surface temperatures up to 300°F (149°C)

Size	Color	Order No.	Price
1" x 60 yds	Tan	**LF5364774**	Price
1-1/2" x 60 yds	Tan	**LF5364775**	Price
2" x 60 yds	Tan	**LF5364776**	Price
3" x 60 yds	Tan	**LF5364777**	Price

3M™ High Performance Green Masking Tape 401



- High performance for critical paint masking applications
- Solvent-free adhesive sticks to most surfaces including metal, rubber, glass and plastic while removing cleanly in one piece
- Withstands surface temperatures up to 250°F (121°C)

Size	Color	Order No.	Price
1" x 60 yds	Green	**LF5364761**	Price
2" x 60 yds	Green	**LF5364763**	Price
3" x 60 yds	Green	**LF5364764**	Price

Scotch® Flatback Paper Tape 2517



- A general purpose flatback tape used for splicing liner boards, bundling, holding and packaging applications
- Color: medium brown

Size	Order No.	Price
2" x 60 yds	**LF53485671**	Price
3" x 60 yds	**LF53485763**	Price

3M™ Double-Sided Masking Tape 410B



- Instantly bonds and grips to just about anything
- This double-sided tape is thick and sticky made with a rubber adhesive
- Used for splicing and mounting printing plates

Size	Color	Order No.	Price
1" x 60 yds	Off-White	**LF53993480**	Price
2" x 36 yds	White with Green Plaid	**LF5331651**	Price

PT14 Blue PaintersTape with Bloc-It™ Clean Line Technology



- Prevents paint from seeping under the tape
- Superior paint lines
- Conformability and tear strength
- Indoor and outdoor 14 day clean removal
- Excellent cornering
- Resistant to UV rays up to 14 days
- Strong enough to hang plastic sheeting and masking paper
- Can be used on hardwood floors, lacquer and laminated surfaces

Size	Order No.	Price
1" x 60 yds	**LF52PT1436**	Price
2" x 60 yds	**LF52PT1438**	Price

AC20 9 Mil Utility Grade Duct Tape



- Silver color with aggressive natural rubber adhesive
- Designed for packaging, wrapping and sealing duct work, binding and bundling, exterminators, book repair, weather proofing, and general maintenance

Size	Order No.	Price
2" x 60 yds	**LF52DT2**	Price

3M™ Silver Duct Tape 3939



- All purpose packaging and light duty repair tape
- Perfect for splice insulation, sealing ventilation ducts while resisting moisture and temperatures to 200° F
- 25 Lb. tensile strength

Color	Size	Order No.	Price
Silver	2" x 60 yds	**LF53069756**	Price

3M™ Extra Heavy Duty Duct Tape 6969



- Abrasion and moisture resistant
- Designed for demanding duct tape applications
- 32 Lb. tensile strength

Color	Size	Order No.	Price
Silver	2" x 60 yds	**LF53069695**	Price

Scotch® Filament Tape 898

- Designed for heavy duty closure, reinforcing and banding
- Made from High Performance Polypropylene reinforced material with continuous glass yarn with stain resistant finish



Size	Color	Order No.	Price
1/2" x 60 yds	Clear	**LF53068964**	Price
3/4" x 60 yds	Clear	**LF53068971**	Price
1" x 60 yds	Clear	**LF53068988**	Price
2" x 60 yds	Clear	**LF53398698**	Price

Scotch® Box Sealing Tapes 371 & 375

- 371 tape adheres instantly to a variety of sufaces
- 375 tape instantly seals single and double wall RSC's
- Tensile strangth 371: 22 lbs./in. and 375: 35 lbs./in.



371



375

Size	Color	Series	Order No.	Price
2" x 109 yds	Clear	371	**LF53158735**	Price
2" x 55 yds	Clear	375	**LF53724060**	Price
3" x 109 yds	Clear	371	**LF53192807**	Price
3" x 55 yds	Clear	375	**LF53724077**	Price

RG300 100# Utility Grade Filament Tape

- An economical fiberglass reinforced polypropylene film combined with an aggressive pressure-sensitive adhesive
- Provides excellent adhesion to corrugated cartons and outstanding holding power
- Designed for light bundling and strapping



Size	Order No.	Price
3/4" x 60 yds	**LF52NF1**	Price
1" x 60 yds	**LF52NF2**	Price

Carton Sealing Tape

- Excellent performance for manual and automatic applications
- Production grade
- Superior tensile strength and adhesion
- Dispenser not included



Size		Order No.	Price
1-7/8" x 328'	Carton Sealing Tape	**KB4871C2110**	Price
2-3/4" x 328'	Carton Sealing Tape	**KB4871C3110**	Price

7100 1.85 Mil Medium Grade Hot Melt Carton Sealing Tape

- Superior adhesion properties, holding force and tensile strength
- Easy unwind ensures consistent, reliable seats to a variety of corrugated and linerboard boxes
- Designed for medium weight, manual box sealing, package repair and bundling applications



Size	Order No.	Price
2" x 110 yds	**LF52F4085**	Price
3" x 110 yds	**LF52F4105**	Price

Scotch® Tape Dispensers for Packaging & Filament Tapes

- Portable, lightweight, easy to operate hand-held tape dispensers
- Features include an adjustable tape brake and tape roll accomodation of 2″ and 3″ size packaging rolls and 1″ x 60″ yards for filament tape



190087



618505



069536

Style	Size	Order No.	Price
Filament Tape	1"	**LF53069536**	Price
Sealing Tape	2"	**LF53190087**	Price
Sealing Tape	3"	**LF53618505**	Price

Production Grade Packaging Tape Dispenser

- Hand dispenser with pistol grip and tension brake
- Side loading for quick changing
- Designed for manual box sealing, packaging and shipping applications
- Tape not included



1969

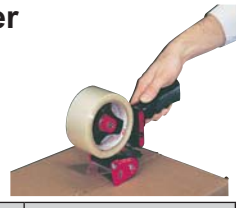


1970

Size	Order No.	Price
2"	**LF521969**	Price
3"	**LF521970**	Price

Carton Sealing Tape Dispenser

- Side loading for quick changing
- Adjustable tension knob
- Tape not included



Size	Order No.	Price
2"	**KB48SL103**	Price
3"	**KB48SL303**	Price

ProLite™ High Performance, Hand-Applied Stretch Film

- Elastic properties keep film tight if load settles
- High strength product requires less film stretching
- Reduced film "neckdown" (width reduction) during tensioning
- Elevated tear and puncture strength
- Significant cost savings advantage over conventional, heavier gauge films
- Sold 4 rolls per minimum order

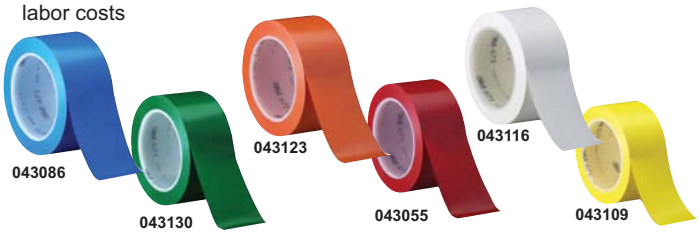




Roll Length	Roll Width	Conventional Film Replacement	Order No.	Price
1500'	18	60-80	**LF5200457**	Price

3M™ Vinyl Tape 471

- Ideal for many color coding, abrasion protection, decoration, sealing, patching, splicing, wrapping and general purpose applications
- Used in paint marking areas
- Clean removal from many surfaces which helps reduce cleanup and labor costs



Color	Size	Order No.	Price
Blue	2" x 36 yds	**LF53043086**	Price
Green	2" x 36 yds	**LF53043130**	Price
Orange	2" x 36 yds	**LF53043123**	Price
Red	2" x 36 yds	**LF53043055**	Price
White	2" x 36 yds	**LF53043116**	Price
Yellow	2" x 36 yds	**LF53043109**	Price

Colored Vinyl Aisle Marking Tape

- Oil, grease and abrasion resistant
- Used for marking aisles
- OSHA approved



Color	Size	Order No.	Price
Yellow	2" x 36 yds	**LF52UT002Y**	Price

Hazard Tape

- High visibility, heavy duty vinyl tape yellow & black for physical hazard
- OSHA approved



Color	Size	Order No.	Price
Yellow / Black	2" x 36 yds	**LF52UT008YB**	Price

3M™ Safety Stripe Tapes 5700 & 5702

- Used to identify or mark traffic and physical areas
- The clear vinyl area over the colored stripes help protect stripes from abrasion
- 5.4 Mil total tape thickness resists snagging



Color	Size	Order No.	Price
Black / White	2" x 36 yds	**LF53043673**	Price
Black / Yellow	2" x 36 yds	**LF53045851**	Price
Black / Yellow	3" x 36 yds	**LF53039515**	Price

Stretch Wrap Film

- Wrap pallet loads to ensure safe and secure delivery
- Protects shipments from dirt and water damage
- Self adhering – each additional layer bonds to the previous layer for added strength
- 4 Rolls per carton



Gauge	Length	Load Capacity	Order No.	Price
60	2000'	2000 lbs	**KB48UNV62018**	Price
80	1000'	2500 lbs	**KB48UFS4G204M**	Price
80	1500'	2500 lbs	**KB48UNV80118**	Price

Teflon Thread Sealant Tape

- Permits easy disassembly, even after many years
- Withstands temperatures: –45° to 550°F
- Withstands pressures: 2000 psi and over



Size	Order No.	Price
1/2" x 520"	**LF52TT1**	Price
3/4" x 260"	**LF52TT2**	Price

3M™ Pipe Thread Sealant Tape 48 & 547

- 2 and 3 mil., high temperature stable (PTFE) pipe thread sealant that provides a leakproof seal with a temperature rated to 500° F (260° C)
- Color: white



Size	Thickness (mil)	Order No.	Price
1/2" x 43 yds	2	**LF53061960**	Price
1/2" x 36 yds	3	**LF53262756**	Price

Empire Caution Tape

- CAUTION printed in black on yellow tape
- Non-pressure sensitive
- Durable 3 Mil plastic
- Yellow tape and Black Lettering





Size	Order No.	Price
200' x 3"	**LF52770201**	Price
1000' x 3"	**LF52771001**	Price

3M™ Industrial Strapping Tape 893

- Heavy duty tape that seals full overlap and telescoping boxes and unitizes pallets
- Low stretch tolerances that hold tight without loosening
- 300 lb. tensile strength, reinforced with glass yard filaments



Size	Color	Order No.	Price
3/4" x 60 yds	Clear	**LF53069381**	Price
1" x 60 yds	Clear	**LF53069398**	Price
2" x 60 yds	Clear	**LF53398469**	Price

Express Stretch Wrap with Handles

- Lightweight rolls reduce the stress in applying the film
- Handles in every carton meaning never having to search for the dispenser
- Excellent puncture and tear resistance handle the most severe protrusions, sharp edges and shipping hazards
- Aggressive cling ensures that layers of film stick together but won't damage the product
- Unmatched optics allow for easy product recognition and a clean appearance



Size	Color	Case Qty	Order No.	Price
3" x 1000'	Clear	18 Rolls	**LF5230300**	Price
20" x 1000'	Clear	4 Rolls	**LF5232000**	Price

3M™ Glass Cloth Tape 361



- Withstands 450°F and intermittent temperatures up to 550°F or higher, depending on heat source
- Very strong abrasion resistant backing for use as masking protection in thermal spray operations
- Silicone adhesive provides long aging, good holding power for a wide range of temperatures
- Used for permanent sealing of high temperature ducts or chambers
- Color: white

Size	Order No.	Price
3/4" x 60 yds	**LF53030161**	Price
1" x 60 yds	**LF53030178**	Price
2" x 60 yds	**LF53042751**	Price
3" x 60 yds	**LF53049941**	Price

3M™ VHB™ Acrylic Foam Tape 5952





- Closed cell acrylic foam carrier
- Comfortable, high strength foam bonds to many low energy surfaces including plastics, most paints, most powder coatings and bare metal
- Color: black

Size	Order No.	Price
1/2" x 36 yds	**LF53599675**	Price
1" x 36 yds	**LF53562297**	Price

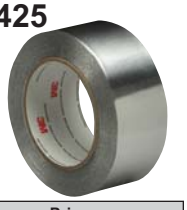
3M™ Removable Transfer Tape 465



- A highly versatile tape consisting of a thin adhesive film, which can be transferred to many dry surfaces
- Once the tape has been removed from the surface, it's virtually impossible to detect any residue remaining on the surface
- Color: clear

Size	Order No.	Price
1/2" x 60 yds	**LF53033353**	Price
1" x 60 yds	**LF53033377**	Price
2" x 60 yds	**LF53042997**	Price

3M™ Aluminum Foil Tape 425



- Shiny, silver, dead soft aluminum foil with transparent, pressure sensitive adhesive
- Aluminum backing provides excellent reflection of both heat and light
- Good candidate as a maskant in electroplating of aluminum because it will not contaminate the bath

Size	Order No.	Price
2" x 60 yds	**LF53605741**	Price

3M™ Double-Sided Tape 415



- High quality, acid-free double sided transparent tape
- Most often used when creating Mylar envelopes, as well as mounting labels and photographs
- Color: clear

Size	Order No.	Price
1" x 36 yds	**LF53033230**	Price
1-1/2" x 36 yds	**LF53033247**	Price
2" x 36 yds	**LF53042942**	Price

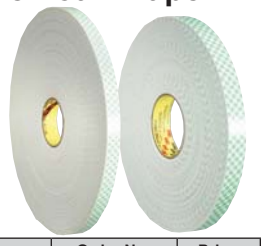
PRES-ON ABRASIVES Shur-Step Pressure Sensitive Non-Skid Tape



- Shur-Step is a specially made waterproof abrasive material that can be applied to floors, stairs, ramps, etc
- Installation requires only minutes with special self-adhesive, and provides long-term protection
- Color: black

Size (in.)	Shape	Order No.	Price
2 x 60	Roll	**MM77GP2060**	Price
4 x 60	Roll	**MM77GP4060**	Price
6 x 60	Roll	**MM77GP6060**	Price
12 x 60	Roll	**MM77GP12060**	Price

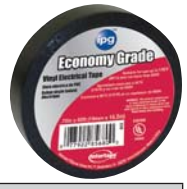
3M™ Industrial Duty 4016 & Heavy Duty Double Coated Urethane Foam Tape 4008



- The tape features a high ultimate bond strength, very good high temperature and solvent resistance and very high shear holding power
- The urethane foams are soft, comfortable and ideal for general purpose use
- Color: off white

Size	Application	Thickness	Color	Order No.	Price
3/4" x 36 yds	Standard	1/16	4016 Off White	**LF53064548**	Price
1" x 36 yds	Standard	1/16	4016 Off White	**LF53064555**	Price
1" x 36 yds	Heavy Duty	1/8	4008 Off White	**LF53064524**	Price

ipg Electrical Tape



- U.L. Approved high, dielectric strength, 10,000 volts, ASTM for tough insulating jobs
- Plenty of stretch; molds snugly to any surface
- Resists water, oils and chemicals

Size	Order No.	Price
3/4" x 60'	**LF52ET1**	Price

LOCTITE® Insulating and Sealing Tape



- Non-sticky, self-fusing, multi-purpose wrap that stretches three times its size
- Temp range -65 to 500 F, tensile strength 700 psi, dielectric strength 400 vpm
- Sticks to itself but not to surfaces
- Leaves no residue
- Waterproof, salt water and UV resistant
- Seals and protects against air and water leakage, corrosion, and scratches

Size	Color	Order No.	Price
1" x 10 ft	Red	**LM501212164**	Price
2" x 36 ft	Black	**LM501496756**	Price

Scotch® Adhesive Transfer Tape 926 & 969



- Offers high performance for bonding fabric or trim
- Splice aluminum coils, bond foam insulation or mount name plates
- 5.0 Mil thick
- Color: clear

		Firm Acrylic		Soft Acrylic	
Size	Color	Order No.	Price	Order No.	Price
1/2" x 36 yds	Clear	**LF53627354**	Price	**LF53156823**	Price
3/4" x 36 yds	Clear	**LF53627361**	Price	**LF53156830**	Price

Fire Blanket

- Used to smother flames, cover injury victims, or to cover stretchers
- Blanket stores in hanging plastic pouch; can be hung or stored
- Size: 62 x 80”



Size	Order No.	Price
62 x 80"	**RT58BTPCO**	Price

MEDI FIRST 120 Pc. Multi-Purpose First Aid Kit

Packed in a sturdy polypropylene carrying case with convenient carry handle. Organized tray keeps contents neat and organized.

- (20) 3/8” x 1-1/2” Plastic bandages
- (1) 2” x 4.1yd Gauze roll
- (30) 1” x 3” Plastic bandages
- (4) Vinyl latex-free gloves
- (1) 0.5” x 5 yd Tape
- (1) Instant cold pack
- (1) Triangular bandage with 2 pins
- (5) 1gm Burn cream ointment
- (2) 5 Pack 3” cotton tips
- (6) 0.9gm Antibiotic ointment
- (2) Finger splints
- (12) Alcohol prep pads
- (1) First Aid Guide – Bilingual
- (3) Sting relief prep pads
- (4) 2” x 2” Sterile gauze pads
- (12) Antiseptic prep pads
- (4) 4” x 4” Sterile gauze pads
- (1) 4.5” Pointed scissors
- (1) 5” x 9” Sterile trauma pad
- (1) Slant edge 3” metal tweezers



Order No.	Price
KB7840120	Price

MEDI FIRST 136 Pc. Multi-Purpose First Aid Kit

This 136 piece multi-purpose first aid kit is packed in a sturdy polypropylene carrying case with convenient carry handle. Organized tray keeps contents neat and organized.

- (20) 3/8” x 1-1/2” Plastic bandages
- (30) 1” x 3” Plastic bandages
- (1) 2” x 4.1yd Gauze roll
- (1) 4” Non-conforming gauze roll
- (1) 1” x 5 yd Tape
- (4) Vinyl latex-free gloves
- (1) Triangular bandage with 2 pins
- (1) Instant cold pack
- (2) 5 pk 3” Cotton tips
- (1) 1oz Steril eye wash
- (6) 1gm Burn cream ointment
- (6) 0.9gm Antibiotic ointment
- (2) Finger splints
- (15) Alcohol prep pads
- (1) First aid guide – bilingual
- (3) Sting relief prep pads
- (15) Antiseptic prep pads
- (2) 2” Round gauze eye pads
- (8) 2” x 2” Steril gauze pads
- (4) 4” x 4” Sterile gauze pads
- (1) 5”x 9” Sterile trauma pad
- (1) CPR face shield
- (1) 4.5” Pointed scissors
- (1) 3” Metal slant edge tweezer





Order No.	Price
KB7840136	Price

MEDI FIRST Refill Items

Style	Size /Count	Order No.	Price
Alcohol Prep Pads	50 Ct.	**KB7822150**	Price
Ammonia Inhalants	10 Ct.	**KB7822712**	Price
Angle Scissor	4.5	**KB7870601**	Price
Antacid	100 Ct.	**KB7880233**	Price
Antacid	250 Ct.	**KB7880248**	Price
Antiseptic Wipes	20 Ct.	**KB7821471**	Price
Bloodstopper Compress	-	**KB7864101**	Price
Cotton Tip Applicator 3"	10 Ct.	**KB7860474**	Price
Decorel Forte Plus	100 Ct.	**KB7842533**	Price
Eye Pads	4 Ct.	**KB7864470**	Price
Eyewash	4 oz	**KB7819818**	Price
Fingertip Bandage	40 Ct.	**KB7861578**	Price
First Aid Book	-	**KB7871401**	Price
Flexible Bandage	7/8 x 3 50 Ct.	**KB7861450**	Price
Ice Pack	Small	**KB7872401**	Price
Knuckle Bandage	40 Ct.	**KB7861678**	Price
Latex Gloves	4 Ct.	**KB7870370**	Price
Medi-Rip Self-Adherent Wrap	2	**KB7860901**	Price
Medic's Choice Eye Drops	1/2 oz	**KB7849566**	Price
Non-Adherent Pads	2 x 3 100 Ct.	**KB7864233**	Price
Non-Aspirin	100 Ct.	**KB7880333**	Price
Pain Relief	100 Ct.	**KB7881133**	Price
Pain Relief	250 Ct.	**KB7881148**	Price
Steril Gauze Pads	3 x 3 2 Ct.	**KB7861273**	Price
Strip Bandages	1 x 3 100 Ct.	**KB7860033**	Price
Tri-Cut Adhesive Tape	5 Yds	**KB7861101**	Price
Triangle Bandage, Non-Sterile	-	**KB7865001**	Price
Triple Antiobotic	25 Ct.	**KB7822373**	Price
Tweezer, Disposable	-	**KB7877233**	Price
Wire Scissor	4.5	**KB7877101**	Price

MEDI FIRST 25 & 50 Person Kits

Meets ANSI Z308.1



Style	Order No.	Price
25 Person Kit	**KB78740P25P**	Price
50 Person Kit	**KB78807P50P**	Price

MEDI FIRST Industrial Cabinets

- These cabinets contain an assortment of adhesive bandages, dressings, eye care products, antiseptics, employee comfort items, and much more
- Convenient door pouches allow for storage of smaller items
- Perfect for industrial work settings, shipping and receiving departments or other remote locations of your facility


756M1SD


745M1


734M1

No. of Shelves	Order No.	Price
2	**KB78756M1SD**	Price
3	**KB78745M1**	Price
4	**KB78734M1**	Price

Type I Safety Cans

- For safer carrying and storing of gasoline and flammable liquids
- Galvanized steel construction
- Equipped with brass pour spout and flame arrestor
- Shown Part # LC50F15 funnel not included
- UL, ULC, FM Approved

MADE IN THE USA



UI4S UI10S UI20S UI50S

Capacity	Dia. (in.)	Height (in.)	Weight (lbs.)	Order No.	Price
2 Quart	9	5-5/16	2.25 lbs	**LC50UI4S**	Price
1 Gallon	9	8	3.52 lbs	**LC50UI10S**	Price
2 Gallon	11-1/4	9-1/2	5.25 lbs	**LC50UI20S**	Price
5 Gallon	12-1/2	13-1/2	7 lbs	**LC50UI50S**	Price

Safety Plunger Cans

MADE IN THE USA

- Ideal for cleaning with flammable or volatile fluids
- Feature brass flame arrestor, dasher screens and pump assemblies, complies with OSHA standards
- When dasher plate is pushed down, safety can dispenses a small amount of liquid to moisten sponges or rags
- Red coated metal cans
- Perforated pan screen serves as a flame arrestor
- Equipped with pump assembly for measured amount of cleaning fluid
- 5-1/4" Dasher diameter
- FM Approved



P704

Capacity	Dia. (in.)	Height (in.)	Weight (lbs.)	Order No.	Price
1 Quart	6-1/4	8	2.34 lbs	**LC50P701**	Price
2 Quart	8	8-1/2	3 lbs	**LC50P702**	Price
4 Quart	8	10-3/4	3.67 lbs	**LC50P704**	Price

Safety Bench & Daub Cans

- For safer cleaning of small parts or swabbing larger ones
- Dasher screens act as fire baffle
- FM Approved and meets OSHA requirements
- Red coated metal cans

MADE IN THE USA

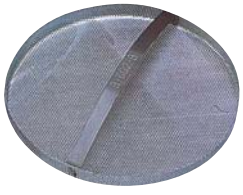


B606

Capacity	Dia. (in.)	Height (in.)	Weight (lbs.)	Order No.	Price
1 Quart	6-1/4	3-5/8	2.17 lbs	**LC50B601**	Price
2 Quart	8	4-1/4	3 lbs	**LC50B602**	Price
4 Quart	8	6-1/2	3.50 lbs	**LC50B604**	Price
6 Quart	7-3/4	9-1/2	3.67 lbs	**LC50B606**	Price
8 Quart	11-1/4	7	8.25 lbs	**LC50B608**	Price

Parts Basket for Models B602/B604

MADE IN THE USA



Description	Order No.	Price
Parts Basket For B602/B604	**LC50BASKET**	Price

Type I Safety Can with F-15 Funnel

- Constructed of 24-gauge hot dipped galvanized steel
- Includes poly yellow funnel
- Double interlock no-weld bottom seam
- Spring closing lid with neoprene gasket that vents at 5 psi internal pressure
- Has a non-sparking flame arrestor and pour spout
- Meets OSHA and NFPA Code 30 requirements and are UL and ULC listed and FM approved for safe handling and storage of gasoline and other flammable liquids (Accepted under CARB)



UI50FS

MADE IN THE USA



UI20FS

Capacity	Dia. (in.)	Weight	Order No.	Price
2 Gallon	11-1/4	5.25 lbs.	**LC50UI20FS**	Price
5 Gallon	12-1/2	7 lbs.	**LC50UI50FS**	Price

Type II Safety Cans

MADE IN THE USA

- Made of galvanized steel
- Helps reduce the danger of explosion while dispensing flammable liquids thru a flexible metal spout
- Cans have flame arrestor in filler opening and pour spout
- UL, ULC, FM Approved



U226S



U251S

Capacity	Dia. (in.)	Height (in.)	Weight (lbs.)	Order No.	Price
2 Gallon	11-1/4	9-1/2	8 lbs	**LC50U226S**	Price
5 Gallon	11-1/4	15-7/8	10 lbs	**LC50U251S**	Price

Poly Oily Waste Cans

- For safe temporary storage of solvent, waste rags and other materials subject to spontaneous combustion
- Won't rust or dent
- Resistant to most chemical compounds
- Self-closing lid with foot lever
- Compliance: OSHA 29 CFR 1910.108 and OSHA 29 CFR



937FL

Capacity	Dia. (in.)	Height	Weight (lbs.)	Order No.	Price
6 Gallon	16-1/2	16	9 lbs	**LC50933FL**	Price
10 Gallon	22	18	14 lbs	**LC50935FL**	Price
14 Gallon	22	21	16 lbs	**LC50937FL**	Price

Master Lock General Security

The #1 Commercial Security Lock

- For all types of security applications, including perimeter and storefront gates, tool cribs, construction equipment, warehouse, vending and truck doors.
- Reinforced laminated steel bodies
- Pin tumbler key security provides thousands of key changes
- Hardened steel and alloy shackles for extra cut resistance (except 3/16" shackle)
- Double-locking mechanisms provide extra pry resistance (1-1/4" body is single-locking)
- Proprietary rustproofing for longer life
- Full range of sizes to best secure your applications

Item	Body Width (in.)	Shackle Dia. (in.)	Vertical Shackle Clearance (in.)	Keyed	Order No.	Price
	1-1/8	3/16	9/16	Different	**KP907D**	Price
	1-1/8	3/16	2-1/2	Different	**KP907LJ**	Price
	1-9/16	9/32	3/4	Different	**KP903D**	Price
	1-3/4	5/16	15/16	Different	**KP901D**	Price
	1-3/4	5/16	2-1/2	Different	**KP901LJ**	Price
	2	3/8	1	Different	**KP905D**	Price
	2	3/8	2-1/2	Different	**KP905LJ**	Price
	1-1/8	3/16	2-1/2	Alike	**KP907KA**	Price
	1-1/8	3/16	2-1/2	Alike	**KP907KALJ**	Price
	1-9/16	9/32	3/4	Alike	**KP903KA**	Price
	1-9/16	9/32	9/16	Alike	**KP903KALF**	Price
	1-3/4	5/16	15/16	Alike	**KP901KA**	Price
	1-3/4	5/16	2-1/2	Alike	**KP901KALJ**	Price
	2	3/8	1	Alike	**KP905KA**	Price
	2	3/8	2-1/2	Alike	**KP905KALJ**	Price

Master Lock Combination Locks

Resettable 4 Digit Dial Combination

- Set your own combination convenience with this high security lock
- Reset to any of 10,000 numbers
- 2" Wide solid brass case for strength and weatherability
- Heavy hardened shackle
- 176 Features a reset tool for fast reset of combination. Features an optional override key available for supervisor's immediate access. Special order, call for pricing.
- Shown with optional override key
- Override Key - KP90176Custom - Call for Pricing
- Custom orders can be ordered in any quantity of locks needed


176



178BLK

Body Width (in.)	Shackle Dia. (in.)	Vertical Shackle Clearance (in.)	Keyed	Order No.	Price
2	9/32	3/4	Resettable	**KP90175D**	Price
2	9/32	3/4	Resettable	**KP90176**	Price
2	9/32	3/4	Resettable	**KP90178BLK**	Price

Master Lock Pro Series® All Weather

High Visibility Aluminum

- Safeguard lives and satisfy OSHA, Master Lock® high visibility aluminum padlocks provide safety color recognition plus high security
- Exclusive cover protects lock from water, ice, dirt and grime
- Heavy steel bodies withstand forcible attacks
- Hardened steel alloy shackles provide superior cut resistance
- Greatest key security available
- 5-Pin tumbler Pro Series cylinders provide tens of thousands of key changes
- Special spool pin tumblers are virtually impossible to pick
- Proprietary and chrome rustproofing provides longer life
- Rekeyable – replaceable cylinder and shackle



6125



6127

			Alike		Different	
Body Width (in.)	Shackle Dia. (in.)	Vertical Shackle Clearance (in.)	Order No.	Price	Order No.	Price
2-1/4	5/16	1-1/8	**KP906121KA**	Price	**KP906121**	Price
2-3/8	3/8	1-3/8	**KP906125KA**	Price	**KP906125**	Price
2-5/8	7/16	1-3/8	**KP906127KA**	Price	**KP906127**	Price

Master Lock Padlock Wall Stations

- Virtually indestructible, these wall mounted stations keep padlocks, tags, and hasps within easy reach
- Xenoy, aluminum, or steel padlocks in 4, 10 or 20 lock formats
- Unfilled stations also available
- 4-Lock Station (12-1/4 x 16 x 1-3/4) contains (4) padlocks, (2) 420 hasps, (1) 497A tags (12/pack)
- 10-Lock Station (15-1/2 x 22 x 1-3/4) contains (10) padlocks, (2) 420 hasps, (2) 497A tags (12/pack)
- 20-Lock Station (22 x 22 x 1-3/4) contains (20) padlocks, (4) 420 hasps, (4) 497A tags (12/pack)

Item	Center Size (in.)	No. of Locks Held	Description	Order No.	Price
	12-1/4 x 16 x 1-3/4	4	Unfilled, Base & Cover	**KP901482B**	Price
	12-1/4 x 16 x 1-3/4	4	With (4) 1106 Aluminum Padlocks	**KP901482BP1106**	Price
	12-1/4 x 16 x 1-3/4	4	With (4) 3Red Steel Padlocks	**KP901482BP3**	Price
	12-1/4 x 16 x 1-3/4	4	With (4) Xenoy Padlocks	**KP901482BP410**	Price
	15-1/2 x 22 x 1-3/4	10	Unfilled, Base & Cover	**KP901483B**	Price
	15-1/2 x 22 x 1-3/4	10	With (10) 3Red Steel Padlocks	**KP901483BP3**	Price
	15-1/2 x 22 x 1-3/4	10	With (10) Xenoy Padlocks	**KP901483BP410**	Price
	22 x 22 x 1-3/4	20	Unfilled, Base & Cover	**KP901484B**	Price

Master Lock Xenoy Padlocks

- Padlocks designed specifically for lockout/tagout
- These special padlocks are stamped with the words “Safety Lockout” to alert workers to the hazard
- Permanent write-on labels eliminate the need for a separate tag
- Choice of eight colors — Red, Yellow, Blue, Orange, Green, Purple, Black and Teal
- Over 100,000 key changes available to ensure no key duplication in your facility–no matter how many employees you have
- 1-1/2” shackle height. Available Keyed Different or in groups of Keyed Alike



				Alike		Different	
Body Width (in.)	Shackle Dia. (in.)	Vertical Shackle Clearance (in.)	Color	Order No.	Price	Order No.	Price
1-1/2	1/4	1-1/2	Black	**KP90410BLKKA**	Price	**KP90410BLK**	Price
1-1/2	1/4	1-1/2	Blue	**KP90410BLUKA**	Price	**KP90410BLU**	Price
1-1/2	1/4	1-1/2	Green	**KP90410GRNKA**	Price	**KP90410GRN**	Price
1-1/2	1/4	1-1/2	Orange	**KP90410ORJKA**	Price	**KP90410ORJ**	Price
1-1/2	1/4	1-1/2	Purple	**KP90410PRPKA**	Price	**KP90410PRP**	Price
1-1/2	1/4	1-1/2	Red	**KP90410REDKA**	Price	**KP90410RED**	Price
1-1/2	1/4	1-1/2	Teal	**KP90410TEALKA**	Price	**KP90410TEAL**	Price
1-1/2	1/4	1-1/2	Yellow	**KP90410YLWKA**	Price	**KP90410YLW**	Price

Master Lock American Lock Aluminum Padlocks

High Visibility Aluminum

- Heavy Duty, keyed differently, aluminum lockout padlocks feature a color anodized 1-1/2”W × 3/4” T body
- 1/4” shackle dia. and a 5-pin cylinder offering 10,000 key changes to minimize risk of key duplication in your facility
- 1-1/2” shackle length in 8 colors — Red, Blue, Gold, Black, Green, Purple, Brown, and Orange



Body Width (in.)	Shackle Dia. (in.)	Vertical Shackle Clearance (in.)	Keyed	Color	Order No.	Price
1-1/2	1/4	1-1/2	Different	Black	**KP90A1106BLK**	Price
1-1/2	1/4	1-1/2	Different	Blue	**KP90A1106BLU**	Price
1-1/2	1/4	1-1/2	Different	Brown	**KP90A1106BRN**	Price
1-1/2	1/4	1-1/2	Different	Green	**KP90A1106GRN**	Price
1-1/2	1/4	1-1/2	Different	Orange	**KP90A1106ORJ**	Price
1-1/2	1/4	1-1/2	Different	Purple	**KP90A1106PRP**	Price
1-1/2	1/4	1-1/2	Different	Red	**KP90A1106RED**	Price
1-1/2	1/4	1-1/2	Different	Yellow	**KP90A1106YLW**	Price

Master Lock Lockout Kits

All Master Lock Lockout Kits use 410 Xenoy padlocks designed by Safety Directors specifically for Safety Lockout. Kits available with Electrical focus (E), Valve focus (V), or both (VE)

- 1457 Tool box kit is ideal for individuals who need to carry a greater selection of lockout devices and padlocks. All padlocks are Keyed Alike in this kit.
- 1458 Group Organizer Kit is for groups of workers who need to lock out equipment. Includes 6 keyed different padlocks and a wide assortment of electrical and valve lockout devices. Organizer Case keeps locks and devices organized and in their place. Includes free key charting service from Master Lock.

1457E410KA – Electrical Focus. Includes tool box, 3 Keyed alike padlocks for a single worker's convenience, 1 compact circuit breaker padlock, 1 labeled snap-on hasp, 1 hasp, 1 wall switch lockout, 12 tags, 2 single pole, 1 double pole, and one 480/600 volt lockout device. Room for adding additional padlocks and lockout devices.



1457V410KA – Valve Focus. Includes tool box, 3 Keyed alike padlocks for a single worker's convenience, 1 labeled snap-on hasp, 1 hasp, includes 1 adjustable cable lockout, 3 gate valve covers to fit 1" to 6.5" valve handles, 1 small and 1 large ball valve lockout device, and 12 tags. Room for adding additional padlocks and lockout devices.

1457VE410KA – For Valve and Electrical Lockout. Includes tool box, 3 Keyed Alike padlocks for a single worker's convenience, 1 compact circuit breaker padlock, 1 hasp, 1 labeled snap-on hasp, 3 single pole, 1 double pole, 1 480/600 volt lockout devices and 1 wall switch lockout. For valve lockout includes 1 adjustable cable lockout, 3 gate valve covers to fit 1" to 6.5" valve handles, 1 small and 1 large ball valve lockout device, and 12 tags.



1458VE410 – Comprehensive Kit for use by groups to lockout Valves and Electrical. Includes Organizer Case, 6 Keyed different padlocks, 2 compact circuit breaker padlocks, 1 hasp, 1 labeled snap-on hasp, 6 single pole, 2 double pole, 1 480/600 volt lockout devices and 2 wall switch lockouts. Also includes 1 small and 1 large plug lockouts. For valve lockout includes 1 adjustable cable lockout, 3 gate valve covers to fit 1" to 6.5" valve handles, 1 small and 1 large ball valve lockout device, and 12 tags.



Description	Order No.	Price
Electrical Lockout Kit- Keyed Alike Padlocks	**KP901457E410KA**	Price
Valve & Electrical Lockout Kit-Keyed Alike Padlocks	**KP901457VE410KA**	Price
Valve & Electrical Organizer with 6 Keyed different Padlocks	**KP901458VE410**	Price

Master Lock Lockout Hasps and Tags

- Choose from two sizes of steel hasps with red handles
- Model 427 offers durable stainless steel and aluminum construction
- Offers an easy to use snap-on feature and I.D. label in English, French, or Spanish
- Tags are heavy duty polyester laminate to withstand water, grease and extreme temperatures

427



420



421



Description (in.)	Type	Order No.	Price
1-1/8 x 5 x 2-3/8	Lockout Hasp	**KP90421**	Price
1-3/8 x 7 x 3	Lockout Hasp	**KP90427**	Price
1 x 4-1/2 x 1-3/4	Lockout Hasp	**KP90420**	Price
5-3/4 x 3-1/8	Heavy Duty Tags	**KP90497A**	Price

Master Lock Gate Valve Lockout

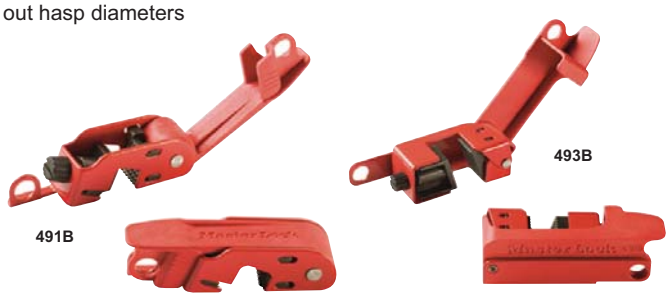
- Each size rotates into itself and nests within the next larger size to take up less space when stored or to fit in toolboxes
- Durable Xenoy stands up to extreme high and low temperatures, sunlight and chemicals
- Includes labels in English, Spanish, and French



Description	Order No.	Price
Fits 1" to 3" Diameter Handles	**KP90480**	Price
Fits 2" to 5" Diameter Handles	**KP90481**	Price
Fits 4" to 6-1/2" Diameter Handles	**KP90482**	Price
Fits 6" to 10" Diameter Handles	**KP90483**	Price

Master Lock Grip Tight™ Circuit Breaker Lockout

- Secure and simple mounting for a solid lockout
- Grips tight with simple thumb turn and clamping handle
- The Grip Tight Circuit Breaker lockout offers superior holding power
- Durable construction with powder coated steel and reinforced polymer allows operation in harsh environments and both devices accept all American Lock® and Master Lock® safety padlock shackle and lock-out hasp diameters



Description	Order No.	Price
Single and Double Pole Toggles	**KP90493B**	Price
Tall & Wide Toggles	**KP90491B**	Price
2 Pc Set, 1 each 491B, 493B	**KP90506**	Price

Admittance & Exit



7" x 10" KB70500
10" x 14" KB70505



7" x 10" KB70510
10" x 14" KB70515



7" x 10" KB70520
10" x 14" KB70525



7" x 10" KB70530
10" x 14" KB70535



7" x 10" KB70540
10" x 14" KB70545



7" x 10" KB70550
10" x 14" KB70555



7" x 10" KB70560
10" x 14" KB70565



7" x 10" KB70570
10" x 14" KB70575



7" x 10" KB70580
10" x 14" KB70585



7" x 10" KB70590
10" x 14" KB70595



7" x 10" KB70600
10" x 14" KB70605



7" x 10" KB70610
10" x 14" KB70615



7" x 10" KB70620
10" x 14" KB70625



7" x 10" KB70630
10" x 14" KB70635



7" x 10" KB70640
10" x 14" KB70645



7" x 10" KB70650
10" x 14" KB70655

ACCUFORM

Accident Prevention Signs

Sign standards, OSHA 29 CFR§ 1910.145 and ANSI Z535, provide guidance for specifications, design and application of accident prevention signs. Signs indicate potential, type, and degree of hazards that may lead to accidental injury or property damage and convey a rapidly understood message on how to avoid hazards.

- **Adhesive Vinyl (V):** Flexible 4-mil thick vinyl with permanent acrylic adhesive back. Moisture resistant with scored backing for easy peel-off and apply. Ideal for light duty use.
- **Plastic (P):** Moderate-duty .055" thick plastic ideal for indoors and sheltered outdoor environments. Impact resistant with 3/16" corner mounting holes.
- **Aluminum (A):** Rigid .040" aluminum printed and protected with UV overlaminate. Durable for indoor and outdoor harsh environments. 3/16" corner mounting holes.

How To Order Signs

- Select Sign: KB70500
- Select Material Code: Plastic (P)
- Order Part Number: KB70500P

Price per Each

Material	Material Code	7" x 10"	10" x 14"
Adhesive Vinyl	V	Price	Price
Plastic	P	Price	Price
Aluminum	A	Price	Price

Chemical & Hazardous Materials



7" x 10" KB70830
10" x 14" KB70835



7" x 10" KB70670
10" x 14" KB70675



7" x 10" KB70680
10" x 14" KB70685



7" x 10" KB70690
10" x 14" KB70695



7" x 10" KB70700
10" x 14" KB70705



7" x 10" KB70710
10" x 14" KB70715



7" x 10" KB70720
10" x 14" KB70725



7" x 10" KB70730
10" x 14" KB70735

Confined Space



7" x 10" KB70740
10" x 14" KB70745



7" x 10" KB70750
10" x 14" KB70755



7" x 10" KB70760
10" x 14" KB70765



7" x 10" KB70770
10" x 14" KB70775

Electrical



7" x 10" KB70780
10" x 14" KB70785



7" x 10" KB70790
10" x 14" KB70795



7" x 10" KB70800
10" x 14" KB70805



7" x 10" KB70810
10" x 14" KB70815

Equipment, Machinery, Operations



7" x 10" KB70820
10" x 14" KB70825



7" x 10" KB70660
10" x 14" KB70665



7" x 10" KB70840
10" x 14" KB70845



7" x 10" KB70850
10" x 14" KB70855

Fire & First Aid



7" x 10" KB70860
10" x 14" KB70865



7" x 10" KB70870
10" x 14" KB70875

Safety Incentive



7" x 10" KB70880
10" x 14" KB70885



7" x 10" KB70890
10" x 14" KB70895

Personal Protective Equipment

7" x 10" KB70900
10" x 14" KB70905

7" x 10" KB70910
10" x 14" KB70915

7" x 10" KB70920
10" x 14" KB70925

7" x 10" KB70930
10" x 14" KB70935

Slips, Trips & Falls

7" x 10" KB70940
10" x 14" KB70945

7" x 10" KB70950
10" x 14" KB70955

Smoking Control

7" x 10" KB70960
10" x 14" KB70965

7" x 10" KB70970
10" x 14" KB70975

Custom Signs are also Available

Call us or Visit us Online.

Traffic - Industrial

7" x 10" KB70980
10" x 14" KB70985

7" x 10" KB70990
10" x 14" KB70955

Accident Prevention Tags also available. See website.

Material Handling



Casters..... I13–I14

CNC/NC Tooling Holders & Carts I48–I19

Dispensers for Drills, Taps, Etc. .. I43–I46

Drum Handling Equipment I79–I82, I61

Hand Trucks I60–I61

Hoists/Pullers & Accessories I66, I74

Hydraulic Cylinders I70–I73

Jacks..... I68

Lockers..... I30–I31

Maintenance Carts I50–I51

Mobile Work Station I20

Modular Cabinets I47

Pallet Trucks I62–I63

Seating..... I57–I59

Service Carts I53–I54

Shelving..... I34–I38

Slings..... I64–I65

Storage Bins I39–I43

Storage Cabinets I21–I29

Storage Tool Boards & Carts I15

Tarps..... I67

Tie Downs I66–I67

Tool Bags & Cases I16–I20

Tool Chests, Cabinets, Boxes, Accessories..... I2–I13

Platform Trucks. I52

Work Benches & Stations I55–I56

Work Lifters & Tables I77

KENNEDY Machinist's Chests

MADE IN THE USA

- High Security Tubular Locking System
- Drawers and top till wool felt-lined
- Drop front panel
- Lid Support
- Adjustable drawer dividers
- Heavy duty plated side handles (except 520 & 620)
- Kennedy limited lifetime warranty



RX50620



RX50526B



RX5052611B



RX50520B



RX503611B

Color	No. of Drawers	Slides	Width (in.)	Depth (in.)	Height (in.)	MFG Model #	Weight	Order No.	Price
Brown Wrinkle	3	Friction	20.13	8.5	13.63	620B	32 lbs	**RX50620**	Price
Brown Wrinkle	7	Friction	20.13	8.5	13.63	520B	35 lbs	**RX50520B**	Price
Brown Wrinkle	8	Friction	26.75	8.5	13.63	526B	44 lbs	**RX50526B**	Price
Brown Wrinkle	11	Friction	26	12	19	3611B	75 lbs	**RX503611B**	Price
Brown Wrinkle	11	Friction	26	8	18	52611B	56 lbs	**RX5052611B**	Price

KENNEDY Machinist's Add-On Bases

- Adds two extra drawers to your storage units
- High security tubular locking system
- Top drawer felt lined
- Heavy duty side handles for easy carry
- Kennedy limited lifetime warranty

MADE IN THE USA



RX50MC22B



RX505150



RX50MC28B

Color	No. of Drawers	Slides	Width (in.)	Depth (in.)	Height (in.)	Use With	MFG Model #	Weight	Order No.	Price
Brown Wrinkle	2	Friction	21.63	9.63	7.88	520 or 620 Machinists' Chests	MC22B	19 lbs	**RX50MC22B**	Price
Brown Wrinkle	2	Friction	26.75	12.5	9.5	526, 52611, 3611	5150B	37 lbs	**RX505150**	Price
Brown Wrinkle	2	Friction	28.13	9.63	7.88	526, 52611, 3611	MC28B	23 lbs	**RX50MC28B**	Price

KENNEDY Mechanic's Chests

- Heavy duty drawer slides hold up to 80 lbs. per drawer
- High security tubular locking system
- Durable, powder coat finish
- Kennedy limited lifetime warranty


RX50263B


RX502805B


RX50285B


RX50266B


RX50360B


RX502812B


RX50263SR


RX502805SR


RX50285SR


RX50266SR


RX50360SR


RX502812SR

No. of Drawers	Color	Slides	Width (in.)	Depth (in.)	Height (in.)	Use With	MFG Model #	Weight	Order No.	Price
5	Brown Wrinkle	-	27	18	35	20" or 26" Wide Chests	275B	121 lbs	**RX50275B**	Price
5	Brown Wrinkle	-	29	20	35	26" or 28" Wide Chests	295B	140 lbs	**RX50295B**	Price
3	Brown Wrinkle	Friction	26.13	12.06	14.75	27", 29" or 34" Roller Cabinets	263B	50 lbs	**RX50263B**	Price
3	Red	Friction	26.13	12	14.75	27", 29" or 34" Roller Cabinets	263R	50 lbs	**RX50263SR**	Price
5	Brown Wrinkle	Ball Bearing	27	18	16.63	27" Wide Roller Cabinets	285XB	84 lbs	**RX50285XB**	Price
5	Brown Wrinkle	Ball Bearing	29	20	16.63	29" Wide Roller Cabinets	2805XB	96 lbs	**RX502805XB**	Price
5	Brown Wrinkle	Friction	27	18	16.63	27" Wide Roller Cabinets	285B	84 lbs	**RX50285B**	Price
5	Brown Wrinkle	Friction	29	20	16.63	29" Wide Roller Cabinets	2805B	96 lbs	**RX502805B**	Price
5	Red	-	29	20	35	-	295XR	140 lbs	**RX50295XR**	Price
5	Red	Ball Bearing	27	18	16.63	27" Wide Roller Cabinets	285XR	84 lbs	**RX50285XR**	Price
5	Red	Friction	27	18	16.63	27" Wide Roller Cabinets	285R	84 lbs	**RX50285SR**	Price
5	Red	Friction	29	20	16.63	29" Wide Roller Cabinets	2805R	96 lbs	**RX502805SR**	Price
6	Brown Wrinkle	Friction	26.13	12	14.75	27" or 29" Roller Cabinets	266B	58 lbs	**RX50266B**	Price
6	Red	Friction	26.13	12	14.75	27" or 29" Roller Cabinets	266R	58 lbs	**RX50266SR**	Price
10	Brown Wrinkle	Friction	26.13	12.06	18.88	27", 29" or 34" Roller Cabinets	360B	75 lbs	**RX50360B**	Price
10	Red	Friction	26.13	12.06	18.88	27", 29" or 34" Roller Cabinets	360R	75 lbs	**RX50360SR**	Price
12	Brown Wrinkle	Friction	28.63	12	18.88	29" or 34" Wide Roller Cabinets	2812B	78 lbs	**RX502812B**	Price
12	Red	Friction	28.63	12	18.88	29" or 34" Wide Roller Cabinets	2812R	78 lbs	**RX502812SR**	Price

KENNEDY Mechanic's Add-On Bases

MADE IN THE USA

- Adds extra drawers to your storage units
- High security tubular locking system
- Heavy duty side handles for easy carry (except risers)
- Kennedy limited lifetime warranty


RX502602B


RX502902B


RX502603B


RX502604B


Riser
RX502600B


RX502602SR


RX502902SR


RX502603SR


RX502604SR


Riser
RX502600SR

Color	No. of Drawers	Slides	Width (in.)	Depth (in.)	Use With	Height (in.)	Weight	MFG Model #	Order No.	Price
Brown Wrinkle	2	Friction	26.63	12.5	263, 266, 360 Chests / 27", 29" or 34" Wide Roller Cabinets	11.75	40 lbs	2602B	**RX502602B**	Price
Brown Wrinkle	2	Friction	28.75	12.5	2812 and 2806 Chests / 29" or 34" Roller Cabinets	11.75	46 lbs	2902B	**RX502902B**	Price
Brown Wrinkle	3	Friction	26.63	12.5	263, 266, 360 Chests / 27", 29" or 34" Wide Roller Cabinets	11.75	43 lbs	2603B	**RX502603B**	Price
Brown Wrinkle	4	Friction	26.75	12.5	263, 266, 360 Chests / 27", 29" or 34" Wide Roller Cabinets	11.75	45 lbs	2604B	**RX502604B**	Price
Red	2	Friction	26.63	12.5	263, 266, 360 Chests / 27", 29" or 34" Wide Roller Cabinets	11.75	40 lbs	2602R	**RX502602SR**	Price
Red	2	Friction	28.75	12.5	2812 and 2806 Chests / 29" or 34" Roller Cabinets	11.75	46 lbs	2902R	**RX502902SR**	Price
Red	3	Friction	26.63	12.5	263,266, 360 Chests / 27", 29" or 34" Wide Roller Cabinets	11.75	43 lbs	2603R	**RX502603SR**	Price
Red	4	Friction	26.75	12.5	263, 266, 360 Chests / 27", 29" or 34" Wide Roller Cabinets	11.75	45 lbs	2604R	**RX502604SR**	Price
Brown Wrinkle	Riser	-	26.63	12.5	263, 266, 360 Chests / 27", 29" or 34" Wide Roller Cabinets	11.75	19 lbs	2600B	**RX502600B**	Price
Red	Riser	-	26.63	12.5	263, 266, 360 Chests / 27", 29" or 34" Wide Roller Cabinets	11.75	19 lbs	2600R	**RX502600SR**	Price

Shop Series Medium Duty Chests, Cabinets & Intermediates

- Medium use / Medium capacity
- Friction drawer slides (Red units)
- Full Extension Ball bearing drawer slides (Black units)
- Full width drawer pulls
- Internal keyed-locking system
- 1 Year Limited Warranty


RX61SIN263RDF


RX61SCH267RDF


RX61SCH264RDF


RX61SCA265RDF


RX61SCA26514RDF


RX61STC266RDF


RX61SIN262BKB


RX61SCH265BKB


RX61SCH264BKB


RX61SCA264BKB


RX61SCA265BKB


RX61STC265BKB

Type - Combination Cabinet/Tool Chest											
No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Caster Size (in.)	Color	Drawer Type	Material	Lid Support	Weight	Order No.	Price
5	26.5	14	43.5	3 x 1	Black	Ball Bearing	Steel	Yes	71 lbs	**RX61STC265BKB**	Price
6	26.5	14	43.5	3 x 1	Red	Friction	Steel	No	86 lbs	**RX61STC266RDF**	Price

Type - Intermediate Drawer											
No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Caster Size (in.)	Color	Drawer Type	Material	Lid Support	Weight	Order No.	Price
2	26	12	12	-	Black	Ball Bearing	Steel	N/A	26 lbs	**RX61SIN262BKB**	Price
3	26	12	12	-	Red	Friction	Steel	N/A	33 lbs	**RX61SIN263RDF**	Price

Type - Roller Cabinet										
No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Caster Size (in.)	Color	Drawer Type	Material	Weight	Order No.	Price
4	26	18	32	4 x 2	Black	Ball Bearing	Steel	72 lbs	**RX61SCA264BKB**	Price
5	26	14	32	4 x 2	Red	Friction	Steel	63 lbs	**RX61SCA26514RDF**	Price
5	26	18	32	4 x 2	Black	Ball Bearing	Steel	72 lbs	**RX61SCA265BKB**	Price
5	26	18	32	4 x 2	Red	Friction	Steel	75 lbs	**RX61SCA265RDF**	Price

Type - Tool Cabinet									
No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Color	Drawer Type	Material	Weight	Order No.	Price
3	26.5	18	32	Black	Ball Bearing	Steel	57 lbs	**RX61SCA263BKB**	Price

Type - Tool Chest										
No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Color	Drawer Type	Material	Lid Support	Weight	Order No.	Price
4	26	12	15.5	Red	Friction	Steel	No	42 lbs	**RX61SCH264RDF**	Price
4	26	12	15.5	Black	Ball Bearing	Steel	Yes	42 lbs	**RX61SCH264BKB**	Price
5	26	12	17.5	Black	Ball Bearing	Steel	Yes	42 lbs	**RX61SCH265BKB**	Price
7	26	12	17.5	Red	Friction	Steel	No	47 lbs	**RX61SCH267RDF**	Price

Industrial Chests, Cabinets & Intermediates

- Industrial use / Industrial capacity
- Full-Extension ball-bearing drawer slides support up to 125 lbs
- Durable handles for easy lifting (chests)
- Sturdy tubular handle (roller cabinets)
- Standard casters 5” x 2”
- Internal keyed locking system
- Non-slip drawer liners included
- 7 Year Limited Warranty



Type - Tool Chest												
No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Color	Non-Slip Drawer Liner	Material	Lid Support	Locking System	Weight	Drawer Type	Order No.	Price
5	26	16	20	Black	Yes	Steel	Yes	Keyed Internal Lock Bar	52 lbs	Ball Bearing	**RX61WCH265BK**	Price
5	26	16	20	Red	Yes	Steel	Yes	Keyed Internal Lock Bar	52 lbs	Ball Bearing	**RX61WCH265RD**	Price
6	26	12	15.5	Black	Yes	Steel	Yes	Keyed Internal Lock Bar	52 lbs	Ball Bearing	**RX61WCH266BK**	Price
6	26	12	15.5	Red	Yes	Steel	Yes	Keyed Internal Lock Bar	52 lbs	Ball Bearing	**RX61WCH266RD**	Price
8	41	16	20	Black	Yes	Steel	Yes	Keyed Internal Lock Bar	146 lbs	Ball Bearing	**RX61WCH418BK**	Price
8	41	16	20	Red	Yes	Steel	Yes	Keyed Internal Lock Bar	143 lbs	Ball Bearing	**RX61WCH418RD**	Price

Type - Intermediate Drawer											
No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Color	Non-Slip Drawer Liner	Material	Lid Support	Locking System	Weight	Drawer Type	Order No.	Price
2	26	16	10.25	Black	Yes	Steel	Yes	Keyed Internal Lock Bar	37 lbs	Ball Bearing	**RX61WIN262BK**	Price
2	26	16	10.25	Red	Yes	Steel	Yes	Keyed Internal Lock Bar	37 lbs	Ball Bearing	**RX61WIN262RD**	Price

Type - Roller Cabinet												
No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Caster Size (in.)	Load Capacity	Color	Non-Slip Drawer Liner	Material	Locking System	Weight	Drawer Type	Order No.	Price
5	26.5	18	34.5	5 x 2	700 lbs	Black	Yes	Steel	Keyed Internal Lock Bar	113 lbs	Ball Bearing	**RX61WCA265BK**	Price
5	26.5	18	34.5	5 x 2	700 lbs	Red	Yes	Steel	Keyed Internal Lock Bar	113 lbs	Ball Bearing	**RX61WCA265RD**	Price
6	26	18	41	5 x 2	700 lbs	Black	Yes	Steel	Keyed Internal Lock Bar	130 lbs	Ball Bearing	**RX61WCA266BK**	Price
6	26	18	41	5 x 2	700 lbs	Red	Yes	Steel	Keyed Internal Lock Bar	130 lbs	Ball Bearing	**RX61WCA266RD**	Price
11	41	18	37.5	5 x 2	700 lbs	Black	Yes	Steel	Keyed Internal Lock Bar	225 lbs	Ball Bearing	**RX61WCA4111BK**	Price
11	41	18	37.5	5 x 2	700 lbs	Red	Yes	Steel	Keyed Internal Lock Bar	225 lbs	Ball Bearing	**RX61WCA4111RD**	Price

KENNEDY 3-Drawer Chest & 4-Drawer Roller Cabinet

MADE IN THE USA

Chest:
- Drawers and top till wool felt-lined
- Vinyl cushioned, steel core top handle
- High security tubular locking system
- Adjustable drawer dividers
- Friction drawer slides
- Kennedy limited lifetime warranty

Roller Cabinet:
- Tubular push handle
- Ball bearing drawer slides
- High security tubular locking system
- 5 x 1-1/4" roller bearing casters
- Kennedy limited lifetime warranty
- Drawer liners sold separately



RX50620



RX5021040B

Type - Chest								
Color	No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	MFG Model #	Weight	Order No.	Price
Brown Wrinkle	3	20.13	8.5	13.63	620B	32 lbs	**RX50620**	Price

Type - Roller Cabinet									
Color	No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	MFG Model #	Weight	Darawer Liner	Order No.	Price
Brown Wrinkle	4	20.5	18	34	21040B	133 lbs	RX5584038	**RX5021040B**	Price

KENNEDY Roller Cabinets

MADE IN THE USA

- Transportable, versatile and made to last
- Constructed of industrial grade 18 ga. steel
- Ball bearing drawer slides
- High Security Tubular Locking System
- Tubular end handles
- Friction available upon request
- Kennedy Limited Lifetime Warranty
- Drawer Liners Sold Seperately



RX50275SR



RX50378XB



RX50378XR



RX50348XB



RX50348XR

Color	No. of Drawers	Drawer Type	Width (in.)	Depth (in.)	Height (in.)	Caster Size (in.)	Use With	MFG Model #	Drawer Liner	Weight	Order No.	Price
Brown Wrinkle	3	Ball Bearing	27	18	35	5 x 2	20" or 26" Wide Chests	273XB	RX5584037	4.55	**RX50273XB**	Price
Brown Wrinkle	5	Ball Bearing	27	18	35	5 x 2	20" or 26" Wide Chests	275XB	RX5584037	4.55	**RX50275XB**	Price
Brown Wrinkle	5	Ball Bearing	29	20	35	5 x 2	26" or 28" Wide Chests	295XB	RX5584030	5.50	**RX50295XB**	Price
Brown Wrinkle	6	Ball Bearing	27	18	39	5 x 2	20" or 26" Wide Chests	376XB	RX5584037	4.55	**RX50376XB**	Price
Brown Wrinkle	7	Ball Bearing	27	18	35	5 x 2	20" or 26" Wide Chests	277XB	RX5584037	4.55	**RX50277XB**	Price
Brown Wrinkle	7	Ball Bearing	29	20	35	5 x 2	26" or 28" Wide Chests	297XB	RX5584030	5.50	**RX50297XB**	Price
Brown Wrinkle	8	Ball Bearing	27	18	39	5 x 2	26" or 28" Wide Chests	378XB	RX5584037	4.55	**RX50378XB**	Price
Brown Wrinkle	8	Ball Bearing	34	20	40	5 x 2	26" or 28" Wide Chests	348XB	RX5584027	6.55	**RX50348XB**	Price
Red	3	Ball Bearing	27	18	35	5 x 2	20" or 26" Wide Chests	273XR	RX5584037	4.55	**RX50273XR**	Price
Red	5	Ball Bearing	27	18	35	5 x 2	20" or 26" Wide Chests	275XR	RX5584037	4.55	**RX50275XR**	Price
Red	6	Ball Bearing	27	18	39	5 x 2	20" or 26" Wide Chests	376XR	RX5584037	4.55	**RX50376XR**	Price
Red	7	Ball Bearing	27	18	35	5 x 2	20" or 26" Wide Chests	277XR	RX5584037	4.55	**RX50277XR**	Price
Red	7	Ball Bearing	29	20	35	5 x 2	26" or 28" Wide Chests	297XR	RX5584030	5.50	**RX50297XR**	Price
Red	8	Ball Bearing	27	18	39	5 x 2	26" or 28" Wide Chests	378XR	RX5584037	4.55	**RX50378XR**	Price
Red	8	Ball Bearing	34	20	40	5 x 2	26" or 28" Wide Chests	348XR	RX5584027	6.55	**RX50348XR**	Price

KENNEDY 6-Drawer Hang-On Cabinets

- Universal bracket attaches left or right side
- Big bottom drawer for large tool storage
- Aluminum drawer pulls
- Ball bearing drawer slides
- Kennedy limited lifetime warranty
- Drawer liners sold separately



Color	No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Use With	MFG Model #	Drawer Liner	Weight	Order No.	Price
Brown Wrinkle	6	13.63	18	33.13	Models 376X & 378X	386XB	RX5584039	1.90	**RX50386XB**	Price
Brown Wrinkle	6	13.63	20	33.13	Models 348X, 3407X & 2907X	306XB	RX5584032	2.00	**RX50306XB**	Price
Red	6	13.63	18	33.13	Models 376X & 378X	386XR	RX5584039	1.90	**RX50386XR**	Price
Red	6	13.63	20	33.13	Models 348X, 3407X & 2907X	306XR	RX5584032	2.00	**RX50306XR**	Price

KENNEDY Fold Away Cabinet Shelf

MADE IN THE USA

- Provides 2.4 square feet of added work surface
- Folds flat when not in use
- Raised sides keep tools from rolling off
- 20-1/8"W x 17-1/4"D x 1"H
- Shipping weight 11 lbs.



Color	Order No.	Price
Brown Wrinkle	**RX50DS1B**	Price
Red	**RX50DS1SR**	Price

KENNEDY 5-Drawer Hang-On Cabinets

- Universal bracket attaches left or right side
- Big bottom drawer for large tool storage
- Aluminum drawer pulls
- Ball bearing drawer slides
- Friction available upon request
- Kennedy Limited Lifetime Warranty
- Drawer Liners Sold Separately

MADE IN THE USA



Shown with 275R



Shown with 275B

Color	No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Ball Bearing Drawer	Fits Model	Drawer Liner	Weight	Order No.	Price
Brown Wrinkle	5	13.63	18	29	Yes	Models 273, 275 & 277	RX5584039	1.90	**RX50185XB**	Price
Red	5	13.63	18	29	Yes	Models 273, 275 & 277	RX5584039	1.90	**RX50185XR**	Price
Brown Wrinkle	5	13.63	20	29	Yes	Models 293, 295 & 297	RX5584032	2.00	**RX50205XB**	Price
Red	5	13.63	20	29	Yes	Models 293, 295 & 297	RX5584032	2.00	**RX50205XR**	Price

KENNEDY Non-Slip Drawer Liners

- Non-slip solid surface liner
- Keeps tools from shifting and sliding
- PVC coated polyester fabric
- Washable
- Mold & mildew resistant
- 1/16" Thick



Description	Fits Model Nos.	Roll Size (in.)	Order No.	Price
Liner, 18" D - Small Drawer	4800MP	16.375 x 9.5	**RX5584039**	Price
Liner, 21" W x 18" D - Work Station & Tool Stand	185, 185X, 386X, 308X, 10488, 10492, 10493, 382MP	16.375 x 16.375	**RX5584038**	Price
Liner, 27" W x 18" D - Chest, Till	2705X, 285, 285X, 273X, 275X, 277X, 376X, 378X, 305X, 310X, 315X, 308X, 10488, 10489, 10491, 10492, 10493, 5300MP, 5302MP	17.75 x 26.75	**RX5584036**	Price
Liner, 27" W x 18" D - Drawer	21040, 21041, 21042, W5405X, W5410X, TS216X, TS265X	16.375 x 22.875	**RX5584037**	Price
Liner, 29" W x 20" D - Chest, Small Drawer	205, 205X, 202X, 306X	18.375 x 7.375	**RX5584031**	Price
Liner, 29" W x 20" D - Chest, Till	2912MP, 2907MP, 2905MP, 295, 295X, 297, 297X, 10494, 10495, 4200MP, 4202MP	19.75 x 28.75	**RX5584029**	Price
Liner, 29" W x 20" D - Drawer	2912MP	18.375 x 24.875	**RX5584030**	Price
Liner, 34" W x 20" D - Chest, Small Drawer	2905MP	18.375 x 9	**RX5584028**	Price
Liner, 34" W x 20" D - Chest, Till	3407MP, 348X	19.75 x 33.75	**RX5584026**	Price
Liner, 39" W x 18" D - Ex-Wide Drawer	2705X	16.375 x 35.125	**RX5584035**	Price
Liner, 39" W x 20" D - Chest, Small Drawer	3400MP	18.375 x 10.75	**RX5584025**	Price
Liner, 39" W x 20" D - Chest, Till	3900MP	19.75 x 38.75	**RX5584023**	Price
Liner, 42" W x 20" D - Chest, Till	4200MP	19.75 x 41	**RX5584021**	Price
Liner, 44" W x 20" D - Small Bank Drawer	4202MP	18.375 x 11.875	**RX5584020**	Price
Liner, 46" W x 24" D - Equal Bank Drawer	46000, 46003	22.375 x 19	**RX5584012**	Price
Liner, 46" W x 24" D - Ex-Wide Drawer	46003	22.375 x 40.125	**RX5584010**	Price
Liner, 46" W x 24" D - Series Chest, Till	46000	23.625 x 45.75	**RX5584009**	Price
Liner, 4800MP - Big Bank Drawer	4800MP	23.375 x 29.125	**RX5584041**	Price
Liner, 4800MP - Ex Wide Drawer	4800MP	22.75 x 43.75	**RX5584040**	Price
Liner, 4800MP - Small Bank Drawer	263, 266, 360	23.375 x 11.875	**RX5584042**	Price
Liner, 53" W x 18" D - Chest, Till	5300MP	17.75 x 52.75	**RX5584033**	Price
Liner, 53" W x 18" D - Ex-Wide Drawer	10493	16.375 x 48.75	**RX5584034**	Price
Liner, Large Drawer, Chest	266, 360	10.625 x 23	**RX5584043**	Price

Professional Series Heavy Duty Chests & Cabinets

- Heavy use / heavy capacity
- Full-extension 110 lb. ball-bearing drawer slides (double slides on select drawers)
- Posi-Latch® latching system assures latch security
- Tubular locking system secures property
- Non-Slip drawer liners included
- Heavy-duty casters
- 10 Year limited manufacturer warranty

New!

PCA-4112SS



PCA-4111RD



PCA-521BK



PCH-528BK



PCA-4111BK



PCH-418BK



PCH-4111SS



PCH-418RD



Type - Tool Cabinet										
No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Caster Stize (in.)	Load Capacity	Color	Metal Type	Weight	Order No.	Price
5	26.5	18	42.25	5 x 2	1100 lbs	Black	Steel	112 lbs	**RX61PCA265BK**	Price
5	26.5	18	42.25	5 x 2	1100 lbs	Red	Steel	112 lbs	**RX61PCA265RD**	Price
8	36	21	42.25	6 x 2	3500 lbs	Black	Steel	268 lbs	**RX61PCA36821BK**	Price
8	36	21	42.25	6 x 2	3500 lbs	Red	Steel	268 lbs	**RX61PCA36821RD**	Price
5	38.5	24	40.5	6 x 2	3500 lbs	Black	Steel	330 lbs	**RX61PCA40524BK**	Price
5	38.5	24	40.5	6 x 2	3500 lbs	Red	Steel	330 lbs	**RX61PCA40524RD**	Price
11	41	18	41	6 x 2	1100 lbs	Black	Steel	252 lbs	**RX61PCA4111BK**	Price
11	41	20	41	6 x 2	1100 lbs	Red	Steel	252 lbs	**RX61PCA4111RD**	Price
12	46	24	42.25	6 x 2	3500 lbs	Black	Steel	423 lbs	**RX61PCA461224BK**	Price
12	46	24	42.25	6 x 2	3500 lbs	Red	Steel	423 lbs	**RX61PCA461224RD**	Price
6	46	24	40.5	6 x 2	3500 lbs	Black	Steel	400 lbs	**RX61PCA46624BK**	Price
6	46	24	40.5	6 x 2	3500 lbs	Red	Steel	400 lbs	**RX61PCA46624RD**	Price
11	51.63	18	42.5	6 x 2	3500 lbs	Black	Steel	112 lbs	**RX61PCA521118BK**	Price
11	51.63	18	42.5	6 x 2	3500 lbs	Red	Steel	112 lbs	**RX61PCA521118RD**	Price
12	56	30	42.25	6 x 2	5200 lbs	Black	Steel	579 lbs	**RX61PCA561230BK**	Price
12	56	30	42.25	6 x 2	5200 lbs	Red	Steel	579 lbs	**RX61PCA561230RD**	Price

Type - Tool Chest										
No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	Color	Metal Type	Lid Support	Weight	Order No.	Price
6	26	16	19.75	660 lbs	Black	Steel	Gas Struts	85 lbs	**RX61PCH266BK**	Price
6	26	16	19.75	660 lbs	Red	Steel	Gas Struts	85 lbs	**RX61PCH266RD**	Price
5	36	21	23.75	1800 lbs	Black	Steel	Gas Struts	195 lbs	**RX61PCH36521BK**	Price
5	36	21	23.75	1800 lbs	Red	Steel	Gas Struts	195 lbs	**RX61PCH36521RD**	Price
8	41	18	20	675 lbs	Black	Steel	Gas Struts	154 lbs	**RX61PCH418BK**	Price
8	41	18	20	675 lbs	Red	Steel	Gas Struts	154 lbs	**RX61PCH418RD**	Price
10	46	24	23.75	3000 lbs	Black	Steel	Gas Struts	290 lbs	**RX61PCH461024BK**	Price
10	46	24	23.75	3000 lbs	Red	Steel	Gas Struts	290 lbs	**RX61PCH461024RD**	Price
10	56	30	23.75	5400 lbs	Black	Steel	Gas Struts	390 lbs	**RX61PCH561030BK**	Price
10	56	30	23.75	5400 lbs	Red	Steel	Gas Struts	390 lbs	**RX61PCH561030RD**	Price

Ships Common Carriers

Professional Series 3-Drawer Chests

- Rugged sidewall post construction
- Full-extension 110 lb. capacity ball-bearing drawer slides
- Adds capacity without using floor space
- Tubular keyed locking system protects valuable tools
- Non-slip drawer liners protect tools and drawer surfaces
- 10 year limited manufacturer warranty

New!





Color	No. of Drawers	Depth (in.)	Width (in.)	Height (in.)	Drawer Type	Weight	Order No.	Price
Black	3	17.75	26	13.25	Ball Bearing	60 lbs	**RX61PIN263BK**	Price
Red	3	17.75	26	13.25	Ball Bearing	60 lbs	**RX61PIN263RD**	Price

KENNEDY Heavy Duty Roller Cabinets

- High security tubular locking system
- Ball-bearing drawer slides
- Tubular side handle
- Full-width aluminum drawer pulls
- Heavy-duty roller-bearing casters
- MDF work surface
- Kennedy limited lifetime warranty
- Drawer liners sold separately
- 5” x 2” Casters


RX5010491


RX5010493 & RX5010495


RX5010492 & RX5010494

Color	No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Caster Size (in.)	MFG Model #	Weight	Order No.	Price
Black	7	39-3/8	18	35-1/8	5 x 2	10491BKX	205 lbs	**RX5010491**	Price
Black	12	39-3/8	18	39-1/8	5 x 2	10493BKX	255 lbs	**RX5010493**	Price
Black	12	41-3/8	20	42	6 x 2	10495BKX	280 lbs	**RX5010495**	Price
Black	13	41-3/8	20	42	6 x 2	10494BKX	275 lbs	**RX5010494**	Price

KENNEDY K1800 Series Roller Cabinets

- High security tubular locking system
- Ball bearing drawer slides
- Tubular side handle
- Kennedy Limited Lifetime Warranty
- Drawer Liners Sold Separately


RX50310XB


RX50310XR


RX50315XB


RX50315XR

Color	No. of Drawers	Depth (in.)	Width (in.)	Height (in.)	Caster Size (in.)	MFG Model #	Weight	Order No.	Price
Brown Wrinkle	10	18	39.38	35	5 x 2	310XB	210 lbs	**RX50310XB**	Price
Red	10	18	39.38	35	5 x 2	310XR	210 lbs	**RX50310XR**	Price
Brown Wrinkle	15	18	39.38	39	5 x 2	315XB	255 lbs	**RX50315XB**	Price
Red	15	18	39.38	39	5 x 2	315XR	255 lbs	**RX50315XR**	Price

KENNEDY K1800 Series Chests

- High-Security tublar locking system
- Includes heavy-duty, plated lift handles
- Full-width aluminum drawer pulls
- Ball-bearing drawer slides
- Compartment has removable partial shelf and locking door
- Kennedy Limited Lilfetime Warranty
- Drawer Liners Sold Separately


RX5010488BKX


RX50305XB

Color	No. of Drawers	Depth (in.)	Width (in.)	Height (in.)	Use With	MFG Model #	Weight	Order No.	Price
Black	8	18	39-3/8	35	10481, 10493, 10494, 10495 Roller Cabinets	10488BKX	208 lbs	**RX5010488BKX**	Price
Brown Wrinkle	8	19	53	19	310X or 315X Maintenance Carts	5302MPB	155 lbs	**RX505302MPB**	Price
Red	8	19	53	19	310X or 315X Maintenance Carts	5302MPR	155 lbs	**RX505302MPR**	Price
Brown Wrinkle	5	18	39.38	16.5	310X or 315X Maintenance Carts	305XB	102 lbs	**RX50305XB**	Price

KENNEDY K2000 Series Chest & Cabinets

- Ball bearing drawer slides that holds up to 120 lbs. per drawer
- Full width, extruded aluminum drawer pulls
- Heavy duty non-slip drawer liners
- High security tubular locking system
- Coated MDF work surface
- Gas-shock lid stays in top chests
- Rugged 6 x 2" roller bearing heavy duty casters with 900 lb capacity per caster
- Metal thickness: Body - 16 gauge / Drawers - 18 gauge
- Kennedy limited lifetime warranty
- Drawer liners sold separately

MADE IN THE USA



RX502905MPBK



RX502905MPBL



RX503400MPBK



RX503400MPBL



RX502907MPBK



RX502907MPBL



RX503407MPBK



RX503407MPBL

Type - Tool Chest										
Color	No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Fits On	Model Number	Drawer Liner	Weight	Order No.	Price
Black	5	29	20	18-3/8	2907MPBK	2905MPBK	RX5584029	6.70	**RX502905MPBK**	Price
Black	5	34	20	18-3/8	3407MPBK	3400MPBK	RX5584026	7.75	**RX503400MPBK**	Price
Blue	5	29	20	18-3/8	2907MPBL	2905MPBL	RX5584029	6.70	**RX502905MPBL**	Price
Blue	5	34	20	18-3/8	3407MPBL	3400MPBL	RX5584026	7.75	**RX503400MPBL**	Price

Type - Roller Cabinet										
Color	No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Fits On	Model Number	Drawer Liner	Weight	Order No.	Price
Black	7	29	20	40-1/8	2905MPBK	2907MPBK	RX5584030	215 lbs	**RX502907MPBK**	Price
Black	7	34	20	40-1/8	3400MPBK	3407MPBK	RX5584027	231 lbs	**RX503407MPBK**	Price
Blue	7	29	20	40-1/8	2905MPBL	2907MPBL	RX5584030	215 lbs	**RX502907MPBL**	Price
Blue	7	34	20	40-1/8	3400MPBL	3407MPBL	RX5584027	231 lbs	**RX503407MPBL**	Price

Professional Series Heavy Duty Side Lockers

- Roll cage construction
- Four adjustable ball-bearing drawer drawers
- Attaches to either side of any Waterloo Professional HD chest and cabinet combination
- 10 Year limited manufacturer warranty
- 400 lb Load Capacity

New!



Color	No. of Drawes	Depth (in.)	Width (in.)	Height (in.)	Drawer Type	Weight	Order No.	Price
Black	4	21	18.5	59.25	Ball Bearing	147 lbs	**RX61PSL18421BK**	Price
Red	4	21	18.5	59.25	Ball Bearing	147 lbs	**RX61PSL18421RD**	Price

Professional Series Heavy Duty 7-Drawer Side Cabinets

- Roll cage construction
- Full-extension 200 lb. capacity drawer slides
- Attaches to either side of any Waterloo Professional HD cabinet
- Treated MDF work surface
- Non-slip drawer liners protect tools and drawer surface

New!



Color	No. of Drawers	Depth (in.)	Width (in.)	Height (in.)	Drawer Type	Weight	Order No.	Price
Black	7	21	18.5	35.375	Ball Bearing	155 lbs	**RX61PSC18721BK**	Price
Red	7	21	18.5	35.375	Ball Bearing	155 lbs	**RX61PSC18721RD**	Price

KENNEDY Versa-Bench®

MADE IN THE USA

Specifications:

- All models have a 1/8” steel work surface
- Frame and body constructed of 11 gauge steel
- Four 8” x 2” roller bearing phenolic wheels - 900 lbs per caster
- Floor lock
- Tubular end handle
- All models have pad-lockable doors. Model 4806 also includes lock and two keys in drawer unit
- Load capacity can be increased to 5400 lbs. by adding two optional casters



RX504806SR



RX504804

No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Caster Size (in.)	Color	MFG Model #	Weight	Order No.	Price
4	48-1/8	26	35-7/8	8 x 2	Brown Wrinkle	4804B	375 lbs	**RX504804**	Price
6	48-1/8	26	35-7/8	8 x 2	Brown Wrinkle	4806B	425 lbs	**RX504806**	Price
6	48-1/8	26	35-7/8	8 x 2	Red	4806R	425 lbs	**RX504806SR**	Price

KENNEDY Drawer Security Compartment For Chests & Roller Cabinets



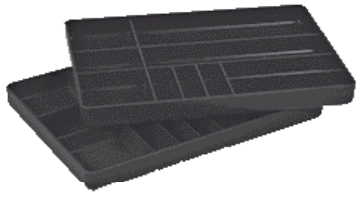
- Steel compartments securely fasten to drawer through pre-drilled holes with included 1/8" aluminum pop rivets
- Allows you to lock up personal valuables (wallet, jewelry, cash, keys, etc.) without having to lock up the entire chest or roller cabinet
- Cylinder lock with two keys
- Black finish

MADE IN THE USA

For Use With	W (in.)	D (in.)	H (in.)	Order No.	Price
2"H Drawers	5.56	8.13	1.19	**RX5580475**	Price
4"H Drawers	7.56	11.13	2.19	**RX5580477**	Price

KENNEDY Ultimate Organizer

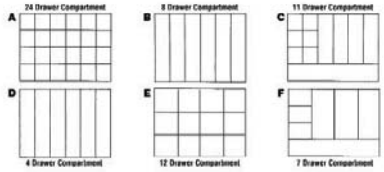
MADE IN THE USA



- High impact polystyrene
- Color: black
- Two trays per package, 10 compartments per tray
- Tray size: 16"W x 11"D x 1-1/4"H

Order No.	Price
RX5582223	Price

KENNEDY Drawer Divider Inserts



- Tough ABS plastic
- Color: black
- All compartments have rounded corners
- Sized to fit Kennedy 2" and 4" high drawers in 27" and 29" wide roller cabinets.
- Drawer sizes: for 27" wide cabinet - 23" x 16-12" for 29" wide cabinet - 25" x 18-1/2"
- Note: Measure cabinet and drawers before ordering



MADE IN THE USA

Description	27" Cabinet		29" Cabinet	
	Order No.	Price	Order No.	Price
Style A - 2" Dr., 24 Compartments	**RX5581923**	Price	**RX5581929**	Price
Style B - 2" Dr., 6 Compartments	**RX5581921**	Price	**RX5581927**	Price
Style C - 2" Dr., 11 Compartments	**RX5581922**	Price	**RX5581928**	Price
Style D - 4" Dr., 4 Compartments	**RX5581924**	Price	**RX5581930**	Price
Style E - 4" Dr., 12 Compartments	**RX5581926**	Price	**RX5581932**	Price
Style F - 4" Dr., 7 Compartments	**RX5581925**	Price	**RX5581931**	Price

KENNEDY Standard Friction Drawer Slides

MADE IN THE USA



- Two-piece, I-beam drawer slides permit smooth, easy full drawer extension
- Package includes 4 female and 2 male slides with spring clips

Fits Order No.	Order No.	Price
185, 205, 285, 2912X, 3412X, All 27", 29" & 34" Roller Cabinets, All 6 & 12 drawer Versa-Benches, All 54" Work Benches, All Tool Stands	**RX5580889**	Price
2812, 263, 266, 360, 2602, 2603, 2604, 2902, 5150	**RX5580888**	Price
620, 520, 526, 52611, MC22, MC28, 220	**RX5580887**	Price

WATERLOO Security Storage Box Organizer



- Small lock box that can be used to securely store small items of value
- Sized to fit in a 2" drawer
- Can be locked independently from the storage unit
- 1 Year limited manufacturer warranty

Color	Size (in.)	For Drawer Height	MFG Model #	Weight	Order No.	Price
Black	15.25 x 9.25	2" or Deeper	ASX-ORGSECU-RITY	3 lbs	**RX61ASXORGSEC**	Price

PROTO Drawer Liner

MADE IN THE USA



- Polyethylene foam liner- measures 5' long x 2' wide x 1/16" thick - cut to fit
- Use to protect your tool cabinets and your tools from scratches and marks

New!

Model No.	Order No.	Price
J9910	**KP4292005**	Price

WATERLOO Non-Slip Drawer Liner

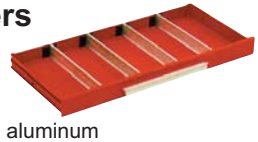


- 2 Sizes available
- Cuts easily to fit any width drawer
- Prevents tools from sliding

New!

Size (in.)	Order No.	Price
16.5 x 115 x.125H	**RX61SPLINER17BK**	Price
22.5 x 115 x.125H	**RX61SPLINER23BK**	Price

KENNEDY Drawer Dividers



MADE IN THE USA

- Fully adjustable
- Spring clips hold in place
- Machinist's Chests: Zinc coated steel
- Mechanic's Chests and Cabinets: Extruded aluminum

Description	Fits Order Nos.	Size (Qty.)	Order No.	Price
27" Drawer Dividers - 4 pack	2705X, 285(X), 310X, 315X, 273(X), 275(X), 277(X), 376X, 378X, 185(X), 386X, 415(X), All Work Stations & All Tool Stands 4804, 4806, & All 60" Versa-Benches	16-3/8 x 3 (2), 16-3/8 x 1-3/8 (2)	**RX5582232**	Price
29" Drawer Dividers - 4 pack	2805(X), 205(X), 295(X), 2905(X), 297(X), 2907(X), 2912X, 3412X, 3407X, 348X, 306X, 3400MP, 3900MP, 4400MP, 4410, 4405, 435(X), 5800MP	18-3/8 x 3 (2), 18-3/8 x 1-3/8 (2)	**RX5582234**	Price

KENNEDY Kennedy Ball Bearing Drawer Slides



- Standard duty ball-bearing replacement slides, 1-13/16"H x 16-5/16"L
- Easy effortless slide action
- Three-member full extension ball-bearing slides
- Package includes one left and one right hand slide
- Replaces existing ball bearing slides or interchangeable with I-beam slides in units manufactured after April 1996

Order No.	Price
RX5582183	Price

KENNEDY Tubular Key High Security Lock Sets

MADE IN THE USA



Description	Order No.	Price
Replaces Original Equipment Lock 80840	**RX5580401**	Price
Replaces Original Equipment Lock 80843	**RX5580402**	Price
Additional Keys- Specify Serial No.	**RX5580404**	Price
Replaces Original Equipment Lock 80844	**RX5580403**	Price

KENNEDY Roller Cabinet Caster Sets

- Soft rubber tread, hard rubber core bonded to metal center
- For cabinets 20, 27, 29 or 34" wide

MADE IN THE USA



For Use With Model No.	D (in.)	W (in.)	Overall Height (in.)	Capacity Ea. lbs.	Bearing Type	Wheel Type	Order No.	Price
273, 275, 277, 295, 297	5	1-1/4	6	200 lbs	Sintered	2 Fixed, 2 Swivel	**RX5580835**	Price
273, 275, 277, 295, 297, 376, 378	5	1-1/2	6-1/4	450 lbs	Sintered	2 Fixed, 2 Swivel w/ Dual-Lok	**RX5580985**	Price
293(X), 295(X), 297(X), 2907X, 3407X, 376(X), 378(X), 310(X), 315(X), 10491, 10493, 21040, 273(X), 275(X), 277(X), 28085, 28087, & 28197	5	2	6	350 lbs	Roller	2 Fixed, 2 Swivel	**RX5580837**	Price
435, 415	5	2	6	175 lbs	Roller	2 Swivel	**RX5580977**	Price

KENNEDY Screwdriver Tray

- Attaches to any Kennedy roller cabinet for easy access to screwdrivers
- Also holds standard aerosol spray cans
- Screwdrivers not included



Color	Order No.	Price
Brown Screwdriver Tray	**RX5580876**	Price
Red Screwdriver Tray	**RX5580878**	Price

KENNEDY Security Lock Guard

- Provides added protection for your tools
- Fits over any Kennedy lock and secures with your own padlock

MADE IN THE USA



Order No.	Price
RX5580845	Price

KENNEDY Versa-Bench Caster Sets

- 8" x 2" Roller bearing casters with phenolic wheels
- For all Versa-Bench® models

MADE IN THE USA



D (in.)	W (in.)	Overall Height (in.)	Capacity	Bearing Type	Wheel Type	Order No.	Price
8	2	9-1/2	900 lbs	Roller	2 Fixed, 2 Swivel	**RX5580839**	Price
8	2	9-1/2	900 lbs	Roller	2 Swivel	**RX5580838**	Price

KENNEDY Tubular Handle For Cabinets

- Full-size, chrome plated tubular handle attaches to either side of any Kennedy 27", 29", 34" or 44" roller cabinet
- Hole center distance of 15-3/4"



Order No.	Price
RX5582245	Price

HANSEN Socket Trays

Trays designed to help you work faster

- Sizes are marked on posts for instant identification
- Tough ABS plastic resists gas, oil and abuse
- Edge tangs for easy handling





Color - Gray Socket Trays, Metric Size		
Description	**Order No.**	**Price**
1/2" Drive, Regular & Deep Well: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27mm	**RX801202**	Price
1/4" Drive, Regular & Deep Well: 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15mm	**RX801402**	Price
3/8" Drive, Regular & Deep Well: 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20mm	**RX803802**	Price

Color - Red Socket Trays, Standard Size		
Description	**Order No.**	**Price**
1/2" Drive, Regular & Deep Well: 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16, 1-1/8, 1-1/4"	**RX801201**	Price
1/4" Drive, Regular & Deep Well: 1/8, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16, 5/8"	**RX801401**	Price
3/8" Drive, Regular & Deep Well: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1"	**RX803801**	Price



760
GENERAL DUTY

Economical single ball race construction. Heavy gauge steel. Used on dollies, platform trucks, racks, laundry baskets, and other equipment.



050
LIGHT MEDIUM

Two separate ball bearing swivel raceways. Embossed for strength and heat treated for long wear. Industrial and office applications. Well suited for furniture, appliances, electronic cabinets, etc.



190
MEDIUM HEAVY

Cold-forged steel design. Two separate large diameter ball bearing raceways. Industrial and plant floor applications. Economical version of #200 series casters.



200
MEDIUM HEAVY

Precision-built. Hardened steel with exacting tolerances. Zerk fittings for swivel and wheel. Industrial and institutional equipment. Used on warehouse trucks, refuse containers, linen carts, etc. Rated for severe service and long wear.



300
HEAVY DUTY

Cold-forged steel design. Precise double ball bearings. Hardened swivel raceways. For heavy industrial and warehousing applications where high shock loads and severe operating conditions prevail.



500
HEAVY DUTY

Cold-forged steel. 1/2" top plate.1" king bolt and axle. Rugged, dependable. For continuous and punishing service on heavy duty equipment. Well suited for the heaviest possible manually operated loads, severe shock conditions, and power-driven equipment.

						Rigid		Swivel	
Dia. (in.)	Width (in.)	Bolt Hole Spacing (in.)	Overall Height (in.)	Capacity (lbs.)	Wheel Type	Order No.	Price	Order No.	Price
2	7/8	1 x 2-1/8	2-3/4	100 lbs	Hard Rubber	**RY507612OH**	Price	**RY507602OH**	Price
6	3	4-1/8 x 6-1/8	8-1/4	2200 lbs	Phenolic	**-**	-	**RY505006UM**	Price
2	7/8	1 x 2-1/8	2-3/4	75 lbs	Cushioned Tread	**RY507612OX**	Price	**RY507602OX**	Price
6	3	4-1/8 x 6-1/8	8-1/4	2500 lbs	Semi-Steel	**RY505016US**	Price	**RY505006US**	Price
2	7/8	1 x 2-1/8	2-3/4	100 lbs	Semi-Steel	**RY507612PS**	Price	**RY507602PS**	Price
8	3	4-1/8 x 6-1/8	10-1/4	2500 lbs	Polyurethane Mold-On	**-**	-	**RY505008UL**	Price
2-1/2	1	1-3/4 x 3	3-5/16	200 lbs	Semi-Steel	**RY50761212PS**	Price	**RY50760212PS**	Price
8	3	4-1/8 x 6-1/8	10-1/4	2500 lbs	Phenolic	**-**	-	**RY505008UM**	Price
2-1/2	1-1/8	1-3/4 x 3	3-5/16	160 lbs	Hard Rubber	**RY50761212OH**	Price	**RY50760212OH**	Price
8	3	4-1/8 x 6-1/8	10-1/4	2500 lbs	Semi-Steel	**-**	-	**RY505008US**	Price
10	3	4-1/8 x 6-1/8	12-1/4	2700 lbs	Polyurethane Mold-On	**RY5050110UL**	Price	**RY5050010UL**	Price
2-1/2	1-1/8	1-3/4 x 3	3-5/16	110 lbs	Cushioned Tread	**RY50761212OX**	Price	**RY50760212OX**	Price
10	3	4-1/8 x 6-1/8	12-1/4	2700 lbs	Phenolic	**RY5050110UM**	Price	**RY5050010UM**	Price
3	1-3/8	2-3/8 x 3-7/16	3-7/8	210 lbs	Hard Rubber	**RY507613OH**	Price	**RY507603OH**	Price
10	3	4-1/8 x 6-1/8	12-1/4	2700 lbs	Semi-Steel	**RY5050110US**	Price	**RY5050010US**	Price
3	1-3/8	2-3/8 x 3-7/16	3-7/8	125 lbs	Cushioned Tread	**RY507613OX**	Price	**RY507603OX**	Price
3	1-1/4	2-3/8 x 3-7/16	3-7/8	210 lbs	Semi-Steel	**RY507613PS**	Price	**RY507603PS**	Price
4	1-1/2	3 x 4	5	300 lbs	Hard Rubber	**RY507614OH**	Price	**RY507604OH**	Price
4	1-1/2	3 x 4	5	200 lbs	Cushioned Tread	**RY507614OX**	Price	**RY507604OX**	Price
4	1-3/8	3 x 4	5	375 lbs	Semi-Steel	**RY507614PS**	Price	**RY507604PS**	Price
3	1-3/8	1-3/4 x 2-7/8-3	4	125 lbs	Cushioned Tread	**RY500513OX**	Price	**RY500503OX**	Price
3	1-3/8	1-3/4 x 2-7/8-3	4	210 lbs	Hard Rubber	**RY500513OH**	Price	**RY500503OH**	Price
4	1-1/4	1-3/4 x 2-7/8-3	5	165 lbs	Cushioned Tread	**RY500514OX**	Price	**RY500504OX**	Price
4	1-1/4	1-3/4 x 2-7/8-3	5	255 lbs	Hard Rubber	**RY500514OH**	Price	**RY500504OH**	Price
4	1-1/8	1-3/4 x 2-7/8-3	5	200 lbs	Gray Polyurethane	**RY500514BR**	Price	**RY500504BR**	Price
4	2	3 x 3 Slotted	5-5/8	325 lbs	Mold-On Rubber	**RY501914UP**	Price	**RY501904UP**	Price
4	2	3 x 3 Slotted	5-5/8	500 lbs	Phenolic	**RY501914UM**	Price	**RY501904UM**	Price
5	1-1/4	1-3/4 x 2-7/8-3	6-1/16	190 lbs	Cushioned Tread	**RY500515OX**	Price	**RY500505OX**	Price
5	1-1/4	1-3/4 x 2-7/8-3	6-1/16	260 lbs	Hard Rubber	**RY500515OH**	Price	**RY500505OH**	Price
5	1-1/8	1-3/4 x 2-7/8-3	6-1/16	200 lbs	Gray Polyurethane	**RY500515BR**	Price	**RY500505BR**	Price
5	2	3 x 3 Slotted	6-1/2	375 lbs	Mold-On Rubber	**RY501915UP**	Price	**RY501905UP**	Price
5	2	3 x 3 Slotted	6-1/2	700 lbs	Phenolic	**RY501915UM**	Price	**RY501905UM**	Price
6	2	3 x 3 Slotted	7-1/2	400 lbs	Cushioned Tread	**RY502016OX**	Price	**RY502006OX**	Price
6	2	3 x 3 Slotted	7-1/2	410 lbs	Gray Mold-On Rubber	**RY502016UV**	Price	**RY502006UV**	Price
6	2	3 x 3 Slotted	7-1/2	410 lbs	Mold-On Rubber	**RY501916UP**	Price	**RY501906UP**	Price
6	2	3 x 3 Slotted	7-1/2	560 lbs	Hard Rubber	**RY502016OH**	Price	**RY502006OH**	Price
6	2	3 x 3 Slotted	7-1/2	820 lbs	Phenolic	**RY501916UM**	Price	**RY501906UM**	Price
6	2	3 x 3 Slotted	7-1/2	820 lbs	Red Polyurethane	**RY502016UT**	Price	**RY502006UT**	Price
6	2	3 x 3 Slotted	7-1/2	900 lbs	Semi-Steel	**RY502016US**	Price	**RY502006US**	Price
6	2-1/2	3-3/8 x 5-1/4	7-3/4	1400 lbs	Polyurethane Mold-On	**RY503016UL**	Price	**RY503006UL**	Price
6	2-1/2	3-3/8 x 5-1/4	7-3/4	1500 lbs	Phenolic	**RY503016UM**	Price	**RY503006UM**	Price
6	2-1/2	3-3/8 x 5-1/4	7-3/4	1500 lbs	Semi-Steel	**RY503016US**	Price	**RY503006US**	Price
6	2-1/2	3-3/8 x 5-1/4	7-3/4	600 lbs	Gray Mold-On Rubber	**RY503016UV**	Price	**RY503006UV**	Price
8	2	3 x 3 Slotted	9-1/2	1000 lbs	Phenolic	**RY502018UM**	Price	**RY502008UM**	Price
8	2	3 x 3 Slotted	9-1/2	1000 lbs	Red Polyurethane	**RY502018UT**	Price	**RY502008UT**	Price
8	2	3 x 3 Slotted	9-1/2	1005 lbs	Phenolic	**RY501918UM**	Price	**RY501908UM**	Price
8	2	3 x 3 Slotted	9-1/2	1050 lbs	Semi-Steel	**RY502018US**	Price	**RY502008US**	Price
8	2	3 x 3 Slotted	9-1/2	500 lbs	Gray Mold-On Rubber	**RY502018UV**	Price	**RY502008UV**	Price
8	2	3 x 3 Slotted	9-1/2	500 lbs	Mold-On Rubber	**RY501918UP**	Price	**RY501908UP**	Price
8	2-1/2	3-3/8 x 5-1/4	10-1/4	1600 lbs	Phenolic	**RY503018UM**	Price	**RY503008UM**	Price
8	2-1/2	3-3/8 x 5-1/4	10-1/4	1600 lbs	Polyurethane Mold-On	**RY503018UL**	Price	**RY503008UL**	Price
8	2-1/2	3-3/8 x 5-1/4	10-1/4	1600 lbs	Semi-Steel	**RY503018US**	Price	**RY503008US**	Price
8	2-1/2	3-3/8 x 5-1/4	10-1/4	700 lbs	Gray Mold-On Rubber	**RY503018UV**	Price	**RY503008UV**	Price
3-1/2	1-1/8	1-3/4 x 2-7/8-3	4-3/4	200 lbs	Gray Polyurethane	**RY50051312BR**	Price	**RY50050312BR**	Price

Stem casters are available on the 050 and 200 series casters. Casters with brakes are available on all of the above casters.

Wheel Types and Applications:

H = Hard Rubber
Molded of a special hard fibrous rubber compound. High capacities. Good floor protection. Oil and chemical resistant. Recommended for concrete, wood block, and steel floor surfaces.

M = Phenolic
Molded of a phenolic resin compound backed with macerated or chopped canvas. Resists shock without chipping. Non-marking. Non-sparking. Can be operated continuously -50° to 260°, intermittently to 300°F. Unaffected by grease, oil or most other chemicals. Excellent for floor protection. Recommended for concrete and ceramic tile. Not recommended for softer tile.

S = Semi-Steel
Constructed of top grade cast iron, with steel added for extra strength. High capacities. Recommended for extreme heat and cold, around chemicals, wood block and steel floors. Not suggested for concrete, as floor protection is minimal.

V = Mold-On Rubber
Charcoal gray rubber. Will not mark like black rubber. Easier rolling. Lightweight, yet is designed to withstand shock loads. Recommended for hand trucks or load wheels. May be used in any application in which floor protection is the prime consideration. Exception: Around animal fats and blood, a chemical reaction could cause bond separation.

L = Polyurethane Mold-On
Polyurethane elastomer treads bonded to cast iron centers. High capacities of steel with the non-marking qualities of rubber wheels. Complete floor protection. Outwears rubber five-to-one. Resistant to most oils and chemicals. Recommended for virtually all floor surfaces. Exception: Around animal fats and blood, a chemical reaction could cause bond separation.

X = Cushion Tread
Molded with a cushion outer tread and a hard fibrous innner core. Non-marking, noiseless. Affords complete floor protection. Recommended for hardwood, linoleum, ceramict tile, concrete or smooth steel floors.

T = Red Polyurethane
A bright red polyurethane bonded around and through a tough polyolefin core. For use on virtually any floor surface under almost all operationg conditions. High capacities. Lightweight, but resistant to impact, shock and abrasion.

P = Mold-On Rubber
Vulcanized mold-on rubber. Standard with steel centers. A soft rubber tread protects the floor and affords quiet operations.

R = Gray Polyurethane
Gray polyurethane tread, mechanically bonded to a durable polyolefin core. For lighter loads. Ideal for wet conditions. Non-marking. Complete floor protection.

KENNEDY

VTC - Visual Tool Control Systems

Professional Tool Storage • Versatile • Convient • Secure

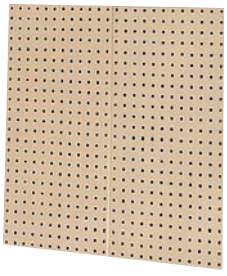
Utility Blue (UB) | Tan Texture (TX) | Classic Blue (BL) | Utility Gray (UGY)

- Reinforced steel panels with square hole perforations
- Heavy steel lock-on hooks, clips, accessories
- Locate tools at the worksite–either open access or in locked cabinets

KENNEDY Two Panel Sets

MADE IN THE USA

- Reinforced steel panels with square hole perforations
- Heavy steel lock-on hooks, clips, accessories
- Locate tools at the worksite–either open access or in locked cabinets
- Comes with two 18” x 36” panels.
- Attaches to variety of surfaces, racks, etc. (Fasteners not included)
- Toolholders must be ordered separately, 99852/99853
- 18”W x 1/2”D x 36”H
- Shipping weight: 15.75 lbs.

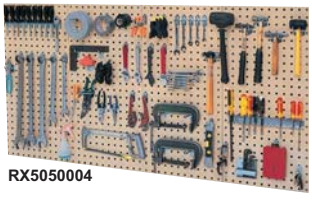


Color	Order No.	Price
Utility Blue	**RX5050002UB**	Price
Blue	**RX5050012**	Price
Gray	**RX5050022**	Price
Tan	**RX5050002**	Price

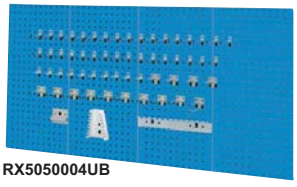
KENNEDY Four Panel Sets

MADE IN THE USA

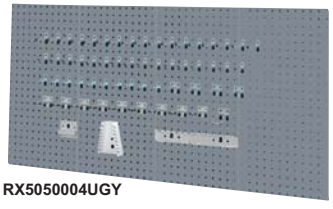
- Comes with four 18” x 36” panels.
- Attaches to variety of surfaces, racks, etc. (Fasteners not included)
- 60 Pc. toolholder set 99853 included
- 18”W x 1/2”D x 36”H
- Shipping weight: 36.75 lbs.
- Tools not included
- 18 sq. ft. of wall space
- Utility Blue (UB) and Utility Gray (UGY) Available



RX5050004



RX5050004UB



RX5050004UGY

Model No.	Color	Order No.	Price
50004	Tan	**RX5050004**	Price
50004BL	Classic Blue	**RX5050004BL**	Price
50004UB	Utility Blue	**RX5050004UB**	Price
50004UGY	Utility Gray	**RX5050004UGY**	Price

KENNEDY Open Tool Trolley

MADE IN THE USA

- Sturdy and easy to maneuver, this all-steel trolley is double sided with inclined panels to ensure tools are safely stored when the trolley is moving. The base has raised edges for easy storage of tool boxes and larger items
- Mounted end handle and four casters
- Includes four 18” x 36” toolboard panels and 60 Pc. toolholder set no. 99853
- 36-3/4”W x 23-7/8”D x 51-7/8”H (Includes 5 x 1-1/4” casters)
- Tan finish
- Shipping weight 90 lbs.



Model No.	Color	Order No.	Price
50102BK	Classic Blue	**RX5050102BL**	Price
50102TX	Tan	**RX5050102**	Price
50102UB	Utility Blue	**RX5050102UB**	Price
50102UGY	Utility Gray	**RX5050102UGY**	Price

KENNEDY 60 Pc. Toolholder Set

- Consists of: 33 assorted single hooks; 9 assorted double hooks; 4 assorted plier hooks; 10 assorted spring clips; 1 each ring hook, screwdriver unit, wrench rack and allen key unit.
- Shipping weight: 8.91 lbs.

MADE IN THE USA



Color	Order No.	Price
Tan	**RX5099853**	Price

KENNEDY 30 Pc. Toolholder Set

- Hooks, clips and toolholder accessories are industrial grade, zinc-plated heavy steel and lock on to panels to prevent the accidental removal of tools
- Consists of: 17 assorted single hooks; 4 assorted double hooks; 2 assorted plier hooks; 4 assorted spring clips; 1 each ring hook, screwdriver unit and wrench rack.
- Shipping weight: 5.24 lbs.

MADE IN THE USA



Color	Order No.	Price
Tan	**RX5099852**	Price

DURHAM MFG Est. 1922 Pegboard "A" Frame Trucks

- 12 G Steel Deck with reinforced channels
- 1-1/2” lip on deck
- 16 G. steel pegboard welded to both sides
- 9” of deck space on each side of “A”
- Pegboard holes are 1/4”
- Fully assembled
- Textured gray powder coat finish.



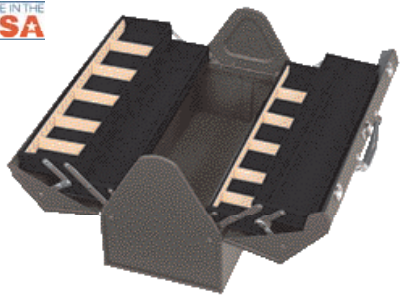


Model No.	Size	Caster Size	Platform Height (in.)	Color	Weight	Order No.	Price
AF-3048-PB-95	48"W x 30"D x 57"H	6" x 2" Phenolic Bolt-on casters (2) swivel, (2) rigid	9-1/8	Gray	226 lbs	**SB55AF3048PB95**	Price
AF-3048-PBLP-95	48"W x 30"D x 57"H	6" x 2" Phenolic Bolt-on casters (2) swivel, (2) rigid	9-1/8	Gray	254 lbs	**SB55AF3048PBLP9**	Price

KENNEDY 22" Cantilever Tool Box Model 1022

MADE IN THE USA

- Movable/removable partitions and divider sets in two trays
- Steel core, vinyl cushioned handle
- Has divider for storing sockets
- Black enamel trays



Length (in.)	Width (in.)	Height (in.)	Color	Order No.	Price
22.13	10	12.63	Brown Wrinkle	**RX501022B**	Price

PROTO Hip Roof Tool Box with Tray

MADE IN THE USA

- Removable steel tote tray
- Double latch for strength
- Hip roof lid design

New!



Model No.	Width (in.)	Depth (in.)	Height (in.)	Order No.	Price
J9971-NA	19	7	7	**KP4295015**	Price

PROTO 19" Hip Roof Tool Box with Tray

MADE IN THE USA

- Removable steel tote tray
- Double latch for strength
- Hip roof lid design

New!



Model No.	Width (in.)	Depth (in.)	Height (in.)	Order No.	Price
J9971R	19	7	7	**KP4292140**	Price

Snap-on Industrial Brands | WILLIAMS 21" Four Tray Cantilever Tool Box

- Four trays cantilever outward when box is open providing access to the exceptionally deep box
- Two of the trays feature movable dividers and another has a protective cover to prevent small tools or parts from spilling into the box
- Formed feet in the box bottom add to strength and keep the box away from wet, dirty surfaces
- 1971 Cubic Inch Capacity



Width (in.)	Depth (in.)	Height (in.)	Color	Order No.	Price
21-1/4	8-3/4	12	Red	**KP31TB6218A**	Price

Snap-on Industrial Brands | WILLIAMS 20" Hip Roof Tool Box

- Hip roof design for fitting bulky tools
- Ideal for tradesman who carries bulky drills or 3/4 inch drive sets
- Extra large tote tray with deeper space between handle and tray bottom
- Combination drawbolt and padlock eye provide security
- 959 Cubic Inch Capacity
- Shipping weight: 8 lbs.



Length (in.)	Width (in.)	Height (in.)	Color	Order No.	Price
20	7	8	Red	**KP31TB6220A**	Price

Snap-on Industrial Brands | WILLIAMS Flat Top Tool Box

- Ruggedly constructed hand tool box
- Extra long tools up to 25" fit neatly inside
- Three compartment tray with socket divider to keep small tools better organized and close at hand
- Double drawbolts keep the lid tightly closed
- Padlock eye with slotted hasp provides security
- Shipping weight: 13.624 lbs



Width (in.)	Depth (in.)	Height (in.)	Color	Order No.	Price
26	8-3/4	9	Red	**KP31TB6124A**	Price

KENNEDY 20" Professional All Purpose Tool Box Model 5220

- Vinyl cushioned, steel core top handle
- Comes with lift-out tray
- 20 gauge steel

MADE IN THE USA



Length (in.)	Width (in.)	Height (in.)	Color	Order No.	Price
20	7.13	7.25	Brown Wrinkle	**RX505220**	Price

PROTO Cantilever Box

- 4 Trays - 2 with covers
- Trays swing out for easy tool access

New!



Length (in.)	Depth (in.)	Height (in.)	Model No.	Order No.	Price
18	14	10	J9951	**KP4292190**	Price

PROTO General Purpose Tool Boxes

MADE IN THE USA

- Removable steel tote tray
- Heavy-duty side handles
- Double and single latch for strength
- Padlockable center hasp for security





New!

Type - Double Latch					
Model No.	Length (in.)	Width (in.)	Depth (in.)	Order No.	Price
J9954-NA	14	6-1/2	6	**KP4295020**	Price
J9969-NA	26	9-1/2	8-1/2	**KP4294995**	Price
J9975-NA	20	9-1/2	8-1/2	**KP4295010**	Price
J9977-NA	19-1/2	7	8	**KP4295000**	Price

Type - Single Latch					
Model No.	Length (in.)	Width (in.)	Depth (in.)	Order No.	Price
J9954R	14	6-1/2	6	**KP4292130**	Price
J9975R	20	9-1/2	8-1/2	**KP4292145**	Price
J9977R	19-1/2	7	8	**KP4292150**	Price

KENNEDY 20" Professional Tool Box Model K20

- Includes lift-out tray
- Vinyl coated, steel top handle
- Tray has divider for storing sockets

MADE IN THE USA



Length (in)	Width (in.)	Height (in.)	Color	Order No.	Price
20.13	8.63	9.75	Brown Wrinkle	**RX50K20B**	Price

KENNEDY 24" Professional Tool Box Model K24

- Includes lift-out tray
- Tray has divider for storing sockets
- Vinyl coated steel top handle

MADE IN THE USA



Length (in.)	Width (in.)	Height (in.)	Color	Order No.	Price
24.13	8.63	9.75	Brown Wrinkle	**RX50K24B**	Price

PROTO Carpenter's Box

MADE IN THE USA

- Removable steel tote tray
- Extra wide for large tools
- Double latch for strength
- Padlockable center hasp for security
- Heavy-duty side handles

New!



Length (in.)	Depth (in.)	Height (in.)	Model No.	Order No.	Price
32	8-1/2	9-1/2	J9979-NA	**KP4292155**	Price

PROTO General Purpose Tool Box with 3 Drawers

- Cubic capacity: 2.075
- Weight: 25 lbs

MADE IN THE USA

New!



Model No.	Length (in.)	Width (in.)	Height (in.)	Depth (in.)	Order No.	Price
J9993	18	20-3/16	11-3/4	8-3/4	**KP4292125**	Price

Snap-on Industrial Brands | WILLIAMS 21" - 3 Drawer Portable Tool Chest

- Ideal for general use
- Steel tote tray keeps smaller items handy
- Combination drawbolt and keylock provide security
- 1606 Cubic Inch Capacity



Width (in.)	Depth (in.)	Height (in.)	Color	Order No.	Price
21	8-3/4	12	Red	**KP31TB6123**	Price

Snap-on Industrial Brands | WILLIAMS Hand Carry Tool Boxes

- Ruggedly constructed hand lool box
- Three compartment tray with socket divider to keep small tools better organized and close at hand
- Double drawbolts keep the lid lightly closed
- Padlock eye with slotted hasp provides security



KP31TB6116



KP31TB6121

Width (in.)	Depth (in.)	Height (in.)	Color	Order No.	Price
16	6	6-1/2	Red	**KP31TB6116**	Price
21-1/4	8-3/4	12	Red	**KP31TB6121**	Price

WATERLOO 20" Metal Portable 3-Drawer Chest

- Full extension 25 lb friction drawer slides
- Top tray
- Comfort grip handle
- 1 Year Limited Warranty



Width (in.)	Depth (in.)	Height (in.)	Color	Order No.	Price
20	9	12	Black	**RX61MP2012BK**	Price

STANLEY 12" Technician Tool Bag



- Made of durable 600 x 600 denier polyester fabric that is hardwearing, strong and durable
- Multiple internal and external pockets for organization
- Covered front pocket for secure storage of small parts

New!

Model No.	Height (in.)	Width (in.)	OAL (in.)	Order No.	Price
STST70574	9-7/8	5-1/8	11-7/8	**KP438116**	Price

STANLEY Fatmax® Open Mouth Tool Bag

New!



- Central zipper allows for quick access and maximum visibility to contents when opened
- Ideal for carrying hand tools and other medium to small size items
- Rugged 600 x 600 denier (density of material) polyester
- Injected polypropylene hard base extends life of bag by strengthening base and makes bag bottom water-resistant
- Rubber grip handle and padded shoulder strap for extra comfort
- Multiple easy access pockets and compartments for maximum organization

Model No.	Height (in.)	Width (in.)	OAL (in.)	Order No.	Price
518150M	12	10-3/8	19	**KP438038**	Price

PROTO Open Tote Tool Bag

New!



- Durable 1,200 x 1,200 denier fabric
- Rigid and waterproof plastic bottom
- Ergonomically designed leather handle
- 14 Internal storage loops for maximum organization
- Special storage partition for 12 screwdrivers
- 10 External storage pockets
- Adjustable saw compartment with self-adhesive strips
- Weather flap protects tools and conveniently tucks away

Model No.	Width (in.)	Depth (in.)	Height (in.)	Order No.	Price
J120TB	19-1/2	9-1/2	14-1/2	**KP4292275**	Price

PROTO Tool Backpack & Removeable Tote

New!



- Durable 1,200 x 1,200 denier fabric
- Rigid and waterproof plastic bottom
- Ergonomically designed padded straps and back support provide comfort and durability
- Internal storage compartments for maximum organization
- Convenient laptop storage included
- Quick carry tool pouch included for easy transport of commonly used tools

Model No.	Width (in.)	Depth (in.)	Height (in.)	Order No.	Price
J114BP	14	11	18	**KP4292270**	Price

PROTO 14 Pocket Leather Electrician's Pouch

Model No. J95030

MADE IN THE USA

New!



- 10" x 10"
- 4 Large gusseted utility pockets and 2 preformed pliers pockets
- 4 Screwdriver slots, 12" tape rule holder, secured T-type tape holder with swivel rivet
- 2" Belt slots
- Sectioned pocket for torpedo level, multi-purpose tool snap, scratch awl pocket and pencil holders
- Heavy-duty, top grain leather

Order No.	Price
KP4295130	Price

PRM PRO® Cargo Tool Bags with Zip Closure



- Top opening reinforced with metal
- Pop open design, 4 exterior pockets, 2 side strapping for levels, 8 interior pockets and large compartment for tools and parts
- Padded handle and shoulder strap made from heavy duty water repellent polyester

Length (in.)	Width (in.)	Height (in.)	Order No.	Price
18	9	11	**LC707697**	Price
24	9	12	**LC707699**	Price

PRM PRO® 25" Tote Tool Bag



- Made from heavy duty water repellent polyester
- Hard bottom reinforced base with studs for base protection
- Closed top with zip and framed opening
- 19 exterior pockets and 18 interior pockets; 2 side strapping for levels
- Includes padded hande and detachable shouler strap

Length (in.)	Width (in.)	Height (in.)	Order No.	Price
25	12	13	**LC707701**	Price

PRM PRO® 20" All Purpose Tool Bag



- Made from heavy duty water repellent polyester
- For easy storage of welding helmet, welding jacket, tools and gloves
- Closed top with zip
- Includes padded handle and detachable shoulder strap

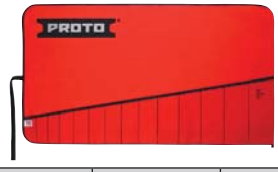
Length (in.)	Width (in.)	Height (in.)	Order No.	Price
20	11	13	**LC700001**	Price

PROTO Pocket Tool Rolls- Red Canvas

- Red canvas
- Stitched and reinforced edges for strength
- Reinforced pockets
- Tie strap closure

New!

MADE IN THE USA



Length (in.)	Width (in.)	No. of Pockets	Model No.	Order No.	Price
14	10	10	J25TR05C	**KP4292400**	Price
15	12	14	J25TR08C	**KP4292525**	Price
12	7	13	J25TR10C	**KP4292535**	Price
15	11	15	J25TR34C	**KP4292470**	Price

ergodyne Arsenal® Tool Roll-Up

- Stores up to 25 tools with room for sockets
- 1680D Ballistic polyester
- 25 Pockets for wrenches, sockets. etc.
- Carry handle for easy transport
- Socket pockets holds 3/8" or 1/4" sockets
- Buckle closure with a handy carry strap included
- Dimensions: 27"L x 14.75"W



Order No.	Price
LF6513770	Price

STANLEY Fatmax® Structural Foam Tool Box

New!

- Extra heavy duty, professional tool box
- Water seal makes tool box water resistant
- Ideal for carrying power tools, hand tools and medium to large items
- Portable half tray allows room for storage of larger items
- V-groove with ruler on top of lid holds materials such as lumber and pipes in place for cutting



Model No.	Height (in.)	Width (in.)	OAL (in.)	Order No.	Price
028001L	11-1/2	12-1/4	28	**KP438020**	Price

STANLEY Series 2000 Tool Boxes

New!

- Two lid organizers for small parts storage – accessible without opening the tool box
- Built-in pad lock eye for small locks helps keep contents secure
- Removable tray



Model No.	Height (in.)	Width (in.)	OAL (in.)	Order No.	Price
016011R	7-1/8	7-1/2	15-3/4	**KP438004**	Price
016013R	8.1	7.1	16	**KP438006**	Price

Waterloo Plastic Portable Tool Boxes

- Available in 5 sizes; 14”, 17”, 20”, 23” & 26”
- Includes plastic tote tray
- Comfort grip handle
- Dent resistant polypropylene



Width (in.)	Depth (in).	Height (in.)	Color	Order No.	Price
14	7.5	6.25	Black	**RX61PP1406BK**	Price
17	9.25	9	Black	**RX61PP1709BK**	Price
20	9.25	9	Black	**RX61PP2009BK**	Price
23	10.5	10	Black	**RX61PP2310BK**	Price
23	10.5	13.5	Black	**RX61PP2314BK**	Price
26	10.5	10	Black	**RX61PP2610BK**	Price

Rubbermaid Commercial Products Tool Boxes

Professional-grade tool boxes for commercial/industrial use.

- Made of sturdy structural foam construction that won’t rust, dent, chip, or peel
- Removable trays provide added compartmentalized storage area
- Metal latches can be padlocked for security



Model No.	Length (in.)	Width (in.)	Height (in.)	Order No.	Price
7802	26	11-1/2	11-1/8	**RZ557802B**	Price

ergodyne Arsenal™ Open Top Tool Organizer 5810

- 30 Pockets: 21 exterior, 9 interior, adjustable internal divider
- Molded rubber base
- Plastic parts organizer
- Wide, reinforced opening
- Bio-curved padded shoulder strap and carry handle for heavy loads
- Outside tape loop
- Nickel-plated tape measure holder
- Detachable cell phone holder, parts organizer and junk pouch
- Ballistic poly construction holds up to jobsite abuse
- Dimensions: 13.5”L x 7.5”W x 11”H



Length (in.)	Width (in.)	Height (in.)	Order No.	Price
13.5	7.5	11	**LF655810**	Price

ergodyne Arsenal

New!

- Wide, reinforced opening
- Molded rubber base
- Bio-curved padded shoulder strap and carry handle
- Outside tape loop and strapping for level or long tools
- Detachable cell phone holder
- 28 Pockets: 14 exterior, 14 interior, adjustable internal divider



Length (in.)	Width (in.)	Height (in.)	Order No.	Price
15.25	9	12	**LF655802**	Price
25	10	14	**LF655808**	Price

PROTO Extra Heavy Duty Polyester Leather Reinforced Tool Bag

MADE IN THE USA

New!

- Measures 24” wide x 8” deep
- Rugged water resistant polyester reinforced with top grain leather bottom
- One-piece construction riveted to 12 gauge steel hinged frame
- Riveted reinforced leather handles and retaining straps
- Water-resistant fiber board bottom
- 9” x 1” Reinforced inside pocket
- 6 Metal studs to protect outside bottom wear



Model No.	Order No.	Price
J95322	**KP4292260**	Price

PROTO All Purpose Polyester Zipper Tool Bags

MADE IN THE USA

New!

- One piece construction of water resistant polyester
- Heavy-duty zipper
- Ideal for storing pliers, wrenches, screwdrivers and other small tools and instruments



Size (in.)	Model No.	Order No.	Price
7 x 12	J95305	**KP4292240**	Price
15 x 9	J95306	**KP4292245**	Price

PROTO Straight Wall Utility Bucket

- Rugged water resistant polyester
- Polypropylene rope handles reinforced at top ring
- 8” x 7” inside pocket
- Heavy-duty die cast swivel snap hook

MADE IN THE USA

New!



Model No.	Order No.	Price
J95336	**KP4292280**	Price

STANLEY Fatmax® 4-in-1 Mobile Work Station

New!

- 4 storage solutions in one includes tool box, part bins, portable tray and oversized lower bin for larger items
- Patented tiered cantilever multi-level rolling system allows easy access to all 4 storage areas at the same time
- Durable Structural Foam construction
- Telescopic handle for easy maneuvering
- Easy latch system includes a quick push to close feature
- Large front latch that locks the entire unit
- Ball bearing slides for smooth operation even under heavy load
- V-groove on top of lid holds materials such as lumber and pipes in place for cutting
- Extra large, heavy duty metal latches with pad lockable eye lets
- Extra heavy duty rubber-coated 7″ wheels – for maximum stability



Model No.	Height (in.)	Width (in.)	Weight	Order No.	Price
020800R	24.8	16.2	23.63 lbs	**KP439302**	Price

STANLEY Mobile Work Center

New!

- Large bin for power tools, level and other large tools
- Easy mobility with large wheels
- Slide down door with easy shut snap
- Handle folds down for storage
- Portable tray for hand tools in top tool storage compartment



Model No.	Height (in.)	Width (in.)	Weight	Order No.	Price
018800R	11.4	17.7	8.68 lbs	**KP438008**	Price

STANLEY 17 Gallon Contractor Chest

New!

- Removable organizer so all small parts are organized and accessible
- Unique organizer with STANLEY branding on lid and long lasting IML (In Mold Labeling)
- Power tools easily accessible from bottom bin
- 2/3 size portable tray allows for storage of larger/longer tools
- V groove on top lid for onsite sawing needs
- 200lb weight capacity



Model No.	Height (in.)	Width (in.)	Weight	Order No.	Price
033026R	19.3	29.64	20.68 lbs	**KP438024**	Price

STANLEY 50 Gallon Mobile Tool Chest

New!

- Wide work surface on lid that includes two 2” x 4” saw grooves
- Pull-out steel handle with soft grip for easy maneuverability
- Large, nickel-plated metal latches
- Lock and keys included
- Wide, heavy-duty rubber-coated wheel



Model No.	Height (in.)	Width (in.)	Weight	Order No.	Price
037025H	23	23	31.75 lbs	**KP438026**	Price

STANLEY SortMaster™ Light Organizer

New!

- Innovation in a basic organizer locking latches and carriage of up to 3 at once
- Added value of 3 in 1
- Removable dividers provide high customization for small parts and larger hand tools
- Special lid structure prevents movement of small parts from one compartment to another
- Convenient ergonomic carriage of tools with additional latch enables back-to-back stacking



Model No.	Size (in.)	Order No.	Price
STST14021	11-1/2 L x 8-1/2 W x 2.9 H	**KP438064**	Price

STANLEY Deep Professional Organizer

New!

- High-impact, break-resistant, crystal-clear lid
- Unique lid design keeps storage cups locked in place
- Removable cup compartments in different sizes
- Large, deep cups for easy access to small items
- Extra-wide handle designed for gloved hands



Model No.	Size (in.)	Order No.	Price
014710R	17-1/2 L x 14 W x 4-1/2 H	**KP438000**	Price

Snap-on Industrial Brands | WILLIAMS Hand Carry Tool Boxes

- Ruggedly constructed for long life
- Ideal for storing socket sets, other tools, and small parts
- Folding metal handle and locking latch



Width (in.)	Length (in.)	Height (in.)	Color	Order No.	Price
5-1/2	14-1/2	1-3/4	Blue	**KP31TB35**	Price
7	10	1-1/2	Blue	**KP31TB101**	Price
8	18	2	Blue	**KP31TB103**	Price
8-1/8	24-7/8	3-7/8	Blue	**KP31TB49**	Price
11-1/2	30-1/4	4-3/4	Blue	**KP31TB12**	Price

PROTO Socket Tool Boxes

New!

- These set boxes are used to store Socket Sets in your Tool Box or Utility Cart
- They also make it convenient and easy to transport a full set of sockets to the job



Model No.	Width (in.)	Depth (in.)	Height	Order No.	Price
J4795	7	7-3/4	1-5/8	**KP4294905**	Price
J4797	1.5 lbs	7-3/4	1-5/8	**KP4294910**	Price
J5299	10	4-7/16	1-5/8	**KP4294920**	Price
J5497	23	7-3/4	1-5/8	**KP4294925**	Price

PRM PRO Deluxe Storage Cabinets

- Heavy gauge steel with16-gauge door frame construction
- Louvers ventilation to reduce fume build-ups an staleness
- Adjustable levelers and knuckle hinges
- Brushed handles with key locks
- 200 lbs capactiy per shelf

MADE IN THE USA



60035



Openings	Type	Color	Width (in.)	Depth (in.)	Height (in.)	Weight	Order No.	Price
5	Assembly Required	Med Gray	36	24	78	183 lbs	**RV8260020**	Price
5	Welded	Med Gray	36	24	78	178 lbs	**RV8260035**	Price

*** Ships by common carrier**

PRM PRO Standard & Combination Storage Cabinets

- These units are general purpose storage cabinets that provide a level of quality you won't find elsewhere
- Provides secure storage for office supplies, books, records, small parts, tools, etc
- Offers 5 openings with 4 adjustable shelves, a chrome handle with 2 keys and a 2-point locking system for extra security
- 200 lbs capacity per shelf

MADE IN THE USA



RV8260000



RV8260025

Openings	Type	Color	Width (in.)	Depth (in.)	Height (in.)	Weight	Order No.	Price
5	Assembly Required	Med Gray	36	18	72	113 lbs	**RV8260015**	Price
5	Assembly Required	Med Gray	36	24	72	136 lbs	**RV8260025**	Price
5	Welded	Med Gray	36	18	72	121 lbs	**RV8260030**	Price
7	Assembly Required	Med Gray	36	18	72	112 lbs	**RV8260000**	Price

*** Ships by common carrier**

PRM PRO Extra-Large Storage Cabinets

- 48" wide cabinet provides 13 more cubic feet of storage than a 36" wide cabinet
- Specially engineered shelves utilize box formed construction to accomodate heavy loads
- With the extra wide shelf span, they will support 400 lbs per shelf

MADE IN THE USA



RV8260005

Openings	Type	Color	Width (in.)	Depth (in.)	Height (in.)	Weight	Order No.	Price
5	Assembly Required	Med Gray	48	24	78	214 lbs	**RV8260005**	Price
5	Welded	Med Gray	48	24	78	230 lbs	**RV8260010**	Price

*** Ships by common carrier**

DURHAM MFG Est. 1922 16 Gauge Industrial Strength Cabinets



- All welded 16 guage steel
- 3-point locking system wih keyed handle and 5/16” diameter lock rods
- Full height flush doors with full length piano hinges
- Doors freature 6-5/8” wide door reinforcement for added strength
- 6”H base / legs which provide access fro forklifts:pre-punched holes allow for lagging to the floor
- 4 adjustable shelves rest on louver uprights and adjust on 4” centers (no tools required)

Model No.	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	No. of Shelves	Weight	Order No.	Price
2501-4S-95	36	24	84	900 lbs per shelf	(4) adjustable shelves	354 lbs	**SB5525014S95**	Price
2502-4S-95	48	24	72	700 lbs per shelf	(4) adjustable shelves	394 lbs	**SB5525024S95**	Price
2601-3S-95	36	18	60	600 lbs per shelf	(3) adjustable shelves	254 lbs	**SB5526013S95**	Price

Ships By Common Carrier from Manufacturer

DURHAM MFG Est. 1922 14 Gauge Cabinet with Adjustable Shelves



- Heavy Duty all welded 14 guage steel
- Full height welded piano hinges for increased strength and rigidity of doors
- 3-point locking system with chrome keyed handle and 5/16” diameter lock rods
- Main Cabinet is 20”D; box style 4” doors make full cabinet depth 24”
- Fully welded louver panels reinforce door with 14 door shelves
- Adjustable shelves rest on louver uprights and adjust on 4” centers (no tools required)

Model No.	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	No. of Shelves	Weight	Order No.	Price
DC36-4S12DS-95	36	24	72	900 lbs per shelf	(4) adjustable shelves, (12) adjustable Door shelves	416 lbs	**SB55DC364S12DS9**	Price
DC48-4S14DS-95	48	24	72	700 lbs per shelf	(4) adjustable shelves, (14)adjustable Door shelves	528 lbs	**SB55DC484S14DS9**	Price
SJC-DLP-4S-14DS-95	36	24	72	700 lbs per shelf	(4) adjustable shelves, (14) adjustable Door shelves	544 lbs	**SB55SJCDLP4S14D**	Price

Ships By Common Carrier from Manufacturer

DURHAM MFG Est. 1922 Heavy Duty 14 Gauge Cabinets with Adjustable Shelves



- Heavy Duty all welded 14 guage steel
- 7 Guage leaf hinges to prevent sagging
- 3-point cast steel locking handle with 3/8” diameter lock rods and provision for a padlock (padlock not provided)
- 6” High base/legs which provide access for forklifts: pre-punched holes allow for lagging to the floor(consturcted of 3/16” steel)
- (2) shelves bolt into place easily using fasteners provided and adjust on 2-1/4” centers

Model No.	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	No. of Shelves	Weight	Order No.	Price
3700-2S-95	36	24	42	1900 lbs per shelf	(2) adjustable shelves	272 lbs	**SB5537002S95**	Price
3701-3S-95	36	24	60	500 lbs per shelf	(3) adjustable shelves	347 lbs	**SB5537013S95**	Price
3702-4S-95	36	24	78	1900 lbs per shelf	(4) adjustable shelves	396 lbs	**SB5537024S95**	Price

Ships by Common Carrier from Manufacturer

DURHAM MFG Est. 1922 Extra Shelves



Model No.	Width (in.)	Depth (in.)	For Use On	Weight	Order No.	Price
FDC-SH-3618-95	35-1/2	16-3/8	Extra shelf for DC-DLP-96-4S-95, DC36-4S-12DS-95, DC36-642S6DS-95, 2601-3S-95, EMDC-361872-95	17 lbs	**SB55FDCSH361895**	Price
FDC-SH-3624-95	35-1/2	21-3/8	Extra shelf for 2501-4S-95	21 lbs	**SB55FDCSH362495**	Price
FDC-SH-4818-95	47-1/2	16-3/8	Extra shelf for DC48-128-4S-95, SJC-DLP-4S-14DS-95, DC48-4S14DS-95, JC-137-3S-95	24 lbs	**SB55FDCSH481895**	Price
FDC-SH-4824-95	47-1/2	21-3/8	Extra shelf for 2502-4S-95, EMDC-362472-95	30 lbs	**SB55FDCSH482495**	Price
HDC-SH-2436-95	33-15/16	20-27/32	Extra shelf for 3700, 3701, 3702	21 lbs	**SB55HDCSH243695**	Price
HDC-SH-2448-95	45-15/16	20-27/32	Extra shelf for HDC-244878-4S95	26 lbs	**SB55HDCSH244895**	Price
HDC-SH-2460-95	57-15/16	20-27/32	Extra shelf for HDC-246078-4S95	37 lbs	**SB55HDCSH246095**	Price

Professional Series Floor Cabinets

New!

- Available butcher block or stainless-steel surface; 1-3/4" thick
- Height adjust from 28" to 41"
- Sturdy black frame has capacity of 3,000 lbs



RX61PWS36TC



RX61PWS36LC



RX61PWS36SC

Color	Depth (in.)	Width (in.)	Height (in.)	Description	Load Cap.	Weight	Order No.	Price
Black	21.5	36	74	Trio	400 lbs	190 lbs	**RX61PWS36TC**	Price
Black	21.5	36	74	With Locker	400 lbs	155 lbs	**RX61PWS36LC**	Price
Black	21.5	36	74	With Shelves	400 lbs	149 lbs	**RX61PWS36SC**	Price

Ships By Common Carrier

Professional Series Base Cabinets

- Rolls under workbenches
- Protective plastic bumpers
- Internal keyed locking system protects valuable items
- Four swiveling 5 x 2" casters
- 10 Year limited manufacturer warranty

New!



RX61PWS262D



RX61PWS264D

Color	No. of Drawers/Sbelf	Depth (in.)	Width (in.)	Height (in.)	Caster Size (in.)	Load Cap.	Weight	Order No.	Price
Black	1	18	26.5	34.5	5 x 2	1200 lbs	68 lbs	**RX61PWS262D**	Price
Black	4	18	26.5	34.5	5 x 2	1200 lbs	68 lbs	**RX61PWS264D**	Price

Work Surfaces

- Stainless steel work surface can be added to a PCA-40524 40" wide Waterloo Professional HD Mobile Workstation
- Easy to clean
- Fits inside the recessed work surface of the PCA-40524 Wateloo Mobile Workbench
- 1 Year limited manufacturer warranty



Size (in.)	Width (in.)	Description	Weight	Order No.	Price
27.5 x 19	27.5	For 26" Wide Cabinets	17 lbs	**RX61ASX26SSWS**	Price
38.13 x 28.5 x .5H	38.13	For Heavy Duty Workstationn PCA-40524BK, PCA-40524RD	39 lbs	**RX61ASX4024SSWS**	Price
39.63 x 17.5 x .5H	39.63	For Workstations PCA-4111BK, PCA-4111RD, WCA-4111RD, WCA-4111BK	39 lbs	**RX61ASX4118SSWS**	Price
45.63 x 23.5 x 1H	45.63	For Heavy Duty Workstation PCA-46624BK, PCA-46624RD	43 lbs	**RX61ASX4624SSWS**	Price

Professional Series Wall Cabinet

- Workspace storage compliments our tool chest and cabinets for a complete storage solution
- Organize a repair shop, maintenance room or supply closet to fit your needs

New!



Color	Depth (in.)	Width (in.)	Height (in.)	Load Cap.	Weight	Order No.	Price
Black	15	30	30	200 lbs	50 lbs	**RX61PWS30WC**	Price

PRM PRO Pro Standing Desk Converter

New!



- The sturdy desktop holds up to 35 lbs. and easily lifts dual-monitors and laptops
- Seamlessly move from sit to stand in a matter of seconds
- Remains stable even at its maximum height of 15-3/4″
- Lower shelf 27-1/2”W x 9-3/4”D
- Top shelf 32”W x 13-3/4”D
- Two-tier design helps posture and maintains space for computer & accessories (not included)
- Chamfered edges keep forearms comfortable while typing and working
- Comes preassembled and can be easily added to any surface

Color	Order No.	Price
Charcoal	**SA70PRO32**	Price

DURHAM MFG Est. 1922 Specialty Table High Shelf Cabinets



300095

- All welded 16 guage steel
- 3-point locking system wih keyed handle and2 keys
- 36” x 24” wide unit with 1 fixed shelf welded into place provideds secures storage
- 6” legs make unit fork liftable
- 3” back and end stops

Width (in.)	Depth (in.)	Height (in.)	Load Capacity	No. of Shelves	Weight	Order No.	Price
36	24	36	900 lbs per shelf	1	158 lbs	**SB55300095**	Price
36	24	36	900 lbs per shelf	1	128 lbs	**SB55301095**	Price

Ships by Common Carrier from Manufacturer

DURHAM MFG Est. 1922 Heavy Duty 12 Gauge Cabinets with Adjustable Shelves



- Heavy Duty all welded 12 guage steel
- 7 Guage leaf hinges to prevent sagging
- 3-point cast steel locking handle with 3/8” diameter lock rods and provision for a padlock (padlock not provided)
- 6” High base/legs which provide access for forklifts: pre-punched holes allow for lagging to the floor. (consturcted of 3/16” steel)
- 4 shelves bolt into place easily using fasteners provided and adjust on 2-1/4” centers

Width (in.)	Depth (in.)	Height (in.)	Load Capacity	No. of Shelves	Weight	Order No.	Price
48	24	78	1200 lbs per shelf	(4) adjustable shelves	573 lbs	**SB55HDC2448784S**	Price
60	24	78	1650 lbs per shelf	(4) adjustable shelves	699 lbs	**SB55HDC2460784S**	Price

Ships By Common Carrier from Manufacturer

DURHAM MFG Est. 1922 14 Gauge Ventilated Cabinets



- Heavy duty all welded 14 guage steel
- 3-point locking system with chrome keyed handle and 5/16” diameter lock rods
- Full height welded piano hinges for increased strength and rigidity of doors
- Punched diamond pattern in doors allws content visibility and ventilation
- Adjustable shelves rest on louver uprihts and adjust on 4” centers.(no tools required)

Height (in.)	Width (in.)	Depth (in.)	Load Capacity	No. of Shelves	Weight	Model No.	Order No.	Price
42	36	24	1900 lbs per shelf	(2) adjustable shelves	272 lbs	3700-2S-95	**SB5537002S95**	Price
60	36	24	500 lbs per shelf	(3) adjustable shelves	347 lbs	3701-3S-95	**SB5537013S95**	Price
78	36	24	1900 lbs per shelf	(4) adjustable shelves	396 lbs	3702-4S-95	**SB5537024S95**	Price

Ships by Common Carrier from Manufacturer

Extra-Wide Heavy Duty Gauge Steel Cabinets

- Deluxe grade extra-wide storage cabinets give maximum space and security to all your business supplies and tools
- 48” Wide for extra storage
- Welded door frame
- 3-point latching door for maximum security
- Chrome handle & lock
- 4 adjustable shelves on 2” centers
- Smooth panels and concealed hinges
- Tough powder coat finish available in gray, tan or black
- Easy to assemble

MADE IN THE USA



W (in.)	D (in.)	H (in.)	Color	Weight	Order No.	Price
48	18	78	Black	196 lbs	**RZ504001B**	Price
48	18	78	Gray	196 lbs	**RZ504001G**	Price
48	18	78	Tan	196 lbs	**RZ504001T**	Price
48	24	78	Black	215 lbs	**RZ504000B**	Price
48	24	78	Gray	215 lbs	**RZ504000G**	Price
48	24	78	Tan	215 lbs	**RZ504000T**	Price

Storage Cabinets

- Modern styling includes rounded front corners
- Quick easy shelf adjustments on 2” centers
- Polished chrome handle with built-in lock
- Quiet door features



Tan



Tan



Tan

Type	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
Wardrobe Cabinet	36	18	78	127 lbs	**SA501086**	Price
Storage Cabinet	36	18	78	130 lbs	**SA501081**	Price
Storage Cabinet	36	24	78	113 lbs	**SA501091**	Price
Wardrobe Cabinet	36	24	78	130 lbs	**SA501096**	Price
Combo Wardrobe/ Storage Cabinet	36	18	78	133 lbs	**SA501089**	Price
Combo Wardrobe/ Storage Cabinet	36	24	78	152 lbs	**SA501099**	Price

F.O.B. Aurora, IL.

Heavy Duty Gauge Steel Storage Cabinets

- Deluxe grade, storage cabinets give maximum security to all your business supplies and tools
- 78” High for extra storage
- Welded door frame
- 3-point latching door for maximum security
- Chrome handle & lock
- 4 adjustable shelves on 2” centers
- Smooth panels and concealed hinges
- Tough powder coat finish available in gray, tan or black
- Easy to assemble

MADE IN THE USA



W (in.)	D (in.)	H (in.)	Color	Weight	Order No.	Price
36	18	78	Black	135 lbs	**RZ503000B**	Price
36	18	78	Gray	135 lbs	**RZ503000G**	Price
36	18	78	Tan	135 lbs	**RZ503000T**	Price
36	24	78	Black	161 lbs	**RZ503001B**	Price
36	24	78	Gray	161 lbs	**RZ503001G**	Price
36	24	78	Tan	161 lbs	**RZ503001T**	Price

Extra Shelves for Storage Cabinets Above

Width (in.)	Depth (in.)	Color	Weight	Order No.	Price
36	18	Black	8 lbs	**RZ503002B**	Price
36	18	Gray	8 lbs	**RZ503002G**	Price
36	18	Tan	8 lbs	**RZ503002T**	Price
36	24	Black	11 lbs	**RZ503003B**	Price
36	24	Gray	11 lbs	**RZ503003G**	Price
36	24	Tan	11 lbs	**RZ503003T**	Price

48" Wide Storage Cabinet

Up to 52 cubic feet of storage!

- A virtual storeroom of space — can hold 2000 pounds of parts, stationery, literature, or supplies
- 1000 Series cabinets are designed for pleasing appearance and long life
- Cabinets can be mixed or matched to create the type of storage facilities that exactly meet your needs
- Use singly or grouped
- Sound-deadening, double-pan door reinforcement for added strength and 3 Pc. welded shelf reinforcement that boosts load capacity to 400 lbs. per shelf
- Wide 24” doors offer easy access to cabinet contents
- Fixed bottom shelf



W (in.)	D (in.)	H (in.)	No. of Shelves	Weight	Order No.	Price
48	24	42	2	128 lbs	**SA501035**	Price
48	24	78	4	199.6 lbs	**SA501031**	Price

F.O.B. Aurora, IL

Extra Shelves for 48" Wide Cabinet Above

W (in.)	D (in.)	Weight	Order No.	Price
48	24	17 lbs	**SA5010581**	Price

All Welded Heavy Duty Storage Cabinets

- Adjustable, 1450-lb. capacity shelves
- So tough they provide safe-like security on your shop floor
- Heavy-duty cabinets are made of 14-ga. welded steel for superior durability
- Steel doors have a padlock hasp and heavy-duty 5/16" brass pin hinges to protect contents when you're away
- Available in widths of 36", 48" or 60"
- Adjustable shelves bolt securely into keyhole slots and can be positioned on 3" centers
- Shipped in corrugate on 4"H wood block to accommodate fork lift; shelves are bolted in place
- The 36" Combination Cabinet lets you store garments and supply items in one convenient unit
- Includes one fixed, full-width top shelf and four half-shelves that adjust on 3" centers
- The wardrobe compartment includes a coat rod
- Dove Gray in color


1121


1120


1114


1145


1112


1110

Description	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
Counter-High Storage Cabinet	36	21	42	230 lbs	**SA501110**	Price
Eye-Level Storage Cabinet	36	21	60	300 lbs	**SA501112**	Price
Full Height Storage Cabinet	36	21	78	370 lbs	**SA501114**	Price
Full Height Storage Cabinet	36	24	78	400 lbs	**SA501121**	Price
Full Height Storage Cabinet	36	24	78	405 lbs	**SA501115**	Price
Full Height Wide Storage Cabinet	48	24	78	470 lbs	**SA501120**	Price
Full Height Wide Storage Cabinet	60	24	78	525 lbs	**SA501145**	Price

F.O.B. Aurora, IL

All Welded Storage Cabinets with Removable Plastic Bins

- All-welded 14-gauge steel construction delivers secure storage behind heavy-gauge steel doors
- 3-point locking system featuring 3/8" latch rods and 3/16" latch plates
- Removable plastic parts bins increase storage density, speed selection and retrieval
- Corrosion resistant, and impervious to most solvents
- Safety Yellow plastic bins easily clip on and off racks welded to cabinets and doors
- All-welded cabinets are wrapped in corrugate and shipped set up for forklift access
- Dove Gray in color


1124


1123


1122

Type	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
Bin Storage Cabinet	36	21	78	400 lbs	**SA501124**	Price
Combination/Bin Storage Cabinet	36	21	78	400 lbs	**SA501122**	Price
Large Plastic Bins	8-1/4	14-3/4	7	2 lbs	**SA5078228**	Price
Shelf/Bin Storage Cabinet	36	21	78	370 lbs	**SA501123**	Price
Small Plastic Bins	4-1/8	5-3/8	3	.1 lb	**SA5078222**	Price

All Welded Deep Door Storage Cabinets with Removable Plastic Tilt Bins

- All-Welded, 14-ga. steel delivers secure storage behind heavy-gauge steel doors with three-point locking system.
- Unique tilt-bins add more storage space for small parts and equipment
- Hard composition, swivel casters underneath swingout doors maintain positive alignment and allow smooth door opening and closing under heavy loads
- Casters and legs (included) create clearance for forklift access
- Interior depth of cabinets is 21"; doors are 7" D
- Easy-to-remove Tilt-Bins swing forward to allow 100% access to contents, then tilt back for storage
- Replacement Tilt-Bins sold separately
- Shipped assembled and ready to use
- Dove Gray in color


1128


1127

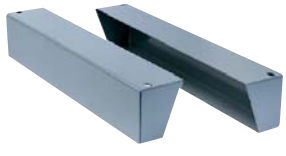

1126


1125

Description	No. of Shelves	Total Bins Included	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
Bin Storage Cabinet	2	40	38	28	76	460 lbs	**SA501126**	Price
Bin Storage Cabinet	4	12	38	28	76	455 lbs	**SA501127**	Price
Bin Storage Cabinet	4	24	38	28	76	455 lbs	**SA501125**	Price
Bin Storage Cabinet	4	36	38	28	76	460 lbs	**SA501128**	Price

Bolt On Legs For All Welded Cabinets

- Height: 4"
- Provides forklift acess



For Use With	Order No.	Price
Bolt-On leg set for 21" D Cabinets	**SA501117**	Price

DURHAM MFG Est. 1922 14 Gauge Cabinet with Hook On Bins and Adjustable Shelves



- Heavy duty all welded 14 gauge steel
- Full height welded piano hinges for increased strength and rigidity of doors
- 3-Point locking system with chrome keyed handle and 5/16” diameter lock rods
- Double doors open at 180 degrees for full access to product
- Fully welded louvered panels and 171 Hook-On Bins®
- 6” H base/legs which provide access for forklifts; pre-punched holes allow for lagging to the floor (constructed of 3/16” steel)

Width (in.)	Depth (in.)	Height (in.)	No. of Bins Included	Weight	Order No.	Price
36	24	72	(48) 4"W x 5"L x 3"H, (48) 4"W x 7"L x 3"H, (18) 6"W x 11"L x 5"H, (12) 8"W x 15"L x 7"H, (6) 16"W x 15"L x 7"H	546 lbs	**SB55DCBDLP13295**	Price
36	24	72	(48) 4"W x 7"L x 3"H, (16) 8"W x 15"L x 7"H	464 lbs	**SB55DC36642S6DS**	Price
36	24	72	(96) 4" W x 5"L x 3"H	414 lbs	**SB55DCDLP964S95**	Price
48	24	72	(64) 4"W x 5"L x 3"H, (64) 4"W x 7"L x 3"H, (24) 6"W x 11"L x 5"H, (18) 8"W x 15"L x 7"H, (6) 16"W x 15"L x 7"H	546 lbs	**SB55DC4817695**	Price
48	24	78	(128) 4" W x 5"L x 3"H	516 lbs	**SB55DC481284S95**	Price
48	24	78	(64) 4"W x 5"L x 3"H, (64) 4"W x 7"L x 3"H, (25) 6"W x 11"L x 5"H, (12) 8"W x 15"L x 7"H, (6) 16"W x 15"L x 7"H	540 lbs	**SB55JC17195**	Price
48	24	78	(64) 4"W x 5"L x 3"H, (64) 4"W x 7"L x 3"H, (3) 8"W x 15"L x 7"H, (6) 16"W x 15"L x 7"H	570 lbs	**SB55JC1373S95**	Price

Ships By Common Carrier from Manufacturer

edsal Bin Storage Cabinets

- Secures and organizes parts, tools, equipment, supplies and other valuable inventory items
- Rugged 16 gauge all welded construction
- Overall size of 24”D x 72”H available in standard 38” wide or 48” wide jumbo units for extra storage space
- Inside shelves have load capacities of 800 lbs. (for 38” wide) and 700 lbs. (for 48” wide), evenly distributed
- All shelves are fully adjustable on 4” centers
- 4” Deep pocket doors with heavy-duty hinges open 270° and accommodate bins and/or 30 lb. capacity shelves
- Complete with padlock hasp (padlock not included), leveling feet, bins and/or shelves
- 38” wide inside shelf size is 2”H x 37-1/2”W x 18”D; door shelf size is 3/4”H x 18-3/8”W x 3-3/4”D
- 48” wide inside shelf size is 2”H x 47-1/2”W x 18”D; door shelf size is 3/4”H x 23-3/8”W x 3-3/4”D
- Tough powder coat finish in gray
- Heavy-duty removable plastic bins in yellow
- Ships assembled



RZ50BC6200G
Includes 32 Bins



RZ50BC6201G



RZ50BC6202G



RZ50BC6203G



RZ50BC4801G
Includes 176 Bins



RZ50BC4802G



RZ50BC4803G
Includes 128 Bins



RZ50BC4804G
Includes 84 Bins

Width (in.) - 38			
(No. of Bins) Bin Size W" x D" x H"	Adjustable Shelves	Order No.	Price
48 - 4-1/8 x 5-3/8 x 3; 48 - 4-1/8 x 7-3/8 x 3; 18 - 5-1/2 x 10-7/8 x 5; 12 - 8-1/4 x 14-3/4 x 7; 6 - 16-1/2 x 14-3/4 x 7	None	**RZ50BC6200G**	Price
48 - 4-1/8 x 7-3/8 x 3; 16 - 8-1/4 x 14-3/4 x 7	2 Interior, 6 Door	**RZ50BC6203G**	Price
96 - 4-1/8 x 5-3/8 x 3	4 Interior	**RZ50BC6202G**	Price
None	4 Interior, 12 Door	**RZ50BC6201G**	Price

Width (in.) - 48			
(No. of Bins) Bin Size W" x D" x H"	Adjustable Shelves	Order No.	Price
128 - 4-1/8 x 5-3/8 x 3	4 Interior	**RZ50BC4803G**	Price
64 - 4-1/8 x 5-3/8 x 3; 64 - 4-1/8 x 7-3/8 x 3; 24 - 5-1/2 x 10-7/8 x 5; 18 - 8-1/4 x 14-3/4 x 7; 6 - 16-1/2 x 14-3/4 x 7	None	**RZ50BC4801G**	Price
64 - 4-1/8 x 7-3/8 x 3; 20 - 8-1/4 x 14-3/4 x 7	2 Interior, 6 Door	**RZ50BC4804G**	Price
None	4 Interior, 12 Door	**RZ50BC4802G**	Price

edsal Self Closing Flammable Liquids Safety Cabinets

- 500 Lb. capacity galvanized shelves adjustable on 2-1/2" centers
- Locking handle with 3-point latch
- Durable powder coat finish in safety yellow
- 18 Gauge double wall welded construction with dual 2" capped vents with flash arrestors for external exhaust
- Choice of 30, 45 and 60 gallon capacity
- Meets NFPA Code 30 & OSHA Standard 190.106 for storage Class I, II, or III Liquids
- Extra shelves: RZ50SCS350F

MADE IN THE USA



W (in.)	D (in.)	H (in.)	Cabinet Capacity	No. of Shelves	Weight	Order No.	Price
34	34	65	60 Gallons	2	400 lbs	**RZ50SCM760F**	Price
43	18	44	30 Gallons	1	250 lbs	**RZ50SCM730F**	Price
43	18	65	45 Gallons	2	350 lbs	**RZ50SCM745F**	Price

LYON Workspace Products All Welded Visible Storage Cabinets

- Reinforcing K-Brace welded to the door frame delivers added strength and proper door alignment
- All-welded 13-gauge diamond shaped steel mesh stands up to heavy use
- Adjustable shelves bolt into holes spaced from 8-3/4" at bottom to 8-3/4" from top
- Full length door has three-point latching system with cam-locking system and chrome-plated handle
- Baked-on Dove Gray enamel finish
- All stored items are clearly visible even with the door shut





W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
24	21	78	146 lbs	**SA501130**	Price

F.O.B. Aurora, IL

DURHAM MFG Est. 1922 Horizontal Cylinder Storage Cabinets

- Horizontal cabinets will accept (4) 20 lb. and 33-1/2 lb. LPG cylinders
- Cylinder cradles securely hold propane tanks in place
- Expanded metal sides, back and door, for visibility of contents. 1-1/2" x 1/8" angle iron frame
- DANGER FLAMMABLE MATERIALS signs on each door
- In full compliance with OSHA and NFPA standards when used properly
- Shipped fully assembled



Width (in.)	Depth (in.)	Height (in.)	No. of Shelves	Weight	Order No.	Price
29-3/4	30	34-7/8	(2) adjustable shelves	133 lbs	**SB55EGCC450**	Price
29-3/4	30	71-3/4	(4) adjustable shelves	203 lbs	**SB55EGCC850**	Price

Ships By Common Carrier from Manufacturer

DURHAM MFG Est. 1922 Vertical Cylinder Storage Cabinets

- Vertical cabinets will accept 4 standard vertical cylinders up to 59-3/4"
- Includes chain, adjustable in 1" increments, to hold cylinders in place
- Pre-punched lagging holes in feet
- Expanded metal sides, back and door, for visibility of contents. 1-1/2" x 1/8" angle iron frame
- DANGER FLAMMABLE MATERIALS signs on each door
- In full compliance with OSHA and NFPA standards when used properly
- Shipped fully assembled



Width (in.)	Depth (in.)	Height (in.)	Weight	Order No.	Price
29-3/4	20	33-1/2	91 lbs	**SB55EGCVC250**	Price
29-3/4	30	71-3/4	147 lbs	**SB55EGCVC950**	Price
29-3/4	30-3/16	35-1/16	109 lbs	**SB55EGCVC450**	Price
59-3/4	30	71-3/4	256 lbs	**SB55EGCVC1850**	Price

DURHAM MFG Est. 1922 Horizontal/Vertical Cylinder Storage Cabinet

- Holds (8) Horizontal cylinder cabinets - will accept 20 lb. and 33-1/2 lb. LPG cylinders and (9) Vertical cylinders
- Cylinder cradles securely hold propane tanks in place
- Expanded metal sides, back and door, for visibility of contents. 1-1/2" x 1/8" angle iron frame
- DANGER FLAMMABLE MATERIALS signs on each door
- In full compliance with OSHA and NFPA standards when used properly
- Shipped fully assembled from manufacturer



Width (in.)	Depth (in.)	Height (in.)	No. of Shelves	Weight	Order No.	Price
59-3/4	30	71-3/4	(4) shelves on one side of unit.	308 lbs	**SB55EGCC8950**	Price

Ships By Common Carrier from Manufacturer

DURHAM MFG Est. 1922 Flammable Safety Cabinets

FM Approved

- Sturdy all welded double wall steel construction
- Self closing door
- Fusible link provided - Melts to activate self close at 165 degrees
- 2” wide louvers support shelves, adjustable on 4” centers
- 2” Deep leak proof sump
- 2” Bunged air vents with flame arrestors on each side of the cabinet allows for ventilation



Width (in.)	Depth (in.)	Height (in.)	No. of Shelves	Weight	Order No.	Price
17-3/8	18-1/8	22-1/8	(1) adjustable shelf	104 lbs	**SB551004M50**	Price
17-3/8	18-1/8	23.275	(1) adjustable shelf	110 lbs	**SB551004S50**	Price
23	18	41	(1) adjustable shelf	159 lbs	**SB551012M50**	Price
23	18	41	(1) adjustable shelf	167 lbs	**SB551012S50**	Price
34	34	65	(2) adjustable shelf	509 lbs	**SB551060M50**	Price
34	34	65-3/8	(2) adjustable shelf	533 lbs	**SB551060S50**	Price
42-1/8	18-1/8	18-1/8	(1) adjustable shelf	146 lbs	**SB551012MH50**	Price
43	18	44	(1) adjustable shelf	285 lbs	**SB551030M50**	Price
43	18	45-3/8	(1) adjustable shelf	309 lbs	**SB551030S50**	Price
43	18	65	(2) adjustable shelf	409 lbs	**SB551045M50**	Price
43	18	66-3/8	(2) adjustable shelf	423 lbs	**SB551045S50**	Price
43	34	65	(2) adjustable shelf	587 lbs	**SB551090M50**	Price
43	34	65-3/8	(2) adjustable shelf	623 lbs	**SB551090S50**	Price

Ships By Common Carrier from Manufacturer

edsal Flammable Liquids Safety Cabinet

- FM Approved
- Meets NFPA Code 30 & OSHA Standard 190.106 for storage of Class I, II, or III Liquids
- 500-Lb. capacity galvanized shelves adjustable on 2-1/2” centers
- Locking handle with 3-point latch
- Durable powder coat finish in safety yellow
- Dual 2” capped vents with flash arrestors for external exhaust
- 18 Gauge double wall welded construction
- Choice of 30, 45 and 60 gallon capacity

MADE IN THE USA



W (in.)	D (in.)	H (in.)	Cabinet Capacity	No. of Shelves	Weight	Order No.	Price
34	34	65	60 Gallons	2	409 lbs	**RZ50SC600F**	Price
43	18	44	30 Gallons	1	252 lbs	**RZ50SC300F**	Price
43	18	65	45 Gallons	2	349 lbs	**RZ50SC450**	Price

edsal Extra Shelves for Flammable Liquid Cabinets Above

Fits Gallon Size	Weight	Order No.	Price
30 & 45 lbs	9 lbs	**RZ50SCS350F**	Price

DURHAM MFG Est. 1922 Spill Control Cabinets

- Prime cold rolled steel
- Door is welded and riveted in place using a full piano hinge with rust resistant hinge pin
- Spring loaded latches keep door closed and allow easy access in an emergency
- (2) fully adjustable shelves included
- Full Length Plexiglas window allows easy content inventory
- Keyhole slots in back profide for wall hanging



Color	Width (in.)	Depth (in.)	Height (in.)	Weight	Order No.	Price
White	13-3/4	14-1/4	30	24 lbs	**SB5505243**	Price
Yellow	19-7/8	14-1/4	32-3/4	34 lbs	**SB5505750**	Price

Ships By Common Carrier from Manufacturer

LYON Workspace Products Flammable Liquid Storage Cabinets

- Choice of 30 & 45 gallon capacity
- 18 Gauge welded steel, double-wall construction with 1-1/2” air space
- Safety Yellow finish with red “FLAMMABLE LIQUID — KEEP FIRE AWAY” decal
- 3-Point latching system with key lock
- Optional Self-Closing Door with holding latch, has a spring loaded fusible releasing device
- Zinc plated leveling legs
- Dual vents with 2” threaded fittings with fire baffle and cap
- Ribbed, galvanized steel shelves with 350 lb. capacity
- Conforms to OSHA regulations and NFPA Code 30 standards
- 30-Gal. models come with one shelf and 45-Gallon with two shelves
- Capacity is measured using standard 5-gallon size cans
- Ground wire connections dissipate static electricity buildup
- Shelves adjust on 1/2” centers



SA505440N SA505441N SA505444N SA505445N

Door Type	W (in.)	D (in.)	H (in.)	Cabinet Capacity	Weight	Order No.	Price
Manual	43	18	44	30 Gallons	231 lbs	**SA505440N**	Price
Manual	43	18	65	45 Gallons	310 lbs	**SA505444N**	Price
Self Closing	43	18	44	30 Gallons	246 lbs	**SA505441N**	Price
Self Closing	43	18	65	45 Gallons	330 lbs	**SA505445N**	Price

F.O.B. Aurora, IL.

LYON Workspace Products Extra Shelves for Flammable Liquid Cabinets Above



W (in.)	D (in.)	Weight	Order No.	Price
43	18	7.5 lbs	**SA505449N**	Price

Citadel Locker

Lockers are sent unassembled

- Heavy gauge door with electrically welded frame construction forms a rigid one piece uni-body structure
- Vertical members have a uniquely designed flange forming a continuous solid door strike
- Clean lines and an attractive finish help create the right environment
- Steel recessed handles add safety and create a modern contemporary look
- A finger-lift control neatly recessed into the door frame
- Designed for use with a padlock or a built in lock
- Ample height for hanging full length garments
- Conveniently located hat shelf
- Louvered door for improved ventilation
- (3) single prong wall hooks and (1) double prong ceiling hook on 12" and 15" deep lockers
- Coat rod on 18" deep lockers
- Quick easy assembly means substantial labor savings
- Other colors availabe upon request



Single-Tier
3 wide shown



Double-Tier
3 wide shown



Six-Tier
3 wide shown



16-Person
Box Locker

Type - 1 Wide Single Tier Locker						
No. of Openings	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
1	12	12	60	45 lbs	**RZ50CL5001GY**	Price
1	12	12	72	51 lbs	**RZ50CL5031GY**	Price
1	12	15	60	48 lbs	**RZ50CL5011GY**	Price
1	12	15	72	55 lbs	**RZ50CL5041GY**	Price
1	12	18	60	51 lbs	**RZ50CL5021GY**	Price
1	12	18	72	59 lbs	**RZ50CL5051GY**	Price
1	15	18	72	66 lbs	**RZ50CL5061GY**	Price

Type - 3 Wide Single Tier Locker						
No. of Openings	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
3	12	12	60	135 lbs	**RZ50CL5003GY**	Price
3	12	12	72	153 lbs	**RZ50CL5033GY**	Price
3	12	15	60	144 lbs	**RZ50CL5013GY**	Price
3	12	15	72	165 lbs	**RZ50CL5043GY**	Price
3	12	18	60	153 lbs	**RZ50CL5023GY**	Price
3	12	18	72	177 lbs	**RZ50CL5053GY**	Price
3	15	18	72	198 lbs	**RZ50CL5063GY**	Price

Type - 1 Wide Double Tier Locker						
No. of Openings	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
2	12	12	36	52 lbs	**RZ50CL5071GY**	Price
2	12	15	36	56 lbs	**RZ50CL5081GY**	Price
2	12	18	36	59 lbs	**RZ50CL5091GY**	Price

Type - 1 Wide 5 Tier Locker						
No. of Openings	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
5	12	12	60	47 lbs	**RZ50CL5101GY**	Price
5	12	15	60	51 lbs	**RZ50CL5111GY**	Price

Type - 3 Wide 6 Tier Locker						
No. of Openings	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
18	12	12	60	162 lbs	**RZ50CL5123GY**	Price
18	12	15	72	171 lbs	**RZ50CL5133GY**	Price
18	12	18	72	192 lbs	**RZ50CL5143GY**	Price

Type - 16 Person Locker						
No. of Openings	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
16	12	18	12	172 lbs	**RZ50CL515GY**	Price

Type - 1 Wide 6 Tier Locker						
No. of Openings	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
6	12	12	72	54 lbs	**RZ50CL5121GY**	Price
6	12	15	72	59 lbs	**RZ50CL5131GY**	Price
6	12	18	72	64 lbs	**RZ50CL5141GY**	Price

Type - 3 Wide 5 Tier Locker						
No. of Openings	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
15	12	12	60	141 lbs	**RZ50CL5103GY**	Price
15	12	15	60	153 lbs	**RZ50CL5113GY**	Price

Type - 3 Wide Double Tier Locker						
No. of Openings	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
6	12	12	36	156 lbs	**RZ50CL5073GY**	Price
6	12	15	36	168 lbs	**RZ50CL5083GY**	Price
6	12	18	36	177 lbs	**RZ50CL5093GY**	Price

Optional Locks & Number Plates





Type	For Use With	Order No.	Price
Cylinder Lock	5, 6-Tier & 16 Person Box Lockers	**RZ50SL8**	Price
3-Number Combination Lock	All Citadel Lockers	**RZ501502**	Price
Number Plates (Individual Plates)	All Citadel Lockers	**RZ50X100†**	Price
Built-In Combination Lock	Single & Double Tier Lockers	**RZ501630**	Price
Built-In Flat Key Lock	Single & Double Tier Lockers	**RZ501710**	Price

† When ordering, specify sequential numbers needed. i.e.: Need 1-37 when ordering 37 plates.

PRM PRO Foreman's Desks

MADE IN THE USA

Open Style:

- Fully progressive, ball-bearing suspensions allows the drawer to glide easily and quietly
- Drawer comes with lock and keys
- In situations where you don't need a lockable storage cabinet, the added leg room permits the use of a stool for seated comfort
- Shelf can be used for storage of bulky items or as a footrest
- Ideal for the industrial workplace, businesses, schools and institutions

Closed Style:

- 14 Gauge corner posts and heavy steel construction assures long life
- Large storage area with 3-point locking system boasts two shelves for storing tools and other supplies
- Compartmentalized riser is perfect for storing writing utensils, forms and papers
- Drawer and cabinet come with individual locks and keys
- Large sloping surface leaves plenty of room for paperwork and supplies



RV8266050



RV8266055

Style	Color	Width (in.)	Depth (in.)	Height (in.)	Weight	Order No.	Price
Closed	Gray	34-1/2	29	53	155 lbs	**RV8266055**	Price
Open	Gray	34-1/2	29	53	97 lbs	**RV8266050**	Price

Assembly Required

LYON Workspace Products Steel Lockers

- Secured latching system
- One piece, top to bottom 16-gauge steel door-strike on all lockers for strength and security
- Single Tier Lockers includes a separate shelf space
- All door frame corners are lapped and welded to form a strong, rigid assembly



Single Tier High
One Opening Shown



Double Tier High
6 Opening Shown



Six Tier High
1 Opening Shown

Width (in.)	Depth (in.)	Height (in.)	No. of Openings	Style	Weight	Order No.	Price
12	12	72	1	Single Tier	52 lbs	**SA505112**	Price
12	12	72	2	Double Tier	52 lbs	**SA505202**	Price
12	12	72	3	Single Tier	141 lbs	**SA5051123**	Price
12	12	72	6	Double Tier	143 lbs	**SA5052023**	Price
12	15	72	1	Single Tier	57 lbs	**SA505032**	Price
12	15	72	18	Six Tier	162 lbs	**SA5053423**	Price
12	15	72	2	Double Tier	57 lbs	**SA505212**	Price
12	15	72	3	Single Tier	152 lbs	**SA5050323**	Price
12	15	72	6	Double Tier	155 lbs	**SA5052123**	Price
12	15	72	6	Six Tier	66 lbs	**SA505342**	Price
12	18	72	1	Single Tier	62 lbs	**SA505042**	Price
12	18	72	18	Six Tier	180 lbs	**SA5053623**	Price
12	18	72	2	Double Tier	63 lbs	**SA505222**	Price
12	18	72	3	Single Tier	163 lbs	**SA5050423**	Price
12	18	72	6	Double Tier	168 lbs	**SA5052223**	Price
12	18	72	6	Six Tier	71 lbs	**SA505362**	Price
15	18	72	1	Single Tier	68 lbs	**SA505062**	Price
15	18	72	3	Single Tier	184 lbs	**SA5050623**	Price

DURHAM MFG Est. 1922 Key Stock Rack



- Sturdy steel construction
- Holds up to 3/4" square x 12" long stock
- Key holes for easy wall mounting
- 12-1/4" W x 12" H x 6-1/2" D
- Finished in durable gray powder/paint
- Carton pack: one

MADE IN THE USA

No. of Openings	Weight	Order No.	Price
10	8 lbs	**SB55381†**	Price

† Shipped via UPS

DURHAM MFG Est. 1922 Threaded Rod Rack



- Fabricated of prime cold rolled steel
- Separates and organizes threaded rods
- Eighteen 2-1/8" diameter openings to accommodate different sizes
- Easy to assemble
- Finished in durable gray powder paint
- 24-1/8" W x 24" H x 6-7/8" D
- Carton pack: one

MADE IN THE USA

No. of Openings	Weight	Order No.	Price
18	16 lbs	**SB55367†**	Price

† Shipped via UPS

DURHAM MFG Est. 1922 Wire & Terminal Storage Cabinet



- Prime cold rolled steal construction
- 16 Rubberized wire grommets provided to keep wires free from tangling
- 6 Rods for wire spools, maximizing your small wire storage
- Accomodates (24) 3-1/2" spools
- Modular with Durham small slide rack cabinets
- Durable gray powder coat finish

Model No.	Depth (in.)	Width (in.)	Height (in.)	Weight	Order No.	Price
297-95	12	15-1/4	16-1/2	23 lbs	**SB5529795**	Price

DURHAM MFG Est. 1922 Mobile Wire Spool Rack



- Louvered panels on 2 ends
- (8) 23"removable rods accommadate wire spools
- 7-1/2" between rods, 4 wire guides for easy cutting
- Ships assembled

Model No.	Size	Caster Size	Platform Height	Color	Weight	Order No.	Price
MWSR8-LP-95	26" x 18" x 46"	(4) 5" x 1-14" Polyurethane bolt on (2) swivel, (2) rigid	46	Gray	122 lbs	**SB55MWSR8LP95**	Price

DURHAM MFG Est. 1922 Heavy Duty Wire Spool Rack

- Fabricated of prime cold rolled steel
- 5/8" Diameter steel rods for convenient storing
- Ideal for counter top use
- Easy to assemble
- Finished in durable gray powder/paint
- Carton pack: one

MADE IN THE USA



SB55383



SB55384

Weight	Order No.	Price
11 lbs	**SB55384†**	Price
9 lbs	**SB55383†**	Price

† Shipped via UPS

DURHAM MFG Est. 1922 Aerosol/Utility Cabinets

- Fabricated of prime cold-rolled steel
- Keyhole slots allow easy wall mounting
- Finished in durable gray powder/paint
- Carton pack: one



SB55343



SB55055



SB55056

MADE IN THE USA

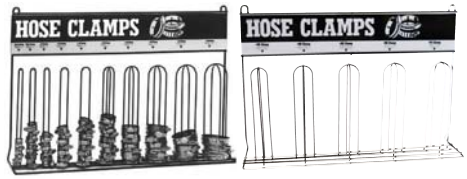
Width (in.)	Height (in.)	Depth (in.)	Weight	Order No.	Price
13-3/4	30	12-3/4	33 lbs	**SB55055†**	Price
19-7/8	32-3/4	14-1/4	40 lbs	**SB55056†**	Price
33-3/4	22-1/4	8-1/2	45 lbs	**SB55343†**	Price

† Shipped via UPS

DURHAM MFG Est. 1922 Hose Clamp Racks

MADE IN THE USA

- Provides easy access to adjustable hose clamps
- For countertop use or may be wall mounted sign panel lists clamp diameters
- Carton pack: one



No. of Loops	Width (in.)	Height (in.)	Weight	Order No.	Price
5	23-1/4	16-1/8	5 lbs	**SB55905†**	Price
10	23-1/4	15-3/4	5 lbs	**SB55907†**	Price

† Shipped via UPS

DURHAM MFG Est. 1922 Con-Tur® Literature Racks

- Fabricated of prime cold rolled steel
- Patented Con-tur® design prevents paper curl
- Holds up to 150 sheets 8-1/2" x 11" per pocket
- 2-1/2" of material remains visible for content identification
- Keyhole slots for wall mounting
- Available in tan, putty, gray, and black powder/paint
- Carton pack: one



MADE IN THE USA

No. of Pockets	Weight	Order No.	Price
5	9 lbs	**SB55403†**	Price
11	16 lbs	**SB55402†**	Price
20	23 lbs	**SB55400†**	Price

† Shipped via UPS

DURHAM MFG Est. 1922 Sturdy All Steel Parts Bin



- Easy parts access
- Hemmed and ribbed dividers
- Finished in durable gray powder/paint
- No sharp edges
- 1-1/8" Wide label holders
- Large capacity — all units are 12" deep and all bin openings are 11-7/8" deep.

(No. of Bins) W x H (in.)	No. of Compartments	Width (in.)	Depth (in.)	Height (in.)	Weight	Order No.	Price
4 x 4-1/2	40	33-3/4	12	23-7/8	50 lbs	**SB5540B**	Price
4 x 4-1/2	72	33-3/4	12	42	80 lbs	**SB5572B†**	Price
4-7/8 x 5-1/8	56	33-3/4	12	42	75 lbs	**SB5556B**	Price
5-3/8 x 5-1/2	24	33-3/4	12	23-7/8	50 lbs	**SB5524B†**	Price
5-3/8 x 5-1/2	42	33-3/4	12	42	71 lbs	**SB5542B**	Price

† Shipped via UPS Dimensional Rate

DURHAM MFG Est. 1922 Modular All Steel Drawer Cabinet

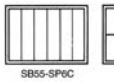


- Positive drawer stops prevent spilling
- Drawers measure 5-3/8"W x 2-3/4"H x 11-1/4"D and includes 2 dividers
- Finished in durable gray powder/paint

No. of Compartments	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
6	33-3/4	11-5/8	4	18 lbs	**SB556D†**	Price
9	17-1/4	11-5/8	10-7/8	28 lbs	**SB559D†**	Price
18	33-3/4	11-5/8	10-7/8	50 lbs	**SB5518D†**	Price
24	33-3/4	11-5/8	14-3/8	62 lbs	**SB5524D†**	Price
30	33-3/4	11-5/8	17-3/4	72 lbs	**SB5530D**	Price

† Shipped via UPS

DURHAM MFG Est. 1922 Steel Slide Rack and Compartment Boxes





Slide Rack:

- Holds 5 Durham Model SP compartment boxes
- Finished in durable gray powder/paint
- Keyhole slots for wall mounting
- Handle provided
- 11-1/4"W x 10-3/4"H x 6-3/4"D



Compartment Box:

- Clear plastic
- 11"W x 1-3/4"H x 6-3/4"D

No. of Compartments	Weight (lbs.)	Order No.	Price
6	2 lbs	**SB55SP6C**	Price
12	2 lbs	**SB55SP12C**	Price
13	2 lbs	**SB55SP13C**	Price
18	2 lbs	**SB55SP18C**	Price
18 - Rack for Trays	7 lbs	**SB55290**	Price

DURHAM MFG Est. 1922 Accessories for All Steel Parts Bin



Description	Weight	Order No.	Price
Door set for 40B, 24B	11 lbs	**SB55366†**	Price
Door set for 72B, 42B, 56B	18 lbs	**SB55365†**	Price

† Shipped via UPS

DURHAM MFG Est. 1922 Compartment Boxes, Slide Racks & Optional Base

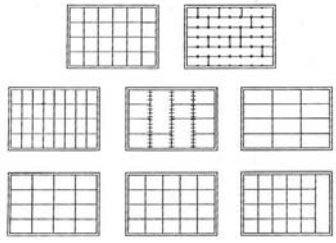


Compartment Box:

- Sturdy steel shell
- Large handles and positive catches
- High impact plastic inserts18"W x 3"H x 12"D
- Finished in durable gray powder/paint

Slide Rack:

- Holds 4 Durham scoop compartment boxes
- Reinforced for heavy weight
- Easy glide slides.
- 20"W x 15"H x 15-3/4"D



Type	Packa-ge Qty.	Weight	Order No.	Price
Adjustable Compartment Boxes	4	32 lbs	**SB55ADLC†**	Price
Adjustable Compartment Boxes	4	32 lbs	**SB55ADLHC†**	Price
Base for Steel Compartment Box Rack	1	16 lbs	**SB55BLR15†**	Price
Steel Rack for Steel Compartment Boxes	1	32 lbs	**SB554LR†**	Price
12 Compartment Steel Boxes	4	32 lbs	**SB55DL12C†**	Price
16 Compartment Steel Boxes	4	32 lbs	**SB55DL16C†**	Price
20 Compartment Steel Boxes	4	32 lbs	**SB55DL20C†**	Price
21 Compartment Steel Boxes	4	32 lbs	**SB55DL21C†**	Price
24 Compartment Steel Boxes	4	32 lbs	**SB55DL24C†**	Price
32 Compartment Steel Boxes	4	32 lbs	**SB55DL32C†**	Price

† Shipped via UPS

DURHAM MFG Est. 1922 Easy Glide Slide Rack



- Easy glide racks are designed to accommodate (4) compartment boxes
- Boxes can be removed and tranported to the job site
- Stack to make storage systems

Depth (in.)	Width (in.)	Height (in.)	Weight	Order No.	Price
15-3/4	20	15	37 lbs	**SB55303B157595**	Price

DURHAM MFG Est. 1922 Deep Bins



- All welded, prime cold rolled steel
- Fully hemmed 1-1/8" bin fronts to hold labels and retain parts
- Roll-formed sides for increased strength and stability
- Newly redesigned slope shelves
- Modular with most 12" deep bins and drawer cabinets; mounting holes are located in both the top and the bottom
- Optional doors, base and bin labels available

Depth (in.)	Width (in.)	Height (in.)	Weight	Order No.	Price
12	33-3/4	23-7/8	34 lbs	**SB5533095**	Price
8-1/2	33-3/4	19-1/4	29 lbs	**SB5534495**	Price
8-1/2	33-3/4	22-1/4	34 lbs	**SB5534995**	Price
12	33-3/4	42	55 lbs	**SB5535095**	Price
12	33-3/4	42	51 lbs	**SB5535195**	Price
12	33-3/4	11-1/2	25 lbs	**SB5535395**	Price
12	33-3/4	19-1/4	31 lbs	**SB5535495**	Price
12	33-3/4	19-3/4	36 lbs	**SB5535795**	Price
12	17-7/8	42	41 lbs	**SB5535895**	Price

Small Parts Storage Units

- Consolidate all small parts in one location and save time searching for misplaced inventory
- Heavy-duty steel shelving units available in 42” or 75” heights
- Includes polystyrene plastic bins that are easy to clean and are unaffected by most chemicals or oils
- All bins are OSHA safety yellow in color
- Steel shelving unit finish in tough powder coat finish



MADE IN THE USA

Number of Shelves	W (in.)	D (in.)	H (in.)	Bin Size (W x D x H) (in.)	Qty. of Bins	Weight	Order No.	Price
7	36	12	42	4 x 12 x 4	48	36 lbs	**RZ50PB310**	Price
7	36	12	42	8 x 12 x 4	24	37 lbs	**RZ50PB311**	Price
13	36	12	75	4 x 12 x 4	96	90 lbs	**RZ50PB306**	Price
13	36	12	75	48 - 4 x 12 x 4, 24 - 8 x 12 x 4	72	91 lbs	**RZ50PB309**	Price
13	36	12	75	8 x 12 x 4	48	92 lbs	**RZ50PB308**	Price
13	36	18	75	4 x 18 x 4	96	135 lbs	**RZ50PB307**	Price

Steel Drawer Shelving Units

- Keep small parts, bulk or packaged items neatly stored and organized in these heavy-duty steel drawer units
- All welded steel drawers feature a back stop to avoid spilling and allows hands free access
- Full grip drawer handle for easy opening
- Drawers are removable and have label front area
- Tough baked enamel gray finish. All units are 36”W x 18”D x 73”H



RZ50232318



RZ50232218



RZ50232118

No. of Drawers	Drawer Size (W x D x H) (in.)	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
36	11-1/4 x 18 x 4-5/8	36	18	73	372 lbs	**RZ50232118**	Price
48	8-3/8 x 18 x 4-5/8	36	18	73	384 lbs	**RZ50232218**	Price
72	5-9/16 x 18 x 4-5/8	36	18	73	408 lbs	**RZ50232318**	Price

Heavy Duty Boltless Storage Shelving

MADE IN THE USA

- Heavy duty 16-gauge steel construction provides maximum weight carrying capacity
- Double riveted beams lock into heavy duty corner posts to form a structurally secure joint
- Shelves adjustable on 1-1/2” centers and includes particleboard decking
- Two-piece posts allow unit to be assembled as a single 72” high unit or two 36” high units
- Assembles instantly with just a tap from a hammer, no nuts or bolts needed
- Convenient accessibility from all four sides
- Tough baked enamel finish resists rust and corrosion
- Modular Design can be used as storage shelving, work center, or assembled as a workbench





W (in.)	D (in.)	H (in.)	Shelf Capacity†	Color	Weight	Order No.	Price
36	18	72	1500 lbs	Gray	85 lbs	**RZ50MR185**	Price
36	24	72	1500 lbs	Gray	101 lbs	**RZ50MR2**	Price
48	18	72	1500 lbs	Gray	103 lbs	**RZ50MR1848**	Price
48	24	72	1500 lbs	Gray	127 lbs	**RZ50MR245**	Price
60	18	72	1800 lbs	Tan	130 lbs	**RZ50UR60**	Price

† Shelf capacity based on evenly distributed loads.

Records Storage Rack

- Heavy-duty all steel structure with double rivet beams for strength
- Drop-in support rails speed assembly and neatly holds storage boxes in place
- Heavy duty corrugated storage boxes feature easy grip handles and printed label front for easy identification
- All boxes measure 12”W x 15”D x 10”H
- Durable tan finish



Description	W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
3-Level, 18 box cap.	42	16.94	60	50 lbs	**RZ50RR31318**	Price
3-Level, 36 box cap.	42	32.88	60	70 lbs	**RZ50RR32336**	Price
4-Level, 24 box cap.	42	16.94	84	70 lbs	**RZ50RR41324**	Price
4-Level, 48 box cap.	42	32.88	84	96 lbs	**RZ50RR42348**	Price

PRM PRO Heavy-Duty Industrial Shelving

- Open style design for easy access to your containers and boxes
- Box beam construction
- Gray
- Assembly required
- Lifetime warranty against manufacturer defects
- Ships common carrier

MADE IN THE USA





Shelves	W	D	H	Gauge	Capacity*	Weight	Order No.	Price
6	36	18	87	20	1000	92 lbs	**RV8280000**	Price
6	36	18	87	22	750	82 lbs	**RV8290000**	Price
6	36	24	87	20	1000	107 lbs	**RV8280005**	Price
6	36	24	87	22	750	94 lbs	**RV8290005**	Price
6	48	18	87	20	1000	111 lbs	**RV8280010**	Price
6	48	18	87	22	750	82 lbs	**RV8290010**	Price
6	48	24	87	20	1000	130 lbs	**RV8280015**	Price
6	48	24	87	22	750	114 lbs	**RV8290015**	Price

***Capacity is per shelf at a maximum level, store heavier items on bottom shelves**

PRM PRO Heavy-Duty Industrial Shelving Adder Units

- Add on shelving for Shop Pro heavy-duty industrial shelving
- Same features as the industrial shelving
- Adder units include 2 off-set angle posts, 1-beaded post, 1-side brace, 1-back bone brace and 6 shelves

Shelves	W	D	H	Gauge	Capacity*	Weight	Order No.	Price
6	36	18	87	20	1000	85 lbs	**RV8293618**	Price
6	36	18	87	22	750	75 lbs	**RV8283618**	Price
6	36	24	87	20	1000	100 lbs	**RV8293624**	Price
6	36	24	87	22	750	88 lbs	**RV8283624**	Price
6	48	18	87	20	1000	104 lbs	**RV8294818**	Price
6	48	18	87	22	750	91 lbs	**RV8284818**	Price
6	48	24	87	20	1000	123 lbs	**RV8294824**	Price
6	48	24	87	22	750	107 lbs	**RV8284824**	Price

***Capacity is per shelf at a maximum level, store heavier items on bottom shelves**

edsal 5-Shelf Heavy-Duty Shelving Unit

- Heavy duty industrial strength all steel frame
- Shelves hold up to 1,000 lbs of evenly distributed loads
- Five heavy duty wire shelves adjust in 1-1/2" increments
- Assembles in minutes, no nuts or bolts
- Can also be assembled horizontal as a two-piece shelf unit
- Durable textured black finish for durability
- NSF Certified

New!



Width (in.)	Depth (in.)	Height (in.)	Shelf Cap.	Weight	Order No.	Price
48	24	72	800 lbs	75 lbs	**RZ50482472**	Price

edsal Bin Storage Rack

- Wire decks with guide rails and stops keep bins in place
- Top shelf with wire deck for extra storage space
- Industrial-strength steel frame
- Assembles in minutes, no nuts or bolts
- Durable black powder coat finish

New!

Bins Included



Bin size: 12.25"W x 14.5"D x 12.25"H

Width (in.)	Depth (in.)	Height (in.)	Total Capacity	Order No.	Price
42	16	33	150 lbs	**RZ50421633**	Price

Heavy Duty UltraCap Industrial Shelving

- Easy to assemble shelving is perfect when configuring runs of multiple shelving sections
- Select a Starter unit and then use as many Add-On units as needed to complete a section - Each Add-On unit connects easily to adjacent shelving using a common 14-gauge box shaped post that creates a very strong unified structure
- No disassembly required
- Gray powder coat finish provides added protection from rust and chipping. Optional Steel Panel Kits available to enclose back and sides of open units
- All units are 85" high
- 20-gauge shelves with tubular welded box beam construction have lapped and welded corners to provide maximum strength
- 14-gauge common box formed front posts provide full shelf access and reduce assembly time when connecting two or more units
- Posts are punched on 1" centers for easy shelf adjustment



Adjustable, heavy duty steel shelf clips install easily, no special tools needed.



Depth (in.) - 12													
		Open Style Add-On Shelving Unit						Open Style Starter Shelving Unit					
		5 Shelf		6 Shelf		8 Shelf		5 Shelf		6 Shelf		8 Shelf	
Width (in.)	Shelf Capacity†	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
36	1000 lbs	**RZ50UC5106**	Price	**RZ50UC5118**	Price	**RZ50UC5130**	Price	**RZ50UC5100**	Price	**RZ50UC5112**	Price	**RZ50UC5124**	Price
48	650 lbs	**RZ50UC5109**	Price	**RZ50UC5121**	Price	**RZ50UC5133**	Price	**RZ50UC5103**	Price	**RZ50UC5115**	Price	**RZ50UC5127**	Price
Depth (in.) - 18													
36	1050 lbs	**RZ50UC5107**	Price	**RZ50UC5119**	Price	**RZ50UC5131**	Price	**RZ50UC5101**	Price	**RZ50UC5113**	Price	**RZ50UC5125**	Price
48	675 lbs	**RZ50UC5110**	Price	**RZ50UC5122**	Price	**RZ50UC5134**	Price	**RZ50UC5104**	Price	**RZ50UC5116**	Price	**RZ50UC5128**	Price
Depth (in.) - 24													
36	1100 lbs	**RZ50UC5108**	Price	**RZ50UC5120**	Price	**RZ50UC5132**	Price	**RZ50UC5102**	Price	**RZ50UC5114**	Price	**RZ50UC5126**	Price
48	750 lbs	**RZ50UC5111**	Price	**RZ50UC5123**	Price	**RZ50UC5135**	Price	**RZ50UC5105**	Price	**RZ50UC5117**	Price	**RZ50UC5129**	Price

Optional Steel Panel Kits

- Provides protection on sides and back to store and contain materials
- Helps prevent dust accumulation
- Consists of 1 back panel and 2 side panels for Starter unit or 1 side panel for Add-on unit



			Steel Panel Kit for UltraCap Shelving Add On Unit		Steel Panel Kit for UltraCap Shelving Starter Unit		
Width (in.)	Depth (in.)	Weight	Order No.	Price	Weight	Order No.	Price
36	12	34.5 lbs	**RZ501W822N**	Price	30 lbs	**RZ501W802N**	Price
36	18	39 lbs	**RZ501W823N**	Price	42.5 lbs	**RZ501W803N**	Price
36	24	44 lbs	**RZ501W824N**	Price	50.5 lbs	**RZ501W804N**	Price
48	12	43 lbs	**RZ501W894N**	Price	51 lbs	**RZ501W874N**	Price
48	18	47.5 lbs	**RZ501W895N**	Price	60 lbs	**RZ501W875N**	Price
48	24	52.5 lbs	**RZ501W896N**	Price	70 lbs	**RZ501W876N**	Price

Heavy Duty Boltless Reinforced Shelving

- Ideal for applications which require the heaviest capacities such as dies, fixtures, jigs or any other heavy material
- Boltless construction allows for quick and easy assembly - no nuts or bolts needed
- Heavy-duty all steel construction with load capacities up to 4,000 lbs. per shelf
- 16 gauge steel shelves are reinforced with central cross braces to insure a flat, level surface
- Includes 5 steel shelves that adjust on 1-1/2" centers
- Formed angle uprights are constructed of 14 gauge steel for maximum support
- Tough gray powder coat finish for extra durability and long life



Width (in.)	Depth (in.)	Height (in.)	Shelf Capacity	Weight	Order No.	Price
36	18	84	4000 lbs	154 lbs	**RZ50HCU361884**	Price
48	18	84	4000 lbs	188 lbs	**RZ50HCU481884**	Price
48	24	84	4000 lbs	220 lbs	**RZ50HCU482484**	Price
60	24	84	3250 lbs	261 lbs	**RZ50HCU602484**	Price
72	24	84	2750 lbs	312 lbs	**RZ50HCU722484**	Price
72	36	84	2750 lbs	453 lbs	**RZ50HCU723684**	Price
96	24	84	2600 lbs	406 lbs	**RZ50HCU962484**	Price
96	36	84	2600 lbs	595 lbs	**RZ50HCU963684**	Price

NSF Approved Welded Frame Storage Rack

- This versatile storage rack is NSF® certified
- Perfect for storing large, bulky items
- Welded end frame design allows for quick assembly without the use of tools
- Includes three zinc plated wire shelves which will never rust
- Open wire shelves improve air circulation, eliminates dirt build-up, and increases sprinkler effectiveness
- Fully expandable using Add-On units which share the double-wide common end frame
- Shelves can be quickly adjusted in 3" increments
- Beam load capacity is 1,500 lbs. per level with evenly distributed loads
- Welded foot plate allows unit to be secured to floor
- Durable silver paint finish

Type - Additional Shelf Only						
Width (in.)	Depth (in.)	Height (in.)	Shelf Capacity† (lbs.)	Weight	Order No.	Price
72	18	72	1500 lbs	35 lbs	**RZ50ERX7218**	Price
72	24	72	1500 lbs	40 lbs	**RZ50ERX7224**	Price
96	24	96	1500 lbs	50 lbs	**RZ50ERX9624**	Price

Type - Shelving Add-On Unit						
Width (in.)	Depth (in.)	Height (in.)	Shelf Capacity† (lbs.)	Weight	Order No.	Price
72	18	72	1500 lbs	130 lbs	**RZ50ERX721872A**	Price
72	24	72	1500 lbs	160 lbs	**RZ50ERX722472A**	Price
96	24	96	1500 lbs	270 lbs	**RZ50ERX962496A**	Price

Type - Shelving Starter Unit						
Width (in.)	Depth (in.)	Height (in.)	Shelf Capacity† (lbs.)	Weight	Order No.	Price
72	18	72	1500 lbs	160 lbs	**RZ50ERX721872S**	Price
72	24	72	1500 lbs	200 lbs	**RZ50ERX722472S**	Price
96	24	96	1500 lbs	320 lbs	**RZ50ERX962496S**	Price

† Shelf capacity based on evenly distributed loads.







Assembles in minutes no tools needed



Double-wide end frame allows easy expansion

Welded Frame In-Line Shelving

- Designed for faster and efficient production
- Parts slide forward for fast and easy first in, first out inventory control and stock picking operations
- Double units provide back-to-back storage for maximum linear floor space
- Available in Starter and Add-On units
- Add-On units easily attach to Starter unit on either side to create a row of units and can be mixed or matched using same depth size
- Heavy-duty welded steel frame construction for maximum strength and durability
- Includes five steel shelves with capacities up to 550 lbs. each on evenly distributed loads
- Shelves assemble quickly without the use of tools, nuts, or bolts and adjust easily in 2" increments
- Tough powder coat finish in gray



Double Inverted Tilt Starter



Single Tilt Starter



Double Straight/Tilt Starter



Single Straight Starter

Description	Width (in.)	Depth (in.)	Height (in.)	Weight	Order No.	Price
Welded Frame Double Inverted Tilt Shelving Add-On Unit	50	48	78	356 lbs	**RZ50INDITA2711**	Price
Welded Frame Double Inverted Tilt Shelving Starter Unit	52	48	78	404 lbs	**RZ50INDITS2710**	Price
Welded Frame Double Straight Shelving Add-On Unit	50	52	78	360 lbs	**RZ50INDA2703**	Price
Welded Frame Double Straight Shelving Starter Unit	52	52	78	410 lbs	**RZ50INSD2702**	Price
Welded Frame Double Straight/Tilt Shelving Add-On Unit	50	50	78	358 lbs	**RZ50INDSTA2705**	Price
Welded Frame Double Straight/Tilt Shelving Starter Unit	52	50	78	407 lbs	**RZ50INDSTS2704**	Price
Welded Frame Double Tilt Shelving Add-On Unit	50	48	78	356 lbs	**RZ50INDTA2709**	Price
Welded Frame Double Tilt Shelving Starter Unit	52	48	78	404 lbs	**RZ50INDTS2708**	Price
Welded Frame Single Straight Shelving Add-On Unit	50	26	78	180 lbs	**RZ50INSA2701**	Price
Welded Frame Single Straight Shelving Starter Unit	52	26	78	205 lbs	**RZ50INSS2700**	Price
Welded Frame Single Tilt Shelving Add-On Unit	50	24	78	178 lbs	**RZ50INSTA2707**	Price
Welded Frame Single Tilt Shelving Starter Unit	52	24	78	202 lbs	**RZ50INSTS2706**	Price

LYON Pre-Engineered 84" High Rivet Rack
Double-Rivet, Flanged Beam Sections

MADE IN THE USA

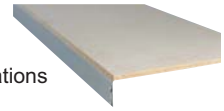




- Highly versatile, easy-to-assemble Rivet Rack offers economical bulk storage for a myriad of applications
- No tools required to assemble
- Beams simply drop into slots on uprights, punched on 1-1/2” centers to create a sturdy, rigid structure
- Use for merchandise displays, storing packaged goods, or holding large cartons of equipment and supplies in commercial, industrial, or institutional facilities
- Particle Board decking sold separately below

			3 Level			4 Level		
W (in.) per shelf	D (in.) per shelf	Shelf Capacity	Weight	Order No.	Price	Weight	Order No.	Price
48	24	600 lbs	47.2 lbs	**SA5073020**	Price	56.4 lbs	**SA5073040**	Price
48	36	600 lbs	61.8 lbs	**SA5073021**	Price	62.8 lbs	**SA5073041**	Price
48	48	600 lbs	56.8 lbs	**SA5073022**	Price	69.2 lbs	**SA5073042**	Price
60	24	550 lbs	52 lbs	**SA5073023**	Price	62.8 lbs	**SA5073043**	Price
60	36	550 lbs	56.8 lbs	**SA5073024**	Price	69.2 lbs	**SA5073044**	Price
60	48	550 lbs	61.6 lbs	**SA5073025**	Price	75.6 lbs	**SA5073045**	Price
72	24	800 lbs	74.2 lbs	**SA5073026**	Price	91.6 lbs	**SA5073046**	Price
72	36	800 lbs	84.4 lbs	**SA5073027**	Price	105.2 lbs	**SA5073047**	Price
72	48	800 lbs	94 lbs	**SA5073028**	Price	118 lbs	**SA5073048**	Price
96	24	620 lbs	86.2 lbs	**SA5073029**	Price	108.4 lbs	**SA5073049**	Price
96	36	620 lbs	97 lbs	**SA5073030**	Price	122 lbs	**SA5073050**	Price
96	48	620 lbs	106.6 lbs	**SA5073031**	Price	134.8 lbs	**SA5073051**	Price

LYON Particle Board Decking



- For general purpose and record storage applications
- 5/8” Thick

W (in.)	D (in.)	Weight	Order No.	Price
36	12	8.4 lbs	**SA5072504**	Price
36	18	12.6 lbs	**SA5072506**	Price
36	24	16.8 lbs	**SA5072508**	Price
48	12	11.2 lbs	**SA5072524**	Price
48	18	16.8 lbs	**SA5072526**	Price
48	24	22.4 lbs	**SA5072528**	Price
48	36	33.6 lbs	**SA5072532**	Price
48	48	44.8 lbs	**SA5072534**	Price
60	24	28 lbs	**SA5072544**	Price
60	36	42 lbs	**SA5072546**	Price
60	48	56 lbs	**SA5072548**	Price
69	16	21.1 lbs	**SA5072580**	Price
69	32	42.4 lbs	**SA5072582**	Price
72	24	33.6 lbs	**SA5072554**	Price
72	36	50.4 lbs	**SA5072556**	Price
72	48	67.2 lbs	**SA5072558**	Price
96	24	44.8 lbs	**SA5072564**	Price
96	36	67.2 lbs	**SA5072566**	Price
96	48	89.6 lbs	**SA5072568**	Price

LYON Heavy Duty Channel Beam Sections

- Particle Board decking sold separately below



MADE IN THE USA

			3 Level			4 Level		
W (in.)	D (in.)	Shelf Capacity	Weight	Order No.	Price	Weight	Order No.	Price
96	24	1200 lbs	97.6 lbs	**SA5073035**	Price	122.8 lbs	**SA5073055**	Price
96	36	1200 lbs	107.8 lbs	**SA5073036**	Price	136.4 lbs	**SA5073056**	Price
96	48	1200 lbs	117.4 lbs	**SA5073037**	Price	149.2 lbs	**SA5073057**	Price

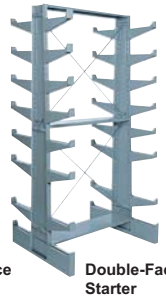
LYON Single & Double-Face Racks
Pre-Engineered Bar, Pipe and Rod Racks

MADE IN THE USA


Single-Face Starter


Single-Face Add-On


Double-Face Add-On


Double-Face Starter

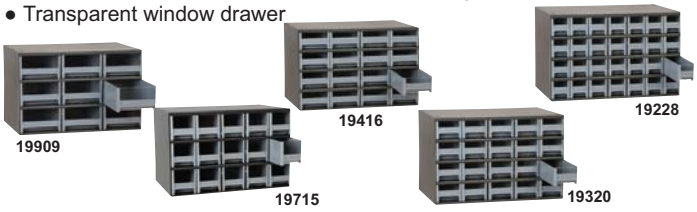
- Store long items with maximum efficiency
- Great for steel, iron, aluminum, wood, plastic tubes, and other materials that are awkward to store on shelving or conventional racking
- All models feature heavy duty arms with 450 lb. capacity (6000 lbs. per upright maximum) that can be adjusted every 1-1/2” with spacing as close as 7-1/2”
- Extra arms and accessories available below
- Brace panels and cross braces included
- **Single-Face**: Designed for use against walls with arms and base on one side of uprights
- **Double-Face:** Designed for free-standing use with arms and base on both sides of uprights

Style - Double-Face Rack						
Width (in.)	Depth (in.)	Height (in.)	Weight	Type	Order No.	Price
36	33-3/4	79-1/4	120 lbs	Double Face Bar Rack Add-On Unit	**SA503710**	Price
36	33-3/4	79-1/4	217 lbs	Double Face Bar Rack Starter Unit	**SA503710S**	Price
36	33-3/4	79-1/4	97 lbs	Double Face Bar Rack End Unit converts Add-on into Starter	**SA503711**	Price

Style - Single-Face Rack						
Width (in.)	Depth (in.)	Height (in.)	Weight	Type	Order No.	Price
36	21-7/8	79-1/4	156 lbs	Single Face Bar Rack Starter Unit	**SA503700S**	Price
36	21-7/8	79-1/4	67 lbs	Single Face Bar Rack End Unit converts Add-on into Starter	**SA503701**	Price
36	21-7/8	79-1/4	89 lbs	Single Face Bar Rack Add-On Unit	**SA503700**	Price

Modular Cabinets

- Welded steel frames
- Full width steel shelves for support
- Curved finger grips at drawer front for ease of opening
- Transparent window drawer
- Keyhole slots in frame for easy wall mounting
- Chip proof, baked enamel charcoal-gray finish
- One label per drawer included



W (in.)	H (in.)	D (in.)	No. of Compartments	Inside Drawer Dim. (W x H x D) (in.)	Order No.	Price
17	11	11	15	3-3/16 x 3-1/16 x 10-9/16	**SD5019715**	Price
17	11	11	16	4 x 2-1/8 x 10-9/16	**SD5019416**	Price
17	11	11	20	3-3/16 x 2-1/8 x 10-9/16	**SD5019320**	Price
17	11	11	28	2-3/16 x 2-1/6 x 10-9/16	**SD5019228**	Price
17	11	11	9	5-3/16 x 3-1/16 x 10-9/16	**SD5019909**	Price

Additional dividers available by package

Extra Dividers & Drawers for Economy Cabinets



Type	Size (in.)	For Use With	Order No.	Price
25-Pack Bin Dividers	2-1/2 x 2-3/4	SD50-17018	**SD5040901**	Price
Replacement Drawer	2-1/2 x 2-3/4	SD50-17018	**SD5020902**	Price

Extra Dividers & Drawers for Modular Cabinets



Type	Size (in.)	For Use With	Order No.	Price
25-Pack Bin Dividers	2-1/16 x 2-3/16	SD50-19228	**SD5040228**	Price
25-Pack Bin Dividers	2-1/8 x 3-3/16	SD50-19320	**SD5040320**	Price
25-Pack Bin Dividers	2-1/8 x 4	SD50-19416	**SD5040416**	Price
25-Pack Bin Dividers	3-1/16 x 3-3/16	SD50-19715	**SD5040715**	Price
25-Pack Bin Dividers	3-1/16 x 5-3/16	SD50-19909	**SD5040909**	Price
Replacement Drawer	2-1/16 x 2-3/16	SD50-19228	**SD5020228**	Price
Replacement Drawer	2-1/8 x 3-3/16	SD50-19320	**SD5020320**	Price
Replacement Drawer	2-1/8 x 4	SD50-19416	**SD5020416**	Price
Replacement Drawer	3-1/16 x 5-3/16	SD50-19909	**SD5020909**	Price
Replacement Drawer	3-3/16 x 3-1/16	SD50-19715	**SD5020715**	Price

Economy, Welded Steel Frame & Plastic Frame Storage Cabinets

- Economy Cabinets feature transparent styrene drawers
- They are compact specially priced storage units that allow you to consolidate, store, and organize small-to-medium sized parts
- Drawers are molded of transparent clarified polypropylene for easy visibility of contents
- Drawers can be partitioned with dividers
- Cabinets are available with welded steel frames or plastic

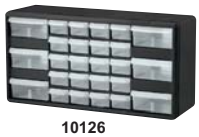
Welded Steel Frame:

- A welded steel frame with an attractive gray baked enamel finish gives years of service
- A full-width steel shelf supports each drawer with steel centerposts for extra reinforcement
- Frames also feature keyhole slots for wall mounting

Plastic Frame Storage Cabinets:

- Organize and protect components
- A variety of drawer configurations provide versatile storage solutions
- Cabinets stack securely and are wall mountable
- Dividers won't get lost because they are molded into the back of the cabinet

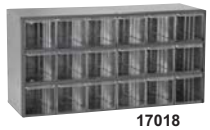

10116


10126


10124


10144


10164


17018

Type	W (in.)	H (in.)	D (in.)	No. of Compartments	Inside Drawer Dim. (W x H x D) (in.)	Order No.	Price
Plastic Modular Parts Cabinet	10-9/16	8-1/2	6-3/8	16	2-1/8 x 1-1/2 x 5-1/4	**SD5010116††**	Price
Plastic Modular Parts Cabinet	20	10-11/32	6-3/8	26	2-1/8 x 1-1/2 x 5-1/4, 4-3/8 x 2 x 5-1/4	**SD5010126**	Price
Plastic Modular Parts Cabinet	20	15-13/16	6-3/8	24	2-3/4 x 2-1/2 x 5-3/4	**SD5010124**	Price
Plastic Modular Parts Cabinet	20	15-13/16	6-3/8	44	2-1/8 x 1-1/2 x 5-1/4, 4-3/8 x 2 x 5-1/4	**SD5010144**	Price
Plastic Modular Parts Cabinet	20	15-13/16	6-3/8	64	2-1/8 x 1-1/2 x 5-1/4	**SD5010164**	Price
Steel Modular Parts Cabinet	18	9-1/2	6	18	2-3/4 x 2-1/2 x 5-3/4	**SD5017018†**	Price

†Additional dividers available by package ††16-drawer cabinet has 8 dividers - All others have 8 small and 4 large dividers

Stak-N-Store Bins

- The perfect way to organize heavy, bulky items
- Bins stack to form tall, stable storage arrangements on floors or standard industrial shelving
- Capacity: 75 lb.
- Color: gray, red, blue
- Large comfort grip handles
- Large radius corners and a curved upper lip add strength
- Wide hopper front allows easy access to bulky items
- Side ribs insure stability when stacked



D (in./mm)	W (in./mm)	H (in./mm)	Color	Cubic Ft. Capacity	Order No.	Price
15-1/4/387	19/505	12/316	Blue	1.7	**SD5013017B**	Price
15-1/4/387	19/505	12/316	Gray	1.7	**SD5013017G**	Price
15-1/4/387	19/505	12/316	Red	1.7	**SD5013017R**	Price
17-1/2/445	10/276	10-1/2/318	Blue	.98	**SD5013014B**	Price
17-1/2/445	10/276	10-1/2/318	Gray	.98	**SD5013014G**	Price
17-1/2/445	10/276	10-1/2/318	Red	.98	**SD5013014R**	Price
17-1/2/445	16-1/2/419	12-1/2/318	Blue	1.6	**SD5013018B**	Price
17-1/2/445	16-1/2/419	12-1/2/318	Gray	1.6	**SD5013018G**	Price
17-1/2/445	16-1/2/419	12-1/2/318	Red	1.6	**SD5013018R**	Price

Louvered Panels & Racks

- Versatile structures for supporting AkroBins of all sizes
- Louvered units equipped with AkroBins give you maximal storage space per square foot at minimal cost
- They also allow for extensive classification of stored items
- Louvered equipment is made of 16-gauge cold rolled steel with a gray baked enamel finish
- **Bins Must Be Purchased Separately**

Racks:

- Freestanding louvered racks are available in a bench model or floor model
- Bench Rack: Accommodates three sizes of bins, supports up to 24 AkroBins, 120 lb. capacity
- Louvered Rack: Two sided floor model accommodates all AkroBins, supports up to 228 Akro Bins, 2000 lb. capacity

Panels:

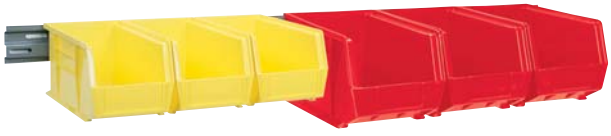
- Louvered panels can be wall-mounted, attached to the back of shelving, mounted on benches, carts, inside cabinets, fastened to slotted angle components, or used for service truck interiors
- Installation note: panels must be securely fastened at the center and both ends to materials of adequate load bearing strength


98600


30618/30636

Type	L (in.)	W (in.)	H (in.)	No. of Cartons	Order No.	Price
Benchtop Bin Rack	27-3/4	8	21	1	**SD5098600**	Price
Louvered Panel for Bin Storage	18	-	19	1	**SD5030618**	Price
Louvered Panel for Bin Storage	35-3/4	-	19	1	**SD5030636**	Price

Steel Rail for Bins



Type	Size (in.)	Order No.	Price
Steel Bin Rail	48 x 3	**SD5030148**	Price

Quantity of Bins to Fit Racks and Carts

Akro-Mils No.	Order No.						
	SD5030210	SD5030220	SD5030230	SD5030235	SD5030239	SD503024	SD503025
30006	96	96	-	-	24	24	12
30008	-	-	48	24	-	-	-
30012	192	192	-	-	48	48	24
30016	-	-	96	48	-	-	-
30812	96	96	48	24	24	24	12

Bin Racks & Carts

- With mobile carts, you can move your parts inventory to any area where you might need it
- With stationary racks you can store and organize a variety of parts without the expense of shelving.
- All these units can be equipped with your choice of AkroBins (order separately) for maximum storage efficiency
- All racks and carts are built with 16 gauge steel with a baked enamel finish
- Double-sided racks hold up to 1000 lbs.
- Mobile Racks and Carts feature reinforcing braces and 4" rubber wheel casters with a locking wheel
- The Single-sided Bin Rack has a 500 lb. capacity when bolted to the floor
- Bin Cart and Service Cart have a load capacity of 500 lbs.
- Model 30016 is shown with optional 30424 Mobile Kit


30008


30016


30812

Description	L (in.)	W (in.)	H (in.)	No. of Cartons	Order No.	Price
1-Sided 16-Rail Bin Rack	36	14-1/8	53	3	**SD5030008**	Price
Bin Cart	38-1/2	24	36-1/2	2	**SD5030812**	Price
2-Sided 16-Rail Bin Rack	36	20	53	3	**SD5030016**	Price

Bin Racks and Cart Accessories

- Storage-Go-Round: Modular cabinets may be used in any combination 5 rows high (up to 20 cabinets)
- Model 98325 is shown with optional cabinets


30424


98325

Type	Order No.	Price
Mobility Kit for Bin Racks and Carts	**SD5030424†**	Price
Storage-Go-Round Base and Clips	**SD5098325**	Price

† Mobile Kit converts stationary racks (model no. 30012 and 30016) to Mobile.

Bin Load Capacity When Attached to Panel

Bin. No.	30210	30220	30230	30235	30239	30240	30250
Capacity	10 lbs.	10 lbs.	30 lbs.	60 lbs.	50 lbs.	60 lbs.	75 lbs.

Economy Shelf Bins

for 12", 18" & 24" Deep Shelving or Automated Storage & Retrieval Units

- Molded of durable industrial grade polymers for years of service
- Special built-in hanglock allows easy access to the entire bin
- Wide label holder molded in
- Available in: Blue, Red, Yellow



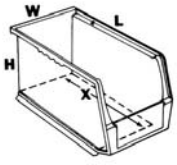
				Blue		Red		Yellow	
Outside Dim. (L x W x H) (in.)	Inside Dim. (L x W x H) (in.)	Carton Qty.	Uses Dividers (up to 7 per bin)	Order No.	Price	Order No.	Price	Order No.	Price
11-5/8 x 2-3/4 x 4	10-1/4 x 1-5/8 x 4	24	None	**SD5030110B**	Price	**SD5030110R**	Price	**SD5030110Y**	Price
11-5/8 x 4-1/8 x 4	10-1/4 x 3 x 4	24	SD50-40120	**SD5030120B**	Price	**SD5030120R**	Price	**SD5030120Y**	Price
11-5/8 x 6-5/8 x 4	10-1/4 x 5-1/2 x 4	12	SD50-40130	**SD5030130B**	Price	**SD5030130R**	Price	**SD5030130Y**	Price
11-5/8 x 8-3/8 x 4	10-1/4 x 7-1/8 x 4	12	SD50-40150	**SD5030150B**	Price	**SD5030150R**	Price	**SD5030150Y**	Price
11-5/8 x 11-1/8 x 4	10-1/4 x 10 x 4	12	SD50-40170	**SD5030170B**	Price	**SD5030170R**	Price	**SD5030170Y**	Price
17-7/8 x 4-1/8 x 4	16-1/2 x 3 x 4	12	SD50-40120	**SD5030128B**	Price	**SD5030128R**	Price	**SD5030128Y**	Price
17-7/8 x 6-5/8 x 4	16-1/2 x 5-1/2 x 4	12	SD50-40130	**SD5030138B**	Price	**SD5030138R**	Price	**SD5030138Y**	Price
17-7/8 x 8-3/8 x 4	16-1/2 x 7-1/8 x 4	12	SD50-40150	**SD5030158B**	Price	**SD5030158R**	Price	**SD5030158Y**	Price
17-7/8 x 11-1/8 x 4	16-1/2 x 10 x 4	12	SD50-40170	**SD5030178B**	Price	**SD5030178R**	Price	**SD5030178Y**	Price
23-5/8 x 4-1/8 x 4	22-1/8 x 3 x 4	12	SD50-40120	**SD5030124B**	Price	**SD5030124R**	Price	**SD5030124Y**	Price
23-5/8 x 6-5/8 x 4	22-1/8 x 5-1/2 x 4	6	SD50-40130	**SD5030164B**	Price	**SD5030164R**	Price	**SD5030164Y**	Price
23-5/8 x 8-3/8 x 4	22-1/8 x 7-1/8 x 4	6	SD50-40150	**SD5030184B**	Price	**SD5030184R**	Price	**SD5030184Y**	Price
23-5/8 x 11-1/8 x 4	22-1/8 x 10 x 4	6	SD50-40170	**SD5030174B**	Price	**SD5030174R**	Price	**SD5030174Y**	Price

Storage Bins

AkroBins Industrial Grade Polymers Storage Bins That Hang or Stack

- AkroBins hang securely from louvered panels
- Extra-wide stacking ledge assures secure stacking
- Anti-slide stop prevents loaded bins from shifting forward when stacked
- Large label slot for clear identification
- Reinforced ribs prevent bins from spreading when loaded
- Finger grips allow easy handling
- Available in: Blue, Red, Stone, Yellow.





				Blue		Red		Stone		Yellow	
Outside Dim. (L x W x H) (in.)	Inside Dim. (L x W x H x X) (in.)	Carton Qty.	Use Dividers	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
5-3/8 x 4-1/8 x 3	4-3/4 x 3-7/16 x 2-13/16 x 4	24	SD50-40210	**SD5030210B**	Price	**SD5030210R**	Price	**SD5030210S**	Price	**SD5030210Y**	Price
7-3/8 x 4-1/8 x 3	6-3/4 x 3-7/16 x 2-13/16 x 6	24	SD50-40220	**SD5030220B**	Price	**SD5030220R**	Price	**SD5030220S**	Price	**SD5030220Y**	Price
10-7/8 x 5-1/2 x 5	10-1/4 x 4-3/8 x 4-3/4 x 9	12	SD50-40230	**SD5030230B**	Price	**SD5030230R**	Price	**SD5030230S**	Price	**SD5030230Y**	Price
10-3/4 x 8-1/4 x 7	10 x 6-9/16 x 6-3/4 x 8	6	SD50-40239	**SD5030239B**	Price	**SD5030239R**	Price	**SD5030239S**	Price	**SD5030239Y**	Price
10-7/8 x 11 x 5	10-1/4 x 10 x 4-3/4 x 9	6	SD50-40230	**SD5030235B**	Price	**SD5030235R**	Price	**SD5030235S**	Price	**SD5030235Y**	Price
14-3/4 x 8-1/4 x 7	14 x 6-9/16 x 6-3/4 x 12	12	SD50-40245	**SD5030240B**	Price	**SD5030240R**	Price	**SD5030240S**	Price	**SD5030240Y**	Price
14-3/4 x 16-1/2 x 7	14 x 14-3/4 x 6-3/4 x 12	6	SD50-40245	**SD5030250B**	Price	**SD5030250R**	Price	**SD5030250S**	Price	**SD5030250Y**	Price
18 x 8-1/4 x 9	17-1/8 x 6-1/2 x 8-1/4 x 14-1/2	6	SD50-40265	**SD5030265B**	Price	**SD5030265R**	Price	**SD5030265S**	Price	**SD5030265Y**	Price
18 x 16-1/2 x 11	17-1/8 x 14-7/8 x 10-1/2 x 13-3/4	3	SD50-40270	**SD5030270B**	Price	**SD5030270R**	Price	**SD5030270S**	Price	**SD5030270Y**	Price

Optional AkroBin Dividers

Sold in Package Quantity of Six Only



Size (in.)	Order No.	Price
5-3/8 x 3	**SD5040210**	Price
7-3/8 x 3	**SD5040220**	Price
10-3/4 x 7	**SD5040239**	Price
10-7/8 x 5	**SD5040230**	Price
14-3/4 x 7	**SD5040245**	Price
18 x 9	**SD5040265**	Price
18 x 11	**SD5040270**	Price
20-1/2 x 7	**SD5040348**	Price
20-1/2 x 7	**SD5040358**	Price

Optional Shelf Bin Dividers

Sold in Package Quantity of 24 Only



Size (in.)	Order No.	Price
4-1/8	**SD5040120**	Price
6-5/8	**SD5040130**	Price
8-3/8	**SD5040150**	Price
11-1/8	**SD5040170**	Price

Shelf Bin Cups

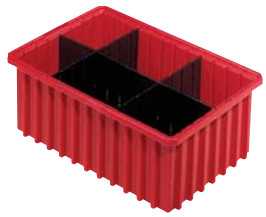


Description	L (in.)	W (in.)	H (in.)	Ctn. Qty.	Order No.	Price
Small Shelf Cup Bin	3-1/4	2	3	48	**SD5030101**	Price
Large Shelf Cup Bin	5	2-3/4	3	24	**SD5030102**	Price

Akro-Grid Dividable Containers

- Made of high density industrial grade polymers and resists most solvents and chemicals
- Stackable
- Compatible with most rack, shelving and automated material handling equipment





Outside Dim. (L x W x H) (in.)	Inside Dim. (L x W x H) (in.)	Carton Qty.	Uses Dividers (up to 7 per bin)	Blue		Gray		Red	
				Order No.	Price	Order No.	Price	Order No.	Price
10-7/8 x 8-1/4 x 5	6-11/16 x 9-5/16 x 9-1/8 x 6-1/2 x 4-5/8	20	SD50-42105 Long, SD50-41105 Short	**SD5033105B**	Price	**SD5033105G**	Price	**SD5033105R**	Price
16-1/2 x 10-7/8 x 6	9-5/16 x 14-/78 x 14-3/4 x 9-1/8 x 5-9/16	8	SD50-42166 Long, SD50-41166 Short	**SD5033166B**	Price	**SD5033166G**	Price	**SD5033166R**	Price
16-1/2 x 10-7/8 x 8	9-5/16 x 14-15/16 x 14-5/8 x 9-1/16 x 7-9/16	6	SD50-42168 Long, SD50-41168 Short	**SD5033168B**	Price	**SD5033168G**	Price	**SD5033168R**	Price
22-3/8 x 17-3/8 x 8	15-1/8 x 20-1/8 x 19-7/8 x 14-7/8 x 7-7/16	3	SD50-42228 Long, SD50-41228 Short	**SD5033228B**	Price	**SD5033228G**	Price	**SD5033228R**	Price

Akro-N.S.T Nest-Stack-Tote

- Resistant to solvents, chemicals, and stress cracks
- Constructed of high density industrial grade polymers
- Material complies with FDA regulations for use in meat and poultry plants
- Won't rust, corrode, or bend out of shape
- Designed to prevent jamming when nested
- Comfortable grab handles for easy carrying




Outside Dimensions (L x W x H) (in.)	Inside Dim. (L x W x H) (in.)	Carton Qty.	Blue		Gray		Red	
			Order No.	Price	Order No.	Price	Order No.	Price
18 x 11 x 6	10 x 16 x 15-1/4 x 9-3/8 x 5-7/8	6	**SD5035180B**	Price	**SD5035180G**	Price	**SD5035180R**	Price
19-1/2 x 13-1/2 x 8	12-3/8 x 17-1/8 x 16-3/8 x 11-1/2 x 7-7/8	6	**SD5035200B**	Price	**SD5035200G**	Price	**SD5035200R**	Price
19-1/2 x 15-1/2 x 10	14-1/2 x 17 x 16 x 13-1/4 x 9-7/8	6	**SD5035190B**	Price	**SD5035190G**	Price	**SD5035190R**	Price
23-1/2 x 15-1/2 x 12	14-1/4 x 20-7/8 x 19-5/8 x 13 x 11-7/8	3	**SD5035240B**	Price	**SD5035240G**	Price	**SD5035240R**	Price
23-1/2 x 19-1/2 x 13	18-1/8 x 20-7/8 x 19-1/2 x 16-7/8 x 12-7/8	3	**SD5035230B**	Price	**SD5035230G**	Price	**SD5035230R**	Price
29-1/2 x 19-1/2 x 15	18-1/4 x 26-5/8 x 25-1/8 x 16-5/8 x 14-7/8	3	**SD5035300B**	Price	**SD5035300G**	Price	**SD5035300R**	Price

Akro-Grid Optional Lids and Dividers

- Lids are clear
- Dividers are black




Type	Fits Box No.	Order No.	Price
6-Pack Long Bin Dividers	33-105	**SD5042105**	Price
6-Pack Long Bin Dividers	33-166	**SD5042166**	Price
6-Pack Long Bin Dividers	33-168	**SD5042168**	Price
6-Pack Long Bin Dividers	33-228	**SD5042228**	Price
6-Pack Short Bin Dividers	33-105	**SD5041105**	Price
6-Pack Short Bin Dividers	33-166	**SD5041166**	Price

Type	Fits Box No.	Order No.	Price
6-Pack Short Bin Dividers	33-168	**SD5041168**	Price
6-Pack Short Bin Dividers	33-228	**SD5041228**	Price
Lids	33-166 & 33-168	**SD5033161**	Price
Lids	33-105	**SD5033101**	Price
Lids	33-228	**SD5033221**	Price

Nest Stack Tote Lids





For Use With	Size (in.)	Blue		Gray		Red	
		Order No.	Price	Order No.	Price	Order No.	Price
Akro Nest-Stack Tote 35-180	18 x 11	**SD5035181B**	Price	**SD5035181G**	Price	**SD5035181R**	Price
Akro Nest-Stack Tote 35-200	19-1/2 x 13-1/2	**SD5035201B**	Price	**SD5035201G**	Price	**SD5035201R**	Price
Akro Nest-Stack Tote 35-190	19-1/2 x 15-1/2	**SD5035191B**	Price	**SD5035191G**	Price	**SD5035191R**	Price
Akro Nest-Stack Tote 35-240	23-1/2 x 15-1/2	**SD5035241B**	Price	**SD5035241G**	Price	**SD5035241R**	Price
Akro Nest-Stack Tote 35-230	23-1/2 x 19-1/2	**SD5035231B**	Price	**SD5035231G**	Price	**SD5035231R**	Price
Akro Nest-Stack Tote 35-300	29-1/2 x 19-1/2	**SD5035301B**	Price	**SD5035301G**	Price	**SD5035301R**	Price

Super Size AkroBin





- Control inventories, shorten assembly times and minimize parts handling
- Heavy-duty bins securely stack atop each other or sit on shelving
- Molded of high-density industrial grade polymers
- AkroBins are unaffected by weak acids and alkalis
- Sturdy one-piece construction is water, rust and corrosion-proof
- Guaranteed not to crack or break under normal load conditions as stated in our 1 year limited warranty
- Autoclavable up to 250° F
- Extra stacking ledge saves space and prevents spilling
- Akrobins can be used alone or stacked together for high-density storage
- Anti-slide stop prevents stacked bins from shifting forward
- Large label area on front of bin
- Curved-bottom hopper front makes it easy to retrieve small parts
- Reinforced side ribs add strength and prevent spreading when stacked

MADE IN THE USA

		Blue		Red		Yellow	
Outside Dimensions (L x W x H) (in.)	Inside Dimensions (L x W x H x X) (in.)	Order No.	Price	Order No.	Price	Order No.	Price
20 x 12-3/8 x 6	16 x 10 x 5-3/8 x 15-1/2	**SD5030280B**	Price	**SD5030280R**	Price	**SD5030280Y**	Price
20 x 12-3/8 x 8	16 x 10 x 7-3/8 x 15-1/2	**SD5030281B**	Price	**SD5030281R**	Price	**SD5030281Y**	Price
20 x 12-3/8 x 12	16 x 10 x 11-3/8 x 15-1/2	**SD5030282B**	Price	**SD5030282R**	Price	**SD5030282Y**	Price
20 x 18-3/8 x 12	16 x 16 x 11-3/8 x 15-1/2	**SD5030283B**	Price	**SD5030283R**	Price	**SD5030283Y**	Price
29-1/4 x 18-3/8 x 12	26-1/8 x 16 x 11-3/8 x 24-3/4	**SD5030290B**	Price	**SD5030290R**	Price	**SD5030290Y**	Price

AkroBins 1800 Series Bins

Extra Large Bins for Longer, Bulkier Items




MADE IN THE USA

- Molded of heavy duty filled copolymer
- Water, oil, and grease-proof
- 1 Cross-wise dividers included per bin
- Stackable
- Available in BEIGE only
- Sold in carton qty. of six

H (in.)	L (in.)	W (in.)	Carton Quantity	Use Dividers	Order No.	Price
7	20-1/2	11	6	SD50-40358	**SD5030358**	Price
7	20-1/2	8-1/4	6	SD50-40348	**SD5030348**	Price

AkroTubs Cross Stack

MADE IN THE USA

- Industrial-grade 90° nest and stack tub
- Nesting when empty conserves storage space
- Molded-in side handles for comfortable lifting
- Manufactured from FDA-approved materials
- Smooth surface is easy to clean
- Compatible with standard 36" shelving and conveyor systems
- Color is gray
- Stacking grooves allow stable 90° stack
- Extra thick walls and reinforcing ribs provide superior strength



Outside Dim. (L x W x H x A x B) (in.)	Capacity (Gallons)	Order No.	Price
17-1/4 x 11 x 12 x 12-5/8 x 7	5.51	**SD5034202**	Price
17-1/4 x 11 x 8 x 13-1/4 x 7-3/4	3.85	**SD5034301**	Price
23-3/4 x 17-1/4 x 12 x 19 x 13-1/4	14.38	**SD5034304**	Price
23-3/4 x 17-1/4 x 8 x 19-3/4 x 14	9.81	**SD5034303**	Price

Rubbermaid Commercial Products Brute® Totes With Lid

- Reinforced ribbed bottom protects container during dragging
- User-friendly grip handles decrease potential for back injury and finger strain
- Lid snaps tight, keeping contents secure
- Lid included
- Available in 14 & 20 gallon

MADE IN THE USA

NSF QUALITY SYSTEM REGISTERED TO ISO 9002



Capacity	Order No.	Price
14 Gallon	**RZ559S30G**	Price
20 Gallon	**RZ559S31G**	Price

Huot Jobber Drill Indexes



Description - Fractional Size		
Size Range	Order No.	Price
1/16 - 1/2 x 32nds	**AP5315**	Price
1/16 - 1/4 x 64ths	**AP53313**	Price
1/16 - 3/8 x 64ths	**AP5321**	Price

Description - Holds 29 Fractional Jobber Drills		
Size Range	Order No.	Price
1/16 - 1/2 x 64ths	**AP5329**	Price

Description - Letter Size		
Size Range	Order No.	Price
Letter A - Z	**AP5326**	Price

Description - Metric Jobber Length		
Size Range	Order No.	Price
1.0mm to 5.9mm by 0.1mm	**AP5311250**	Price
6.0mm to 10mm by 0.1mm	**AP5311200**	Price
1 to 10mm x 0.5mm	**AP534019**	Price
1 to 13mm x 0.5mm	**AP534025**	Price
1 to 6mm x 0.5mm	**AP534011**	Price
1 to 7mm x 0.5mm	**AP534013**	Price

Description - Wire Gage Size		
Size Range	Order No.	Price
#1 - 60	**AP5360**	Price
#1 - 80	**AP5380**	Price
#61 - 80	**AP5320**	Price

Huot Screw Machine Drill Indexes



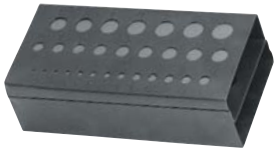
Description - Fractional Size		
Size Range	Order No.	Price
1/16 - 1/2 x 64ths	**AP532029**	Price

Description - Letter Size		
Size Range	Order No.	Price
#1 - 60	**AP532060**	Price
Letter A - Z	**AP532026**	Price

Description - Metric Size		
Size Range	Order No.	Price
1mm - 13mm x 0.5mm	**AP532025**	Price

Huot Drill Stands

- Hang it on a wall, use it on a bench, or mount it on a drill press
- Plated black zinc finish



Size Range	Product Dispensed	Order No.	Price
1/16 - 1/2 x 64ths	Jobber Drill	**AP53829**	Price
1/4" shanks (Holds 24)	Carbide Burr	**AP53824**	Price
Letter A - Z	Jobber Drill	**AP53826**	Price

Huot 3-in-1 Combination Drill Indexes

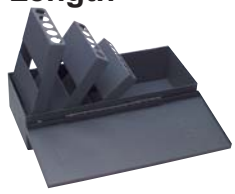
- Ideal for keeping all the most commonly used drills handy
- Indexed for size and decimal equivalents
- Inch and metric

MADE IN THE USA



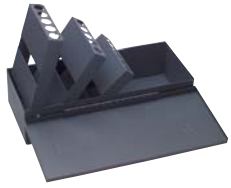
Description	Size Range	Order No.	Price
Holds 115 Jobber Drills	Letter A - Z, 1/16 - 1/2 x 64ths, & #1 - 60	**AP53115**	Price
Holds 115 Screw Machine Drills	Letter A - Z, 1/16 - 1/2 x 64ths, & #1 - 60	**AP5311550**	Price
Holds 118 Metric Jobber Drills	1.0mm - 13.mm	**AP53118**	Price
Holds 134 Jobber Drills	1/16 - 1/2 x 64ths, #1 - 80, & 1.0mm - 13.0mm x .5mm	**AP53134**	Price
Holds 135 Jobber Drills	Letter A - Z, 1/16 - 1/2 x 64ths, & #1 - 80	**AP53135**	Price

Huot Taper Length Drill Indexes



Size Range	Order No.	Price
#1 - 60	**AP53360**	Price
1/16 - 1/2 x 64ths	**AP53329**	Price
Letter A - Z	**AP53326**	Price

Huot Taper Shank Drill Indexes



Size Range	Order No.	Price
33/64 - 3/4 x 64ths	**AP531016**	Price
49/64 - 1 x 64ths	**AP532016**	Price

Huot Silver & Deming 1/2" Shank Drill Index



Size Range	Order No.	Price
9/16 - 1 x 16ths	**AP5388SD**	Price

Huot Silver & Deming 1/2" Shank Drill Stand



Size Range	Order No.	Price
1/2 - 1 x 64ths	**AP53833SD**	Price

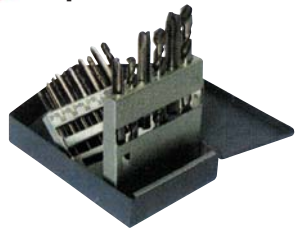
Huot Reamer Indexes

- Reamers not included



Size Range	Order No.	Price
1.0mm to 13mm by 0.5mm	**AP5312130**	Price
#1 - 60	**AP53160**	Price
1/16 to 1/2 x 64ths	**AP53129**	Price
Dowel Pin Sizes .123 thru .4995	**AP5312125**	Price
Letter A - Z	**AP53126**	Price
Over and Under Sizes .124 thru .501	**AP5314**	Price

Huot Tap/Drill Indexes



Size Range	Order No.	Price
National Coarse: Holds sizes 6-32 Tap #36 Drill, 8-32 #29, 10-24 #25, 10-32 #21, 1/4-20 #7, 5/16-18 #F, 3/8-16 #5/16, 7/16-14 #U, 1/2-13 #27/64.	**AP5399**	Price
National Fine: Holds sizes 6-40 Tap #33 Drill, 8-36 #29, 10-24 #25, 10-32 #21, 1/4-28 #3, 5/16-24 #I, 3/8-24 #Q, 7/16-20 #25/64, 1/2-20 #29/64.	**AP5318**	Price

Huot 10 Pc. Tap Index

- Each storage hole precisely sized for accurate, quick tool selection
- Corrosion resistant, epoxy baked on coating
- Secure, snap-lock steel cover
- Rugged, heavy gauge all-steel case



Size	Order No.	Price
Holds 4-40NC, 6-32NC, 8-32NC, 10-24NC, 10-32NF, 1/4-20NC, 5/16-18 NC, 3/8-16NC, 1/2-13NC, 5/8-11NC	**AP5312590**	Price

Huot Drill Dispensers

- Stackable
- One piece drawer slide
- Drills not included

New!

MADE IN THE USA



Size Range	Weight	Order No.	Price
Holds 1/16 to 1/2" x 64ths	10.25 lbs	**AP5313015**	Price
#1 - 60 Wire Gage	13.5 lbs	**AP532**	Price
1 to 13mm x 0.5mm	11 lbs	**AP534**	Price
Stubby, 1 to 6.9mm x .1mm	14 lbs	**AP535**	Price
1/16 - 1/2 x 64ths	10.5 lbs	**AP531**	Price
Letter A - Z	10.5 lbs	**AP533**	Price

Huot End Mill Dispensers

- Holds most popular end mills 1/16" to 1"
- Top drawer: 41 compartments
- Middle drawer: 41 compartments
- Lower drawer undivided
- Lockable

MADE IN THE USA



Style	Size Range	Weight	Order No.	Price
2 Flute	1/16 - 1	36 lbs	**AP5313300**	Price
4 Flute	1/16 - 1	36 lbs	**AP5313325**	Price

Huot End Mill Dispenser

- For small inventories of end mills
- (1) compartment for 9/16, 11/16, 7/8"
- (2) compartments for 3/16, 5/16, 7/16, 5/8, 1"
- (3) compartments for 1/8, 1/4, 3/8, 1/2, 3/4"
- Shipping weight 11 lbs



Order No.	Price
AP5313350	Price

Huot Reamer Dispenser

- Holds fractional reamers 1/8 thru 1/2" x 64ths, 14 over/under sizes -- .1240 to .5010" and 14 dowel pin sizes; .1230 to .4995"
- Lockable
- Reamers NOT included

MADE IN THE USA



Weight	Order No.	Price
13 lbs	**AP5313410**	Price
38 lbs	**AP5313400**	Price

Huot Insert Dispenser

- 36 Compartments to hold square, triangular, diamond and round inserts with additional space for specials

MADE IN THE USA



Order No.	Price
AP5313600	Price

Huot Metric Master Drill Dispenser

- Holds metric drills from .35mm to 13.00mm
- Sizes include .35mm to 2.5mm by .05mm, 2.6mm to 10mm by .1mm, 10.2mm, 10.5mm, 10.8mm, 11mm, 11.2mm, 11.5mm, 11.8mm, 12mm, 12.2mm, 12.5mm, and 13mm
- 138 compartments to store and inventory all your metric drill bits
- Lockable with two keys
- Shipping weight 46 lbs

MADE IN THE USA



Order No.	Price
AP5313180	Price

Huot Master Drill Dispenser

MADE IN THE USA

- Lockable with two keys
- Top drawer: 42 compartments – fractional sizes 1/16" thru 1/2" x 64ths
- Second drawer: 75 compartments – wire gage 1 to 60
- Third drawer: 42 compartments – letter sizes A to Z
- Lower drawer undivided for miscellaneous tools
- Shipping weight 46 lbs



Order No.	Price
AP5313175	Price

Huot Master Combination Drill Cabinet

- Holds fractional drills 1/16 to 1/2" by 64ths, 1 to 60 wire gage, A to Z letter sizes and metric from .35mm to 13.00mm
- Lockable with two keys
- Equipped with smooth ball bearing drawer slides
- Shipping wieght 80 lbs



Order No.	Price
AP5313190	Price

Huot Taper Shank/Taper Length Drill Dispenser

- Lockable with two keys
- Holds taper shank or taper length drills from 1/8" thru 1" x 64ths.
- Shipping weight 42 lbs

MADE IN THE USA



Order No.	Price
AP5313185	Price

Huot Carbide Burr Dispenser

- Holds the following burs: SA-1, SC-1, SD-1, SE-1, SF-1, SG-1, SL-1, SM-3, SA-3, SC-3, SD-3, SE-3, SF-3, SG-3, SL-3, SM-4, SA-5, SC-5, SE-5, SF-5, SG-5, SL-4, SM-5
- Shipping weight: 11 lbs
- Separates and protects valuable carbide burrs
- All steel cabinet with extruded vinyl compartments
- Easy to read identification numbers
- Sturdy and stackable
- High quality epoxy finish
- Dimensions: 7-3/8 x 7-3/4 x 14-5/8

MADE IN THE USA



Order No.	Price
AP5313200	Price

Huot Tap Dispensers

MADE IN THE USA

- Stackable
- One piece drawer slide



Size Range	Weight	Order No.	Price
1/4 - 20 to 1 - 14	11 lbs	**AP5313500**	Price
Metric 3mm to 24mm	11 lbs	**AP5313575**	Price
Screw Machine #2-56 to #12-28	13 lbs	**AP5313550**	Price

Huot Tap Dispenser

- Holds bottom, plug, and taper of each size from 1/4-20 to 1-14
- Holds taper, plug, bottom and spiral from 2-56 to 12-28
- Dimensions: 26" x 12-1/2" x 12"
- Shipping weight 51 lbs



MADE IN THE USA

Order No.	Price
AP5313580	Price

Huot Tap & Drill Dispenser

- Holds 12 pieces each size: Taps: 6-32, 8-32, 10-24, 10-32, 1/4-20, 1/4-28, 5/16-18, 5/16-24, 3/8-16, 3/8-24, 7/16-14, 7/16-20, 1/2-13 & 1/2-20
- Drills: #36, #29, #25, #21, #7, #3, F, I, 5/16", Q, U, 25/64", 27/64" & 29/64"
- Shipping weight 11 lbs



MADE IN THE USA

Order No.	Price
AP531414	Price

Huot Under-Mount Dispensers

- The latest thing in organizing, sorting, storing, and securing your cutting tools is the Undermount Dispenser
- Outer shell can be mounted underneath a work bench, desk, shelf and inside a cabinet
- The drawer has a built-in cam-lock to keep your cutting tools safely locked away
- Overall dimensions: 26-1/8"W x 12-1/2"D x 4-1/2"H
- Drawer dimensions: 23-1/8"W x 11"D x 3"H

MADE IN THE USA



Description	Size Range	Weight (lbs.)	Order No.	Price
Fractional Drills	1/16 to 1/2 x 64ths	15 lbs	**AP5330000**	Price
Empty, No Dividers	-	14 lbs	**AP5330001**	Price
Wire Gage	#1 - 60	15 lbs	**AP5330025**	Price
A to Z Drills	A to Z	15 lbs	**AP5330050**	Price

Huot Master Tap Dispenser

MADE IN THE USA

- Holds most commonly used taps, 1/4 to 1-1/2", both NC and NF
- Metric sizes 2.5mm to 30mm
- Lockable
- Machine screw sizes 2-56 to 12-28
- Drawer compartments: Top – 40, Second – 78, Third – 21, Fourth – 13
- Shipping weight 46 lbs



Order No.	Price
AP5313585	Price

Huot Tap Dispensers

MADE IN THE USA

Two new dispensers to help manage your inventory of taps.

- #13560 for NPT & #13595 Metric taps, drills, and dies
- #13560 NPT dispenser holds all sizes of National Pipe Taps (NPT) from 1/16" to 2
- #13595 new dispenser for Metric, Taps, drills, and dies - From 2.5 x .45 tap to 12.0 x 1.75 tap





Description	Size Range	Weight	Order No.	Price
NPT Dispenser	1/16 to 2 NPT	12 lbs	**AP5313560**	Price
Metric Tap, Drills & Dies	2.5 to 12mm	12 lbs	**AP5313595**	Price

Huot Silver/Deming Drill Dispensers



MADE IN THE USA

Size Range	Weight	Order No.	Price
Holds 2 ea. Reduced Shank S/D bits from 33/64ths to 63/64ths x 64ths	14 lbs	**AP5313166**	Price
Holds 2 ea. Reduced Shank S/D bits 1, 1-1/32, 1-1/16, 1-1/8, 1-5/32, 1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-7/16, 1-1/2"	12 lbs	**AP5313167**	Price

Huot Collet Racks

MADE IN THE USA

- Protects, stores, and organizes your valuable collets
- Made of 14 gauge steel, finished with epoxy powder paint
- Racks mountable on bench top
- For ER style collets



Collet Style	Tool Capacity	Size (W x D x H) (in.)	Order No.	Price
ER11	49	7-7/32 x 9-7/32 x 1-3/8	**AP5314800**	Price
ER16	49	7-7/32 x 9-7/32 x 1-3/8	**AP5314801**	Price
ER20	36	7-7/32 x 9-7/32 x 1-3/8	**AP5314802**	Price
ER25	48	17 x 9-7/32 x 2	**AP5314803**	Price
ER32	40	17 x 9-1/8 x 2	**AP5314804**	Price
ER40	27	17 x 9-7/32 x 2	**AP5314805**	Price

KENNEDY HDS Worktop Cabinets

- Ideal for use as under-counter cabinet in workstation application or as upper cabinet in stacking application

MADE IN THE USA

New!

Available Colors





RX757322UGY



RX757121UGY

No. of Drawers - 5								
Model No.	Color	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	Weight	Order No.	Price
7121TX	Industrial Utility Tan	25-3/8	24-1/4	31-7/8	2200 lbs	152 lbs	**RX757121TX**	Price
7121UB	Industrial Utility Blue	25-3/8	24-1/4	31-7/8	2200 lbs	152 lbs	**RX757121UB**	Price
7121UGY	Industrial Utility Grey	25-3/8	24-1/4	31-7/8	2200 lbs	152 lbs	**RX757121UGY**	Price

No. of Drawers - 6								
Model No.	Color	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	Weight	Order No.	Price
7322TX	Industrial Utility Tan	30-7/8	29-13/16	31-7/8	2640 lbs	231 lbs	**RX757322TX**	Price
7322UB	Industrial Utility Blue	30-7/8	29-13/16	31-7/8	2640 lbs	231 lbs	**RX757322UB**	Price
7322UGY	Industrial Utility Grey	30-7/8	29-13/16	31-7/8	2640 lbs	231 lbs	**RX757322UGY**	Price

KENNEDY HDS Countertop Cabinets

- Great for fastening together and pairing with wood tops to create long banks of storage with a work surface

MADE IN THE USA

New!

Available Colors





RX757127UGY



RX757425UGY



RX757326UGY

No. of Drawers - 6									
Model No.	Color	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	Weight	No. of Drawers	Order No.	Price
7127TX	Industrial Utility Tan	25-3/8	24-1/4	39-3/4	2640 lbs	181 lbs	6	**RX757127TX**	Price
7127UB	Industrial Utility Blue	25-3/8	24-1/4	39-3/4	2640 lbs	181 lbs	6	**RX757127UB**	Price
7127UGY	Industrial Utility Grey	25-3/8	24-1/4	39-3/4	2640 lbs	181 lbs	6	**RX757127UGY**	Price

No. of Drawers - 6 Wide									
Model No.	Color	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	Weight	No. of Drawers	Order No.	Price
7425TX	Industrial Utility Tan	45-3/16	29-13/16	39-3/4	2640 lbs	325 lbs	6 Wide	**RX757425TX**	Price
7425UB	Industrial Utility Blue	45-3/16	29-13/16	39-3/4	2640 lbs	325 lbs	6 Wide	**RX757425UB**	Price
7425UGY	Industrial Utility Grey	45-3/16	29-13/16	39-3/4	2640 lbs	325 lbs	6 Wide	**RX757425UGY**	Price

No. of Drawers - 7									
Model No.	Color	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	Weight	No. of Drawers	Order No.	Price
7326TX	Industrial Utility Tan	30-7/8	29-13/16	39-3/4	3080 lbs	291 lbs	7	**RX757326TX**	Price
7326UB	Industrial Utility Blue	30-7/8	29-13/16	39-3/4	3080 lbs	291 lbs	7	**RX757326UB**	Price
7326UGY	Industrial Utility Grey	30-7/8	29-13/16	39-3/4	3080 lbs	291 lbs	7	**RX757326UGY**	Price

KENNEDY HDS Standing Cabinets

- Perfect for stock and supply rooms where storage capacity must .85 maximized

MADE IN THE USA

New!

Available Colors





RX757132UGY



RX757333UGY

No. of Drawers - 8								
Model No.	Color	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	Weight	Order No.	Price
7132TX	Industrial Utility Tan	25-3/8	24-1/4	59-1/2	3520 lbs	249 lbs	**RX757132TX**	Price
7132UB	Industrial Utility Blue	25-3/8	24-1/4	59-1/2	3520 lbs	249 lbs	**RX757132UB**	Price
7132UGY	Industrial Utility Grey	25-3/8	24-1/4	59-1/2	3520 lbs	249 lbs	**RX757132UGY**	Price

No. of Drawers - 9								
Model No.	Color	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	Weight	Order No.	Price
7333TX	Industrial Utility Tan	30-7/8	29-13/16	59-1/2	3960 lbs	355 lbs	**RX757333TX**	Price
7333UB	Industrial Utility Blue	30-7/8	29-13/16	59-1/2	3960 lbs	355 lbs	**RX757333UB**	Price
7333UGY	Industrial Utility Grey	30-7/8	29-13/16	59-1/2	3960 lbs	355 lbs	**RX757333UGY**	Price

Huot ToolScoot™ Carts

- Durable nylon inserts to help prevent tool damage
- Two end storage trays with universal mounting holes for tool lock
- Solid, interlocking side panel construction adds strength and stability
- Heavy duty 5 x 1-1/4" casters load rated at 1000 lbs
- Angled lower tray for easy, quick tool access from either side
- All steel painted with durable Ecolo-Clad in red and black
- UPS dimensional weight shipping rates apply



Tool Capacity	Weight	Order No.	Price
48-30 Taper CNC Tooling	75 lbs	**AP5330HU**	Price
48-40 Taper CNC Tooling	75 lbs	**AP5340HU**	Price
36-50 Taper CNC Tooling	75 lbs	**AP5350HU**	Price
48-HSK63A Tooling	79 lbs	**AP5313970**	Price
36-HSK100A Tooling	79 lbs	**AP5313980**	Price

Huot CNC Tool Tower

- Individual units are 3' tall
- Three shelves
- Nylon inserts protect each tool holder
- Sturdy 16 gauge steel construction



13850



13840

Tool Capacity	Weight	Order No.	Price
54-50 Taper Tooling	65 lbs	**AP5313850**	Price
72-40 Taper Tooling	65 lbs	**AP5313840**	Price

Huot CNC Wall Locker

MADE IN THE USA

- Shelves mount flat or at a 20 degree angle for easy viewing and access
- Nylon inserts protect and securely hold tool holders
- Reinforced doors lock to keep valuable tools secure and protect against chips & debris
- Finished with a baked on powder coat for lasting durability
- Frame and shelves made of rugged 12 and 16 gauge steel
- Textured black with red shelves
- Size: 15-3/4 x 31-1/4 x 46-1/2"



Tool Capacity	Order No.	Price
30-50 Taper Tooling	**AP5355751**	Price
30-HSK 100A Taper Tooling	**AP5355781**	Price
54-30 Taper Tooling	**AP5355731**	Price
54-40 Taper Tooling	**AP5355741**	Price
54-HSK 63A Taper Tooling	**AP5355771**	Price

Huot CNC ToolScoot™ Tree

HUOT TOOLSCOOT

Tree with wheels provides:

- 70 (total) receiving slots provide ample variety for shelf locations.
- Heavy 14 gauge unibody construction with see-through design.
- Includes 6 shelves - 5 for toolholders and 1 utility.
- Nylon inserts protect and securely hold tool-holders
- Every 5th slot is marked for easy shelf alignment
- Shelves can be set flat or at a 20 degree angle
- 16 gauge CRS shelves provide strength and rugged durability
- Heavy duty 5" casters are load rated to 1,200 pounds
- Slotted top for holding spanner wrenches
- Dozens of pegboard holes for misc. storage
- Size: 28 x 28-1/2 x 57"



Tool Capacity	Weight	Order No.	Price
90-30 Taper Toolholders (BT,CAT or NMTB)	160 lbs	**AP5355930**	Price
90-40 Taper Toolholders (BT,CAT or NMTB)	160 lbs	**AP5355940**	Price
50- HSK-100A Toolholders	160 lbs	**AP5355980**	Price
50-50 Taper Toolholders (BT, CAT or NMTB)	160 lbs	**AP5355950**	Price
90-HSK-63A Toolholders	160 lbs	**AP5355970**	Price
90-HSK-63F Toolholders	160 lbs	**AP5355976**	Price

SUPER TOWER by HUOT Tooling Racks

- Almost twice the storage capacity for less!
- Heavier duty than others in its class
- Finished in beautiful, strong gold vein powder coating, baked on for lasting durability
- Phosphate pretreatment undercoating for additional toughness
- Constructed of prime 12 gauge steel for rugged heavy duty use
- Angled shelving for easier, quicker tool access
- Tower is stackable two high to expand your storage area
- Optional 4th shelf available
- Single Super Tower can be stored inside a standard 36" wide x 18" deep industrial cabinet
- Cart Size: 33-3/4 x 17-1/2 x 33-1/2"



Tool Capacity	Weight	Order No.	Price
135-40 Taper Tooling	91 lbs	**AP5323840**	Price
135-HSK 63A Toolholders	91 lbs	**AP5323870**	Price
78-HSK 100A Toolholders	91 lbs	**AP5323880**	Price
78-50 Taper Tooling	91 lbs	**AP5323850**	Price

Huot CNC Workstation

MADE IN THE USA

- Bottom 6" drawer holds up to 30 tool holders
- Top 2 drawers utilize welded columns with dividers every 1" for customizing storage and organization
- Locking doors
- Cabinet is pre-frilled on both sides to mount a tool
- Heavy duty welded steel construction
- All drawers use full extension ball bearing slides
- Size: 34 x 22-3/4 x 39"
- Weight: 285 lbs.



Tool Capacity	Order No.	Price
18-50 Taper Tooling	**AP5377250**	Price
18-HSK 100A Taper Tooling	**AP5377280**	Price
30-30 Taper Tooling	**AP5377230**	Price
30-40 Taper Tooling	**AP5377240**	Price
30-HSK 63A Taper Tooling	**AP5377270**	Price

Ships by Truck

SUPERSCOOT by HUOT

- Constructed of prime 12 gauge steel for rugged heavy duty use
- New outrigger design for improved stability, easier maneuverability for a safe, smooth tool ride
- Heavy duty, extra smooth rolling casters load rated to 1600 lbs for long caster life, with locking caster mechanism
- Cart Size 45-1/4 x 17-1/2 x 40”
- Ships by Truck



Tool Capacity	Weight	Order No.	Price
52-HSK 100A Toolholders	132 lbs	**AP5323980**	Price
52-50 Taper Tooling	132 lbs	**AP5323950**	Price
90-40 Taper Tooling	132 lbs	**AP5323940**	Price
90-HSKA 63A Toolholders	132 lbs	**AP5323970**	Price

Huot CNC Machine Mount Rack

- Shelves mount flat or at a 20 degree angle for easy tool presentation
- Large capacity - up to 28 tools total
- Low profile keeps shelves close to the machine -only protrudes 11”
- Durable nylon inserts (included) protect and securely hold tool holders
- Size 11 x 19 x 18-1/4”
- Black & red

MADE IN THE USA



Tool Capacity	Order No.	Price
28-40 Taper Tooling	**AP5356740**	Price

UPS Dimensional Shipping Rates Apply

Huot Lathe Tooling Cart

MADE IN THE USA

- Large 6” deep drawer for storing live tooling heads and other large tools
- Top drawer utilizes welded columns with dividers for tool organization
- Removable top bins store and organize set up tools
- Live center shelf holds 3MT and 4MT taper centers by the shank
- Welded frame for rigidity requires no assembly
- Side tray for optional collet racks, presetters, or miscellaneous items
- Size 41 x 35-1/4 x 18”



Order No.	Price
AP5377300	Price

Ships by Truck

RAPIDHOLD CNC Tool Cart

- Solid side panel construction
- 30”L x 15”W x 35”H
- Durable nylon inserts
- 4” x 1-1/2” Casters rated at 1,000 lbs (2 swivel & 2 locking)
- Baked-on blue epoxy finish

MADE IN THE USA



Type - Tool Storage Cart			
Description	**Weight**	**Order No.**	**Price**
15 CAT50 Taper Tooling	52 lbs	**RX8076304**	Price
15 HSK-100A Tooling	52 lbs	**RX8076308**	Price
24 CAT40 Taper Tooling	52 lbs	**RX8076302**	Price
24 HSK-63A Tooling	52 lbs	**RX8076306**	Price

Type - Tool Cart Accessories			
Description	**Weight**	**Order No.**	**Price**
Tool Drawer	14 lbs	**RX8030011**	Price
Utility Shelf	6 lbs	**RX8014191**	Price
40 Taper Extra Shelf	6 lbs	**RX8014171**	Price
50 Taper Extra Shelf	6 lbs	**RX8014176**	Price
HSK63A Taper Extra Shelf	6 lbs	**RX8014181**	Price
HSK100A Taper Extra Shelf	6 lbs	**RX8014186**	Price

Huot CNC Tool Carts

HUOT TOOLSCOOT

- Heavy gauge all steel infrared baked epoxy finish
- Durable nylon inserts to protect tools
- Second shelf angled for easy access
- 2 Storage trays with protective lining
- 5 x 1-1/4” Casters load rated at 1000 lbs.
- Size 18 x 35-1/4 x 35”
- UPS Dimensional Weight Shipping Rates Apply

MADE IN THE USA



Tool Capacity	Weight	Order No.	Price
48-30 Taper CNC Tooling	75 lbs	**AP5330HU**	Price
48-40 Taper CNC Tooling	75 lbs	**AP5340HU**	Price
36-50 Taper CNC Tooling	75 lbs	**AP5350HU**	Price

Huot CNC Security Cart

- Clear polycarbonate doors allow for easy at-a-glance tool identification
- Comes with 2 sets of doors to secure both sides
- Doors are keyed alike for easy operation and security
- Shelves can be adjusted in 7 different mounting positions
- Side tray allows for optional tool changing vise or collect racks
- Large open tray area for utility transport
- Size: 41 x 35 x 20”

MADE IN THE USA



Tool Capacity	Order No.	Price
36-HSK 100A Taper Tooling	**AP5316980**	Price
36-HSK 50A Taper Tooling	**AP5316950**	Price
48-30 Taper Tooling	**AP5316930**	Price
48-40 Taper Tooling	**AP5316940**	Price
48-HSK 63A Taper Tooling	**AP5316970**	Price

Ships by common carrier

Mobile Service Benches

- Combines the work surface of a bench, storage facility of a cabinet and mobility of a service bench
- Move heavy parts and tools right to the job site
- These units feature a hard-pressed wood top, a closed door section with adjustable shelf and key lock and steel drawers
- Steel back and end-stops keep parts and tools from falling off
- Drawers have recessed handle and roll-formed slides for full suspension
- Rolls on 2 rigid and 2 brake type swivel 5" diameter casters
- Choose from four styles to fit your needs
- Cabinet portion shipped assembled
- Tough powder coat gray finish


MB300


MB301


MB304


MB305

Doors	Drawers	Weight	Order No.	Price
1	1	135 lbs	**RZ50MB301**	Price
1	4	168 lbs	**RZ50MB304**	Price
1	5	174 lbs	**RZ50MB305**	Price

Bench Drawers

- The most often requested work bench accessory
- Model BD2318 has padlock attachment for security protection
- Model SD2014 has knock-out for cylinder lock key and can be stackable



Type	Depth (in.)	Height (in.)	Weight	Width (in.)	Order No.	Price
Drawer	20	6-1/2	15 lbs	14	**RZ50SD2014**	Price
Drawer	23-7/8	5-3/8	22 lbs	18-1/4	**RZ50BD2318**	Price
Cylinder Lock	-	-	.118 lbs	-	**RZ50CL10**	Price

Mobile Bench Cabinet

- 14 G Fixed shelf
- Double doors with 3-point locking handle w/2 keys
- 12G-12" vise support
- 6" x 2" Phenolic bolt-on casters (2) swivel, (2) rigid
- Fully welded



Size	Platform Height (in.)	Color	Weight	Order No.	Price
60"L x 24"W x 37-3/4"H	36-3/4	Gray	280 lbs	**SB55340095**	Price

Ships By Common Carrier from Manufacturer

PRM PRO White Board - Double Sided

- Perfect for meeting and multi-tasking
- Available in two sizes
- Both sides of the reversible whiteboard are magnetic
- Silver aluminum frame around whiteboard
- Includes 4 casters, two with locking brakes
- Boards lock into place when in position
- Includes marker/eraser tray
- Assembly required
- 10 Year warranty on board



Height	Length	Description	Ships	Order No.	Price
36"	48"	Whiteboard w/Frame & Casters	UPS Dimensional	**SA7004836**	Price
40"	72"	Whiteboard w/Frame & Casters	Commercial Truck	**SA7007240**	Price
36"	48"	Replacement Whiteboard Only	UPS Dimensional	**SA7084836**	Price
40"	72"	Replacement Whiteboard Only	Commercial Truck	**SA7087240**	Price
36	48	Replacement Frame & Casters	UPS Dimensional	**SA7084837**	Price
40	72	Replacement Frame & Casters	Commercial Truck	**SA7087241**	Price

3-Drawer Project Center

- Medium use / medium capacity
- Full-width drawer pulls
- External keyed-lock bar
- 25 lb friction drawer slides
- Ships by truck



Size W x D x H (in.)	Caster Size (in.)	Load Capacity	Color	Weight	Order No.	Price
34 x 20 x 34.5	4 x 2	300 lbs	Black	75 lbs	**RX61SPPC3BK**	Price

5-Drawer Project Center

- Medium use / medium capacity
- Battery charger storage
- Power tool holster
- UL Approved power strip included
- 25 lb. Friction drawer slides
- Full-width drawer pulls
- External keyed-lock bar



Size W x D x H (in.)	Caster Size (in.)	Load Capacity	Color	Weight	Order No.	Price
29 x 20 x 34.5	4 x 2	300 lbs	Black	80 lbs	**RX61SPPC5BKP**	Price

3 Drawer Mobile Work Center

- All welded steel construction with powder coat finish in silver vein with silver drawers
- Full extension 50 lb. rated ball bearing drawer slides
- Single lock secures all drawers, 2 keys included
- Side handle
- Top storage compartment features gas struts to assist in opening and closing of lid
- Two fold down side trays with storage compartment for tools, plus bottom tray for additional storage space
- Heavy duty 5” casters (2 swivel w/ brakes) support up to 1,000 lbs

New!



Model No.	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	Weight	Order No.	Price
MTC27-3SSV	27	18	38	1000 lbs	75 lbs	**RZ50MTC273SSV**	Price

Mobile Work Centers

New!

- All welded steel construction with black powder coat finish
- Full extension 75 lb. rated ball bearing drawer slides on top and bottom drawers and 50 lb. rated on all other drawers
- Single lock secures all drawers, 2 keys included
- Side handle for easier maneuvering; mounts on either side
- Durable solid wood worktop
- Full width aluminum pull handles
- Heavy duty 5” casters (2 swivel w/ brakes) support up to 1,000 lbs





Model No.	No. of Drawers	Width (in.)	Depth (in.)	Height (in.)	Load Capacity	Weight	Order No.	Price
MWC46-BK	9	46	18	39	1000 lbs	200 lbs	**RZ50MWC46BK**	Price
MWC52-10S	10	52	18	39	1000 lbs	250 lbs	**RZ50MWC5210S**	Price

Multi-Purpose Work Stand

- Provides added work space and storage in shop and office
- Suited for use as a machine stand – has 1500 lb. capacity
- Heavy-duty steel construction for strength and rigidity
- Legs are adjustable in 2” increments
- Tough powder coat gray finish



Depth (in.)	Width (in.)	Leg Height Range (in.)	Weight	Order No.	Price
18	24	18 - 24	29 lbs	**RZ50182418**	Price
18	24	30 - 36	30 lbs	**RZ50182430**	Price
24	36	18 - 24	32 lbs	**RZ50243618**	Price
24	36	30 - 36	51 lbs	**RZ50243630**	Price

Utility Cart with Sliding Top

New!

- Sliding top opens to reveal additional storage space
- 2 extra drawers and a 3” bottom drawer included
- Padded top protects the powder coat finish and doubles as a work surface
- Two, 100 lbs. ball bearing sliding drawers provide traditional tool storage and an open bottom for bulky items
- Power and USB outlets imbedded on side of cart
- Weight load capacity 500 lbs.



Order No.	Price
PD2178088	Price

ProCart

Versatile box-top to flat-top & portable storage all in one



- Deep molded-in compartments hold hand-held computer, scanner, tools, etc.
- Dent resistant & rust-proof
- Sized to hold Akro-Bins (sold separately)
- Rail kit to hang bins (sold separately)
- Maneuvers smoothly on durable non-marking 5" wheels
- Each shelf holds 200 lbs.
- Color: gray

Description	Size	Shipping Wt.	Order No.	Price
Large Cart	45"L x 24"W x 35"H	62 lbs	**SD5030936G**	Price
Small Cart	40"L x 19-1/2"W x 35"H	51 lbs	**SD5030930G**	Price
Rail Kit	For SD5030930G	22 lbs	**SD5030900G**	Price
Rail Kit	For SD5030936G	24 lbs	**SD5030906G**	Price

edsal Stock Trucks



- These multi-tray stock trucks collect, store and deliver large amounts of materials right to the job site
- 800 lb. capacity on evenly distributed loads
- Strong 16 gauge ribbed steel angle posts
- 18 gauge, 3" deep steel trays with mitered edges for extra rigidity
- All trays with exception of bottom tray can be inverted for flat working surface
- Gray enamel baked finish

No. of Trays	Dim. (L x W x H) (in.)	Weight	Order No.	Price
4	30 x 16 x 60	78 lbs	**RZ50ST8000**	Price
4	36 x 24 x 60	107 lbs	**RZ50ST9000**	Price
5	30 x 16 x 60	91 lbs	**RZ50ST8003**	Price
5	36 x 24 x 60	128 lbs	**RZ50ST9003**	Price

Rubbermaid Commercial Products Triple® Trolley



- Efficiently transports large, bulky loads, then folds flat for easy storage
- Sturdy structural foam deck won't rust, dent, chip or peel
- Non-skid platform surface helps prevent load shifting
- Three-position handle lets users, pull or fold flat for use as a dolly
- Casters are non-marking

Size	Holding Capacity	Weight	Order No.	Price
20-1/2 x 30-1/2	500 lbs	25.435 lbs	**RZ554401**	Price

Rubbermaid Commercial Products 5th Wheel Wagon



- Ideal for moving large, heavy loads
- 5th Wheel steering allows the front axle to pivot and turn with a tight radius
- Vinyl grip "T-Bar" pull handle stays upright when not in-use
- Duramold™ precision engineered resin and metal composite structure
- Molded-in tie-down slots for load security
- Textured deck surface reduces load slippage
- Perimeter deck channel retains small items
- Retainer clips prevent unintended handle removal
- Powder coated steel handle / frame for optimum service life
- 12" Pneumatic wheels - 2 fixed, 2 swivel casters for optimal control & maneuverability

Size	Holding Capacity	Weight	Order No.	Price
24 x 48	2000 lbs	96 lbs	**RZ554477**	Price

WESCO Platform Truck with Folding Handle



- Fold down handle for easy storage
- Enameled finish with non-skid heavy vinyl deck surface
- Protective vinyl perimeter bumpers
- UPS shippable

Holding Capacity	Size (in.)	Caster Size	Weight	Order No.	Price
440 lbs	19 x 29	4	25 lbs	**RV55272019**	Price

Rubbermaid Commercial Products Platform Truck



- Built for durability and efficient transportation of heavy loads
- Sturdy structural foam construction won't rust, dent, chip, peep or splinter - virtually maintenance free
- Capacity: 1000 lbs.

Size	Holding Capacity	Weight	Order No.	Price
24 x 48	1000 lbs	76.328 lbs	**RZ554436**	Price

Vestil Hardwood Platform Trucks



- Economical solution to your material handling needs
- Constructed of 1" thick hardwood
- Two rigid and two swivel 6" x 2" rubber casters
- Casters and steel push handle are bolted on
- Countersunk holes allow for a smooth deck surface

Size (W x L) (in.)	Holding Capacity	Platform Height (in.)	Weight	Order No.	Price
24 x 48	1600 lbs	9-1/2	72 lbs	**RV54VHPT2448**	Price
27 x 54	1600 lbs	9-1/2	82 llbs	**RV54VHPT2754**	Price
30 x 60	1600 lbs	9-1/2	92 lbs	**RV54VHPT3060**	Price
36 x 72	1600 lbs	9-1/2	158 lbs	**RV54VHPT3672**	Price

Rubbermaid Commercial Products Heavy-Duty Dolly



- Steel reinforced, molded dolly performs a wide varity of moving tasks
- Durable, one-piece molded polyethylene deck is lightweight and easy to clean
- Sturdy plastic construction won't rot, mildew, warp, rust or splinter
- Easy rolling, 4" non-marking swivel casters
- 1" Thick rubber pads to protect load and minimize slippage
- Dimensions: 30"L x 18"W
- Capacity: 1000 lbs.

Weight	Order No.	Price
22 lbs	**RZ559T55**	Price

Vestil Panel Carts



PRCTHD

MADE IN THE USA



PRCT

- Perfect for handling items such as sheets of paneling, plywood, doors and lumber
- Steel construction, powder coated blue finish
- Model PRCT has a removable basket and rollers on one end for easy loading
- Two rigid and two swivel casters
- Model PRCT-HD features removable 27" high support rails and a side retainer lip

Size (W x L) (in.)	Holding Capacity	Caster Size & Type	Weight	Order No.	Price
26 x 32	2000 lbs	4 x 2 Glass Filled Nylon	99 lbs	**RV54PRCT**	Price
29-1/2 x 36	4000 lbs	5 x 2 Poly-On-Steel	184 lbs	**RV54PRCTHD**	Price

PRO Multi-Purpose Shop Carts

- Polyethylene shelves and legs
- Scratch, dent, stain, and rust free designed
- Tub shelves are 2-3/4" deep
- Integrated molded push handle
- 4" Swivel casters with stability locks (on 2 of the 4 casters)
- Ships UPS at dimensional rate
- Lifetime warranty against mfg. defect

MADE IN THE USA



No. of Shelves	Shelf Styles	Dimensions (WxDxH)	Weight	Load Capacity	Color	Order No.	Price
2	Both Shelves are Tub	32 x 24 x 37-1/4	41 lbs	400 lbs	Black	**SA7010075**	Price
2	Tub Shelf	32-1/4 x 18 x 35-1/4	23 lbs	500 lbs	Black	**SA7022000**	Price
3	All 3 Shelves are Flat	24 x 18 x 42	28 lbs	400 lbs	Black	**SA7021060**	Price
3	All 3 Shelves are Tub	24 x 18 x 38-1/2	29 lbs	300 lbs	Black	**SA7010055**	Price
3	Top Shelf Flat, 2nd Shelf Tub, 3rd Shelf Tub	24 x 18 x 36-1/2	29 lbs	300 lbs	Black	**SA7021055**	Price
2	Top Shelf Tub, 2nd Shelf Tub	24 x 18 x 37-1/4	23 lbs	300 lbs	Black	**SA7010050**	Price
3	Tub Shelf	32-1/4 x 18 x 37-1/4	31 lbs	500 lbs	Black	**SA7022100**	Price

Snap-on Industrial Brands | WILLIAMS Metal Service Carts

- Service carts with multiple usages
- Heavy duty undercarriage to help support bottom tray
- High gloss powder coat paint is scratch & chemical resistant
- Heavy duty 18 gauge steel
- 4" x 1" Swivel casters
- Ships common carrier



Overall Size (W x D x H) (in.)	Color	No. of Shelves	Drawers	Lids	Order No.	Price
30 x 19-1/2 x 34-1/2	Black	2	-	Yes	**KP3150721**	Price
41 x 17 x 36-7/32	Red	5	4	Yes	**KP3150724**	Price
30 x 17 x 36-7/32	Red	2	1	No	**KP3150723**	Price
30 x 17 x 36-7/32	Red	2	0	No	**KP3150722**	Price

PRO Metal Service Cart

- Push handle is rounded to allow for a firm, comfortable grip
- Capacity is per shelf at a maximum level, store heavier items on bottom shelves
- Top tray can be inverted to provide flat work surface
- Tray may be added to the cart anytime for addtional storage
- Two fixed and two locking swivel casters with 5" wheels provide maximum steering control in confined areas
- Color: medium gray

MADE IN THE USA



Type - Service Cart					
No. of Shelves	**Size**	**Holding Capacity**	**Weight**	**Order No.**	**Price**
2	16 x 30 x 32	150 lbs	36 lbs	**RV8250000**	Price
2	24 x 36 x 32	150 lbs	51 lbs	**RV8250005**	Price

Type - Center Tray			
No. of Shelves	**Size**	**Order No.**	**Price**
1	16 x 30 x 3-1/4	**RV8250002**	Price
1	24 x 36 x 3-1/4	**RV8250004**	Price

Rubbermaid Commercial Products Flat Two Shelf Utility Carts

- Ergonomically designed push handle
- Molded-in storage compartments, holsters, hooks, and notches
- Molded-in customizable fittings
- High density structural resin construction
- Best-in-class casters to meet the most demanding environments
- Color: black
- Ships UPS



Overall Size (in.)	Shelf Size (in.)	Capacity	Weight	Order No.	Price
37-7/8 x 19-3/16 x 33-5/16	16 x 30	500 lbs	32.922 lbs	**RZ55FG450500B**	Price
43-7/8 x 25-7/8 x 33-5/16	24 x 36	500 lbs	42.552 lbs	**RZ55FG452500B**	Price

Rubbermaid Commercial Products Heavy Duty Two Shelf Utility Carts With Lipped Shelf

- Perfect for transporting equipment and heavy loads
- Deep shelves securely hold contents
- Sturdy, structural foam contruction won't rust, dent, chip or peel
- Lightweight & maneuverable, includes 5" diameter, non-marking casters (two fixed & two swivel
- Color: black
- UPS dimensional weight shipping rates may apply



4500



4520

Overall Size (in.)	Shelf Size (in.)	Capacity	Weight	Order No.	Price
39-1/4 x 17-7/8 x 33-1/4	16 x 30	500 lbs	31.07 lbs	**RZ554500**	Price
45-1/4 x 25-7/8 x 37-1/8	24 x 36	500 lbs	44.71 lbs	**RZ554520**	Price

edsal Industrial Service Carts

Commercial Service Carts:

- 5" Heavy Duty hard rubber casters (2 rigid, 2 swivel)
- 3-1/2" deep tray with rolled edges

Heavy Duty Service Carts:

- Ribbed steel angle post



Type - Commercial Service Cart				
Dim. (W x H) (in.)	Capacity	Weight	Order No.	Price
16 x 30 x 32	500 lbs	32 lbs	**RZ50SC2016**	Price
24 x 36 x 32	500 lbs	56 lbs	**RZ50SC2024**	Price

Type - Heavy Duty Service Cart				
Dim. (W x H) (in.)	Capacity	Weight	Order No.	Price
16 x 30	800 lbs	46 lbs	**RZ50SC5000**	Price
24 x 36	800 lbs	63 lbs	**RZ50SC6000**	Price

JET Service Carts

- Heavy duty plastic construction resists dents, chips, and rust
- Handle has built-in storage bins
- Round corners mean no sharp edges to nick walls or furniture
- Shipping weight: 42 lbs.
- Upper shelf height: 33-1/2"
- Lower shelf height: 6"



JET RED ASSURANCE 2-YEAR WARRANTY

Shelf Size (in.)	Overall Size (L x W x H) (in.)	Capacity	Order No.	Price
31-1/8 x 17-1/8	39-3/4 x 17-1/8 x 33-1/2	550 lbs	**RS50140018**	Price
37-3/8 x 25-5/8	46 x 25-5/8 x 33-1/2	550 lbs	**RS50140019**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

DURHAM MFG Est. 1922 Welded Service Trucks

- 2" x 3/16" Angle iron frame
- Shelves are reinforced 14 gauge
- Durable, textured, gray powder coat finish
- 4000 lb Total capacity
- Shelf clearance 26-1/2"



Size	Caster Size	Platform Height	Color	Weight	Order No.	Price
36"W x 24"D x 37-1/2"H	6" x 2" Phenolic Bolt-on casters (2) swivel, (2) rigid	9-1/8	Gray	142 lbs	**SB55HET2436295**	Price
48"W x 24"D x37-1/2"H	6" x 2" Phenolic Bolt-on casters (2) swivel, (2) rigid	9-1/8	Gray	156 lbs	**SB55HET2448295**	Price

Ships By Common Carrier • Ships fully assembled

STANLEY 2 Pk. 2 Way Adjustable Saw Horse

- Capacity: Holds 1000 lbs. per pair
- 2 ways adjustable, folding saw horse
- Smooth slide mechanism for width adjustment
- Anti-slip rubber on feet and top for safety
- Innovative ergonomic mechanism for height adjustment



Model No.	Height (in.)	Width (in.)	OAL (in.)	Order No.	Price
STST60626	31-1/8	2-7/8	28-1/8	**KP438112**	Price

STANLEY 2 Pk. Junior Folding Saw Horse

- Capacity: Holds 800 lbs. per pair
- Light weight and easy to transport
- Integrated V-groove
- Bottom tray for storage while in use



Model No.	Height (in.)	Width (in.)	OAL (in.)	Order No.	Price
STST60952	32	5	22-1/2	**KP438114**	Price

PRM PRO Work Benches

MADE IN THE USA

- Available with steel top or solid hardwood top
- Available with fixed or adjustable legs
- Steel top is made of 12 gauge steel with a 14 gauge reinforcement channel
- Hardwood top with “butcher block” construction sanded smooth
- Lifetime warranty against manufacturer defects



Type - Adjustable Leg							
Top	W	D	H	Capacity	Weight	Order No.	Price
Steel	60	30	33-1/2	2500	110 lbs	**RV8273850**	Price
Steel	72	30	33-1/2	1800	127 lbs	**RV8273855**	Price
Steel	72	36	33-1/2	1800	141 lbs	**RV8273860**	Price
Steel	96	36	33-1/2	4000	173 lbs	**RV8273865**	Price
Wood	60	30	33-1/2	3800	131 lbs	**RV8273870**	Price
Wood	72	30	33-1/2	3600	148 lbs	**RV8273875**	Price
Wood	72	36	33-1/3	3600	168 lbs	**RV8273880**	Price

Type - Fixed Leg							
Top	W	D	H	Capacity	Weight	Order No.	Price
Steel	48	30	33-1/2	4000	91 lbs	**RV8273800**	Price
Steel	60	30	33-1/2	2500	103 lbs	**RV8273805**	Price
Steel	72	30	33-1/2	1800	120 lbs	**RV8273810**	Price
Steel	72	36	33-1/2	1800	134 lbs	**RV8273815**	Price
Steel	96	36	33-1/2	4000	160 lbs	**RV8273820**	Price
Wood	60	30	33-1/2	3800	124 lbs	**RV8273825**	Price
Wood	72	30	33-1/2	3600	142 lbs	**RV8273830**	Price
Wood	72	36	33-1/2	3600	162 lbs	**RV8273835**	Price

Professional Series Workbenches

- Waterloo workbenches enhance any shops functionality by providing a sturdy, comfortable height work surface
- Leveling feet, adjustable height legs, butcher block top and two width options ensure you will find a workbench to fit your needs



New!



Size	Depth (in.)	Gauge	Top Style	Weight	Order No.	Price
6 ft	24	14	Butcher Block	120 lbs	**RX61PWS6FBB**	Price
6 ft	24	14	Stainless	120 lbs	**RX61PWS6FSS**	Price
8 ft	24	14	Butcher Block	131 lbs	**RX61PWS8FBB**	Price
8 ft	24	14	Stainless	131 lbs	**RX61PWS8FSS**	Price

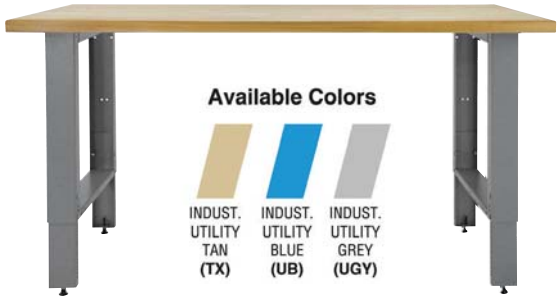
KENNEDY Adjustable Height Workbenches

New!

Model 7900

- Heavy-duty work table is height adjustable from 29-1/4” to 43-3/4”
- 1-3/4” Maple top
- Full length laminations specially selected for grain and color match
- Some assembly required

MADE IN THE USA



Frame Color	Height (in.)	Width (in.)	Depth (in.)	Order No.	Price
Blue	29-1/4 to 43-3/4	60	30	**RX507900UB**	Price
Grey	29-1/4 to 43-3/4	60	30	**RX507900UGY**	Price
Tan	29-1/4 to 43-3/4	60	30	**RX507900TX**	Price

KENNEDY 5-Drawer Workbenches

Model 7902

New!

- High-security tubular lock
- Roller bearing slides hold 440 lbs of capacity per drawer
- 1-3/4” thick maple top
- Some assembly required

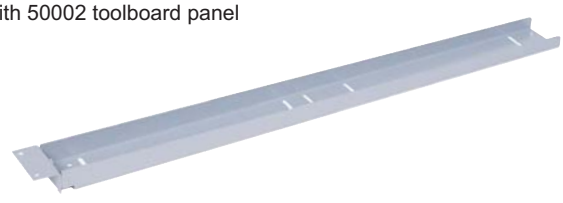


Frame & Cabinet Color	Height (in.)	Width (in.)	Depth (in.)	Order No.	Price
Blue	33-3/4	60	30	**RX507902UB**	Price
Grey	33-3/4	60	30	**RX507902UGY**	Price
Tan	33-3/4	60	30	**RX507902TX**	Price

KENNEDY Mounting Bracket

New!

- Brace and mounting hardware
- Use with 50002 toolboard panel



Order No.	Price
RX5050050	Price

KENNEDY 7-Drawer Workbenches
Models 7908 & & 7910

New!

- High-security tubular lock
- Roller bearing slides hold 440 lbs of capacity per drawer
- 1-3/4" Maple top
- Some assembly required



Description - Model 7908					
Frame & Drawer Color	Height (in.)	Width (in.)	Depth (in.)	Order No.	Price
Blue	33-3/4	60	30	**RX507908UB**	Price
Grey	33-3/4	60	30	**RX507908UGY**	Price
Tan	33-3/4	60	30	**RX507908TX**	Price

Description - Model 7910					
Frame & Drawer Color	Height (in.)	Width (in.)	Depth (in.)	Order No.	Price
Blue	38-1/4	60	30	**RX507910UB**	Price
Grey	38-1/4	60	30	**RX507910UGY**	Price
Tan	38-1/4	60	30	**RX507910TX**	Price

KENNEDY 12-Drawer Workbenches
Model 7920

New!

- 72" W x 30" D x 41-3/4" H
- High-secruity tubular lock
- Roller bearing slides hold 440 lbs of capacity per drawer
- 1-3/4" Maple top
- Some assembly required



Frame & Cabinet Color	Height (in.)	Width (in.)	Depth (in.)	Order No.	Price
Blue	41-3/4	72	30	**RX507920UB**	Price
Grey	41-3/4	72	30	**RX507920UGY**	Price
Tan	41-3/4	72	30	**RX507920TX**	Price

edsal Heavy Duty Industrial Work Benches

- **Butcher Block Maple:** Made from quality kiln-dried maple strips. Solid laminated maple top resists damage by sharp tools and solid blows, yet harmless to precision machined parts and dies. Recommendable for tool and die work, electrical wiring, fabric cutting, industrial arts, or office. Maximum shock absorption where sensitive instruments are used. 1-3/4" thick. Stringer not included with this top.
- **Steel Top:** 12 Gauge steel top is the number one choice for heavy-duty use. Will not become oil soaked or crack. Gray enamel finish. 1-3/4" thick.
- **ShopTop:** The preferred work surface for industry. Features a hard, gloss smooth surface of phenolic bonded particle board with a core of northern hardwoods; 30% harder than maple. Light color matte finish. Resists acids, oil, and grease. 1-3/4" thick.



MADE IN THE USA



Complete Work Bench

Top Style	Width (in.)	Depth (in.)	Height (in.)	Weight	Order No.	Price
Maple	60	30	34	181 lbs	**RZ50M5331**	Price
Maple	72	30	34	180 lbs	**RZ50M5332**	Price
Shop Top	60	30	34	162 lbs	**RZ50W5325**	Price
Shop Top	72	30	34	181 lbs	**RZ50W5326**	Price
Steel	60	30	34	110 lbs	**RZ505303**	Price
Steel	72	30	34	126 lbs	**RZ505305**	Price

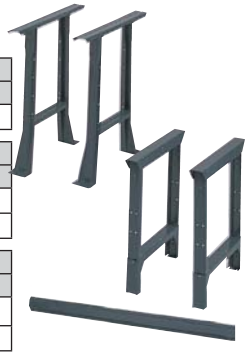
edsal Heavy Duty Industrial Work Bench Tops

Top Style	Width (in.)	Depth (in.)	Weight	Order No.	Price
Maple	60	30	81 lbs	**RZ50M5331T**	Price
Maple	72	30	89 lbs	**RZ50M5332T**	Price
Shop Top	60	30	89 lbs	**RZ50W5325T**	Price
Shop Top	72	30	104 lbs	**RZ50W5326T**	Price



Top Style	Width (in.)	Depth (in.)	Weight	Order No.	Price
Steel	60	30	74 lbs	**RZ505303T**	Price
Steel	72	30	86 lbs	**RZ505305T**	Price

edsal Bench Accessories



Type - Adjustable Height Bench Leg				
Width (in.)	Height (in.)	Weight	Order No.	Price
30	29 - 33	19 lbs	**RZ50ABL30**	Price

Type - Flared Fixed Bench Leg				
Width (in.)	Height (in.)	Weight	Order No.	Price
30	28	13.5 lbs	**RZ505707**	Price
30	32	16.5 lbs	**RZ505709**	Price

Type - Bench Stringer				
Width (in.)	Height (in.)	Weight	Order No.	Price
60	5	8 lbs	**RZ50ST60**	Price
72	5	10 lbs	**RZ50ST72**	Price

Type - Back & End Stops				
Width (in.)	Height (in.)	Weight	Order No.	Price
60	3	12 lbs	**RZ505503**	Price
72	3	13 lbs	**RZ505505**	Price



Type - Riser				
Width (in.)	Height (in.)	Weight	Order No.	Price
60	10-1/2	18 lbs	**RZ505410**	Price
72	10-1/2	21 lbs	**RZ505411**	Price



Type - Shelf				
Width (in.)	Height (in.)	Weight	Order No.	Price
60	15	22 lbs	**RZ505602**	Price
72	15	27 lbs	**RZ505603**	Price



Shop Stool with Cushion Seat

- Vinyl black padded seat swivels 360°
- Chrome plated legs
- Seat diameter 13.7”
- Great for shop, warehouse, office, etc.
- Limited lifetime warranty against manufacturer defects
- Ships UPS



Approx. Seat Height (in.)	Order No.	Price
29	**RZ456000**	Price

Heavy Duty Adjustable Stool

New!

- Black frame / red seat
- Cushioned 14” seat red seat with square foot rest
- Stool capacity 300 lbs.
- Air-cylinder adjustable seat, 5” estimate of height differential
- Square foot rest
- Powder coated paint
- Ships UPS



Approx. Seat Height	Order No.	Price
26" to 31"	**RZ451005**	Price

Heavy Duty Adjustable Stool

New!

- Cushioned 14” seat with round foot rest
- Stool capacity 300 lbs.
- Air-cylinder adjustable seat, 5” estimate of height differential
- Round foot rest
- Powder coated paint
- Ships UPS



Approx. Seat Height	Order No.	Price
26" to 31"*	**RZ451010**	Price

Adjustable Shop Stool with Backrest

New!

- Matte black powder coat finish
- Padded 14” vinyl seat features a backrest for comfort
- Backrest adjusts and can be removed when desired
- Stool rotates 360°
- Seat height adjusts from 29”. to 33” easily with just one hand
- Load capacity 300 lbs
- Limited lifetime warranty against manufacturer defects
- Ships UPS



Order No.	Price
RZ457000	Price

Heavy Duty Stool with Back Rest

- Red frame / black seat
- Thick big vinyl cushioned 14” seat
- Stool capacity 300 lbs.
- Multiple adjustable backrest
- Powder coated paint
- Ships UPS



Approx. Seat Height	Order No.	Price
31"	**RZ451000**	Price

Mechanics Shop Stool Seat

- 14” Seat adjusts from 15-3/4” to 20”
- Cushion seat swivels 360°
- 2-1/2” diameter nonmarring nylon casters
- 300 lb maximum seat capacity
- Limited lifetime warranty
- Ships UPS



Order No.	Price
RZ453000	Price

Roller Shop Stool With Side Drawer

New!

- Two side drawers that will not interfere with the user’s legs
- Front tray
- Tool bracket for easy access to your tools*
- Back seat handle, 2-1/2” casters
- Maximum loading capacity: 330 lbs.
- 3” Cushioned seat for user’s comfort
- Hook holes on backside for “S” hooks
- Limited lifetime warranty





Order No.	Price
RZ455500	Price

***Tools not included**

PROTO Heavy-Duty Shop Stool

New!

- 300 lbs seating capacity
- 29” to 34” pneumatic gas lift seat height adjustment
- Comfortable 14” diameter x 3-1/2” thick vinyl fabric over foam seat
- Contoured 12” x 6” x 2-1/2” thick vinyl over foam back
- Durable steel constructed seat control with dual 1” tubular steel back bars
- Back depth adjustment
- 1” chrome finished tubular legs with 18” diameter steel foot ring



Model No.	Order No.	Price
JFC1011	**KP4270240**	Price

Swivel Tractor Seat

- Air cylinder for easy height adjustment
- Five 3-1/2” heavy duty, chrome finished casters with rubber tread for ease of mobility
- Large, reinforced 17” diameter 1” deep tool tray
- Seat width 16”
- Limited lifetime warranty
- Ships UPS



Approx. Seat Height	Order No.	Price
18 to 22"	**RZ454000**	Price

PROTO Heavy-Duty Tool Trolley

New!

- 300 lbs seating capacity
- 18” seating height
- 1” chrome finished tubular steel constructed frame
- 3” industrial grade hard floor casters, 2 with brakes
- Comfortable 16” x 16” x 3-1/2” thick vinyl fabric over foam seat
- Contoured 12” x 6” x 2-1/2” thick vinyl over foam back
- 12” x 18” x 1-3/4” heavy-duty stamped steel tool tray



Model No.	Order No.	Price
JFC1010	**KP4270210**	Price

Mechanic's Roller Seat with Drawer

- Hard-wearing steel frame
- Comfortable foam-cushioned seat holds up to 300 lbs
- Seat sits 14” off the ground
- Handy sliding drawer (ball-bearing slide)
- 2-1/2” roll smoothly swivel casters
- Sturdy high-impact pan keeps tools and parts close at hand
- Limited lifetime warranty



Drawer Under Seat

Order No.	Price
RZ455000	Price

Vestil Ergonomic Workers Seat/Chairs

- Go from a low crouch position to a standing position
- Move the seat and hook it in to the horizontal bars
- Four rubber “shocks” under the seat mimic body movements
- Maintain natural posture position of the spine


CPRO600


CPRO600S


CPRO100

Height	Seat Material	Description	Order No.	Price
13-34"	Padded	With Footrest	**RV54CPRO600**	Price
14-35"	Padded	Swivel Seat	**RV54CPRO600S**	Price
9-18"	Padded	Portable with Swivel Casters	**RV54CPRO100**	Price

Brewer Polyurethane Round Stools

- Soft, polyurethane round seat provides comfort and durability
- 14” Black polyurethane round seat
- Heavy-duty stationary glides standard (casters optional, Order No. SA40-CS5)
- Self skinned, Black Polyurethane resists stains, punctures, grease, water and chemicals
- Meets flame retardant standards FMVSS 302
- 12 Year Warranty

MADE IN THE USA


PR1


PR3

Height	Description	Weight	Order No.	Price
16.5"-21.5" Pneumatic, Adjustable	Stable 25” 5-star reinforced plastic base	18 lbs	**SA40PR1**	Price
22.5"-32.5" Pneumatic, Adjustable	Stable 27” 5-star reinforced plastic base; 20” Adjustable footring standard	28 lbs	**SA40PR3**	Price

Brewer Polylurethane Sit/Stands

MADE IN THE USA

PSIT-3

- Designed to promote balanced posture, while providing support to areas that experience discomfort as a result of excessive standing
- Comfortable and durable 13” soft polyurethane seat
- Black self-skinned, solid molded polyurethane resists stains
- Contoured, tilting seat improves leg circulation
- Self skinned, Black Polyurethane resists stains, punctures, grease, water and chemicals
- Meets flame retardant standards FMVSS 302
- Warranty: 12-years



Height	Description	Weight	Order No.	Price
21.5"-31.5"	Stable 27” 5-star base with heavy duty stationary glides; Contoured, tilting seat	23 lbs	**SA40PSIT3**	Price

Brewer Vinyl Cushioned Stool

MADE IN THE USA

VR-1

- Heavy duty NaughaSoft vinyl seating, specifically designed for outstanding comfort and durability
- 16” x 4” Round, polyfoam seat with Black NaughaSoft Vinyl
- Heavy-duty stationary glides standard casters optional, Order No. SA40-CS5)
- 12 Year Warranty
- UPS dimensional weight shipping rates apply



Description	Height	Weight	Order No.	Price
Stable 25" 5-star reinforced plastic base	16.5"-21.5" Pneumatic, Adjustable	18 lbs	**SA40VR1**	Price
Optional Casters	1"	-	**SA40CS5**	Price

PRM PRO Mechanics Seat

MADE IN THE USA

- Made from polyethylene
- 24”W x 18”D x 20”H
- Bottom tub shelf measures 2-3/4” deep
- Rolling cart with four 4” easy-roll casters, two with locking brake
- Limited lifetime warranty
- Ships UPS at dimensional rate



Weight	Order No.	Price
19 lbs	**SA7050000**	Price

National Public SEATING Corp. Heavy Duty Stools

Specifications:

- 7/8” O.D., 18 gauge steel
- 6300 Series - Square seat for more room; masonite board recessed into pad of seat
- 6400 Series - 14” round seat, vinyl padded seat and back rest
- 6200 Series - Available with optional back rest or can be bought as a stool
- UPS Dimensional weight shipping rates may apply



Model No.	Description	Weight	Order No.	Price
6224	24" Stool with Hardboard Seat	9 lbs	**RZ406224**	Price
6230	30" Stool with Hardboard Seat	10 lbs	**RZ406230**	Price
6218HB	19-27" Adjustable Stool with Backrest	17 lbs	**RZ406218HB**	Price
6224HB	25-33" Adjustable Stool with Backrest	21 lbs	**RZ406224HB**	Price
6318HB	19-27" Adjustable Square Stool with Backrest	18.4 lbs	**RZ406318HB**	Price
6324HB	25-33" Adjustable Square Stool with Backrest	19.5 lbs	**RZ406324HB**	Price
6418HB	19-27" Adjustable Padded Seat with Backrest	18 lbs	**RZ406418HB**	Price
6424HB	25-33" Adjustable Padded Seat with Backrest	19 lbs	**RZ406424HB**	Price

National Public SEATING Corp. Folding Chairs



- 18 and 19-Guage 7/8 round tubular frame with 2-1/2" frame strengthener on each side of the seat
- Size: 29-1/2" H x 18-1/2" W x 20-3/4" D
- Double hinged for added strength
- Power-coated frame, with non-marring guides
- Seat is 15-3/4" x 16" with a waterfront for added comfort for all steel version, also available with fully vinyl upholstered seat and back.
- Color for all steel seat (gray), for upholstered seat (warm gray/gray steel frame)
- Ships UPS

Style	Gauge	Weight	Order No.	Price
Steel	19	9 lbs	**RZ4052**	Price
Vinyl - Padded	18	11 lbs	**RZ401202**	Price

Huot CNC Safety Cover



- Helps protect operator from accidental injuries on sharp tooling
- Covers are held in place with key-hole slots molded into the base
- Keeps tools from getting nicked and marred
- Write on top with a dry erase marker for faster set-ups
- Protects your investment in expensive tooling
- Keeps staged tooling clean and ready to go

MADE IN THE USA

Style	Order No.	Price
Safety Cover for ToolScoots 45, 50 or HSK100A Tapers - Clear	**AP5314001**	Price
Safety Cover for ToolScoots, 30, 35, 40 or HSK63A Tapers	**AP5314000**	Price
Safety Cover for ToolScoots 45, 50 or HSK100A Tapers - Clear	**AP5314016**	Price

Brewer Polyurethane Seating With Synchronized Seat

- Designed with comfort and safety in mind
- Each stool is crafted to meet your performance, safety and durability needs

Stools Feature:

- Self skinned polyurethane resists dirt and grease
- 18" Contoured waterfall seat
- 16" Contoured, adjustable backrest
- Stable 5-star reinforced plastic base
- Heavy-duty stationary glides (standard)
- Warranty: 12 years

MADE IN THE USA

PS-1: Standard Model with Dual Adjustable Backrest
PS-3: Standard Model with Dual Adjustable Backrest and Adjustable Footring
PT-1: Deluxe Model with Synchronized Seat/Back Tilt
PT-3: Deluxe Model with Synchronized Seat/Back Tilt and Adjustable Footring



Height	Back Tilt	Weight	Order No.	Price
16.5"-21.5" Pneumatic, Adjustable	No	28 lbs	**SA40PS1**	Price
17"-22.5" Pneumatic, Adjustable	Yes	32 lbs	**SA40PT1**	Price
22.5"-32.5" Pneumatic, Adjustable	No	34 lbs	**SA40PS3**	Price
23.5"-33.5" Pneumatic, Adjustable	Yes	38 lbs	**SA40PT3**	Price

Brewer Vinyl Round Seating With Back

- Heavy duty NaughaSoft vinyl seating, with a back, is specifically designed for outstanding comfort and durability
- 16" x 4" Round, polyfoam seat with Black NaughaSoft Vinyl
- 16" x 10" Contoured, adjustable backrest
- Heavy-duty stationary glides standard (casters optional, Order No. SA40-CS5)
- Warranty: 12 yea



Height	Description	Weight	Order No.	Price
16.5"-21.5" Pneumatic, Adjustable	Stable 25" 5-star reinforced plastic base; Fully adjustable backrest	23 lbs	**SA40VRB1**	Price
22.5"-32.5" Pneumatic, Adjustable	Stable 27" 5-star reinforced plastic base; Fully adjustable, plastic shrouded backrest; 18" Adjustable Footring standard	28 lbs	**SA40VRB3**	Price

Brewer Polyurethane Seat With Arm Rest, Synchronized Seat & Back Tilt



- Ergonomically designed for comfort and safety, this bench height stool features synchronized seat/back tilt and adjustable arms
- 18" x 17" Contoured waterfall seat
- 17"W x 12"H Contoured, Adjustable backrest
- Synchronized Seat and Back Tilt
- Ergonomic, adjustable arms
- Heavy-duty stationary glides standard (casters optional, Order No. SA40-CS5)
- Self skinned, Black Polyurethane upholstery
- Meets FMVSS 302 Flame Retardant Standards
- 12 Year Warranty

MADE IN US

Height	Description	Weight	Order No.	Price
23.5"-33.5" Pneumatic, Adjustable	Stable 27" 5-star reinforced plastic base; 20" Adjustable footring standard; Adjustable arms	43 lbs	**SA40PT3EAA**	Price

National Public SEATING Corp. Kangaroo Stool



- Heavy duty 1-1/4" thick polyurethane seat with waterfall edge
- 10" of Kangaroo pneumatic height adjustment from 22"-32"
- Swivels 360° for unlimited functionality
- Integrated under seat spring system allows for control of backrest tilt
- Footrest adjusts 12" up or down for comfort
- Convenient backrest handhold for maneuverability
- Comes with casters and slides
- 300 Lb. weight capacity

Order No.	Price
RZ406722HB	Price

HARPER Hand Truck

- Super Steel™ 800 Hand Truck
- "P" handle for easy 1 or 2 hand control
- 50" Height for larger loads
- Larger base for heavy load
- Large fenders protect load from damage
- 10" Heavy duty pneumatic All-terrain tire
- Harper Green Powder Coat Paint



MADE IN THE USA

Nose Plate (W x D) (in.)	Capacity	Overall Size	Tire	Weight	Order No.	Price
8 x 20	800 lbs	51 H x 19 L x 22 W	10 x 2" Solid Rubber	30 lbs	**RV30H5986**	Price
8 x 20	800 lbs	51 H x 19 L x 22 W	10 x 3-1/2" Pneumatic	30 lbs	**RV30H59K19**	Price

HARPER Hand Truck - General Purpose

- 1-1/4" Tubular steel frame robotically welded
- 1/4" High strength tapered steel base plate with beveled edge 14" wide at the front edge. 17-1/2" wide at the back and 13" long
- Heavy gauge fenders prevent load from rubbing on wheels and ties the base and frame together for strength
- 3/4" "D-Lok" zinc plated axle to resist rust
- 900 lb. Capacity
- Ships by truck

MADE IN THE USA



Nose Plate	Capacity	Overall Size	Tire	Weight	Order No.	Price
17-1/2 x 13"	900 lbs	51 x 20"	8 x 2-1/4" Solid Rubber	46.9 lbs	**RV3032T57**	Price
17-1/2 x 13"	900 lbs	51 x 21"	10 x 2-1/2" Solid Rubber	46.9 lbs	**RV3032T84**	Price

HARPER Hand Truck

MADE IN THE USA

- 1-1/4" Super Steel™ Frame
- Dual handle for ultimate control
- Curved back frame for hauling round objects
- 10" Heavy-duty pneumatic All-Terrain tire
- Harper Green Powder Coat Paint



Nose Plate	Capacity	Overall Size	Tire	Weight	Order No.	Price
7 x 14	800 lbs	45 H x 18 L x 19 W	10 x 2" Solid Rubber	29.5 lbs	**RV3051T86**	Price

HARPER Series 700

- Provides a wide range of utility for handling oxygen, acetylene, nitrogen, helium, argon and other gas cylinders
- Base plates are designed for hauling boxes when needed
- Has retactable rear casters that lock into place for additional load handling

Specifications:

- 10" x 2" Solid Rubber, BB
- Designed to handle 9-1/4" cylinder
- 27" Bracket chain height
- 7" x 14" Base plate dimension
- 48" H x 21" W
- 32 lbs.

MADE IN THE USA



Order No.	Price
RV3070186	Price

WESCO 900 Lb. Capacity Heavy Duty Hand Truck

MADE IN THE USA

- 8" Diameter wheels
- All-steel, arc welded construction
- One piece tubular handles, easy to grab, won't slip, no sharp edges
- Truck stands 53" high
- 1/4" Steel blade is flat on floor, has milled knife edge
- Blade guaranteed not to bend with any load one man can handle
- With Roller Bearings
- Weight 60 lbs
- Can Be Shipped UPS



Order No.	Price
RV50ST2H	Price

HARPER Hand Truck - Dual Purpose

- Designed for the dual purpose of moving conventional boxed items as well as 55 gallon drums
- Continuous handle design gives the user one or two hand operation
- 1/4" High strength steel base plate with beveled edge
- The unique design of the chime hook allows the user to rotate the hook out of the way for hand truck applications then rotate it back to carry 30 and 55 gallon drums
- UPS dimensional weight shipping rates apply

MADE IN THE USA



Nose Plate (in.)	Capacity	Overall Size	Tire	Weight	Order No.	Price
8 x 14	600 lbs	49 H x 19 L x 20 W	10 x 2-1/2" Solid Rubber	31 lbs	**RV3052DA60**	Price

Vestil Aluminum Convertible Hand Truck

- Can work in both the vertical and horizontal positions
- The task of transporting smaller crates or long narrow boxes is now simplified
- This cart roll smoothly on 10" x 3-1/2" rigid pneumatic wheels and 4" x 1" swivel solid rubber casters
- Ships knocked down
- 500 lbs Capacity as hand truck
- 650 lbs Capacity as platform truck
- 18" x 7-1/4" Nose plate



Weight	Order No.	Price
41 lbs	**RV54CAHT500**	Price

HARPER Drum Truck

- Has a uniquely designed adjustable and replaceable universal chime hook that fits a large variety of plastic, steel and fiber drums
- Foot rest helps position truck under drum, eases break-over and serves as a safety device
- Spring loaded device to help ease drum onto lifting toes and automatically returns truck to vertical position when drum is disengaged
- Holds drums from 24” to 48” high



MADE IN THE USA

Tire	Order No.	Price
10" x 2-1/2" Molded on Rubber	**RV3076A59**	Price

HARPER Drum Truck

- Rear wheel assembly makes for even weight distribution and easy, safe handling for the operator
- Handle design allows for easy loading and unloading of drums on pallets
- Spring loaded kickstand holds truck in vertical position when not in use
- Handles drums from 23 to 43 inches high
- Caster type 6” molded on rubber



MADE IN THE USA

Tire	Frame Capacity	Order No.	Price
10" x 2" Mold on Rubber - Front 6" x 2" Molded on Rubber - Back	1000 lbs	**RV30926863**	Price

WESCO Drum Trucks

- Versatile multi-purpose truck that does it all
- Drum Drainer— Dispenses contents into 5 gallon can—no cradle needed
- Loads and unloads drums from pallets with ease
- Self standing with kick stand



MADE IN THE USA

Height (in.)	Width at Handle (in.)	Nose Width (in.)	Weight	Capacity	Order No.	Price
61	22	16-1/2	74 lbs	1000 lbs	**RV5510BT**	Price
56-1/2	24	16-1/4	82 lbs	1000 lbs	**RV5530BT**	Price

HARPER Drum Truck

- Adjustable sliding chime hook for steel or fiber drums
- Foot rest helps position truck under drum, eases break-over and serves as a safety device
- Handles drums from 24 to 48 inches high
- Kickstand holds truck upright when not in use



MADE IN THE USA

Tire	Frame Capacity	Order No.	Price
10" x 2-1/2" Molded on Rubber	1200 lbs	**RV307559**	Price

HARPER Drum Truck

- Design enables one person to quickly, easily and safely move drums weighing up to 1200 lbs.
- Replaceable chime hook and lifting toes ensure a long product life
- Lifting toes create a cradle for easy break-over
- Spring loaded swing axle keep truck in upright position when not in use
- Handles drums from 21” to 43” high
- Available with WH87 and WH 89P wheels
- Frame capacity 1200 lbs.



MADE IN THE USA

Tire	Order No.	Price
10" x 2-1/2" Molded on Rubber	**RV307889**	Price

Vestil Fold-Away Hand Truck

- The aluminum fold-up hand truck, model FHC-250, is designed for everyday all purpose use
- Perfect for salespeople, students, and maintenance personnel
- The handle and wheels fold up quickly and easily, allowing you to store it into tight spaces such as trunks of cars, under tables, or in closets
- Lightweight aluminum construction with some steel components
- 250 lbs Capacity
- 19”W x 2-3/4”D x 26”H when folded
- 19”W x 17”D x 40-1/2”H when open



Order No.	Price
RV54FHC250	Price

WESCO Lightweight Folding Trucks - Maxi Mover, Superlight & Mini Mover Models

- Space saving folding design. Fits into small storage spaces or car trunks
- Elastic straps for securing load
- Aluminum or steel construction
- Non-marking shock absorbing rubber tread tires
- Mini Mover fits into overhead airline compartments











Capacity	Nose Plate (in.)	Overall Size (in.)	Weight	Order No.	Price
110 lbs	15 W x 12.5 D	41 x 15.5 x 17.5	7.25 lbs	**RV55220646**	Price
175 lbs	19 W x 12 D	42 x 19 x 19	8.4 lbs	**RV55220617**	Price
250 lbs	19 W x 12 D	42 x 19 x 19	12 lbs	**RV55220649**	Price

JET Double Scissor Lift Table

- Ideal for lifting, positioning and transporting heavy materials around the shop, factory, warehouse or office
- Ergonomic answer to preventing back injuries
- Heavy-duty steel frame and table



Model No.	Capacity	Service Range	Size (L x W) (in.)	OAL	Strokes to Reach Max. Hght.	Handle Hght.	Weight	Order No.	Price
DSLT-770	770 lbs	13-9/16 to 51-1/8	35-5/8 x 20-1/8	45-3/4	21	39	235 lbs	**RS50140778**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

WESCO Platform and Fork Model Hydraulic Stackers

MADE IN THE USA

Hydraulic Stacker Features:

- Lift heights: 56”, 60”, 65”, 68”, 76” and 80”
- Floor locks, safety screen and foot guard are standard on all models.
- Forks touch the floor on all fork models.
- Front phenolic wheels are 5” diameter.
- Rear phenolic swivel casters are 4” diameter.

Wesco Platform Model Features:

- 24” x 24” Heavy gauge platform with 5.75” lowered height
- 15” Load center
- 25.5” Overall width, 40” depth
- Base leg span – 15” inside, 21” outside
- 1,000 lb. Capacity

Wesco Large Platform Model Features:

- 30” x 32” Wide heavy gauge platform with 5.25” lowered height
- 18” Load center
- 32” Overall width, 44” depth
- Base leg span – 25.5” inside, 32” outside
- 1,000 lb. Capacity

Straddle Fork Model Features:

- 1”T x 3”W x 30”L forks
- Adjustable span up to 25”
- 18” Load center
- 32” Overall width, 44” depth
- Base leg span – 25.5” inside, 32” outside
- Forks lower to ground
- 1,000 lb. Capacity



Type - Hydraulic 24 x 24” Platform Stacker		
Max. Lift Height (in.)	Order No.	Price
60	**RV50260044**	Price
68	**RV50260045**	Price
80	**RV50260046**	Price

Type - Hydraulic 30 x 32” Platform Stacker		
Max. Lift Height (in.)	Order No.	Price
60	**RV50260050**	Price
68	**RV50260051**	Price
80	**RV50260052**	Price

Type - Hydraulic Straddle Fork Model Stacker		
Max. Lift Height (in.)	Order No.	Price
56	**RV50260053**	Price
64	**RV50260054**	Price
76	**RV50260055**	Price

STEELMAN 2-Ton Low Profile Jack

- Magical lift offers quick lift for precision performance
- Extra wide wheels and solid stance designed for stability under load stress
- Universal joint release feature provides precision control of load descent
- Largest saddle in this category as allowed by ANSI standards
- Hydraulic unit is protected from internal damage due to ram over-travel



Capacity	Order No.	Price
2 Ton	**KE5399015**	Price

STEELMAN Roll Around Jacks

- Wide stance and low center of gravity provide optimum stability under load stress
- Heavy gauge steel, sturdy frame
- Handle actuated release valve provides precise metered control of lowering speed
- Foot pedal operation provides quick no load lifts to load point
- Largest saddle in this catagory by ANSI Standard



Capacity	Order No.	Price
3-1/2 Ton	**KE53647530**	Price
5 Ton	**KE53647509**	Price
10 Ton	**KE53647510**	Price

WESCO Hydraulic Pallet Truck

- Handles loads up to 5000 lb. capacity
- 3 Position handle (raise, neutral, and lower)
- 8” Polyurethane/rubber covering on steel wheels
- Raised height 7”
- Lowered height 2.9”
- 6” Fork width



Size	Max. Lift Height (in.)	Min. Lift Height (in.)	Weight	Order No.	Price
20-1/2 x 42	7-1/4	2.9	180 lbs	**RS55W2042P**	Price
27 x 48	7-1/4	2.9	196 lbs	**RS55W2748P**	Price

Vestil Pallet Trucks

- Wide loop handle offers easy unit maneuverability
- Fingertip lever provides an easy lift, lower and neutral operation
- Suspension system has heavy-duty thrust bearing for long lasting use
- Lifetime lubricated bearings never need maintenance work



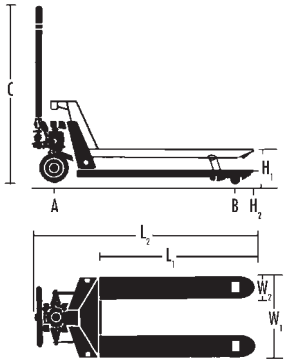
Length (in.)	Fork Size (in.)	Max. Lift Height (in.)	Turning Radius (in.)	Wheel Diameter (in.)	Load Capacity	Color	Order No.	Price
61	48 x 20-5/8 x 7	6	51-1/2	Steer Caster: Poly-On-Steel 7 X 2 Load Roller: Steel 4-1/2 X 1-1/2	4000 lbs	Red	**RV54PM42048LP**	Price
61	48 x 27 x 7	6	51-1/2	Steer Caster: Poly-On-Steel 7 X 2 Load Roller: Polyurethane 4 X 3	5500 lbs	Yellow	**RV54PM52748Y**	Price
63	48 x 33 x 7	6	53-1/8	Steer Caster: Poly-On-Steel 7 X 2 Load Roller: Steel 4-1/2 X 1-1/2	4000 lbs	Red	**RV54PM43348LP**	Price
64	48 x 27 x 7	6	52-1/4	Steer Caster: Poly-On-Steel 7 X 2 Load Roller: Steel 4-1/2 X 1-1/2	4000 lbs	Red	**RV54PM42748LP**	Price

F.O.B. Factory - Ships by common carrier.

JET PTW Series Premium Pallet Truck

- Availale in 5 different configurations
- Each PTW pallet truck has a low profile of 2-7/8", varying widths of 20 to 27" and diferent lengths from 36 to 48"
- Capacity 6000 lbs
- Turning Radius - 200°
- Overload Protection ball valve prevents lifting loads past maximum capacity
- Top-Stroke release valve prevents cylinder extension beyond maximum height
- Chrome-plated pump piston and ram provide corrosion resistance in any industrial environment
- One-piece cast iron pump has a built-in valve that lowers the material in a controlled decent
- Poly over aluminum 7 x 2" steel wheels ensure contact with uneven floors
- Steer wheels fezture double sealed lubricated bearings





Model No.	Dim. (in.)	L1/L2 (in.)	H1/H2 (in.)	A (in.)	B (in.)	Weight	Order No.	Price
PT-2036W	20-1/2	36 / 52-1/2	7-3/4 / 2-7/8	7 x 2	2-7/8 x 3-11/16	170 lbs	**RS50140170**	Price
PT-2042W	20-1/2	42 / 58-1/2	7-3/4 / 2-7/8	7 x 2	2-7/8 x 3-11/16	179 lbs	**RS50140171**	Price
PT-2048W	20-1/2	48 / 64-1/2	7-3/4 / 2-7/8	7 x 2	2-7/8 x 3-11/16	187 lbs	**RS50140172**	Price
PT-2742W	27	42 / 58-1/2	7-3/4 / 2-7/8	7 x 2	2-7/8 x 3-11/16	192 lbs	**RS50140174**	Price
PT-2748W	27	48 / 64-1/2	7-3/4 / 2-7/8	7 x 2	2-7/8 x 3-11/16	200 lbs	**RS50140175**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA. • Ships By Truck • FOB Lavergne TN

JET J Series Pallet Trucks

JET® J Series Pallet Trucks are available in 6 different configurations.
High quality welded steel construction to handle heavy lifting.



Features:

- 6" Fork Width
- 5,000 lbs Capacity
- 180 degree turning radius
- 2-1/2" low profile allows for easy engagement of pallets
- Easy-to-use fingertip controls permit single-handed operation
- Chrome-plated pump piston and ram provide corrosion resistance in any industrial environment
- Poly over steel 6-1/4 x 2-3/4 inch steer wheels ensure contact with uneven floors
- Steer wheels feature double-sealed lubricated bearings
- 2 Year Warranty

Model No.	Size (L x W) (in.)	Lowered Height (in.)	Max. Height (in.)	Weight	Order No.	Price
PT-1636J	36 x 16	2-1/2	6-1/4	154 lbs	**RS50161003**	Price
PT-2036J	36 x 20-1/2	2-1/2	6-1/4	203.5 lbs	**RS50161004**	Price
PT-2048J	48 x 20-1/2	2-1/2	6-1/4	167 lbs	**RS50161006**	Price
PT-2742J	42 x 27	2-1/2	6-1/4	203.5 lbs	**RS50161008**	Price
PT-2748J	48 x 27	2-1/2	6-1/4	203.5 lbs	**RS50161009**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA • F.O.B. Lavergne TN • Ships by Truck

JET JTX Series Pallet Truck

Features:

- 8,000 lbs Capacity
- 210 degree turning radius
- Overload protection ball valve prevents lifting loads past max. capacity
- Top-stroke release valve prevents cylinder extension beyond max. height
- Chrome plated pump piston and ram
- Poly over aluminum 8" x 2" steer wheels
- 2 Year warranty



Model No.	Dim. (in.)	L1/L2 (in.)	H1/H2 (in.)	A (in.)	B (in.)	Weight	Order No.	Price
JTX-2748	20	48 / 63-1/2	6-1/4 / 3-1/4	8 x 2	3-1/4 x 3-1/2	285 lbs	**RS50140800**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA • F.O.B. Lavergne TN • Ships by truck

LiftAll® Tuff Edge® Polyester Web Slings

- Abrasion and cut resistant blue polymer edges
- Silver body yarn treatment to resist abrasion
- Proven sling web construction with red core warning yarns
- Tuff-Tag provides legible identification for the life of the sling

Sling Capacities - Type 3 Flat Eye and Type 4 Twisted Eye

Ply	Sling Width	Rated Capacities in Pounds		
		Vertical	Choker	Basket
1	1″	1,600	1,250	3,200
	2″	3,200	2,500	6,400
	3″	4,800	3,800	9,600
	4″	6,400	5,000	12,800
2	1″	3,200	2,500	6,400
	2″	6,400	5,000	12,800
	3″	8,800	7,040	17,600
	4″	11,500	9,200	23,000

Single Ply

Type 3 (EE) Flat Eye Type:
Flat Eye slings are very popular and can be used in all three types of hitches. They are easier to remove from beneath the load than other slings.



Sling Width (in.)	3'		4'		6'		8'		10'		12'	
	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	SE82EE1801T3	Price	-	-	-	-	SE82EE1801T8	Price	SE82EE1801T10	Price	SE82EE1801T12	Price
-	-	-	-	-	-	-	SE82EE1802T8	Price	SE82EE1802T10	Price	SE82EE1802T12	Price
3	-	-	SE82EE1803T4	Price	SE82EE1803T6	Price	SE82EE1803T8	Price	SE82EE1803T10	Price	SE82EE1803T12	Price
4	-	-	SE82EE1804T4	Price	SE82EE1804T6	Price	SE82EE1804T8	Price	SE82EE1804T10	Price	SE82EE1804T12	Price

Two Ply

Type 3 (EE) Flat Eye Type:
Flat Eye slings are very popular and can be used in all three types of hitches. They are easier to remove from beneath the load than other slings.



Sling Width (in.)	3'		4'		6'		8'		10'		12'	
	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	SE82EE2801T3	Price	-	-	-	-	SE82EE2801T8	Price	SE82EE2801T10	Price	SE82EE2801T12	Price
2	SE82EE2802T3	Price	-	-	-	-	SE82EE2802T8	Price	SE82EE2802T10	Price	SE82EE2802T12	Price
3	-	-	SE82EE2803T4	Price	SE82EE2803T6	Price	SE82EE2803T8	Price	SE82EE2803T10	Price	SE82EE2803T12	Price
4	-	-	SE82EE2804T4	Price	SE82EE2804T6	Price	SE82EE2804T8	Price	SE82EE2804T10	Price	SE82EE2804T12	Price

Single Ply

Type 4 (EE) Twisted Eye Type
Twisted Eye slings are similar to Type 3 except the eyes are turned 90° to form a better choker hitch. The eyes of a Type 4 nest better on the crane hook.



Sling Width (in.)	3'		4'		6'		8'		10'		12'	
	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	SE83EE1801T3	Price	SE83EE1801T4	Price	SE83EE1801T6	Price	SE83EE1801T8	Price	SE83EE1801T10	Price	SE83EE1801T12	Price
2	-	-	SE83EE1802T4	Price	SE83EE1802T6	Price	SE83EE1802T8	Price	SE83EE1802T10	Price	SE83EE1802T12	Price
3	-	-	SE83EE1803T4	Price	SE83EE1803T6	Price	SE83EE1803T8	Price	SE83EE1803T10	Price	SE83EE1803T12	Price
4	-	-	SE83EE1804T4	Price	SE83EE1804T6	Price	SE83EE1804T8	Price	SE83EE1804T10	Price	SE83EE1804T12	Price

LiftAll® Tuff Edge® Polyester Web Slings

- Abrasion and cut resistant blue polymer edges
- Silver body yarn treatment to resist abrasion
- Proven sling web construction with red core warning yarns
- Tuff-Tag provides legible identification for the life of the sling

Sling Capacities - Type 5 Endless

Ply	Sling Width	Rated Capacities in Pounds		
		Vertical	Choker	Basket
1	1″	3,200	2,250	6,400
	2″	6,400	5,000	12,800
	3″	8,800	7,040	17,600
	4″	11,500	9,200	23,000
2	1″	6,200	4,900	12,400
	2″	12,400	9,900	24,800
	3″	16,300	13,00	32,600
	4″	20,700	16,500	41,400

Two Ply

Type 4 (EE) Twisted Eye Type
Twisted Eye slings are similar to Type 3 except the eyes are turned 90° to form a better choker hitch. The eyes of a Type 4 nest better on the crane hook.



	3'		4'		6'		8'		10'		12'	
Sling Width (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	SE83EE2801T3	Price	SE83EE2801T4	Price	SE83EE2801T6	Price	SE83EE2801T8	Price	SE83EE2801T10	Price	SE83EE2801T12	Price
2	SE83EE2802T3	Price	SE83EE2802T4	Price	SE83EE2802T6	Price	SE83EE2802T8	Price	SE83EE2802T10	Price	SE83EE2802T12	Price
3	-	-	SE83EE2803T4	Price	SE83EE2803T6	Price	SE83EE2803T8	Price	SE83EE2803T10	Price	SE83EE2803T12	Price
4	-	-	SE83EE2804T4	Price	SE83EE2804T6	Price	SE83EE2804T8	Price	SE83EE2804T10	Price	SE83EE2804T12	Price

Single Ply

Type 5 (EN) Endless Type
Endless slings are versatile and the most economically priced. The can be used in all three types of hitches. The sling can be roated to minimize wear. The sling legs can be spread for improved load balance.



Sling Width (in.)	3'		4'		6'		8'		10'		12'	
	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	SE84EN1801T3	Price	-	-	-	-	SE84EN1801T8	Price	SE84EN1801T10	Price	SE84EN1801T12	Price
2	SE84EN1802T3	Price	-	-	-	-	SE84EN1802T8	Price	SE84EN1802T10	Price	SE84EN1802T12	Price
3	SE84EN1803T3	Price	SE84EN1803T4	Price	SE84EN1803T6	Price	SE84EN1803T8	Price	SE84EN1803T10	Price	SE84EN1803T12	Price
4	SE84EN1804T3	Price	SE84EN1804T4	Price	SE84EN1804T6	Price	SE84EN1804T8	Price	SE84EN1804T10	Price	SE84EN1804T12	Price

Two Ply

Type 5 (EN) Endless Type
Endless slings are versatile and the most economically priced. The can be used in all three types of hitches. The sling can be roated to minimize wear. The sling legs can be spread for improved load balance.



Sling Width (in.)	3'		4'		6'		8'		10'		12'	
	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1	SE84EN2801T3	Price	-	-	-	-	SE84EN2801T8	Price	SE84EN2801T10	Price	SE84EN2801T12	Price
2	SE84EN2802T3	Price	-	-	-	-	SE84EN2802T8	Price	SE84EN2802T10	Price	SE84EN2802T12	Price
3	SE84EN2803T3	Price	SE84EN2803T4	Price	SE84EN2803T6	Price	SE84EN2803T8	Price	SE84EN2803T10	Price	SE84EN2803T12	Price
4	SE84EN2804T3	Price	SE84EN2804T4	Price	SE84EN2804T6	Price	SE84EN2804T8	Price	SE84EN2804T10	Price	SE84EN2804T12	Price

LiftAll® Wire Rope Single Leg Permaloc® Slings

- Extra Improved Plow Steel, IWRC, 6 x 19 Class rope
- Other sizes and lengths available for all slings



		4'		6'		8'	
Rope Dia. (in.)	Loop Size (W x L) (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/4	2 x 4	SE85WW2504	Price	SE85WW2506	Price	-	
3/8	3 x 6	SE85WW3124	Price	SE85WW3126	Price	SE85WW3128	Price
1/2	4 x 8	SE85WW5004	Price	SE85WW5006	Price	SE85WW5008	Price

Rope Dia . Inches	Capacity In Tons		
	Vertical	Choker	Basket
1/4	.65	.48	1.30
3/8	1.40	1.10	2.90
1/2	2.50	1.90	5.10

GRIP 4 Pc. Ratchet Tie Down Sets



- Use to secure products on truck beds
- Designed to stay secure and tight regardless of road vibration
- Rubber coated S hooks will not rust and protect delicate vehicle finishes from scratches
- Heavy duty rot and weather resistant nylon straps

Size	Max. Capacity	Order No.	Price
1-1/2" x 15'	3000 lbs.	**KP9328642**	Price

JET Web Strap Pullers



- Provides unrivaled safety, dependability and long service life for a wide range of lifting, pulling and holding operations
- They are precision-engineered and constructed of premium materials
- Isolated ratcheting gear, oversized strap guide and bottom block assembly
- Corrosion-resistant stainless steel springs, bronze bushings, drum shafts, self lubrication bearings and drop-forged steel hooks
- 1:1 gear ratio
- Friction brake design and double inter-locking pawls
- Open housing design
- 360° degree swivel hooks with safety latches
- Lifetime Warranty

Model No.	Handle (in.)	Headroom (in.)	OAL (in.)	Weight	Order No.	Price
JWS-2A	12-4/5	13-1/2	-	9 lbs	**RS50352100**	Price
JWS-3A	15	13-1/2	-	11 lbs	**RS50352110**	Price
JWS-25A	12-4/5	20	-	12 lbs	**RS50352105**	Price
JWS-4A	15	21	-	14 lbs	**RS50352115**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Mini-Mule Cable Hoist/Pullers



- Multi-purpose — portable power for lifting and pulling.
- Safety latches both hooks
- Plastic safety cover

Max. Capacity	Cable Dia. (in.)	Lift Pull	Weight	Order No.	Price
1000 lbs	1/8	28 Feet	9 lbs	**RP50MM5028184SC**	Price
1000 lbs	5/32	14 Feet	7-1/2 lbs	**RP50MM5014184SC**	Price
2000 lbs	3/16	12 Feet	9-1/2 lbs	**RP50MM112R184SC**	Price
2000 to 4000 lbs	3/16	6 - 12 Feet	10-1/2 lbs	**RP50MM1212CDD**	Price

JET Ratchet Puller



- Light weight — all steel construction
- Safety latches — standard both hooks

Max. Lift	Max. Capacity	Weight	Order No.	Price
12 Feet	1 Ton	8.55 lbs	**RR51JCP1**	Price
6 Feet	2 Ton	9.05 lbs	**RR51JCP2**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

LiftAll LoadHugger™ Tiedown Assemblies

Quickly and Easily Secures Cargo

- Meet all DOT, CHP and CVSA requirements
- Flexible, conforms to and controls the load
- Ratchet or cam for fast, easy adjustment


U-Hook Ratchet Buckle


Flat Hook Ratchet Buckle


Flat Hook Cam Buckle

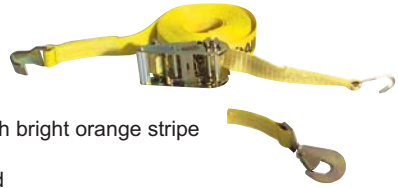

Open Hook Ratchet Buckle


Hook Keeper Ratchet Buckle



Style	Order No.	Price
Flat Hook Cam Buckle	**SE8560110**	Price
Flat Hook Ratchet Buckle	**SE8560102**	Price
Hook Keeper Cam Buckle	**SE8560114**	Price
Hook Keeper Ratchet Buckle	**SE8560105**	Price
Open Hook Cam Buckle	**SE8560111**	Price
Open Hook Ratchet Buckle	**SE8560103**	Price
U-Hook Cam Buckle	**SE8560109**	Price
U-Hook Ratchet Buckle	**SE8560101**	Price

LiftAll 2" Wide General Duty Ratchet Assemblies



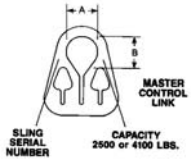
- Ultimate strength 5000 lbs
- Working load limit rounded to 1600 lbs
- 2” Wide yellow webbing with bright orange stripe one side
- 10” web length on fixed end

Style	27'		30'	
	Order No.	Price	Order No.	Price
Flat Hook Ratchet Buckle	**SE8560501**	Price	**SE8560502**	Price
Twisted Snap Hook Ratchet Buckle	**SE8560507**	Price	**SE8560508**	Price

LiftAll Adjust-A-Link™ Adjustable Chain Slings



- The most versatile style of chain sling
- Adjust one or multiple links at one time to keep load level
- Complies with OSHA - proof tested and certified
- Grade 100 chain - alloy steel master link



Chain Size (in.)	Chain Length	Max. Capacity	Order No.	Price
7/32	10'	2500 lbs	**SE861DC710**	Price
7/32	6'	2500 lbs	**SE861DC76**	Price
9/32	10'	4100 lbs	**SE861DC910**	Price
9/32	6'	4100 lbs	**SE861DC96**	Price

Pack-Mule Portable Hoist/Puller



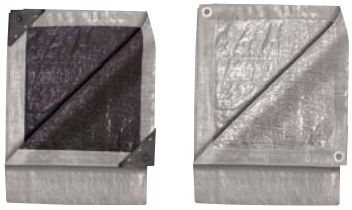
- Multi-purpose portable hoist/puller packaged in a convenient case
- 10’, 5/32” Aircraft cable
- Insulated handle
- 1000 lb Capacity
- Folding handle for storage
- 5-3/4 lbs
- Heavy duty carrying case

Order No.	Price
RP50PM5010	Price

Regular & Double Duty Tarps

Double Duty Two Sided - Silver & Black:

- 200% denser than regular grade
- Black polycast reinforcement bars on corners
- Dual sided for heat and light reflection
- U.V. resistant treated fabric
- Brass grommets every 18”
- Sealed hems with polyroping for extra strength



Regular Duty Tough All Purpose Tarp - Silver:

- Aluminum grommets every 36”
- Reinforced corners with rustproofed grommets

Size	Sq. Ft.	Silver		Silver/Black	
		Order No.	Price	Order No.	Price
6 x 8'	48	-	-	**KP856292**	Price
8 x 10'	80	-	-	**KP856297**	Price
10 x 10'	100	**KP856310**	Price	**KP856312**	Price
10 x 12'	120	-	-	**KP856317**	Price
10 x 20'	200	-	-	**KP856323**	Price
12 x 16'	192	-	-	**KP856332**	Price
12 x 20'	240	**KP856335**	Price	**KP856337**	Price
12 x 24'	288	**KP856340**	Price	**KP856338**	Price
15 x 30'	450	**KP856345**	Price	**KP856347**	Price
16 x 20'	320	-	-	**KP856352**	Price
18 x 24'	432	**KP856360**	Price	**KP856362**	Price
20 x 20'	400	-	-	**KP856377**	Price
20 x 30'	600	**KP856380**	Price	**KP856382**	Price
20 x 40'	800	**KP856385**	Price	**KP856387**	Price
26 x 40'	1040	**KP856395**	Price	-	-
30 x 30'	900	**KP856406**	Price	-	-
30 x 50'	1500	**KP856410**	Price	**KP856412**	Price
40 x 60'	2400	**KP856425**	Price	**KP856427**	Price

PRM PRO 6 Pc. Bungee Strap Regular Set

- Elastic design provides constant tension
- Vinyl coated steel hooks and woven polyester strap cover will not mar finish
- Color coded sizes



Length	Order No.	Price
2 each 12", 18" & 24"	**KP8343000**	Price

Rubber Tie Downs

- Made of weather resistant rubber
- Quick on/off hooks eliminate rope tying
- Sold in box qty.: 10



Length (in.)	Order No.	Price
15	**KT80TD15**	Price
21	**KT80TD21**	Price
31	**KT80TD31**	Price
41	**KT80TD41**	Price

Pack-Mule 'Jaws' Pallet Pullers

- The harder you pull, the tighter the jaws grip
- Can be used as a pallet or skid puller
- Pulls up to 2,000 lbs.
- Fits 2” spaced pallets, opens to 4” width
- 5 Lbs. shipping weight



MADE IN THE USA

Order No.	Price
RP50MP508	Price

Vestil Fork Truck Hoisting Swivel Hooks

Standard Features:

MADE IN THE USA

- Heavy-duty solid steel construction
- Double-fork style for use on both fork truck forks
- Usable fork pockets are 6-1/4”W x 1-3/4”H
- Frame includes a safety strap with snap hook to attach unit to carriage of fork truck
- Hooks are manufactured of forged steel and include a safety latch with galvanized finish
- Each unit features a zinc-plated finish





Size	Load Capacity	Order No.	Price
24 x 13-7/8	4000 lbs	**RV54LMHP4S**	Price
24 x 15	6000 lbs	**RV54LMHP6S**	Price

Lisle Low Profile Plastic Creepers

Features and Benefits:

- Available in red, yellow, or blue
- Urethane rollers
- Low profile, 7/8” floor clearance
- Surface is resistant to solvents, greases and fuels
- Dimensions: Length 38”, Width 17-1/2”, Height 4”
- This has a unique design that is body fitting to provide comfort for the user.
- 2” Longer for a better fit.
- The rollers are inserted into the creeper body for ease of use.



Color	Order No.	Price
Red	**KN6592102**	Price
Yellow	**KN6593102**	Price
Blue	**KN6594102**	Price

Vestil Adjustable Height Steel Gantry Cranes

Standard Features:

- Heavy-duty welded steel construction for years of dependable use
- Steel construction designed for use in more permanent applications
- Adjustable-height models must be adjusted with fork truck or other overhead lifting device
- Height is adjustable in 6” increments
- Usable distance between uprights is overall I-Beam length minus 11”
- Usable trolley travel distance is overall I-Beam length minus 30”
- Hoist and trolley are NOT included - sold separately
- Painted blue finish with warning and operating stickers and complete owner’s manual
- All units comply to ANSI specifications



Load Capacity (lbs)	Height	Overall I-Beam Length	I-Beam Width	I-Beam Height	Order No.	Price
4000	Under I-Beam Usable Height 8'6" to 14'	15	4"	8"	**RV54AHS41514**	Price
6000	Under I-Beam Usable Height 8'7" to 14'1"	15	4"	10"	**RV54AHS61514**	Price
8000	Under I-Beam Usable Height 8"6" to 14'	15	4"	10"	**RV54AHS81514**	Price

JET JHJ Series Low Profile Hydraulic Bottle Jacks

- Precision machined and polished cylinders
- Heavy-duty bases are electrically welded
- Hydraulic system is protected from damage by internal by-pass mechanism
- Chrome-plated piston and ram are corrosion reisistant
- Industrial-duty construction
- Lifting, pushing, spreading, bending, pressing or straightening capabilities
- Upright, horizontal or angled operating positions
- Pump handle included
- Complies with ANSI/ASME B30.1 and PALD-1 Standards



Rated Capacity	Closed Ht. (in.)	Piston Ht. (in.)	Head Screw Ht. (in.)	Max. Ht. (in.)	Base Length (in.)	Base Wdith (in.)	Weight	Order No.	Price
12-1/2 Ton	6-3/4	3-3/4	3	13-3/8	4-1/8	6-1/2	15 lbs	**RS50453313H**	Price
22-1/2 Ton	7-1/8	3-3/8	1-1/2	12	5-1/16	7-1/4	23 lbs	**RS50453323H**	Price
35 Ton	11	6-1/4	-	17-1/4	8-1/2	8-3/8	48 lbs	**RS50453335H**	Price
60 Ton	12	6-3/4	-	18-5/8	7-3/8	9-1/4	82 lbs	**RS50453360H**	Price
100 Ton	12	5-23/32	-	17-11/16	10-7/16	15	225 lbs	**RS50453399H**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

JET JHJ Series Heavy Duty Industrial Bottle Jacks

- For lifting, pushing, spreading, bending, pressing or straightening requirements
- Not affected by temperature extremes
- Low profile truck models or standard models
- Electrically welded base and cylinders to assure strength and eliminate leaks
- All models work in upright, angle or horizontal position
- Pump handle included
- Carrying handles on 12-1/2 to 60-ton models
- Complies with ANSI/ASME B30.1 and PALD-1 standards



Rated Capacity	Closed Hght. (in.)	Piston Hght. (in.)	Head Screw Hght. (in.)	Max. Height (in.)	Base Length (in.)	Base Width (in.)	Weight	Order No.	Price
2	7-1/8	4-1/2	2	13-5/8	2-1/2	4-1/2	5.35 lbs	**RS50453301**	Price
3	7-1/2	4-1/2	2-3/8	14-3/8	2-13/16	4-9/16	6.75 lbs	**RS50453303**	Price
5	7-7/8	4-5/8	2-3/4	15-1/2	3-1/4	5-5/8	8.75 lbs	**RS50453305**	Price
8	7-7/8	4-5/8	2-3/4	15-1/2	3-1/2	6	12.35 lbs	**RS50453308**	Price
12-1/2	6-3/4	3-3/4	3	13-3/8	4-1/8	6-1/2	14.15 lbs	**RS50453313K**	Price
12-1/2	9-1/2	5-7/8	3-1/8	18-1/2	4-1/8	6-1/2	17.9 lbs	**RS50453312**	Price
17-1/2	10-3/8	6-1/2	3-1/8	20	4-5/8	7-1/8	23.8 lbs	**RS50453317**	Price
17-1/2	6-3/4	3-1/2	2-3/4	13	4-5/8	7-1/8	17.6 lbs	**RS50453318K**	Price
22-1/2	7-1/8	3-3/8	1-1/2	12	5-1/16	7-1/4	22.35 lbs	**RS50453323K**	Price
22-1/2	10-5/8	6-1/4	-	16-7/8	5-1/2	7-1/8	29.35 lbs	**RS50453322**	Price
35	11	6-1/4	-	17-1/4	5-1/2	8-3/8	41.3 lbs	**RS50453335K**	Price
60	12	6-3/4	-	18-5/8	7-3/8	9-1/4	79 lbs	**RS50453360K**	Price

NOTE: When used at an angle or in the horizontal position, pump must be in upright position and piston movement is reduced.
JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

Vestil Trailer Stabilizing Jacks

MADE IN THE USA

Standard Features:

- Powder coated safety yellow finish
- Welded steel construction
- Reflective collar for visibility at night
- Operator instruction sticker



Winding	Lift Range	Rated Capacity	Order No.	Price
Hand Crank	41 to 55 inches	100,000 lb. Static capacity / 50,000 lb. Lifting capacity	**RV54CJBEAMSN**	Price
Ratchet	39 to 51 inches	100,000 lb. Static capacity / 40,000 lb. Lifting capacity	**RV54LOJ**	Price
Spin Top	39.5 to 51 inches	100,000 lb. Static capacity / 40,000 lb. Lifting capacity	**RV54SPTOP**	Price
Spin Top	44 to 51 inches	50,000 Static / 5,000 lifting	**RV54SJ35**	Price

OSHA specification 1910.178(k) (3) reads: "Fixed jacks may be necessary to support a semitrailer and prevent upending during the loading or unloading when the trailer is not coupled to the tractor."

STEELMAN Ratchet Type Jack Stands

- Sturdy, welded steel construction for superior safety and strength
- Multi-position ductile ratchet bar provides super strength and durability
- Quick adjustment mechanism that securely locks into desired location
- Counter weighted pawl serves as a safe, secure locking device to prevent the load from accidentally disengaging
- 1-year warranty
- Meets ANSI/ASME/PALD safety standard



Capacity	Approx. Support Height	Base	Order No.	Price
4 Ton	14" - 21"	7" x 8-3/4"	**KE53647529**	Price
12 Ton	19-3/4" - 30"	12-3/4" x 14-3/4"	**KE53647512**	Price

ENERPAC P-Series Hydraulic Lightweight Hand Pump

New!



- Compact design
- Durable glass-filled nylon reservoir and nylon encapsulated aluminum pump base for maximum corrosion resistance
- Two-speed operation reduces handle strokes
- Lower handle effort to minimize operator fatigue
- Integral 4-way valve for opration of double-acting cylinders
- Handle lock and lightweight construction for easy carrying
- Large oil capacities to power a wide range of cylinders or tools
- Non-conductive fiberglass handle for operator safety
- Internal pressure relief valve for overload protection

MFG Model #	Oil Displacement (Stage 1)	Oil Displacement (Stage 2)	Pressure Rating (Stage 1)	Pressure Rating (Stage 2)	Usable Oil Cap.	Stroke	Weight	Order No.	Price
P-392	11,26	2,47	13	700	901	25,4	4.1 lbs	**KL70107070**	Price

ENERPAC Cordless Hydraulic Pumps

New!



- Lighweight design with integrated handle and carrying strap for portability
- Bladder reservoir prevents contamination and allows pump usage in any position
- Powerful 1/2 HP motor and 28 Volt Lithium-Ion battery deliver exceptional speed and run time
- High-strength fiberglass reinforced composite shroud for superior durability in demanding job site environments
- Cordless technology eliminates tripping hazards found in other eletric or air powered pumps

MFG Model #	Flow	Usable Oil Cap.	Weight	Order No.	Price
XC-1201MB	125 No Load / 30 @ 2000 PSI / 15 @ 10000 PSI	60	21.9 lbs	**KL70373185**	Price
XC-1202MB	125 No Load / 30 @ 2000 PSI / 15 @ 10000 PSI	120	23.8 lbs	**KL70373215**	Price

ENERPAC P Series ULTIMA Hydraulic Steel Hand Pumps

New!



- Reduced handle effort and ergonomic grip for less operator fatigue
- Two-speed operation for fast and easy operations (except P-39)
- Vent free reservoir eliminates spills
- Quick grip handle allows for easy transport
- Integral reservoir over-pressurization protection
- All steel construction, chrome plated plunger and wiper system for durable, long lasting performance

MFG Model #	Oil Displacement (Stage 1)	Oil Displacement (Stage 2)	Pressure Rating (Stage 1)	Pressure Rating (Stage 2)	Usable Oil Cap.	Stroke	Weight	Order No.	Price
P-39	-	2,46	-	700	672	25.4	6.2 lbs	**KL70107056**	Price
P-80	16,39	2,46	34	700	2200	25.4	10.7 lbs	**KL70107407**	Price

ENERPAC Hydraulic Economy Electric Pump

New!



- Best suited to power small to medium size cylinders or hydraulic tools
- Lightweight and compact design
- Large easy-carry handle for maximum portability
- Two-speed economy pump operation reduces cycle times for improved productivity
- 115 VAC 50/60 cycle universal motor will operate on voltages as low as 60 volts
- 24 VAC remote motor control, 10-ft length for operator safety
- Starts under full load
- High strength molded shroud with integral handle, protects electric pump motor from contamination and damage
- Designed for intermittent duty cycle

MFG Model #	Oil Displacement Stage 1	Oil Displacement Stage 2	Pressure Rating Stage 2	Usable Oil Cap.	Volt	Weight	Description	Order No.	Price
PUJ-1201B	200	20	10,000	1 Gal.	115	31 lbs	3-way, 2-pos.	**KL70106578**	Price

SIMPLEX Steel Hydraulic Hand Pumps

New!



- Heavy duty, metal construction for durability
- High displacements of oil per stroke
- Adjustable handle effort / dual pivot points
- Low, back saving handle effort
- External adjustable relief valves

MFG Model No.	Oil Displacement Stage 1	Oil Displacement Stage 2	Usable Oil Cap.	Weight	Order No.	Price
P22	23	.06	20	12.5 lbs	**KL71P22**	Price
P42	.79	.16	45	19.65 lbs	**KL71P42**	Price

SIMPLEX Aluminum Hydraulic Hand Pump

- All aluminum construction makes this pump extremely lightweight and easy to handle
- 25% faster per stroke than comparative pumps means less work for operator

New!



MFG Model No.	Oil Displacement Stage 1	Oil Displacement Stage 2	Usable Oil Cap.	Weight	Order No.	Price
P72	.91	.19	70	13.3 lbs	**KL71P72**	Price

Single Acting Hydraulic Cylinders



- Snap in grooved saddles
- Rod wiper seals out dirt and contamination
- Collar fixture thread, collar thread protector
- Two base mounting holes on most models
- High strength steel construction from gun drilled solid bar, solid steel cylinder body
- High flow 3/8" NPTF couplers, Internal plunger threads
- One piece high grade alloy bearing for side load protectionIndustrial hard chrome plated ram helps prevent rust and corrosion
- Heavy duty return spring provides quicker retraction
- Maximum working pressure: 10,000 psi / 700 bar

Cylinder Capacity (Tons)	Collapsed Height	Extended Height	Cylinder Effective Area	Cylinder Bore Diameter	Outside Dia.	Plunger Dia.	Saddle Dia.	Order No.	Price
5	1.61	2.24	1.10	1.18	2.36 x 1.58	.98	N/A	**KP306C05T00**	Price
5	6.65	9.72	1.00	1.13	1.5	1.00	0.98	**KP306C05T03**	Price
5	8.7	59.5	1.00	1.13	1.5	1.00	0.98	**KP306C05T05**	Price
5	10.71	17.8	1.00	1.13	1.5	1.00	0.98	**KP306C05T07**	Price
10	4.84	6.85	2.24	1.69	2.26	1.49	1.38	**KP306C10T02**	Price
10	6.85	10.87	2.24	1.69	2.26	1.49	1.38	**KP306C10T04**	Price
10	9.84	15.78	2.24	1.69	2.26	1.49	1.38	**KP306C10T06**	Price
15	5.87	7.88	3.14	2.00	2.75	1.63	1.5	**KP306C15T02**	Price
25	6.82	8.83	5.14	2.56	3.35	2.24	1.97	**KP306C25T02**	Price
25	10.79	16.73	5.14	2.56	3.35	2.24	1.97	**KP306C25T06**	Price

Hand Pumps



- 5HS2S35, 5HS2S100 and 5HS2S200 feature 2 speed operation
- Pressure relief valve for overload protection
- Load release valve for single acting cylinder usage
- Large oil capacities to power a wide range of cylinders and tools
- 5HS2S35 and 5HS2S100 are constructed of high strength lightweight aluminum alloy for easy handling and corrosion resistance
- All hand pumps function in horizontal positions and will also function in some vertical positions
- Maximum working pressure: 10,000 PSI / 700 bar
- Oil output port: 3/8-18NPTF except for (5HS2S35 which is 1/4-18NPTF)

Pump Type	Used with Cylinder Type	Usable Oil Capacity	Pressure Rating (PSI)	Oil Displacement per Stroke	Max. Operating Force (lbs)	Stroke (in)	Order No.	Price
Single-Speed	Single Acting	36.5 In3	10,000	0.15	109	.79	**KP305HS1S60**	Price
Two-Speed	Double Acting	21.4 In3	1st Stage 200, 2nd Stage 10,000	1st Stage 0.18; 2nd Stage 0.05	88	.38	**KP305HS2S35**	Price
Two-Speed	Single Acting	128.0 In3	1st Stage 200, 2nd Stage 10,000	2nd Stage 0.81; 2nd Stage 0.14	132	.82	**KP305HS2S200**	Price
Two-Speed	Single Acting	61.0 In3	1st Stage 200, 2nd Stage 10,000	1st Stage 0.81; 2nd Stage 0.14	132	.82	**KP305HS2S100**	Price

Hydraulic Pump & Cylinder Combo Sets



Capacity (Tons)	Stroke (in.)	Collapsed Ht.	Pressure Rating (PSI)	Cylinder Incl.	Hand Pump Incl.	Order No.	Price
5	5.08	8.70	10,000	6C05T05	5HS2S35	**KP301HP05T05**	Price
10	2.01	4.84	8,930	6C10T02	5AS150	**KP301AP10T02**	Price
10	2.01	4.84	8,930	6C10T02	5HS2S100	**KP301HP10T02**	Price
15	3.86	8.66	9,550	6C15T04	5AS150	**KP301AP15T04**	Price
15	3.86	8.66	9,550	6C15T04	5HS2S100	**KP301HP15T04**	Price
25	3.94	8.78	9,730	6G25T04	5AS150	**KP301HP25T02**	Price
25	3.94	8.78	9,730	6G25T04	5HS2S100	**KP301HP25T04**	Price

Electric Pumps



- Quiet operation meets OSHA regulations (80dBA)
- 2 speed operation allows for faster cylinder advance
- Full load starting capacities
- Internal filter keeps contamination from damaging pump
- Precision components to minimize wear and improve overall dependability
- Designed to minimize the number of moving parts and maximize overall pump efficiency deal
- Motor voltage 115
- Valve type: 4-Way; 3-Position
- Max Output Pressure (PSI) 10,000

Motor Size (hp)	Useable Oil Capacity	Oil Output Flow Rate (in3/min)	Pressure Rt. (PSI)	Used with Cyl. Type	Solenoid Valve	Remote Control Pendant Switch	Order No.	Price
.5	1.0 Gal	1st Stage 293; 2nd Stage 18	10,000	Single Acting	No	No	**KP305E05H1G**	Price
1	2.0 Gal	1st Stage 397; 2nd Stage 37	10,000	Double Acting	Yes	No	**KP305ES10H2GR**	Price
1	2.0 Gal	1st Stage 397; 2nd Stage 37	10,000	Single Acting	No	No	**KP305E10H2G**	Price
1.5	3.0 Gal	1st Stage 470; 2nd Stage 61	10,000	Double Acting	No	Yes	**KP305E15H3GR**	Price
1.5	3.0 Gal	1st Stage 470; 2nd Stage 61	10,000	Single Acting	No	No	**KP305E15H3G**	Price
.5	2.0 Gal	1st Stage 293; 2nd Stage 18	10,000	Double Acting	Yes	Yes	**KP305ES05H2GR**	Price

Hydraulic Maintenance Kit



- Sets are portable for easy use in the plant or on the job site
- Custom fitted, rugged blow molded storage case
- 10 Ton set has wheels for easy movement
- Designed for applications of pushing, spreading, pressing and more
- Pumps are rated from 8,000 to 10,000 psi
- Hand Pump

Contents of Kit

- Ram, Hose Assembly, Hose Coupler, Ram Coupler, Case, Hydraulic Spreader, Combination Head (900), Rubber Head, Ram Toe, Plunger Toe, Flat Base, Serrated Saddle, Wedge Head, Male Connector
- **4M04T** Extension Tubes Included: 3", 6 1/8", 8 1/2", 16-1/2", 19-1/2"
- **4M10T** Extension Tubes Included: 4", 10", 18", 27"

Capacity (Tons)	Ram Collapsed Ht.	Ram Extended Ht.	Order No.	Price
4	11	15-3/4	**KP304M04T**	Price
10	13.63	19-3/4	**KP304M10T**	Price

ENERPAC Cylinders

- Equipped with hardened removable grooved saddles
- Unique GR2 Bearing Design
- Collar threads, plunger threads and base mounting holes
- Designed for use in all positions
- High strength allow steel
- Redesigned cylinder thread protector
- NV Model Nickel Viton
- Heavy-duty, pretensioned spring improves retracttion speed
- Baked enamel finish for increased corrosion resistance
- CR-400 coupler and dust cap included on all models
- Plunger wiper reduces contami-

New!



MFG Model No.	Type	Cylinder Effecti-ve Area	Collapsed Ht (in.)	Stroke	Usable Oil Cap.	Weight	Order No.	Price
RC-1010	10 Ton General Purpose Cylinder	2.24	13.75	10.13	22.65	14 lbs	**KL70300860**	Price
RC-102	10 Ton General Purpose Cylinder	2.24	4.78	2.13	4.75	5.1 lbs	**KL70300761**	Price
RC-106	10 Ton General Purpose Cylinder	2.24	9.75	6.13	13.7	9.8 lbs	**KL70300822**	Price
RC-256	25 Ton General Purpose Cylinder	5.16	10.75	6.25	32.23	22 lbs	**KL70301386**	Price
RC-256NV	25 Ton Cylinder	5.16	10.75	6.00	32.23	22 lbs	**KL70133130**	Price

SIMPLEX R Series Steel Cylinders

- HD internal spring for fast retract assistance
- Plated piston resists scoring & corrosion
- Rod wiper protects inner cylinder from dirt
- 10,000 PSI operating pressure

New!



MFG Model No.	Size	Stroke	Height (in.)	Weight	Order No.	Price
R1010	10 Ton	10	13.78 Min.	13.3 lbs	**KL71R1010**	Price
R102	10 Ton	2.19	4.78 Min.	5.2 lbs	**KL71R102**	Price
R104	10 Ton	4.19	6.78 Min.	7.05 lbs	**KL71R104**	Price
R106	10 Ton	6	9.78 Min.	9.80 lbs	**KL71R106**	Price
R2510	25 Ton	10.19	14.75 Min.	32.4 lbs	**KL71R2510**	Price
R256	25 Ton	6.19	10.75 Min.	22.55 lbs	**KL71R256**	Price
R556	55 Ton	6.19	11.06 Min	52.90 lbs	**KL71R556**	Price

SIMPLEX RC Series Steel Cylinder

- Induction hardened piston rod for added strength eliminating the need for a loadcap
- Design allows for both push & pull forces
- Large center hole for greater flexibiltiy
- 10,000 PSI operating pressure

New!



MFG Model No.	Size	Stroke	Collapsed Ht. (in.)	Weight	Order No.	Price
RC1003A	100 Ton	3	10	134.75 lbs	**KL71RC1003A**	Price

SIMPLEX RAS Series Aluminum Cylinder

- Half the weight of steel cylinders
- Heavy duty spring for fast & full retraction
- Large bearing surfaces for side load protection
- 10,000 PSI operating pressure

New!



MFG Model No.	Size	Stroke	Ht. (in.)	Weight	Order No.	Price
RAS056B	50 Ton	6	10.5 Min.	27.25 lbs	**KL71RAS506B**	Price

SIMPLEX MK Series Maintenance Kit

- Set includes a Simplex hand pump, cylinder, hose, gauge and gauge adapter
- Rated at 5 tons when attachments are used
- Quick lock and threaded adapters
- 10 Ton Capacity
- R106 Cylinder
- P42 Hand Pump
- MK-4 thru MK-20 Attachments
- Weight 115 lbs

New!



MFG Model No.	Order No.	Price
MK106	**KL71MK106**	Price

SIMPLEX RAS Series Aluminum Cylinder

- Compact and portable
- Large plunger contact area with grooved end
- 10,000 PSI operating pressure

New!



MFG Model No.	Size	Stroke	Height (in.)	Weight	Order No.	Price
RFS30	30 Ton	.5	2.31 Min.	8.65 lbs	**KL71RFS30**	Price
RLS502	50 ton	2.38	4.81 Min.	21.75 lbs	**KL71RLS502**	Price

SIMPLEX Nut Splitter

- Cuts hardened nuts up to grade 8 & 2H
- Maximum pressure 10,000 PSI
- Angled head design for easy placement on nut
- Compact, ergonomic, lightweight design
- .44 - .56 Stud Diameter
- .75 - .94 Nut A/F
- P42 / P72 Suggested Hand Pump

New!



MFG Model No.	Weight	Order No.	Price
NS1924	9.25 lbs	**KL71NS1924**	Price

ENERPAC Air Driven Hydraulic Pump

- Used with a 13 ton hollow cylinder to compress and position diesel engine valve springs
- Higher oil flow for increased productivity
- Variable oil flow and fine metering for precise control
- Ergonomic design for less operator fatigue
- Closed hydraulic system prevents contamination and allows pump usage in any position
- Pedal lock function for retract position
- External adjustable pressure setting valve
- ATEX Certified; includes ground screw for expolosion protection
- Air Consumption: 10-35 scfm
- Reservoir Capacity: 61-122”

New!



MFG Model No.	Flow at Rated Pressure	Max. Operating Pressure	Usable Oil Cap.	Weight	Order No.	Price
XA-11	15"/min.	10,000 PSI	61	19 lbs	**KL70139200**	Price

ENERPAC Turbo II Air Hydraulic Pump

- Easily operated by hand or by foot
- High efficiency cast aluminum air motor for increased life and reduce air consumption
- Fully serviceable air motor assembly
- Reinforce heavy-duty reservoir for applications in tough environments
- New generation air saver piston with rugged one-piece design reduces air consumption and operating costs
- Return-to-tank port for use in remote valve applications
- Quiet-only 76 dBA with low air consumption of 12 scfm
- Operating air pressure: 40-125psi, enables pump to start at extremely low pressure
- Internal pressure relief valve provides overload protection



New!

MFG Model No.	Flow	Usable Oil Cap.	Weight	Order No.	Price
PTAG-1102N	60 No Load / 10 Load	127	18 lbs	**KL70118731**	Price

ENERPAC WR-Series Hydraulic Wedgie and Spread Cylinders

- For use in very confined work areas
- Single-acting, spring return
- Cylinder Capacty; 1,0 ton
- Tip Clearance 12,8mm
- Max. Spread: 94mm
- Cylinder Effective Area: 6,5
- Oil Capacity: 10
- Weight: 5 lbs

New!



Order No.	Price
KL70800940	Price

ENERPAC LW-Seires Hydraulic Vertical Lifting Wedge

- Lifting force of 16 tons at 700 bar hydraulic pressure
- Requires very small access gap of only 10mm
- Each step can spread under full load
- Straight vertical lifting
- Unique interlocking wedge design; no first step bending and risk of slipping out
- Single-acting, spring return cylinder
- Includes safety block SB-2
- Includes RC-Series Cylinder with CR-400 coupler
- Maximum Lifting Force: 16 tons
- Lifting Stroke: 21mm
- Tip Clearance/ Max. Spread: 10 / 81,5
- Maximum Oeprating Pressure: 700 bar
- Oil Capacity: 78
- Weight 20.90 lbas

New!



Order No.	Price
KL70133055	Price

ENERPAC RSM Series Flat-Jac® Cylinders

- Compact, flat design
- Single-acting, spring return
- RSM-750, 1000 and 1500 have handles for easy carrying
- Mounting holes permit easy fixturing
- Baked enamel finish for increased corrosion resistance
- CR-400 coupler and dust cap included on all models
- Hard chrome plated high quality steel plungers
- Grooved plunger ends require no saddle

New!



Model No.	Type	Cylinder Effective Area	Stroke	Usable Oil Cap.	Weight	Order No.	Price
RSM-50	5 Ton Flat-Jac Cylinder	6,5	6	4	-	**KL70302345**	Price
RSM-100	10 Ton Flat-Jac Cylinder	14, 5	11	18	26 lbs	**KL70302352**	Price
RSM-200	20 Ton Flat-Jac Cylinder	28, 7	11	32	-	**KL70302369**	Price
RSM-300	30 Ton Flat-Jac Cylinder	42, 1	13	55	-	**KL70302376**	Price
RSM-500	45 Ton Flat-Jac Cylinder	62, 1	16	99	-	**KL70302383**	Price
RSM-750	75 Ton Flat-Jac Cylinder	102, 6	16	164	-	**KL70302390**	Price
RSM-1000	90 Ton Flat-Jac Cylinder	126, 7	16	203	-	**KL70302406**	Price
RSM-1500	150 Ton Flat-Jac Cylinder	198, 1	16	317	-	**KL70302413**	Price

SIMPLEX Ratchet Jacks

New!

- Multiple-tooth pawls for strength & safety
- Large base ensures a firm foundation
- Plated springs to resist corrosion
- Double-lever sockets for jacking in close quarters



MFG Model No.	Lifting Cap.	Stroke	Collapsed Ht. (in.)	Weight	Order No.	Price
RJ22B	10 ton	-	21.62	77.35 lbs	**KL71RJ22B**	Price
RJ84A	5 ton	-	14	30.6 lbs	**KL71RJ84A**	Price
RJ85A	5 ton	-	17	33.4 lbs	**KL71RJ85A**	Price

ENERPAC PA-Series Air Hydraulic Foot Pumps

New!

- Rugged construction
- Swivel coupling simplifies hydraulic connection and pump operation
- Three-position treadle provides cylinder advance, hold or retract operations
- Operates in all positions for increased versatility in use and mounting
- Base mounting slosts provided



MFG Model No.	Oil Output Flow Rate	Usable Oil Cap.	Weight	Order No.	Price
PA-133	.65 No Load / .13 Load	589	12 lbs	**KL70100002**	Price
PA-133R (With Relief Valve)	.65 No Load / .13 Load	589	20 lbs	**KL70100019**	Price

SIMPLEX Air Hydraulic Foot Pump

New!

- 3 position non-slip, diamond grip treadle for safe advance, hold & retract operation
- Quiet operation - 85 dba @ 10,000 psi
- Rugged all metal construction
- High quality rubber gasket seals
- Integrated non-spill vent / oil lever indicator



MFG Model No.	Usable Oil Cap.	Weight	Order No.	Price
GA90	90	19.10 lbs	**KL71GA90**	Price

ENERPAC 6' High Pressure Hydraulic Hose

New!

- 1/4" NPTF
- Maximum Operating Pressure 10,000 PSI
- Inside diameter 1/4"



MFG Model No.	Description	Order No.	Price
CH-604	Hydraulic Hose	**KL70201174**	Price
CR-400	3/8" NPTF Female Hydraulic Coupler	**KL70201204**	Price

SIMPLEX 6' High Pressure Hydraulic Hose

- 3/8" NPTF Male; C213 Coupler
- Ideal for manual pumps and small cylinders with a 1/4" I.D. and 2;1 design factor

New!



MFG Model No.	Order No.	Price
HCA6	**KL71HCA6**	Price

SIMPLEX G1 Electric Pump

- Powered by a 115V - 60HZ, universal motor
- Low startup voltage, G1 draws 10 amps at full load
- Two-speed pump operation provides fast tool performance
- External adjustable relief standard

New!



MFG Model No.	Motor	Usable Oil Cap.	Weight	Order No.	Price
G1141	1/2HP, 115V, 60Hz	1	46 lbs	**KL71G1141**	Price

SIMPLEX Glycerine Filled Pressure Gauge

- Liquid dampens needle vibration to protect components
- Reads both PSi and Bar pressures (0 - 10,000 PSI, 0 - 700 bar scale, 1% full range accuracy)
- 1/4" NPT connection thread

New!



MFG Model No.	Order No.	Price
G5	**KL7118905**	Price

ENERPAC Hydraulic Pressure Gauge

- Glycerin Filled
- Calibrated in dual scale reading in psi and bar
- All pressure sensing parts sealed and dampened by glycerin for long life
- Includes safety blow-out disk and pressure equalizing membrane
- Gauge snubbers or needle valve recommended for high-cycle applications
- Pressure Range: 0-10,000 psi / 0-700 bar
- Face 2.5", 1/4" NPTF Lower Mouont

New!



Order No.	Price
KL70223015	Price

ENERPAC GA-45GC Gauge Adaptor Assembly

- 45° angled gauge improves visibility
- Slim and narrow design
- Easy to fit in a broad range of systems
- Maximize controlled load movement
- Glycerin dampened gauge with dual scale
- High flow female coupler
- 10,000 PSI Maximum Operating Pressure
- 3/8" NPTF male connection
- CR-400 Coupler

New!



Order No.	Price
KL70385614	Price

ENERPAC Split Manifold Valve

- Functions as split-flow valve to control 2 to 4 single-acting cylinders simultaneously
- All ports 3/8"-18 NPTF

New!



MFG Model No.	Order No.	Price
AM-21	**KL70128914**	Price

HARRINGTON Premium Industrial/Contractor Quality Lever Puller



- Lightweight – Durable all-steel construction weighs less than comparable aluminum models
- Weston-Style Load Brake – Utilizes two moisture-resistant brake pads and four braking surfaces for positive braking action. Two brake pawls.
- Easy Load Chain Adjustment – Spring loaded free-wheel knob makes the LB the easiest puller to adjust in the market
- Single Load Chain Fall – Through 3 ton capacity
- Load Tested – Each LB is tested to 125% of capacity and supplied with a test certificate
- Load chain qty. one
- Optional Load Limit Warning Handle
- 1 Year Warranty

Capacity (tons)	Lift Height (ft.)	Load Chain Falls	Order No.	Price
3/4	10	1	**RN51LB00810**	Price
3/4	20	1	**RN51LB00820**	Price
1	10	1	**RN51LB01010**	Price
1	20	1	**RN51LB01020**	Price
1-1/2	10	1	**RN51LB01510**	Price
3	20	1	**RN51LB03020**	Price
1-1/2	20	1	**RN51LB01520**	Price
3	10	1	**RN51LB03010**	Price

5', 15', and other length lifts also available

HARRINGTON Portable Hand Chain Hoists

Best in the Industry/Premium Quality



- Exceptional Strength – Thick cross sectional die-cast aluminum body. High strength, heat-treated main shaft, pinions and load gears.
- Weston-Style Load Brake – Utilizes four friction surfaces for positive braking action and easy maintenance
- Minimal Manual Effort – Smooth-running, sealed ball bearings minimize manual effort
- Load Tested – Each CF is tested to 125% of capacity and supplied with a test certificate
- Capacities – Up to 5 tons
- 1 Year Warranty

Capacity (tons)	Lift Height (ft.)	Headroom (in.)	Order No.	Price
1/2	10	12.8	**RN51CF00510**	Price
1/2	20	12.8	**RN51CF00520**	Price
1	10	14.6	**RN51CF01010**	Price
1	20	14.6	**RN51CF01020**	Price
1-1/2	10	17.3	**RN51CF01510**	Price
1-1/2	20	17.3	**RN51CF01520**	Price
2	10	20.1	**RN51CF02010**	Price
2	20	20.1	**RN51CF02020**	Price
3	10	23.2	**RN51CF03010**	Price
3	20	23.2	**RN51CF03020**	Price

Other and longer lifts available

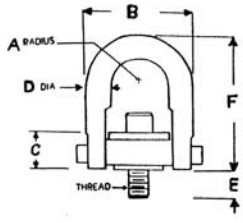
Hoist Rings

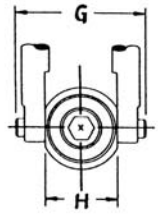
- For heavy lifting and are designed to replace conventional lifting hardware and devices that have been outmoded by new safety regulations

Features:

- 360° Swivel, 180° Pivot
- 5:1 Safety factor
- ISO 9001; 2008 Certified
- Precision machined lifting bail
- Accepted on many Government, Aerospace, and Automotive specifications
- Heat treated alloy steel. Black oxide corrosion resistant finish
- Hoist rings individually numbered







Rating Load	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F ±.060 (in.)	Thread Size	G (in.)	H (in.)	Torque (ft./lbs.)	Weight	Order No.	1 pair	2 pair	10 pair	20 pair	50 pair
800 lbs	.43	1.61	.71	3/8	.54	2.67	5/16-18	1.84	1.00	.7	5 oz	**SF52020**	Price	Price	Price	Price	Price
1000 lbs	.43	1.61	.71	3/8	.54	2.67	3/8-16	1.84	1.00	12	5 oz	**SF52024**	Price	Price	Price	Price	Price
2500 lbs	.70	2.40	.93	1/2	1.07	3.77	1/2-13	2.58	1.49	28	1 lb	**SF52032**	Price	Price	Price	Price	Price
2500 lbs	.88	3.25	1.22	3/4	.78	4.78	1/2-13	3.52	1.99	28	2 lbs 5 oz	**SF52032A**	Price	Price	Price	Price	Price
2500 lbs	.88	3.25	1.22	3/4	1.03	4.78	1/2-13	3.52	1.99	28	2 lbs 5 oz	**SF52032B**	Price	Price	Price	Price	Price
2500 lbs	.88	3.25	1.22	3/4	1.28	4.78	1/2-13	3.52	1.99	28	2 lbs 5 oz	**SF52032C**	Price	Price	Price	Price	Price
4000 lbs	.88	3.25	1.22	3/4	.78	4.78	5/8-11	3.52	1.99	60	2 lbs 7 oz	**SF52040**	Price	Price	Price	Price	Price
4000 lbs	.88	3.25	1.22	3/4	1.03	4.78	5/8-11	3.52	1.99	60	2 lbs 7 oz	**SF52040A**	Price	Price	Price	Price	Price
5000 lbs	.88	3.25	1.22	3/4	1.03	4.78	3/4-10	3.52	1.99	100	2 lbs 9 oz	**SF52048**	Price	Price	Price	Price	Price
5000 lbs	.88	3.25	1.22	3/4	1.53	4.78	3/4-10	3.52	1.99	100	2 lbs 9 oz	**SF52048A**	Price	Price	Price	Price	Price
7000 lbs	1.40	4.80	1.71	1.00	1.04	6.52	3/4-10	5.14	3.00	100	6 lbs	**SF52048B**	Price	Price	Price	Price	Price
10000 lbs	1.40	4.93	1.71	1.00	1.29	6.52	1-8	5.14	3.00	230	7 lbs	**SF52100**	Price	Price	Price	Price	Price
10000 lbs	1.40	4.93	1.71	1.00	1.54	6.52	1-8	5.14	3.00	230	7 lbs	**SF52100A**	Price	Price	Price	Price	Price
15000 lbs	1.75	6.00	2.11	1-1/4	1.89	8.73	1-1/4-7	6.50	3.76	470	14 lbs	**SF52116**	Price	Price	Price	Price	Price
24000 lbs	2.25	8.00	2.81	1-3/4	2.70	12.47	1-1/2-6	8.55	4.87	800	33 lbs 12 oz	**SF52132**	Price	Price	Price	Price	Price

JET S90 Series Chain Hoists

- Weston style double ratchet pawl brake design
- Grade 80 black oxide coated load chain
- Designed with reliability and durability to perform in light-duty industrial applications
- ½ ton to 10 ton Capacities and standard lifts of 10, 15, 20, and 30 feet
- Ideal contractor grade hoist
- Complies with ANSI/ASME B30.16 and HST-2 Standards
- Lifetime Warranty

New!



Rated Load - 1/2 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
S90-050-10	10	26 lbs	5 x 15	**RR50101900**	Price
S90-050-15	15	31 lbs	5 x 15	**RR50101901**	Price
S90-050-20	20	36 lbs	5 x 15	**RR50101902**	Price
S90-050-30	30	45 lbs	5 x 15	**RR50101903**	Price

Rated Load - 1 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
S90-100-10	10	35 lbs	6 x 18	**RR50101910**	Price
S90-100-15	15	41 lbs	6 x 18	**RR50101911**	Price
S90-100-20	20	47 lbs	6 x 18	**RR50101912**	Price
S90-100-30	30	58 lbs	6 x 18	**RR50101913**	Price

Rated Load - 1-1/2 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
S90-150-10	10	50 lbs	8 x 24	**RR50101920**	Price
S90-150-15	15	58 lbs	8 x 24	**RR50101921**	Price
S90-150-20	20	66 lbs	8 x 24	**RR50101922**	Price
S90-150-30	30	81 lbs	8 x 24	**RR50101923**	Price

Rated Load - 2 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
S90-200-10	10	52 lbs	8 x 24	**RR50101930**	Price
S90-200-15	15	60 lbs	8 x 24	**RR50101931**	Price
S90-200-20	20	68 lbs	8 x 24	**RR50101932**	Price
S90-200-30	30	83 lbs	8 x 24	**RR50101933**	Price

Rated Load - 3 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
S90-300-10	10	78 lbs	8 x 24	**RR50101940**	Price
S90-300-15	15	90 lbs	8 x 24	**RR50101941**	Price
S90-300-20	20	103 lbs	8 x 24	**RR50101942**	Price
S90-300-30	30	128 lbs	8 x 24	**RR50101943**	Price

Rated Load - 5 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
S90-500-10	10	123 lbs	10 x 30	**RR50101950**	Price
S90-500-15	15	140 lbs	10 x 30	**RR50101951**	Price
S90-500-20	20	158 lbs	10 x 30	**RR50101952**	Price
S90-500-30	30	194 lbs	10 x 30	**RR50101953**	Price

Rated Load - 10 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
S90-1000-10	10	220 lbs	10 x 30	**RR50101960**	Price
S90-1000-15	15	252 lbs	10 x 30	**RR50101961**	Price
S90-1000-20	20	284 lbs	10 x 30	**RR50101962**	Price
S90-1000-30	30	349 lbs	10 x 30	**RR50101963**	Price

F.O.B. LaVergne, TN • JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

JET L-Series Chain Hoists

- JET® L-100 Series hand chain hoist integrates safety, durability and innovation enabling it to operate in the most demanding industrial environments
- Safety features such as optional overload protection prevents the hoist from lifting damaging loads beyond its rated capacity
- The JET® exclusive innovation showcased in the patented fused brake system reduces maintenance costs and limits downtime
- JET® is so confident in the durability of the fused brake design we back it with an industry leading lifetime replacement warranty

New!



Rated Load - 1/2 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
L-100-50WO-15	15	29 lbs	5 x 15	**RS50205115**	Price
L-100-50WO-20	20	29 lbs	5 x 15	**RS50205120**	Price
L-100-50WO-30	30	44 lbs	5 x 15	**RS50205130**	Price

Rated Load - 1 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
L100-100WO-15	15	34 lbs	6.3 x 19	**RS50203115**	Price
L-100-100WO-20	20	39 lbs	6.3 x 19	**RS50203120**	Price
L-100-100WO-30	30	51 lbs	6.3 x 19	**RS50203130**	Price

Rated Load - 1-1/2 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
L-100-150WO-15	15	41 lbs	7.1 x 21	**RS50201115**	Price
L-100-150WO-20	20	48 lbs	7.1 x 21	**RS50201120**	Price
L-100-150WO-30	30	62 lbs	7.1 x 21	**RS50201130**	Price

Rated Load - 2 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
L-100-200WO-15	15	52 lbs	8 x 24	**RS50206115**	Price
L-100-200WO-20	20	59 lbs	8 x 24	**RS50206121**	Price
L-100-200WO-30	30	75 lbs	8 x 24	**RS50206130**	Price

Rated Load - 3 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
L-100-300WO-15	15	64 lbs	7.1 x 21	**RS50207115**	Price
L-100-300WO-20	20	74 lbs	7.1 x 21	**RS50207120**	Price
L-100-300WO-30	30	95 lbs	7.1 x 21	**RS50207130**	Price

Rated Load - 5 Ton					
Model No.	Lift Height (ft.)	Weight	Load Chain Diameter (mm)	Order No.	Price
L-100-500WO-15	15	105 lbs	9 x 27	**RS50208115**	Price
L-100-500WO-20	20	120 lbs	9 x 27	**RS50208120**	Price
L-100-500WO-30	30	149 lbs	9 x 27	**RS50208130**	Price

F.O.B. LaVergne, TN • JET BRAND PRODUCTS NOT AVAILABLE IN CANADA

Vestil Adjustable Work-Mate Stands

- The height of each leg can be adjusted individually to ensure proper working height
- Minimizes fatigue
- Serrated steel platform
- Yellow powder coat finish

MADE IN THE USA



W (in.)	L (in.)	Capacity	Service Range	Weight	Order No.	Price
19	24	500 lbs	10-1/2 to 16-1/2	40 lbs	**RV54AHWH1924**	Price
19	24	500 lbs	6-3/4 to 8-3/4	34 lbs	**RV54AHWL1924**	Price
24	24	500 lbs	10-1/2 to 16-1/2	46 lbs	**RV54AHWH2424**	Price
24	24	500 lbs	6-3/4 to 8-3/4	41 lbs	**RV54AHWL2424**	Price
24	36	500 lbs	10-1/2 to 16-1/2	60 lbs	**RV54AHWH2436**	Price
24	36	500 lbs	6-3/4 to 8-3/4	55 lbs	**RV54AHWL2436**	Price

Vestil Adjustable Step-Mate Stands

- Comfortable worker platform or a semi-permanent step
- Individual step size is 12" deep
- Serrated steel style surface ensures safe footing
- Legs adjust individually by screwing them in to or out of the leg base
- 1st step adjustment maximum 8-1/4"
- 2nd step adjustment maximum 15-1/4"
- Yellow powder coat finish

MADE IN THE USA



W (in.)	L (in.)	Capacity	Top Step Service Range	Weight	Order No.	Price
24	23	500 lbs	up to 15-1/4	47 lbs	**RV54ASP24**	Price
36	23	500 lbs	up to 15-1/4	61 lbs	**RV54ASP36**	Price
48	24	500 lbs	up to 15-1/4	75 lbs	**RV54ASP48**	Price
60	24	500 lbs	up to 15-1/4	101 lbs	**RV54ASP60**	Price

JET HD Series Heavy Duty Beam Clamps

- 1-ton to 5-ton capacities
- Mount hoists or lift beams with portable lightweight clamp



Model No.	Pull to Lift Capacity	Order No.	Price
HD-1T	1 Ton	**RS50202710**	Price
HD-2T	2 Ton	**RS50202720**	Price
HD-3T	3 Ton	**RS50202730**	Price
HD-5T	5 Ton	**RS50202750**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

JET Adjustable Trolleys

- Designed for flexibility
- Use on straight or curved track
- All ball bearing construction
- Easy adjustment—remove one cotter pin and shift spacers to fit I-Beam



I-Beam Flange Width	Vertical Measurement (in.)	Shipping Weight	I-Beam Capacity (in.) (tons)	Order No.	Price
2-1/2 - 8	4 - 19	18.85 lbs	1/2 Ton	**RR52AT05**	Price
3 - 8	4 - 19	33.05 lbs	1 Ton	**RR52AT10**	Price
3-1/4 - 8	4 - 19	41.3 lbs	1-1/2 Ton	**RR52AT15**	Price
3-1/4 - 8	4 - 19	50.8 lbs	2 Ton	**RR52AT20**	Price
4 - 8	5 - 19	84.6 lbs	3 Ton	**RR52AT30**	Price
4-5/8 - 8	5 - 19	124 lbs	5 Ton	**RR52AT50**	Price

Geared trolleys with ball bearings also available. Call for price and delivery.
JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

JET JBC Series Industrial Duty Beam Clamps

- For construction, commercial and industrial vertical or horizontal rigging operations
- Mount hoists or lift beams with portable lightweight clamp
- Adjusts with ease to fit a broad range of wide-flange H or standard I-beams
- 5 Year Warranty



Model No.	Rated Load	Beam Flange Width (in.)	Weight	Order No.	Price
JBC-1	1 Ton	8-2/3	12 lbs	**RS50252710**	Price
JBC-2	2 Ton	8-2/3	14 lbs	**RS50252720**	Price
JBC-3	3 Ton	9-5/6	27 lbs	**RS50252730**	Price
JBC-5	5 Ton	10-5/8	34 lbs	**RS50252750**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

Rotomolded Heavy Duty Tilt Trucks

- **Industrial strength construction transports heavy loads with ease**
- Manufactured with traditional rotational molding technology
- Easy to handle and maneuver
- 12” Axel mounted rubber wheels
- Curved support rails allows for easy tilting
- Inset wheels on 1/2 and 1 cu. yd. models protect walls, fixtures and patrons
- Smooth surface is easy to clean and resists pitting and corroding
- Ships common carrier



Size (in.)	Capacity	Volume Capacity	Weight	Order No.	Price
60-1/2 x 28 x 38-5/8	1400 lbs	1/2 cu. yard	88 lbs	**RZ551306B**	Price
72-1/4 x 33-1/2 x 43-3/4	2100 lbs	1 cu. yard	120 lbs	**RZ551316B**	Price

Electric Hydraulic Scissor Lift Tables

Standard Features:

- Four-sided electric toe-guard (meets OSHA pinch point specification)
- Heavy-duty 56 frame electric motor pre-wired to 460V/3 phase power
- Standard 460V/3-phase power option includes pigtail for customer convenience
- Step-down safety control transformer to 24V AC
- Durable aluminum pressure-plated hydraulic pump for maximum efficiency
- Rain-proof hand pendent control, 24V AC, mounted to 8ft electric cord
- Displacement-style hydraulic cylinders for maximum strength
- Safety brass velocity fuse internal to each hydraulic cylinder
- Upper-travel limit switch, 24V AC, adjustable
- Lifetime lubricated bearings for long life
- Hardened pins & rollers
- Hinged maintenance prop
- Heavy-duty welded steel construction
- Platform includes durable powder-coat blue finish

MADE IN THE USA



Size (in.)	Service Range (in.)	Load Capacity	Weight	Order No.	Price
24-3/8 x 48-3/8	7 to 43	3000	648 lbs	**RV54EHLT2448343**	Price
30-3/8 x 60-3/8	7 to 43	3000	817 lbs	**RV54EHLT3060343**	Price
40 x 48	7 to 43	3000	814 lbs	**RV54EHLT4048343**	Price
48-3/8 x 48-3/8	7 to 43	3000	852 lbs	**RV54EHLT4848343**	Price
48-3/8 x 72-3/8	7 to 43	3000	962 lbs	**RV54EHLT4872343**	Price

2.5 Ton JLH Series Lever Hoists

- 1 ton to 2-1/2 ton Capacities
- All units feature premium 100 grade chain for extreme wear resistance
- Caged roller bearings used on load sprocket increase ease of use and efficiency

JET RED ASSURANCE 2-YEAR WARRANTY



Model No.	Lift Height (ft.)	Weight	Type	Order No.	Price
JLH-250-15	15	36 lbs	Lever Hoist	**RS50225015**	Price

JET BRAND PRODUCTS NOT AVAILABLE IN CANADA.

Vestil Hoppers

MADE IN THE USA

Standard Features:

- Includes front bumper release for easy hopper dumping
- Includes manual pull-cable to dump from seat of fork truck
- Hopper returns to upright position automatically after dumping
- Each fork pocket is 7-1/2"W x 2-1/2"H useable
- Safety strap to secure hopper to forklift
- Full-length fork tubes
- Precision robotic welded steel construction
- Durable powder coat blue finish

Capacity - 2000		
Size	**Order No.**	**Price**
41-11/16 x 61-1/8 x 42-11/16" (W x D x H), 18" fork pocket centers	**RV54D100LD**	Price
56-11/16 x 68-5/16 x 51-313/16" (W x D x H), 28" fork pocket centers	**RV54D200LD**	Price

Capacity - 4000		
Size	**Order No.**	**Price**
41-9/16 x 61-1/8 x 42-3/4" (W x D x H), 18" fork pocket centers	**RV54D100MD**	Price
56-5/8 x 68-5/16 x 51-13/16" (W x D x H), 28" fork pocket centers	**RV54D200MD**	Price



Capacity - 6000		
Size	**Order No.**	**Price**
41-9/16 x 61-1/8 x 42-3/4" (W x D x H), 18" fork pocket centers	**RV54D100HD**	Price
56-9/16 x 68-5/16 x 51-13/16" (W x D x H), 28" fork pocket centers	**RV54D200HD**	Price
81-3/4 x 68-5/8 x 51-13/16" (W x D x H), 28" fork pocket centers	**RV54D300HD**	Price

Vestil Mobile Tilting Work Tables

- Designed to bring work to an ergonomically correct position
- Working in a comfortable position reduces fatigue and risk of injuries
- Platform height and tilt angle is manually adjustable
- Four 3-1/2" x 1-1/4" polyurethane swivel casters (two double locking)
- All steel construction

MADE IN THE USA



Platform Size (W x L) (in.)	Capacity	Service Range	Degree of Tilt	Weight	Order No.	Price
22 x 21	150 lbs	28 to 38	45°	56 lbs	**RV54WT2221**	Price
24 x 24	300 lbs	31-1/2 to 42	30°	98 lbs	**RV54WT2424**	Price

Vestil Hydraulic Post Tables

- Foot-operated hydraulic lift tables
- Posts are telescoping to help stabilize and support loads during operation
- Two rigid and two swivel casters with wheel brakes are standard

MADE IN THE USA



Platform Size (W x L) (in.)	Capacity	Service Range	No. of Posts	Foot Pump Speed	Weight	Order No.	Price
18 x 18	500 lbs	31 to 49	2	Single	106 lbs	**RV54HT051818A**	Price
20 x 36	1000 lbs	36 to 54	2	Single	196 lbs	**RV54HT102036A**	Price

Vertical Storage Rack

- Allows for vertical storage of tubing, steel, and wood
- Each rack has (4) bays
- Capacity of 1,500 lbs. per bay
- A restraint chain securely holds items in storage bays
- Welded steel construction
- Powder coat blue finish

MADE IN THE USA



W (in.)	D (in.)	H (in.)	No. of Bays	Distance Between Bays (in.)	Weight	Order No.	Price
48-1/2	24	61	4	9-3/4	153 lbs	**RV54SSRT47**	Price

Variable Height Sheet Rack

- Store various sizes of sheet goods
- Four different bays with heights from 16” to 42”
- All welded steel construction
- Capacity per bay is 1,500 lbs.
- Powder coat blue finish
- Unit is supplied with lag down points

MADE IN THE USA



W (in.)	D (in.)	H (in.)	No. of Bays	Distance Between Bays (in.)	Weight	Order No.	Price
47	36	41.75	4	6-7/8	143 lbs	**RV54VHSR4**	Price

Reel Rack

MADE IN THE USA

- Store and dispense poly or wire rope, hose, electrical cable, or chain
- 96” units have 3 pair of axle brackets and axles; 120” units have 4 pair of axle brackets and axles (add’l brackets available)
- Axle brackets are infinitely adjustable on 2” centers
- Capacity per level 1,500 lbs.
- Ships knocked down



W (in.)	D (in.)	H (in.)	Weight	Order No.	Price
39	36	98.5	169 lbs	**RV54RERC338**	Price
39	36	123	204 lbs	**RV54RERC3310**	Price
51	36	98.5	184 lbs	**RV54RERC438**	Price
51	36	123	231 lbs	**RV54RERC4310**	Price

Cantilever Racking

Uprights Only

MADE IN THE USA

- Cantilever rack systems offer flexibility to custom-fit individual applications
- The unique bolt together construction with welded steel components offer a great combination of strength and durability
- Individual components are sold separately to accommodate your requirements
- Powder coat finish
- **Arms and braces sold separately**



Type - Double Sided Cantilever Storage Upright				
Column Height (in.)	Arm Lengths (in.)	Capacity (lbs.)	Order No.	Price
120	12	26500	**RV54DAC1012**	Price
120	24	16600	**RV54DAC1024**	Price
120	36	12250	**RV54DAC1036**	Price
120	48	9500	**RV54DAC1048**	Price

Type - Single Sided Cantilever Storage Upright				
Column Height (in.)	Arm Lengths (in.)	Capacity (lbs.)	Order No.	Price
120	12	26500	**RV54SAC1012**	Price
120	24	16500	**RV54SAC1024**	Price
120	36	12250	**RV54SAC1036**	Price
120	48	9500	**RV54SAC1048**	Price

Straight Arms with Lips

Arm Length (in.)	Capacity (lbs.)	Order No.	Price
12 (usable length 11-5/16")	3000 lbs	**RV54SSAL12**	Price
24 (usable length 23-5/16)	2000 lbs	**RV54SSAL24**	Price
36 (usable length 35-5/16")	1200 lbs	**RV54SSAL36**	Price
48 (usable length 47-5/16)	1000 lbs	**RV54SSAL48**	Price

Horizontal Brace Sets

Column Height (in.)	Column Spacing	Braces Per Set	Order No.	Price
120	36	5	**RV54HBS10123**	Price
120	48	5	**RV54HBS10124**	Price
120	60	5	**RV54HBS10125**	Price
120	72	5	**RV54HBS10126**	Price

Vestil Economical Mechanical Drum Transporter

MADE IN THE USA

- Designed to lift and transport plastic, steel, and fiber drums with a top lip
- Spring loaded steel jaws securely grip top lip of drum
- Available in either a manual mechanical ratchet or a foot pump hydraulic lift mechanism
- Straddle legs rotate for access to drums on pallets
- Unit rolls on (4) 8" x 2" phenolic swivel casters, front casters are lockable to rigid position
- The push handle folds down for easy access to ratchet and foot pump
- All welded steel construction



DCR880H



DCR880M



DCR880HHP

Operation	Capacity	Jaw Service Range	Order No.	Price
Foot Pump	1500 lbs	31 to 49"	**RV54DCR880H**	Price
Foot Pump	880 lbs	31 to 77"	**RV54DCR880HHP**	Price
Hand Ratchet	880 lbs	31 to 47"	**RV54DCR880M**	Price

Vestil Drum Carrier/Rotator

MADE IN THE USA

- Easily transport and rotate 55 gallon steel drums using a fork truck
- Drums are held securely in place by a durable chain locking system
- Includes a 15 foot long chain to allow the drum to be rotated up to 360° from the fork truck operators seat





DCR20515



DCR2058

Crank Turns Per 90° Rotation	Capacity	Fork Pocket Size (W x H) (in.)	Order No.	Price
10	1500 lbs	7 x 2-5/8"	**RV54DCR20515**	Price
10	800 lbs	7 x 2-5/8"	**RV54DCR2058**	Price

Vestil Stackable Bar Cradles

- Strong enough to handle heavy loads yet light enough to be set up by one person
- Stackable up to five units high



W (in.)	L (in.)	H (in.)	Capacity (lbs.)	Weight	Order No.	Price
12	16	14-1/2	2500	29 lbs	**RV54CRAD25**	Price
14	19	18-1/2	3700	36 lbs	**RV54CRAD37**	Price
16	26	24-1/2	7500	52 lbs	**RV54CRAD75**	Price

Vestil Multi Purpose Overhead Drum Lifter/ Wrench

- Use with closed head 30 and 55 gallon plastic, steel, and fiber drums with a top lip
- Each removable arm also functions as a wrench for use on drum plugs, faucets, and rim ring bolts
- Mechanical operation
- Durable powder coat finish





Acceptable Drum Styles	Capacity	Order No.	Price
Plastic, Fiber, and Steel	800 lbs	**RV54PDL800M**	Price

Vestil Lo-Profile Drum Caddies with Bung Wrench Handle

- Transport (1) 55 or 30 gallon drum or (2) 5 gallon pails
- Unit rolls easily on two 6" x 2" rigid wheels and one 3" x 1" swivel caster
- The removable handle doubles as a bung nut wrench and seal remover
- Inside cradle diameter is 23-1/2"



Straddle W x D (in.)	Capacity	Order No.	Price
31-5/8 x 16	1000 lbs	**RV54LODCMR**	Price
31-5/8 x 16	1200 lbs	**RV54LODCPU**	Price

Vestil Bar Cradle Trucks

- For easy handling of bar stock, pipe, and tubing
- The cradles are supported by structural channel on the bottom and both sides
- Units roll on (2) rigid and (2) swivel glass filled nylon casters
- Capacities based on evenly distributed loads





W (in.)	L (in.)	H (in.)	Capacity (lbs.)	Weight	Order No.	Price
31-1/2	60-5/15	29-15/16	4000	196 lbs	**RV54DCC28604**	Price
31-1/2	63	32	10000	338 lbs	**RV54DCC286010**	Price
31-1/2	96-5/15	29-15/16	4000	260 lbs	**RV54DCC28964**	Price
31-1/2	98-1/4	32-1/2	10000	492 lbs	**RV54DCC289610**	Price
31-1/2	123	32	10000	601 lbs	**RV54DCC2812010**	Price

WESCO Drum Dollies



- All welded steel construction
- Capacities to 900 lbs.
- Casters bolted in place
- Reinforced outrigger design for load stability
- With hard rubber casters

MADE IN THE USA

For Use With	Capacity	Order No.	Price
30 Gallon Drums	900 lbs	**RV55D3HR**	Price
55 Gallon Drums	900 lbs	**RV55D5HR**	Price

Vestil Heavy Duty Drum Dolly



- Transport 55 gallon drums
- Rolls on (4) 4" x 2" locking swivel phenolic casters with brakes
- Handles drums weighing up to 2,000 lbs.

MADE IN THE USA

For Use With	Capacity	Order No.	Price
55 Gallon Drums	2000 lbs	**RV54DRUMHD**	Price

Vestil Tilting Drum Dolly



- Round steel drum dolly for 55 gallon drums
- Tilts drums 10° for better liquid extraction
- Tilting feature is foot-operated and locks into place when activated
- Dolly includes four swivel casters

For Use With	Capacity	Order No.	Price
55 Gallon Drums	1200 lbs	**RV54TILTDOL55C**	Price
55 Gallon Drums	900 lbs	**RV54TILTDOL55H**	Price

Vestil Octo Drum Dolly

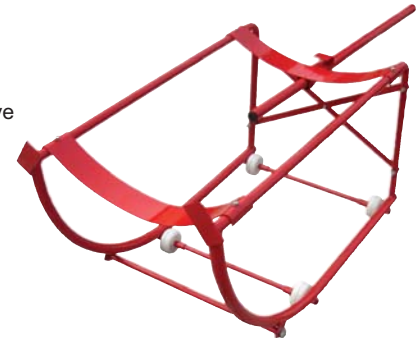


- Transport 55 gallon drums
- Rolls on (8) 4" x 1-1/4" cast iron swivel casters
- Handles drums weighing up to 2,000 lbs.

MADE IN THE USA

For Use With	Capacity	Order No.	Price
55 Gallon Drums	2000 lbs	**RV54OCTO55**	Price

PRM PRO Drum Cradle 55 Gallon



- For use with 55 gallon drums
- Capacity 600 lbs
- 4 Wheels with channeled steel
- Cross-braced construction
- Titling design to rotate, move and store drums
- Color red/gray

Order No.	Price
LC707122	Price

HARPER 600 & 700 Lb. Drum Cradle

MADE IN THE USA

- Constructed of 1" O.D. x 14 gauge steel tubing
- "Non-skid" features on front rockers to prevent frame from sliding when drum is tipped
- 5" Rubber wheels and 3" rubber casters

#8818-41:



- Welded for strength
- Bung drain is 21" off floor in horizontal position
- For use with 30 and 55 gallon drums
- Comes with two break-over retractable handles

#8618-41KD:



- Shipped knocked down in a 36" x 23-1/2" x 3-1/2" carton
- Bung drain is 18-7/8" off floor in horizontal position
- For use with 55 gallon drums
- Comes with one break-over retractable handle

Style	Order No.	Price
Knocked Down	**RV30861841KD**	Price
Welded	**RV30881841†**	Price

† Ships UPS Dimensional

Vestil Tilting Drum Rings

MADE IN THE USA





- Easily transport steel drums with your fork truck
- Manually rotate drum to dispense light materials
- The band secures around the belly of the drum
- Welded steel construction for durable strength
- Capacity 1200 lbs
- **Capacity is based on full drums / half-full drums are rated at 600 lbs**

Acceptable Drum Style	Material	Fork Opening (W x H")	Order No.	Price
30 Gallon Steel	Steel	5-3/4 x 3	**RV54TDR30**	Price
30 Gallon Steel	Galvonized Steel	5-3/4 x 3	**RV54TDR30G**	Price
30 Gallon Steel	Stainless Steel	5-3/4 x 3	**RV54TDR30SS**	Price
55 Gallon Steel	Steel	5-3/4 x 3	**RV54TDR55**	Price
55 Gallon Steel	Galvonized Steel	5-3/4 x 3	**RV54TDR55G**	Price
55 Gallon Steel	Stainless Steel	5-3/4 x 3	**RV54TDR55SS**	Price

WESCO Drum Cradle

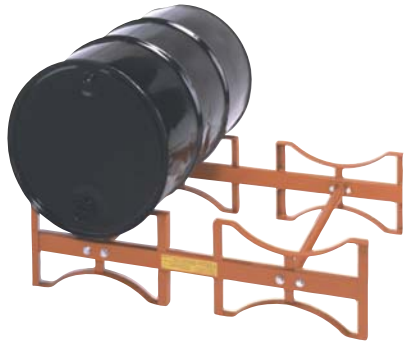
- Self storing load tipping lever
- Non-sparking aluminum wheels (except casters)
- Standard inboard wheels
- Handles 55 gallon drums
- One man load and unload
- Other Models of Drum Trucks and Cradles Available
- Weight: 33 lbs
- Drip tray sold separate



Order No.	Price
RV55CW10	Price

WESCO Drum Rack

- Two drum model (DR-2) can be shipped via UPS
- Designed for economical storage of 55 gallon drums
- Available in two or three drum models
- Can be safely stacked four high
- Competitively priced
- Easy to assemble
- Four-side fork truck entry
- Shipped knocked down to reduce freight costs and storage space
- Weight 44 lbs



Order No.	Price
RV55DR2	Price

WESCO Drip Tray

- Steel slide-out tray 9.75” x 9.75” with 1.75” lip
- Fits all Wesco drum cradles
- Plastic tray – Polyethylene – Cellulose absorbent material – Holds 3 qt. liquid



Type	Order No.	Price
Drip Tray Kit for Drum Truck	**RV55270413**	Price
Replacement Pan for Drip Tray	**RV55270414**	Price

WESCO 500 Lb. Combination Drum & Hand Truck

- Can be used as a hand truck or drum truck
- Chime hook works with 55 & 30 gallon drums
- 15’ Deep curved frame accommodates 5 gallon pails & kegs
- Semi-Pneumatic wheels
- Weight: 39 lbs



Order No.	Price
RV50156DHZ	Price

WESCO Fork Mounted Drum Grabber

- Mounts easily on forks - just slide on and hand tighten lock screws - no tools required
- Picks up drums automatically - Driver simply approaches drum, lifts, transports, sets down and backs truck away without leaving driving position
- Double 90° design ensures firm grip - Weight of drum holds grab jaws in, preventing slippage
- All welded steel for durability - no castings
- Jaws formed from 3/4” x 3” steel bar
- Capacity: 1500 lbs. per drum
- Fork pocket size: 5-1/2” x 2”
- Pocket distance-center to center: 22”
- Safety orange enamel finish



For Use With	Weight	Order No.	Price
55 Gallon Drums	145 lbs	**RV55DJ55**	Price

PRM PRO Steel Barrel Pump - Lever Type

- Heavy steel pumpbody with ribbed section pump head
- Fits15 to 55 gallon drums with built in 1-1/2" and 2" bung opening
- Includes curved discharge metal pipe and telescoping steel tube assembly
- Recommended for use with oil based fluids, heating oils, motor oils, heavy & light oils, diesl & kerosene
- Pump not suited for use with water



Order No.	Price
LC727765	Price

Legacy Heavy Duty Barrel Pump

- Engineered for heavy duty use
- Two-piece telescoping suction tube fits 30 to 55 gallon drums
- Pump delivers a full ten ounces of fluid per stroke
- Rugged epoxy finish pump assembly
- Discharge spout thread fits all garden hose fittings
- Complete with a standard bung adapter, tough all steel foot valve and piston valve
- For oil based material only



Type	Weight	Order No.	Price
Heavy Duty Barrel Pump	7 lbs	**LX55L3000**	Price

EXXO Exxo Rotary Barrel Hand Pumps

Oil-Based Hand Pump 7119:

- For dispensing oil-based fluids
- Fits 15 - 55 gallon units
- Pump body & veins made of polypropylene
- Includes: pump, strainer filter, suction tube & 2" bung adapter

Chemical-Based Hand Pump 7118:

- Corrosion resistant
- Used with petroleum products, water & water-based chemicals, anti-freeze, mild acids, and alkali solutions
- Pump body made from glass filled polypropylene with Ryton veins, seals made from viton rubber and all hardware is stainless steel
- Includes: 3 Pc. (45" long) suction tubes & choice of 2" bung adapters
- Fits 15 -55 gallon units





Type	Order No.	Price
Oil-Based Hand Pump	**HY507119**	Price
Chemical-Based Hand Pump	**HY507118**	Price

WESCO Series "R" Iron Rotary Pump

Application Information:

- This pump was designed primarily for the transfer of fuel oil products
- It should be noted that this pump can only be used for chemicals which are compatible with cast iron and phenolic
- For use in 30 gallon or larger drums
- Rugged cast iron construction
- Capacity: 1 gallon per 15 revolutions
- 2 Pc. Suction pipe for easier installation in a wide variety of drums
- Suction pipe assembled is 47" long
- Supplied with 48" long flexible PVC discharge tube
- Shipping weight.: 14 lbs. – UPS shippable



Order No.	Price
RV55270021	Price

Vestil Drum Deheader

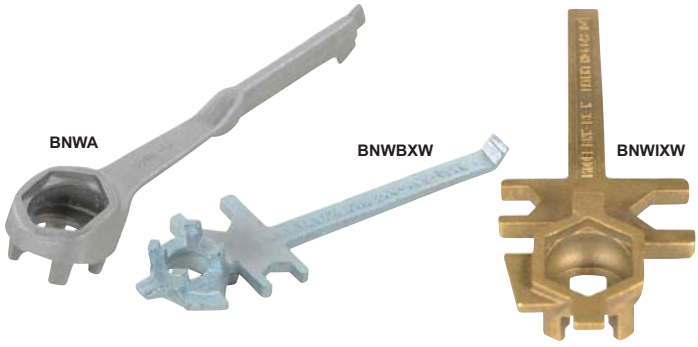
- Adjustable design works with different types of steel drums
- Beveled blade prevents sharp edges on drum
- Rugged construction quickly converts steel drums into storage containers
- Angled blade offers maximum penetration



Size (in.)	Material	Style	Order No.	Price
4.5 x 18 x 5.5	Steel	Standard	**RV54DD9**	Price
21 x 6.5 x 5.25	Steel	Extra Leverage	**RV54DD10**	Price
21 x 6 x 4	Bronze	Non Sparking	**RV54DD9NS**	Price

Vestil Drum Bung Nut Wrenches

- Open and close drum bungs or plugs for optimal results
- Multi-purpose features are ideal for maximum efficiency
- Unit is universal meaning it fits all types of drum plugs and bungs
- Durable wrenches will eliminate the need for extra tools



Material	Style	Order No.	Price
Bronze Alloy†	Non Sparking	**RV54BNWBXW**	Price
Cast Aluminum	Non Sparking	**RV54BNWA**	Price
Cast Steel	Standard	**RV54BNWIXW**	Price

†Available while supplies last

WESCO Deheaders

- Easily open any size and gauge steel drum
- Can recycle steel drums without the danger of fire
- Sharp-edged hardened steel replaceable blade
- Comfortable plastic hand grip



Description	Order No.	Price
Drum Deheader-Heavy Duty	**RV55440013**	Price
Drum Deheader-Standard	**RV55272018**	Price

WESCO Non-Sparking Drum Plug Wrench

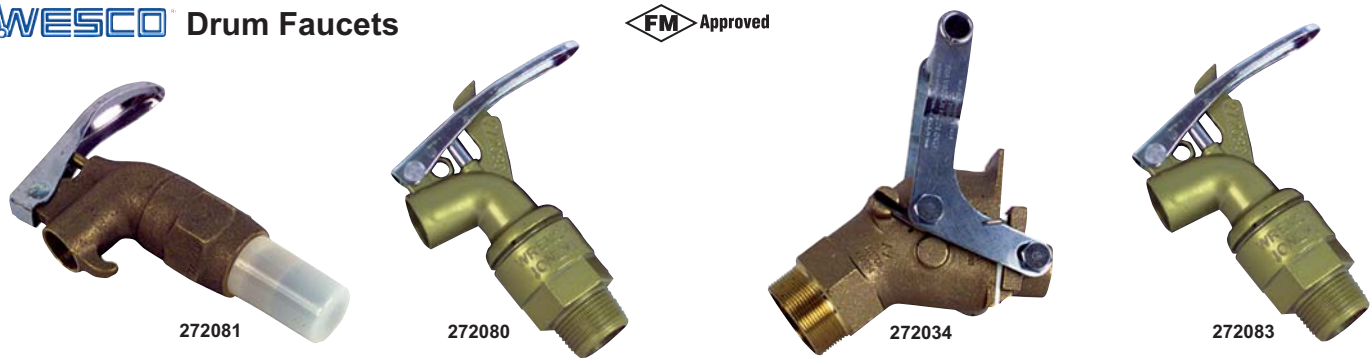
- Spark proof Bronze Alloy — safe around flammables
- Stronger than aluminum for long life
- Offset handle design reduces stress and minimizes knuckle injury
- Most popular style
- Natural finish



Type	Size (in.)	Weight	Order No.	Price
Bronze Drum Wrench	12	1 lb 14 oz	**RV55272016**	Price

WESCO Drum Faucets

FM Approved



For Use With	Description	Order No.	Price
Non-Viscous Liquids	Die cast aluminum, self closing, Nylon gasket, 3/4 NPT connection, Built-in Flame arrestor	**RV55272083**	Price
Non-Viscous Liquids	Rigid brass faucet with external flame arrestor.	**RV55272081**	Price
Viscous Liquids Only	Die cast aluminum, self closing, Nylon gasket, 3/4 NPT connection	**RV55272080**	Price
Viscous Non-Corrosive Liquids	2 Gate Valve, heavier than 30SAE, Fast Closing teflon blade.	**RV55272034**	Price

Vestil Multi-Purpose Drum Lid Tool

- Multi-purpose design has hook used for breaking open the lid seal
- Long handle provides adequate torque for easy operation
- Drum tool has integral wrench for removal of ring bolt and nut
- Slotted end is used to close drum ring lever lock



Size	Material	Color	Order No.	Price
14.125 x .375 x 2.625	Steel	Silver	**RV54DRUMPLB**	Price

WESCO Drum Vent

- Automatically relieves pressure at 5 psi.
- Maximum flow 200 CFM at 20 psi.
- Flame arrestor prevents sparks from igniting drum contents
- FM Approved



For Use With	Order No.	Price
Horizontal Drum	**RV55272030**	Price

Vestil Secure Overhead Drum Lifter

- Designed to securely lift closed & open-head 55 gallon steel drums with lid
- One person design makes for quick and easy operation
- Three-arm ductile-iron design offers maximum strength and simplicity
- Narrow profile easily picks up drums packed close together



Lifting Capacity	Lifting Position	Holding Device	Order No.	Price
2200 lbs	Vertical/Horizontal	Hoist	**RV54DRUMGRAB**	Price

WESCO Drum Ground Wires

- OSHA requires that all drums and containers storing and receiving hazardous chemicals (flashpoint below 140°F) and flammables be bonded and grounded - wires shown here meet these requirements
- Alligator clip on one end, “C” clamp on other
- 3′ Long heavy duty wire rope
- For bonding of drums to each other, to containers being filled and to storage racks



272031



272032



272033

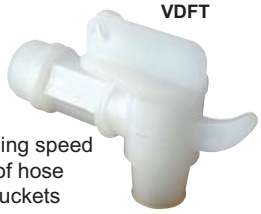
Type	Includes	Use For	Order No.	Price
All Purpose Bond Wire	1 Alligator Clip, 1 C-clamp, 3' Plain Wire Rope	Bonding of drums to each other, to containers being filled, and to storage racks	**RV55272031**	Price
Deluxe Ground Wire	1 Alligator Clip, 1 C-clamp, 3' Insulated Wire Rope	Connection between drum and true ground	**RV55272032**	Price
Standard Bond Wire	2 Alligator Clips, 3' Plain Wire Rope	Bonding of drums to each other, to containers being filled and to storage racks	**RV55272033**	Price

Vestil Drum Faucets

#VDFT:

- Handle padlock hole keep unwanted users out
- Unique design offers graduated dispensing speed
- Ring around bottom allows attachment of hose
- Hook in front of faucet holds pails and buckets

VDFT



#JDFT:

- Spout ring allows easy attachment of hose
- Faucet front hook conveniently hold pails and buckets
- Padlockable handle restricts access to unwanted individuals
- Unique design offers graduated dispensing speed

JDFT



Description	Material	Order No.	Price
Corrosion Resistance, Integral hook	Polyethylene	**RV54VDFT**	Price
Integral Hook, Includes port for addition of Drum Level Gauge (sold separately)	Polyethylene (LDPE) & Ethylene-Vinyl Acetate (EVA) Mixture	**RV54JDFT**	Price

Workholding



5 Axis J137, J142-J145
5C & R8 Collets & Accessories J162-J167
5C Collet Fixtures J170
Anchoring Products J36
Angle Plates J151-J152
Arbor Screws J225
Arbor Spacers & Shims J48-J49
Assortments J2-J7, J23
Bar Clamps J111
Boring Heads, Sets & Shanks J185-J187
Box Parallels J152
Button Head Cap Screws J16-J17
Cable Ties J9-J11
Cable Tie Clamps J8
Cable Tie Cutter J11
Cable Tie Mounting Bases J8
Cantilever Clamps J111-J112
Capto J226
Centers Spring, Live, Dead and Sets J253-J266
C-Clamps J104-J107
Chuck Jaws J270-J276
CNC Angle Heads J175-J176
Collet Chucks / Collets & Accessories J170, J188-J214
Collet Racks 1J63, J167
Connectors J3, J8
Coupling & Flange Nuts J85-J86
Demagnetizers J150
Disconnects J8
Dividing Heads J175
Dovetail Cutters J145
Dovetail Fixtures J143-J145
Dowel Pins J24-J25
Drill Bushings J59-J63
Drill Chucks & Accessories J153-J160
Drill Chuck Keys J153
Drill Drivers J161
Drill Rod J39-J40
Eccentric Bore Toolholders J215
Emergency Collets J163, J167
Endmill Holders J163, J215-J220
Endmill Sharpeners J172
Expanding Arbors & Mandrels J168
Eye Bolts J37-J39, J92
Eye Nuts J38
F & L Style Clamps J107-J108
Face Drivers J267-J268
Feeler Stock J42-J43
Flat Head Screws J17-J19
Flat Stock J50-J58
Fly Cutters J164
Grinding Carriers J256
Handwheels J93, J95
Hex Cap Screws J26-J29
Hex Nuts J33-J35
Hold Down Clamps J100-J103
Jaw Nuts J273
Kant-Twist J112
Key Stock J41
Knurling J245-J250
Kurt Vises & Accessories J137-J142
Lathe Chucks & Accessories J277-J300
Lathe Dogs J256
Lathe Chuck Keys J284, J298-J299
Lock Nuts J33
Machine Handles J93, J95-J96
Machinist Clamping Kits J97-J99
Magnetic & Sine Products J146-J150
Magnets J113-J122
Magnetic Lifters J120-J122
Magnetic Shop Sweep J116
Magnetic Trays J116
Maintenance Kits J2-J7, J23
Master Grind J171
Milling & Rotary Tables J173
Milling Chucks and Sleeves J227-J230
Milling Machine Vises J134-J139
Pneumatic Clamps 77-79
Pocket Tools, Retrievers & Clips J113, J116
Power Chucks J300-J302
Precision Test Bars J225
Presetters J176, J235
Pressure Pipe Plugs J19
Punch & Die Sets J47
Raptor J137, J143-J145
Retention Knobs J235-J237
Rivets & Rivet Tools J6-J7
Self-Centering Vises J136-J137
Shell Mill Holders J164, J223-J225
Shims & Shim Stock J44-J46
Shoulder Screws J22-J23
Shrink Fit Tool Holders & Accessories J231-J234
Simple & Super Spacers J174
Socket Head Cap Screws J12-J15
Socket Set Screws J19-J22
Speed Handles J146
Spindle Cleaners & Accessories J238
Spring Clamps J111
Spring Plungers J80-J82
Steel Sealed Collets J208-J210
Step Blocks & Straps J88-J90
T- Bolts J90-J92
T- Nuts J86-J88
Tailstocks J174-J175
Tapping Products J176-J184
Terminals J3, J7
TG & DA Collet Holders & Collets J188-J190
Thickness Gage Holders J42
Threaded Rod J35
Thumb Screws & Knobs J94
Tightening Fixtures J238
Toggle Style Clamps & Accessories J64-J76
Tool Holder Bushings J252
Tool Post Grinders J251
Tool Posts & Holders J239-J244
Tool Wrap J54
T-Slot studs J83-J85
Turn Buckle Assemblies J38
V-Flange Jacob Taper Adapters J221
V-Flange Morse Taper Adapters J222
Vises & Accessories J123-J142
Washers J30-J33
Welding Clamps J109-J110
Welding Magnets J118-J119
Woodruff Keys J41
Work Stops J145

AVAILABLE NOW

STREAM MORSE POWER HSM Green Jet Spindle

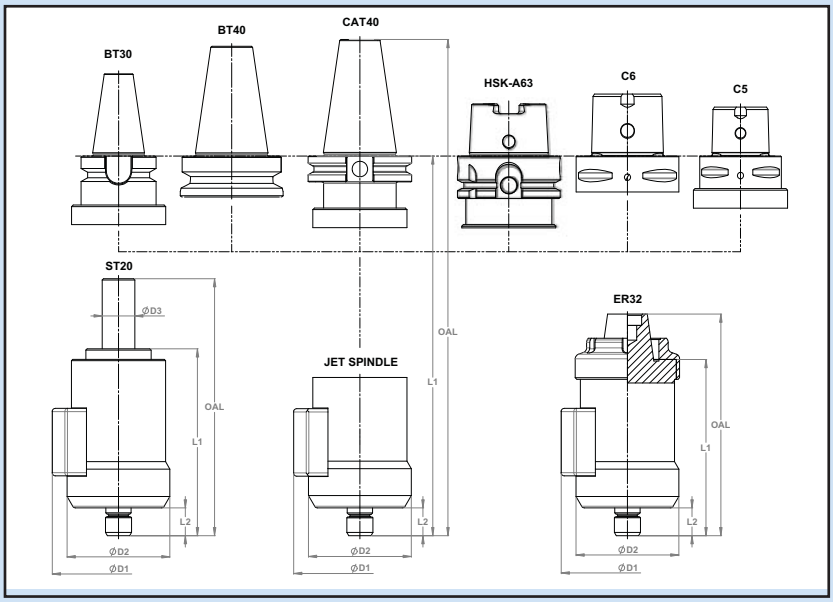
- Robust, compact high-speed spindle powered by coolant or cutting fluid
- For finishing/semi-finishing operations using small diameter cutting tools
- Plug & Play – no external feed or pre-installation, ATC / turret mountable
- Fitted with wireless speed monitor and display system



Operating Parameters	HSM Jet Spindle
Operating range of coolant pressure*	20bar (290psi) to 40bar (580psi)
Operating range of coolant flow rate	Min 12 L/min / 3.17 Gal/min
Rotational spindle speed	35,000 – 55,000 RPM
Optimum cutting tool sizes: Drilling	Ø 0.5 – 2.0 mm
Optimum cutting tool sizes: Milling	Ø 1.5 – 3.5 mm
Max shank size	7.0 mm
Compatible adaptor models	ER32, HSK-A63, BT30, BT40, ST20, C5, C6, CAT40. Contact factory for other models

* Coolant pressure is measured from the spindle inlet

New!



Designation	OAL [mm]	L1 mm]	L2 [mm]	D1 [mm]	D2 [mm]	D3 [mm]	W [Kg]	Order No	Price
TJS GJET CAT40	212	141	17	81	63	-	2.0	MT0610782	Price
TJS GJET ER32	136	109	17	81	63	-	1.3	MT0610781	Price
TJS GJET BT30	190	139	17	81	63	-	1.6	MT0610780	Price
TJS GJET HSK A63	173	141	17	81	63	-	1.8	MT0610783	Price
TJS GJET ST20	158	115	17	81	63	20	1.2	MT0610776	Price
TJS GJET C6	157	119	17	81	63	-	1.6	MT0610777	Price
TJS GJET C5	159	129	17	81	63	-	1.5	MT0610778	Price
TJS GJET BT40	190	122	17	81	63	-	1.8	MT0610779	Price

AVAILABLE NOW

STREAM MORSE POWER HPC (High Pressure Coolant) Jet Spindle

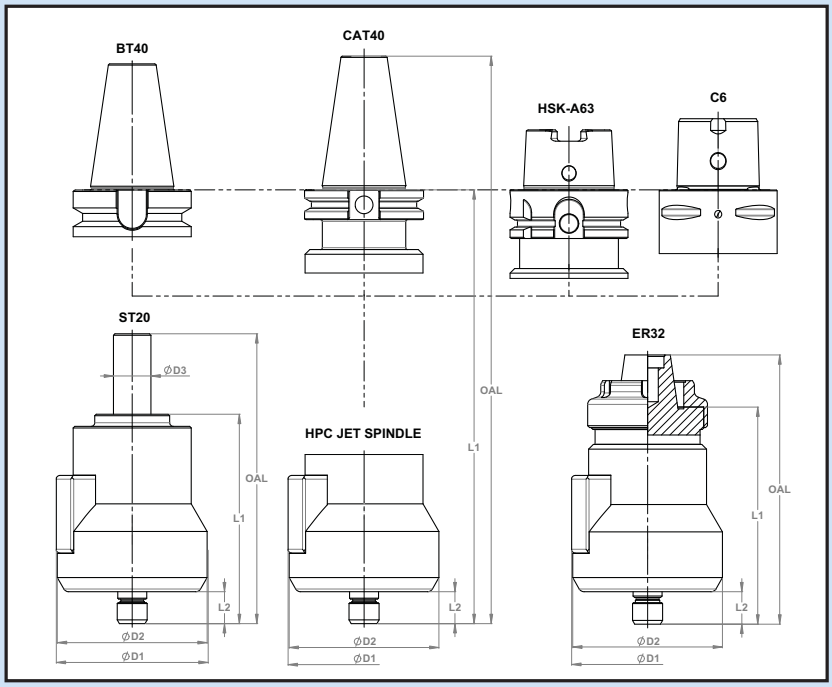
- Robust, compact high-speed spindle powered by coolant or cutting fluid
- For finishing/semi-finishing operations using small diameter cutting tools
- Plug & Play – no external feed or pre-installation, ATC / turret mountable
- Fitted with wireless speed monitor and display system

Operating Parameters	High Pressure Coolant Jet Spindle
Operating range of coolant pressure*	40bar (580psi) to 70bar (1020psi)
Operating range of coolant flow rate	Min 16 L/min / 4.23 Gal/min
Rotational spindle speed	25,000 – 45,000 RPM
Max output power	1.5 Kw
Optimum cutting tool sizes: Drilling	Ø 0.5 – 3.0 mm
Optimum cutting tool sizes: Milling	Ø 1.0 – 4.0 mm
Max shank size	7.0 mm
Compatible adaptor models	ER32, HSK-A63, BT40, ST20, C6, CAT40 Contact factory for other models

* Coolant pressure is measured from the spindle inlet



New!



Designation	OAL [mm]	L1 [mm]	L2 [mm]	D1 [mm]	D2 [mm]	D3 [mm]	W [Kg]	Order No	List Price
TJS HPC CAT40	206	118	17	81	80	-	2.3	MT0610774	Price
TJS HPC ER32	144	99	17	81	80	-	1.7	MT0610773	Price
TJS HPC HSK A63	170	121	17	81	80	-	2.0	MT0610772	Price
TJS HPC ST20	155	95	17	81	80	20	1.5	MT0610770	Price
TJS HPC C6	162	107	17	81	80	-	2.0	MT0610771	Price
TJS HPC BT40	183	98	17	81	80	-	1.9	MT0610775	Price

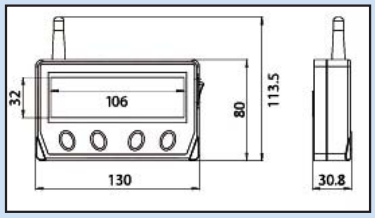
AVAILABLE NOW

STREAM MORSE POWER HSM JET Spindle – Display Monitor

New!

All HSM Jet Spindle models include a wireless RPM Display Monitor System. Registers real-time rotational speed of the spindle at idle and working mode.

- 2.4 GHz radio frequency transmission
- Speed monitoring range up to 10 meters
- Externally powered receiver display
- Reads multiple spindle units mounted on one machine





Designation	Order No	Price
DISPLAY UNIT	MT0610784	Price

STREAM MORSE POWER HSM Jet Spindle – Tools & Accessories

All HSM Jet Spindle models are supported by specially designed tools and accessories to ensure high accuracy at high speeds.

Standard clamping accessories may not always be sufficient for best performance at higher RPMs. It is recommended to use:
- ER11 AA High precision collets
- ER11 (Shrink) Ø3.0, 4.0mm

New!



Image	Description	Order No	Price
	ER 11 GHS Tightening Nut	ER704517225	Price
	ER 11 SMS Wrench	EH704517226	Price
	Thermal Shrink Collects:		
	ER11 SRK 3X10	EH4510301	Price
	ER11 SRK 4X10	EH4510303	Price
	ER11 SRK 3X25	EH4510302	Price
	ER11 SRK 4X25	EH4510304	Price

Image	Description	Order No	Price
	Shrink Collet Fixture Assembly	MT0610789	Price
	ER11 SPR 2-3-AA	TG624500177	Price
	ER11 SPR 3-4-AA	TG624500178	Price
	ER11 SPR 4-5-AA	TG624500179	Price
	ER11 SPR 5-6-AA	TG624500180	Price

MADE IN THE USA 200 Pc. Set Screw Assortment

Contains:

- (10) 5-40 x 3/16”
- (10) 8-32 x 3/16”
- (10) 10-24 x 1/4”
- (30) 1/4-20 x 1/4”
- (20) 1/4-20 x 3/8”
- (20) 1/4-28 x 1/4”
- (30) 5/16-18 x 3/8”
- (20) 5/16-18 x 1/2”
- (20) 5/16-24 x 3/8”
- (10) 3/8-16 x 3/8”
- (10) 3/8-16 x 1/2”
- (10) 3/8-24 x 3/8”



Order No.	Price
KL55AS99	Price

MADE IN THE USA 305 Pc. Socket Set Screw Assortment

Contains:

- (20) #8-32 x 1/4”
- (20) #8-32 x 3/8”
- (20) #10-24 x 1/2”
- (20) #10-32 x 3/16”
- (20) #10-32 x 1/2”
- (20) 1/4-20 x 1/4”
- (20) 1/4-20 x 3/8”
- (20) 1/4-20 x 5/8”
- (20) 1/4-20 x 3/4”
- (20) 1/4-28 x 1/4”
- (20) 1/4-28 x 1/2”
- (20) 5/16-18 x 1/2”
- (20) 5/16-24 x 3/8”
- (20) 5/16-24 x 1/2”
- (10) 3/8-16 x 3/8
- (10) 3/8-16 x 1/2”
- (5) 1/2-13 x 1/2”



Order No.	Price
KL55124	Price

PRECISION BRAND 200 Pc. Set Screw Assortment

Contains:

- (10) 6-32 x 3/16”
- (10) 8-32 x 3/16”
- (10) 10-24 x 1/4”
- (30) 1/4-20 x 1/4”
- (20) 1/4-28 x 1/4”
- (20) 1/4-20 x 3/8”
- (30) 5/16-18 x 3/8”
- (20) 5/16-24 x 3/8”
- (20) 5/16-18 x 1/2”
- (10) 3/8-16 x 3/8”
- (10) 3/8-14 x 3/8”
- (10) 3/8-16 x 1/2”
- Alloy steel set screws with hexagon recessed heads
- Ends have cup points for positive torque



Order No.	Price
KL5512950	Price

TITAN 160 Pc. Metric Allen Head Set Screw Assortment

Contains:

- (15) 3 x 5mm
- (15) 4 x 5mm
- (10) 5 x 6mm
- (20) 6 x 6mm
- (15) 6 x 6mm
- (10) 6 x 10mm
- (20) 8 x 10mm
- (15) 8 x 10mm
- (10) 8 x 12mm
- (10)10 x 10mm
- (10)10 x 10mm
- (10)10 x 12mm
- Convenient re-sealable plastic case



Order No.	Price
KL5545251	Price

PRECISION BRAND 375 Pc. Metric Set Screw Assortment

Contains:

- (25) M3 x 0.5 x 3mm
- (25) M3 x 0.5 x 6mm
- (25) M3 x 0.5 x 10mm
- (25) M4 x 0.7 x 4mm
- (25) M4 x 0.7 x 6mm
- (25) M4 x 0.7 x 10mm
- (25) M5 x 0.8 x 5mm
- (25) M5 x 0.8 x 8mm
- (25) M5 x 0.8 x 12mm
- (25) M6 x 1.0 x 6mm
- (25) M6 x 1.0 x 8mm
- (25) M6 x 1.0 x 10mm
- (25) M8 x 1.25 x 8mm
- (25) M8 x 1.25 x 12mm
- (25) M8 x 1.25 x 16mm
- Hexagon recessed heads with cup points



Order No.	Price
KL5512975	Price

TITAN 1000 Pc. Cotter Pin Assortment

Contains:

- (380) 1/16 x 1”
- (240) 3/32 x 1”
- (140) 3/32 x 1-1/2”
- (115) 1/8 x 1-1/4”
- (75) 1/8 x 2”
- (50) 5/32 x 2-1/2”
- Convenient re-sealable plastic case



Order No.	Price
KL5545204	Price

TITAN 144 Pc. Large Cotter Pin Assortment

Contains:

- (50) 1/8 x 2”
- (30) 5/32 x 2-1/2”
- (20) 3/16 x 3”
- (20) 1/4 x 2”
- (16) 1/4 x 3”
- (8) 5/16 x 2-1/2”
- Convenient re-sealable plastic case



Order No.	Price
KL5545206	Price

555 Pc. Cotter Pin Assortment

Contains:

- (150) 1/16 x 1”
- (150) 3/32 x 1”
- (100) 3/32 x 1-1/2”
- (75) 1/8 x 1-1/4”
- (50) 1/8 x 2”
- (30) 5/32 x 2-1/2”



Order No.	Price
KL55CP99	Price

MADE IN THE USA 525 Pc. Cotter Pin Assortment

Contains:

- (75) 1/16 x 1/2”
- (50) 1/16 x 1”
- (25) 1/16 x 1-1/2”
- (50) 3/32 x 1”
- (25) 3/32 x 1-1/2”
- (25) 3/32 x 2”
- (50) 1/8 x 1”
- (25) 1/8 x 1-1/2”
- (25) 1/8 x 2”
- (25) 1/8 x 2-1/2”
- (25) 5/32 x 1”
- (25) 5/32 x 1-1/2”
- (25) 5/32 x 2”
- (25) 5/32 x 2-1/2”
- (25) 3/16 x 1-1/2”
- (25) 3/16 x 2”



Order No.	Price
KL55507	Price

MADE IN THE USA 210 Pc. Dowel Pin Assortment

Contains:

- (15) 1/16 x 3/4”
- (15) 1/8 x 5/8”
- (15) 1/8 x 3/4”
- (15) 1/8 x 1”
- (15) 3/16 x 1/2”
- (15) 3/16 x 3/4”
- (15) 3/16 x 1”
- (15) 3/16 x 1-1/2”
- (15) 3/16 x 2”
- (15) 1/4 x 1/2”
- (15) 1/4 x 3/4”
- (15) 1/4 x 1”
- (15) 1/4 x 1-1/2”
- (15) 1/4 x 2”



Order No.	Price
KL55DP99	Price

MADE IN THE USA 185 Pc. Electrical Terminal Assortment

Contains:

- (20) 16/14 Gauge #10 Hook
- (20) 16/14 Gauge #10 Ring
- (20) 12/10 Gauge #10 Ring
- (15) 12/10 Gauge Butt Connector
- (20) 12/10 Gauge 1/4” Ring
- (20) 12/10 Gauge #10 Fork
- (20) 16/14 Gauge #10 Fork
- (15) 16/14 Gauge Butt Connector
- (20) 22/16 Gauge #10 Fork
- (15) 22/16 Gauge Butt Connector



Order No.	Price
KL55ET99	Price

TITAN 88 Pc. Master Auto Fuse Assortment

Mini Blade Fuses
Contains:

- (5) 3A (Violet)
- (5) 5A (Orange)
- (5) 7.5A (Brown)
- (5) 10A (Red)
- (5) 15A (Blue)
- (5) 20A (Yellow)
- (5) 25A (Clear)
- (5) 30A (Green)

Blade Fuses
Contains:

- (5) 3A (Violet)
- (5) 5A (Orange)
- (5) 7.5A (Brown)
- (5) 10A (Red)
- (5) 15A (Blue)
- (5) 20A (Yellow)
- (5) 25A (Clear)
- (5) 30A (Green)



Order No.	Price
KL5545230	Price

TITAN 158 Pc. Wire Nut Assortment

Contains:

- (40) Gray: #22 to #16 AWG Wire (300v)
- (40) Blue: #22 to #14 AWG Wire (300v)
- (50) Orange: #22 to #14 AWG Wire (600v)
- (18) Yellow: #18 to #12 AWG Wire (600v)
- (10) Red: #18 to #10 AWG Wire (600v)
- UL Listed and CSA certified
- Flame retardant polyproelene shell
- Reuseable
- Convenient re-sealable plastic case

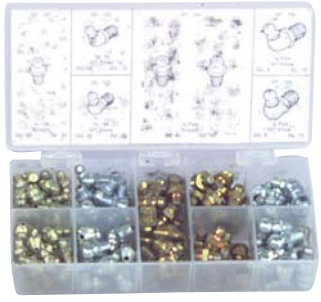


Order No.	Price
KL5545339	Price

MADE IN THE USA 385 Pc. Grease Fitting Assortment

Contains:

- (20) 1/8” Pipe 30º
- (10) 1/8” Pipe 45º
- (10) 1/8” Pipe 65º
- (10) 1/8” Pipe 90º
- (35) 1/8” Pipe Straight
- (10) 1/4” Pipe 65º
- (10) 1/4” Pipe Straight
- (20) 1/4-28” 45º
- (20) 1/4-28” 90º
- (60) 1/4-28” Straight
- (20) M6 x 1.0 45º
- (20) M6 x 1.0 90º
- (40) M6 x 1.0 Straight
- (20) M8 x 1.0 45º
- (20) M8 x 1.0 90º
- (20) M8 x 1.0 Straight
- (10) M10 x 1.0 45º
- (10) M10 x 1.0 90º
- (20) M10 x 1.0 Straight

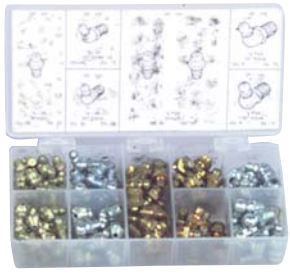


Order No.	Price
KL55GF100S	Price

MADE IN THE USA 135 Pc. Grease Fitting Assortment

Contains:

- (1) 1/4-28 Straight
- (1) 45° Elbow
- (1) 90° Elbow
- (1) 1/8” Pipe straight
- (1) 45° Elbow
- (1) 90° Elbow

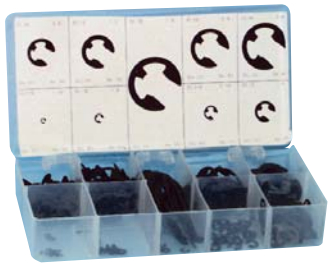


Order No.	Price
KL55GF99	Price

TITAN 300 Pc. E-Clip Assortment

Contains:

- (30) 1/16”
- (30) 1/8”
- (40) 3/16”
- (50) 1/4”
- (50) 3/8”
- (40) 1/2”
- (20) 5/8”
- (20) 3/4”
- (20) 7/8”



Order No.	Price
KL55EC99	Price

PRECISION BRAND 265 Pc. E-Clip Assortment

Contains:
- (30) 1/8”
- (20) 5/32”
- (30) 3/16”
- (20) 7/32”
- (30) 1/4”
- (30) 5/16”
- (30) 3/8”
- (25) 7/16”
- (20) 1/2”
- (15) 5/8”
- (10) 3/4”
- (5) 7/8”
- Made of plated spring carbon steel



Order No.	Price
KL5512910	Price

TITAN 110 Pc. Copper Washer Assortment

Contains:
- (30) 1/4”
- (25) 5/16”
- (20) 3/8”
- (15) 7/16”
- (10) 1/2”
- (10) 5/8”
- Convenient re-sealable plastic case



Order No.	Price
KL5545217	Price

TITAN 150 Pc. Hitch Pin Clip Assortment

Contains:
- (42) 3/32 x 1-3/16”
- (30) 5/64 x 1-5/16”
- (25) 5/64 x 1-9/16”
- (25) 7/64 x 1-5/8”
- (20) 9/64 x 1-3/4”
- (8) 5/32 x 2-15/16”



Order No.	Price
KL55HPC99	Price

PRECISION BRAND 150 Pc. Hitch Pin Clip Assortment

Contains:
- (60) 1/16” #18
- (30) 3/32” #3
- (20) 3/32” #7
- (20) 1/8” #16
- (15) 5/32” #10
- (5) 3/16” #6
- Reusable, quick release pins for fast assembly and disassembly
- Made of spring steel to maintain tension



Order No.	Price
KL5512915	Price

TITAN 225 Pc. O-Ring Assortment

Contains:
- (10) 3/32 x 15/64”
- (20) 1/8 x 1/4”
- (20) 5/32 x 9/32”
- (20) 3/16 x 5/16”
- (15) 7/32 x 11/32”
- (15) 1/4 x 3/8”
- (15) 5/16 x 7/16”
- (10) 3/8 x 1/2”
- (10) 3/8 x 9/16”
- (10) 7/16 x 5/8”
- (10) 1/2 x 11/16”
- (10) 9/16 x 3/4”
- (10) 5/8 x 3/4”
- (10) 5/8 x 13/16”
- (10) 11/16 x 7/8”
- (10) 3/4 x 15/16”
- (10) 3/4 x 1”
- (10) 13/16 x 1-1/16”



Order No.	Price
KL55OR99	Price

TITAN 407 Pc. O-Ring Assortment

Contains:
- (20) 1/8 x 1/4”
- (20) 3/16 x 5/16”
- (20) 1/4” x 3/8”
- (20) 5/16 x 7/16”
- (20) 3/8 x 1/2”
- (20) 1/2 x 5/8”
- (13) 3/8 x 9/16”
- (13) 7/16 x 5/8”
- (13) 1/2 x 11/16”
- (13) 9/16 x 3/4”
- (13) 5/8 x 13/16”
- (13) 11/16 x 7/8”
- (13) 3/4 x 15/16”
- (13) 13/16 x 1”
- (13) 7/8 x 11/16”
- (10) 3/4 x 1”
- (10) 13/16 x 1-1/6”
- (10) 7/8 x 1-1/8”
- (10) 15/16 x 1-3/16”
- (10) 1 x 1-1/4”
- (10) 1-1/16 x 1-5/16”
- (10) 1-1/8 x 1-3/8”
- (10) 1-3/16 x 1-7/16”
- (10) 1-1/4 x 1-1/2”
- (10) 1-5/16 x 1-9/16”
- (10) 1-3/8 x 1-5/8”
- (10) 1-7/16 x 1-11/16”
- (10) 1-1/2 x 1-3/4”
- (10) 1-5/8 x 1-7/8”
- (10) 1-3/4 x 2”
- (10) 1-7/8 x 2-1/8”
- (10) 2 x 2-1/4”



Order No.	Price
KL55OR99S	Price

TITAN 419 Pc. Metric O-Ring Assortment

- Constructed of Buna-N BG715(Nitrile 70 Shore) Rubber
- Meets ASTM D-2000 SAE 200 Standards

Contains:
- (20) 3.00 x 1.78
- (20) 4.40 x 2.62
- (18) 5.00 x 2.62
- (23) 7.00 x 1.78
- (23) 10.00 x 1.78
- (14) 10.00 x 2.62
- (13) 11.00 x 2.62
- (23) 13.00 x 1.78
- (14) 13.00 x 2.62
- (13) 14.00 x 2.62
- (14) 16.00 x 2.62
- (14) 18.00 x 2.62
- (10) 18.00 x 3.53
- (13) 19.00 x 2.62
- (10) 20.00 x 3.53
- (14) 21.00 x 2.62
- (13) 22.00 x 2.62
- (10) 22.00 x 3.53
- (10) 23.50 x 3.53
- (10) 25.00 x 3.53
- (10) 26.50 x 3.53
- (10) 28.00 x 3.53
- (10) 30.00 x 3.53
- (10) 31.00 x 3.53
- (10) 33.00 x 3.53
- (10) 34.50 x 3.53
- (10) 36.00 x 3.53
- (10) 38.00 x 3.53
- (10) 41.00 x 3.53
- (10) 44.00 x 3.53
- (10) 47.00 x 3.53
- (10) 50.00 x 3.53
- Convenient re-sealable plastic case

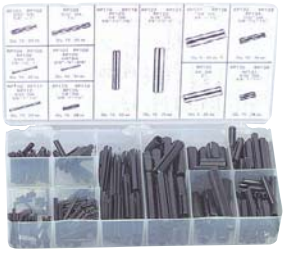


Order No.	Price
KL5545203	Price

MADE IN THE USA 315 Pc. Roll Pin Assortment

Contains:

- (10) 1/16 x 3/16”
- (10) 1/16 x 3/8”
- (10) 1/16 x 3/4”
- (10) 5/64 x 1/4”
- (10) 5/64 x 1/2”
- (10) 5/64 x 1”
- (10) 3/32 x 5/8”
- (10) 3/32 x 1”
- (10) 3/32 x 1-1/4”
- (15) 1/8 x 5/8”
- (15) 1/8 x 1”
- (15) 1/8 x 1-3/4
- (10) 5/32 x 5/8”
- (10) 5/32 x 1”
- (10) 5/32 x 1-1/2”
- (15) 3/16 x 5/8”
- (15) 3/16 x 1”
- (15) 3/16 x 1-1/4”
- (10) 7/32 x 5/8”
- (10) 7/32 x 1-1/4”
- (10) 7/32 x 1-3/4”
- (10) 1/4 x 5/8”
- (10) 1/4 x 1-1/4”
- (10) 1/4 x 2-1/4”
- (10) 5/16 x 1”
- (10) 5/16 x 1-1/2”
- (10) 5/16 x 2”
- (5) 3/8 x 1”
- (5) 3/8 x 1-1/2”
- (5) 3/8 x 2-1/2”



Order No.	Price
KL55RP99	Price

PRECISION BRAND 300 Pc. Roll Pin Assortment

Contains:

- (10) ea 1/16 x 1/4”, 1/16 x 3/8”, 1/16 x 1/2”, 1/16 x 3/4”
- (10) ea 5/64 x 1/4”, 5/64 x 3/8”, 5/64 x 1/2”, 5/64 x 3/4”
- (10) ea 3/32 x 5/8”, 3/32 x 1”, 3/32 x 1-1/4”, 3/32 x 1-1/2”
- (8) ea 1/8 x 5/8”, 1/8 x 1”, 1/8 x 1-1/4”, 1/8 x 1-1/2”
- (7) ea 5/32 x 1”, 5/32 x 1-1/4”, 5/32 x 1-1/2”, 5/32 x 1-3/4”
- (7) ea 3/16 x 1”, 3/16 x 1-1/4”, 3/16 x 1-1/2”, 3/16 x 1-3/4”
- (8) ea 7/32 x 1-1/4”, 7/32 x 1-1/2”, 7/32 x 1-3/4”, 7/32 x 2”
- (7) ea 1/4 x 1-1/4”, 1/4 x 1-1/2”, 1/4 x 1-3/4”, 1/4 x 2”
- (5) ea 5/16 x 1-1/4”, 5/16 x 1-3/4”, 5/16 x 2”, 5/16 x 2-1/2”
- (3) ea 3/8 x 1-1/2”, 3/8 x 1-3/4”, 3/8 x 2”, 3/8 x 2-1/2:
- Made of flexible spring steel, cold rolled, hardened and tempered with chamfered ends



Order No.	Price
KL5512925	Price

TITAN 120 Pc. Roll Pin Assortment

Contains:

- (5) ea 1/8 x 5/8”, 1/8 x 1”, 1/8 x 1-1/4”
- (5) ea 3/16 x 5/8”, 3/16 x 1”, 3/16 x 1-1/4”
- (4) ea 1/16 x 3/16”, 1/16 x 3/4”, 1/16 x 5/16”
- (4) ea 3/32 x 5/8”, 3/32 x 1”, 3/32 x 1-1/4”
- (4) ea 5/64 x 1/4”, 5/64 x 1/2”, 5/64 x 1”
- (4) ea 5/32 x 5/8”, 5/32 x 1”, 5/32 x 1-1/2”
- (4) ea 7/32 x 5/8”, 7/32 x 1-1/4”, 7/32 x 1-3/4”
- (4) ea 1/4 x 5/8”, 1/4 x 1-1/4”, 1/4 x 1-3/4”
- (4) ea 5/16 x 3/4”, 5/16 x 1-1/2”, 5/16 x 2”
- (2) ea 3/8 x 3/4”, 3/8 x 1-1/2”, 3/8 x 2”
- Convenient re-sealable plastic case



Order No.	Price
KL5545342	Price

300 Pc. Snap Ring Assortment

Internal Contains:

- (15) 5/16”
- (20) 3/8”
- (15) 7/16”
- (15) 15/32”
- (25) 3/4”
- (20) 7/8”

External Contains:

- (20) 1/8”
- (10) 5/32”
- (25) 1/4”
- (15) 5/16”
- (25) 1/2”
- (15) 9/16”
- (20) 5/8”
- (15) 13/16”
- (15) 1”
- (15) 1-1/16”
- (10) 1-1/8”
- (5) 1-1/4”



Order No.	Price
KL55SR99	Price

PRECISION BRAND 300 Pc. Snap Ring Assortment

Contains:

- (30) 1/4”
- (20) 5/16”
- (50) 3/8”
- (20) 7/16”
- (50) 1/2”
- (20) 9/16”
- (30) 5/8”
- (35) 3/4”
- (10) 13/16”
- (20) 7/8”
- (10) 1”
- (5) 1-1/4”
- External, spring steel used to retain pulleys, gears or wheels on shafts



Order No.	Price
KL5512900	Price

PRECISION BRAND 190 Pc. Socket Head Cap Screw Assortment

Contains:

- (10) 6-32 x 1/2”
- (10) 6-32 x 1”
- (10) 8-32 x 1/2”
- (10) 8-32 x 3/4”
- (10) 8-32 x 1”
- (10) 10-32 x 1/2”
- (10) 10-32 x 3/4”
- (10) 10-32 x 1”
- (10) 10-24 x 1/2”
- (10) 10-24 x 1”
- (10) 1/4-20 x 1/2”
- (10) 1/4-20 x 3/4”
- (10) 1/4-20 x 1”
- (10) 1/4-20 x 1-1/4”
- (10) 1/4-20 x 1-1/2”
- (10) 1/4-28 x 3/4”
- (10) 1/4-28 x 1”
- (10) 1/4-28 x 1-1/4”
- (10) 1/4-28 x 1-1/2”
- Hexagon recessed heads



Order No.	Price
KL5512970	Price

PRECISION BRAND 255 Pc. Metric Socket Head Cap Screw Assortment

Contains:

- (25) M4 x 0.7 x 10mm
- (25) M4 x 0.7 x 12mm
- (25) M4 x 0.7 x 20mm
- (25) M4 x 0.7 x 25mm
- (25) M5 x 0.8 x 12mm
- (25) M5 x 0.8 x 20mm
- (10) M5 x 0.8 x 25mm
- (10) M5 x 0.8 x 30mm
- (10) M6 x 1.0 x 12mm
- (10) M6 x 1.0 x 20mm
- (10) M6 x 1.0 x 25mm
- (10) M6 x 1.0 x 30mm
- (10) M6 x 1.0 x 40mm
- (10) M8 x 1.25 x 20mm
- (10) M8 x 1.25 x 25mm
- (10) M8 x 1.25 x 30mm
- (3) M8 x 1.25 x 40mm
- (2) M8 x 1.25 x 45mm
- Hexagon recessed heads

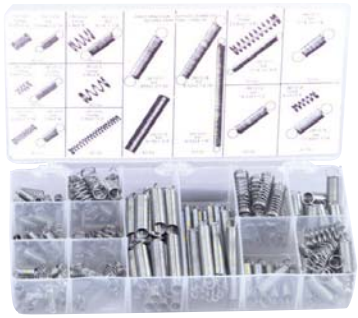


Order No.	Price
KL5512980	Price

200 Pc. Spring Assortment

Compression Contains:
- (10) 7/32 x 11/16”
- (10) 7/32 x 1-1/2”
- (10) 1/4 x 13/32”
- (10) 9/32 x 1/2”
- (10) 9/32 x 3/4”
- (8) 23/64 x 1-3/8”
- (12) 3/8 x 3/4”
- (6) 3/8 x 5/8”

Extension Contains:
- (12) 5/32 x 3-1/8”
- (8) 3/16 x 1-3/4”
- (10) 13/64 x 13/16”
- (10) 7/32 x 1”
- (10) 1/4 x 7/8”
- (12) 9/32 x 2”
- (10) 9/32 x 1-1/2”
- (10) 5/16 x 1-1/4”
- (8) 5/16 x 1-1/8”
- (12) 5/16 x 1-3/4”
- (12) 11/32 x 1-27/32”
- (10) 11/32 x 1-7/16”



Order No.	Price
KL55S99	Price

PRECISION BRAND 250 Pc. Woodruff Key Assortment

Contains:
- (10) 1/16 x 3/8”
- (10) 1/16 x 1/2”
- (20) 3/32 x 3/8”
- (20) 3/32 x 1/2”
- (10) 3/32 x 5/8”
- (10) 1/8 x 3/8”
- (20) 1/8 x 1/2”
- (30) 1/8 x 5/8”
- (20) 1/8 x 3/4”
- (40) 5/32 x 5/8”
- (10) 5/32 x 3/4”
- (5) 5/32 x 7/8”
- (5) 3/16 x 5/8”
- (20) 3/16 x 7/8”
- (5) 3/16 x 7/8”
- (5) 7/32 x 7/8”
- (5) 1/4 x 3/4”
- (5) 1/4 x 7/8”
- Zinc plated steel keys used for pulleys and drive shaft applications



Order No.	Price
KL5512940	Price

PRECISION BRAND 58 Pc. Machinery Key Assortment

Contains:
- (3) 1/8 x 1/8 x 3/4”
- (3) 1/8 x 1/8 x 1”
- (5) 3/16 x 3/16 x 3/4”
- (5) 3/16 x 3/16 x 1”
- (5) 3/16 x 3/16 x 1-1/4”
- (5) 1/4 x 1/4 x 3/4”
- (5) 1/4 x 1/4 x 1-1/4”
- (5) 1/4 x 1/4 x 1-1/2”
- (5) 5/16 x 5/16 x 1-1/4”
- (5) 5/16 x 5/16 x 1-1/2”
- (5) 3/8 x 3/8 x 1-1/4”
- (5) 3/8 x 3/8 x 1-1/2”
- (2) 1/2 x 1/2 x 1-1/2”
- Zinc plated steel, square keys with smooth corners



Order No.	Price
KL5512955	Price

TITAN 125 Pc. Rubber Grommet/ Plug Assortment

Contains:
- (15) 1/8 x 1/4”
- (10) 7/32 x 5/16”
- (7) 9/32 x 1/2”
- (3) 5/16 x 9/16”
- (6) 3/8 x 15/32”
- (5) 3/8 x 1/2”
- (3) 3/8 x13/16”
- (4) 7/16 x3/4”
- (3) 1/2 x 19/32”
- (3) 5/8 x 31/32”
- (2) 3/4 x 15/16”

Rubber Plugs Contains Sizes:
- (20) 9/32”
- (20) 3/8”
- (10) 1/2”
- (5) 5/8”
- (4)3/4”
- (3) 7/8”
- (2) 1”
- Convenient re-sealable plastic case



Order No.	Price
KL5545214	Price

TITAN 500 Pc. Aluminum Rivet Assortment

- (120) 1/8 x 1/4”
- (120) 1/8 x 5/16”
- (120) 1/8 x 3/8”
- (70) 3/16 x 5/16”
- (70) 3/16 x 3/8”
- Rustproof aluminum rivet body
- Steel mandrel
- Convenient re-sealable plastic case



Order No.	Price
KL5545228	Price

TITAN 151 Pc. Hook & Eye Screw Assortment

Eye Screws Contains:
- (60) 1-1/8”
- (12) 1-13/16”
- (12)1-15/16”

Hook Screws Contains:
- (50) 1-5/8”
- (12) 2-1/2”
- (5) 3-3/8”
- Convenient re-sealable plastic case



Order No.	Price
KL5545340	Price

TITAN 34 Pc. Hose Clamp Assortment

Contains:
- (8) 5/8” 16mm
- (8) 3/4” 19mm
- (6) 7/8” 22mm
- (4) 1” 25mm
- (4) 1-1/16” 27mm
- (4) 1-1/4” 32mm
- Convenient re-sealable plastic case



Order No.	Price
KL5545348	Price

MADE IN THE USA Empty Large Plastic Kit Box

Contains:
- 12 adjustable dividers



Order No.	Price
KL55550	Price

MADE IN THE USA 250 Pc. Woodruff Key Assortment

Contains:
- (5) Key No. 10, 11, 12, 61, 91, A
- (10) Key No. 211, 213, 1, 4, 8
- (15) Key No. 2, 3
- (20) Key No. 212, 7, 9
- (30) Key No. 5
- (50) Key 6
- Standard half-moon keys
- Carbon steel material



Order No.	Price
DH56WK99	Price

Emhart Teknologies POP Manual Rivet Tool

- An inexpensive hand tool
- Designed to set 1/8" diameter rivets and some larger sizes
- Ideal for the repairman's toolbox



Order No.	Price
KX58PS10	Price

Emhart Teknologies POP Professional Manual Rivet Tool Kit

- Lightweight
- Sets Aluminum rivets up to 3/16 and Steel up to 5/32 body diameter
- Supplied with nosepieces for 3/32, 1/8, 5/32 & 3/16" rivets
- Supplied with noespiece wrench
- Length: 9.65"
- Weight: 1.3 lbs

New!



Order No.	Price
KX58PS15KIT	Price

Emhart Teknologies POP Pneumatic Rivet Tool

- Designed for high production operations
- Ideal for a variety of applications
- Air required: 85 psi max.
- 6-9/16" L x 9-5/8" H
- 4-1/2" Base diameter
- Hose not included
- Weight: 4 lbs.



Order No.	Price
KX58PRG510A	Price

Terminals Vinyl

MADE IN THE USA

- Rigid polyvinyl chloride (PVC) insulation sleeve permanently attached to ring, spade and hook barrels
- Wire range from #22 to #10
- UL listed - 7B07, CSA approved – AP98720 to 90°C (194°F) maximum
- 600V Maximum building wire (1000V maximum in fixtures and signs)





Type - Butt Terminal				
			Hillsdale Terminal	
Wire Range (AWG)	Stud Size	Color	Order No.	Price
12-10	6	Red	**HT9020310**	Price
16-14	10	Red	**HT9020170**	Price
22-18	10	Red	**HT9020080**	Price

Thomas&Betts

Type - Fork Terminal						
			Hillsdale Terminal		Thomas & Betts	
Wire Range (AWG)	Stud Size	Color	Order No.	Price	Order No.	Price
12-10	6	Yellow	**HT9050270**	Price	**KL5470130**	Price
12-10	8	Yellow	**HT9050280**	Price	**KL5470135**	Price
16-14	6	Blue	**HT9050140**	Price	**KL5470120**	Price
16-14	8	Blue	**HT9050150**	Price	**KL5470125**	Price
22-16	6	Red	-	-	**KL5470105**	Price
22-16	8	Red	-	-	**KL5470110**	Price
22-16 Locking	8	Red	-	-	**KL5470140**	Price
22-16	10	Red	-	-	**KL5470115**	Price
22-18	6	Red	**HT9050050**	Price	-	-
22-18	8	Red	**HT9050060**	Price	-	-
22-18	10	Red	**HT9050070**	Price	-	-

Thomas&Betts

Type - Lock Fork						
			Hillsdale Terminal		Thomas & Betts	
Wire Range (AWG)	Stud Size	Color	Order No.	Price	Order No.	Price
12-10	8	Yellow	**HT9050281**	Price	**KL5470165**	Price
12-10	10	Yellow	**HT9050291**	Price	**KL5470170**	Price
16-14	6	Blue	**HT9050141**	Price	**KL5470150**	Price
16-14	8	Blue	**HT9050151**	Price	**KL5470155**	Price
16-14	10	Blue	**HT9050161**	Price	**KL5470160**	Price
22-16	10	Red	-	-	**KL5470145**	Price
22-18	10	Red	**HT9050071**	Price	-	-

Thomas&Betts

Type - Ring Terminal						
			Hillsdale Terminal		Thomas & Betts	
Wire Range (AWG)	Stud Size	Color	Order No.	Price	Order No.	Price
12-10	8	Yellow	**HT9050220**	Price	**KL5470085**	Price
12-10	10	Yellow	**HT9050230**	Price	**KL5470090**	Price
12-10	1/4	Yellow	**HT9050240**	Price	**KL5470095**	Price
16-14	6	Blue	-	-	**KL5470070**	Price
16-14	8	Blue	**HT9050090**	Price	**KL5470075**	Price
16-14	1/4	Blue	**HT9050101**	Price	**KL5470080**	Price
22-16	8	Red	-	-	**KL5470060**	Price
22-16	10	Red	-	-	**KL5470065**	Price
22-18	8	Red	**HT9050030**	Price	-	-
22-18	10	Red	**HT9050040**	Price	-	-
12-10	3/8	Yellow	**HT9050260**	Price	-	-
12-10	5/16	Yellow	**HT9050250**	Price	-	-

Quick Disconnects Vinyl

- Rigid polyvinyl chloride (PVC) insulation for wire range from #22 to #10
- Female is tin plated brass with rolled edge design for maximum spring
- Male is pure copper tab, with zinc chromate for greater corrosion resistance
- UL listed 0 7B07, CSA approved – AP98720 to 90°C (194°F) maximum
- 600V Maximum building wire (1000V max. in fixtures and signs)
- Thomas & Betts package quanity - 75
- Hillsdale Terminal package quantity - 100



MADE IN THE USA

Thomas&Betts

			Hillsdale Terminal		Thomas & Betts	
Wire Range (AWG)	Type	Color	Order No.	Price	Order No.	Price
12-10	Female Disconnect	Yellow	**HT9050187**	Price	**KL5470020**	Price
12-10	Male Disconnect	Yellow	-	-	**KL5470030**	Price
16-14	Female Disconnect	Blue	**HT9050180**	Price	**KL5470015**	Price
22-10	Female Disconnect	Red	-	-	**KL5470010**	Price
22-18	Female Disconnect	Red	**HT9050176**	Price	-	-
22-18	Male Disconnect	Red	**HT9050177**	Price	**KL5470025**	Price

Fully Insulated Disconnects Nylon

MADE IN THE USA

- Nylon insulated for wires from #22 to #14
- Funnel entry and deep wire grip serrations for superior strain relief
- Ul Listed - 7B07, CSA approved – AP98720 to 90°C (194°F) maximum
- 600V Maximum building wire (1000V maximum in fixtures and signs)
- Thomas & Betts package quantity - 75
- Hillsdale Terminal package quanity - 100



Thomas&Betts

			Hillsdale Terminal		Thomas & Betts	
Wire Range (AWG)	Type	Color	Order No.	Price	Order No.	Price
4-6	Female Disconnect	Blue	-	-	**KL5470055**	Price
16-14	Male Disconnect	Blue	-	-	**KL5470050**	Price
16-14	Female Disconnect	Blue	**HT9030183**	Price	**KL5470040**	Price
22-16	Male Disconnect	Red	-	-	**KL5470045**	Price
22-16	Female Disconnect	Red	-	-	**KL5470035**	Price
22-18	Female Disconnect	Red	**HT9030179**	Price	-	-

Wire Connectors

MADE IN THE USA

- Color coded for easy identification
- Five sizes for combinations from #10 through #22
- Rated at 300, 600 or 1000 Volts as noted
- Temperature rated at 105°C maximum



Brand Name - Hillsdale Terminal					
Wire Range (AWG)	UL Rating (Volts)	Color	Pkg. Qty.	Order No.	Price
22-10	600	Red	100	**HT9020506**	Price
22-10	600	Yellow	100	**HT9020504**	Price
22-14	300	Blue	100	**HT9020502**	Price
22-14	300	Gray	100	**HT9020501**	Price
22-14	600	Orange	100	**HT9020503**	Price

Brand Name - Thomas & Betts					
Wire Range (AWG)	UL Rating (Volts)	Color	Pkg. Qty.	Order No.	Price
22-10	600 (Building Wire) 1000 (Fixtures/Signs)	Red	100	**KL5460450**	Price
18-10	600 (Building Wire) 1000 (Fixtures/Signs)	Yellow	100	**KL5460440**	Price
18-14	600 (Building Wire) 1000 (Fixtures/Signs)	Orange	100	**KL5460430**	Price
22-14	300	Blue	100	**KL5460420**	Price
22-16	300	Grey	100	**KL5460410**	Price

Thomas&Betts Winged Wire Connectors

MADE IN THE USA

- Color coded for easy identification
- UL Listed - 6C66
- Streamlined wing uses less space in crowded electrical boxes
- Three sizes for combinations from #6 through #22
- Rated 600 or 1000 Volts as noted
- Temperature rated at 105° maximum



Wire Range (AWG)	UL Rating (Volts)	Color	Pkg. Qty.	Order No.	Price
14-6	600 (Building Wire) 1000 (Fixtures/Signs)	Blue	50	**KL5460480**	Price
18-10	600 (Building Wire) 1000 (Fixtures/Signs)	Yellow	100	**KL5460460**	Price

Cable Clamps

- Effective and durable fixed diameter wire management mounting product for routing and securing wires and cables in place
- Easy to install with a screw or rivet

New!



			Natural		UV Black	
Clamp Dia. (in.)	Width Dia. (in.)	Box Qty.	Order No.	Price	Order No.	Price
.125	.375	100	**KL65CC18N100**	Price	**KL65CC18UV100**	Price
.188	.375	100	**KL65CC316N100**	Price	**KL65CC316UV100**	Price
.25	.375	100	**KL65CC14N100**	Price	**KL65CC14UV100**	Price
.312	.375	100	**KL65CC516N100**	Price	**KL65CC516UV100**	Price
.375	.50	100	**KL65CC38N100**	Price	**KL65CC38UV100**	Price
.50	.50	100	**KL65CC12N100**	Price	**KL65CC12UV100**	Price
.625	.50	100	**KL65CC58N100**	Price	**KL65CC58UV100**	Price
.75	.50	100	**KL65CC34N100**	Price	**KL65CC34UV100**	Price
1	.50	100	**KL65CC1N100**	Price	**KL65CC1UV100**	Price

Adhesive Mounting Bases

- Effective, versatile and durable wire management mounting product for routing and securing wires and cables in place
- Easy to install and are available in a variety of configurations for adherence to the mounting surface

New!



				Natural		UV Black	
Length (in.)	Width Dia. (in.)	Mount	Box Qty.	Order No.	Price	Order No.	Price
0.75	.75	2 / #6	100	**KL6511N100**	Price	**KL6511UV100**	Price
1	1	1 / #10	100	**KL6512N100**	Price	**KL6512UV100**	Price

Mounting Hole Cable Ties

- Effective for use in a wide variety of cable and wire bundling applications that require that a wire or cable bundle be attached to another surface such as a control panel, wall or ceiling
- One piece construction with a mounting hole feature outside the head of the tie allows for consistent performance and reliability
- The design allows for use of a screw or rivet for clamping
- #10 Mount Head Screw

New!



				Natural		UV Black	
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Box Qty.	Order No.	Price	Order No.	Price
2	8.1	.18	100	**KL658M50N100**	Price	**KL658M50UV100**	Price
3	11.6	.18	100	**KL6511M50N100**	Price	**KL6511M50UV100**	Price
4	15.1	.18	100	**KL6514M50N100**	Price	**KL6514M50UV100**	Price
4	15.7	.30	100	**KL6514M120N100**	Price	**KL6514M120UV100**	Price

Miniature Cable Ties

- The ideal solution for small, light duty cable and wire bundling applictations up to 18 lbs
- One piece construction allows for consistent performace and reliability
- A very low insertion force is required

New!



				Natural		UV Black	
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Box Qty.	Order No.	Price	Order No.	Price
1	4	.10	100	**KL65418N100**	Price	**KL65418UV100**	Price
1.2	6.1	.10	100	**KL65618N100**	Price	**KL65618UV100**	Price
2.2	8	.10	100	**KL65818N100**	Price	**KL65818UV100**	Price

Fluorescent Cable Ties

New!

- Tensile Strength - Range from 18 lbs to 50 lbs
- Material - Nylon 66
- Temperature Rating - 40° F - 185° F
- Flammability Rating - UL 94-V2
- 100 Pc Package



Min. Loop Tensile (lbs.) - 18 lbs						
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Color	Box Qty.	Order No.	Price
0.8	3.9	.10	Flourescent Blue	100	**KL65418FBE100**	Price
0.8	3.9	.10	Flourescent Green	100	**KL65418FGN100**	Price
0.8	3.9	.10	Flourescent Pink	100	**KL65418FPK100**	Price
0.8	3.9	.10	Flourescent Yellow	100	**KL65418FYW100**	Price
0.8	3.9	.10	Flouresent Orange	100	**KL65418FOE100**	Price

Min. Loop Tensile (lbs.) - 40 lbs						
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Color	Box Qty.	Order No.	Price
1.5	5.5	.14	Flourescent Blue	100	**KL65540FBE100**	Price
1.5	5.5	.14	Flourescent Green	100	**KL65540FGN100**	Price
1.5	5.5	.14	Flourescent Pink	100	**KL65540FPK100**	Price
1.5	5.5	.14	Flourescent Yellow	100	**KL65540FYW100**	Price
1.5	5.5	.14	Flouresent Orange	100	**KL65540FOE100**	Price
2	8.6	.14	Flourescent Blue	100	**KL65840FBE100**	Price
2	8.6	.14	Flourescent Green	100	**KL65840FGN100**	Price
2	8.6	.14	Flourescent Pink	100	**KL65840FPK100**	Price
2	8.6	.14	Flourescent Yellow	100	**KL65840FYW100**	Price
2	8.6	.14	Flouresent Orange	100	**KL65840FOE100**	Price

Min. Loop Tensile (lbs.) - 50 lbs						
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Color	Box Qty.	Order No.	Price
1.8	7.3	.18	Flourescent Blue	100	**KL65750FBE100**	Price
1.8	7.3	.18	Flourescent Green	100	**KL65750FGN100**	Price
1.8	7.3	.18	Flourescent Pink	100	**KL65750FPK100**	Price
1.8	7.3	.18	Flourescent Yellow	100	**KL65750FYW100**	Price
1.8	7.3	.18	Flouresent Orange	100	**KL65750FOE100**	Price
3	10.8	.18	Flourescent Blue	100	**KL651150FBE100**	Price
3	10.8	.18	Flourescent Green	100	**KL651150FGN100**	Price
3	10.8	.18	Flourescent Pink	100	**KL651150FPK100**	Price
3	10.8	.18	Flourescent Yellow	100	**KL651150FYW100**	Price
3	10.8	.18	Flouresent Orange	100	**KL651150FOE100**	Price
4	14.3	.18	Flourescent Blue	100	**KL651450FBE100**	Price
4	14.3	.18	Flourescent Green	100	**KL651450FGN100**	Price
4	14.3	.18	Flourescent Pink	100	**KL651450FPK100**	Price
4	14.3	.18	Flourescent Yellow	100	**KL651450FYW100**	Price
4	14.3	.18	Flouresent Orange	100	**KL651450FOE100**	Price

Colored Cable Ties

- One piece construction allows for consistent performance and reliability
- Used in a wide variety of applications in industry, wire bundling, and cable management

New!



Min. Loop Tensile - 18 lbs						
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Box Qty.	Color	Order No.	Price
0.8	3.9	.10	100	Blue	**KL65418BE100**	Price
0.8	3.9	.10	100	Brown	**KL65418BR100**	Price
0.8	3.9	.10	100	Gray	**KL65418GY100**	Price
0.8	3.9	.10	100	Green	**KL65418GN100**	Price
0.8	3.9	.10	100	Orange	**KL65418OE100**	Price
0.8	3.9	.10	100	Purple	**KL65418PE100**	Price
0.8	3.9	.10	100	Red	**KL65418RD100**	Price
0.8	3.9	.10	100	Yellow	**KL65418YW100**	Price

Min. Loop Tensile - 40 lbs						
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Box Qty.	Color	Order No.	Price
1.5	5.5	.14	100	Blue	**KL65540BE100**	Price
1.5	5.5	.14	100	Brown	**KL65540BR100**	Price
1.5	5.5	.14	100	Gray	**KL65540GY100**	Price
1.5	5.5	.14	100	Green	**KL65540GN100**	Price
1.5	5.5	.14	100	Orange	**KL65540OE100**	Price
1.5	5.5	.14	100	Purple	**KL65540PE100**	Price
1.5	5.5	.14	100	Red	**KL65540RD100**	Price
1.5	5.5	.14	100	Yellow	**KL65540YW100**	Price
2	8.6	.14	100	Blue	**KL65840BE100**	Price
2	8.6	.14	100	Brown	**KL65840BR100**	Price
2	8.6	.14	100	Gray	**KL65840GY100**	Price
2	8.6	.14	100	Green	**KL65840GN100**	Price
2	8.6	.14	100	Orange	**KL65840OE100**	Price
2	8.6	.14	100	Purple	**KL65840PE100**	Price
2	8.6	.14	100	Red	**KL65840RD100**	Price
2	8.6	.14	100	Yellow	**KL65840YW100**	Price

Min. Loop Tensile - 50 lbs						
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Box Qty.	Color	Order No.	Price
1.8	7.3	.18	100	Blue	**KL65750BE100**	Price
1.8	7.3	.18	100	Brown	**KL65750BR100**	Price
1.8	7.3	.18	100	Gray	**KL65750GY100**	Price
1.8	7.3	.18	100	Green	**KL65750GN100**	Price
1.8	7.3	.18	100	Orange	**KL65750OE100**	Price
1.8	7.3	.18	100	Purple	**KL65750PE100**	Price
1.8	7.3	.18	100	Red	**KL65750RD100**	Price
1.8	7.3	.18	100	Yellow	**KL65750YW100**	Price
3	10.8	.18	100	Blue	**KL651150BE100**	Price
3	10.8	.18	100	Brown	**KL651150BR100**	Price
3	10.8	.18	100	Gray	**KL651150GY100**	Price
3	10.8	.18	100	Green	**KL651150GN100**	Price
3	10.8	.18	100	Orange	**KL651150OE100**	Price
3	10.8	.18	100	Purple	**KL651150PE100**	Price
3	10.8	.18	100	Red	**KL651150RD100**	Price
3	10.8	.18	100	Yellow	**KL651150YW100**	Price
4	14.3	.18	100	Blue	**KL651450BE100**	Price
4	14.3	.18	100	Brown	**KL651450BR100**	Price
4	14.3	.18	100	Gray	**KL651450GY100**	Price
4	14.3	.18	100	Green	**KL651450GN100**	Price
4	14.3	.18	100	Orange	**KL651450OE100**	Price
4	14.3	.18	100	Purple	**KL651450PE100**	Price
4	14.3	.18	100	Red	**KL651450RD100**	Price
4	14.3	.18	100	Yellow	**KL651450YW100**	Price

Intermediate Cable Ties

- Minimum Loop Tensile 40 lbs
- Used in a wide variety cable and wire bundling applications
- The one piece construction allows for consistent performance and reliability

New!



				Black		Natural		UV Black	
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Box Qty.	Order No.	Price	Order No.	Price	Order No.	Price
1.25	5.7	.14	100	-	-	KL65540N100	Price	KL65540UV100	Price
1.5	6	.14	100	KL65640UV100	Price	KL65640N100	Price	-	-
2	8.6	.14	100	-	-	KL65840N100	Price	KL65840UV100	Price
3.2	11.5	.14	100	-	-	KL651140N100	Price	KL651140UV100	Price
4.1	14.5	.14	100	-	-	KL651440N100	Price	KL651440UV100	Price

Heavy Duty Cable Ties

New!



- Maximum Loop Tensile 120 lbs
- Heavy duty cable ties are effective in applications requiring 120 lbs tensile strengths
- One piece construction allows for consistent performance and reliability

				Natural		UV Black	
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Box Qty.	Order No.	Price	Order No.	Price
2	9	.30	100	KL658120N100	Price	KL658120UV100	Price
3	12	.30	100	KL6511120N100	Price	KL6511120UV100	Price
4	15	.30	100	KL6514120N100	Price	KL6514120UV100	Price
5	17.7	.30	50	KL6518120N50	Price	KL6518120UV50	Price
6.3	21.7	.30	50	KL6521120N50	Price	KL6521120UV50	Price
8.2	28	.35	50	KL6528120N50	Price	KL6528120UV50	Price

Cold Weather Cable Ties



New!

- Designed to function in extreme environmental conditions
- Nylon 6/6 resin blend is designed to solve cold temperate (-20C) and low humidity application issues
- Extended UV protection and enhanced flexibility

Nodel No.	Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Min. Loop Tensile (lbs)	Box Qty.	Order No.	Price
11-50-CWB-100	3	11.1	.18	50 lbs	100	KL651150CWB100	Price
14-120-CWB-100	4	15	.298	120 lbs	100	KL6514120CWB100	Price
14-50-CWB-100	4	14.5	.18	50 lbs	100	KL651450CWB100	Price
24-175-CWB-50	8	24.5	.335	175 lbs	100	KL6524175CWB50	Price
8-50-CWB-100	2	7.6	.18	50 lbs	100	KL65850CWB100	Price

Metal Detectable Cable Ties



New!

- Specifically designed for use in the food, beverage, and pharmaceutical processing industries
- Manufactured with metal impregnated material that allows for identification by metal detectors, x-ray inspections, and magnets
- Teal color per common industry practices for easy visual detection

Model No.	Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Box Qty.	Color	Order No.	Price
4-18-DTN-100	.75	4.1	.096	100	Teal	KL65418DTN100	Price
7-50-DTN-100	1.9	7.6	.18	100	Teal	KL65750DTN100	Price
8-40-DTN-100	2	8.6	.142	100	Teal	KL65840DTN100	Price
11-50-DTN-100	3	11.1	.18	100	Teal	KL651150DTN100	Price
14-50-DTN-100	4	14.5	.18	100	Teal	KL651450DTN100	Price
14-120-DTN-100	4	15	.298	100	Teal	KL6514120DTN100	Price

Releaseable Cable Ties



New!

- One piece construction allows for consistent performance and reliability
- Offers a wide variety of application in the industry, wire bundling, and cable management
- Natural ties are preferred for indoor use application while UV Black is recommended for outdoor applications

Model No.	Length (in.)	Color	Box Qty.	Order No.	Price
6R-50-N-100	6	Natural	100	KL656R50N100	Price
6R-50-UV-100	6	Black	100	KL656R50UV100	Price
8R-50-N-100	7.6	Natural	100	KL658R50N100	Price
8R-50-UV-100	7.6	Black	100	KL658R50UV100	Price

Standard Cable Ties



New!

- Minimum Loop Tensile 50 lbs
- One piece construction allows for consistent performance and reliability
- Used in a wide variety of applications in industry, wire bundling, and cable management

				Natural		UV Black	
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Box Qty.	Order No.	Price	Order No.	Price
1.5	6.3	.19	100	KL65650N100	Price	KL65650UV100	Price
1.9	7.6	.19	100	KL65850N100	Price	KL65850UV100	Price
3	11.1	.19	100	KL651150N100	Price	KL651150UV100	Price
4	14.5	.19	100	KL651450N100	Price	KL651450UV100	Price
5	17	.19	100	KL651750N100	Price	KL651750UV100	Price
5.8	19.7	.19	100	KL651950N100	Price	KL651950UV100	Price
6.4	21.7	.19	100	KL652150N100	Price	KL652150UV100	Price
7.4	24	.19	100	KL652450N100	Price	KL652450UV100	Price
10.9	36	.19	50	KL653650N50	Price	KL653650UV50	Price

Extra Heavy Duty Cable Ties



New!

- Effective in applications requiring up to 175 lbs tensile strengths
- One piece construction allows for consistent performance and reliability
- For heavier duty cable and wire bundling applications

				Natural		UV Black	
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Box Qty.	Order No.	Price	Order No.	Price
5	17.8	.35	50	KL6518175N50	Price	KL6518175UV50	Price
6.3	21.7	.35	50	KL6521175N50	Price	KL6521175UV50	Price
7.2	24.5	.35	50	KL6524175N50	Price	KL6524175UV50	Price
11	36.7	.35	50	KL6536175N50	Price	KL6536175UV50	Price
15	48	.35	50	KL6548175N50	Price	KL6548175UV50	Price
18.2	59	.35	50	KL6560175N50	Price	KL6560175UV50	Price

Nylon Peel Cable Ties



New!

- Designed to be tamperproof and removeable without the need for a cutting device
- Used for returnable tote boxes
- Easy to apply
- Safe and quick removal - not tools needed
- Available in all colors

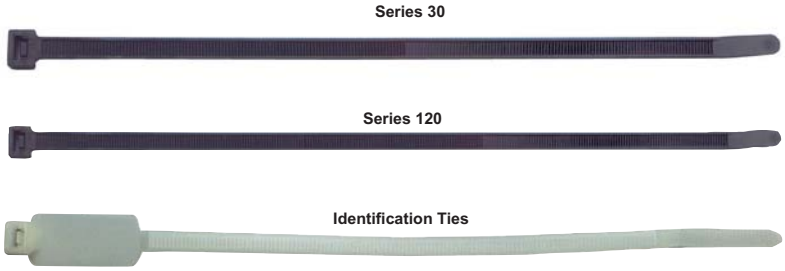
Model No.	Length (in.)	Color	Box Qty.	Order No.	Price
N6-BE-1000	6	Blue	1000	KL65N6BE1000	Price
N6-BK-1000	6	Black	1000	KL65N6BK1000	Price
N6-GN-1000	6	Green	1000	KL65N6GN1000	Price
N6-N-1000	6	Natural	1000	KL65N6N1000	Price
N6-OE-1000	6	Orange	1000	KL65N6OE1000	Price
N6-PE-1000	6	Purple	1000	KL65N6PE1000	Price
N6-RD-1000	6	Red	1000	KL65N6RD1000	Price
N6-YW-1000	6	Yellow	1000	KL65N6YW1000	Price

Cable Ties

Thomas&Betts

- Strict tolerances assure locking strength
- Reinforced head and strap transition for added strength
- Bent tip design for easier assembly
- Generous radii on all angles to reduce friction
- Highly engineered tooth and pawl design for max. engagement
- Many other sizes available upon request

MADE IN THE USA



Type - Cable Ties - Miniature Series 18										
					Black Nylon			Natural Nylon		
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Min. Loop Tensile (lbs.)	Pkg Qty.	Model No.	Order No.	Price	Model No.	Order No.	Price
1/16 - 5/8	4	.10	18	100	L-4-18-0-C	**KL5410000**	Price	L-4-18-9-C	**KL5410005**	Price
1/16 - 1-1/2	6.4	.10	18	100	L-6-18-0-C	**KL5410010**	Price	L-6-18-9-C	**KL5410015**	Price
1/16 - 1-1/2	8	.10	18	100	-	-	-	L-8-18-9-C	**KL5410025**	Price
1/16 - 2.0	8	.10	18	100	L-8-18-0-C	**KL5410020**	Price	-	-	-

Type - Cable Ties - Standard Series 50										
					Black Nylon			Natural Nylon		
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Min. Loop Tensile (lbs.)	Pkg Qty.	Model No.	Order No.	Price	Model No.	Order No.	Price
1/16 - 1-3/4	7.5	.187	50	100	L-7-50-0-C	**KL5430000**	Price	L-7-50-9-C	**KL5430005**	Price
1/16 - 3.0	11.1	.187	50	100	L-11-50-0-C	**KL5430010**	Price	L-11-50-9-C	**KL5430015**	Price
1/16 - 4.0	14.1	.187	50	100	L-14-50-0-C	**KL5430020**	Price	L-14-50-9-C	**KL5430025**	Price

Type - Cable Ties - Intermediate Series 30										
					Black Nylon			Natural Nylon		
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Min. Loop Tensile (lbs.)	Pkg Qty.	Model No.	Order No.	Price	Model No.	Order No.	Price
1/16 - 1-1/4	5.6	.13	30	100	L-5-30-0-C	**KL5420000**	Price	L-5-30-9-C	**KL5420005**	Price
1/16 - 2.0	8.5	.13	40	100	L-8-40-0-C	**KL5420010**	Price	L-8-40-9-C	**KL5420015**	Price
1/16 - 3.0	11.5	.13	40	100	L-11-40-0-C	**KL5420020**	Price	L-11-40-9-C	**KL5420025**	Price
1/16 - 4.0	14.5	.146	40	100	L-14-40-0-C	**KL5420030**	Price	-	-	-
1/16 - 4.1	14.5	.146	40	100	-	-	-	L-14-40-9-C	**KL5420035**	Price

Type - Cable Ties - Heavy Duty Series 120										
					Black Nylon			Natural Nylon		
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Min. Loop Tensile (lbs.)	Pkg Qty.	Model No.	Order No.	Price	Model No.	Order No.	Price
3/16 - 2.0	8	.30	120	100	L-8-120-0-C	**KL5440000**	Price	L-8-120-9-C	**KL5440005**	Price
3/16 - 4.0	14.2	.30	120	100	L-14-120-0-C	**KL5440010**	Price	L-14-120-9-C	**KL5440015**	Price
3/16 - 7.0	24.2	.30	120	50	L-24-120-0-L	**KL5440020**	Price	L-24-120-9-L	**KL5440025**	Price

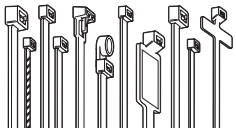
Type - Identification Ties							
					Natural Nylon		
Bundle Dia. (in.)	Length (in.)	Width Dia. (in.)	Min. Loop Tensile (lbs.)	Pkg Qty.	Model No.	Order No.	Price
1/16 - 1-3/4	7.875	.183	50	100	L-7-501D-9-C	**KL5450000**	Price

Cable Ties in a Jar

- Ties available in natural nylon or black weather-resistant nylon
- Reusable jar

MADE IN THE USA

Thomas&Betts





Bundle Dia.	Model No.	Color	Length (in.)	Width Dia. (in.)	Min. Loop Tensile (lbs.)	Pkg. Qty.	Order No.	Price
5/8, 1-1/4, 1-3/4	90457-I	Natural Nylon	4, 5.6, 7.5	.10, .13, .187	18, 30, 50	500	**KL5410100**	Price
5/8, 1-3/4, 3	90650-I	Natural Nylon	4, 7.5, 11	.10, .187, .187	18, 50, 50	650	**KL5410300**	Price
5/8, 1-3/4, 3	90650-IUV	Black Nylon	4, 7.5, 11	.10, .187, .187	18, 50, 50	650	**KL5410400**	Price

Cable Ties Cutter

Thomas&Betts

KL54L200

- Economy tool for use with 18 - 50 pound ties
- Automatic cut-off removes excess strap flush against cable tie head
- Equipped with adjustable tensioning

KL54L400

- Heavy duty tool for use with 18 - 50 pound ties
- Automatic cut-off and adjustable tensioning for dependable use in assembly applications





MADE IN THE USA

Type	Order No.	Price
Cable Tie Cutter - 18-50 lb Ties - Economy	**KL54L200**	Price
Cable Tie Cutter - 18-50 lb Ties	**KL54L400**	Price

Socket Head Cap Screws



UNRC Coarse Thread

Ideal for precision assembly work with close tolerances, and applications needing a well tooled appearance. Socket cap screws are internally wrenched, and are black finished in appearance. Heat treated alloy steel.

- Complete traceability
- Quality controlled products machined to ANSI/ASTM Standards
- Heat treated alloy, unified 3A thread fit

				Brighton Best		Holo-Krome	
Thread Size	Length Under Head (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
2-56	3/16	100	5/64	SH5000203	Price	-	-
2-56	1/4	100	5/64	SH5000204	Price	-	-
2-56	3/8	100	5/64	SH5000206	Price	-	-
2-56	1/2	100	5/64	SH5000208	Price	-	-
3-48	3/16	100	5/64	SH5000303	Price	-	-
3-48	1/4	100	5/64	SH5000304	Price	-	-
3-48	3/8	100	5/64	SH5000306	Price	-	-
3-48	1/2	100	5/64	SH5000308	Price	-	-
4-40	1/4	100	3/32	SH5000404	Price	-	-
4-40	3/8	100	3/32	SH5000406	Price	SH8000406	Price
4-40	1/2	100	3/32	SH5000408	Price	SH8000408	Price
4-40	5/8	100	3/32	SH5000410	Price	SH8000410	Price
4-40	3/4	100	3/32	SH5000412	Price	SH8000412	Price
5-40	1/4	100	3/32	SH5000504	Price	SH8000504	Price
5-40	3/8	100	3/32	SH5000506	Price	SH8000506	Price
5-40	1/2	100	3/32	SH5000508	Price	SH8000508	Price
5-40	5/8	100	3/32	SH5000510	Price	SH8000510	Price
5-40	3/4	100	3/32	SH5000512	Price	SH8000512	Price
6-32	1/4	100	7/64	SH5000604	Price	SH8000604	Price
6-32	3/8	100	7/64	SH5000606	Price	SH8000606	Price
8-32	3/8	100	9/64	SH5000806	Price	SH8000806	Price
6-32	1/2	100	7/64	SH5000608	Price	SH8000608	Price
6-32	5/8	100	7/64	SH5000610	Price	SH8000610	Price
6-32	3/4	100	7/64	SH5000612	Price	SH8000612	Price
6-32	7/8	100	7/64	SH5000614	Price	SH8000614	Price
6-32	1	100	7/64	SH5000616	Price	SH8000616	Price
8-32	1/4	100	9/64	SH5000804	Price	SH8000804	Price
8-32	1/2	100	9/64	SH5000808	Price	SH8000808	Price
8-32	5/8	100	9/64	SH5000810	Price	SH8000810	Price
8-32	3/4	100	9/64	SH5000812	Price	SH8000812	Price
8-32	7/8	100	9/64	SH5000814	Price	SH8000814	Price
8-32	1	100	9/64	SH5000816	Price	SH8000816	Price
8-32	1-1/4	100	9/64	SH5000820	Price	SH8000820	Price
8-32	1-1/2	100	9/64	SH5000824	Price	SH8000824	Price
10-24	3/8	100	5/32	SH5001006	Price	SH8001006	Price
10-24	1/2	100	5/32	SH5001008	Price	SH8001008	Price
10-24	5/8	100	5/32	SH5001010	Price	SH8001010	Price
10-24	3/4	100	5/32	SH5001012	Price	SH8001012	Price
10-24	7/8	100	5/32	SH5001014	Price	SH8001014	Price
10-24	1	100	5/32	SH5001016	Price	SH8001016	Price
10-24	1-1/4	100	5/32	SH5001020	Price	SH8001020	Price
10-24	1-1/2	100	5/32	SH5001024	Price	SH8001024	Price
10-24	1-3/4	100	5/32	SH5001028	Price	SH8001028	Price
10-24	2	100	5/32	SH5001032	Price	SH8001032	Price
1/4-20	3/8	100	3/16	SH5004006	Price	SH8004006	Price
1/4-20	1/2	100	3/16	SH5004008	Price	SH8004008	Price
1/4-20	5/8	100	3/16	SH5004010	Price	SH8004010	Price
1/4-20	3/4	100	3/16	SH5004012	Price	SH8004012	Price
1/4-20	7/8	100	3/16	SH5004014	Price	SH8004014	Price
1/4-20	1	100	3/16	SH5004016	Price	SH8004016	Price
1/4-20	1-1/4	100	3/16	SH5004020	Price	SH8004020	Price
1/4-20	1-1/2	100	3/16	SH5004024	Price	SH8004024	Price
1/4-20	1-3/4	100	3/16	SH5004028	Price	SH8004028	Price
1/4-20	2	100	3/16	SH5004032	Price	SH8004032	Price
1/4-20	2-1/4	100	3/16	SH5004036	Price	SH8004036	Price
1/4-20	2-1/2	100	3/16	SH5004040	Price	SH8004040	Price
1/4-20	2-3/4	100	3/16	SH5004044	Price	SH8004044	Price
1/4-20	3	100	3/16	SH5004048	Price	SH8004048	Price
5/16-18	3/8	100	1/4	SH5005006	Price	-	

Prices Per 100

				Brighton Best		Holo-Krome	
Thread Size	Length Under Head (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
5/16-18	1/2	100	1/4	SH5005008	Price	SH8005008	Price
5/16-18	5/8	100	1/4	SH5005010	Price	SH8005010	Price
5/16-18	3/4	100	1/4	SH5005012	Price	SH8005012	Price
5/16-18	7/8	100	1/4	SH5005014	Price	SH8005014	Price
5/16-18	1	100	1/4	SH5005016	Price	SH8005016	Price
5/16-18	1-1/4	100	1/4	SH5005020	Price	SH8005020	Price
5/16-18	1-1/2	100	1/4	SH5005024	Price	SH8005024	Price
5/16-18	1-3/4	100	1/4	SH5005028	Price	SH8005028	Price
5/16-18	2	100	1/4	SH5005032	Price	SH8005032	Price
5/16-18	2-1/4	100	1/4	SH5005036	Price	SH8005036	Price
5/16-18	2-1/2	100	1/4	SH5005040	Price	SH8005040	Price
5/16-18	2-3/4	100	1/4	SH5005044	Price	SH8005044	Price
5/16-18	3	100	1/4	SH5005048	Price	SH8005048	Price
5/16-18	3-1/4	100	1/4	SH5005052	Price	-	-
5/16-18	3-1/4	50	1/4	-	-	SH8005052	Price
5/16-18	3-1/2	100	1/4	SH5005056	Price	-	-
5/16-18	3-1/2	50	1/4	-	-	SH8005056	Price
3/8-16	1/2	100	5/16	SH5006008	Price	SH8006008	Price
3/8-16	5/8	100	5/16	SH5006010	Price	SH8006010	Price
3/8-16	3/4	100	5/16	SH5006012	Price	SH8006012	Price
3/8-16	7/8	100	5/16	SH5006014	Price	SH8006014	Price
3/8-16	1	100	5/16	SH5006016	Price	SH8006016	Price
3/8-16	1-1/4	100	5/16	SH5006020	Price	SH8006020	Price
3/8-16	1-1/2	100	5/16	SH5006024	Price	SH8006024	Price
3/8-16	1-3/4	100	5/16	SH5006028	Price	-	-
3/8-16	1-3/4	50	5/16	-	-	SH8006028	Price
3/8-16	2	100	5/16	SH5006032	Price	-	-
3/8-16	2	50	5/16	-	-	SH8006032	Price
3/8-16	2-1/4	100	5/16	SH5006036	Price	-	-
3/8-16	2-1/4	50	5/16	-	-	SH8006036	Price
3/8-16	2-1/2	50	5/16	SH5006040	Price	SH8006040	Price
3/8-16	2-3/4	50	5/16	SH5006044	Price	SH8006044	Price
3/8-16	3	50	5/16	SH5006048	Price	SH8006048	Price
3/8-16	3-1/4	50	5/16	SH5006052	Price	SH8006052	Price
3/8-16	3-1/2	50	5/16	SH5006056	Price	SH8006056	Price
3/8-16	4	50	5/16	SH5006064	Price	SH8006064	Price
3/8-16	4-1/2	50	5/16	SH5006072	Price	SH8006072	Price
3/8-16	5	50	5/16	SH5006080	Price	SH8006080	Price
7/16-14	1/2	100	3/8	SH5007008	Price	-	-
7/16-14	5/8	100	3/8	SH5007010	Price	-	-
7/16-14	3/4	100	3/8	SH5007012	Price	SH8007012	Price
7/16-14	7/8	100	3/8	SH5007014	Price	SH8007014	Price
7/16-14	1	100	3/8	SH5007016	Price	SH8007016	Price
7/16-14	1-1/4	100	3/8	SH5007020	Price	-	-
7/16-14	1-1/4	50	3/8	-	-	SH8007020	Price
7/16-14	1-1/2	100	3/8	SH5007024	Price	-	-
7/16-14	1-1/2	50	3/8	-	-	SH8007024	Price
7/16-14	1-3/4	100	3/8	SH5007028	Price	-	-
7/16-14	1-3/4	50	3/8	-	-	SH8007028	Price
7/16-14	2	50	3/8	SH5007032	Price	SH8007032	Price
7/16-14	2-1/4	50	3/8	SH5007036	Price	SH8007036	Price
7/16-14	2-1/2	50	3/8	SH5007040	Price	SH8007040	Price
7/16-14	2-3/4	25	3/8	-	-	SH8007044	Price
7/16-14	2-3/4	50	3/8	SH5007044	Price	-	-
7/16-14	3	25	3/8	-	-	SH8007048	Price
7/16-14	3	50	3/8	SH5007048	Price	-	-
7/16-14	3-1/2	25	3/8	-	-	SH8007056	Price
7/16-14	3-1/2	50	3/8	SH5007056	Price	-	-
7/16-14	4	25	3/8	-	-	SH8007064	Price
7/16-14	4	50	3/8	SH5007064	Price	-	-
1/2-13	1/2	50	3/8	SH5008008	Price	-	-
1/2-13	5-1/2	25	3/8	SH5008088	Price	SH8008088	Price
1/2-13	5/8	50	3/8	SH5008010	Price	-	-
1/2-13	3/4	50	3/8	SH5008012	Price	SH8008012	Price
1/2-13	7/8	50	3/8	SH5008014	Price	SH8008014	Price
1/2-13	1	50	3/8	SH5008016	Price	SH8008016	Price
1/2-13	1-1/4	50	3/8	SH5008020	Price	SH8008020	Price
1/2-13	1-1/2	50	3/8	SH5008024	Price	SH8008024	Price
1/2-13	1-3/4	50	3/8	SH5008028	Price	SH8008028	Price
1/2-13	2	50	3/8	SH5008032	Price	SH8008032	Price
1/2-13	2-1/4	25	3/8	-	-	SH8008036	Price
1/2-13	2-1/4	50	3/8	SH5008036	Price	-	-

Socket Head Cap Screws (Cont.)

UNRC Coarse Thread



Prices Per 100

				Brighton Best		Holo-Krome	
Thread Size	Length Under Head (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
1/2-13	2-1/2	25	3/8	-	-	SH8008040	Price
1/2-13	2-1/2	50	3/8	SH5008040	Price	-	-
1/2-13	2-3/4	25	3/8	-	-	SH8008044	Price
1/2-13	2-3/4	50	3/8	SH5008044	Price	-	-
1/2-13	3	25	3/8	-	-	SH8008048	Price
1/2-13	3	50	3/8	SH5008048	Price	-	-
1/2-13	3-1/4	25	3/8	SH5008052	Price	SH8008052	Price
1/2-13	3-1/2	25	3/8	SH5008056	Price	SH8008056	Price
1/2-13	4	25	3/8	SH5008064	Price	SH8008064	Price
1/2-13	4-1/2	25	3/8	SH5008072	Price	SH8008072	Price
1/2-13	5	25	3/8	SH5008080	Price	SH8008080	Price
1/2-13	6	25	3/8	SH5008096	Price	SH8008096	Price
1/2-13	6-1/2	10	3/8	SH5008097	Price	SH8008097	Price
1/2-13	7	10	3/8	SH5008098	Price	SH8008098	Price
1/2-13	8	10	3/8	SH5008099	Price	SH8008099	Price
5/8-11	1	25	1/2	-	-	SH8010016	Price
5/8-11	1	50	1/2	SH5010016	Price	-	-
5/8-11	1-1/4	25	1/2	-	-	SH8010020	Price
5/8-11	1-1/4	50	1/2	SH5010020	Price	-	-
5/8-11	1-1/2	25	1/2	-	-	SH8010024	Price
5/8-11	1-1/2	50	1/2	SH5010024	Price	-	-
5/8-11	1-3/4	25	1/2	-	-	SH8010028	Price
5/8-11	1-3/4	50	1/2	SH5010028	Price	-	-
5/8-11	2	25	1/2	-	-	SH8010032	Price
5/8-11	2	50	1/2	SH5010032	Price	-	-
5/8-11	2-1/4	25	1/2	SH5010036	Price	SH8010036	Price
5/8-11	2-1/2	25	1/2	SH5010040	Price	SH8010040	Price
5/8-11	2-3/4	25	1/2	SH5010044	Price	SH8010044	Price
5/8-11	3	25	1/2	SH5010048	Price	SH8010048	Price
5/8-11	3-1/4	25	1/2	SH5010052	Price	SH8010052	Price
5/8-11	3-1/2	25	1/2	SH5010056	Price	SH8010056	Price
5/8-11	4	25	1/2	SH5010064	Price	SH8010064	Price
5/8-11	4-1/2	20	1/2	-	-	SH8010072	Price
5/8-11	4-1/2	25	1/2	SH5010072	Price	-	-
5/8-11	5	25	1/2	SH5010080	Price	SH8010080	Price
5/8-11	5-1/2	10	1/2	SH5010088	Price	SH8010088	Price
5/8-11	6	10	1/2	SH5010096	Price	SH8010096	Price
5/8-11	6-1/2	10	1/2	SH5010097	Price	-	-
5/8-11	7	10	1/2	SH5010098	Price	-	-
5/8-11	8	10	1/2	SH5010099	Price	-	-
3/4-10	1-1/4	25	5/8	SH5012020	Price	SH8012020	Price
3/4-10	1-1/2	25	5/8	SH5012024	Price	SH8012024	Price
3/4-10	1-3/4	25	5/8	SH5012028	Price	SH8012028	Price
3/4-10	2	25	5/8	SH5012032	Price	SH8012032	Price
3/4-10	2-1/4	25	5/8	SH5012036	Price	SH8012036	Price
3/4-10	2-1/2	25	5/8	SH5012040	Price	SH8012040	Price
3/4-10	2-3/4	25	5/8	SH5012044	Price	SH8012044	Price
3/4-10	3	25	5/8	SH5012048	Price	SH8012048	Price
3/4-10	3-1/4	25	5/8	SH5012052	Price	SH8012052	Price
3/4-10	3-1/2	25	5/8	SH5012056	Price	SH8012056	Price
3/4-10	4	25	5/8	SH5012064	Price	SH8012064	Price
3/4-10	4-1/2	20	5/8	-	-	SH8012072	Price
3/4-10	4-1/2	25	5/8	SH5012072	Price	-	-
3/4-10	5	20	5/8	-	-	SH8012080	Price
3/4-10	5	25	5/8	SH5012080	Price	-	-
3/4-10	5-1/2	10	5/8	SH5012088	Price	SH8012088	Price
3/4-10	6	10	5/8	SH5012096	Price	SH8012096	Price
3/4-10	6-1/2	10	5/8	SH5012097	Price	-	-
3/4-10	7	10	5/8	SH5012098	Price	-	-
3/4-10	8	10	5/8	SH5012099	Price	-	-
7/8-9	2	10	3/4	SH5014032	Price	SH8014032	Price
7/8-9	2-1/4	10	3/4	SH5014036	Price	SH8014036	Price
7/8-9	2-1/2	10	3/4	SH5014040	Price	SH8014040	Price
7/8-9	2-3/4	10	3/4	SH5014044	Price	SH8014044	Price
7/8-9	3	10	3/4	SH5014048	Price	SH8014048	Price
7/8-9	3-1/4	10	3/4	SH5014052	Price	SH8014052	Price
7/8-9	3-1/2	10	3/4	SH5014056	Price	SH8014056	Price
7/8-9	4	10	3/4	SH5014064	Price	SH8014064	Price
7/8-9	4-1/2	10	3/4	SH5014072	Price	SH8014072	Price
7/8-9	5	10	3/4	SH5014080	Price	SH8014080	Price

				Brighton Best		Holo-Krome	
Thread Size	Length Under Head (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
7/8-9	5-1/2	10	3/4	SH5014088	Price	SH8014088	Price
7/8-9	6	10	3/4	SH5014096	Price	SH8014096	Price
7/8-9	6-1/2	10	3/4	SH5014097	Price	SH8014097	Price
7/8-9	7	10	3/4	SH5014098	Price	SH8014098	Price
7/8-9	8	10	3/4	SH5014099	Price	SH8014099	Price
1-8	2	10	3/4	SH5016032	Price	SH8016032	Price
1-8	2-1/4	10	3/4	SH5016036	Price	SH8016036	Price
1-8	2-1/2	10	3/4	SH5016040	Price	SH8016040	Price
1-8	2-3/4	10	3/4	SH5016044	Price	SH8016044	Price
1-8	3	10	3/4	SH5016048	Price	SH8016048	Price
1-8	3-1/4	10	3/4	SH5016052	Price	SH8016052	Price
1-8	3-1/2	10	3/4	SH5016056	Price	SH8016056	Price
1-8	4	10	3/4	SH5016064	Price	SH8016064	Price
1-8	4-1/2	10	3/4	SH5016072	Price	SH8016072	Price
1-8	5	10	3/4	SH5016080	Price	SH8016080	Price
1-8	5-1/2	10	3/4	SH5016088	Price	SH8016088	Price
1-8	6	10	3/4	SH5016096	Price	-	-
1-8	6-1/2	10	3/4	SH5016097	Price	-	-
1-8	7	10	3/4	SH5016098	Price	-	-
1-8	8	10	3/4	SH5016099	Price	-	-
1-1/4-7	2-1/2	5	7/8	SH5020040	Price	-	-
1-1/4-7	3	5	7/8	SH5020048	Price	-	-
1-1/4-7	3-1/2	5	7/8	SH5020056	Price	-	-
1-1/4-7	4	5	7/8	SH5020064	Price	-	-
1-1/4-7	4-1/2	1	7/8	SH5020072	Price	-	-
1-1/4-7	5	5	7/8	SH5020080	Price	-	-
1-1/4-7	5-1/2	1	7/8	SH5020088	Price	-	-
1-1/4-7	6-1/2	1	7/8	SH5020097	Price	-	-
1-1/4-7	7	1	7/8	SH5020098	Price	-	-
1-1/4-7	8	5	7/8	SH5020099	Price	-	-
1-1/2-6	3	5	1	SH5024048	Price	-	-
1-1/2-6	3-1/2	1	1	SH5024056	Price	-	-
1-1/2-6	4	1	1	SH5024064	Price	-	-
1-1/2-6	4-1/2	1	1	SH5024072	Price	-	-
1-1/2-6	5	5	1	SH5024080	Price	-	-

Special discounts on total orders of 5,000 or More!

Socket Head Cap Screws

UNRF Fine Thread

Prices Per 100



				Brighton Best		Holo-Krome	
Thread Size	Length Under Head (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
0-80	1/4	100	.050	SH5100004	Price	-	-
0-80	1/8	100	.050	SH5100002	Price	-	-
0-80	3/16	100	.050	SH5100003	Price	-	-
0-80	3/8	100	.050	SH5100006	Price	-	-
1/2-20	1	50	3/8	SH5108016	Price	SH8000301	Price
1/2-20	1-1/2	50	3/8	SH5108024	Price	SH8000305	Price
1/2-20	1-1/4	50	3/8	SH5108020	Price	SH8000303	Price
1/2-20	1-3/4	50	3/8	SH5108028	Price	SH8000307	Price
1/2-20	2	50	3/8	SH5108032	Price	SH8000309	Price
1/2-20	2-1/2	25	3/8	-	-	SH8000313	Price
1/2-20	2-1/2	50	3/8	SH5108040	Price	-	-
1/2-20	2-1/4	25	3/8	-	-	SH8000311	Price
1/2-20	2-1/4	50	3/8	SH5108036	Price	-	-
1/2-20	3	25	3/8	-	-	SH8000315	Price
1/2-20	3	50	3/8	SH5108048	Price	-	-
1/4-28	1/2	100	3/16	SH5104008	Price	SH8000177	Price
1/4-28	1	100	3/16	SH5104016	Price	SH8000185	Price
1/4-28	1-1/2	100	3/16	SH5104024	Price	SH8000189	Price
1/4-28	1-1/4	100	3/16	SH5104020	Price	SH8000187	Price
1/4-28	1-3/4	100	3/16	SH5104028	Price	SH8000191	Price
1/4-28	2	100	3/16	SH5104032	Price	SH8000193	Price
1/4-28	2-1/4	100	3/16	SH5104036	Price	SH8000195	Price
1/4-28	3/4	100	3/16	SH5104012	Price	SH8000181	Price
1/4-28	3/8	100	3/16	SH5104006	Price	SH8000175	Price
1/4-28	5/8	100	3/16	SH5104010	Price	SH8000179	Price

Socket Head Cap Screws (Cont.)



Prices Per 100

				Brighton Best		Holo-Krome	
Thread Size	Length Under Head (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
1/4-28	7/8	100	3/16	**SH5104014**	Price	**SH8000183**	Price
10-32	1/2	100	5/32	**SH5101008**	Price	**SH8000145**	Price
10-32	1/4	100	5/32	-	-	**SH8000141**	Price
10-32	1	100	5/32	**SH5101016**	Price	**SH8000153**	Price
10-32	1-1/2	100	5/32	**SH5101024**	Price	**SH8000157**	Price
10-32	1-1/4	100	5/32	**SH5101020**	Price	**SH8000155**	Price
10-32	1-3/4	100	5/32	**SH5101028**	Price	**SH8000159**	Price
10-32	2	100	5/32	**SH5101032**	Price	**SH8000161**	Price
10-32	3/4	100	5/32	**SH5101012**	Price	**SH8000149**	Price
10-32	3/8	100	5/32	**SH5101006**	Price	**SH8000143**	Price
10-32	5/8	100	5/32	**SH5101010**	Price	**SH8000147**	Price
10-32	7/8	100	5/32	**SH5101014**	Price	**SH8000151**	Price
1-72	1/4	100	1/16	**SH5100104**	Price	-	-
1-72	1/8	100	1/16	**SH5100102**	Price	-	-
1-72	3/16	100	1/16	**SH5100103**	Price	-	-
1-72	3/8	100	1/16	**SH5100106**	Price	-	-
3/8-24	1/2	100	5/16	**SH5106008**	Price	**SH8000251**	Price
3/8-24	1	100	5/16	**SH5106016**	Price	**SH8000259**	Price
3/8-24	1-1/2	100	5/16	**SH5106024**	Price	**SH8000263**	Price
3/8-24	1-1/4	100	5/16	**SH5106020**	Price	**SH8000261**	Price
3/8-24	1-3/4	100	5/16	**SH5106028**	Price	-	-
3/8-24	1-3/4	50	5/16	-	-	**SH8000265**	Price
3/8-24	2	100	5/16	**SH5106032**	Price	-	-
3/8-24	2	50	5/16	-	-	**SH8000267**	Price
3/8-24	2-1/2	50	5/16	**SH5106040**	Price	**SH8000271**	Price
3/8-24	2-1/4	100	5/16	**SH5106036**	Price	-	-
3/8-24	2-1/4	50	5/16	-	-	**SH8000269**	Price
3/8-24	3/4	100	5/16	**SH5106012**	Price	**SH8000255**	Price
3/8-24	3	50	5/16	**SH5106048**	Price	**SH8000273**	Price
3/8-24	5/8	100	5/16	**SH5106010**	Price	**SH8000253**	Price
3/8-24	7/8	100	5/16	**SH5106014**	Price	**SH8000257**	Price
5/16-24	1/2	100	1/4	**SH5105008**	Price	**SH8000211**	Price
5/16-24	1	100	1/4	**SH5105016**	Price	**SH8000219**	Price
5/16-24	1-1/2	100	1/4	**SH5105024**	Price	**SH8000223**	Price
5/16-24	1-1/4	100	1/4	**SH5105020**	Price	**SH8000221**	Price
5/16-24	1-3/4	100	1/4	**SH5105028**	Price	**SH8000225**	Price
5/16-24	2	100	1/4	**SH5105032**	Price	**SH8000227**	Price
5/16-24	2-1/2	100	1/4	**SH5105040**	Price	**SH8000231**	Price
5/16-24	2-1/4	100	1/4	**SH5105036**	Price	**SH8000229**	Price
5/16-24	3/4	100	1/4	**SH5105012**	Price	**SH8000215**	Price
5/16-24	5/8	100	1/4	**SH5105010**	Price	**SH8000213**	Price
5/16-24	7/8	100	1/4	**SH5105014**	Price	**SH8000217**	Price
5/8-18	1	25	1/2	-	-	**SH8000317**	Price
5/8-18	1	50	1/2	**SH5110016**	Price	-	-
5/8-18	1-1/2	25	1/2	-	-	**SH8000321**	Price
5/8-18	1-1/2	50	1/2	**SH5110024**	Price	-	-
5/8-18	1-1/4	25	1/2	-	-	**SH8000319**	Price
5/8-18	1-1/4	50	1/2	**SH5110020**	Price	-	-
5/8-18	1-3/4	25	1/2	-	-	**SH8000323**	Price
5/8-18	1-3/4	50	1/2	**SH5110028**	Price	-	-
5/8-18	2	25	1/2	-	-	**SH8000325**	Price
5/8-18	2	50	1/2	**SH5110032**	Price	-	-
5/8-18	2-1/2	25	1/2	**SH5110040**	Price	**SH8000327**	Price
6-40	1/2	100	7/64	**SH5100608**	Price	**SH8000104**	Price
6-40	1/4	100	7/64	**SH5100604**	Price	-	-
6-40	1	100	7/64	**SH5100616**	Price	-	-
6-40	3/4	100	7/64	**SH5100612**	Price	**SH8000108**	Price
6-40	3/8	100	7/64	**SH5100606**	Price	**SH8000102**	Price
6-40	5/8	100	7/64	**SH5100610**	Price	**SH8000106**	Price
7/16-20	1	100	3/8	**SH5107016**	Price	**SH8000285**	Price
7/16-20	1-1/2	100	3/8	**SH5107024**	Price	-	-
7/16-20	1-1/2	50	3/8	-	-	**SH8000289**	Price
7/16-20	1-1/4	100	3/8	**SH5107020**	Price	-	-
7/16-20	1-1/4	50	3/8	-	-	**SH8000287**	Price
7/16-20	2	50	3/8	**SH5107032**	Price	**SH8000291**	Price
8-36	1/2	100	9/64	**SH5100808**	Price	**SH8000125**	Price
8-36	3/4	100	9/64	**SH5100812**	Price	**SH8000127**	Price
8-36	3/8	100	9/64	**SH5100806**	Price	-	-

Standard Low Head Socket Cap Screws

- Low head socket cap screws are similar to socket cap screws except the head is 50% smaller than a regular socket cap screw
- Excellent in applications where there is limited clearance to accept a socket cap screw
- Pre-loads strengths are less than a standard socket cap screw

Prices Per 100



Thread Size	Length Under Head (in.)	Box Qty.	Hex Key	Order No.	Price Per 100
8-32	3/8	100	5/64	**SH8067000**	Price
8-32	1/2	100	5/64	**SH8067005**	Price
8-32	3/4	100	5/64	**SH8067015**	Price
10-24	3/8	100	3/32	**SH8067025**	Price
10-24	1/2	100	3/32	**SH8067030**	Price
10-24	3/4	100	3/32	**SH8067040**	Price
10-32	3/8	100	3/32	**SH8067050**	Price
10-32	1/2	100	3/32	**SH8067055**	Price
10-32	5/8	100	3/32	**SH8067060**	Price
10-32	3/4	100	3/32	**SH8067065**	Price
1/4-20	3/8	100	1/8	**SH8067080**	Price
1/4-20	1/2	100	1/8	**SH8067085**	Price
1/4-20	5/8	100	1/8	**SH8067090**	Price
1/4-20	3/4	100	1/8	**SH8067095**	Price
1/4-20	1	100	1/8	**SH8067100**	Price
5/16-18	1/2	100	5/32	**SH8067125**	Price
5/16-18	3/4	100	5/32	**SH8067130**	Price
5/16-18	1	100	5/32	**SH8067135**	Price
5/16-18	1-1/4	100	5/32	**SH8067140**	Price
5/16-18	1-1/2	100	5/32	**SH8067145**	Price
3/8-16	1/2	100	3/16	**SH8067175**	Price
3/8-16	3/4	100	3/16	**SH8067200**	Price
3/8-16	1	100	3/16	**SH8067225**	Price
3/8-16	1-1/4	100	3/16	**SH8067250**	Price
3/8-16	1-1/2	100	3/16	**SH8067275**	Price
1/2-13	1	50	1/4	**SH8067300**	Price
1/2-13	1-1/4	50	1/4	**SH8067305**	Price
1/2-13	1-1/2	50	1/4	**SH8067310**	Price

Metric Socket Cap Screws

- Ideal for precision assembly work with close tolerances, and applications needing a well tooled appearance
- Supplies greater tensile strength than equivalent sizes of grade 8.8 and 10.9 socket cap screws
- Metric socket cap screws are internally wrenched, and are black finished in appearance
- Grade 12.9 heat treated alloy steel

Prices Per 100



			Brighton Best			Holo-Krome		
Size	Length Under Head (mm)	Hex Key	Box Qty.	Order No.	Price	Box Qty.	Order No.	Price
M3 - .50	5	2.5 mm	-	-	-	100	**SH8055505**	Price
M3 - .50	6	2.5 mm	100	**SH6003006**	Price	100	**SH8055506**	Price
M3 - .50	8	2.5 mm	100	**SH6003008**	Price	100	**SH8055508**	Price
M3 - .50	10	2.5 mm	100	**SH6003010**	Price	100	**SH8055510**	Price
M3 - .50	12	2.5 mm	100	**SH6003012**	Price	100	**SH8055512**	Price
M3 - .50	16	2.5 mm	100	**SH6003016**	Price	100	**SH8055516**	Price
M3 - .50	20	2.5 mm	100	**SH6003020**	Price	100	**SH8055520**	Price
M3 - .50	25	2.5 mm	100	**SH6003025**	Price	100	**SH8055525**	Price
M3 - .50	30	2.5 mm	100	**SH6003030**	Price	100	**SH8055530**	Price
M3 - .50	35	2.5 mm	-	-	-	100	**SH8055535**	Price
M4 - .70	5	3 mm	-	-	-	100	**SH8055605**	Price
M4 - .70	6	3 mm	-	-	-	100	**SH8055606**	Price
M4 - .70	8	3 mm	100	**SH6004008**	Price	100	**SH8055608**	Price
M4 - .70	10	3 mm	100	**SH6004010**	Price	100	**SH8055610**	Price
M4 - .70	12	3 mm	100	**SH6004012**	Price	100	**SH8055612**	Price
M4 - .70	16	3 mm	100	**SH6004016**	Price	100	**SH8055616**	Price
M4 - .70	20	3 mm	100	**SH6004020**	Price	100	**SH8055620**	Price
M4 - .70	25	3 mm	100	**SH6004025**	Price	100	**SH8055625**	Price
M4 - .70	30	3 mm	100	**SH6004030**	Price	100	**SH8055630**	Price
M4 - .70	35	3 mm	100	**SH6004035**	Price	100	**SH8055635**	Price
M4 - .70	40	3 mm	100	**SH6004040**	Price	100	**SH8055640**	Price
M4 - .70	45	3 mm	100	**SH6004045**	Price	100	**SH8055645**	Price
M4 - .70	50	3 mm	100	**SH6004050**	Price	100	**SH8055650**	Price
M5 - .80	6	4 mm	-	-	-	100	**SH8055706**	Price
M5 - .80	8	4 mm	100	**SH6005008**	Price	100	**SH8055708**	Price

Metric Socket Cap Screws (Cont.)



Prices Per 100

SOLD IN BOX QUANTITY ONLY

			Brighton Best			Holo-Krome		
Size	Length Under Head (mm)	Hex Key	Box Qty.	Order No.	Price	Box Qty.	Order No.	Price
M5 - .80	10	4 mm	100	**SH6005010**	Price	100	**SH8055710**	Price
M5 - .80	12	4 mm	100	**SH6005012**	Price	100	**SH8055712**	Price
M5 - .80	16	4 mm	100	**SH6005016**	Price	100	**SH8055716**	Price
M5 - .80	20	4 mm	100	**SH6005020**	Price	100	**SH8055720**	Price
M5 - .80	25	4 mm	100	**SH6005025**	Price	100	**SH8055725**	Price
M5 - .80	30	4 mm	100	**SH6005030**	Price	100	**SH8055730**	Price
M5 - .80	35	4 mm	100	**SH6005035**	Price	100	**SH8055735**	Price
M5 - .80	40	4 mm	100	**SH6005040**	Price	100	**SH8055740**	Price
M5 - .80	45	4 mm	100	**SH6005045**	Price	100	**SH8055745**	Price
M5 - .80	50	4 mm	100	**SH6005050**	Price	100	**SH8055750**	Price
M5 - .80	55	4 mm	-	-	-	100	**SH8055755**	Price
M5 - .80	60	4 mm	-	-	-	100	**SH8055760**	Price
M5 - .80	65	4 mm	-	-	-	100	**SH8055765**	Price
M5 - .80	70	4 mm	-	-	-	100	**SH8055770**	Price
M6 - 1.00	8	5 mm	100	**SH6006008**	Price	100	**SH8055808**	Price
M6 - 1.00	10	5 mm	100	**SH6006010**	Price	100	**SH8055810**	Price
M6 - 1.00	12	5 mm	100	**SH6006012**	Price	100	**SH8055812**	Price
M6 - 1.00	16	5 mm	100	**SH6006016**	Price	100	**SH8055816**	Price
M6 - 1.00	20	5 mm	100	**SH6006020**	Price	100	**SH8055820**	Price
M6 - 1.00	25	5 mm	100	**SH6006025**	Price	100	**SH8055825**	Price
M6 - 1.00	30	5 mm	100	**SH6006030**	Price	100	**SH8055830**	Price
M6 - 1.00	35	5 mm	100	**SH6006035**	Price	100	**SH8055835**	Price
M6 - 1.00	40	5 mm	100	**SH6006040**	Price	100	**SH8055840**	Price
M6 - 1.00	45	5 mm	100	**SH6006045**	Price	100	**SH8055845**	Price
M6 - 1.00	50	5 mm	100	**SH6006050**	Price	100	**SH8055850**	Price
M6 - 1.00	55	5 mm	100	**SH6006055**	Price	100	**SH8055855**	Price
M6 - 1.00	60	5 mm	100	**SH6006060**	Price	100	**SH8055860**	Price
M6 - 1.00	65	5 mm	100	**SH6006065**	Price	100	**SH8055865**	Price
M6 - 1.00	70	5 mm	100	**SH6006070**	Price	100	**SH8055870**	Price
M6 - 1.00	75	5 mm	100	**SH6006075**	Price	100	**SH8055875**	Price
M6 - 1.00	80	5 mm	-	-	-	100	**SH8055880**	Price
M6 - 1.00	90	5 mm	-	-	-	100	**SH8055890**	Price
M6 - 1.00	100	5 mm	-	-	-	100	**SH8056100**	Price
M6 - 1.00	110	5 mm	-	-	-	100	**SH8056110**	Price
M8 - 1.25	10	6 mm	100	**SH6008010**	Price	100	**SH8056210**	Price
M8 - 1.25	12	6 mm	100	**SH6008012**	Price	100	**SH8056212**	Price
M8 - 1.25	16	6 mm	100	**SH6008016**	Price	100	**SH8056216**	Price
M8 - 1.25	20	6 mm	100	**SH6008020**	Price	100	**SH8056220**	Price
M8 - 1.25	25	6 mm	100	**SH6008025**	Price	100	**SH8056225**	Price
M8 - 1.25	30	6 mm	100	**SH6008030**	Price	100	**SH8056230**	Price
M8 - 1.25	35	6 mm	100	**SH6008035**	Price	100	**SH8056235**	Price
M8 - 1.25	40	6 mm	100	**SH6008040**	Price	100	**SH8056240**	Price
M8 - 1.25	45	6 mm	100	**SH6008045**	Price	100	**SH8056245**	Price
M8 - 1.25	50	6 mm	100	**SH6008050**	Price	100	**SH8056250**	Price
M8 - 1.25	55	6 mm	100	**SH6008055**	Price	100	**SH8056255**	Price
M8 - 1.25	60	6 mm	100	**SH6008060**	Price	100	**SH8056260**	Price
M8 - 1.25	65	6 mm	100	**SH6008065**	Price	100	**SH8056265**	Price
M8 - 1.25	70	6 mm	100	**SH6008070**	Price	100	**SH8056270**	Price
M8 - 1.25	80	6 mm	100	**SH6008080**	Price	100	**SH8056280**	Price
M8 - 1.25	90	6 mm	-	-	-	100	**SH8056290**	Price
M8 - 1.25	100	6 mm	-	-	-	100	**SH8057100**	Price
M8 - 1.25	110	6 mm	-	-	-	100	**SH8057110**	Price
M8 - 1.25	120	6 mm	-	-	-	100	**SH8057120**	Price
M8 - 1.25	130	6 mm	-	-	-	100	**SH8057130**	Price
M8 - 1.25	140	6 mm	-	-	-	100	**SH8057140**	Price
M8 - 1.25	150	6 mm	-	-	-	100	**SH8057150**	Price
M10 - 1.50	10	8 mm	-	-	-	100	**SH8057210**	Price
M10 - 1.50	12	8 mm	-	-	-	100	**SH8057212**	Price
M10 - 1.50	16	8 mm	100	**SH6010016**	Price	100	**SH8057216**	Price
M10 - 1.50	20	8 mm	100	**SH6010020**	Price	100	**SH8057220**	Price
M10 - 1.50	25	8 mm	100	**SH6010025**	Price	100	**SH8057225**	Price
M10 - 1.50	30	8 mm	100	**SH6010030**	Price	100	**SH8057230**	Price
M10 - 1.50	35	8 mm	100	**SH6010035**	Price	100	**SH8057235**	Price
M10 - 1.50	40	8 mm	100	**SH6010040**	Price	100	**SH8057240**	Price
M10 - 1.50	45	8 mm	50	**SH6010045**	Price	100	**SH8057245**	Price
M10 - 1.50	50	8 mm	50	**SH6010050**	Price	100	**SH8057250**	Price
M10 - 1.50	55	8 mm	50	**SH6010055**	Price	100	**SH8057255**	Price
M10 - 1.50	60	8 mm	50	**SH6010060**	Price	50	**SH8057260**	Price
M10 - 1.50	65	8 mm	50	**SH6010065**	Price	50	**SH8057265**	Price
M10 - 1.50	70	8 mm	50	**SH6010070**	Price	50	**SH8057270**	Price
M10 - 1.50	75	8 mm	-	-	-	50	**SH8057275**	Price
M10 - 1.50	80	8 mm	50	**SH6010080**	Price	50	**SH8057280**	Price
M10 - 1.50	90	8 mm	-	-	-	50	**SH8057290**	Price
M10 - 1.50	100	8 mm	50	**SH6010100**	Price	50	**SH8058100**	Price
M10 - 1.50	110	8 mm	-	-	-	50	**SH8058110**	Price
M10 - 1.50	120	8 mm	-	-	-	50	**SH8058113**	Price
M10 - 1.50	130	8 mm	-	-	-	50	**SH8058116**	Price
M10 - 1.50	150	8 mm	-	-	-	50	**SH8058122**	Price

			Brighton Best			Holo-Krome		
Size	Length Under Head (mm)	Hex Key	Box Qty.	Order No.	Price	Box Qty.	Order No.	Price
M12 - 1.75	16	10 mm	-	-	-	100	**SH8058134**	Price
M12 - 1.75	20	10 mm	50	**SH6012020**	Price	100	**SH8058137**	Price
M12 - 1.75	25	10 mm	50	**SH6012025**	Price	100	**SH8058140**	Price
M12 - 1.75	30	10 mm	50	**SH6012030**	Price	100	**SH8058143**	Price
M12 - 1.75	35	10 mm	50	**SH6012035**	Price	100	**SH8058146**	Price
M12 - 1.75	40	10 mm	50	**SH6012040**	Price	50	**SH8058149**	Price
M12 - 1.75	45	10 mm	50	**SH6012045**	Price	50	**SH8058152**	Price
M12 - 1.75	50	10 mm	50	**SH6012050**	Price	50	**SH8058155**	Price
M12 - 1.75	55	10 mm	50	**SH6012055**	Price	50	**SH8058158**	Price
M12 - 1.75	60	10 mm	50	**SH6012060**	Price	50	**SH8058161**	Price
M12 - 1.75	65	10 mm	50	**SH6012065**	Price	50	**SH8058164**	Price
M12 - 1.75	70	10 mm	25	**SH6012070**	Price	50	**SH8058167**	Price
M12 - 1.75	75	10 mm	25	**SH6012075**	Price	50	**SH8058170**	Price
M12 - 1.75	80	10 mm	25	**SH6012080**	Price	25	**SH8058173**	Price
M12 - 1.75	90	10 mm	25	**SH6012090**	Price	25	**SH8058176**	Price
M12 - 1.75	100	10 mm	25	**SH6012100**	Price	25	**SH8058179**	Price
M12 - 1.75	110	10 mm	25	**SH6012110**	Price	25	**SH8058182**	Price
M12 - 1.75	120	10 mm	25	**SH6012120**	Price	25	**SH8058185**	Price
M12 - 1.75	130	10 mm	-	-	-	25	**SH8058188**	Price
M12 - 1.75	140	10 mm	-	-	-	25	**SH8058191**	Price
M12 - 1.75	150	10 mm	-	-	-	10	**SH8058194**	Price
M12 - 1.75	160	10 mm	-	-	-	10	**SH8058197**	Price
M16 - 2.00	30	14 mm	25	**SH6016030**	Price	25	**SH8058230**	Price
M16 - 2.00	35	14 mm	25	**SH6016035**	Price	25	**SH8058235**	Price
M16 - 2.00	40	14 mm	25	**SH6016040**	Price	25	**SH8058240**	Price
M16 - 2.00	45	14 mm	25	**SH6016045**	Price	25	**SH8058245**	Price
M16 - 2.00	50	14 mm	25	**SH6016050**	Price	25	**SH8058250**	Price
M16 - 2.00	55	14 mm	25	**SH6016055**	Price	25	**SH8058255**	Price
M16 - 2.00	60	14 mm	25	**SH6016060**	Price	25	**SH8058260**	Price
M16 - 2.00	65	14 mm	25	**SH6016065**	Price	25	**SH8058265**	Price
M16 - 2.00	70	14 mm	25	**SH6016070**	Price	25	**SH8058270**	Price
M16 - 2.00	75	14 mm	25	**SH6016075**	Price	25	**SH8058275**	Price
M16 - 2.00	80	14 mm	25	**SH6016080**	Price	25	**SH8058280**	Price
M16 - 2.00	90	14 mm	25	**SH6016090**	Price	25	**SH8058290**	Price
M16 - 2.00	100	14 mm	25	**SH6016100**	Price	10	**SH8059100**	Price
M16 - 2.00	110	14 mm	25	**SH6016110**	Price	10	**SH8059110**	Price
M16 - 2.00	120	14 mm	25	**SH6016120**	Price	10	**SH8059120**	Price
M16 - 2.00	130	14 mm	-	-	-	10	**SH8059130**	Price
M16 - 2.00	140	14 mm	-	-	-	10	**SH8059140**	Price
M16 - 2.00	150	14 mm	-	-	-	10	**SH8059150**	Price
M16 - 2.00	160	14 mm	-	-	-	10	**SH8059160**	Price
M16 - 2.00	180	14 mm	-	-	-	10	**SH8059180**	Price
M20 - 2.50	30	17 mm	-	-	-	50	**SH8059230**	Price
M20 - 2.50	35	17 mm	-	-	-	10	**SH8059235**	Price
M20 - 2.50	40	17 mm	25	**SH6020040**	Price	10	**SH8059240**	Price
M20 - 2.50	45	17 mm	25	**SH6020045**	Price	10	**SH8059245**	Price
M20 - 2.50	50	17 mm	25	**SH6020050**	Price	10	**SH8059250**	Price
M20 - 2.50	55	17 mm	25	**SH6020055**	Price	10	**SH8059255**	Price
M20 - 2.50	60	17 mm	25	**SH6020060**	Price	10	**SH8059260**	Price
M20 - 2.50	65	17 mm	25	**SH6020065**	Price	10	**SH8059265**	Price
M20 - 2.50	70	17 mm	25	**SH6020070**	Price	10	**SH8059270**	Price
M20 - 2.50	75	17 mm	25	**SH6020075**	Price	10	**SH8059275**	Price
M20 - 2.50	80	17 mm	25	**SH6020080**	Price	10	**SH8059280**	Price
M20 - 2.50	90	17 mm	25	**SH6020090**	Price	10	**SH8059290**	Price
M20 - 2.50	100	17 mm	25	**SH6020100**	Price	10	**SH8060100**	Price
M20 - 2.50	110	17 mm	25	**SH6020110**	Price	10	**SH8060110**	Price
M20 - 2.50	120	17 mm	10	**SH6020120**	Price	10	**SH8060120**	Price
M20 - 2.50	130	17 mm	10	**SH6020130**	Price	10	**SH8060130**	Price
M20 - 2.50	140	17 mm	-	-	-	10	**SH8060140**	Price
M20 - 2.50	150	17 mm	10	**SH6020150**	Price	10	**SH8060150**	Price
M20 - 2.50	160	17 mm	-	-	-	10	**SH8060160**	Price
M20 - 2.50	180	17 mm	-	-	-	10	**SH8060180**	Price
M20 - 2.50	200	17 mm	-	-	-	10	**SH8060200**	Price
M24 - 3.00	40	19 mm	-	-	-	25	**SH8060240**	Price
M24 - 3.00	50	19 mm	10	**SH6024050**	Price	10	**SH8060250**	Price
M24 - 3.00	55	19 mm	-	-	-	10	**SH8060255**	Price
M24 - 3.00	60	19 mm	10	**SH6024060**	Price	10	**SH8060260**	Price
M24 - 3.00	65	19 mm	10	**SH6024065**	Price	10	**SH8060265**	Price
M24 - 3.00	70	19 mm	10	**SH6024070**	Price	10	**SH8060270**	Price
M24 - 3.00	80	19 mm	10	**SH6024080**	Price	10	**SH8060280**	Price
M24 - 3.00	90	19 mm	10	**SH6024090**	Price	10	**SH8060285**	Price
M24 - 3.00	100	19 mm	10	**SH6024100**	Price	10	**SH8061100**	Price
M24 - 3.00	110	19 mm	-	-	-	10	**SH8061110**	Price
M24 - 3.00	120	19 mm	10	**SH6024120**	Price	10	**SH8061120**	Price
M24 - 3.00	130	19 mm	-	-	-	10	**SH8061130**	Price
M24 - 3.00	140	19 mm	-	-	-	10	**SH8061140**	Price
M24 - 3.00	150	19 mm	10	**SH6024150**	Price	5	**SH8061150**	Price
M24 - 3.00	160	19 mm	-	-	-	5	**SH8061160**	Price
M24 - 3.00	180	19 mm	-	-	-	5	**SH8061180**	Price
M24 - 3.00	200	19 mm	-	-	-	5	**SH8061200**	Price

Button Head Socket Cap Screws

Coarse Thread





Prices Per 100

- The button socket cap screw is close in design to a socket cap screw
- The dome shaped head is wider, and has a lower style head than a socket cap screw
- Button socket cap screws are not recommended for critical, high strength applications
- Heat treated alloy steel class 3A thread fit standard

			Brighton Best			Holo-Krome		
Size	Length Under Head (in.)	Hex Key	Box Qty.	Order No.	Price	Box Qty.	Order No.	Price
4-40	1/4	1/16	100	**SK5100404C**	Price	100	**SH8061304**	Price
4-40	3/8	1/16	100	**SK5100406C**	Price	100	**SH8061306**	Price
4-40	1/2	1/16	100	**SK5100408C**	Price	100	**SH8061308**	Price
6-32	1/4	5/64	100	**SK5100604C**	Price	100	**SH8061404**	Price
6-32	3/8	5/64	100	**SK5100606C**	Price	100	**SH8061406**	Price
6-32	1/2	5/64	100	**SK5100608C**	Price	100	**SH8061408**	Price
6-32	5/8	5/64	100	**SK5100610C**	Price	100	**SH8061410**	Price
8-32	1/4	3/32	100	**SK5100804C**	Price	100	**SH8061504**	Price
8-32	3/8	3/32	100	**SK5100806C**	Price	100	**SH8061506**	Price
8-32	1/2	3/32	100	**SK5100808C**	Price	100	**SH8061508**	Price
8-32	5/8	3/32	100	**SK5100810C**	Price	100	**SH8061510**	Price
8-32	3/4	3/32	100	**SK5100812C**	Price	100	**SH8061512**	Price
10-24	1/4	1/8	100	**SK5101004C**	Price	100	**SH8061604**	Price
10-24	3/8	1/8	100	**SK5101006C**	Price	100	**SH8061606**	Price
10-24	1/2	1/8	100	**SK5101008C**	Price	100	**SH8061608**	Price
10-24	5/8	1/8	100	**SK5101010C**	Price	100	**SH8061610**	Price
10-24	3/4	1/8	100	**SK5101012C**	Price	100	**SH8061612**	Price
10-24	7/8	1/8	100	**SK5101014C**	Price	100	**SH8061614**	Price
10-24	1	1/8	100	**SK5101016C**	Price	100	**SH8061616**	Price
1/4-20	3/8	5/32	100	**SK5104006C**	Price	100	**SH8061706**	Price
1/4-20	1/2	5/32	100	**SK5104008C**	Price	100	**SH8061708**	Price
1/4-20	5/8	5/32	100	**SK5104010C**	Price	100	**SH8061710**	Price

			Brighton Best			Holo-Krome		
Size	Length Under Head (in.)	Hex Key	Box Qty.	Order No.	Price	Box Qty.	Order No.	Price
1/4-20	3/4	5/32	100	**SK5104012C**	Price	100	**SH8061712**	Price
1/4-20	7/8	5/32	100	**SK5104014C**	Price	50	**SH8061714**	Price
1/4-20	1	5/32	100	**SK5104016C**	Price	50	**SH8061716**	Price
5/16-18	1/2	3/16	100	**SK5105008C**	Price	100	**SH8061808**	Price
5/16-18	5/8	3/16	100	**SK5105010C**	Price	100	**SH8061810**	Price
5/16-18	3/4	3/16	100	**SK5105012C**	Price	100	**SH8061812**	Price
5/16-18	7/8	3/16	100	**SK5105014C**	Price	50	**SH8061914**	Price
5/16-18	1	3/16	100	**SK5105016C**	Price	50	**SH8061916**	Price
3/8-16	1/2	7/32	100	**SK5106008C**	Price	50	**SH8064064**	Price
3/8-16	5/8	7/32	100	**SK5106010C**	Price	50	**SH8064066**	Price
3/8-16	3/4	7/32	100	**SK5106012C**	Price	50	**SH8064068**	Price
3/8-16	7/8	7/32	100	**SK5106014C**	Price	50	**SH8064070**	Price
3/8-16	1	7/32	100	**SK5106016C**	Price	50	**SH8064072**	Price
3/8-16	1-1/4	7/32	100	**SK5106020C**	Price	50	**SH8064074**	Price
1/2-13	1	5/16	100	**SK5108016C**	Price	50	**SH8062016**	Price
1/2-13	1-1/4	5/16	100	**SK5108020C**	Price	50	**SH8062020**	Price
1/2-13	1-1/2	5/16	100	**SK5108024C**	Price	50	**SH8062024**	Price
1/2-13	2	5/16	50	**SK5108032C**	Price	25	**SH8062032**	Price
5/8-11	1	3/8	50	**SK5110016C**	Price	-	**-**	-
5/8-11	1-1/4	3/8	50	**SK5110020C**	Price	25	**SH8062120**	Price
5/8-11	1-1/2	3/8	50	**SK5110024C**	Price	25	**SH8062128**	Price
5/8-11	2	3/8	50	**SK5110032C**	Price	25	**SH8062132**	Price

Button Head Socket Cap Screws

Fine Thread





Prices Per 100

- Heat treated alloy steel class 3A thread fit standard
- Bulk pricing available on request
- Many other non standards not listed, in stock
- Please call for pricing

				Brighton Best		Holo-Krome	
Size	Length Under Head (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
8-36	1/4	100	3/32	**SK5100804F**	Price	**-**	-
8-36	3/8	100	3/32	**SK5100806F**	Price	**-**	-
8-36	5/8	100	3/32	**SK5100810F**	Price	**-**	-
8-36	3/4	100	3/32	**SK5100812F**	Price	**-**	-
10-32	1/4	100	1/8	**SK5101004F**	Price	**SH8063604**	Price
10-32	3/8	100	1/8	**SK5101006F**	Price	**SH8063606**	Price
10-32	1/2	100	1/8	**SK5101008F**	Price	**SH8063608**	Price
10-32	5/8	100	1/8	**SK5101010F**	Price	**SH8063610**	Price
10-32	3/4	100	1/8	**SK5101012F**	Price	**SH8063612**	Price
10-32	7/8	100	1/8	**SK5101014F**	Price	**-**	-
10-32	7/8	50	1/8	**-**	-	**SH8063614**	Price
10-32	1	100	1/8	**SK5101016F**	Price	**-**	-
10-32	1	50	1/8	**-**	-	**SH8063616**	Price
1/4-28	3/8	100	5/32	**SK5104006F**	Price	**SH8063706**	Price
1/4-28	1/2	100	5/32	**SK5104008F**	Price	**SH8063708**	Price
1/4-28	5/8	100	5/32	**SK5104010F**	Price	**SH8063710**	Price
1/4-28	3/4	100	5/32	**SK5104012F**	Price	**SH8063712**	Price

				Brighton Best		Holo-Krome	
Size	Length Under Head (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
1/4-28	1	100	5/32	**SK5104016F**	Price	**-**	-
1/4-28	1	50	5/32	**-**	-	**SH8063716**	Price
5/16-24	3/8	100	3/16	**SK5105006F**	Price	**-**	-
5/16-24	1/2	100	3/16	**SK5105008F**	Price	**SH8063801**	Price
5/16-24	5/8	100	3/16	**SK5105010F**	Price	**SH8063803**	Price
5/16-24	3/4	100	3/16	**SK5105012F**	Price	**SH8063805**	Price
5/16-24	7/8	100	3/16	**SK5105014F**	Price	**-**	-
5/16-24	1	100	3/16	**SK5105016F**	Price	**-**	-
5/16-24	1	50	3/16	**-**	-	**SH8063807**	Price
3/8-24	1/2	100	7/32	**SK5106008F**	Price	**-**	-
3/8-24	1/2	50	7/32	**-**	-	**SH8063827**	Price
3/8-24	5/8	100	7/32	**SK5106010F**	Price	**-**	-
3/8-24	3/4	100	7/32	**SK5106012F**	Price	**-**	-
3/8-24	3/4	50	7/32	**-**	-	**SH8063829**	Price
3/8-24	1	100	7/32	**SK5106016F**	Price	**-**	-
3/8-24	1	50	7/32	**-**	-	**SH8063831**	Price
3/8-24	1-1/4	100	7/32	**SK5106020F**	Price	**-**	-

Button Head Socket Cap Screws Metric

- Heat treated alloy steel class 3A thread fit standard
- Bulk pricing available on request
- Many other non standards not listed, in stock
- Please call for pricing

MADE IN THE USA



SOLD IN BOX QUANTITY ONLY

Prices Per 100

Size	Length Under Head (mm)	Box Qty.	Hex Key	Order No.	Price Per 100
M3 - .50	8	100	2 mm	**SH8066005**	Price
M3 - .50	10	100	2 mm	**SH8066010**	Price
M3 - .50	12	100	2 mm	**SH8066015**	Price
M3 - .50	16	100	2 mm	**SH8066020**	Price
M4 - .70	8	100	2.5 mm	**SH8066055**	Price
M4 - .70	10	100	2.5 mm	**SH8066060**	Price
M4 - .70	12	100	2.5 mm	**SH8066065**	Price
M4 - .70	16	100	2.5 mm	**SH8066070**	Price
M5 - .80	10	100	3 mm	**SH8066100**	Price
M5 - .80	12	100	3 mm	**SH8066105**	Price
M5 - .80	16	100	3 mm	**SH8066110**	Price
M5 - .80	20	100	3 mm	**SH8066115**	Price
M5 - .80	25	100	3 mm	**SH8066120**	Price
M5 - .80	30	100	3 mm	**SH8066125**	Price
M6 - 1.00	10	100	4 mm	**SH8066150**	Price
M6 - 1.00	12	100	4 mm	**SH8066155**	Price
M6 - 1.00	16	100	4 mm	**SH8066160**	Price
M6 - 1.00	20	100	4 mm	**SH8066165**	Price
M6 - 1.00	25	100	4 mm	**SH8066170**	Price

Size	Length Under Head (mm)	Box Qty.	Hex Key	Order No.	Price Per 100
M6 - 1.00	30	100	4 mm	**SH8066175**	Price
M8 - 1.25	10	100	5 mm	**SH8066200**	Price
M8 - 1.25	12	100	5 mm	**SH8066205**	Price
M8 - 1.25	16	100	5 mm	**SH8066210**	Price
M8 - 1.25	20	100	5 mm	**SH8066215**	Price
M8 - 1.25	25	100	5 mm	**SH8066220**	Price
M8 - 1.25	30	100	5 mm	**SH8066225**	Price
M8 - 1.25	35	100	5 mm	**SH8066230**	Price
M8 - 1.25	40	100	5 mm	**SH8066235**	Price
M10 - 1.50	16	100	6 mm	**SH8066250**	Price
M10 - 1.50	20	100	6 mm	**SH8066255**	Price
M10 - 1.50	25	100	6 mm	**SH8066260**	Price
M10 - 1.50	30	100	6 mm	**SH8066265**	Price
M10 - 1.50	40	100	6 mm	**SH8066275**	Price
M12 - 1.75	20	100	8 mm	**SH8066305**	Price
M12 - 1.75	25	100	8 mm	**SH8066310**	Price
M12 - 1.75	30	50	8 mm	**SH8066315**	Price
M12 - 1.75	50	100	8 mm	**SH8066330**	Price

Flat Head Screws - Fine

- Flat head socket cap screws have an 82° countersunk flat head
- Used when a flush mounting, high strength screw is needed
- Commonly used in tools and dies where moving parts pass over the fastened area



SOLD IN BOX QUANTITY ONLY

Prices Per 100

				Brighton Best		Holo-Krome	
Size	Length (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
10-32	3/8	100	1/8	**SK5001006**	Price	**SH8053006**	Price
10-32	1/2	100	1/8	**SK5001008**	Price	**SH8053008**	Price
10-32	5/8	100	1/8	**SK5001010**	Price	**SH8053010**	Price
10-32	3/4	100	1/8	**SK5001012**	Price	**SH8053012**	Price
10-32	1	100	1/8	**SK5001016**	Price	**SH8053016**	Price
10-32	1-1/4	100	1/8	**SK5001020**	Price	**SH8053020**	Price
10-32	1-1/2	100	1/8	**SK5001024**	Price	**SH8053024**	Price
1/4-28	3/8	100	7/32	**SK5004006**	Price	**SH8053106**	Price
1/4-28	1/2	100	7/32	**SK5004008**	Price	**SH8053108**	Price
1/4-28	5/8	100	7/32	**SK5004010**	Price	**SH8053110**	Price
1/4-28	3/4	100	7/32	**SK5004012**	Price	**SH8053112**	Price
1/4-28	1	100	7/32	**SK5004016**	Price	**SH8053116**	Price
1/4-28	1-1/4	100	7/32	**SK5004020**	Price	**SH8053120**	Price
1/2-20	1-1/2	50	5/16	-	-	**SH8053424**	Price
1/4-28	1-1/2	100	7/32	**SK5004024**	Price	**SH8053124**	Price
1/4-28	1-3/4	100	7/32	**SK5004028**	Price	-	-
5/16-24	1/2	100	3/16	**SK5005008**	Price	**SH8053208**	Price
5/16-24	5/8	100	3/16	**SK5005010**	Price	**SH8053210**	Price

				Brighton Best		Holo-Krome	
Size	Length (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
5/16-24	3/4	100	3/16	**SK5005012**	Price	**SH8053212**	Price
5/16-24	1	100	3/16	**SK5005016**	Price	**SH8053216**	Price
5/16-24	1-1/4	100	3/16	**SK5005020**	Price	**SH8053220**	Price
5/16-24	1-1/2	100	3/16	**SK5005024**	Price	-	-
3/8-24	1/2	100	7/32	**SK5006008**	Price	-	-
3/8-24	5/8	100	7/32	**SK5006010**	Price	**SH8053310**	Price
3/8-24	3/4	100	7/32	**SK5006012**	Price	**SH8053312**	Price
3/8-24	1	100	7/32	**SK5006016**	Price	**SH8053316**	Price
3/8-24	1-1/4	100	7/32	**SK5006020**	Price	**SH8053320**	Price
3/8-24	1-1/2	100	7/32	**SK5006024**	Price	**SH8053324**	Price
1/2-20	3/4	50	5/16	-	-	**SH8053412**	Price
1/2-20	1	100	5/16	**SK5008016**	Price	-	-
1/2-20	1	50	5/16	-	-	**SH8053416**	Price
1/2-20	1-1/4	100	5/16	**SK5008020**	Price	-	-
1/2-20	1-1/4	50	5/16	-	-	**SH8053420**	Price
1/2-20	1-1/2	100	5/16	**SK5008024**	Price	-	-
1/2-20	1-3/4	50	5/16	**SK5008028**	Price	**SH8053428**	Price
1/2-20	2	50	5/16	**SK5008032**	Price	**SH8053432**	Price

Flat Head Screws - Coarse

- Flat head socket cap screws have an 82° countersunk flat head
- Used when a flush mounting, high strength screw is needed
- Commonly used in tools and dies where moving parts pass over the fastened area



SOLD IN BOX QUANTITY ONLY

Prices Per 100

				Brighton Best		Holo-Krome	
Size	Length (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
4-40	1/4	100	1/16	**SK4900404**	Price	**SH8051404**	Price
4-40	3/8	100	1/16	**SK4900406**	Price	**SH8051406**	Price
4-40	1/2	100	1/16	**SK4900408**	Price	**SH8051408**	Price
4-40	5/8	100	1/16	**SK4900410**	Price	**SH8051410**	Price
4-40	3/4	100	1/16	**SK4900412**	Price	**SH8051412**	Price
5-40	1/4	100	5/64	**SK4900504**	Price	**SH8051504**	Price
5-40	3/8	100	5/64	**SK4900506**	Price	**SH8051506**	Price
5-40	1/2	100	5/64	**SK4900508**	Price	**SH8051508**	Price
5-40	5/8	100	5/64	**SK4900510**	Price	**SH8051510**	Price
5-40	3/4	100	5/64	**SK4900512**	Price	**SH8051512**	Price
6-32	1/4	100	5/64	**SK4900604**	Price	**SH8051604**	Price
6-32	3/8	100	5/64	**SK4900606**	Price	**SH8051606**	Price
6-32	1/2	100	5/64	**SK4900608**	Price	**SH8051608**	Price
6-32	5/8	100	5/64	**SK4900610**	Price	**SH8051610**	Price
6-32	3/4	100	5/64	**SK4900612**	Price	**SH8051612**	Price
8-32	3/8	100	3/32	**SK4900806**	Price	**SH8051706**	Price
8-32	1/2	100	3/32	**SK4900808**	Price	**SH8051708**	Price
8-32	5/8	100	3/32	**SK4900810**	Price	**SH8051710**	Price
8-32	3/4	100	3/32	**SK4900812**	Price	**SH8051712**	Price
8-32	1	100	3/32	**SK4900816**	Price	**SH8051716**	Price
10-24	3/8	100	5/32	**SK4901006**	Price	**SH8051806**	Price
10-24	1/2	100	5/32	**SK4901008**	Price	**SH8051808**	Price
10-24	5/8	100	5/32	**SK4901010**	Price	**SH8051810**	Price
10-24	3/4	100	5/32	**SK4901012**	Price	**SH8051812**	Price
10-24	1	100	5/32	**SK4901016**	Price	**SH8051816**	Price
10-24	1-1/4	100	5/32	**SK4901020**	Price	**SH8051820**	Price
10-24	1-1/2	100	5/32	**SK4901024**	Price	**SH8051824**	Price
1/4-20	3/8	100	5/32	**SK4904006**	Price	**SH8051906**	Price
1/4-20	1/2	100	5/32	**SK4904008**	Price	**SH8051908**	Price
1/4-20	5/8	100	5/32	**SK4904010**	Price	**SH8051910**	Price
1/4-20	3/4	100	5/32	**SK4904012**	Price	**SH8051912**	Price
1/4-20	1	100	5/32	**SK4904016**	Price	**SH8051916**	Price
1/4-20	1-1/4	100	5/32	**SK4904020**	Price	**SH8051920**	Price
1/4-20	1-1/2	100	5/32	**SK4904024**	Price	**SH8051924**	Price
1/4-20	1-3/4	100	5/32	**SK4904028**	Price	**SH8051928**	Price
1/4-20	2	100	5/32	**SK4904032**	Price	**SH8051932**	Price
5/16-18	1/2	100	3/16	**SK4905008**	Price	**SH8052008**	Price
5/16-18	5/8	100	3/16	**SK4905010**	Price	**SH8052010**	Price
5/16-18	3/4	100	3/16	**SK4905012**	Price	**SH8052012**	Price
5/16-18	1	100	3/16	**SK4905016**	Price	**SH8052016**	Price
5/16-18	1-1/4	100	3/16	**SK4905020**	Price	**SH8052020**	Price
5/16-18	1-1/2	100	3/16	**SK4905024**	Price	**SH8052024**	Price
5/16-18	1-3/4	100	3/16	**SK4905028**	Price	**SH8052028**	Price
5/16-18	2	100	3/16	**SK4905032**	Price	**SH8052032**	Price
5/16-18	2-1/4	100	3/16	**SK4905036**	Price	**SH8052036**	Price
5/16-18	2-1/2	100	3/16	**SK4905040**	Price	**SH8052040**	Price
3/8-16	1/2	100	-	**SK4906008**	Price	**-**	-
3/8-16	5/8	100	7/32	**SK4906010**	Price	**SH8052110**	Price
3/8-16	3/4	100	7/32	**SK4906012**	Price	**SH8052112**	Price
3/8-16	1	100	7/32	**SK4906016**	Price	**SH8052116**	Price

				Brighton Best		Holo-Krome	
Size	Length (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
3/8-16	1-1/4	100	7/32	**SK4906020**	Price	**SH8052120**	Price
3/8-16	1-1/2	100	7/32	**SK4906024**	Price	**SH8052124**	Price
3/8-16	1-3/4	100	7/32	**SK4906028**	Price	**-**	-
3/8-16	2	100	7/32	**SK4906032**	Price	**-**	-
3/8-16	2-1/4	100	7/32	**SK4906036**	Price	**-**	-
3/8-16	2-1/2	50	7/32	**SK4906040**	Price	**SH8052140**	Price
3/8-16	3	50	7/32	**SK4906048**	Price	**SH8052148**	Price
7/16-14	3/4	100	1/4	**SK4907012**	Price	**SH8052212**	Price
7/16-14	1	100	1/4	**SK4907016**	Price	**SH8052216**	Price
7/16-14	1-1/4	100	1/4	**SK4907020**	Price	**-**	-
7/16-14	1-1/2	100	1/4	**SK4907024**	Price	**-**	-
7/16-14	1-3/4	100	1/4	**SK4907028**	Price	**-**	-
7/16-14	2	50	1/4	**SK4907032**	Price	**-**	-
1/2-13	3/4	100	5/16	**SK4908012**	Price	**-**	-
1/2-13	1	100	5/16	**SK4908016**	Price	**-**	-
1/2-13	1-1/4	100	5/16	**SK4908020**	Price	**-**	-
1/2-13	1-1/2	100	5/16	**SK4908024**	Price	**-**	-
1/2-13	1-3/4	50	5/16	**SK4908028**	Price	**SH8052328**	Price
1/2-13	2	50	5/16	**SK4908032**	Price	**SH8052332**	Price
1/2-13	2-1/4	50	5/16	**SK4908036**	Price	**-**	-
1/2-13	2-1/2	50	5/16	**SK4908040**	Price	**-**	-
1/2-13	3	50	5/16	**SK4908048**	Price	**-**	-
5/8-11	1-1/4	50	3/8	**SK4910020**	Price	**-**	-
5/8-11	1-1/2	50	3/8	**SK4910024**	Price	**-**	-
5/8-11	1-3/4	25	3/8	**SK4910028**	Price	**SH8052428**	Price
5/8-11	2	50	3/8	**SK4910032**	Price	**-**	-
5/8-11	2-1/4	25	3/8	**SK4910036**	Price	**SH8052436**	Price
5/8-11	2-1/2	25	3/8	**SK4910040**	Price	**SH8052440**	Price
5/8-11	3	25	3/8	**SK4910048**	Price	**SH8052448**	Price
3/4-10	1-1/2	25	1/2	**SK4912024**	Price	**SH8052524**	Price
3/4-10	1-3/4	25	1/2	**SK4912028**	Price	**SH8052528**	Price
3/4-10	2	25	1/2	**SK4912032**	Price	**SH8052532**	Price
3/4-10	2-1/2	25	1/2	**SK4912040**	Price	**SH8052540**	Price
3/4-10	3	25	1/2	**SK4912048**	Price	**SH8052548**	Price
1/2-13	1	50	5/16	**-**	-	**SH8052316**	Price
1/2-13	1-1/2	50	5/16	**-**	-	**SH8052324**	Price
1/2-13	1-1/4	50	5/16	**-**	-	**SH8052320**	Price
1/2-13	2-1/2	25	5/16	**-**	-	**SH8052340**	Price
1/2-13	2-1/4	25	5/16	**-**	-	**SH8052336**	Price
1/2-13	3/4	50	5/16	**-**	-	**SH8052312**	Price
1/2-13	3	25	5/16	**-**	-	**SH8052348**	Price
3/8-16	1-3/4	50	7/32	**-**	-	**SH8052128**	Price
3/8-16	2	50	7/32	**-**	-	**SH8052132**	Price
3/8-16	2-1/4	50	7/32	**-**	-	**SH8052136**	Price
5/8-11	1-1/2	25	3/8	**-**	-	**SH8052424**	Price
5/8-11	1-1/4	25	3/8	**-**	-	**SH8052420**	Price
5/8-11	2	25	3/8	**-**	-	**SH8052432**	Price
7/16-14	1-1/2	50	1/4	**-**	-	**SH8052224**	Price
7/16-14	1-1/4	50	1/4	**-**	-	**SH8052220**	Price

Metric Flat Head Socket Cap Screws

- Flat head socket cap screws have an 92° countersunk flat head
- Used when a flush mounting, high strength screw is needed
- Commonly used in tools and dies where moving parts pass over the fastened area

MADE IN THE USA

SOLD IN BOX QUANTITY ONLY

Prices Per 100



Size	Length (in.)	Box Qty.	Hex Key	Order No.	Price Per 100
M3 - .50	6	100	2 mm	**SH8070000**	Price
M3 - .50	8	100	2 mm	**SH8070005**	Price
M3 - .50	10	100	2 mm	**SH8070010**	Price
M3 - .50	12	100	2 mm	**SH8070015**	Price
M3 - .50	16	100	2 mm	**SH8070020**	Price
M3 - .50	20	100	2 mm	**SH8070025**	Price
M3 - .50	25	100	2 mm	**SH8070030**	Price
M4 - .70	8	100	2.5 mm	**SH8070035**	Price
M4 - .70	10	100	2.5 mm	**SH8070040**	Price
M4 - .70	12	100	2.5 mm	**SH8070045**	Price
M4 - .70	16	100	2.5 mm	**SH8070050**	Price
M4 - .70	20	100	2.5 mm	**SH8070055**	Price
M4 - .70	25	100	2.5 mm	**SH8070060**	Price
M4 - .70	30	100	2.5 mm	**SH8070065**	Price
M4 - .70	35	100	2.5 mm	**SH8070070**	Price
M4 - .70	40	100	2.5 mm	**SH8070075**	Price
M5 - .80	8	100	3 mm	**SH8070080**	Price
M5 - .80	10	100	3 mm	**SH8070085**	Price
M5 - .80	12	100	3 mm	**SH8070090**	Price
M5 - .80	16	100	3 mm	**SH8070095**	Price
M5 - .80	20	100	3 mm	**SH8070100**	Price
M5 - .80	25	100	3 mm	**SH8070105**	Price
M5 - .80	30	100	3 mm	**SH8070110**	Price
M5 - .80	40	100	3 mm	**SH8070115**	Price
M5 - .80	50	100	3 mm	**SH8070120**	Price
M6 - 1.00	10	100	4 mm	**SH8070130**	Price
M6 - 1.00	12	100	4 mm	**SH8070135**	Price
M6 - 1.00	16	100	4 mm	**SH8070140**	Price
M6 - 1.00	20	100	4 mm	**SH8070145**	Price
M6 - 1.00	25	100	4 mm	**SH8070150**	Price
M6 - 1.00	30	100	4 mm	**SH8070155**	Price
M6 - 1.00	35	100	4 mm	**SH8070160**	Price
M6 - 1.00	40	100	4 mm	**SH8070165**	Price
M6 - 1.00	45	100	4 mm	**SH8070170**	Price
M8 - 1.25	16	100	5 mm	**SH8070190**	Price
M8 - 1.25	20	100	5 mm	**SH8070195**	Price
M8 - 1.25	25	100	5 mm	**SH8070200**	Price
M8 - 1.25	30	100	5 mm	**SH8070205**	Price
M8 - 1.25	35	100	5 mm	**SH8070210**	Price
M8 - 1.25	40	100	5 mm	**SH8070215**	Price
M8 - 1.25	45	100	5 mm	**SH8070220**	Price
M8 - 1.25	50	100	5 mm	**SH8070225**	Price
M10 - 1.50	16	100	6 mm	**SH8070230**	Price
M10 - 1.50	20	100	6 mm	**SH8070235**	Price
M10 - 1.50	25	100	6 mm	**SH8070240**	Price
M10 - 1.50	30	100	6 mm	**SH8070245**	Price
M10 - 1.50	35	100	6 mm	**SH8070250**	Price
M10 - 1.50	40	100	6 mm	**SH8070255**	Price
M10 - 1.50	45	100	6 mm	**SH8070260**	Price
M10 - 1.50	50	100	6 mm	**SH8070265**	Price
M12 - 1.75	20	100	8 mm	**SH8070270**	Price
M12 - 1.75	25	100	8 mm	**SH8070275**	Price
M12 - 1.75	30	100	8 mm	**SH8070280**	Price
M12 - 1.75	35	100	8 mm	**SH8070285**	Price
M12 - 1.75	40	100	8 mm	**SH8070290**	Price
M12 - 1.75	45	100	8 mm	**SH8070295**	Price
M12 - 1.75	50	50	8 mm	**SH8070300**	Price

Pressure Pipe Plugs

Diameter Range:

- NPTF 1/16 through 1-1/4"
- PTF 1/16 through 3/4"
- Both 3/4 and 7/8" taper plugs used in pneumatic or hydraulic pressure applications
- Alloy steel products have a minimum hardness of 38HRC

SOLD IN BOX QUANTITY ONLY



Prices Per 100

Dryseal - 3/4" Taper NPTF							
				Brighton Best		Holo-Krome	
Pipe Size (in.)	TPI	OAL (in.)	Box Qty.	Order No.	Price	Order No.	Price
1/16	27	5/16	100	**SJ51001**	Price	**SH8080000**	Price
1/8	27	5/16	100	**SJ51002**	Price	**SH8080005**	Price
1/4	18	7/16	100	**SJ51004**	Price	**SH8080010**	Price
3/8	18	1/2	100	**SJ51006**	Price	**SH8080015**	Price
1/2	14	9/16	50	**SJ51008**	Price	**SH8080020**	Price
3/4	14	5/8	50	**SJ51012**	Price	**SH8080025**	Price
1	11-1/2	3/4	25	**SJ51016**	Price	**SH8080030**	Price
1-1/4	11-1/2	13/16	25	**SJ51020**	Price	**SH8080035**	Price

Prices Per 100

Dryseal - 7/8" Taper Flush Type PTF							
				Brighton Best		Holo-Krome	
Pipe Size (in.)	TPI	OAL (in.)	Box Qty.	Order No.	Price	Order No.	Price
1/16	27	1/4	100	**SJ51030**	Price	**SH8081000**	Price
1/8	27	1/4	100	**SJ51031**	Price	**SH8081005**	Price
1/4	18	13/32	100	**SJ51032**	Price	**SH8081010**	Price
3/8	18	13/32	100	**SJ51033**	Price	**SH8081015**	Price
1/2	14	17/32	50	**SJ51034**	Price	**SH8081020**	Price
3/4	14	17/32	50	**SJ51035**	Price	**SH8081025**	Price
1	11-1/2	21/32	25	**SJ51036**	Price	-	-
1-1/4	11-1/2	21/32	25	**SJ51037**	Price	**SH8081035**	Price

Cup Point Socket Set Screws - Coarse

- Most common set screw style used
- Designed for fast, permanent/semi-permanent location of parts on shafts, where cutting in of a cup edge is acceptable
- Heat Treated Alloy Steel Class 3A Thread Fit

SOLD IN BOX QUANTITY ONLY

Prices Per 100



				Brighton Best		Holo-Krome	
Size	Length (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
2-56	1/16	100	.035	**SJ5000202**	Price	-	-
2-56	3/32	100	.035	**SJ5000203**	Price	**SH8020203**	Price
2-56	1/8	100	.035	**SJ5000204**	Price	-	-
2-56	5/32	100	.035	**SJ5000205**	Price	-	-
2-56	3/16	100	.035	**SJ5000206**	Price	-	-
2-56	1/4	100	.035	**SJ5000208**	Price	-	-
3-48	3/32	100	.050	**SJ5000303**	Price	**SH8020303**	Price
3-48	1/8	100	.050	**SJ5000304**	Price	-	-
3-48	5/32	100	.050	**SJ5000305**	Price	-	-
3-48	3/16	100	.050	**SJ5000306**	Price	-	-
3-48	1/4	100	.050	**SJ5000308**	Price	-	-
4-40	1/8	100	.050	**SJ5000402**	Price	**SH8020402**	Price
4-40	3/16	100	.050	**SJ5000403**	Price	**SH8020403**	Price
4-40	1/4	100	.050	**SJ5000404**	Price	**SH8020404**	Price
4-40	5/16	100	.050	**SJ5000405**	Price	**SH8020405**	Price
4-40	3/8	100	.050	**SJ5000406**	Price	**SH8020406**	Price
4-40	7/16	100	.050	**SJ5000407**	Price	-	-
4-40	1/2	100	.050	**SJ5000408**	Price	**SH8020408**	Price
4-40	5/8	100	.050	**SJ5000410**	Price	**SH8020410**	Price
5-40	1/8	100	1/16	**SJ5000502**	Price	**SH8020502**	Price
5-40	3/16	100	1/16	**SJ5000503**	Price	**SH8020503**	Price
5-40	1/4	100	1/16	**SJ5000504**	Price	**SH8020504**	Price

Cup Point Socket Set Screws - Coarse (Cont.)



Prices Per 100

SOLD IN BOX QUANTITY ONLY

				Brighton Best		Holo-Krome	
Size	Length (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
5-40	5/16	100	1/16	SJ5000505	Price	SH8020505	Price
5-40	3/8	100	1/16	SJ5000506	Price	SH8020506	Price
5-40	7/16	100	1/16	SJ5000507	Price	-	-
5-40	1/2	100	1/16	SJ5000508	Price	SH8020508	Price
5-40	5/8	100	1/16	SJ5000510	Price	-	-
5-40	3/4	100	1/16	SJ5000512	Price	-	-
6-32	1/8	100	1/16	SJ5000602	Price	SH8020602	Price
6-32	3/16	100	1/16	SJ5000603	Price	SH8020603	Price
6-32	1/4	100	1/16	SJ5000604	Price	SH8020604	Price
6-32	5/16	100	1/16	SJ5000605	Price	SH8020605	Price
6-32	3/8	100	1/16	SJ5000606	Price	SH8020606	Price
6-32	7/16	100	1/16	SJ5000607	Price	-	-
6-32	1/2	100	1/16	SJ5000608	Price	SH8020608	Price
6-32	5/8	100	1/16	SJ5000610	Price	SH8020610	Price
6-32	3/4	100	1/16	SJ5000612	Price	SH8020612	Price
6-32	7/8	100	1/16	SJ5000614	Price	-	-
6-32	1	100	1/16	SJ5000616	Price	SH8020616	Price
8-32	1/8	100	5/64	SJ5000802	Price	SH8020802	Price
8-32	3/16	100	5/64	SJ5000803	Price	SH8020803	Price
8-32	1/4	100	5/64	SJ5000804	Price	SH8020804	Price
8-32	5/16	100	5/64	SJ5000805	Price	SH8020805	Price
8-32	3/8	100	5/64	SJ5000806	Price	SH8020806	Price
8-32	7/16	100	5/64	SJ5000807	Price	-	-
8-32	1/2	100	5/64	SJ5000808	Price	SH8020808	Price
8-32	5/8	100	5/64	SJ5000810	Price	SH8020810	Price
8-32	3/4	100	5/64	SJ5000812	Price	SH8020812	Price
8-32	7/8	100	5/64	SJ5000814	Price	-	-
8-32	1	100	5/64	SJ5000816	Price	SH8020816	Price
10-24	3/16	100	3/32	SJ5001003	Price	SH8021003	Price
10-24	1/4	100	3/32	SJ5001004	Price	SH8021004	Price
10-24	5/16	100	3/32	SJ5001005	Price	SH8021005	Price
10-24	3/8	100	3/32	SJ5001006	Price	SH8021006	Price
10-24	7/16	100	3/32	SJ5001007	Price	-	-
10-24	1/2	100	3/32	SJ5001008	Price	SH8021008	Price
10-24	5/8	100	3/32	SJ5001010	Price	SH8021010	Price
10-24	3/4	100	3/32	SJ5001012	Price	SH8021012	Price
10-24	7/8	100	3/32	SJ5001014	Price	-	-
10-24	1	100	3/32	SJ5001016	Price	SH8021016	Price
10-24	1-1/4	100	3/32	SJ5001020	Price	SH8021020	Price
1/4-20	3/16	100	1/8	SJ5004003	Price	SH8021403	Price
1/4-20	1/4	100	1/8	SJ5004004	Price	SH8021404	Price
1/4-20	5/16	100	1/8	SJ5004005	Price	SH8021405	Price
1/4-20	3/8	100	1/8	SJ5004006	Price	SH8021406	Price
1/4-20	7/16	100	1/8	SJ5004007	Price	-	-
1/4-20	1/2	100	1/8	SJ5004008	Price	SH8021408	Price
1/4-20	5/8	100	1/8	SJ5004010	Price	SH8021410	Price
1/4-20	3/4	100	1/8	SJ5004012	Price	SH8021412	Price
1/4-20	7/8	100	1/8	SJ5004014	Price	-	-
1/4-20	1	100	1/8	SJ5004016	Price	SH8021416	Price
1/4-20	1-1/4	100	1/8	SJ5004020	Price	SH8021420	Price
1/4-20	1-1/2	100	1/8	SJ5004024	Price	SH8021424	Price
1/4-20	1-3/4	100	1/8	SJ5004028	Price	SH8021428	Price
1/4-20	2	100	1/8	SJ5004032	Price	SH8021432	Price
5/16-18	1/4	100	5/32	SJ5005004	Price	SH8021504	Price
5/16-18	5/16	100	5/32	SJ5005005	Price	SH8021505	Price
5/16-18	3/8	100	5/32	SJ5005006	Price	SH8021506	Price
5/16-18	7/16	100	5/32	SJ5005007	Price	-	-
5/16-18	1/2	100	5/32	SJ5005008	Price	SH8021508	Price
5/16-18	5/8	100	5/32	SJ5005010	Price	SH8021510	Price
5/16-18	3/4	100	5/32	SJ5005012	Price	SH8021512	Price
5/16-18	7/8	100	5/32	SJ5005014	Price	-	-
5/16-18	1	100	5/32	SJ5005016	Price	SH8021516	Price
5/16-18	1-1/4	100	5/32	SJ5005020	Price	SH8021520	Price
5/16-18	1-1/2	100	5/32	SJ5005024	Price	SH8021524	Price
5/16-18	1-3/4	100	5/32	SJ5005028	Price	SH8021528	Price
5/16-18	2	100	5/32	SJ5005032	Price	SH8021532	Price
3/8-16	1/4	100	3/16	SJ5006004	Price	SH8021604	Price
3/8-16	5/16	100	3/16	SJ5006005	Price	-	-
3/8-16	3/8	100	3/16	SJ5006006	Price	SH8021606	Price
3/8-16	7/16	100	3/16	SJ5006007	Price	-	-

				Brighton Best		Holo-Krome	
Size	Length (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
3/8-16	1/2	100	3/16	SJ5006008	Price	SH8021608	Price
3/8-16	5/8	100	3/16	SJ5006010	Price	SH8021610	Price
3/8-16	3/4	100	3/16	SJ5006012	Price	SH8021612	Price
3/8-16	7/8	100	3/16	SJ5006014	Price	SH8021614	Price
3/8-16	1	100	3/16	SJ5006016	Price	SH8021616	Price
3/8-16	1-1/4	100	3/16	SJ5006020	Price	SH8021620	Price
3/8-16	1-1/2	100	3/16	SJ5006024	Price	SH8021624	Price
3/8-16	1-3/4	100	3/16	SJ5006028	Price	SH8021628	Price
3/8-16	2	100	3/16	SJ5006032	Price	SH8021632	Price
3/8-16	2-1/2	100	3/16	SJ5006040	Price	SH8021640	Price
7/16-14	3/8	100	7/32	SJ5007006	Price	SH8021706	Price
7/16-14	7/16	100	7/32	SJ5007007	Price	-	-
7/16-14	1/2	100	7/32	SJ5007008	Price	SH8021708	Price
7/16-14	5/8	100	7/32	SJ5007010	Price	-	-
7/16-14	3/4	100	7/32	SJ5007012	Price	SH8021712	Price
7/16-14	7/8	100	7/32	SJ5007014	Price	-	-
7/16-14	1	100	7/32	SJ5007016	Price	SH8021716	Price
7/16-14	1-1/4	100	7/32	SJ5007020	Price	-	-
7/16-14	1-1/2	100	7/32	SJ5007024	Price	-	-
7/16-14	1-3/4	100	7/32	SJ5007028	Price	-	-
7/16-14	2	100	7/32	SJ5007032	Price	-	-
1/2-13	3/8	100	1/4	SJ5008006	Price	SH8021806	Price
1/2-13	7/16	100	1/4	SJ5008007	Price	-	-
1/2-13	1/2	100	1/4	SJ5008008	Price	SH8021808	Price
1/2-13	5/8	100	1/4	SJ5008010	Price	SH8021810	Price
1/2-13	3/4	100	1/4	SJ5008012	Price	SH8021812	Price
1/2-13	7/8	100	1/4	SJ5008014	Price	SH8021814	Price
1/2-13	1	100	1/4	SJ5008016	Price	SH8021816	Price
1/2-13	1-1/4	100	1/4	SJ5008020	Price	SH8021820	Price
1/2-13	1-1/2	100	1/4	SJ5008024	Price	SH8021824	Price
1/2-13	1-3/4	50	1/4	SJ5008028	Price	SH8021828	Price
1/2-13	2	50	1/4	SJ5008032	Price	SH8021832	Price
1/2-13	2-1/2	50	1/4	SJ5008040	Price	SH8021840	Price
1/2-13	3	50	1/4	SJ5008048	Price	-	-
5/8-11	1/2	50	5/16	SJ5010008	Price	SH8021908	Price
5/8-11	5/8	50	5/16	SJ5010010	Price	SH8021910	Price
5/8-11	3/4	50	5/16	SJ5010012	Price	SH8021912	Price
5/8-11	7/8	50	5/16	SJ5010014	Price	-	-
5/8-11	1	50	5/16	SJ5010016	Price	SH8021916	Price
5/8-11	1-1/4	50	5/16	SJ5010020	Price	SH8021920	Price
5/8-11	1-1/2	50	5/16	SJ5010024	Price	SH8021924	Price
5/8-11	1-3/4	50	5/16	SJ5010028	Price	SH8021928	Price
5/8-11	2	50	5/16	SJ5010032	Price	SH8021932	Price
5/8-11	2-1/2	50	5/16	SJ5010040	Price	SH8021940	Price
5/8-11	3	50	5/16	SJ5010048	Price	SH8021948	Price
3/4-10	5/8	50	3/8	SJ5012010	Price	SH8022010	Price
3/4-10	3/4	50	3/8	SJ5012012	Price	SH8022012	Price
3/4-10	7/8	50	3/8	SJ5012014	Price	-	-
3/4-10	1	50	3/8	SJ5012016	Price	SH8022016	Price
3/4-10	1-1/4	50	5/8	SJ5012020	Price	SH8022020	Price
3/4-10	1-1/2	50	5/8	SJ5012024	Price	SH8022024	Price
3/4-10	1-3/4	50	5/8	SJ5012028	Price	SH8022028	Price
3/4-10	2	25	5/8	-	-	SH8022032	Price
3/4-10	2	50	5/8	SJ5012032	Price	-	-
3/4-10	2-1/2	25	5/8	SJ5012040	Price	SH8022040	Price
3/4-10	3	25	5/8	SJ5012048	Price	SH8022048	Price
7/8-9	7/8	25	3/4	SJ5014014	Price	SH8022114	Price
7/8-9	1	25	3/4	SJ5014016	Price	SH8022116	Price
7/8-9	1-1/4	25	3/4	SJ5014020	Price	-	-
7/8-9	1-1/2	25	3/4	SJ5014024	Price	-	-
7/8-9	1-3/4	25	3/4	SJ5014028	Price	-	-
7/8-9	2	25	3/4	SJ5014032	Price	-	-
7/8-9	2-1/2	25	3/4	SJ5014040	Price	-	-
7/8-9	3	25	3/4	SJ5014048	Price	-	-
1-8	1	25	3/4	SJ5016016	Price	SH8022216	Price
1-8	1-1/4	25	3/4	SJ5016020	Price	-	-
1-8	1-1/2	25	3/4	SJ5016024	Price	SH8022224	Price
1-8	2	25	3/4	SJ5016032	Price	SH8022232	Price
1-8	2-1/2	25	3/4	SJ5016040	Price	-	-
1-8	3	25	3/4	SJ5016048	Price	SH8022248	Price

Cup Point Socket Set Screws-Fine

- Most common set screw style used
- Designed for fast, permanent/semi-permanent location of parts on shafts, where cutting in of a cup edge is acceptable



				Brighton Best		Holo-Krome	
Size	Length (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
0-80	3/32	100	.028	**SJ5100003**	Price	-	-
0-80	5/32	100	.028	**SJ5100005**	Price	-	-
1-72	1/16	100	.035	**SJ5100102**	Price	-	-
1-72	3/32	100	.035	**SJ5100103**	Price	-	-
1-72	1/8	100	.035	**SJ5100104**	Price	-	-
1-72	5/32	100	.035	**SJ5100105**	Price	-	-
1-72	3/16	100	.035	**SJ5100106**	Price	-	-
1-72	1/4	100	.035	**SJ5100108**	Price	-	-
4-48	1/8	100	.050	**SJ5100402**	Price	-	-
4-48	3/16	100	.050	**SJ5100403**	Price	-	-
4-48	1/4	100	.050	**SJ5100404**	Price	-	-
4-48	5/16	100	.050	**SJ5100405**	Price	-	-
4-48	3/8	100	.050	**SJ5100406**	Price	-	-
5-44	1/8	100	1/16	**SJ5100502**	Price	-	-
5-44	3/16	100	1/16	**SJ5100503**	Price	-	-
5-44	1/4	100	1/16	**SJ5100504**	Price	-	-
6-40	1/8	100	1/16	**SJ5100602**	Price	-	-
6-40	3/16	100	1/16	**SJ5100603**	Price	-	-
6-40	1/4	100	1/16	**SJ5100604**	Price	-	-
6-40	5/16	100	1/16	**SJ5100605**	Price	-	-
6-40	3/8	100	1/16	**SJ5100606**	Price	-	-
8-36	1/8	100	5/64	**SJ5100802**	Price	-	-
8-36	3/16	100	5/64	**SJ5100803**	Price	-	-
8-36	1/4	100	5/64	**SJ5100804**	Price	-	-
8-36	5/16	100	5/64	**SJ5100805**	Price	-	-
8-36	3/8	100	5/64	**SJ5100806**	Price	-	-
8-36	1/2	100	5/64	**SJ5100808**	Price	-	-
10-32	3/16	100	3/32	**SJ5101003**	Price	**SH8022703**	Price
10-32	1/4	100	3/32	**SJ5101004**	Price	**SH8022704**	Price
10-32	5/16	100	3/32	**SJ5101005**	Price	-	-
10-32	3/8	100	3/32	**SJ5101006**	Price	**SH8022706**	Price
10-32	7/16	100	3/32	**SJ5101007**	Price	-	-
10-32	1/2	100	3/32	**SJ5101008**	Price	**SH8022708**	Price
10-32	5/8	100	3/32	**SJ5101010**	Price	**SH8022710**	Price
10-32	3/4	100	3/32	**SJ5101012**	Price	**SH8022712**	Price

Prices Per 100

				Brighton Best		Holo-Krome	
Size	Length (in.)	Box Qty.	Hex Key	Order No.	Price	Order No.	Price
10-32	1	100	3/32	**SJ5101016**	Price	**SH8022716**	Price
10-32	1-1/4	100	3/32	**SJ5101020**	Price	**SH8022720**	Price
1/4-28	3/16	100	1/8	**SJ5104003**	Price	-	-
1/4-28	1/4	100	1/8	**SJ5104004**	Price	**SH8023404**	Price
1/4-28	5/16	100	1/8	**SJ5104005**	Price	**SH8023405**	Price
1/4-28	3/8	100	1/8	**SJ5104006**	Price	**SH8023406**	Price
1/4-28	7/16	100	1/8	**SJ5104007**	Price	-	-
1/4-28	1/2	100	1/8	**SJ5104008**	Price	**SH8023408**	Price
1/4-28	5/8	100	1/8	**SJ5104010**	Price	**SH8023410**	Price
1/4-28	3/4	100	1/8	**SJ5104012**	Price	**SH8023412**	Price
1/4-28	1	100	1/8	**SJ5104016**	Price	-	-
1/4-28	1-1/4	100	1/8	**SJ5104020**	Price	-	-
5/16-24	1/4	100	5/32	**SJ5105004**	Price	**SH8023504**	Price
5/16-24	5/16	100	5/32	**SJ5105005**	Price	**SH8023505**	Price
5/16-24	3/8	100	5/32	**SJ5105006**	Price	**SH8023506**	Price
5/16-24	7/16	100	5/32	**SJ5105007**	Price	-	-
5/16-24	1/2	100	5/32	**SJ5105008**	Price	**SH8023508**	Price
5/16-24	5/8	100	5/32	**SJ5105010**	Price	-	-
5/16-24	3/4	100	5/32	**SJ5105012**	Price	-	-
5/16-24	1	100	5/32	**SJ5105016**	Price	-	-
5/16-24	1-1/4	100	5/32	**SJ5105020**	Price	-	-
3/8-24	1/4	100	3/16	**SJ5106004**	Price	-	-
3/8-24	5/16	100	3/16	**SJ5106005**	Price	-	-
3/8-24	3/8	100	3/16	**SJ5106006**	Price	**SH8023606**	Price
3/8-24	7/16	100	3/16	**SJ5106007**	Price	-	-
3/8-24	1/2	100	3/16	**SJ5106008**	Price	**SH8023608**	Price
3/8-24	5/8	100	3/16	**SJ5106010**	Price	**SH8023610**	Price
3/8-24	3/4	100	3/16	**SJ5106012**	Price	**SH8023612**	Price
3/8-24	1	100	3/16	**SJ5106016**	Price	**SH8023616**	Price
3/8-24	1-1/4	100	3/16	**SJ5106020**	Price	-	-
3/8-24	1-1/2	100	3/16	**SJ5106024**	Price	-	-
7/16-20	3/8	100	3/8	**SJ5107006**	Price	-	-
7/16-20	7/16	100	3/8	**SJ5107007**	Price	-	-
7/16-20	1/2	100	3/8	**SJ5107008**	Price	-	-
1/2-20	1/2	100	3/8	**SJ5108008**	Price	-	-
1/2-20	5/8	100	3/8	**SJ5108010**	Price	-	-
1/2-20	3/4	100	3/8	**SJ5108012**	Price	**SH8023812**	Price
1/2-20	1	100	3/8	**SJ5108016**	Price	-	-
5/8-18	5/8	50	1/2	**SJ5110010**	Price	-	-
5/8-18	1	50	1/2	**SJ5110016**	Price	-	-

Metric Socket Set Cup Point Screws

Grade 14.9 Threads – ISO Metric

- Most common set screw style used
- Designed for fast, permanent/semi-permanent location of parts on shafts, where cutting in of a cup edge is acceptable
- Heat Treated Alloy Steel

Size (mm)	Length (mm)	Box Qty.	Hex Key	Order No.	Price Per 100
M3 - .50	4	100	1.5 mm	**SJ6003004**	Price
M3 - .50	5	100	1.5 mm	**SJ6003005**	Price
M3 - .50	6	100	1.5 mm	**SJ6003006**	Price
M3 - .50	8	100	1.5 mm	**SJ6003008**	Price
M3 - .50	10	100	1.5 mm	**SJ6003010**	Price
M3 - .50	12	100	1.5 mm	**SJ6003012**	Price
M4 - .70	4	100	2 mm	**SJ6004004**	Price
M4 - .70	5	100	2 mm	**SJ6004005**	Price
M4 - .70	6	100	2 mm	**SJ6004006**	Price
M4 - .70	8	100	2 mm	**SJ6004008**	Price
M4 - .70	10	100	2 mm	**SJ6004010**	Price
M4 - .70	12	100	2 mm	**SJ6004012**	Price
M4 - .70	16	100	2 mm	**SJ6004016**	Price
M4 - .70	20	100	2 mm	**SJ6004020**	Price
M5 - .80	5	100	2.5 mm	**SJ6005005**	Price
M5 - .80	6	100	2.5 mm	**SJ6005006**	Price
M5 - .80	8	100	2.5 mm	**SJ6005008**	Price
M5 - .80	10	100	2.5 mm	**SJ6005010**	Price
M5 - .80	12	100	2.5 mm	**SJ6005012**	Price
M5 - .80	16	100	2.5 mm	**SJ6005016**	Price
M5 - .80	20	100	2.5 mm	**SJ6005020**	Price
M5 - .80	25	100	2.5 mm	**SJ6005025**	Price
M6 - 1.00	6	100	3 mm	**SJ6006006**	Price
M6 - 1.00	8	100	3 mm	**SJ6006008**	Price
M6 - 1.00	10	100	3 mm	**SJ6006010**	Price
M6 - 1.00	12	100	3 mm	**SJ6006012**	Price

Prices Per 100



Size (mm)	Length (mm)	Box Qty.	Hex Key	Order No.	Price Per 100
M6 - 1.00	16	100	3 mm	**SJ6006016**	Price
M6 - 1.00	20	100	3 mm	**SJ6006020**	Price
M6 - 1.00	25	100	3 mm	**SJ6006025**	Price
M6 - 1.00	30	100	3 mm	**SJ6006030**	Price
M6 - 1.00	35	100	3 mm	**SJ6006035**	Price
M6 - 1.00	40	100	3 mm	**SJ6006040**	Price
M8 - 1.25	8	100	4 mm	**SJ6008008**	Price
M8 - 1.25	10	100	4 mm	**SJ6008010**	Price
M8 - 1.25	12	100	4 mm	**SJ6008012**	Price
M8 - 1.25	16	100	4 mm	**SJ6008016**	Price
M8 - 1.25	20	100	4 mm	**SJ6008020**	Price
M8 - 1.25	25	100	4 mm	**SJ6008025**	Price
M8 - 1.25	30	100	4 mm	**SJ6008030**	Price
M8 - 1.25	35	100	4 mm	**SJ6008035**	Price
M8 - 1.25	40	100	4 mm	**SJ6008040**	Price
M8 - 1.25	45	100	4 mm	**SJ6008045**	Price
M8 - 1.25	50	100	4 mm	**SJ6008050**	Price
M10 - 1.50	10	100	5 mm	**SJ6010010**	Price
M10 - 1.50	12	100	5 mm	**SJ6010012**	Price
M10 - 1.50	16	100	5 mm	**SJ6010016**	Price
M10 - 1.50	20	100	5 mm	**SJ6010020**	Price
M10 - 1.50	25	100	5 mm	**SJ6010025**	Price
M10 - 1.50	30	100	5 mm	**SJ6010030**	Price
M10 - 1.50	35	100	5 mm	**SJ6010035**	Price
M10 - 1.50	40	100	5 mm	**SJ6010040**	Price
M10 - 1.50	45	50	5 mm	**SJ6010045**	Price
M10 - 1.50	50	50	5 mm	**SJ6010050**	Price
M12 - 1.75	12	100	6 mm	**SJ6012012**	Price
M12 - 1.75	16	100	6 mm	**SJ6012016**	Price

Metric Socket Set Cup Point Screws (Cont.)



Prices Per 100

SOLD IN BOX QUANTITY ONLY

Size (mm)	Length (mm)	Box Qty.	Hex Key	Order No.	Price Per 100
M12 - 1.75	20	100	6 mm	**SJ6012020**	Price
M12 - 1.75	25	100	6 mm	**SJ6012025**	Price
M12 - 1.75	30	100	6 mm	**SJ6012030**	Price
M12 - 1.75	35	100	6 mm	**SJ6012035**	Price
M12 - 1.75	40	50	6 mm	**SJ6012040**	Price
M12 - 1.75	45	50	6 mm	**SJ6012045**	Price
M12 - 1.75	50	50	6 mm	**SJ6012050**	Price
M16 - 2.00	16	50	8 mm	**SJ6016016**	Price
M16 - 2.00	20	50	8 mm	**SJ6016020**	Price
M16 - 2.00	25	50	8 mm	**SJ6016025**	Price
M16 - 2.00	30	50	8 mm	**SJ6016030**	Price
M16 - 2.00	35	50	8 mm	**SJ6016035**	Price
M16 - 2.00	40	50	8 mm	**SJ6016040**	Price
M16 - 2.00	45	50	8 mm	**SJ6016045**	Price
M16 - 2.00	50	50	8 mm	**SJ6016050**	Price
M16 - 2.00	55	25	8 mm	**SJ6016055**	Price
M16 - 2.00	60	25	8 mm	**SJ6016060**	Price
M20 - 2.50	20	50	10 mm	**SJ6020020**	Price
M20 - 2.50	25	50	10 mm	**SJ6020025**	Price
M20 - 2.50	30	50	10 mm	**SJ6020030**	Price
M20 - 2.50	35	50	10 mm	**SJ6020035**	Price
M20 - 2.50	40	50	10 mm	**SJ6020040**	Price
M20 - 2.50	45	25	10 mm	**SJ6020045**	Price
M20 - 2.50	50	25	10 mm	**SJ6020050**	Price
M20 - 2.50	60	25	10 mm	**SJ6020060**	Price
M24 - 3.00	40	25	12 mm	**SJ6024040**	Price
M24 - 3.00	45	25	12 mm	**SJ6024045**	Price
M24 - 3.00	50	25	12 mm	**SJ6024050**	Price

Bulk pricing available on request. Many other non-standards, not listed, in stock. Please call for pricing.

Metric Socket Shoulder Screws

WORLD CLASS QUALITY

- A hex socket screw with an enlarged, unthreaded shoulder under the socket driven head
- The threaded portion of the shoulder screw is usually one standard size below the shoulder diameter
- Shoulder screws are often referred to as “stripper bolts”
- Most used for rotation or sliding applications, such as pulley shafts, in punch work, or for use as a bearing pin
- Shoulder bolts are black in appearance
- Grade 12.9



SOLD IN BOX QUANTITY ONLY

Prices Per 100

Shoulder Dia. (mm)	Shoulder Length	Thread Pitch	Box Qty.	Hex Key	Order No.	Price Per 100
M6	10	M5 - .8	25	3 mm	**SK7010000**	Price
M6	16	M5 - .8	25	3 mm	**SK7010010**	Price
M6	20	M5 - .8	25	3 mm	**SK7010015**	Price
M6	30	M5 - .8	25	3 mm	**SK7010025**	Price
M8	16	M6 - 1.0	25	4 mm	**SK7010035**	Price
M8	20	M6 - 1.0	25	4 mm	**SK7010040**	Price
M8	40	M6 - 1.0	25	4 mm	**SK7010055**	Price
M10	16	M8 - 1.25	25	5 mm	**SK7010060**	Price
M10	20	M8 - 1.25	25	5 mm	**SK7010065**	Price
M10	25	M8 - 1.25	25	5 mm	**SK7010070**	Price
M10	30	M8 - 1.25	25	5 mm	**SK7010075**	Price
M10	40	M8 - 1.25	25	5 mm	**SK7010085**	Price
M10	50	M8 - 1.25	25	5 mm	**SK7010090**	Price
M10	60	M8 - 1.25	25	5 mm	**SK7010095**	Price
M10	70	M8 - 1.25	25	5 mm	**SK7010100**	Price
M10	80	M8 - 1.25	25	5 mm	**SK7010105**	Price
M12	16	M10 - 1.5	25	6 mm	**SK7010110**	Price
M12	20	M10 - 1.5	25	6 mm	**SK7010115**	Price
M12	25	M10 - 1.5	25	6 mm	**SK7010120**	Price
M12	30	M10 - 1.5	25	6 mm	**SK7010125**	Price
M12	40	M10 - 1.5	25	6 mm	**SK7010130**	Price
M12	50	M10 - 1.5	25	6 mm	**SK7010135**	Price
M12	60	M10 - 1.5	25	6 mm	**SK7010140**	Price
M12	70	M10 - 1.5	25	6 mm	**SK7010145**	Price
M16	30	M12 - 1.75	25	8 mm	**SK7010150**	Price
M16	50	M12 - 1.75	25	8 mm	**SK7010155**	Price
M16	70	M12 - 1.75	25	8 mm	**SK7010160**	Price

Shoulder Screws/Bolts

Prices Per 100

SOLD IN BOX QUANTITY ONLY



- Precision ground
- Heat treated alloy steel
- NC thread series
- Class 3A thread
- Used for rotation or sliding applications such as pulley shafts, in punch work, or for use as a bearing pin
- Shoulder screws are also referred to as “stripper bolts”
- The shoulder screw has an enlarged unthreaded, cylindrical shoulder under the head, the diameter of which serves as basis for the begining of the nominal size

					Brighton Best		Holo-Krome	
Body Dia. (in.)	Length (in.)	Thread	Box Qty.	Hex Key (in.)	Order No.	Price	Order No.	Price
1/4	3/8	10-24	25	1/8	**SK520406**	Price	**SH8000001**	Price
1/4	1/2	10-24	25	1/8	**SK520408**	Price	**SH8000002**	Price
1/4	5/8	10-24	25	1/8	**SK520410**	Price	**SH8000003**	Price
1/4	3/4	10-24	25	1/8	**SK520412**	Price	**SH8000004**	Price
1/4	1	10-24	25	1/8	**SK520416**	Price	**SH8000005**	Price
1/4	1-1/4	10-24	25	1/8	**SK520420**	Price	**SH8000006**	Price
1/4	1-1/2	10-24	25	1/8	**SK520424**	Price	**SH8000007**	Price
5/16	3/8	1/4-20	25	5/32	**SK520506**	Price	**SH8000009**	Price
5/16	1/2	1/4-20	25	5/32	**SK520508**	Price	**SH8000010**	Price
5/16	5/8	1/4-20	25	5/32	**SK520510**	Price	**SH8000011**	Price
5/16	3/4	1/4-20	25	5/32	**SK520512**	Price	**SH8000012**	Price

					Brighton Best		Holo-Krome	
Body Dia. (in.)	Length (in.)	Thread	Box Qty.	Hex Key (in.)	Order No.	Price	Order No.	Price
5/16	1	1/4-20	25	5/32	**SK520516**	Price	**SH8000013**	Price
5/16	1-1/4	1/4-20	25	5/32	**SK520520**	Price	**SH8000014**	Price
5/16	1-1/2	1/4-20	25	5/32	**SK520524**	Price	**SH8000015**	Price
5/16	1-3/4	1/4-20	25	5/32	**SK520528**	Price	**SH8000016**	Price
5/16	2	1/4-20	25	5/32	**SK520532**	Price	**SH8000017**	Price
3/8	3/8	5/16-18	25	3/16	**SK520606**	Price	**SH8000020**	Price
3/8	1/2	5/16-18	25	3/16	**SK520608**	Price	**SH8000021**	Price
3/8	5/8	5/16-18	25	3/16	**SK520610**	Price	**SH8000022**	Price
3/8	3/4	5/16-18	25	3/16	**SK520612**	Price	**SH8000023**	Price
3/8	1	5/16-18	25	3/16	**SK520616**	Price	**SH8000024**	Price
3/8	1-1/4	5/16-18	25	3/16	**SK520620**	Price	**SH8000025**	Price

Shoulder Screws/Bolts (Cont.)

SOLD IN BOX QUANTITY ONLY

Prices Per 100

					Brighton Best		Holo-Krome	
Body Dia. (in.)	Length (in.)	Thread	Box Qty.	Hex Key (in.)	Order No.	Price	Order No.	Price
3/8	1-1/2	5/16-18	25	3/16	**SK520624**	Price	**SH8000026**	Price
3/8	1-3/4	5/16-18	25	3/16	**SK520628**	Price	**SH8000027**	Price
3/8	2	5/16-18	25	3/16	**SK520632**	Price	**SH8000028**	Price
3/8	2-1/4	5/16-18	25	3/16	**SK520636**	Price	**SH8000029**	Price
3/8	2-1/2	5/16-18	25	3/16	**SK520640**	Price	**SH8000030**	Price
3/8	2-3/4	5/16-18	25	3/16	**SK520644**	Price	**SH8000031**	Price
3/8	3	5/16-18	25	3/16	**SK520648**	Price	**SH8000032**	Price
3/8	3-1/4	5/16-18	25	3/16	**SK520652**	Price	**SH8000033**	Price
3/8	3-1/2	5/16-18	25	3/16	**SK520656**	Price	**SH8000034**	Price
3/8	3-3/4	5/16-18	25	3/16	**SK520660**	Price	**-**	-
3/8	4	5/16-18	25	3/16	**SK520664**	Price	**SH8000036**	Price
1/2	1/2	3/8-16	25	1/4	**SK520808**	Price	**SH8000040**	Price
1/2	5/8	3/8-16	25	1/4	**SK520810**	Price	**SH8000041**	Price
1/2	3/4	3/8-16	25	1/4	**SK520812**	Price	**SH8000042**	Price
1/2	1	3/8-16	25	1/4	**SK520816**	Price	**SH8000043**	Price
1/2	1-1/4	3/8-16	25	1/4	**SK520820**	Price	**SH8000044**	Price
1/2	1-1/2	3/8-16	25	1/4	**SK520824**	Price	**SH8000045**	Price
1/2	1-3/4	3/8-16	25	1/4	**SK520828**	Price	**SH8000046**	Price
1/2	2	3/8-16	25	1/4	**SK520832**	Price	**SH8000047**	Price
1/2	2-1/4	3/8-16	25	1/4	**SK520836**	Price	**SH8000048**	Price
1/2	2-1/2	3/8-16	25	1/4	**SK520840**	Price	**SH8000049**	Price
1/2	2-3/4	3/8-16	25	1/4	**SK520844**	Price	**SH8000050**	Price
1/2	3	3/8-16	25	1/4	**SK520848**	Price	**SH8000051**	Price
1/2	3-1/4	3/8-16	25	1/4	**SK520852**	Price	**SH8000052**	Price
1/2	3-1/2	3/8-16	25	1/4	**SK520856**	Price	**SH8000053**	Price
1/2	3-3/4	3/8-16	25	1/4	**SK520860**	Price	**SH8000054**	Price
1/2	4	3/8-16	25	1/4	**SK520864**	Price	**SH8000055**	Price
1/2	4-1/4	3/8-16	25	1/4	**SK520868**	Price	**SH8000056**	Price
1/2	4-1/2	3/8-16	25	1/4	**SK520872**	Price	**SH8000057**	Price
1/2	4-3/4	3/8-16	25	1/4	**SK520876**	Price	**SH8000058**	Price
1/2	5	3/8-16	25	1/4	**SK520880**	Price	**SH8000059**	Price
5/8	1-1/4	1/2-13	25	5/16	**SK521020**	Price	**SH8000063**	Price
5/8	1-1/2	1/2-13	25	5/16	**SK521024**	Price	**SH8000064**	Price
5/8	1-3/4	1/2-13	25	5/16	**SK521028**	Price	**SH8000065**	Price



					Brighton Best		Holo-Krome	
Body Dia. (in.)	Length (in.)	Thread	Box Qty.	Hex Key (in.)	Order No.	Price	Order No.	Price
5/8	2	1/2-13	25	5/16	**SK521032**	Price	**SH8000066**	Price
5/8	2-1/4	1/2-13	25	5/16	**SK521036**	Price	**SH8000067**	Price
5/8	2-1/2	1/2-13	25	5/16	**SK521040**	Price	**SH8000068**	Price
5/8	2-3/4	1/2-13	25	5/16	**SK521044**	Price	**SH8000069**	Price
5/8	3	1/2-13	10	5/16	**SK521048**	Price	**-**	-
5/8	3	1/2-13	25	5/16	**-**	-	**SH8000070**	Price
5/8	3-1/4	1/2-13	10	5/16	**SK521052**	Price	**SH8000071**	Price
5/8	3-1/2	1/2-13	10	5/16	**SK521056**	Price	**SH8000072**	Price
5/8	3-3/4	1/2-13	25	5/16	**-**	-	**SH8000073**	Price
5/8	4	1/2-13	10	5/16	**SK521064**	Price	**SH8000074**	Price
5/8	4-1/4	1/2-13	10	5/16	**-**	-	**SH8000075**	Price
5/8	4-1/2	1/2-13	10	5/16	**SK521072**	Price	**SH8000076**	Price
5/8	4-3/4	1/2-13	10	5/16	**SK521076**	Price	**SH8000077**	Price
5/8	5	1/2-13	10	5/16	**SK521080**	Price	**SH8000078**	Price
5/8	5-1/2	1/2-13	10	5/16	**SK521088**	Price	**SH8000079**	Price
5/8	6	1/2-13	10	5/16	**SK521096**	Price	**SH8000080**	Price
3/4	1-1/2	5/8-11	10	3/8	**SK521224**	Price	**SH8000081**	Price
3/4	1-3/4	5/8-11	10	3/8	**SK521228**	Price	**SH8000082**	Price
3/4	2	5/8-11	10	3/8	**SK521232**	Price	**SH8000083**	Price
3/4	2-1/4	5/8-11	10	3/8	**SK521236**	Price	**SH8000084**	Price
3/4	2-1/2	5/8-11	10	3/8	**SK521240**	Price	**SH8000085**	Price
3/4	2-3/4	5/8-11	10	3/8	**SK521244**	Price	**SH8000086**	Price
3/4	3	5/8-11	10	3/8	**SK521248**	Price	**SH8000087**	Price
3/4	3-1/4	5/8-11	10	3/8	**SK521252**	Price	**SH8000088**	Price
3/4	3-1/2	5/8-11	10	3/8	**SK521256**	Price	**SH8000089**	Price
3/4	3-3/4	5/8-11	10	3/8	**-**	-	**SH8000090**	Price
3/4	4	5/8-11	10	3/8	**SK521264**	Price	**SH8000091**	Price
3/4	4-1/4	5/8-11	10	3/8	**SK521268**	Price	**SH8000092**	Price
3/4	4-1/2	5/8-11	10	3/8	**SK521272**	Price	**SH8000093**	Price
3/4	4-3/4	5/8-11	10	3/8	**SK521276**	Price	**SH8000094**	Price
3/4	5	5/8-11	10	3/8	**SK521280**	Price	**SH8000095**	Price
3/4	5-1/2	5/8-11	10	3/8	**SK521288**	Price	**SH8000096**	Price
3/4	6	5/8-11	10	3/8	**SK521296**	Price	**SH8000097**	Price

PRECISION BRAND 15 Pc. Shoulder Screw Shim Assortment

Shortening Shims

- Shortening Shims are precision die cut to fit with the close tolerances around the shoulder screw shank to fit under the screw head

Contains:

- **(**15) each .005", .015" and .032" for 1/4", 5/16", 3/8", 1/2", 5/8" & 3/4" bolts – a total of 270 pieces
- Individual sizes available



Order No.	Price
MA5326010	Price

PRECISION BRAND 15 Pc. Stripper Bolt Shim Assortment

Lengthening Shims

- Lengthening Shims fit perfectly over the stripper screw threads and under the shoulder which, in effect, lengthens the stripper screw length

Contains:

- (15) each .005", .015" and .032" for 1/4", 5/16", 3/8", 1/2", 5/8" & 3/4" bolts – a total of 270 pieces
- Individual sizes available



Order No.	Price
MA5326005	Price

Standard Dowel Pins



ISO 9002

SOLD IN BOX QUANTITY ONLY

Prices Per 100

- Heat treated alloy steel
- Standard tollerance +.0002 over the listed diameters
- Uniform quality
- Dowels are uniform polished and ground to all government specifications

Dia. (in.)	Length (in.)	Box Qty.	Order No.	Price
1/8	1	100	**SM500216**	Price
1/8	1/2	100	**SM500208**	Price
1/8	1-1/2	100	**SM500224**	Price
1/8	1-1/4	100	**SM500220**	Price
1/8	1-3/4	100	**SM500228**	Price
1/8	2	100	**SM500232**	Price
1/8	3/4	100	**SM500212**	Price
1/8	3/8	100	**SM500206**	Price
1/8	5/8	100	**SM500210**	Price
1/8	7/8	100	**SM500214**	Price
3/16	1	100	**SM500316**	Price
3/16	1/2	100	**SM500308**	Price
3/16	1-1/2	100	**SM500324**	Price
3/16	1-1/4	100	**SM500320**	Price
3/16	1-3/4	100	**SM500328**	Price
3/16	2	100	**SM500332**	Price
3/16	3/4	100	**SM500312**	Price
3/16	5/8	100	**SM500310**	Price
3/16	7/8	100	**SM500314**	Price
1/4	1	100	**SM500416**	Price
1/4	1/2	100	**SM500408**	Price
1/4	1-1/2	100	**SM500424**	Price
1/4	1-1/4	100	**SM500420**	Price
1/4	1-3/4	100	**SM500428**	Price
1/4	2	100	**SM500432**	Price
1/4	2-1/2	100	**SM500440**	Price
1/4	2-1/4	100	**SM500436**	Price
1/4	3/4	100	**SM500412**	Price
1/4	5/8	100	**SM500410**	Price
1/4	7/8	100	**SM500414**	Price
5/16	1	100	**SM500516**	Price
5/16	1/2	100	**SM500508**	Price
5/16	1-1/2	100	**SM500524**	Price
5/16	1-1/4	100	**SM500520**	Price
5/16	1-3/4	100	**SM500528**	Price
5/16	2	100	**SM500532**	Price

Dia. (in.)	Length (in.)	Box Qty.	Order No.	Price
5/16	2-1/2	100	**SM500540**	Price
5/16	2-1/4	100	**SM500536**	Price
5/16	3	100	**SM500548**	Price
5/16	3/4	100	**SM500512**	Price
5/16	5/8	100	**SM500510**	Price
5/16	7/8	100	**SM500514**	Price
3/8	1	100	**SM500616**	Price
3/8	1/2	100	**SM500608**	Price
3/8	1-1/2	100	**SM500624**	Price
3/8	1-1/4	100	**SM500620**	Price
3/8	1-3/4	100	**SM500628**	Price
3/8	2	100	**SM500632**	Price
3/8	2-1/2	100	**SM500640**	Price
3/8	2-1/4	100	**SM500636**	Price
3/8	3	100	**SM500648**	Price
3/8	3/4	100	**SM500612**	Price
3/8	5/8	100	**SM500610**	Price
3/8	7/8	100	**SM500614**	Price
7/16	1	100	**SM500716**	Price
7/16	1-1/2	100	**SM500724**	Price
7/16	1-1/4	100	**SM500720**	Price
7/16	1-3/4	100	**SM500728**	Price
7/16	2	100	**SM500732**	Price
7/16	2-1/2	50	**SM500740**	Price
7/16	3	50	**SM500748**	Price
1/2	1	100	**SM500816**	Price
1/2	1-1/2	100	**SM500824**	Price
1/2	1-1/4	100	**SM500820**	Price
1/2	1-3/4	50	**SM500828**	Price
1/2	2	50	**SM500832**	Price
1/2	2-1/2	50	**SM500840**	Price
1/2	2-1/4	50	**SM500836**	Price
1/2	3	50	**SM500848**	Price
1/2	3/4	100	**SM500812**	Price
1/2	3-1/2	25	**SM500856**	Price
1/2	3-3/4	25	**SM500860**	Price

Dia. (in.)	Length (in.)	Box Qty.	Order No.	Price
1/2	4	25	**SM500864**	Price
5/8	1	50	**SM501016**	Price
5/8	1-1/2	50	**SM501024**	Price
5/8	1-1/4	50	**SM501020**	Price
5/8	1-3/4	50	**SM501028**	Price
5/8	2	50	**SM501032**	Price
5/8	2-1/2	50	**SM501040**	Price
5/8	2-1/4	50	**SM501036**	Price
5/8	3	25	**SM501048**	Price
5/8	3-1/2	25	**SM501056**	Price
5/8	3-1/4	25	**SM501052**	Price
5/8	4	25	**SM501064**	Price
5/8	4-1/2	50	**SM501072**	Price
5/8	5	10	**SM501080**	Price
3/4	3	25	**SM501248**	Price
3/4	3-1/2	10	**SM501256**	Price
3/4	3-1/4	10	**SM501252**	Price
3/4	4	10	**SM501264**	Price
3/4	4-1/2	10	**SM501272**	Price
3/4	5	10	**SM501280**	Price
3/4	6	10	**SM501296**	Price
7/8	2-1/2	10	**SM501440**	Price
7/8	3	10	**SM501448**	Price
7/8	3-1/2	10	**SM501456**	Price
7/8	4	10	**SM501464**	Price
7/8	4-1/2	10	**SM501472**	Price
7/8	5	10	**SM501480**	Price
7/8	6	10	**SM501496**	Price
1	2	10	**SM501632**	Price
1	2-1/2	10	**SM501640**	Price
1	3	10	**SM501648**	Price
1	3-1/2	10	**SM501656**	Price
1	4	10	**SM501664**	Price
1	4-1/2	5	**SM501672**	Price
1	5	5	**SM501680**	Price
1	6	5	**SM501696**	Price

Pull Dowel Pins



Prices Per 100

SOLD IN BOX QUANTITY ONLY

- Hardened and ground alloy steel
- Standard tolerance +.0002 over the listed diameters
- Uniform quality

Dia. (in.)	Tap Size	Length (in.)	Box Qty.	Order No.	Price
3/16	6-32	1	100	**SM520316**	Price
3/16	6-32	1-1/2	100	**SM520324**	Price
3/16	6-32	1-1/4	100	**SM520320**	Price
3/16	6-32	1-3/4	100	**SM520328**	Price
3/16	6-32	2	100	**SM520332**	Price
3/16	6-32	2-1/2	100	**SM520340**	Price
3/16	6-32	3	100	**SM520348**	Price
3/16	6-32	3/4	100	**SM520312**	Price
1/4	8-32	1	100	**SM520416**	Price
1/4	8-32	1-1/2	100	**SM520424**	Price
1/4	8-32	1-1/4	100	**SM520420**	Price
1/4	8-32	1-3/4	50	**SM520428**	Price
1/4	8-32	2	50	**SM520432**	Price
1/4	8-32	2-1/2	50	**SM520440**	Price
1/4	8-32	3	50	**SM520448**	Price
5/16	10-32	1	100	**SM520516**	Price
5/16	10-32	1-1/2	100	**SM520524**	Price
5/16	10-32	1-1/4	100	**SM520520**	Price
5/16	10-32	1-3/4	50	**SM520528**	Price
5/16	10-32	2	50	**SM520532**	Price
5/16	10-32	2-1/2	50	**SM520540**	Price
5/16	10-32	3	50	**SM520548**	Price
3/8	10-32	1	20	**SM520616**	Price

Dia. (in.)	Tap Size	Length (in.)	Box Qty.	Order No.	Price
3/8	10-32	1-1/2	20	**SM520624**	Price
3/8	10-32	1-1/4	20	**SM520620**	Price
3/8	10-32	1-3/4	20	**SM520628**	Price
3/8	10-32	2	20	**SM520632**	Price
3/8	10-32	2-1/2	20	**SM520640**	Price
3/8	10-32	2-1/4	20	**SM520636**	Price
3/8	10-32	2-3/4	20	**SM520644**	Price
3/8	10-32	3	20	**SM520648**	Price
7/16	1/4-20	1-1/2	20	**SM520724**	Price
7/16	1/4-20	1-1/4	20	**SM520720**	Price
7/16	1/4-20	1-3/4	20	**SM520728**	Price
7/16	1/4-20	2	20	**SM520732**	Price
7/16	1/4-20	2-1/2	20	**SM520740**	Price
7/16	1/4-20	3	20	**SM520748**	Price
1/2	1/4-20	1	20	**SM520816**	Price
1/2	1/4-20	1-1/2	20	**SM520824**	Price
1/2	1/4-20	1-1/4	20	**SM520820**	Price
1/2	1/4-20	1-3/4	20	**SM520828**	Price
1/2	1/4-20	2	20	**SM520832**	Price
1/2	1/4-20	2-1/2	20	**SM520840**	Price
1/2	1/4-20	2-1/4	20	**SM520836**	Price
1/2	1/4-20	2-3/4	20	**SM520844**	Price
1/2	1/4-20	3	20	**SM520848**	Price

Dia. (in.)	Tap Size	Length (in.)	Box Qty.	Order No.	Price
1/2	1/4-20	3-1/2	20	**SM520856**	Price
1/2	1/4-20	4	20	**SM520864**	Price
5/8	1/4-20	1	10	**SM521016**	Price
5/8	1/4-20	1-1/2	10	**SM521024**	Price
5/8	1/4-20	1-1/4	10	**SM521020**	Price
5/8	1/4-20	1-3/4	10	**SM521028**	Price
5/8	1/4-20	2	10	**SM521032**	Price
5/8	1/4-20	2-1/2	10	**SM521040**	Price
5/8	1/4-20	2-3/4	10	**SM521044**	Price
5/8	1/4-20	3	10	**SM521048**	Price
5/8	1/4-20	4	10	**SM521064**	Price
3/4	5/16-18	1-1/2	25	**SM521224**	Price
3/4	5/16-18	1-3/4	10	**SM521228**	Price
3/4	5/16-18	2	10	**SM521232**	Price
3/4	5/16-18	2-1/2	10	**SM521240**	Price
3/4	5/16-18	2-3/4	10	**SM521244**	Price
3/4	5/16-18	3	10	**SM521248**	Price
3/4	5/16-18	4	10	**SM521264**	Price
1	5/16-18	2	5	**SM521632**	Price
1	5/16-18	3	5	**SM521648**	Price
1	5/16-18	4	5	**SM521664**	Price
1	5/16-18	5	5	**SM521680**	Price

Metric Dowel Pins

- A solid headless straight pin with a closely controlled diameter
- One end is chamfered with the other end radiused to form a crown
- Precise tolerances of dowel pins make them excellent for achieving proper alignment of parts in high-speed assemblies
- DiN 6325
- Heat treated to RC 60 min. — surface
- RC 47-58 - core



Prices Per 100



Diameter	Length (mm)	Box Qty.	Order No.	Price
M3	8	100	**SM5060000**	Price
M3	10	100	**SM5060005**	Price
M3	12	100	**SM5060010**	Price
M3	16	100	**SM5060015**	Price
M3	20	100	**SM5060020**	Price
M3	25	100	**SM5060025**	Price
M3	30	100	**SM5060030**	Price
M4	10	100	**SM5060040**	Price
M4	12	100	**SM5060045**	Price
M4	16	100	**SM5060050**	Price
M4	20	100	**SM5060055**	Price
M4	25	100	**SM5060060**	Price
M4	30	100	**SM5060065**	Price
M4	35	100	**SM5060070**	Price
M5	12	100	**SM5060100**	Price
M5	16	100	**SM5060105**	Price
M5	20	100	**SM5060110**	Price
M5	25	100	**SM5060115**	Price
M5	30	100	**SM5060120**	Price
M5	35	100	**SM5060125**	Price
M5	40	100	**SM5060130**	Price
M5	45	100	**SM5060135**	Price
M5	50	100	**SM5060140**	Price
M6	16	100	**SM5060150**	Price
M6	20	100	**SM5060155**	Price
M6	25	100	**SM5060160**	Price
M6	30	100	**SM5060165**	Price
M6	35	100	**SM5060170**	Price
M6	40	100	**SM5060175**	Price
M6	45	100	**SM5060180**	Price
M6	50	100	**SM5060185**	Price
M6	60	100	**SM5060190**	Price
M8	16	100	**SM5060300**	Price
M8	20	100	**SM5060305**	Price
M8	25	100	**SM5060310**	Price
M8	30	100	**SM5060315**	Price
M8	35	100	**SM5060320**	Price

Diameter	Length (mm)	Box Qty.	Order No.	Price
M8	40	100	**SM5060325**	Price
M8	45	100	**SM5060330**	Price
M8	50	100	**SM5060335**	Price
M8	60	100	**SM5060340**	Price
M8	70	100	**SM5060345**	Price
M10	20	100	**SM5060370**	Price
M10	25	100	**SM5060372**	Price
M10	30	100	**SM5060374**	Price
M10	35	100	**SM5060376**	Price
M10	40	100	**SM5060378**	Price
M10	45	100	**SM5060380**	Price
M10	50	100	**SM5060382**	Price
M10	60	50	**SM5060384**	Price
M10	70	50	**SM5060386**	Price
M10	80	50	**SM5060388**	Price
M10	90	50	**SM5060390**	Price
M12	25	50	**SM5060405**	Price
M12	30	50	**SM5060410**	Price
M12	35	50	**SM5060415**	Price
M12	40	50	**SM5060420**	Price
M12	45	50	**SM5060425**	Price
M12	50	50	**SM5060430**	Price
M12	60	25	**SM5060435**	Price
M12	70	25	**SM5060440**	Price
M12	80	25	**SM5060445**	Price
M12	90	25	**SM5060450**	Price
M12	100	25	**SM5060455**	Price
M16	30	25	**SM5060655**	Price
M16	35	25	**SM5060660**	Price
M16	40	25	**SM5060665**	Price
M16	45	25	**SM5060670**	Price
M16	50	25	**SM5060675**	Price
M16	60	25	**SM5060685**	Price
M16	70	25	**SM5060690**	Price
M16	80	25	**SM5060695**	Price
M16	90	25	**SM5060700**	Price
M16	100	25	**SM5060705**	Price

MADE IN THE USA Metric Pull Dowels

- Tapped hole for easy pull-out
- Heat treated alloy steel
- Pull dowel pins are easier, more accurate and more economical than modifying standard dowel pins
- Pull dowel pins are easy to install in blind holes, and are reusable
- DiN 7979
- Case hardened RC 58-62



Prices Per 100



Diameter	Tap Size	Length (mm)	Box Qty.	Order No.	Price
M6	M4 - .7	16	100	**SM5270000**	Price
M6	M4 - .7	20	100	**SM5270005**	Price
M6	M4 - .7	24	100	**SM5270010**	Price
M6	M4 - .7	30	100	**SM5270015**	Price
M6	M4 - .7	32	100	**SM5270020**	Price
M6	M4 - .7	36	100	**SM5270025**	Price
M6	M4 - .7	40	50	**SM5270030**	Price
M6	M4 - .7	50	50	**SM5270035**	Price
M6	M4 - .7	60	50	**SM5270040**	Price
M8	M5 - .8	16	100	**SM5270050**	Price
M8	M5 - .8	20	100	**SM5270055**	Price
M8	M5 - .8	24	100	**SM5270060**	Price
M8	M5 - .8	30	100	**SM5270065**	Price
M8	M5 - .8	32	100	**SM5270070**	Price
M8	M5 - .8	36	100	**SM5270075**	Price
M8	M5 - .8	40	100	**SM5270080**	Price
M8	M5 - .8	50	50	**SM5270085**	Price
M8	M5 - .8	60	50	**SM5270090**	Price
M10	M6 - 1.0	20	100	**SM5270100**	Price
M10	M6 - 1.0	24	100	**SM5270105**	Price
M10	M6 - 1.0	32	100	**SM5270110**	Price

Diameter	Tap Size	Length (mm)	Box Qty.	Order No.	Price
M10	M6 - 1.0	36	100	**SM5270115**	Price
M10	M6 - 1.0	40	50	**SM5270120**	Price
M10	M6 - 1.0	50	50	**SM5270125**	Price
M10	M6 - 1.0	60	50	**SM5270130**	Price
M12	M6 - 1.0	30	50	**SM5270155**	Price
M12	M6 - 1.0	32	50	**SM5270160**	Price
M12	M6 - 1.0	40	50	**SM5270165**	Price
M12	M6 - 1.0	50	50	**SM5270170**	Price
M12	M6 - 1.0	60	25	**SM5270175**	Price
M12	M6 - 1.0	70	25	**SM5270180**	Price
M12	M6 - 1.0	80	25	**SM5270185**	Price
M16	M8 - 1.25	40	50	**SM5270200**	Price
M16	M8 - 1.25	50	25	**SM5270210**	Price
M16	M8 - 1.25	60	25	**SM5270215**	Price
M16	M8 - 1.25	70	25	**SM5270220**	Price
M16	M8 - 1.25	80	10	**SM5270225**	Price
M20	M10 - 1.5	40	25	**SM5270250**	Price
M20	M10 - 1.5	50	25	**SM5270255**	Price
M20	M10 - 1.5	60	25	**SM5270260**	Price
M20	M10 - 1.5	70	25	**SM5270265**	Price
M20	M10 - 1.5	80	20	**SM5270270**	Price

Hex Cap Screws



Hex Cap Grade 5 - Zinc:

- Grade 5 hex head cap screws are heat treated
- Ideal fastener for use in routine fastening applications
- Grade 5 hex cap screws offers the versatility of dual usage in most applications, either as a stronger substitute for a grade 2 application, or its designed purpose as grade 5 hex head cap screw
- Grade 5 hex cap screws are finished with a bright zinc plate

Hex Cap Grade 8 - Zinc/Yellow:



- Grade 8 hex head cap screws are designed for use in areas where there is high stress, and need for extra strength
- Used with grade 8 nuts to give you the reliability and assurance that you need
- The zinc and yellow plating offers a greater degree resistance than standard zinc, and its bright yellow plating will differentiate itself from our grade 5 hex cap screws



Prices Per 100

Grade - 5				
Size	Length Under Head	Box Qty.	Order No.	Price
1/4-20	1/2	100	**SN7510005**	Price
1/4-20	5/8	100	**SN7510010**	Price
1/4-20	3/4	100	**SN7510015**	Price
1/4-20	7/8	100	**SN7510020**	Price
1/4-20	1	100	**SN7510025**	Price
1/4-20	1-1/4	100	**SN7510030**	Price
1/4-20	1-1/2	100	**SN7510035**	Price
1/4-20	1-3/4	100	**SN7510040**	Price
1/4-20	2	100	**SN7510045**	Price
1/4-20	2-1/4	50	**SN7510050**	Price
1/4-20	2-1/2	50	**SN7510055**	Price
1/4-20	2-3/4	50	**SN7510060**	Price
1/4-20	3	50	**SN7510065**	Price
1/4-20	3-1/4	50	**SN7510070**	Price
1/4-20	3-1/2	50	**SN7510075**	Price
1/4-20	4	50	**SN7510085**	Price
1/4-20	4-1/2	50	**SN7510090**	Price
1/4-20	5	50	**SN7510095**	Price
1/4-20	5-1/2	50	**SN7510100**	Price
1/4-20	6	50	**SN7510105**	Price
5/16-18	1/2	100	**SN7510108**	Price
5/16-18	5/8	100	**SN7510109**	Price
5/16-18	3/4	100	**SN7510110**	Price
5/16-18	7/8	100	**SN7510115**	Price
5/16-18	1	100	**SN7510120**	Price
5/16-18	1-1/4	100	**SN7510125**	Price
5/16-18	1-1/2	100	**SN7510130**	Price
5/16-18	1-3/4	100	**SN7510135**	Price
5/16-18	2	100	**SN7510140**	Price
5/16-18	2-1/4	50	**SN7510145**	Price
5/16-18	2-1/2	50	**SN7510150**	Price
5/16-18	2-3/4	50	**SN7510155**	Price
5/16-18	3	50	**SN7510160**	Price
5/16-18	3-1/4	50	**SN7510165**	Price
5/16-18	3-1/2	50	**SN7510170**	Price
5/16-18	3-3/4	50	**SN7510175**	Price
5/16-18	4	50	**SN7510180**	Price
5/16-18	4-1/2	50	**SN7510185**	Price
5/16-18	5	50	**SN7510190**	Price
5/16-18	5-1/2	25	**SN7510195**	Price
5/16-18	6	25	**SN7510200**	Price
3/8-16	1/2	100	**SN7510250**	Price
3/8-16	5/8	100	**SN7510255**	Price
3/8-16	3/4	100	**SN7510260**	Price
3/8-16	7/8	100	**SN7510265**	Price
3/8-16	1	100	**SN7510270**	Price
3/8-16	1-1/4	100	**SN7510275**	Price
3/8-16	1-1/2	100	**SN7510280**	Price
3/8-16	1-3/4	50	**SN7510285**	Price
3/8-16	2	50	**SN7510290**	Price

Grade - 5				
Size	Length Under Head	Box Qty.	Order No.	Price
3/8-16	2-1/4	50	**SN7510295**	Price
3/8-16	2-1/2	50	**SN7510300**	Price
3/8-16	2-3/4	50	**SN7510305**	Price
3/8-16	3	50	**SN7510310**	Price
3/8-16	3-1/4	25	**SN7510315**	Price
3/8-16	3-1/2	25	**SN7510320**	Price
3/8-16	3-3/4	25	**SN7510325**	Price
3/8-16	4	25	**SN7510330**	Price
3/8-16	4-1/2	25	**SN7510335**	Price
3/8-16	5	25	**SN7510340**	Price
3/8-16	5-1/2	25	**SN7510345**	Price
3/8-16	6	25	**SN7510350**	Price
3/8-16	6-1/2	25	**SN7510355**	Price
3/8-16	7	25	**SN7510360**	Price
7/16-14	3/4	50	**SN7510400**	Price
7/16-14	1	50	**SN7510410**	Price
7/16-14	1-1/4	50	**SN7510415**	Price
7/16-14	1-1/2	50	**SN7510420**	Price
7/16-14	1-3/4	50	**SN7510425**	Price
7/16-14	2	50	**SN7510430**	Price
7/16-14	2-1/4	25	**SN7510435**	Price
7/16-14	2-1/2	25	**SN7510440**	Price
7/16-14	3	50	**SN7510445**	Price
7/16-14	3-1/2	25	**SN7510450**	Price
7/16-14	4	25	**SN7510455**	Price
7/16-14	4-1/2	25	**SN7510460**	Price
7/16-14	5	25	**SN7510465**	Price
1/2-13	3/4	50	**SN7510500**	Price
1/2-13	1	50	**SN7510510**	Price
1/2-13	1-1/4	50	**SN7510515**	Price
1/2-13	1-1/2	50	**SN7510520**	Price
1/2-13	1-3/4	50	**SN7510525**	Price
1/2-13	2	50	**SN7510530**	Price
1/2-13	2-1/4	25	**SN7510535**	Price
1/2-13	2-1/2	25	**SN7510540**	Price
1/2-13	2-3/4	25	**SN7510545**	Price
1/2-13	3	25	**SN7510550**	Price
1/2-13	3-1/4	25	**SN7510555**	Price
1/2-13	3-1/2	25	**SN7510560**	Price
1/2-13	3-3/4	25	**SN7510565**	Price
1/2-13	4	25	**SN7510570**	Price
1/2-13	4-1/2	25	**SN7510575**	Price
1/2-13	5	25	**SN7510580**	Price
1/2-13	5-1/2	25	**SN7510585**	Price
1/2-13	6	25	**SN7510590**	Price
1/2-13	6-1/2	25	**SN7510595**	Price
1/2-13	7	25	**SN7510600**	Price
1/2-13	8	25	**SN7510605**	Price
9/16-12	1	25	**SN7510630**	Price
9/16-12	1-1/4	25	**SN7510635**	Price
9/16-12	1-1/2	25	**SN7510640**	Price
9/16-12	1-3/4	25	**SN7510645**	Price
9/16-12	2	25	**SN7510650**	Price
9/16-12	2-1/4	25	**SN7510655**	Price
9/16-12	2-1/2	25	**SN7510660**	Price
9/16-12	3	25	**SN7510665**	Price
9/16-12	3-1/2	25	**SN7510670**	Price
9/16-12	4	25	**SN7510675**	Price
5/8-11	1	25	**SN7510700**	Price
5/8-11	1-1/4	25	**SN7510705**	Price
5/8-11	1-1/2	25	**SN7510710**	Price
5/8-11	1-3/4	25	**SN7510715**	Price
5/8-11	2	25	**SN7510720**	Price
5/8-11	2-1/4	25	**SN7510725**	Price
5/8-11	2-1/2	25	**SN7510730**	Price
5/8-11	2-3/4	25	**SN7510735**	Price
5/8-11	3	25	**SN7510740**	Price
5/8-11	3-1/4	25	**SN7510745**	Price
5/8-11	3-1/2	25	**SN7510750**	Price
5/8-11	3-3/4	25	**SN7510755**	Price
5/8-11	4	25	**SN7510760**	Price
5/8-11	4-1/2	25	**SN7510765**	Price
5/8-11	5	25	**SN7510770**	Price

Hex Cap Screws (Cont.)



Prices Per 100 SOLD IN BOX QUANTITY ONLY

Grade - 5				
Size	Length Under Head	Box Qty.	Order No.	Price
5/8-11	5-1/2	25	**SN7510775**	Price
5/8-11	6	25	**SN7510780**	Price
5/8-11	7	25	**SN7510785**	Price
5/8-11	8	25	**SN7510790**	Price
3/4-10	1	25	**SN7510830**	Price
3/4-10	1-1/4	25	**SN7510835**	Price
3/4-10	1-1/2	25	**SN7510840**	Price
3/4-10	1-3/4	25	**SN7510845**	Price
3/4-10	2	25	**SN7510850**	Price
3/4-10	2-1/4	25	**SN7510855**	Price
3/4-10	2-1/2	25	**SN7510860**	Price
3/4-10	2-3/4	25	**SN7510865**	Price
3/4-10	3	25	**SN7510870**	Price
3/4-10	3-1/4	25	**SN7510875**	Price
3/4-10	3-1/2	25	**SN7510880**	Price
3/4-10	3-3/4	25	**SN7510885**	Price
3/4-10	4	25	**SN7510890**	Price
3/4-10	4-1/2	10	**SN7510895**	Price
3/4-10	5	10	**SN7510900**	Price
3/4-10	5-1/2	10	**SN7510905**	Price
3/4-10	6	10	**SN7510910**	Price
3/4-10	7	10	**SN7510915**	Price
3/4-10	8	10	**SN7510920**	Price
7/8-9	1-1/2	15	**SN7511000**	Price
7/8-9	1-3/4	15	**SN7511005**	Price
7/8-9	2	15	**SN7511010**	Price
7/8-9	2-1/4	15	**SN7511015**	Price
7/8-9	2-1/2	15	**SN7511020**	Price
7/8-9	2-3/4	15	**SN7511025**	Price
7/8-9	3	15	**SN7511030**	Price
7/8-9	3-1/4	15	**SN7511035**	Price
7/8-9	3-1/2	15	**SN7511040**	Price
7/8-9	3-3/4	15	**SN7511045**	Price
7/8-9	4	15	**SN7511050**	Price
7/8-9	4-1/2	10	**SN7511055**	Price
7/8-9	5	10	**SN7511060**	Price
7/8-9	5-1/2	10	**SN7511065**	Price
7/8-9	6	10	**SN7511070**	Price
7/8-9	7	10	**SN7511075**	Price
7/8-9	8	10	**SN7511080**	Price
1-8	1-3/4	10	**SN7511155**	Price
1-8	2	10	**SN7511160**	Price
1-8	2-1/4	10	**SN7511165**	Price
1-8	2-1/2	10	**SN7511170**	Price
1-8	2-3/4	10	**SN7511175**	Price
1-8	3	10	**SN7511180**	Price
1-8	3-1/4	10	**SN7511185**	Price
1-8	3-1/2	10	**SN7511190**	Price
1-8	3-3/4	10	**SN7511195**	Price
1-8	4	10	**SN7511200**	Price
1-8	4-1/2	10	**SN7511205**	Price
1-8	5	10	**SN7511210**	Price
1-8	5-1/2	10	**SN7511215**	Price
1-8	6	10	**SN7511220**	Price
1-8	7	5	**SN7511230**	Price
1-8	8	5	**SN7511235**	Price

Grade - 8				
Size	Length Under Head	Box Qty.	Order No.	Price
1/4-20	1/2	100	**SN7830005**	Price
1/4-20	5/8	100	**SN7830010**	Price
1/4-20	3/4	100	**SN7830015**	Price
1/4-20	7/8	100	**SN7830020**	Price
1/4-20	1	100	**SN7830025**	Price
1/4-20	1-1/4	100	**SN7830030**	Price
1/4-20	1-1/2	100	**SN7830035**	Price
1/4-20	1-3/4	100	**SN7830040**	Price
1/4-20	2	100	**SN7830045**	Price

Grade - 8				
Size	Length Under Head	Box Qty.	Order No.	Price
1/4-20	2-1/4	100	**SN7830050**	Price
1/4-20	2-1/2	100	**SN7830055**	Price
1/4-20	2-3/4	100	**SN7830060**	Price
1/4-20	3	50	**SN7830065**	Price
1/4-20	3-1/2	50	**SN7830075**	Price
1/4-20	4	100	**SN7830085**	Price
1/4-20	4-1/2	100	**SN7830090**	Price
1/4-20	5	100	**SN7830095**	Price
1/4-20	5-1/2	100	**SN7830100**	Price
1/4-20	6	50	**SN7830105**	Price
1/4-28	5-1/2	50	**SN7840990**	Price
5/16-18	1/2	100	**SN7830140**	Price
5/16-18	5/8	100	**SN7830145**	Price
5/16-18	3/4	100	**SN7830150**	Price
5/16-18	7/8	100	**SN7830155**	Price
5/16-18	1	100	**SN7830160**	Price
5/16-18	1-1/4	100	**SN7830165**	Price
5/16-18	1-1/2	100	**SN7830170**	Price
5/16-18	1-3/4	100	**SN7830175**	Price
5/16-18	2	100	**SN7830180**	Price
5/16-18	2-1/4	100	**SN7830185**	Price
5/16-18	2-1/2	100	**SN7830190**	Price
5/16-18	2-3/4	100	**SN7830195**	Price
5/16-18	3	50	**SN7830200**	Price
5/16-18	3-1/4	50	**SN7841000**	Price
5/16-18	3-1/2	50	**SN7830210**	Price
5/16-18	3-3/4	50	**SN7830215**	Price
5/16-18	4	50	**SN7830220**	Price
5/16-18	4-1/2	50	**SN7830225**	Price
5/16-18	5	50	**SN7830230**	Price
5/16-18	5-1/2	50	**SN7830235**	Price
5/16-18	6	50	**SN7830240**	Price
3/8-16	1/2	100	**SN7830300**	Price
3/8-16	5/8	100	**SN7830305**	Price
3/8-16	3/4	100	**SN7830310**	Price
3/8-16	7/8	100	**SN7830315**	Price
3/8-16	1	100	**SN7830320**	Price
3/8-16	1-1/4	100	**SN7830325**	Price
3/8-16	1-1/2	100	**SN7830330**	Price
3/8-16	1-3/4	50	**SN7830335**	Price
3/8-16	2	50	**SN7830340**	Price
3/8-16	2-1/4	50	**SN7830345**	Price
3/8-16	2-1/2	50	**SN7830350**	Price
3/8-16	2-3/4	50	**SN7830355**	Price
3/8-16	3	50	**SN7830360**	Price
3/8-16	3-1/4	25	**SN7830365**	Price
3/8-16	3-1/2	25	**SN7830370**	Price
3/8-16	3-3/4	25	**SN7830375**	Price
3/8-16	4	25	**SN7830380**	Price
3/8-16	4-1/2	50	**SN7830385**	Price
3/8-16	5	50	**SN7830390**	Price
3/8-16	5-1/2	50	**SN7830395**	Price
3/8-16	6	25	**SN7830400**	Price
3/8-16	7	25	**SN7841005**	Price
3/8-16	8	25	**SN7841010**	Price
3/8-24	5	25	**SN7840995**	Price
7/16-14	3/4	50	**SN7841015**	Price
7/16-14	1	50	**SN7830460**	Price
7/16-14	1-1/4	50	**SN7830465**	Price
7/16-14	1-1/2	50	**SN7830470**	Price
7/16-14	1-3/4	50	**SN7830475**	Price
7/16-14	2	50	**SN7830480**	Price
7/16-14	2-1/4	50	**SN7830485**	Price
7/16-14	2-1/2	50	**SN7830490**	Price
7/16-14	2-3/4	25	**SN7841020**	Price
7/16-14	3	50	**SN7830495**	Price

Hex Cap Screws (Cont.)





Prices Per 100 SOLD IN BOX QUANTITY ONLY

Grade - 8				
Size	Length Under Head	Box Qty.	Order No.	Price
7/16-14	4-1/2	25	**SN7841025**	Price
7/16-14	5	25	**SN7841030**	Price
7/16-14	6	25	**SN7841035**	Price
1/2-13	3/4	50	**SN7841040**	Price
1/2-13	1	50	**SN7830610**	Price
1/2-13	1-1/4	50	**SN7830615**	Price
1/2-13	1-1/2	50	**SN7830620**	Price
1/2-13	1-3/4	50	**SN7830625**	Price
1/2-13	2	50	**SN7830630**	Price
1/2-13	2-1/4	50	**SN7830635**	Price
1/2-13	2-1/2	50	**SN7830640**	Price
1/2-13	2-3/4	50	**SN7830645**	Price
1/2-13	3	50	**SN7830650**	Price
1/2-13	3-1/4	25	**SN7830655**	Price
1/2-13	3-1/2	25	**SN7830660**	Price
1/2-13	3-3/4	25	**SN7830665**	Price
1/2-13	4	25	**SN7830670**	Price
1/2-13	4-1/2	25	**SN7830675**	Price
1/2-13	5	25	**SN7830680**	Price
1/2-13	5-1/2	25	**SN7830685**	Price
1/2-13	6	25	**SN7830690**	Price
1/2-13	6-1/2	25	**SN7841045**	Price
1/2-13	7	25	**SN7841050**	Price
1/2-13	8	25	**SN7841055**	Price
9/16-12	1	25	**SN7830750**	Price
9/16-12	1-1/4	25	**SN7830755**	Price
9/16-12	1-1/2	25	**SN7830760**	Price
9/16-12	1-3/4	25	**SN7830765**	Price
9/16-12	2	25	**SN7830770**	Price
9/16-12	2-1/4	25	**SN7830775**	Price
9/16-12	2-1/2	25	**SN7830780**	Price
9/16-12	3	25	**SN7830785**	Price
9/16-12	3-1/2	25	**SN7830790**	Price
9/16-12	4	25	**SN7830795**	Price
5/8-11	1	25	**SN7830850**	Price
9/16-12	5	25	**SN7841060**	Price
5/8-11	1-1/4	25	**SN7830855**	Price
5/8-11	1-1/2	25	**SN7830860**	Price
5/8-11	1-3/4	25	**SN7830865**	Price
5/8-11	2	25	**SN7830870**	Price
5/8-11	2-1/4	25	**SN7830875**	Price
5/8-11	2-1/2	25	**SN7830880**	Price
5/8-11	2-3/4	25	**SN7830885**	Price
5/8-11	3	25	**SN7830890**	Price
5/8-11	3-1/4	25	**SN7830895**	Price
5/8-11	3-1/2	25	**SN7830900**	Price
5/8-11	3-3/4	25	**SN7830905**	Price
5/8-11	4	25	**SN7830910**	Price
5/8-11	4-1/2	25	**SN7830915**	Price
5/8-11	5	25	**SN7830920**	Price
5/8-11	5-1/2	25	**SN7830925**	Price
5/8-11	6	25	**SN7830930**	Price
5/8-11	7	25	**SN7841065**	Price
5/8-11	8	25	**SN7841070**	Price
3/4-10	1	25	**SN7831000**	Price
3/4-10	1-1/4	25	**SN7831005**	Price
3/4-10	1-1/2	25	**SN7831010**	Price
3/4-10	1-3/4	20	**SN7831015**	Price
3/4-10	2	20	**SN7831020**	Price
3/4-10	2-1/4	25	**SN7831025**	Price
3/4-10	2-1/2	25	**SN7831030**	Price
3/4-10	2-3/4	25	**SN7831035**	Price
3/4-10	3	25	**SN7831040**	Price
3/4-10	3-1/4	25	**SN7831045**	Price
3/4-10	3-1/2	25	**SN7831050**	Price

Grade - 8				
Size	Length Under Head	Box Qty.	Order No.	Price
3/4-10	3-3/4	25	**SN7831055**	Price
3/4-10	4	20	**SN7831060**	Price
3/4-10	4-1/2	10	**SN7831065**	Price
3/4-10	5	10	**SN7831070**	Price
3/4-10	5-1/2	10	**SN7831075**	Price
3/4-10	6	10	**SN7831080**	Price
3/4-10	6-1/2	10	**SN7841075**	Price
3/4-10	7	10	**SN7841080**	Price
3/4-10	8	10	**SN7841085**	Price
3/4-10	9	10	**SN7841090**	Price
3/4-10	10	10	**SN7841095**	Price
7/8-9	1-1/2	15	**SN7831150**	Price
7/8-9	2-1/4	15	**SN7831165**	Price
7/8-9	2-1/2	15	**SN7831170**	Price
7/8-9	2-3/4	15	**SN7831175**	Price
7/8-9	3	15	**SN7831180**	Price
7/8-9	3-1/4	15	**SN7831185**	Price
7/8-9	3-1/2	15	**SN7831190**	Price
7/8-9	3-3/4	15	**SN7831195**	Price
7/8-9	4	15	**SN7831200**	Price
7/8-9	4-1/2	15	**SN7831205**	Price
7/8-9	5	10	**SN7831210**	Price
7/8-9	5-1/2	15	**SN7831215**	Price
7/8-9	6	10	**SN7831220**	Price
7/8-9	8	10	**SN7841100**	Price
1-8	2	10	**SN7831260**	Price
7/8-9	9	10	**SN7841105**	Price
1-8	2-1/4	10	**SN7831265**	Price
1-8	2-1/2	10	**SN7831270**	Price
1-8	2-3/4	10	**SN7831275**	Price
1-8	3	10	**SN7831280**	Price
1-8	3-1/4	10	**SN7831285**	Price
1-8	3-1/2	10	**SN7831290**	Price
1-8	3-3/4	10	**SN7831295**	Price
1-8	4	10	**SN7831300**	Price
1-8	4-1/2	10	**SN7831305**	Price
1-8	5	10	**SN7831310**	Price
1-8	5-1/2	10	**SN7831315**	Price
1-8	6	10	**SN7831320**	Price
1-8	7	10	**SN7831330**	Price
1-8	8	5	**SN7831335**	Price
1-1/8-7	3	5	**SN7841110**	Price
1-1/8-7	3-1/2	5	**SN7841115**	Price
1-1/8-7	4	5	**SN7841120**	Price
1-1/8-7	4-1/2	5	**SN7841125**	Price
1-1/8-7	5	5	**SN7841130**	Price
1-1/8-7	5-1/2	5	**SN7841135**	Price
1-1/8-7	6	5	**SN7841140**	Price
1-1/8-7	6-1/2	5	**SN7841145**	Price
1-1/8-7	7	5	**SN7841150**	Price
1-1/8-7	7-1/2	5	**SN7841155**	Price
1-1/8-7	8	5	**SN7841160**	Price
1-1/8-7	9	5	**SN7841165**	Price
1-1/4-7	3	5	**SN7841170**	Price
1-1/4-7	3-1/2	5	**SN7841175**	Price
1-1/4-7	4	5	**SN7841180**	Price
1-1/4-7	4-1/2	5	**SN7841185**	Price
1-1/4-7	5	5	**SN7841190**	Price
1-1/4-7	5-1/2	5	**SN7841195**	Price
1-1/4-7	6	5	**SN7841200**	Price
1-1/4-7	6-1/2	5	**SN7841205**	Price
1-1/4-7	7	5	**SN7841210**	Price
1-1/4-7	7-1/2	5	**SN7841215**	Price
1-1/4-7	9	5	**SN7841225**	Price
1-1/4-7	10	5	**SN7841230**	Price

Metric Hex Head Screws 8.8



- Conforms to DIN-933 standards
- Metric 8.8's are fully threaded underneath the head
- Used mostly in low to medium stress applications
- Available in zinc coated bright finish

Prices Per 100 

Size	Length (mm)	Box Qty.	Order No.	Price Per 100
M4 - .70	6	100	**SN6060400**	Price
M4 - .70	8	100	**SN6060405**	Price
M4 - .70	20	100	**SN6060425**	Price
M4 - .70	30	100	**SN6060435**	Price
M4 - .70	35	100	**SN6060440**	Price
M4 - .70	40	100	**SN6060445**	Price
M6 - 1.00	8	100	**SN6060455**	Price
M6 - 1.00	12	100	**SN6060465**	Price
M6 - 1.00	16	100	**SN6060470**	Price
M6 - 1.00	20	100	**SN6060475**	Price
M6 - 1.00	25	100	**SN6060480**	Price
M6 - 1.00	30	100	**SN6060485**	Price
M6 - 1.00	35	100	**SN6060490**	Price
M6 - 1.00	40	100	**SN6060495†**	Price
M6 - 1.00	50	100	**SN6060500**	Price
M6 - 1.00	60	100	**SN6060505**	Price
M6 - 1.00	70	50	**SN6060510**	Price
M8 - 1.25	10	100	**SN6060515**	Price
M8 - 1.25	12	100	**SN6060520**	Price
M8 - 1.25	16	100	**SN6060525**	Price
M8 - 1.25	20	100	**SN6060530**	Price
M8 - 1.25	25	100	**SN6060535**	Price
M8 - 1.25	30	100	**SN6060540**	Price
M8 - 1.25	35	100	**SN6060545**	Price
M8 - 1.25	40	100	**SN6060550**	Price
M8 - 1.25	50	100	**SN6060555**	Price
M8 - 1.25	60	100	**SN6060560**	Price
M8 - 1.25	70	100	**SN6060565**	Price
M10 - 1.50	10	100	**SN6060575**	Price
M10 - 1.50	12	100	**SN6060580**	Price
M10 - 1.50	16	100	**SN6060585**	Price
M10 - 1.50	20	100	**SN6060590**	Price
M10 - 1.50	25	100	**SN6060595**	Price
M10 - 1.50	30	100	**SN6060601**	Price
M10 - 1.50	35	100	**SN6060606**	Price
M10 - 1.50	40	100	**SN6060611**	Price
M10 - 1.50	50	100	**SN6060615**	Price
M10 - 1.50	60	100	**SN6060621**	Price
M10 - 1.50	70	100	**SN6060625**	Price
M10 - 1.50	80	100	**SN6060631**	Price
M10 - 1.50	90	50	**SN6060635**	Price
M10 - 1.50	100	50	**SN6060641**	Price
M12 - 1.75	16	50	**SN6060645**	Price
M12 - 1.75	20	50	**SN6060651**	Price
M12 - 1.75	25	50	**SN6060655**	Price
M12 - 1.75	30	50	**SN6060661**	Price
M12 - 1.75	35	50	**SN6060665**	Price
M12 - 1.75	40	50	**SN6060671**	Price
M12 - 1.75	45	50	**SN6060675**	Price
M12 - 1.75	50	50	**SN6060681**	Price
M12 - 1.75	60	50	**SN6060685**	Price
M12 - 1.75	70	50	**SN6060691**	Price
M12 - 1.75	80	25	**SN6060695**	Price
M12 - 1.75	90	25	**SN6060700**	Price
M12 - 1.75	100	25	**SN6060705**	Price
M12 - 1.75	120	25	**SN6060710**	Price
M14 - 2.00	25	25	**SN6060715**	Price
M14 - 2.00	30	25	**SN6060721**	Price
M14 - 2.00	40	25	**SN6060725**	Price
M14 - 2.00	50	25	**SN6060730**	Price
M14 - 2.00	60	25	**SN6060736**	Price
M16 - 2.00	25	25	**SN6060746**	Price
M16 - 2.00	30	25	**SN6060750**	Price
M16 - 2.00	35	25	**SN6060756**	Price
M16 - 2.00	40	25	**SN6060760**	Price
M16 - 2.00	50	25	**SN6060770**	Price
M16 - 2.00	55	25	**SN6060776**	Price
M16 - 2.00	60	25	**SN6060780**	Price
M16 - 2.00	70	25	**SN6060786**	Price
M16 - 2.00	80	25	**SN6060790**	Price
M16 - 2.00	90	25	**SN6060795**	Price
M16 - 2.00	100	25	**SN6060800**	Price
M16 - 2.00	120	25	**SN6060805**	Price
M18 - 2.50	40	10	**SN6060816**	Price
M18 - 2.50	45	10	**SN6060821**	Price
M18 - 2.50	60	10	**SN6060831**	Price
M18 - 2.50	70	10	**SN6060835**	Price
M18 - 2.50	80	10	**SN6060841**	Price
M18 - 2.50	90	10	**SN6060845**	Price
M18 - 2.50	100	10	**SN6060851**	Price

†Partial Thread

Metric Hex Head Screws 10.9





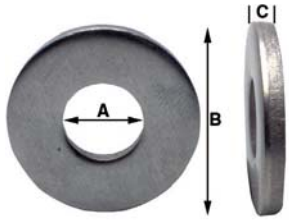
Prices Per 100

- Conforms to DIN-931 standards
- Heat treated and are comparable in strength to a grade 8 hex cap screw
- Metric hex cap screws are designed for use in high stress applications
- Available in a black oil

Size	Length (mm)	Box Qty.	Order No.	Price Per 100
M6 - 1.00	30	100	**SN6060000**	Price
M6 - 1.00	35	100	**SN6060005**	Price
M6 - 1.00	40	100	**SN6060010**	Price
M6 - 1.00	45	100	**SN6060015**	Price
M6 - 1.00	50	100	**SN6060020**	Price
M6 - 1.00	55	100	**SN6060025**	Price
M6 - 1.00	60	100	**SN6060030**	Price
M8 - 1.25	35	100	**SN6060050**	Price
M8 - 1.25	40	100	**SN6060055**	Price
M8 - 1.25	45	100	**SN6060060**	Price
M8 - 1.25	50	100	**SN6060065**	Price
M8 - 1.25	55	50	**SN6060070**	Price
M8 - 1.25	60	100	**SN6060075**	Price
M8 - 1.25	65	50	**SN6060080**	Price
M8 - 1.25	70	100	**SN6060085**	Price
M8 - 1.25	80	50	**SN6060095**	Price
M10 - 1.50	40	100	**SN6060115**	Price
M10 - 1.50	45	100	**SN6060120**	Price
M10 - 1.50	50	100	**SN6060125**	Price
M10 - 1.50	55	100	**SN6060130**	Price
M10 - 1.50	60	100	**SN6060135**	Price
M10 - 1.50	65	100	**SN6060140**	Price
M10 - 1.50	70	100	**SN6060145**	Price
M10 - 1.50	75	100	**SN6060150**	Price
M10 - 1.50	80	100	**SN6060155**	Price
M10 - 1.50	90	50	**SN6060160**	Price
M10 - 1.50	100	50	**SN6060165**	Price
M12 - 1.75	45	50	**SN6060180**	Price
M12 - 1.75	50	50	**SN6060185**	Price
M12 - 1.75	55	50	**SN6060190**	Price
M12 - 1.75	60	50	**SN6060195**	Price
M12 - 1.75	65	50	**SN6060200**	Price
M12 - 1.75	70	50	**SN6060205**	Price
M12 - 1.75	75	25	**SN6060210**	Price
M12 - 1.75	80	25	**SN6060215**	Price
M12 - 1.75	90	25	**SN6060220**	Price
M12 - 1.75	100	25	**SN6060225**	Price
M12 - 1.75	110	25	**SN6060230**	Price
M12 - 1.75	120	25	**SN6060235**	Price
M16 - 2.00	60	25	**SN6060250**	Price
M16 - 2.00	70	25	**SN6060260**	Price
M16 - 2.00	75	25	**SN6060265**	Price
M16 - 2.00	80	25	**SN6060270**	Price
M16 - 2.00	90	25	**SN6060275**	Price
M16 - 2.00	100	25	**SN6060280**	Price
M16 - 2.00	110	25	**SN6060285**	Price
M16 - 2.00	120	25	**SN6060290**	Price
M20 - 2.50	70	10	**SN6060315**	Price
M20 - 2.50	80	10	**SN6060320**	Price
M20 - 2.50	90	10	**SN6060325**	Price
M20 - 2.50	100	10	**SN6060330**	Price
M20 - 2.50	120	10	**SN6060335**	Price

MADE IN THE USA Steel Spacing Washers

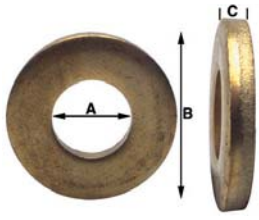
- A thick flat washer used for spacing applications
- Low carbon steel
- Plain finish
- Machined and beveled



Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
#10	13/64	1/2	3/32	**NB80Z9180**	Price
1/4	9/32	5/8	1/8	**NB80Z9181**	Price
5/16	11/32	3/4	1/8	**NB80Z9182**	Price
3/8	13/32	7/8	1/8	**NB80Z9183**	Price
7/16	15/32	1	5/32	**NB80Z9184**	Price
1/2	17/32	1	3/16	**NB80Z9185**	Price
5/8	21/32	1-1/4	1/4	**NB80Z9186**	Price
3/4	25/32	1-1/2	1/4	**NB80Z9187**	Price
7/8	29/32	1-3/4	1/4	**NB80Z9188**	Price
1	1-1/32	2	5/16	**NB80Z9189**	Price
1-1/8	1-5/32	2-1/4	5/16	**NB80Z9190**	Price
1-1/4	1-9/32	2-1/4	5/16	**NB80Z9191**	Price

Super Strength Alloy Spacer Washers

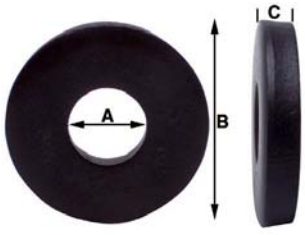
- Thru hardened to Rc C43-49
- Medium carbon steel
- Marked with bolt size, for easy identification
- Use with grade 8 cap screw, and socket cap screws
- Certification available
- Zinc/yellow dichromates



Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
1/4	9/32	5/8	3/32	**NB80Z9270**	Price
5/16	11/32	11/16	3/32	**NB80Z9271**	Price
3/8	13/32	13/16	1/8	**NB80Z9272**	Price
7/16	15/32	59/64	1/8	**NB80Z9273**	Price
1/2	17/32	1-1/16	13/64	**NB80Z9274**	Price
9/16	19/32	1-11/64	3/16	**NB80Z9275**	Price
5/8	21/32	1-5/16	7/32	**NB80Z9276**	Price
3/4	13/16	1-15/32	7/32	**NB80Z9277**	Price
7/8	15/16	1-3/4	1/4	**NB80Z9278**	Price
1	1-1/16	2	1/4	**NB80Z9279**	Price
1-1/4	1-3/8	2-1/2	1/4	**NB80Z9281**	Price

MADE IN THE USA Case Hardened Spacing Washers

- A thick flat washer used for spacing applications
- Low carbon steel
- Black oxide



Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
1/4	9/32	25/32	3/16	**NB80Z9200U**	Price
5/16	11/32	53/64	3/16	**NB80Z9201U**	Price
3/8	13/32	1-1/16	3/16	**NB80Z9202U**	Price
7/16	15/32	1-1/4	3/16	**NB80Z9203U**	Price
1/2	17/32	1-3/16	3/16	**NB80Z9204U**	Price
5/8	21/32	1-7/16	3/16	**NB80Z9205U**	Price
3/4	25/32	1-11/16	1/4	**NB80Z9206U**	Price
7/8	29/32	1-53/64	1/4	**NB80Z9207U**	Price
1	1-1/32	2-1/16	9/32	**NB80Z9208U**	Price

MADE IN THE USA Beveled Machine Washers

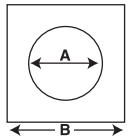
- Soft case or hardened
- Perfect for welding applications
- Plain finish



Bolt Size (in.)	ID - A (in.)	OD- B (in.)	Thickness - C (in.)	Order No.	Price
#10	13/64	1/2	3/32	**NB80Z9180BH**	Price
1/4	9/32	5/8	1/8	**NB80Z9181BH**	Price
5/16	11/32	3/4	1/8	**NB80Z9182BH**	Price
3/8	13/32	7/8	1/8	**NB80Z9183BH**	Price
7/16	15/32	1	5/32	**NB80Z9184BH**	Price
1/2	17/32	1	3/16	**NB80Z9185BH**	Price
5/8	21/32	1-1/4	1/4	**NB80Z9186BH**	Price
3/4	25/32	1-1/2	1/4	**NB80Z9187BH**	Price
7/8	29/32	1-3/4	1/4	**NB80Z9188BH**	Price
1	1-1/32	2	5/16	**NB80Z9189BH**	Price
1-1/8	1-5/32	2-1/4	5/16	**NB80Z9190BH**	Price
1-1/4	1-9/32	2-1/4	5/16	**NB80Z9191BH**	Price

Square Flat Washers

- Perfect for shimming
- Low carbon steel
- Case hardened, .005/.010 deep
- Black oxide finish





Brand Name - Generic USA					
Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
1/4	5/16	2	1/4	**NB80Z8950H**	Price
3/8	7/16	2	1/4	**NB80Z8952H**	Price
7/16	1/2	2	1/4	**NB80Z8953H**	Price
1/2	9/16	2	1/4	**NB80Z8954H**	Price
5/8	11/16	2	1/4	**NB80Z8956H**	Price
3/4	13/16	2	1/4	**NB80Z8958H**	Price
7/8	15/16	2	1/4	**NB80Z8960H**	Price
1	1-1/16	2	1/4	**NB80Z8962H**	Price

Brand Name - Jergens					
Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
5/16	11/32	1-3/8	3/16	**SG6631920**	Price
3/8	13/32	1-3/8	3/16	**SG6631921**	Price
1/2	17/32	1-3/8	1/4	**SG6631932**	Price
5/8	17/32	2	1/4	**SG6631933**	Price
3/4	21/32	2	1/4	**SG6631934**	Price
3/4	13/16	2	1/4	**SG6631935**	Price
3/4	1-1/16	2-1/2	5/16	**SG6631937**	Price
7/8	13/16	3	5/16	**SG6631924**	Price
7/8	15/16	2	1/4	**SG6631922**	Price
7/8	15/16	2-1/2	1/4	**SG6631923**	Price
1	13/16	2-1/2	1/4	**SG6631936**	Price
1	15/16	3	5/16	**SG6631925**	Price
1	1-1/16	3	3/8	**SG6631926**	Price
1-1/4	1-1/16	3	3/8	**SG6631927**	Price
1-1/2	1-5/16	3	3/8	**SG6631928**	Price
1-1/2	1-9/16	3	3/8	**SG6631929**	Price

C Washers

- Used in repetitive clamping operations
- Black oxide
- Hard



Brand Name - Generic USA				
Slot Dia. (in.)	OD (in.)	Thickness (in.)	Order No.	Price
9/32	1	1/4	**NB80Z9421**	Price
13/32	1-1/4	5/16	**NB80Z9424**	Price
13/32	1-1/2	5/16	**NB80Z9425**	Price
17/32	1-7/8	3/8	**NB80Z9428**	Price
17/32	2-1/4	3/8	**NB80Z9429**	Price
21/32	2-1/8	3/8	**NB80Z9431**	Price

Brand Name - Jergens				
Slot Dia. (in.)	OD (in.)	Thickness (in.)	Order No.	Price
9/32	3/4	1/4	**SG6617701**	Price
9/32	1	1/4	**SG6617702**	Price
9/32	1-1/4	1/4	**SG6617703**	Price
13/32	1-1/4	3/8	**SG6617704**	Price
13/32	1-1/2	3/8	**SG6617705**	Price
13/32	1-3/4	3/8	**SG6617706**	Price
17/32	1-7/8	3/8	**SG6617707**	Price
17/32	2-1/4	3/8	**SG6617708**	Price
21/32	2-1/8	3/8	**SG6617709**	Price
21/32	2-1/2	3/8	**SG6617710**	Price
25/32	2-1/2	7/16	**SG6617711**	Price

Jergens Flat Washers



- Material: 1010 Cold Rolled; 303 stainless
- Finish: Black Oxide
- Heat Treat: Carbon Nitride to 60
- Flat and parallel within .005”
- Available ini FixtureProTM Design Sofware

Material - Stainless Steel					
Width (in.)	Hole Size (in.)	Thickness (in.)	Bolt Size (in.)	Order No.	Price
7/16	.196	5/64	3/16	**SG6632001**	Price
5/8	17/64	3/32	1/4	**SG6632002**	Price
11/16	11/32	1/8	5/16	**SG6632003**	Price
7/8	25/64	1/8	3/8	**SG6632004**	Price
1-1/8	17/32	1/8	1/2	**SG6632005**	Price
1-1/4	21/32	1/8	5/8	**SG6632006**	Price
1-1/2	25/32	5/32	3/4	**SG6632007**	Price

Material - Steel					
Width (in.)	Hole Size (in.)	Thickness (in.)	Bolt Size (in.)	Order No.	Price
1/2	13/64	3/32	3/16	**SG6631901**	Price
5/8	9/32	1/8	1/4	**SG6631902**	Price
3/4	11/32	1/8	5/16	**SG6631903**	Price
7/8	13/32	1/8	3/8	**SG6631904**	Price
1-1/8	17/32	1/8	1/2	**SG6631905**	Price
1-3/8	21/32	1/8	5/8	**SG6631906**	Price
1-5/8	25/32	5/32	3/4	**SG6631907**	Price
1-3/4	29/32	5/32	7/8	**SG6631908**	Price
2	1-1/32	3/16	1	**SG6631909**	Price
2-1/2	1-9/32	9/32	1-1/4	**SG6631910**	Price

USS Flat Washers



- Flat washers are used to improve stress distribution, and to span large clearance holes
- Zinc coated with a bright finish

Size (in.)	ID (in.)	OD (in.)	Box Qty.	Order No.	Price
3/16	1/4	9/16	100	**SN5800100**	Price
1/4	5/16	3/4	100	**SN5800110**	Price
5/16	3/8	7/8	100	**SN5800120**	Price
3/8	7/16	1	100	**SN5800130**	Price
7/16	1/2	1-1/4	100	**SN5800140**	Price
1/2	9/16	1-3/8	100	**SN5800150**	Price
9/16	5/8	1-1/2	50	**SN5800160**	Price
5/8	11/16	1-3/4	50	**SN5800170**	Price
3/4	11/16	2	50	**SN5800180**	Price
7/8	15/16	2-1/4	25	**SN5800190**	Price
1	1-1/16	2-1/2	25	**SN5800200**	Price
1-3/8	1-1/2	3-1/4	15	**SN5800230**	Price

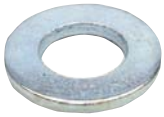
S.A.E. Flat Washers



- Equivalent to USS flat washers, but with slightly smaller inside and outside diameters
- Zinc coated with a bright finish

Size (in.)	ID (in.)	OD (in.)	Box Qty.	Order No.	Price
#6	5/32	3/8	100	**SN5800300**	Price
#8	3/16	7/16	100	**SN5800310**	Price
#10	7/32	1/2	100	**SN5800320**	Price
1/4	9/32	5/8	100	**SN5800330**	Price
5/16	11/32	11/16	100	**SN5800340**	Price
3/8	13/32	13/16	100	**SN5800350**	Price
7/16	15/32	59/64	100	**SN5800360**	Price
1/2	17/32	1-1/16	100	**SN5800370**	Price
9/16	19/32	1-3/16	50	**SN5800380**	Price
5/8	21/32	1-5/16	50	**SN5800390**	Price
3/4	13/16	1-1/2	50	**SN5800400**	Price
7/8	15/16	1-3/4	25	**SN5800410**	Price
1	1-1/16	2	25	**SN5800420**	Price
1-3/8	1-7/16	2-3/4	5	**SN5800450**	Price

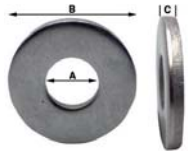
Metric Flat Washers



- Conforms to **DIN-125** standards
- Used to improve stress distribution, and to span large clearance holes
- Available in zinc plated bright finish

Dia.	ID	OD	Thickness	Box Qty.	Order No.	Price
M3	3.2	7	.5	100	**SN6072000**	Price
M4	4.3	9	.8	100	**SN6072005**	Price
M5	5.3	10	1	100	**SN6072010**	Price
M6	6.4	11	1.6	100	**SN6072015**	Price
M8	8.4	16	1.6	100	**SN6072025**	Price
M10	10.5	20	2	100	**SN6072030**	Price
M12	13	24	2.5	100	**SN6072035**	Price
M14	15	28	2.5	100	**SN6072040**	Price
M16	17	30	3	100	**SN6072045**	Price
M20	21	37	3	50	**SN6072055**	Price
M24	25	44	4	25	**SN6072060**	Price

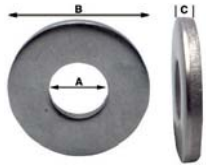
MADE IN THE USA Stainless Steel Finished Flat Washers



- Perfect in applications where corrosion protection is needed
- Finished, non-magnetic flat washer
- 300 Series stainless steel corrosion resistant

Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
#0	1/16	1/8	.019	**NB80Z9150**	Price
#1	5/64	5/32	.019	**NB80Z9151**	Price
#2	3/32	3/16	.028	**NB80Z9152**	Price
#4	1/8	1/4	1/16	**NB80Z9154**	Price
#4	1/8	5/16	5/64	**NB80Z9085SS**	Price
#6	5/32	5/16	1/16	**NB80Z9156**	Price
#6	5/32	3/8	5/64	**NB80Z9086SS**	Price
#8	11/64	3/8	1/16	**NB80Z9158**	Price
#8	3/16	7/16	5/64	**NB80Z9087SS**	Price
#10	3/16	7/16	5/64	**NB80Z9160**	Price
#10	13/64	1/2	3/32	**NB80Z9094SS**	Price
1/4	9/32	1/2	5/64	**NB80Z9161**	Price
1/4	9/32	5/8	1/8	**NB80Z9095SS**	Price
5/16	11/32	5/8	3/32	**NB80Z9162**	Price
5/16	11/32	3/4	1/8	**NB80Z9096SS**	Price
3/8	13/32	3/4	3/32	**NB80Z9163**	Price
3/8	13/32	7/8	1/8	**NB80Z9097SS**	Price
7/16	15/32	1	1/8	**NB80Z9098SS**	Price
1/2	17/32	1-1/8	1/8	**NB80Z9099SS**	Price
5/8	21/32	1-3/8	1/8	**NB80Z9100SS**	Price
3/4	25/32	1-5/8	5/32	**NB80Z9101SS**	Price
7/8	29/32	1-3/4	5/32	**NB80Z9102SS**	Price
1	1-1/32	2	3/16	**NB80Z9103SS**	Price
1-1/8	1-5/32	2-1/4	7/32	**NB80Z9104SS**	Price
1-1/4	1-9/32	2-1/2	9/32	**NB80Z9105SS**	Price

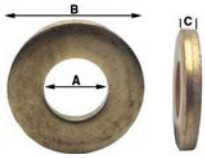
MADE IN THE USA Stainless Steel Extra Thick Finished Flat Washers



- Perfect in applications where corrosion protection is needed
- Finished, non-magnetic flat washer
- 300 Series stainless steel corrosion resistant
- Extra thick for added strength

Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
1/4	9/32	5/8	3/16	**NB80Z9200SS**	Price
5/16	11/32	3/4	3/16	**NB80Z9201SS**	Price
3/8	13/32	1	1/8	**NB80Z9217**	Price
3/8	13/32	1	3/16	**NB80Z9202SS**	Price
7/16	15/32	59/64	1/8	**NB80Z9218**	Price
1/2	17/32	1-1/16	3/16	**NB80Z9219**	Price
1/2	17/32	1-1/8	3/16	**NB80Z9204SS**	Price
9/16	19/32	1-3/16	3/16	**NB80Z9220**	Price
5/8	21/32	1-3/8	3/16	**NB80Z9205SS**	Price
5/8	21/32	1-5/16	7/32	**NB80Z9221**	Price
3/4	13/16	1-1/2	7/32	**NB80Z9222**	Price
3/4	25/32	1-5/8	1/4	**NB80Z9206SS**	Price
7/8	29/32	1-3/4	1/4	**NB80Z9207SS**	Price
1	1-1/32	2	9/32	**NB80Z9208SS**	Price

MADE IN THE USA Brass Extra Thick Flat Washers



- Perfect for accurate setups
- Corrosion resistant
- Finished appearance
- Thicker than a standard flat washer

ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
13/64	1/2	3/32	**NB80Z9094BR**	Price
9/32	5/8	1/8	**NB80Z9095BR**	Price
11/32	3/4	1/8	**NB80Z9096BR**	Price
13/32	7/8	1/8	**NB80Z9097BR**	Price
17/32	1-1/8	1/8	**NB80Z9099BR**	Price
21/32	1-3/8	1/8	**NB80Z9100BR**	Price
25/32	1-5/8	5/32	**NB80Z9101BR**	Price
29/32	1-3/4	5/32	**NB80Z9102BR**	Price
1-1/32	2	3/16	**NB80Z9103BR**	Price

Hardened Flat Washers

- Case hardened
- C1010 Material
- Black oxide

MADE IN THE USA



Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
3/16	13/64	1/2	3/32	**SG5042600**	Price
1/4	9/32	5/8	1/8	**SG5042601**	Price
5/16	11/32	3/4	1/8	**SG5042602**	Price
3/8	13/32	7/8	1/8	**SG5042603**	Price
7/16	15/32	1	1/8	**SG5042604**	Price
1/2	17/32	1-1/8	1/8	**SG5042605**	Price
5/8	21/32	1-3/8	1/8	**SG5042606**	Price
3/4	25/32	1-5/8	5/32	**SG5042607**	Price
7/8	29/32	1-3/4	5/32	**SG5042608**	Price
1	1-1/32	2	3/16	**SG5042609**	Price
1-1/8	1-5/32	2-1/4	7/32	**SG5042610**	Price
1-1/4	1-9/32	2-1/2	9/32	**SG5042611**	Price

Hardened Heavy Duty Flat Washers

- Case hardened
- C1010 Material
- Black oxide
- Te-Co Brand Made in the USA



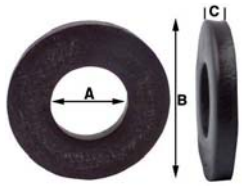
Brand Name - Jergens					
Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
1/4	9/32	5/8	3/16	**SG6631967**	Price
5/16	11/32	3/4	3/16	**SG6631968**	Price
3/8	13/32	7/8	3/16	**SG6631969**	Price
1/2	17/32	1-1/2	7/32	**SG6631960**	Price
5/8	43/64	1-1/2	7/32	**SG6631961**	Price
3/4	25/32	1-57/64	1/4	**SG6631962**	Price
7/8	29/32	2-1/8	1/4	**SG6631963**	Price
1	1-1/16	2-33/64	1/4	**SG6631964**	Price
1-1/4	1-5/16	2-1/2	1/4	**SG6631965**	Price
1-1/2	1-9/16	2-3/4	1/4	**SG6631966**	Price

Brand Name - Quality Import					
Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
#4	1/8	5/16	5/64	**NB80Z9085**	Price
#6	5/32	3/8	5/64	**NB80Z9086**	Price
#8	3/16	7/16	5/64	**NB80Z9087**	Price
#10	13/64	1/2	3/32	**NB80Z9094**	Price
1/4	9/32	5/8	1/8	**NB80Z9095**	Price
1/4	9/32	5/8	3/16	**NB80Z9200**	Price
5/16	11/32	3/4	1/8	**NB80Z9096**	Price
5/16	11/32	3/4	3/16	**NB80Z9201**	Price
3/8	13/32	7/8	1/8	**NB80Z9097**	Price
3/8	13/32	1	3/16	**NB80Z9202**	Price
7/16	15/32	1	1/8	**NB80Z9098**	Price
7/16	15/32	1	3/16	**NB80Z9203**	Price
1/2	17/32	1-1/8	1/8	**NB80Z9099**	Price
1/2	17/32	1-1/8	3/16	**NB80Z9204**	Price
5/8	21/32	1-3/8	1/8	**NB80Z9100**	Price
5/8	21/32	1-3/8	3/16	**NB80Z9205**	Price
3/4	25/32	1-5/8	5/32	**NB80Z9101**	Price
3/4	25/32	1-5/8	1/4	**NB80Z9206**	Price
7/8	29/32	1-3/4	5/32	**NB80Z9102**	Price
7/8	29/32	1-3/4	1/4	**NB80Z9207**	Price
1	1-1/32	2	3/16	**NB80Z9103**	Price
1	1-1/32	2	9/32	**NB80Z9208**	Price
1-1/8	1-5/32	2-1/4	7/32	**NB80Z9104**	Price
1-1/4	1-5/32	2-1/2	9/32	**NB80Z9105**	Price

Brand Name - Te-Co					
Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
#4	1/8	5/16	5/64	**SG5042612**	Price
#6	5/32	3/8	5/64	**SG5042613**	Price
#8	3/16	7/16	5/64	**SG5042614**	Price
1/4	9/32	5/8	3/16	**SG5042619**	Price
5/16	11/32	3/4	3/16	**SG5042620**	Price
3/8	13/32	7/8	3/16	**SG5042621**	Price
1/2	17/32	1-1/8	3/16	**SG5042623**	Price
5/8	21/32	1-3/8	3/16	**SG5042624**	Price
3/4	25/32	1-5/8	1/4	**SG5042625**	Price
7/8	29/32	1-3/4	1/4	**SG5042626**	Price
1	1-1/32	2	9/32	**SG5042627**	Price

Thick Metric Finished Flat Washers

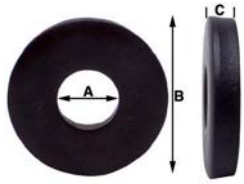
- Perfect for tool & die applications
- 1010 Cold rolled steel
- Case hardened
- Black oxide



Bolt Size	ID - A	OD - B	Thickness - C	Order No.	Price
M3	M3.2	M8	M2	**NB80Z8803**	Price
M4	M4.3	M10	M2	**NB80Z8804**	Price
M5	M5.3	M11	M2	**NB80Z8805**	Price
M6	M6.4	M13	M2.5	**NB80Z8806**	Price
M8	M8.4	M16	M3	**NB80Z8808**	Price
M10	M10.5	M19	M3	**NB80Z8810**	Price
M12	M13	M22	M3	**NB80Z8812**	Price
M14	M15	M25	M3	**NB80Z8814**	Price
M16	M17	M28	M3.5	**NB80Z8816**	Price
M20	M21	M35	M3.5	**NB80Z8820**	Price
M24	M25	M40	M4	**NB80Z8824**	Price
M30	M31	M44	M4	**NB80Z8830**	Price
M36	M37	M50	M5	**NB80Z8836**	Price

Extra Thick Metric Flat Washers

- Extra thick for added strength
- 1010 Cold rolled steel
- Case hardened
- Black oxide



Bolt Size	ID - A	OD - B	Thickness - C	Order No.	Price
M8	M8.4	M22	M5	**NB80Z8848**	Price
M10	M10.5	M23	M5	**NB80Z8850**	Price
M12	M13	M26	M5	**NB80Z8852**	Price
M14	M15	M27	M5	**NB80Z8854**	Price
M16	M17	M32	M5	**NB80Z8856**	Price
M20	M21	M35	M5	**NB80Z8860**	Price
M24	M25	M43	M6.5	**NB80Z8864**	Price
M30	M31	M48	M6.5	**NB80Z8870**	Price
M36	M37	M50	M7.5	**NB80Z8876**	Price

Spherical Washer Assemblies

- Compensates for slight misalignment between work piece and strap clamp
- Reduces stress on threads
- Case hardened
- Black oxide finish
- Sold together top and bottom
- For 3/16 bolt size, use 1/4; 5/16 use 3/8; 7/16 use 1/2

MADE IN THE USA



Bolt Size (in.)	ID - A (in.)	OD - B (in.)	Thickness - C (in.)	Order No.	Price
1/4	9/32	5/8	3/16	**SG5042701**	Price
3/8	13/32	7/8	1/4	**SG5042702**	Price
1/2	17/32	1-1/8	5/16	**SG5042703**	Price
5/8	21/32	1-3/8	5/16	**SG5042704**	Price
3/4	25/32	1-5/8	3/8	**SG5042705**	Price
7/8	15/16	1-3/4	3/8	**SG5042706**	Price
1	1-1/16	2	1/2	**SG5042707**	Price
1-1/8	1-3/16	2-1/4	1/2	**SG5042708**	Price
1-1/4	1-5/16	2-1/2	1/2	**SG5042709**	Price
1-1/2	1-9/16	2-7/8	1/2	**SG5042710**	Price

Lock Washers



- Hardened, split circular washer with a slightly trapezoidal wire selection
- Provides greater bolt tension per unit of applied torque, resist loosening caused by vibration and corrosion, and provide more uniform load distribution
- Zinc coated with a bright finish

Size (in.)	ID (in.)	OD (in.)	Box Qty.	Order No.	Price Per 100
#6	.148	.250	100	**SN5800600**	Price
#8	.174	.293	100	**SN5800610**	Price
#10	.200	.334	100	**SN5800620**	Price
1/4	.260	.487	100	**SN5800630**	Price
5/16	.322	.583	100	**SN5800640**	Price
3/8	.385	.680	100	**SN5800650**	Price
7/16	.450	.776	100	**SN5800660**	Price
1/2	.512	.869	100	**SN5800670**	Price
9/16	.574	.965	100	**SN5800680**	Price
5/8	.641	1.073	100	**SN5800690**	Price
3/4	.766	1.265	100	**SN5800700**	Price
7/8	.894	1.459	50	**SN5800710**	Price
1	1.024	1.659	50	**SN5800720**	Price
1-1/8	1.153	1.847	10	**SN5800730**	Price
1-1/4	1.280	2.036	25	**SN5800740**	Price
1-1/2	1.534	2.419	5	**SN5800760**	Price

Metric Split Lock Washers



- Conforms to DIN-127 standards
- Coiled hardened, split circular washer with a slightly trapezoidal wire section
- Available in zinc coating, with a bright finish

Bolt Size	ID (mm)	OD (mm)	Thickness (mm)	Box Qty.	Order No.	Price Per 100
M3	3.1/3.4	6.2	.8	100	**SN6072115**	Price
M4	4.1/4.4	7.6	.09	100	**SN6072120**	Price
M5	5.1/5.4	9.2	1.2	100	**SN6072125**	Price
M6	6.1/6.5	11.8	1.6	100	**SN6072130**	Price
M7	7.1/7.5	12.8	1.6	100	**SN6072135**	Price
M8	8.1/8.5	14.8	2	100	**SN6072140**	Price
M10	10.2/10.7	18.1	2.2	100	**SN6072145**	Price
M12	12.2/12.7	21.1	2.5	100	**SN6072150**	Price
M14	14.2/14.7	24.1	3	100	**SN6072155**	Price
M16	16.2/17	27.4	3.5	50	**SN6072160**	Price
M18	18.2/19	29.4	3.5	50	**SN6072165**	Price
M20	20.2/21.2	33.6	4	50	**SN6072170**	Price

Lock Nuts

Stover Lock Nut Grade C Plated



- An all-metal, one-piece hex nut that derives its prevailing torque feature from a controlled distortion of its top threads from their normal circle form to a more oval shape
- The grade C feature gives it a high quality strength consistent with grade 8
- Zinc plated

Nylon Insert (Elastic) Stop Nut



- A Hex nut with a nylon-filled collar on one end
- The locking feature engages when a screw reaches the collar and forms a tight fit
- Excellent for areas exposed to vibration
- Zinc plated

Thread - Coarse						
	Nylon Insert Stop			Stover Lock		
Size	Box Qty.	Order No.	Price	Box Qty.	Order No.	Price
#6-32	100	**SN7930005**	Price	-	**-**	-
#8-32	100	**SN7930010**	Price	-	**-**	-
#10-24	100	**SN7930015**	Price	-	**-**	-
1/4-20	100	**SN7930025**	Price	100	**SN7720025**	Price
5/16-18	100	**SN7930030**	Price	100	**SN7720030**	Price
3/8-16	100	**SN7930035**	Price	100	**SN7720035**	Price
7/16-14	50	**SN7930040**	Price	50	**SN7720040**	Price
1/2-13	100	**SN7930045**	Price	50	**SN7720045**	Price
9/16-12	50	**SN7930050**	Price	50	**SN7720050**	Price
5/8-11	50	**SN7930055**	Price	50	**SN7720055**	Price
3/4-10	25	**SN7930060**	Price	25	**SN7720060**	Price
7/8-9	15	**SN7930065**	Price	-	**-**	-
1-8	10	**SN7930070**	Price	-	**-**	-

Thread - Fine						
	Nylon Insert Stop			Stover Lock		
Size	Box Qty.	Order No.	Price	Box Qty.	Order No.	Price
#10-32	100	**SN7930110**	Price	-	**-**	-
1/4-28	100	**SN7930115**	Price	100	**SN7720115**	Price
5/16-24	100	**SN7930120**	Price	100	**SN7720120**	Price
3/8-24	100	**SN7930125**	Price	100	**SN7720125**	Price
7/16-20	50	**SN7930130**	Price	50	**SN7720130**	Price
1/2-20	100	**SN7930135**	Price	50	**SN7720135**	Price
9/16-18	25	**SN7930140**	Price	25	**SN7720140**	Price
5/8-18	25	**SN7930145**	Price	25	**SN7720145**	Price
3/4-16	-	**-**	-	25	**SN7720150**	Price

Stainless Steel & Brass Hex Nuts

- Stainless steel (316)
- Brass



		Brass		Stainless Steel	
Thread Dia.	Box Qty.	Order No.	Price	Order No.	Price
1/4-20	100	**-**	-	**SN7250300**	Price
1/4-28	100	**-**	-	**SN7250305**	Price
5/16-18	100	**-**	-	**SN7250310**	Price
5/16-24	100	**-**	-	**SN7250315**	Price
3/8-16	100	**-**	-	**SN7250320**	Price
3/8-24	100	**-**	-	**SN7250325**	Price
1/2-13	100	**-**	-	**SN7250330**	Price
1/2-20	100	**-**	-	**SN7250335**	Price

		Brass		Stainless Steel	
Thread Dia.	Box Qty.	Order No.	Price	Order No.	Price
5/8-11	50	**-**	-	**SN7250340**	Price
3/4-10	25	**-**	-	**SN7250345**	Price
3/4-16	20	**SN7250455**	Price	**-**	-
7/8-9	10	**-**	-	**SN7250355**	Price
7/8-9	15	**SN7250460**	Price	**-**	-
1-8	10	**SN7250470**	Price	**-**	-
1-8	15	**-**	-	**SN7250360**	Price

Finished Hex Nuts

Finished Hex Nuts Grade 2
- Low carbon nut used with a grade 2 fastener
- Used in light duty work
- Zinc plating offers a bright finished look with a good corrosion resistance in many environments not exposed to excessive moisture

Finished Hex Nuts - Grade 5
- Medium grade hex nut used with grade 5, or low carbon fastener
- Common usage is medium duty work to fasten items together that has a higher need for strength than grade 2 fasteners
- Plating same as grade 2 hex nut

Thread - Coarse Grade - Grade 2			
Size	Box Qty.	Order No.	Price
1/4-20	100	**SN7250030**	Price
5/16-18	100	**SN7250035**	Price
3/8-16	100	**SN7250040**	Price
7/16-14	100	**SN7250045**	Price
1/2-13	100	**SN7250050**	Price
9/16-12	50	**SN7250055**	Price
5/8-11	50	**SN7250060**	Price
3/4-10	50	**SN7250065**	Price
7/8-9	25	**SN7250070**	Price
1-8	25	**SN7250075**	Price
1-1/8-7	25	**SN7250080**	Price
1-1/4-7	25	**SN7250085**	Price
1-3/8-6	10	**SN7250090**	Price
1-1/2-6	10	**SN7250095**	Price

Thread - Fine Grade - Grade 2			
Size	Box Qty.	Order No.	Price
1/4-28	100	**SN7250105**	Price
5/16-24	100	**SN7250110**	Price
3/8-24	100	**SN7250115**	Price
7/16-20	100	**SN7250120**	Price
1/2-20	100	**SN7250125**	Price
9/16-18	50	**SN7250130**	Price
5/8-18	50	**SN7250135**	Price
3/4-16	50	**SN7250140**	Price
7/8-14	25	**SN7250145**	Price
1-14	25	**SN7250150**	Price

Thread - Coarse Grade - Grade 5			
Size	Box Qty.	Order No.	Price
1/4-20	100	**SN7360030**	Price
5/16-18	100	**SN7360035**	Price
3/8-16	100	**SN7360040**	Price
7/16-14	100	**SN7360045**	Price
1/2-13	100	**SN7360050**	Price

Finished Hex Nuts Grade 8
- High grade hex nut used with grade 8 fasteners
- This grade is very strong, and is used with bolts that have a minimum tensile strength equal to or less than 150,000 PSI
- The zinc & yellow plating offers a greater degree of corrosion resistance than standard zinc, and its bright yellow plating will differentiate itself from our grade 2 and grade 5 hex nuts



Thread - Coarse Grade - Grade 5			
Size	Box Qty.	Order No.	Price
9/16-12	50	**SN7360055**	Price
5/8-11	50	**SN7360060**	Price
3/4-10	20	**SN7360065**	Price
7/8-9	25	**SN7360070**	Price
1-8	25	**SN7360075**	Price
1-1/8-7	10	**SN7360080**	Price
1-1/4-7	5	**SN7360085**	Price

Thread - Coarse Grade - Grade 8			
Size	Box Qty.	Order No.	Price
1/4-20	100	**SN7470030**	Price
5/16-18	100	**SN7470035**	Price
3/8-16	100	**SN7470040**	Price
7/16-14	100	**SN7470045**	Price
1/2-13	100	**SN7470050**	Price
9/16-12	25	**SN7470055**	Price
5/8-11	50	**SN7470060**	Price
3/4-10	20	**SN7470065**	Price
7/8-9	25	**SN7470070**	Price
1-8	25	**SN7470075**	Price

Thread - Fine Grade - Grade 8			
Size	Box Qty.	Order No.	Price
1/4-28	100	**SN7470105**	Price
5/16-24	100	**SN7470110**	Price
3/8-24	100	**SN7470115**	Price
7/16-20	100	**SN7470120**	Price
1/2-20	100	**SN7470125**	Price
9/16-18	25	**SN7470130**	Price
5/8-18	50	**SN7470135**	Price
3/4-16	20	**SN7470140**	Price
7/8-14	15	**SN7470145**	Price
1-14	25	**SN7470150**	Price

Bulk pricing available on request. Many other non-standards, not listed, in stock. Please call for pricing.

Metric Nuts

Hex Nuts Zinc:
- Conforms to **DIN-934** standards
- Available in material grade 8.8 non-heat treated, and grade 10.9 heat treated
- Metric hex nuts should be used with equivalent grade bolts and screws
- Zinc plated, with a bright finish

Nylon Insert Lock Nuts:
- Conforms to **DIN–985** standards
- Available in class 8, and class 10
- Nylon insert lock nuts have a nylon-filled collar at its back end
- When the screw reaches the collar, the threads and nylon form a tight fit, restricting movement of the screw when it's subjected to vibration
- Available in zinc bright finish







		Finished Hex				Nylon Insert Stop			
		Class 10		Class 8		Class 10		Class 8	
Size	Box Qty.	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
M3-.50	100	-	-	**SN6062600**	Price	-	-	-	-
M4-.70	100	-	-	**SN6062605**	Price	-	-	**SN6062815**	Price
M5-.80	100	-	-	**SN6062610**	Price	-	-	**SN6062820**	Price
M6-1.00	100	**SN6062720**	Price	**SN6062615**	Price	-	-	**SN6062825**	Price
M8-1.25	100	**SN6062725**	Price	**SN6062620**	Price	**SN6062950**	Price	**SN6062830**	Price
M10-1.50	100	**SN6062735**	Price	**SN6062630**	Price	**SN6062960**	Price	**SN6062840**	Price
M12-1.75	-	**SN6062745**	Price	**SN6062640**	Price	-	-	**SN6062850**	Price
M14-2.00	50	**SN6062755**	Price	**SN6062650**	Price	**SN6062980**	Price	**SN6062860**	Price
M16-2.00	50	**SN6062765**	Price	**SN6062660**	Price	**SN6062990**	Price	**SN6062870**	Price
M18-2.50	25	**SN6062775**	Price	**SN6062670**	Price	-	-	-	-
-	-	**SN6062785**	Price	-	-	-	-	-	-
M24-3.00	25	**SN6062795**	Price	**SN6062690**	Price	-	-	-	-

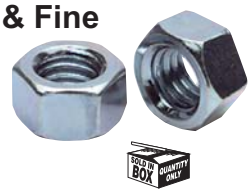
Hex Jam Nuts



- A six-sided internally threaded fastener which is only 2/3 thickness of a full form nut
- Jam nuts are tightened against the work surface and a finished, or heavy hex nut is tightened against the jam nut to keep it from loosening
- Zinc coated with a bright finish

Size	Box Qty.	Order No.	Price Per 100
1/4-20	100	**SN4200500**	Price
5/16-18	100	**SN4200510**	Price
3/8-16	100	**SN4200520**	Price
7/16-14	100	**SN4200530**	Price
1/2-13	100	**SN4200540**	Price
9/16-12	50	**SN4200550**	Price
5/8-11	50	**SN4200560**	Price
3/4-10	50	**SN4200570**	Price
7/8-9	25	**SN4200580**	Price
1-8	25	**SN4200590**	Price
1-1/8-7	25	**SN4200600**	Price
1-1/4-7	25	**SN4200610**	Price
1-1/2-6	10	**SN4200630**	Price

Machine Screw Nuts Coarse & Fine

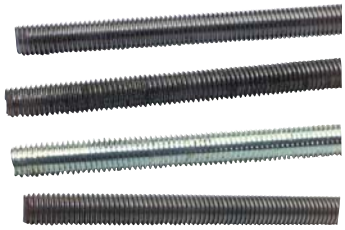


- A six-sided internally threaded fastener with chamfered corners, and a flat top
- Threads shall be unified standard, class 2B
- Designed to be used with machine screws
- Zinc coated with a bright finish

Thread - Coarse			
Size	Box Qty.	Order No.	Price Per 100
#2-56	100	**SN4230000**	Price
#4-40	100	**SN4230020**	Price
#5-40	100	**SN4230030**	Price
#6-32	100	**SN4230040**	Price
#8-32	100	**SN4230050**	Price
#10-24	100	**SN4230060**	Price
#12-24	100	**SN4230070**	Price

Thread - Fine			
Size	Box Qty.	Order No.	Price Per 100
#3-56	100	**SN4230210**	Price
#4-48	100	**SN4230220**	Price
#6-40	100	**SN4230240**	Price
#8-36	100	**SN4230250**	Price
#10-32	100	**SN4230260**	Price

MADE IN THE USA Threaded Rod



Steel-Oil Plain:
- Low carbon AISI C-1010 to C-1020 type steel
- Coarse or Fine thread
- Zinc Plated coated

B7 Alloy Steel:
- Made from alloy steel 4140B-7
- Manufactured with chromium molybdenum for high strength and through hardness

304 Stainless:
- Corrosion resistance (18-8 stainless steel)
- Designed for use in chemical, marine, and other environments where corrosion protection is needed
- Non-magnetic
- **Sold in 3 Foot Lengths**

Material - B-7 Alloy		
Thread	Order No.	Price
1/4-20	**ME50A0420**	Price
5/16-18	**ME50A0518**	Price
3/8-16	**ME50A0616**	Price
1/2-13	**ME50A0813**	Price
5/8-11	**ME50A1011**	Price
3/4-10	**ME50A1210**	Price
7/8-9	**ME50A1409**	Price
1-8	**ME50A1608**	Price
1-1/8-7	**ME50A1807**	Price
1-1/4-7	**ME50A2007**	Price
1-1/2-6	**ME50A2406**	Price

Material - Stainless Steel		
Thread	Order No.	Price
1/4-20	**ME50S0420**	Price
1/4-28	**ME50S0428**	Price
5/16-18	**ME50S0518**	Price
5/16-24	**ME50S0524**	Price
3/8-16	**ME50S0616**	Price
3/8-24	**ME50S0624**	Price
1/2-13	**ME50S0813**	Price
1/2-20	**ME50S0820**	Price
5/8-11	**ME50S1011**	Price
5/8-18	**ME50S1018**	Price
3/4-10	**ME50S1210**	Price
3/4-16	**ME50S1216**	Price
7/8-9	**ME50S1409**	Price
1-8	**ME50S1608**	Price

Material - Steel-Oil Plain		
Thread	Order No.	Price
10-24	**ME500124**	Price
10-32	**ME500132**	Price
1/4-20	**ME500420**	Price
1/4-28	**ME500428**	Price
5/16-18	**ME500518**	Price
5/16-24	**ME500524**	Price
3/8-16	**ME500616**	Price
3/8-24	**ME500624**	Price
7/16-14	**ME500714**	Price
7/16-20	**ME500720**	Price
1/2-13	**ME500813**	Price
1/2-20	**ME500820**	Price
5/8-11	**ME501011**	Price
5/8-18	**ME501018**	Price
3/4-10	**ME501210**	Price
3/4-16	**ME501216**	Price
7/8-9	**ME501409**	Price
7/8-14	**ME501414**	Price
1-8	**ME501608**	Price
1-14	**ME501614**	Price
1-1/8-7	**ME501807**	Price
1-1/8-12	**ME501812**	Price
1-1/4-7	**ME502007**	Price
1-1/4-12	**ME502012**	Price
1-3/8-6	**ME502206**	Price
1-1/2-6	**ME502406**	Price
1-1/2-12	**ME502412**	Price

Material - Zinc Plated		
Thread	Order No.	Price
10-24	**ME5037136**	Price
10-32	**ME5037148**	Price
1/4-20	**ME5037168**	Price
1/4-28	**ME5037188**	Price
5/16-18	**ME5037200**	Price
5/16-24	**ME5037220**	Price
3/8-16	**ME5037232**	Price
3/8-24	**ME5037252**	Price
7/16-14	**ME5037264**	Price
7/16-20	**ME5037284**	Price
1/2-13	**ME5037296**	Price
1/2-20	**ME5037316**	Price
5/8-11	**ME5037356**	Price
5/8-18	**ME5037376**	Price
3/4-10	**ME5037388**	Price
3/4-16	**ME5037408**	Price
7/8-9	**ME5037420**	Price
7/8-14	**ME5037436**	Price
1-8	**ME5037448**	Price
1-14	**ME5037464**	Price
1-1/8-7	**ME5037480**	Price
1-1/8-12	**ME5037504**	Price
1-1/4-12	**ME5037548**	Price
1-1/4-7	**ME5037512**	Price
1-3/8-6	**ME5037544**	Price
1-1/2-12	**ME5037624**	Price
1-1/2-6	**ME5037566**	Price

MADE IN THE USA Metric Threaded Rod

- Plain & Zinc
- One meter in length





	Steel-Oil Plain		Zinc Plated	
Thread	Order No.	Price	Order No.	Price
M6 x 1.0	**ME5012653**	Price	**ME5019653**	Price
M8 x 1.25	**ME5012673**	Price	**ME5019673**	Price
M10 x 1.5	**ME5012693**	Price	**ME5019693**	Price
M12 x 1.75	**ME5012713**	Price	**ME5019713**	Price

	Steel-Oil Plain		Zinc Plated	
Thread	Order No.	Price	Order No.	Price
M14 x 2.0	**ME5012723**	Price	**ME5019723**	Price
M16 x 2.0	**ME5012733**	Price	**ME5019733**	Price
M20 x 2.5	**ME5012753**	Price	**ME5019753**	Price

Wedge Anchors



- Used for heavy duty fastening applications where high pullout values are required
- The advanced design of the collar reduces the likelihood of the anchor "spinning"
- Used in a wide variety of structural applications
- Pipe-hanging tilt-ups, bridges, elevator equipment, conveyors and highway construction frequently require the wedge type anchor
- Ideal for installing machinery, hand rails, dock bumpers and storage racks, etc.
- Wedge anchors are sold unassembled with the appropriate nuts and washers

Size (in.)	Length (in.)	Min. Embed (in.)	Thread Length (in.)	Box Qty.	Order No.	Price
1/4	3-1/4	1-1/8	3/4	100	**SK4810010**	Price
3/8	2-1/4	1-1/2	7/8	100	**SK4810015**	Price
3/8	2-3/4	1-1/2	1-1/8	100	**SK4810020**	Price
3/8	3	1-1/2	1-1/8	100	**SK4810025**	Price
3/8	3-3/4	1-1/2	1-1/8	100	**SK4810035**	Price
3/8	5	1-1/2	1-1/8	50	**SK4810040**	Price
1/2	2-3/4	2-1/4	1-1/4	50	**SK4810045**	Price
1/2	3-3/4	2-1/4	1-1/4	50	**SK4810050**	Price
1/2	4-1/4	2-1/4	1-1/4	25	**SK4810055**	Price
1/2	5-1/2	2-1/4	1-1/4	25	**SK4810060**	Price
1/2	7	2-1/4	1-1/4	25	**SK4810065**	Price
5/8	3-1/2	2-3/4	2	25	**SK4810070**	Price
5/8	4-1/2	2-3/4	2	25	**SK4810075**	Price
5/8	5	2-3/4	2	25	**SK4810080**	Price
5/8	6	2-3/4	2	25	**SK4810085**	Price
5/8	7	2-3/4	2	25	**SK4810090**	Price
5/8	8-1/2	2-3/4	2	25	**SK4810095**	Price
5/8	10	2-3/4	2	10	**SK4810100**	Price
3/4	4-1/4	3-1/4	2	20	**SK4810105**	Price
3/4	4-3/4	3-1/4	2	20	**SK4810110**	Price
3/4	5-1/2	3-1/4	2	20	**SK4810115**	Price
3/4	6-1/4	3-1/4	2	10	**SK4810120**	Price
3/4	7	3-1/4	2	10	**SK4810125**	Price
3/4	8-1/2	3-1/4	2	10	**SK4810130**	Price
3/4	10	3-1/4	2	10	**SK4810135**	Price
3/4	12	3-1/4	2	10	**SK4810140**	Price
1	6	4-1/2	3-1/4	5	**SK4810160**	Price
1	12	4-1/2	4	5	**SK4810170**	Price
1-1/4	12	5-1/2	4	5	**SK4810180**	Price

Many anchors available in Stainless Steel. Call for pricing.

Hammer Drive Anchors



- High zamac zinc alloy
- Used in brick, block, or stone
- Light to medium applications

Dia. (in.)	Anchor Length (in.)	Hole Size (in.)	Grip Range (in.)	Box Qty.	Order No.	Price
3/16	7/8	3/16	0-1/8	100	**SK4850000**	Price
1/4	1	1/4	1/8-1/4	100	**SK4850020**	Price
1/4	1-1/2	1/4	1/2-3/4	100	**SK4850040**	Price
1/4	1-1/4	1/4	1/4-1/2	100	**SK4850030**	Price
1/4	2	1/4	3/4-1-1/4	100	**SK4850050**	Price
1/4	3/4	1/4	0-1/8	100	**SK4850010**	Price

Sleeve Anchors



- Dependable for use in brick, cinder block, thin wall, marble and concrete
- One benefit is that the base material doesn't have to be solid
- Like the wedge anchor, the sleeve anchors diameter and the hole size are the same, simplifying installation
- The variety of head styles offers extra versatility, and this preassembled anchor is extremely fast and easy to use
- Ability to remove this anchor after installation
- Used for anchoring window and door frames, thresholds, cabinets, theater seats, duct straps, dock bumpers, aluminum and steel angles, steel columns, etc.

Size (in.)	Length (in.)	Min. Embed (in.)	Box Qty.	Order No.	Price
5/16	1-1/2	1	100	**SK4820000**	Price
5/16	2-1/2	1	100	**SK4820010**	Price
3/8	1-7/8	1-1/4	50	**SK4820020**	Price
3/8	3	1-1/4	50	**SK4820030**	Price
3/8	4	1-1/4	50	**SK4820040**	Price
1/2	2-1/4	1-1/2	25	**SK4820050**	Price
1/2	3	1-1/2	25	**SK4820060**	Price
1/2	4	1-1/2	25	**SK4820070**	Price
1/2	6	3	25	**SK4820080**	Price
5/8	2-1/4	2	25	**SK4820090**	Price
5/8	3	2	25	**SK4820100**	Price
5/8	4-1/4	3-1/2	10	**SK4820110**	Price
5/8	6	3-1/2	10	**SK4820120**	Price
3/4	2-1/2	2	10	**SK4820130**	Price
3/4	4-1/4	3-1/2	5	**SK4820140**	Price
3/4	6-1/4	3-1/2	5	**SK4820150**	Price

Drop-In Anchors

Carbon Steel



- Used frequently in overhead applications
- Setting tool provided
- Medium – heavy appliations (carbon steel)

Anchor Size (in.)	Anchor Length (in.)	Hole Size (in.)	Thread Depth (in.)	Box Qty.	Order No.	Price
1/4	1-1/8	3/8	1/2	100	**SK4870000**	Price
3/8	1-9/16	1/2	5/8	100	**SK4870010**	Price
1/2	2	5/8	1-3/16	50	**SK4870020**	Price
5/8	2-1/2	7/8	1-3/16	25	**SK4870030**	Price
3/4	3-1/8	1	1-3/16	25	**SK4870040**	Price

Machine Screw Anchors



- Zinc alloy cone with lead ring
- Setting tool provided

Anchor Size (in.)	Drill (in.)	Box Qty.	Order No.	Price
10-24	3/8	100	**SK4860420**	Price
1/4	1/2	100	**SK4860430**	Price
3/8	3/4	50	**SK4860450**	Price
1/2	7/8	50	**SK4860460**	Price
5/8	1-1/8	25	**SK4860470**	Price

Masonry Anchors

Double Expansion Anchors

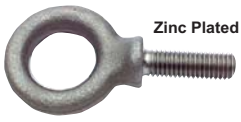


- Zinc alloy (rust proof)
- Working well in sort masonry

Dia. (in.)	Arbor Length (in.)	Hole Size (in.)	Box Qty.	Order No.	Price
1/4	1	1/2	100	**SK4860800**	Price
5/16	1-1/4	5/8	50	**SK4860810**	Price
3/8	2	3/4	50	**SK4860820**	Price
1/2	2	7/8	25	**SK4860830**	Price
5/8	2-1/4	1	25	**SK4860840**	Price
3/4	2-7/8	1-1/4	10	**SK4860850**	Price

MADE IN THE USA Eye Bolts Forged

- C-1030 to ASTM A489
- Heat treated
- Plain and zinc


Zinc Plated Shoulder


Plain Pattern


Shoulder Pattern Plain

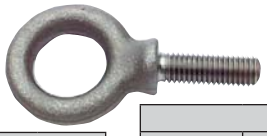
Style - Plain Pattern						
					Carbon Steel	
Thread UNC-2A (in.)	Thread Length (in.)	Eye I.D. (in.)	Eye O.D. (in.)	Safe Workload	Order No.	Price
1/4-20	1	3/4	1-3/16	500 lbs	**SF50004P**	Price
5/16-18	1-1/8	7/8	1-7/16	900 lbs	**SF50005P**	Price
3/8-16	1-1/4	1	1-21/32	1300 lbs	**SF50006P**	Price
7/16-14	1-3/8	1-1/16	1-27/32	1800 lbs	**SF50007P**	Price
1/2-13	1-1/2	1-3/16	2-1/16	2400 lbs	**SF50008P**	Price
9/16-12	1-5/8	1-9/32	2-9/32	3000 lbs	**SF50009P**	Price
5/8-11	1-3/4	1-3/8	2-1/2	4000 lbs	**SF50010P**	Price
3/4-10	2	1-1/2	2-13/16	5000 lbs	**SF50012P**	Price
7/8-9	2-1/4	1-11/16	3-1/4	7000 lbs	**SF50014P**	Price
1-8	2-1/2	1-13/16	3-9/16	9000 lbs	**SF50016P**	Price
1-1/8-7	2-3/4	2	4	12000 lbs	**SF50018P**	Price
1-1/4-7	3	2-3/16	4-7/16	15000 lbs	**SF50020P**	Price
1-1/2-6	3-1/2	2-9/16	5-3/16	21000 lbs	**SF50024P**	Price
1-3/4-5	3-3/4	2-7/8	6-1/16	28000 lbs	**SF50028P**	Price
2-4-1/2	4	3-3/8	6-7/8	38000 lbs	**SF50032P**	Price

Style - Shoulder Pattern										
					304 Stainless		Carbon Steel		Zinc Plated	
Thread UNC-2A (in.)	Thread Length (in.)	Eye I.D. (in.)	Eye O.D. (in.)	Safe Workload	Order No.	Price	Order No.	Price	Order No.	Price
1/4-20	1	3/4	1-3/16	500 lbs	-	-	**SF50004**	Price	**SF50004Z**	Price
5/16-18	1-1/8	7/8	1-7/16	900 lbs	-	-	**SF50005**	Price	**SF50005Z**	Price
3/8-16	1-1/4	1	1-21/32	1300 lbs	**SF50SS006**	Price	**SF50006**	Price	**SF50006Z**	Price
1/2-13	1-1/2	1-3/16	2-1/16	2400 lbs	-	-	**SF50008**	Price	**SF50008Z**	Price
5/8-11	1-3/4	1-3/8	2-1/2	4000 lbs	**SF50SS010**	Price	**SF50010**	Price	**SF50010Z**	Price
1/2-13	1-1/2	1-3/16	2-1/19	2400 lbs	**SF50SS008**	Price	-	-	-	-
3/4-10	2	1-1/2	2-13/16	5000 lbs	**SF50SS012**	Price	**SF50012**	Price	**SF50012Z**	Price
7/8-9	2-1/4	1-11/16	3-1/4	7000 lbs	-	-	**SF50014**	Price	**SF50014Z**	Price
1-8	2-1/2	1-13/16	3-9/16	9000 lbs	**SF50SS016**	Price	**SF50016**	Price	**SF50016Z**	Price
1-1/4-7	3	2-3/16	4-7/16	15000 lbs	**SF50SS020**	Price	**SF50020**	Price	-	-
1-1/2-6	3-1/2	2-9/16	5-3/16	21000 lbs	-	-	**SF50024**	Price	-	-
2-4-1/2	4	3-3/8	6-7/8	38000 lbs	-	-	**SF50032**	Price	-	-
1-1/8-7	2-3/4	2	4	12000 lbs	-	-	**SF50018**	Price	-	-
1-3/4-5	3-3/4	2-7/8	6-1/16	28000 lbs	-	-	**SF50028**	Price	-	-
7/16-14	1-3/8	1-1/16	1-27/32	1800 lbs	-	-	**SF50007**	Price	-	-
9/16-12	1-5/8	1-9/32	2-9/32	3000 lbs	-	-	**SF50009**	Price	-	-

MADE IN THE USA Eye Bolts Metric

Carbon Steel

- Self-colored
- Fully Threaded: ISO Coarse Thread 6g



Style - Short Shank Shoulder Pattern						
Thread Size	Thread Length	Eye I.D.	Eye O.D.	Safe Workload	Order No.	Price
M6 x 1.00	12.0mm	19.0mm	30.0mm	462 lbs	**SF50M6A**	Price
M7 x 1.00	14.0mm	22.0mm	36.5mm	814 lbs	**SF50M7A**	Price
M8 x 1.25	16.0mm	25.0mm	43.0mm	1110 lbs	**SF50M8A**	Price
M10 x 1.50	20.0mm	27.0mm	46.0mm	1628 lbs	**SF50M10A**	Price
M12 x 1.75	25.4mm	30.0mm	54.0mm	2266 lbs	**SF50M12A**	Price
M14 x 2.00	28.0mm	33.0mm	58.0mm	3520 lbs	**SF50M14A**	Price
M16 x 2.00	32.0mm	35.0mm	65.0mm	3520 lbs	**SF50M16A**	Price
M18 x 2.50	36.0mm	38.0mm	71.5mm	4708 lbs	**SF50M18A**	Price
M20 x 2.50	40.0mm	41.0mm	81.0mm	6292 lbs	**SF50M20A**	Price
M22 x 2.50	44.0mm	46.0mm	90.4mm	6292 lbs	**SF50M22A**	Price
M24 x 3.00	48.0mm	46.0mm	90.4mm	8470 lbs	**SF50M24A**	Price
M27 x 3.00	48.0mm	51.0mm	103.0mm	11440 lbs	**SF50M27A**	Price
M30 x 3.50	60.0mm	55.0mm	112.7mm	14080 lbs	**SF50M30A**	Price
M36 x 4.00	72.0mm	63.0mm	131.8mm	19734 lbs	**SF50M36A**	Price
M42 x 4.50	84.0mm	73.0mm	152.4mm	26312 lbs	**SF50M42A**	Price
M45 x 4.50	84.0mm	73.0mm	152.4mm	27984 lbs	**SF50M45A**	Price
M48 x 5.00	96.0mm	82.0mm	174.6mm	36080 lbs	**SF50M48A**	Price
M52 x 5.00	96.0mm	82.0mm	174.6mm	38060 lbs	**SF50M52A**	Price

Style - Shoulder Pattern						
Thread Size	Thread Length	Eye I.D.	Eye O.D.	Safe Workload	Order No.	Price
M6 x 1.00	25.4mm	19.0mm	30.0mm	462 lbs	**SF50M6**	Price
M7 x 1.00	28.5mm	22.0mm	36.5mm	814 lbs	**SF50M7**	Price
M8 x 1.25	31.7mm	25.0mm	43.0mm	1110 lbs	**SF50M8**	Price
M10 x 1.50	35.0mm	27.0mm	46.0mm	1628 lbs	**SF50M10**	Price
M12 x 1.75	38.0mm	30.0mm	54.0mm	2266 lbs	**SF50M12**	Price
M14 x 2.00	41.1mm	33.0mm	58.0mm	3520 lbs	**SF50M14**	Price
M16 x 2.00	44.5mm	35.0mm	65.0mm	3520 lbs	**SF50M16**	Price
M18 x 2.50	51.0mm	38.0mm	71.5mm	4708 lbs	**SF50M18**	Price
M20 x 2.50	57.0mm	41.0mm	81.0mm	6292 lbs	**SF50M20**	Price
M22 x 2.50	63.5mm	46.0mm	90.4mm	6292 lbs	**SF50M22**	Price
M24 x 3.00	63.5mm	46.0mm	90.4mm	8470 lbs	**SF50M24**	Price
M27 x 3.00	70.0mm	51.0mm	103.0mm	11440 lbs	**SF50M27**	Price
M30 x 3.50	76.0mm	55.0mm	112.7mm	14080 lbs	**SF50M30**	Price
M36 x 4.00	89.0mm	63.0mm	131.8mm	19734 lbs	**SF50M36**	Price
M42 x 4.50	95.0mm	73.0mm	152.4mm	26312 lbs	**SF50M42**	Price
M45 x 4.50	95.0mm	73.0mm	152.4mm	27984 lbs	**SF50M45**	Price
M48 x 5.00	101.6mm	82.0mm	174.6mm	36080 lbs	**SF50M48**	Price
M52 x 5.00	101.6mm	82.0mm	174.6mm	38060 lbs	**SF50M52**	Price
M64 x 6.00	127.0mm	102.0mm	217.5mm	53931 lbs	**SF50M64**	Price

MADE IN THE USA Turnbuckle Assemblies



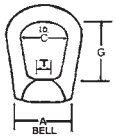
- Stub Ends Mild Carbon Steel
- Galvanized

Material - Zinc plated					
Diameter & Thread (in.)	Take-Up (in.)	OAL (in.)	Safe Workload	Order No.	Price
1/4-20	4-1/2	10-1/2	500 lbs	**SF50TB101SZN**	Price

Material - Galvanized					
Diameter & Thread (in.)	Take-Up (in.)	OAL (in.)	Safe Workload	Order No.	Price
5/16-18	4-1/2	10-1/2	800 lbs	**SF50TB102SHDG**	Price
3/8-16	6	13	1200 lbs	**SF50TB103SHDG**	Price
1/2-13	3	8	2200 lbs	**SF50TB1053SHDG**	Price
1/2-13	4	10	2200 lbs	**SF50TB1054SHDG**	Price
1/2-13	6	14	2200 lbs	**SF50TB105SHDG**	Price
1/2-13	9	20	2200 lbs	**SF50TB1059SHDG**	Price
1/2-13	12	26	2200 lbs	**SF50TB105JSHDG**	Price
5/8-11	3	9	3500 lbs	**SF50TB1073SHDG**	Price
5/8-11	4	11	3500 lbs	**SF50TB1074SHDG**	Price
5/8-11	6	14	2000 lbs	**SF50TB107SHDG**	Price
5/8-11	9	21	3500 lbs	**SF50TB1079SHDG**	Price
5/8-11	12	27	3500 lbs	**SF50TB107JSHDG**	Price
3/4-10	6	15	3500 lbs	**SF50TB108SHDG**	Price
3/4-10	9	21	3500 lbs	**SF50TB1089SHDG**	Price

Material - Galvanized					
Diameter & Thread (in.)	Take-Up (in.)	OAL (in.)	Safe Workload	Order No.	Price
3/4-10	12	27	3500 lbs	**SF50TB108JSHDG**	Price
7/8-9	6	16	5200 lbs	**SF50TB109SHDG**	Price
7/8-9	12	28	5200 lbs	**SF50TB109JSHDG**	Price
1-8	6	17	7200 lbs	**SF50TB110SHDG**	Price
1-8	12	29	7200 lbs	**SF50TB110JSHDG**	Price
1-1/8-7	6	18	10000 lbs	**SF50TB111SHDG**	Price
1-1/8-7	12	30	10000 lbs	**SF50TB111JSHDG**	Price
1-1/4-7	6	19	15000 lbs	**SF50TB112SHDG**	Price
1-1/4-7	12	31	15000 lbs	**SF50TB112JSHDG**	Price
1-1/2-6	6	19-1/8	15200 lbs	**SF50TB114SHDG**	Price
1-1/2-6	12	32-1/4	21000 lbs	**SF50TB114JSHDG**	Price
1-3/4-5	6	21	28000 lbs	**SF50TB115SHDG**	Price
1-5/8-5-1/2	6	21	27000 lbs	**SF50TB117SHDG**	Price
1-3/8-6	6	20	17400 lbs	**SF50TB113SHDG**	Price
1-7/8-5	6	22	36000 lbs	**SF50TB118SHDG**	Price
2-1/4-4-1/2	6	21	27000 lbs	**SF50TB119SHDG**	Price
2-1/2-4	6	22	34000 lbs	**SF50TB120SHDG**	Price
2-4-1/2	6	21	28000 lbs	**SF50TB116SHDG**	Price

Eye Nuts Heavy Duty





(T) Thread Size (in.)	(A) Bell (in.)	(C) I.D. (in.)	(G) I.D. Length (in.)	Rated Capacity	Order No.	Price
3/8-16	7/8	1-1/4	1-1/2	2700 lbs	**SF50EN3**	Price
1/2-13	7/8	1-1/4	1-1/2	2700 lbs	**SF50EN5**	Price
5/8-11	1-3/8	1-1/2	1-3/4	5000 lbs	**SF50EN7**	Price

(T) Thread Size (in.)	(A) Bell (in.)	(C) I.D. (in.)	(G) I.D. Length (in.)	Rated Capacity	Order No.	Price
3/4-10	1-3/8	1-1/2	1-3/4	5000 lbs	**SF50EN8**	Price
7/8-9	1-9/16	2-1/4	3	10000 lbs	**SF50EN9**	Price
1-8	1-9/16	2-1/4	3	10000 lbs	**SF50EN10**	Price

MADE IN THE USA Carbon & Stainless Steel Nut Eye Bolts



Carbon Steel:

- Hot Dip Galavanized to ASTM A 153: UNC-2A before Galvanizing
- Each threaded eye bolt includes one galavanized hex nut assembled

Material - 304 Stainless						
Thread Size (in.)	Thread Length (in.)	Eye I.D. (in.)	Shank Length (in.)	Safe Wor-kload	Order No.	Price
1/4-20	2	1/2	4	500 lbs	**SF50N2001SS4**	Price
1/4-20	3	1/2	6	500 lbs	**SF50N2001SS6**	Price
5/16-18	1-1/2	5/8	2-1/4	800 lbs	**SF50N2002SS214**	Price
5/16-18	1-1/2	5/8	3-1/4	800 lbs	**SF50N2002SS314**	Price
5/16-18	2-1/2	5/8	4-1/4	800 lbs	**SF50N2002SS414**	Price
5/16-18	3	5/8	6	800 lbs	**SF50N2002SS6**	Price
3/8-16	2	3/4	4-1/4	1200 lbs	**SF50N2003SS414**	Price
3/8-16	3	3/4	6	1200 lbs	**SF50N2003SS6**	Price
3/8-16	1-1/2	3/4	2-1/2	1200 lbs	**SF50N2003SS212**	Price
1/2-13	3	1	4-1/2	2200 lbs	**SF50N2005SS412**	Price
1/2-13	3	1	6	2200 lbs	**SF50N2005SS6**	Price
1/2-13	4	1	12	2200 lbs	**SF50N2005SS12**	Price
5/8-11	3	1-3/8	6	3500 lbs	**SF50N2007SS6**	Price
5/8-11	4	1-3/8	12	3500 lbs	**SF50N2007SS12**	Price
3/4-10	3	1-1/2	6	5200 lbs	**SF50N2008SS6**	Price
3/4-10	4	1-1/2	12	5200 lbs	**SF50N2008SS12**	Price
7/8-9	3	1-3/4	6	7200 lbs	**SF50N2009SS6**	Price
7/8-9	4	1-3/4	12	7200 lbs	**SF50N2009SS12**	Price
1-8	3	2	6	10000 lbs	**SF50N2010SS6**	Price
1-8	4	2	12	10000 lbs	**SF50N2010SS12**	Price
1-1/4-7	3	2-3/16	6	13500 lbs	**SF50N2012SS6**	Price
1-1/4-7	4	2-3/16	12	13500 lbs	**SF50N2012SS12**	Price
1-1/2-6	3	2-1/2	6	20000 lbs	**SF50N2014SS6**	Price
1-1/2-6	4	2-1/2	12	20000 lbs	**SF50N2014SS12**	Price

Stainless Steel:

- Passivated & electropolished
- Each threaded eye bolt includes one stainless steel hex nut assembled

Material - 316 Stainless						
Thread Size (in.)	Thread Length (in.)	Eye I.D. (in.)	Shank Length (in.)	Safe Wor-kload	Order No.	Price
1/4-20	2	1/2	4	500 lbs	**SF50N20013164**	Price
1/4-20	3	1/2	6	500 lbs	**SF50N20013166**	Price
5/16-18	1-1/2	5/8	2-1/4	800 lbs	**SF50N2002316214**	Price
5/16-18	1-1/2	5/8	3-1/4	800 lbs	**SF50N2002316314**	Price
5/16-18	2-1/2	5/8	4-1/4	800 lbs	**SF50N2002316414**	Price
5/16-18	3	5/8	6	800 lbs	**SF50N20023166**	Price
3/8-16	1-1/2	3/4	2-1/2	1200 lbs	**SF50N2003316212**	Price
3/8-16	2	3/4	4-1/4	1200 lbs	**SF50N2003316414**	Price
3/8-16	3	3/4	6	1200 lbs	**SF50N20033166**	Price
1/2-13	3	1	4-1/2	2200 lbs	**SF50N2005316412**	Price
1/2-13	3	1	6	2200 lbs	**SF50N20053166**	Price
1/2-13	4	1	12	2200 lbs	**SF50N200531612**	Price
3/4-10	3	1-1/2	6	5200 lbs	**SF50N20083166**	Price
3/4-10	4	1-1/2	12	5200 lbs	**SF50N200831612**	Price
5/8-11	3	1-3/8	6	3500 lbs	**SF50N20073166**	Price
5/8-11	4	1-3/8	12	3500 lbs	**SF50N200731612**	Price
7/8-9	3	1-3/4	6	7200 lbs	**SF50N20093166**	Price
7/8-9	4	1-3/4	12	7200 lbs	**SF50N200931612**	Price
1-8	3	2	6	10000 lbs	**SF50N20103166**	Price
1-8	4	2	12	10000 lbs	**SF50N201031612**	Price
1-1/4-7	3	2-3/16	6	13500 lbs	**SF50N20123166**	Price
1-1/4-7	4	2-3/16	12	13500 lbs	**SF50N201231612**	Price
1-1/2-6	3	2-1/2	6	20000 lbs	**SF50N20143166**	Price
1-1/2-6	4	2-1/2	12	20000 lbs	**SF50N201431612**	Price

MADE IN THE USA Carbon & Stainless Steel Nut Eye Bolts (cont.)



Material - Carbon Steel						
Thread Size (in.)	Thread Length (in.)	Eye I.D. (in.)	Shank Length (in.)	Safe Workload	Order No.	Price
1/4-20	1-1/2	1/2	2	500 lbs	**SF50N20012**	Price
1/4-20	1-1/2	1/2	3	500 lbs	**SF50N20013**	Price
1/4-20	2	1/2	4	500 lbs	**SF50N20014**	Price
1/4-20	2-1/2	1/2	5	500 lbs	**SF50N20015**	Price
1/4-20	3	1/2	6	500 lbs	**SF50N20016**	Price
5/16-18	1-1/2	5/8	2-1/4	800 lbs	**SF50N2002214**	Price
5/16-18	1-1/2	5/8	3-1/4	800 lbs	**SF50N2002314**	Price
5/16-18	2-1/2	5/8	4-1/4	800 lbs	**SF50N2002414**	Price
5/16-18	2-1/2	5/8	5	800 lbs	**SF50N20025**	Price
5/16-18	3	5/8	6	800 lbs	**SF50N20026**	Price
3/8-16	1-1/2	3/4	2-1/2	1200 lbs	**SF50N2003212**	Price
3/8-16	1-1/2	3/4	3	1200 lbs	**SF50N20033**	Price
3/8-16	2	3/4	4	1200 lbs	**SF50N20034**	Price
3/8-16	3	3/4	4-1/2	1200 lbs	**SF50N2003412**	Price
3/8-16	3	3/4	5	1200 lbs	**SF50N20035**	Price
3/8-16	3	3/4	6	1200 lbs	**SF50N20036**	Price
3/8-16	4	3/4	8	1200 lbs	**SF50N20038**	Price
3/8-16	4	3/4	10	1200 lbs	**SF50N200310**	Price
1/2-13	1-5/8	1	2	2200 lbs	**SF50N20052**	Price
1/2-13	2	1	3-1/4	2200 lbs	**SF50N2005314**	Price
1/2-13	3	1	4	2200 lbs	**SF50N20054**	Price
1/2-13	3	1	4-1/2	2200 lbs	**SF50N2005412**	Price
1/2-13	3	1	6	2200 lbs	**SF50N20056**	Price
1/2-13	4	1	8	2200 lbs	**SF50N20058**	Price
1/2-13	4	1	10	2200 lbs	**SF50N200510**	Price
1/2-13	4	1	12	2200 lbs	**SF50N200512**	Price
3/4-10	4	1-1/2	12	5200 lbs	**SF50N200812**	Price
3/4-10	3	1-1/2	4	5200 lbs	**SF50N20084**	Price
3/4-10	3	1-1/2	4-1/2	5200 lbs	**SF50N2008412**	Price
3/4-10	3	1-1/2	6	5200 lbs	**SF50N20086**	Price
3/4-10	4	1-1/2	8	5200 lbs	**SF50N20088**	Price
3/4-10	4	1-1/2	10	5200 lbs	**SF50N200810**	Price
3/4-10	6	1-1/2	15	5200 lbs	**SF50N200815**	Price
3/4-10	6	1-1/2	18	5200 lbs	**SF50N200818**	Price

Material - Carbon Steel						
Thread Size (in.)	Thread Length (in.)	Eye I.D. (in.)	Shank Length (in.)	Safe Workload	Order No.	Price
3/4-10	6	1-1/2	24	5200 lbs	**SF50N200824**	Price
5/8-11	3	1-3/8	4	3500 lbs	**SF50N20074**	Price
5/8-11	3	1-3/8	4-1/2	3500 lbs	**SF50N2007412**	Price
5/8-11	3	1-3/8	6	3500 lbs	**SF50N20076**	Price
5/8-11	4	1-3/8	8	3500 lbs	**SF50N20078**	Price
5/8-11	4	1-3/8	10	3500 lbs	**SF50N200710**	Price
5/8-11	4	1-3/8	12	3500 lbs	**SF50N200712**	Price
5/8-11	6	1-3/8	15	3500 lbs	**SF50N200715**	Price
5/8-11	6	1-3/8	18	3500 lbs	**SF50N200718**	Price
5/8-11	6	1-3/8	24	3500 lbs	**SF50N200724**	Price
7/8-9	3	1-3/4	5	7200 lbs	**SF50N20095**	Price
7/8-9	3	1-3/4	6	7200 lbs	**SF50N20096**	Price
7/8-9	4	1-3/4	8	7200 lbs	**SF50N20098**	Price
7/8-9	4	1-3/4	10	7200 lbs	**SF50N200910**	Price
7/8-9	4	1-3/4	12	7200 lbs	**SF50N200912**	Price
7/8-9	6	1-3/4	18	7200 lbs	**SF50N200918**	Price
7/8-9	6	1-3/4	24	7200 lbs	**SF50N200924**	Price
1-8	3	2	6	10000 lbs	**SF50N20106**	Price
1-8	4	2	8	10000 lbs	**SF50N20108**	Price
1-8	4	2	10	10000 lbs	**SF50N201010**	Price
1-8	4	2	12	10000 lbs	**SF50N201012**	Price
1-8	6	2	15	10000 lbs	**SF50N201015**	Price
1-8	6	2	18	10000 lbs	**SF50N201018**	Price
1-8	6	2	24	10000 lbs	**SF50N201024**	Price
1-1/4-7	3	2-3/16	6	13500 lbs	**SF50N20126**	Price
1-1/4-7	4	2-3/16	8	13500 lbs	**SF50N20128**	Price
1-1/4-7	4	2-3/16	12	13500 lbs	**SF50N201212**	Price
1-1/4-7	6	2-3/16	18	13500 lbs	**SF50N201218**	Price
1-1/4-7	6	2-3/16	24	13500 lbs	**SF50N201224**	Price
1-1/2-6	3	2-1/2	6	20000 lbs	**SF50N20146**	Price
1-1/2-6	4	2-1/2	12	20000 lbs	**SF50N201412**	Price
1-1/2-6	6	2-1/2	18	20000 lbs	**SF50N201418**	Price
1-1/2-6	6	2-1/2	24	20000 lbs	**SF50N201424**	Price
2-4-1/2	4	3-1/4	12	35000 lbs	**SF50N201612**	Price

MADE IN THE USA Metric Drill Rods



- 3 Feet Lengths

Material - A-2			
Dia.	Decimal Equiv. (in)	Order No.	Price
2mm	.0787	**MC52A402**	Price
3mm	.1181	**MC52A403**	Price
4mm	.1575	**MC52A404**	Price
5mm	.1968	**MC52A405**	Price
6mm	.2362	**MC52A406**	Price
7mm	.2756	**MC52A407**	Price
8mm	.3150	**MC52A408**	Price
10mm	.3937	**MC52A410**	Price
11mm	.4331	**MC52A411**	Price
12mm	.4724	**MC52A412**	Price
13mm	.5118	**MC52A413**	Price
14mm	.5512	**MC52A414**	Price
15mm	.5906	**MC52A415**	Price
16mm	.6299	**MC52A416**	Price
17mm	.6693	**MC52A417**	Price
18mm	.7087	**MC52A418**	Price
19mm	.7480	**MC52A419**	Price
20mm	.7874	**MC52A420**	Price
21mm	.8268	**MC52A421**	Price
22mm	.8661	**MC52A422**	Price
23mm	.9055	**MC52A423**	Price
24mm	.9449	**MC52A424**	Price
25mm	.9843	**MC52A425**	Price

Material - O-1			
Dia.	Decimal Equiv. (in)	Order No.	Price
2mm	.0787	**MC50402**	Price
3mm	.1181	**MC50403**	Price
4mm	.1575	**MC50404**	Price
5mm	.1968	**MC50405**	Price
6mm	.2362	**MC50406**	Price
7mm	.2756	**MC50407**	Price
8mm	.3150	**MC50408**	Price
9mm	.3543	**MC50409**	Price
10mm	.3937	**MC50410**	Price
11mm	.4331	**MC50411**	Price
12mm	.4724	**MC50412**	Price
13mm	.5118	**MC50413**	Price
14mm	.5512	**MC50414**	Price
15mm	.5906	**MC50415**	Price
16mm	.6299	**MC50416**	Price
17mm	.6693	**MC50417**	Price
18mm	.7087	**MC50418**	Price
19mm	.7480	**MC50419**	Price
20mm	.7874	**MC50420**	Price
21mm	.8268	**MC50421**	Price
22mm	.8661	**MC50422**	Price
23mm	.9055	**MC50423**	Price
24mm	.9449	**MC50424**	Price
25mm	.9843	**MC50425**	Price

MADE IN THE USA Drill Rods



- (A-2) Air-hardening ground and polished drill rod
- (S-7) Shock Resistant Tool Steel Super-7
- (O-1) A non-shrinking general purpose tool steel
- (W-1) Water hardened drill rod is the most popular, versatile, and least expensive grade of drill rod
- High carbon contents allows it to be used often without heat treatment, for maintenance applications
- Oil hardened drill rod, has excellent abrasion resistance, toughness and machinability characteristics
- 3 Feet lengths

Material - A-2		
Dia. (in.)	Order No.	Price
1/16	MC52A004	Price
5/64	MC52A005	Price
3/32	MC52A006	Price
7/64	MC52A007	Price
1/8	MC52A008	Price
9/64	MC52A009	Price
5/32	MC52A010	Price
11/64	MC52A011	Price
3/16	MC52A012	Price
13/64	MC52A013	Price
7/32	MC52A014	Price
15/64	MC52A015	Price
1/4	MC52A016	Price
17/64	MC52A017	Price
9/32	MC52A018	Price
19/64	MC52A019	Price
5/16	MC52A020	Price
21/64	MC52A021	Price
11/32	MC52A022	Price
23/64	MC52A023	Price
3/8	MC52A024	Price
25/64	MC52A025	Price
13/32	MC52A026	Price
27/64	MC52A027	Price
7/16	MC52A028	Price
29/64	MC52A029	Price
15/32	MC52A030	Price
31/64	MC52A031	Price
1/2	MC52A032	Price
17/32	MC52A034	Price
9/16	MC52A036	Price
19/32	MC52A038	Price
5/8	MC52A040	Price
21/32	MC52A042	Price
11/16	MC52A044	Price
23/32	MC52A046	Price
3/4	MC52A048	Price
13/16	MC52A052	Price
7/8	MC52A056	Price
1	MC52A100	Price
1-1/16	MC52A104	Price
1-1/8	MC52A108	Price
1-1/4	MC52A116	Price
1-3/8	MC52A124	Price
1-1/2	MC52A132	Price
1-3/4	MC52A148	Price
2	MC52A200	Price

Material - O-1		
Dia. (in.)	Order No.	Price
1/16	MC50004	Price
5/64	MC50005	Price
3/32	MC50006	Price
7/64	MC50007	Price
1/8	MC50008	Price
9/64	MC50009	Price
5/32	MC50010	Price
11/64	MC50011	Price
3/16	MC50012	Price
13/64	MC50013	Price
7/32	MC50014	Price
15/64	MC50015	Price
1/4	MC50016	Price
17/64	MC50017	Price
9/32	MC50018	Price
19/64	MC50019	Price
5/16	MC50020	Price
21/64	MC50021	Price
11/32	MC50022	Price
23/64	MC50023	Price
3/8	MC50024	Price
25/64	MC50025	Price
13/32	MC50026	Price
27/64	MC50027	Price
7/16	MC50028	Price

Material - O-1		
Dia. (in.)	Order No.	Price
29/64	MC50029	Price
15/32	MC50030	Price
31/64	MC50031	Price
1/2	MC50032	Price
33/64	MC50033	Price
17/32	MC50034	Price
35/64	MC50035	Price
9/16	MC50036	Price
37/64	MC50037	Price
19/32	MC50038	Price
39/64	MC50039	Price
5/8	MC50040	Price
41/64	MC50041	Price
21/32	MC50042	Price
43/64	MC50043	Price
11/16	MC50044	Price
45/64	MC50045	Price
23/32	MC50046	Price
47/64	MC50047	Price
3/4	MC50048	Price
49/64	MC50049	Price
25/32	MC50050	Price
51/64	MC50051	Price
13/16	MC50052	Price
53/64	MC50053	Price
27/32	MC50054	Price
55/64	MC50055	Price
7/8	MC50056	Price
57/64	MC50057	Price
29/32	MC50058	Price
59/64	MC50059	Price
15/16	MC50060	Price
61/64	MC50061	Price
31/32	MC50062	Price
63/64	MC50063	Price
1	MC50100	Price
1-1/16	MC50104	Price
1-1/8	MC50108	Price
1-3/16	MC50112	Price
1-1/4	MC50116	Price
1-5/16	MC50120	Price
1-3/8	MC50124	Price
1-7/16	MC50128	Price
1-1/2	MC50132	Price
1-9/16	MC50136	Price
1-5/8	MC50140	Price
1-11/16	MC50144	Price
1-3/4	MC50148	Price
1-13/16	MC50152	Price
1-7/8	MC50156	Price
1-15/16	MC50160	Price
2	MC50200	Price

Material - S-7		
Dia. (in.)	Order No.	Price
1/16	MC53S004	Price
1/2	MC53S032	Price
1/4	MC53S016	Price
1/8	MC53S008	Price
3/16	MC53S012	Price
3/32	MC53S006	Price
3/4	MC53S048	Price
3/8	MC53S024	Price
5/16	MC53S020	Price
5/32	MC53S010	Price
5/8	MC53S040	Price
7/16	MC53S028	Price
7/32	MC53S014	Price
7/8	MC53S056	Price
1	MC53S100	Price
1-1/16	MC53S104	Price
1-1/2	MC53S132	Price
1-3/4	MC53S148	Price
1-3/8	MC53S124	Price
2	MC53S200	Price

Material - W-1		
Dia. (in.)	Order No.	Price
1/16	MD50004	Price
5/64	MD50005	Price
3/32	MD50006	Price
7/64	MD50007	Price
1/8	MD50008	Price
9/64	MD50009	Price
5/32	MD50010	Price
11/64	MD50011	Price
3/16	MD50012	Price
13/64	MD50013	Price
7/32	MD50014	Price
15/64	MD50015	Price
1/4	MD50016	Price
17/64	MD50017	Price
9/32	MD50018	Price
19/64	MD50019	Price
5/16	MD50020	Price
21/64	MD50021	Price
11/32	MD50022	Price
23/64	MD50023	Price
3/8	MD50024	Price
25/64	MD50025	Price
13/32	MD50026	Price
27/64	MD50027	Price
7/16	MD50028	Price
29/64	MD50029	Price
15/32	MD50030	Price
31/64	MD50031	Price
1/2	MD50032	Price
33/64	MD50033	Price
17/32	MD50034	Price
35/64	MD50035	Price
9/16	MD50036	Price
37/64	MD50037	Price
19/32	MD50038	Price
39/64	MD50039	Price
5/8	MD50040	Price
41/64	MD50041	Price
21/32	MD50042	Price
43/64	MD50043	Price
11/16	MD50044	Price
45/64	MD50045	Price
23/32	MD50046	Price
47/64	MD50047	Price
3/4	MD50048	Price
49/64	MD50049	Price
25/32	MD50050	Price
51/64	MD50051	Price
13/16	MD50052	Price
53/64	MD50053	Price
27/32	MD50054	Price
55/64	MD50055	Price
7/8	MD50056	Price
57/64	MD50057	Price
29/32	MD50058	Price
59/64	MD50059	Price
15/16	MD50060	Price
61/64	MD50061	Price
31/32	MD50062	Price
63/64	MD50063	Price
1	MD50100	Price
1-1/16	MD50104	Price
1-1/2	MD50132	Price
1-1/4	MD50116	Price
1-1/8	MD50108	Price
1-11/16	MD50144	Price
1-13/16	MD50152	Price
1-15/16	MD50160	Price
1-3/16	MD50112	Price
1-3/4	MD50148	Price
1-3/8	MD50124	Price
1-5/16	MD50120	Price
1-5/8	MD50140	Price
1-7/16	MD50128	Price
1-7/8	MD50156	Price
1-9/16	MD50136	Price
2	MD50200	Price

Woodruff Keys

- Used to lock pulleys and gears tightly to transmission shafts
- Keys reach deep into key shaft and become firmly embedded, but also rock in their seat and adjust to an angular spine



Key No.	Width (in.)	Outside Dia. (in.)	Order No.	Price
202	1/16	1/4	**DH56201**	Price
202-1/2	1/16	5/16	**DH56206**	Price
203	1/16	3/8	**DH56211**	Price
204	1/16	1/2	**DH561**	Price
302-1/2	3/32	5/16	**DH56207**	Price
303	3/32	3/8	**DH56212**	Price
304	3/32	1/2	**DH562**	Price
305	3/32	5/8	**DH564**	Price
403	1/8	3/8	**DH56213**	Price
404	1/8	1/2	**DH563**	Price
405	1/8	5/8	**DH565**	Price
406	1/8	3/4	**DH567**	Price
505	5/32	5/8	**DH566**	Price
506	5/32	3/4	**DH568**	Price
507	5/32	7/8	**DH5610**	Price
605	3/16	5/8	**DH5661**	Price
606	3/16	3/4	**DH569**	Price
607	3/16	7/8	**DH5611**	Price
608	3/16	1	**DH5613**	Price
609	3/16	1-1/8	**DH5616**	Price
610	3/16	1-1/4	**DH5619**	Price
617	3/16	2-1/8	**DH5626**	Price
707	7/32	7/8	**DH5612**	Price
708	7/32	1	**DH5614**	Price
709	7/32	1-1/8	**DH5617**	Price
710	7/32	1-1/4	**DH5620**	Price
806	1/4	3/4	**DH5691**	Price
807	1/4	7/8	**DH56A**	Price
808	1/4	1	**DH5615**	Price
809	1/4	1-1/8	**DH5618**	Price
810	1/4	1-1/4	**DH5621**	Price
811	1/4	1-3/8	**DH5622**	Price
812	1/4	1-1/2	**DH5624**	Price
817	1/4	2-1/8	**DH5627**	Price
822	1/4	2-3/4	**DH56R**	Price
1008	5/16	1	**DH56B**	Price
1009	5/16	1-1/8	**DH56C**	Price
1010	5/16	1-1/4	**DH56D**	Price
1011	5/16	1-3/8	**DH5623**	Price
1012	5/16	1-1/2	**DH5625**	Price
1017	5/16	2-1/8	**DH5628**	Price
1022	5/16	2-3/4	**DH56S**	Price
1208	3/8	1	**DH56152**	Price
1210	3/8	1-1/4	**DH56E**	Price
1211	3/8	1-3/8	**DH56F**	Price
1212	3/8	1-1/2	**DH56G**	Price
1217	3/8	2-1/8	**DH5629**	Price
-	3/8	2-1/4	**DH5631**	Price
1222	3/8	2-3/4	**DH56T**	Price
1422	7/16	2-3/4	**DH56U**	Price
1622	1/2	2-3/4	**DH56V**	Price

PRECISION BRAND 32 Pc. Square Cold Finished Keystock

- 6 Popular sizes
- 12” Length



Sizes Included (in.)	Order No.	Price
6 ea. 3/16, 1/4, 5/16, 3/8; 4 ea. 7/16, 1/2"	**MF5000310**	Price

PRECISION BRAND Stainless Steel Keystock

- Excellent alternative to Steel Keystock when corrosion resistance is a concern
- Made from 300 series stainless steel
- Rockwell Hardness: RB 80-95
- Most tolerances are undersized
- 12” Length
- Frequently used in food and marine applications



Size Square (in.)	Length (in./mm)	Weight Per Piece	Order No.	Price
3mm	12	.05	**MF5057405**	Price
3mm	1mm	.16	**MF5057406**	Price
4mm	12	.09	**MF5057410**	Price
4mm	1mm	.28	**MF5057411**	Price
5mm	12	.13	**MF5057415**	Price
5mm	1mm	.43	**MF5057416**	Price
6mm	12	.19	**MF5057420**	Price
6mm	1mm	.62	**MF5057421**	Price
7mm	12	.26	**MF5057425**	Price
7mm	1mm	.84	**MF5057426**	Price
8mm	12	.34	**MF5057430**	Price
8mm	1mm	1.1	**MF5057431**	Price
10mm	12	.52	**MF5057435**	Price
10mm	1mm	1.7	**MF5057436**	Price
12mm	12	.76	**MF5057440**	Price
12mm	1mm	2.5	**MF5057441**	Price
14mm	12	1.04	**MF5057445**	Price
14mm	1mm	3.4	**MF5057446**	Price
16mm	12	1.34	**MF5057450**	Price
16mm	1mm	4.4	**MF5057451**	Price
18mm	12	1.71	**MF5057455**	Price
18mm	1mm	5.6	**MF5057456**	Price
20mm	12	2.1	**MF5057460**	Price
20mm	1mm	6.9	**MF5057461**	Price
22mm	12	2.38	**MF5057465**	Price
22mm	1mm	7.8	**MF5057466**	Price
3/16	12	.12	**MF50187SS**	Price
1/4	12	.213	**MF50250SS**	Price
5/16	12	.332	**MF50313SS**	Price
3/8	12	.48	**MF50375SS**	Price
7/16	12	.65	**MF50438SS**	Price
1/2	12	.85	**MF50500SS**	Price
5/8	12	1.33	**MF50625SS**	Price

PRECISION BRAND Square Cold Finished Keystock

- Zinc plated cold finished keystock is available in 12” lengths
- Used to provide driving torque between shafts and pulleys, gears, sprockets, etc.
- Material is high quality steel
- Most tolerances on dimensions are oversized to assure tight fits in keyways for positive, zero backlash power transmission
- Sizes are clearly marked on each piece
- Sold in bundle quantity only



Size (in.)	Order No.	Price
1/8	**MF50125**	Price
3/16	**MF50187**	Price
1/4	**MF50250**	Price
5/16	**MF50313**	Price
3/8	**MF50375**	Price
7/16	**MF50438**	Price
1/2	**MF50500**	Price
5/8	**MF50625**	Price
3/4	**MF50750**	Price
7/8	**MF50875**	Price
1	**MF501000**	Price

Starrett® Thickness Gage or Feeler Stock

In 12” and 304mm Lengths



- Convenient 12” lengths, 1/2” wide
- 32 Thicknesses meet all requirements
- Rounded ends — no ragged edges
- Made of finest tempered steel
- Each piece marked with thickness and in individual envelope
- With convenient 3/16” hole punched in end for hanging up
- Popular priced

Blade Length - 12		
Thickness (in.)	Order No.	Price
.001	MV7052837	Price
.0015	MV7052838	Price
.002	MV7052839	Price
.0025	MV7052840	Price
.003	MV7052841	Price
.004	MV7052842	Price
.005	MV7052843	Price
.006	MV7052844	Price
.007	MV7052845	Price
.008	MV7052846	Price
.009	MV7052847	Price
.010	MV7052848	Price
.011	MV7052849	Price
.012	MV7052850	Price
.013	MV7052851	Price
.014	MV7052852	Price
.015	MV7052853	Price
.016	MV7052854	Price
.017	MV7052855	Price
.018	MV7052856	Price
.019	MV7052857	Price
.020	MV7052858	Price
.021	MV7052859	Price
.022	MV7052860	Price
.023	MV7052861	Price

Blade Length - 12		
Thickness (in.)	Order No.	Price
.024	MV7052862	Price
.025	MV7052863	Price
.026	MV7052864	Price
.027	MV7052865	Price
.028	MV7052866	Price
.029	MV7052867	Price
.030	MV7052868	Price

Blade Length - 304mm		
Thickness (in.)	Order No.	Price
.03mm	MV7052869	Price
.04mm	MV7052870	Price
.05mm	MV7052871	Price
.06mm	MV7052872	Price
.08mm	MV7052873	Price
.10mm	MV7052874	Price
.15mm	MV7052875	Price
.20mm	MV7052876	Price
.25mm	MV7052877	Price
.30mm	MV7052878	Price
.35mm	MV7052879	Price
.40mm	MV7052880	Price
.45mm	MV7052881	Price
.50mm	MV7052882	Price

Steel Feeler Stock





Type - Steel Feeler Stock Strips			
Thickness	Blade Length	Order No.	Price
.001	12	MA52F1	Price
.0015	12	MA52F1X	Price
.002	12	MA52F2	Price
.003	12	MA52F3	Price
.004	12	MA52F4	Price
.005	12	MA52F5	Price
.006	12	MA52F6	Price
.007	12	MA52F7	Price
.008	12	MA52F8	Price
.009	12	MA52F9	Price
.010	12	MA52F10	Price
.011	12	MA52F11	Price
.012	12	MA52F12	Price
.013	12	MA52F13	Price
.014	12	MA52F14	Price
.015	12	MA52F15	Price
.016	12	MA52F16	Price
.017	12	MA52F17	Price
.018	12	MA52F18	Price
.019	12	MA52F19	Price
.020	12	MA52F20	Price
.021	12	MA52F21	Price
.022	12	MA52F22	Price
.023	12	MA52F23	Price
.024	12	MA52F24	Price
.025	12	MA52F25	Price
.026	12	MA52F26	Price
.027	12	MA52F27	Price
.028	12	MA52F28	Price
.029	12	MA52F29	Price
.030	12	MA52F30	Price
.031	12	MA52F31	Price
.032	12	MA52F32	Price
.034	12	MA52F34	Price

Type - Steel Feeler Stock Rolls			
Thickness	Blade Length	Order No.	Price
.001	25 ft	MA52T1	Price
.0015	25 ft	MA52T1X	Price
.002	25 ft	MA52T2	Price
.003	25 ft	MA52T3	Price
.004	25 ft	MA52T4	Price
.005	25 ft	MA52T5	Price
.006	25 ft	MA52T6	Price
.007	25 ft	MA52T7	Price
.008	25 ft	MA52T8	Price
.009	25 ft	MA52T9	Price
.010	25 ft	MA52T10	Price
.011	25 ft	MA52T11	Price
.012	25 ft	MA52T12	Price
.013	25 ft	MA52T13	Price
.014	25 ft	MA52T14	Price
.015	25 ft	MA52T15	Price
.016	25 ft	MA52T16	Price
.017	25 ft	MA52T17	Price
.018	25 ft	MA52T18	Price
.019	25 ft	MA52T19	Price
.020	25 ft	MA52T20	Price
.021	25 ft	MA52T21	Price
.022	25 ft	MA52T22	Price
.023	25 ft	MA52T23	Price
.024	25 ft	MA52T24	Price
.025	25 ft	MA52T25	Price
.026	25 ft	MA52T26	Price
.027	25 ft	MA52T27	Price
.028	25 ft	MA52T28	Price
.029	25 ft	MA52T29	Price
.030	25 ft	MA52T30	Price
.031	25 ft	MA52T31	Price
.032	25 ft	MA52T32	Price
.034	25 ft	MA52T34	Price

Starrett® Feeler Stock Rolls

Type - Steel Feeler Stock Roll in Cardboard Box Blade Length - 20 ft		
Thickness (in.)	Order No.	Price
.016	MV7052813	Price
.017	MV7052814	Price
.018	MV7052815	Price
.019	MV7052816	Price
.020	MV7052817	Price
.021	MV7052818	Price
.022	MV7052819	Price
.023	MV7052820	Price
.024	MV7052821	Price
.025	MV7052822	Price
.40mm	MV7052834	Price
.45mm	MV7052835	Price
.50mm	MV7052836	Price

Type - Steel Feeler Stock Rolls in Rewind Dispenser Blade Length - 25 ft		
Thickness (in.)	Order No.	Price
.001	MV7052796	Price
.0015	MV7052797	Price
.002	MV7052798	Price

Type - Steel Feeler Stock Rolls in Rewind Dispenser Blade Length - 25 ft		
Thickness (in.)	Order No.	Price
.0025	MV7052799	Price
.003	MV7052800	Price
.004	MV7052801	Price
.005	MV7052802	Price
.006	MV7052803	Price
.007	MV7052804	Price
.008	MV7052805	Price
.009	MV7052806	Price
.010	MV7052807	Price
.011	MV7052808	Price
.012	MV7052809	Price
.013	MV7052810	Price
.014	MV7052811	Price
.015	MV7052812	Price
.03mm	MV7052823	Price
.04mm	MV7052824	Price
.05mm	MV7052825	Price
.06mm	MV7052826	Price
.08mm	MV7052827	Price



Type - Steel Feeler Stock Rolls in Rewind Dispenser Blade Length - 25 ft		
Thickness (in.)	Order No.	Price
.10mm	MV7052828	Price
.15mm	MV7052829	Price
.20mm	MV7052830	Price
.25mm	MV7052831	Price
.30mm	MV7052832	Price
.35mm	MV7052833	Price

Packed one rewind dispensor in a box.

PRECISION BRAND Feeler Stock Assortment

- Consists of 1 piece each thickness
- .001, .0015, .002, .003, .004, .005, .010, .015, .020, .025, .028 and .032”



Order No.	Price
MA52002	Price

Starrett® Thickness Gage Holders



Style	Order No.	Price
Clamps stock at both ends	MV7053040	Price
Clamps stock at one end	MV7053039	Price

PROCHECK Feeler Gage (5 Pack)



Thickness (in.)	Order No.	Price
.001	MA56S0010P	Price
.0015	MA56S0015P	Price
.002	MA56S0020P	Price
.003	MA56S0030P	Price
.004	MA56S0040P	Price
.005	MA56S0050P	Price
.006	MA56S0060P	Price
.007	MA56S0070P	Price
.008	MA56S0080P	Price
.009	MA56S0090P	Price
.010	MA56S0100P	Price
.011	MA56S0110P	Price
.012	MA56S0120P	Price
.013	MA56S0130P	Price
.014	MA56S0140P	Price
.015	MA56S0150P	Price
.016	MA56S0160P	Price
.017	MA56S0170P	Price

Thickness (in.)	Order No.	Price
.018	MA56S0180P	Price
.019	MA56S0190P	Price
.020	MA56S0200P	Price
.021	MA56S0210P	Price
.022	MA56S0220P	Price
.023	MA56S0230P	Price
.024	MA56S0240P	Price
.025	MA56S0250P	Price
.028	MA56S0280P	Price
.030	MA56S0300P	Price
.031	MA56S0310P	Price
.032	MA56S0320P	Price
.034	MA56S0340P	Price

PRECISION BRAND Metric Steel Feeler Gage 10 Pack

- Available in flat length 1/2" wide feeler gage in either 127mm or 305mm long and 7.6m long coils
- Additional sizes available



Thickness	Order No.	Price
.05mm	MA5209305	Price
.10mm	MA5209310	Price
.15mm	MA5209315	Price
.20mm	MA5209320	Price
.25mm	MA5209325	Price
.30mm	MA5209330	Price
.35mm	MA5209335	Price
.40mm	MA5209340	Price
.45mm	MA5209345	Price
.50mm	MA5209350	Price
.55mm	MA5209355	Price
.60mm	MA5209360	Price
.65mm	MA5209365	Price
.70mm	MA5209370	Price
.75mm	MA5209375	Price
.80mm	MA5209380	Price
.85mm	MA5209385	Price
.90mm	MA5209390	Price
.95mm	MA5209395	Price
1.0mm	MA5209400	Price

PRECISION BRAND 20 Pc. Poc-Kit® Feeler Gage Assortment 5" Long Blades



- Packaged in a sturdy, vinyl case with individual blade pockets and folds flat for convenience
- Contains twenty 1/2" wide blades
- Each blade is clearly etched with thickness
- Ends are rounded and edges are smooth for safety
- Contains: .001"/.025mm, .0015"/.038mm, .002"/.051mm, .003"/.076mm, .004"/.102mm, .005"/.127mm, .006"/.152mm, .007"/.178mm, .008"/.203mm, .009"/.229mm, .010"/.254mm, .012"/.305mm, .014"/.356mm, .015"/.381mm, .016"/.406mm, .018"/.457mm, .020"/.508mm, .022"/.559mm, .024"/.610mm, .025"/.635mm

Order No.	Price
MA5219740	Price

PRECISION BRAND 20 Pc. Metric (Steel) Poc-Kit® Feeler Gage Assortment



- Made of C1905 close grain, high carbon spring steel
- Rockwell hardness: C scale 46-62
- Assortment contains twenty 12.7mm (1/2") wide x 127mm
- 5" Long blades
- Contains: .05mm, .10mm, .15mm, .20mm, .25mm, .30mm, .35mm, .40mm, .45mm, .50mm, .55mm, .60mm, .65mm, .70mm, .75mm, .80mm, .85mm, .90mm, .95mm, 1.00mm

Order No.	Price
MA5209740	Price

PRECISION BRAND 20 Pc. "The Big" Poc-Kit® Feeler Gage Assortment



- 12" Long blades
- Packaged in a sturdy, vinyl case with individual blade pockets and folds flat for convenience
- Contains twenty 1/2" wide blades
- Each blade is clearly etched with thickness
- Ends are rounded and edges are smooth for safety
- Contains: .001"/.025mm, .0015"/.038mm, .002"/.051mm, .003"/.076mm, .004"/.102mm, .005"/.127mm, .006"/.152mm, .007"/.178mm, .008"/.203mm, .009"/.229mm, .010"/.254mm, .012"/.305mm, .014"/.356mm, .015"/.381mm, .016"/.406mm, .018"/.457mm, .020"/.508mm, .022"/.559mm, .025"/.635mm, .030"/.762mm

Order No.	Price
MA5219990	Price

PRECISION BRAND 20 Pc. Stainless Steel Poc-Kit® Feeler Gage Assortment



- 1/2" Wide blades
- 5" Long blades
- Contains sixteen different thicknesses; duplicate blades have been included for the four most commonly used thicknesses
- Contains: .001"/.025mm – 2 Pcs., .0015"/.038mm – 2 Pcs., .002"/.051mm – 2 Pcs., .003"/.076mm – 2 Pcs., .004"/.102mm, .005"/.127mm, .006"/.152mm, .007"/.178mm, .008"/.203mm, .009"/.229mm, .010"/.254mm, .012"/.305mm, .015"/.381mm, .020"/.508mm, .025"/.635mm, .031"/.787mm

Order No.	Price
MA5277750	Price

20 Pc. 6" Feeler Gage Assortment



- 6" Long blades
- Feeler gage assortment, packaged in sturdy pocket size vinyl case with individual blade pockets
- 1/2" wide blades of most frequently used thicknesses
- Each blade clearly etched with size
- Ends are rounded, edges are smooth
- Contains: .001"/.025mm, .0015"/.038mm, .002"/.051mm, .003"/.076mm, .004"/.102mm, .005"/.127mm, .006"/.152mm, .007"/.178mm, .008"/.203mm, .009"/.229mm, .010"/.254mm, .012"/.305mm, .014"/.356mm, .015"/.381mm, .016"/.406mm, .018"/.457mm, .020"/.508mm, .022"/.559mm, .024"/.610mm, .025"/.635mm

MADE IN THE USA

Order No.	Price
MA53FP20	Price

PRECISION BRAND Color Coded Shim

Plastic Material



- Color Coded Shim is made from a high quality plastic material
- Great for all your plastic shim requirements
- Used for gaskets, special parts and various manufacturing applications
- Easy to cut
- Resists oil
- Minimal compression during use
- Thickness tolerances to industry standards
- Consistent performance
- Non-conductive to electricty
- Thickness indicated by shim color
- Eliminates need for micrometer, saves time and reduces error



		10 x 20		5 x 20	
Thickness (in.)	Pkg. Qty.	Order No.	Price	Order No.	Price
.0005	5	**MA5244605**	Price	**MA5244505**	Price
.001	5	**MA5244610**	Price	**MA5244510**	Price
.0015	5	**MA5244615**	Price	**MA5244515**	Price
.002	5	**MA5244620**	Price	**MA5244520**	Price
.003	5	**MA5244625**	Price	**MA5244525**	Price
.004	10	**MA5244630**	Price	**MA5244530**	Price
.005	10	**MA5244635**	Price	**MA5244535**	Price
.0075	10	**MA5244640**	Price	**MA5244540**	Price
.010	10	**MA5244645**	Price	**MA5244545**	Price
.0125	10	**MA5244650**	Price	**MA5244550**	Price
.015	10	**MA5244655**	Price	**MA5244555**	Price
.020	10	**MA5244660**	Price	**MA5244560**	Price
.025	10	**MA5244665**	Price	**MA5244565**	Price
.030	10	**MA5244670**	Price	**MA5244570**	Price
.040	3	**MA5244675**	Price	**MA5244575**	Price
.050	3	**MA5244680**	Price	**MA5244580**	Price
.060	3	**MA5244685**	Price	**MA5244585**	Price

CONDITIONS: Determination of the suitability of the material to the use contemplated is the user's responsibility. Users assume all risk resulting from the use of these products and must confirm adaptability therof by their own tests.

PRECISION BRAND 13 Pc. Plastic Thickness Gage Fan Blade Assortments

- Contains thirteen blades riveted together for on-site convenience
- 1/2" Wide blades
- Color indicates thickness
- Packaged in a sturdy vinyl case
- Non-corrosive, non-conductive, non-sparking, and non-marring
- Each assortment contains 13 thicknessess: Decimal/Metric/Color: .001"/ .025mm/Amber, .0015"/ .038mm/Purple, .002"/ .051mm/ Red, .003"/ .076mm/Green, .004"/ .102mm/Tan, .005"/ .127mm/Blue, .0075"/ .191mm/Matte, .010"/ .254mm/Brown, .0125"/ .318mm/ Black, .015"/ .381mm/Pink, .020"/ .508mm/Yellow, .025"/ .635mm/ White, .030"/ .762mm/Coral



Blade Length (in.)	Order No.	Price
5	**MA5278905**	Price
12	**MA5278900**	Price

PRECISION BRAND 14 Pc. Color Coded Shim Assortments



- Assortments Plastic Material: .0005 - .005 Polyester; .0075 - .030 Vinyl
- Each assortment contains one each of the following thicknesses: .0005 Silver, .001 Amber, .0015 Purple, .002 Red, .003 Green, .004 Tan, .005 Blue, .0075 Matte, .010 Brown, .0125 Black, .015 Pink, .020 Yellow, .025 White, and .030" Coral

Size (in.)	Order No.	Price
5 x 20	**MA5244905**	Price
10 x 20	**MA5244910**	Price
20 x 20	**MA5244915**	Price

Color Coded Shim Typical Properties

Decimal Thickness	.0005 - .005	.0075 - .030	.040 - .060
Tensile Strength, p.s.i.	30,000	6,600	14,000
Ultimate Elongation	90%	180%	180%
Folding endurance (MIT)	>100,000	37,000	37,000
Tear Strength (Elmendorf)	20g/mil	—	—
Moisture Absorption	.08%	.15%	.15%
Thickness Tolerance	+/- 5%	+/- 5%	+/- 5%
Military Specification	LP-377	LP-535	LP-535
Compression at 5,000 p.s.i.	1.0%	.7%	.7%
Service Temperature	-90°F to 300°F	-10°F to 155°F	-10°F to 155°F

PRECISION BRAND 20 Pc. Brass Poc-Kit® Thickness Gage Assortment



- Contains twenty 5" long x 1/2" wide blades
- Packaged in a sturdy vinyl case
- Individual blade pockets
- Conveniently folds flat
- Contains 20 thicknesses: .001"/.025mm, .0015"/.038mm, .002"/.051mm, .003"/.076mm, .004"/.102mm, .005"/.127mm, .006"/.152mm, .007"/.178mm, .008"/.203mm, .009"/.229mm, .010"/.254mm, .012"/.305mm, .014"/.356mm, .015"/.381mm, .016"/.406mm, .018"/.457mm, .020"/.508mm, .022"/.559mm, .025"/.635mm, .030"/.762mm

Order No.	Price
MA5276740	Price

PRECISION BRAND Wedgies Shims

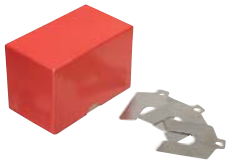


- Wedgies™ Installation Shims ar e stackable, nonslip, plastic shims used for leveling and stabilizing
- Available in Mini (1.2" x .58" x .16"), Standard (1.9375" x .1875 x .25") and Large (3.54" x 2.36" x .48" Double Wide) Sizes
- 37 Pc. assortment contains 8 rigid and 8 flexible mini shims, 4 rigid and 2 flexible single wide large shims, 5 flexible and 10 rigid standard shims

Size (in.)	Order No.	Price
1.12 x .58 x .16	**MA5748930**	Price
1.12 x .58 x .16	**MA5748935**	Price
1.9375 x .1875 x .25	**MA5748605**	Price
1.9375 x .1875 x .25	**MA5748620**	Price
1.9375 x .1875 x .25	**MA5748805**	Price
1.9375 x .1875 x .25	**MA5748820**	Price
1.9375 x .1875 x .25	**MA5748920**	Price
1.9375 x .1875 x .25	**MA5748975**	Price
3.54 x 2.36 x .48	**MA5748940**	Price
3.54 x 2.36 x .48	**MA5748945**	Price
Mix of flex and ridgid / 16 mini, 6 large, 15 standard	**MA5748950**	Price

PRECISION BRAND 300 Series Stainless Steel Slotted Shims

- 300 Series Stainless resists rust and corrosion
- Shop Kit - Each Shop Kit contains 10 pieces of the following sizes: .001, .003, .005, .010, .015, .020, .025, and .075". A Shop Kit contains 80 pieces and is packaged in a sturdy chipboard box
- Mini Assortment - Each Mini Assortment contains 10 pieces of the following sizes: .001, .002, .003, .004, .005, .010, .015, .020, .025, .050, .075, .100, and .125". A Mini Assortment contains 130 pieces and is packaged in a durable metal box.





Style - Mini Assortment						
			.001 to .075		.001 to .125	
Size (in.)	Pkg. Qty.	Slot Width (in.)	Order No.	Price	Order No.	Price
2 x 2	10 ea. size	5/8	-	-	**MA5342940**	Price
3 x 3	10 ea. size	7/8	-	-	**MA5342950**	Price
4 x 4	10 ea. size	1-1/4	**MA5342965**	Price	**MA5342960**	Price
5 x 5	10 ea. size	1-5/8	-	-	**MA5342970**	Price

Style - Shop Kit						
			.025mm to 2mm		.001 to .075	
Size (in.)	Pkg. Qty.	Slot Width (in.)	Order No.	Price	Order No.	Price
2 x 2	10 ea. size	5/8	-	-	**MA5342945**	Price
3 x 3	10 ea. size	7/8	-	-	**MA5342955**	Price
5 x 5	10 ea. size	1-5/8	-	-	**MA5342975**	Price
50mm x 50mm	10 ea. size	16mm	**MA5381945**	Price	-	-
75mm x 75mm	10 ea. size	22mm	**MA5381955**	Price	-	-
100mm x 100mm	10 ea. size	32mm	**MA5381965**	Price	-	-
125mm x 125mm	10 ea. size	41mm	**MA5381975**	Price	-	-

PRECISION BRAND Sof' Shoe® Shims

- Sof' Shoe® shim is made of a proprietary elastomer
- Each Sof' Shoe shim thickness has a 12 percent flat compression under standard bolt torque
- The yellow Sof' Shoe shims are .045" thick, compress to .040" and absorb up to .020" of angularity
- The Blue Sof' Shoe shims are .020" thick, compress to .0175" and absorb up to .010" of angularity





			2 x 2			3 x 3			4 x 4			5 x 5		
Thickness (in.)	Color	Pkg. Qty.	Slot Width (in.)	Order No.	Price	Slot Width (in.)	Order No.	Price	Slot Width (in.)	Order No.	Price	Slot Width (in.)	Order No.	Price
.020	Blue	10	5/8	**MA5349105**	Price	7/8	**MA5349110**	Price	1-1/4	**MA5349115**	Price	1-5/8	**MA5349120**	Price
.045	Yellow	10	5/8	**MA5349125**	Price	7/8	**MA5349130**	Price	1-1/4	**MA5349135**	Price	1-5/8	**MA5349140**	Price

Shim Flat Sheets

Applications:

- Laser & water jet cutting industry
- Prototypes/ short run production
- Shimming and lignment of motors & pumps
- Repair and maintenance
- Tool & die set up



Material - Aluminum		
Size	Order No.	Price
.020 x 12 x 12	**MA35AL121220**	Price
.020 x 12 x 24	**MA35AL122420**	Price
.020 x 24 x 24	**MA35AL242420**	Price
.020 x 24 x 48	**MA35AL244820**	Price
.030 x 24 x 48	**MA35AL244832**	Price
.032 x 12 x 12	**MA35AL121232**	Price
.032 x 12 x 24	**MA35AL122432**	Price
.032 x 24 x 24	**MA35AL242432**	Price
.040 x 12 x 12	**MA35AL121240**	Price
.040 x 12 x 24	**MA35AL122440**	Price
.040 x 24 x 24	**MA35AL242440**	Price
.040 x 24 x 48	**MA35AL244840**	Price
.050 x 12 x 12	**MA35AL121250**	Price
.050 x 12 x 24	**MA35AL122450**	Price
.050 x 24 x 24	**MA35AL242450**	Price
.050 x 24 x 48	**MA35AL244850**	Price

Material - Stainless Steel		
Size	Order No.	Price
.008 x 8 x 12	**MA35FS8**	Price
.001 x 24	**MA3524S1**	Price

Material - Stainless Steel		
Size	Order No.	Price
.001 x 6 x 12	**MA35612H1**	Price
.001 x 8 x 12	**MA35FS1**	Price
.0015 x 6 x 12	**MA35612H1X**	Price
.0015 x 8 x 12	**MA35FS1X**	Price
.002 x 24	**MA3524S2**	Price
.002 x 6 x 12	**MA35612H2**	Price
.002 x 8 x 12	**MA35FS2**	Price
.003 x 24	**MA3524S3**	Price
.003 x 6 x 12	**MA35612H3**	Price
.003 x 8 x 12	**MA35FS3**	Price
.004 x 24	**MA3524S4**	Price
.004 x 6 x 12	**MA35612H4**	Price
.004 x 8 x 12	**MA35FS4**	Price
.005 x 24	**MA3524S5**	Price
.005 x 6 x 12	**MA35612H5**	Price
.005 x 8 x 12	**MA35FS5**	Price
.006 x 6 x 12	**MA35612H6**	Price
.006 x 8 x 12	**MA35FS6**	Price
.007 x 24	**MA3524S7**	Price
.007 x 6 x 12	**MA35612H7**	Price

Material - Stainless Steel		
Size	Order No.	Price
.007 x 8 x 12	**MA35FS7**	Price
.008 x 6 x 12	**MA35612H8**	Price
.009 x 6 x 12	**MA35612H9**	Price
.009 x 8 x 12	**MA35FS9**	Price
.010 x 24	**MA3524S10**	Price
.010 x 6 x 12	**MA35612H10**	Price
.010 x 8 x 12	**MA35FS10**	Price
.012 x 24	**MA3524S12**	Price
.012 x 6 x 12	**MA35612H12**	Price
.012 x 8 x 12	**MA35FS12**	Price
.015 x 24	**MA3524S15**	Price
.015 x 6 x 12	**MA35612H15**	Price
.015 x 8 x 12	**MA35FS15**	Price
.020 x 24	**MA3524S20**	Price
.020 x 6 x 12	**MA35612H20**	Price
.020 x 8 x 12	**MA35FS20**	Price
.025 x 6 x 12	**MA35612H25**	Price
.025 x 8 x 12	**MA35FS25**	Price
.031 x 6 x 12	**MA35612H31**	Price
.031 x 8 x 12	**MA35FS31**	Price

PRECISION BRAND Plastic Slotted Shims

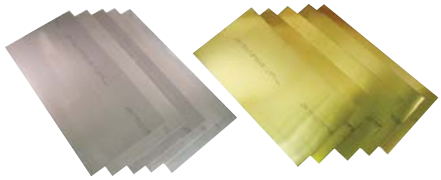
- Used for mounting and leveling smaller fractional horsepower motors, various gages and instruments, and light-duty plant machinery
- Each thickness is easily identified by its own color
- Plastic Slotted Shim is not recommended and should not be used for larger, heavier motors
- Packaged in a sturdy chipboard box
- **Each kit contains 170 pieces /10 each .0005 – .060"**



Size (in.)	Slot Width (in.)	Order No.	Price
AA - 1 x 1	5/16	**MA5342904**	Price
A - 2 x 2	5/8	**MA5342905**	Price
B - 3 x 3	3/4	**MA5342906**	Price

PRECISION BRAND Shim Stock Assortments

- 12 Pc. Assortment: .001, .0015, .002, .003, .004, .005, .006, .007, .008, .010, .012, .015"
- 15 Pc. Assortment: All sizes from the 12 Pc. listed above plus .020, .025, .031"



		Assortment 6" x 12" Stainless Steel		Assortment 6" x 18" - Brass		Assortment 6" x 18" - Steel	
Std. Asst. (in.)	Sheets Per Pkg.	Order No.	Price	Order No.	Price	Order No.	Price
.001 to .015	12	-	-	**MA5217950**	Price	**MA5216950**	Price
.001 to .031	12	**MA5222895**	Price	-	-	-	-
.001 to .031	15	-	-	**MA5217955**	Price	**MA5216955**	Price

PRECISION BRAND Shim Stock

- Steel Shim Stock is a full hard, cold rolled, low carbon 1008-1010
- Blue Tempered Shim Stock is a high carbon 1095, hardened and tempered spring steel
- Brass Shim Stock is a half hard, cold rolled, 260 alloy
- Stainless Steel Shim Stock is a full hard, cold rolled, 300 series stainless steel
- Precision Brand (registered trademark) is the only manufacturer to offer Branded (registered trademark) Shim



Type - 10-Pack 300 Slotted Shim Stock Metric Size (in.) - 100mm x 100mm

Thickness (in.)	Order No.	Price
.025mm	MA5381405	Price
.05mm	MA5381410	Price
.1mm	MA5381415	Price
.25mm	MA5381425	Price
.2mm	MA5381420	Price
.4mm	MA5381430	Price
.5mm	MA5381435	Price
.7mm	MA5381440	Price
1mm	MA5381445	Price
2mm	MA5381450	Price

Type - 10-Pack 300 Slotted Shim Stock Metric Size (in.) - 125mm x 125mm

Thickness (in.)	Order No.	Price
.025mm	MA5381505	Price
.05mm	MA5381510	Price
.1mm	MA5381515	Price
.25mm	MA5381525	Price
.2mm	MA5381520	Price
.4mm	MA5381530	Price
.5mm	MA5381535	Price
.7mm	MA5381540	Price
1mm	MA5381545	Price
2mm	MA5381550	Price

Type - 10-Pack 300 Slotted Shim Stock Metric Size (in.) - 50mm x 50mm

Thickness (in.)	Order No.	Price
.05mm	MA5381210	Price
.1mm	MA5381215	Price
.25mm	MA5381205	Price
.25mm	MA5381225	Price
.2mm	MA5381220	Price
.4mm	MA5381230	Price
.5mm	MA5381235	Price
.7mm	MA5381240	Price
1mm	MA5381245	Price
2mm	MA5381250	Price

Type - 10-Pack 300 Slotted Shim Stock Metric Size (in.) - 75mm x 75mm

Thickness (in.)	Order No.	Price
.025mm	MA5381305	Price
.05mm	MA5381310	Price
.1mm	MA5381315	Price
.25mm	MA5381325	Price
.2mm	MA5381320	Price
.4mm	MA5381330	Price
.5mm	MA5381335	Price
.7mm	MA5381340	Price
1mm	MA5381345	Price
2mm	MA5381350	Price

Type - 10-Pack Brass Shim Stock Sheets Size (in.) - 6 x 18

Thickness (in.)	Order No.	Price
.001	MA5217810	Price
.0015	MA5217815	Price
.002	MA5217820	Price
.003	MA5217830	Price
.004	MA5217840	Price
.005	MA5217845	Price
.006	MA5217850	Price
.007	MA5217855	Price
.008	MA5217860	Price
.010	MA5217870	Price
.012	MA5217875	Price
.015	MA5217885	Price
.020	MA5217900	Price
.025	MA5217910	Price
.031	MA5217915	Price

Type - 10-Pack Steel Shim Stock Sheets Size (in.) - 6 x 18

Thickness (in.)	Order No.	Price
.001	MA5216810	Price
.0015	MA5216815	Price
.002	MA5216820	Price
.003	MA5216830	Price

Type - 10-Pack Steel Shim Stock Sheets Size (in.) - 6 x 18

Thickness (in.)	Order No.	Price
.004	MA5216840	Price
.005	MA5216845	Price
.006	MA5216850	Price
.007	MA5216855	Price
.008	MA5216860	Price
.010	MA5216870	Price
.012	MA5216875	Price
.015	MA5216885	Price
.020	MA5216900	Price
.025	MA5216910	Price
.031	MA5216915	Price

Type - 2-Pack Blue Tempered Shim Stock Sheets Size (in.) - 6 x 25

Thickness (in.)	Order No.	Price
.008	MA5223170	Price
.010	MA5223180	Price
.012	MA5223200	Price
.015	MA5223220	Price
.020	MA5223240	Price
.025	MA5223260	Price
.032	MA5223280	Price

Type - 316 Shim Stock Roll Size (in.) - 12 x 50

Thickness (in.)	Order No.	Price
.001	MA5222841	Price
.002	MA5222842	Price
.003	MA5222843	Price
.004	MA5222844	Price
.005	MA5222845	Price
.007	MA5222846	Price
.010	MA5222847	Price
.012	MA5222848	Price
.015	MA5222849	Price
.020	MA5222850	Price
.025	MA5222851	Price
.031	MA5222852	Price

Type - 316 Shim Stock Roll Size (in.) - 6 x 50

Thickness (in.)	Order No.	Price
.001	MA5222801	Price
.002	MA5222802	Price
.003	MA5222803	Price
.004	MA5222804	Price
.005	MA5222805	Price
.007	MA5222806	Price
.010	MA5222807	Price
.012	MA5222808	Price
.015	MA5222809	Price
.020	MA5222810	Price
.025	MA5222811	Price
.031	MA5222812	Price

Type - Blue Tempered Shim Stock Roll Size (in.) - 3 x 50

Thickness (in.)	Order No.	Price
.002	MA5223110	Price
.003	MA5223120	Price

Type - Blue Tempered Shim Stock Roll Size (in.) - 5 x 50

Thickness (in.)	Order No.	Price
.004	MA5223130	Price

Type - Blue Tempered Shim Stock Roll Size (in.) - 6 x 50

Thickness (in.)	Order No.	Price
.005	MA5223145	Price
.006	MA5223155	Price
.007	MA5223165	Price

Type - Brass Shim Stock Roll Size (in.) - 6 x 180

Thickness (in.)	Order No.	Price
.001	MA5217700	Price
.0015	MA5217705	Price
.002	MA5217725	Price
.003	MA5217740	Price
.004	MA5217750	Price
.005	MA5217755	Price
.006	MA5217760	Price
.007	MA5217765	Price
.008	MA5217770	Price

Type - Brass Shim Stock Roll Size (in.) - 6 x 180

Thickness (in.)	Order No.	Price
.010	MA5217710	Price
.012	MA5217715	Price
.015	MA5217720	Price
.020	MA5217730	Price
.025	MA5217735	Price
.031	MA5217745	Price

Type - Spring Tempered Stainless Shim Stock Roll Size (in.) - 6 x 60

Thickness (in.)	Order No.	Price
.001	MA5222139	Price
.002	MA5222146	Price
.003	MA5222149	Price
.004	MA5222152	Price
.005	MA5222153	Price
.006	MA5222154	Price
.007	MA5222156	Price
.008	MA5222157	Price
.010	MA5222142	Price
.012	MA5222143	Price
.015	MA5222144	Price
.020	MA5222147	Price
.025	MA5222148	Price
.031	MA5222151	Price

Type - Steel Shim Stock Roll Size (in.) - 12 x 120

Thickness (in.)	Order No.	Price
.001	MA5216140	Price
.002	MA5216205	Price
.003	MA5216255	Price
.004	MA5216290	Price
.005	MA5216330	Price
.006	MA5216355	Price
.007	MA5216380	Price
.008	MA5216405	Price
.010	MA5216460	Price
.012	MA5216490	Price
.015	MA5216540	Price
.020	MA5216600	Price
.025	MA5216640	Price
.031	MA5216670	Price

Type - Steel Shim Stock Roll Size (in.) - 6 x 100

Thickness (in.)	Order No.	Price
.001	MA5216130	Price
.0015	MA5216155	Price
.002	MA5216195	Price
.003	MA5216245	Price
.004	MA5216280	Price
.005	MA5216320	Price
.006	MA5216345	Price
.007	MA5216370	Price
.008	MA5216395	Price
.010	MA5216450	Price
.012	MA5216480	Price
.015	MA5216530	Price
.020	MA5216590	Price
.025	MA5216630	Price
.031	MA5216660	Price

Type - Steel Shim Stock Roll Size (in.) - 6 x 180

Thickness (in.)	Order No.	Price
.001	MA5216700	Price
.0015	MA5216705	Price
.002	MA5216740	Price
.003	MA5216765	Price
.004	MA5216780	Price
.005	MA5216785	Price
.006	MA5216790	Price
.007	MA5216795	Price
.008	MA5216800	Price
.010	MA5216710	Price
.012	MA5216715	Price
.015	MA5216725	Price
.020	MA5216750	Price
.025	MA5216760	Price
.031	MA5216775	Price

Type - Steel Shim Stock Roll Size (in.) - 6 x 200

Thickness (in.)	Order No.	Price
.018	MA5216560	Price

How to use the PRECISION BRAND Sets:

- Punch the I.D. hole first
- Attach the appropriate I.D. pilot to the O.D. punch
- Insert the O.D. punch so that the I.D. pilot moves into the I.D. hole which should automatically center the material. Make sure the O.D. punch has been pushed completely through the top plate and is touching the material
- Strike the punch squarely with enough force to penetrate the material with one blow

PRECISION BRAND Punch & Die Set

- Traditional style punch & die set
- Economical way to make washers, shims and gaskets
- Cut steel, brass, copper, aluminum, rubber and plastic up to .025" thick
- Cut stainless and blue tempered shim up to .010" thick
- Packaged in durable plastic case
- The base and punches are made of a hardened and ground A-2 tool steel
- Clear plastic top plate is marked with accurate center lines
- Mark center lines, align with center lines and hit with hammer
- Nine punch sizes: 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8 and 3/4"



Order No.	Price
MA52SPS	Price

PRECISION BRAND Punch & Die Stand

- Provides solid support for consistent shim and washer fabricating
- Custom fit, sturdy steel die stand holds dies from any of the sets: 40105, 40110, 40200 & 40300
- Stand allows for easy access to cut shims and washers
- Elevated die allows punches to fall clean, reduces shim burrs and decreases possible damage to punches
- The last hammer hit to push the punch completely through the die is eliminated, thus reducing risk of injury to the hand holding the die during this process



Order No.	Price
MA5240999	Price

The First Self-Centering Punch & Die

- PRECISION BRAND TruPunch® sets make perfect, custom washers, shims, and gaskets in seconds
- Eliminates time and material wasted with conventional punch & dies
- No guess work need to center the I.D.
- No need to scribe center lines
- Exclusive, patented punch, pilot and pin system
- Packaged in a durable plastic case

PRECISION BRAND TruPunch® Punch & Die Set

- TruPunch® can accommodate O.D. sizes up to 3/4"
- Nine punch sizes: 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8 and 3/4"
- Eight I.D. pilot sizes: 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 and 5/8"
- Cut steel, brass, copper, aluminum, rubber, and plastic effortlessly up to .025" thick
- Cut stainless and blue tempered shim up to .010" thick



Order No.	Price
MA5240110	Price

PRECISION BRAND "The Big" TruPunch® Punch & Die Set

- "The Big" TruPunch® can accommodate O.D. sizes up to 1-1/4"
- Four punch sizes: 7/8, 1, 1-1/8 and 1-1/4"
- Four I.D. pilot sizes: 3/4, 7/8, 1 and 1-1/8"
- Works in conjunction with TruPunch® #40110, I.D. pilots are interchangeable to allow for 77 O.D. and I.D. shim combinations
- Cut brass, copper, aluminum, rubber, and plastic effortlessly up to .020" thick
- Cut steel up to .015" thick
- Cut stainless and blue tempered shim up to .010" thick



Order No.	Price
MA5240200	Price

PRECISION BRAND "Metric 10" TruPunch® Punch & Die Set

- "METRIC 10" TruPunch® is the fist "true metric" self-centering punch & die set
- Ten O.D. punch sizes: 3, 4, 5, 6, 7, 8, 10, 12, 16 and 20mm
- Nine I.D. pilot sizes: 3, 4, 5, 6, 7, 8, 10, 12 and 16mm
- This set is able to produce 44 different I.D. and O.D. shim combinations
- Cut steel, brass, copper, aluminum, rubber, and plastic effortlessly up to .635mm thick
- Cut stainless and blue tempered shim up to .25mm thick



Order No.	Price
MA5240300	Price

PRECISION BRAND Arbor Spacers & Shims

- Used for fast, accurate spacing of milling cutters, gang cutters, saws, slitting blades and grinding tools
- Made of high quality, low carbon, cold rolled, full hard, steel shim keyways onform to American standards
- Packaged in airtight poly bags
- 10 Pieces per bag (except assortments)
- Special sizes, materials, and bulk quantities available on request
- Shims do not have a keyway
- Spacers do have a keyway



Arbor Spacers & Shims Tolerances

Thickness	Tolerance
.001 – .003	+/- 10%
.004 – .006	+/- .0005
.007 – .015	+/- .00075
.020 & .025	+/- .001
.031	+/- .0015
.047 & .062	+/- .002
.093	+/- .0025
.125	+/- .003
I.D.	+/- .011/-.000
O.P.	+/- .002

Note: Tolerances on special orders may vary.

Description - 3/8" ID x 5/8" OD

	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.001	GS8625101	Price	GS8624101	Price
.0015	GS8625102	Price	GS8624102	Price
.002	GS8625103	Price	GS8624103	Price
.003	GS8625104	Price	GS8624104	Price
.004	GS8625105	Price	GS8624105	Price
.005	GS8625106	Price	GS8624106	Price
.006	GS8625107	Price	GS8624107	Price
.007	GS8625108	Price	GS8624108	Price
.008	GS8625109	Price	GS8624109	Price
.010	GS8625110	Price	GS8624110	Price
.012	GS8625111	Price	GS8624111	Price
.015	GS8625112	Price	GS8624112	Price
.020	GS8625113	Price	GS8624113	Price
.025	GS8625114	Price	GS8624114	Price
.031	GS8625115	Price	GS8624115	Price
.047	GS8625116	Price	GS8624116	Price
.062	GS8625117	Price	GS8624117	Price
.093	GS8625118	Price	GS8624118	Price
.125	GS8625119	Price	GS8624119	Price

Description - 1/2" ID x 3/4" OD

	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.001	GS8725121	Price	GS8724121	Price
.0015	GS8725122	Price	GS8724122	Price
.002	GS8725123	Price	GS8724123	Price
.003	GS8725124	Price	GS8724124	Price
.004	GS8725125	Price	GS8724125	Price
.005	GS8725126	Price	GS8724126	Price
.006	GS8725127	Price	GS8724127	Price
.007	GS8725128	Price	GS8724128	Price
.008	GS8725129	Price	GS8724129	Price
.010	GS8725130	Price	GS8724130	Price
.012	GS8725131	Price	GS8724131	Price
.015	GS8725132	Price	GS8724132	Price
.020	GS8725133	Price	GS8724133	Price
.025	GS8725134	Price	GS8724134	Price
.031	GS8725135	Price	GS8724135	Price
.047	GS8725136	Price	GS8724136	Price
.062	GS8725137	Price	GS8724137	Price
.093	GS8725138	Price	GS8724138	Price
.125	GS8725139	Price	GS8724139	Price

Description - 5/8" ID x 1" OD

	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.001	GS8825141	Price	GS8824141	Price
.0015	GS8825142	Price	GS8824142	Price
.002	GS8825143	Price	GS8824143	Price
.003	GS8825144	Price	GS8824144	Price
.004	GS8825145	Price	GS8824145	Price
.005	GS8825146	Price	GS8824146	Price
.006	GS8825147	Price	GS8824147	Price

Description - 5/8" ID x 1" OD

	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.007	GS8825148	Price	GS8824148	Price
.008	GS8825149	Price	GS8824149	Price
.010	GS8825150	Price	GS8824150	Price
.012	GS8825151	Price	GS8824151	Price
.015	GS8825152	Price	GS8824152	Price
.020	GS8825153	Price	GS8824153	Price
.025	GS8825154	Price	GS8824154	Price
.031	GS8825155	Price	GS8824155	Price
.047	GS8825156	Price	GS8824156	Price
.062	GS8825157	Price	GS8824157	Price
.093	GS8825158	Price	GS8824158	Price
.125	GS8825159	Price	GS8824159	Price

Description - 3/4" ID x 1-1/8" OD

	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.001	GS8925161	Price	GS8924161	Price
.0015	GS8925162	Price	GS8924162	Price
.002	GS8925163	Price	GS8924163	Price
.003	GS8925164	Price	GS8924164	Price
.004	GS8925165	Price	GS8924165	Price
.005	GS8925166	Price	GS8924166	Price
.006	GS8925167	Price	GS8924167	Price
.007	GS8925168	Price	GS8924168	Price
.008	GS8925169	Price	GS8924169	Price
.010	GS8925170	Price	GS8924170	Price
.012	GS8925171	Price	GS8924171	Price
.015	GS8925172	Price	GS8924172	Price
.020	GS8925173	Price	GS8924173	Price
.025	GS8925174	Price	GS8924174	Price
.031	GS8925175	Price	GS8924175	Price
.047	GS8925176	Price	GS8924176	Price
.062	GS8925177	Price	GS8924177	Price
.093	GS8925178	Price	GS8924178	Price
.125	GS8925179	Price	GS8924179	Price

Description - 7/8" ID x 1-3/8" OD

	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.001	GS9025181	Price	GS9024181	Price
.0015	GS9025182	Price	GS9024182	Price
.002	GS9025183	Price	GS9024183	Price
.003	GS9025184	Price	GS9024184	Price
.004	GS9025185	Price	GS9024185	Price
.005	GS9025186	Price	GS9024186	Price
.006	GS9025187	Price	GS9024187	Price
.007	GS9025188	Price	GS9024188	Price
.008	GS9025189	Price	GS9024189	Price
.010	GS9025190	Price	GS9024190	Price
.012	GS9025191	Price	GS9024191	Price
.015	GS9025192	Price	GS9024192	Price
.020	GS9025193	Price	GS9024193	Price
.025	GS9025194	Price	GS9024194	Price

Description - 7/8" ID x 1-3/8" OD

	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.031	GS9025195	Price	GS9024195	Price
.047	GS9025196	Price	GS9024196	Price
.062	GS9025197	Price	GS9024197	Price
.093	GS9025198	Price	GS9024198	Price
.125	GS9025199	Price	GS9024199	Price

Description - 1" ID x 1-1/2" OD

	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.001	GS9125201	Price	GS9124201	Price
.0015	GS9125202	Price	GS9124202	Price
.002	GS9125203	Price	GS9124203	Price
.003	GS9125204	Price	GS9124204	Price
.004	GS9125205	Price	GS9124205	Price
.005	GS9125206	Price	GS9124206	Price
.006	GS9125207	Price	GS9124207	Price
.007	GS9125208	Price	GS9124208	Price
.008	GS9125209	Price	GS9124209	Price
.010	GS9125210	Price	GS9124210	Price
.012	GS9125211	Price	GS9124211	Price
.015	GS9125212	Price	GS9124212	Price
.020	GS9125213	Price	GS9124213	Price
.025	GS9125214	Price	GS9124214	Price
.031	GS9125215	Price	GS9124215	Price
.047	GS9125216	Price	GS9124216	Price
.062	GS9125217	Price	GS9124217	Price
.093	GS9125218	Price	GS9124218	Price
.125	GS9125219	Price	GS9124219	Price

Description - 1-1/4" ID x 1-3/4" OD

	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.001	GS9225241	Price	GS9224241	Price
.0015	GS9225242	Price	GS9224242	Price
.002	GS9225243	Price	GS9224243	Price
.003	GS9225244	Price	GS9224244	Price
.004	GS9225245	Price	GS9224245	Price
.005	GS9225246	Price	GS9224246	Price
.006	GS9225247	Price	GS9224247	Price
.007	GS9225248	Price	GS9224248	Price
.008	GS9225249	Price	GS9224249	Price
.010	GS9225250	Price	GS9224250	Price
.012	GS9225251	Price	GS9224251	Price
.015	GS9225252	Price	GS9224252	Price
.020	GS9225253	Price	GS9224253	Price
.025	GS9225254	Price	GS9224254	Price
.031	GS9225255	Price	GS9224255	Price
.047	GS9225256	Price	GS9224256	Price
.062	GS9225257	Price	GS9224257	Price
.093	GS9225258	Price	GS9224258	Price
.125	GS9225259	Price	GS9224259	Price

PRECISION BRAND Arbor Spacers & Shims (Cont.)

Description - 1-1/2" ID x 2-1/8" OD				
	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.001	GS9325441	Price	GS9324441	Price
.0015	GS9325442	Price	GS9324442	Price
.002	GS9325443	Price	GS9324443	Price
.003	GS9325444	Price	GS9324444	Price
.004	GS9325445	Price	GS9324445	Price
.005	GS9325446	Price	GS9324446	Price
.006	GS9325447	Price	GS9324447	Price
.007	GS9325448	Price	GS9324448	Price
.008	GS9325449	Price	GS9324449	Price
.010	GS9325450	Price	GS9324450	Price
.012	GS9325451	Price	GS9324451	Price
.015	GS9325452	Price	GS9324452	Price
.020	GS9325453	Price	GS9324453	Price
.025	GS9325454	Price	GS9324454	Price

Description - 1-1/2" ID x 2-1/8" OD				
	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.031	GS9325455	Price	GS9324455	Price
.047	GS9325456	Price	GS9324456	Price
.062	GS9325457	Price	GS9324457	Price
.093	GS9325458	Price	GS9324458	Price
.125	GS9325459	Price	GS9324459	Price

Description - 2" ID x 2-3/4" OD				
	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.001	GS9425461	Price	GS9424461	Price
.0015	GS9425462	Price	GS9424462	Price
.002	GS9425463	Price	GS9424463	Price
.003	GS9425464	Price	GS9424464	Price

Description - 2" ID x 2-3/4" OD				
	Arbor Shim (Pack of 10)		Arbor Spacer (Pack of 10)	
Thickness (in.)	Order No.	Price	Order No.	Price
.004	GS9425465	Price	GS9424465	Price
.005	GS9425466	Price	GS9424466	Price
.006	GS9425467	Price	GS9424467	Price
.007	GS9425468	Price	GS9424468	Price
.008	GS9425469	Price	GS9424469	Price
.010	GS9425470	Price	GS9424470	Price
.012	GS9425471	Price	GS9424471	Price
.015	GS9425472	Price	GS9424472	Price
.020	GS9425473	Price	GS9424473	Price
.025	GS9425474	Price	GS9424474	Price
.031	GS9425475	Price	GS9424475	Price
.047	GS9425476	Price	GS9424476	Price
.062	GS9425477	Price	GS9424477	Price
.093	GS9425478	Price	GS9424478	Price
.125	GS9425479	Price	GS9424479	Price

PRECISION BRAND 19 Pc. Arbor Spacer & Shim Assortments

- Used for fast, accurate spacing of milling cutters, gang cutters, saws, slitting blades, and grinding tools
- Keyways conform to American standards
- Packaged in airtight poly bags
- Contains one piece each thickness shown



		Arbor Shim Assortment		Arbor Spacer Assortment	
I.D. (in.)	O.D. (in.)	Order No.	Price	Order No.	Price
3/8	5/8	GS8525120	Price	GS8524120	Price
1/2	3/4	GS8525140	Price	GS8524140	Price
5/8	1	GS8525160	Price	GS8524160	Price
3/4	1-1/8	GS8525180	Price	GS8524180	Price
7/8	1-3/8	GS8525200	Price	GS8524200	Price
1	1-1/2	GS8525220	Price	GS8524220	Price
1-1/4	1-3/4	GS8525260	Price	GS8524260	Price
1-1/2	2-1/8	GS8525460	Price	GS8524460	Price
2	2-3/4	GS8525480	Price	GS8524480	Price

Arbor Spaces with Keyways

- Hardened and ground on all surfaces
- Lapped for parallelism



	7/8		1		1-1/4		1-1/2		2	
Width (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	GS50004	Price	GS51004	Price	GS52004	Price	GS53004	Price	GS54004	Price
3/32	GS50006	Price	GS51006	Price	GS52006	Price	-	-	GS54006	Price
1/8	GS50008	Price	GS51008	Price	GS52008	Price	GS53008	Price	-	-
3/16	GS50012	Price	GS51012	Price	GS52012	Price	GS53012	Price	GS54012	Price
1/4	GS50016	Price	GS51016	Price	GS52016	Price	GS53016	Price	-	-
5/16	GS50020	Price	GS51020	Price	GS52020	Price	GS53020	Price	-	-
3/8	GS50024	Price	GS51024	Price	GS52024	Price	-	-	-	-
7/16	GS50028	Price	GS51028	Price	GS52028	Price	GS53028	Price	-	-
1/2	GS50032	Price	GS51032	Price	GS52032	Price	GS53032	Price	-	-
5/8	GS50040	Price	GS51040	Price	GS52040	Price	-	-	-	-
3/4	GS50048	Price	GS51048	Price	GS52048	Price	-	-	-	-
7/8	GS50056	Price	GS51056	Price	GS52056	Price	GS53056	Price	GS54056	Price
1	GS50100	Price	GS51100	Price	GS52100	Price	GS53100	Price	-	-
1-1/4	GS50116	Price	GS51116	Price	-	-	GS53116	Price	-	-
1-1/2	GS50132	Price	GS51132	Price	GS52132	Price	GS53132	Price	GS54132	Price
2	GS50200	Price	GS51200	Price	GS52200	Price	GS53200	Price	-	-
3	GS50300	Price	-	-	GS52300	Price	GS53300	Price	-	-

Precision Ground 0-1 Gage Stock 18" Length



- 0-1 Oil Hardening Ground Flat Stock
- Electric furnace melt oil-hardening tool steel supplied with a fully spheroidized structure
- Non-shrinking general purpose tool steel
- **HEAT TREATMENT:** For sections smaller than 1/4" heat to 1450°–1475°F & hold until heated through. For larger sections, preheat to 1200°F, then raise to 1450°–1500°F hardening temperature, hold half an hour per inch of cross section. Quench in oil at 125°–150°F & **Temper Immediately.**
- **Tolerance Thickness ±.001" Width +.000 / .005"**

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
1/64	1/2	LY5000101	Price	LY4053924	Price
1/64	3/4	LY5000102	Price	LY4053925	Price
1/64	1	LY5000103	Price	LY4053926	Price
1/64	1-1/4	LY5000104	Price	LY4053927	Price
1/64	1-1/2	LY5000105	Price	LY4053928	Price
1/64	2	LY5000106	Price	LY4053929	Price
1/64	2-1/2	LY5000107	Price	LY4053930	Price
1/64	3	LY5000108	Price	LY4053931	Price
1/64	4	LY5000109	Price	LY4053932	Price
1/32	1/2	LY5000201	Price	LY4053933	Price
1/32	3/4	LY5000202	Price	LY4053934	Price
1/32	1	LY5000203	Price	LY4053935	Price
1/32	1-1/4	LY5000204	Price	LY4053936	Price
1/32	1-1/2	LY5000205	Price	LY4053937	Price
1/32	2	LY5000206	Price	LY4053938	Price
1/32	2-1/2	LY5000207	Price	LY4053939	Price
1/32	3	LY5000208	Price	LY4053940	Price
1/32	4	LY5000209	Price	LY4053941	Price
1/32	6	LY5000210	Price	LY4053942	Price
3/64	1/2	LY5000301	Price	LY4053943	Price
3/64	3/4	LY5000302	Price	LY4053944	Price
3/64	1	LY5000303	Price	LY4053945	Price
3/64	1-1/4	LY5000304	Price	LY4053946	Price
3/64	1-1/2	LY5000305	Price	LY4053947	Price
3/64	2	LY5000306	Price	LY4053948	Price
3/64	2-1/2	LY5000307	Price	LY4053949	Price
3/64	3	LY5000308	Price	LY4053950	Price
3/64	3-1/2	LY5000309	Price	LY4053951	Price
3/64	4	LY5000310	Price	LY4053952	Price
3/64	6	LY5000311	Price	LY4053953	Price
1/16	1/2	LY5000401	Price	LY4053954	Price
1/16	3/4	LY5000402	Price	LY4053955	Price
1/16	1	LY5000403	Price	LY4053956	Price
1/16	1-1/4	LY5000404	Price	LY4053957	Price
1/16	1-1/2	LY5000405	Price	LY4053958	Price
1/16	1-3/4	LY5000406	Price	LY4053959	Price
1/16	2	LY5000407	Price	LY4053960	Price
1/16	2-1/2	LY5000408	Price	LY4053961	Price
1/16	3	LY5000409	Price	LY4053962	Price
1/16	3-1/2	LY5000410	Price	LY4053963	Price
1/16	4	LY5000411	Price	LY4053964	Price
1/16	5	LY5000412	Price	LY4053965	Price
1/16	6	LY5000413	Price	LY4053966	Price
1/16	8	LY5000414	Price	LY4053967	Price
1/16	10	LY5000415	Price	LY4053968	Price
5/64	1/2	LY5000501	Price	LY4053969	Price
5/64	3/4	LY5000502	Price	LY4053970	Price
5/64	1	LY5000503	Price	LY4053971	Price
5/64	1-1/2	LY5000504	Price	LY4053972	Price
5/64	2	LY5000505	Price	LY4053973	Price
5/64	2-1/2	LY5000506	Price	LY4053974	Price
5/64	3	LY5000507	Price	LY4053975	Price

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
5/64	4	LY5000508	Price	LY4053976	Price
5/64	6	LY5000509	Price	LY4053977	Price
3/32	1/2	LY5000601	Price	LY4053978	Price
3/32	3/4	LY5000602	Price	LY4053979	Price
3/32	1	LY5000603	Price	LY4053980	Price
3/32	1-1/4	LY5000604	Price	LY4053981	Price
3/32	1-1/2	LY5000605	Price	LY4053982	Price
3/32	2	LY5000606	Price	LY4053983	Price
3/32	2-1/2	LY5000607	Price	LY4053984	Price
3/32	3	LY5000608	Price	LY4053985	Price
3/32	4	LY5000609	Price	LY4053986	Price
3/32	5	LY5000610	Price	LY4053987	Price
3/32	6	LY5000611	Price	LY4053988	Price
3/32	8	LY5000612	Price	LY4053989	Price
7/64	1/2	LY5000701	Price	LY4053990	Price
7/64	3/4	LY5000702	Price	LY4053991	Price
7/64	1	LY5000703	Price	LY4053992	Price
7/64	1-1/4	LY5000704	Price	LY4053993	Price
7/64	1-1/2	LY5000705	Price	LY4053994	Price
7/64	2	LY5000706	Price	LY4053995	Price
7/64	3	LY5000707	Price	LY4053996	Price
7/64	4	LY5000708	Price	LY4053997	Price
1/8	1/8	LY5000801	Price	LY4053998	Price
1/8	1/2	LY5000802	Price	LY4053999	Price
1/8	5/8	LY5000803	Price	LY4054000	Price
1/8	3/4	LY5000804	Price	LY4054001	Price
1/8	1	LY5000805	Price	LY4054002	Price
1/8	1-1/4	LY5000806	Price	LY4054003	Price
1/8	1-1/2	LY5000807	Price	LY4054004	Price
1/8	1-3/4	LY5000808	Price	LY4054005	Price
1/8	2	LY5000809	Price	LY4054006	Price
1/8	2-1/2	LY5000810	Price	LY4054007	Price
1/8	3	LY5000811	Price	LY4054008	Price
1/8	3-1/2	LY5000812	Price	LY4054009	Price
1/8	4	LY5000813	Price	LY4054010	Price
1/8	4-1/2	LY5000814	Price	LY4054011	Price
1/8	5	LY5000815	Price	LY4054012	Price
1/8	6	LY5000816	Price	LY4054013	Price
1/8	7	LY5000817	Price	LY4054014	Price
1/8	8	LY5000818	Price	LY4054015	Price
1/8	10	LY5000819	Price	LY4054016	Price
1/8	12	LY5000820	Price	LY4054017	Price
1/8	14	LY5000821	Price	LY4054018	Price
9/64	9/64	LY5000901	Price	LY4054019	Price
9/64	1/2	LY5000902	Price	LY4054020	Price
9/64	3/4	LY5000903	Price	LY4054021	Price
9/64	1	LY5000904	Price	LY4054022	Price
9/64	1-1/2	LY5000905	Price	LY4054023	Price
9/64	2	LY5000906	Price	LY4054024	Price
9/64	3	LY5000907	Price	LY4054025	Price
9/64	4	LY5000908	Price	LY4054026	Price
5/32	5/32	LY5001001	Price	LY4054027	Price

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
5/32	1/2	LY5001002	Price	LY4054028	Price
5/32	3/4	LY5001003	Price	LY4054029	Price
5/32	1	LY5001004	Price	LY4054030	Price
5/32	1-1/4	LY5001005	Price	LY4054031	Price
5/32	1-1/2	LY5001006	Price	LY4054032	Price
5/32	1-3/4	LY5001007	Price	LY4054033	Price
5/32	2	LY5001008	Price	LY4054034	Price
5/32	2-1/2	LY5001009	Price	LY4054035	Price
5/32	3	LY5001010	Price	LY4054036	Price
5/32	3-1/2	LY5001011	Price	LY4054037	Price
5/32	4	LY5001012	Price	LY4054038	Price
5/32	5	LY5001013	Price	LY4054039	Price
5/32	6	LY5001014	Price	LY4054040	Price
5/32	8	LY5001015	Price	LY4054041	Price
3/16	3/16	LY5001201	Price	LY4054042	Price
3/16	1/2	LY5001202	Price	LY4054043	Price
3/16	3/4	LY5001203	Price	LY4054044	Price
3/16	1	LY5001204	Price	LY4054045	Price
3/16	1-1/4	LY5001205	Price	LY4054046	Price
3/16	1-1/2	LY5001206	Price	LY4054047	Price
3/16	1-3/4	LY5001207	Price	LY4054048	Price
3/16	2	LY5001208	Price	LY4054049	Price
3/16	2-1/2	LY5001209	Price	LY4054050	Price
3/16	3	LY5001210	Price	LY4054051	Price
3/16	3-1/2	LY5001211	Price	LY4054052	Price
3/16	4	LY5001212	Price	LY4054053	Price
3/16	5	LY5001213	Price	LY4054054	Price
3/16	6	LY5001214	Price	LY4054055	Price
3/16	8	LY5001215	Price	LY4054056	Price
3/16	10	LY5001216	Price	LY4054057	Price
7/32	7/32	LY5001401	Price	LY4054058	Price
7/32	1/2	LY5001402	Price	LY4054059	Price
7/32	3/4	LY5001403	Price	LY4054060	Price
7/32	1	LY5001404	Price	LY4054061	Price
7/32	1-1/4	LY5001405	Price	LY4054062	Price
7/32	1-1/2	LY5001406	Price	LY4054063	Price
7/32	2	LY5001407	Price	LY4054064	Price
7/32	3	LY5001408	Price	LY4054065	Price
7/32	4	LY5001409	Price	LY4054066	Price
7/32	6	LY5001410	Price	LY4054067	Price
1/4	1/4	LY5001601	Price	LY4054068	Price
1/4	1/2	LY5001602	Price	LY4054070	Price
1/4	3/4	LY5001603	Price	LY4054071	Price
1/4	1	LY5001604	Price	LY4054072	Price
1/4	1-1/4	LY5001605	Price	LY4054073	Price
1/4	1-1/2	LY5001606	Price	LY4054074	Price
1/4	1-3/4	LY5001608	Price	LY4054075	Price
1/4	2	LY5001610	Price	LY4054076	Price
1/4	2-1/2	LY5001612	Price	LY4054077	Price
1/4	3	LY5001613	Price	LY4054078	Price
1/4	3-1/2	LY5001614	Price	LY4054079	Price
1/4	4	LY5001615	Price	LY4054080	Price

Precision Ground 0-1 Gage Stock 18" Length (cont.)

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
1/4	4-1/2	LY5001616	Price	LY4054081	Price
1/4	5	LY5001617	Price	LY4054082	Price
1/4	5-1/2	LY5001618	Price	LY4054083	Price
1/4	6	LY5001619	Price	LY4054084	Price
1/4	7	LY5001620	Price	LY4054085	Price
1/4	8	LY5001621	Price	LY4054086	Price
1/4	10	LY5001622	Price	LY4054087	Price
1/4	12	LY5001623	Price	LY4054088	Price
1/4	14	LY5001624	Price	LY4054089	Price
9/32	9/32	LY5001801	Price	LY4054090	Price
9/32	1/2	LY5001802	Price	LY4054091	Price
9/32	3/4	LY5001803	Price	LY4054092	Price
9/32	1	LY5001804	Price	LY4054093	Price
9/32	1-1/4	LY5001805	Price	LY4054094	Price
9/32	1-1/2	LY5001806	Price	LY4054095	Price
9/32	2	LY5001807	Price	LY4054096	Price
9/32	2-1/2	LY5001808	Price	LY4054097	Price
9/32	3	LY5001809	Price	LY4054098	Price
9/32	4	LY5001810	Price	LY4054099	Price
9/32	6	LY5001811	Price	LY4054100	Price
5/16	5/16	LY5002001	Price	LY4054101	Price
5/16	1/2	LY5002002	Price	LY4054102	Price
5/16	3/4	LY5002003	Price	LY4054103	Price
5/16	1	LY5002004	Price	LY4054104	Price
5/16	1-1/4	LY5002005	Price	LY4054105	Price
5/16	1-1/2	LY5002006	Price	LY4054106	Price
5/16	1-3/4	LY5002007	Price	LY4057233	Price
5/16	2	LY5002008	Price	LY4054107	Price
5/16	2-1/2	LY5002009	Price	LY4054108	Price
5/16	3	LY5002010	Price	LY4054109	Price
5/16	3-1/2	LY5002011	Price	LY4054110	Price
5/16	4	LY5002012	Price	LY4054111	Price
5/16	4-1/2	-	-	LY4054112	Price
5/16	5	LY5002014	Price	LY4054113	Price
5/16	6	LY5002015	Price	LY4054114	Price
5/16	8	LY5002016	Price	LY4054115	Price
3/8	3/8	LY5002401	Price	LY4054116	Price
3/8	1/2	LY5002402	Price	LY4054117	Price
3/8	3/4	LY5002403	Price	LY4054118	Price
3/8	1	LY5002404	Price	LY4054119	Price
3/8	1-1/4	LY5002405	Price	LY4054120	Price
3/8	1-1/2	LY5002406	Price	LY4054121	Price
3/8	1-3/4	LY5002408	Price	LY4054122	Price
3/8	2	LY5002409	Price	LY4054123	Price
3/8	2-1/2	LY5002410	Price	LY4054124	Price
3/8	3	LY5002411	Price	LY4054125	Price
3/8	3-1/2	LY5002412	Price	LY4054126	Price
3/8	4	LY5002413	Price	LY4054127	Price
3/8	4-1/2	LY5002414	Price	LY4054128	Price
3/8	5	LY5002415	Price	LY4054129	Price
3/8	5-1/2	LY5002416	Price	LY4054130	Price
3/8	6	LY5002417	Price	LY4054131	Price
3/8	7	LY5002418	Price	LY4054132	Price
3/8	8	LY5002419	Price	LY4054133	Price
3/8	10	LY5002420	Price	LY4054134	Price
3/8	12	LY5002421	Price	LY4054135	Price
7/16	7/16	LY5002801	Price	LY4054136	Price
7/16	1/2	LY5002802	Price	LY4054137	Price
7/16	3/4	LY5002803	Price	LY4054138	Price
7/16	1	LY5002804	Price	LY4054139	Price
7/16	1-1/4	LY5002805	Price	LY4054140	Price
7/16	1-1/2	LY5002806	Price	LY4054141	Price
7/16	2	LY5002807	Price	LY4054142	Price
7/16	2-1/2	LY5002808	Price	LY4054143	Price
7/16	3	LY5002809	Price	LY4054144	Price
7/16	4	LY5002810	Price	LY4054145	Price
7/16	6	LY5002811	Price	LY4054146	Price
1/2	1/2	LY5003201	Price	LY4054147	Price
1/2	5/8	LY5003202	Price	LY4054148	Price
1/2	3/4	LY5003203	Price	LY4054149	Price
1/2	1	LY5003204	Price	LY4054150	Price
1/2	1-1/4	LY5003205	Price	LY4054151	Price
1/2	1-1/2	LY5003206	Price	LY4054152	Price
1/2	2	LY5003207	Price	LY4054153	Price
1/2	2-1/2	LY5003208	Price	LY4054154	Price
1/2	3	LY5003209	Price	LY4054155	Price
1/2	3-1/2	LY5003210	Price	LY4054156	Price
1/2	4	LY5003211	Price	LY4054157	Price
1/2	4-1/2	LY5003212	Price	LY4054158	Price
1/2	5	LY5003213	Price	LY4054159	Price
1/2	6	LY5003214	Price	LY4054160	Price
1/2	7	LY5003215	Price	LY4054161	Price
1/2	8	LY5003216	Price	LY4054162	Price
1/2	10	LY5003217	Price	LY4054163	Price
1/2	12	LY5003218	Price	LY4054164	Price
1/2	14	LY5003219	Price	LY4054165	Price
9/16	9/16	LY5003601	Price	LY4054166	Price
9/16	3/4	LY5003602	Price	LY4054167	Price
9/16	1	LY5003603	Price	LY4054168	Price
9/16	1-1/4	LY5003604	Price	LY4054169	Price
9/16	1-1/2	LY5003605	Price	LY4054170	Price
9/16	2	LY5003606	Price	LY4054171	Price
5/8	5/8	LY5004001	Price	LY4054172	Price
5/8	3/4	LY5004002	Price	LY4054173	Price
5/8	1	LY5004003	Price	LY4054174	Price
5/8	1-1/4	LY5004004	Price	LY4054175	Price
5/8	1-1/2	LY5004005	Price	LY4054176	Price
5/8	2	LY5004006	Price	LY4054177	Price
5/8	2-1/2	LY5004007	Price	LY4054178	Price
5/8	3	LY5004008	Price	LY4054179	Price
5/8	3-1/2	LY5004009	Price	LY4054180	Price
5/8	4	LY5004010	Price	LY4054181	Price
5/8	5	LY5004011	Price	LY4054182	Price
5/8	6	LY5004012	Price	LY4054183	Price
5/8	7	LY5004013	Price	LY4054185	Price
5/8	8	LY5004014	Price	LY4054186	Price
5/8	10	LY5004015	Price	-	-
3/4	3/4	LY5004801	Price	LY4054187	Price
3/4	1	LY5004802	Price	LY4054188	Price
3/4	1-1/4	LY5004803	Price	LY4054189	Price
3/4	1-1/2	LY5004804	Price	LY4054190	Price
3/4	2	LY5004805	Price	LY4054191	Price
3/4	2-1/2	LY5004806	Price	LY4054192	Price
3/4	3	LY5004807	Price	LY4054193	Price
3/4	3-1/2	LY5004808	Price	LY4054194	Price
3/4	4	LY5004809	Price	LY4054195	Price
3/4	4-1/2	LY5004810	Price	LY4054196	Price
3/4	5	LY5004811	Price	LY4054197	Price
3/4	6	LY5004812	Price	LY4054198	Price
3/4	8	LY5004813	Price	LY4054199	Price
3/4	10	LY5004814	Price	LY4054200	Price
3/4	12	LY5004815	Price	LY4054201	Price
7/8	7/8	LY5005601	Price	LY4054202	Price
7/8	1	LY5005602	Price	LY4054203	Price
7/8	1-1/4	LY5005603	Price	LY4054204	Price
7/8	1-1/2	LY5005604	Price	LY4054205	Price
7/8	2	LY5005605	Price	LY4054206	Price
7/8	2-1/2	LY5005606	Price	LY4054207	Price
7/8	3	LY5005607	Price	LY4054208	Price
7/8	4	LY5005608	Price	LY4054209	Price
7/8	6	LY5005609	Price	LY4054210	Price
1	1	LY5010001	Price	LY4054211	Price
1	1-1/4	LY5010002	Price	LY4054212	Price
1	1-1/2	LY5010003	Price	LY4054213	Price
1	2	LY5010004	Price	LY4054214	Price
1	2-1/2	LY5010005	Price	LY4054215	Price
1	3	LY5010006	Price	LY4054216	Price
1	3-1/2	LY5010007	Price	LY4054217	Price
1	4	LY5010008	Price	LY4054218	Price
1	4-1/2	LY5010009	Price	LY4054219	Price
1	5	LY5010010	Price	LY4054220	Price
1	6	LY5010011	Price	LY4054221	Price
1	8	LY5010012	Price	LY4054222	Price
1	10	LY5010013	Price	LY4054223	Price
1	12	LY5010014	Price	LY4054224	Price
1-1/8	1-1/2	LY5010801	Price	LY4054225	Price
1-1/8	2	LY5010802	Price	LY4054226	Price
1-1/8	3	LY5010803	Price	LY4054227	Price
1-1/8	4	LY5010804	Price	LY4054228	Price
1-1/8	6	LY5010805	Price	LY4054229	Price
1-1/4	1-1/4	LY5011601	Price	LY4054230	Price
1-1/4	1-1/2	LY5011602	Price	LY4054231	Price
1-1/4	2	LY5011603	Price	LY4054232	Price
1-1/4	2-1/2	LY5011604	Price	LY4054233	Price
1-1/4	3	LY5011605	Price	LY4054234	Price
1-1/4	4	LY5011606	Price	LY4054235	Price
1-1/4	5	LY5011607	Price	LY4054236	Price
1-1/4	6	LY5011608	Price	LY4054237	Price
1-1/4	8	LY5011609	Price	LY4054238	Price
1-1/2	1-1/2	LY5013201	Price	LY4054240	Price
1-1/2	2	LY5013202	Price	LY4054241	Price
1-1/2	2-1/2	LY5013203	Price	LY4054242	Price
1-1/2	3	LY5013204	Price	LY4054243	Price
1-1/2	3-1/2	LY5013205	Price	LY4054244	Price
1-1/2	4	LY5013206	Price	LY4054245	Price
1-1/2	5	LY5013207	Price	LY4054246	Price
1-1/2	6	LY5013208	Price	LY4054247	Price
1-1/2	8	LY5013209	Price	LY4054248	Price
1-1/2	10	LY5013210	Price	LY4054249	Price
2	2	LY5020001	Price	LY4054250	Price
2	3	LY5020002	Price	LY4054251	Price
2	4	LY5020003	Price	LY4054252	Price
2	6	LY5020004	Price	LY4054253	Price

Precision Ground O-1 Gage Stock - 36" Length



- O-1 Oil Hardening Ground Flat Stock
- Electric furnace melt oil-hardening tool steel supplied with a fully spheroidized structure
- Non-shrinking general purpose tool steel
- **HEAT TREATMENT:** For sections smaller than 1/4" heat to 1450° – 1475°F & hold until heated through. For larger sections, preheat to 1200°F, then raise to 1450° – 1500°F hardening temperature, hold half an hour per inch of cross section. Quench in oil at 125° –1 50°F & **Temper Immediately.**
- **Tolerance Thickness ±.001" Width +.000 / .005"**

Tempering Data	
Temper °F	Rockwell C Hardness
As Quenched	63-65
300	63-65
400	61-64
500	60-63
600	57-60
800	48-51
1000	44-48

MADE IN THE USA — Starrett®

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
1/32	1/2	LY5100201	Price	-	-
1/32	3/4	LY5100202	Price	-	-
1/32	1-1/2	LY5100205	Price	-	-
1/32	2	LY5100206	Price	-	-
1/32	4	LY5100209	Price	-	-
3/64	1/2	LY5100301	Price	-	-
3/64	3/4	LY5100302	Price	-	-
3/64	1-1/4	LY5100304	Price	-	-
3/64	1-1/2	LY5100305	Price	-	-
3/64	2	LY5100306	Price	-	-
3/64	2-1/2	LY5100307	Price	-	-
1/16	1/2	LY5100401	Price	LY4054257	Price
1/16	3/4	LY5100402	Price	LY4054258	Price
1/16	1	LY5100403	Price	LY4054259	Price
1/16	1-1/4	LY5100404	Price	LY4054260	Price
1/16	1-1/2	LY5100405	Price	LY4054261	Price
1/16	1-3/4	LY5100406	Price	LY4054262	Price
1/16	2	LY5100407	Price	LY4054263	Price
1/16	2-1/2	LY5100408	Price	LY4054264	Price
1/16	3	LY5100409	Price	LY4054265	Price
1/16	3-1/2	LY5100410	Price	LY4054266	Price
1/16	4	LY5100411	Price	LY4054267	Price
1/16	5	LY5100412	Price	LY4054268	Price
1/16	6	LY5100413	Price	LY4054269	Price
1/16	8	LY5100414	Price	LY4057236	Price
1/16	10	LY5100415	Price	LY4057237	Price
3/32	1/2	LY5100601	Price	LY4054279	Price
3/32	3/4	LY5100602	Price	LY4054280	Price
3/32	1	LY5100603	Price	LY4054281	Price
3/32	1-1/4	LY5100604	Price	LY4054282	Price
3/32	1-1/2	LY5100605	Price	LY4054283	Price
3/32	2	LY5100606	Price	LY4054284	Price
3/32	2-1/2	LY5100607	Price	LY4054285	Price
3/32	3	LY5100608	Price	LY4054286	Price
3/32	4	LY5100609	Price	LY4054287	Price
3/32	5	LY5100610	Price	LY4054288	Price
3/32	6	LY5100611	Price	LY4054289	Price
1/8	1/2	LY5100802	Price	LY4054298	Price
1/8	5/8	LY5100803	Price	LY4054299	Price
1/8	3/4	LY5100804	Price	LY4054300	Price
1/8	1	LY5100805	Price	LY4054301	Price

MADE IN THE USA — Starrett®

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
1/8	1-1/4	LY5100806	Price	LY4054302	Price
1/8	1-1/2	LY5100807	Price	LY4054303	Price
1/8	1-3/4	LY5100808	Price	LY4054304	Price
1/8	2	LY5100809	Price	LY4054305	Price
1/8	2-1/2	LY5100810	Price	LY4054306	Price
1/8	3	LY5100811	Price	LY4054307	Price
1/8	3-1/2	LY5100812	Price	LY4054308	Price
1/8	4	LY5100813	Price	LY4054309	Price
1/8	4-1/2	LY5100814	Price	LY4054310	Price
1/8	5	LY5100815	Price	LY4054311	Price
1/8	6	LY5100816	Price	LY4054312	Price
1/8	7	LY5100817	Price	LY4054313	Price
1/8	8	LY5100818	Price	LY4054314	Price
1/8	10	LY5100819	Price	LY4054315	Price
1/8	12	LY5100820	Price	LY4054316	Price
1/8	14	LY5100821	Price	LY4057238	Price
5/32	1/2	LY5101002	Price	LY4054324	Price
5/32	3/4	LY5101003	Price	LY4054325	Price
5/32	1	LY5101004	Price	LY4054326	Price
5/32	1-1/4	LY5101005	Price	LY4054327	Price
5/32	1-1/2	LY5101006	Price	LY4054328	Price
5/32	1-3/4	LY5101007	Price	LY4054329	Price
5/32	2	LY5101008	Price	LY4054330	Price
5/32	2-1/2	LY5101009	Price	LY4054331	Price
5/32	3	LY5101010	Price	LY4054332	Price
5/32	3-1/2	LY5101011	Price	LY4054333	Price
5/32	4	LY5101012	Price	LY4054334	Price
5/32	5	LY5101013	Price	LY4054335	Price
5/32	6	LY5101014	Price	LY4054336	Price
5/32	8	LY5101015	Price	LY4054337	Price
3/16	3/16	LY5101201	Price	-	-
3/16	1/2	LY5101202	Price	LY4054338	Price
3/16	3/4	LY5101203	Price	LY4054339	Price
3/16	1	LY5101204	Price	LY4054340	Price
3/16	1-1/4	LY5101205	Price	LY4054341	Price
3/16	1-1/2	LY5101206	Price	LY4054342	Price
3/16	1-3/4	LY5101207	Price	LY4054343	Price
3/16	2	LY5101208	Price	LY4054344	Price
3/16	2-1/2	LY5101209	Price	LY4054345	Price
3/16	3	LY5101210	Price	LY4054346	Price
3/16	3-1/2	LY5101211	Price	LY4054347	Price

MADE IN THE USA — Starrett®

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
3/16	4	LY5101212	Price	LY4054348	Price
3/16	5	LY5101213	Price	LY4054349	Price
3/16	6	LY5101214	Price	LY4054350	Price
3/16	8	LY5101215	Price	LY4054351	Price
3/16	10	LY5101216	Price	LY4054352	Price
7/32	7/32	LY5101401	Price	-	-
7/32	1/2	LY5101402	Price	LY4054353	Price
7/32	3/4	LY5101403	Price	LY4054354	Price
7/32	1	LY5101404	Price	LY4054355	Price
7/32	1-1/4	LY5101405	Price	LY4054356	Price
7/32	1-1/2	LY5101406	Price	LY4054357	Price
7/32	2	LY5101407	Price	LY4054358	Price
7/32	3	LY5101408	Price	LY4054359	Price
7/32	4	LY5101409	Price	LY4054360	Price
1/4	1/4	LY5101601	Price	LY4056517	Price
1/4	1/2	LY5101602	Price	LY4054362	Price
1/4	3/4	LY5101603	Price	LY4054363	Price
1/4	1	LY5101604	Price	LY4054364	Price
1/4	1-1/4	LY5101605	Price	LY4054365	Price
1/4	1-1/2	LY5101606	Price	LY4054366	Price
1/4	1-3/4	LY5101608	Price	LY4054367	Price
1/4	2	LY5101610	Price	LY4054368	Price
1/4	2-1/2	LY5101612	Price	LY4054369	Price
1/4	3	LY5101613	Price	LY4054370	Price
1/4	3-1/2	LY5101614	Price	LY4054371	Price
1/4	4	LY5101615	Price	LY4054372	Price
1/4	4-1/2	LY5101616	Price	LY4054373	Price
1/4	5	LY5101617	Price	LY4054374	Price
1/4	5-1/2	LY5101618	Price	LY4054375	Price
1/4	6	LY5101619	Price	LY4054376	Price
1/4	7	LY5101620	Price	LY4054377	Price
1/4	8	LY5101621	Price	LY4054378	Price
1/4	10	LY5101622	Price	LY4054379	Price
1/4	12	LY5101623	Price	LY4054380	Price
1/4	14	LY5101624	Price	LY4057239	Price
5/16	5/16	LY5102001	Price	LY4054391	Price
5/16	1/2	LY5102002	Price	LY4054392	Price
5/16	3/4	LY5102003	Price	LY4054393	Price
5/16	1	LY5102004	Price	LY4054394	Price
5/16	1-1/4	LY5102005	Price	LY4054395	Price
5/16	1-1/2	LY5102006	Price	LY4054396	Price

Precision Ground O-1 Gage Stock - 36" Length (Cont.)

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
5/16	1-3/4	LY5102007	Price	LY4057240	Price
5/16	2	LY5102008	Price	LY4054397	Price
5/16	2-1/2	LY5102009	Price	LY4054398	Price
5/16	3	LY5102010	Price	LY4054399	Price
5/16	3-1/2	LY5102011	Price	LY4054400	Price
5/16	4	LY5102012	Price	LY4054401	Price
5/16	4-1/2	LY5102013	Price	LY4054402	Price
5/16	5	LY5102014	Price	LY4054403	Price
5/16	6	LY5102015	Price	LY4054404	Price
5/16	8	LY5102016	Price	LY4054405	Price
3/8	3/8	LY5102401	Price	LY4054406	Price
3/8	1/2	LY5102402	Price	LY4054407	Price
3/8	3/4	LY5102403	Price	LY4054408	Price
3/8	1	LY5102404	Price	LY4054409	Price
3/8	1-1/4	LY5102405	Price	LY4054410	Price
3/8	1-1/2	LY5102406	Price	LY4054411	Price
3/8	1-3/4	LY5102408	Price	LY4054412	Price
3/8	2	LY5102409	Price	LY4054413	Price
3/8	2-1/2	LY5102410	Price	LY4054414	Price
3/8	3	LY5102411	Price	LY4054415	Price
3/8	3-1/2	LY5102412	Price	LY4054416	Price
3/8	4	LY5102413	Price	LY4054417	Price
3/8	4-1/2	LY5102414	Price	LY4054418	Price
3/8	5	LY5102415	Price	LY4054419	Price
3/8	5-1/2	LY5102416	Price	LY4054420	Price
3/8	6	LY5102417	Price	LY4054421	Price
3/8	7	LY5102418	Price	LY4054422	Price
3/8	8	LY5102419	Price	LY4054423	Price
3/8	10	LY5102420	Price	LY4054424	Price
3/8	12	LY5102421	Price	LY4054425	Price
7/16	7/16	LY5102801	Price	LY4054426	Price
7/16	1/2	LY5102802	Price	LY4054427	Price
7/16	3/4	LY5102803	Price	LY4054428	Price
7/16	1	LY5102804	Price	LY4054429	Price
7/16	1-1/4	LY5102805	Price	LY4054430	Price
7/16	1-1/2	LY5102806	Price	LY4054431	Price
7/16	2	LY5102807	Price	LY4054432	Price
7/16	2-1/2	LY5102808	Price	LY4054433	Price
7/16	3	LY5102809	Price	LY4054434	Price
7/16	4	LY5102810	Price	LY4054435	Price
7/16	6	LY5102811	Price	LY4054436	Price
1/2	1/2	LY5103201	Price	LY4054437	Price
1/2	5/8	LY5103202	Price	LY4054438	Price
1/2	3/4	LY5103203	Price	LY4054439	Price
1/2	1	LY5103204	Price	LY4054440	Price
1/2	1-1/4	LY5103205	Price	LY4054441	Price
1/2	1-1/2	LY5103206	Price	LY4054442	Price
1/2	2	LY5103207	Price	LY4054443	Price

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
1/2	2-1/2	LY5103208	Price	LY4054444	Price
1/2	3	LY5103209	Price	LY4054445	Price
1/2	3-1/2	LY5103210	Price	LY4054446	Price
1/2	4	LY5103211	Price	LY4054447	Price
1/2	4-1/2	LY5103212	Price	LY4054448	Price
1/2	5	LY5103213	Price	LY4054449	Price
1/2	6	LY5103214	Price	LY4054450	Price
1/2	7	LY5103215	Price	LY4054451	Price
1/2	8	LY5103216	Price	LY4054452	Price
1/2	10	LY5103217	Price	LY4054453	Price
9/16	9/16	LY5103601	Price	LY4054455	Price
9/16	3/4	LY5103602	Price	LY4054456	Price
9/16	1	LY5103603	Price	LY4054457	Price
9/16	1-1/4	LY5103604	Price	LY4054458	Price
9/16	1-1/2	LY5103605	Price	LY4054459	Price
9/16	2	LY5103606	Price	LY4054460	Price
5/8	5/8	LY5104001	Price	LY4054461	Price
5/8	3/4	LY5104002	Price	LY4054462	Price
5/8	1	LY5104003	Price	LY4054463	Price
5/8	1-1/4	LY5104004	Price	LY4054464	Price
5/8	1-1/2	LY5104005	Price	LY4054465	Price
5/8	2	LY5104006	Price	LY4054466	Price
5/8	2-1/2	LY5104007	Price	LY4054467	Price
5/8	3	LY5104008	Price	LY4054468	Price
5/8	3-1/2	LY5104009	Price	LY4054469	Price
5/8	4	LY5104010	Price	LY4054470	Price
5/8	5	LY5104011	Price	LY4054471	Price
5/8	6	LY5104012	Price	LY4054472	Price
5/8	8	LY5104014	Price	LY4054474	Price
5/8	10	LY5104015	Price	LY4054475	Price
3/4	3/4	LY5104801	Price	LY4054476	Price
3/4	1	LY5104802	Price	LY4054477	Price
3/4	1-1/4	LY5104803	Price	LY4054478	Price
3/4	1-1/2	LY5104804	Price	LY4054479	Price
3/4	2	LY5104805	Price	LY4054480	Price
3/4	2-1/2	LY5104806	Price	LY4054481	Price
3/4	3	LY5104807	Price	LY4054482	Price
3/4	3-1/2	LY5104808	Price	LY4054483	Price
3/4	4	LY5104809	Price	LY4054484	Price
3/4	4-1/2	LY5104810	Price	LY4054485	Price
3/4	5	LY5104811	Price	LY4054486	Price
3/4	6	LY5104812	Price	LY4054487	Price
3/4	8	LY5104813	Price	LY4054488	Price
3/4	10	LY5104814	Price	LY4054489	Price
3/4	12	LY5104815	Price	LY4054490	Price
7/8	7/8	LY5105601	Price	LY4054491	Price
7/8	1	LY5105602	Price	LY4054492	Price
7/8	1-1/4	LY5105603	Price	LY4054493	Price

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
7/8	1-1/2	LY5105604	Price	LY4054494	Price
7/8	2	LY5105605	Price	LY4054495	Price
7/8	2-1/2	LY5105606	Price	LY4054496	Price
7/8	3	LY5105607	Price	LY4054497	Price
7/8	4	LY5105608	Price	LY4054498	Price
7/8	6	LY5105609	Price	LY4054499	Price
1	1	LY5110001	Price	LY4054500	Price
1	1-1/4	LY5110002	Price	LY4054501	Price
1	1-1/2	LY5110003	Price	LY4054502	Price
1	2	LY5110004	Price	LY4054503	Price
1	2-1/2	LY5110005	Price	LY4054504	Price
1	3	LY5110006	Price	LY4054505	Price
1	3-1/2	LY5110007	Price	LY4054506	Price
1	4	LY5110008	Price	LY4054507	Price
1	4-1/2	LY5110009	Price	LY4054508	Price
1	5	LY5110010	Price	LY4054509	Price
1	6	LY5110011	Price	LY4054510	Price
1	8	LY5110012	Price	LY4054511	Price
1	10	LY5110013	Price	LY4054512	Price
1	12	LY5110014	Price	LY4054513	Price
1-1/8	1-1/2	LY5110801	Price	LY4054514	Price
1-1/8	2	LY5110802	Price	LY4054515	Price
1-1/8	3	LY5110803	Price	LY4054516	Price
1-1/8	4	LY5110804	Price	LY4054517	Price
1-1/8	6	LY5110805	Price	LY4054518	Price
1-1/4	1-1/4	LY5111601	Price	LY4054519	Price
1-1/4	1-1/2	LY5111602	Price	LY4054520	Price
1-1/4	2	LY5111603	Price	LY4054521	Price
1-1/4	2-1/2	LY5111604	Price	LY4054522	Price
1-1/4	3	LY5111605	Price	LY4054523	Price
1-1/4	4	LY5111606	Price	LY4054524	Price
1-1/4	5	LY5111607	Price	LY4054525	Price
1-1/4	6	LY5111608	Price	LY4054526	Price
1-1/4	8	LY5111609	Price	LY4054527	Price
1-1/2	1-1/2	LY5113201	Price	LY4054529	Price
1-1/2	2	LY5113202	Price	LY4054530	Price
1-1/2	2-1/2	LY5113203	Price	LY4054531	Price
1-1/2	3	LY5113204	Price	LY4054532	Price
1-1/2	3-1/2	LY5113205	Price	LY4054533	Price
1-1/2	4	LY5113206	Price	LY4054534	Price
1-1/2	5	LY5113207	Price	LY4054535	Price
1-1/2	6	LY5113208	Price	LY4054536	Price
1-1/2	8	LY5113209	Price	LY4054537	Price
1-1/2	10	LY5113210	Price	LY4054538	Price
2	2	LY5120001	Price	LY4054539	Price
2	3	LY5120002	Price	LY4054540	Price
2	4	LY5120003	Price	LY4054541	Price
2	6	LY5120004	Price	LY4054542	Price

A-2 Air Hardening Ground Flat Stock - 18" Length

- Made from fine grain, electric furnace air-hardening, 5 chrome tool steel
- Has excellent wear and abrasion resistance properties
- Furnished with a fully spheroidized structure and is 100 free of decarb and other surface imperfections.
- **Low sulphur content makes it non-freemachining.**
- **HEAT TREATMENT:** Preheat thoroughly at 1450°F, then raise to hardening temperature 1725° – 1800°F and soak uniformly. For larger sections, use high side; for thin or smaller sections, use low side. Quench in still air or dry air blast at 125° – 175°F, then **Temper Immediately**.
- **Tolerance Thickness ±.001" Width +.000/.005"**
- Larger Sizes A-2 available thru 1" thickness
- Oversize tolerances available thru 2" thickness
- Many other types of gage stock available
- Modified Nutec 42
- A-6 Diecrat
- D-2 Aristocrat
- S-7
- C-1018 Marshallcrat low carbon



MADE IN THE USA — Starrett

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
1/16	1/2	LY55401	Price	LY4557489	Price
1/16	3/4	LY55402	Price	LY4557490	Price
1/16	1	LY55403	Price	LY4557491	Price
1/16	1-1/4	LY55404	Price	LY4557492	Price
1/16	1-1/2	LY55405	Price	LY4557493	Price
1/16	2	LY55407	Price	LY4557494	Price
1/16	2-1/2	LY55408	Price	LY4557495	Price
1/16	3	LY55409	Price	LY4557496	Price
1/16	4	LY55411	Price	LY4557497	Price
3/32	1/2	LY55601	Price	LY4557498	Price
3/32	3/4	LY55602	Price	LY4557499	Price
3/32	1	LY55603	Price	LY4557500	Price
3/32	1-1/4	LY55604	Price	LY4557501	Price
3/32	1-1/2	LY55605	Price	LY4557502	Price
3/32	2	LY55606	Price	LY4557503	Price
3/32	2-1/2	LY55607	Price	LY4557504	Price
3/32	3	LY55608	Price	LY4557505	Price
3/32	4	LY55609	Price	LY4557506	Price
1/8	1/2	LY55802	Price	LY4557243	Price
1/8	5/8	LY55803	Price	LY4557507	Price
1/8	3/4	LY55804	Price	LY4557244	Price
1/8	1	LY55805	Price	LY4554589	Price
1/8	1-1/4	LY55806	Price	LY4554590	Price
1/8	1-1/2	LY55807	Price	LY4554591	Price
1/8	1-3/4	LY55808	Price	LY4557508	Price
1/8	2	LY55809	Price	LY4554592	Price
1/8	2-1/2	LY55810	Price	LY4554593	Price
1/8	3	LY55811	Price	LY4554594	Price
1/8	3-1/2	LY55812	Price	LY4554595	Price
1/8	4	LY55813	Price	LY4554596	Price
1/8	5	LY55815	Price	LY4554598	Price
1/8	6	LY55816	Price	LY4554599	Price
5/32	1/2	LY551002	Price	LY4557513	Price
5/32	3/4	LY551003	Price	LY4557514	Price
5/32	1	LY551004	Price	LY4554600	Price
5/32	1-1/4	LY551005	Price	LY4554601	Price
5/32	1-1/2	LY551006	Price	LY4554602	Price
5/32	1-3/4	LY551007	Price	LY4557515	Price
5/32	2	LY551008	Price	LY4554603	Price
5/32	2-1/2	LY551009	Price	LY4554604	Price
5/32	3	LY551010	Price	LY4554605	Price
5/32	3-1/2	LY551011	Price	LY4554606	Price
5/32	4	LY551012	Price	LY4554607	Price

MADE IN THE USA — Starrett

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
5/32	5	LY551013	Price	LY4554608	Price
5/32	6	LY551014	Price	LY4554609	Price
3/16	3/16	LY551201	Price	LY4557517	Price
3/16	1/2	LY551202	Price	LY4557518	Price
3/16	3/4	LY551203	Price	LY4557519	Price
3/16	1	LY551204	Price	LY4554610	Price
3/16	1-1/4	LY551205	Price	LY4554611	Price
3/16	1-1/2	LY551206	Price	LY4554612	Price
3/16	1-3/4	LY551207	Price	LY4557520	Price
3/16	2	LY551208	Price	LY4554613	Price
3/16	2-1/2	LY551209	Price	LY4554614	Price
3/16	3	LY551210	Price	LY4554615	Price
3/16	3-1/2	LY551211	Price	LY4554616	Price
3/16	4	LY551212	Price	LY4554617	Price
3/16	5	LY551213	Price	LY4554618	Price
3/16	6	LY551214	Price	LY4554619	Price
1/4	1/4	LY551601	Price	LY4557523	Price
1/4	1/2	LY551602	Price	LY4557524	Price
1/4	3/4	LY551603	Price	LY4557525	Price
1/4	1	LY551604	Price	LY4554620	Price
1/4	1-1/4	LY551605	Price	LY4554621	Price
1/4	1-1/2	LY551606	Price	LY4554622	Price
1/4	1-3/4	LY551608	Price	LY4557526	Price
1/4	2	LY551610	Price	LY4554623	Price
1/4	2-1/2	LY551612	Price	LY4554624	Price
1/4	3	LY551613	Price	LY4554625	Price
1/4	3-1/2	LY551614	Price	LY4554626	Price
1/4	4	LY551615	Price	LY4554627	Price
1/4	5	LY551617	Price	LY4554629	Price
1/4	6	LY551619	Price	LY4554631	Price
5/16	5/16	LY552001	Price	LY4557527	Price
5/16	1/2	LY552002	Price	LY4557528	Price
5/16	3/4	LY552003	Price	LY4557529	Price
5/16	1	LY552004	Price	LY4554717	Price
5/16	1-1/4	LY552005	Price	LY4554718	Price
5/16	1-1/2	LY552006	Price	LY4554719	Price
5/16	1-3/4	LY552007	Price	LY4557530	Price
5/16	2	LY552008	Price	LY4554720	Price
5/16	2-1/2	LY552009	Price	LY4554721	Price
5/16	3	LY552010	Price	LY4554722	Price
5/16	3-1/2	LY552011	Price	LY4554723	Price
5/16	4	LY552012	Price	LY4554724	Price
5/16	5	LY552014	Price	LY4554726	Price
5/16	6	LY552015	Price	LY4554727	Price
3/8	3/8	LY552401	Price	LY4557531	Price
3/8	1/2	LY552402	Price	LY4557532	Price
3/8	3/4	LY552403	Price	LY4557533	Price
3/8	1	LY552404	Price	LY4554728	Price
3/8	1-1/4	LY552405	Price	LY4554729	Price
3/8	1-1/2	LY552406	Price	LY4554730	Price
3/8	1-3/4	LY552408	Price	LY4557534	Price
3/8	2	LY552409	Price	LY4554731	Price
3/8	2-1/2	LY552410	Price	LY4554732	Price
3/8	3	LY552411	Price	LY4554733	Price
3/8	3-1/2	LY552412	Price	LY4554734	Price
3/8	4	LY552413	Price	LY4554735	Price
3/8	5	LY552415	Price	LY4554737	Price
3/8	6	LY552417	Price	LY4554739	Price
1/2	1/2	LY553201	Price	LY4556495	Price
1/2	5/8	LY553202	Price	LY4557535	Price
1/2	3/4	LY553203	Price	LY4556494	Price
1/2	1	LY553204	Price	LY4556493	Price
1/2	1-1/4	LY553205	Price	LY4557536	Price
1/2	1-1/2	LY553206	Price	LY4557537	Price
1/2	2	LY553207	Price	LY4554748	Price
1/2	2-1/2	LY553208	Price	LY4554749	Price
1/2	3	LY553209	Price	LY4554750	Price
1/2	3-1/2	LY553210	Price	LY4554751	Price
1/2	4	LY553211	Price	LY4554752	Price
1/2	5	LY553213	Price	LY4554754	Price
1/2	6	LY553214	Price	LY4554755	Price

PRECISION BRAND Tool Wraps



- Made of soft annealed, stainless steel
- Helps protect from scale and oxide buildup during heat treating in atmospheric furnaces
- Resistant to chromium carbide precipitation during exposure to high temperatures
- Eliminates decarburization buildup
- Protects the surface of air hardening tool steels
- Cut-to-fit stainless steel tool wrap creates an airtight envelope around your part
- Type 321 can be used in furnaces up to 2000˚F (1093˚C)
- Type 309 can be used in furnaces up to 2240°F (1227°C)
- You realize the benefits of a vacuum furnace at a fraction of the cost
- Thickness: 0.002"

		Stainless Steel Type 321		Stainless Steel Type 309	
Width (in.)	Length (ft.)	Order No.	Price	Order No.	Price
12	50	MA5220310	Price	MA5220810	Price
12	100	MA5220410	Price	MA5220910	Price
24	50	MA5220110	Price	MA5220610	Price
24	100	MA5220210	Price	MA5220710	Price
10	100	MA5220250	Price	-	-
10	50	MA5220225	Price	-	-
12	24	MA5220315	Price	-	-
20	100	MA5220450	Price	-	-
20	50	MA5220425	Price	-	-

A-2 Air Hardening Ground Flat Stock - 36" Length

- Made from fine grain, electric furnace air-hardening, 5 chrome tool steel
- Has excellent wear and abrasion resistance properties
- Furnished with a fully spheroidized structure and is 100 free of decarb and other surface imperfections.
- **Low sulphur content makes it non-freemachining.**
- **HEAT TREATMENT:** Preheat thoroughly at 1450°F, then raise to hardening temperature 1725° – 1800°F and soak uniformly. For larger sections, use high side; for thin or smaller sections, use low side. Quench in still air or dry air blast at 125° – 175°F, then **Temper Immediately**.
- **Tolerance Thickness ±.001" Width +.000/.005"**
- Larger Sizes A-2 available thru 1" thickness
- Oversize tolerances available thru 2" thickness
- Many other types of gage stock available
- Modified Nutec 42
- A-6 Diecrat
- D-2 Aristocrat
- S-7
- C-1018 Marshallcrat low carbon



		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
1/16	1/2	LY56401	Price	LY4557301	Price
1/16	3/4	LY56402	Price	LY4557302	Price
1/16	1	LY56403	Price	LY4557303	Price
1/16	1-1/4	LY56404	Price	LY4557304	Price
1/16	1-1/2	LY56405	Price	LY4557305	Price
1/16	2	LY56407	Price	LY4557306	Price
1/16	2-1/2	LY56408	Price	LY4557307	Price
1/16	3	LY56409	Price	LY4557308	Price
1/16	4	LY56411	Price	LY4557309	Price
3/32	1/2	LY56601	Price	LY4557310	Price
3/32	3/4	LY56602	Price	LY4557311	Price
3/32	1	LY56603	Price	LY4557312	Price
3/32	1-1/4	LY56604	Price	LY4557313	Price
3/32	1-1/2	LY56605	Price	LY4557314	Price
3/32	2	LY56606	Price	LY4557315	Price
3/32	2-1/2	LY56607	Price	LY4557316	Price
3/32	3	LY56608	Price	LY4557317	Price
3/32	4	LY56609	Price	LY4557318	Price
1/8	1/2	LY56802	Price	LY4557245	Price
1/8	5/8	LY56803	Price	LY4557319	Price
1/8	3/4	LY56804	Price	LY4557246	Price
1/8	1	LY56805	Price	LY4554546	Price
1/8	1-1/4	LY56806	Price	LY4554547	Price
1/8	1-1/2	LY56807	Price	LY4554548	Price
1/8	1-3/4	LY56808	Price	LY4557320	Price
1/8	2	LY56809	Price	LY4554549	Price
1/8	2-1/2	LY56810	Price	LY4554550	Price
1/8	3	LY56811	Price	LY4554551	Price
1/8	3-1/2	LY56812	Price	LY4554552	Price
1/8	4	LY56813	Price	LY4554553	Price
1/8	5	LY56815	Price	LY4554555	Price
1/8	6	LY56816	Price	LY4554556	Price
5/32	1/2	LY561002	Price	LY4557325	Price
5/32	3/4	LY561003	Price	LY4557326	Price
5/32	1	LY561004	Price	LY4554557	Price
5/32	1-1/4	LY561005	Price	LY4554558	Price
5/32	1-1/2	LY561006	Price	LY4554559	Price
5/32	1-3/4	LY561007	Price	LY4557327	Price
5/32	2	LY561008	Price	LY4554560	Price
5/32	2-1/2	LY561009	Price	LY4554561	Price
5/32	3	LY561010	Price	LY4554562	Price
5/32	3-1/2	LY561011	Price	LY4554563	Price
5/32	4	LY561012	Price	LY4554564	Price
5/32	5	LY561013	Price	LY4554565	Price
5/32	6	LY561014	Price	LY4554566	Price

		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
3/16	3/16	LY561201	Price	LY4557329	Price
3/16	1/2	LY561202	Price	LY4557330	Price
3/16	3/4	LY561203	Price	LY4557331	Price
3/16	1	LY561204	Price	LY4554567	Price
3/16	1-1/4	LY561205	Price	LY4554568	Price
3/16	1-1/2	LY561206	Price	LY4554569	Price
3/16	1-3/4	LY561207	Price	LY4557332	Price
3/16	2	LY561208	Price	LY4554570	Price
3/16	2-1/2	LY561209	Price	LY4554571	Price
3/16	3	LY561210	Price	LY4554572	Price
3/16	3-1/2	LY561211	Price	LY4554573	Price
3/16	4	LY561212	Price	LY4554574	Price
3/16	5	LY561213	Price	LY4554575	Price
3/16	6	LY561214	Price	LY4554576	Price
1/4	1/4	LY561601	Price	LY4557335	Price
1/4	1/2	LY561602	Price	LY4557336	Price
1/4	3/4	LY561603	Price	LY4557337	Price
1/4	1	LY561604	Price	LY4554577	Price
1/4	1-1/4	LY561605	Price	LY4554578	Price
1/4	1-1/2	LY561606	Price	LY4554579	Price
1/4	1-3/4	LY561608	Price	LY4557338	Price
1/4	2	LY561610	Price	LY4554580	Price
1/4	2-1/2	LY561612	Price	LY4554581	Price
1/4	3	LY561613	Price	LY4554582	Price
1/4	3-1/2	LY561614	Price	LY4554583	Price
1/4	4	LY561615	Price	LY4554584	Price
1/4	5	LY561617	Price	LY4554586	Price
1/4	6	LY561619	Price	LY4554588	Price
5/16	5/16	LY562001	Price	LY4557339	Price
5/16	1/2	LY562002	Price	LY4557340	Price
5/16	3/4	LY562003	Price	LY4557341	Price
5/16	1	LY562004	Price	LY4554632	Price
5/16	1-1/4	LY562005	Price	LY4554633	Price
5/16	1-1/2	LY562006	Price	LY4554634	Price
5/16	1-3/4	LY562007	Price	LY4557342	Price
5/16	2	LY562008	Price	LY4554635	Price
5/16	2-1/2	LY562009	Price	LY4554636	Price
5/16	3	LY562010	Price	LY4554637	Price
5/16	3-1/2	LY562011	Price	LY4554638	Price
5/16	4	LY562012	Price	LY4554639	Price
5/16	5	LY562014	Price	LY4554641	Price
5/16	6	LY562015	Price	LY4554642	Price
3/8	3/8	LY562401	Price	LY4557343	Price
3/8	1/2	LY562402	Price	LY4557344	Price
3/8	3/4	LY562403	Price	LY4557345	Price
3/8	1	LY562404	Price	LY4554643	Price
3/8	1-1/4	LY562405	Price	LY4554644	Price
3/8	1-1/2	LY562406	Price	LY4554645	Price
3/8	1-3/4	LY562408	Price	LY4557346	Price
3/8	2	LY562409	Price	LY4554646	Price
3/8	2-1/2	LY562410	Price	LY4554647	Price
3/8	3	LY562411	Price	LY4554648	Price
3/8	3-1/2	LY562412	Price	LY4554649	Price
3/8	4	LY562413	Price	LY4554650	Price
3/8	5	LY562415	Price	LY4554652	Price
3/8	6	LY562417	Price	LY4554654	Price
1/2	1/2	LY563201	Price	LY4556505	Price
1/2	5/8	LY563202	Price	LY4557347	Price
1/2	3/4	LY563203	Price	LY4556506	Price
1/2	1	LY563204	Price	LY4556507	Price
1/2	1-1/4	LY563205	Price	LY4557348	Price
1/2	1-1/2	LY563206	Price	LY4557349	Price
1/2	2	LY563207	Price	LY4554663	Price
1/2	2-1/2	LY563208	Price	LY4554664	Price
1/2	3	LY563209	Price	LY4554665	Price
1/2	3-1/2	LY563210	Price	LY4554666	Price
1/2	4	LY563211	Price	LY4554667	Price
1/2	5	LY563213	Price	LY4554669	Price
1/2	6	LY563214	Price	LY4554670	Price

Oversize O-1 Oil Hardening Ground Flat Stock 18 & 36" OAL

- Flat Ground Stock is manufactured from fine grain tool steel, electrically melted from high grade materials to close limits of analysis
- Ideal for the manufacture of dies, gages, punches, templates, jigs and precision tools
- Width: +.010/.015
- Thickness: +10.010/.015
- Squareness edge to surface .003 per inch of thickness
- Finish 10-25 micro inches

MADE IN THE USA Starrett

Length (in.) - 18					
		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
3/16	3/16	LY601201	Price	LY4156957	Price
3/16	1/2	LY601202	Price	LY4156958	Price
3/16	3/4	LY601203	Price	LY4156959	Price
3/16	1	LY601204	Price	LY4156960	Price
3/16	1-1/4	LY601205	Price	LY4156961	Price
3/16	1-1/2	LY601206	Price	LY4156962	Price
3/16	1-3/4	LY601207	Price	-	-
3/16	2	LY601208	Price	LY4156963	Price
3/16	2-1/2	LY601209	Price	LY4156964	Price
3/16	3	LY601210	Price	LY4156965	Price
3/16	4	LY601212	Price	LY4156966	Price
3/16	5	LY601213	Price	LY4156967	Price
3/16	6	LY601214	Price	LY4156968	Price
1/4	1/4	LY601601	Price	LY4156971	Price
1/4	1/2	LY601602	Price	LY4156972	Price
1/4	3/4	LY601603	Price	LY4156973	Price
1/4	1	LY601604	Price	LY4156974	Price
1/4	1-1/4	LY601605	Price	LY4156975	Price
1/4	1-1/2	LY601606	Price	LY4156976	Price
1/4	1-3/4	LY601608	Price	LY4156977	Price
1/4	2	LY601610	Price	LY4156978	Price
1/4	2-1/2	LY601612	Price	LY4156979	Price
1/4	3	LY601613	Price	LY4156980	Price
1/4	3-1/2	LY601614	Price	LY4156981	Price
1/4	4	LY601615	Price	LY4156982	Price
1/4	5	LY601617	Price	LY4156984	Price
1/4	6	LY601619	Price	LY4156985	Price
5/16	5/16	LY602001	Price	LY4156987	Price
5/16	1/2	LY602002	Price	LY4156988	Price
5/16	3/4	LY602003	Price	LY4156989	Price
5/16	1	LY602004	Price	LY4156990	Price
5/16	1-1/4	LY602005	Price	LY4156991	Price
5/16	1-1/2	LY602006	Price	LY4156992	Price
5/16	2	LY602008	Price	LY4156993	Price
5/16	2-1/2	LY602009	Price	LY4156994	Price
5/16	3	LY602010	Price	LY4156995	Price
5/16	4	LY602012	Price	LY4156996	Price
5/16	5	LY602014	Price	LY4156997	Price
3/8	3/8	LY602401	Price	LY4156998	Price
3/8	1/2	LY602402	Price	LY4156999	Price
3/8	3/4	LY602403	Price	LY4157000	Price
3/8	1	LY602404	Price	LY4157001	Price
3/8	1-1/4	LY602405	Price	LY4157002	Price
3/8	1-1/2	LY602406	Price	LY4157003	Price
3/8	2	LY602409	Price	LY4157004	Price
3/8	3	LY602411	Price	LY4157006	Price
3/8	3-1/2	LY602412	Price	LY4157007	Price
3/8	4	LY602413	Price	LY4157008	Price
3/8	5	LY602415	Price	LY4157010	Price
3/8	6	LY602417	Price	LY4157011	Price
1/2	1/2	LY603201	Price	LY4157014	Price
1/2	3/4	LY603203	Price	LY4157015	Price
1/2	1	LY603204	Price	LY4157016	Price
1/2	1-1/4	LY603205	Price	LY4157017	Price
1/2	1-1/2	LY603206	Price	LY4157018	Price
1/2	2	LY603207	Price	LY4157019	Price
1/2	2-1/2	LY603208	Price	LY4157020	Price
1/2	3	LY603209	Price	LY4157021	Price



MADE IN THE USA Starrett

Length (in.) - 18					
		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
1/2	3-1/2	LY603210	Price	LY4157022	Price
1/2	4	LY603211	Price	LY4157023	Price
1/2	5	LY603213	Price	LY4157025	Price
1/2	6	LY603214	Price	LY4157026	Price

MADE IN THE USA Starrett

Length (in.) - 36					
		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
3/16	3/16	LY651201	Price	-	-
3/16	1/2	LY651202	Price	LY4156813	Price
3/16	3/4	LY651203	Price	LY4156814	Price
3/16	1	LY651204	Price	LY4156815	Price
3/16	1-1/4	LY651205	Price	LY4156816	Price
3/16	1-1/2	LY651206	Price	LY4156817	Price
3/16	2	LY651208	Price	LY4156818	Price
3/16	2-1/2	LY651209	Price	LY4156819	Price
3/16	3	LY651210	Price	LY4156820	Price
3/16	4	LY651212	Price	LY4156821	Price
3/16	6	LY651214	Price	LY4156822	Price
1/4	1/4	LY651601	Price	-	-
1/4	1/2	LY651602	Price	LY4156823	Price
1/4	3/4	LY651603	Price	LY4156824	Price
1/4	1	LY651604	Price	LY4156825	Price
1/4	1-1/4	LY651605	Price	LY4156826	Price
1/4	1-1/2	LY651606	Price	LY4156827	Price
1/4	2	LY651610	Price	LY4156828	Price
1/4	2-1/2	LY651612	Price	LY4156829	Price
1/4	3	LY651613	Price	LY4156830	Price
1/4	3-1/2	LY651614	Price	LY4156831	Price
1/4	4	LY651615	Price	LY4156832	Price
1/4	5	LY651617	Price	LY4156833	Price
1/4	6	LY651619	Price	LY4156834	Price
5/16	1/2	LY652002	Price	LY4156835	Price
5/16	3/4	LY652003	Price	LY4156836	Price
5/16	1	LY652004	Price	LY4156837	Price
5/16	1-1/4	LY652005	Price	LY4156838	Price
5/16	1-1/2	LY652006	Price	LY4156839	Price
5/16	2	LY652008	Price	LY4156840	Price
5/16	2-1/2	LY652009	Price	LY4156841	Price
5/16	3	LY652010	Price	LY4156842	Price
5/16	4	LY652012	Price	LY4156843	Price
5/16	5	LY652014	Price	LY4156844	Price
5/16	6	LY652015	Price	LY4156845	Price
3/8	3/8	LY652401	Price	-	-
3/8	1/2	LY652402	Price	LY4156846	Price
3/8	3/4	LY652403	Price	LY4156847	Price
3/8	1	LY652404	Price	LY4156848	Price
3/8	1-1/4	LY652405	Price	LY4156849	Price
3/8	1-1/2	LY652406	Price	LY4156850	Price
3/8	2	LY652409	Price	LY4156851	Price
3/8	3	LY652411	Price	LY4156853	Price
3/8	4	LY652413	Price	LY4156854	Price
3/8	5	LY652415	Price	LY4156855	Price
3/8	6	LY652417	Price	LY4156856	Price
1/2	1/2	LY653201	Price	LY4156858	Price
1/2	3/4	LY653203	Price	LY4156859	Price
1/2	1	LY653204	Price	LY4156860	Price
1/2	1-1/4	LY653205	Price	LY4156861	Price
1/2	1-1/2	LY653206	Price	LY4156862	Price
1/2	2	LY653207	Price	LY4156863	Price
1/2	2-1/2	LY653208	Price	LY4156864	Price
1/2	3	LY653209	Price	LY4156865	Price
1/2	4	LY653211	Price	LY4156866	Price
1/2	6	LY653214	Price	LY4156868	Price

Oversize A-2 Air Hardening Ground Flat Stock 18" & 36" OAL



MADE IN THE USA

Starrett

Length (in.) - 18					
		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
1/8	1/2	LY70802	Price	LY4657541	Price
1/8	5/8	LY70803	Price	LY4657542	Price
1/8	3/4	LY70804	Price	LY4657543	Price
1/8	1	LY70805	Price	LY4657544	Price
1/8	1-1/4	LY70806	Price	LY4657545	Price
1/8	1-1/2	LY70807	Price	LY4657546	Price
1/8	1-3/4	LY70808	Price	LY4657547	Price
1/8	2	LY70809	Price	LY4657548	Price
1/8	2-1/2	LY70810	Price	LY4657549	Price
1/8	3	LY70811	Price	LY4657550	Price
1/8	3-1/2	LY70812	Price	LY4657551	Price
1/8	4	LY70813	Price	LY4657552	Price
1/8	5	LY70815	Price	LY4657553	Price
1/8	6	LY70816	Price	LY4657554	Price
5/32	1/2	LY701002	Price	LY4657559	Price
5/32	3/4	LY701003	Price	LY4657560	Price
5/32	1	LY701004	Price	LY4657561	Price
5/32	1-1/4	LY701005	Price	LY4657562	Price
5/32	1-1/2	LY701006	Price	LY4657563	Price
5/32	2	LY701008	Price	LY4657564	Price
5/32	2-1/2	LY701009	Price	LY4657565	Price
5/32	3	LY701010	Price	LY4657566	Price
5/32	4	LY701012	Price	LY4657567	Price
5/32	5	LY701013	Price	LY4657568	Price
5/32	6	LY701014	Price	LY4657569	Price
3/16	3/16	LY701201	Price	LY4657571	Price
3/16	1/2	LY701202	Price	LY4657572	Price
3/16	3/4	LY701203	Price	LY4657573	Price
3/16	1	LY701204	Price	LY4657162	Price
3/16	1-1/4	LY701205	Price	LY4657163	Price
3/16	1-1/2	LY701206	Price	LY4657164	Price
3/16	1-3/4	LY701207	Price	LY4657574	Price
3/16	2	LY701208	Price	LY4657165	Price
3/16	2-1/2	LY701209	Price	LY4657166	Price
3/16	3	LY701210	Price	LY4657167	Price
3/16	3-1/2	LY701211	Price	LY4657575	Price
3/16	4	LY701212	Price	LY4657168	Price
3/16	5	LY701213	Price	LY4657576	Price
3/16	6	LY701214	Price	LY4657577	Price
1/4	1/4	LY701601	Price	LY4657580	Price
1/4	1/2	LY701602	Price	LY4657581	Price
1/4	3/4	LY701603	Price	LY4657582	Price
1/4	1	LY701604	Price	LY4657169	Price
1/4	1-1/4	LY701605	Price	LY4657170	Price
1/4	1-1/2	LY701606	Price	LY4657171	Price
1/4	1-3/4	LY701608	Price	LY4657583	Price
1/4	2	LY701610	Price	LY4657172	Price
1/4	2-1/2	LY701612	Price	LY4657173	Price
1/4	3	LY701613	Price	LY4657174	Price
1/4	3-1/2	LY701614	Price	LY4657584	Price
1/4	4	LY701615	Price	LY4657175	Price
1/4	5	LY701617	Price	LY4657176	Price
1/4	6	LY701619	Price	LY4657177	Price
5/16	5/16	LY702001	Price	LY4657589	Price
5/16	1/2	LY702002	Price	LY4657590	Price
5/16	3/4	LY702003	Price	LY4657591	Price
5/16	1	LY702004	Price	LY4657178	Price
5/16	1-1/4	LY702005	Price	LY4657179	Price
5/16	1-1/2	LY702006	Price	LY4657180	Price
5/16	1-3/4	LY702007	Price	LY4657592	Price
5/16	2	LY702008	Price	LY4657181	Price
5/16	2-1/2	LY702009	Price	LY4657593	Price
5/16	3	LY702010	Price	LY4657182	Price
5/16	3-1/2	LY702011	Price	LY4657594	Price
5/16	4	LY702012	Price	LY4657183	Price
5/16	5	LY702014	Price	LY4657184	Price
5/16	6	LY702015	Price	LY4657595	Price
3/8	3/8	LY702401	Price	LY4657597	Price
3/8	1/2	LY702402	Price	LY4657598	Price
3/8	3/4	LY702403	Price	LY4657599	Price
3/8	1	LY702404	Price	LY4657185	Price
3/8	1-1/4	LY702405	Price	LY4657186	Price
3/8	1-1/2	LY702406	Price	LY4657187	Price
3/8	1-3/4	LY702408	Price	LY4657600	Price
3/8	2	LY702409	Price	LY4657188	Price
3/8	2-1/2	LY702410	Price	LY4657189	Price
3/8	3	LY702411	Price	LY4657190	Price
3/8	3-1/2	LY702412	Price	LY4657191	Price

MADE IN THE USA

Starrett

Length (in.) - 18					
		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
3/8	4	LY702413	Price	LY4657192	Price
3/8	5	LY702415	Price	LY4657193	Price
3/8	6	LY702417	Price	LY4657194	Price
1/2	1/2	LY703201	Price	LY4657195	Price
1/2	5/8	LY703202	Price	LY4657606	Price
1/2	3/4	LY703203	Price	LY4657196	Price
1/2	1	LY703204	Price	LY4657197	Price
1/2	1-1/4	LY703205	Price	LY4657607	Price
1/2	1-1/2	LY703206	Price	LY4657608	Price
1/2	2	LY703207	Price	LY4657198	Price
1/2	2-1/2	LY703208	Price	LY4657199	Price
1/2	3	LY703209	Price	LY4657200	Price
1/2	3-1/2	LY703210	Price	LY4657201	Price
1/2	4	LY703211	Price	LY4657202	Price
1/2	5	LY703213	Price	LY4657203	Price
1/2	6	LY703214	Price	LY4657204	Price

MADE IN THE USA

Starrett

Length (in.) - 36					
		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
1/8	1/2	LY75802	Price	LY4657353	Price
1/8	5/8	LY75803	Price	LY4657354	Price
1/8	3/4	LY75804	Price	LY4657355	Price
1/8	1	LY75805	Price	LY4657356	Price
1/8	1-1/4	LY75806	Price	LY4657357	Price
1/8	1-1/2	LY75807	Price	LY4657358	Price
1/8	1-3/4	LY75808	Price	LY4657359	Price
1/8	2	LY75809	Price	LY4657360	Price
1/8	2-1/2	LY75810	Price	LY4657361	Price
1/8	3	LY75811	Price	LY4657362	Price
1/8	3-1/2	LY75812	Price	LY4657363	Price
1/8	4	LY75813	Price	LY4657364	Price
1/8	5	LY75815	Price	LY4657365	Price
1/8	6	LY75816	Price	LY4657366	Price
5/32	1/2	LY751002	Price	LY4657371	Price
5/32	3/4	LY751003	Price	LY4657372	Price
5/32	1	LY751004	Price	LY4657373	Price
5/32	1-1/4	LY751005	Price	LY4657374	Price
5/32	1-1/2	LY751006	Price	LY4657375	Price
5/32	2	LY751008	Price	LY4657376	Price
5/32	2-1/2	LY751009	Price	LY4657377	Price
5/32	3	LY751010	Price	LY4657378	Price
5/32	4	LY751012	Price	LY4657379	Price
5/32	5	LY751013	Price	LY4657380	Price
5/32	6	LY751014	Price	LY4657381	Price
3/16	3/16	LY751201	Price	LY4657383	Price
3/16	1/2	LY751202	Price	LY4657384	Price
3/16	3/4	LY751203	Price	LY4657385	Price
3/16	1	LY751204	Price	LY4656896	Price
3/16	1-1/4	LY751205	Price	LY4656897	Price
3/16	1-1/2	LY751206	Price	LY4656898	Price
3/16	1-3/4	LY751207	Price	LY4657386	Price
3/16	2	LY751208	Price	LY4656899	Price
3/16	2-1/2	LY751209	Price	LY4656900	Price
3/16	3	LY751210	Price	LY4656901	Price
3/16	3-1/2	LY751211	Price	LY4657387	Price
3/16	4	LY751212	Price	LY4656902	Price
3/16	5	LY751213	Price	LY4657388	Price
3/16	6	LY751214	Price	LY4657389	Price
1/4	1/4	LY751601	Price	LY4657392	Price
1/4	1/2	LY751602	Price	LY4657393	Price
1/4	3/4	LY751603	Price	LY4657394	Price
1/4	1	LY751604	Price	LY4656903	Price
1/4	1-1/4	LY751605	Price	LY4656904	Price
1/4	1-1/2	LY751606	Price	LY4656905	Price
1/4	1-3/4	LY751608	Price	LY4657395	Price
1/4	2	LY751610	Price	LY4656906	Price
1/4	2-1/2	LY751612	Price	LY4656907	Price
1/4	3	LY751613	Price	LY4656908	Price
1/4	3-1/2	LY751614	Price	LY4657396	Price
1/4	4	LY751615	Price	LY4656909	Price
1/4	5	LY751617	Price	LY4656910	Price
1/4	6	LY751619	Price	LY4656911	Price
5/16	5/16	LY752001	Price	LY4657401	Price
5/16	1/2	LY752002	Price	LY4657402	Price
5/16	3/4	LY752003	Price	LY4657403	Price
5/16	1	LY752004	Price	LY4656912	Price
5/16	1-1/4	LY752005	Price	LY4656913	Price

Oversize A-2 Air Hardening Ground Flat Stock 18" & 36" OAL (Cont.)

MADE IN THE USA Starrett

Length (in.) - 36					
		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
5/16	1-1/2	LY752006	Price	LY4656914	Price
5/16	1-3/4	LY752007	Price	LY4657404	Price
5/16	2	LY752008	Price	LY4656915	Price
5/16	2-1/2	LY752009	Price	LY4657405	Price
5/16	3	LY752010	Price	LY4656916	Price
5/16	3-1/2	LY752011	Price	LY4657406	Price
5/16	4	LY752012	Price	LY4656917	Price
5/16	5	LY752014	Price	LY4656918	Price
5/16	6	LY752015	Price	LY4657407	Price
3/8	3/8	LY752401	Price	LY4657409	Price
3/8	1/2	LY752402	Price	LY4657410	Price
3/8	3/4	LY752403	Price	LY4657411	Price
3/8	1	LY752404	Price	LY4656919	Price
3/8	1-1/4	LY752405	Price	LY4656920	Price
3/8	1-1/2	LY752406	Price	LY4656921	Price
3/8	1-3/4	LY752408	Price	LY4657412	Price
3/8	2	LY752409	Price	LY4656922	Price
3/8	2-1/2	LY752410	Price	LY4656923	Price

MADE IN THE USA Starrett

Length (in.) - 36					
		Generic USA		Starrett	
Thick (in.)	Width (in.)	Order No.	Price	Order No.	Price
3/8	3	LY752411	Price	LY4656924	Price
3/8	3-1/2	LY752412	Price	LY4656925	Price
3/8	4	LY752413	Price	LY4656926	Price
3/8	5	LY752415	Price	LY4656927	Price
3/8	6	LY752417	Price	LY4656928	Price
1/2	1/2	LY753201	Price	LY4656929	Price
1/2	5/8	LY753202	Price	LY4657418	Price
1/2	3/4	LY753203	Price	LY4656930	Price
1/2	1	LY753204	Price	LY4656931	Price
1/2	1-1/4	LY753205	Price	LY4657419	Price
1/2	1-1/2	LY753206	Price	LY4657420	Price
1/2	2	LY753207	Price	LY4656932	Price
1/2	2-1/2	LY753208	Price	LY4656933	Price
1/2	3	LY753209	Price	LY4656934	Price
1/2	3-1/2	LY753210	Price	LY4656935	Price
1/2	4	LY753211	Price	LY4656936	Price
1/2	5	LY753213	Price	LY4656937	Price
1/2	6	LY753214	Price	LY4656938	Price

Low-Carbon 24" Length Ground Flat Stock



- A fine-grained, vacuum-degassed carbon steel
- Easily machined, has excellent weldability and responds uniformly to case hardening
- Manganese content provides greater strength and hardness compared to many other carbon steels
- Often used in its natural state for such applications as backup plate, stripper plates, punch pads and machine parts
- Used for jigs, fixtures, cams and patterns
- **Hardening:** CARBURIZING: For maximum depth of hardening, 1/21", hold in carburizing salt at 1700°F for 3 hours. CASE HARDENING: Hold in sodium cyanide salt bath at 1500°F for 30 minutes. Maximum case is .006"

MADE IN THE USA

Thick (in.)	Width (in.)	Order No.	Price
1/16	1/2	LY8000025	Price
1/16	3/4	LY8000081	Price
1/16	1	LY8000129	Price
1/16	1-1/2	LY8000198	Price
1/16	2	LY8000166	Price
3/32	1/2	LY8000057	Price
3/32	3/4	LY8000755	Price
3/32	1	LY8000026	Price
3/32	1-1/4	LY8001610	Price
3/32	1-1/2	LY8000905	Price
3/32	2	LY8000785	Price
1/8	1/2	LY8000011	Price
1/8	3/4	LY8000054	Price
1/8	1	LY8000028	Price
1/8	1-1/4	LY8000446	Price
1/8	1-1/2	LY8000039	Price
1/8	2	LY8000066	Price
1/8	2-1/2	LY8000105	Price
1/8	3	LY8000206	Price
1/8	4	LY8000152	Price
1/8	6	LY8000177	Price
5/32	1/2	LY8000116	Price
5/32	1	LY8000365	Price
5/32	1-1/2	LY8001880	Price
3/16	1/2	LY8000118	Price
3/16	3/4	LY8000092	Price
3/16	1	LY8000115	Price
3/16	1-1/4	LY8000165	Price
3/16	1-1/2	LY8000167	Price
3/16	2	LY8000296	Price
1/4	1/4	LY8000159	Price
1/4	1/2	LY8000053	Price
1/4	3/4	LY8000052	Price
1/4	1	LY8000109	Price
1/4	1-1/4	LY8000096	Price
1/4	1-1/2	LY8000158	Price
1/4	2	LY8000036	Price
1/4	2-1/2	LY8000088	Price
1/4	3	LY8000102	Price
1/4	3-1/2	LY8000293	Price
1/4	4	LY8000149	Price
1/4	5	LY8000668	Price
1/4	6	LY8000168	Price
1/4	8	LY8000260	Price
5/16	1/2	LY8000130	Price
5/16	3/4	LY8000578	Price
5/16	1	LY8000602	Price

Thick (in.)	Width (in.)	Order No.	Price
5/16	1-1/4	LY8000914	Price
5/16	1-1/2	LY8000509	Price
5/16	2	LY8000686	Price
3/8	3/8	LY8000041	Price
3/8	1/2	LY8000097	Price
3/8	3/4	LY8000045	Price
3/8	1	LY8000064	Price
3/8	1-1/4	LY8000137	Price
3/8	1-1/2	LY8000099	Price
3/8	2-1/2	LY8000401	Price
3/8	3	LY8000314	Price
3/8	3-1/2	LY8001585	Price
3/8	4	LY8000203	Price
3/8	5	LY8000659	Price
3/8	6	LY8000809	Price
1/2	1/2	LY8000124	Price
1/2	3/4	LY8000062	Price
1/2	1	LY8000085	Price
1/2	1-1/4	LY8000551	Price
1/2	1-1/2	LY8000107	Price
1/2	2	LY8000077	Price
1/2	2-1/2	LY8000272	Price
1/2	3	LY8000251	Price
1/2	4	LY8000111	Price
1/2	5	LY8000186	Price
1/2	6	LY8000125	Price
1/2	8	LY8000560	Price
5/8	5/8	LY8000497	Price
5/8	1	LY8000230	Price
5/8	1-1/2	LY8001330	Price
5/8	2	LY8000587	Price
5/8	3	LY8000959	Price
5/8	4	LY8001150	Price
5/8	6	LY8002415	Price
3/4	3/4	LY8000195	Price
3/4	1	LY8000089	Price
3/4	1-1/2	LY8000368	Price
3/4	2	LY8000353	Price
3/4	3	LY8000269	Price
3/4	4	LY8004130	Price
3/4	6	LY8000788	Price
1	1	LY8000187	Price
1	1-1/2	LY8000791	Price
1	2	LY8000212	Price
1	3	LY8000605	Price
1	4	LY8000683	Price
1	6	LY8000986	Price

Drill Bushings

- To Size – ANSI and BMP Standard
- CONCENTRICITY - (Total indicator reading)
- Bushings 1/8" to 1/2" I.D.- Concentricity 0" to .0003" (Max.)
- Other Sizes - Concentricity 0" to .0005" (Max.)
- Above tolerances will be met at the drill exit end
- HARDNESS - Rockwell C 62-65 in the hole
- RADIUS COUNTERSINK - All bushings feature a radius countersink on the drill entrance end.



Type - Head Press Fit (H) Inside Dia. (in.) - 1/16			
Outside Dia. (in.)	Length	Order No.	Price
5/32	1/4	**GS40H104004**	Price
5/32	1/2	**GS40H108004**	Price
13/64	5/16	**GS40H135004**	Price
13/64	1/2	**GS40H138004**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 1/8			
Outside Dia. (in.)	Length	Order No.	Price
1/4	1/4	**GS40H164008**	Price
1/4	1/2	**GS40H168008**	Price
1/4	1	**GS40H1616008**	Price
1/4	1-1/2	**GS40H1624008**	Price
5/16	1/4	**GS40H204008**	Price
5/16	3/8	**GS40H206008**	Price
5/16	1/2	**GS40H208008**	Price
5/16	5/8	**GS40H2010008**	Price
5/16	3/4	**GS40H2012008**	Price
5/16	1	**GS40H2016008**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 3/16			
Outside Dia. (in.)	Length	Order No.	Price
5/16	1/4	**GS40H204012**	Price
5/16	3/8	**GS40H206012**	Price
5/16	1/2	**GS40H208012**	Price
5/16	5/8	**GS40H2010012**	Price
5/16	3/4	**GS40H2012012**	Price
5/16	1	**GS40H2016012**	Price
13/32	1/4	**GS40H264012**	Price
13/32	5/16	**GS40H265012**	Price
13/32	3/8	**GS40H266012**	Price
13/32	1/2	**GS40H268012**	Price
1/2	1/4	**GS40H324012**	Price
1/2	3/8	**GS40H326012**	Price
1/2	1/2	**GS40H328012**	Price
1/2	3/4	**GS40H3212012**	Price
1/2	1	**GS40H3216012**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 1/4			
Outside Dia. (in.)	Length	Order No.	Price
13/32	1/4	**GS40H264016**	Price
13/32	5/16	**GS40H265016**	Price
13/32	3/8	**GS40H266016**	Price
13/32	1/2	**GS40H268016**	Price
13/32	3/4	**GS40H2612016**	Price
13/32	1	**GS40H2616016**	Price
13/32	1-3/8	**GS40H2622016**	Price
13/32	1-3/4	**GS40H2628016**	Price
7/16	1/4	**GS40H284016**	Price
7/16	1/2	**GS40H288016**	Price
7/16	5/8	**GS40H2810016**	Price
1/2	1/4	**GS40H324016**	Price
1/2	5/16	**GS40H325016**	Price
1/2	3/8	**GS40H326016**	Price
1/2	1/2	**GS40H328016**	Price
1/2	3/4	**GS40H3212016**	Price
1/2	1	**GS40H3216016**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 5/16			
Outside Dia. (in.)	Length	Order No.	Price
1/2	1/4	**GS40H324020**	Price
1/2	5/16	**GS40H325020**	Price
1/2	3/8	**GS40H326020**	Price
1/2	1/2	**GS40H328020**	Price
1/2	3/4	**GS40H3212020**	Price
1/2	1	**GS40H3216020**	Price
9/16	1/2	**GS40H368020**	Price
5/8	1/4	**GS40H404020**	Price

Fractional sizes shown, other sizes available. Call for price and availability.

Type - Head Press Fit (H) Inside Dia. (in.) - 5/16			
Outside Dia. (in.)	Length	Order No.	Price
5/8	5/16	**GS40H405020**	Price
5/8	3/8	**GS40H406020**	Price
5/8	1/2	**GS40H408020**	Price
5/8	3/4	**GS40H4012020**	Price
5/8	1	**GS40H4016020**	Price
5/8	2-1/8	**GS40H4034020**	Price
3/4	3/8	**GS40H486020**	Price
3/4	1/2	**GS40H488020**	Price
3/4	3/4	**GS40H4812020**	Price
3/4	1	**GS40H4816020**	Price
3/4	1-1/4	**GS40H4820020**	Price
3/4	1-3/8	**GS40H4822020**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 3/8			
Outside Dia. (in.)	Length	Order No.	Price
5/8	1/4	**GS40H404024**	Price
5/8	5/16	**GS40H405024**	Price
5/8	3/8	**GS40H406024**	Price
5/8	1/2	**GS40H408024**	Price
5/8	5/8	**GS40H4010024**	Price
5/8	3/4	**GS40H4012024**	Price
5/8	1	**GS40H4016024**	Price
5/8	1-1/2	**GS40H4024024**	Price
3/4	5/16	**GS40H485024**	Price
3/4	3/8	**GS40H486024**	Price
3/4	1/2	**GS40H488024**	Price
3/4	3/4	**GS40H4812024**	Price
3/4	1	**GS40H4816024**	Price
3/4	1-1/4	**GS40H4820024**	Price
3/4	1-3/4	**GS40H4828024**	Price
3/4	2-1/8	**GS40H4834024**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 7/16			
Outside Dia. (in.)	Length	Order No.	Price
5/8	1/4	**GS40H404028**	Price
5/8	5/16	**GS40H405028**	Price
5/8	3/8	**GS40H406028**	Price
5/8	1/2	**GS40H408028**	Price
5/8	3/4	**GS40H4012028**	Price
5/8	1	**GS40H4016028**	Price
5/8	1-3/4	**GS40H4028028**	Price
3/4	3/8	**GS40H486028**	Price
3/4	1/2	**GS40H488028**	Price
3/4	3/4	**GS40H4812028**	Price
3/4	1	**GS40H4816028**	Price
3/4	2-1/8	**GS40H4834028**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 1/2			
Outside Dia. (in.)	Length	Order No.	Price
3/4	1/4	**GS40H484032**	Price
3/4	3/8	**GS40H486032**	Price
3/4	1/2	**GS40H488032**	Price
3/4	5/8	**GS40H4810032**	Price
3/4	3/4	**GS40H4812032**	Price
3/4	1	**GS40H4816032**	Price
3/4	1-1/2	**GS40H4824032**	Price
3/4	1-1/4	**GS40H4820032**	Price
3/4	1-3/4	**GS40H4828032**	Price
3/4	2-1/8	**GS40H4834032**	Price
7/8	3/8	**GS40H566032**	Price
7/8	1/2	**GS40H568032**	Price
7/8	5/8	**GS40H5610032**	Price

Drill Bushings (cont.)

Type - Head Press Fit (H) Inside Dia. (in.) - 1/2			
Outside Dia. (in.)	Length	Order No.	Price
7/8	3/4	**GS40H5612032**	Price
7/8	1	**GS40H5616032**	Price
7/8	1-3/8	**GS40H5622032**	Price
1	1/2	**GS40H648032**	Price
1	3/4	**GS40H6412032**	Price
1	1-3/8	**GS40H6422032**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 9/16			
Outside Dia. (in.)	Length	Order No.	Price
7/8	3/8	**GS40H566036**	Price
7/8	1/2	**GS40H568036**	Price
7/8	5/8	**GS40H5610036**	Price
7/8	1	**GS40H5616036**	Price
7/8	1-1/4	**GS40H5620036**	Price
1	1/2	**GS40H648036**	Price
1	3/4	**GS40H6412036**	Price
1	1-1/2	**GS40H6424036**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 5/8			
Outside Dia. (in.)	Length	Order No.	Price
7/8	3/8	**GS40H566040**	Price
7/8	1/2	**GS40H568040**	Price
7/8	1	**GS40H5616040**	Price
7/8	1-1/4	**GS40H5620040**	Price
7/8	1-3/8	**GS40H5622040**	Price
1	1-3/8	**GS40H6422040**	Price
1-3/8	1/2	**GS40H888040**	Price
1-3/8	1	**GS40H8816040**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 11/16			
Outside Dia. (in.)	Length	Order No.	Price
1	1/2	**GS40H648044**	Price
1	3/4	**GS40H6412044**	Price
1	1	**GS40H6416044**	Price
1-3/8	1/2	**GS40H888044**	Price
1-3/8	3/4	**GS40H8812044**	Price
1-3/8	1	**GS40H8816044**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 3/4			
Outside Dia. (in.)	Length	Order No.	Price
1	3/4	**GS40H6412048**	Price
1	1	**GS40H6416048**	Price
1	1-3/8	**GS40H6422048**	Price
1	1-1/2	**GS40H6424048**	Price
1-3/8	1	**GS40H8816048**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 13/16			
Outside Dia. (in.)	Length	Order No.	Price
1-3/8	1/2	**GS40H888052**	Price
1-3/8	3/4	**GS40H8812052**	Price
1-3/8	1	**GS40H8816052**	Price

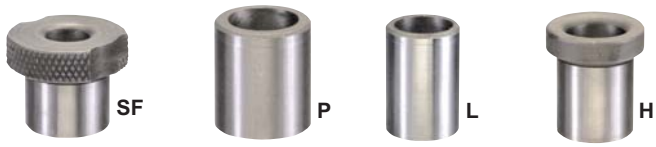
Type - Head Press Fit (H) Inside Dia. (in.) - 7/8			
Outside Dia. (in.)	Length	Order No.	Price
1-3/8	1/2	**GS40H888056**	Price
1-3/8	1	**GS40H8816056**	Price
1-3/8	1-3/8	**GS40H8822056**	Price
1-3/8	2-1/8	**GS40H8834056**	Price
1-3/8	3	**GS40H8848056**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 15/16			
Outside Dia. (in.)	Length	Order No.	Price
1-3/8	1/2	**GS40H888060**	Price
1-3/8	1	**GS40H8816060**	Price
1-3/8	1-3/8	**GS40H8822060**	Price

Type - Head Press Fit (H) Inside Dia. (in.) - 1			
Outside Dia. (in.)	Length	Order No.	Price
1-3/8	3/4	**GS40H8812100**	Price
1-3/8	1	**GS40H8816100**	Price
1-3/8	1-3/8	**GS40H8822100**	Price
1-3/8	2-1/8	**GS40H8834100**	Price
1-3/8	3	**GS40H8848100**	Price

Type - Liner (L) Inside Dia. (in.) - 3/16			
Outside Dia. (in.)	Length	Order No.	Price
5/16	1/2	**GS40L208012**	Price

Fractional sizes shown, other sizes available. Call for price and availability.



Type - Liner (L) Inside Dia. (in.) - 1/4			
Outside Dia. (in.)	Length	Order No.	Price
7/16	5/16	**GS40L285016**	Price
7/16	1/2	**GS40L288016**	Price
7/16	3/4	**GS40L2812016**	Price

Type - Liner (L) Inside Dia. (in.) - 5/16			
Outside Dia. (in.)	Length	Order No.	Price
1/2	1/4	**GS40L324020**	Price
1/2	5/16	**GS40L325020**	Price
1/2	3/8	**GS40L326020**	Price
1/2	1/2	**GS40L328020**	Price
1/2	3/4	**GS40L3212020**	Price
1/2	1	**GS40L3216020**	Price

Type - Liner (L) Inside Dia. (in.) - 3/8			
Outside Dia. (in.)	Length	Order No.	Price
5/8	3/8	**GS40L406024**	Price
5/8	1/2	**GS40L408024**	Price
5/8	3/4	**GS40L4012024**	Price
5/8	1	**GS40L4016024**	Price
3/4	3/4	**GS40L4812024**	Price

Type - Liner (L) Inside Dia. (in.) - 7/16			
Outside Dia. (in.)	Length	Order No.	Price
5/8	3/8	**GS40L406028**	Price
5/8	1/2	**GS40L408028**	Price
5/8	1	**GS40L4016028**	Price

Type - Liner (L) Inside Dia. (in.) - 1/2			
Outside Dia. (in.)	Length	Order No.	Price
3/4	5/16	**GS40L485032**	Price
3/4	3/8	**GS40L486032**	Price
3/4	1/2	**GS40L488032**	Price
3/4	3/4	**GS40L4812032**	Price
3/4	1	**GS40L4816032**	Price
3/4	1-1/2	**GS40L4824032**	Price
3/4	2-1/8	**GS40L4834032**	Price

Type - Liner (L) Inside Dia. (in.) - 9/16			
Outside Dia. (in.)	Length	Order No.	Price
7/8	5/16	**GS40L565036**	Price
7/8	1/2	**GS40L568036**	Price
7/8	3/4	**GS40L5612036**	Price

Type - Liner (L) Inside Dia. (in.) - 5/8			
Outside Dia. (in.)	Length	Order No.	Price
7/8	3/8	**GS40L566040**	Price
7/8	5/16	**GS40L565040**	Price
7/8	1/2	**GS40L568040**	Price
7/8	3/4	**GS40L5612040**	Price
7/8	1	**GS40L5616040**	Price

Type - Liner (L) Inside Dia. (in.) - 3/4			
Outside Dia. (in.)	Length	Order No.	Price
1	5/16	**GS40L645048**	Price
1	3/8	**GS40L646048**	Price
1	1/2	**GS40L648048**	Price
1	3/4	**GS40L6412048**	Price
1	1	**GS40L6416048**	Price
1	1-3/8	**GS40L6422048**	Price
1	1-1/2	**GS40L6424048**	Price
1	1-3/4	**GS40L6428048**	Price
1	2-1/8	**GS40L6434048**	Price
1	2-1/2	**GS40L6440048**	Price

Type - Liner (L) Inside Dia. (in.) - 7/8			
Outside Dia. (in.)	Length	Order No.	Price
1-1/4	3/4	**GS40L8012056**	Price
1-1/4	1	**GS40L8016056**	Price
1-1/4	1-1/2	**GS40L8024056**	Price

Drill Bushings (cont.)

Type - Liner (L) Inside Dia. (in.) - 1			
Outside Dia. (in.)	Length	Order No.	Price
1-3/8	3/4	**GS40L8812100**	Price
1-3/8	1	**GS40L8816100**	Price
1-3/8	1-3/8	**GS40L8822100**	Price
1-3/8	1-1/2	**GS40L8824100**	Price
1-3/8	1-3/4	**GS40L8828100**	Price
1-3/8	2-1/8	**GS40L8834100**	Price
1-3/8	3	**GS40L8848100**	Price

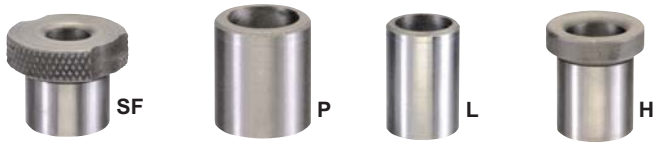
Type - Headless Press Fit (P) Inside Dia. (in.) - 1/16			
Outside Dia. (in.)	Length	Order No.	Price
5/32	1/4	**GS40P104004**	Price
3/16	5/16	**GS40P125004**	Price
13/64	1/4	**GS40P134004**	Price
13/64	5/16	**GS40P135004**	Price
13/64	3/8	**GS40P136004**	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 1/8			
Outside Dia. (in.)	Length	Order No.	Price
1/4	1/4	**GS40P164008**	Price
1/4	5/16	**GS40P165008**	Price
1/4	3/8	**GS40P166008**	Price
1/4	1/2	**GS40P168008**	Price
1/4	1	**GS40P1616008**	Price
1/4	1-1/2	**GS40P1624008**	Price
5/16	1/4	**GS40P204008**	Price
5/16	5/16	**GS40P205008**	Price
5/16	3/8	**GS40P206008**	Price
5/16	1/2	**GS40P208008**	Price
5/16	5/8	**GS40P2010008**	Price
5/16	3/4	**GS40P2012008**	Price
5/16	1	**GS40P2016008**	Price
5/16	1-3/8	**GS40P2022008**	Price
5/16	1-1/2	**GS40P2024008**	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 3/16			
Outside Dia. (in.)	Length	Order No.	Price
5/16	1/4	**GS40P204012**	Price
5/16	5/16	**GS40P205012**	Price
5/16	3/8	**GS40P206012**	Price
5/16	1/2	**GS40P208012**	Price
5/16	5/8	**GS40P2010012**	Price
5/16	3/4	**GS40P2012012**	Price
5/16	1	**GS40P2016012**	Price
5/16	1-3/8	**GS40P2022012**	Price
13/32	1/4	**GS40P264012**	Price
13/32	3/8	**GS40P266012**	Price
13/32	1/2	**GS40P268012**	Price
13/32	3/4	**GS40P2612012**	Price
13/32	1	**GS40P2616012**	Price
13/32	1-1/2	**GS40P2624012**	Price
1/2	1/4	**GS40P324012**	Price
1/2	3/8	**GS40P326012**	Price
1/2	1/2	**GS40P328012**	Price
1/2	3/4	**GS40P3212012**	Price
1/2	1	**GS40P3216012**	Price
1/2	1-3/8	**GS40P3222012**	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 1/4			
Outside Dia. (in.)	Length	Order No.	Price
13/32	1/4	**GS40P264016**	Price
13/32	5/16	**GS40P265016**	Price
13/32	3/8	**GS40P266016**	Price
13/32	1/2	**GS40P268016**	Price
13/32	3/4	**GS40P2612016**	Price
13/32	1	**GS40P2616016**	Price
7/16	1/4	**GS40P284016**	Price
7/16	3/8	**GS40P286016**	Price
7/16	1/2	**GS40P288016**	Price
7/16	5/8	**GS40P2810016**	Price
7/16	3/4	**GS40P2812016**	Price
7/16	1	**GS40P2816016**	Price
1/2	3/8	**GS40P326016**	Price
1/2	1/2	**GS40P328016**	Price
1/2	3/4	**GS40P3212016**	Price
1/2	1	**GS40P3216016**	Price

Fractional sizes shown, other sizes available. Call for price and availability.



Type - Headless Press Fit (P) Inside Dia. (in.) - 1/4			
Outside Dia. (in.)	Length	Order No.	Price
1/2	1-3/8	**GS40P3222016**	Price
1/2	1-3/4	**GS40P3228016**	Price
1/2	2-1/8	**GS40P3234016**	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 5/16			
Outside Dia. (in.)	Length	Order No.	Price
1/2	1/4	**GS40P324020**	Price
1/2	3/8	**GS40P326020**	Price
1/2	1/2	**GS40P328020**	Price
1/2	3/4	**GS40P3212020**	Price
1/2	1	**GS40P3216020**	Price
1/2	1-3/8	**GS40P3222020**	Price
9/16	1/4	**GS40P364020**	Price
9/16	5/16	**GS40P365020**	Price
9/16	3/4	**GS40P3612020**	Price
5/8	1/4	**GS40P404020**	Price
5/8	3/8	**GS40P406020**	Price
5/8	1/2	**GS40P408020**	Price
5/8	5/8	**GS40P4010020**	Price
5/8	3/4	**GS40P4012020**	Price
5/8	1	**GS40P4016020**	Price
3/4	1/4	**GS40P484020**	Price
3/4	3/8	**GS40P486020**	Price
3/4	1/2	**GS40P488020**	Price
3/4	3/4	**GS40P4812020**	Price
3/4	1	**GS40P4816020**	Price
3/4	1-1/4	**GS40P4820020**	Price
3/4	1-1/2	**GS40P4824020**	Price
3/4	1-3/4	**GS40P4828020**	Price
3/4	2-1/8	**GS40P4834020**	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 3/8			
Outside Dia. (in.)	Length	Order No.	Price
5/8	1/4	**GS40P404024**	Price
5/8	5/16	**GS40P405024**	Price
5/8	3/8	**GS40P406024**	Price
5/8	1/2	**GS40P408024**	Price
5/8	5/8	**GS40P4010024**	Price
5/8	3/4	**GS40P4012024**	Price
5/8	1	**GS40P4016024**	Price
5/8	1-1/4	**GS40P4020024**	Price
5/8	1-3/8	**GS40P4022024**	Price
5/8	1-3/4	**GS40P4028024**	Price
3/4	1/4	**GS40P484024**	Price
3/4	3/8	**GS40P486024**	Price
3/4	1/2	**GS40P488024**	Price
3/4	5/8	**GS40P4810024**	Price
3/4	3/4	**GS40P4812024**	Price
3/4	1	**GS40P4816024**	Price
3/4	1-1/4	**GS40P4820024**	Price
3/4	1-1/2	**GS40P4824024**	Price
3/4	2-1/8	**GS40P4834024**	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 7/16			
Outside Dia. (in.)	Length	Order No.	Price
5/8	3/8	**GS40P406028**	Price
5/8	1/2	**GS40P408028**	Price
5/8	5/8	**GS40P4010028**	Price
5/8	3/4	**GS40P4012028**	Price
5/8	1	**GS40P4016028**	Price
5/8	1-1/4	**GS40P4020028**	Price
5/8	1-1/2	**GS40P4024028**	Price
5/8	1-3/4	**GS40P4028028**	Price
5/8	2-1/8	**GS40P4034028**	Price
3/4	1/2	**GS40P488028**	Price
3/4	3/4	**GS40P4812028**	Price
3/4	1	**GS40P4816028**	Price
3/4	1-1/4	**GS40P4820028**	Price
3/4	1-1/2	**GS40P4824028**	Price
3/4	1-3/4	**GS40P4828028**	Price
3/4	2-1/8	**GS40P4834028**	Price

Drill Bushings (cont.)

Type - Headless Press Fit (P) Inside Dia. (in.) - 1/2			
Outside Dia. (in.)	Length	Order No.	Price
3/4	1/2	GS40P488032	Price
3/4	5/8	GS40P4810032	Price
3/4	3/4	GS40P4812032	Price
3/4	1	GS40P4816032	Price
3/4	1-1/4	GS40P4820032	Price
3/4	1-3/8	GS40P4822032	Price
3/4	1-3/4	GS40P4828032	Price
3/4	2-1/8	GS40P4834032	Price
3/4	2-1/2	GS40P4840032	Price
7/8	1/2	GS40P568032	Price
7/8	5/8	GS40P5610032	Price
7/8	3/4	GS40P5612032	Price
7/8	1	GS40P5616032	Price
7/8	1-1/4	GS40P5620032	Price
7/8	1-3/8	GS40P5622032	Price
7/8	1-1/2	GS40P5624032	Price
7/8	1-3/4	GS40P5628032	Price
1	1/2	GS40P648032	Price
1	3/4	GS40P6412032	Price
1	1	GS40P6416032	Price
1	1-3/8	GS40P6422032	Price
1	1-1/2	GS40P6424032	Price
1	2-1/2	GS40P6440032	Price
1	3	GS40P6448032	Price

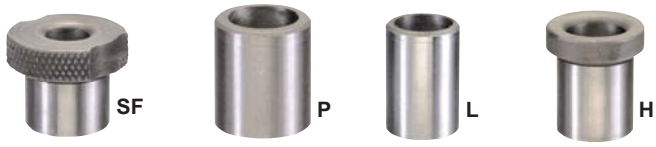
Type - Headless Press Fit (P) Inside Dia. (in.) - 9/16			
Outside Dia. (in.)	Length	Order No.	Price
7/8	1/2	GS40P568036	Price
7/8	5/8	GS40P5610036	Price
7/8	3/4	GS40P5612036	Price
7/8	1	GS40P5616036	Price
7/8	1-3/8	GS40P5622036	Price
1	3/4	GS40P6412036	Price
1	1	GS40P6416036	Price
1	1-1/4	GS40P6420036	Price
1	1-1/2	GS40P6424036	Price
1	1-3/4	GS40P6428036	Price
1	2-1/8	GS40P6434036	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 5/8			
Outside Dia. (in.)	Length	Order No.	Price
7/8	1/2	GS40P568040	Price
7/8	5/8	GS40P5610040	Price
7/8	3/4	GS40P5612040	Price
7/8	1	GS40P5616040	Price
7/8	1-3/8	GS40P5622040	Price
1	1/2	GS40P648040	Price
1	3/4	GS40P6412040	Price
1	1	GS40P6416040	Price
1	1-3/8	GS40P6422040	Price
1	1-1/2	GS40P6424040	Price
1	1-3/4	GS40P6428040	Price
1	2-1/2	GS40P6440040	Price
1	3	GS40P6448040	Price
1-3/8	1/2	GS40P888040	Price
1-3/8	3/4	GS40P8812040	Price
1-3/8	1	GS40P8816040	Price
1-3/8	1-3/4	GS40P8828040	Price
1-3/8	2	GS40P8832040	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 11/16			
Outside Dia. (in.)	Length	Order No.	Price
1	1/2	GS40P648044	Price
1	3/4	GS40P6412044	Price
1	1	GS40P6416044	Price
1	1-1/4	GS40P6420044	Price
1	1-1/2	GS40P6424044	Price
1	1-3/8	GS40P6422044	Price
1-3/8	1-3/4	GS40P8828044	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 3/4			
Outside Dia. (in.)	Length	Order No.	Price
1	1/2	GS40P648048	Price
1	5/8	GS40P6410048	Price
1	3/4	GS40P6412048	Price

Fractional sizes shown, other sizes available. Call for price and availability.



Type - Headless Press Fit (P) Inside Dia. (in.) - 3/4			
Outside Dia. (in.)	Length	Order No.	Price
1	1	GS40P6416048	Price
1	1-1/4	GS40P6420048	Price
1	1-3/8	GS40P6422048	Price
1	1-1/2	GS40P6424048	Price
1	2-1/2	GS40P6440048	Price
1	3	GS40P6448048	Price
1-3/8	5/8	GS40P8810048	Price
1-3/8	3/4	GS40P8812048	Price
1-3/8	1	GS40P8816048	Price
1-3/8	1-1/4	GS40P8820048	Price
1-3/8	1-3/8	GS40P8822048	Price
1-3/8	1-3/4	GS40P8828048	Price
1-3/8	2	GS40P8832048	Price
1-3/8	3	GS40P8848048	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 13/16			
Outside Dia. (in.)	Length	Order No.	Price
1-3/8	1/2	GS40P888052	Price
1-3/8	1-1/4	GS40P8820052	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 7/8			
Outside Dia. (in.)	Length	Order No.	Price
1-1/4	1	GS40P8016056	Price
1-3/8	5/8	GS40P8810056	Price
1-3/8	3/4	GS40P8812056	Price
1-3/8	1	GS40P8816056	Price
1-3/8	1-3/4	GS40P8828056	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 15/16			
Outside Dia. (in.)	Length	Order No.	Price
1-3/8	1/2	GS40P888060	Price
1-3/8	3/4	GS40P8812060	Price
1-3/8	1	GS40P8816060	Price
1-3/8	1-3/8	GS40P8822060	Price
1-3/8	1-1/2	GS40P8824060	Price

Type - Headless Press Fit (P) Inside Dia. (in.) - 1			
Outside Dia. (in.)	Length	Order No.	Price
1-3/8	1/2	GS40P888100	Price
1-3/8	5/8	GS40P8810100	Price
1-3/8	3/4	GS40P8812100	Price
1-3/8	1	GS40P8816100	Price
1-3/8	1-1/4	GS40P8820100	Price
1-3/8	1-3/8	GS40P8822100	Price
1-3/8	1-3/4	GS40P8828100	Price
1-3/8	2	GS40P8832100	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 1/16			
Outside Dia. (in.)	Length	Order No.	Price
5/16	1/2	GS40SF208004	Price
5/16	3/4	GS40SF2012004	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 1/8			
Outside Dia. (in.)	Length	Order No.	Price
5/16	5/16	GS40SF205008	Price
5/16	3/8	GS40SF206008	Price
5/16	1/2	GS40SF208008	Price
5/16	3/4	GS40SF2012008	Price
5/16	1	GS40SF2016008	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 3/16			
Outside Dia. (in.)	Length	Order No.	Price
5/16	5/16	GS40SF205012	Price
5/16	3/8	GS40SF206012	Price
5/16	1/2	GS40SF208012	Price
5/16	5/8	GS40SF2010012	Price
5/16	3/4	GS40SF2012012	Price
5/16	1	GS40SF2016012	Price
1/2	5/16	GS40SF325012	Price
1/2	1/2	GS40SF328012	Price
1/2	3/4	GS40SF3212012	Price
1/2	1	GS40SF3216012	Price
1/2	1-3/8	GS40SF3222012	Price
1/2	1-3/4	GS40SF3228012	Price

Drill Bushings (cont.)

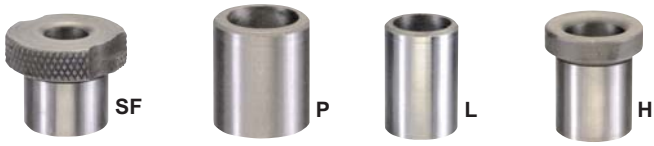
Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 1/4			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
7/16	1/2	**GS40SF288016**	Price
7/16	5/8	**GS40SF2810016**	Price
7/16	3/4	**GS40SF2812016**	Price
7/16	1	**GS40SF2816016**	Price
1/2	5/16	**GS40SF325016**	Price
1/2	3/8	**GS40SF326016**	Price
1/2	1/2	**GS40SF328016**	Price
1/2	3/4	**GS40SF3212016**	Price
1/2	1	**GS40SF3216016**	Price
1/2	1-3/8	**GS40SF3222016**	Price
1/2	1-1/2	**GS40SF3224016**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 5/16			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
1/2	5/16	**GS40SF325020**	Price
1/2	3/8	**GS40SF326020**	Price
1/2	1/2	**GS40SF328020**	Price
1/2	3/4	**GS40SF3212020**	Price
1/2	1	**GS40SF3216020**	Price
1/2	2-1/8	**GS40SF3234020**	Price
9/16	1/4	**GS40SF364020**	Price
9/16	1/2	**GS40SF368020**	Price
9/16	5/8	**GS40SF3610020**	Price
9/16	1	**GS40SF3616020**	Price
3/4	3/8	**GS40SF486020**	Price
3/4	1/2	**GS40SF488020**	Price
3/4	3/4	**GS40SF4812020**	Price
3/4	1	**GS40SF4816020**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 3/8			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
5/8	3/8	**GS40SF406024**	Price
5/8	1/2	**GS40SF408024**	Price
5/8	5/8	**GS40SF4010024**	Price
5/8	3/4	**GS40SF4012024**	Price
5/8	1	**GS40SF4016024**	Price
3/4	3/8	**GS40SF486024**	Price
3/4	1/2	**GS40SF488024**	Price
3/4	3/4	**GS40SF4812024**	Price
3/4	1	**GS40SF4816024**	Price
3/4	1-3/8	**GS40SF4822024**	Price
3/4	1-1/2	**GS40SF4824024**	Price
3/4	2-1/8	**GS40SF4834024**	Price
3/4	2-1/2	**GS40SF4840024**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 7/16			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
5/8	1/2	**GS40SF408028**	Price
5/8	5/8	**GS40SF4010028**	Price
5/8	3/4	**GS40SF4012028**	Price
5/8	1	**GS40SF4016028**	Price
5/8	1-1/4	**GS40SF4020028**	Price
3/4	3/8	**GS40SF486028**	Price
3/4	1/2	**GS40SF488028**	Price
3/4	3/4	**GS40SF4812028**	Price
3/4	1	**GS40SF4816028**	Price
3/4	1-3/8	**GS40SF4822028**	Price
3/4	1-1/2	**GS40SF4824028**	Price
3/4	2-1/8	**GS40SF4834028**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 1/2			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
3/4	3/8	**GS40SF486032**	Price
3/4	1/2	**GS40SF488032**	Price
3/4	3/4	**GS40SF4812032**	Price
3/4	1	**GS40SF4816032**	Price
3/4	1-1/2	**GS40SF4824032**	Price
3/4	1-3/4	**GS40SF4828032**	Price
3/4	2-1/8	**GS40SF4834032**	Price
3/4	2-1/2	**GS40SF4840032**	Price
1	1/2	**GS40SF648032**	Price
1	3/4	**GS40SF6412032**	Price
1	1	**GS40SF6416032**	Price
1	1-3/4	**GS40SF6428032**	Price
1	2-1/8	**GS40SF6434032**	Price



Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 9/16			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
3/4	3/8	**GS40SF486036**	Price
3/4	1/2	**GS40SF488036**	Price
3/4	3/4	**GS40SF4812036**	Price
3/4	1	**GS40SF4816036**	Price
3/4	1-3/8	**GS40SF4822036**	Price
3/4	1-3/4	**GS40SF4828036**	Price
3/4	2-1/8	**GS40SF4834036**	Price
3/4	2-1/2	**GS40SF4840036**	Price
3/4	3	**GS40SF4848036**	Price
1	3/4	**GS40SF6412036**	Price
1	1-3/4	**GS40SF6428036**	Price
1	1-3/8	**GS40SF6422036**	Price
1	2-1/2	**GS40SF6440036**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 5/8			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
7/8	1/2	**GS40SF568040**	Price
7/8	5/8	**GS40SF5610040**	Price
7/8	3/4	**GS40SF5612040**	Price
7/8	1	**GS40SF5616040**	Price
1	3/4	**GS40SF6412040**	Price
1	1	**GS40SF6416040**	Price
1	1-3/8	**GS40SF6422040**	Price
1	2-1/2	**GS40SF6440040**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 11/16			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
1	1/2	**GS40SF648044**	Price
1	1	**GS40SF6416044**	Price
1	1-3/8	**GS40SF6422044**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 3/4			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
1	1/2	**GS40SF648048**	Price
1	3/4	**GS40SF6412048**	Price
1	1	**GS40SF6416048**	Price
1	1-3/8	**GS40SF6422048**	Price
1	1-1/2	**GS40SF6424048**	Price
1	2-1/8	**GS40SF6434048**	Price
1	2-1/2	**GS40SF6440048**	Price
1	3	**GS40SF6448048**	Price
1-3/8	3/4	**GS40SF8812048**	Price
1-3/8	1	**GS40SF8816048**	Price
1-3/8	1-1/2	**GS40SF8824048**	Price
1-3/8	3	**GS40SF8848048**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 13/16			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
1-3/8	3/4	**GS40SF8812052**	Price
1-3/8	1	**GS40SF8816052**	Price
1-3/8	2-1/8	**GS40SF8834052**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 7/8			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
1-3/8	3/4	**GS40SF8812056**	Price
1-3/8	1-3/8	**GS40SF8822056**	Price
1-3/8	1-3/4	**GS40SF8828056**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 15/16			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
1-3/8	3/4	**GS40SF8812060**	Price

Type - Slip-Fixed Renewable (SF) Inside Dia. (in.) - 1			
Outside Dia. (in.)	**Length**	**Order No.**	**Price**
1-3/8	3/4	**GS40SF8812100**	Price
1-3/8	1	**GS40SF8816100**	Price
1-3/8	1-3/4	**GS40SF8828100**	Price
1-3/8	3/4	**GS40SF8812100**	Price

Fractional sizes shown, other sizes available call for price and availability

Auto-Adjust Toggle Clamps

- Auto-Adjust Toggle Clamp automatically adjusts to variations in work piece dimensions while maintaining constant clamping force
- Removable non-marring plastic cap is included on the 7/8" diameter pads.
- **Adjustable Clamping Force:** The integrated clamping force adjustment screw can be used to create an actually applied clamping force from 25 to 550 lbs. (max holding capacity 700 lbs.) One BESSEY® Auto-Adjust Toggle Clamp can replace a range of competitive clamps.
- **Adaptable Base Plate:** The large (2 1/4" x 2 1/2") flanged base is designed for use with 1/4" or M6 fasteners. Mounting holes are sized & spaced for easy mounting and versatility.
- **Extra large handle:** The large 1" x 2-1/8" handle offers greater user comfort and ease of operation



Model No.	Style	Bar Style	OAL Height (in.)	OAL (in.)	Spindle Size	Order No.	Price
STCHH20	Horizontal	U-Shape	1.73	6.57	1.65	**SG75STCHH20**	Price
STCHV20	Horizontal	U-Shape	1.85	6.57	1.97	**SG75STCHV20**	Price
STCHA20	Horizontal	U-Shape	2.52	6.57	2.68	**SG75STCHA20**	Price
STCIHH15	Inline	Solid base	1.26	7.13	NA	**SG75STCIHH15**	Price
STCIHA15	Inline	Solid base	1.81	7.13	NA	**SG75STCIHA15**	Price
STCVH20	Vertical	U-Shape	5.08	3.62	1.65	**SG75STCVH20**	Price
STCVH50	Vertical	U-Shape	6.38	4.57	1.97	**SG75STCVH50**	Price
STCHH50	Horizontal	U-Shape	1.79	8.35	M8	**SG75STCHH50**	Price
STCHH70	Horizontal	U-Shape	2.50	8.35	M8	**SG75STCHH70**	Price
STCIHH25	Inline	Inline	1.80	9.39	M8	**SG75STCIHH25**	Price

Vertical Hold Down Toggle Clamps Flanged Base Type

Features:

- High strength forged clamping arm for heavy-duty service
- Hardened steel pivot pins and bushings provide long life
- Black oxide finish
- Large clearance under the clamping bar
- Model No. with "R" have De-Sta-Co toggle lock plus



Model No.	Mounting Length (in.)	Base Length (in.)	OAL Width (in.)	Ht. Under Clamp Arm (in.)	Mount Dia. (in.)	OAL Height (in.)	OAL (in.)	Order No.	Price
5105	1.00	1.62	2.24	2.54	.26	6.54	4.13	**MA455105**	Price
5105R	1.00	1.62	2.24	2.54	.26	6.54	4.13	**MA455105R**	Price
5110	1.50	2.50	2.76	3.37	.35	8.70	6.33	**MA455110**	Price
5110R	1.50	2.50	2.76	3.37	.35	8.70	6.33	**MA455110R**	Price

Vertical Hold Down Toggle Clamps Solid Base Type

Features:

- High strength forged clamping arm for heavy-duty service
- Hardened steel pivot pins and bushings provide long life
- Black oxide finish
- Large clearance under the clamping bar



Model No.	Base Width (in.)	Surface From Surface to Clamp Point (in.)	OAL Height (in.)	Order No.	Price
5105B	.98	2.14	6.14	**MA455105B**	Price
5110B	1.26	3.05	8.39	**MA455110B**	Price

Straight Line Action Clamps Solid Base Type

Features:

- Reverse action allows the handle to stay out of the work zone
- Hardened steel pivot pins and bushings provide long life
- Black oxide finish with hardened plungers
- 5150 Series - Square plunger provides positive radial location



Model No.	Base Width (in.)	Plunger Ht. (in.)	Plunger Dia. (in.)	OAL Height (in.)	Order No.	Price
5130B	1.87	1.14	.75	3.40	**MA455130B**	Price
5131B	1.14	.87	.51	2.25	**MA455131B**	Price
5133B	1.57	1.14	.75	3.60	**MA455133B**	Price
5150B	1.54	1.14	.75	3.40	**MA455150B**	Price

DESTACO Straight Line Action Clamps
Flanged Base Type



Features:
- Reverse action allows the handle to stay out of the work zone
- Hardened steel pivot pins and bushings provide long life
- Black oxide finish with hardened plungers
- 5150 Series - Square plunger provides positive radial location

Model No.	Mounting Length (in.)	Moutning Width (in.)	OAL Width (in.)	Distance from Surface to Plunger (in.)	Mount Dia. (in.)	Plunger Dia. (in.)	OAL Ht. (in.)	OAL Length (in.)	Plunger Length (in.)	Order No.	Price
5130	1.75	2.31	2.99	1.38	.41	.75	2.49	11.14	1.96	**MA455130**	Price
5131	1.13	1.87	2.52	1.10	.34	.51	2.49	7.61	1.15	**MA455131**	Price
5133	1.75	2.31	2.99	1.38	.41	.75	3.84	13.05	3.24	**MA455133**	Price
5150	1.75	2.31	2.99	1.57	.41	.75	3.63	11.23	1.96	**MA455150**	Price

DESTACO Horizontal Hold Down Clamps
Flanged Base Type



Features:
- Solid clamping arm may be modified to suit requirements
- Hardened steel pivot pins and bushings provide long life
- Black oxide finish
- Model No. with “R” have De-Sta-Co toggle lock plus

Model No.	Mounting Length (in.)	Base Length (in.)	Clamp Arm Length (in.)	Base Width (in.)	OAl Width (in.)	Mount Dia. (in.)	OAL Height (in.)	OAL (in.)	Order No.	Price
5305	2.50	3.15	2.12	.98	.98	.35	1.51	8.36	**MA455305**	Price
5305R	2.50	3.15	2.12	.98	1.84	.35	1.51	8.36	**MA455305R**	Price
5310	3.63	4.63	2.63	1.50	1.50	.41	2.00	11.13	**MA455310**	Price
5310R	3.63	4.63	2.63	1.50	2.31	.41	2.00	11.13	**MA455310R**	Price

DESTACO Horizontal Hold Down Clamps
Solid Base Type

Features:
- Solid clamping arm may be modified to suit requirements
- Hardened steel pivot pins and bushings provide long life
- Black oxide finish



Model No.	OAL Width (in.)	Ht. Under Clamp Arm (in.)	OAL Height (in.)	OAL Length (in.)	Order No.	Price
5305B	.79	.81	1.20	8.36	**MA455305B**	Price
5310B	1.13	1.00	1.69	11.13	**MA455310B**	Price

DESTACO Vertical Hold Down Toggle Clamps
Solid Base Type

Features:
- High strength forged clamping arm for heavy-duty service
- Hardened steel pivot pins and bushings provide long life
- Black oxide finish
- Large clearance under the clamping bar



Model No.	Base Length (in.)	Clamp Arm Length (in.)	Base Width (in.)	OAL Width (in.)	OAL (in.)	Order No.	Price
5905B	1.51	2.49	.59	1.02	4.02	**MA455905B**	Price
5910B	2.25	3.76	.75	1.57	6.02	**MA455910B**	Price

DESTACO Vertical Hold Down Toggle Clamps
Flanged Base Type

Features:
- High strength forged clamping arm for heavy-duty service
- Hardened steel pivot pins and bushings provide long life
- Black oxide finish
- Large clearance under the clamping bar



Model No.	Mounting Length (in.)	Mounting Width (in.)	Base Length (in.)	Clamp Arm Length (in.)	Width Between Mounting Base (in.)	OAL Width (in.)	Distance from Surface to Clamp Point (in.)	Mount Dia. (in.)	OAL Height (in.)	OAL (in.)	Order No.	Price
5905	1.00	1.50	1.51	2.49	1.50	2.13	1.27	.29	6.75	4.02	**MA455905**	Price
5910	1.50	2.00	2.25	3.76	2.00	2.76	1.75	.41	9.27	6.02	**MA455910**	Price
5915	2.00	2.75	2.99	5.00	2.75	3.88	2.37	.55	11.25	7.50	**MA455915**	Price

RAPIDHOLD™ Vertical Clamps

- Light to Medium duty
- U-bar model supplied with flanged washers and cushion tipped spindle
- Solid bar model supplied with cushion tipped spindle

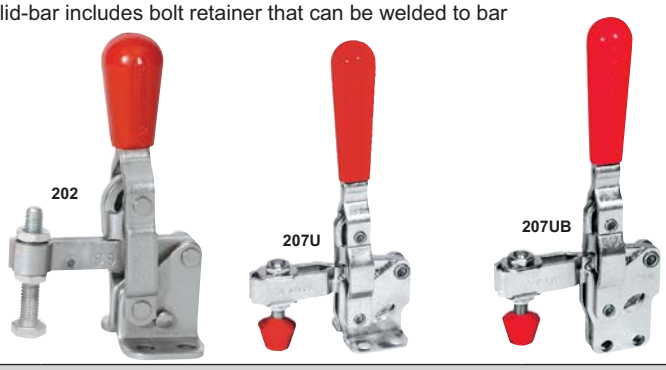


Base Type - Flanged													
Model No.	Holding Capacity	Bar Style	Overall Height (in.)	OAL (in.)	Distance Under Clamp Arm (in.)	Mount Dia. (in.)	Mounting Length (in.)	Mounting Width (in.)	Base Width (in.)	Base to Clamp Bar (in.)	Spindle Size (in.)	Order No.	Price
R101	100 lbs	U-Bar	3.06	2.13	0.74	.17	.63	.94	1.31	1.03	3/16-24 x 1.38	**RH10R101**	Price
R104	500 lbs	U-Bar	5.67	5.5	1.25	.28	.75	1.25	1.81	4.57	5/16-18 x 2.50	**RH10R104**	Price
R105	200 lbs	Straight Bar	3.94	2.52	0.89	.20	.50	1.06	1.56	1.06	1/4-20 x 1.75	**RH10R105**	Price
R106	200 lbs	U-Bar	3.94	2.52	0.89	.20	.50	1.06	1.56	1.06	1/4-20 x 1.75	**RH10R106**	Price
R110	500 lbs	U-Bar	5.67	4.57	1.25	.28	.75	1.25	1.81	2.81	5/16-18 x 2.50	**RH10R110**	Price
R113	500 lbs	T-Handle	4.65	4.57	1.25	.28	.75	1.25	1.81	2.81	5/16-18 x 2.50	**RH10R113**	Price
R115	750 lbs	U-Bar	7.99	5.55	1.73	.34	1.25	1.78	2.53	3.35	3/8-16 x 3.50	**RH10R115**	Price
R116	750 lbs	Solid Bar	7.99	5.55	1.73	.34	1.25	1.78	2.53	3.35	3/8-16 x 3.50	**RH10R116**	Price
R118	1000 lbs	U-Bar	8.87	6.89	2.01	.35	1.25	1.77	2.00	2.01	1/2-13 x 3.00	**RH10R118**	Price
R119	1000 lbs	Solid Bar	8.81	7.12	2.01	.35	1.25	1.77	2.00	2.01	1/2-13 x 3.00	**RH10R119**	Price
R120	1200 lbs	U-Bar	11.87	9.02	3.25	.48	2.00	2.75	3.00	6.02	1/2-13 x 4.50	**RH10R120**	Price
R199	200 lbs	T-Handle	3.06	2.52	0.89	.20	.50	1.06	1.56	1.06	1/4-20 x 1.75	**RH10R199**	Price
R200	200 lbs	T-Handle	3.08	2.52	0.89	.20	.50	1.06	1.56	1.06	1/4-20 x 1.75	**RH10R200**	Price
R203	500 lbs	Solid Bar	5.67	5.5	1.25	.28	.75	1.25	1.81	2.81	5/16-18 x 2.50	**RH10R203**	Price
R206	750 lbs	U-Bar	5.49	5.55	1.73	.34	1.25	1.78	2.53	3.35	3/8-16 x 3.50	**RH10R206**	Price
R207	225 lbs	U-Bar	6.66	6.14	2.76	.26	.94	.98	1.5	2.68	5/16-18 x 2.50	**RH10R207**	Price
R220	1200 lbs	Solid Bar	11.83	8.97	3.25	.48	2.00	2.75	3.75	6.02	1/2-13 x 4.50	**RH10R220**	Price

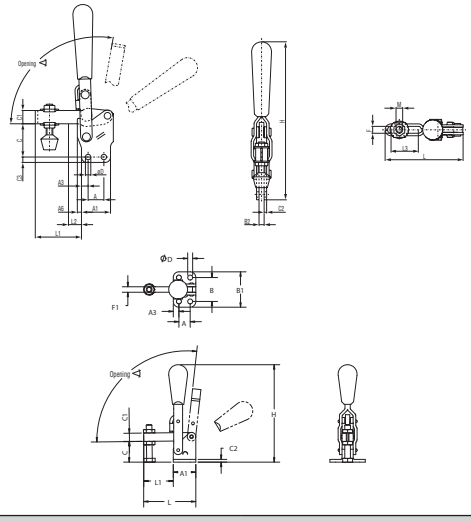
Base Type - Straight													
Model No.	Holding Capacity	Bar Style	Overall Height (in.)	OAL (in.)	Distance Under Clamp Arm (in.)	Mount Dia. (in.)	Mounting Length (in.)	Mounting Width (in.)	Base Width (in.)	Base to Clamp Bar (in.)	Spindle Size (in.)	Order No.	Price
R103	100 lbs	U-Bar	3.51	2.13	0.74	.17	.63	.94	1.31	1.03	3/16-24 x 1.38	**RH10R103**	Price
R108	200 lbs	U-Bar	4.33	2.52	0.89	.20	.50	1.06	1.56	1.06	1/4-20 x 1.75	**RH10R108**	Price
R109	200 lbs	Straight Bar	4.33	2.52	0.89	.20	.50	1.06	1.56	1.06	1/4-20 x 1.75	**RH10R109**	Price
R112	500 lbs	U-Bar	6.22	4.57	1.25	.28	.75	1.25	1.81	2.81	5/16-18 x 2.50	**RH10R112**	Price
R117	750 lbs	Solid Bar	8.95	5.55	1.73	.34	1.25	1.78	2.53	3.35	3/8-16 x 3.50	**RH10R117**	Price
R198	500 lbs	U-Bar	6.22	5.5	1.25	.28	.75	1.25	1.81	2.81	5/6-18 x 2.50	**RH10R198**	Price
R202	500 lbs	Solid Bar	6.22	4.57	1.25	.28	.75	1.25	1.81	2.81	5/16-18 x 2.50	**RH10R202**	Price
R204	500 lbs	Solid Bar	6.22	5.5	1.25	.28	.75	1.25	1.81	2.81	5/16-18 x 2.50	**RH10R204**	Price
R205	750 lbs	U-Bar	8.95	5.55	1.73	.34	1.25	1.78	2.53	3.35	3/8-16 x 3.50	**RH10R205**	Price
R208	1000 lbs	U-Bar	9.49	6.9	2.01	.35	1.25	1.77	2.53	2.01	1/2-13 x 3.00	**RH10R208**	Price
R209	1000 lbs	Solid Bar	9.49	6.94	2.01	.34	1.25	1.78	2.53	2.01	1/2-13 x 3.00	**RH10R209**	Price

DESTACO Vertical Hold Down Action Clamps

- Ideal for all sectors in which work is performed with holding capacities of up to 1200 lbs.
- Applications include assembly, drilling, testing, gluing, and other processing operations
- Oil-resistant ergo-handle for easy operations
- 4-Bar styles include spindle flanged-washer and nuts
- Solid-bar includes bolt retainer that can be welded to bar



MADE IN THE USA



Bar - Solid															
Base	Holding Capacity	Bar Opening	Accessory Fastener included (see below for details†)	A (in.)	B (in.)	B1 (in.)	B2 (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	L1 (in.)	M (in.)	Order No.	Price
Flanged	1000 lbs	120°	Without Spindle	1.25	1.78	2.53	-	1.98	.34	8.86	6.87	4.87	M12	**MA50247S**	Price
Straight	200 lbs	105°	202208-M M6 x 1.00 (T)	.50	-	-	.25	1.13	.22	4.75	2.31	1.31	M6	**MA50202B**	Price
Flanged	200 lbs	105°	202208-M M6 x 1.00 (T)	.50	1.06	1.57	-	.94	.22	4.31	2.31	1.31	M6	**MA50202**	Price
Flanged	375 lbs	185°	Bolt Retainer Clip	.63	1.00	1.50	-	2.69	.27	5.54	6.57	3.20	M8	**MA50317S**	Price
Straight	500 lbs	99°	Without Spindle	.75	-	-	.24	1.55	.28	7.48	5.02	3.45	M8	**MA50207LB**	Price
Flanged	500 lbs	99°	Without Spindle	.75	1.25	1.73	-	1.25	.28	6.93	5.02	3.45	M8	**MA50207L**	Price
Flanged	500 lbs	99°	Without Spindle	.75	1.25	1.73	-	1.25	.28	6.93	3.75	2.19	M8	**MA50207S**	Price
Flanged	750 lbs	103°	Without Spindle	1.26	1.77	2.56	-	1.67	.33	8.15	6.61	3.65	M10	**MA50210SR**	Price

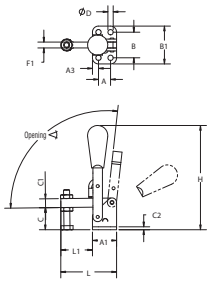
DESTACO Vertical Hold Down Action Clamps (cont.)

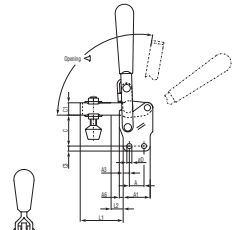
MADE IN THE USA











Bar - Solid														
Base	Holding Capacity	Bar Opening	Accessory Fastener included (see below for details†)	A (in.)	B (in.)	B1 (in.)	B2 (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	L1 (in.)	M (in.)	Order No.	Price
Flanged	750 lbs	103°	Without Spindle	1.26	1.77	2.56	-	1.67	.33	8.15	5.53	3.65	M10	**MA50210S**	Price
Flanged	500 lbs	99°	Without Spindle	.75	1.25	1.70	-	1.25	.28	6.90	4.58	3.45	M8	**MA50207LR**	Price

Bar - U-Shape														
Base	Holding Capacity	Bar Opening	Accessory Fastener included (see below for details†)	A (in.)	B (in.)	B1 (in.)	B2 (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	L1 (in.)	M (in.)	Order No.	Price
Flanged	100 lbs	100°	305208-M M5 x 0.7	.63	.94	1.34	-	.63	.17	3.08	2.04	1.04	M5	**MA50201U**	Price
Flanged	1000 lbs	120°	247208-M M12 x 1.75	1.25	1.78	2.53	-	2.00	.35	8.69	6.87	4.87	M12	**MA50247U**	Price
Flanged	1200 lbs	140°	267203-M M16 x 5.12	2.00	2.75	3.75	-	3.08	.48	11.97	8.87	5.87	M16	**MA50267U**	Price
Flanged	200 lbs	105°	202208-M M6 x 1.00	.50	1.06	1.56	-	.94	.22	4.31	2.73	1.73	M6	**MA50202U**	Price
Flanged	200 lbs	105°	202208-M M6 x 1.00	.50	1.06	1.56	-	.94	.22	4.31	3.27	2.27	M6	**MA50202UL**	Price
Flanged	375 lbs	99°	225208-M M8 x 1.25	.75	1.25	1.73	-	1.25	.28	6.93	5.41	3.85	M8	**MA50207UL**	Price
Flanged	375 lbs	99°	225208-M M8 x 1.25	.75	1.25	1.73	-	1.25	.28	6.93	4.58	2.09	M8	**MA50207UR**	Price
Flanged	375 lbs	99°	225208-M M8 x 1.25	.75	1.25	1.73	-	1.25	.28	6.93	3.68	2.15	M8	**MA50207U**	Price
Flanged	375 lbs	185°	507208-M M8 x 1.25	.63	1.00	1.50	-	2.68	.27	5.28	6.53	2.53	M8	**MA50317U**	Price
Flanged	600 lbs	103°	240208-M M10 x 1.50	1.25	1.77	2.56	-	1.67	.33	8.19	6.72	3.66	M10	**MA50210UR**	Price
Flanged	600 lbs	103°	240208-M M10 x 1.50	1.77	1.78	2.56	-	1.67	.33	8.19	5.54	3.63	M10	**MA50210U**	Price
Straight	100 lbs	100°	305208-M M5 x 0.7	.63	-	-	.16	.88	.17	3.53	2.04	1.04	M5	**MA50201UB**	Price
Straight	200 lbs	105°	202208-M M6 x 1.00	.50	-	-	.25	1.13	.22	4.40	2.73	1.73	M6	**MA50202UB**	Price
Straight	375 lbs	99°	225208-M M8 x 1.25	.75	-	-	.24	1.55	.28	7.48	3.68	2.15	M8	**MA50207UB**	Price
Straight	375 lbs	99°	225208-M M8 x 1.25	.75	-	-	.24	1.55	.28	7.48	5.41	3.85	M8	**MA50207ULB**	Price
Straight	600 lbs	103°	240208-M M10 x 1.50	1.25	-	-	.31	2.19	.33	8.19	5.54	3.63	M10	**MA50210UB**	Price

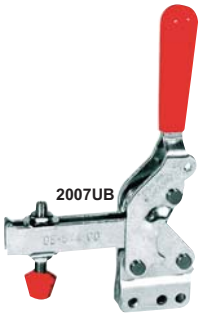
(T) Flanged washer not included
† U-bar style comes with spindle, nuts and flanged-washer, solid bar comes with bolt retainer clip

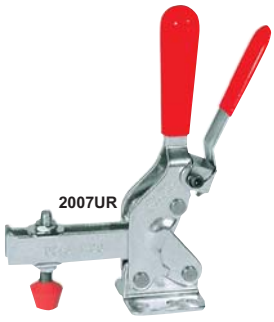
DESTACO Vertical Hold Down Toggle Locking Clamps

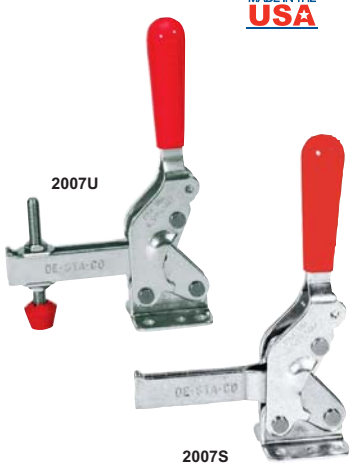
2000 Series

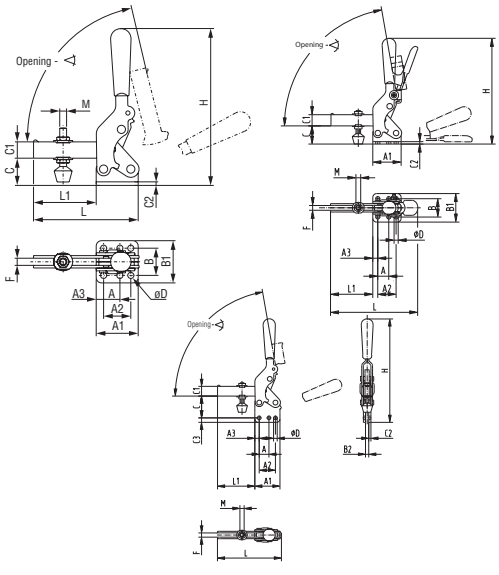
- Designed with 2-3x's higher holding capacity
- Compact design
- Great hand clearance for pinch point protection
- More flexibility
- Ideal for fixtures and applications with restricted space where high holding capacity is required

MADE IN THE USA



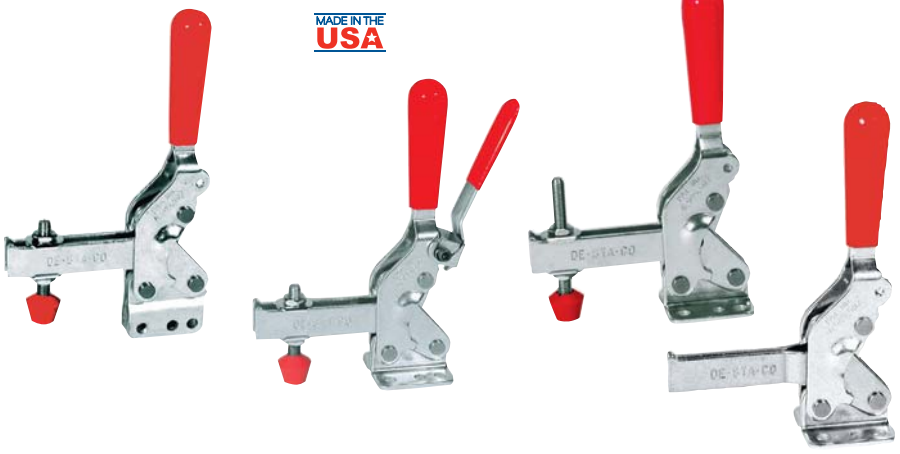


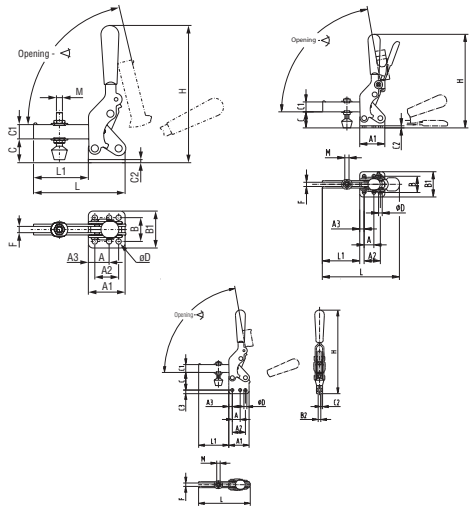




Bar Style - Solid										
Base	Holding Capacity	Bar Opening	Accessory Fastener	A (in.)	B (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	Order No.	Price
Flanged	1000 lbs	76	Bolt Retainer Clip	.75	1.25	1.25	.28	7.17	4.81	**MA502007S**	Price
Flanged	1400 lbs	78	Bolt Retainer Clip	1.25	1.78	1.70	.34	9.08	6.09	**MA502010S**	Price
Flanged	600 lbs	75	Bolt Retainer Clip	.50	1.06	.95	.22	4.72	3.29	**MA502002S**	Price
Flanged	1400 lbs	78	Belt Retainer Clip	1.25	1.78	1.70	.34	9.08	7.51	**MA502010SR**	Price

DESTACO Vertical Hold-Down Toggle Locking Clamps (cont.)





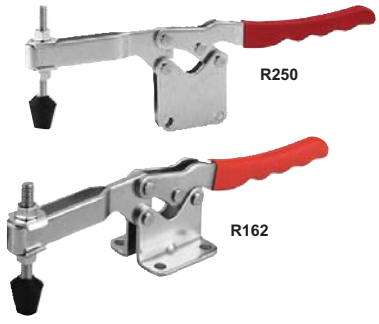
Bar Style - U-Shape											
Base	Holding Capacity	Bar Opening	Accessory Fastener	A (in.)	B (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	Order No.	Price
Flanged	600 lbs	75	215208-M M6 x 1.00	.50	1.06	.95	.22	4.72	3.29	**MA502002U**	Price
Flanged	600 lbs	75	215208-M M6 x 1.00	.50	1.06	.95	.22	4.72	4.27	**MA502002UR**	Price
Flanged	1000 lbs	76	2007208-M M8 x 1.25	.75	1.25	1.25	.28	7.17	4.81	**MA502007U**	Price
Flanged	1000 lbs	76	2007208-M M8 x 1.25	.75	1.25	1.25	.28	7.17	6.60	**MA502007UR**	Price
Flanged	1400 lbs	78	240208-M M10 x 1.50	1.25	1.78	1.70	.34	9.08	6.09	**MA502010U**	Price
Flanged	1400 lbs	78	240208-M M10 x 1.50	1.25	1.78	1.70	.34	9.08	7.51	**MA502010UR**	Price

RAPIDHOLD Horizontal Handle Toggle Clamps

- Medium Duty
- Low profile
- Solid bar model supplied with nylon spindle
- U-bar model supplied with flanged washers and cushion tipped spindle

New!





Base Type - Flanged												
Model No.	Overall Height (in.)	Overall Length (in.)	Height Under Clamp Arm (in.)	Mounting Length (in.)	Mounting Width (in.)	Base Width (in.)	Distance From Base to Clamp Arm (in.)	Mount Dia. (in.)	Holding Capacity	Spindle Size (in.)	Order No.	Price
R155	1.02	3.11	0.31	.44	.63	.94	.70	.17	60 lbs	#8-32 x 0.75	**RH10R155**	Price
R156	1.02	3.11	0.31	.44	.63	.94	.70	.17	60 lbs	#8-32 x 0.75	**RH10R156**	Price
R157	1.5	5.9	1	1.00	.87	1.42	2.21	.21	200 lbs	1/4-20 x 2.13	**RH10R157**	Price
R159	1.97	6.62	1.37	.82	.87	1.38	2.76	.35	500 lbs	5/16-18 x 3.00	**RH10R159**	Price
R162	2.5	11.5	1.75	1.63	1.63	2.25	4.21	.33	750 lbs	3/8-16 x 3.50	**RH10R162**	Price
R163	1.39	2.25	0.58	.53	.63	1.00	1.21	.17	150 lbs	3/16-24 x 1.38	**RH10R163**	Price
R165	3.53	3.79	0.87	.75	1.16	1.81	1.97	.28	300 lbs	5/16-18 x 2.50	**RH10R165**	Price
R166	3.47	5.32	1.31	1.22	1.5	2.47	2.78	.31	700 lbs	3/8-16 x 3.50	**RH10R166**	Price
R246	1.12	4.57	0.75	.53	.66	1.06	1.46	.20	150 lbs	#8-32 x 0.75	**RH10R246**	Price
R248	1.5	5.59	1	1.00	.87	1.46	2.21	.25	200 lbs	1/4-20 x 2.13	**RH10R248**	Price
R250	3.23	11.5	1.75	1.63	1.63	2.25	4.21	.33	750 lbs	3/8-16*3.5	**RH10R250**	Price

Base Type - Straight												
Model No.	Overall Height (in.)	Overall Length (in.)	Height Under Clamp Arm (in.)	Mounting Length (in.)	Mounting Width (in.)	Base Width (in.)	Distance From Base to Clamp Arm (in.)	Mount Dia. (in.)	Holding Capacity	Spindle Size (in.)	Order No.	Price
60300	.73	3.24	.43	.41	-	-	.87	.17	60 lbs	#8-32 x 0.75	**RH1060300**	Price
R158	1.99	5.59	1	1.00	.87	1.46	2.21	.25	200 lbs	1/4-20 x 2.13	**RH10R158**	Price
R161	2.42	6.62	1.37	.82	.87	1.38	2.76	.35	500 lbs	5/16-18 x 3.00	**RH10R161**	Price
R245	1.02	3.11	0.31	.44	.63	.94	.70	.17	60 lbs	#8-32 x 0.75	**RH10R245**	Price
R249	1.99	5.59	1	1.00	.89	1.46	2.21	.25	200 lbs	1/4-20 x 2.13	**RH10R249**	Price

Horizontal Clamps

MADE IN THE USA

- Used in drilling, testing, gluing and other processing applications.
- Suitable for use in welding, fixtures, in gauge manufacturing as well as in the woodworking industry.



215U



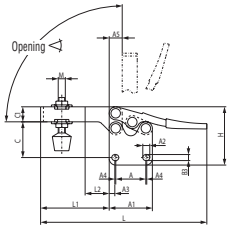
305U

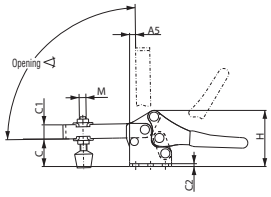


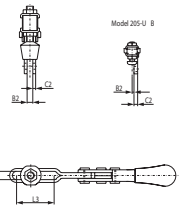
217U

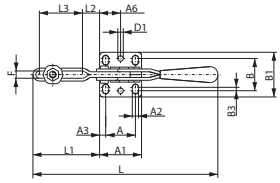


215U









Bar Style	Base	Holding Capacity	Bar Opening	Spindle Assembly Included with Flanged washer	A (in.)	A3 (in.)	B (in.)	B2 (in.)	B3 (in.)	C (in.)	H (in.)	L (in.)	M (in.)	Order No.	Price
Solid	Flanged	200 lbs	90°	(202208-M) 6mm-1.00 x 44mm Flat Tip	1.00	.19	.88	-	.20	1.03	1.53	5.50	1/4	**MA50215S**	Price
Solid	Flanged	60 lbs	90°	(205208-M) 4mm-.07 x 32mm Flat Tip	.44	.16	.62	-	.17	.36	.67	2.78	#10	**MA50205S**	Price
U-Shape	Flanged	150 lbs	90°	(213208-M) 5mm-0.8 x 34mm Flat Tip	.53	.23	.75	-	.06	.65	1.40	4.06	#10	**MA50213U**	Price
U-Shape	Flanged	150 lbs	92°	(MA50-305208-M) 5mm-0.8 x 29mm Flat Tip	.53	.25	.63	-	-	.48	1.43	2.21	#10	**MA50305U**	Price
U-Shape	Flanged	200 lbs	90°	(202208-M) 6mm-1.00 x 44mm Flat Tip	1.00	.19	.88	-	-	1.00	1.53	5.50	1/4	**MA50215U**	Price
U-Shape	Flanged	200 lbs	92°	(202208-M) 6mm-1.00 x 44mm Flat Tip	1.03	.21	1.12	-	.12	.92	1.95	7.00	1/4	**MA50217U**	Price
U-Shape	Flanged	350 lbs	92°	(MA50-307208-M) 8mm-1.25 x 43mm Flat Tip	.91	.40	1.14	-	-	.89	2.36	3.61	5/16	**MA50307U**	Price
U-Shape	Flanged	500 lbs	90°	(225208-M) 8mm-1.25 x 53mm Flat Tip	1.00	.25	.88	-	-	1.31	1.84	6.81	5/16	**MA50225U**	Price
U-Shape	Flanged	500 lbs	92°	(225208-M) 8mm-1.25 x 53mm Flat Tip	1.02	.28	1.24	-	.10	1.25	2.40	7.50	5/16	**MA50227U**	Price
U-Shape	Flanged	60 lbs	90°	(205208-M) 4mm-.07 x 32mm Flat Tip	.44	.16	.62	-	.17	.31	.67	2.65	#10	**MA50205U**	Price
U-Shape	Flanged	750 lbs	90°	(MA50-240208-M) 10mm-1.50 x 79mm Flat Tip	1.63	.37	1.63	-	-	1.75	2.55	10.87	3/8	**MA50235U**	Price
U-Shape	Flanged	750 lbs	92°	(MA50-240208-M) 10mm-1.50 x 79mm Flat Tip	1.61	.31	1.69	-	.08	1.67	3.18	11.00	3/8	**MA50237U**	Price
U-Shape	Flanged	750 lbs	92°	MA50-309208	1.38	1.50	-	-	-	1.31	3.53	5.19	3/8-16	**MA50309U**	Price
U-Shape	Flanged to Right	500 lbs	90°	(225208-M) 8mm-1.25 x 53mm Flat Tip	1.00	.25	.88	-	.30	1.32	1.92	7.14	5/16	**MA50225UR**	Price
U-Shape	Flanged to Right	750 lbs	90°	(MA50-240208-M) 10mm-1.50 x 79mm Flat Tip	1.63	.37	1.63	-	.34	1.70	2.56	10.87	3/8	**MA50235UR**	Price
U-Shape	Straight	200 lbs	90°	(202208-M) 6mm-1.00 x 44mm Flat Tip	1.00	.19	-	.20	-	1.28	1.78	5.50	1/4	**MA50215UB**	Price

New Generation Horizontal Clamps

- Offers an average of twice the holding capacity of legacy models
- Order numbers that end in “R” come with Locking Lever (R)

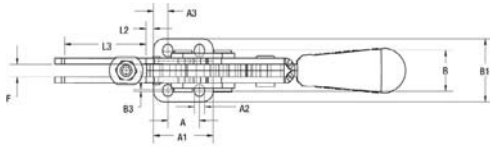


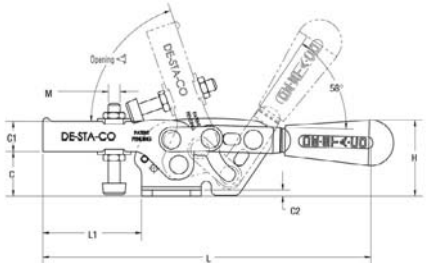
Locking Lever
2017UR

MADE IN THE USA



2017U



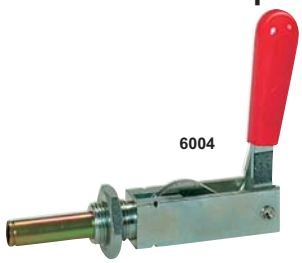


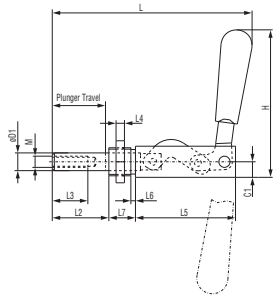
Bar Style	Toggle Lock Plus Release Lever	Holding Capacity	A (in.)	A2 (in.)	B (in.)	C (in.)	H (in.)	L (in.)	M (in.)	Order No.	Price
U-Shape	No	295 lbs	.53	.17	.70	.75	1.30	5.88	M5	**MA502013U**	Price
U-Shape	No	560 lbs	1.03	.27	1.21	.98	1.95	8.65	M6	**MA502017U**	Price
U-Shape	No	840 lbs	1.03	.27	1.21	1.32	2.25	9.88	M8	**MA502027U**	Price
U-Shape	Yes	295 lbs	.53	.17	.70	.75	1.30	5.88	M5	**MA502013UR**	Price
U-Shape	Yes	560 lbs	1.03	.27	1.21	.98	1.95	8.65	M6	**MA502017UR**	Price
U-Shape	Yes	840 lbs	1.03	.27	1.21	1.32	2.25	9.88	M8	**MA502027UR**	Price

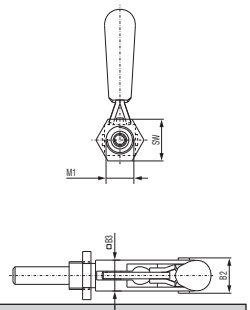
DESTACO Threaded Body Straight Line Action Clamps

- Versatile and compact straight line action clamps
- Threaded body for through hole mounting

MADE IN THE USA







Model No.	Holding Capacity	Plunger Travel (in.)	B2 (in.)	C1 (in.)	OD1 (in.)	H (in.)	L (in.)	L1 (in.)	L2 (in.)	M1 (in.)	Order No.	Price
602	200 lbs	.75	1.04	.37	.37	3.13	2.43	1.31	.97	5/8-18	**MA50602**	Price
604	300 lbs	1.50	1.30	.44	.44	4.16	4.27	2.18	1.82	3/4-16	**MA50604**	Price
6004	450 lbs	1.50	1.00	.44	.50	4.21	5.52	2.71	1.59	3/4-16	**MA506004**	Price
624	700 lbs	2.63	1.81	.75	.62	5.60	6.68	3.62	3.24	1-14	**MA50624**	Price

RAPIDHOLD Horizonal Latch Clamps

New!

- Feature handles that are in a horizontal position when the clamp is locked
- The hold down clamps direct clamping force perpendicular to the clamping arm
- A wide variety of and holding capacites are available with industry standard mounting patterns to suit your requirements



Model No.	Overall Height (in.)	Overall Length (in.)	Mounting Length (in.)	Mounting Width (in.)	Mount Dia. (in.)	Hook Dia. (in.)	Max. Distance (in.)	Min. Distance (in.)	Latch Plate OAl (in.)	Latch Plate Width (in.)	Distance From Surface to Clamp Point (in.)	Holding Capacity	Order No.	Price
R122	1.15	2.96	.63	.75	.17	.16	2.57	1.84	.79	.52	.44	360 lbs	**RH10R122**	Price
R126	1.63	4.87	.75	.25	.26	.2	3.69	2.53	1.00	.67	.48	700 lbs	**RH10R126**	Price
R129	4.27	4.73	.75	1.00	.28	.23	4.49	2.89	1.50	.67	.25	1000 lbs	**RH10R129**	Price
R130	2.92	6.64	1.63	1.5	.34	.31	5.37	3.53	1.50	1.19	.91	2000 lbs	**RH10R130**	Price
R137	4	9.69	2.25	2.25	.41	.37	7.21	5.83	2.25	3.13	1.09	4000 lbs	**RH10R137**	Price
R139	3.75	8.63	2.25	2.25	.41	.50	7.21	5.83	2.25	3.13	1.09	7500 lbs	**RH10R139**	Price

RAPIDHOLD Vertical Pull Action Latch Clamps

New!

- Provides straight line clamping/positioning action
- Most models can be locked over-center in either extended or retracted position
- Useful in a wide range of applications beyond workholding



Model No.	Overall Height (in.)	OAL (in.)	Mounting Length (in.)	Mounting Width (in.)	Mount Dia. (in.)	Hook Dia. (in.)	Max. Distance (in.)	Min. Distance (in.)	Latch Plate OAL (in.)	Latch Plate Width (in.)	Distance From Surface to Clamp Point (in.)	Holding Capacity	Order No.	Price
R124	3.35	3.11	.51	.87	.21	.16	3.09	2.04	1.00	.67	.20	500 lbs	**RH10R124**	Price
R128	4.27	4.73	.75	1.00	.28	.23	4.49	2.89	1.50	.67	.25	1000 lbs	**RH10R128**	Price
R132	5.91	5.13	1.25	1.06	.34	.31	2.11	2.14	2.13	1.19	.50	2000 lbs	**RH10R132**	Price

RAPIDHOLD Horizontal Pull Action Hook Clamps

New!

- Provides straight line clamping/positioning action
- Most models can be locked over-center in either extended or retracted position
- Useful in a wide range of applications beyond workholding

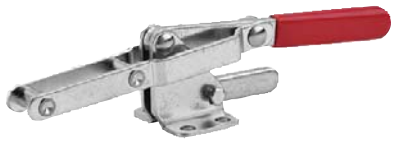


Model No	Overall Height (in.)	OAL (in.)	Mounting Length (in.)	Mounting Width (in.)	Mount Dia. (in.)	Hook Dia. (in.)	Max. Distance (in.)	Min. Distance (in.)	Holding Capacity	Order No.	Price
R133	1.44	8.31	.75	1.38	.22	.32	3.11	1.53	375 lbs	**RH10R133**	Price
R135	1.38	8.31	1.50	1.38	.26	.32	2.20	1.61	375 lbs	**RH10R135**	Price
R136	2.26	11.35	1.25	.25	.34	.37	3.60	2.75	750 lbs	**RH10R136**	Price
R138	2.68	13.24	1.13	2.38	.41	.47	3.60	2.75	1000 lbs	**RH10R138**	Price

RAPIDHOLD Horizontal Pull Action Latch Clamps

New!

- Operate with a pulling action
- Ideally suited for stationary latching applications such as a door, lid, and mold closures



Model No.	Overall Height (in.)	OAL (in.)	Mounting Length (in.)	Mounting Width (in.)	Mount Dia. (in.)	Hook Dia. (in.)	Min Distance (in.)	Holding Capacity	Order No.	Price
R121	1.87	8.31	.74	1.24	.28	.26	2.24	375 lbs	**RH10R121**	Price

RAPIDHOLD™ Push / Pull Toggle Clamps

- Provides straight line clamping/positioning action
- Most models can be locked over-center in either extended or retracted position
- Useful in a wide range of applications beyond workholding
- Handle must be allowed to rotate > 180° for over-center locking in retracted position - Handle will fall below mounting surface

New!



Base Type - Flanged										
Model No.	Overall Height (in.)	OAI (in.)	Mounting Length (in.)	Base Width (in.)	Height Under Clamp Arm (in.)	Mount Dia. (in.)	Spindle Size (in.)	Holding Capacity	Order No.	Price
30160	-	67.8	.41	1.73	-	.20	1/4 x 1.57	200 lbs	**RH1030160**	Price
30180	-	4.26	.75	2.79	-	.22	5/16 x 1.96	300 lbs	**RH1030180**	Price
R140	1.61	2.68	.63	1.06	0.5	.17	#8-32 x 0.50	100 lbs	**RH10R140**	Price
R148	3.07	5.51	1.38	2.20	0.97	.22	5/16-18 x 1.00	300 lbs	**RH10R148**	Price
R150	3.07	5.12	1.34	2.19	0.97	.20	5/16-18 x 1.00	400 lbs	**RH10R150**	Price
R151	4.33	6.75	1.63	2.25	1.75	.34	3/8 x 16 x 1.96	800 lbs	**RH10R151**	Price
R222	1.61	2.68	.63	1.06	0.5	.17	#8-32 x 0.50	100 lbs	**RH10R222**	Price
R224	3.23	4.9	1.44	1.88	0.97	.22	5/16 x 18 x 1.00	600 lbs	**RH10R224**	Price
R230	5.43	6.73	1.25	2.99	0.88	.33	3/8 x 16 x 1.96	700 lbs	**RH10R230**	Price
R231	2.84	7.06	3.01	2.25	0.81	.34	3/8 x 16 x 1.96	2500 lbs	**RH10R231**	Price
R233	3.68	6.23	1.62	2.25	1.25	.34	3/8 x 16 x 1.96	850 lbs	**RH10R233**	Price

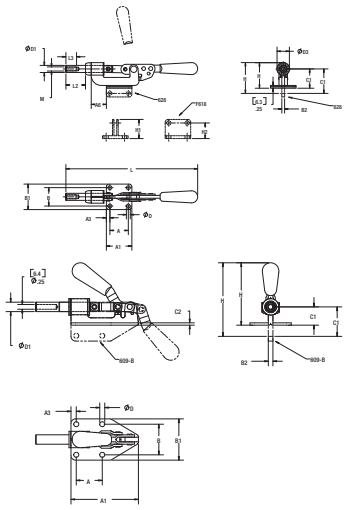
Base Type - Through Hole Mount										
Model No.	Overall Height (in.)	OAI (in.)	Mounting Length (in.)	Base Width (in.)	Height Under Clamp Arm (in.)	Mount Dia. (in.)	Spindle Size (in.)	Holding Capacity	Order No.	Price
R141	2.96	2.53	.41	1.73	0.47	.20	1/4 x 1.57	200 lbs	**RH10R141**	Price
R144	3.23	4.9	1.44	1.88	0.97	.22	5/16 x 18 x 1.00	600 lbs	**RH10R144**	Price
R145	3.86	4.53	.75	2.79	0.43	.22	5/16 x 18 x 1.00	300 lbs	**RH10R145**	Price
R149	2.67	6.01	3.00	2.19	0.68	.28	5/16 x 18 x 1.00	600 lbs	**RH10R149**	Price
R152	5.4	6.73	1.78	2.99	0.79	.33	3/8-16 x 1.25	700 lbs	**RH10R152**	Price

DESTACO Straight Line Action Flanged Clamps

- Ideal for clamping during soldering, gluing, locking, assembling, drilling, testing, positioning, and much more
- Sizes and clamp range are distinguished by their compact design
- Many versions locking both extended and retracted positions
- Zinc plated, rivets made of stainless steel, with oil resistant handles
- "R" models have the toggle Lock Plus™ lever feature

MADE IN THE USA





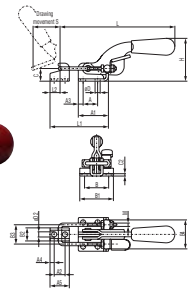
Holding Capacity	Plunger Travel	Plunger Thread	A (in.)	A5 (in.)	B (in.)	C1 (in.)	OD (in.)	OD2 (in.)	H (in.)	L	Order No.	Price
100 lbs	.63	8-32	.63	-	.63	.50	.17	-	1.27	2.61	**MA50601**	Price
100 lbs	.63	1/4-20 Ext.	.63	-	.63	.50	.17	-	1.27	2.86	**MA50601O**	Price
150 lbs	.63	M4	.63	.43	.63	.50	.19	.019	1.27	2.63	**MA506001M**	Price
300 lbs	.97	5/16-18	1.38	-	1.63	.97	.22	-	1.27	8.53	**MA50615**	Price
300 lbs	1.25	5/16-18	1.38	-	1.62	.97	.27	-	3.17	5.46	**MA50609**	Price
300 lbs	1.25	5/16-18	1.38	-	1.63	.97	.22	-	3.29	5.47	**MA50605**	Price
450 lbs	1.57	5/16-18	1.25	-	.63	.88	.20	-	2.42	6.72	**MA50606**	Price
560 lbs	.70	M6 x 1.0	1.75	-	.87	.50	.22	-	1.59	2.96	**MA506015MR**	Price
560 lbs	.70	M6 x 1.0	1.75	-	.87	.50	.22	-	1.59	2.96	**MA506015M**	Price
600 lbs	1.11	3/8-16	1.63	-	1.63	1.70	.38	-	2.25	11.63	**MA50620**	Price
600 lbs	1.25	5/16-18	1.44	.51	1.31	.97	.27	-	3.43	4.77	**MA50603R**	Price
600 lbs	1.25	5/16-18	1.44	.51	1.31	.97	.27	-	3.43	4.77	**MA50603**	Price
800 lbs	1.63	5/16-18	1.38	-	1.63	.69	.28	-	3.52	6.02	**MA50607**	Price
800 lbs	1.63	5/16-18	1.38	-	1.63	.69	.28	-	3.52	6.02	**MA50607SQ**	Price
800 lbs	1.63	3/8-16	1.62	-	1.62	1.70	.34	-	4.41	6.72	**MA50610**	Price
850 lbs	1.63	3/8-16	1.63	.75	1.63	1.25	.33	-	4.04	6.00	**MA50608**	Price
2500 lbs	2.00	3/8-16	1.38	-	1.63	.81	.34	-	3.09	7.06	**MA50630**	Price
2500 lbs	2.00	3/8-16	1.38	-	1.63	.81	.34	-	3.06	7.06	**MA50630R**	Price
7500 lbs	4.00	1/2-13	3.56	-	2.13	1.25	.41	-	4.28	12.65	**MA50640**	Price
16000 lbs	3.00	5/8-11	2.75	-	2.25	2.25	.41	-	4.84	11.16	**MA50650**	Price

DESTACO Horizontal Latch Clamp

MADE IN THE USA

- Clamps are provided with u-shaped hooks
- Ergo handle
- Ideal for quick closing of covers and flaps on rotating or stationary containers
- "R" Models have a release lever to protect against vibrations and movement of boxes
- Latch plates sold separately #375, 375R, 385





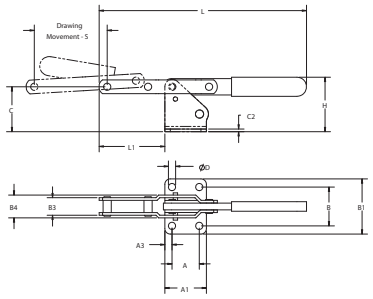
Holding Capacity	Adjustment Range	A (in.)	A2 (in.)	A5 (in.)	B (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	M	S	Order No.	Price
2000 lbs	0-0.97	1.63	.75	1.50	1.50	.94	.33	2.89	8.20	M8	2.50	**MA50341**	Price
2000 lbs	0-0.97	1.63	.75	1.50	1.50	.94	.33	2.89	8.20	M8	2.50	**MA50341R**	Price
360 lbs	0-0.36	.63	.39	.79	.75	.47	.17	1.19	3.88	M4	1.18	**MA50323**	Price
4000 lbs	0-0.81	2.25	-	-	2.25	1.13	.41	4.19	10.19	M10	3.50	**MA50375**	Price
4000 lbs	0-0.81	2.25	-	-	2.25	1.13	.41	4.19	10.19	M10	3.50	**MA50375R**	Price
720 lbs	0-0.87	.75	.56	1.00	1.25	.66	.27	2.89	6.06	M5	1.75	**MA50331R**	Price
720 lbs	0-0.87	.75	.56	1.00	1.25	.66	.27	1.97	6.07	M5	1.75	**MA50331**	Price
7500 lbs	0-1.36	2.25	-	-	2.25	1.13	.41	3.67	9.65	M12	2.19	**MA50385**	Price

DESTACO Horizontal Pull Action Hook Clamps

MADE IN THE USA

- Ideal for quick closing of covers and flaps on rotating or stationary containers
- "R" Models have a release lever to protect against vibrations and movement of boxes





Holding Capacity	Adjustment Range	A (in.)	B (in.)	C (in.)	OD (in.)	OD2 (in.)	H (in.)	L (in.)	L1 Max (in.)	M	S	Order No.	Price
200 lbs	0-0.29	.50	1.22	.56	.22	.32	1.43	6.01	1.70	M5	2.35	**MA50330**	Price
375 lbs	0-0.49	.75	1.37	.75	.22	.38	1.83	8.82	2.13	M8	4.00	**MA50351**	Price
375 lbs	0-0.49	.75	1.37	.75	.22	.38	1.85	9.45	2.13	M8	4.00	**MA50351R**	Price
375 lbs	0-0.49	1.50	.56	.86	.27	.38	1.94	8.32	1.63	M8	4.00	**MA50351B**	Price
750 lbs	0-0.94	1.25	1.94	1.42	.34	.50	2.58	11.89	2.81	M10	5.38	**MA50371**	Price
1000 lbs	0-1.17	1.13	2.37	1.81	.41	.62	2.90	13.45	3.13	M12	6.13	**MA50381**	Price

DESTACO Horizontal Pull Action Latch Clamps

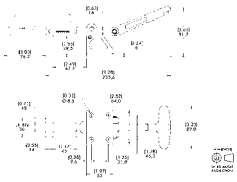
Models 301 & 311:

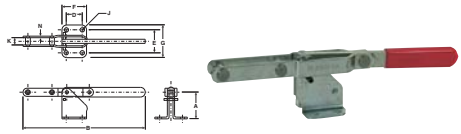
- Fixed stop automatically limits handle travel at various clamping positions once clamp is installed

Model 3011:

- Heavy duty cast steel construction with ergonomic handle
- Replaceable stainless steel pivot pins

MADE IN THE USA



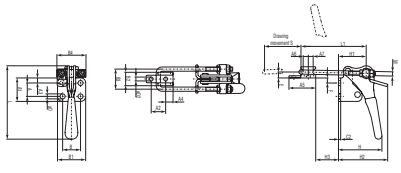


Holding Capacity	A (in.)	B (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	S	Order No.	Price
375 lbs	.75	1.25	1.50	.28	1.91	8.33	4.00	**MA50301**	Price
1200 lbs	1.25	1.78	1.91	.33	2.44	9.49	3.38	**MA50311**	Price
2000 lbs	1.25	1.78	1.87	.33	3.61	9.28	3.00	**MA503011**	Price

DESTACO Vertical Pull Action Latch Clamps

- Ideal for quick closing of covers and flaps on rotating or stationary containers
- Ergo handle
- Latch plate sold separately #374107

MADE IN THE USA





Holding Capacity	Adjustment Range	A (in.)	A2 (in.)	B (in.)	OD (in.)	OD2 (in.)	H (in.)	H2 (in.)	L (in.)	L1 Max (in.)	M	S	Order No.	Price
500 lbs	0-0.47	.50	.56	.88	.20	.17	1.91	1.97	3.49	2.56	M4	1.53	**MA50324**	Price
1000 lbs	0-0.76	.75	.81	1.00	.28	.22	2.37	2.68	4.10	3.70	M6	2.04	**MA50334**	Price
2000 lbs	0-1.22	1.25	1.06	1.44	.34	.34	3.39	3.39	5.77	5.00	M8	2.46	**MA50344**	Price
4000 lbs	0-2.12	1.25	-	1.50	.41	0	2.38	-	6.60	6.04	M10	1.75	**MA50374**	Price

DESTACO Squeeze Action Plier Hex Steel Clamp

Series 325

- Designed for attachment by welding or using mount holes



Holding Capacity	Jaw Opens	Handle Moves	A (in.)	B (in.)	F (in.)	H (in.)	Order No.	Price
800 lbs	90°	50	.50	1.78	.27	8.28	**MA50325**	Price

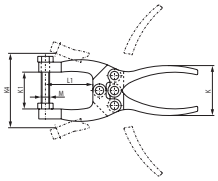
DESTACO Squeeze Action Plier Clamps

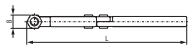
Series 460 & 480

- Drop forged alloy steel components for exceptional strength
- Two way trigger release allows for fast and easy opening







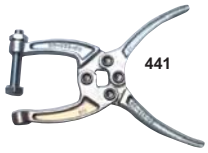


Holding Capacity	Max. Clamping Thickness (K5)	Spindle Supplied	Order No.	Price
700 lbs	1.16	468206-M	**MA50462**	Price
700 lbs	2.13	468206-M, 210203-M	**MA50463**	Price
1200 lbs	1.16	468206-M	**MA50482**	Price

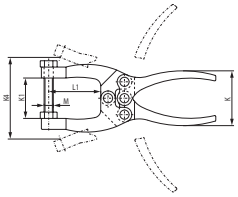
DESTACO Squeeze Action Plier Clamps

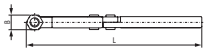
Series 424 & 441

- Compact clamps with forged alloy steel construction for high strength
- Versions ending with (2) are supplied with two adjustable spindles









Holding Capacity	Max. Clamping Thickness (K5)	Min. Opening (K1)	Spindle Size (M)	Max. Opening (K4)	Jaw Depth (L1)	Thickness (B)	Spindle Supplied	Order No.	Price
200 lbs	.63	1.00	M6	2.06	1.08	0.66	424208-M	**MA50424**	Price
200 lbs	.29	1.00	M6	2.66	1.08	0.66	(2X) 431208-M	**MA504242**	Price
350 lbs	1.03	2.80	M8	71.2	1.77	0.50	441203-M	**MA50441**	Price

BESSEY Toggle Clamp Spindles

- Spindle assemblies for Bessey toggle clamps



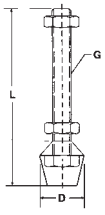
Description	Order No.	Price
STC-HH20 / STC-HV-20 / STC-HA20 / STC-IHA15 / STC-IHHI5	**SG753101627**	Price
STC-HH50 / STC-IHH25	**SG753101589**	Price
STC-HH70	**SG753101588**	Price

Flat Tip Bonded Neoprene Spindle - Inch

- Black neoprene, hardness 70-80 shore A
- Temperature range: -22°F to 212°F
- Oil resistant, labs (silicone free)
- Includes jam nuts







Brand Name - De-Sta-Co				
Thread (in.)	Length (in.)	Cap Width (in.)	Order No.	Price
#8-32	1.00	.56	**MA50105208**	Price
#8-32	1.25	.56	**MA50102208**	Price
#10-32	1.38	.56	**MA50201208**	Price
1/4-20	1.50	.66	**MA50424208**	Price
1/4-20	1.63	.66	**MA50202208**	Price
1/4-20	2.13	.66	**MA50215208**	Price
5/16-18	2.25	.83	**MA50225208**	Price
5/16-18	3.00	.83	**MA50507208**	Price
3/8-16	3.25	.88	**MA50240208**	Price
3/8-16	3.50	.88	**MA50527208**	Price
3/8-16	5.75	.88	**MA50235208**	Price
1/2-13	3.87	1.18	**MA50247208**	Price
5/8-11	5.00	1.38	**MA50267208**	Price

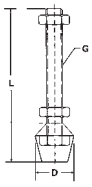
Brand Name - Rapidhold				
Thread (in.)	Length (in.)	Cap Width (in.)	Order No.	Price
1/4-20	2.17	.63	**RH10R174**	Price
5/16-18	3.05	.83	**RH10R177**	Price
3/8-16	3.62	.88	**RH10R176**	Price

Flat Cap Bonded Neoprene Spindle - Metric

- Red & blue neoprene, hardness 80-85 shore A
- Temperature range: -22°F to 212°F
- Oil resistant, labs (silicone free)
- Includes jam nuts







Brand Name - De-Sta-Co				
Thread	Length (in.)	Cap Width (in.)	Order No.	Price
M5	1.54	.39	**MA502013208M**	Price
M6	1.00	.66	**MA50431208M**	Price
M6	1.63	.66	**MA50424208M**	Price
M6	1.73	.47	**MA50202208M**	Price
M6	2.13	.47	**MA50215208M**	Price
M8	2.09	.83	**MA50225208M**	Price
M8	2.48	.83	**MA502007208M**	Price
M8	3.27	.83	**MA50507208M**	Price
M10	3.11	.78	**MA50240208M**	Price
M12	4.02	.94	**MA50247208M**	Price
M10	4.72	.78	**MA50235208M**	Price

Brand Name - Rapidhold				
Thread	Length (in.)	Cap Width (in.)	Order No.	Price
M6	.20	.63	**RH10R191**	Price
M8	2.09	.83	**RH10R194**	Price
M10	1.25	1.02	**RH10R167**	Price

Round Cap Bonded Neoprene Spindle - Metric

- Red & blue neoprene, hardness 80-85 shore A
- Temperature range: -22°F to 212°F
- Oil resistant, labs (silicone free)
- Includes jam nuts

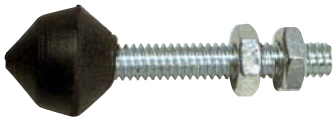


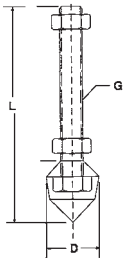
Brand Name - De-Sta-Co				
Thread	Length (in.)	Cap Width (in.)	Order No.	Price
M4	.87	.32	**MA50205208M**	Price
M4	1.26	.32	**MA50201208M**	Price
M5	1.14	.39	**MA50305208M**	Price
M5	1.34	.39	**MA50213208M**	Price
M5	1.54	.39	**MA502013208M**	Price
M6	2.13	.47	**MA50215208M**	Price
M8	1.69	.75	**MA50307208M**	Price

Brand Name - Rapidhold				
Thread	Length (in.)	Cap Width (in.)	Order No.	Price
M4	.88	.31	**RH10R180**	Price
M5	1.14	.39	**RH10R187**	Price
M8	1.78	.83	**RH10R195**	Price

DESTACO Cone-Tip Bonded Neoprene Spindle Assemblies

- Black neoprene, hardness 70-80 shore A
- Temperature range: -22°F to 212°F
- Oil resistant, labs (silicone free)
- Includes jam nuts



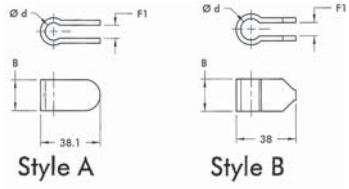


G Thread Dia. (in.)	L OAL (in.)	D Dia. of Cap (in.)	Order No.	Price
#10-32	1.50	.56	**MA50305208**	Price
1/4-20	2.25	.75	**MA50213208**	Price
3/8-16	3.50	.88	**MA50210208**	Price
5/16-18	3.00	.75	**MA50509208**	Price
5/16-18	5.50	.75	**MA50519208**	Price

Bolt Retainers

- For use with clamps featuring u-bar and open bar clamping arms





Brand Name - De-Sta-Co				
Dia. (in.)	Width	Style	Order No.	Price
1/2	0.88	A	**MA50247110**	Price
1/4	0.50	B	**MA502002115E**	Price
3/8	0.75	A	**MA50210114**	Price
5/16	0.63	A	**MA50207105**	Price
5/16	0.75	B	**MA502007115E**	Price
M10	0.78	B	**MA50210114M**	Price
M10	1.13	B	**MA502010115E**	Price
M12	0.87	B	**MA50247110M**	Price
M8	0.63	B	**MA50207105M**	Price

Brand Name - Rapidhold				
Dia. (in.)	Width	Style	Order No.	Price
1/2	1.19	A	**RH10R171**	Price
3/8	.74	A	**RH10R178**	Price
5/16	.64	A	**RH10R184**	Price

DESTACO Flanged Washers

- For use with clamps featuring u-bar and open bar clamping arms



		Stainless Steel		Zinc Plated	
Spindle Dia.	Brand Name	Order No.	Price	Order No.	Price
M10 or 3/8	De-Sta-Co	**MA50235906**	Price	**MA50235106**	Price
M12 or 1/2	De-Sta-Co	**-**	-	**MA50247109**	Price
M16 or 5/8	De-Sta-Co	**-**	-	**MA50267102**	Price
M4 or #8	De-Sta-Co	**MA50105906**	Price	**MA50105106**	Price
M5 or #10	De-Sta-Co	**MA50102911**	Price	**MA50102111**	Price
M6 or 1/4	De-Sta-Co	**MA50215905**	Price	**MA50215105**	Price
M8 or 5/16	De-Sta-Co	**MA50507907**	Price	**MA50507107**	Price

DESTACO Latch Plates



Description	Order No.	Price
Fits Clamp No. 331	**MA50331005**	Price
Fits Clamp No. 341	**MA50341005**	Price
Fits Clamp No. 375 & 385	**MA50385102**	Price

DESTACO Plunger-matic Assemblies

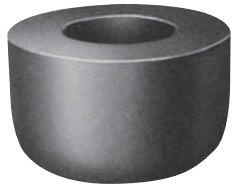
- Use with straight line action clamps
- Internal compression spring compensates for variations in material
- Zinc plated
- Includes jaw nuts



For Spindle Dia. (in.)	OAL (in.)	Thread Length (in.)	Cap Dia. (in.)	Order No.	Price
3/16-18	2.50	1.13	.88	**MA50920**	Price
5/16-18	2.50	.75	.88	**MA50905**	Price
M8	3.65	.75	.88	**MA50905M**	Price
M10	3.63	1.13	.88	**MA50920M**	Price

DESTACO Neoprene Caps

- Slip on head of hex head spindles
- Hardness 60-70 shore A
- Temperature range: -40°F to 220°F



Fits Spindle Dia. (in.)	Order No.	Price
M6 or 1/4	**MA50424107**	Price
M8 or 5/16	**MA50225119**	Price
M10 or 3/8	**MA50235119**	Price

DESTACO Polyurethane Caps

- Internally threaded
- Hardness 80 shore A
- Temperature range: -90°F to 200°F



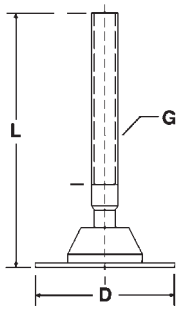
	Cone Tip		Flat Tip	
Fits Spindle Dia. (in.)	Order No.	Price	Order No.	Price
1/4	**MA50215319**	Price	**MA50215219**	Price
5/16	**MA50225319**	Price	**MA50225219**	Price
3/8	**MA50235319**	Price	**MA50235219**	Price

DESTACO Large Diameter Swivel Spindle Assembles

With Neoprene Pad

- White neoprene hardness 70-80 shore A
- Temperature range: -40°F to 220°F
- Non-marking
- Includes jam nuts



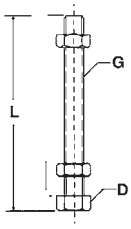


G Thread Dia. (in.)	L OAL (in.)	D Dia. of Cap (in.)	Order No.	Price
1/4-20	2.56	1.00	**MA50207209**	Price
5/16-18	2.98	1.50	**MA50507209**	Price
3/8-16	3.56	2.00	**MA50210209**	Price

Hex-Head Spindle Assemblies

- Plain hexagonal head
- Fully threaded
- Zinc plated or stainless steel
- Includes jam nuts
- †Hex head spindle made from nylon







Style - Inch					
Thread (G)	Length (L) (in.)	Material	Brand Name	Order No.	Price
#8-32	.86	Nylon	De-Sta-Co	**MA50105203†**	Price
#8-32	.90	Zinc Plated	Rapidhold	**RH10R170**	Price
1/2-13	2.84	Zinc Plated	De-Sta-Co	**MA50325203**	Price
1/2-13	3.31	Zinc Plated	Rapidhold	**RH10R175**	Price
1/2-13	3.34	Zinc Plated	De-Sta-Co	**MA50220203**	Price
1/2-13	4.81	Zinc Plated	Rapidhold	**RH10R182**	Price
10/32	1.12	Zinc Plated	De-Sta-Co	**MA50305203**	Price
3/8-16	3.00	Zinc Plated	De-Sta-Co	**MA50210203**	Price
3/8-16	4.25	Zinc Plated	De-Sta-Co	**MA50240203**	Price
3/8-16	5.25	Zinc Plated	De-Sta-Co	**MA50527203**	Price
5/16-18	1.22	Zinc Plated	De-Sta-Co	**MA50461203**	Price
5/16-18	1.22	Zinc Plated	Rapidhold	**RH10R186**	Price
5/16-18	1.97	Zinc Plated	De-Sta-Co	**MA50441203**	Price
5/16-18	2.72	Zinc Plated	De-Sta-Co	**MA50207203**	Price
5/8-11	4.42	Zinc Plated	De-Sta-Co	**MA50250203**	Price

Style - Metric					
Thread (G)	Length (L) (in.)	Material	Brand Name	Order No.	Price
M10	0.9	Zinc Plated	Rapidhold	**RH10R168**	Price
M10	1.85	Zinc Plated	De-Sta-Co	**MA50491203M**	Price
M10	3.03	Zinc Plated	De-Sta-Co	**MA50210203M**	Price
M10	4.21	Zinc Plated	De-Sta-Co	**MA50240203M**	Price
M12	3.46	Zinc Plated	De-Sta-Co	**MA50220203M**	Price
M16	5.12	Zinc Plated	De-Sta-Co	**MA50267203M**	Price
M5	1.32	Stainless Steel	Rapidhold	**RH10R188**	Price
M6	.90	Zinc Plated	Rapidhold	**RH10R190**	Price
M6	1.93	Zinc Plated	De-Sta-Co	**MA50205203M**	Price
M8	1.20	Zinc Plated	De-Sta-Co	**MA50461203M**	Price
M8	2.77	Stainless Steel	De-Sta-Co	**MA50207943M**	Price
M8	2.97	Zinc Plated	De-Sta-Co	**MA50207203M**	Price

DESTACO Swivel Foot Spindle Assemblies

- Includes jam nuts



Style - English				
Thread (in.)	Length (in.)	Cap Width (in.)	Order No.	Price
1/4-20	2.38	.50	**MA50207206**	Price
5/16-18	2.75	.56	**MA50507206**	Price
3/8-16	3.38	.63	**MA50210206**	Price
1/2-13	4.63	1.00	**MA50250206**	Price

Style - Metric				
Thread (in.)	Length (in.)	Cap Width (in.)	Order No.	Price
M6	2.44	.47	**MA50207206M**	Price
M8	2.87	.63	**MA50507206M**	Price
M10	3.00	.63	**MA50468206M**	Price
M10	3.31	.79	**MA50210206M**	Price
M12	4.72	.98	**MA50250206M**	Price

RAPIDHOLD U-Bolt Spindle Accessories



Style - Inch				
Length (in.)	Thread	Material	Order No.	Price
5.8	1/2-12	HSS	**RH1070055**	Price
5.82	3/8-16	HSS	**RH1070000**	Price
8.66	3/8-16	HSS	**RH1070125**	Price

Style - Metric				
Length (in.)	Thread	Material	Order No.	Price
.57	M4	HSS	**RH1070005**	Price
.57	M4	Stainless Steel	**RH1070010**	Price
.78	M4	HSS	**RH1070015**	Price
.78	M4	Stainless Steel	**RH1070020**	Price
.87	M5	HSS	**RH1070060**	Price
.87	M5	Stainless Steel	**RH1070065**	Price
1.00	M6	HSS	**RH1070135**	Price
1.14	M6	HSS	**RH1070025**	Price
1.14	M6	Stainless Steel	**RH1070030**	Price
1.15	M8	HSS	**RH1070035**	Price
1.15	M8	Stainless Steel	**RH1070040**	Price
1.54	M8	HSS	**RH1070045**	Price

RAPIDHOLD Stainless Steel Push / Pull Toggle Clamps

- Provides straight line clamping/positioning action
- Most models can be locked over-center in either extended or retracted position
- Useful in a wide range of applications beyond workholding
- Handle must be allowed to rotate > 180° for over-center locking in retracted position - Handle will fall below mounting surface

New!

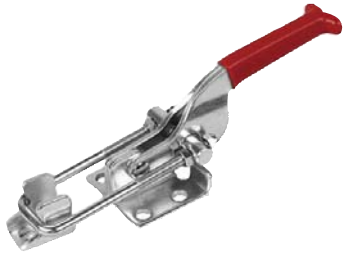


Model no.	Mounting Length (in.)	Base Width (in.)	OAL (in.)	Height Under Clamp Arm (in.)	Mount Dia. (in.)	Bar Style	Spindle Size (in.)	Order No.	Price
R142	.41	1.73	2.53	0.47	.20	Straight Line	1/4-20 x 0.63	**RH10R142**	Price
R143	.41	1.73	2.53	0.48	.20	Straight Line	1/4 x 1.57	**RH10R143**	Price
R146	.75	2.79	4.53	0.63	.22	Straight Line	5/16 x 1.96	**RH10R146**	Price
R147	.75	2.79	4.53	0.43	.22	Straight Line	5/16 x 18 x 1.00	**RH10R147**	Price

RAPIDHOLD Stainless Steel Latch Clamps

- Fixed hook
- Latch plate not included

New!



Model No.	OAL (in.)	Overall Height (in.)	Latch Plate Length (in.)	Mounting Length (in.)	Mounting Width (in.)	Latch Plate OAL (in.)	Mount Dia. (in.)	Latch Plate Width (in.)	Hook Dia. (in.)	Distance From Surface to Clamp Pt. (in.)	Max. Distance (in.)	Min. Distance (in.)	Holding Capacity	Order No.	Price
R123	2.96	1.15	.79	.63	.75	.79	.17	.52	.16	.44	2.57	1.84	360 lbs	**RH10R123**	Price
R125	3.11	3.35	1.00	.51	.87	1.00	.21	.67	.16	.20	3.09	2.04	500 lbs	**RH10R125**	Price
R127	4.87	1.63	1.00	.75	.25	1.00	.26	.67	.20	.48	3.69	2.53	700 lbs	**RH10R127**	Price
R129	4.73	4.27	1.5	.75	1.00	1.50	.28	.67	.23	.25	4.49	2.89	1000 lbs	**RH10R129**	Price
R131	6.64	2.92	1.50	1.63	1.5	1.50	.34	1.19	.31	.91	5.37	3.53	2000 lbs	**RH10R131**	Price
R134	8.31	1.44	2.00	.75	1.38	2.00	.22	-	.32	-	3.11	1.53	375 lbs	**RH10R134**	Price

RAPIDHOLD Stainless Steel Horizontal Handle Toggle Clamps

- Medium duty
- Low profile
- Solid bar model supplied with nylon spindle
- U-bar model supplied with flanged washers and cushion tipped spindle

New!



Model No.	Overall Height (in.)	OAL (in.)	Height Under Clamp Arm (in.)	Mounting Length (in.)	Mounting Width (in.)	Base Width (in.)	Distance From Base to Clamp Bar (in.)	Mount Dia. (in.)	Spindle Size (in.)	Holding Capactiy	Order No.	Price
R160	1.87	6.62	1.37	1.00	.87	1.38	2.76	.35	5/16-18 x 3.00	500 lbs	**RH10R160**	Price
R164	1.39	2.25	1.58	.53	.65	1.00	1.21	.17	3/16-24 x 1.38	150 lbs	**RH10R164**	Price
R244	1.5	5.59	1	1.00	.87	1.42	1.00	.25	#8-32 x 0.75	200 ;bs	**RH10R244**	Price

RAPIDHOLD Stainless Steel Vertical Clamps

- Light to medium duty
- U-bar model supplied with flanged washers and cushion tipped spindle
- Solid bar model supplied with cushion tipped spindle
- Stainless steel clamps are heat resisting non-magnetic stainless steel in the annealed state and slightly magnetic when cold worked

New!



Model No.	Bar Style	Overall Height (in.)	OAL (in.)	Height Under Clamp Arm. (in.)	Mounting Length (in.)	Base Length (in.)	Base Width (in.)	Distance From Base to Clamp Bar (in.)	Holding Capacity	Order No.	Price
17020	U-Bar	2.49	3.68	.89	.91	1.37	1.72	1.93	350 lbs	**RH1017020**	Price
R102	U-Bar	3.05	2.13	0.74	.63	1.00	1.31	1.03	100 lbs	**RH10R102**	Price
R107	U-Bar	3.94	2.52	0.89	.50	1.00	1.56	1.06	200 lbs	**RH10R107**	Price
R111	U-Bar	5.67	5.5	1.25	.75	1.37	1.81	2.81	500 lbs	**RH10R111**	Price

DESTACO Pneumatic Cylinders - Horizontal

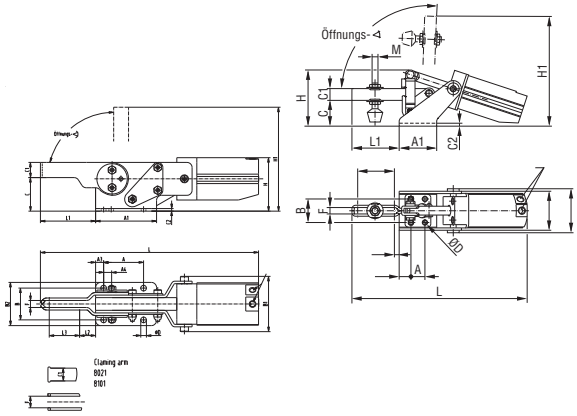
- Designed for dirty environments such as spot or MIG welding
- Comes with magnetic ring for sensing
- The non-pivoting cylinder can be hard-piped into a fixture

MADE IN THE USA


847S


8071


807U



Bar Style - Solid											
Holding Capacity	Std. Equip. (Spindle, Flanged Washers or Bolt Retainer)	A (in.)	B (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	M (in.)	Opening ± 5°	Order No.	Price
500 lbs	207105 Bolt Retainer	.75	1.25	1.38	.30	3.30	10.33	M8	97°	**MA51807S**	Price
750 lbs	-	1.00	1.50	1.61	.28	3.29	10.80	-	98°	**MA51846**	Price
750 lbs	210114 Bolt Retainer	1.25	1.79	1.81	.34	3.79	12.22	M10	99°	**MA51810S**	Price
1000 lbs	247110 Bolt Retainer	1.25	1.78	2.25	.34	4.40	15.90	M12	94°	**MA51847S**	Price
4000 lbs	-	4.25	2.75	3.85	.41	7.12	17.52	-	97°	**MA51858**	Price

Bar Style - U-Shape										
Holding Capacity	Std. Equip. (Spindle, Flanged Washers or Bolt Retainer)	A (in.)	B (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	M (in.)	Opening ± 5°	Order No.	Price
100 lbs	305208-M Spindle	.63	.94	.68	.17	1.55	5.59	M5	99°	**MA51812U**	Price
200 lbs	202208-M Spindle	.50	1.06	1.06	.22	2.55	7.69	M6	102°	**MA51802U**	Price
375 lbs	507107 Flanged Washer	.75	1.25	1.38	.28	3.00	9.33	M8	103°	**MA51807U**	Price
390 lbs	8021122 Flanged Washer	.79	1.50	1.56	.21	2.40	9.86	1/4 or M6	90°	**MA518021**	Price
450 lbs	507107 Flanged Washer	1.97	1.56	1.65	.28	2.63	10.74	5/16 or M8	90°	**MA518071**	Price
600 lbs	235106 Flanged Washer	1.25	1.79	1.79	.34	3.79	11.70	M10	99°	**MA51810U**	Price
1000 lbs	247109 Flanged Washer	1.25	1.78	2.25	.34	4.40	15.25	M12	94°	**MA51847U**	Price

DESTACO Pneumatic Cylinders – Vertical

- Used with rotary indexing tables and injection molding operations
- All 3 models can be mounted on the sides of a fixture
- 817 & 827 can also be top mounted

MADE IN THE USA


817U

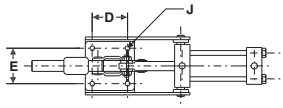
Bar Style - Solid											
Holding Capacity	Std. Equip.(Spindle, Flanged Washers or Bolt Retainer	A (in.)	B (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	M (in.)	Opening ± 5°	Order No.	Price
450 lbs	Bolt Retainer	.63	1.00	2.69	.27	7.51	6.97	5/16 or M8	95°	**MA51817S**	Price
700 lbs	Bolt Retainer	1.25	1.75	3.91	.33	9.04	8.49	3/8 or M10	88°	**MA51827S**	Price
4000 lbs	None	1.63	2.25	4.20	.41	13.50	10.17	-	91°	**MA51868**	Price

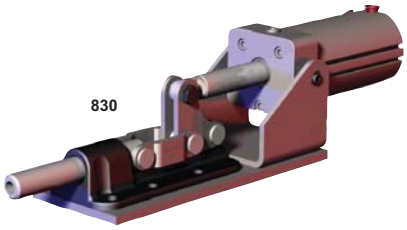
Bar Style - U-Shape										
Holding Capacity	Std. Equip.(Spindle, Flanged Washers or Bolt Retainer	A (in.)	B (in.)	C (in.)	OD (in.)	H (in.)	L (in.)	M (in.)	Opening ± 5°	Order No.	Price
375 lbs	507107 Flanged Washer	.63	1.00	2.69	.27	7.51	6.24	5/16 or M8	95°	**MA51817U**	Price
600 lbs	235106 Flanged Washer	1.25	1.75	3.89	.33	9.04	8.61	3/8 or M10	88°	**MA51827U**	Price

DESTACO Straight Action Pneumatic Clamps

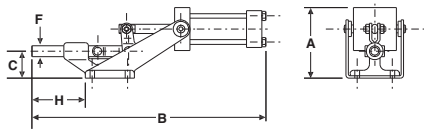
- Ideal for production end runs
- Large open angles
- Locks into place over center positioin when clamped
- Remains closed even if exposed to vibration

MADE IN THE USA







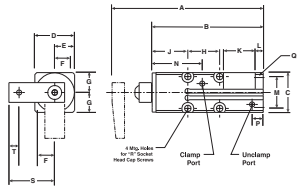


Bar Style	Holding Capacity	Plunger Travel	Port Size	A (in.)	B (in.)	C1 (in.)	OD (in.)	H (in.)	L (in.)	L3 (in.)	M	Order No.	Price
Plunger	16000 lbs	2.00	1/4 NPT	2.75	2.25	2.63	.41	7.21	20.56	2.00	5/8-11	**MA51850**	Price
Plunger	2500 lbs	1.25	1/8 NPT	1.38	1.63	1.06	.34	3.59	13.40	1.25	3/8-16	**MA51830**	Price
Plunger	600 lbs	.75	1/8 NPT	1.44	1.31	1.09	.27	2.93	9.86	1.00	5/16-18	**MA51803**	Price

DESTACO Pneumatic Swing Cylinder Clamps

- 90° Swing of clamping arm
- 3/8" Clamping stroke (vertical arm) adjust automatically on every cycle
- Clamping force is adjustable across a wide range: 20 lbs to 160 lbs
- Intended for quick clamping in secondary manufacturing operations on metallic or non-metallic products

MADE IN THE USA



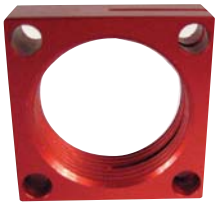


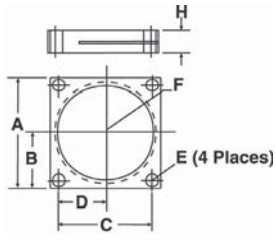
Type - Block Style Pneumatic Swing Cylinder														
Swing	Arm Supplied	Spindle Supplied	Travel During Rotation	Vertical Clamp Stroke	Max. Arm Length	A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	S (in.)	T (in.)	Port Size (in.)	Order No.	Price
RH	801528	305203	.466	.38	2.25	4.88	3.5	1.25	1-1/4	.47	1.44	.31	10-32	**MA518115**	Price
LH	801528	305203	.466	.38	2.25	4.88	3.5	1.25	1-1/4	.47	1.44	.31	10-32	**MA518116**	Price
RH	821512	485203-AL	.75	.50	3	6.36	4.27	3	2	.72	2.38	.38	1/8 NPT	**MA518315**	Price
LH	821512	485203-AL	.75	.50	3	6.36	4.27	3	2	.72	2.38	.38	1/8 NPT	**MA518316**	Price

Type - Round Threaded Body Pneumatic Swing Cylinder														
Swing	Arm Supplied	Spindle Supplied	Travel During Rotation	Vertical Clamp Stroke	Max. Arm Length	A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	S (in.)	T (in.)	Port Size (in.)	Order No.	Price
RH	801528	305203	.466	.38	2.25	4.88	2.87	-	1-1/8-16	-	-	.30	10-32	**MA518015**	Price
LH	801528	305203	.466	.38	2.25	4.88	2.87	-	1-1/8-16	-	-	.30	10-32	**MA518016**	Price
RH	821512	485203-AL	.75	.50	3	6.36	3.36	-	2-1/4-12	1.16	-	.38	1/8 NPT	**MA518215**	Price
LH	821512	485203-AL	.75	.50	3	6.36	3.36	-	2-1/4-12	1.16	-	.38	1/8 NPT	**MA518216**	Price
RH	841512	485203-AL	.75	.50	3	6.14	3.17	-	1-3/4-12	.98	-	.38	1/8 NPT	**MA518415**	Price
LH	841512	485203-AL	.75	.50	3	6.14	3.17	-	1-3/4-12	.98	-	.38	1/8 NPT	**MA518416**	Price

DESTACO Mounting Block Pneumatic Swing Cylinder Mounting Flanges

- For use with threaded body pneumatic swing clamps
- Variable height adjustment
- For recessed mounting





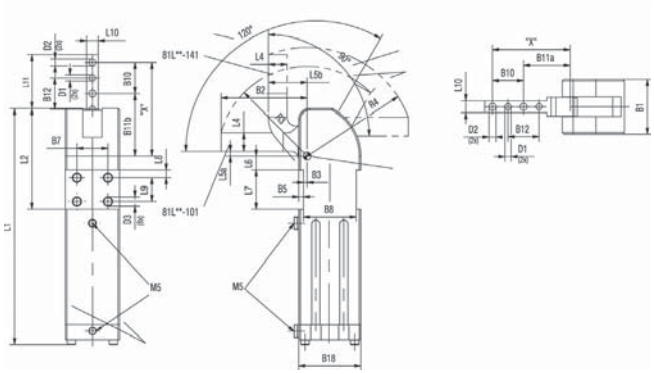
For Use With Series	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	H (in.)	Order No.	Price
8015, 8016	1.38	.69	1.08	.54	.20	1-1/8-16	.50	**MA51801553**	Price
8215, 8216	2-1/2	1.25	2.12	1.06	.28	2-1/4-12	.50	**MA51821553**	Price
8415, 8416	2	1.00	1.60	.80	.28	1-3/4-12	.50	**MA51841550**	Price

DESTACO 81L - Pneumatic Power Clamps

- Lightweight, aluminum body
- Two mounting areas; front and side
- Toggle-action mechanism
- Can be quickly retrofitted with magnetic sensing system

MADE IN THE USA





Clamping Arm - Horizontal Arm																
Holding Torque (Max.)	Clamping Torque (Max. @ 72 PSIG)	Max. add'l wt. at clamp arm mtd. in position "X" (lbs.)	OD1 H7 (mm)	OD2 (mm)	OD3	B1 (mm)	B7 ±0.1 (mm)	B10 ±0.2 (mm)	B11a (mm)	B11b (mm)	B12 (mm)	B18 (mm)	L1 (mm)	L9 (mm)	Order No.	Price
18.4 in-ft/lb	3.3 in-ft/lb	.40 lbs	3	3.3	M4 x 6	24	15	9	27	31.5	9	28	104	9	**MA5181L12101**	Price
44 in-ft/lb	4.8 in-ft/lb	.60 lbs	3	4.3	M5 x 5	30	20	15	30	39.5	15	30	119	12	**MA5181L16101**	Price
73.8 in-ft/lb	13.3 in-ft/lb	1.1 lbs	4	4.5	M6 x 8	35	20	20	30.5	40	20	40	151	15	**MA5181L20101**	Price
73.8 in-ft/lb	13.3 in-ft/lb	1.2 lbs	4	6.5	M6 x 8	35	20	20	40.5	50	20	40	151	15	**MA5181L25101**	Price

Clamping Arm - Vertical Arm																
Holding Torque (Max.)	Clamping Torque (Max. @ 72 PSIG)	Max. add'l wt. at clamp arm mtd. in position "X" (lbs.)	OD1 H7 (mm)	OD2 (mm)	OD3	B1 (mm)	B7 ±0.1 (mm)	B10 ±0.2 (mm)	B11a (mm)	B11b (mm)	B12 (mm)	B18 (mm)	L1 (mm)	L9 (mm)	Order No.	Price
14.8 in-ft/lb	3.3 in-ft/lb	.40 lbs	3	3.3	M4 x 6	24	15	9	27	31.5	9	28	104	9	**MA5181L12141**	Price
29.5 in-ft/lb	5.23 in-ft/lb	.60 lbs	3	4.3	M5 x 5	30	20	15	30	39.5	15	30	119	12	**MA5181L16141**	Price
59 in-ft/lb	12.5 in-ft/lb	1.2 lbs	4	4.5	M6 x 8	35	20	20	30.5	40	20	40	151	15	**MA5181L20141**	Price
59 in-ft/lb	12.5 in-ft/lb	1.25 lbs	4	6.5	M6 x 8	35	20	20	40.5	50	20	40	151	15	**MA5181L25141**	Price

DESTACO Pneumatic Power Clamp Sensors

- Sensors are activated by a magnetic ring installed on the cylinder piston
- All sensors feature an LED for easy set-up
- IP67 rated
- Temperature Range: -10°C to 60°C (14°F to 140°F)

MADE IN THE USA



Connection	Brief	Operating Voltage	Switching Current	Description	Order No.	Price
M8 Male Quick Connect	NPN	4.5-28V DC	100mA	Sensor, 4mm, NPN-NO, DC, 6" male connector	**MA51810174**	Price
M8 Male Quick Connect	PNP	4.5-28V DC	100mA	Sensor, 4mm, PNP-NO, DC, 6" male connector	**MA51810173**	Price
M8 Male Quick Connect	Reed	5-120V AC/DC	50mA	Sensor, 4mm, SPST-NO, AC/DC, 6" male connector	**MA51810169**	Price

TE-CO Spring & Ball Plunger Wrenches

- Designed to eliminate excessive spring compression during installation and removal of spring and ball plungers



MADE IN THE USA

Fits Thread Size Inches	Fits Thread Size Metric	Order No.	Price
6-32	-	**SG5053001**	Price
8-32	M4	**SG5053002**	Price
10-32	M5	**SG5053003**	Price
1/4-20	M6	**SG5053004**	Price
5/16-18	M8	**SG5053005**	Price

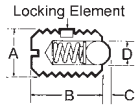
Fits Thread Size Inches	Fits Thread Size Metric	Order No.	Price
3/8-16	M10	**SG5053006**	Price
1/2-13	M12	**SG5053007**	Price
5/8-11	-	**SG5053008**	Price
3/4-10	-	**SG5053009**	Price
1-8	-	**SG5053010**	Price

Standard Ball Plungers

Stainless steel ball – bodies color coded to indicate end forces

- Cadmium plate = Light force
- Black = Standard force
- Gold = Heavy fForce

MADE IN THE USA





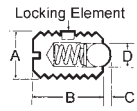
Thread A	B (in.)	C	Ball Dia. D	Initial End Force lbs.	Final End Force lbs.	Body Color Code	Order No.	Price
4-48	3/16	.020	.062	.12	.50	Black	**SG5052821**	Price
5-40	1/4	.020	.062	.25	.75	Black	**SG5052822**	Price
6-40	5/16	.023	.078	.50	1.0	Black	**SG5052823**	Price
8-32	11/32	.025	.093	.50	1.25	Black	**SG5052825**	Price
8-36	11/32	.025	.093	.50	1.25	Black	**SG5052824**	Price
10-32	33/64	.025	.093	.50	1.5	Cadmium	**SG5052801**	Price
10-32	33/64	.025	.093	1.5	3.0	Black	**SG5052802**	Price
10-32	33/64	.025	.093	2.0	5.0	Gold	**SG5052803**	Price
1/4-20	17/32	.035	.125	2.0	4.0	Cadmium	**SG5052804**	Price
1/4-20	17/32	.035	.125	3.0	7.0	Black	**SG5052805**	Price
1/4-20	17/32	.035	.125	4.0	12.0	Gold	**SG5052806**	Price
5/16-18	37/64	.040	.156	2.0	4.5	Cadmium	**SG5052807**	Price
5/16-18	37/64	.040	.156	4.0	9.0	Black	**SG5052808**	Price
5/16-18	37/64	.040	.156	6.0	17.0	Gold	**SG5052809**	Price
3/8-16	5/8	.048	.187	2.5	5.0	Cadmium	**SG5052810**	Price
3/8-16	5/8	.048	.187	5.0	10.0	Black	**SG5052811**	Price
3/8-16	5/8	.048	.187	6.0	21.0	Gold	**SG5052812**	Price
1/2-13	3/4	.072	.281	3.0	6.0	Cadmium	**SG5052813**	Price
1/2-13	3/4	.072	.281	6.0	12.0	Black	**SG5052814**	Price
1/2-13	3/4	.072	.281	6.0	30.0	Gold	**SG5052815**	Price
5/8-11	63/64	.096	.375	4.5	9.0	Cadmium	**SG5052816**	Price
5/8-11	63/64	.096	.375	7.0	50.0	Gold	**SG5052818**	Price
5/8-11	63/64	.096	.375	9.0	18.0	Black	**SG5052817**	Price

Ball Plungers Stainless Steel Bodies

Bodies color coded to indicate end forces

- Plain stainless steel = Light force
- Black = Standard force
- Gold = Heavy force

MADE IN THE USA





Thread A	B (in.)	C	Ball Dia. D	Initial End Force lbs.	Final End Force lbs.	Body Color Code	Order No.	Price
4-48	3/16	.020	.062	.12	.50	Plain	**SG5052901**	Price
5-40	1/4	.020	.062	.25	.75	Plain	**SG5052902**	Price
6-40	5/16	.023	.078	.50	1.0	Plain	**SG5052903**	Price
8-32	11/32	.025	.093	.50	1.25	Plain	**SG5052923**	Price
8-36	11/32	.025	.093	.50	1.25	Plain	**SG5052904**	Price
10-32	33/64	.025	.093	.50	1.5	Plain	**SG5052905**	Price
10-32	33/64	.025	.093	1.5	3.0	Black	**SG5052906**	Price
10-32	33/64	.025	.093	2.0	5.0	Gold	**SG5052907**	Price
1/4-20	17/32	.035	.125	2.0	4.0	Plain	**SG5052908**	Price
1/4-20	17/32	.035	.125	3.0	7.0	Black	**SG5052909**	Price
1/4-20	17/32	.035	.125	4.0	12.0	Gold	**SG5052910**	Price
5/16-18	37/64	.040	.156	2.0	4.5	Plain	**SG5052911**	Price
5/16-18	37/64	.040	.156	4.0	9.0	Black	**SG5052912**	Price
5/16-18	37/64	.040	.156	6.0	17.0	Gold	**SG5052913**	Price
3/8-16	5/8	.048	.187	2.5	5.0	Plain	**SG5052914**	Price
3/8-16	5/8	.048	.187	5.0	10.0	Black	**SG5052915**	Price
3/8-16	5/8	.048	.187	6.0	21.0	Gold	**SG5052916**	Price
1/2-13	3/4	.072	.281	3.0	6.0	Plain	**SG5052917**	Price
1/2-13	3/4	.072	.281	6.0	12.0	Black	**SG5052918**	Price
1/2-13	3/4	.072	.281	6.0	30.0	Gold	**SG5052919**	Price
5/8-11	63/64	.096	.375	4.5	9.0	Plain	**SG5052920**	Price
5/8-11	63/64	.096	.375	7.0	50.0	Gold	**SG5052922**	Price
5/8-11	63/64	.096	.375	9.0	18.0	Black	**SG5052921**	Price

LOCKING ELEMENT IS STANDARD ON ALL SIZES

Steel & Stainless Steel Light End Force Short Spring Plungers

- Excellent wear resistance

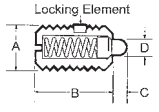
Steel Body Plungers:

- 12L14 Steel body
- Black oxide finish
- Case hardened 12L14 steel nose, zinc plated

MADE IN THE USA

Stainless Steel Body Plungers:

- 303 Stainless steel body and nose





						Stainless Steel Body		Zinc Plated	
Thread Size (A)	Thread Length (B)	End of Ball to Thread (C)	Ball Dia. (D)	Initial End Force lbs	Final End Force lbs	Order No.	Price	Order No.	Price
6-32	3/8	.036	.046	.50	1.5	**SG5053508**	Price	**SG5052608**	Price
8-32	7/16	.052	.070	.50	1.5	**SG5053509**	Price	**SG5052609**	Price
8-36	7/16	.052	.069	.50	1.5	**SG5053501**	Price	**SG5052601**	Price
10-32	15/32	.065	.093	.75	2.5	**SG5053502**	Price	**SG5052602**	Price
1/4-20	17/32	.078	.119	1.0	3.5	**SG5053503**	Price	**SG5052603**	Price
5/16-18	9/16	.084	.135	1.5	4.0	**SG5053504**	Price	**SG5052604**	Price
3/8-16	5/8	.110	.186	1.5	5.0	**SG5053505**	Price	**SG5052605**	Price
1/2-13	3/4	.151	.248	1.75	5.5	**SG5053506**	Price	**SG5052606**	Price
5/8-11	1-1/16	.215	.310	2.0	8.5	**SG5053507**	Price	**SG5052607**	Price

Steel & Stainless Steel Light End Force Standard Spring Plungers

- Excellent wear resistance

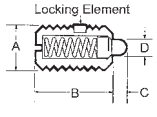
Steel Body Plungers:

- 12L14 Steel body
- Black oxide finish
- Case hardened 12L14 steel nose, zinc plated

MADE IN THE USA

Stainless Steel Body Plungers:

- 303 Stainless steel body & nose





						Stainless Steel Body		Steel Body	
Thread Size (A)	Thread Length (B)	End of Ball to Thread (C)	Ball Dia. (D)	Initial End Force lbs	Final End Force lbs	Order No.	Price	Order No.	Price
6-32	17/32	.062	.046	.50	1.5	**SG5053301**	Price	**SG5052201**	Price
8-32	5/8	.093	.070	.70	2.3	**SG5053302**	Price	**SG5052202**	Price
10-32	3/4	.125	.093	1.3	2.7	**SG5053303**	Price	**SG5052203**	Price
1/4-20	1	.187	.119	1.0	4.0	**SG5053305**	Price	**SG5052204**	Price
1/4-28	1	.187	.119	1.0	4.0	**SG5053306**	Price	**SG5052205**	Price
5/16-18	1	.187	.135	1.5	4.5	**SG5053304**	Price	**SG5052206**	Price
3/8-16	1-1/8	.187	.186	2.8	7.2	**SG5053307**	Price	**SG5052207**	Price
1/2-13	1-1/4	.250	.248	2.7	9.3	**SG5053309**	Price	**SG5052208**	Price
5/8-11	1-1/2	.312	.310	3.5	10.5	**SG5053310**	Price	**SG5052209**	Price
3/4-10	1-3/4	.312	.374	4.0	16.0	**SG5053311**	Price	**SG5052210**	Price
1-8	2-13/32	.500	.499	4.0	31.0	**SG5053312**	Price	**SG5052211**	Price

White Delrin® Light End Force Short Spring Plungers

- Ideal for aluminum, brass or any soft, easily marred material

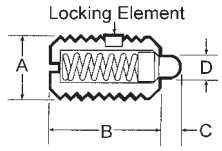
Steel Body Plungers:

- 12L14 Steel body
- Black oxide finish
- White Delrin® nose

Stainless Steel Body Plungers:

- 303 Stainless steel body
- Insulating Delrin® plungers

MADE IN THE USA





						Stainless Steel Body		Steel Body	
Thread Size (A)	Thread Length (B)	End of Ball to Thread (C)	Ball Dia. (D)	Initial End Force lbs	Final End Force lbs	Order No.	Price	Order No.	Price
6-32	3/8	.036	.046	.50	1.5	**SG5053527**	Price	**SG5052708**	Price
8-32	7/16	.052	.070	.50	1.5	**SG5053528**	Price	**SG5052709**	Price
8-36	7/16	.052	.070	.50	1.5	**SG5053520**	Price	**SG5052701**	Price
10-32	15/32	.065	.093	.75	2.5	**SG5053521**	Price	**SG5052702**	Price
1/4-20	17/32	.078	.119	1.0	3.5	**SG5053522**	Price	**SG5052703**	Price
5/16-18	9/16	.084	.135	1.5	4.0	**SG5053523**	Price	**SG5052704**	Price
3/8-16	5/8	.110	.186	1.5	5.0	**SG5053524**	Price	**SG5052705**	Price
1/2-13	3/4	.151	.248	1.75	5.5	**SG5053525**	Price	**SG5052706**	Price
5/8-11	1-1/16	.215	.310	2.0	8.5	**SG5053526**	Price	**SG5052707**	Price

White Delrin® Light End Force Standard Spring Plungers

- Ideal for aluminum, brass, or any soft, easily marred material

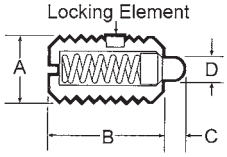
Steel Body Plungers:

- 12L14 Steel body
- Black oxide finish
- White Delrin® nose

Stainless Steel Body Plungers:

- 303 Stainless steel body
- White Delrin® nose

MADE IN THE USA





						Stainless Steel Body		Steel Body	
Thread Size (A)	Thread Length (B)	End of Ball to Thread (C)	Ball Dia. (D)	Initial End Force lbs	Final End Force lbs	Order No.	Price	Order No.	Price
8-32	5/8	.093	.070	.70	2.3	**SG5053313**	Price	**SG5052301**	Price
10-32	3/4	.125	.093	1.3	2.7	**SG5053314**	Price	**SG5052302**	Price
1/4-20	1	.187	.119	1.0	4.0	**SG5053315**	Price	**SG5052303**	Price
1/4-28	1	.187	.118	1.0	4.0	**SG5053320**	Price	**SG5052308**	Price
5/16-18	1	.187	.135	1.5	4.5	**SG5053316**	Price	**SG5052304**	Price
3/8-16	1-1/8	.187	.186	2.8	7.2	**SG5053317**	Price	**SG5052305**	Price
1/2-13	1-1/4	.250	.248	2.7	9.3	**SG5053318**	Price	**SG5052306**	Price
5/8-11	1-1/2	.312	.310	3.5	10.5	**SG5053319**	Price	**SG5052307**	Price

Carbon & Stainless Steel Heavy End Force Short Spring Plungers with Locking Element

- Excellent wear resistance

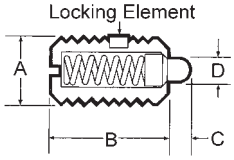
Steel Body Plungers:

- 12L14 Steel body
- Black oxide finish
- Case hardened 12L14 steel nose, black oxide

Stainless Steel Body Plungers:

- 303 Stainless steel body and nose

MADE IN THE USA





						Stainless Steel Body		Steel Body	
Thread Size (A)	Thread Length (B)	End of Ball to Thread (C)	Ball Dia. (D)	Initial End Force lbs	Final End Force lbs	Order No.	Price	Order No.	Price
6-32	3/8	.036	.046	.50	3.5	**SG5053408**	Price	**SG5052408**	Price
8-32	7/16	.052	.070	1.5	4.75	**SG5053409**	Price	**SG5052409**	Price
8-36	7/16	.052	.069	1.5	4.75	**SG5053401**	Price	**SG5052401**	Price
10-32	15/32	.065	.093	1.75	6.25	**SG5053402**	Price	**SG5052402**	Price
1/4-20	17/32	.078	.119	3.0	10.5	**SG5053403**	Price	**SG5052403**	Price
5/16-18	9/16	.084	.135	3.75	15.5	**SG5053404**	Price	**SG5052404**	Price
3/8-16	5/8	.110	.186	4.5	18.5	**SG5053405**	Price	**SG5052405**	Price
1/2-13	3/4	.151	.248	5.0	28.0	**SG5053406**	Price	**SG5052406**	Price
5/8-11	1-1/16	.215	.310	7.0	50.0	**SG5053407**	Price	**SG5052407**	Price

Carbon & Stainless Steel Heavy End Force Spring Plungers with Locking Element

- Excellent wear resistance

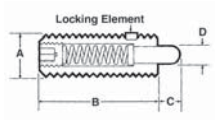
Steel Body Plungers:

- 12L14 Steel body
- Black oxide finish
- Case hardned 12L14 steel nose, black oxide finish

Stainless Steel Body Plungers:

- 303 Stainless steel body and nose

MADE IN THE USA





						Stainless Steel Body		Steel Body	
Thread Size (A)	Thread Length (B)	End of Ball to Thread (C)	Ball Dia. (D)	Initial End Force lbs	Final End Force lbs	Order No.	Price	Order No.	Price
6-32	3/8	.062	.046	1.0	1.6	**SG5053202**	Price	**SG5052002**	Price
6-32	17/32	.062	.046	1.5	4.5	**SG5053201**	Price	**SG5052001**	Price
8-32	5/8	.093	.070	2.7	7.3	**SG5053203**	Price	**SG5052003**	Price
10-32	3/4	.125	.093	2.9	11.1	**SG5053204**	Price	**SG5052004**	Price
1/4-20	3/4	.125	.119	2.0	9.0	**SG5053207**	Price	**SG5052007**	Price
1/4-20	1	.187	.119	3.0	13.0	**SG5053205**	Price	**SG5052005**	Price
1/4-28	1	.187	.119	3.0	13.0	**SG5053206**	Price	**SG5052006**	Price
5/16-18	1	.187	.135	3.0	15.0	**SG5053208**	Price	**SG5052008**	Price
3/8-16	1-1/8	.187	.186	5.5	14.5	**SG5053209**	Price	**SG5052009**	Price
1/2-13	1-1/4	.250	.248	6.6	17.4	**SG5053210**	Price	**SG5052010**	Price
5/8-11	1-1/2	.312	.310	10.5	25.5	**SG5053211**	Price	**SG5052011**	Price
3/4-10	1-3/4	.312	.374	6.7	37.3	**SG5053212**	Price	**SG5052012**	Price
1-8	2-13/32	.500	.499	16.0	68.0	**SG5053213**	Price	**SG5052013**	Price

Black Delrin® Heavy End Force Short Spring Plungers with Locking Element

- Ideal for aluminum, brass or any soft, easily marred material

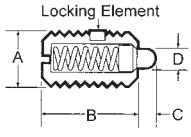
Steel Body Plungers:

- 12L14 Steel body
- Zinc plated clear chromate finish
- Black Delrin® nose

Stainless Steel Body Plungers:

- 303 Stainless steel body
- Black Delrin® nose

MADE IN THE USA





						Stainless Steel Body		Steel Body	
Thread Size (A)	Thread Length (B)	End of Ball to Thread (C)	Ball Dia. (D)	Initial End Force lbs	Final End Force lbs	Order No.	Price	Order No.	Price
6-32	3/8	.036	.046	.50	3.5	**SG5053427**	Price	**SG5052508**	Price
8-32	7/16	.052	.070	1.5	4.75	**SG5053428**	Price	**SG5052509**	Price
8-36	7/16	.052	.070	1.5	4.75	**SG5053420**	Price	**SG5052501**	Price
10-32	15/32	.065	.093	1.75	6.25	**SG5053421**	Price	**SG5052502**	Price
1/4-20	17/32	.078	.119	3.0	10.5	**SG5053422**	Price	**SG5052503**	Price
5/16-18	9/16	.084	.135	3.75	15.5	**SG5053423**	Price	**SG5052504**	Price
3/8-16	5/8	.110	.186	4.5	18.5	**SG5053424**	Price	**SG5052505**	Price
1/2-13	3/4	.151	.248	5.0	28.0	**SG5053425**	Price	**SG5052506**	Price
5/8-11	1-1/16	.215	.310	7.0	50.0	**SG5053426**	Price	**SG5052507**	Price

Black Delrin® Heavy End Force Standard Spring Plungers with Locking Element

- Ideal for aluminum, brass or any soft, easily marred material

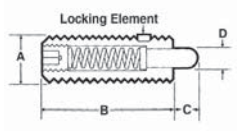
Steel Body Plungers:

- 12L14 Steel body
- Black oxide finish
- Black Delrin® nose

Stainless Steel Body Plungers:

- 303 Stainless steel body
- Black Delrin® nose

MADE IN THE USA



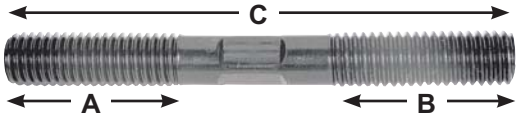


						Stainless Steel Body		Steel Body	
Thread Size (A)	Thread Length (B)	End of Ball to Thread (C)	Ball Dia. (D)	Initial End Force lbs	Final End Force lbs	Order No.	Price	Order No.	Price
8-32	5/8	.093	.070	2.7	7.3	**SG5053220**	Price	**SG5052101**	Price
10-32	3/4	.125	.093	2.9	11.1	**SG5053221**	Price	**SG5052102**	Price
1/4-20	3/4	.125	.118	2.0	9.0	**SG5053228**	Price	**SG5052109**	Price
1/4-20	1	.187	.119	3.0	13.0	**SG5053222**	Price	**SG5052103**	Price
1/4-28	1	.187	.118	3.0	13.0	**SG5053227**	Price	**SG5052108**	Price
5/16-18	1	.187	.135	3.0	15.0	**SG5053223**	Price	**SG5052104**	Price
3/8-16	1-1/8	.187	.186	5.5	14.5	**SG5053224**	Price	**SG5052105**	Price
1/2-13	1-1/4	.250	.248	6.6	17.4	**SG5053225**	Price	**SG5052106**	Price
5/8-11	1-1/2	.312	.310	10.6	25.5	**SG5053226**	Price	**SG5052107**	Price

TE-CO Driver Studs - Inch

- Tensile 125,000 PSI
- Yield 100,000 PSI
- Black Oxide finish
- Medium carbon steel

MADE IN THE USA



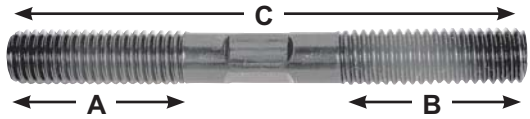
Thread (in.)	A (in.)	B (in.)	OAL C (in.)	Order No.	Price
1/4-20	1/2	1/2	1-1/2	SG5040301†	Price
1/4-20	3/4	3/4	2	SG5040302†	Price
1/4-20	1	3/8	2	SG5040351	Price
1/4-20	1	1	2-1/2	SG5040303†	Price
1/4-20	1-1/2	3/8	3	SG5040353	Price
1/4-20	1-3/4	3/8	4	SG5040354	Price
1/4-20	1-3/4	3/8	5	SG5040355	Price
1/4-20	2	3/8	6	SG5040356	Price
1/4-20	2	3/8	7	SG5040357	Price
1/4-20	2-1/2	1	8	SG5040358	Price
5/16-18	1/2	1/2	1-1/2	SG5040401†	Price
5/16-18	3/4	3/4	2	SG5040402†	Price
5/16-18	1	1	2-1/2	SG5040403†	Price
5/16-18	1-1/8	1-1/8	3	SG5040404†	Price
5/16-18	1-1/8	1-1/8	3-1/2	SG5040405†	Price
5/16-18	1-1/2	1/2	4	SG5040454	Price
5/16-18	2	1/2	6	SG5040456	Price
5/16-18	2-1/2	1/2	8	SG5040458	Price
3/8-16	1/2	1/2	1-1/2	SG5040501†	Price
3/8-16	3/4	3/4	2	SG5040502†	Price
3/8-16	1	5/8	2	SG5040551	Price
3/8-16	1	1	2-1/2	SG5040503†	Price
3/8-16	1	1	3	SG5040504	Price
3/8-16	1-1/2	5/8	3	SG5040552	Price
3/8-16	1-1/4	1-1/4	3-1/2	SG5040505	Price
3/8-16	1-1/4	1-1/4	4	SG5040506	Price
3/8-16	1-1/2	5/8	4	SG5040553	Price
3/8-16	1-1/4	1-1/4	4-1/2	SG5040507	Price
3/8-16	1-1/4	1-1/4	5	SG5040508	Price
3/8-16	1-3/4	5/8	5	SG5040554	Price
3/8-16	1-1/4	1-1/4	6	SG5040510	Price
3/8-16	2	5/8	6	SG5040555	Price
3/8-16	1-1/4	1-1/4	7	SG5040512	Price
3/8-16	1-1/4	1-1/4	8	SG5040514	Price
3/8-16	2-1/2	5/8	8	SG5040556	Price
1/2-13	1/2	1/2	1-1/2	SG5040701†	Price
1/2-13	3/4	3/4	2	SG5040702†	Price
1/2-13	1	5/8	2	SG5040771	Price
1/2-13	1	1	2-1/2	SG5040703†	Price
1/2-13	1	1	3	SG5040704	Price
1/2-13	1-1/2	3/4	3	SG5040772	Price
1/2-13	1-1/4	1-1/4	3-1/2	SG5040705	Price
1/2-13	1-1/2	3/4	4	SG5040773	Price
1/2-13	1-1/2	1-1/2	4	SG5040706	Price
1/2-13	1-1/2	1-1/2	4-1/2	SG5040707	Price
1/2-13	1-1/2	1-1/2	5	SG5040708	Price
1/2-13	1-3/4	3/4	5	SG5040774	Price
1/2-13	1-1/2	1-1/2	5-1/2	SG5040709	Price
1/2-13	1-1/2	1-1/2	6	SG5040710	Price
1/2-13	2	3/4	6	SG5040776	Price
1/2-13	1-1/2	1-1/2	6-1/2	SG5040711	Price
1/2-13	1-1/2	1-1/2	7	SG5040712	Price
1/2-13	2	3/4	7	SG5040778	Price
1/2-13	1-1/2	1-1/2	7-1/2	SG5040713	Price
1/2-13	1-1/2	1-1/2	8	SG5040714	Price
1/2-13	2-1/2	3/4	8	SG5040779	Price
1/2-13	1-1/2	1-1/2	9	SG5040715	Price
1/2-13	2-1/2	3/4	9	SG5040780	Price
1/2-13	1-1/2	1-1/2	10	SG5040716	Price
1/2-13	3	3/4	10	SG5040781	Price
1/2-13	1-1/2	1-1/2	12	SG5040717	Price
1/2-13	3	3/4	12	SG5040782	Price
1/2-13	1-1/2	1-1/2	14	SG5040718	Price
1/2-13	1-1/2	1-1/2	16	SG5040719	Price
5/8-11	1	5/8	2	SG5040850	Price
5/8-11	1	1	3	SG5040804	Price
5/8-11	1-1/2	7/8	3	SG5040852	Price
5/8-11	1-1/4	1-1/4	3-1/2	SG5040805	Price
5/8-11	1-5/8	1-5/8	4	SG5040806	Price
5/8-11	1-3/4	7/8	4	SG5040853	Price
5/8-11	1-3/4	1-3/4	4-1/2	SG5040807	Price
5/8-11	1-3/4	7/8	5	SG5040854	Price
5/8-11	1-3/4	1-3/4	5	SG5040808	Price
5/8-11	1-3/4	1-3/4	5-1/2	SG5040809	Price
5/8-11	1-3/4	1-3/4	6	SG5040810	Price
5/8-11	2	7/8	6	SG5040856	Price
5/8-11	1-3/4	1-3/4	6-1/2	SG5040811	Price
5/8-11	1-3/4	1-3/4	7	SG5040812	Price
5/8-11	2	7/8	7	SG5040858	Price
5/8-11	1-3/4	1-3/4	7-1/2	SG5040813	Price
5/8-11	1-3/4	1-3/4	8	SG5040814	Price
5/8-11	2-1/2	7/8	8	SG5040859	Price
5/8-11	1-3/4	1-3/4	9	SG5040815	Price
5/8-11	2-1/2	7/8	9	SG5040860	Price
5/8-11	1-3/4	1-3/4	10	SG5040816	Price
5/8-11	2-1/2	7/8	10	SG5040861	Price
5/8-11	1-3/4	1-3/4	12	SG5040817	Price
5/8-11	1-3/4	1-3/4	14	SG5040818	Price
5/8-11	1-3/4	1-3/4	16	SG5040819	Price
5/8-11	1-3/4	1-3/4	18	SG5040820	Price
5/8-11	1-3/4	1-3/4	20	SG5040821	Price
5/8-11	1-3/4	1-3/4	22	SG5040822	Price
5/8-11	1-3/4	1-3/4	24	SG5040823	Price
3/4-10	1-1/8	1-1/8	3	SG5040901	Price
3/4-10	1-3/8	1-3/8	3-1/2	SG5040902	Price
3/4-10	1-1/2	1-1/2	4	SG5040903	Price
3/4-10	1-3/4	1-3/4	4-1/2	SG5040904	Price
3/4-10	2	2	5	SG5040905	Price
3/4-10	2	2	5-1/2	SG5040906	Price
3/4-10	2	2	6	SG5040907	Price
3/4-10	2	2	6-1/2	SG5040908	Price
3/4-10	2	2	7	SG5040909	Price
3/4-10	2	2	7-1/2	SG5040910	Price
3/4-10	2	2	8	SG5040911	Price
3/4-10	2	2	9	SG5040912	Price
3/4-10	2	2	10	SG5040913	Price
3/4-10	2	2	12	SG5040914	Price
3/4-10	2	2	14	SG5040915	Price
3/4-10	2	2	16	SG5040916	Price
3/4-10	2	2	18	SG5040917	Price
3/4-10	2	2	20	SG5040918	Price
3/4-10	2	2	22	SG5040919	Price
3/4-10	2	2	24	SG5040920	Price
7/8-9	1	1	3	SG5041001	Price
7/8-9	1-1/2	1-1/2	4	SG5041003	Price
7/8-9	2	2	5	SG5041005	Price
7/8-9	2-1/4	2-1/4	6	SG5041007	Price
7/8-9	2-1/4	2-1/4	7	SG5041009	Price
7/8-9	2-1/4	2-1/4	8	SG5041011	Price
7/8-9	2-1/4	2-1/4	9	SG5041012	Price
7/8-9	2-1/4	2-1/4	10	SG5041013	Price
7/8-9	2-1/4	2-1/4	12	SG5041014	Price

† Items Do Not Have Flats on Studs

TE-CO Driver Studs - Metric

- Tensile 125,000 PSI
- Yield 100,000 PSI
- Black oxide finish
- Medium carbon steel

MADE IN THE USA



Thread	Dimension A	Dimension B	OAL (C)	Order No.	Price
M6 x 1.0	20mm	20mm	50mm	SG5060201	Price
M8 x 1.25	20mm	20mm	50mm	SG5060301	Price
M8 x 1.25	20mm	20mm	65mm	SG5060302	Price
M8 x 1.25	27mm	27mm	80mm	SG5060303	Price
M8 x 1.25	31mm	31mm	110mm	SG5060306	Price
M8 x 1.25	35mm	35mm	140mm	SG5060308	Price
M8 x 1.25	35mm	35mm	150mm	SG5060310	Price
M8 x 1.25	35mm	35mm	175mm	SG5060311	Price
M8 x 1.25	35mm	35mm	200mm	SG5060313	Price
M10 x 1.50	20mm	20mm	50mm	SG5060401	Price
M10 x 1.50	20mm	20mm	65mm	SG5060402	Price
M10 x 1.50	27mm	27mm	80mm	SG5060403	Price
M10 x 1.50	35mm	35mm	110mm	SG5060406	Price
M10 x 1.50	35mm	35mm	125mm	SG5060407	Price
M10 x 1.50	35mm	35mm	150mm	SG5060410	Price
M10 x 1.50	35mm	35mm	175mm	SG5060411	Price
M10 x 1.50	35mm	35mm	200mm	SG5060413	Price
M12 x 1.75	20mm	20mm	50mm	SG5060501	Price
M12 x 1.75	20mm	20mm	65mm	SG5060502	Price
M12 x 1.75	27mm	27mm	80mm	SG5060503	Price
M12 x 1.75	31mm	31mm	95mm	SG5060504	Price
M12 x 1.75	39mm	39mm	110mm	SG5060506	Price
M12 x 1.75	39mm	39mm	125mm	SG5060507	Price
M12 x 1.75	39mm	39mm	140mm	SG5060508	Price
M12 x 1.75	39mm	39mm	150mm	SG5060510	Price
M12 x 1.75	39mm	39mm	175mm	SG5060511	Price
M12 x 1.75	39mm	39mm	200mm	SG5060513	Price
M16 x 2.0	21mm	21mm	80mm	SG5060603	Price
M16 x 2.0	31mm	31mm	95mm	SG5060604	Price
M16 x 2.0	47mm	47mm	110mm	SG5060606	Price
M16 x 2.0	47mm	47mm	125mm	SG5060607	Price
M16 x 2.0	47mm	47mm	150mm	SG5060609	Price
M16 x 2.0	47mm	47mm	175mm	SG5060611	Price
M16 x 2.0	47mm	47mm	200mm	SG5060613	Price
M16 x 2.0	47mm	47mm	250mm	SG5060615	Price
M16 x 2.0	47mm	47mm	300mm	SG5060616	Price
M20 x 2.5	55mm	55mm	125mm	SG5060707	Price
M20 x 2.5	55mm	55mm	150mm	SG5060709	Price
M20 x 2.5	55mm	55mm	200mm	SG5060713	Price
M20 x 2.5	55mm	55mm	300mm	SG5060716	Price

Jergens Alloy Steel Studs

- Material: Stressproof (125,000 PSI Min.) Tensile; (100,000 PSI Min.) Yield
- Finish: Black Oxide
- Available in Fixture Pro TM Design Software

Thread Size (in.)	OAL (in.)	Thread Length (A & B)	Order No.	Price
1/4-20	1-1/2	9/32	**SG6637720**	Price
1/4-20	2	9/32	**SG6637721**	Price
1/4-20	2-1/2	9/32	**SG6637722**	Price
1/4-20	3	9/32	**SG6637723**	Price
1/4-20	3-1/2	1	**SG6637724**	Price
1/4-20	4	1	**SG6637725**	Price
5/16-18	1-1/2	7/16	**SG6637920**	Price
5/16-18	2	11/16	**SG6637921**	Price
5/16-18	2-1/2	15/16	**SG6637922**	Price
5/16-18	3	1-1/8	**SG6637923**	Price
5/16-18	3-1/2	1-1/8	**SG6637924**	Price
5/16-18	4	1-1/8	**SG6637925**	Price
3/8-16	1-5/8	11/32	**SG6638120**	Price
3/8-16	2	11/32	**SG6638121**	Price
3/8-16	2-1/2	11/32	**SG6638122**	Price
3/8-16	3	11/32	**SG6638123**	Price
3/8-16	3-1/2	11/32	**SG6638124**	Price
3/8-16	4	11/32	**SG6638125**	Price
3/8-16	4-1/2	1-1/4	**SG6638126**	Price
3/8-16	5	1-1/4	**SG6638127**	Price
3/8-16	5-1/2	1-1/4	**SG6638128**	Price
3/8-16	6	1-1/4	**SG6638129**	Price
3/8-16	7	1-1/4	**SG6638131**	Price
3/8-16	8	1-1/4	**SG6638133**	Price
1/2-13	2	5/8	**SG6638321**	Price
1/2-13	2-1/2	7/8	**SG6638322**	Price
1/2-13	3	1-1/8	**SG6638323**	Price
1/2-13	3-1/2	1-3/8	**SG6638324**	Price
1/2-13	4	1-1/2	**SG6638325**	Price
1/2-13	4-1/2	1-1/2	**SG6638326**	Price
1/2-13	5	1-1/2	**SG6638327**	Price
1/2-13	5-1/2	1-1/2	**SG6638328**	Price
1/2-13	6	1-1/2	**SG6638329**	Price
1/2-13	7	1-1/2	**SG6638331**	Price
1/2-13	8	1-1/2	**SG6638333**	Price
1/2-13	9	1-1/2	**SG6638334**	Price
1/2-13	10	1-1/2	**SG6638335**	Price
1/2-13	12	1-1/2	**SG6638336**	Price



Thread Size (in.)	OAL (in.)	Thread Length (A & B)	Order No.	Price
5/8-11	2-1/2	13/16	**SG6638520**	Price
5/8-11	3	1-1/16	**SG6638521**	Price
5/8-11	3-1/2	1-5/16	**SG6638522**	Price
5/8-11	4	1-9/16	**SG6638523**	Price
5/8-11	4-1/2	1-3/4	**SG6638524**	Price
5/8-11	5	1-3/4	**SG6638525**	Price
5/8-11	5-1/2	1-3/4	**SG6638526**	Price
5/8-11	6	1-3/4	**SG6638527**	Price
5/8-11	7	1-3/4	**SG6638529**	Price
5/8-11	8	1-3/4	**SG6638531**	Price
5/8-11	9	1-3/4	**SG6638532**	Price
5/8-11	10	1-3/4	**SG6638533**	Price
5/8-11	12	1-3/4	**SG6638534**	Price
3/4-10	3	15/16	**SG6638721**	Price
3/4-10	3-1/2	1-3/16	**SG6638722**	Price
3/4-10	4	1-7/16	**SG6638723**	Price
3/4-10	4-1/2	1-11/16	**SG6638724**	Price
3/4-10	5	1-15/16	**SG6638725**	Price
3/4-10	5-1/2	2	**SG6638726**	Price
3/4-10	6	2	**SG6638727**	Price
3/4-10	7	2	**SG6638729**	Price
3/4-10	8	2	**SG6638731**	Price
3/4-10	10	2	**SG6638733**	Price
3/4-10	12	2	**SG6638734**	Price
7/8-9	4	1-13/32	**SG6638922**	Price
7/8-9	5	1-29/32	**SG6638923**	Price
7/8-9	6	2-1/4	**SG6638924**	Price
7/8-9	8	2-1/4	**SG6638925**	Price
7/8-9	10	2-1/4	**SG6638926**	Price
7/8-9	12	2-1/4	**SG6638927**	Price
1-8	4	1-3/8	**SG6639122**	Price
1-8	5	1-7/8	**SG6639123**	Price
1-8	6	2-3/8	**SG6639124**	Price
1-8	8	2-1/2	**SG6639125**	Price
1-8	10	2-1/2	**SG6639126**	Price
1-8	12	2-1/2	**SG6639127**	Price

Jergens Alloy Steel Studs - Metric

- Material: Stressproof (125,000 PSI Min.) Tensile; (100,000 PSI Min.) Yield
- Finish: Black Oxide
- Available in Fixture Pro TM Design Software

Thread Size (in.)	OAL (in.)	Thread Length (A & B)	Order No.	Price
M6 x 1.0	50mm	18mm	**SG6637771**	Price
M6 x 1.0	66mm	25mm	**SG6637772**	Price
M6 x 1.0	81mm	28mm	**SG6637773**	Price
M6 x 1.0	96mm	28mm	**SG6637774**	Price
M8 x 1.25	50mm	18mm	**SG6637971**	Price
M8 x 1.25	66mm	25mm	**SG6637972**	Price
M8 x 1.25	81mm	32mm	**SG6637973**	Price
M8 x 1.25	96mm	32mm	**SG6637974**	Price
M8 x 1.25	111mm	32mm	**SG6637975**	Price
M10 x 1.5	50mm	16mm	**SG6638171**	Price
M10 x 1.5	66mm	23mm	**SG6638172**	Price
M10 x 1.5	81mm	30mm	**SG6638173**	Price
M10 x 1.5	95mm	35mm	**SG6638174**	Price
M10 x 1.5	110mm	35mm	**SG6638175**	Price
M10 x 1.5	125mm	39mm	**SG6638176**	Price
M10 x 1.5	140mm	39mm	**SG6638177**	Price
M10 x 1.5	155mm	39mm	**SG6638178**	Price
M12 x 1.75	50mm	16mm	**SG6638371**	Price
M12 x 1.75	66mm	23mm	**SG6638372**	Price
M12 x 1.75	81mm	31mm	**SG6638373**	Price



Thread Size (in.)	OAL (in.)	Thread Length (A & B)	Order No.	Price
M12 x 1.75	95mm	40mm	**SG6638374**	Price
M12 x 1.75	111mm	40mm	**SG6638375**	Price
M12 x 1.75	125mm	40mm	**SG6638376**	Price
M12 x 1.75	141mm	40mm	**SG6638377**	Price
M12 x 1.75	156mm	40mm	**SG6638378**	Price
M16 x 2.0	80mm	29mm	**SG6638571**	Price
M16 x 2.0	95mm	36mm	**SG6638572**	Price
M16 x 2.0	110mm	44mm	**SG6638573**	Price
M16 x 2.0	125mm	47mm	**SG6638574**	Price
M16 x 2.0	150mm	47mm	**SG6638575**	Price
M16 x 2.0	175mm	47mm	**SG6638576**	Price
M16 x 2.0	200mm	47mm	**SG6638577**	Price
M20 x 2.5	81mm	30mm	**SG6638771**	Price
M20 x 2.5	96mm	37mm	**SG6638772**	Price
M20 x 2.5	111mm	45mm	**SG6638773**	Price
M20 x 2.5	126mm	52mm	**SG6638774**	Price
M20 x 2.5	151mm	48mm	**SG6638775**	Price
M20 x 2.5	176mm	56mm	**SG6638776**	Price
M20 x 2.5	201mm	56mm	**SG6638777**	Price

Jergens Set-Up Studs



- Material: 303 Stainless

Thread Size (in.)	OAL (in.)	Thread Length A & B (in.)	Order No.	Price
1/2-13	2	3/4	**SG6638421**	Price
1/2-13	2-1/2	1-1/8	**SG6638422**	Price
1/2-13	3	1-3/8	**SG6638423**	Price
1/2-13	3-1/2	1-1/2	**SG6638424**	Price
1/2-13	4	1-1/2	**SG6638425**	Price
1/2-13	4-1/2	1-1/2	**SG6638426**	Price
1/2-13	5	1-1/2	**SG6638427**	Price
1/2-13	5-1/2	1-1/2	**SG6638428**	Price
1/2-13	6	1-1/2	**SG6638429**	Price
1/2-13	7	1-1/2	**SG6638431**	Price
1/2-13	8	1-1/2	**SG6638433**	Price
1/2-13	9	1-1/2	**SG6638434**	Price
1/2-13	10	1-1/2	**SG6638435**	Price
1/2-13	12	1-1/2	**SG6638436**	Price
5/8-11	2-1/2	1-1/8	**SG6638620**	Price
5/8-11	3	1-3/8	**SG6638621**	Price
5/8-11	3-1/2	1-3/4	**SG6638622**	Price
5/8-11	4	1-3/4	**SG6638623**	Price
5/8-11	4-1/2	1-3/4	**SG6638624**	Price
5/8-11	5	1-3/4	**SG6638625**	Price
5/8-11	5-1/2	1-3/4	**SG6638626**	Price
5/8-11	6	1-3/4	**SG6638627**	Price
5/8-11	7	1-3/4	**SG6638629**	Price
5/8-11	8	1-3/4	**SG6638631**	Price
5/8-11	9	1-3/4	**SG6638632**	Price
5/8-11	10	1-3/4	**SG6638633**	Price
5/8-11	12	1-3/4	**SG6638634**	Price
3/4-10	3	1-3/8	**SG6638821**	Price
3/4-10	3-1/2	1-1/2	**SG6638822**	Price
3/4-10	4	1-3/4	**SG6638823**	Price
3/4-10	4-1/2	2	**SG6638824**	Price
3/4-10	5	2	**SG6638825**	Price
3/4-10	5-1/2	2	**SG6638826**	Price
3/4-10	6	2	**SG6638827**	Price
3/4-10	7	2	**SG6638829**	Price
3/4-10	8	2	**SG6638831**	Price
3/4-10	10	2	**SG6638833**	Price
3/4-10	12	2	**SG6638834**	Price

Jergens Fixture Studs



- Material: 303 Stainless

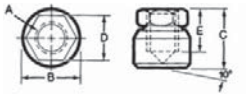
Thread Size (in.)	OAL (in.)	Stud Fit	Nut Fit	Order No.	Price
10-32	1	7/32	1/2	**SG6637601**	Price
10-32	1-1/2	7/32	3/4	**SG6637602**	Price
10-32	2	7/32	3/4	**SG6637603**	Price
1/4-20	1-1/2	9/32	5/8	**SG6637802**	Price
1/4-20	2	9/32	3/4	**SG6637804**	Price
1/4-20	2-1/2	9/32	3/4	**SG6637806**	Price
1/4-20	3	9/32	1	**SG6637808**	Price
5/16-18	1-1/2	11/32	5/8	**SG6638002**	Price
5/16-18	2	11/32	1	**SG6638004**	Price
5/16-18	2-1/2	11/32	1-1/4	**SG6638006**	Price
5/16-18	3	11/32	1-3/8	**SG6638008**	Price
5/16-18	3-1/2	11/32	1-1/2	**SG6638009**	Price
5/16-18	4	11/32	1-1/2	**SG6638010**	Price
3/8-16	1-5/8	11/32	3/4	**SG6638201**	Price
3/8-16	2	11/32	1	**SG6638202**	Price
3/8-16	2-1/2	11/32	1-1/4	**SG6638204**	Price
3/8-16	3	11/32	1-3/8	**SG6638206**	Price
3/8-16	3-1/2	11/32	1-1/2	**SG6638207**	Price
3/8-16	4	11/32	1-1/2	**SG6638208**	Price

TE-CO Toggle Pads 10°

MADE IN THE USA



- Case hardened 12L14 steel
- Use when high clamping pressures are required
- Pads swivel 10° from vertical in any direction



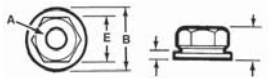
Thread Size	B (in.)	C (in.)	D (in.)	E (in.)	Order No.	Price
1/4-20	5/8	5/8	1/2	13/32	**SG5044302**	Price
5/16-18	11/16	11/16	9/16	7/16	**SG5044303**	Price
3/8-16	3/4	3/4	5/8	1/2	**SG5044304**	Price
1/2-13	7/8	1	3/4	17/32	**SG5044305**	Price
5/8-11	1	1-1/16	7/8	9/16	**SG5044306**	Price
3/4-10	1-1/4	1-5/16	1-1/16	3/4	**SG5044307**	Price
1-8	1-5/8	1-11/16	1-3/8	1	**SG5044308**	Price

TE-CO Flange Nuts

MADE IN THE USA



- Black oxide finish
- Case hardened
- 12L14 material



Thread Size	B (in.)	C (in.)	D (in.)	E (in.)	Order No.	Price
1/4-20	5/8	5/16	3/32	1/2	**SG5041601**	Price
5/16-18	3/4	3/8	1/8	9/16	**SG5041602**	Price
3/8-16	7/8	1/2	1/8	11/16	**SG5041603**	Price
7/16-14	1	9/16	5/32	3/4	**SG5041604**	Price
1/2-13	1-1/8	11/16	3/16	7/8	**SG5041605**	Price
5/8-11	1-3/8	13/16	3/16	1-1/16	**SG5041606**	Price
3/4-10	1-5/8	1	1/4	1-1/4	**SG5041607**	Price
7/8-9	1-3/4	1-1/8	1/4	1-7/16	**SG5041608**	Price
1-8	2	1-1/4	1/4	1-5/8	**SG5041609**	Price
1-1/4-7	2-1/2	1-1/4	1/4	1-13/16	**SG5041611**	Price

TE-CO Flange Nuts — Metric

- Black oxide finish
- Case hardened
- 12L14 material

MADE IN THE USA

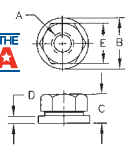


Thread Size	B	C	D	E	Order No.	Price
M6 x 1.0	16mm	8mm	2mm	10mm	**SG5061601**	Price
M8 x 1.25	19mm	10mm	2.5mm	13mm	**SG5061602**	Price
M10 x 1.5	22mm	13mm	3mm	17mm	**SG5061603**	Price
M12 x 1.75	27mm	17mm	4mm	19mm	**SG5061604**	Price
M16 x 2.0	33mm	21mm	5mm	24mm	**SG5061605**	Price
M20 x 2.5	40mm	25mm	6mm	30mm	**SG5061606**	Price
M24 x 3.0	49mm	32mm	7mm	36mm	**SG5061607**	Price

TE-CO Swivel Flange Nuts

- Material: 12L14 steel
- Black oxide finish, case hardened
- Head rotates but washer remains stationary upon contact to prevent marring of workpiece

MADE IN THE USA



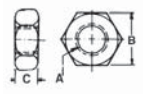


Thread Size	B (in.)	C (in.)	D (in.)	E (in.)	Order No.	Price
1/4-20	5/8	3/8	1/8	1/2	**SG5042001**	Price
5/16-18	3/4	7/16	9/64	9/16	**SG5042002**	Price
3/8-16	7/8	17/32	5/32	11/16	**SG5042003**	Price
1/2-13	1-1/8	23/32	7/32	7/8	**SG5042004**	Price
5/8-11	1-3/8	29/32	1/4	1-1/16	**SG5042005**	Price
3/4-10	1-5/8	1-1/64	9/32	1-1/4	**SG5042006**	Price
7/8-9	1-3/4	1-1/8	7/16	1-7/16	**SG5042007**	Price
1-8	2	1-15/64	15/32	1-5/8	**SG5042008**	Price

Heavy Duty Hardened Hex Nuts

- Black oxide finish
- High grade alloy steel
- Will outlast ordinary Hex Nuts when used in repetitive operations

MADE IN THE USA





Jergens

Brand Name - Jergens				
Thread Size	B (in.)	C (in.)	Order No.	Price
1/4-20	7/16	7/32	**SG6620711**	Price
5/16-18	1/2	17/64	**SG6620712**	Price
3/8-16	9/16	21/64	**SG6620713**	Price
1/2-13	3/4	7/16	**SG6620714**	Price
5/8-11	15/16	35/64	**SG6620716**	Price
3/4-10	1-1/8	41/64	**SG6620717**	Price
7/8-9	1-5/16	3/4	**SG6620718**	Price
1-8	1-1/2	55/64	**SG6620719**	Price

TE-CO

Brand Name - Te-Co				
Thread Size	B (in.)	C (in.)	Order No.	Price
1/4-20	1/2	15/64	**SG5042101**	Price
5/16-18	9/16	19/64	**SG5042102**	Price
7/16-14	3/4	27/64	**SG5042104**	Price
1/2-13	7/8	31/64	**SG5042105**	Price
3/8-16	11/16	23/64	**SG5042103**	Price
5/8-11	1-1/16	39/64	**SG5042106**	Price
3/4-10	1-1/4	47/64	**SG5042107**	Price
7/8-9	1-7/16	55/64	**SG5042108**	Price
1-8	1-5/8	63/64	**SG5042109**	Price

Spherical Flange Nut Washer Assemblies

- Assemblies consist of Flange Nuts (Part No's 41801 & 41811) and Spherical Washers (Part No's 42741 & 42750)

MADE IN THE USA



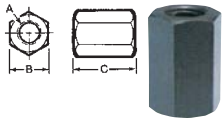
Jergens

TE-CO

	Jergens		Te-Co	
Thread Size	Order No.	Price	Order No.	Price
10-24	**SG6639301**	Price	-	-
1/4-20	**SG6639302**	Price	**SG5041901**	Price
5/16-18	**SG6639303**	Price	**SG5041902**	Price
3/8-16	**SG6639304**	Price	**SG5041903**	Price
7/16-14	-	-	**SG5041904**	Price
1/2-13	**SG6639305**	Price	**SG5041905**	Price
5/8-11	**SG6639306**	Price	**SG5041906**	Price
3/4-10	**SG6639307**	Price	**SG5041907**	Price
7/8-9	**SG6639308**	Price	-	-
1-8	**SG6639309**	Price	**SG5041909**	Price
1-1/4-7	**SG6639311**	Price	**SG5041911**	Price
1-1/2-6	**SG6639312**	Price	-	-
M6	**SG6639352**	Price	-	-
M8	**SG6639353**	Price	-	-
M10	**SG6639354**	Price	-	-
M12	**SG6639355**	Price	-	-
M16	**SG6639356**	Price	-	-
M20	**SG6639357**	Price	-	-

Coupling Nuts

- Used to join 2 or more studs for desired length
- Black oxide finish
- Case hardened



MADE IN THE USA

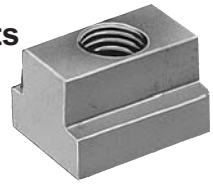
Jergens

TE-CO

			Jergens		Te-Co	
Thread Size	Across Flats (in.)	Length (in.)	Order No.	Price	Order No.	Price
1/4-20	1/2	5/8	-	-	**SG5041501**	Price
5/16-18	9/16	7/8	-	-	**SG5041502**	Price
3/8-16	11/16	1	**SG6618711**	Price	**SG5041503**	Price
7/16-14	3/4	1-1/4	-	-	**SG5041504**	Price
1/2-13	7/8	1-1/4	**SG6618712**	Price	**SG5041505**	Price
5/8-11	1-1/16	1-5/8	**SG6618713**	Price	**SG5041506**	Price
3/4-10	1-1/4	1-7/8	**SG6618714**	Price	**SG5041507**	Price
7/8-9	1-7/16	2-1/4	**SG6618715**	Price	**SG5041508**	Price
1-8	1-5/8	2-1/2	**SG6618716**	Price	**SG5041509**	Price
M10	16mm	25mm	**SG6618761**	Price	-	-
M12	19mm	32mm	**SG6618762**	Price	-	-
M16	24mm	41mm	**SG6618763**	Price	-	-
M20	27mm	51mm	**SG6618764**	Price	-	-

Jergens English T-Slot Nuts

- Material: C-1018, 303 Stainless
- Finish: Black Oxide
- Heat Treat: Case Hardened
- Thread: 2B-UNC
- Available in Fixture Pro TM Design Software



Thread (in.)	T-Slot Width	Width (in.)	Flange Ht. (in.)	Overall Ht. (in.)	Length	Order No.	Price
3/8-16	7/16	7/8	7/32	1/2	11/16	**SG6643302**	Price
3/8-16	1/2	7/8	9/32	1/2	7/8	**SG6643303**	Price
3/8-16	9/16	7/8	1/4	1/2	7/8	**SG6643301**	Price
1/2-13	9/16	1-1/8	11/32	5/8	7/8	**SG6643305**	Price
1/2-13	5/8	1-1/8	11/32	5/8	1	**SG6643306**	Price
1/2-13	11/16	1-1/4	7/16	3/4	1-1/8	**SG6643304**	Price
5/8-11	11/16	1-1/4	7/16	3/4	1-1/8	**SG6643308**	Price
5/8-11	3/4	1-1/4	15/32	3/4	1-1/4	**SG6643309**	Price
3/4-10	13/16	1-1/2	9/16	1	1-1/4	**SG6643311**	Price
5/8-11	13/16	1-1/2	9/16	1	1-1/4	**SG6643307**	Price
3/4-10	7/8	1-1/2	9/16	1	1-1/2	**SG6643312**	Price
3/4-10	1-1/16	2	11/16	1-1/4	1-5/8	**SG6643310**	Price
7/8-9	1	2	5/8	1-1/4	1-5/8	**SG6643313**	Price
7/8-9	1-1/16	2	5/8	1-1/4	1-3/4	**SG6643314**	Price

Jergens Metric T-Slot Nuts

- Material: C-1018, 303 Stainless
- Finish: Black Oxide
- Heat Treat: Case Hardened
- Thread: 2B-UNC
- Available in Fixture Pro TM Design Software



Thread	Table Slot Width	Width	Flange Ht.	Overall Ht.	Length	Order No.	Price
M10 x 1.5	12mm	25mm	7mm	13mm	19mm	**SG6643372**	Price
M10 x 1.5	14mm	29mm	9mm	16mm	22mm	**SG6643373**	Price
M10 x 1.5	16mm	29mm	9mm	16mm	25mm	**SG6643374**	Price
M12 x 1.75	14mm	29mm	9mm	16mm	22mm	**SG6643375**	Price
M12 x 1.75	16mm	29mm	9mm	16mm	25mm	**SG6643376**	Price
M12 x 1.75	18mm	32mm	11mm	19mm	29mm	**SG6643377**	Price
M16 x 2.0	18mm	32mm	11mm	19mm	29mm	**SG6643378**	Price
M16 x 2.0	20mm	38mm	14mm	25mm	32mm	**SG6643379**	Price
M16 x 2.0	22mm	38mm	14mm	25mm	35mm	**SG6643380**	Price
M20 x 2.5	22mm	38mm	14mm	25mm	35mm	**SG6643381**	Price
M20 x 2.5	24mm	44mm	16mm	25mm	38mm	**SG6643382**	Price
M20 x 2.5	28mm	51mm	18mm	29mm	41mm	**SG6643383**	Price

Jergens Stainless Steel T-Slot Nuts

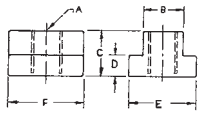
- Finish: Black Oxide
- Heat Treat: Case Hardened
- Thread: 2B-UNC
- Available in Fixture Pro TM Design Software



Thread (in.)	T-Slot Width (in.)	Width (in.)	Flange Ht. (in.)	Oveall Ht. (in.)	Length (in.)	Order No.	Price
3/8-16	7/16	1	7/32	1/2	3/4	**SG6643402**	Price
3/8-16	1/2	7/8	1/4	5/8	7/8	**SG6643403**	Price
1/2-13	9/16	1-1/4	5/16	3/4	7/8	**SG6643405**	Price
1/2-13	5/8	1-1/4	3/8	3/4	1	**SG6643406**	Price
5/8-11	11/16	1-1/2	15/32	1	1-1/4	**SG6643408**	Price
5/8-11	3/4	1-1/2	17/32	1-1/4	1-1/4	**SG6643409**	Price
3/4-10	13/16	1-3/4	9/16	1	1-1/2	**SG6643411**	Price
3/4-10	1-1/16	1-3/4	9/16	1	1-5/8	**SG6643410**	Price

English T-Slot Nuts

MADE IN THE USA





- Case hardened
- Black oxide finish
- Last thread incomplete to prevent stud from turning through bottom of nut into machine table
- T-Slot Nuts are undersized to fit machine table slot
- Tapped thru T-Slot nuts are also available. Add “T” to the end of the part number for Tapped Thru style.

Thread A (in.)	English Table Slot B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Order No.	Price
1/4-20	5/16	1/4	3/16	9/16	9/16	**SG5041401**	Price
1/4-20	3/8	3/8	1/4	5/8	7/8	**SG5041470**	Price
1/4-20	3/8	3/8	15/64	9/16	9/16	**SG5041402**	Price
5/16-18	7/16	1/2	7/32	3/4	1	**SG5041471**	Price
5/16-18	3/8	3/8	1/4	5/8	7/8	**SG5041403**	Price
3/8-16	7/16	1/2	7/32	11/16	7/8	**SG5041404**	Price
3/8-16	7/16	1/2	7/32	3/4	1	**SG5041472**	Price
3/8-16	1/2	1/2	9/32	7/8	7/8	**SG5041405**	Price
3/8-16	1/2	1/2	9/32	7/8	1	**SG5041473**	Price
3/8-16	9/16	5/8	11/32	7/8	1	**SG5041474**	Price
3/8-16	9/16	5/8	11/32	7/8	1-1/8	**SG5041406**	Price
3/8-16	5/8	5/8	3/8	1	1	**SG5041476**	Price
3/8-16	5/8	7/8	7/16	1-3/16	1-3/16	**SG5041478**	Price
7/16-14	1/2	3/8	7/32	3/4	7/8	**SG5041408**	Price
7/16-14	1/2	1/2	9/32	7/8	7/8	**SG5041407**	Price
1/2-13	9/16	5/8	11/32	7/8	1	**SG5041475**	Price
1/2-13	9/16	5/8	11/32	7/8	1-1/8	**SG5041409**	Price
1/2-13	5/8	5/8	11/32	1	1-1/8	**SG5041410**	Price
1/2-13	5/8	5/8	3/8	1	1	**SG5041477**	Price
1/2-13	5/8	3/4	3/8	1-1/8	1-1/8	**SG5041411**	Price
1/2-13	11/16	3/4	13/32	1-1/8	1-1/8	**SG5041480**	Price
1/2-13	5/8	7/8	7/16	1-3/16	1-3/16	**SG5041479**	Price
1/2-13	11/16	3/4	7/16	1-1/8	1-1/4	**SG5041412**	Price
1/2-13	3/4	3/4	15/32	1-1/4	1-1/4	**SG5041413**	Price
5/8-11	11/16	3/4	13/32	1-1/8	1-1/8	**SG5041481**	Price
5/8-11	11/16	3/4	7/16	1-1/8	1-1/4	**SG5041415**	Price
5/8-11	3/4	3/4	15/32	1-1/4	1-1/4	**SG5041416**	Price
5/8-11	3/4	3/4	1/2	1-1/4	1-1/8	**SG5041482**	Price
5/8-11	13/16	1	9/16	1-1/4	1-1/2	**SG5041417**	Price
5/8-11	13/16	1	9/16	1-3/8	1-1/2	**SG5041483**	Price
3/4-10	13/16	1	17/32	1-1/4	1-1/2	**SG5041486**	Price
3/4-10	13/16	1	9/16	1-1/4	1-1/2	**SG5041418**	Price
3/4-10	13/16	1	9/16	1-3/8	1-1/2	**SG5041484**	Price
3/4-10	7/8	1	9/16	1-1/2	1-1/2	**SG5041419**	Price
3/4-10	7/8	1	5/8	1-1/2	1-1/2	**SG5041485**	Price
3/4-10	1	1	5/8	1-5/8	1-3/4	**SG5041420**	Price
3/4-10	1	1-1/4	3/4	1-1/2	1-1/2	**SG5041487**	Price
3/4-10	1	1-1/2	3/4	1-3/4	1-3/4	**SG5041421**	Price
3/4-10	1-1/16	1-1/8	11/16	1-5/8	2	**SG5041422**	Price
7/8-9	1	1	5/8	1-5/8	1-3/4	**SG5041423**	Price
7/8-9	1	1-1/2	3/4	1-3/4	1-1/2	**SG5041488**	Price
7/8-9	1-1/16	1-1/16	3/4	1-3/4	1-1/2	**SG5041490**	Price
7/8-9	1-1/16	1-1/8	11/16	1-5/8	2	**SG5041424**	Price
7/8-9	1-1/8	1-1/2	3/4	1-3/4	1-1/2	**SG5041489**	Price
7/8-9	1-1/8	1-1/2	3/4	1-3/4	2	**SG5041425**	Price
7/8-9	1-5/16	1-1/4	15/16	2	2	**SG5041429**	Price
1-8	1-1/16	1-1/8	11/16	1-5/8	2	**SG5041426**	Price
1-8	1-1/8	1-1/2	3/4	1-3/4	1-3/4	**SG5041491**	Price
1-8	1-1/8	1-1/2	3/4	1-3/4	2	**SG5041427**	Price
1-8	1-1/4	1-1/4	7/8	2	2	**SG5041428**	Price
1-8	1-5/16	1-1/4	15/16	2	2	**SG5041430**	Price
1-1/4-7	1-3/8	1-3/4	1-1/8	2-1/2	2-1/2	**SG5041432**	Price

Metric T-Slot Nuts

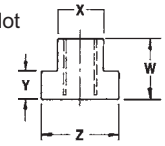
MADE IN THE USA



Thread A	Metric T-Slot B	C	D	E	F	Order No.	Price
M6 x 1.0	8mm	10mm	6mm	14mm	19mm	**SG5061401**	Price
M6 x 1.0	10mm	11mm	6mm	16mm	22mm	**SG5061402**	Price
M8 x 1.25	10mm	11mm	6mm	16mm	22mm	**SG5061403**	Price
M10 x 1.5	12mm	13mm	7mm	19mm	22mm	**SG5061404**	Price
M10 x 1.5	14mm	16mm	9mm	22mm	29mm	**SG5061405**	Price
M12 x 1.75	14mm	16mm	9mm	22mm	29mm	**SG5061406**	Price
M12 x 1.75	16mm	16mm	9mm	25mm	29mm	**SG5061407**	Price
M12 x 1.75	17mm	19mm	11mm	29mm	32mm	**SG5061408**	Price
M16 x 2.0	18mm	19mm	11mm	29mm	32mm	**SG5061409**	Price
M16 x 2.0	22mm	25mm	14mm	32mm	38mm	**SG5061410**	Price
M20 x 2.5	22mm	25mm	14mm	35mm	38mm	**SG5061411**	Price
M24 x 3.0	27mm	29mm	18mm	41mm	51mm	**SG5061412**	Price
M24 x 3.0	33mm	32mm	24mm	51mm	51mm	**SG5061413**	Price

T-Slot Nuts

- Undersized to fit machine table slot
- Case hardened
- Black oxide finish





Thread (in.)	Table Slot (X) (in.)	W (in.)	Y (in.)	Z (in.)	Order No.	Price
5/16-18	3/8	3/8	1/4	5/8	**SG60403**	Price
3/8-16	7/16	1/2	7/32	11/16	**SG60404**	Price
3/8-16	1/2	1/2	9/32	7/8	**SG60405**	Price
3/8-16	9/16	5/8	11/32	7/8	**SG60406**	Price
1/2-13	9/16	5/8	11/32	7/8	**SG60409**	Price
1/2-13	5/8	5/8	11/32	1	**SG60410**	Price
1/2-13	5/8	3/4	3/8	1-1/8	**SG60411**	Price
1/2-13	11/16	3/4	7/16	1-1/8	**SG60412**	Price
5/8-11	11/16	3/4	7/16	1-1/8	**SG60415**	Price
5/8-11	3/4	3/4	15/32	1-1/4	**SG60416**	Price
5/8-11	13/16	1	9/16	1-1/4	**SG60417**	Price
3/4-10	13/16	1	9/16	1-1/4	**SG60418**	Price
3/4-10	7/8	1	9/16	1-1/4	**SG60419**	Price

Kwik-Turn T-Slot Nuts

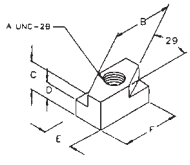
- Material: Low Carbon Steel
- Finish: Black Oxide
- Threads: 2B-UNC (Inch)
- Heat Treat: Case Hardened
- 1/4 turn design allows the Kwik-Turn to be installed from the top of the T-Slot, in order to avoid uninstallation of set-ups when additional nuts and studs are required



Thread (in.)	T-Slot Width (in.)	Width (in.)	Flange Ht. (in.)	Overall Ht. (in.)	Across Flats	Length	Order No.	Price
3/8-16	7/16	7/32	11/16	1/2	.432	.432	**SG6643332**	Price
3/8-16	1/2	9/32	7/8	1/2	.495	.495	**SG6643333**	Price
1/2-13	9/16	11/32	7/8	5/8	.562	.562	**SG6643335**	Price
1/2-13	5/8	11/32	1	5/8	.620	.620	**SG6643336**	Price
1/2-13	11/16	7/16	1-1/8	3/4	.683	.683	**SG6643334**	Price
5/8-11	11/16	7/16	1-1/8	3/4	.683	.683	**SG6643338**	Price
5/8-11	3/4	15/32	1-1/4	3/4	.745	.745	**SG6643339**	Price
3/4-10	1	5/8	1-5/8	1	.995	.995	**SG6643345**	Price

Quarter Turn T-Slot Nuts

- Add studs, and clamps without tearing down prior set-ups!
- Last thread closed
- Alloy steel
- †Quarter Turn T-Slot Nuts are undersized to fit machine table slot

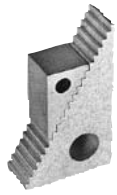




English Table Slot B (in.)	† Metric Table Slot	Thread A (in.)	C (in.)	D	E (in.)	F (in.)	Order No.	Price
7/16	12mm	3/8-16	1/2	.208	7/16	3/4	**SG5041450**	Price
1/2	12mm	3/8-16	1/2	.271	1/2	1	**SG5041451**	Price
9/16	15mm	1/2-13	5/8	.333	.563	15/16	**SG5041452**	Price
5/8	16mm	1/2-13	5/8	.333	5/8	1-1/4	**SG5041453**	Price
11/16	18mm	1/2-13	3/4	.427	11/16	1-3/8	**SG5041456**	Price
11/16	18mm	5/8-11	3/4	.427	11/16	1-3/8	**SG5041454**	Price
3/4	20mm	5/8-11	3/4	.458	3/4	1-1/2	**SG5041455**	Price
1	26mm	3/4-10	1	.615	1	1-3/4	**SG5041457**	Price

Adjustable Step Blocks

- Step blocks are made of aluminum to prevent damage to the machine table surfaces
- Tooth design has no sharp edges which helps to prevent burrs and chip build-up in the steps
- Blocks are completely interchangeable with each other
- Step elevation 11/64”



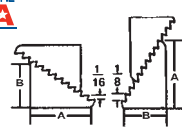
Description - Adjustable Step Block				
Thickness (in.)	Width (in.)	Height	Order No.	Price
1	5/8	1-1/16	**SG6621705**	Price
1	1	1-1/16	**SG6621702**	Price
1	2-3/16	3-3/4	**SG6621703**	Price
2	5/8	1-1/16	**SG6621712**	Price
2	2-3/16	3-3/4	**SG6621714**	Price
3	1	1-3/4	**SG6621713**	Price

Description - Protective Pad				
Thickness (in.)	Width (in.)	Height	Order No.	Price
1	-	-	**SG6621706**	Price
-	2	-	**SG6621715**	Price

Step Blocks - Steel

- Larger sizes have chamfered holes for ease of use
- Blocks work in conjunction with serrated end clamps
- Two halves = One Block





Thickness - 1” Thick					
Height Ad. Range (in.)	Description	Length (in.)	Height	Order No.	Price
3/4 to 1-5/8	-	1-1/16	11/16	**SG5040102**	Price
1-1/8 to 2-1/2	-	1-39/64	1-1/16	**SG5040103**	Price
2-1/2 to 6	Chamfered Hole	3-3/4	2-15/32	**SG5040104**	Price

Thickness - 1-1/2” Thick					
Height Ad. Range (in.)	Description	Length (in.)	Height	Order No.	Price
1-3/4 to 4	-	2-17/32	1-43/64	**SG5040105**	Price
2-1/2 to 6	Chamfered Hole	3-3/4	2-15/32	**SG5040106**	Price
3-1/2 to 9	Chamfered Hole	5-21/64	3-7/16	**SG5040107**	Price

Thickness - 2” Thick					
Height Ad. Range (in.)	Description	Length (in.)	Height	Order No.	Price
1-3/4 to 4	-	2-17/32	1-43/64	**SG5040108**	Price
2-1/2 to 6	Chamfered Hole	3-3/4	2-15/32	**SG5040109**	Price
3-1/2 to 9	Chamfered Hole	5-21/64	3-7/16	**SG5040110**	Price
4-7/8 to 10-1/2	-	7-3/8	4-3/4	**SG5040111**	Price

Plain Straps

- Material: Low Carbon Steel, 2024 Aluminum
- Available in Fixture Pro TM Design Software



Bolt Size (in.)	Slot Width (in.)	Slot Length (in.)	Width (in.)	Thickness (in.)	Length (in.)	Order No.	Price
1/4 or M6	9/32	5/8	5/8	3/8	2	**SG6633111**	Price
1/4 or M6	9/32	5/8	3/4	3/8	2	**SG6633001**	Price
5/16 or M8	11/32	3/4	7/8	1/2	2-1/2	**SG6633113**	Price
5/16 or M8	11/32	1-1/4	7/8	1/2	3-1/2	**SG6633114**	Price
5/16 or M8	11/32	1-1/4	1	1/2	3-1/2	**SG6633004**	Price
3/8 or M10	13/32	1-1/8	1-1/4	5/8	3-1/2	**SG6633115**	Price
3/8 or M10	13/32	1-5/8	1-1/4	5/8	4-1/2	**SG6633116**	Price
3/8 or M10	13/32	1-5/8	1-1/2	5/8	4-1/2	**SG6633006**	Price
1/2 or M12	17/32	1-1/4	1-1/2	3/4	4-1/2	**SG6633117**	Price
1/2 or M12	17/32	2	1-1/2	3/4	6	**SG6633118**	Price
1/2 or M12	17/32	2	2	3/4	6	**SG6633008**	Price
5/8 or M16	21/32	1-1/2	1-3/4	7/8	7	**SG6633119**	Price
5/8 or M16	21/32	2-1/2	1-3/4	7/8	7	**SG6633120**	Price
3/4 or M19	25/32	1-1/2	1-3/4	1	5	**SG6633121**	Price
3/4 or M19	25/32	2-1/2	1-3/4	1	7	**SG6633122**	Price

Jergens Steel Heel Straps - Coarse & Fine Pitch



- Material: C-1018
- Finish: Black Oxide
- Heat Treat: Case Hardened 50-54 R30N

Style - Coarse Pitch									
Bolt Size (in.)	Slot Width (in.)	Slot Length (in.)	Nose Dia. (in.)	Nose Ht. (in.)	Ht. (in.)	Clamp Length (in.)	Clamp Width (in.)	Order No.	Price
1/2 or M12	17/32	1/2	1/2	1/4	5/8	2-1/2	1-1/4	**SG6646814**	Price
1/2 or M12	17/32	1-1/4	1/2	1/4	3/4	4	1-1/4	**SG6646815**	Price
1/2 or M12	17/32	2	1/2	1/4	7/8	6	1-1/4	**SG6646816**	Price
5/8 or M16	21/32	1/2	5/8	1/4	5/8	3	1-1/4	**SG6646817**	Price
5/8 or M16	21/32	1-1/4	5/8	3/8	3/4	5	1-1/2	**SG6646818**	Price
5/8 or M16	21/32	2	5/8	3/8	7/8	7	1-1/2	**SG6646819**	Price
3/4 or M20	25/32	3/4	5/8	3/8	3/4	4	1-1/2	**SG6646820**	Price
3/4 or M20	25/32	1-1/2	5/8	3/8	1	6	1-1/2	**SG6646821**	Price
3/4 or M20	25/32	2-1/4	5/8	3/8	1-1/8	8	1-3/4	**SG6646822**	Price

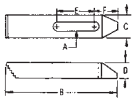
Style - Fine Pitch									
Bolt Size (in.)	Slot Width (in.)	Slot Length (in.)	Nose Dia. (in.)	Nose Ht. (in.)	Ht. (in.)	Clamp Length (in.)	Clamp Width (in.)	Order No.	Price
1/2 or M12	9/16	1/2	1/2	1/4	1/2	2-1/2	1-1/8	**SG6646834**	Price
1/2 or M12	9/16	1-1/4	1/2	1/4	3/4	4	1-1/4	**SG6646835**	Price
1/2 or M12	9/16	2	1/2	1/4	7/8	6	1-1/4	**SG6646836**	Price
5/8 or M16	11/16	1/2	5/8	1/4	5/8	2-1/2	1-1/4	**SG6646837**	Price
5/8 or M16	11/16	1-1/4	5/8	3/8	3/4	4	1-1/2	**SG6646838**	Price
5/8 or M16	11/16	2	5/8	3/8	7/8	6	1-1/2	**SG6646839**	Price
3/4 or M20	13/16	1-1/2	5/8	3/8	1	6	1-5/8	**SG6646841**	Price
3/4 or M20	13/16	3/4	5/8	3/8	3/4	4	1-/12	**SG6646840**	Price
3/4 or M20	13/16	2-1/4	5/8	3/8	1-1/8	8	1-3/4	**SG6646842**	Price

TE-CO Serrated End Clamps

MADE IN THE USA



- Case hardened
- Black oxide finish
- Teeth match all step blocks



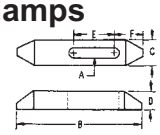
Stud Size-A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Order No.	Price
5/16 & 3/8	2-1/2	1.00	1/2	13/16	27/32	**SG5030501**	Price
5/16 & 3/8	4	1.00	5/8	1-7/16	1-1/32	**SG5030502**	Price
5/16 & 3/8	6	1-1/8	3/4	2-3/16	1-5/32	**SG5030503**	Price
1/2	2-1/2	1-1/8	1/2	11/16	29/32	**SG5030504**	Price
1/2	4	1-1/4	3/4	1-5/16	1-5/32	**SG5030505**	Price
1/2	6	1-1/4	7/8	2-1/16	1-9/32	**SG5030506**	Price
5/8	2-1/2	1-1/4	5/8	9/16	31/32	**SG5030507**	Price
5/8	4	1-1/2	3/4	1-3/16	1-9/32	**SG5030508**	Price
5/8	6	1-1/2	7/8	1-15/16	1-13/32	**SG5030509**	Price
3/4	4	1-1/2	3/4	1-1/16	1-11/32	**SG5030510**	Price
3/4	6	1-1/2	1.00	1-15/16	1-15/32	**SG5030511**	Price
3/4	8	1-3/4	1-1/8	2-3/16	1-29/32	**SG5030512**	Price
7/8 & 1	10	2.00	1-1/2	2-15/16	2-1/32	**SG5030515**	Price
7/8 & 1	6	2.00	1-1/4	1-11/16	1-27/32	**SG5030513**	Price
7/8 & 1	8	2.00	1-3/8	1-15/16	2-1/32	**SG5030514**	Price

TE-CO Plain Clamps

MADE IN THE USA



- Case hardened
- Black oxide finish



Stud Size-A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Order No.	Price
5/16 & 3/8	2-1/2	1.00	1/2	13/16	27/32	**SG5030401**	Price
5/16 & 3/8	4	1.00	5/8	1-7/16	1-1/32	**SG5030402**	Price
5/16 & 3/8	6	1-1/8	3/4	2-3/16	1-5/32	**SG5030403**	Price
1/2	2-1/2	1-1/8	1/2	11/16	29/32	**SG5030404**	Price
1/2	4	1-1/4	3/4	1-5/16	1-5/32	**SG5030405**	Price
1/2	6	1-1/4	7/8	2-1/16	1-5/32	**SG5030406**	Price
5/8	2-1/2	1-1/4	5/8	9/16	31/32	**SG5030407**	Price
5/8	4	1-1/2	3/4	1-3/16	1-7/32	**SG5030408**	Price
5/8	6	1-1/2	7/8	1-15/16	1-11/32	**SG5030409**	Price
3/4	4	1-1/2	3/4	1-1/16	1-9/32	**SG5030410**	Price
3/4	6	1-1/2	1.00	1-15/16	1-15/32	**SG5030411**	Price
3/4	8	1-3/4	1-1/8	2-3/16	1-29/32	**SG5030412**	Price
7/8 & 1	10	2.00	1-1/2	2-15/16	2-1/32	**SG5030415**	Price
7/8 & 1	6	2.00	1-1/4	1-11/16	1-27/32	**SG5030413**	Price
7/8 & 1	8	2.00	1-3/8	1-15/16	2-1/32	**SG5030414**	Price

TE-CO Basic Clamp Kits

Contains:

- 14 Clamps
- 1 Holder

MADE IN THE USA



Stud Size (in.)	Serrated End Clamps, 2 ea.	Plain Clamps, 2ea.	Step Clamps, 2 ea.	Order No.	Price
3/8-16	30501, 30502, 30503	30401, 30402, 30403	30801	**SG5020901**	Price
1/2-13	30504, 30505, 30506	30404, 30405, 30406	30802	**SG5020902**	Price
5/8-11	30507, 30508, 30509	30407, 30408, 30409	30803	**SG5020903**	Price

Jergens Adjustable Step Block Kits

- Step blocks are made of aluminum & steel to prevent damage to machine table surfaces
- Tooth design has no sharp edges which helps to prevent burrs and chip build-up in the steps



No. of Pieces	Description	Order No.	Price
36	Adjustable Steel Kit Includes: 8 ea of #21831, #21832; 4 ea #21833, 16 ea #27106	**SG6621821**	Price
36	Standard Aluminum 1"W Kit Includes: 8 ea of #21702, 21705; 4 ea #21703, 16 ea #27106	**SG6621701**	Price
36	Heavy Duty Aluminum 2"W Kit Includes: 8 ea of #21702, 21705; 4 ea #21703, 16 ea #27106	**SG6621711**	Price

TE-CO Step Block & Clamp Sets

Contains:

- 6 Step blocks
- 6 Serrated end clamps
- 1 Holder

MADE IN THE USA



Style - With 1/2" Thick Steel Blocks				
Stud Size (in.)	Step Blocks, 2 ea.	Serrated End Clamps, 2 ea.	Order No.	Price
1/2	40105, 40106, 40107	30504, 30505, 30506	**SG5021004**	Price
5/8	40105, 40106, 40107	30507, 30508, 30509	**SG5021005**	Price
3/4	40105, 40106, 40107	30510, 30511, 30512	**SG5021006**	Price

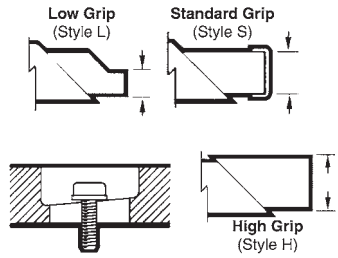
Style - With 1" Thick Step Blocks				
Stud Size (in.)	Step Blocks, 2 ea.	Serrated End Clamps, 2 ea.	Order No.	Price
5/16 & 3/8	40102, 40103, 40104	30501, 30502, 30503	**SG5021001**	Price
1/2 & 5/8	40102, 40103, 40104	30504, 30505, 30506	**SG5021002**	Price
5/8	40102, 40103, 40104	30507, 30508, 30509	**SG5021003**	Price

Heavy Duty Double Action Edge Clamps

MADE IN THE USA

- Double action, adjustable nose exerts clamping forces both in and down
- Low profile provides greater machining clearance
- "V" groove in nose allows positive grip on round parts and corners
- Removable aluminum nose cap prevents damage to work piece
- Black oxide finish
- Case hardened
- Tapered slot prevents clamp from sliding off workpiece during tightening
- Standard grip (with removable aluminum nose cap)



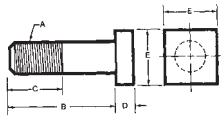


					High Grip		Low Grip		Standard Grip	
Height (in.)	Clamp Width (in.)	Clamp Length (in.)	Slot Width (in.)	Slot Length (in.)	Order No.	Price	Order No.	Price	Order No.	Price
5/8	1.00	1-7/8	5/16	1/4	-	-	SG5033817	Price	SG5033818	Price
5/8	1.00	2-3/8	5/16	3/4	-	-	SG5033819	Price	-	-
5/8	1.00	2-7/8	5/16	1-1/4	-	-	SG5033821	Price	-	-
5/8	1-1/4	2-5/16	3/8	3/8	-	-	SG5033801	Price	SG5033802	Price
5/8	1-1/4	2-3/4	3/8	11/16	-	-	SG5033890	Price	SG5033891	Price
5/8	1-1/4	4-1/8	3/8	2	-	-	SG5033803	Price	SG5033804	Price
5/8	1-1/2	5-5/16	5/8	2	-	-	SG5033716	Price	-	-
3/4	1-1/2	3-5/16	1/2	3/4	-	-	SG5033805	Price	SG5033806	Price
3/4	1-1/2	3-5/16	5/8	5/8	-	-	SG5033710	Price	SG5033711	Price
3/4	1-1/2	5-3/16	1/2	2-1/2	-	-	SG5033807	Price	SG5033808	Price
3/4	1-1/2	5-3/16	5/8	2-1/2	-	-	SG5033712	Price	SG5033713	Price
7/8	1-1/2	3-7/8	1/2	1-1/4	-	-	SG5033823	Price	SG5033824	Price
7/8	1-1/2	3-7/8	5/8	1-1/4	-	-	SG5033714	Price	SG5033715	Price
7/8	1-1/2	5-5/16	1/2	2	-	-	SG5033825	Price	SG5033826	Price
7/8	1-1/2	5-5/16	5/8	2	-	-	-	-	SG5033717	Price
7/8	1-1/2	7-1/4	1/2	3	-	-	-	-	SG5033828	Price
1-1/4	1-1/2	5-13/16	1/2	2-1/4	-	-	SG5033809	Price	SG5033810	Price
1-1/4	1-1/2	7-1/8	1/2	3-5/16	-	-	SG5033812	Price	SG5033813	Price
1-1/4	1-1/2	7-3/8	1/2	3-5/16	SG5033814	Price	-	-	-	-
1-1/4	2.00	5-1/4	3/4	1-3/8	SG5033815	Price	-	-	-	-
1-1/2	2-1/2	6-7/16	7/8	2	SG5033816	Price	-	-	-	-

Tugger® T-Bolts

- Black Oxide finish
- Medium Carbon Steel
- Heat treated
- Thread Class 2A UNC

MADE IN THE USA



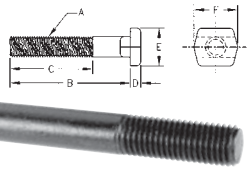


A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	T-Slot Width (in.)	Order No.	Price
1/2-13	2	1-1/2	5/16	7/8	1/2	SG5046402	Price
1/2-13	3	2	5/16	7/8	1/2	SG5046404	Price
1/2-13	4	2	5/16	7/8	1/2	SG5046406	Price
1/2-13	5	2	5/16	7/8	1/2	SG5046407	Price
1/2-13	6	2	5/16	7/8	1/2	SG5046408	Price
1/2-13	7	2	5/16	7/8	1/2	SG5046409	Price
1/2-13	8	2	5/16	7/8	1/2	SG5046410	Price
1/2-13	10	2	5/16	7/8	1/2	SG5046411	Price
5/8-11	2	1-1/2	13/32	1-1/8	5/8	SG5046502	Price
5/8-11	3	2	13/32	1-1/8	5/8	SG5046504	Price
5/8-11	4	2	13/32	1-1/8	5/8	SG5046506	Price
5/8-11	5	2	13/32	1-1/8	5/8	SG5046507	Price
5/8-11	6	2	13/32	1-1/8	5/8	SG5046508	Price
5/8-11	7	2	13/32	1-1/8	5/8	SG5046509	Price
3/4-10	4	2	17/32	1-5/16	3/4	SG5046603	Price
3/4-10	5	2	17/32	1-5/16	3/4	SG5046604	Price
3/4-10	6	2	17/32	1-5/16	3/4	SG5046605	Price
3/4-10	8	2	17/32	1-5/16	3/4	SG5046607	Price

Heavy Duty Undersized Head T-Slot Bolts — 4140 Steel

MADE IN THE USA

- Black Oxide finish
- 4140 Steel
- Bolt head dimension "D" is undersized to fit machine table slot
- Thread Class 2A UNC



A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Table Slot (in.)	Order No.	Price
1/2-13	2	1	5/16	7/8	1-1/4	1/2	SG5045460	Price
1/2-13	3	1-1/2	5/16	7/8	1-1/4	1/2	SG5045462	Price
1/2-13	4	1-1/2	5/16	7/8	1-1/4	1/2	SG5045464	Price
1/2-13	5	2	5/16	7/8	1-1/4	1/2	SG5045465	Price
1/2-13	6	2	5/16	7/8	1-1/4	1/2	SG5045466	Price
1/2-13	8	2	5/16	7/8	1-1/4	1/2	SG5045467	Price
1/2-13	9	2	5/16	7/8	1-1/4	1/2	SG5045468	Price
5/8-11	2	1-1/4	3/8	1-1/8	1-1/2	5/8	SG5045560	Price
5/8-11	3	1-1/2	3/8	1-1/8	1-1/2	5/8	SG5045562	Price
5/8-11	4	1-1/2	3/8	1-1/8	1-1/2	5/8	SG5045564	Price
5/8-11	5	1-1/2	3/8	1-1/8	1-1/2	5/8	SG5045565	Price
5/8-11	6	1-1/2	3/8	1-1/8	1-1/2	5/8	SG5045566	Price
5/8-11	7	3	3/8	1-1/8	1-1/2	5/8	SG5045572	Price
5/8-11	8	3	3/8	1-1/8	1-1/2	5/8	SG5045567	Price
5/8-11	10	3	3/8	1-1/8	1-1/2	5/8	SG5045568	Price
5/8-11	12	3	3/8	1-1/8	1-1/2	5/8	SG5045573	Price
3/4-10	3	1-1/2	7/16	1-5/16	1-3/4	3/4	SG5045660	Price
3/4-10	4	1-1/2	7/16	1-5/16	1-3/4	3/4	SG5045662	Price
3/4-10	5	1-1/2	7/16	1-5/16	1-3/4	3/4	SG5045663	Price
3/4-10	6	1-1/2	7/16	1-5/16	1-3/4	3/4	SG5045664	Price
3/4-10	7	3	7/16	1-5/16	1-3/4	3/4	SG5045670	Price
3/4-10	8	3	7/16	1-5/16	1-3/4	3/4	SG5045665	Price
3/4-10	10	3	7/16	1-5/16	1-3/4	3/4	SG5045666	Price
3/4-10	12	3	7/16	1-5/16	1-3/4	3/4	SG5045667	Price

Jergens T-Bolts



- Material: 4140 Forging (140,000 PSI) Tensile
- Finish: Black Oxide
- Heat Treat: Rc 32-36
- Thread: 2A-UNC
- Available in Fixture Pro™ Design Software

Thread Size (in.)	Length Under Head (in.)	T-Slot Width (in.)	T-Slot Thickness (in.)	Thread Length (in.)	Order No.	Price
3/8-16	1-1/2	11/16	1/4	3/4	**SG6642101**	Price
3/8-16	2	11/16	1/4	1-1/4	**SG6642102**	Price
3/8-16	2-1/2	11/16	1/4	1-1/4	**SG6642103**	Price
3/8-16	3	11/16	1/4	1-1/2	**SG6642104**	Price
3/8-16	3-1/2	11/16	1/4	1-1/2	**SG6642105**	Price
3/8-16	4	11/16	1/4	1-1/2	**SG6642106**	Price
1/2-13	1-1/2	7/8	1/4	3/4	**SG6642301**	Price
1/2-13	2	7/8	1/4	1-1/4	**SG6642302**	Price
1/2-13	2-1/2	7/8	1/4	1-1/4	**SG6642303**	Price
1/2-13	3	7/8	1/4	1-1/2	**SG6642304**	Price
1/2-13	3-1/2	7/8	1/4	1-1/2	**SG6642305**	Price
1/2-13	4	7/8	1/4	2	**SG6642306**	Price
1/2-13	4-1/2	7/8	1/4	2	**SG6642307**	Price
1/2-13	5	7/8	1/4	2	**SG6642308**	Price
1/2-13	5-1/2	7/8	1/4	2	**SG6642309**	Price
1/2-13	6	7/8	1/4	2	**SG6642310**	Price
5/8-11	2	1-1/8	3/8	1-1/4	**SG6642502**	Price
5/8-11	2-1/2	1-1/8	3/8	1-1/4	**SG6642503**	Price
5/8-11	3	1-1/8	3/8	1-1/2	**SG6642504**	Price
5/8-11	3-1/2	1-1/8	3/8	1-1/2	**SG6642505**	Price
5/8-11	4	1-1/8	3/8	1-1/2	**SG6642506**	Price
5/8-11	5	1-1/8	3/8	1-1/2	**SG6642507**	Price
5/8-11	6	1-1/8	3/8	1-1/2	**SG6642508**	Price
5/8-11	8	1-1/8	3/8	3	**SG6642509**	Price
5/8-11	10	1-1/8	3/8	3	**SG6642510**	Price
5/8-11	12	1-1/8	3/8	3	**SG6642511**	Price
3/4-10	2-1/2	1-1/4	1/2	1-1/4	**SG6642701**	Price
3/4-10	3	1-1/4	1/2	1-1/2	**SG6642702**	Price
3/4-10	3-1/2	1-1/4	1/2	1-1/2	**SG6642703**	Price
3/4-10	4	1-1/4	1/2	1-1/2	**SG6642704**	Price
3/4-10	5	1-1/4	1/2	1-1/2	**SG6642705**	Price
3/4-10	6	1-1/4	1/2	1-1/2	**SG6642706**	Price
3/4-10	8	1-1/4	1/2	3	**SG6642707**	Price
3/4-10	10	1-1/4	1/2	3	**SG6642708**	Price
3/4-10	12	1-1/4	1/2	3	**SG6642709**	Price
1-8	4	1-11/16	11/16	2-1/2	**SG6642901**	Price
1-8	5	1-11/16	11/16	2-1/2	**SG6642902**	Price
1-8	6	1-11/16	11/16	2-1/2	**SG6642903**	Price
1-8	7	1-11/16	11/16	2-1/2	**SG6642904**	Price
1-8	8	1-11/16	11/16	3	**SG6642905**	Price
1-8	9	1-11/16	11/16	3	**SG6642912**	Price
1-8	10	1-11/16	11/16	3	**SG6642906**	Price
1-8	12	1-11/16	11/16	3	**SG6642907**	Price
1-8	14	1-11/16	11/16	3	**SG6642911**	Price
1-1/4-7	8	1-7/8	1-7/8	5	**SG6643004**	Price
1-1/4-7	9	1-7/8	7/8	5	**SG6643005**	Price
1-1/4-7	10	1-7/8	7/8	5	**SG6643006**	Price
1-1/4-7	12	1-7/8	7/8	5	**SG6643007**	Price
1-1/4-7	14	1-7/8	7/8	5	**SG6643008**	Price
1-1/4-7	16	1-7/8	7/8	5	**SG6643009**	Price
1-1/4-7	18	1-7/8	7/8	5	**SG6643011**	Price
1-1/4-7	22	1-7/8	7/8	5	**SG6643012**	Price
1-1/4-7	24	1-7/8	7/8	5	**SG6643003**	Price

Jergens T-Slot Bolts



- Material: 4140 Forging (140,000 PSI) Tensile
- Finish: Black Oxide
- Heat Treat: Rc 32-36
- Thread: 2A-UNC
- Available in Fixture Pro™ Design Software

Thread Size (in.)	Length Under Head (in.)	T-Slot Base Width (in.)	T-Slot Thickness (in.)	Thread Length	T-Slot Table Width	T-Slot Length	Order No.	Price
1/2-13	2	7/8	5/16	1	1/2	1-1/4	**SG6644101**	Price
1/2-13	2-1/2	7/8	5/16	1-1/4	1/2	1-1/4	**SG6644102**	Price
1/2-13	3	7/8	5/16	1-1/2	1/2	1-1/4	**SG6644103**	Price
1/2-13	3-1/2	7/8	5/16	1-1/2	1/2	1-1/4	**SG6644104**	Price
1/2-13	4	7/8	5/16	1-1/2	1/2	1-1/4	**SG6644105**	Price
1/2-13	5	7/8	5/16	2	1/2	1-1/4	**SG6644106**	Price
1/2-13	6	7/8	5/16	2	1/2	1-1/4	**SG6644107**	Price
1/2-13	8	7/8	5/16	2	1/2	1-1/4	**SG6644108**	Price
5/8-11	2	1-1/8	3/8	1-1/4	5/8	1-1/2	**SG6644301**	Price
5/8-11	2-1/2	1-1/8	3/8	1-1/4	5/8	1-1/2	**SG6644302**	Price
5/8-11	3	1-1/8	3/8	1-1/2	5/8	1-1/2	**SG6644303**	Price
5/8-11	3-1/2	1-1/8	3/8	1-1/2	5/8	1-1/2	**SG6644304**	Price
5/8-11	4	1-1/8	3/8	1-1/2	5/8	1-1/2	**SG6644305**	Price
5/8-11	5	1-1/8	3/8	1-1/2	5/8	1-1/2	**SG6644306**	Price
5/8-11	6	1-1/8	3/8	1-1/2	5/8	1-1/2	**SG6644307**	Price
5/8-11	8	1-1/8	3/8	3	5/8	1-1/2	**SG6644308**	Price
5/8-11	10	1-1/8	3/8	3	5/8	1-1/2	**SG6644309**	Price
5/8-11	12	1-1/8	3/8	3	5/8	1-1/2	**SG6644310**	Price
3/4-10	2-1/2	1-5/16	7/16	1-1/4	3/4	1-3/4	**SG6644502**	Price
3/4-10	3	1-5/16	7/16	1-1/2	3/4	1-3/4	**SG6644503**	Price
3/4-10	3-1/2	1-5/16	7/16	1-1/2	3/4	1-3/4	**SG6644504**	Price
3/4-10	4	1-5/16	7/16	1-1/2	3/4	1-3/4	**SG6644505**	Price
3/4-10	5	1-5/16	7/16	1-1/2	3/4	1-3/4	**SG6644506**	Price
3/4-10	6	1-5/16	7/16	1-1/2	3/4	1-3/4	**SG6644507**	Price
3/4-10	8	1-5/16	7/16	3	3/4	1-3/4	**SG6644508**	Price
3/4-10	10	1-5/16	7/16	3	3/4	1-3/4	**SG6644509**	Price
3/4-10	12	1-5/16	7/16	3	3/4	1-3/4	**SG6644510**	Price
1-8	3-1/2	1-11/16	1/2	2	1	2-1/4	**SG6644701**	Price
1-8	4	1-11/16	1/2	2	1	2-1/4	**SG6644702**	Price
1-8	4-1/2	1-11/16	1/2	2-1/2	1	2-1/4	**SG6644703**	Price
1-8	5	1-11/16	1/2	2-1/2	1	2-1/4	**SG6644704**	Price
1-8	6	1-11/16	1/2	2-1/2	1	2-1/4	**SG6644705**	Price
1-8	8	1-11/16	1/2	3	1	2 1/4	**SG6644706**	Price
1-8	10	1-11/16	1/2	3	1	2-1/4	**SG6644707**	Price
1-8	12	1-11/16	1/2	3	1	2-1/4	**SG6644708**	Price

Jergens Dovetail Bolts



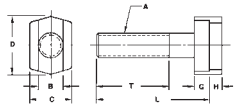
- Material: 4140 Forging (140,000 PSI) Tensile
- Finish: Black Oxide
- Heat Treat: Rc 32-36
- Thread: 2A-UNC
- Available in FeaturePro™ Design Software

Thread Size (in.)	Bolt Length (in.)	Bottom Dovetail Width (in.)	Dovetail Ht. (in.)	Thread Length (in.)	Top Dovetail Width (in.)	Dovetail Length (in.)	Order No.	Price
5/8-11	1-1/4	1-1/16	3/8	3/4	3/4	1-1/8	**SG6617901**	Price
5/8-11	2	1-1/16	3/8	1-1/8	3/4	1-1/8	**SG6617902**	Price
5/8-11	2-3/4	1-1/16	3/8	1-1/2	3/4	1-1/8	**SG6617903**	Price
5/8-11	3-3/4	1-1/16	3/8	1-1/2	3/4	1-1/8	**SG6617904**	Price

T-Slot Bolts

- Hot forged from C-1045 Steel
- Class 3 N.C.
- Full smooth cut threads





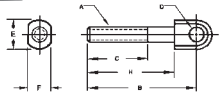
Thread Size-A	Length Under Head (in.)	T-Slot Width-B (in.)	C (in.)	D (in.)	G (in.)	H (in.)	Order No.	Price
3/8-16	1	3/8	11/16	13/16	3/16	3/16	**SF51010100**	Price
3/8-16	1-1/2	3/8	11/16	13/16	3/16	3/16	**SF51010150**	Price
3/8-16	2	3/8	11/16	13/16	3/16	3/16	**SF51010200**	Price
3/8-16	2-1/2	3/8	11/16	13/16	3/16	3/16	**SF51010250**	Price
3/8-16	2-3/4	3/8	11/16	13/16	3/16	3/16	**SF51010275**	Price
3/8-16	3	3/8	11/16	13/16	3/16	3/16	**SF51010300**	Price
3/8-16	3-1/2	3/8	11/16	13/16	3/16	3/16	**SF51010350**	Price
1/2-13	1-3/4	1/2	7/8	1-3/16	1/16	9/32	**SF51020175**	Price
1/2-13	2	1/2	7/8	1-3/16	1/16	9/32	**SF51020200**	Price
1/2-13	2-1/4	1/2	7/8	1-3/16	1/16	9/32	**SF51020225**	Price
1/2-13	2-1/2	1/2	7/8	1-3/16	1/16	9/32	**SF51020250**	Price
1/2-13	2-3/4	1/2	7/8	1-3/16	1/16	9/32	**SF51020275**	Price
1/2-13	3	1/2	7/8	1-3/16	1/16	9/32	**SF51020300**	Price
1/2-13	3-1/2	1/2	7/8	1-3/16	1/16	9/32	**SF51020350**	Price
1/2-13	4	1/2	7/8	1-3/16	1/16	9/32	**SF51020400**	Price
1/2-13	4-1/2	1/2	7/8	1-3/16	1/16	9/32	**SF51020450**	Price
1/2-13	5	1/2	7/8	1-3/16	1/16	9/32	**SF51020500**	Price
1/2-13	6	1/2	7/8	1-3/16	1/16	9/32	**SF51020600**	Price
1/2-13	7	1/2	7/8	1-3/16	1/16	9/32	**SF51020700**	Price
1/2-13	8	1/2	7/8	1-3/16	1/16	9/32	**SF51020800**	Price
5/8-11	2	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030200**	Price
5/8-11	2-1/4	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030225**	Price
5/8-11	2-1/2	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030250**	Price
5/8-11	3	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030300**	Price
5/8-11	3-1/2	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030350**	Price
5/8-11	4	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030400**	Price
5/8-11	4-1/2	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030450**	Price
5/8-11	5	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030500**	Price
5/8-11	6	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030600**	Price
5/8-11	7	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030700**	Price
5/8-11	8	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030800**	Price
5/8-11	9	5/8	1-1/8	1-5/16	11/32	11/32	**SF51030900**	Price
5/8-11	10	5/8	1-1/8	1-5/16	11/32	11/32	**SF51031000**	Price
5/8-11	12	5/8	1-1/8	1-5/16	11/32	11/32	**SF51031200**	Price
3/4-10	2	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040200**	Price
3/4-10	2-1/2	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040250**	Price
3/4-10	3	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040300**	Price
3/4-10	3	7/8	1-1/2	1-3/4	3/8	9/16	**SF51050300**	Price
3/4-10	3-1/2	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040350**	Price

Thread Size-A	Length Under Head (in.)	T-Slot Width-B (in.)	C (in.)	D (in.)	G (in.)	H (in.)	Order No.	Price
3/4-10	4	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040400**	Price
3/4-10	4	7/8	1-1/2	1-3/4	3/8	9/16	**SF51050400**	Price
3/4-10	4-1/2	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040450**	Price
3/4-10	4-1/2	7/8	1-1/2	1-3/4	3/8	9/16	**SF51050450**	Price
3/4-10	5	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040500**	Price
3/4-10	5	7/8	1-1/2	1-3/4	3/8	9/16	**SF51050500**	Price
3/4-10	6	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040600**	Price
3/4-10	6	7/8	1-1/2	1-3/4	3/8	9/16	**SF51050600**	Price
3/4-10	7	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040700**	Price
3/4-10	7	7/8	1-1/2	1-3/4	3/8	9/16	**SF51050700**	Price
3/4-10	8	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040800**	Price
3/4-10	8	7/8	1-1/2	1-3/4	3/8	9/16	**SF51050800**	Price
3/4-10	9	3/4	1-1/4	1-1/2	13/32	7/16	**SF51040900**	Price
3/4-10	10	3/4	1-1/4	1-1/2	13/32	7/16	**SF51041000**	Price
3/4-10	10	7/8	1-1/2	1-3/4	3/8	9/16	**SF51051000**	Price
3/4-10	12	3/4	1-1/4	1-1/2	13/32	7/16	**SF51041200**	Price
3/4-10	12	7/8	1-1/2	1-3/4	3/8	9/16	**SF51051200**	Price
3/4-10	14	3/4	1-1/4	1-1/2	13/32	7/16	**SF51041400**	Price
7/8-9	3	7/8	1-1/2	1-3/4	7/16	9/16	**SF51070300**	Price
7/8-9	4	7/8	1-1/2	1-3/4	7/16	9/16	**SF51070400**	Price
7/8-9	4	1	1-3/4	2	19/32	5/8	**SF51060400**	Price
7/8-9	5	7/8	1-1/2	1-3/4	7/16	9/16	**SF51070500**	Price
7/8-9	5	1	1-3/4	2	19/32	5/8	**SF51060500**	Price
7/8-9	6	7/8	1-1/2	1-3/4	7/16	9/16	**SF51070600**	Price
7/8-9	6	1	1-3/4	2	19/32	5/8	**SF51060600**	Price
7/8-9	7	7/8	1-1/2	1-3/4	7/16	9/16	**SF51070700**	Price
7/8-9	7	1	1-3/4	2	19/32	5/8	**SF51060700**	Price
7/8-9	8	7/8	1-1/2	1-3/4	7/16	9/16	**SF51070800**	Price
7/8-9	8	1	1-3/4	2	19/32	5/8	**SF51060800**	Price
1-8	4	1	1-3/4	2-1/16	7/16	5/8	**SF51080400**	Price
1-8	5	1	1-3/4	2-1/16	7/16	5/8	**SF51080500**	Price
1-8	6	1	1-3/4	2-1/16	7/16	5/8	**SF51080600**	Price
1-8	7	1	1-3/4	2-1/16	7/16	5/8	**SF51080700**	Price
1-8	8	1	1-3/4	2-1/16	7/16	5/8	**SF51080800**	Price
1-8	9	1	1-3/4	2-1/16	7/16	5/8	**SF51080900**	Price
1-8	10	1	1-3/4	2-1/16	7/16	5/8	**SF51081000**	Price
1-8	12	1	1-3/4	2-1/16	7/16	5/8	**SF51081200**	Price
1-8	14	1	1-3/4	2-1/16	7/16	5/8	**SF51081400**	Price

VALTRA Swing (Jiglatch) Bolts

- Designed to pivot and swing out of the way
- Perfect for loading and unloading work pieces
- Heat treated steel with black oxide finish

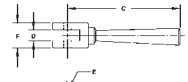




A	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	H (in.)	Order No.	Price
1/4-20	1-1/2	3/4	1/4	1/2	5/16	1-3/16	**MA62832700**	Price
1/4-20	2-1/2	1-1/4	1/4	1/2	5/16	2-3/16	**MA62832710**	Price
5/16-18	3	1-3/8	5/16	5/8	3/8	2-5/8	**MA62832730**	Price
3/8-16	2-1/2	1-3/8	3/8	3/4	1/2	2	**MA62832740**	Price
3/8-16	3-1/2	2	3/8	3/4	1/2	3	**MA62832750**	Price
1/2-13	3-1/8	1-3/4	1/2	1	5/8	2-1/2	**MA62832760**	Price
1/2-13	4-1/8	2-1/3	1/2	1	5/8	3-1/2	**MA62832770**	Price
5/8-11	3-1/2	1-3/4	5/8	1-1/4	3/4	2-3/4	**MA62832780**	Price
5/8-11	4-3/4	2-1/2	5/8	1-1/4	3/4	4	**MA62832790**	Price

VALTRA Double Cams

- Ideal for fast change tooling applications that require moderate clamping force
- Heat treated steel with black oxide finish



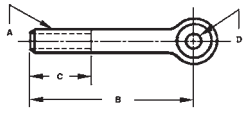


A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Order No.	Price
9/16	1/16	2-1/2	1/4	3/16	9/16	**MA62849005**	Price
11/16	1/16	3-1/2	5/16	1/4	5/8	**MA62849010**	Price
15/16	7/64	5	1/2	3/8	1-1/8	**MA62849015**	Price
1-3/16	9/64	5-3/8	5/8	5/8	1-1/4	**MA62849020**	Price

VALTRA Plain Tooling Eyebolts

- Designed to be used to build control linkages and shaft connections
- Can be used as a stationary hinge point
- Heat treated alloy steel (125,000 psi) in black oxide finish

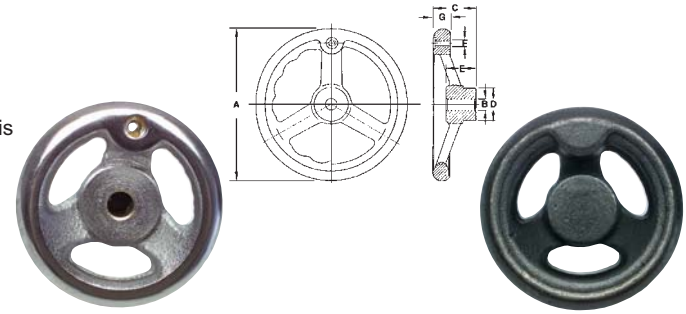




A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Order No.	Price
1/4-20	3	2-5/8	3/16	1/2	1/4	**MA62832403**	Price
5/16-18	3	1-1/2	1/4	5/8	5/16	**MA62832404**	Price
5/16-18	3	1-1/2	5/16	5/8	5/16	**MA62832408**	Price
5/16-18	4	2	1/4	5/8	5/16	**MA62832406**	Price
5/16-18	4	2	5/16	5/8	5/16	**MA62832410**	Price
5/16-18	4	3-1/2	5/16	5/8	5/16	**MA62832411**	Price
3/8-16	3	1-1/2	5/16	3/4	3/8	**MA62832412**	Price
3/8-16	3	1-1/2	3/8	3/4	3/8	**MA62832416**	Price
3/8-16	3-3/4	1-1/2	3/8	1	1/2	**MA62832420**	Price
3/8-16	5	4-1/2	3/8	3/4	3/8	**MA62832419**	Price
1/2-13	3-3/4	1-1/2	3/8	1	1/2	**MA62832424**	Price
1/2-13	5	2	3/8	1	1/2	**MA62832426**	Price
1/2-13	5	4-1/2	3/8	1	1/2	**MA62832427**	Price
5/8-11	4-1/2	2	5/8	1-1/4	5/8	**MA62832428**	Price
5/8-11	6	2-1/2	5/8	1-1/4	5/8	**MA62832430**	Price
5/8-11	6	5-1/2	5/8	1-1/4	5/8	**MA62832431**	Price
3/4-10	4-1/2	2	3/4	1-1/2	3/4	**MA62832432**	Price
3/4-10	6	2-1/2	3/4	1-1/2	3/4	**MA62832434**	Price
3/4-10	6	5-1/4	3/4	1-1/2	3/4	**MA62832435**	Price

VALTRA Handwheels

- Handsome, and yet surprisingly affordable handwheel
- Round machined rim, and two different finishes to fit your budget
- The cast iron handwheel is tumbled clean and smooth, without holes
- The polished handwheel is chrome plated and ready to use, and the wheel is tapped and ready for the handle
- **Machine handles sold separately**



							With Hole		Without Hole	
A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F	G (in.)	Order No.	Price	Order No.	Price
3.00	3/8	1	1	1	10-24	1/2	**MA61A233**	Price	**MA61A133**	Price
4.00	3/8	1-1/2	1-1/8	1-1/16	10-24	9/16	**MA61A234**	Price	**MA61A134**	Price
5.00	3/8	1-5/8	1-1/4	1-3/16	1/4-20	19/32	**MA61A235**	Price	**MA61A135**	Price
6.00	1/2	1-13/16	1-3/8	1-1/4	5/16-18	21/32	**MA61A236**	Price	**MA61A136**	Price
8.00	5/8	2-3/16	1-21/32	1-1/2	3/8-16	7/8	**MA61A238**	Price	**MA61A138**	Price
10.00	5/8	2-3/8	1-7/8	1-21/32	3/8-16	15/16	**MA61A2310**	Price	**MA61A1310**	Price
12.00	3/4	2-1/2	2-5/32	1-25/32	1/2-13	1	**MA61A2312**	Price	**MA61A1312**	Price

VALTRA Machine Handles

- Both fixed and revolving steel handles are chrome plated
- The lengths are well proportioned, and the grips are exceptionally attractive and comfortable



F (in.)	B (in.)	C (in.)	L (in.)	K (in.)	Order No.	Price
1/2-13	1-1/4	13/16	4	5/8	**MA61B650**	Price

Handle Chart for Handwheels

Fixed Handle			Revolving Handle		
Handwheel Part No.†		Handle Order No.	Handwheel Part No.†		Handle Order No.
A133	A233	**MA61B519**	5.00	A233	**MA61B619**
10.20	A234	**MA61B519**	5.00	A234	**MA61B619**
10.20	A235	**MA61B525**	5.00	A235	**MA61B625**
10.20	A236	**MA61B531**	5.65	A236	**MA61B631**
12.00	A238	**MA61B537**	7.90	A238	**MA61B637**
16.60	A2310	**MA61B537**	7.90	A2310	**MA61B637**
16.60	A2312	**MA61B550**	10.70	A2312	**MA61B650**

†See above Handwheel chart

MORTON Adjustable Clamping Levers with Stud

- Black thermoplastic handle with metal insert
- Steel parts give increased stability and rigidity
- External steel stud with black oxide finish

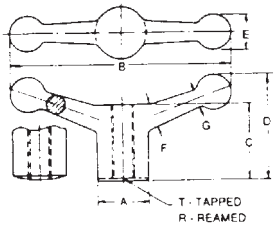


					Die-Cast Handle		Plastic Handle	
Thread X	Thread Length	D (in.)	E (in.)	F (in.)	Order No.	Price	Order No.	Price
10-24	.63	1.65	1.30	.39	**SG80MH301**	Price	**SG80AH301**	Price
10-32	.63	1.65	1.30	.39	**SG80MH302**	Price	**SG80AH302**	Price
1/4-20	.78	1.65	1.30	.39	**SG80MH303**	Price	**SG80AH303**	Price
5/16-18	.78	2.56	1.77	.53	**SG80MH3037**	Price	**-**	-
5/16-18	1.57	2.56	1.77	.53	**SG80MH304**	Price	**SG80AH304**	Price
3/8-16	1.57	2.56	1.77	.53	**SG80MH305**	Price	**SG80AH305**	Price
3/8-16	1.57	3.07	2.12	.63	**SG80MH306**	Price	**SG80AH306**	Price
3/8-16	1.97	3.07	2.12	.63	**SG80MH307**	Price	**SG80AH307**	Price
1/2-13	1.25	3.62	2.52	.75	**SG80MH308**	Price	**SG80AH308**	Price
1/2-13	1.97	3.62	2.52	.75	**SG80MH309**	Price	**SG80AH309**	Price
1/2-13	2.48	3.62	2.52	.75	**SG80MH310**	Price	**SG80AH310**	Price

MORTON Cast Iron Ball Handles

- Cast iron
- Zinc-plated
- Blank casting, reamed & tapered



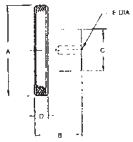


A (in.)	B (in.)	C (in.)	D (in.)	Ream	Tapped	Order No.	Price
1-1/8	4-3/4	1-3/8	2-1/4	-	-	**SG80BH100**	Price
1-1/8	4-3/4	1-3/8	2-1/4	-	1/2-13	**SG80BH102**	Price
1-1/8	4-3/4	1-3/8	2-1/4	.499	-	**SG80BH101**	Price
1-3/8	6	1-5/8	2-1/2	-	-	**SG80BH200**	Price
1-3/8	6	1-5/8	2-1/2	-	5/8-11	**SG80BH205**	Price
1-3/8	6	1-5/8	2-1/2	.624	-	**SG80BH204**	Price
1-5/8	8	1-3/4	2-15/16	-	-	**SG80BH300**	Price
1-5/8	8	1-3/4	2-15/16	-	3/4-10	**SG80BH308**	Price
1-5/8	8	1-3/4	2-15/16	.749	-	**SG80BH307**	Price

MORTON Knurled Knobs

- Steel knob
- Black oxide finish



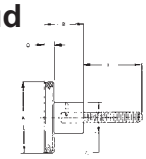


Tapped Hole	A (in.)	B (in.)	C (in.)	D (in.)	Order No.	Price
10-24	3/4	5/8	1/2	1/4	**SG80KK30**	Price
1/4-20	3/4	5/8	1/2	1/4	**SG80KK31**	Price
1/4-20	1.00	3/4	5/8	1/4	**SG80KK32**	Price
5/16-18	1.00	3/4	5/8	1/4	**SG80KK33**	Price
5/16-18	1-1/2	1	3/4	5/16	**SG80KK34**	Price
3/8-16	1-1/2	1	3/4	5/16	**SG80KK35**	Price
3/8-16	2.00	1-1/8	1	3/8	**SG80KK36**	Price
1/2-13	2.00	1-1/8	1	3/8	**SG80KK37**	Price
1/2-13	2-1/2	1-1/2	1-1/2	9/16	**SG80KK38**	Price
5/8-11	2-1/2	1-1/2	1-1/2	9/16	**SG80KK39**	Price

MORTON Knurled Knobs with Stud

- Steel knob & screw
- Black oxide finish

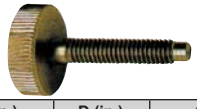


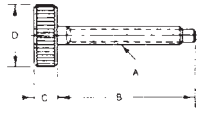


Stud Length	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Order No.	Price
10-24	3/4	5/8	1/2	1/4	1/2	**SG80KKS50**	Price
10-24	3/4	5/8	1/2	1/4	1	**SG80KKS51**	Price
1/4-20	3/4	5/8	1/2	1/4	3/4	**SG80KKS52**	Price
1/4-20	3/4	5/8	1/2	1/4	1-1/4	**SG80KKS53**	Price
1/4-20	1.00	3/4	5/8	1/4	1-3/4	**SG80KKS54**	Price
5/16-18	1.00	3/4	5/8	1/4	1-3/4	**SG80KKS55**	Price
5/16-18	1.00	3/4	5/8	1/4	3	**SG80KKS56**	Price
5/16-18	1-1/2	1	3/4	5/16	1-3/4	**SG80KKS57**	Price
5/16-18	1-1/2	1	3/4	5/16	3	**SG80KKS58**	Price

MORTON Stainless Steel Adjusting Screws

- Made from 303 stainless steel
- Two-piece construction





A	B (in.)	C (in.)	D (in.)	Order No.	Price
1/4-20	1	5/16	1.00	**SG80KHS10SS**	Price
1/4-20	2-1/2	5/16	1.00	**SG80KHS1SS**	Price
3/8-16	2	7/16	1-1/4	**SG80KHS31SS**	Price
3/8-16	3	7/16	1-1/4	**SG80KHS3SS**	Price
5/16-18	1-1/2	3/8	1-1/8	**SG80KHS21SS**	Price
5/16-18	2-1/4	3/8	1-1/8	**SG80KHS22SS**	Price
5/16-18	2-3/4	3/8	1-1/8	**SG80KHS24SS**	Price

Jergens Hand Knob Toggle Screws

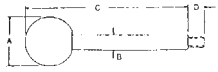
- Material: Stem, Stressproof Pad, 4140 Head, Cast Iron
- Finish: Stem, Black Oxide Pad, Zinc Plate Head, Zinc Plate
- Thread: 2A-UNC
- Pad: Angular movement either side of center
- Available in Fixture Pro TM Design Software



Thread Size (in.)	Thread Length (in.)	Toggle Width (in.)	Toggle Height (in.)	Knob Height (in.)	Knob Width (in.)	Order No.	Price
3/8-16	1-21/32	11/16	3/8	1-1/8	2	**SG6636301**	Price
3/8-16	2-13/32	11/16	3/8	1-1/8	2	**SG6636302**	Price
3/8-16	3-9/32	11/16	3/8	1-1/8	2	**SG6636303**	Price
1/2-13	1-21/32	13/16	15/32	1-1/2	2-1/2	**SG6636304**	Price
1/2-13	2-9/32	13/16	15/32	1-1/2	2-1/2	**SG6636305**	Price
1/2-13	2-29/32	13/16	15/32	1-1/2	2-1/2	**SG6636306**	Price
1/2-13	3-17/32	13/16	15/32	1-1/2	2-1/2	**SG6636307**	Price
5/8-11	2-17/32	15/16	1/2	2	3	**SG6636308**	Price
5/8-11	3-9/32	15/16	1/2	2	3	**SG6636309**	Price
3/4-10	4-11/32	1-1/8	19/32	2	3	**SG6636310**	Price

MORTON Plastic Ball Knob with Shaft

- Plastic ball
- Steel shaft with black oxide finish



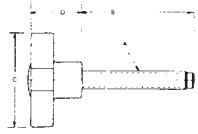


Thread	A (in.)	B (in.)	C (in.)	D (in.)	Order No.	Price
10-32	3/4	1/4	3	3/8	**SG80GL10**	Price
1/4-20	3/4	1/4	3-1/2	3/8	**SG80GL20**	Price
1/4-20	1	3/8	6	1/2	**SG80GL30**	Price
5/16-18	1	3/8	6	1/2	**SG80GL40**	Price
3/8-16	1-3/8	1/2	8	1/2	**SG80GL50**	Price
1/2-13	1-7/8	5/8	10	5/8	**SG80GL60**	Price

MORTON Aluminum Clamping Knob Assemblies

- Aluminum hand knob
- Carbon steel screw with black oxide finish





Thread A	B (in.)	C (in.)	D (in.)	Order No.	Price
1/4-20	1-3/4	1-1/2	7/8	**SG80HKS2517A**	Price
1/4-20	3	1-1/2	7/8	**SG80HKS2530A**	Price
5/16-18	1-3/4	2.00	7/8	**SG80HKS3117A**	Price
5/16-18	3	2.00	7/8	**SG80HKS3130A**	Price
3/8-16	1-3/4	2.00	7/8	**SG80HKS3717A**	Price
3/8-16	3	2.00	7/8	**SG80HKS3730A**	Price
1/2-13	1-3/4	2-1/2	1-1/2	**SG80HKS5017A**	Price
1/2-13	3	2-1/2	1-1/2	**SG80HKS5030A**	Price
5/8-11	1-3/4	2-1/2	1-1/2	**SG80HKS6217A**	Price
5/8-11	3	2-1/2	1-1/2	**SG80HKS6230A**	Price

Jergens Socket Toggle Screws

- Material: 4140
- Finish: Black Oxide
- Heat Treat: 38-42 Rc
- Screws may be inserted without removing pads
- Available in Fixture Pro TM Design Software



Thread Size (in.)	OAL (in.)	Toggle Length (in.)	Outside Dia. (in.)	Order No.	Price
1/2-13	1	7/16	.400	**SG6633307**	Price
1/2-13	2	7/16	.400	**SG6633308**	Price
1/4-20	1	15/64	.185	**SG6633302**	Price
1/4-20	1/2	15/64	.185	**SG6633301**	Price
3/8-16	1	11/32	.294	**SG6633305**	Price
3/8-16	2	11/32	.294	**SG6633306**	Price
5/16-18	1-1/2	9/32	.240	**SG6633304**	Price
5/16-18	3/4	9/32	.240	**SG6633303**	Price
5/8-11	2	17/32	.507	**SG6633310**	Price

Jergens Toggle Thumb Screws

- Material: Stem and Head 1215, Pad 4140
- Finish: Black Oxide
- Available in Fixture Pro TM Design Software



Thread Size (in.)	OAL (in.)	Thumb Screw Size (in.)	Thum Screw Width (in.)	Toggle Length (in.)	Order No.	Price
10-24	1	3/4	5/16	3/16	**SG6633501**	Price
10-24	1-1/2	3/4	5/16	3/16	**SG6633502**	Price
1/4-20	1-1/2	1	5/16	15/64	**SG6633503**	Price
1/4-20	2	1	5/16	15/64	**SG6633504**	Price
5/16-18	1-1/2	1-1/8	3/8	9/32	**SG6633505**	Price
5/16-18	2	1-1/8	3/8	9/32	**SG6633506**	Price
5/16-18	2-1/2	1-1/8	3/8	9/32	**SG6633507**	Price
3/8-16	1-1/2	1-1/4	7/16	11/32	**SG6633508**	Price
3/8-16	2	1-1/4	7/16	11/32	**SG6633509**	Price
3/8-16	2-1/2	1-1/4	7/16	11/32	**SG6633510**	Price
3/8-16	3	1-1/4	7/16	11/32	**SG6633511**	Price

Pull Ring Retractable, Locking

- Designed for applications where space is limited
- Plunger can be completely withdrawn into the body and locked into a retracted position
- Chamfered plunger for easy alignment



Initial End Force lbs	Final End Force lbs	Thread Size (in.)	Material	Nose Dia. (in.)	Order No.	Price
1.0	2.5	1/4-20	12L14 Steel Black Oxide	.155	**SG5054401**	Price
1.0	2.5	1/4-20	12L14 Steel Zinc Plated	.155	**SG5054414**	Price
1.0	2.5	1/4-20	303 SS	.155	**SG5054405**	Price
2.0	4.0	3/8-16	12L14 Steel Black Oxide	.233	**SG5054402**	Price
2.0	4.0	3/8-16	12L14 Steel Zinc Plated	.233	**SG5054415**	Price
2.0	4.0	3/8-16	303 SS	.233	**SG5054406**	Price
2.50	5.0	1/2-13	12L14 Steel Black Oxide	.312	**SG5054403**	Price
2.50	5.0	1/2-13	12L14 Steel Zinc Plated	.312	**SG5054416**	Price
2.50	5.0	1/2-13	303 SS	.312	**SG5054407**	Price

L-Handle Retractable, Locking, Steel Zinc Chromate

- Plunger can be completely withdrawn into the body and locked into a retracted position
- Chamfered plunger for easy alignment
- Built in drive wrench for rapid installation and alignment



Initial End Force lbs	Final End Force lbs	Thread Size (in.)	Thread Length (in.)	End of nose to thread (in.)	Nose Dia. (in.)	Material	Order No.	Price
.50	2.5	1/4-20	.800	.380	.16	12L14 Steel	**SG5054305**	Price
.75	3.75	3/8-16	1.18	.560	.23	12L14 Steel	**SG5054306**	Price
1.0	5.0	1/2-13	1.10	.750	.31	12L14 Steel	**SG5054307**	Price
1.0	5.0	5/8-11	1.82	1.00	.38	12L14 Steel	**SG5054308**	Price

L-Handle Retractable, Non-Locking, Steel Zinc Chromate without Locking Element

- Fully retractable plunger
- Chamfered plunger for easy alignment
- Easy withdrawing and re-engagement
- Zinc plated clear chromate finish



Initial End Force lbs	Final End Force lbs	Thread Size (in.)	Thread Length (in.)	End of Nose to Thread (in.)	Nose Dia. (in.)	Material	Order No.	Price
.50	2.5	1/4-20	.800	.380	.16	12L14 Steel	**SG5054310**	Price
.75	3.75	3/8-16	1.18	.560	.23	12L14 Steel	**SG5054311**	Price
1.0	5.0	1/2-13	1.10	.750	.31	12L14 Steel	**SG5054312**	Price
1.0	5.0	5/8-11	1.82	1.00	.38	12L14 Steel	**SG5054313**	Price

Pull Handles - Plastic Bridge Top Mount

- Top mount bridge handle with smooth radius edges
- Standard on most modular framing systems and enclosures
- Material: PA6, matte black color
- Socket head screws (not included)



Reamed Hole Size	Handle Length (in.)	Handle Height (in.)	Order No.	Price
1/4	4.40	1.42	**SG5071160**	Price
5/16	5.47	1.61	**SG5071161**	Price
5/16	6.14	1.77	**SG5071162**	Price

2 Spoked Aluminum Hand Wheels with Folding Handle

- Material: High quality fine grain black powder coated gravity cast aluminum
- Available in a variety of diameters and bore sizes
- Custom bores, keyways and set screws available
- Polished versions available by special order (Add suffix "P" when ordering)
- Supplied with phenolic grip safety folding handle



Outside Dia. (in.)	Hole Dia. (in.)	Overall Height (in.)	Handle Length (in.)	Weight	Order No.	Price
4.00	3/8	1.77	1.97	.80 lbs	**SG5070931**	Price
4.00	1/2	1.77	1.97	.80 lbs	**SG5070930**	Price
5.00	3/8	1.93	2.56	1.0 lbs	**SG5070933**	Price
5.00	1/2	1.93	2.56	1.0 lbs	**SG5070932**	Price
6.00	1/2	2.05	2.56	1.4 lbs	**SG5070935**	Price
6.00	5/8	2.05	2.56	1.4 lbs	**SG5070934**	Price
8.00	1/2	2.74	3.15	2.7 lbs	**SG5070937**	Price
8.00	5/8	2.74	3.15	2.7 lbs	**SG5070936**	Price
10.00	5/8	2.8	3.15	3.8 lbs	**SG5070939**	Price
10.00	3/4	2.8	3.15	3.8 lbs	**SG5070938**	Price

2 Spoked Aluminum Hand Wheels Without Handle

- Material: High quality fine grain black powder coated gravity cast aluminum
- Available in a variety of diameters and bore sizes
- Custom bores, keyways and set screws available
- Polished versions available by special order (Add suffix "P" when ordering)



Outside Dia. (in.)	Hole Dia. (in.)	Overall Height (in.)	Weight	Order No.	Price
4.00	1/2	1.77	.60 lbs	**SG5070921**	Price
4.00	3/8	1.77	.60 lbs	**SG5070920**	Price
5.00	1/2	1.93	.80 lbs	**SG5070923**	Price
5.00	3/8	1.93	.80 lbs	**SG5070922**	Price
6.00	1/2	2.05	1.2 lbs	**SG5070924**	Price
6.00	5/8	2.05	1.2 lbs	**SG5070925**	Price
8.00	1/2	2.74	2.5 lbs	**SG5070926**	Price
8.00	5/8	2.74	2.5 lbs	**SG5070927**	Price
10.00	3/4	2.8	3.6 lbs	**SG5070929**	Price
10.00	5/8	2.8	3.6 lbs	**SG5070928**	Price

3 Spoked Cast Iron Dished Style Hand Wheels with Revolving Handle

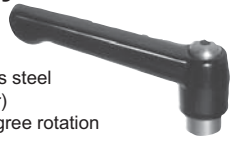
- Oversized hub can accommodate all types of bores, keyways and set screws
- Cast Iron
- Nickel plated with polished rim finish
- Handle chrome plated steel revolving with wrench flats



Outside Dia. (in.)	Hole Dia. (in.)	Overall Height (in.)	Handle Height (in.)	Weight	Order No.	Price
4.00	3/8	4.1	2.4	1.4 lbs	**SG5070980**	Price
6.00	1/2	5.23	2.95	3.6 lbs	**SG5070981**	Price
8.00	5/8	4.53	2.95	5.9 lbs	**SG5070982**	Price
10.00	3/4	5.43	2.95	8.6 lbs	**SG5070983**	Price
12.00	3/4	5.78	2.95	11.7 lbs	**SG5070984**	Price

Zinc Classic Tapped Style Steel Handles

- Handle: Die cast zinc
- Insert, screw & spring: Stainless: Grade 303 stainless steel
- Grade 304 and 316 stainless available (special order)
- Lift & Rotate: handle is adjustable throught a 360 degree rotation
- Chrome plated version available from stock



Thread/Stud Size (in.)	Thread Depth (in.)	Handle Length (in.)	Handle Height (in.)	Overall Height (in.)	Order No.	Price
1/4-20	.24	2.56	1.77	1.77	**SG5070716**	Price
5/16-18	.24	2.56	1.77	1.77	**SG5070717**	Price
5/16-18	.29	3.07	2.12	2.12	**SG5070720**	Price
3/8-16	.29	3.07	2.12	2.12	**SG5070721**	Price
3/8-16	.35	3.62	2.52	2.52	**SG5070724**	Price
1/2-13	.35	3.62	2.52	2.52	**SG5070725**	Price
1/2-13	.47	4.25	2.95	2.95	**SG5070728**	Price
5/8-11	.47	4.25	2.95	2.95	**SG5070729**	Price

Zinc Ball Tapped Style Steel Handles



- Zinc die cast zinc ball style handle
- Durable black powder coated finish
- Insert, screw and spring black zinc coated carbon steel
- RoHs compliant
- Handle is adjustable throughout a 360° rotation

Thread/Stud Size (in.)	Thread Depth (in.)	Handle Length (in.)	Handle Height (in.)	Overall Height (in.)	Order No.	Price
1/4-20	.25	2.56	1.81	1.14	**SG5070586**	Price
5/16-18	.25	2.56	1.81	1.14	**SG5070587**	Price
5/16-18	.39	3.15	2.28	1.47	**SG5070591**	Price
3/8-16	.39	3.15	2.28	1.47	**SG5070592**	Price
3/8-16	.47	3.74	3.11	2.00	**SG5070596**	Price
1/2-13	.47	3.74	3.11	2.00	**SG5070597**	Price
1/2-13	.47	4.33	3.11	2.00	**SG5070601**	Price
5/8-11	.47	4.33	3.11	2.00	**SG5070602**	Price

Plastic Classic Tapped Style Steel Handles



- High quality Nylon 6 handle reinforced with 30% glass fiber
- Molded in zinc metal teeth makes handles extremely durable
- RoHs compliant
- Insert, screw and spring black zinc coated carbon steel
- Temperature rating -40°F to +265°F
- Handle is adjustable throughout a 360° rotation
- Unique design reduces cavity area around the retention screw for less debris accumulation

Thread/Stud Size (in.)	Thread Depth (in.)	Overall Height (in.)	Handle Length (in.)	Handle Height (in.)	Order No.	Price
1/4-20	.26	1.77	2.48	1.77	**SG5070862**	Price
5/16-18	.26	1.77	2.48	1.77	**SG5070863**	Price
5/16-18	.31	2.12	3.07	2.12	**SG5070866**	Price
3/8-16	.31	2.12	3.07	2.12	**SG5070867**	Price
3/8-16	.43	2.56	3.62	2.56	**SG5070870**	Price
1/2-13	.43	2.56	3.62	2.56	**SG5070871**	Price

Zinc Classic Stud Style Steel Handles



- Zinc die cast classic style handle with durable black powder coated finish
- RoHS compliant
- Die cast zinc handle
- Insert, screw & spring blank zinc coated carbon steel
- Handle is adjustable throughout a 360° rotation

Thread/Stud Size (in.)	Thread Length (in.)	Handle Length (in.)	Handle Height (in.)	Overall Height (in.)	Order No.	Price
5/16-18	.59	2.48	1.77	2.36	**SG5070640**	Price
5/16-18	.78	2.48	1.77	2.55	**SG5070641**	Price
5/16-18	1.18	2.48	1.77	2.95	**SG5070642**	Price
5/16-18	1.57	2.48	1.77	3.34	**SG5070643**	Price
5/16-18	2.36	2.48	1.77	4.13	**SG5070646**	Price
3/8-16	.59	2.48	1.77	2.36	**SG5070647**	Price
3/8-16	.59	3.07	2.17	2.76	**SG5070658**	Price
3/8-16	.59	3.62	2.56	3.15	**SG5070676**	Price
3/8-16	.78	2.48	1.77	2.55	**SG5070648**	Price
3/8-16	.78	3.07	2.17	2.95	**SG5070659**	Price
3/8-16	.78	3.62	2.56	3.34	**SG5070677**	Price
3/8-16	1.18	2.48	1.77	2.95	**SG5070649**	Price
3/8-16	1.18	3.07	2.17	3.35	**SG5070660**	Price
3/8-16	1.18	3.62	2.56	3.74	**SG5070678**	Price
3/8-16	1.57	2.48	1.77	3.34	**SG5070650**	Price
3/8-16	1.57	3.07	2.17	3.74	**SG5070661**	Price
3/8-16	1.57	3.62	2.56	4.13	**SG5070679**	Price
3/8-16	2.36	2.48	2.28	4.64	**SG5070653**	Price
3/8-16	2.36	3.07	2.17	4.53	**SG5070664**	Price
3/8-16	2.36	3.62	2.56	4.92	**SG5070682**	Price
1/2-13	.59	3.62	2.56	3.15	**SG5070687**	Price
1/2-13	.78	3.07	2.17	2.95	**SG5070670**	Price
1/2-13	.78	3.62	2.56	3.34	**SG5070688**	Price
1/2-13	.98	4.25	3.11	4.09	**SG5070699**	Price
1/2-13	1.18	3.62	2.56	3.74	**SG5070689**	Price
1/2-13	1.57	3.07	2.17	3.74	**SG5070673**	Price
1/2-13	1.57	3.62	2.56	4.13	**SG5070691**	Price
1/2-13	1.57	4.25	3.11	4.68	**SG5070700**	Price
1/2-13	2.36	3.62	2.56	4.92	**SG5070694**	Price
1/2-13	2.36	4.25	3.11	5.47	**SG5070702**	Price
5/8-11	1.57	4.25	3.11	4.68	**SG5070706**	Price
5/8-11	2.36	4.25	3.11	5.47	**SG5070710**	Price

Zinc Ball Stud Style Steel Handles



- Zinc die cast zinc ball style handle
- Durable black powder coated finish
- Insert, screw and spring black zinc coated carbon steel
- RoHs compliant
- Handle is adjustable throughout a 360° rotation

Thread/Stud Size (in.)	Thread Length (in.)	Handle Length (in.)	Handle Height (in.)	Overall Height (in.)	Order No.	Price
5/16-18	.59	2.56	1.81	2.4	**SG5070514**	Price
5/16-18	.78	2.56	1.81	2.59	**SG5070515**	Price
5/16-18	1.18	2.56	1.81	2.99	**SG5070516**	Price
5/16-18	1.57	2.56	1.81	3.38	**SG5070517**	Price
5/16-18	2.36	2.56	1.81	4.17	**SG5070520**	Price
3/8-16	.39	3.15	2.28	2.67	**SG5070528**	Price
3/8-16	.59	2.56	1.81	2.4	**SG5070521**	Price
3/8-16	.78	2.56	1.81	2.59	**SG5070522**	Price
3/8-16	.78	3.15	2.28	3.06	**SG5070529**	Price
3/8-16	1.18	2.56	1.81	2.99	**SG5070523**	Price
3/8-16	1.18	3.15	2.28	3.46	**SG5070530**	Price
3/8-16	1.57	2.56	1.81	3.38	**SG5070524**	Price
1/2-13	.59	3.74	2.63	3.22	**SG5070535**	Price
1/2-13	.78	3.74	2.63	3.41	**SG5070536**	Price
1/2-13	.98	4.33	3.11	4.09	**SG5070550**	Price
1/2-13	1.18	3.74	2.63	3.81	**SG5070537**	Price
1/2-13	1.57	3.74	2.63	4.2	**SG5070538**	Price
1/2-13	1.57	4.33	3.11	4.68	**SG5070551**	Price
1/2-13	2.36	3.74	2.63	4.99	**SG5070541**	Price
1/2-13	2.36	4.33	3.11	5.47	**SG5070552**	Price
5/8-11	1.57	4.33	3.11	4.68	**SG5070553**	Price
5/8-11	2.36	4.33	3.11	5.47	**SG5070554**	Price

Plastic Classic Stud Style Steel Handles



- Material: High quality Nylon 6 handle reinforced with 30% glass fiber - Insert, screw and spring black zinc coated carbon steel
- Molded in zinc metal teeth makes handles extremely durable
- Temperature rating -40°F to +265°F
- Lift & Rotate: Handle is adjustable throughout a 360° rotation

Thread/Stud Size (in.)	Thread Length (in.)	Handle Length (in.)	Handle Height (in.)	Overall Height (in.)	Order No.	Price
5/16-18	.59	2.48	1.77	2.36	**SG5070787**	Price
5/16-18	.78	2.48	1.77	2.55	**SG5070788**	Price
5/16-18	1.18	2.48	1.77	2.95	**SG5070789**	Price
5/16-18	1.57	2.48	1.77	4.13	**SG5070790**	Price
5/16-18	2.36	2.48	1.77	4.84	**SG5070793**	Price
3/8-16	.59	2.48	1.77	2.36	**SG5070794**	Price
3/8-16	.59	3.07	2.17	2.76	**SG5070805**	Price
3/8-16	.59	3.62	2.56	3.15	**SG5070823**	Price
3/8-16	.78	2.48	2.17	2.95	**SG5070795**	Price
3/8-16	.78	3.07	2.17	2.95	**SG5070806**	Price
3/8-16	.78	3.62	2.56	3.34	**SG5070824**	Price
3/8-16	1.18	2.48	2.17	3.35	**SG5070796**	Price
3/8-16	1.18	3.07	2.17	3.35	**SG5070807**	Price
3/8-16	1.18	3.62	2.56	3.74	**SG5070825**	Price
3/8-16	1.57	2.48	2.17	3.74	**SG5070797**	Price
3/8-16	1.57	3.07	2.17	3.74	**SG5070808**	Price
3/8-16	1.57	3.62	2.56	4.13	**SG5070826**	Price
3/8-16	2.36	2.48	2.17	4.53	**SG5070800**	Price
3/8-16	2.36	3.07	2.17	4.53	**SG5070811**	Price
3/8-16	2.36	3.62	2.56	4.92	**SG5070829**	Price
1/2-13	.59	3.62	2.56	3.15	**SG5070834**	Price
1/2-13	.78	3.07	2.17	2.95	**SG5070817**	Price
1/2-13	.78	3.62	2.56	3.34	**SG5070835**	Price
1/2-13	1.18	3.62	2.56	3.74	**SG5070836**	Price
1/2-13	1.57	3.07	2.17	3.74	**SG5070820**	Price
1/2-13	1.57	3.62	2.56	4.13	**SG5070838**	Price
1/2-13	2.36	3.62	2.56	4.92	**SG5070841**	Price

Super Bridgeport Clamping Set

For 5/8” Table Slot with 1/2” -13 T-Nuts & Studs

Set Contains:

- 6 Step blocks
- 6 Serrated end clamps
- 4 Coupling nuts
- 4 Flange nuts
- 4 T-slot nuts
- 24 Studs with flats, 4 each: 3, 4, 5, 6, 7 & 8” long
- 1 Holder



Order No.	Price
SG60NS625SS	Price

T-Nut and Stud Sets

Sets Contain:

- 4 Coupling nuts
- 4 Flange nuts
- 4 T-Slot nuts
- 1 T-Slot cleaner
- 24 studs, 4 each of: English Kits: 3, 4, 5, 6, 7 & 8” long
- 1 Holder

MADE IN THE USA



Table T-Slot Size (in.)	Stud Size (in.)	Order No.	Price
3/8	5/16-18	**SG5020601**	Price
7/16	3/8-16	**SG5020602**	Price
1/2	3/8-16	**SG5020603**	Price
9/16	3/8-16	**SG5020604**	Price
9/16	1/2-13	**SG5020605**	Price
5/8	1/2-13	**SG5020606**	Price
11/16	1/2-13	**SG5020607**	Price
11/16	5/8-11	**SG5020608**	Price
3/4	5/8-11	**SG5020609**	Price
13/16	5/8-11	**SG5020610**	Price
13/16	3/4-10	**SG5020611**	Price
7/8	3/4-10	**SG5020612**	Price

T-Nut & Stud Sets-Metric

Sets Contain:

- 4 Coupling nuts
- 4 Flange nuts
- 4 T-Slot nuts
- 1 T-Slot cleaners
- 24 studs - 4 each: Kits 68201-206 - 80, 110, 140, 150, 175 & 200mm / Kits 68207-209 - 80, 110, 150, 175, 200, 250mm
- 1 Holder

MADE IN THE USA



Table T-Slot Size	Stud Size	Order No.	Price
10mm	M8 x 1.25	**SG5068201**	Price
12mm	M10 x 1.5	**SG5068202**	Price
14mm	M10 x 1.5	**SG5068203**	Price
14mm	M12 x 1.75	**SG5068204**	Price
16mm	M12 x 1.75	**SG5068205**	Price
17mm	M12 x 1.75	**SG5068206**	Price
18mm	M16 x 2.0	**SG5068207**	Price
20mm	M16 x 2.0	**SG5068208**	Price
22mm	M20 x 2.5	**SG5068209**	Price

T-Slot Cleaner

- Black oxide finish

MADE IN THE USA



Order No.	Price
SG5050101	Price

Super Clamp Sets with Steel Blocks

Sets Contain:

- 4 Flange nuts
- 4 T-Slot nuts
- 1 T-Slot cleaner
- 4 Coupling nuts
- 6 Step blocks
- 6 Serrated end clamps
- 24 Studs; 4 each of 3, 4, 5, 6, 7 & 8” long
- 1 Holder

MADE IN THE USA



Block Thickness - 1				
Table T-Slot Size (in.)	Stud Size (in.)	Step Block & Clamp Set No.	Order No.	Price
3/8	5/16-18	21001	**SG5020201**	Price
7/16	3/8-16	21001	**SG5020202**	Price
1/2	3/8-16	21001	**SG5020203**	Price
9/16	3/8-16	21001	**SG5020204**	Price
9/16	1/2-13	21002	**SG5020205**	Price
5/8	1/2-13	21002	**SG5020206**	Price
11/16	1/2-13	21002	**SG5020207**	Price
11/16	5/8-11	21003	**SG5020208**	Price
3/4	5/8-11	21003	**SG5020209**	Price
13/16	5/8-11	21003	**SG5020210**	Price

Block Thickness - 1-1/2				
Table T-Slot Size (in.)	Stud Size (in.)	Step Block & Clamp Set No.	Order No.	Price
13/16	3/4-10	21006	**SG5020217**	Price
7/8	3/4-10	21006	**SG5020218**	Price
1	3/4-10	21006	**SG5020219**	Price

Block Thickness - 2				
Table T-Slot Size (in.)	Stud Size (in.)	Step Block & Clamp Set No.	Order No.	Price
1-1/16	1-8	21007	**SG5020221**	Price

Small Toe Clamp Kits

- Kit Includes:
- Six Toe Clamps: Two of each length 1-1/2, 2, 2-1/2”
- Six Low Grip Steel Toes
- Six Toe Clamp Nuts
- Six Protective Washers
- One T-Wrench
- One Wooden Holder



Table Slot (in.)	Toe Clamps	Toe Clamp Nuts	Washers	Order No.	Price
3/8	46921, 46922, 46923	46931	46942	**SG6644901**	Price
7/16	46921, 46922, 46923	46935	46942	**SG6644902**	Price
1/2	46921, 46922, 46923	46933	46942	**SG6644903**	Price
9/16	46921, 46922, 46923	46934	46942	**SG6644904**	Price
5/8	46921, 46922, 46923	46935	46942	**SG6644905**	Price

Large Toe Clamp Kits

Kit Includes:

- Six Toe Clamps: Two of each length 3-1/4, 4-11/16, 6-5/8”
- Four Low Grip Steel Toes
- Six Toe Clamp Nuts
- Six Protective Washers
- One T-Wrench
- One Wooden Holder



Table Slot (in.)	Toe Clamps	Toe Clamp Nuts	Washers	Order No.	Price
9/16	46926, 46927, 46928	46936	46943	**SG6644906**	Price
5/8	46926, 46927, 46928	46937	46943	**SG6644907**	Price
11/16	46926, 46927, 46928	46938	46943	**SG6644909**	Price
13/16	46926, 46927, 46928	46939	46943	**SG6644910**	Price
7/8	46926, 46927, 46928	46940	46943	**SG6644911**	Price
1	46926, 46927, 46928	46941	46943	**SG6644912**	Price

TE-CO Machinist Clamping Sets

Sets Contain:

- 6 Flange nuts
- 6 T-Slot nuts
- 4 Coupling nuts
- 6 Step blocks
- 6 Serrated end clamps
- 1 T-Slot cleaner
- 24 Studs; 4 each of 3, 4, 5, 6, 7 & 8" long
- †Bridgeport Set
- 1 Holder

MADE IN THE USA



Table T-Slot Size (in.)	Stud Size (in.)	Step Block & Clamp Set No.	T-Nut No.	Order No.	Price
7/16	3/8-16	21001	41404	**SG5020412**	Price
1/2	3/8-16	21001	41405	**SG5020413**	Price
9/16	3/8-16	21001	41406	**SG5020414**	Price
9/16	1/2-13	21002	41409	**SG5020401**	Price
5/8	1/2-13	21002	41410	**SG5020402**	Price
11/16	1/2-13	21002	41412	**SG5020403**	Price
11/16	5/8-11	21003	41415	**SG5020415**	Price
3/4	5/8-11	21003	41416	**SG5020416**	Price
13/16	5/8-11	21003	41417	**SG5020417**	Price

TE-CO Metric Machinist Clamping Sets

Sets Contain:

- 4 Coupling nuts
- 6 Flange nuts
- 6 T-slot nuts
- 1 T-slot cleaner
- 24 Studs

1 Metric Step Block & Clamp Set Including:

- 6 step blocks
- 6 Serrated end clamps
- 1 Holder

MADE IN THE USA

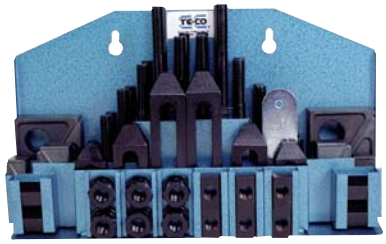


Table T-Slot Size	English T-Slot (in.)	Stud Size	Step Block & Clamp Set No.	Order No.	Price
12mm	1/2	M10 x 1.5	21001M	**SG5068001**	Price
14mm	9/16	M10 x 1.5	21001M	**SG5068002**	Price
14mm	9/16	M12 x 1.75	21002M	**SG5068003**	Price
16mm	5/8	M12 x 1.75	21002M	**SG5068004**	Price
17mm	11/16	M12 x 1.75	21002M	**SG5068005**	Price
18mm	3/4	M16 x 2.0	21003M	**SG5068006**	Price
20mm	13/16	M16 x 2.0	21003M	**SG5068007**	Price

TE-CO 52 Pc. Machinist Clamping Set

For 5/8" Table Slot with 1/2" –13 T-Nuts & Studs

Set Contains:

- 4 Coupling nuts
- 6 Flange nuts
- 6 T-slot nuts
- 24 Studs, 4 each:3, 4, 5, 6, 7 & 8" long
- 6 Step blocks
- 6 Serrated end clamps
- 1 All plastic holder

MADE IN THE USA

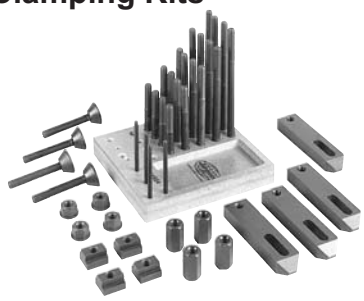


Order No.	Price
SG6012625CKUS	Price

Jergens 40 Pc. Clamping Kits

Kit Includes:

- Four Table Saver T-Nuts
- Twenty Studs: Four Each of 4, 5, 6, 7, 8" lengths
- Four Adjustable Clamp Heels
- Four Flange Nuts
- Four Coupling Nuts
- Four Taper Nose Straps
- One T-Slot Cleaner
- One Wooden Holder



T-Slot Width (in.)	Stud Size (in.)	Strap Clamp (in.)	Adj. Clamp Heel (in.)	Order No.	Price
7/16	3/8-16	5/8 x 1-1/4 x 5	3/8-16 x 3	**SG6645022**	Price
1/2	3/8-16	5/8 x 1-1/4 x 5	3/8-16 x 3	**SG6645023**	Price
9/16	3/8-16	5/8 x 1-1/4 x 5	3/8-16 x 3	**SG6645021**	Price
9/16	1/2-13	7/8 x 1-1/4 x 6	1/2-13 x 4	**SG6645025**	Price
5/8	1/2-13	7/8 x 1-1/4 x 6	1/2-13 x 4	**SG6645026**	Price
11/16	1/2-13	7/8 x 1-1/4 x 6	1/2-13 x 4	**SG6645024**	Price
11/16	5/8-11	7/8 x 1-1/2 x 7	5/8-11 x 5	**SG6645028**	Price
3/4	5/8-11	7/8 x 1-1/2 x 7	5/8-11 x 5	**SG6645029**	Price
13/16	5/8-11	7/8 x 1-1/2 x 7	5/8-11 x 5	**SG6645027**	Price
13/16	3/4-10	1 x 1-1/2 x 6	3/4-10 x 7	**SG6645031**	Price
7/8	3/4-10	1 x 1-1/2 x 6	3/4-10 x 8	**SG6645032**	Price
1-1/16	3/4-10	1 x 1-1/2 x 6	3/4-10 x 6	**SG6645030**	Price

RAPIDHOLD 58 Pc. Clamp Set

New!

- Fits all Bridgeport type milling machines
- Hardened for longer life

Set Contains:

- 6 Flange Nuts
- 6 T-Slot nuts & wall holder
- 6 Forged Steel Step Clamps; 2 each based on stud sets
- 4 Couling Nuts
- 12 Steel Step Blcoks
- 24 Studs; 4 each of 3, 4, 5, 6. 7 & 8" long



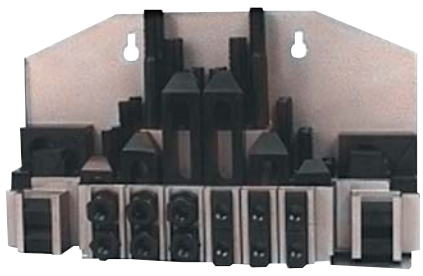
Order No.	Price
SG6158CK	Price

NATIONAL 52 Pc. Clamping Set

For Bridgeport Type Machines
For 5/8" Table Slot with 1/2" –13 T-Nuts & Studs

Set Contains:

- 4 Coupling nuts
- 6 Flange nuts
- 6 T-slot nuts
- 24 Studs, 4 each:3, 4, 5, 6, 7 & 8" long
- 6 Step blocks
- 6 Serrated end clamps
- 1 All plastic holder

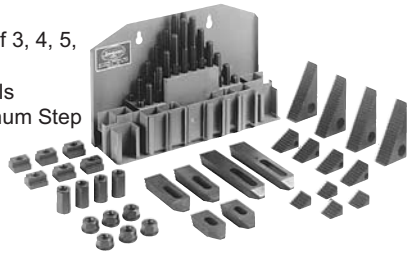


Order No.	Price
SG6012625CK	Price

Jergens 60 Pc. Set-Up Kits with Aluminum Step Blocks

Kit Includes:

- Six Table Sve T-Nuts
- Twenty Studs: Four Each of 3, 4, 5, 6, 7, 8" lengths
- Four Adjustable Clamp Heels
- Twelve Course Pitch Aluminum Step Blocks
- Six Flange Nuts
- Four Coupling Nuts
- Six Step Heel Straps
- One T-Slot Cleaner
- One Wooden Holder



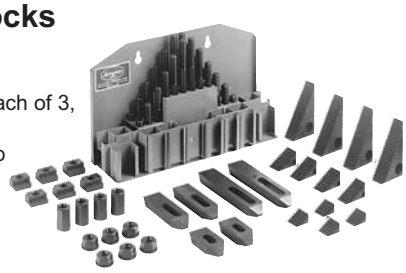
T-Slot Size (in.)	Thread Size (in.)	Strap Length (in.)	Order No.	Price
9/16	1/2-13	2-1/2, 4, 6	**SG6645105**	Price
5/8	1/2-13	2-1/2, 4, 6	**SG6645106**	Price
11/16	1/2-13	2-1/2, 4, 6	**SG6645104**	Price
11/16	5/8-11	3, 5, 7	**SG6645108**	Price
3/4	5/8-11	3, 5, 7	**SG6645109**	Price
13/16	5/8-11	3, 5, 7	**SG6645107**	Price

F.O.B. Factory • UPS Dimensional Weight Rates May Apply

Jergens 60 Pc. Set-Up Kits with Steel Step Blocks

Kit Includes:

- Six Table Saver T-Nuts
- Twenty Four Studs: Four Each of 3, 4, 5, 6, 7, 8" lengths
- Twelve Fine Pitch Steel Step Blocks
- Six Flange Nuts
- Six Steel Heel Straps
- One Wooden Holder



T-Slot Size (in.)	Thread Size (in.)	Strap Length (in.)	Order No.	Price
9/16	1/2-13	2-1/2, 4, 6	**SG6645205**	Price
5/8	1/2-13	2-1/2, 4, 6	**SG6645206**	Price
11/16	1/2-13	2-1/2, 4, 6	**SG6645204**	Price
11/16	5/8-11	2-1/2, 4, 6	**SG6645208**	Price
3/4	5/8-11	2-1/2, 4, 6	**SG6645209**	Price
13/16	5/8-11	2-1/2, 4, 6	**SG6645207**	Price

Jergens Forged Adjustable Clamps

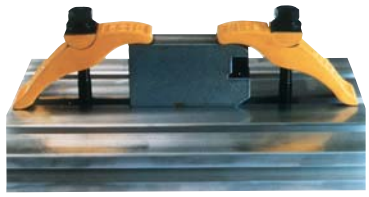
- Automatically compenates for clamping height changes within their clamping ranges
- The swivel bushing is permanently mounted in the clamp which alleviates lost or missing parts
- Standard brass heel plate protects the machine table
- Material: 1137 Forged Steel, heat Treated
- Finish: Black Oxide
- One Piece Construction
- Versatile Clamping Height



Bolt Size (in.)	Clamping Range (in.)	Clamp Width (in.)	Clamp Thickness (in.)	Heel to Center (in.)	Max. Torque (ft/lbs)	Max. Holding Force (lbs)	Order No.	Price
1/2	0-2	1-3/4	1-1/2	2-1/2	90 lbs	6800	**SG6619101**	Price
5/8	0-2-3/8	2	1-5/8	3	180 lbs	10600	**SG6619102**	Price
3/4	0-2-3/4	2-1/2	1-3/4	3-3/4	300 lbs	16000	**SG6619103**	Price
7/8	0-3-1/2	3	2-3/8	4-1/4	500 lbs	21800	**SG6619104**	Price

BESSEY Rite Hite Self Positioning Hold Down Clamps

- Use on any machine with a "T" Slot
- Instant adjustment up to 5"
- Assorted stud sizes 3/8" to 1"
- 10,000 to 80,000 lbs. load limit
- Swivel rocker attached to base to prevent loss



Model - Model L - Longer Reach								
Max. Stud Size	Clamping Range (in.)	Clamp Thickness (in.)	Clamp Width (in.)	Clamp Length (in.)	Approx. Weight	Load Limit	Order No.	Price
3/8	0 - 1-1/4	1-3/32	1-1/8	3-1/2	.5 lbs	10000 lbs	**SG75375L**	Price
1/2	0 - 2-1/2	1-13-32	1-7/16	5-3/4	1.4 lbs	12800 lbs	**SG75500L**	Price
5/8	0 - 3-1/2	1-1/2	1-7/8	6-3/4	2.5 lbs	18000 lbs	**SG75625L**	Price
3/4	0 - 5	2-3/8	2-1/8	9	4.75 lbs	24000 lbs	**SG75750L**	Price
1	0 - 5	3-5/16	2-7/8	11-1/8	12 lbs	65000 lbs	**SG751000L**	Price

Model - Model S - Shorter for Closer Set-Ups								
Max. Stud Size	Clamping Range (in.)	Clamp Thickness (in.)	Clamp Width (in.)	Clamp Length (in.)	Approx. Weight	Load Limit	Order No.	Price
3/8	0 - 1	1-3/32	1-1/8	3	.5 lbs	14000 lbs	**SG75376S**	Price
1/2	0 - 1-3/4	1-13-32	1-3/8	4-1/4	1 lb	16800 lbs	**SG75501S**	Price
5/8	0 - 2-3/4	1-1/2	1-7/8	5-1/2	2 lbs	24000 lbs	**SG75626S**	Price
3/4	0 - 3-1/2	2-3/8	2.00	7	4 lbs	35000 lbs	**SG75751S**	Price
1	0 - 3	3-5/16	2-7/8	9	10 lbs	80000 lbs	**SG751001S**	Price

Plain Clamps

- Material C-1030 or C-1035



Jergens MADE IN THE USA

Style - Standard							
				Jergens		Generic USA	
Length (in.)	Width (in.)	Slot Width (in.)	Slot Length (in.)	Order No.	Price	Order No.	Price
4	1-5/8	11/16	1-3/8	-	-	**SE5054**	Price
4	1-5/8	11/16	11/16	**SG6637201**	Price	-	-
6	1-3/4	11/16	2-1/16	-	-	**SE5056**	Price
8	2-1/8	13/16	2-13/16	-	-	**SE5058**	Price
10	2-1/2	15/16	3-11/16	-	-	**SE5059**	Price
150mm	44mm	17mm	35mm	**SG6637203**	Price	-	-
200mm	54mm	21mm	50mm	**SG6637205**	Price	-	-
250mm	63mm	24mm	70mm	**SG6637207**	Price	-	-

Jergens

Style - Tapped					
				Jergens	
Length (in.)	Width (in.)	Slot Width (in.)	Slot Length (in.)	Order No.	Price
4	1-5/8	11/16	11/16	**SG6637202**	Price
6	1-3/4	11/16	1-3/8	**SG6637204**	Price
8	2-1/8	13/16	2	**SG6637206**	Price
10	2-1/2	15/16	2-3/4	**SG6637208**	Price
100mm	41mm	17mm	17mm	**SG6637252**	Price
150mm	44mm	17mm	35mm	**SG6637254**	Price
200mm	54mm	21mm	50mm	**SG6637256**	Price
250mm	63mm	24mm	70mm	**SG6637258**	Price

Machine U Clamps

- Material: C-1030 or C-1035



				Jergens		Generic USA	
Length (in.)	Width (in.)	Thickness (in.)	Slot Width (in.)	Order No.	Price	Order No.	Price
4	1-3/4	3/4	11/16	**SG6637231**	Price	**SE5064**	Price
6	2	7/8	11/16	**SG6637232**	Price	**SE5066**	Price
8	2-3/8	1-1/8	13/16	**SG6637233**	Price	**SE5068**	Price
10	2-3/4	1-1/4	15/16	**SG6637234**	Price	**SE50110**	Price
12	3-1/4	1-3/8	1-1/16	**SG6637235**	Price	**SE50112**	Price

Finger Clamps

- Material: C-1030 or C-1035



					Jergens		Generic USA	
Length (in.)	Width (in.)	Thick-ness (in.)	Slot Width (in.)	Slot Length (in.)	Order No.	Price	Order No.	Price
4	1-3/8	3/4	11/16	1-3/8	-	-	**SE5044**	Price
4	1-5/8	3/4	11/16	11/16	**SG6637221**	Price	-	-
6	1-3/4	7/8	11/6	1-1/4	**SG6637223**	Price	-	-
8	2-1/8	1-1/8	13/16	1-3/4	**SG6637225**	Price	-	-

Gooseneck Clamps

- Material: C-1030 or C-1035
- Available standard or tapped
- Inch Tapped 5/8-11
- Metric Tapped M16 x 2

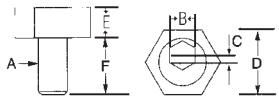


Style - Standard							
				Jergens		Generic USA	
Length (in./mm)	Width (in./mm)	Thickness (in./mm)	Slot Width (in./mm)	Order No.	Price	Order No.	Price
4	1-3/8	3/4	11/16	-	-	**SE5074**	Price
6	1-3/4	7/8	11/16	-	-	**SE5076**	Price
8	2-1/8	1-1/8	13/16	-	-	**SE5078**	Price
100mm	41mm	19mm	17mm	**SG6637211**	Price	-	-
150mm	44mm	22mm	17mm	**SG6637213**	Price	-	-
200mm	54mm	29mm	21mm	**SG6637215**	Price	-	-

Style - Tapped					
				Jergens	
Length (in./mm)	Width (in./mm)	Thickness (in./mm)	Slot Width (in./mm)	Order No.	Price
4	1-5/8	3/4	11/16	**SG6637212**	Price
6	1-3/4	7/8	11/16	**SG6637214**	Price
8	2-1/8	1-1/8	13/16	**SG6637216**	Price
100mm	41mm	100mm	17mm	**SG6637262**	Price
150mm	44mm	150mm	17mm	**SG6637264**	Price
200mm	54mm	200mm	21mm	**SG6637266**	Price

Micro™ Fixture Clamps

- Low profile makes computer programming easier
- Cam action provides fast, strong clamping
- Small size allows more parts per load
- Requires only a tapped hole in your fixture
- Available in stainless steel





Style - Inch							
A (in./mm)	B (in./mm)	C (in./mm)	D (in./mm)	F (in./mm)	Max. Holding Force	Order No.	Price
8-32	11/32	5/16	.110	5/64	205 lbs	**SG6668501**	Price
10-32	11/32	1/2	.160	3/32	350 lbs	**SG6668502**	Price
1/4-20	15/32	5/8	3/16	1/8	800 lbs	**SG6668503**	Price
5/16-18	15/32	13/16	3/16	3/16	750 lbs	**SG6668506**	Price
5/16-24	15/32	13/16	3/16	3/16	750 lbs	**SG6668505**	Price
3/8-16	23/32	13/16	1/4	3/16	2000 lbs	**SG6668507**	Price
1/2-13	29/32	1	3/8	5/16	4000 lbs	**SG6668509**	Price
5/8-11	1	1-3/16	1/2	3/8	6000 lbs	**SG6668511**	Price

Style - Metric							
A (in./mm)	B (in./mm)	C (in./mm)	D (in./mm)	F (in./mm)	Max. Holding Force	Order No.	Price
M4 x 0.7	9.6	7.93	2.8	3	90 lbs	**SG6668571**	Price
M6 x 1.0	11.2	15.86	4.75	4	340 lbs	**SG6668572**	Price
M8 x 1.25	15.0	20.61	4.75	5	360 lbs	**SG6668573**	Price
M10 x 1.5	19.0	20.61	6.35	7	900 lbs	**SG6668574**	Price
M12 x 1.75	22.8	25.38	9.52	8	1800 lbs	**SG6668575**	Price
M16 x 2.0	28.5	30.13	12.69	12	2700 lbs	**SG6668576**	Price

Knife Edge Clamps

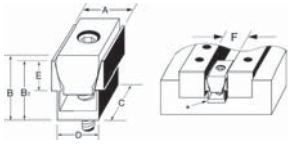
- Knife edge clamps can be used for clamping rough cut stock, castings, or any material that requires a hardenend clamping element
- Hardened steel, brass-plated

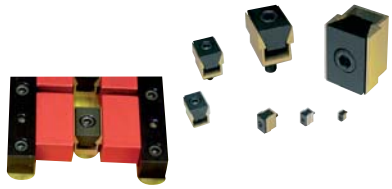


Style - Inch							
Thread Size (in./mm)	Thread Length (in./mm)	Width Across Flats (in./mm)	Thickness (in./mm)	Hex Key Size (in./mm)	Max. Holding Force	Order No.	Price
3/8-16	3/16	13/16	1/4	23/32	2000 lbs	**SG6668547**	Price
1/2-13	5/16	1	3/8	29/32	4000 lbs	**SG6668548**	Price
5/8-11	3/8	1-3/16	1/2	1-1/4	6000 lbs	**SG6668549**	Price

Style - Metric							
Thread Size (in./mm)	Thread Length (in./mm)	Width Across Flats (in./mm)	Thickness (in./mm)	Hex Key Size (in./mm)	Max. Holding Force	Order No.	Price
M10	M10	7M	20.60	19.0	8895 lbs	**SG6668840**	Price
M12	M12	8M	25.40	22.8	17790 lbs	**SG6668841**	Price
M16	M16	12M	30.15	28.5	26680 lbs	**SG6668842**	Price

Uniforce® Clamps





- Compact, economical workholding device enables you to fixture more parts on the machine table
- Efficient method of clamping workpieces will decrease your set up time and increase your profits and production
- *F Means the distance between workpieces for clamp clearance
- Drill and tap mounting tap mounting hole on the center of F dimension

Style - Inch												
Thread Size (in.)	Hex Key Size (in.)	Max. Spread	Holding Force	Clamps Per Pack	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F* (in.)	Order No.	Price
1/2-13	3/8	1.560	3500 lbs	2	1.470	1.52	1.875	1.215	.750	1.500	**SG7061500**	Price
2-56	5/64	.260	200 lbs	6	240	.27	.320	.210	.140	.250	**SG7060250**	Price
4-40	3/32	.390	310 lbs	6	360	.38	.470	.310	.185	.675	**SG7060375**	Price
5/8-11	1/2	2.080	6000 lbs	2	1.960	2.03	2.50	1.625	1.000	2.000	**SG7062000**	Price
1/4-20	3/16	.785	1500 lbs	6	.735	.77	.940	.635	.375	.750	**SG7060750**	Price
5/16-18	1/4	1.050	2000 lbs	4	.980	1.02	1.250	.820	.500	1.000	**SG7061000**	Price
8-32	9/64	.530	500 lbs	8	.485	.58	.625	.410	.220	.500	**SG7060500**	Price

Style - Metric												
Thread Size (in.)	Hex Key Size (in.)	Max. Spread	Holding Force	Clamps Per Pack	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F* (in.)	Order No.	Price
M12	10.0mm	39.9mm	11525 lbs	2	37.3mm	38.6mm	47.6mm	30.8mm	19.0mm	38.10mm	**SG7081500**	Price
M16	14.0mm	53.0mm	19750 lbs	2	49.7mm	51.5mm	63.50mm	41.2mm	25.4mm	50.80mm	**SG7082000**	Price
M2	1.5mm	6.7mm	650 lbs	6	6.1mm	6.9mm	8.1mm	5.3mm	3.6mm	6.40mm	**SG7080250**	Price
M2.5	2.0mm	10.0mm	999 lbs	6	9.1mm	9.7mm	11.9mm	7.9mm	4.7mm	9.50mm	**SG7080375**	Price
M4	3.0mm	13.2mm	1640 lbs	8	12.3mm	14.5mm	15.9mm	10.4mm	5.6mm	12.70mm	**SG7080500**	Price
M6	5.0mm	20.3mm	4930 lbs	6	18.6mm	19.0mm	23.8mm	16.1mm	9.5mm	19.05mm	**SG7080750**	Price
M8	6.0mm	26.9mm	8230 lbs	4	24.8mm	25.9mm	31.7mm	20.8mm	12.7mm	25.40mm	**SG7081000**	Price

Knife Edge Clamps



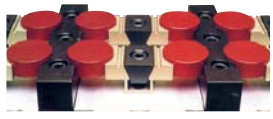
- Can be used instead of the original brass hex clamps for clamping rough cut stock, castings and any material that requires a hardened clamping element
- Produced in 12L 14 steel with a nickel coating

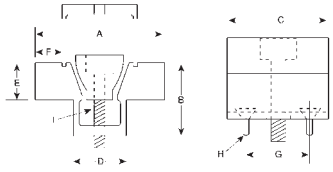
Style - Inch			
Thread Size (in.)	Package Includes	Order No.	Price
1/2-13	(8) Cam Screws + Knife Edge W	**SG7022588**	Price
3/8-16	(8) Cam Screws + Knife Edge W	**SG7022584**	Price
5/8-11	(4) Cam Screws + Knife Edge W	**SG7022592**	Price

Style - Metric			
Thread Size (in.)	Package Includes	Order No.	Price
M10	(8) Cam Screws + Knife Edge W	**SG7082584**	Price
M12	(8) Cam Screws + Knife Edge W	**SG7082588**	Price
M16	(4) Cam Screws + Knife Edge W	**SG7082592**	Price

Machinable Uniforce Clamps







- The compact Uniforce® clamp is available with extra material on the clamping jaws so it can be machined to conform to the shape of your workpiece - enabling you to fixture unusual applications easily
- The specially designed steel wedge spreads the clamping force uniformly on both sides of the 7075-T6 aluminum channel
- *A: The distance needed between workpieces for clamp clearance, drill and tap mounting holes on the center of “A” dimension
- †F: The amount of machinable stock on jaws
- **H: Mounting screws included
- NOTE: Locking plate properly expands the clamp, while making it rigid for machining - Machine to a slip fit on workpiece - Remove locking plate before clamping workpiece

Style - Inch											
A* (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F†	G	H**	I (in.)	Holding Force	Order No.	Price
1.125	.50	.62	.420	.250	.18	.400	2-56	8-32	500 lbs	**SG7060050**	Price
1.125	.50	.92	.420	.250	.18	.400	2-56	8-32	500 lbs	**SG7060055**	Price
1.50	.75	.94	.632	.370	.26	.625	6-32	1/4-20	1500 lbs	**SG7060075**	Price
1.50	.75	.94	.632	.370	.26	.625	6-32	1/4-20	1500 lbs	**SG7060080**	Price
2.00	1.00	1.25	.820	.500	.39	.812	6-32	5/16-18	2000 lbs	**SG7060100**	Price
2.00	1.00	1.25	.820	.500	.39	.812	6-32	5/16-18	2000 lbs	**SG7060105**	Price
3.00	1.50	1.87	1.215	.750	.62	1.200	10-32	1/2-13	3500 lbs	**SG7060150**	Price
3.00	1.50	1.87	1.215	.750	.62	1.200	10-32	1/2-13	3500 lbs	**SG7060153**	Price
4.00	2.00	2.50	1.625	1.00	.80	1.625	1/4-20	5/8-11	6000 lbs	**SG7060200**	Price
4.00	2.00	2.50	1.625	1.00	.80	1.625	1/4-20	5/8-11	6000 lbs	**SG7060203**	Price

Style - Metric											
A* (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F†	G	H**	I (in.)	Holding Force	Order No.	Price
28.6mm	12.7mm	15.7mm	10.67mm	6.3mm	4.6mm	10.16mm	M2	M4	1640 lbs	**SG7080050**	Price
28.6mm	12.7mm	15.7mm	10.67mm	6.3mm	4.6mm	10.16mm	M2	M4	1640 lbs	**SG7080055**	Price
38.1mm	19.1mm	23.9mm	16.05mm	9.4mm	6.6mm	15.87mm	M4	M6	4930 lbs	**SG7080075**	Price
38.1mm	19.1mm	23.9mm	16.05mm	9.4mm	6.6mm	15.87mm	M4	M6	4930 lbs	**SG7080080**	Price
50.8mm	25.4mm	31.8mm	20.83mm	12.7mm	9.9mm	20.62mm	M4	M8	8230 lbs	**SG7080100**	Price
50.8mm	25.4mm	31.8mm	20.83mm	12.7mm	9.9mm	20.62mm	M4	M8	8230 lbs	**SG7080105**	Price
50.8mm	50.8mm	63.5mm	41.28mm	25.4mm	20.3mm	41.28mm	M6	M16	19750 lbs	**SG7080200**	Price
50.8mm	50.8mm	63.5mm	41.28mm	25.4mm	20.3mm	41.28mm	M6	M16	19750 lbs	**SG7080205**	Price
76.2mm	38.1mm	47.5mm	30.86mm	19.1mm	15.7mm	30.48mm	M5	M12	11520 lbs	**SG7080150**	Price
76.2mm	38.1mm	47.5mm	30.86mm	19.1mm	15.7mm	30.48mm	M5	M12	11520 lbs	**SG7080155**	Price

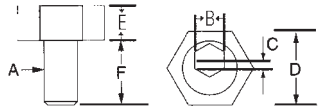
MiTee-Bite Products Company Fixture Clamps

- Made up of two simple components: a hardened steel socket cap screw with an offset head & a hexagonal washer
- Low profile for quick and easy installation of linear motion gide rails
- Cam action provides fast, strong clamping
- Small size allows more parts per load









Style - Inch									
A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Max. Holding Force	No. of Clamps Per Pkg	Order No.	Price
1/2-13	5/16	.100	1.000	.375	.900	4000 lbs	8	**SG7010208**	Price
1/4-20	1/8	.040	.625	.190	.470	800 lbs	10	**SG7010204**	Price
10-32	3/32	.040	.500	.160	.340	350 lbs	10	**SG7010207**	Price
3/8-16	3/16	.050	.812	.250	.710	2000 lbs	10	**SG7010206**	Price
5/16-18	3/16	.040	.812	.190	.460	800 lbs	12	**SG7010201**	Price
5/16-24	3/16	.040	.812	.190	.460	800 lbs	12	**SG7010205**	Price
5/8-11	3/8	.100	1.187	.500	1.125	6000 lbs	4	**SG7010210**	Price
8-32	5/64	.030	.312	.110	.350	205 lbs	10	**SG7010202**	Price

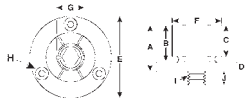
Style - Metric									
A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Max. Holding Force	No. of Clamps Per Pkg	Order No.	Price
M10	7mm	1.27mm	20.61mm	6.35mm	19.0mm	6560 lbs	10	**SG7050210**	Price
M12	8mm	2.03mm	25.38mm	9.52mm	22.8mm	13120 lbs	8	**SG7050212**	Price
M16	12mm	2.54mm	30.13mm	12.70mm	28.5mm	19670 lbs	4	**SG7050216**	Price
M4	3mm	.76mm	7.93mm	2.80mm	9.6mm	670 lbs	10	**SG7050204**	Price
M6	4mm	1.01mm	15.86mm	4.75mm	11.2mm	2620 lbs	10	**SG7050206**	Price
M8	5mm	1.01mm	20.61mm	4.55mm	15.0mm	2620 lbs	12	**SG7050208**	Price

Style - Stainless Steel									
A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Max. Holding Force	No. of Clamps Per Pkg	Order No.	Price
1/4-20	1/8	.040	.625	.190	.470	800 lbs	4	**SG7010203**	Price
5/16-18	3/16	.040	.812	.250	.460	800 lbs	4	**SG7010213**	Price
M6	4mm	1.01mm	15.86mm	4.75mm	11.2mm	671 lbs	4	**SG7050205**	Price
M8	5mm	1.01mm	20.60mm	6.35mm	15.0mm	2620 lbs	4	**SG7050207**	Price

MiTee-Bite Products Company ID Xpansion Clamps

- Ideal way to hold parts on an inside diameter for multiple machining on vertical or horizontal machining centers
- Can also be used as an expanding mandrel on a lathe
- Produced in 12L14 steel with black oxide coating
- Can hold interanl diameters from under 3/16 to amlomst 10” (4.0 to 254mm)
- No. 10 manufactured using 7076-T6 aluminum
- Flange diameter of the clamp is held to a close tolerance for precision locating in a machined pocket on work cubes and fixture plates
- Wuickly tightened with a hex key, torque driver or can be mated to hydraulic pull cylinders for automation
- G†- Minimum diameter the “F” dimension be machined or turned down to
- H*-(3) Mounting screws included

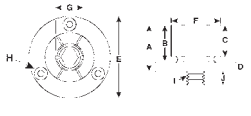






Style - Inch												
Model No.	A (in.)	B (in.)	C (in.)	D (in.)	E -.002 (in.)	F (in.)	G† (in.)	H* (in.)	I (in.)	J (in.)	Holding Force	Order No.	Price
#10	1.79	1.48	1.27	.31	6.000	9.85	1.15	1/4-20 on 5 .250 BHC	5/8-11	.790	6000 lbs	**SG7031550**	Price
#9	1.79	1.48	1.27	.31	5.232	6.89	1.15	1/4-20 on 4.648 BHC	5/8-11	.790	10000 lbs	**SG7031500**	Price
#0	.86	.63	.59	.23	1.170	.49	.28	6-32 on .825 BHC	8-32	.300	950 lbs	**SG7031050**	Price
#00	.42	.30	.24	.12	.787	.29	.16	2-56 on .540 BHC	2-56	.160	250 lbs	**SG7031000**	Price
#1	.98	.75	.59	.23	1.240	.56	.48	6-32 on .910 BHC	1/4-20	.500	1900 lbs	**SG7031100**	Price
#2	.98	.75	.59	.23	1.476	.79	.53	6-32 on 1.140 BHC	5/16-18	.560	2500 lbs	**SG7031150**	Price
#3	1.13	.88	.69	.25	1.968	1.06	.71	8-32 on 1.550 BHC	3/8-16	.710	4500 lbs	**SG7031200**	Price
#4	1.25	1.00	.81	.25	2.205	1.39	.90	8-32 on 1.790 BHC	1/2-13	.710	5900 lbs	**SG7031250**	Price
#5	1.56	1.25	1.06	.31	2.736	1.65	1.15	10-32 on 2.200 BHC	5/8-11	.790	10000 lbs	**SG7031300**	Price
#6	1.56	1.25	1.06	.31	2.972	2.03	1.15	10-32 on 2.515 BHC	5/8-11	.790	10000 lbs	**SG7031350**	Price
#7	1.79	1.48	1.27	.31	4.232	3.06	1.15	1/4-20 on 3.646 BHC	5/8-11	.790	10000 lbs	**SG7031400**	Price
#8	1.79	1.48	1.27	.31	5.232	4.06	1.15	1/4-20 on 4.648 BHC	5/8-11	.790	10000 lbs	**SG7031450**	Price

ID Xpansion Clamps (cont.)



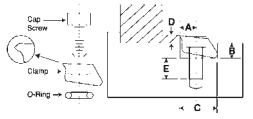




Style - Metric													
Model No.	A (in.)	B (in.)	C (in.)	D (in.)	E -.002 (in.)	F (in.)	G† (in.)	H* (in.)	I (in.)	J (in.)	Holding Force	Order No.	Price
#0	21.8mm	16.0mm	15.0mm	5.9mm	29.72mm	12.4mm	7.1mm	M3 on 20.95mm BHD	M4	7.2mm	3125 lbs	**SG7038050**	Price
#00	10.7mm	7.6mm	6.1mm	3.0mm	20.00mm	7.4mm	4.1mm	M2 on 13.7mm BHC	M2	4.1mm	823 lbs	**SG7038000**	Price
#1	24.9mm	19.0mm	15.0mm	5.9mm	31.50mm	14.2mm	12.2mm	M3 on 23.1mm BHC	M4	11.2mm	6256 lbs	**SG7038100**	Price
#10	45.5mm	37.6mm	32.3mm	7.9mm	152.40mm	250.2mm	29.3mm	M6 on 133.35mm BHC	M16	19.3mm	19240 lbs	**SG7038550**	Price
#2	24.9mm	19.0mm	15.0mm	5.9mm	37.50mm	20.0mm	13.5mm	M3 on 29.0mm BHC	M8	13.2mm	8232 lbs	**SG7038150**	Price
#3	28.6mm	22.2mm	17.5mm	6.4mm	50.00mm	27.0mm	18.0mm	M4 on 39.4mm BHC	M10	16.3mm	14818 lbs	**SG7038200**	Price
#4	31.8mm	25.4mm	20.6mm	6.4mm	56.00mm	35.3mm	23.0mm	M4 on 45.5mm BHC	M12	20.3mm	19425 lbs	**SG7038250**	Price
#5	39.6mm	31.8mm	27.0mm	7.9mm	69.50mm	42.0mm	29.3mm	M5 on 55.9mm BHC	M16	21.4mm	32930 lbs	**SG7038300**	Price
#6	39.6mm	31.8mm	27.0mm	7.9mm	72.50mm	51.5mm	29.3mm	M5 on 63.9mm BHC	M16	21.4mm	32930 lbs	**SG7038350**	Price
#7	45.5mm	37.6mm	32.3mm	7.9mm	107.50mm	77.7mm	29.3mm	M6 on 92.6mm BHC	M16	19.3mm	32930 lbs	**SG7038400**	Price
#9	45.5mm	37.6mm	32.3mm	7.9mm	132.90mm	175.0mm	29.3mm	M6 on 118.06mm BHC	M16	19.3mm	32930 lbs	**SG7038500**	Price
38	45.5mm	37.6mm	32.3mm	7.9mm	132.90mm	103.0mm	29.3mm	M6 on 118.06mm BHC	M16	19.3mm	32930 lbs	**SG7038450**	Price

Pitbull® Clamps

- Revolutionary Pitbull® clamp remains the lowest profile, highest holding force clampe
- High vertical and horizontal clamping forces are generated, considering the size of the Pitbull® Clamps
- Uses a standard cap screw and an oil resistant O-ring
- Low bite
- Positive down force
- High strength A2 Tool Steel
- D*- Clamp height







Description - Brass, Blunt Edge Style - Inch											
A (in.)	B (in.)	C (in.)	D* (in.)	E (in.)	Clamp Width (in.)	Screw Size (in.)	Max. Holding Force	Torque (in./lbs.)	Total Throw	No. Clamps Per Package	Order No.	Price
.150	.140	.375	.075	.220	.375	4-40	200 lbs	.41	.0075	8	**SG7026015**	Price
.200	.187	.500	.100	.340	.500	8-32	400 lbs	2.00	.0160	8	**SG7026040**	Price
.300	.280	.750	.150	.440	.750	1/4-20	950 lbs	4.10	.0240	6	**SG7026065**	Price

Description - Brass, Blunt Edge Style - Metric											
A (in.)	B (in.)	C (in.)	D* (in.)	E (in.)	Clamp Width (in.)	Screw Size (in.)	Max. Holding Force	Torque (in./lbs.)	Total Throw	No. Clamps Per Package	Order No.	Price
3.81mm	3.55mm	9.52mm	1.90mm	5.59mm	9.52mm	M2.5	650 lbs	.41	.190mm	8	**SG7056015**	Price
5.08mm	4.75mm	12.70mm	2.54mm	8.64mm	12.70mm	M4	1295 lbs	2.07	.406mm	8	**SG7056040**	Price
7.62mm	7.11mm	19.05mm	3.81mm	11.18mm	19.05mm	M6	3108 lbs	4.14	.610mm	6	**SG7056065**	Price

Description - Tool Steel, Blunt Edge Style - Inch											
A (in.)	B (in.)	C (in.)	D* (in.)	E (in.)	Clamp Width (in.)	Screw Size (in.)	Max. Holding Force	Torque (in./lbs.)	Total Throw	No. Clamps Per Package	Order No.	Price
.150	.140	.375	.075	.260	.375	4-40	650 lbs	1.30	.0075	8	**SG7026010**	Price
.200	.187	.500	.100	.390	.500	8-32	1500 lbs	3.70	.0160	8	**SG7026030**	Price
.300	.280	.750	.150	.570	.750	1/4-20	3600 lbs	14.50	.0240	6	**SG7026060**	Price
.400	.450	1.000	.250	.710	1.000	3/8-16	6000 lbs	30.00	.0500	4	**SG7026075**	Price
.600	.400	1.500	.375	.770	1.500	1/2-13	12000 lbs	108.30	.0750	2	**SG7026085**	Price

Description - Tool Steel, Blunt Edge Style - Metric											
A (in.)	B (in.)	C (in.)	D* (in.)	E (in.)	Clamp Width (in.)	Screw Size (in.)	Max. Holding Force	Torque (in./lbs.)	Total Throw	No. Clamps Per Package	Order No.	Price
10.16mm	11.43mm	25.40mm	6.35mm	18.03mm	25.40mm	M10	19240 lbs	30.04	1.270mm	4	**SG7056075**	Price
15.24mm	16.26mm	38.10mm	9.52mm	19.56mm	38.10mm	M12	37000 lbs	107.30	1.900mm	2	**SG7056085**	Price
3.81mm	3.55mm	9.52mm	1.90mm	6.60mm	9.52mm	M2.5	2070 lbs	1.33	.190mm	8	**SG7056010**	Price
5.08mm	4.75mm	12.70mm	2.54mm	9.90mm	12.70mm	M4	4880 lbs	4.14	.406mm	8	**SG7056030**	Price
7.62mm	7.11mm	19.05mm	3.81mm	14.48mm	19.05mm	M6	11840 lbs	16.65	.610mm	6	**SG7056060**	Price

Description - Tool Steel, Knife Edge Style - Inch											
A (in.)	B (in.)	C (in.)	D* (in.)	E (in.)	Clamp Width (in.)	Screw Size (in.)	Max. Holding Force	Torque (in./lbs.)	Total Throw	No. Clamps Per Package	Order No.	Price
.150	.140	.375	.075	.260	.375	4-40	650 lbs	1.30	.0075	8	**SG7026000**	Price
.200	.187	.500	.100	.390	.500	8-32	1500 lbs	3.70	.0160	8	**SG7026020**	Price
.300	.280	.750	.150	.570	.750	1/4-20	3600 lbs	14.50	.0240	6	**SG7026050**	Price
.400	.450	1.000	.250	.710	1.000	3/8-16	6000 lbs	30.00	.0500	4	**SG7026070**	Price
.600	.640	1.500	.375	.770	1.500	1/2-13	12000 lbs	108.30	.0750	2	**SG7026080**	Price

Description - Tool Steel, Knife Edge Style - Metric											
A (in.)	B (in.)	C (in.)	D* (in.)	E (in.)	Clamp Width (in.)	Screw Size (in.)	Max. Holding Force	Torque (in./lbs.)	Total Throw	No. Clamps Per Package	Order No.	Price
10.16mm	11.43mm	25.40mm	6.35mm	18.03mm	25.40mm	M10	19240 lbs	30.04	1.270mm	4	**SG7056070**	Price
15.24mm	16.26mm	38.10mm	9.52mm	19.56mm	38.10mm	M12	37000 lbs	107.30	1.900mm	2	**SG7056080**	Price
3.81mm	3.55mm	9.52mm	1.90mm	6.60mm	9.52mm	M2.5	2070 lbs	1.33	.190mm	8	**SG7056000**	Price
5.08mm	4.75mm	12.70mm	2.54mm	9.90mm	12.70mm	M4	4880 lbs	4.14	.406mm	8	**SG7056020**	Price
7.62mm	7.11mm	19.05mm	3.81mm	14.48mm	19.05mm	M6	11840 lbs	16.65	.610mm	6	**SG7056050**	Price

Toolmaker's Parallel Clamps



- Holding or clamping when drilling, tapping and assembling
- Jaws and screws are hardened
- NE604PCS Includes 1 each: 275, 276, 277, & 278

Type - Parallel Clamp					
		National		Starrett	
Jaw Capacity (in.)	Jaw Length (in.)	Order No.	Price	Order No.	Price
3/4	5/8	-	-	MV7050593	Price
1-1/4	2	-	-	MV7050594	Price
1-3/4	2-1/2	NE60274	Price	MV7050595	Price
2-1/4	3	NE60275	Price	MV7050596	Price
2-3/4	4	NE60276	Price	MV7050597	Price
3-1/2	5	NE60277	Price	MV7050598	Price
4-1/2	6	NE60278	Price	-	-
6	8	NE60279	Price	-	-

Type - 4 Piece Parallel Clamp Set			
		National	
Jaw Capacity (in.)	Jaw Length (in.)	Order No.	Price
2-1/4 to 4-1/2	3 to 6	NE604PCS	Price

IRWIN QUICK-GRIP C-Clamps



- Double-rolled thread
- Larger swivel pad reduces marring
- Larger handle for greater clamping pressure

Max. Opening (in.)	Throth Depth (in.)	Screw Size (in.)	Test Load	Order No.	Price
1	1-3/16	1/4	400 lbs	KX50101	Price
2	1-5/16	3/8	500 lbs	KX50102	Price
2	3-1/2	3/8	400 lbs	KX50123	Price
3	2-1/4	1/2	800 lbs	KX50103	Price
3	4-1/2	1/2	400 lbs	KX50134	Price
4	3	9/16	1200 lbs	KX50104	Price
6	3-1/2	5/8	1500 lbs	KX50106	Price
8	4	3/4	1500 lbs	KX50108	Price

BESSEY 540 Series Ductile Alloy C-Clamps



- 540 series C-Clamps made of high tensile ductile alloy casting
- Provides excellent strength in a cast clamp
- Black oxide spindle to resist corrosion

Max. Opening	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
2-1/2	1-3/4	1/2	1100 lbs	SG75540212	Price
3	1-7/8	1/2	1800 lbs	SG755403	Price
4	2	5/8	2150 lbs	SG755404	Price
5	2-1/2	5/8	2250 lbs	SG755405	Price
6	2-3/4	5/8	2450 lbs	SG755406	Price
8	3-1/4	3/4	2750 lbs	SG755408	Price
10	3-5/8	7/8	2850 lbs	SG7554010	Price
12	3-5/8	7/8	2850 lbs	SG7554012	Price
14	3-3/4	7/8	2850 lbs	SG7554014	Price

BESSEY Drop Forged Light Duty C-Clamps



- Galvanized finish frame
- Swivel pad moves freely to adapt to various surfaces
- Steel sliding pin for use in tight spaces

Max. Opening	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
1	1	5/16	400 lbs	SG75CM10	Price
1-1/2	1-1/2	5/16	400 lbs	SG75CM15	Price
2	1-1/2	3/8	400 lbs	SG75CM20	Price
3	1-3/4	1/2	800 lbs	SG75CM30	Price
2-1/2	1-3/8	3.8	600 lbs	SG75CM22	Price

WILTON Series 50 Super Junior Clamps



- Forged steel, heat treated frames
- Steel screws are zinc plated

Opening (in.)	Throat Depth (in.)	Test Load	Weight	Order No.	Price
0 - 1	1	500 lbs	.100 lbs	SF3050	Price
0 - 1	1-1/2	500 lbs	.220 lbs	SF3051	Price
0 - 1-1/4	1-1/4	800 lbs	.240 lbs	SF3052	Price
0 - 1-1/2	1-1/2	850 lbs	.150 lbs	SF3053	Price
0 - 2	1-1/4	875 lbs	.300 lbs	SF3054	Price
0 - 2-1/2	2-1/2	850 lbs	.750 lbs	SF3056	Price
0 - 3	1-3/8	1100 lbs	.550 lbs	SF3055	Price

WILTON 800 Series Standard Depth C-Clamps



- PERMA-PADS®: Exclusive black oxide coated pad swivels and adapts to angular work pieces for tighter holding
- Spindle and PERMA-PADS® are replaceable and can be individually ordered

Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
0 - 2	1-13/16	9/16	2700 lbs	HZ41802	Price
0 - 3	1-15/16	9/16	3000 lbs	HZ41803	Price
0 - 4	2-5/16	5/8	3700 lbs	HZ41804	Price
0 - 6	2-15/16	5/8	4500 lbs	HZ41806	Price
0 - 8	3-7/16	3/4	5200 lbs	HZ41808	Price
1-1/2 - 10	3-3/4	3/4	6000 lbs	HZ41810	Price
1-1/8 - 12	3-7/8	3/4	8000 lbs	HZ41812	Price

Heavy Duty C-Clamps

- Strong malleable steel frames
- T-handle with swivel pad
- Meets US Federal Specifications GGG C-404
- Zinc plated screw spindle
- Lifetime warranty

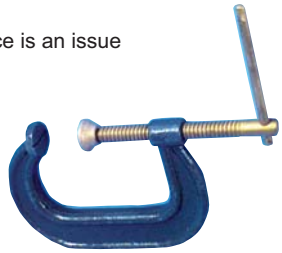


TEKTON

				Generic		Tekton	
Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Capacity	Order No.	Price	Order No.	Price
4	4	1/2	1762 lbs	KP8320404	Price	KP854017	Price
6	2-3/4	5/8	2312 lbs	KP8320406	Price	KP854027	Price
8	3-3/8	5/8	2312 lbs	KP8320408	Price	KP854031	Price
10	3-1/2	11/16	2378 lbs	-	-	KP854035	Price
12	3-5/8	11/16	2356 lbs	-	-	KP854040	Price

Forged Deep Throat C-Clamps

- Designed for body welding
- Deep throat designed where clearance is an issue
- Heat treated, high grade steel
- Copper plated serrated pad



Max. Opening (in.)	Throat Depth (in.)	Screw Dia. x OAL (in.)	Clamping Pressure	Order No.	Price
2	2	1/2 x 4-7/8	3300 lbs	**SE60402**	Price
3	2-5/16	1/2 x 6-1/8	3500 lbs	**SE60403**	Price
4	2-11/16	5/8 x 7-7/16	4100 lbs	**SE60404**	Price
6	3-3/4	5/8 x 9-9/16	5400 lbs	**SE60406**	Price
8	4-3/8	3/4 x 12-7/16	5900 lbs	**SE60408**	Price
10	5-1/4	3/4 x 12-7/16	6200 lbs	**SE60410**	Price
12	5-3/4	7/8 x 12-7/8	9300 lbs	**SE60412**	Price

Wilton® Brute Force™ 100 Seriece C-Clamps

- For heavy industrial and construction job site demands
- 100 Series frames are forged of superior quality steels
- Forged square head spindle with rolled threads, black oxide coating for added strength
- Perma-pads® standard and black oxide coated
- Lifetime warranty



Opening Cap. Max. (in.)	Throat Depth (in.)	Clamping Force	Spindle Dia. (in.)	Shipping Weight	Order No.	Price
0 - 2	1-1/2	7500 lbs	9/16	1.75 lbs	**HZ41102**	Price
0 - 3	2	8750 lbs	5/8	2.65 lbs	**HZ41103**	Price
0 - 4	2-1/4	10000 lbs	3/4	4.3 lbs	**HZ41104**	Price
2 - 6	2-1/2	11250 lbs	3/4	6.35 lbs	**HZ41106**	Price
4 - 8	2-3/4	12500 lbs	3/4	8.35 lbs	**HZ41108**	Price
6 - 10	2-7/8	13750 lbs	3/4	9.3 lbs	**HZ41110**	Price
8 - 12	2-15/16	15000 lbs	3/4	11.8 lbs	**HZ41112**	Price

400 Series Deep Throat C-Clamps

- Industry's top choice for maintenance, production and repair operations
- Drop-forged steel frame, regular-duty with extra deep-throat
- Black oxide coated spindles and Perma-pad® resist corrosion, and are replaceable
- Innovative frame geometry for maximum strength
- V grooved anvil allows secure holding of all materials
- Lifetime Warranty



Opening Cap. Max. (in.)	Throat Depth (in.)	Clamping Force	Spindle Dia. (in.)	Order No.	Price
2-1/8	2-1/4	3500 lbs	9/16	**HZ41402**	Price
0 - 3	2-1/2	3500 lbs	9/16	**HZ41403**	Price
0 - 4-1/4	3-1/4	6200 lbs	3/4	**HZ41404**	Price
0 - 6-1/16	4-1/8	6600 lbs	3/4	**HZ41406**	Price
0 - 8-1/4	5	6900 lbs	3/4	**HZ41408**	Price
10-1/8	6	8000 lbs	3/4	**HZ41410**	Price
2 - 12-1/4	6-5/16	9300 lbs	7/8	**HZ4114298**	Price

Black Oxide Deep Forge C-Clamps

- Drop-forged heat-treated steel frame
- Swivel pads
- Black oxide coated to resist corrosion



Capacity (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Load Test	Order No.	Price
2	2	1/2	3500 lbs	**SG75402**	Price
3	2-3/8	1/2	3500 lbs	**SG75403**	Price
4	2-3/4	3/4	6200 lbs	**SG75404**	Price
6	3-5/8	3/4	6900 lbs	**SG75406**	Price
8	4-1/2	3/4	6900 lbs	**SG75408**	Price
10	5-3/8	3/4	8000 lbs	**SG75410**	Price
12	5-3/4	3/4	9300 lbs	**SG75412**	Price

Deep Throat C-Clamps

- Built from state-of-the-art research, computer aided design, and all new steel spring tempered frame geometry - coupled with an advanced heat treating process creates c-clamps that provide a secure and accurate hold
- Black-oxide spindles that resist wear and tear while impeding rust
- Innovative spring tempered steel frames with extra throat depth and high strength
- Through hardened steel spindles provide greater loading capabilites and longer service life
- Bodies have nickel and chrome plated finish, replaceable swivel pads
- Lifetime Warranty



Model No.	Max. Opening (in.)	Spindle Dia. (in.)	Throat Depth	Order No.	Price
9629112	0 - 2	9/16	2	**JB509629112**	Price
9629113	0 - 3	9/16	2	**JB509629113**	Price
9629114	0 - 4	5/8	2-3	**JB509629114**	Price
9629116	0 - 6	3/4	8	**JB509629116**	Price
9629118	0 - 8	3/4	4	**JB509629118**	Price
9629120	0 - 10	7/8	4-1/2	**JB509629120**	Price
9629122	2 - 12	3/4	5	**JB509629122**	Price
9629124	2 - 14	7/8	6	**JB509629124**	Price
9629126	2 - 16	7/8	7	**JB509629126**	Price
9629152	0 - 2	9/16	2	**JB509629152**	Price
9629154	0 - 4	5/8	2-3/8	**JB509629154**	Price
9629156	0 - 6	3/4	3	**JB509629156**	Price

Extended Deep Throat C-Clamps

- Built from state-of-the-art research, computer aided design, and all new steel spring tempered frame geometry - coupled with an advanced heat treating process creates c-clamps that provide a secure and accurate hold
- Black-oxide spindles that resist wear and tear while impeding rust
- Innovative spring tempered steel frames with extra deep throats
- Through hardened steel spindles provide greater loading capabilites
- Bodies have nickel and chrome plated finish, replaceable swivel pads
- Lifetime Warranty



Model No.	Max. Opening (in.)	Spindle Dia. (in.)	Throat Depth (in.)	Order No.	Price
9629222	0 - 2	1/2	4	**JB509629222**	Price
9629223	0 - 3	9/16	5	**JB509629223**	Price
9629224	0 - 4	5/8	6-1/4	**JB509629224**	Price
9629226	0 - 6	3/4	9-7/8	**JB509629226**	Price
9629228	0 - 8	3/4	13-3/4	**JB509629228**	Price
9629230	0 - 10	7/8	15-3/4	**JB509629230**	Price
9629233	0 - 3	9/16	5	**JB509629233**	Price
9629234	0 - 4	5/8	6-1/4	**JB509629234**	Price
9629238	0 - 6	3/4	13-3/4	**JB509629238**	Price
9629239	0 - 8	7/8	15-3	**JB509629239**	Price

540A Series C-Clamps



- 540A Series Carriage C-Clamps are ideal for light industrial, woodworking and repair applications
- Wilton's heaviest-duty carriage clamp available
- Frames made from high strength ductile iron casting
- Sliding pin (vise type) handle, single acme thread rolled spindle and oscillating ball and socket tip
- Lifetime warranty

Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
0 - 2-1/2	1-3/4	1/2	1110 lbs	**SF305402**	Price
0 - 3	1-7/8	1/2	1800 lbs	**SF305403**	Price
0 - 4	2-1/16	5/8	2150 lbs	**SF305404**	Price
0 - 5	2-1/2	5/8	2250 lbs	**SF305405**	Price
0 - 6	2-3/4	5/8	2450 lbs	**SF305406**	Price
0 - 8	3-1/4	3/4	2750 lbs	**SF305408**	Price
0 - 10	3-5/8	7/8	2850 lbs	**SF305410**	Price
0 - 12	3-5/8	7/8	2850 lbs	**SF305412**	Price
0 - 14	3-3/4	7/8	2850 lbs	**SF305414**	Price

400 Series Hi-Vis Safety Yellow C-Clamps



- High Visibility Yellow Conforms to OSHA Safety Color Standard for Physical Hazards Regulation # 1910.144
- V Grooved Anvil Feature Allows Secure Holding of All Materials Including Rounds, Squares and Flats.

Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
0 - 2-1/8	2-1/4	9/16	3500 lbs	**HZ41402SF**	Price
0 - 3	2-1/2	9/16	3500 lbs	**HZ41403SF**	Price
0 - 4-1/4	3-1/4	3/4	6200 lbs	**HZ41404SF**	Price
0 - 6-1/16	4-1/8	3/4	6600 lbs	**HZ41406SF**	Price
0 - 8-1/4	5	3/4	6900 lbs	**HZ41408SF**	Price
2 - 10-1/8	6	3/4	8000 lbs	**HZ41410SF**	Price
2 - 12-1/4	6-5/16	7/8	9300 lbs	**HZ41412SF**	Price

4400 Series Square Throat C-Clamps



- Square Throat Design: Up to 37% more throat depth than standard deep throat C Clamps
- PERMA-PADS®: Exclusive black oxide coated pad swivels and adapts to angular work pieces for tighter holding

Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
0 - 4	4	3/4	4100 lbs	**HZ4114350**	Price
0 - 6	5	3/4	5400 lbs	**HZ4114375**	Price
2 - 8	6	3/4	5900 lbs	**HZ4114400**	Price

Classic 400 Series Columbian C-Clamps



- Patented design frame geometry allows for maximum strength with greater throat depth and lower weight
- Oscillating Head: High quality steel pad is built to last and provides firm gripping action on angular surfaces

Max. Opening (in.)	Spindle Dia. (in.)	Throat Depth (in.)	Clamping Pressure	Order No.	Price
0 - 2	1/2	2	3500 lbs	**SF30402**	Price
0 - 3	5/8	2 3/8	3500 lbs	**SF30403**	Price
0 - 4	3/4	2-3/4	6200 lbs	**SF30404**	Price
0 - 6	3/4	3-5/8	6600 lbs	**SF30406**	Price
0 - 8	3/4	4-1/2	6900 lbs	**SF30408**	Price
0 - 10	7/8	5-3/8	8000 lbs	**SF30410**	Price
0 - 12	7/8	5-3/4	9300 lbs	**SF30412**	Price

Deep-Reach Carriage C-Clamp



- Ductile Iron Frames
- Black oxide coating
- Oscillating head
- Sliding cross pin handle
- Lifetime warranty

Type - 140 Series Carriage					
Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
0 - 2	1-1/8	5/16	800 lbs	**SF3041421**	Price
0 - 2-1/2	1-7/16	3/8	850 lbs	**SF3041423**	Price
2-1/2	2-1/2	3/8	1005 lbs	**SF3041426**	Price
0 - 4	2-3/4	1/2	1535 lbs	**SF3041406**	Price
0 - 8	4	3/4	1700 lbs	**SF3041409**	Price

Type - Deep Reach Carriage					
Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
0 - 1	3	1/4	350 lbs	**SF30251**	Price
0 - 2	3-1/2	5/16	450 lbs	**SF3042520**	Price
0 - 3	4-1/2	7/16	700 lbs	**SF3042530**	Price

Type - Xtra Deep Reach Carriage					
Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
2-1/2	4-3/4	7/16	1600 lbs	**SF30245**	Price
2-1/2	6-1/4	7/16	1600 lbs	**SF30246**	Price

PALMGREN Square Throat C-Clamps



- Built from state-of-the-art research, computer aided design, and all new steel spring tempered frame geometry - coupled with an advanced heat treating process creates c-clamps that provide a secure and accurate hold
- Palmgren's all steel clamps are cost effective, versatile, durable, and long lasting
- Through hardened steel spindles provide greater loading capabilities and longer service life
- Black-oxide plated spindles resist wear and tear while impeding rust
- Bodies hava a nickel and chrome plated finish, replaceable swivel pads
- Lifetime Warranty

New!

Model No.	Max. Opening (in.)	Spindle Dia. (in.)	Throat Depth (in.)	Order No.	Price
9629133	0 - 3	3/4	3	**JB509629133**	Price
9629134	0 - 4	3/4	4	**JB509629134**	Price
9629136	0 - 6	3/4	6	**JB509629136**	Price
9629138	0 - 8	3/4	8	**JB509629138**	Price
9629140	0 - 10	3/4	10	**JB509629140**	Price

540A Series Carriage C-Clamp Kit

- Ideal for light industrial, woodworking and repair applications
- Features a black oxide coating, oscillating head, and sliding cross pin handle
- This kit includes four of our most popular sizes - 540A Series C-Clamp 0 - 2-1/2" Opening Capacity, 540A Series C-Clamp 0 - 4" Opening Capacity, 540A Series C-Clamp 0 - 6" Opening Capacity and 540A Series C-Clamp 0 - 8" Opening Capacity
- Frames made from high strength ductile iron castings
- Sliding pin (vise type) handle, single acme thread rolled spindle and oscillating ball and socket tip
- Lifetime Warranty



Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure (lbs)	Order No.	Price
2-1/2, 4, 6, 8	1-3/4, 2-1/16, 2-3/4, 3-1/4	1/2, 5/8, 5/8, 3/4	1110; 2150; 2450; 2750	**HZ4111115**	Price

Steel Clamps

MightyMini STEEL

- Sliding arm moves to position itself right next to your workpiece to support the Acme threaded screw
- By comparison, when a 3" C-clamp is used to do the job of a 1" C-clamp, the point of support for the screw does NOT move… leaving the extended screw to do all the work



Nominal Size (in.)	Throat Depth (in.)	Nominal Clamping Cap.	Order No.	Price
4	2-1/4	660 lbs	**SG75MMS4**	Price
8	2-1/2	660 lbs	**SG75MMS8**	Price

SQ Series Regular Duty L-Clamps

- The fast action sliding arm mechanism can save up to 90% in labor cost.
- The tough, dependable Bessey quality makes the SQ the clamp of choice for the North American welding and Industrial workplace!



Nominal Opening (in.)	Throat Depth (in.)	Clamping Pressure	Order No.	Price
6	4-3/4	1330 lbs	**SG75SQ4**	Price
8	4-3/4	2660 lbs	**SG75SQ8**	Price
12	4-3/4	2660 lbs	**SG75SQ12**	Price
20	4-3/4	2660 lbs	**SG75SQ20**	Price

All Steel L-Clamps

With Patented 35° Tilt Morpad Assembly

- Nine times faster than a C-Clamp
- Easy to use, just slide moveable arm into position and tighten screw spindle
- Instant clamping at any opening
- No wasted set-up time
- Save 90% of clamping time versus the ordinary "C" Clamp



Nominal Opening (in.)	Throat Depth (in.)	Clamping Pressure	Order No.	Price
8	5-1/2	2660 lbs	**SG752400S8**	Price
12	5-1/2	2660 lbs	**SG752400S12**	Price
12	7	4880 lbs	**SG754800S12**	Price
18	7	4880 lbs	**SG754800S18**	Price
20	5-1/2	2660 lbs	**SG752400S20**	Price
40	5-1/2	2660 lbs	**SG752400S36**	Price
40	7	4880 lbs	**SG754800S36**	Price
48	7	4880 lbs	**SG754800S48**	Price
60	5-1/2	2660 lbs	**SG752400S60**	Price
60	7	4880 lbs	**SG754800S60**	Price

Classic Series F-Clamp Kit

- Features four of our most popular sizes - MMS-4, 4" MINI F-CLAMP, MMS-8, 8" MINI F-CLAMP, 1800S-8, 8" REGULAR DUTY F-CLAMP and 1800S-12, 12" REGULAR DUTY F-CLAMP
- Built tough and are small enough to tackle smaller, more intricate jobs where a standard clamp is just too big
- Black oxide spindle resists wear and tear while impeding rust
- Drop forged arm provides minimal flex under heavy workloads
- Swivel pad centers on work piece for a sturdy hold
- Sturdy tommy bar is engineered for durability and comfort



Clamping Cap.	Throat Depth (in.0	Clamping Pressue	Order No.	Price
4, 8, 8, 12	2-1/4, 2-1/4, 4-3/4, 5-1/2	400; 400; 1800; 1800 lbs	**HZ4111116**	Price

MMS-4, 4" Mini F-Clamps

- Black oxide spindle resists wear and tear while impeding rust
- Drop forged arm provides minimal flex under heavy work loads
- Swivel pad centers on workpiece for a sturdy hold
- Sturdy tommy bar is engineered for durability and comfort
- Lifetime warranty



Max. Opening (in.)	Throat Depth (in.)	Nominal Rail Size	Clamping Pressure	Order No.	Price
4	2-1/4	7/16 x 7/32	400 lbs	**HZ4186000**	Price
8	2-1/4	7/16 x 7/32	400 lbs	**HZ4186010**	Price
12	2-1/4	7/16 x 7/32	400 lbs	**HZ4186020**	Price

Classic Series Light Duty F-Clamps

- Black oxide spindles resist wear and tear while impeding rust
- Drop forged arm provides minimal flex under heavy workloads
- Swivel pad centers on workpiece for sturdy hold
- Sturdy tommy bar engineered for durability and comfort



Opening Cap. (in.)	Throat Depth (in.)	Clamping Force	Order No.	Price
8	4	660 lbs	**HZ4186100**	Price
8	4-3/4	1200 lbs	**HZ4186130**	Price
12	4	660 lbs	**HZ4186110**	Price
12	4-3/4	1200 lbs	**HZ4186140**	Price
18	4	660 lbs	**HZ4186120**	Price
18	4-3/4	1200 lbs	**HZ4186150**	Price
24	4-3/4	1200 lbs	**HZ4186160**	Price

Classic Series Regular Duty F-Clamps

- Black oxide spindles resist wear and tear while impeding rust
- Drop forged arm provides minimal flex under heavy workloads
- Swivel pad centers on workpiece for sturdy hold
- Sturdy tommy bar engineered for durability and comfort



Opening Cap. (in.)	Throat Depth (in.)	Clamping Force	Order No.	Price
8	4-3/4	1800 lbs	**HZ4186200**	Price
12	5-1/2	1800 lbs	**HZ4186210**	Price
18	4-3/4	1800 lbs	**HZ4186220**	Price
24	4-3/4	1800 lbs	**HZ4186230**	Price

PALMGREN INC L-Clamps

- Just slide the clamping arm to the work piece and tighten
- When the job is complete, simply loosen the spindle and slide the clamping arm back
- L-Clamps handle a wide variety or work sizes and shapes allowing you to clamp the work piece quicker while using fewer clamps on each job
- Lifetime Warranty

New!



Max Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
4	2-3/8	1/2	600 lbs	**JB509629304**	Price
6	3-5/32	9/16	700 lbs	**JB509629306**	Price
8	3-15/16	5/8	1000 lbs	**JB509629308**	Price
10	3-15/16	5/8	1200 lbs	**JB509629310**	Price
12	3-15/16	3/4	1200 lbs	**JB509629312**	Price
16	3-15/16	3/4	1650 lbs	**JB509629316**	Price

PALMGREN INC Standard Duty L-Clamps

- Slide the clamping arm to the work piece and tighten
- When the job is complete, simply loosen the spindle and slide the clamping arm back
- Handles a wide variety or work sizes and shapes allowing you to clamp the work piece quicker while using fewer clamps
- Lifetime Warranty

New!



Style - Heavy Duty					
Clamping Cap. (in.)	Spindle Dia. (in.)	Throat Depth (in.)	Clamp Pressure	Order No.	Price
0 - 10	3/4	4-3/4	2300 lbs	**JB509629410**	Price
0 - 12	3/4	4-3/4	2300 lbs	**JB509629412**	Price
0 - 20	3/4	4-3/4	2300 lbs	**JB509629420**	Price
0 - 8	3/4	4-3/4	2300 lbs	**JB509629408**	Price
0- 24	3/4	4-3/4	2300 lbs	**JB509629424**	Price

Style - Standard Duty					
Clamping Cap. (in.)	Spindle Dia. (in.)	Throat Depth (in.)	Clamp Pressure	Order No.	Price
4	1/2	2-3/8	600 lbs	**JB509629304**	Price
6	9/16	3-5/32	700 lbs	**JB509629306**	Price
8	5/8	3-15/16	1000 lbs	**JB509629308**	Price

Style - Standard Duty					
Clamping Cap. (in.)	Spindle Dia. (in.)	Throat Depth (in.)	Clamp Pressure	Order No.	Price
10	5/8	3-15/16	1200 lbs	**JB509629310**	Price
12	3/4	3-15/16	1200 lbs	**JB509629312**	Price
16	3/4	3-15/16	1650 lbs	**JB509629316**	Price

Style - Super Duty					
Clamping Cap. (in.)	Spindle Dia. (in.)	Throat Depth (in.)	Clamp Pressure	Order No.	Price
0 - 12	7/8	6-7/8	5000 lbs	**JB509629432**	Price
0 - 16	7/8	6-7/8	5000 lbs	**JB509629434**	Price
0 - 20	7/8	6-7/8	5000 lbs	**JB509629436**	Price
0 - 24	7/8	6-7/8	5000 lbs	**JB509629438**	Price

WILTON Heavy Duty F-Clamps

- Features a clamping force of 2660 lbs, a heavy-duty replaceable pad and replaceable parts
- Heavy duty quick twist pads are simple and fast to replace
- Black oxide spindle resists wear and tear while impeding rust
- Drop forged arm provides minimal flex under heavy work loads
- Sturdy tommy bar is engineered for durability and comfort
- Replaceable parts to you save money
- Lifetime Warranty

New!



Spindle Dia. (in.)	Throat Depth (in.)	Normal Rail Size (in.)	Clamping Cap. (in.)	Clamping Pressure (in.)	Order No.	Price
3/4	4-3/4	1-3/16 x 19/32	16	2660 lbs	**HZ4186660**	Price
3/4	4-3/4	1-3/16 x 19/32	16	2660 lbs	**HZ4186660**	Price
3/4	5-1/2	1-3/16 x 19/32	12	2660 lbs	**HZ4186650**	Price
3/4	5-1/2	1-3/16 x 19/32	8	2660 lbs	**HZ4186640**	Price
3/4	5-1/2	1-3/16 x 19/32	12	2660 lbs	**HZ4186650**	Price
3/4	5-1/2	1-3/16 x 19/32	20	2660 lbs	**HZ4186670**	Price
3/4	5-1/2	1-3/16 x 19/32	20	2660 lbs	**HZ4186670**	Price
3/4	5-1/2	1-3/16 x 19/32	8	2660 lbs	**HZ4186640**	Price
3/4	5-3/4	1-3/16 x 19/32	24	2660 lbs	**HZ4186680**	Price
3/4	5-3/4	1-3/16 x 19/32	24	2660 lbs	**HZ4186680**	Price

BESSEY STB Series Heavy Duty L-Clamps

- "Super Tough" welding & industrial clamps with an economical, new heavy-duty pad and screw



Nominal Opening (in.)	Throat Depth (in.)	Clamping Pressure	Order No.	Price
12	7	4880 lbs	**SG75STB12**	Price
18	7	4880 lbs	**SG75STB18**	Price
36	7	4880 lbs	**SG75STB36**	Price

Heavy Duty Drop-Forged C-Clamps

- Drop forged
- Heat treated steel frame
- Used in most extreme class of industrial service
- Square set screw is heat treated
- Heaviest and strongest C-Clamp available



Min. Opening (in.)	Max. Opening (in.)	Throat Depth (in.)	Thread Size (in.)	Clamping Pressure	Order No.	Price
1/2	2-3/8	1-9/16	3/4-10	12500 lbs	**SE608202**	Price
5/8	3-5/16	2	7/8-9	16250 lbs	**SE608203**	Price
1	4-5/8	2-7/16	1-8	20000 lbs	**SE608204**	Price
1-1/4	5-3/8	2-7/8	1-8	23800 lbs	**SE608205**	Price
2-1/4	8-1/4	3	1-1/4-7	31250 lbs	**SE608208**	Price
2-1/2	6-5/8	3-1/4	1-1/8-7	27500 lbs	**SE608206**	Price
4-1/4	10-3/8	3-1/8	1-1/4-7	35000 lbs	**SE608210**	Price

Brute Force™ O Series C-Clamps

- Bridge / Boiler Clamps
- Highest clamping pressure ranging up to 40,000 lbs.
- Spindles full length, machined from a single piece of square, cold drawn steel, hardened and tempered
- Square spindle head stands up to heavy wrench tightening use



Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
0 - 10-1/2	3-15/16	1-1/4	35000 lbs	**SF3020210**	Price
0 - 12-3/8	4-1/4	1-1/4	40000 lbs	**SF3020211**	Price
0 - 1-3/4	1-7/16	5/8	8750 lbs	**SF3020203**	Price
0 - 1-3/8	1-3/32	7/16	5600 lbs	**SF3020202**	Price
0 - 2	1-1/2	9/16	7500 lbs	**HZ41102**	Price
0 - 2-3/8	1-7/8	3/4	12500 lbs	**SF3020204**	Price
0 - 3	2	5/8	8750 lbs	**HZ41103**	Price
0 - 3-5/16	2-5/16	7/8	16250 lbs	**SF3020205**	Price
0 - 4	2-1/4	3/4	10000 lbs	**HZ41104**	Price
0 - 4-1/2	2-3/4	1	20000 lbs	**SF3020206**	Price
0 - 5-1/2	3-1/8	1	23800 lbs	**SF3020207**	Price
0 - 6-1/2	3-3/8	1-1/8	27500 lbs	**SF3020208**	Price
0 - 8-1/2	3-5/8	1-1/4	31250 lbs	**SF3020209**	Price
2 - 6	2-1/2	3/4	11250 lbs	**HZ41106**	Price
4 - 8	2-3/4	3/4	12500 lbs	**HZ41108**	Price
6 - 10	2-7/8	3/4	13750 lbs	**HZ41110**	Price
8 - 12	2-15/16	3/4	15000 lbs	**HZ41112**	Price

classiX™ International Line of Welding Clamps

- Provides the impetus for high-volume production runs
- Profiled rail, spatter resistant spindle and simplified heavy duty pad offer great value for industrial use



Type - Heavy Duty Pad				
Clamping Capacity (in.)	Throat Depth (in.)	Clamping Force	Order No.	Price
7-1/2	4-3/4	2660 lbs	**SG75GSM20**	Price
9	5-1/2	2660 lbs	**SG75GSM25**	Price
12	4-3/4	1880 lbs	**SG75GSL30**	Price
12	5-1/2	2660 lbs	**SG75GSM30**	Price
16	5-1/2	2660 lbs	**SG75GSM40**	Price
20	5-1/2	2660 lbs	**SG75GSM50**	Price
24	4-3/4	1880 lbs	**SG75GSL60**	Price
24	5-1/2	2660 lbs	**SG75GSM60**	Price

Type - Standard Pad				
Clamping Capacity (in.)	Throat Depth (in.)	Clamping Force	Order No.	Price
4	3-1/8	550 lbs	**SG75GS128K**	Price
6	3-1/8	550 lbs	**SG75GS16K**	Price
6	4-3/4	1000 lbs	**SG75GS1612K**	Price
8	4	880 lbs	**SG75GS20K**	Price
10	4-3/4	1000 lbs	**SG75GS25K**	Price
12	5-1/2	1200 lbs	**SG75GS30K**	Price
24	4-3/4	1200 lbs	**SG75GS60K**	Price

Spark-Duty™ Deep Reach Series Copper F-Clamps

Extra Deep Reach

- Increased throat depth provides a deeper reach for unique projects
- Spark-Duty™ copper plated spindle extends the life of the clamp by protecting the spindle and pad from welding spatter
- Quick Twist pads simple and fast replaceable pads in v-groove or serrated surfaces
- Ergonomic Wilton-Grip® anti-fatigue grip provides comfort during repetitive clamping



Opening Cap. (in.)	Throat Depth (in.)	Clamping Force	Order No.	Price
12	8	1770 lbs	**HZ4186700**	Price
24	8	1770 lbs	**HZ4186710**	Price

400P Spark Duty™ C-Clamps

- Patented design, frame geometry allows for maximum strength with greater throat depth and lower weight
- PERMA-PADS® exclusive copper plated pad swivels and adapts to angular work pieces for tighter holding
- Same features As 400SEP without serrated pads and V Grooved Anvil



Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
2-1/8	2-5/8	9/16	3500 lbs	**HZ4114215**	Price
0 - 3	2-1/2	5/8	3500 lbs	**HZ4114229**	Price
0 - 4-1/4	3-1/4	3/4	6200 lbs	**HZ41404P**	Price
0 - 6-1/16	4-1/8	3/4	6600 lbs	**HZ4114257**	Price
0 - 8-1/4	5	3/4	6900 lbs	**HZ4114271**	Price
2 - 10-1/8	6	3/4	8000 lbs	**HZ4114285**	Price
2 - 12-1/4	6-5/16	7/8	9300 lbs	**HZ4114299**	Price

Hi-Vis Deep Forge C-Clamps

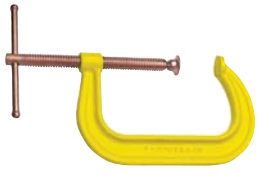
- Drop-forged heat-treated steel frame
- Swivel pads
- High visibility clamp with copper coated spindle to resist weld splatter



Capacity (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Load Test	Order No.	Price
2	2	1/2	3500 lbs	**SG75402VC**	Price
3	2-3/8	1/2	3500 lbs	**SG75403VC**	Price
4	2-3/4	3/4	6200 lbs	**SG75404VC**	Price
6	3-5/8	3/4	6900 lbs	**SG75406VC**	Price
8	4-1/2	3/4	6900 lbs	**SG75408VC**	Price
10	5-3/8	3/4	8000 lbs	**SG75410VC**	Price
12	5-3/4	3/4	9300 lbs	**SG75412VC**	Price

400CS Hargrave Spark Duty™ C-Clamps

- High visibility yellow conforms to OSHA Safety color standard for physical hazards regulation # 1910.144
- Oscillating head high quality steel pad is built to last and provides firm gripping action on angular surfaces



Max. Opening (in.)	Throat Depth (in.)	Spindle Dia. (in.)	Clamping Pressure	Order No.	Price
2, 4, 6, 8	2, 2-3/4, 3-5/8, 4-1/2	1/2, 3/4, 3/4, 3/4	-	**HZ4111114**	Price
0 - 2	2	1/2	3500 lbs	**SF30402CS**	Price
0 - 3	2-3/8	5/8	3500 lbs	**SF30403CS**	Price
0 - 4	2-3/4	3/4	6200 lbs	**SF30404CS**	Price
0 - 6	3-5/8	3/4	6600 lbs	**SF30406CS**	Price
0 - 8	4-1/2	3/4	6900 lbs	**SF30408CS**	Price
2 - 10	5-3/8	7/8	8000 lbs	**SF30410CS**	Price
2 - 12	5-3/4	7/8	9300 lbs	**SF30412CS**	Price

T-Bar Morpad Welding Table Clamp

- Tempered profiled rail and drop forged sliding arm for strength
- Tempered spindle - particularly sturdy and wear resistant
- Long life due to heat resistant pressure plate with sintered steel insert, which can be tilted up to 35°

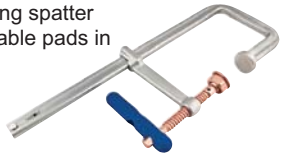


Model No.	Hole Size	Clamping Capacity (in.)	Throat Depth (in.)	Clamping Force (in.	Weight	Order No.	Price
TWM28-30-12	28mm	12	4-3/4	1400 lbs	3.92 lbs	**SG75TWM283012**	Price

Spark-Duty™ J-Series Copper F-Clamps

Built Tough For Irregular Shapes

- J-Shaped rail steps over I-beams and irregular shapes
- Spark-Duty™ copper plated spindle extends the life of the clamp by protecting the spindle and pad from welding spatter
- Quick Twist pads simple and fast replaceable pads in v-groove or serrated surfaces
- Ergonomic Wilton-Grip® anti-fatigue grip provides comfort during repetitive clamping
- Lifetime Warranty



Clamping Cap. (in.)	Throat Depth (in.)	Clamping Force	Nominal Rail Size (in.)	Spindle Dia. (in.)	Order No.	Price
10	4-3/4	1210 lbs	7/8 x 3/8	5/8	**HZ4186900**	Price
12	5-1/2	2420 lbs	1-3/16 x 9/16	3/4	**HZ4186910**	Price
20	7	4840 lbs	1-9/16 x 3/4	7/8	**HZ4186920**	Price

Spark-Duty™ 2000S Light Duty Series Copper F-Clamps

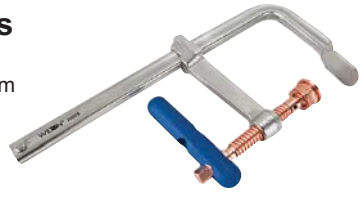
- Drop forged arm provides minimal flex under heavy workloads
- Spark-Duty™ copper plated spindle extends the life of the clamp by protecting the spindle and pad from welding spatter
- Quick Twist pads simple and fast replaceable pads in v-groove or serrated surfaces
- Ergonomic Wilton-Grip® anti-fatigue grip provides comfort during repetitive clamping
- Lifetime Warranty



Clamping Cap. (in.)	Throat Depth (in.)	Clamping Force	Nominal Rail Size (in.)	Spindle Dia. (in.)	Order No.	Price
8	4-3/4	2000 lbs	1-1/16 x 1/2	3/4	**HZ4186300**	Price
12	5-1/2	2000 lbs	1-1/16 x 1/2	3/4	**HZ4186310**	Price
18	4-3/4	2000 lbs	1-1/16 x 1/2	3/4	**HZ4186320**	Price
24	4-3/4	2000 lbs	1-1/16 x 1/2	3/4	**HZ4186330**	Price

Spark-Duty™ 2400S Regular Duty Series Copper F-Clamps

- Drop forged arm provides minimal flex under heavy workloads
- Spark-Duty™ copper plated spindle extends the life of the clamp by protecting the spindle and pad from welding spatter
- Quick Twist pads simple and fast replaceable pads in v-groove or serrated surfaces
- Ergonomic Wilton-Grip® anti-fatigue grip provides comfort during repetitive clamping
- Lifetime Warranty



Clamping Cap. (in.)	Throat Depth (in.)	Clamping Force	Nominal Rail Size (in.)	Spindle Dia. (in.)	Order No.	Price
8	5-1/2	2660 lbs	1-3/16 x 19/32	3/4	**HZ4186400**	Price
12	5-1/2	2660 lbs	1-3/16 x 19/32	3/4	**HZ4186410**	Price
16	4-3/4	2660 lbs	1-3/16 x 19/32	3/4	**HZ4186420**	Price
20	5-1/2	2660 lbs	1-3/16 x 19/32	3/4	**HZ4186430**	Price

Clamping Cap. (in.)	Throat Depth (in.)	Clamping Force	Nominal Rail Size (in.)	Spindle Dia. (in.)	Order No.	Price
24	4-3/4	2660 lbs	1-3/16 x 19/32	3/4	**HZ4186440**	Price
36	5-1/2	2660 lbs	1-3/16 x 19/32	3/4	**HZ4186450**	Price
48	5-1/2	2660 lbs	1-3/16 x 19/32	3/4	**HZ4186460**	Price
60	5-1/2	2660 lbs	1-3/16 x 19/32	3/4	**HZ4186470**	Price

Spark Duty™ Heavy Duty Copper F-Clamps

- Drop forged arm provides minimal flex under heavy workloads
- Spark-Duty™ copper plated spindle extends the life of the clamp by protecting the spindle and pad from welding spatter
- Quick Twist pads simple and fast replaceable pads in v-groove or serrated surfaces
- Ergonomic Wilton-Grip® anti-fatigue grip provides comfort during repetitive clamping
- L:ifetime Warranty

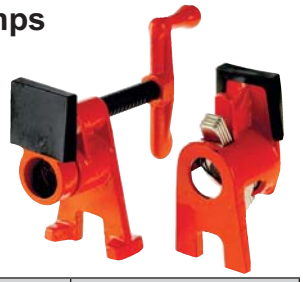


Clamping Cap. (in.)	Throat Depth (in.)	Clamping Force	Nominal Rail Size (in.0	Order No.	Price
12	7	4880 lbs	1-9/16 x 25/32	**HZ4186500**	Price
18	7	4880 lbs	1-9/16 x 25/32	**HZ4186510**	Price
24	7	4880 lbs	1-9/16 x 25/32	**HZ4186520**	Price
36	7	4880 lbs	1-9/16 x 25/32	**HZ4186530**	Price
48	7	4880 lbs	1-9/16 x 25/32	**HZ4186540**	Price
60	7	4880 lbs	1-9/16 x 25/32	**HZ4186550**	Price

"H" Series Pipe Clamps

Bessey® "H" Series pipe clamp has a rugged foot design that stabilizes the clamp in two dimensions giving dual-axis stability to the work piece.

- Extra high base provides hand clearance from the work surface
- Cast jaws for durability
- Smooth action spindle
- Patent Pending



Black Pipe Dia.	Order No.	Price
1/2	**SG75BPCH12**	Price
3/4	**SG75BPCH34**	Price

Pipe Clamps

PC Style:

- Acme threaded spindle and multiple clutch plates
- Easty to assemble and a staple item for many workshops
- Plated spindles to prevent rust and corrosion
- Large clamping surface - positive grip
- Large handle - positive pressure
- Shown with pipe not included

PC-2 Style:

- Large clamping surface
- Acme threaded screw
- Hex head on spindle
- Virtually limitless clamping capacity determined by the length of pipe used



Pipe Size (in.)	Approx. Weight	Order No.	Price
1/2	2.12 lbs	**SG75PC122**	Price
3/4	2.88 lbs	**SG75PC342**	Price

SPEEDJAW Adjustable Multi-Clamp

- Adjustable sizes from 0 to 5-3/4”
- Quick release
- Made from tough glass filled nylon materials
- Independent jaws allow clamping of almost any shape
- Swivel pads at he end of the jaws to insure a great grip

New!



Order No.	Price
KE5394036	Price

IRWIN QUICK-GRIP Bar Clamps



- Handle and jaws engineered for strength and lightweight
- High carbon, heat treated steel bar
- Soft, pliable pads protect fine finishes
- Quick release trigger

Jaw Opening (in.)	Throat Depth (in.)	Order No.	Price
6	3-1/4	KX5000546†	Price
6	3-1/4	KX50506QC	Price
12	3-1/4	KX50512QC	Price
18	3-1/4	KX50518QC	Price
24	3-1/4	KX50524QC	Price
36	3-1/4	KX50536QC	Price

†Mini Bar Clamp

Spring Clamps



- Chrome plated steel constuction
- Cushioned non-slip handle grips
- Non-slip padded jaws grip work piece without damaging surface
- Tempered steel spring for consistent holding power

Opening (in.)	OAL (in.)	Order No.	Price
1	4	SE75SC1	Price
1	4	SE75SC1P†	Price
2	6	SE75SC2	Price
2	6	SE75SC2P†	Price

† Set of 5

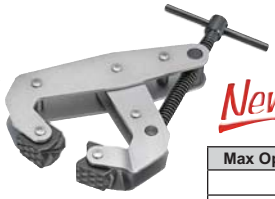
IRWIN QUICK-GRIP Spring Clamps



- High-tech resin construction
- Non-marring pads protech workpiece
- Specially designed jaws hold odd-shaped workpieces
- Lifetime warranty

Jaw Opening (in.)	Throat Depth (in.)	Order No.	Price
1	1-1/2	KX5058100	Price
2	2-1/4	KX5058200	Price
3	3-1/4	KX5058300	Price

PALMGREN Cantilever Clamps



New!

- Clamping handle is always outside the work area, body plates are made from chrome-molybdenum alloy steel
- Provides best features of c-clamps and parallel clamps
- Floating jaws always stay parallel to the workpiece, free floating jaws adjust to un-parallel surfaces
- Will not walk off-center when pressure applied against the jaw because there is no unsupported screw or loose pad
- Lifetime Warranty

Max Opening (in.)	Throat Depth (in.)	Clamp Force	Order No.	Price
1	.059	300 lbs	JB509629491	Price
2	1.300	800 lbs	JB509629492	Price
3	1.378	1500 lbs	JB509629493	Price
4-1/2	2.284	1700 lbs	JB509629494	Price
6	4.311	2000 lbs	JB509629496	Price

SPEEDJAW Jaw Pads for Multi-Clamp

- 100% Compatible with Speedjaw clamps
- Easy slip-on design
- The perfect grip for your project

New!



Description	Material	Order No.	Price
Curved Pads (Set of 2)	Glass-filled nylon	KE5393622	Price
Non-Marring Pads (Set of 2)	Polyethene (PE)	KE5393623	Price
Steel Pads (Set of 2)	Ductile iron	KE5393624	Price

BESSEY EZS Clamps



- Intelligent release mechanism
- Ergonomically shaped 2-component plastic handle with pump lever
- Soft pressure caps guarantee material protection and secure clamping

Max. Opening (in.)	Throat Depth (in.)	Clamping Pressure	Order No.	Price
6	3-1/2	445 lbs	SG75EZS158	Price
12	3-1/2	445 lbs	SG75EZS308	Price
18	3-1/2	445 lbs	SG75EZS458	Price
24	3-1/2	445 lbs	SG75EZS608	Price
36	3-1/2	445 lbs	SG75EZS908	Price

BESSEY Steel Spring Clamps



- Vinyl tips and handles prevent marring
- Heavy duty springs for firm grip
- Nickel plating resists corrosion

Throat Depth (in.)	Clamping Capacity (in.)	Weight	Order No.	Price
1	1-1/4	.17 lbs	SG75XM3	Price
2	2-1/4	.40 lbs	SG75XM5	Price
3	3-5/16	.80 lbs	SG75XM7	Price
4	5	1 lb	SG75XM10	Price

IRWIN QUICK-GRIP Quick-Grip® Handi-Clamp®



- Quick-Release™ trigger
- High-tech resin construction
- Specially designed jaws hold odd-shaped workpieces

Clamping Capacity	Throat Depth (in.)	Order No.	Price
1-1/2	1-1/2	KX5059100CD	Price
2	2	KX5059200CD	Price
4	3	KX5059400CD	Price

KANT TWIST Kant-Twist Key Chain

It Really Works!

- Maximum Opening 3/4”
- Throat Depth 3/8”

MADE IN THE USA



Order No.	Price
SE64400KEY	Price

KANT TWIST Standard “T” Handle Style Clamps

- Multi-purpose clamp that combines the best features of an ordinary “C” clamp and parallel clamps
- Free floating jaws adjusts to unparallel surfaces
- Copper plated jaws and screws are ideal for welding
- Built in “V” blocks is perfect for holding round stock
- Cantilever acton provides 4:1 ratio

MADE IN THE USA

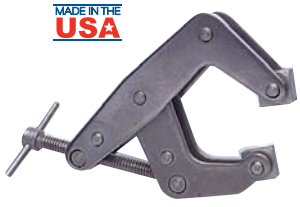


Max. Opening (in.)	Throat Depth (in.)	Closed Depth (in.)	Holding Capacity	Order No.	Price
1	3/8	1/2	350 lbs	**SE64401**	Price
2	1-1/8	1-1/4	800 lbs	**SE64405**	Price
3	1-1/4	1-3/4	1500 lbs	**SE64410**	Price
6	2-1/8	3-3/8	2000 lbs	**SE64420**	Price
9	3-3/8	5-1/4	2500 lbs	**SE64430**	Price
12	12	7	6000 lbs	**SE64440**	Price

KANT TWIST Universal "T" Handle Stainless Style Clamps

- Designed for corrosive and magnetic problem areas
- Use of grinding work, around magnetic chucks
- 300 Series stainless steel
- Includes all other features of the Kant-Twist clamp

MADE IN THE USA

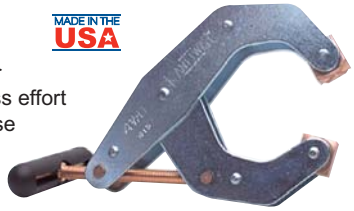


Max. Opening (in.)	Throat Depth (in.)	Closed Depth (in.)	Holding Capacity	Order No.	Price
2	1-1/8	1-1/4	700 lbs	**SE64505**	Price
3	1-1/4	1-3/4	1200 lbs	**SE64510**	Price
4-1/2	2-1/4	3	1500 lbs	**SE64515**	Price

KANT TWIST "T" Handle Style Clamps with Cushion Handles

- Comfortable grip for ease of use
- Makes repetitive use much easier
- Apply maximum pressure with less effort
- Cushion handle removes with ease

MADE IN THE USA



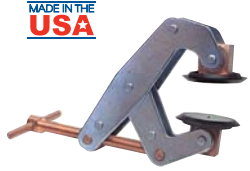
Max. Opening (in.)	Throat Depth (in.)	Closed Depth (in.)	Holding Capacity	Order No.	Price
1	3/8	1/2	350 lbs	**SE64401G**	Price
2	1-1/8	1-1/4	800 lbs	**SE64405G**	Price
2-1/2	2	1-13/16	700 lbs	**SE64407G†**	Price
3	1-1/4	1-3/4	1500 lbs	**SE64410G**	Price
4-1/2	2-1/4	3	1700 lbs	**SE64415G†**	Price
6	2-1/8	3-3/8	2000 lbs	**SE64420G**	Price
6	4-1/4	5-1/2	2000 lbs	**SE64421G†**	Price

†Deep throat

KANT TWIST Standard "No-Mar" Round Pad Style Clamps

- Round flat pads for soft or fine finishes
- Will not dig into soft wood, plastisc, aluminum, etc.
- Superior to “C” clamps
- Design brings the jaws together without the turning or twisting of screw-type clamps

MADE IN THE USA

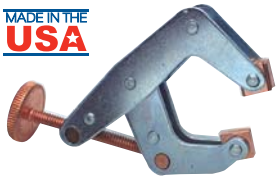


Max. Opening (in.)	Throat Depth (in.)	Closed Depth (in.)	Holding Capacity	Order No.	Price
1	7/8	1/2	350 lbs	**SE644014**	Price
2	1-1/8	1-1/4	800 lbs	**SE644054**	Price
3	1-1/4	1-3/4	1500 lbs	**SE644104**	Price
4-1/2	2-1/4	3	1700 lbs	**SE644154**	Price

KANT TWIST Universal "Round" Handle Style Clamps

- Round handles provide an alternative to standard “T” handles
- Round handles provide the ability to more finely tighten the clamp pressure

MADE IN THE USA

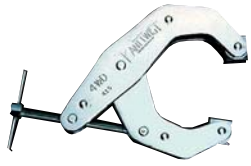


Max. Opening (in.)	Throat Depth (in.)	Closed Depth (in.)	Holding Capacity	Order No.	Price
3/4	3/8	3/8	200 lbs	**SE64396R**	Price
1	1/2	1/2	350 lbs	**SE64401R**	Price
1-1/2	1-1/8	1	600 lbs	**SE64403R**	Price
2	1-1/8	1-1/4	800 lbs	**SE64405R**	Price

KANT TWIST Deep Throat Jaw Opening Clamps

- Allows for a deeper grab on the clamped object
- Multi-purpose clamps combine the best features of rodinary “C” and parallel clamps
- Free-floating jaws adjust to un-parallel surfaces
- Plates are made of high tensile steel
- Eliminates distorting and twisting action of conventional clamps
- Copper plated jaws and screws are ideal for welding
- All clamps close completely

MADE IN THE USA



Max. Opening (in.)	Throat Depth (in.)	Closed Depth (in.)	Holding Capacity	Order No.	Price
2-1/2	2	1-13/16	700 lbs	**SE64407**	Price
4-1/2	2-1/4	3-13/16	1700 lbs	**SE64415**	Price
6	4-1/2	5-1/2	2000 lbs	**SE64421**	Price
10	6	7	3500 lbs	**SE64435**	Price

KANT TWIST Quick-Acting Fixture Clamps

- Best for drill presses and shop machines
- For holding where thickness and surface are not exact from part to part
- Used for drill press, assembly molds, furniture, planners, vertical turrets, mills, woodworking, plastic tooling, and fixtures of all types

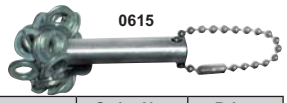




Model No.	Max. Opening (in.)	Slot Width (in.)	Outer Edge Screws (in.)	Base Depth (in.)	Base Width (in.)	Height (in.)	Clamp Width (in.)	Order No.	Price
411	3	1.92	1-1/2	2-11/16	3-1/4	3-3/8	1-3/4	**SE64411**	Price
411-2	3-3/16	T-Slot Mounting	-	2-11/16	3-1/4	4-1/8	1-3/4	**SE644112**	Price
423	6	2.908	2-5/8	3-3/4	3-3/4	6-7/8	3-1/4	**SE64423**	Price

Pocket Tools & Retrievers - Fixed Shaft

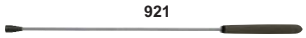




Item	Dia. (in.)	Lift Capacity (lbs.)	Length (in.)	Description	Order No.	Price
GENERAL	5/16	2.0	5-1/2	A medium strong sturdy pick-up tool.	NE50386	Price
MAG-MATE	5/16	2.5	5-1/4	Precision ground carbide tip scribe is reversible. Magnet located on the other end.	NE7010600	Price
	5/16	2.5	6	Pen sized magnetic tool. Sturdy clip holds magnet firmly in pocket.	NE70906	Price
	3/8	4.0	2	Key chain retriever. Powerful magnet, Aluminum rod.	NE700615	Price

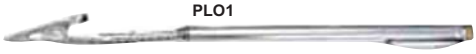
Pocket Tools & Retrievers - Flexible/Bendable Shaft





Item	Dia. (in.)	Lift Capacity (lbs)	Length (in.)	Description	Order No.	Price
PROTO	1	-	13-1/2	Spring loaded plunger actuates jaws at end of flexible casing.	KP4270295	Price
	1	-	23-1/2	Spring loaded plunger actuates jaws at end of flexible casing.	KP4270300	Price
	1/2	1.5	19-1/2	Push button allows reaching an object before energizing the magner.	KP4270335	Price
	1/2	3.0	24-1/2	Push button allows reaching an object before energizing the magner.	KP4270340	Price
GENERAL	1/4	2.0	8-3/4	Magnetic tool with locking pivot joint to pick-up iterms around corner, cushion grip handle.	NE50392	Price
	1/4	2.0	20	Flexible magnetic pick-up tool; excellent for retrieving small steel parts.	NE50395	Price
	1/4	2.0	32"-Max	Flex-O-Stiff magnetic pick-up tool designed with flexible retriever arm.	NE50384N	Price
MAG-MATE	3/8	3.0	20	Flexible dual purpose, bend shaft to permanent position or remove wire to snake into position	NE70928S	Price
	1/2	8.0	21	Flexible retriever with fixed head and nonslip solvent-resistant comfort grip	NE70921	Price

Pocket Tools & Retrievers - Telescoping Scaft





Item	Dia. (in.)	Lift Capacity (lbs.)	Length (in.)	Description	Order No.	Price
PROTO	1	1.5	16-3/4 to 26-3/4 Telescoping	All angle ball joint.	KP4270330	Price
	1	1.5	8 Fixed	All angle ball joint.	KP4270345	Price
	1/2	1.5	5-1/2 - 25-1/2	Push button allows reaching an object before energizing the magnet.	KP4270370	Price
	1/2	16.0	8-1/4 - 30-1/4	Push button allows reaching an object before energizing the magnet.	KP4270395	Price
	1/2	5.0	8-1/4 - 30-1/4	Push button allows reaching an object before energizing the magnet.	KP4270390	Price
PRM PRO	3/4	8.0	Extends to 33"	Telescoping Magnetic Pick-Up	KP8346501	Price
GENERAL	5/16	2.0	5-1/2 to 23-1/2	High-power magnet with pivot joint, for hard to reach area, includes pocket clip.	NE50383NX	Price
	3/4	10	6-1/2 to 27	Telescoping stainless steel wand, magnetic pickup, Double ball joint connection	NE50759398	Price
MAG-MATE	5/16	2.0	5-1/2 to 25-1/2	Stainless steel pen sized tool for tiny jobs. With pocket clip	NE70240N	Price
	3/8	5.0	6-1/2 to 32	Magnetic retriever w/fixed head and nonslip solvent resistant comfort grip	NE70923	Price
	1/2	7.5	17 to 26-1/2	Double ball hinge head, Hex rod prevents magnet from swinging while in use	NE70927	Price
	1/2	12.0	13 to 26	Double ball hinge head, Hex rod prevents magnet from swinging while in use	NE70931	Price
	5/8	7.0	6-1/2 to 32	Magnetic retriever w/fixed head and nonslip solvent resistant comfort grip	NE70924	Price
	5/8	7.0	8 to 35	Magnetic retriever w/single ball swivel head and nonslip solvent resistant comfort grip	NE70925	Price
	5/8	14.0	23-1/2 to 50	Extra long, heavy duty magnetic retriever w/fixed head and nonslip solvent resistant comfort grip	NE70926	Price
	1-1/8	20.0	16-1/2 to 29	Magnetic retriever w/fixed head and nonslip solvent resistant comfort grip	NE70990SM	Price

TITAN 3-in1 Flexible Lighted Retriever

- Overall length: 24”
- Flexible shaft for use in confined areas
- Adjustable retriever claw
- Inspection LED light
- Magnet holds up to 3 lbs
- Aluminum handle and head
- Steel and chrome plated flexible shaft

New!



Order No.	Price
KP8211064	Price

TITAN Magnetic Document Clips

2 Pc. Sets

New!

- Dimensions: 1-1/4 x 3-1/4” high x 1-3/4” deep
- Attach to tool bins, shop cabinets, file cabinets, refrigerators and other ferrous metal surfaces
- Holds manuals, calendars, notepads and more



Color	Order No.	Price
Black	KP8211142	Price
Chrome	KP8211143	Price
Red	KP8211140	Price
White	KP8211141	Price

GENERAL Button Type Alnico Magnets

- Button shaped magnet has almost unlimited applications
- Retrieves screws and steel parts
- Center hole in top for easy fastening



Diameter (in.)	Height (in.)	pull (lbs.)	Cored Hole (in.)	Order No.	Price
1/2	3/8	1.5	1/8	**NE50372A**	Price
3/4	1/2	4	1/8	**NE50372B**	Price
1	5/8	6.5	3/16	**NE50372C**	Price
1-1/4	3/4	14	3/16	**NE50372D**	Price
1-1/2	7/8	18.5	1/4	**NE50372E**	Price

Pot Type Alnico Magnets

- Strong magnet with insulating ring gives it the superior holding power of larger ones
- 1/4 x 20 thread hole for attaching to fixtures and machines



GENERAL WORLD CLASS QUALITY

				General		Quality Import	
Dia. (in.)	Pull (lbs.)	Weight (oz.)	Height (in.)	Order No.	Price	Order No.	Price
11/16	6	6	5/8	**NE50374A**	Price	**NE60431**	Price
13/16	10	6	3/4	**NE50374B**	Price	**NE60432**	Price
1-1/16	18	12	1	**NE50374C**	Price	**NE60433**	Price
1-3/8	35	24	1-3/16	**NE50374D**	Price	**NE60434**	Price

General Purpose Magnets

- Round and Rectangular
- Hold screws for assembling
- Clean up metal shavings around work area



REC134



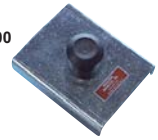
RECHVY178

Thickness (in.)	Width (in.)	Length (in.)	Shape	Order No.	Price
5/32	3/4	1.00	Rectangular	**NE70REC134**	Price
3/16	11/16	11/16	Round	**NE70RR34**	Price
3/16	7/8	1.00	Rectangular	**NE70RECM134**	Price
3/8	7/8	1-7/8	Rectangular	**NE70RECHVY178**	Price

Magnetic Blueprint Holders



15805



10800



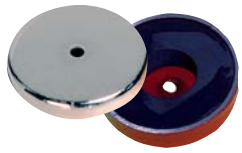
8606

Shape - Rectangular						
Max Holding Capacity (lbs.)	Height With Knob (in.)	Width (in.)	Length (in.)	Thickness (in.)	Order No.	Price
11.5	1-3/8	1-3/8	2-3/8	9/16	**JY608606**	Price
19	1-3/8	1-5/8	2	9/16	**NE7010800**	Price

Shape - Round					
Max Holding Capacity (lbs.)	Height With Knob (in.)	Dia. (in.)	Thickness (in.)	Order No.	Price
7	11/16	1-13/64	3/16	**NE7015795**	Price
11	1-1/32	1-7/16	9/32	**NE7015800**	Price
19	1-1/16	2-1/32	5/16	**NE7015805**	Price
41.0	1-1/8	2-5/8	3/8	**NE70PHMX2500**	Price
47.5	1-3/16	3-3/16	7/16	**NE70PHMX3000**	Price

Low Profile Cup Magnets

- Ideal for hanging signs, lights, etc. or retrieving steel items from tanks, vats & bins
- NE60656 has 10" x 24" threaded center hole for fastening with machine screw.
- NE60 models are painted red. All others are bright silver plated



Diameter (in.)	Max Holding Capacity (lbs.)	Height (in.)	Magnet ID (in.)	Hole ID (in.)	Order No.	Price
1-7/32	7	3/16	1/4	1/8	**NE7020010**	Price
1-7/32	35	3/16	1/4	1/8	**NE7020015**	Price
1-13/32	11	9/32	3/8	3/16	**NE7020020**	Price
1-3/4	10	1/4	11/16	1/8	**NE60656**	Price
2	20	3/8	5/16	3/8	**NE60657**	Price
2-1/32	19	5/16	27/32	3/16	**NE7020025**	Price
2-1/32	47.5	5/16	7/16	3/16	**NE7020030**	Price
2-1/32	74	5/16	7/16	3/16	**NE7020035**	Price
2-5/8	41	3/8	1	9/32	**NE7020040**	Price
2-5/8	100	3/8	5/8	9/32	**NE7020045**	Price
2-3/4	35	7/16	15/16	3/8	**NE60658**	Price
2-7/8	45	3/8	1	9/32	**NE7020050**	Price
3-1/8	50	1/2	1-1/4	3/8	**NE60659**	Price
3-3/16	47.5	7/16	1-3/16	9/32	**NE7020055**	Price
4-29/32	95	11/32	1-3/4	1/2	**NE7020060**	Price

MAG-MATE Magnetic Cup Assemblies

- Ideal for hanging signs, banners and temporary displays
- Bright plated cup, bolt and nuts
- Furnished with two nuts
- Low profile design



Style - Cup Magnet with Adhesive Back						
Magnet Width (in.)	Holding Value (lbs.)	Height (in.)	Bolt Length (in.)	Thread Size	Order No.	Price
1.24	7	0.188	1	6-32	**NE70MX1000ADH**	Price
1.41	11	0.281	1	8-32	**NE70MX1500ADH**	Price
2.03	45	0.313	Throttle	10-24	**NE70MX2000ADH**	Price

Style - Cup Magnet with Bolt and Two Nuts						
Magnet Width (in.)	Holding Value (lbs.)	Height (in.)	Bolt Length (in.)	Thread Size	Order No.	Price
1-9/64	11	.281	1	8-32	**NE70MX1500B**	Price
2	100	.375	1-3/4	1/4-20	**NE70MX2508RB**	Price
2	47.5	.313	1-1/4	10-24	**NE70MX2002RB**	Price

Style - Low Profile Cup Magnet with Bolts						
Magnet Width (in.)	Holding Value (lbs.)	Height (in.)	Bolt Length (in.)	Thread Size	Order No.	Price
1-1/4	7	3/16	1	6-32	**NE7010200**	Price
2-1/32	19	5/16	1-3/4	10-24	**NE7010205**	Price
2-1/4	5	3/16	1	5/16-18	**NE7010210**	Price
2-5/8	41	3/8	1-3/4	1/4-20	**NE7010215**	Price
3-1/8	47.5	7/16	1-3/4	1/4-20	**NE7010220**	Price

MAG-MATE Cup Magnets with Clamps

- Low profile design is ideal for holding, hanging, mounting and more in difficult areas and positions
- Quickly installed and repositioned



Style - 1 - Nickel Plated Clamp					
Hold (lbs)	Overall Height (in.)	Width Dia. (in.)	Opening (in.)	Order No.	Price
7.0	.88	1.24	.19-.38	**NE70MX1000NP01**	Price
11.0	1.53	1.41	.31-.75	**NE70MX1500NP01**	Price
19.0	2.31	2.03	.63-1.25	**NE70MX2000NP01**	Price
41.0	2.50	2.63	1.00-1.88	**NE70MX2500NP01**	Price

Style - 1 - Stainless Steel Clamp					
Hold (lbs)	Overall Height (in.)	Width Dia. (in.)	Opening (in.)	Order No.	Price
7.0	1.09	1.24	.38-.50	**NE70MX1000SS01**	Price
11.0	1.91	1.41	.63-.88	**NE70MX1500SS01**	Price
11.0	2.03	1.41	.88-1.13	**NE70MX1500SS02**	Price

Style - 2 - Black Vinyl Coated C lamp					
Hold (lbs)	Overall Height (in.)	Width Dia. (in.)	Opening (in.)	Order No.	Price
19.0	2.19	2.03	1.50-1.88	**NE70MX2000VB02**	Price

MAG-MATE® Rare Earth Magnets

- Extremely powerful magnet is ideal for miniaturized applications
- Maximum Temperature 180°F (82°C)
- High resistance to demagnetization
- Nickel plated finish



Dia. (in.)	Length (in.)	Max Holding Capacity (lbs.)	Useable Holding Value (lbs.)	Order No.	Price
1/8	.060	.4	.2	**NE7010500**	Price
1/8	1/4	.6	.3	**NE7010503**	Price
3/16	.060	1.2	.6	**NE7010506**	Price
7/32	.100	2	1	**NE7010509**	Price
7/32	1/4	3	1.5	**NE7010512**	Price
7/32	1/2	3.6	1.8	**NE7010515**	Price
1/4	.100	2	1	**NE7010518**	Price
1/4	1/8	2.4	1.2	**NE7010521**	Price
1/4	0.2	3.07	1.54	**NE70NE2520NP42**	Price
1/4	.200	3.4	1.7	**NE7010524**	Price
1/4	1/4	3.35	1.67	**NE70NE2525NP42**	Price
1/4	1/4	3.6	1.8	**NE7010527**	Price
1/4	1/2	3.87	1.94	**NE70NE2550NP42**	Price
1/4	1/2	4.2	2.1	**NE7010530**	Price
21/64	1/4	6.2	3.1	**NE7010533**	Price
3/8	.060	2	1	**NE7010536**	Price
3/8	.100	4	2	**NE7010539**	Price
3/8	3/16	9	4.5	**NE7010541**	Price
3/8	1/4	6.86	3.43	**NE70NE3725NP42**	Price
3/8	1/4	9.2	4.6	**NE7010544**	Price
3/8	3/8	7.96	3.98	**NE70NE3737NP42**	Price
3/8	3/8	11.4	5.7	**NE7010547**	Price
3/8	1/2	8.5	4.25	**NE70NE3750NP42**	Price
3/8	1/2	13.4	6.7	**NE7010550**	Price
1/2	.060	6	3	**NE7010553**	Price
1/2	1/8	6.08	3.04	**NE70NE5012NP42**	Price
1/2	1/8	8	4	**NE7010556**	Price
1/2	3/16	11.4	5.7	**NE7010559**	Price
1/2	.200	12	6	**NE7010562**	Price
1/2	1/4	10.88	5.44	**NE70NE5025NP42**	Price
1/2	1/4	13	6.5	**NE7010565**	Price
1/2	3/8	17.8	8.9	**NE7010568**	Price
1/2	1/2	14.66	7.33	**NE70NE5050NP42**	Price
1/2	1/2	22.4	11.2	**NE7010571**	Price
3/4	1/4	21.4	10.7	**NE70NE7525NP35**	Price
3/4	3/8	24	12	**NE70NE7537NP42**	Price
3/4	3/8	27	13.5	**NE70NE7537NP35**	Price
3/4	1/2	44	22.0	**NE70NE7550NP35**	Price

MAG-MATE® Rare Earth Ring Magnets

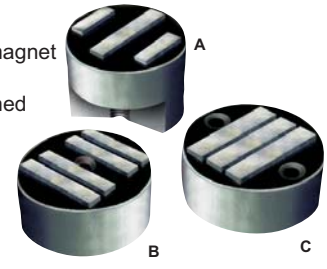
- Extremely powerful
- Ideal for small applications
- Maximum temperature 180°F (82°C)
- High resistance to demagnetization
- Nickel plated finish



Dia. (in.)	Length	Holding Capacity (lbs)	Order No.	Price
1/4	.060	.20	**NE70NE25NP35**	Price
3/8	.100	2.0	**NE70NE37NP35**	Price
.365	1/4	4.2	**NE70NE36NP35**	Price
7/8	.200	19	**NE70NE87NP35**	Price

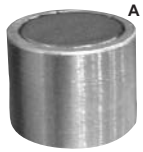
MAG-MATE® Rare Earth Exposed Pole Magnets

- Rare Earth Neodymium 3 & 4-Pole magnet in an aluminum insulated cup
- Extended poles can be lightly machined
- Can be press fit or use hole for mounting. +/- .008" diameter & +/- .015" length
- Maximum temperature 180°F (82°C)

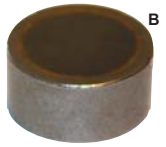


Dia. (in.)	Length (in.)	Thread Size	Depth (in.)	Pull (lbs.)	Style	Order No.	Price
2	1	1/4-Flat	-	60	B	**NE70C4H2004**	Price
3	1	1/4-Flat	-	145	C	**NE70C5H3004**	Price
1-1/4	3/4	5/16-18	1/4	26	A	**NE70N3T1252**	Price

Rare Earth Flush Face Magnets



- **A:** Rare Earth Neodymium 1-Pole magnet in an aluminum insulated cup. Powerful compact magnet that can be press fit or use tapped hole for mounting. +/- .003" diameter & .015" length. Maximum temperature 180°F (82°C).
- **B:** Rare Earth Neodymium Island 2-Pole magnet in a steel cup. Ideal for shallow fixtures. Cannot be press fit without additional insulation. Use tapped hole for mounting. +/- .005" diameter & +/- .015" length. Maximum temperature 180°F (82°C).



Dia. (in.)	Length (in.)	Thread Size	Thread Depth (in.)	Useable Holding Value (lbs.)	Style	Order No.	Price
1/4	1/2	6-32	1/4	.25	A	**NE7010900**	Price
3/8	1/2	8-32	1/4	1.3	A	**NE7010905**	Price
3/8	1/2	8-32	.085	3	B	**NE7010400**	Price
1/2	1/2	10-24	1/4	2.65	A	**NE7010910**	Price
1/2	1/2	10-24	.150	8	B	**NE7010405**	Price
5/8	1/2	10-24	1/4	4.35	A	**NE7010915**	Price
3/4	1/2	10-24	1/4	6	A	**NE7010920**	Price
3/4	1/2	10-24	.150	22	B	**NE7010410**	Price
1	1/2	1/4-20	1/4	7.5	A	**NE7010925**	Price
1	1/2	1/4-20	.150	46	B	**NE7010415**	Price
1-1/4	1/2	5/16-18	.150	50	B	**NE7010425**	Price

MAG-MATE® Multi-Purpose Magnets - Ceramic & Rare Earth

- Two-Pole Ceramic
- Effective holding against shear force
- High impact epoxy encapsulated
- Aluminum insulated
- Mounting holes can be drilled at either end of magnet



Max. Holding Capacity (lbs.)	Width (in.)	Height (in.)	Length (in.)	Bar Length (in.)	Order No.	Price
45	1	1-1/4	4-1/2	2	**NE7010250**	Price
65	1	1-1/4	4-1/2	2	**NE70AC2102**	Price

GENERAL® Flexible Magnetic Strip

- Our flexible magnetic strip with adhesive backing adheres to most smooth surfaces
- Holds small metal objects
- Easily cut to desired length with scissors or knife



Size	Order No.	Price
1" x 10'	**NE50369**	Price

MAG-MATE® Salvage Magnets

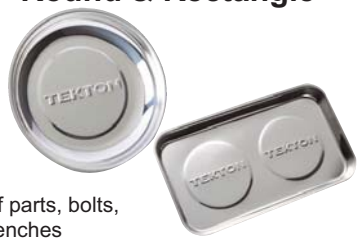
- Retrieves tools, parts, key rings, fishing tackle and more
- Powerful ceramic magnet
- Tools NOT included



Holding Capacity (lbs.)	Mag Size (in.)	Weight (lbs.)	Order No.	Price
35.0	3-1/2 dia.	1.07 lbs	**JY608402**	Price
50.0	6 x 1-7/8	2.34 lbs	**JY608401**	Price

Magnetic Parts Trays - Round & Rectangle

- Polished stainless steel tray
- Round diameter: 6", deep: 1-1/2" or rectangle 9-1/2" x 5-1/2"
- Strong magnet with rubber protective cover won't scratch painted surfaces
- Magnet attaches to car hoods or fenders for convenient storage of parts, bolts, nuts, screws, and even small wrenches



Item	Size (in.)	Order No.	Price
PRM PRO	5-1/2 x 1-1/8	KP8345020	Price
TEKTON	9-1/2 x 5-1/2	KP851903	Price
	6 x 1-1/2	KP8567440	Price

TITAN Rectangular Magnetic Parts Tray

- 6-1/2" x 14" Stainless steel dish - 1" deep
- Perfect for holding pars, hardware and fasteners in place
- Sticks to any ferrous metal surfaces - it even works upside down
- Non marring vinyl magnetic base



New!

Order No.	Price
KP8221263	Price

TITAN Square Magnetic Parts Tray

New!

- Size: 10-1/2" x 11-1/2" - 1" deep
- Stainless steel dish
- Perfect for holding parts, hardware and fasteners in place
- Sticks to any ferrous metal surfaces
- Non-marring rubber covered magnetic base prevents scratching



Order No.	Price
KP8221262	Price

Magnetic Retrievers

- Designed with a rare earth magnet 6 times the power of a regular magnet
- 16" & 36" sizes available with a 26 oz. dump shipped out
- Both sizes 1" diameter with a magnetic field of 7-1/2"





Item	Length (in.)	Order No.	Price
BESSEY	16	SG75MW1	Price
MAG-MATE	16	NE7020125	Price
	36	NE7020150	Price

MAG-MATE Magnetic Shop Sweeper

- Works on hard floors or carpeted areas
- This sweeper offers the ability to clean right up to the edge of walls or machines and into corners with its unique wheel design
- 3/4" Clearance height
- EZ-Cleaning magnet
- 38" Long handle

MADE IN THE USA



Length (in.)	Width (in.)	Height (in.)	Weight	Order No.	Price
19	3/4	52	7 lbs	NE70SS1800	Price

TITAN Magnetic Strainer



New!

- 10-1/2" diameter x 3-1/2" deep
- Great for collecting small metal items such as tools, bolts, nails, screws, and fasteners
- Anti-rust, durable, stainless steel strainer is perfect for washing dirty tools
- Tools can be attracted firmly during flushing
- Rubber coated magnet prevents scuffing and scratching surfaces

Order No.	Price
KP8211180	Price

STEELMAN PRO Magnetic Lug Bucket

New!

- SECURE MOUNTING - Bucket mounts securely on tool boxes, lifts, tire machines, and almost any metal surface
- RUGGED POLYPROPYLENE - Rugged polypropylene construction helps absorb impacts
- POWERFUL MAGNETS - Three high-strength neodymium magnets hold up to 10 pounds of parts and components
- 6 MAGNET POSITIONS - 6 total top and side magnet positions allow for multiple mounting configurations
- GROOVED DIVIDERS - Grooved dividers help separate parts while working



Order No.	Price
KE5379011	Price

TITAN Collapsible Magnetic Parts Tray

- Size: 2 to 5"
- Perfect for holding small parts, hardware and fasteners in place
- Sticks to any ferrous metal surface
- Rubber covered prevents scratching

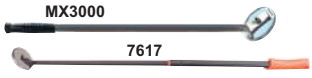
New!



Order No.	Price
KP8221270	Price

Long Reach Magnetic Retrievers

- Tekton has Telescoping Shaft that compact to 21" for storage
- Mag-Mate is made in USA
- World Class is manually operated, Head: 1" diameter; Attracts items up to 11 lbs in weight
- PRM PRO: Powerful Rare Earth magnet material. Rare Earth tools have a maximum temperature of 180°F (82°C)







Item	Holding Capacity (lbs.)	Handle Length (in.)	Magnet Dia. (in.)	Handle Angle	Order No.	Price
WORLD CLASS QUALITY	11	9	1	Straight	JN6031101	Price
MAG-MATE	12.0	48	1-3/8	Adjustable	NE70COR12	Price
	35.0	48	2-1/2	Adjustable	NE70COR35	Price
	47.5	38	3-1/4	45°	NE70MX3000	Price
PRM PRO	50.0	21 to 37	3-1/4	90°	KP8346502	Price

MAG-MATE® Alnico Magnet Material



- Ideal for high heat applications
- Maximum temperature 800°F (427°C)
- Tolerance ±0.005" on all dimensions

Shape - Cylindrical				
Hold (lbs)	Dia. (in.)	Length (in.)	Order No.	Price
1.125	1/4	2	**NE70A5RC025X200**	Price
3.0	3/8	2	**NE70A5RC037X200**	Price
4.0	1/2	3	**NE70A5RC050X300**	Price
6.0	7/8	3	**NE70A5RC087X300**	Price

Shape - Rectangular					
Hold (lbs)	Thickness (in.)	Width (in.)	Length (in.)	Order No.	Price
.75	.250	1/4	1	**NE70ABAR025**	Price
2.0	.375	3/8	1-1/2	**NE70ABAR037**	Price
4.5	1/2	1/2	2	**NE70ABAR050**	Price

MAG-MATE® Ceramic Magnet Material



- Low cost, high energy material
- Performs best at temperatures below 480°F (249°C)
- Difficult to grind, machine or drill and can't be E.D.M.'d
- Can be cut with a diamond wheel
- Tolerance ±2% on O.D. length & width ±.005" on thickness

Style - Rectangular						
Hold (lbs)	Thickness (in.)	Length	Grade	Width	Order No.	Price
5.0	1/4	2	8	1	**NE70250X1X2C8**	Price
6.0	.375	1-3/4	8	7/8	**NE705C458**	Price
7.0	1/2	2	8	1	**NE70500X1X2C8**	Price
9.0	3/4	2	8	1	**NE70750X1X2C8**	Price
11.0	1	2	8	1	**NE701X1X2C8**	Price
15.0	1	2	8	2	**NE701X2X2C8**	Price
23.5	1	6	8	4	**NE701X4X6C8**	Price

Style - Ring						
Hold (lbs)	Thickness (in.)	Hole ID (in.)	Dia.	Grade	Order No.	Price
.36	.250	0.271	3/4	8	**NE70F1409**	Price
.75	.431	0.885	1.230	8	**NE70F1407**	Price
.84	.187	0.705	1.623	8	**NE70F1406**	Price
3.5	.250	0.705	1.723	8	**NE70F1405**	Price
5.5	.330	1.250	2.825	8	**NE70431005**	Price
9.5	.590	1.203	2.800	8	**NE70710006**	Price

MAG-MATE® Polymagnet Rare Earth Discs



- Max-Attach Polymagnets
- Unique possibilites compared to conventionally magnetized magnets
- Particular magnetic function is encoded into the magnet, focusing the magnetic field for better magnet on metal performance
- Delivers much greater shear strength and holding power than conventionaly magnets of the same size and grade for outstanding performance in standard applications such as magnetic hooks and hangers, magnetic whiteboards, and magnetic paint or primer

Style - Adhesive Back				
Dia. (in.)	Length (in.)	Approx. Pull (lbs)	Order No.	Price
1	1/8	41.44	**NE70CMP10012P1A**	Price
1	1/16	18.36	**NE70CMP10006P1A**	Price
1	3/16	43.5	**NE70CMP10018P2A**	Price
1-1/2	1/8	85	**NE70CMP15012P1A**	Price

Style - Plain Back				
Dia. (in.)	Length (in.)	Approx. Pull (lbs)	Order No.	Price
1/2	1/8	8.7	**NE70CMP5012P1N3**	Price
1/2	1/8	10.5	**NE70CMP5012P1N4**	Price
1/2	3/16	9.51	**NE70CMP5018P2N3**	Price
1/2	3/16	11.4	**NE70CMP5018P2N4**	Price
3/4	1/8	20.6	**NE70CMP7512P1N4**	Price
3/4	1/16	17	**NE70CMP7506P1N4**	Price
1	1/8	41.44	**NE70CMP10012P1N**	Price
1	1/16	18.36	**NE70CMP10006P1N**	Price
1	3/16	43.5	**NE70CMP10018P2N**	Price
1-1/2	1/8	85	**NE70CMP15012P1N**	Price

MAG-MATE® Rectangular Rare Earth Magnets



- Max-Attach Polymagnets
- Unique possibilites compared to conventionally magnetized magnets
- Particular magnetic function is encoded into the magnet, focusing the magnetic field for better magnet on metal performance
- Delivers much greater shear strength and holding power than conventionaly magnets of the same size and grade for outstanding performance in standard applications such as magnetic hooks and hangers, magnetic whiteboards, and magnetic paint or primer

Style - Adhesive Back					
Width (in.)	Length (in.)	Thickness (in.)	Approx. Pull (lbs)	Order No.	Price
1/2	1/2	1/8	14.6	**NE70CMP010505P**	Price
1/2	1	1/8	19	**NE70CMP010510P**	Price
1	1	1/8	44.31	**NE70CMP011010P**	Price
1	1-1/2	3/16	69	**NE70CMP181510**	Price
1-1/2	1-1/2	1/8	96	**NE70CMP011515P**	Price

Style - Plain Back					
Width (in.)	Length (in.)	Thickness (in.)	Approx. Pull (lbs)	Order No.	Price
1/2	1/2	1/8	14.6	**NE70CMP010505P1**	Price
1/2	1	1/8	19	**NE70CMP010510P1**	Price
1	1	1/8	44.31	**NE70CMP011010P1**	Price
1	1-1/2	3/16	69	**NE70CMP181510P2**	Price
1	1-1/2	3/16	72	**NE70CMP181510P**	Price
1-1/2	1-1/2	1/8	96	**NE70CMP011515P1**	Price

MAG-MATE® Rare Earth Magnets



- Rare Earth Ring Magnets
- Extremely powerful
- Ideal for small applications
- Maximum temperature 180°F (82°C)
- High resistance to demagnetization
- Nickel plated finish

Shape - Rectangular						
Width	Length (in.)	Thickness (in.)	Holding Cap. (lbs)	Useable Holding Value (lbs)	Order No.	Price
1/2	2	1/4	25.02	12.51	**NE70NE2550200NP**	Price
1	1-1/2	.180	22.49	11.25	**NE70NEO316RECTN**	Price
1	2	1/4	30.6	15.3	**NE70NE25100200N**	Price

Shape - Square						
Width	Length (in.)	Thickness (in.)	Holding Cap. (lbs)	Useable Holding Value (lbs)	Order No.	Price
1/4	1/4	.100	1.76	0.88	**NE70NE012525NP3**	Price
1/2	1/2	1/2	15.59	7.8	**NE70NE505050NP3**	Price
3/4	3/4	1/4	18.28	9.14	**NE70NE257575NP3**	Price

MAG-MATE® Polymagnet Rare Earth Rings



- Max-Attach Polymagnets
- Unique possibilites compared to conventionally magnetized magnets
- Particular magnetic function is encoded into the magnet, focusing the magnetic field for better magnet on metal performance
- Delivers much greater shear strength and holding power than conventionaly magnets of the same size and grade for outstanding performance in standard applications such as magnetic hooks and hangers, magnetic whiteboards, and magnetic paint or primer

Style - Adhesive Back				
Outer Dia. (in.)	Thickness (in.)	Hold (lbs)	Order No.	Price
1 x .1975	1/8	36.85	**NE70CMP101912P**	Price
1-1/2 x 1/8	1/8	74.8	**NE70CMP151212P**	Price

Style - Plain Back				
Outer Dia. (in.)	Thickness (in.)	Hold (lbs)	Order No.	Price
1 x .1975	1/8	36.85	**NE70CMP101912P2**	Price
1-1/2 x 1/8	1/8	74.8	**NE70CMP151212P2**	Price
3/4	1/8	17.5	**NE70CMP7512CSP2**	Price
3/4 x 1/8	1/8	18.5	**NE70CMP751212P2**	Price

MAG-MATE® Grinder Tool Holder Magnet

- Powerful permanent magnet holds 4" diameter grinder wheels in horizontal or vertical positions, regardless of trigger location
- Sturdy stainless steel holder
- Plated permanent ceramic magnet
- Magnetic base allows for quic plameent and repositioning

New!



Model No.	Holding Capacity (lbs)	Height (in.)	Width (in.)	Length (in.)	Weight	Order No.	Price
GTH01	41	6	4-3/8	9-1/8	1.2 LBS	**NE70GTH01**	Price

MAG-MATE® Magnetic Air Chuck Holder

- Holder keeps fittings conveniently on your hose
- Fits typical 3/8" hose
- 3 Holders in a pack

New!



Model No.	Dia. (in.)	Height (in.)	Width (in.)	Length (in.)	Weight	Order No.	Price
ACH1/4	3/8 Hose	1-1/2	7/8	1-1/2	.05 lbs	**NE70ACH14**	Price

MAG-MATE® Magnetic Hose Cord Hook/Holder

- Secure hoses, cables, cords and more to any flat steel surface
- Magnet can be quickly installed and repositioned
- Sturdy stainless steel hook
- Small holder secures ends of hose/cord from unraveling



New!

Mocel No.	Holding Capacity (lbs)	Dia. (in.)	Hook Base Depth (in.)	Hook Tip (in.)	Hook Width (in.0	Weight	Order No.	Price
MX2750HC1	45	2.88	3-3/4	2	1	.65 lbs	**NE70MX2750HC1**	Price

MAG-MATE® Grip Stick Magnetic Retrievers

- Pick your lift lbs., Magnet & grip are interchangeable
- Retrieve hot parts
- Keep hands out of press
- Reduce employee injury
- 10° Angled handle

MADE IN THE USA



Magnet Material	Lift (lb.)	Length (in.)	Width (in.)	Height (in.)	Order No.	Price
Ceramic	12.5	14	1-3/8	7/8	**NE70IMPL2100**	Price
Rare Earth	43.5	14	1-3/8	7/8	**NE70IMPL2104**	Price

Magnetic Welding Squares

- Ideal for welders who need fast set-up and accurate holding of steel sheet stock, plate, tubing and pipe
- Mounting holes provided for fixturing welding squares into jigs



WS400AX3



WS410



WS420



WS100



WS11094



WS302

Item	Holding Capacity (lbs.)	Description	Length (in.)	Height (in.)	Width (in.)	Order No.	Price
WORLD CLASS QUALITY	20	10 Angle	4	2-9/16	1/2	**NE601187**	Price
GENERAL	20	10 Angle	4	2-9/16	1/2	**NE50377**	Price
MAG-MATE®	55	10 Angle	4-3/8	3	3/4	**NE7011094**	Price
	40	Welding Square	5-1/2	2-7/8	5/8	**NE70WS100**	Price
	110	10 Angle	4-3/8	3	1-9/16	**NE70WS11094X2**	Price
	60	Standard	3-3/4	3-3/4	3/4	**NE7011095**	Price
	60	3 Sided Compact	3-3/4	3-3/4	1-1/8	**NE70WS300AX3**	Price
	55	3 Sided Multi Angle	4-3/8	3	1-1/8	**NE70WS11094AX3**	Price
	60	3 Sided Comapct Multi Angle	3-3/4	3-3/4	1-1/8	**NE70WS301AX3**	Price
	75	Standard Heavy Duty	3-3/4	4-3/8	3/4	**NE7011097**	Price
	75	Covered Heavy-Duty	3-3/4	4-3/8	3/4	**NE7011098**	Price
	75	3 Sided Mid Size	3-3/4	4-3/8	1-1/8	**NE70WS400AX3**	Price
	75	3 Sided Mid Size Covered	3-3/4	4-3/8	1-1/8	**NE70WS410AX3**	Price
	120	Adjustable	7-5/8	3-3/4	1-3/8	**NE7011096**	Price
	150	Extra Heavy-Duty	3-3/4	4-3/8	1-1/2	**NE7011099**	Price
	325	Super Heavy-Duty	8	8	1-1/2	**NE7011100**	Price

MAG-MATE® Magnetic Welding Grounds

- Powerful magnet attaches securely to your ferrous metal work surface
- Spring loaded stud assures constant electrical ground contact
- 3-1/2" Dia. cup
- Quick release handle



Type	Holding Capacity (lbs.)	AMPS	Order No.	Price
Magnetic Welding Ground - Brass Stud	35	250	**NE7020000**	Price
Magnetic Welding Ground - Copper Stud	35	800	**NE7020005**	Price

MAG-MATE® On/Off Magnetic Weld Grounds

- ON/OFF Permanent Rare Earth Magnetic Grounds let welders set up, weld and quickly move on to the next project
- Simply place it on a work surface, turn it on and start welding
- Makes welding quicker and easier than ever before
- Will work on flat or pipe



Hold (lbs.)	Height (in.)	Width (in.)	Length (in.)	Amps	Order No.	Price
150	2-3/4	1-13/16	2-7/8	200	**NE70WG200R**	Price
150	2-3/4	1-15/16	2-7/8	300	**NE70WG300R**	Price
450	4-5/8	3	5	800	**NE70WG800R**	Price

MAG-MATE® Mag90™ On/Off Magnetic Squares

- On/Off Permanent Rare Earth Magnetic Squares are extremely powerful and eliminate the need for tedious clamping
- Mag90™ squares offer fast workholding on multiple sides for flat or round steel
- Features pre-tapped holes on all sides for mounting and a locking On/Off handle for safety



Hold (lbs.)	Height (in.)	Width (in.)	Length (in.)	Order No.	Price
150	1-1/8	1-1/2	1-1/2	**NE70WS0150R**	Price
450	2-3/4	2-1/2	3	**NE70WS0450R**	Price
1000	3	4	4-1/4	**NE70WS1000R**	Price

MAG-MATE® On/Off Power Grip Magnets

- Powerful Rare Earth Magnet
- Securely grips heavy parts
- Works on flat or pipe
- Locking On/Off Handle
- Comfort Grip
- Max. temp. 180°F (82°C)



Lift Capacity (lbs)	Height (in.)	Width (in.)	Order No.	Price
60	5	2	**NE70PG3060N**	Price
100	7-3/4	3-3/8	**NE70PG3100N**	Price

Arrow Magnetic Welding Holders

- Use for welding, soldering, assembly and many other applications
- Excellent for holding pipe and metal in upright positions
- Strong, powerful magnet encased in durable steel
- Helps hold work at 45°, 90° and 135° angles, freeing up hands



Holding Capacity (lbs.)	Order No.	Price
50	**KP8346550**	Price
75	**KP8346560**	Price

MAG-MATE® Magnetic Welding Wind Block Magnet

New!

- Powerful permanent magnets
- Prevents loss of gas coverage
- Stainless steel with flat black finish
- Spring load holds tight to surface, horizontally, vertically or inverted



Model No.	Holding Capacity (lbs)	Height (in.)	Width (in.)	Length (in.)	Weight	Order No.	Price
WWB24	50	7.09	2.88	24	2.5 lbs	**NE70WWB24**	Price
WWB36	50	7.09	2.88	36	3 lbs	**NE70WWB36**	Price

MAG-MATE® Load Control Magnets

- Powerful On/Off Rare Earth Magnet
- Works on Flat and Pipe
- Pole telescopes from 6' to 12'



Model No.	Holding Capacity (lbs)	Length (in.)	Description	Weight	Order No.	Price
LCM150-01	150 lbs	7	No Pole	1.2 lbs	**NE70LCM15001**	Price
LCM150-02	150 lbs	80	Pole Included - 147" Extension	2.7 lbs	**NE70LCM15002**	Price

MAG-MATE® Magnetic Squaring Arm for Press Brakes



- Powerful Rare Earth Magnets hold tight to die
- Arm swings from 90° to 20° in two directions allowing for 140° swing in total
- Arm is magnetic to hold small steel pieces, keep fingers away
- Adjustable handle secures arm at proper angle and moves out of the way
- Locator rule on leading edge helps locate squaring arm
- Stainless Steel/Aluminum construction
- Safety strap prevents squaring arm from falling off if accidentally knocked off die

New!

Model No.	Holding Capacity (lbs)	Height (in.)	Width (in.)	Length (in.)	Weight	Order No.	Price
MSAP01	90 lbs	2-5/8	7-1/4	14	5 lbs	**NE70MSAP01**	Price

MAG-MATE® Magnetic Squaring Arm for Shears



- Powerful On/Off Permanent Rare Earth Magnet
- Adjustable magnet locations
- Stainless Steel Construction

New!

Model No.	Holding Capacity (lbs)	Height (in.)	Width	Length	Weight	Order No.	Price
MSAS01	300 lbs	2-5/8	2-1/4	12	2.25 lbs	**NE70MSAS01**	Price

MAG-MATE® Magnetic Tool Holders



- Ideal for keeping tools or drill bits close at hand and organized
- Mount to walls, work benches, ladders, etc.
- 3/16" Mounting holes & screws provided
- Durable stainless steel construction
- 1-1/8" Thick x 2" High
- Tools NOT Included

Holding Capacity (lbs.)	Size (in.)	Weight	Order No.	Price
120	12" Bar	2 lbs	**JY608113**	Price
180	18" Bar	3 lbs	**JY608118**	Price
240	24" Bar	4 lbs	**JY608124**	Price

MAG-MATE® Magnetic Zip Tie Holder



- One piece galvanzied steel
- Powerful Rare Earth magnet
- Fits zip ties up to .30" Wide x .06" Thick

New!

Model No.	Holding Capacity (lbs)	Overall Dimensions (in.)	Weight	Order No.	Price
MX0560RZIP6	6	.21 x .10 Opening	.05 lbs	**NE70MX0560RZIP6**	Price

MAG-MATE® Magnetic Reversible Hooks



- Secures cables, wire, lights, garments and more to any flat steel surface
- Magnet can be quickly installed and repositioned
- Stainless steel hook can be used in the "open" position for quick access to store product
- Move the hook to "closed" position to prevent products from being knocked off
- Overall length 4-1/2"

New!

Model No.	Holding Capacity (lbs)	Dia. (in.)	Hook Base Depth (in.)	Hook Tip (in.)	Hook Width (in.)	Weight	Order No.	Price
MX2000HH	19	2.03	3/4	3/4	1/4	.20 lbs	**NE70MX2000HH**	Price

TECHNIKS EZ-Lift Spreader Bars



- Better for unbalanced loads
- Use with multiple magnetic lifters
- Lifter span adjustable

New!

Model No.	Length (in.)	Width (in.)	Height (in.)	Capacity (lbs)	Weight	Order No.	Price
ELM-SB250	38.25	2.5	3.25	250	20 lbs	**TE10ELMSB250**	Price
ELM-SB500	48.25	3.5	3.5	500	25 lbs	**TE10ELMSB500**	Price
ELM-SB1000	72	6	5.1	1000	65 lbs	**TE10ELMSB1000**	Price
ELM-SB2000	72	8	7.3	2000	115 lbs	**TE10ELMSB2000**	Price
ELM-SB4000	79.75	6.5	6	4000	195 lbs	**TE10ELMSB4000**	Price
ELM-SB8000	96	13	12.3	8000	300 lbs	**TE10ELMSB8000**	Price
ELM-SB10000	116	15	14.7	10000	600 lbs	**TE10ELMSB10000**	Price
ELM-SB13500	140	18	17.1	13500	880 lbs	**TE10ELMSB13500**	Price

TECHNIKS EZ-Lift Vertical Lifters



- Fast loading for vertical transport
- One person can load and unload
- No dangerous straps or slings

New!

Model No.	Length (in.)	Width (in.)	Height (in.)	Capacity (lbs)	Weight	Order No.	Price
ELM-100	4.2	2.4	4.7	220	5.5 lbs	**TE12ELM100**	Price
ELM-300V	5.25	8	6.25	660	57 lbs	**TE12ELM300V**	Price
ELM-300	7.1	3.6	6.1	660	18.9 lbs	**TE12ELM300**	Price
ELM-600V	6.5	11.5	7.5	1320	86 lbs	**TE12ELM600V**	Price
ELM-1000V	8.5	12.75	10	2200	128 lbs	**TE12ELM1000V**	Price
ELM-600	10.0	4.5	8.3	1320	46 lbs	**TE12ELM600**	Price
ELM-1000	11.0	6.5	11.3	2200	101 lbs	**TE12ELM1000**	Price
ELM-2000	16.6	8.5	13.7	4400	259 lbs	**TE12ELM2000**	Price
ELM-3000	22.3	8.5	15.7	6600	399 lbs	**TE12ELM3000**	Price

MAG-MATE® Magnetic Parts Retrievers

- Ideal for removal of steel parts from bins, boxes, kegs, table and floors
- Fingertip release
- Durable aluminum housing
- Comfortable non-slip handle





Style - Long Handle						
Lift Capacity (lbs.)	Length (in.)	Width (in.)	Height (in.)	Weight	Order No.	Price
5.0	4-1/2	2-3/8	33-1/2	2.4 lbs	**NE70PR710030**	Price
7.0	4-1/2	2-3/8	33-1/2	2.5 lbs	**NE70PR720030**	Price
11.0	4-1/2	2-3/8	33-1/2	2.7 lbs	**NE70PR740030**	Price

Style - Short Handle						
Lift Capacity (lbs.)	Length (in.)	Width (in.)	Height (in.)	Weight	Order No.	Price
5.0	4-1/2	2-3/8	7-1/2	1.6 lbs	**NE7010700**	Price
7.0	4-1/2	2-3/8	7-1/2	1.7 lbs	**NE7010710**	Price
11.0	4-1/2	2-3/8	7-1/2	1.8 lbs	**NE7010720**	Price

MAG-MATE® Power Grip Magnets

MADE IN THE USA

- Effective holding against shear force
- Securely grips heavy parts
- Retrieve hot parts from cutting tables
- 300°F (148°C)







Lift Capacity (lbs.)	No. of Poles	Length (in.)	Width (in.)	Height (in.)	Order No.	Price
25.0	2	2-1/8	3/4	2	**NE7020500**	Price
51.5	2	4	3/4	2-1/4	**NE7020505**	Price
92.5	4	5-1/4	1-7/8	2-3/4	**NE7020510**	Price

MAG-MATE® Magnetic Trigger Lift®

- Hand held lift provides a strong grip on parts with an easy to use trigger release
- Lightweight aluminum housing
- One handed operation
- Move sheets and parts fast, safe and easy
- Retrieve hot parts from burn tables

MADE IN THE USA

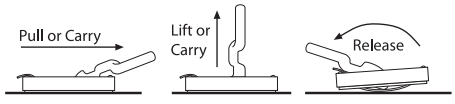


Lift Capacity (lbs.)	Length (in.)	Width (in.)	Height (in.)	Order No.	Price
50	3-3/8	2-3/8	4-13/16	**NE7020515**	Price

MAG-MATE® Magnetic Sheet Handlers

MADE IN THE USA

- Lift or move sheets, plates, hot or oily parts
- Handle sheets stacked horizontally or vertically
- Protect workers from cuts, slivers, nicks & burns
- Increase productivity
- No electricity required
- Heat Resistant up to 300°F (148°C)
- Not intended to be used with a crane







Holding Capacity (lbs.)	Width (in.)	Length (in.)	Height (in.)	Weight (lbs.)	Maximum Penetration (in.)	Order No.	Price
50	3-5/8	6-1/8	1-3/8	3.75 lbs	3/16	**NE70B100**	Price
125	7-1/4	6-1/8	1-1/8	7.25 lbs	5/16	**NE70B250**	Price
200	7-1/4	6-1/8	1-7/16	7.25 lbs	5/16	**NE70B400**	Price
300	7-1/4	6-1/8	1-3/8	7.25 lbs	5/16	**NE70B600**	Price

MAG-MATE® BasicLift™ Ceramic Lift Magnets

For Lifting Thick, Non-Flexing, Flat Steel Items

Permanent lift magnet for a broad range of lifting applications. The Basic Lift magnet has a full width cam release and a tall lift lug for easy use with crane hooks and sling.

- Full width cam release
- Large lift lug
- Light weight Design
- Durable Stainless Steel casing
- Heat resistant up to 300°F (148°C)
- 2:1 Design Factor

MADE IN THE USA



Rated Lift Capacity in lbs (kg)	Width (in.)	Length (in.)	Weight (lbs.)	3/16" (6' Lg)	1/4" (6' Lg)	3/8" (8' Lg)	1/2" (8' Lg)	3/4" (8' Lg)	1" (10' Lg)	Order No.	Price
400	5-5/8	7-1/2	11 lbs	375 (170)	400 (181)	400 (181)	400 (181)	400 (181)	400 (181)	**NE70BL0400**	Price
1000	5-5/8	11	17 lbs	725 (328)	800 (362)	875 (396)	975 (442)	1000 (453)	1000 (453)	**NE70BL1000**	Price
1500	5-5/8	14-1/2	24 lbs	875 (396)	1000 (453)	1400 (635)	1400 (635)	1500 (680)	1500 (680)	**NE70BL1500**	Price

MAG-MATE® Creative Lift® Ceramic Lift Magnets

For Lifting Thick, Non-Flexing, Flat Steel Items

Permanent lift magnets are ideal for handling steel plates, die castings, forgings, etc. They eliminate the need for clamping devices, slings or chains. The patented Non-Marring Roller Cam Release will easily release parts without gouging your valuable materials (U.S. Patent: 6,471,273 B1). F.O.B MI

- Spring return handle
- Less torque required to release load
- "Jack Screw", Secondary Release
- Durable Stainless Steel Casing
- Heat Resistant up to 300°F (148°C)
- 3:1 Design Factor
- Conforms to ASME B30.20 Standards
- † Maximum sheet length for specified material thicknesses are selected due to the sag characteristics of the specified length

MADE IN THE USA



Rated Lift Capacity in lbs. (kg)	Width (in.)	Length (in.)	Weight (lbs.)	3/16" (6' Lg)†	1/4" (6' Lg)†	3/8" (8' Lg)†	1/2" (8' Lg)†	3/4" (8' Lg)†	1" (10' Lg)†	Order No.	Price
400	7-1/4	7-3/4	21 lbs	400	400	400	400	400	400	**JY50MP338**	Price
1000	7-1/4	10-3/4	33 lbs	600	900	1000	1000	1000	1000	**JY50MP339**	Price
1500	7-1/4	14-3/4	46 lbs	800	1000	1500	1500	1500	1500	**JY50MP340**	Price
2200	10-1/2	15	69 lbs	800	1064	1725	2000	2200	2200	**JY50MP500**	Price
3000	10-1/2	19-1/4	92 lbs	800	1100	1800	2700	3000	3000	**JY50MP674**	Price

MAG-MATE® PowerLift® Rare Earth Lift Magnets

For Lifting Thick Non-Flexing Steel Items

- Lightweight On/Off Rare Earth Design
- Easy release, no moving parts contact the load
- Heat resistant up to 180°F (82°C)
- 3:1 Design Factor
- Conforms to ASME B30.20 Standards
- Lifts flat or round loads
- RFID Enabled
- Handle locks in both "On" or "Off" position
- †Maximum sheet length for specified material thicknesses are selected due to the sag characteristics of the specified length
- Hazard Code: 05



Type - Rare Earth Lift Magnets						
Rated Lift Cap. Sheet in lbs. (kg)	Rated Lift Cap. Round in lbs. (kg)	Length (in.)	Width (in.)	Weight	Order No.	Price
250 (113)	125 (57)	3-5/8	2-1/2	7 lbs	**NE700250**	Price
800 (363)	400 (181)	6-3/8	3-5/8	21 lbs	**NE700800**	Price
1600 (726)	800 (363)	9-1/8	4-7/8	51 lbs	**NE701600**	Price
2500 (1134)	1250 (567)	10-5/8	7-1/8	122 lbs	**NE702500**	Price

Type - Handle for Model 1600	
Order No.	Price
NE701600HDL	Price

MAG-MATE® VersaLift™ Magnets

- Rare earth magnet with a locking on/off handle & test load feature
- Supports custom pole shoes
- Lifts flat or round loads
- Heat resistant up to 180°F (82°C)
- Stationary lift lug(s)
- Vertical left capable using the optional lift lug attachment
- Embedded RFID chip
- 3:1 Design factor
- Conforms to ASME B30.20 Standards
- †Maximum sheet length for specified material thicknesses are selected due to the sag characteristics of the specified length

MADE IN THE USA

Compact and powerful rare earth permanent lift magnet for use on flat or round surfaces. Contains an internal on/off release device that does not contact or damage the surface of the part. Permanent magnetic lifts eliminate the fear of dropping the load being lifted due to power failures. Use two or more lifts on a spreader bar to prevent sheet flexing, sagging or peel-off. To operate Test Feature, pull spring loaded handle out and rotate it to the "Test" position. Lift load approximately 2-3" to verify the magnet has the capacity to lift your load. Once verified, place load back down and turn the handle to the "ON" position. Never complete entire lift operation in "Test" position.



Rated Lift Capacity Sheet (lbs)(kg)	Rated Lift Capacity Round (lbs)(kg)	Rated Lift Capacity Vertical in lbs (kg)	Length (in.)	Width (in.)	1/4" (6' Long)†	1/2" (8' Long)†	3/4" (8' Long)†	1" (10' Long)†	2"+ (10' Long)†	Weight (lbs)	Order No.	Price
600 (272)	300 (136)	150 (68)	5-5/8	5	260 (117)	525 (238)	550 (249)	600 (272)	600 (272)	18 lbs	**NE70VL0600**	Price
1200 (544)	600 (272)	300 (136)	10	5	NA	960 (435)	1165 (528)	1200 (544)	1200 (544)	34 lbs	**NE70VL1200**	Price

All Steel Bench Vises with Swivel Base

- Unbreakable all steel body
- Permanent pipe jaws and anvil
- 360° Swivel base with locks



Jaw Width (in.)	Jaw Depth (in.)	Jaw Opening (in.)	Shipping Weight	Order No.	Price
4	2-1/4	4	17 lbs	**HZ60SV4**	Price
5	2-5/8	5	24 lbs	**HZ60SV5**	Price
6	3	6	32 lbs	**HZ60SV6**	Price
8	3-1/2	8	62 lbs	**HZ60SV8**	Price

General Purpose Vises

- Serrated jaws
- 360° swivel base
- Built in anvil
- 3 mounting holes
- 2 lockdowns



Model No.	Jaw Width (in.)	Jaw Opening (in.)	Throat Depth (in.)	Weight	Order No.	Price
BV-HD40	4	4	2	17 lbs	**SG75BVHD40**	Price
BF-HD60	6	6	3	44 lbs	**SG75BVHD60**	Price

Shop Vises

- Designed for general duty use
- Instant-Action™ vise design
- Vise rotates 360˚
- Rubber pinch point safety guards
- Heavy duty 25,000 PSI castings
- Limited lifetime warranty



Jaw Width (in.)	Jaw Opening (in.)	Throat Depth (in.)	Shipping Weight	Order No.	Price
4	4	2-3/4	23.25 lbs	**HZ40WS4**	Price
5	5	3	30.05 lbs	**HZ40WS5**	Price
6	6	3-1/2	45.65 lbs	**HZ40WS6**	Price

High Visibility Safety Vises

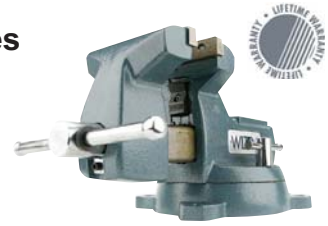
- Wilton safety vises are coated in high visibility yellow which conforms to the OSHA safety color standard for physical hazards regulation #1910.144
- Exclusive powder coat finish resists scratches
- Handles and lock downs are black oxide coated
- Lifetime Warranty



Jaw Width (in.)	Max. Opening (in.)	Pipe Capacity (in.)	Shipping Weight	Order No.	Price
5	5-1/4	1/4 - 2-1/2	49.4 lbs	**HZ401550**	Price
6	5-3/4	1/4 - 3-1/2	63.65 lbs	**HZ401560**	Price

Mechanic's Vises

- Straight line design
- 30,000 PSI body parts
- Locking swivel base — 360° swivel rotation with double lock downs
- Replaceable jaws hardened if needed
- Limited Lifetime warranty



Jaw Width (in.)	Max. Opening (in.)	Pipe Capacity (in.)	Shipping Weight	Order No.	Price
4	4-1/2	1/4 - 2	36.45 lbs	**HZ40744**	Price
5	5-1/4	1/4 - 2-1/2	52.8 lbs	**HZ40745**	Price
6	5-3/4	1/4 - 3-1/2	69.35 lbs	**HZ40746**	Price

ATV All-Terrain Vise™

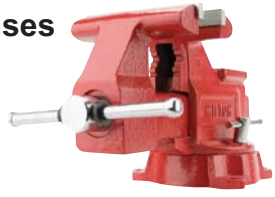
- Fits a standard 2" hitch and includes a hitch pin for security
- Can be mounted on a bench or trailer
- Lightweight and with an integrated carrying handle
- Patented 360° locking handle secures the handle while driving
- Set screws are designed to provide a tight fit in the hitch
- Water resistant for all weather protection
- Large striking anvil
- Jaws are replaceable
- 60,000 PSI ductile iron body
- Mounting Bracket HZ4010300
- Carry Case HZ4010350



Jaw Width (in.)	Jaw Opening (in.)	Jaw Height (in.)	Pipe Capacity	Order No.	Price
5	-	-	7/8 - 3	**HZ4010025**	Price
6	5-3/4	7/8	3/4 - 3	**HZ4010010**	Price
6	5-3/4	7/8	3/4 - 3	**HZ4010015**	Price

Utility Workshop Vises

- Versatile, all around vise
- Replaceable, serrated steel top jaws
- 180° Swivel base
- Large anvil work area
- Built-in pipe jaws
- Lifetime Warranty



Jaw Width (in.)	Max. Opening (in.)	Pipe Capacity (in.)	Shipping Weight	Order No.	Price
4-1/2	-	1/8 - 2	19.4 lbs	**HZ40674**	Price
8	7-1/2	1/8 - 3	86.2 lbs	**HZ40648HD**	Price
5-1/2	5	1/8 - 2-1/2	29.2 lbs	**HZ40675**	Price
6-1/2	5-1/2	1/8 - 2-1/2	41.85 lbs	**HZ40676**	Price
6-1/4	6	1/8 - 3	64.1 lbs	**HZ40656HD**	Price

Tradesman Vises

- Great for general purpose use
- 60,000 PSI tensile ductile iron body parts
- Hardened steel top and pipe jaws
- Straight line, enclosed design
- Enclosed construction keeps lubrication in, contaminants out
- Lifetime Warranty

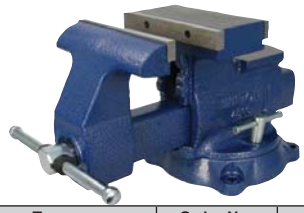


Jaw Width (in.)	Max. Opening (in.)	Pipe Capacity (in.)	Throat Depth (in.)	Shipping Weight	Order No.	Price
4-1/2	4	1/4 - 2-1/2	3/4	41.2 lbs	**HZ401745**	Price
5-1/2	5	1/4 - 3	3/4	51.55 lbs	**HZ401755**	Price
6-1/2	6-1/2	1/4 - 3-1/2	1	70.95 lbs	**HZ401765**	Price
8	7	1/8 - 3-1/2	1	111 lbs	**HZ401780**	Price

Pedestal Base Available. Call for Pricing.

Reversible Mechanics Vises with Swivel Base

- Replaceable, hardened tool steel jaw faces
- Swivel base with four moutning lugs allows for 360° swivel
- Two large anvil work surfaces
- Two lockdown bolts are furnished to ensure stability



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Pipe Capacity (in.)	Base Type	Order No.	Price
6 1/2	8 Regular / 9-3/4 Reversed	4 Regular / 3 Reversed	1/8 - 3-1/2	180 Degree Swivel Base	**HZ4014600**	Price
8	9-1/2 Regular / 11-3/4 Reversed	5 Regular / 2-3/4 Reversed	1/8 - 4-1/2	180 Degree Swivel Base	**HZ4014800**	Price

All Weather Outdoor Vises

- Self-centering nickel plated pipe jaws-hold up to 2-1/2" pipe safely and securely
- Nickel plated jaw inserts
- Enclosed construction keeps lubrication in and contaminants out
- Perfect for outdoor use
- Locking swivel base-with double lockdowns for non-slip hold in any position
- Precision slide bar eliminates movement in the front jaw
- Large anvil work surfacel
- 60,000 PSI ductile iron body
- Lifetime Warranty



Model No.	Jaw Depth (in.)	Jaw Height (in.)	Jaw Width (in.)	Throat Depth (in.)	V-Jaws Max. Opening (in.)	Comments	Weight	Order No.	Price
AW35	5/8	1	3-1/2	4-1/2	5	360 Degree Swivel Base	50.7 lbs	**HZ4010400**	Price
AW45	5/8	1-1/4	4-1/2	4-3/4	6	360 Degree Swivel Base	78.35 lbs	**HZ4010500**	Price

Multi Jaw Bench Vise

- Comes with replaceable hardened steel jaws
- Features parallel jaws, pipe jaws, and v-jaws
- Bolt lugs on the base
- Made from FC25 fine grain cast iron
- Vise swivels 360 degrees on the base and locks in any position
- The jaws rotate 360 degrees and lock in any position
- Trapezoidal-thread lead screw
- Lifetime Warranty



Size (in.)	Weight	Order No.	Price
5	58 lbs	**JB509629503**	Price

Heavy Duty Bench/Pipe Vises

With Rotating Jaws

- Ideal for machine repair, pipe or bench work
- Full 360° rotating jaws
- Machine cut parallel jaws
- Larger, stronger pipe jaws
- Unique V-jaws provide 4-point holding power



Jaw Width (in.)	Jaw Opening (in.)	Throat Depth (in.)	Pipe Jaws Max. Open (in.)	V-Jaws Max Open (in.)	Shipping Weight	Order No.	Price
4	3-1/2	2-1/2	2	3-1/2	52 lbs	**HZ70BP4**	Price
5	4	3-1/2	3	4	89 lbs	**HZ70BP5**	Price
6	5-1/4	3-1/2	6	5-1/2	53 lbs	**HZ70BP6**	Price

Multi Purpose Vise

- Pipe and serrated jaws
- Jaw rotates 360°
- 360° swivel base
- Built in anvil
- 3 mounting holes
- 2 lockdowns



Model No.	Jaw Width (in.)	Jaw Opening (in.)	Throat Depth (in.)	Pipe Capacity (in.)	Weight	Order No.	Price
BV-MPV5	5	5	3	2	43 lbs	**SG75BVMPV5**	Price

Combination Bench & Pipe Vises

- Spindle and nut are totally enclosed in a square tube casting that protects them from dust, chips and moisture, keeping them lubricated for life
- 70% stronger than the competitive u-shaped styles
- 65,000 PSI ductile castings
- Sealed construction
- Straight line pull power tunnel design
- Precision fit slide bar to 0.003"
- Lifetime Warranty



Jaw Opening (in.)	Jaw Width (in.)	Pipe Cap. (in.)	Throat Depth (in.)	Weight	Order No.	Price
7	6	1/4 - 3-1/2	3-3/4	43 lbs	**JB509629746**	Price
8-1/4	8	1/4 - 3-1/2	4-3/4	60 lbs	**JB509629748**	Price

Combination Pipe & Bench Vises

Handles Any Workholding Job A Crew Demands

- 60,000 PSI tensile ductile iron body parts
- Straight line design
- Alloy steel slide bar adds precision and strength
- Hardened steel top and pipe jaws
- Enclosed construction keeps lubrication in, contaminants out
- 360° Swivel base
- Lifetime warranty



Jaw Width (in.)	Max. Opening (in.)	Pipe Capacity (in.)	Throat Depth (in.)	Shipping Weight	Order No.	Price
3-1/2	5	1/8 - 2-1/2	5/8	50.5 lbs	**HZ40C0**	Price
4-1/2	6	1/8 - 3-1/2	5/8	78.05 lbs	**HZ40C1**	Price
5	7	1/8 - 4-1/2	5/8	100 lbs	**HZ40C2**	Price
6	9	1/4 - 6	5/8	204 lbs	**HZ40C3**	Price

Lisle Aluminum Vise Jaw Pads

- Ideal for holding round and hex parts securely
- V-shaped aluminum surface holds and helps protect round or hex parts
- Specially designed ledge supports flat items while clamping
- Strong nitrile magnets will attach to any steel vise jaws
- Pad length is 4”



Order No.	Price
KN6548000	Price

Lisle Rubber Faced Vise Jaw Pads

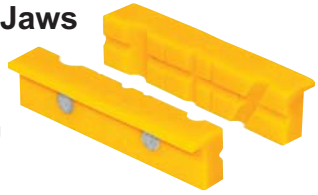
- For protecting delicate parts
- Rubber jaw pads protect delicate parts from damage
- Also works great for holding irregular shapes
- Strong nitrile magnets attach to any steel vise jaw
- Pad length is 4”



Order No.	Price
KN6548100	Price

Bessey Multi Purpose Vise Jaws

- Designed to fit any 3-6” ferrous vise jaw
- Magnetic backing
- Great for holding wood, metal & tubing without marring



Model No.	Jaw Opening (in.)	Weight	Order No.	Price
BV-NVJ	3 - 6	.50 lbs	SG75BVNVJ	Price

Wilton Multi Grip Vise Jaws

- Soft polyurethane jaws designed to avoid marring the surface of softer metals and to protect jaw face
- Designed to fit any 3” – 6” vise jaws, including all WILTON® and Columbian® vises
- Magnetic back mounts securely to jaw
- Great for holding wood, metal and tubing



Order No.	Price
HZ4021111	Price

Wilton Copper Jaw Caps

MADE IN THE USA

- Designed to avoid marring the surface of softer metal and to protect jaw faces
- Jaw caps have polished faces and pliable copper extensions for a sure-grip fit on any make vise
- **Priced per pair**



For Use With	Order No.	Price
3" Jaw Widths	HZ404043	Price
3-1/2" Jaw Widths	HZ40404350	Price
4" Jaw Widths	HZ404044	Price
4-1/2" Jaw Widths	HZ40404450	Price
5" Jaw Widths	HZ404045	Price
5-1/2" Jaw Widths	HZ40404550	Price
6" Jaw Widths	HZ404046	Price
6-1/2" Jaw Widths	HZ40404650	Price
8" Jaw Widths	HZ404048	Price

Wilton Magnefix Vise Jaw Caps

Magnetic Protective Jaw Caps

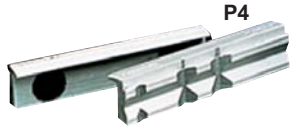
Designed to protect both the vise jaws and the workpiece from marring or deforming during clamping.

- Aluminum alloy with two built-in circular magnets
- Caps are magnetic only towards the vise – clamped parts will not become magnetized
- Right angled and surface parallel to fit any type vise

Model P - Prism Magnefix Jaw Caps

- Jaw construction includes a 120° horizontal Vee-Groove, 3 vertical Vee-Grooves and a 90° groove for marking out and center punching
- Ideal for light tapping

P4



Model R - Rubber Face Magnefix Jaw Caps

- Aluminum alloy with synthetic rubber cover
- Conforms to workpiece and grip without slipping
- Mar-free

R4



Model F- Fiber Face Magneflex Jaw Caps

- Aluminum alloy with laminated fiber cover to prevent the absorption of outside materials
- Heat parts rapidly by concentrating heat into part
- Use on workpieces to avoid distortion and clamping marks

F4



Model A- Aluminum Magneflex Jaw Caps

- Aluminum alloy design includes six grooves to compensate for the unevenness of the workpiece
- Deeper V-groove ensures more secure clamping of circular workpieces
- Use together with rubber magnefix jaw caps

A4



Type - 1-Pair Aluminum Face Vise Jaw Caps		
Jaw Width (in.)	Order No.	Price
4	HZ40A4	Price
4-1/2	HZ40A45	Price
5	HZ40A5	Price
5-1/2	HZ40A55	Price
6	HZ40A6	Price
6-1/2	HZ40A65	Price

Type - 1-Pair Fiber Face Vise Jaw Caps		
Jaw Width (in.)	Order No.	Price
4	HZ40F4	Price
4-1/2	HZ40F45	Price
5	HZ40F5	Price
6	HZ40F6	Price

Type - 1-Pair Prism Face Vise Jaw Caps		
Jaw Width (in.)	Order No.	Price
4	HZ40P4	Price
4-1/2	HZ40P45	Price
5	HZ40P5	Price
6	HZ40P6	Price

Type - 1-Pair Rubber Face Vise Jaw Caps		
Jaw Width (in.)	Order No.	Price
4	HZ40R4	Price
4-1/2	HZ40R45	Price
5	HZ40R5	Price
6	HZ40R6	Price

Speed Vise Extra Jaw Plates

- Alloy steel hardened and ground
- Elevated steps for clear through drilling
- Deep V-grooves, both vertical and horizontal
- Socket head cap screws included



6VJP

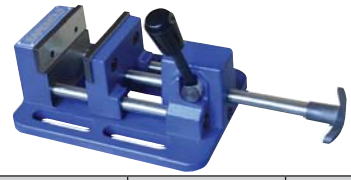
8CJP

	1-Pair Matching V-Groove Jaw Plates		1-Pair Smooth & V-Groove Jaw Plates	
For Use With	Order No.	Price	Order No.	Price
3" Speed Vise	HT553VJP	Price	HT553CJP	Price
4 & 5" Speed Vise	HT554VJP	Price	HT554CJP	Price
6 & 7" Speed Vise	HT556VJP	Price	HT556CJP	Price
8" Speed Vise	HT558VJP	Price	HT558CJP	Price

RAPIDHOLD™ Quick Release Drill Press Vises

- Made for dill press vise applications that require rapid securing and release of work
- Precision ground guide bars and proven
- Locking clamp mechanism provides smooth, accurate holding
- Replaceable jaws are ground flat

New!



Model No.	Jaw Opening (in.)	Jaw Depth (in.)	Jaw Width (in.)	Jaw Height (in.)	Base Sizs (in.0	Weight	Order No.	Price
8503	3	1-1/16	3	2-3/4	7-1/4 x 5-3/8	9 lbs	**HT968503**	Price
8504	4	1-3/8	4	3-9/16	11-3/16 x 5-3/4	19 lbs	**HT968504**	Price
8506	6	1-5/8	6	4-5/16	14-5/8 x 9-3/16	34 lbs	**HT968506**	Price
8508	8	1-5/8	8	4-1/2	18-1/2 x 11-3/8	59 lbs	**HT968508**	Price

F.O.B. Warren, MI

WORLD CLASS QUALITY Quick-Set Adjustable Drill Press Vises

- A quick, screwless vise
- Quick action mechanism on the vise permits the firm clamping
- Designed for clear through drilling
- Locking lever allows for quick raising, lowering, and tightening
- Body and sliding jaw made of cast iron
- Center bar and locking mechanism is made of high carbon steel, hardened, and ground

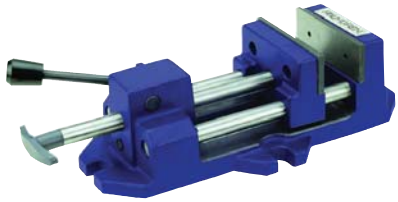


Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Weight	Order No.	Price
3	3	1-1/2	11 lbs	**HX513PSV**	Price
4	4-11/16	1-9/16	16 lbs	**HX514PSV**	Price
6	6-5/16	2	33 lbs	**HX516PSV**	Price

PALMGREN INC Quick Action Vises

- These versatile, general purpose drill press vises are just what you need for drilling, tapping, reaming, etc
- They can be used turned on either side or end
- Lifetime Warranty

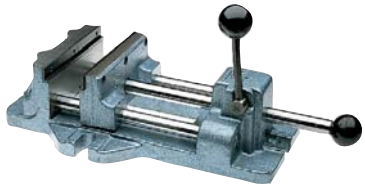
New!



Jaw Opening (in.)	Jaw Width (in.)	Throat Depth (in.)	Weight	Order No.	Price
3	3	1	8 lbs	**JB509612321**	Price
4	4	1-3/8	18 lbs	**JB509612421**	Price

WILTON Cam Action Drill Press Vises

- A simple push or pull of the center knob sets the jaw in position
- Locking lever locks clamps part in place by exerting added holding power
- Holding power is adjustable from 400 to 1100 lbs.
- Base is designed for clear through drilling
- Lifetime Warranty

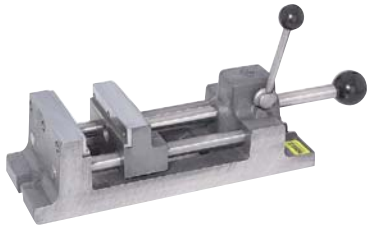


Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
3	3	1-1/4	3.6	10.15 lbs	**HZ401203**	Price
4	4-11/16	1-5/16	4.3	18 lbs	**HZ401204**	Price
6	6-3/16	1-13/16	6.3	35.4 lbs	**HZ401206**	Price
8	8-3/16	2	7.2	53.35 lbs	**HZ401208**	Price

heinrich Cam Action Drill Press Vises

5 Styles to Choose From!

MADE IN THE USA



- Designed for fast loading and unloading
- SV- Standard series locking mechanism, when actuated sets the jaw in place
- PA - Pumping action series is able to advance the jaw forward by “pumping the locking lever”
- GM - Series is similar to the (SV), except it has one side ground perpendicular to the base, which allows for the vise to be rotated 90°, thus eliminating the refixturing of the workpart
- TS - Series is similar to the (SV) except it has two ground sides perpendicular to the base. This allows the base to be rotated ±90°
- PA - Series is ideal for warped castings, wood, or metal laminations and plastics
- Holding power is adjustable from 400 to 1100 lbs. for (SA, GA, TS) series, 200-350 lbs. for (PA)
- Vise base is designed for clear through drilling

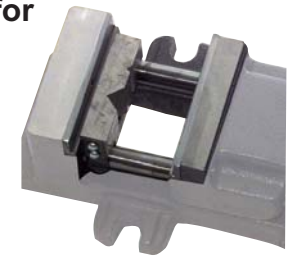
Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
3	3	1-1/4	2-3/4	10 lbs	**JC503PA**	Price
3	3	1-1/4	2-3/4	10 lbs	**JC503SV**	Price
3	3	1-1/4	2-3/4	10 lbs	**JC503TS**	Price
3	3	1-1/4	2-3/4	10 lbs	**JC504TS**	Price
4	4-11/16	1-5/16	3-1/4	20 lbs	**JC504GM**	Price

Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
4	4-11/16	1-5/16	3-1/4	20 lbs	**JC504GMPA**	Price
6	6-3/16	1-13/16	3-3/4	34 lbs	**JC506PA**	Price
6	6-3/16	1-13/16	3-3/4	34 lbs	**JC506SV**	Price
8	8-3/16	2	4-7/16	51 lbs	**JC508PA**	Price
8	8-3/16	2	4-7/16	51 lbs	**JC508SV**	Price

heinrich V-Block Attachment for Cam Action Drill Vises

- Hardened and ground
- Insures a firm grip on round stock





Capacity	Order No.	Price
Holds 9/64 to 1" Rounds	**JC503VB**	Price
Holds 9/64 to 1-1/16" Rounds	**JC504VB**	Price
Holds 5/16 to 1-5/8" Rounds	**JC506VB**	Price
Holds 3/8 to 1-3/16" Rounds	**JC508VB**	Price

heinrich Drill Press Vises

- Can be used from three sides
- Ample clearance from jaw step to table
- V-Groove holds round stock for side and end drilling
- 1 Year Warranty

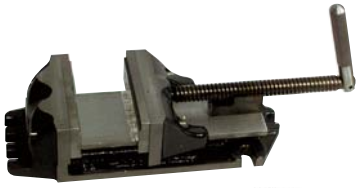


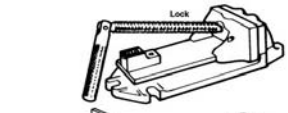
Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth to Bars (in.)	Overall Height (in.)	Shipping Weight	Order No.	Price
6	10	2	4-1/8	22 lbs	**JC5020**	Price
8	10	2-1/2	5	39 lbs	**JC5030**	Price

SPEED VISE

- Ideal for production or prototype work
- Convenient loading and unloading of parts
- Quick-action design
- Screw & nut hardened steel
- Heavy semi-steel castings
- Heavy steel base plate
- Standardized holes in jaws

MADE IN THE USA







Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Weight	Order No.	Price
3	2-1/4	1-1/2	8 lbs	**HT553BV**	Price
4	3-1/4	1-1/2	15 lbs	**HT554BV**	Price
4	5	1-1/2	18 lbs	**HT555BV**	Price
6	5	2	35 lbs	**HT556BV**	Price
6	7	2	44 lbs	**HT557BV**	Price
8	10	3	103 lbs	**HT558BV**	Price

PALMGREN INC Rapid Acting Machine Vises

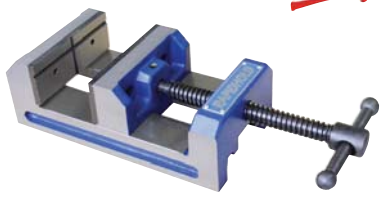
- Designed to hold medium to large size workpieces for tool and die, maintenance as well as production applications
- Our unique rapid action nut is ideal for repetitive operations where the workpiece must be secured and released rapidly
- Turn the handle to the left to release the moveable jaw - pull back to open the vise – push forward to close the vise - turn the handle to the right to tighten and clamp the part
- 4,400 pounds of clamping force
- Replaceable hardened and ground steel jaws with step
- Jaws have horizontal & vertical groove for holding round parts
- Lifetime Warranty



Jaw Opening (in.)	Jaw Width (in.)	Throat Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
8	4	1-7/8	3-1/4	45 lbs	**JB509612428**	Price
10	6	1-7/8	4-1/4	45 lbs	**JB509612628**	Price

RAPIDHOLD 4" & 6" Drill Press Vise

- Versatile vises machined on four sides
- May be used on base, either side or end
- Made of high grade gray iron and are precision ground
- Ground steel jaw plates are removable



Model No.	Jaw Opening (in.)	Jaw Depth (in.)	Jaw Width (in.)	Weight	Order No.	Price
7406	4	1-1/2	4	9 lbs	**HT967406**	Price
7407	6	2	6	24 lbs	**HT967407**	Price

F.O.B. Warren, MI

PALMGREN INC Traditional Drill Press Vises

- Replaceable Steel Jaws
- Made from 30,000 PSI tensile strength, fine grain cast iron
- Base and bed parallel to 0.001 in
- Center of base is open
- All vises can be mounted on the base, either side or placed on end for general use
- Lifetime Warranty



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Jaw Type (in.)	Weight	Order No.	Price
3	3	1-3/4	Smooth	11 lbs	**JB5013**	Price
4	6	1-3/4	Grooved	18 lbs	**JB5014**	Price
4	4-1/2	1.57	-	10 lbs	**JB50DP35**	Price
6	6	2	Grooved	36 lbs	**JB5016**	Price
6	6	2.05	-	25 lbs	**JB50DP60**	Price
1-1/2	1-1/2	1	Smooth, Grooved	2 lbs	**JB506**	Price
2-7/16	2-1/2	1-1/2	Smooth, Grooved	6 lbs	**JB5030**	Price
2-7/16	3	1-1/2	Grooved	6 lbs	**JB5010†**	99.00

†Grooves made directly on fixed jaw.

heinrich Band Saw & Safety Drill Vises

- Soft guide bar prevents damage to saw blade
- Removable shoulder screws provided for automatic chain feed
- Keeps hands clear of saw for safe operation
- Built-in recessed parallel jaw inserts hold work square
- Vertical “V” in jaw provides positive grip on rounds
- Mounts on drill press table
- Swings away when not in use
- Sliding movable jaw
- Locking lever hold work securely
- 12WH Bandsaw Vise
- 13WH Safety Drill Vise

MADE IN THE USA



Jaw Height (in.)	Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth of Bars (in.)	Shipping Weight	Order No.	Price
1-3/4	5-5/8	12-1/2	3	12 lbs	**JC5012WH**	Price
1-3/4	5-5/8	12-1/2	3	13 lbs	**JC5013WH**	Price

heinrich Grip Master Fixture Locks

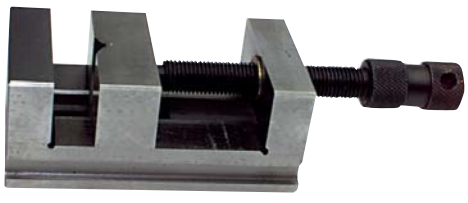
- Clamping at any position on the bar
- Fast and easy loading and unloading
- Available (PA) with pumping action handle, or regular (FL)



Base Length (in.)	Base Width (in.)	Base Height (in.)	Bar Size (in.)	Bar Length (in.)	Shipping Weight	Order No.	Price
3-5/16	3-3/16	2-7/8	.493	9	4 lbs	**JC502FL**	Price
3-5/16	3-3/16	2-7/8	.493	9	4 lbs	**JC502PA**	Price
4-5/16	3-11/16	3-15/16	.742	10	8 lbs	**JC509FL**	Price
4-5/16	3-11/16	3-15/16	.742	10	8 lbs	**JC509PA**	Price

WORLD CLASS QUALITY Toolmakers & Inspection Vises

- 1 Pc. All steel construction
- All surfaces hardened and precision ground square and parallel to accuracy of .0004”
- 2-468-110 and 2-468-115 have ground V-ways



Jaw Width (in.)	Max. Opening (in.)	Order No.	Price
2-3/8	2-1/8	**NB562466000**	Price
3-1/8	2-1/2	**NB562468110**	Price
4	3-1/8	**NB562468115**	Price

WORLD CLASS QUALITY Accu-Sine Vise

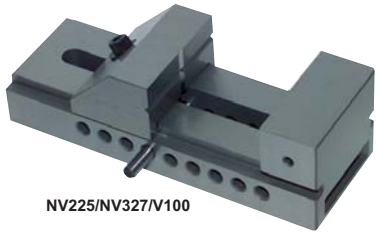
- Made of hardened steel
- Provides a quick and accurate means of holding a workpiece at an angle
- Square & parallel to .0004”
- Dimension: 7-5/8 x 3 x 4”
- Jaw capacity: 4”
- Center Dist. of Rolls: 4.0000 within .0002”
- Weight: 20 lbs.



Order No.	Price
NJ55NSV337	Price

WORLD CLASS QUALITY Precision Vises

- Square and parallel within .0002”
- Hardened and ground



NV225/NV327/V100



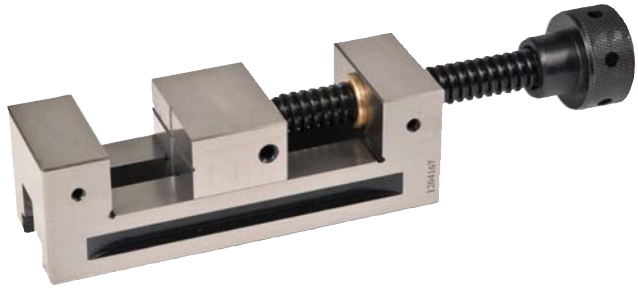
SDV10

Vise Height (in.)	Jaw Height (in.)	Max. Jaw Opening (in.)	Jaw Width (in.)	Vise Length (in.)	Weight	Order No.	Price
1-1/4	3/8	1/2	15/16	2-1/2	1 lb	**HX54SDV10**	Price
2-1/2	1-1/4	3-3/8	2-1/2	6-7/8	7 lbs	**HX54V100**	Price
2-1/4	1-1/4	3	2	5-7/8	4 lbs	**HX54NV225**	Price
2-3/4	1-1/2	4	3	7-1/2	10 lbs	**HX54NV327**	Price

PALMGREN INC. Toolmakers Vises

- Screw type moveable jaw
- Tops, sides, and bottom are precision ground heat treated to 55 HRC square and parallel
- Parallelism: 0.0001”
- Squareness: 0.0002”

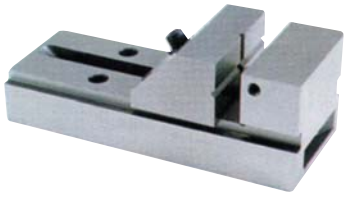
New!



Jaw Opening (in.)	Jaw Width (in.)	Throat Depth (in.)	Weight	Order No.	Price
2-1/2	4	1	4 lbs	**JB509613152**	Price
4-15/16	6	1-3/4	27 lbs	**JB509613154**	Price

Suburban Precision Vises

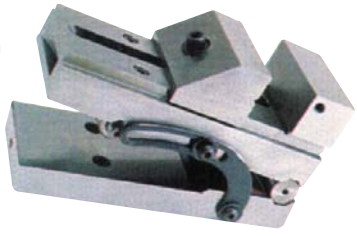
- High precision, solid one-piece steel construction with body and jaws hardened to Rc 58-62
- Angled center channel provides extra holding capacity
- Movable jaw pulls into base at 45 to 60°
- V-237 Models have a ratchet mechanism with notched pockets and one-piece drawbar
- Jaw can be opened and closed without unbolting vise from work surface
- End pockets for convenient clamping on V-237 models and larger
- V-237 Models and smaller have horizontal and vertical vees in the movable jaw



Jaw Width (in.)	Vise Body Width (in.)	Vise Length (in.)	Capacity (in.)	Jaw Height (in.)	Weight	Order No.	Price
2	2	5-7/8	3-1/4	1	6 lbs	**NJ50V225**	Price
2	2	5-7/8	3-1/4	1	6 lbs	**NJ50V225S0**	Price
2-5/8	3	7-1/2	4-3/4	1-5/16	11 lbs	**NJ50V237**	Price
2-5/8	3	7-1/2	4-3/4	1-5/16	11 lbs	**NJ50V237S1**	Price
3	4	11	7	1-7/16	20 lbs	**NJ50V411**	Price
3	4	11	7	1-7/16	20 lbs	**NJ50V411S2**	Price
3-7/16	6	12	8	1-11/16	40 lbs	**NJ50V612**	Price
3-7/16	6	12	8	1-11/16	40 lbs	**NJ50V612S2**	Price

Suburban Sine Vises

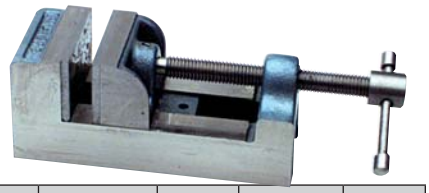
- High precision, steel construction with body and jaws hardened to Rc 58-62
- Angled center channel provides extra jaw capacity
- Movable jaw pulls into base at 45 to 60°
- Dual .200 minute steps built into the gage roll
- SV-337 Models have horizontal and vertical vees in the movable jaw and a ratchet mechanism with notched pockets and one-piece drawbar
- One locking strap is included with each sine vise
- SineSet® models bolt directly to SineSet® sine plate or compound sine plate of the same series. S1 models also bolt to AP-664-S1 90° conversion plate



Dim. (in.)	Center Distance of Rolls (in.)	Square & Parallel (in.)	Capacity (in.)	Weight	Order No.	Price
7-1/2 x 3 x 3-5/8	5.000 within .0002	.0002	4-3/4	17 lbs	**NJ50SV337**	Price
7-1/2 x 3 x 3-5/8	5.000 within .0002	.0002	4-3/4	17 lbs	**NJ50SV337S1**	Price
11 x 4 x 4-5/8	10.000 within .0002	.0003	7	39 lbs	**NJ50SV411**	Price
11 x 4 x 4-5/8	10.000 within .0002	.0003	7	39 lbs	**NJ50SV411S2**	Price
12 x 6 x 5-1/8	10.000 within .0002	.0003	8	60 lbs	**NJ50SV612**	Price
12 x 6 x 5-1/8	10.000 within .0002	.0003	8	60 lbs	**NJ50SV612S2**	Price

PALMGREN Ground Drill Press Vises

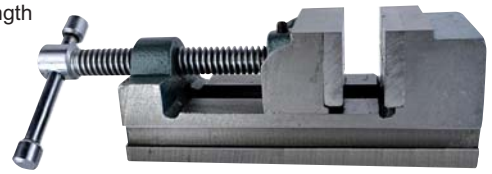
- A precision vise for close-tolerance applications
- Finely ground after machining for squareness and parallelism on five sides to 0.0002 of an inch
- Replaceable Steel Jaw plates are both plain
- May be mounted on the base of either side or placed on end
- Made from 30,000 PSI tensile strength, fine grade cast iron
- Life Guarantee



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
2-7/16	3-1/8	1-1/2	2-1 2	6 lbs	**JB5022G**	Price
4	4	1-3/4	3-1/4	18 lbs	**JB5014G**	Price

Precision Ground or Machined Ground Drill Press Vises

- 90° vertical and horizontal grooved jaws
- Can be used on all sides and end
- Machine parallel and square
- High tensile strength

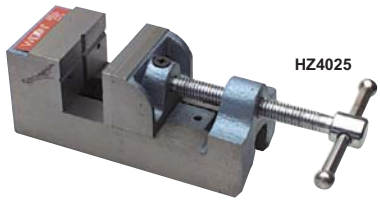


Type - Machined Ground						
Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Overall Length (in.)	Weight	Order No.	Price
2-1/2	2-9/16	1-1/2	7-1/4	7 lbs	**HX51P250**	Price
3-1/2	3	1-3/4	8-5/8	10 lbs	**HX51P350**	Price
4-1/2	4	1-3/4	10-3/4	12 lbs	**HX51P400**	Price

Type - Precision Ground						
Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Overall Length (in.)	Weight	Order No.	Price
3	3	1-3/8	7-1/2	10 lbs	**HX51P130**	Price

WILTON Standard & Angle Drill Press Vises

- Standard & angle drill press vises are precision ground on sides and front side face - this permits additional mounting positions for drilling, tapping, or reaming
- Body and sides are ground perfectly parallel
- Sturdy main casting is 30% heavier than conventional models
- Lifetime warranty

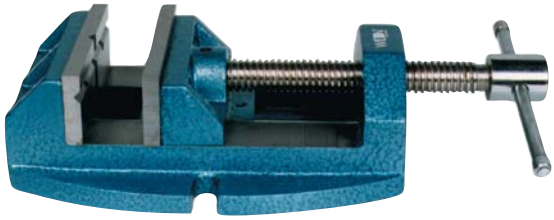


Type - Standard Drill Press Vise					
Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Weight	Order No.	Price
2-1/2	2-9/16	1-1/2	6.2 lbs	**HZ4025**	Price
3	3-1/8	1-3/4	10 lbs	**HZ4030**	Price

Type - Angle Drill Press Vise					
Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Weight	Order No.	Price
2-1/2	2-1/2	1-1/2	12 lbs	**HZ4025A**	Price
3-1/8	3-1/8	1-3/4	17 lbs	**HZ4030A**	Price

Versatile Drill Press Vises

- Rugged design and large workload capacity
- Made from graded case iron
- Machined to flatness 0.0005
- Ground vise bed for a smooth, consistent jaw movement
- Sturdy main casting provides extra strength
- Lifetime warranty



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Weight	Order No.	Price
4	4	2-1/8	12 lbs	**HZ401345**	Price
5	5	2-1/8	24 lbs	**HZ401360**	Price
6	6-3/4	2-1/8	28.5 lbs	**HZ401460**	Price

Drill Press Vise with Mounting Lugs

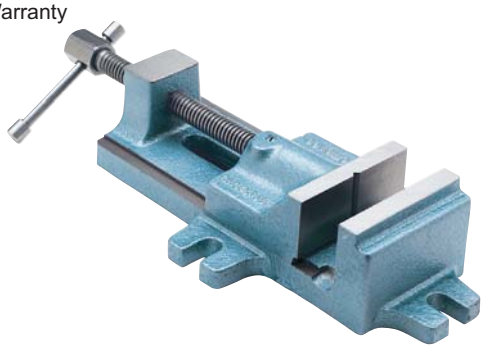
- Precision engineering keeps the bed and base of the vise parallel to 0.001 in
- Replaceable Steel Jaws
- Made from 30,000 PSI tensile strength, fine grain cast iron
- The replaceable jaw on the fixed side is horizontally and vertically grooved for holding round parts
- Center of base is open
- Base and bed parellel to 0.001”
- Lifetime Warranty



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
3	3	1-1/2	2-5/8	7 lbs	**JB50320**	Price

Utility Drill Press Vise

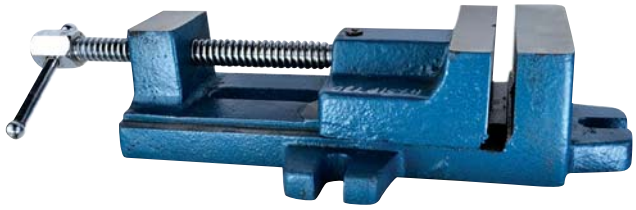
- The moveable jaw is grooved vertically and horizontally for holding round parts
- The base includes three 1/2” bolt lugs for versatility in mounting
- Base to top of jaws are parallel to 0.001”
- Center of base is open
- Made from 30,000 PSI tensile strength, fine grade cast iron
- Lifetime Warranty



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
3-1/2	1-5/8	1-1/2	1-3/4	2 lbs	**JB507**	Price

Utility Drill Press Vise

- Sturdy and compact, with longer jaw opening
- Base includes three bolt lugs for versatility in mounting
- Steel adjusting screw has a coarse pitch Acme thread for fast action
- Moveable jaw is grooved vertically
- Limited Warranty



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
3-1/2	4	1-3/4	2-5/8	11 lbs	**HX51P770**	Price

Drill Press Vise

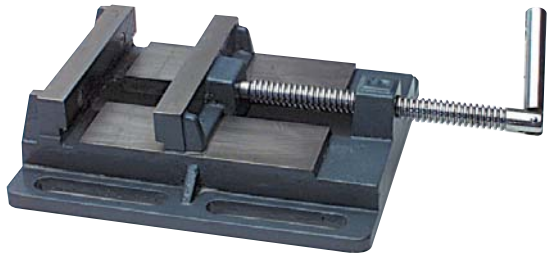
- Serrate jaws
- Elongated holes for easy fastening onto a drill press or work surface



Model No.	Jaw Width (in.)	Jaw Opening (in.)	Throat Depth (in.)	Weight	Order No.	Price
BV-DP40	4	4-1/4	1-1/8	9 lbs	**SG75BVDP40**	Price

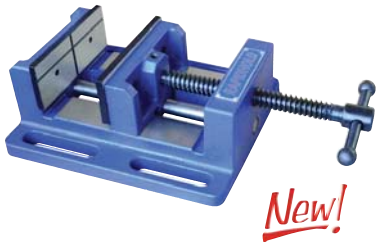
Drill Press Vises with Slotted Base

- Body and slide of quality cast iron
- Main screw with handle of high quality steel
- Replaceable steel jaw plates — plain face
- Slotted base for easy bolting to drill table
- HX51E3 available with 4 bolt lugs on side only



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Weight	Order No.	Price
3	3	1-1/8	7 lbs	**HX51E3**	Price
4	3-15/16	1-1/8	10 lbs	**HX51E4**	Price
5	4-7/8	1-5/16	16 lbs	**HX51E5**	Price
6	5-1/2	1-7/16	23 lbs	**HX51E6**	Price

RAPIDHOLD Low Profile Drill Press Vises



- Designed for dilling, tapping and reaming operations
- Base has four 1/2” shoulder slots for quick, easy positioning on drill press tables
- Moveable jaw is flat and the fixed jaw has a vertical and horizontal v-groove cut
- Replaceable jaws

Model No.	Jaw Opening (in.)	Jaw Depth (in.)	Jaw Width (in.)	Weight	Order No.	Price
8461	3	1-1/8	3	10 lbs	**HT968461**	Price
8462	4	1-1/2	4	15 lbs	**HT968462**	Price
8464	6	2	6	34 lbs	**HT968464**	Price
8465	8	2	8	54 lbs	**HT968465**	Price

F.O.B. Warren, MI

WILTON Low Profile Drill Press Vises

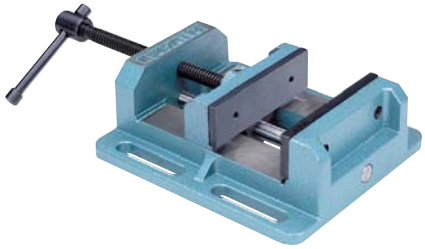
- Low profile clearance for increased working room on machine table
- Hardened V Grooved Jaws hold round shaped objects both vertically and horizontally
- Fine grain cast iron casting and hardened steel vise jaws
- Highly accurate with beds and bases parallel to ±.001”
- Base has four 1/2” shoulder slots for quick, easy positioning on the machine table
- 1 Year Warranty



Model No.	Size (in.)	Jaw Opening (in.)	Jaw Width (in.)	Jaw Depth (in.)	Weight	Order No.	Price
LP3	3	3	3	1-1/8	8 lbs	**HZ4011743**	Price
LP4	4	4	4	1-1/2	12 lbs	**HZ4011744**	Price
LP6	6	6	6	2	30 lbs	**HZ4011746**	Price
LP8	8	8	8	2	50 lbs	**HZ4011748**	Price

PALMGREN Low-Profile Drill Press Vises

- Base and bed are parallel to 0.001 in
- Four slots for secure mounting to machine table
- Lifetime Warranty



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Base Size (in.)	Weight	Order No.	Price
4	4	1-5/8	2-3/8	6-15/16 x 6-1/2	11 lbs	**JB50DPL40**	Price
6	6	1-3/4	3	9-5/8 x 8-7/8	15 lbs	**JB50DPL60**	Price
8	8	1-3/4	3-3/8	13-3/4 x 11-7/16	49 lbs	**JB50DPL80**	Price

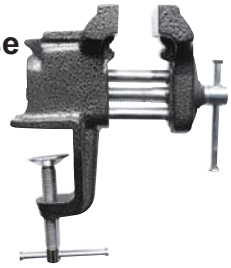
BESSEY Vacuum Base Vise



- Lightweight cast aluminum body
- 360° swivel rotation head for easy positioning
- Convenient vacuum base for mounting on any smooth surface

Model No.	Jaw Opening (in.)	Throat Depth (in.)	Weight	Order No.	Price
BV-VB	2-3/4	3	4.5 lbs	**SG75BVVB**	Price

BESSEY Light Duty Clamp On Vise



- Cast in pipe jaws
- Double steel guide bars
- Clamps on work surfaces up to 1-1/2”
- 1” Pipe Capacity

Model No.	Jaw Width (in.)	Jaw Opening (in.)	Throat Depth (in.)	Pipe Capacity (in.)	Weight	Order No.	Price
BV-C030	3	3	1-1/2	3/4	5 lbs	**SG75BVCO30**	Price

BESSEY Workshop Vise



- Serrated jaws
- 270° Swivel base
- Built in anvil
- (4) Mounting holes
- (1) Lockdown

Model No.	Jaw Width (in.)	Jaw Opening (in.)	Throat Depth (in.)	Pipe Capacity (in.)	Weight	Order No.	Price
BV-HW45	4-1/2	4-1/2	1-3/4	1	11 lbs	**SG75BVHW45**	Price

Vise Clamps

For Fast and Convenient Set-Up

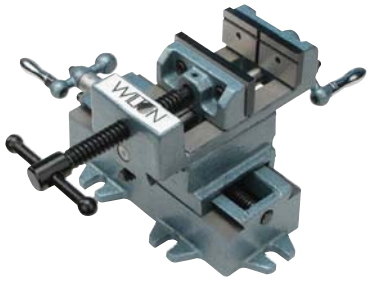


- Holds work firmly to drilling table and work bench
- Easy locking and quick release handle
- Mounts with threaded screw and ring nut

Size (in.)	Order No.	Price
6	**KP70VC6**	Price
9	**KP70VC9**	Price
11	**KP70VC11**	Price

Cross Slide Drill Press Vises

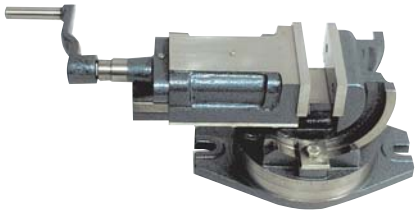
- Accurately moves your workpiece in horizontal and longitudinal for precise positioning
- Cast side knobs accurately dial in .1mm increments
- Hardened V Grooved Jaws hold round shaped objects both vertically and horizontally
- Durable construction with fine grain cast iron castings
- Black oxide coated screw provides consistent clamping pressure
- Durable base has 5 bolt lugs for easy mounting on a machine table



Model No.	Size (in.)	Jaw Opening (in.)	Jaw Width (in.)	Jaw Depth (in.)	Weight	Order No.	Price
CS3	3	3	3	1-1/8	16 lbs	**HZ4011693**	Price
CS4	4	4	4	1-3/8	20 lbs	**HZ4011694**	Price
CS5	5	5	5	1-1/2	45 lbs	**HZ4011695**	Price
CS6	6	6	6	2	59 lbs	**HZ4011696**	Price
CS8	8	8	8	2	77 lbs	**HZ4011698**	Price

Universal 2-Way Angle Vises

- Positive locking to withstand heavy loads
- Horizontal swivel movement 360°
- Vertical swivel movement 90°
- Totally enclosed Acme thread screw
- Vises supplied with plain jaws
- Designed for milling, grinding, shaping, drilling, and jig boring
- Vise body made of high grade casting



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Vise Length (in.)	Weight	Order No.	Price
4	2-3/4	1-5/8	5-9/16	13-1/4	53 lbs	**HY50PT100**	Price
6	5	2	7-3/8	17-1/2	97 lbs	**HY50PT150**	Price

Universal 3-Way Angle Vises

- Angle can be set in 3 dimensions
- Swivels 360° around base
- Vise can be elevated through 90° from horizontal to vertical
- Can be tilted on its lower angle base up to 45° in both right and left
- Workpiece is steady and smooth, in all permissible angle settings
- Ideal for milling, grinding, tapping, chamfering, and inspection
- Precision quality



Jaw Width (in.)	Jaw Opening (in.)	Jaw Height (in.)	Base Size (in.)	Weight	Order No.	Price
3-1/8	3-1/2	1-3/16	7 x 9-1/4	32 lbs	**JJ55L75AV**	Price
4-1/8	4-1/8	1-9/16	8-3/4 x 11-3/8	82 lbs	**JJ55L100AV**	Price
5-1/8	5-3/4	2-1/16	9-7/8 x 12-7/8	96 lbs	**JJ55L125AV**	Price

Super Precision 3-Way Tilting Machine Vises

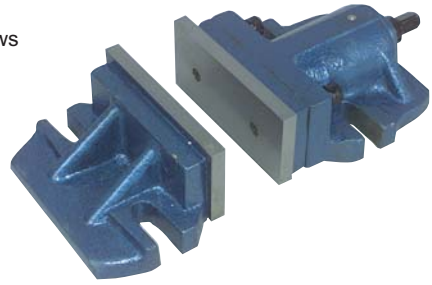
- Perfect for 3 axis jobs in milling, drilling, grinding, shaping and jig boring
- Manufactured from close grain high tensile cast iron
- Jaw plates, hardened and ground
- Hardness of jaws – 55 ±3 HRC
- No jaw tilt
- 360° Swivel bases
- Accuracy indexed for 3 way angular work
- All ground surfaces are made to close accuracies
- 90° Vertical indexing
- 45° Tilting range on either side
- Lifetime warranty



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Weight	Order No.	Price
2	2	1	9.95 lbs	**HZ42TLTSP50**	Price
3	3	1-5/16	25.85 lbs	**HZ42TLTSP75**	Price
4	4	1-1/2	52.265 lbs	**HZ42TLTSP100**	Price
5	5	1-3/4	83.6 lbs	**HZ42TLTSP125**	Price
6	6	1-3/4	118.8 lbs	**HZ42TLTSP150**	Price

2 Pc. Milling Machine Vises

- Utilize full length of machine bed
- Work locates directly on bed for rigidity
- Soft jaws locate on bed and can be keyed to table slots for accuracy
- Quarter turn of detachable handle clamps work firm enough for heaviest cuts
- Hardened & ground jaws
- Precision machined
- Highest quality casting



Jaw Width (in.)	Jaw Depth (in.)	Key Slot Width (in.)	Clamp Travel	Weight	Order No.	Price
6	3	11/16	3/8	29 lbs	**HP50255006**	Price
8	3-1/4	13/16	1/2	53 lbs	**HP50255008**	Price

Angle Swive Vises

New!

- Handy robust angle vises are indispensable for work that requires frequent angle setups, including drilling, tapping, reaming, milling, and grinding
- Base and bed are parallel to 0.004 in with the jaw surface square to 0.002
- Angle hinge is graduated in 1 degree increments from 0 to 90 degrees
- Hinge pin hole is precision drilled and reamed for smooth accurate angle settings, with no lateral end play
- Can be mounted with or with out the swivel base
- Both the swivel base and angle vise feature two 5/8 in bolt slots for mounting
- Lifetime Warranty



Jaw Opening (in.)	Jaw Width (in.)	Throat Depth (in.)	Weight	Order No.	Price
4	4	1-3/4	37 lbs	**JB509611405**	Price
7	6	2	87 lbs	**JB509611602**	Price

Angle & Angle Swivel Vises

- Designed for precision work at angles from 0° to 90° vertical
- Locks with four bolts and two side plates
- Vise body calibrated for vertical angle reading
- Hinge pin hole of body vise precision drilled and reamed to avoid lateral play
- Mounting holes included with vise
- Cast iron construction
- HZ51P250AS & HZ51350AS - Swivel Base Models





Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Length (in.)	Weight	Order No.	Price
2-3/16	2-1/2	1-1/2	9	10 lbs	**HX51P250A**	Price
2-1/2	2-1/2	1-1/2	9	12 lbs	**HX51P250AS**	Price
3	3	1-3/4	12	22 lbs	**HX51P350AS**	Price
3-1/2	3	1-3/4	12	18 lbs	**HX51P350A**	Price
4-3/8	4	1-3/4	13-1/2	22 lbs	**HX51P400A**	Price

Cradle Style Angle Drill Press Vises

- Designed for applications including drilling, tapping and reaming requiring angle setup
- Cradle design with 90° vertical indexing, scaled in 1° increments
- Side tommy bar allows secure locking at any increment from 0° - 90°
- Pin hard stops at 0°, 15°, 30°, 45°, 60°, 75° and 90°
- Durable construction with fine grain cast iron castings and hardened smooth vise jaws
- Lifetime warranty



Model No.	Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Weight	Order No.	Price
CR3	3	3	1-1/8	12 lbs	**HZ4011753**	Price
CR4	4	4	1-1/2	17 lbs	**HZ4011754**	Price

Angle Vises

- Cradle base has a 90° vertical scale in 1° graduations
- Quick setup at 0°, 30°, 45°, 60°, and 90° with positive pin stops
- Hand-tightened mechanism allows secure locking in all positions
- Base includes 1/2" shoulder slots for bolting to drill press



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Height at 0 deg. (in.)	Base Size (in.)	Weight	Order No.	Price
3	3	1-1/8	3-3/8	5-9/16 x 6-3/8	13 lbs	**JB50AVC25**	Price
4	4	1-1/2	4-5/16	7 x 7-3/8	18 lbs	**JB50AVC35**	Price

2-Way Cross Slide Vises

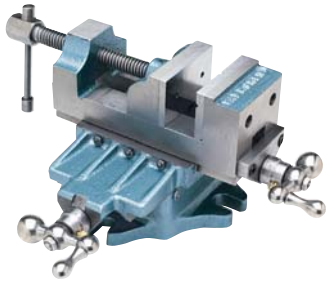
- Secures work piece firmly and accurately on drill press table
- Positive positioning in two coordinates
- Graduated controls for precise adjustment
- Quality construction with Acme threads, adjustable gibs, cast iron body, mounting lugs, independent cross feed and transverse
- Easy to operate - heavy duty construction



Jaw Width (in)	Jaw Depth (in)	Longitudinal Travel (in)	Overall Height (in)	Cross Travel (in)	Weight	Order No.	Price
3	1-1/8	2-3/4	5	3	14 lbs	**HX51TCV3**	Price
4	1-7/16	3-3/4	6	4	21 lbs	**HX51TCV4**	Price
5	1-9/16	4-3/4	7	5	30 lbs	**HX51TCV5**	Price

Cross Slide Vise

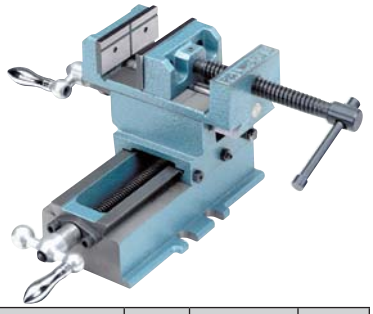
- This unit accurately moves the work in two directions along the X and Y axis
- Ideal for positioning form one machine location to another without losing squareness or alignment
- The cross slide vise gets its strength from the 30,000 PSI tensile strength fine grain cast iron it's made from
- Feed screws are precision cut acme threads
- Built on the cross-slide base
- Dials are graduated in 0.001 in increments
- Counter-balance steel ball crank handles that clear the machine table
- Easily convert from a cross slide vise to a traditional vise by simply removing the screws and the base
- Lifetime Warranty



Jaw Width (in.)	Jaw Opening (in.)	Jaw Height (in.)	Overall Height (in.)	Base Dim. (in.)	Travel (in.)	Weight	Order No.	Price
3	3	1-3/4	5-1/2	7-5/8 x 6-5/8	3-1/2 x 4	29 lbs	**JB5032**	Price

Cross Slide Vises

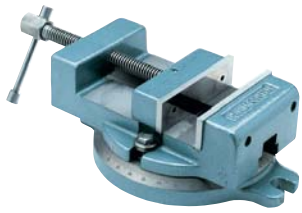
- For quick and precise X and Y axis positioning
- Locking levers on both the X and Y axis for securing the vise into position
- Ball-crank handles aid in rapid movement
- Three bolt lugs on each side of the base to match most table configurations
- CV30 and 60 have knurled jaw faces
- CV80 has smooth jaw faces
- Lifetime warranty



Jaw Width (in.)	Jaw Opening (in.)	Jaw Height (in.)	Vise Height (in.)	Base Size (in.)	Weight	Order No.	Price
3	3	1-1/4	4-1/2	8-1/4 x 6	17 lbs	**JB50CV30**	Price
6	6	1-7/8	6-1/2	11 x 6-3/4	62 lbs	**JB50CV60**	Price
8	8	1-7/8	7-5/8	12-1/4 x 7-5/8	77 lbs	**JB50CV80**	Price

PALMGREN® Low Profile Machine Vises

- A rugged vise designed for low clearance applications
- Model 9618422 comes witha 360 degree swivel base
- Base is graduated in 1 degree increments
- This USA made vise has a lifetime guarantee
- Made from 30,000 PSI tensile strength, fine grain cast iron
- Used on drill presses, mill/drills, milling machines, and grinders
- Base and bed are parallel to 0.001 in
- Center of base is open for holding work through the body of the vise
- For locating and mounting on machine table, the base has 7/16 in keyway and two bolt slots



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
4-1/2	4	1-1/4	2-3/8	16 lbs	**JB50425**	Price
4-1/2	4	1-1/4	3-1/2	23 lbs	**JB50425B**	Price

PALMGREN® Dual Force Precision Standard Machine Vises

Recommended for milling, drilling, boring, tapping and finishing operations. Can be used on your machining centers as well as basic manual machine tools.

Features:

- Equipped with Dual Force anti-lift mechanism
- Friction reducing needle bearings help to increae clamping pressure
- Thrust bearing
- Hardened vise bed & jaw plates
- Semi-Hard steel screw
- Extra large opening
- 70,000 PSI ductile iron castings
- Model 9626604 includes swivel base
- Lifetime Guarantee



Jaw Width (in.)	Jaw Depth (in.)	Jaw Opening (in.)	Weight	Order No.	Price
4	1.3278	6	31 lbs	**JB509625927**	Price
5	1.50	7	47 lbs	**JB509625925**	Price
6	1.752	7-1/2	75 lbs	**JB509625928**	Price
6	1.752	8.9	80 lbs	**JB509625929**	Price
6	.709	8-3/4	83 lbs	**JB509626608**	Price
6	.709	8-3/4	109 lbs	**JB509626604**	Price
8	.953	10	155 lbs	**JB509625930**	Price

F.O.B. Warren, MI • Ships By Truck

PALMGREN® Angle Milling Vise

New!

- For milling or other demanding machine applications
- Solid iron construction with stress relieved design
- Removable swivel base graduated in 1 degree increments a full 360 degrees
- Replaceable smooth jaw plates constructed of hardened and ground tool steel
- An 11/16” key for the angle and swivel base
- Trapezoidal-thread lead screw with large cast-iron crank handle
- Made from FC25 fine-grain, cast iron
- Oversize angle hinge eliminates horizontal play
- Base and bed parallel to 0.004 in with jaw surface square to 0.002 in
- Less than 0.004 in (0.1mm) jaw deflection at 4,000 lbs. clamping pressure
- Lifetime Warranty



Jaw Opening (in.)	Jaw Width (in.)	Weight	Order No.	Price
6	5	110 lbs	**JB509622604**	Price

PALMGREN® Swivel Machine Vises

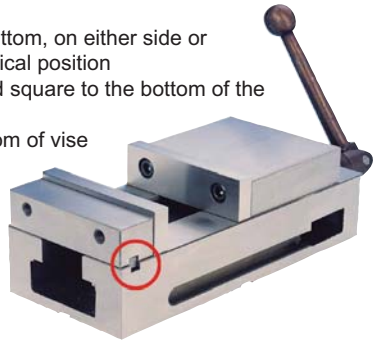
- Intended for demanding vertical and horizontal machining tasks, such as milling and shaping, where strong clamping and secure mounting are all requirements
- The fixed jaw is grooved horizontally and vertically for holding round stock
- This vise has a replaceable steel jaw plate option
- This USA made vise has a lifetime guarantee
- Models 9618402 and 9618602 have a 360 degree swivel base indicated in 1 degree increments
- Can be used on drill presses, mills/drills, milling machines and grinders
- Made from 30,000 PSI tensile strength, fine grade cast iron
- Base and bed are parallel to 0.001 in
- Center of base is open for holding work through the body of vise



Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
4	4	1-3/4	4-3/4	23 lbs	**JB50410B**	Price
6	6	2	5-1/2	47 lbs	**JB50610B**	Price

PALMGREN® Dual Force Precision CNC Machine Vise

- Built for use on all types of CNC machines
- Ideal for applications that require multiple vises to be mounted parallel to each other
- Can be mounted on its base/bottom, on either side or positioned on its end in the vertical position
- Both sides are precision ground square to the bottom of the vise within 0.0004 in
- Parallelism of keyways on bottom of vise bed to the jaw face +/- 0.0008˝
- 80,000 PSI ductile iron castings
- Hardened jaw plates
- Lifeteime Warranty



Jaw Width (in.)	Jaw Depth (in.)	Jaw Opening (in.)	Weight	Order No.	Price
4	-	5	46 lbs	**JB509626600**	Price
6	.709	6	81 lbs	**JB509626110**	Price

PALMGREN® Milling Machine Swivel Vise

- An economical, robust vise for a variety or milling and other demanding machining applications
- An extra large jaw opening
- Vises can be used with or without the 360 degree swivel base
- Base and bed parallel to .002”in
- Hardened moveable jaw plates are square to .0015”
- Hardened and ground steel bed
- 11/16” keyway in vise base and swivel base
- Lifetime Warranty

New!



Jaw Opening (in.)	Jaw Width (in.)	Throat Depth (in.)	Weight	Order No.	Price
4	4	1-1/2	31 lbs	**JB509625404**	Price

RAPIDHOLD™ 6" Precision Milling Machine Vise

New!

- Ductile iron body
- Stationary jaw bolts down from top
- Hardened vise bed and jaw plate
- Sealed bearing system increase bearing life
- Rigid main screw design allows for higher torque loads and clamping force



Weight	Order No.	Price
75 lbs	**HT967268**	Price

F.O.B. Warren, MI • UPS Dimensional Weight Shipping Rates Apply

Precision Machine Vises

- Flame hardened bed for wear resistance
- Hardened and ground jaw plates
- Ground surface top and bottom of vise bed, tops of both jaws in pairs, all jaw plate mounting surfaces
- Needle bearing thrust collar. Cuts friction and adds clamping power.
- Spherical segment eliminates jaw lifting and work piece tilting
- Hardened lead screw with ground threads
- Swivel handle
- Coolant trough on vise body and swivel base
- **Model HT71-ATW60MC is NC/CNC vise**

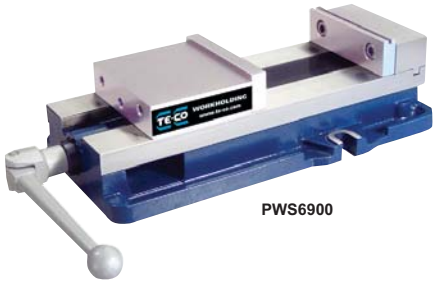


Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth (in.)	Vise Length (in.)	Vise Body Width (in.)	Overall Height (in.)	Weight	Order No.	Price
4	4	1-1/8	12-9/16	5-3/4	3-3/8	46 lbs	**HT71ATW40S†**	Price
6	5-1/2	1-1/2	16-3/4	8-1/4	4-3/8	105 lbs	**HT71ATW60S**	Price
6	5-1/2	1-1/2	16-3/4	8-1/4	4-3/8	63 lbs	**HT71ATW60MC**	Price
8	7-1/2	2	21-3/4	11	5-5/16	225 lbs	**HT71ATW80P**	Price

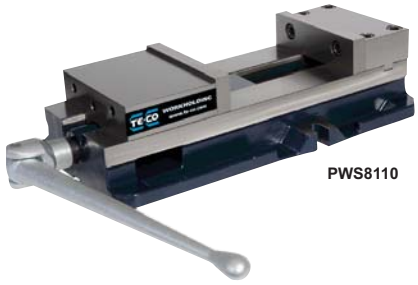
†Swivel Base

TE-CO® Single Station Vises

- Powder coated paint resists flaking and peeling
- Hardened vise bed and jaw plates
- Sealed and lubricated needle roller thrust bearing for maximum life and minimum torque
- Repeatability within .001”
- Outsied rails of body are machined within 0.0005” square to jaw



PWS6900



PWS8110

Size (in.)	Width (in.)	Height (in.)	Jaw Opening (in.)	Clamp Force	Weight	Order No.	Price
6	5.94	4.375	9	8200 lbs	81 lbs	**HT65PWS6900**	Price
8	8	5.275	11	12000 lbs	176 lbs	**HT65PWS8110**	Price

TE-CO® 6" Single Station TECO Vise

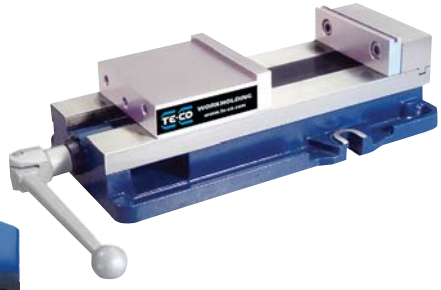
FREE 52 Pc. Clamping Kit with purchase of vise a $105 Value.

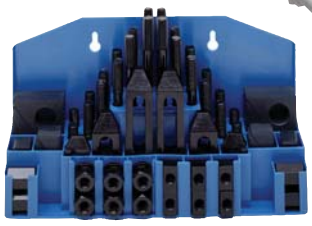
Features:

- Up to 8,200 lbs. of clamping force
- Bed height matched to size 2.875” (73.025mm) +/- 0.0005”
- Repeatability within 0.001”
- Hardened vise bed and jaw plates
- Sealed bearing system reduces clamping pressure and increases bearing life
- Stationary jaw has machined keyway for alignment
- Limited Life Time Warranty

52 Pc. Clamping Kit Includes:

- (4) Coupling nuts
- (6) T-slot nuts
- (24) Studs (4 ea: 3”, 4”, 5”, 6”, 7”, 8”)
- (6) Serrated end clamps
- (6) Flange nuts
- (6) Step blocks
- Fitted rack





Order No.	Price
HT65SP781	Price

F.O.B. Warren, MI • Additional Shipping Charges May Apply

ROHM RB-K Vises

- Operated mechanically with power intensification
- Stepwise clamping force presetting
- Clamping without power intensification for deformation-sensitive work-pieces possible
- High precision due to precise jaw guides
- Rapid clamping range adjustment via locking pin
- Better coolant and chip flow
- High wear resistance due to hardenend jaw guides
- Can be used on a rotation plate with angular spacing
- Ground area with longitudinal groove for accurate fixing on machine table
- Clamping option with clamps
- Enclosed spindle



Model No.	Size (in.)	Jaw Width (in.)	Jaw Depth (in.)	Vise Height (in.)	Key Slot Width (in.)	Clamping Force	Order No.	Price
179075	4	3-5/8	1-7/32	3-37/64	33/64	5600 lbs	**HK80179075**	Price
179076	6	4-29/64	1-7/32	3-13/16	33/64	6700 lbs	**HK80179076**	Price
179077	8	5-5/16	1-17/64	4-13/32	33/64	8975 lbs	**HK80179077**	Price
179078	12	6-19/64	1-59/64	5-15/64	43/64	11200 lbs	**HK80179078**	Price
179079	13-3/4	7-7/8	2-19/32	6-47/64	53/64	22400 lbs	**HK80179079**	Price

ROHM RB-M Vises



- Mechanically operated via threaded spindle
- High precision due to precise jaw guides
- Rapid clamping range adjustment via locking pin
- Better coolant and chip flow
- High wear resistance due to hardenend jaw guides
- Can be used on a rotation plate with angular spacing
- Ground area with longitudinal groove for accurate fixing on machine table
- Clamping option with clamps
- Enclosed spindle

Model No.	Size (in.)	Jaw Width (in.)	Jaw Depth (in.)	Vise Height (in.)	Key Slot Width (in.)	Clamping Force (in.)	Order No.	Price
179080	4	3-5/8	1-7/32	3-37/64	33/64	4500 lbs	**HK80179080**	Price
179081	7	4-29/64	1-7/32	3-13/16	33/64	5600 lbs	**HK80179081**	Price
179082	9	5-5/16	1-17/64	4-13/32	33/64	7800 lbs	**HK80179082**	Price
179083	13	6-19/64	1-59/64	5-15/64	43/64	10100 lbs	**HK80179083**	Price
179084	14-1/2	7-7/8	2-19/32	6-47/64	53/64	12300 lbs	**HK80179084**	Price

PALMGREN INC Dual Force Mechanical Booster Vises



New!

- Equipped with a patented mechanical booster and adjustable clamping force system that delivers secure, accurate and efficient clamping without the need to over tighten the vise spindle
- The adjustable clamping pressure provides consistent, continuous force of up to 11,200 pounds (50KN) maximum making part holding simple and easy
- Precise clamping force regulation (patented) is achieved by turning the force ring to one of three graduation settings and a simple turn on the handle provides precise clamping pressure every time
- Adjustable clamping pressure provides consistent, continuous force of up to 11,200 pounds (50KN) maximum making part holding easy
- Mechanical booster (patented) is equipped with an internal disc spring design that guards against shocks and vibrations maintaining consistent pressure during the machining operation
- Incorporates the Dual-Force design of all directional alignment with a 1/2 pound of downward force for every pound of horizontal force
- Precision ground and hardened jaw plates and hardened vise body
- Lifetime Warranty

Overall Dimensions (LxWxH) (in.)	Jaw Width (in.)	Clamp Force	Weight	Order No.	Price
16.84 x 4.095 x 5.119	4	5620 lbs	66 lbs	**JB509625954**	Price
19.488 x 5 x 4.134	5	7869 lbs	102 lbs	**JB509625955**	Price
25 x 6.339 x 6.614	6	10117 lbs	166 lbs	**JB509625956**	Price
28.071 x 7.953 x 7.008	8	11241 lbs	238 lbs	**JB509625958**	Price

PALMGREN INC Dual Force Double Station Vise



New!

- Allows for multiple part workholding for better spindle utilization, reduced tool change time, and reduced machine travel from part to part
- 80,000 PSI ductile iron casting deliver the strength, rigidity and long term accuracy required while absorbing machine vibration
- 1/2 pound of downward force for every pound of horizontal force on both moveable jaws
- Can be mounted horizontally or vertically
- One handle operates the two moveable jaws
- Unit can clamp two of the same size parts or different size parts
- Lifetime Warranty

Jaw Opening (in.)	Jaw Width (in.)	Throat Depth (in.)	Weight	Order No.	Price
0 - 9.252	4	1.496	44 lbs	**JB509625935**	Price

PALMGREN INC Dual Force Self Centering Vise

New!



- Can be used on both vertical as well as horizontal machining centers
- Centering accuracy from minimum to maxiumum opening is .0006” with .0002” repeatablility
- Both moveable jaws incorporate the Dual Force design with zero deflection and lift while providing quick, accurate centering of the workpiece
- Precision ground on all sides
- Equipped with Dual Force anti-lift mechanism in both jaws
- Height tolerance is within ±0.0004” so several vises can be lined up parallel to each other
- 80,000 PSI ductile iron castings deliver the strength, rigidity and long term accuracy required while absorbing machine vibration
- Hardened bed ways
- Lifetime Warranty

Jaw Opening (in.)	Jaw Width (in.)	Throat Depth (in.)	Weight	Order No.	Price
2.283 - 12.36	6	1.752	114 lbs	**JB509625934**	Price

ROHM MSR Machine Vises with Draw-Down Jaws

- For universal use on milling machines and machining centers
- Fast clamping range adjustment via bolt system
- Complete with clamping wrench, workpiece stop and four clamping claws
- Draw-down jaws
- Hardened steel body (60 HRC)
- Clamping repeatability 0.02mm

New!

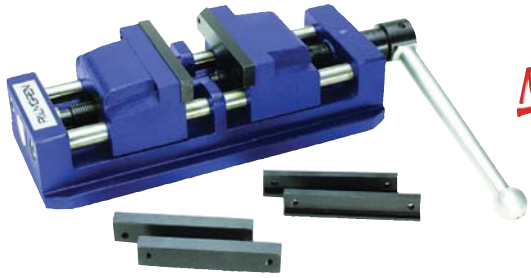


Model No.	Size (in.)	Jaw Width (in.)	Jaw Depth (in.)	Jaw Opening (in.)	Clamp Force	Weight	Order No.	Price
161828	5	4.921	1.26	5.906	6600 lbs	28 lbs	**HT95161828**	Price
161827	6	5.906	1.575	7.874	11000 lbs	56.4 lbs	**HT95161827**	Price
161826	6	5.906	1.575	11.811	11000 lbs	65 lbs	**HT95161826**	Price
161825	7	6.89	1.693	15.748	13200 lbs	112.9 lbs	**HT95161825**	Price

PALMGREN Self Centering Vise

- Ideal to use with drilling and milling machines where quick, accurate centering of the work piece below the spindle is required
- Moveable jaws are mounted on precision ground and hardened guide rails
- Constructed of close grained, high tensile strength fine cast iron
- Each vise comes with three sets of 4 in jaws, 1 pair of steel hardened, 1 pair of steel soft, and 1 pair of steel step jaws
- Lifetime Warranty

New!



Jaw Opening (in.)	Jaw Width (in.)	Throat Depth (in.)	Vise Height (in.)	Weight	Order No.	Price
4	4	3/4	3-3/8	25 lbs	**JB509615404**	Price

RAPTOR 100mm Self Center Vise

- Tolerance +/-0.013 (0.0005)
- Repeatability 0.001
- Jaw adjust from either end of vise
- Jaws opening capability from 2.50”/63.4mm to 5.62”/142.8mm
- Segment screw for added rigidity
- Loc-Down screws to secure vise in place and allows for quick change capability
- Utilizes two dowel pins: one for centering and one for locating
- Clamping rails

New!



Model No.	Jaw Opening (in.)	Overall Height (in.)	Vise Body Width (in.)	Vise Height (in.)	Vise Length (in.)	Weight	Order No.	Price
RW502	2.50	2.971	3.937	1.969	6.50	15 lbs	**RW10RW502**	Price

KURT Self-Centering Vises

- Designed for 5-axis machining
- Repeatability within ±0.0002”
- Reversible, machinable jaws
- Users can machine in a step for higher accuracy, eliminating the need for parallels
- Clamp parts on I.D. or O.D.
- 2-1/2” maximum jaw width
- Tall jaws provide better spindle clearance
- Flexible mounting options

New!



Model No.	Vise Length (in.)	Vise Width (in.)	Jaw Depth (in.)	Jaw Ht. (in.)	Weight	Order No.	Price
SCMX250	6.11	2.50	0.940	1.50	10 lbs	**HT80SCMX250**	Price
SCMX425	9.12	4	1.125	2.25	30 lbs	**HT80SCMX425**	Price

KURT 5 Axis Riser Base Kits

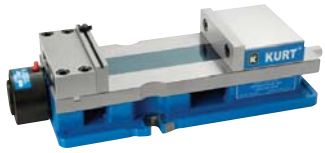
New!



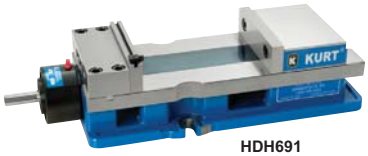
Model No.	Description	Order No.	Price
SCMX250357C	Includes: (1) riser block, (2) LHSHCS, (2) dowel pins; Used for mounting SCMX250 Vise	**HT80SCMX250356C**	Price
SCMX425357C	Includes: (1) riser block, (4) LHSHCS, (4) dowel pins; Used for mounting SCMX425 Vise	**HT80SCMX425356C**	Price

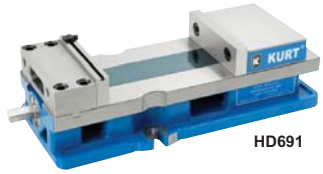
HD690 & HD691 Series Vises

- Stationary jaw bolts down from top
- No need to remove from table to disassemble vise
- Bolting the stationary from the top reduces the stress in the body and will stay flatter after assembly
- Bolts and locates directly on standard grid plates: 40mm, 50mm or 2”
- Pull type body design reduces stress in the body resulting in more accurate clamping
- Quick change movable jaw
- Adaptable to hydraulic (HD690)
- Uses sine keys for alignment
- GrooveLock® jaw and workstop included
- Body Height matched ±0.0005”


HDH690


HDM690


HDH691


HD691

Type	Size (in./mm)	Height (in.)	Length (in.)	Jaw Depth (in./mm)	Jaw Opening (in./mm)	Order No.	Price
Manual English	6	4-5/8	16.810	1.735	9	**HT80HD690**	Price
Manual Metric	152.4mm	4-5/8	16.810	44.069mm	228.6mm	**HT80HDM690**	Price
Reverse Manual English	6	4-5/8	16.810	1.735	9	**HT80HD691**	Price
Reverse Manual Metric	152.4mm	4-5/8	16.810	44.069mm	228.6mm	**HT80HDM691**	Price
Hydraulic English	6	4-5/8	16.810	1.735	9	**HT80HDH690**	Price
Hydraulic Metric	152.4mm	4-5/8	16.810	44.069mm	228.6mm	**HT80HDHM690**	Price
Reverse Hydraulic English	6	4-5/8	16.810	1.735	9	**HT80HDH691**	Price
Reverse Hydraulic Metric	152.4mm	4-5/8	16.810	44.069mm	228.6mm	**HT80HDHM691**	Price

DX Series Crossover™ Vises

- DX CrossOver™ vises are a combination of AngLock®, Pull-Type and 4 bolt stationary jaw design.
- Hardened vise bed/jaw plates
- Semi-hard steel screw
- 80,000 psi ductile iron body, nut and movable jaw
- Bolts & locates on 40mm, 50mm and 2” grid patterns
- Accepts sine keys for alignment’s (not included)
- Chip evacuation straight through the body
- Screw support held in place with snap rings
- GrooveLock® jaw plate and workstop included
- New brush seal design makes it easier to replace
- Includes chip guard
- Powder coat paint is long lasting and durable
- Lifetime Iron Clad Warranty

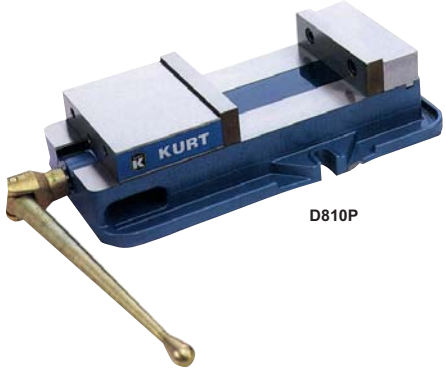
Clamping Force LBS.	
FT LBS.	LBS FORCE
10	512
20	1487
30	2464
40	3440
50	4415
60	5391
70	6367
80	7342



Model No.	Size (in.)	Jaw Opening (in.)	Overall Dimension (LxWxH)	Weight	Order No.	Price
DX4	4	6.5	12.5"L x 4.962"W x 3.365"H	30 lbs	**HT80DX4**	Price
DX6	6	9	16.81"L x 6"W x 4.36"H	65 lbs	**HT80DX6**	Price

AngLock® Vises

- Designed for precision part clamping on basic machine tools such as knee type mills, grinders, and machine centers
- Extremely high accuracy where datums, flatness, and parallelism is important
- Anglock® design assures the movable jaw does not lift
- Hardened vise bed and jaw plates
- 80,000 psi flame hardened ductile iron construction


D810P

						Plain Anglock Vise		Swivel Anglock Vise	
Vise Size (in.)	OAL (in.)	Width (in.)	Height (in.)	Jaw Opening (in.)	Width w/Swivel (in.)	Order No.	Price	Order No.	Price
8	21-3/4	9-7/8	5-5/16	10	16-1/8	**HT80D810P**	Price	**HT80D810S**	Price
10	27-1/2	13-1/8	6-3/8	9-3/4	18	**HT80D100P**	Price	-	-

HDL Anglock® Vises

Features:

- High density long vises with two clamping stations
- Provide repeatable clamping to 0.0002” and combine high density with heavy duty features
- Designed on rugged 80,000 PSI ductile iron body with steel components, provide strength, rigidity and long term accuracy while absorbing machining vibration
- Full 4” opening in each station with standard jaw system
- Maximizes number of parts in the work envelope
- Adjustable pre-load feature allows you to minimize pre-load range thus reducing the turns of the handle to open or close the vise.
- Holding block features the ability to clamp same or dissimilar sized parts and provides pre-loading ability in the front or back jaw.
- **Hydraulic models also available – please inquire.**



Jaw Kits For HDL Anglock® Vises

Description	Order No.	Price
Aluminum Jaw Kit	**HT80HD6ALJAW**	Price
Cast Iron Jaw Kit	**HT80HD6CJAW**	Price
Hard Jaw Kit	**HT80HDLM6JJAW**	Price

Description	Jaw Opening (in.)	Jaw Height (in.)	Jaw Width (in.)	Weight	Order No.	Price
6" Base Vise With Jaw Kit English	6	1.728	6	100 lbs	**HT80HDL6J**	Price
6" Base Vise With Aluminum Jaw Kit	6	1.728	6	83 lbs	**HT80HDLM6AL**	Price
6" Base Vise With Cast Iron Jaw Kit	6	1.728	6	110 lbs	**HT80HDLM6C**	Price
6" Base Vise With Hard Jaw Kit	6	1.728	6	97 lbs	**HT80HDLM6J**	Price

AngLock® Accessories

- †Bolts required for AJ style Innerlock Jaw Plates
- 3” and 4” Vises use same work stop - 5” and 6” Vises use same work stop
- Jaw plates sold in sets only











	4" Vises		5" Vises		6" Vises		8" Vises		10" Vises	
Accessory Description	**Order No.**	**Price**	**Order No.**	**Price**	**Order No.**	**Price**	**Order No.**	**Price**	**Order No.**	**Price**
Handle Assembly	**HT80D4010**	Price	**-**	-	**HT80D6010**	Price	**HT80D8010**	Price	**HT80D10010**	Price
Low Profile Bolts (4 req.)†	**HT80003353**	Price	**-**	-	**HT80003417**	Price	**HT80003481**	Price	**-**	-
Regular Jaw Plates	**HT80D407**	Price	**HT80D504**	Price	**HT80D607**	Price	**HT80D807**	Price	**HT80D1007**	Price
Serrated Jaws	**HT80AJ40047**	Price	**-**	-	**HT80AJ60047**	Price	**HT80AJ80047**	Price	**HT80D10047**	Price
Soft Jaw Plate	**HT80D407SOFT**	Price	**-**	-	**HT80D607SOFT**	Price	**HT80D807SOFT**	Price	**HT80D1007SOFT**	Price
Step Jaws	**HT80AJ40032**	Price	**-**	-	**HT80AJ60032**	Price	**HT80AJ80032**	Price	**-**	-
Swivel Base	**HT80D404**	Price	**-**	-	**HT80D604**	Price	**HT80D804**	Price	**-**	-
Thrust Collar Bearing	**HT80D4072**	Price	**-**	-	**HT80D6072**	Price	**HT80D8072**	Price	**HT80D10072**	Price
Work Stop Assembly	**HT80D3045**	Price	**-**	-	**HT80360PWS**	Price	**HT80D80WS**	Price	**-**	-

Sine Keys

- Hardened vise keys are used to align your Kurt vise to your milling machine table
- Standard keys are used when they are the same width

New!



Description - Inch						
Model No.	**Size (in./mm)**	**Set Includes**	**For Use With**	**Weight**	**Order No.**	**Price**
SKOA89	1/2 x 9/16	2 Pc.	Kurt DX6	1 lb	**HT80SKOA89**	Price
SKOA1011	5/8 x 11/16	2 Pc.	Kurt DX6	1 lb	**HT80SKOA1011**	Price
SKOA1213	3/4 x 13/16	2 Pc.	Kurt DX6	1 lb	**HT80SKOA1213**	Price
SKOA1416	7/8 x 1	2 Pc.	Kurt DX6	1 lb	**HT80SKOA1416**	Price

Description - Metric						
Model No.	**Size (in./ mm)**	**Set Includes**	**For Use With**	**Weight**	**Order No.**	**Price**
SKOAM14	14mm x 16mm	2 Pc.	Kurt DX6	1 lb	**HT80SKOAM1416**	Price
SKOAM1820	18mm x 20mm	2 Pc.	Kurt DX6	1 lb	**HT80SKOAM1820**	Price
SKOAM2022	20mm x 22mm	2 Pc.	Kurt DX6	1 lb	**HT80SKOAM2022**	Price

Hardened Step Keys

(Sold in pairs)



For Use With - 4” Vises		
Size (in.)	**Order No.**	**Price**
1/2 x 5/8	**HT80D3033A**	Price

For Use With - 6” Vises		
Size (in.)	**Order No.**	**Price**
11/16 x 1/2	**HT80D5033E**	Price
11/16 x 9/16	**HT80D5033D**	Price
11/16 x 5/8	**HT80D5033A**	Price
11/16 x 3/4	**HT80D5033C**	Price
11/16 x 13/16	**HT80D5033B**	Price

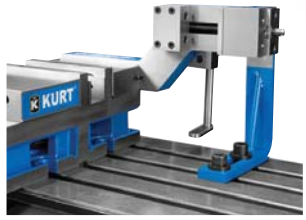
For Use With - 8 & 10” Vises		
Size (in.)	**Order No.**	**Price**
13/16 x 5/8	**HT80D8033D**	Price
13/16 x 11/16	**HT80D8033B**	Price
13/16 x 3/4	**HT80D8033C**	Price
13/16 x 7/8	**HT80D8033A**	Price

SIDEWINDER™ Vise

MADE IN THE USA

For 2nd operation workholding, mounts to any Kurt 6" Vise

- Mounts vertically to back of any Kurt 6" or 8" vise with an integral bracket
- Bracket includes a stabilzation leg
- For 2nd op work holding part vertically rather then horizontally
- SDW25II for 6" vise
- SDW35 for 6 or 8" vise
- Lifetime warranty





Jaw Width (in.)	Jaw Height (in.)	Max. Opening (in.)	Max. Clamping Force	Weight	Order No.	Price
2.50	1.063	2.50	2450 lbs	20 lbs	**HT80SDW25II**	Price
3.50	1.063	3.75	4000 lbs	45 lbs	**HT80SDW35**	Price

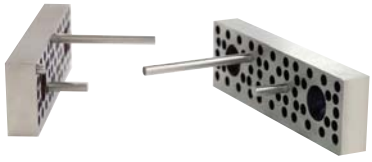
F.O.B. Warren, MI

3-in-1 System Jaw Plates

MADE IN THE USA

KURT360° Advantage

- Ideal for quick setups of common angle cuts
- Preset patterns in jaws provide for these 7 popular angles: 5°, 10°, 15°, 20°, 25°, 30°, 45°
- Tolerance between holes 0.0004" (0.01mm)
- Jaw dimensions: 6" x 1.735" x 0.725" & 8" x 2.20" x 1.075" ±0.000787" (±0.02mm)
- Pins sets included are:
  - 4 ea. 6 x 22mm
  - 3 ea. 6 x 58mm
  - 3 ea. 6 x 40mm
  - 3 ea. 6 x 76mm
- Pins sets dimensional tolerance: ±0.0007" (0.018mm)
- Doubles as a convenient workstop, triples as a parallel
- Does the work of three products











For Use With	Order No.	Price
6" Vises	**HT80KSJ6**	Price
8" Vises	**HT80KSJ8**	Price

Sine Parallel

KURT360° Advantage

MADE IN THE USA

- Squares up parts at 90°
- 30°, 45° and 60° angles built in
- Use as parallels
- Hold round parts (with 2 sets)
- Precision Ground
- Installs quickly and easily
- No need to remove jaw plates to use them



Order No.	Price
HT80SP63045	Price

6PJS Magnetic Jaw Plate & Parallel Set

KURT360° Advantage

This 11 Pc. Set Includes:

- 2 Ea. 3/16 x 1 x 6" ground steel parallels
- 2 Ea. 3/16 x 1-1/4 x 6" ground steel parallels
- 2 Ea. 3/16 x 1-3/4 x 6" ground steel parallels
- 1 Ea. D60-7-MAG hardened jaw plate with earth magnet
- 1 Ea. D60-315-MAG hardened Groove Lock jaw plate with earth magnet
- 1 Ea. WSRL46 Kurt® Groove Lock workstop
- 1 Ea. WSRLE46 Kurt® Groove Lock extended workstop
- Plastic storage box

MADE IN THE USA



Order No.	Price
HT806PJS	Price

8" Parallel Sets

- 0.25" Thickness
- 0.0002" Parallelism
- Plastic storage box included

KURT360° Advantage

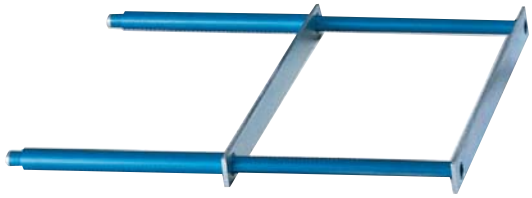
MADE IN THE USA



Pcs. per Set	Set Includes	Weight	Order No.	Price
6	1.000, 1.250, 1.500, 1.750, 2.000, 2.125" Heights	12 lbs	**HT808PS6**	Price
9	1.000, 1.250, 1.375, 1.500, 1.625, 1.750, 1.875, 2.000, 2.125" Heights	17 lbs	**HT808PS9**	Price

Parallel Keepers 6" & 8"

- Place your parallels in the vise against the jaws
- Take the Parallel Keeper, squeeze them together and place them inside the parallels
- Release the Parallel Keeper, they will push against the parallels, holding them against the hard jaws of the vise



For Use With	Order No.	Price
All 6" Vises	**HT80KPS6000**	Price
All 8" Vises	**HT80KPS8000**	Price

2MWS Magnetic Workstop

- Fast, accurate positioning of parts
- Rare earth magnet attaches anywhere on the workholding setup without the need for connecting bolts or screws
- Removes quickly to clear spindle travel when necessary
- Body is 2-5/8" long with 2" adjustable stop pins on both ends of body
- Ideal for single, multiple station vises and high density workholding setups



Order No.	Price
HT802MWS	Price

Speed Handles

- Spend less time clamping and get a handle on your next job
- The Kurt® Speed Handle Fits 4" and 6" Kurt® Anglock® vises and opens vises completely in seconds
- The Kurt® Speed Handle gives you rapid part loading and unloading



For Use With	Order No.	Price
6" Anglock Vises	**HT80D60SH**	Price

DoveLock Jaw Kits

Features:

- Quick change for fast setups in under 1 minute
- DoveLock jaws are changed from the top by loosening 3 quick-clamps
- Jaws can be removed from the front or side
- Workstop for postion repeatability to ±0.001"
- Aluminum jaws are machined not extruded
- Jaws are machinable for part profile or steps
- Jaws can be turned 180° to do 2 different setups
- Machinable jaws sold separately and available in 6, 7, 8 and 10" widths
- Master jaw set and jaw kits machine of 6061 aluminum
- Patent pending design
- Fits all industry standard Kurt 6" vises and towers

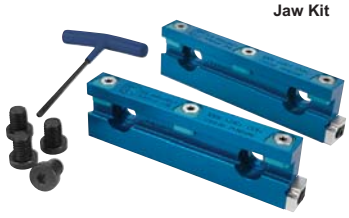
Master Jaw Set Includes:

- 2 Master jaws
- 4 Cap screws
- T-Handle hex key
- DJ6 inch
- DJ6M metric

Jaw Kits Includes:

- 2 Machinable aluminum jaws

Master Jaw Kit





Jaw Kit

Type - Dovelock Aluminum Jaws		
Size	**Order No.**	**Price**
4	**HT80DJ404AL**	Price
6	**HT80DJ406AL**	Price
8	**HT80DJ808AL**	Price
10	**HT80DJ810AL**	Price

Type - DoveLock Jaw Kit - Long		
Size	**Order No.**	**Price**
6 x 1.25 x 1.98	**HT80DJ606AL**	Price
7 x 1.5 x 1.98	**HT80DJ607AL**	Price
10 x 1.5 x 1.98	**HT80DJ610AL**	Price
8 x 1.5 x 1.98	**HT80DJ608AL**	Price

Type - Dovelock Master Jaw Kit		
Size	**Order No.**	**Price**
4	**HT80DJ4**	Price
6	**HT80DJ6S**	Price
8	**HT80DJ8**	Price

Type - DoveLock Master Jaw Kit		
Size	**Order No.**	**Price**
6 x .775 x 1.725	**HT80DJ6**	Price
152.4 x 19.685 x 43.815mm	**HT80DJ6M**	Price

Type - Dovelock Starter Kit		
Size	**Order No.**	**Price**
4	**HT80DJ4SK**	Price
6	**HT80DJ6SK**	Price
8	**HT80DJ8SK**	Price

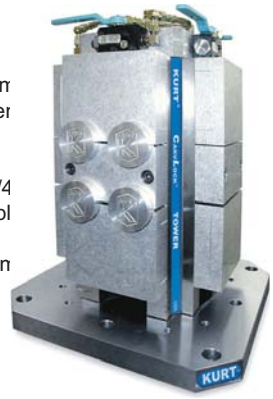
Type - Dovelock Steel Jaws		
Size	**Order No.**	**Price**
6	**HT80DJ606S**	Price

KURT Hydraulic Cluster Towers

- This hydraulically operated eight station tower features all-new design for fast loading of parts
- All internalized hydraulic piston/nut saves valuable space
- Includes all original KURT AngLock precision clamping and iron clad rigid construction for damping vibration

Features:

- Hydraulically operated eight station CTHDHLM64 Cluster Tower
- Utilizes an all internal hydraulic piston nut to conserve space
- Pressure is maintained until released by operator or triggering device
- Easy disconnect for pallet shuttle
- Repeatable clamping to 0.0002”
- Each station delivers up to 7,100 lbs. of clam
- Each face is controlled separately for conver removal
- Jaw opening is 4” per station
- Each face has a maximum total stroke of 1/4
- Jaw options available: Hard jaws, machinabl ductile iron
- Base sizes available: 400mm, 500mm, 630n
- Lifetime Iron Clad Warranty



New!

Jaw Type - Alumimum					
Overall Ht. (in.)	Base Size (in.)	Base Thick-ness (in.)	Weight	Order No.	Price
24.61	11.811	1	350 lbs	**HT80CTHDHM64325**	Price
24.61	11.811	1	350 lbs	**HT80CTHDHM643AL**	Price
24.61	15.748	1.25	400 lbs	**HT80CTHDHM64425**	Price
24.61	15.748	1.25	400 lbs	**HT80CTHDHM644AL**	Price
24.61	19.685	1.25	450 lbs	**HT80CTHDHM64525**	Price
24.61	19.685	1.25	450 lbs	**HT80CTHDHM645AL**	Price
24.61	24.803	1.5	600 lbs	**HT80CTHDHM64625**	Price
24.61	24.803	1.5	600 lbs	**HT80CTHDHM646AL**	Price

Jaw Type - Cast					
Overall Ht. (in.)	Base Size (in.)	Base Thick-ness (in.)	Weight	Order No.	Price
24.61	11.811	1	350 lbs	**HT80CTHDHM643C**	Price
24.61	15.748	1.25	400 lbs	**HT80CTHDHM644C**	Price

Jaw Type - Cast					
Overall Ht. (in.)	Base Size (in.)	Base Thick-ness (in.)	Weight	Order No.	Price
24.61	19.685	1.25	450 lbs	**HT80CTHDHM645C**	Price
24.61	24.803	1.5	600 lbs	**HT80CTHDHM646C**	Price

Jaw Type - Hardened					
Overall Ht. (in.)	Base Size (in.)	Base Thick-ness (in.)	Weight	Order No.	Price
24.61	11.811	1	350 lbs	**HT80CTHDHM643**	Price
24.61	15.748	1.25	400 lbs	**HT80CTHDHM644**	Price
24.61	19.685	1.25	450 lbs	**HT80CTHDHM645**	Price
24.61	24.803	1.5	600 lbs	**HT80CTHDHM646**	Price

KURT MaxLock™ Vises

- Jaws are reversible for ID and OD clampng without losing any clamp force
- Designed with 2 sets of jaws, Serrated and Dovetail (shipped with serrated jaws)
- Each set of jaws has 3 different clamping areas, at the bed, in the middle of the jaw and at the top of the jaw
- Center line that is easily adjusted to the tables rotation
- Clamping force +/- .0005 repeatability

New!



Model No.	Jaw Width (in.)	Base Height (in.)	Vise Height (in.)	Vise Length (in.)	Bed Clamping Area (in.)	Top Clamping Area (in.)	Middle Clamping Area (in.)	Weight	Order No.	Price
HP420	4	1.672	2.922	5	0.6 - 2.19	0.56 - 2.69	0.31 - 2.44	10 lbs	**HT80HP420**	Price
HP440	4	1.672	2.922	7	2.6 - 4.19	4.56 - 6.69	2.31 - 4.44	12 lbs	**HT80HP440**	Price
HP460	4	1.672	2.922	9	4.6 - 6.19	4.56 - 6.69	4.31 - 6.44	14 lbs	**HT80HP460**	Price

KURT MaxLock™ HP Riser Kits

Kit Includes:

- (1) Riser Base
- (2) 1/4-20 x 5/8 SHCS
- (2) 1/2-13 x 2-3/4 SHCS
- (1) 1/2 x 1 Dowel Pin
- (2) HP420-277CP Locator Pincs
- (1) HP420-278-CP Locator Pin

KURT 360° Advantage

MADE IN THE USA

New!



Model No.	Length (in.)	Width (in.)	Height (in.)	Mtg Hole (in.)	Width Between Mtg. Holes - Vise to Riser (in.)	Width Between Mtg. Holes (in.)	Length Between Mtg. Holes - Vise to Riser (in.)	Length Between Mtg. Holes (in.)	Description	Weight	Order No.	Price
HP420RK	5	4	2-1/2	5/8	3-1/8	2.767	4	3.549	For HP420 Vise	6 lbs	**HT80HP420RK**	Price
HP440RK	7	4	2-1/2	5/8	3-1/8	2.767	4	3.549	For HP440 Vise	8 lbs	**HT80HP440RK**	Price
HP460RK	9	4	2-1/2	5/8	3-1/8	2.767	4	3.549	For HP460 Vise	11 lbs	**HT80HP460RK**	Price

PALMGREN INC Dual Force 5 Axis Machine Vises

- Designed especially for multi-face machining of simple to complicated workpieceswith a single clamping operation
- These vises are small but have a large holding capacity making them ideal for 5-sided machining
- Equipped with a variety of jaw options to cover a wide range of workholding applications
- These unique vises deliver unrestricted all around access to the workpiece and are equipped with our Dual Force anti-lift mechanism to counter the lifting effect on the part while being machined
- 80,000 PSI Ductile iron castings for rigidity and dimensional stability
- Simple, robust construction, smooth surfaces, easy cleaning
- All sides are hardened and ground
- Both clamping jaws move simultaneously, self-centering to shorten the clamp and un-clamp times
- From the center of the workpiece to the bed of the vise is perpendicular to 0.0004”
- Lifetime Warranty



New!

Jaw Opening (in.)	Jaw Width (in.)	Throat Depth (in.)	Weight	Order No.	Price
1.732 - 3.307	4	3.543	64 lbs	**JB509625940**	Price
4.016 - 9.449	4	3.543	72 lbs	**JB509625941**	Price

Stainless Steel .375" Dovetail Fixture



- .375” Dovetail fixture is utilized for milling applications
- Offers superior clamping strength while allowing access to five sides of the workpiece
- Comes with two mounting bolts and two Dowel Pins for location
- Manufactured from 17-4 Stainless Steel Heat Treated to H-1150
- Fixture clamp is made from 17-4 Stainless Steel
- Unique Raptor Dovetail spring-loaded clamps require only 1/8” of material to hold the workpiece

Model No.	Max. Workpiece Size (in.)	No. of Clamps	Dovetail Ht. (in.)	Dovetail Width (in.)	Fixture Ht. (in.)	Weight	Order No.	Price
RWP-019SS	2.5	1	.125	.375	1.25	2 lbs	**RW10RWP019SS**	Price

Aluminum & Stainless Steel .5" Dovetail Fixtures



- .50” Dovetail fixture used for milling applications
- Manufactured from 17-4 Heat Treated Stainless Steel
- Fixture clamp is made from 17-4 Stainless Steel
- Unique Raptor Dovetail spring-loaded clamps require a small amount of material to hold the workpiece

Material - Aluminum								
Model No.	Weight	Max. Workpiece Size (in.)	No. of Clamps	Dovetail Height (in.)	Dovetail Width (in.)	Fixture Height (in.)	Order No.	Price
RWP-018	10 lbs	4.75	2	.125	.5	3	**RW10RWP018**	Price

Material - Stainless Steel								
Model No.	Weight	Max. Workpiece Size (in.)	No. of Clamps	Dovetail Height (in.)	Dovetail Width (in.)	Fixture Height (in.)	Order No.	Price
RWP-018SS	12 lbs	5	2	.125	.5	3	**RW10RWP018SS**	Price
RWP-022SS	6 lbs	3.25	1	.125	.5	2	**RW10RWP022SS**	Price
RWP-017SS	6 lbs	3.25	1	.125	.5	2.125	**RW10RWP017SS**	Price

Stainless Steel .281"W x .0781"H Dovetail Fixtures with .075" Dovetail Bottom



- .281” Dovetail fixture for milling applications
- This is new micro design is similar to the original RWP-010SS, yet this product has a deeper dovetail, .0781”, to provide additional holding strength.
- Designed to connect directly to the following 0.75” dovetail fixtures: RWP-002, RWP-002SS, RWP-015, RWP-023, RWP-024 and RWP-030SS
- Sllows you to quickly machine smaller size parts without taking your primary fixtures off of the machine
- Manufactured from 17-4 Heat Treated Stainless Steel
- Fixture clamp is made from 17-4 Stainless Steel
- Unique Raptor Dovetail spring-loaded clamps require only .077” of material to hold the workpiece

Model No.	Max. Workpiece Size (in.)	No. of Clamps	Dovetail Height (in.)	Dovetail Width (in.)	Fixture Height (in.)	Weight	Order No.	Price
RWP-031SS	1.25	1	.0781	.281	1.438	.284 lbs	**RW10RWP031SS**	Price
RWP-032SS	1.25	1	.0781	.281	1.563	.284 lbs	**RW10RWP032SS**	Price

Aluminum & Stainless Steel .75" Dovetail Fixtures with 1.5" Dovetail Bottom



- .75” Wide dovetail fixture for milling applications
- Designed to connect directly to the following 1.5” dovetail fixtures: RWP-001, RWP-001SS, RWP-004, RWP-013, RWP-013SS
- Allows you to quickly machine smaller size parts without taking your primary fixtures off of the machine
- Manufactured from 17-4 Heat Treated Stainless Steel
- Fixture clamp is made from 17-4 Stainless Steel
- Unique Raptor Dovetail spring-loaded clamps require only 1/8” of material to hold the workpiece

Material - Aluminum								
Model No.	Max. Workpiece Size (in.)	No. of Clamps	Dovetail Height (in.)	Dovetail Width (in.)	Fixture Height (in.)	Weight	Order No.	Price
RWP-002	5.75	2	.125	.75	3	18 lbs	**RW10RWP002**	Price
RWP-023	5.75	2	.125	.75	3	18 lbs	**RW10RWP023**	Price
RWP-024	4	1	.125	.75	1.5	8 lbs	**RW10RWP024**	Price

Material - Stainless Steel								
Model No.	Max. Workpiece Size (in.)	No. of Clamps	Dovetail Height (in.)	Dovetail Width (in.)	Fixture Height (in.)	Weight	Order No.	Price
RWP-002SS	6.75	2	.125	.75	3	25 lbs	**RW10RWP002SS**	Price
RWP-007SS	3.75	1	.125	.75	2.125	7 lbs	**RW10RWP007SS**	Price
RWP-011SS	3.75	1	.125	.75	2.001	7 lbs	**RW10RWP011SS**	Price
RWP-012SS	3.75	1	.125	.75	2	7 lbs	**RW10RWP012SS**	Price
RWP-030SS	7.5	3	.125	75	3	40 lbs	**RW10RWP030SS**	Price
RWP-034SS	7.5	3	.125	.75	2	40 lbs	**RW10RWP034SS**	Price
RWP-038SS	5	2	.125	.75	1.3	12 lbs	**RW10RWP038SS**	Price

RAPTOR WORKHOLDING PRODUCTS Aluminum & Stainless Steel 1.5" Dovetail Fixtures

New!



- Can also be utilized in other machines when connected with an adapter or riser
- Offers superior clamping strength while allowing access to five sides of the workpiece
- **RWP-013** is manufactured from 7075-T6511 aluminum and anodized: Class 2 Type II
- **RWP-013SS** is manufactured from 17-4 Stainless Steel Heat Treated to H-1150
- **RWP-001** is manufactured from 7075-T6511 aluminum and anodized: Class 2 Type II
- **RWP-001SS** is manufactured from 17-4 Stainless Steel Heat Treated to H-1150
- Fixture clamps are made from 17-4 Stainless Steel
- Unique Raptor Dovetail spring-loaded clamps require only 1/8" of material to hold the workpiece

Material - Aluminum								
Model No.	Max. Workpiece Size (in.)	No. of Clamps	Dovetail Height (in.)	Dovetail Width (in.)	Fixture Height (in.)	Weight	Order No.	Price
RWP-001	6.75	2	.125	1.5	3	30 lbs	**RW10RWP001**	Price
RWP-004	6.75	2	.125	1.5	2	30 lbs	**RW10RWP004**	Price
RWP-013	6.75	2	.125	1.5	2	30 lbs	**RW10RWP013**	Price
RWP-026	6.75	2	.125	1.5	3	30 lbs	**RW10RWP026**	Price
RWP-027	6	2	.125	1.5	2	20 lbs	**RW10RWP027**	Price
RWP-015SS	5.75	2	.125	.75	2	18 lbs	**RW10RWP015**	Price

Material - Stainless Steel								
Model No.	Max. Workpiece Size (in.)	No. of Clamps	Dovetail Height (in.)	Dovetail Width (in.)	Fixture Height (in.)	Weight	Order No.	Price
RWP-001SS	6.75	2	.125	1.5	3	30 lbs	**RW10RWP001SS**	Price
RWP-013SS	6.75	2	.125	1.5	2	30 lbs	**RW10RWP013SS**	Price
RWP-036SS	-	2	.125	1.5	2	-	**RW10RWP036SS**	Price

RAPTOR WORKHOLDING PRODUCTS Aluminum & Stainless Steel 2.25" Dovetail Fixtures

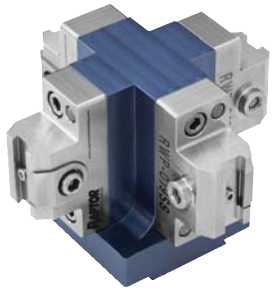
New!



- For milling applications used in four and five axis CNC machining
- Uses two large stainless steel clamps to hold your workpiece
- **RWP006** is manufactured from 7075 Aluminum and anodized: Class 2 Type II
- **RWP006SS** is manufactured from 17-4 heat-treated Stainless Steel
- Fixture clamps are made from 17-4 Stainless Steel
- Unique Raptor Dovetail spring-loaded clamps require only 3/16" of material to hold the workpiece

Model No.	Max. Workpiece Size (in.)	Material	Weight	Order No.	Price
RWP-006	10" L x 8" W x 10" H	Aluminum	81 lbs	**RW10RWP006**	Price
RWP-006SS	12" L x 12" W x 12" H	Stainless Steel	168 lbs	**RW10RWP006SS**	Price

RAPTOR WORKHOLDING PRODUCTS Stainless Steel .375" Dovetail Fixture Nest Systems



- Utilizes (1) RWP-215 Body plus (4) RWP-019SS The RWP-019-4X90T is made from a 7075 Aluminum Base an the four RWP-019SS fixtures are made from 17-4 Stainless Steel
- Fixture clamps are made from 17-4 Stainless Steel
- This Raptor Nest tombstone mounts to the top of any of the following 1.5" dovetail fixtures: RWP-001, RWP-001SS, RWP-004, RWP-013, RWP-013SS

New!

Model No.	Max. Workpiece Size (in.)	No. of Clamps	Dovetail Height (in.)	Dovetail Width (in.)	Fixture Height (in.)	Weight	Order No.	Price
RWP-019-4X45T	2.5	4	.125	.375	1.25	2 lbs	**RW10RWP0194X45T**	Price
RWP-019-4X90T	2.5	4	.125	.375	1.25	2 lbs	**RW10RWP0194X90T**	Price

RAPTOR WORKHOLDING PRODUCTS Aluminum .75" Dovetail Fixture Nest System



- The RWP-003-4X Raptor Nest utilizes four RWP-003 dovetail fixtures
- This fixture is designed specifically for five-axis machining applications and allows you to hold four workpieces at the same time
- Will mount to any of our standard Adapters and Risers
- Fixture is manufactured from 7075-T6511 aluminum
- Fixture clamp is made from 17-4 Stainless Steel

New!

Model No.	Max. Workpiece Size (in.)	Material	No. of Clamps	Dovetail Height (in.)	Dovetail Width (in.)	Fixture Height (in.)	Weight	Order No.	Price
RWP-003-4X	3	Aluminum	4	.125	.75	1.5	3 lbs	**RW10RWP0034X**	Price

RAPTOR WORKHOLDING PRODUCTS Replacement Clamp Kits

New!



Compatibility	Order No.	Price
RWP,008SS, RWP009SS, RWP010SS	**RW10RWPKIT304SQ**	Price
RWP-001(SS), RWP-004, RWP-013(SS), RWP-026, RWP-027, RWP-401-11	**RW10RWPKIT301SQ**	Price
RWP-002(SS), RWP-003, RWP-003-4X, RWP-007SS, RWP-011SS, RWP-012SS, RWP-025, RWP-023, RWP-024, RWP-024-2XR, RWP-024-3XR, RWP-024-4XR, RWP-024-6XC, RWP-025, RWP-030SS, RWP-405	**RW10RWPKIT302SQ**	Price
RWP-006(SS)	**RW10RWPKIT303SQ**	Price
RWP-017SS, RWP-018(SS), RWP-022SS	**RW10RWPKIT306SQ**	Price
RWP-019SS, RWP-019-4X45T, RWP-019-4X90T	**RW10RWPKIT305SQ**	Price
RWP-031SS, RWP-032SS	**RW10RWPKIT307SQ**	Price

RAPTOR WORKHOLDING PRODUCTS Aluminum Dovetail Pinch Blocks

- Connects directly to Raptor dovetail fixture
- Designed to offer a quick solution for secondary or final operations
- Convenient size and shape
- Available in three sizes
- RWP-702 & RWP-704 Utilizes a single 3/8-16 Socket Head Cap Screw to actuate it
- RWP-703 Utilizes two 3/8-16 Socket Head Cap Screws to actuate it

New!



Dovetail Ht. (in.)	Dovetail Width (in.)	Order No.	Price
.125	.75	**RW10RWP704**	Price
.125	1.50	**RW10RWP702**	Price
.125	1.50	**RW10RWP703**	Price

PALMGREN INC. 5-Axis Milling Stop

- Locking lever can be positioned at 360°
- 5/8" T-nut
- 1/4" Diameter stop rod
- Aluminum and steel construction



Model No.	Height Cap. (in.)	Order No.	Price
80211	6	**JB559680211**	Price

Milling Machine Work Stops

For 1/2 - 1" Thick Jaws

- Adjustable spring loaded work stop clamp
- Fits all milling machine vises with 1/2" - 1" thick jaws



Item	For Use With	Order No.	Price
MADE IN THE USA	Workstop	**NB80Z9030**	Price
WORLD CLASS QUALITY	1/2-1" Thick Jaws	**HT70VS1**	Price

RAPTOR WORKHOLDING PRODUCTS Dovetail Cutters

- Machines the flat on the dovetail edge of your workpiece in one pass
- Prevents a sharp edge on the dovetail from pressing into the corner of the fixture

New!



Dia. (in.)	Dovetail Ht. (in.)	No. of Flute	Order No.	Price
.248	.0469	4 Flute	**RW10RWPDC405C**	Price
.248	.248	4 Flute	**RW10RWPDC409C**	Price
.350	.125	4 Flute	**RW10RWPDC407C**	Price
.450	.125	4 Flute	**RW10RWPDC408C**	Price
.750	.125	3 Flute	**RW10RWPDC403U**	Price
.750	.125	4 Flute	**RW10RWPDC404C**	Price

RAPTOR WORKHOLDING PRODUCTS Locating Pins

- **RWP-832** is for all Raptor Fixtures except the RWP-019SS
- **RWP-832MO** is for the RWP-019SS only
- Made from 18-8 Stainless Steel, head height .085" and full thread
- Five replacement pins per pack

New!



Model No.	Size (in.)	Order No.	Price
RWP-832	8/32 x 1/4	**RW10RWP832**	Price
RWP-832MO	8/32 x 8/32 x .165	**RW10RWP832MO**	Price

WORLD CLASS QUALITY 5-Axis Milling Stop

- 5-Axis adjustment moves the stop to any position
- 1/4" stop rod can be modified, replaced or extended with a longer piece of bar stock
- Locking lever can be positioned at 360° to avoid interference
- T-nut to fit 5/8" table slots



Order No.	Price
JN6091101	Price

Pivot™ Workstop

- Allows machinists to perform multiple operations or repeat setups easily
- Once the workpiece is positioned, the Pivot's hinged arm can be easily moved away to allow machining of the workpiece



Description	Order No.	Price
Standard mount	**HT60PWSTD01**	Price

Speed Handle

For Milling Machine Vises

- Replaces swivel handle in Kurt AngLock, Eron Lock-Tight Vise and other Milling Machine Vises
- Machined aluminum



Item	For Use With	Order No.	Price
WORLD CLASS QUALITY	4" Milling Machine Vises	HT71ESH4	Price
	5" Milling Machine Vises	HT71ESH5	Price
	6" Milling Machine Vises	HT71ESH6	Price
	8" Milling Machine Vises	HT71ESH8	Price
MADE IN THE USA	Speed Handle	NB80Z9021	Price

TOOLEX VISE WORKHOLDING SYSTEMS Vise Mounting Kit

- The Vise Mounting Kit is designed for 6" vises
- **Kit Contains:**
  - (2) 1/2-13 x 3 Studs
  - (2) 1/2 x 5/8 T-Nuts
  - (2) 1/2-13 Flange Nuts
  - (2) 1/2 Flat Washers
  - (1) T-Slot Cleaner



Order No.	Price
SG5090442	Price

WORLD CLASS QUALITY Standard Pole Permanent Round Magnetic Chucks

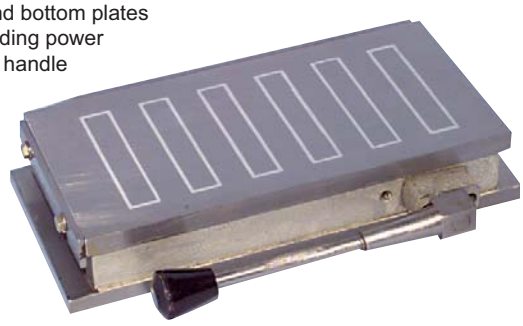
- Powerful ceramic magnets
- Solid top and bottom plates
- Uniform holding power
- Easy on-off handle



Size (in.)	Height (in.)	Weight	Order No.	Price
5	2-7/8	19 lbs	HM45TRMC5	Price
6	2-7/8	35 lbs	HM45TRMC6	Price
9	2-7/8	46 lbs	HM45TRMC9	Price
12	2-7/8	68 lbs	HM45TRMC12	Price

WORLD CLASS QUALITY Standard Pole Permanent Rectangular Magnetic Chucks

- Powerful ceramic magnets
- Solid top and bottom plates
- Uniform holding power
- Easy on-off handle



Dia. (in.)	Height (in.)	Weight	Order No.	Price
4 x 7	2-7/8	19 lbs	HM45TMC47	Price
5 x 10	2-7/8	35 lbs	HM45TMC510	Price
6 x 12	2-7/8	46 lbs	HM45TMC612	Price
6 x 18	2-7/8	68 lbs	HM45TMC618	Price

Suburban Circular Type Magnetic Chucks

- Ceramic magnets provide three times the holding power of ordinary magnets
- Individually magnetized poles assure uniform pull
- No dead spots
- Full power over entire top surface
- Solid top and bottom plates retain accuracy
- Ideal height for work clearance

MADE IN THE USA



Pole - Fine					
Dia. (in.)	Height (in.)	Pole Spacing	Weight	Order No.	Price
6-1/4	3	1/8	18 lbs	HM50RMC6FP	Price
7-3/4	3	3/16	26 lbs	HM50RMC8FP	Price
10	3	3/16	43 lbs	HM50RMC10FP	Price
12-1/4	3	3/16	62 lbs	HM50RMC12FP	Price

Pole - Standard					
Dia. (in.)	Height (in.)	Pole Spacing	Weight	Order No.	Price
5-1/2	3	1/8	15 lbs	HM50RMC5	Price
6-1/4	3	1/8	17 lbs	HM50RMC6	Price
9-1/4	3	3/16	36 lbs	HM50RMC9	Price
12-1/4	3	3/16	60 lbs	HM50RMC12	Price

Suburban Magnum-Force™ Permanent Magnetic Chucks

MADE IN THE USA

- Dual magnets provide 120% more power
- Submersible for use in EDM and fluids
- Clamps included
- 1/16" Stainless dividers with 1/8" minor pole and 1/4" major pole



Size (in.)	Height (in.)	Weight	Order No.	Price
6 x 12	2-1/2	44 lbs	HM50DMB612	Price
6 x 18	2-1/2	65 lbs	HM50DMB618	Price
8 x 18	2-1/2	87 lbs	HM50DMB818	Price
8 x 24	2-1/2	116 lbs	HM50DMB824	Price

Suburban Rectangular Magnetic Chucks

MADE IN THE USA



- Ceramic magnets provide superior holding power that never fades
- Sealed against dirt and liquids, and can also be used in EDM machines
- Front mounted handle is removable to eliminate interference
- Handle, back rail, side rail and two clamps included
- Overall Height: 2-5/8”

Pole - Fine				
Size (in.)	Pole Spacing	Weight	Order No.	Price
4 x 7	1/8	19 lbs	**HM50MCB47FP**	Price
5 x 10	1/8	35 lbs	**HM50MCB510FP**	Price
6 x 12	1/8	47 lbs	**HM50MCB612FP**	Price
6 x 18	1/8	70 lbs	**HM50MCB618FP**	Price

Pole - Standard				
Size (in.)	Pole Spacing	Weight	Order No.	Price
4 x 7	3/8	16 lbs	**HM50MCB47**	Price
5 x 10	3/8	29 lbs	**HM50MCB510**	Price
6 x 12	3/8	42 lbs	**HM50MCB612**	Price
6 x 18	3/8	65 lbs	**HM50MCB618**	Price
8 x 24	3/8	116 lbs	**HM50MCB824**	Price

Suburban Round Rare Earth Magnetics Chucks

MRRE13





MRRE30FP

Features:
- Made with neodymium iron boron type rare earth magnets for exceptonal holding power
- 80 N/cm2 (116 psi) nominal holding power

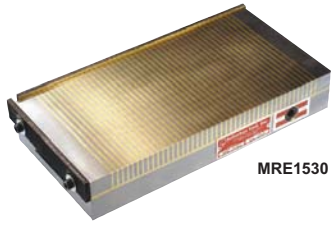
Standard Pole:
- Suitable for grinding & light milling
- Works best for holding medium-sized workpieces
- Has 4mm steel poles & 2mm brass spacers

Fine Pole:
- Suitable for grinding & EDM
- Works best for holding smaller & thinner workpieces
- Has 1.5mm steel poles & 0.5mm brass spacers

Pole - Fine						
Size (in.)	Height (in.)	Bolt Center Distance (in.)	Bolt Size	Weight	Order No.	Price
4	1.69	3.35	(3) M6	10 lbs	**HM50MRRE10FP**	Price
5	1.69	4.53	(3) M6	14 lbs	**HM50MRRE13FP**	Price
6	1.69	5.51	(4) M8	19 lbs	**HM50MRRE16FP**	Price
12	1.77	10.24	(4) M10	73 lbs	**HM50MRRE30FP**	Price

Pole - Standard						
Size (in.)	Height (in.)	Bolt Center Distance (in.)	Bolt Size	Weight	Order No.	Price
4	1.93	3.35	(3) M6	10 lbs	**HM50MRRE10**	Price
5	1.93	4.41	(3) M6	14 lbs	**HM50MRRE13**	Price
6	1.93	5.51	(4) M6	19 lbs	**HM50MRRE16**	Price
8	2.01	7.09	(4) M8	47 lbs	**HM50MRRE20**	Price
12	2.01	11.02	(4) M10	73 lbs	**HM50MRRE30**	Price

Suburban Rectangular Rare Earth Magnetics Chucks



MRE1530



MRE1325FP

Features:
- Made with neodymium iron boron tupe rare earth magnets for exceptional holding power
- Flat, square & parallel within 0.005mm/100mm
- Chucks are lubricated & sealed against dirt & liquids
- 80 N/cm2 (116 psi) nominal holding power
- Includes removeable handle, side and back rails

Standard Pole:
- Suitable for grinding & light milling
- Works best for holding larger & thicker workpieces
- Has 4mm steel poles & 2mm brass spacers

Fine Pole:
- Suitable for grinding & EDM
- Works best for holding smaller & thinner workpieces
- Has 1.5mm steel poles & 0.5mm brass spacers

			Fine		Standard	
Size L x W (in.)	Height (in.)	Weight	Order No.	Price	Order No.	Price
4 x 7	1.97	16 lbs	**HM50MRE1018FP**	Price	**HM50MRE1018**	Price
5 x 10	1.97	28 lbs	**HM50MRE1325FP**	Price	**HM50MRE1325**	Price
6 x 12	1.97	37 lbs	**HM50MRE1530FP**	Price	**HM50MRE1530**	Price
6 x 18	1.97	60 lbs	**HM50MRE1545FP**	Price	**HM50MRE1545**	Price
8 x 18	1.97	91 lbs	**HM50MRE2045FP**	Price	**HM50MRE2045**	Price

O.S. Walker Ceramax Magnetic Chucks

MADE IN THE USA



- Industry standard for permanent magnetic chucks
- Fine pole for maximum strength on small or hardened parts
- Double stacked magnets creating the strongest holding power of any ceramic magnetic chuck
- Silver brazed top plate for maximum holding power
- Watertight for grinders, EDM and milling applications
- Lowest height of any permanent chuck
- Includes backrest, side rails, and two cast clamps

Size (in.)	Height (in)	Weight	Order No.	Price
5 x 10	2-5/8	29 lbs	**HM55FP0510**	Price
6 x 12	2-3/4	45 lbs	**HM55FP0612**	Price
6 x 18	2-3/4	67 lbs	**HM55FP0618**	Price
8 x 18	2-3/4	90 lbs	**HM55FP0818**	Price

Size (in.)	Height (in)	Weight	Order No.	Price
8 x 24	2-3/4	120 lbs	**HM55FP0824**	Price
10 x 24	3-5/8	140 lbs	**HM55FP1024**	Price
12 x 24	3-5/8	200 lbs	**HM55FP1224**	Price

Other sizes available

O.S. WALKER NEOMicro² Chucks

For Precision Grinding & EDM

- Super accurate
- Loaded with Rare Earth Neodymium magnet material
- Micro fine top plate with .02" brass gaps and .05" steel poles
- Maxiumum workholding surface 100% active with no weak areas
- Ideal for very thin and small components
- Low profile
- One back rest and one end stop



Size (in.)	Height (in.)	Weight	Order No.	Price
6 x 12	2	40 lbs	**HM55NM612**	Price
6 x 18	2	62 lbs	**HM55NM618**	Price
8 x 18	2	82 lbs	**HM55NM818**	Price
8 x 24	2	108 lbs	**HM55NM824**	Price
12 x 24	2.2	179 lbs	**HM55NM1224**	Price

O.S. WALKER Electromagnetic Chuck Controls

Manual Release Variable Holding

SCV-1.5 Series Features:

- Direct current supply
- Variable holding feature
- Manual release
- Input: 115V AC
- Output: 0-110V DC
- Wattage capacity: 150
- Can be used with LBP chucks

MADE IN THE USA



SMART-B Series Features:

- Automatic release
- Full, varaible, and residual holding
- Compatible use with chucks from other manufacturers
- Touchpad control for easy selection
- Automatic release cycle assures workpiece is released cleanly without residual magnetism
- Input: 115 VAC Output: 0-110 VDC

Wattage Capacity	Weight	Order No.	Price
150	8 lbs	**HM55SMMCV15**	Price
150	13 lbs	**HM55SMART1B**	Price
300	16 lbs	**HM55SMART3B**	Price
500	18 lbs	**HM55SMART5B**	Price

O.S. WALKER LBP Electro-Magnetic Fine Pole Chucks

- Fine pole longitudinal bar poles with .03" brass gaps and .12" steel poles
- Silver brazed solid top plate
- Watertight for grinders, EDM, and milling applications
- Extremely low profile
- Includes backrest, side rails, and two cast clamps
- Twist lock plug for easy assembly to a Walker Smart B or SCV chuck control
- 115 VDC



Size (in.)	Height (in.)	Watts	Weight	Order No.	Price
6 x 12	2-7/8	50	46 lbs	**HM55EW0612**	Price
6 x 18	2-7/8	85	70 lbs	**HM55EW0618**	Price
8 x 18	2-7/8	100	100 lbs	**HM55EW0818**	Price
8 x 24	2-7/8	150	130 lbs	**HM55EW0824**	Price
10 x 20	2-7/8	143	170 lbs	**HM55EW1020**	Price
10 x 24	2-7/8	150	215 lbs	**HM55EW1024**	Price
12 x 24	3-1/8	141	185 lbs	**HM55EW1224**	Price

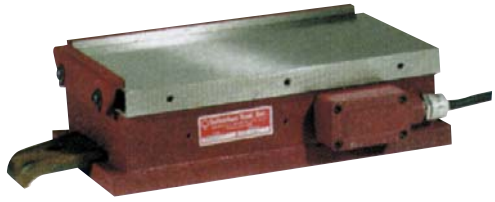
Other sizes available

Suburban Electromagnetic Chucks

Transverse Pole Chucks – Poles Run Side To Side
Longitudinal Pole Chucks – Poles Run End To End

- Top plate has 1/8" steel poles and 1/16" stainless steel separators
- Chucks are sealed against dirt and liquids
- Longitudinal (lengthwise) or transverse (crosswise) pole models available
- Two clamps, back rail and side rail included
- Chuck controls must be used with all electromagnetic chucks!

MADE IN THE USA



Pole - Longitudinal					
Size (in.)	Height (in.)	Watts	Weight	Order No.	Price
6 x 12	3-1/4	56	75 lbs	**NJ50EMCB612L**	Price
6 x 18	3-1/4	110	117 lbs	**NJ50EMCB618L**	Price
8 x 15	3-1/4	85	132 lbs	**NJ50EMCB815L**	Price
8 x 18	3-1/4	100	160 lbs	**NJ50EMCB818L**	Price
8 x 24	4	150	210 lbs	**NJ50EMCB824L**	Price

Pole - Transverse					
Size (in.)	Height (in.)	Watts	Weight	Order No.	Price
6 x 12	3-1/2	72	75 lbs	**NJ50EMCB612T**	Price
6 x 18	3-1/2	130	117 lbs	**NJ50EMCB618T**	Price
8 x 15	3-1/2	125	132 lbs	**NJ50EMCB815T**	Price
8 x 18	3-1/2	150	160 lbs	**NJ50EMCB818T**	Price
8 x 24	4	220	210 lbs	**NJ50EMCB824T**	Price

Suburban Precision Ground Angle Plates

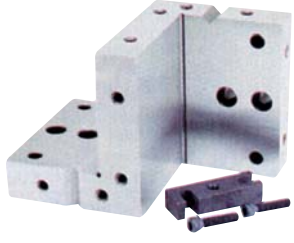
- Solid, one-piece angle plates are made of steel, hardened to Rc 58-60
- SineSet® models bolt directly to SineSet® sine plate or compound sine plate of the same series



Dim. (in.)	No. of Holes	Tapped Hole Size	Weight	Order No.	Price
3 x 3 x 3 x 1 x 1/2	24	1/4-20	5 lbs	**NJ50AP333**	Price
4 x 3 x 3 x 1	13	1/4-20	6 lbs	**NJ50AP334S0**	Price
4 x 4 x 4 x 1-1/4	13	1/4-20	10 lbs	**NJ50AP444S1**	Price
4 x 4 x 4-1/2 x 1 x 3/4	25	5/16-18	9 lbs	**NJ50AP445**	Price
6 x 4 x 4 x 1-1/4	14	3/8-16	13 lbs	**NJ50AP446S2**	Price
6 x 6 x 4 x 1-1/4	33	1/4-20	20 lbs	**NJ50AP664S1**	Price

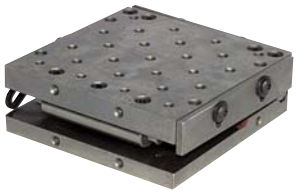
Suburban Compound Angle Plates

- Solid, single piece hardened (Rc 58-60) steel construction provides stable and reliable positioning for compound use.
- Ground vees for convenient holding of small parts
- Square and parallel within .0002"
- Clamp and screws are included



Size (in.)	Weight	Tapped Holes	Hole Size	Order No.	Price
6 x 4 x 4 x 1	11 lbs	16	1/4-20	**NJ50CAP46**	Price

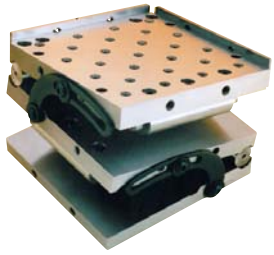
Suburban Sine Plates



- Made of steel, hardened to Rc 58-60
- Sizes up to 6" x 6" have 1/4-20 tapped holes, larger sizes have 3/8-16 tapped holes. Model NJ50-SP555 has t-slots for 1/4" T-bolts
- Gage block roll has two .200" minute steps for setting small angles with standard gage block sets
- A locking strap that always remains below the top surface and two self-storing, hardened and ground rails are standard
- Angular accuracy guaranteed within 5 seconds of arc up to 15°, within 10 seconds up to 30°, and within 15 seconds up to 45°
- Models with the suffix "S0, S1 or S2" are part of the SineSet® System. Other products with the same part number suffix will bolt directly to these sine plates
- T-Slot top - NJ50SP555

Dim. (in.)	Square & Parallel	Center Distance of Rolls	Weight	Order No.	Price
6 x 3 x 2	.0002	5.000 within .0002	9 lbs	**NJ50SP136**	Price
6 x 5	.0002	5.000 within .0002	17 lbs	**NJ50SP555**	Price
6 x 6 x 2	.0002	5.000 within .0002	18 lbs	**NJ50SP66S1**	Price
6 x 12 x 2-5/8	.0003	5.000 within .0002	47 lbs	**NJ50SP612S2**	Price
8 x 12 x 2-5/8	.0003	5.000 within .0002	62 lbs	**NJ50SP812S2**	Price
12 x 6 x 2-5/8	.0003	10.000 within .0002	45 lbs	**NJ50SP126S2**	Price

Suburban Compound Sine Plates



- Made of steel, hardened to Rc 58-60
- Sizes up to 6" x 6" have 1/4-20 tapped holes, larger sizes have 3/8-16 tapped holes.
- Each gage block roll has two 0.200" minute steps for setting small angles with standard gage block sets
- Two locking straps that always remains below the top surface and two self-storing, hardened and ground rails are standard
- Angular accuracy guaranteed within 5 seconds of arc up to 15°, within 10 seconds up to 30°, and within 15 seconds up to 45°
- Models with the suffix "S0, S1 or S2" are part of the SineSet® System. Other products with the same part number suffix will bolt directly to these sine plates

Dim. (in.)	Square & Parallel	Center Distance of Rolls	Weight	Order No.	Price
6 x 6 x 3-1/8	.0002	5.000 within .0002	27 lbs	**NJ50SPC66S1**	Price
6 x 12 x 4-3/16	.0003	5.000 within .0002 & 10.000 within .0002	71 lbs	**NJ50SPC612S2**	Price

Suburban Magnetic Sine Plates

- Ceramic permanent magnetic chucks can't lose their magnetism
- Removable handle for ON/OFF operation, end rail and side rail all included
- Sine plate angles lock rigidly with locking straps
- Squareness, parallelism and roll center distances within .0002" and .0003"
- Unit features .002 minute angle steps
- Chuck not removable - NJ50MSP66FP & NJ50MSP66

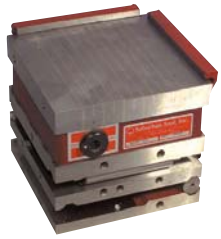
Type - Fine Pole Magnetic Sine Plate					
Size (in.)	Square & Parallel	Center Distance of Rolls	Weight	Order No.	Price
6 x 3 x 4-1/4	.0002	5.000 within .0002	22 lbs	**NJ50MSP363FP**	Price
6 x 3 x 4-1/4	.0002	5.000 within .0002	22 lbs	**NJ50MSP66FP**	Price
6 x 6 x 4-1/4	.0002	5.000 within .0002	39 lbs	**NJ50MSP66FPS1**	Price
6 x 12 x 5-1/4	.0003	5.000 within .0002	94 lbs	**NJ50MSP612FPS2**	Price
12 x 6 x 5-1/4	.0003	10.000 within .0002	92 lbs	**NJ50MSP126FPS2**	Price



Type - Standard Pole Magnetic Sine Plate					
Size (in.)	Square & Parallel	Center Distance of Rolls	Weight	Order No.	Price
6 x 6 x 4-5/8	.0002	5.000 within .0002	39 lbs	**NJ50MSP66**	Price
6 x 6 x 4-5/8	.0002	5.000 within .0002	39 lbs	**NJ50MSP66S1**	Price
6 x 12 x 5-1/4	.0003	5.000 within .0002	89 lbs	**NJ50MSP612S2**	Price
12 x 6 x 5-1/4	.0003	10.000 within .0002	87 lbs	**NJ50MSP126S2**	Price

†Chuck not removable. Other sizes available, call for price and availability.

Suburban Compound Magnetic Sine Plates



- Ceramic permanent magnetic chuck
- Removable handle for ON/OFF control, side rails, end rails all included
- Strap locks sine plate securely.
- .200 minute angle steps with .0002 and .0003 tolerance in squareness, parallelism and roll center distances
- Models with the suffix "S0, S1 or S2" are part of the SineSet® System
- Can be removed, allowing the individual use of both the compound sine plate and magnetic chuck and allowing other products with the same part number suffix to bolt directly to the sine plate
- Chuck not removable - NJ50MSPC66 & NJ50MSPC66FP

			Fine Pole Compound Magnetic Sine Plate			Standard Pole Compound Magnetic Sine Plate		
Size (in.)	Square & Parallel	Center Distance of Rolls	Weight	Order No.	Price	Weight	Order No.	Price
6 x 6 x 5-3/8	.0002	5.000 within .0002	48 lbs	**NJ50MSPC66FP**	Price	44 lbs	**NJ50MSPC66**	Price
6 x 12 x 6-13/16	.0003	5.000 within .0002 & 10.000 within .0002	118 lbs	**NJ50MSPC612FPS2**	Price	113 lbs	**NJ50MSPC612S2**	Price

WORLD CLASS QUALITY Accu Sine Plates



- Built to the most exacting specificatiions, these Sine Plates are accurate, stable and sturdy with a .200" minute angle step built into the gage block roll, this eliminates a step in the base plate
- Two hardened and ground side rails and one locking strap are included along with large hinge pins for extra strength

Size (in.)	Center Distance of Rolls	Order No.	Price
4 x 4 x 2	2-1/4 within .0002	**NJ55NSP44**	Price
6 x 6 x 2	4-1/4 within .0002	**NJ55NSP66**	Price

WORLD CLASS QUALITY Accu Magnetic Sine Plates

Fine Pole



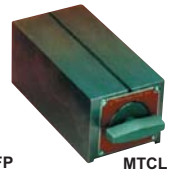
- Using ceramic permanent magnets which cannot be demagnetized, these magnetic Sine Plates are designed for the precise angular positioning and holding of small or odd-shaped workpieces
- Fine pole division permits more uniform magnetic holding
- Sine Plate angles lock rigidly with locking strap
- Removable handle included for on-off

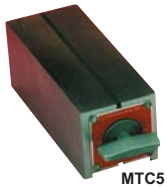
Size (in.)	Center Distance of Rolls	Order No.	Price
4 x 4 x 4-5/8	2-1/4 within .0002	**NJ55NMSP44**	Price
6 x 6 x 4-5/8	4-1/4 within .0002	**NJ55NMSP66**	Price

Suburban Magnetic Toolmaker's Chucks & Angle Iron

- Top, bottom and end magnetize simultaneously (chucks only)
- All models precision ground flat, square and parallel to an overall accuracy of .0005”
- Model MTC-LFP has 3/16” x 1/16” fine pole construction for holding small or thin parts; and removable side and end rails
- On/Off switch
- Powerful Alnico magnets


MTCLFP


MTCL

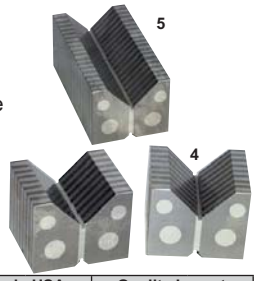

MTC5


MAI644

Shape	Size (in.)	Height (in.)	Pole	Order No.	Price
Angle Iron	4-1/4 x 4-3/4	6-1/2	-	**NJ50MAI644**	Price
Chuck	2 x 5	2	Standard	**NJ50MTCS**	Price
Chuck	2-3/4 x 5-1/2	2-1/2	Fine	**NJ50MTCLFP**	Price
Chuck	2-3/4 x 5-1/2	2-1/2	Standard	**NJ50MTCL**	Price

Magnetic Chuck Parallels, Vee Blocks, & Angle Plate

- Precision ground on all surfaces
- Serial numbered in pairs
- Integrally aluminum cast into one solid piece
- Holds in any direction
- Use with magnetic chucks (For best results use with electromagnetic chucks)
- Available with 1/2” and 2” capacity



		Generic USA		Quality Import	
Description	Size (in.)	Order No.	Price	Order No.	Price
Combo Set V-Blocks & Parallels	Parallels: 1 x 2 x 4 V-Blocks: 1-7/8 x 2-5/8 x 2 2 Cap (large Vee) 1/2 Cap (small Vee)	-	-	**NG5114**	Price
Matched Pair Long V-Block	1-7/8 x 2-3/8 x 4-3/8 2 Cap (large Vee) 1/2 Cap (small Vee) each block	-	-	**NG515MP**	Price
One Long Magnetic Chuck V-Block	1-7/8 x 2-3/8 x 4-3/8 2 Cap (large Vee) 1/2 Cap (small Vee)	-	-	**NG515**	Price
Pair Magnetic Chuck Parallels	1 x 2 x 4	-	-	**NG511**	Price
Pair Magnetic Chuck V-Block	1-7/8 x 2-5/8 x 2 2 Cap (large Vee) 1/2 Cap (small Vee)	**NG494**	Price	**NG514**	Price

MAG-MATE® Continuous Duty Demagnetizers

- Surface Type Demagnetizers are designed for stationary or portable use, providing continuous duty operation as work pieces pass over the demagnetizer’s face plate
- The surface type design allows for installation under, over or alongside conveyors for demagnetizing applications
- 6 Foot cord with grounded plug
- Integrated side handles for hand held operation
- AC pilot light and On/Off Switch
- Portable and/or stationary
- Continuous duty
- Durable face plate
- 240V AC available on request



Width (in.)	Length (in.)	Overall Height (in.)	Amps-120VAC Single Phase	Order No.	Price
4-3/4	7-1/4	3-13/16	2.1	**NE7085**	Price
6-1/4	11-1/4	4-15/16	9	**NE70115**	Price

Suburban Magnetic Vee Blocks

- Top, bottom and end magnetize simultaneously (chucks only)
- All models precision ground flat, square and parallel to an overall accuracy of .0005”
- Model MTC-LFP has 3/16” x 1/16” fine pole construction for holding small or thin parts; and removable side and end rails
- On/Off switch
- Powerful Alnico magnets



Size (in.)	Order No.	Price
2-3/4 x 3-5/8 x 5-1/2	**NJ50MTCVB**	Price
2-3/4 x 3-5/8 x 5-1/2	**NJ50MTCVBM**	Price

WORLD CLASS QUALITY Demagnetizers

Top Quality Import

- Demagnetize dies, punches, cutters or any tools that have become magnetized from any source
- Operates on 115V AC with On/Off switch

UMD1



UMD



Width (in.)	Length (in.)	Height (in.)	Order No.	Price
4	6	3-1/2	**HR62UMD1**	Price
5-1/2	8-1/2	4-7/8	**HR62UMD**	Price

WORLD CLASS QUALITY Demagnetizer/Magnetizer

- Hand held demagnetizer/ magnetizer provides results with push of button
- Round ring opening with handle
- 2.5” Ring opening



Length (in.)	Height (in.)	Voltage	Order No.	Price
9	1	110v	**NE70DZ110**	Price

Demagnetizer/Magnetizer

- Keep those small screw and nuts in position
- Simply insert a tool into the magnetizer section, pull it out, and it’s magnetized
- To demagnetize, pass the tool through one of the outside channels or the demagnetizer section


MD001



MD221



40010

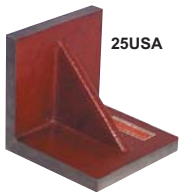
Item	Size (in.)	Opening	Order No.	Price
MAG-MATE®	1-1/8 Cubed	3/8” diameter max. thru-hole	**NE70MD001**	Price
WORLD CLASS QUALITY	2 x 2 x 1	Compact Magnetizer/ Demagnetizer for small parts or tools	**NE70MD221**	Price
wiha Tools that work for you	2 x 2 x 1	Works with items over 1.3” in length and 1/8” or 3mm dia.	**KN5440010**	Price

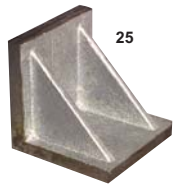
Plain Machined Angle Plates

With ample thickness and ribbed construction, these angle plates offer a versatile means of holding work for layout, machining and inspection and also are widely used as vertical reference. High quality cast iron stress relieved against distortion.

American Made By Suburban Tool:
- Machine Finish Flat & Square .002" per 6"
- Precision Ground Flat & Square .0005" per 6"

Top Quality Import Shop Grade:
- Machine Finish Flat & Square .004" per 6"
- Precision Ground Flat & Square .001" per 6"





Suburban

WORLD CLASS QUALITY

Type - Machined Plain Angle Plate							
				Suburban		Quality Import	
Length (in.)	First Angle (in.)	Second Angle (in.)	Approx. Shipping Weight	Order No.	Price	Order No.	Price
2	2	2	2 lbs	**NL4021USA**	Price	**NL5021**	Price
3	3	3	3 lbs	**NL4022USA**	Price	**NL5022**	Price
4	4	4	7 lbs	**NL4023USA**	Price	**NL5023**	Price
5	5	5	11 lbs	**NL4024USA**	Price	**NL5024**	Price
6	6	6	18 lbs	**NL4025USA**	Price	**NL5025**	Price
8	8	8	38 lbs	**NL4026USA**	Price	**NL5026**	Price
10	10	10	64 lbs	**-**	-	**NL5027**	Price
12	12	12	104 lbs	**NL4028USA**	Price	**NL5028**	Price

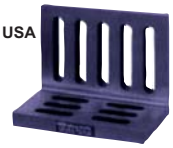
Suburban

WORLD CLASS QUALITY

Type - Precision Ground Plain Angle Plate							
				Suburban		Quality Import	
Length (in.)	First Angle (in.)	Second Angle (in.)	Approx. Shipping Weight	Order No.	Price	Order No.	Price
2	2	2	2 lbs	**NL4031USA**	Price	**NL5031**	Price
3	3	3	3 lbs	**NL4032USA**	Price	**NL5032**	Price
4	4	4	7 lbs	**NL4033USA**	Price	**NL5033**	Price
5	5	5	11 lbs	**NL4034USA**	Price	**NL5034**	Price
6	6	6	18 lbs	**NL4035USA**	Price	**NL5035**	Price
8	8	8	38 lbs	**NL4036USA**	Price	**NL5036**	Price
10	10	10	64 lbs	**-**	-	**NL5037**	Price
12	12	12	104 lbs	**NL4038USA**	Price	**NL5038**	Price

Slotted Angle Plates

These Slotted Angle Plates have convenient clamping slots for mounting and are widely used for machining, layout and inspection.
- Material: High quality close-grained gray iron, stress-relieved against distortion by heat-treatment
- Available in machine finish only
- Available in two qualities: American Made or Top Quality Import
- Webbed end angle plates have side webs and are machined square and parallel on outside faces and ends
- Open End Angle Plates are accurately machined square and parallel on the faces
- Giant Slotted Angle Plates are machined on outside faces





Suburban

WORLD CLASS QUALITY

Type - Machined Giant Slotted Angle Plate							
				Suburban		Quality Import	
Length-A (in.)	First Angle-B (in.)	Second Angle-C (in.)	Approx Shipping Weight	Order No.	Price	Order No.	Price
16	12	9	72 lbs	**NL40G111USA**	Price	**NL50G111**	Price
20	16	12	145 lbs	**NL40G112USA**	Price	**NL50G112**	Price
24	24	18	355 lbs	**-**	-	**NL50G113**	Price

Suburban

WORLD CLASS QUALITY

Type - Machined Open End Slotted Angle Plate							
				Suburban		Quality Import	
Length-A (in.)	First Angle-B (in.)	Second Angle-C (in.)	Approx Shipping Weight	Order No.	Price	Order No.	Price
4-1/2	3-1/2	3	3 lbs	**NL40O11USA**	Price	**NL50O11**	Price
6	5	4-1/2	9 lbs	**NL40O12USA**	Price	**NL50O12**	Price
7	5-1/2	4-1/2	13 lbs	**NL40O13USA**	Price	**NL50O13**	Price
8	6	5	13 lbs	**NL40O14USA**	Price	**NL50O14**	Price
9	7	6	18 lbs	**NL40O15USA**	Price	**NL50O15**	Price
10	8	6	22 lbs	**NL40O16USA**	Price	**NL50O16**	Price
12	9	8	44 lbs	**NL40O17USA**	Price	**NL50O17**	Price

Suburban

WORLD CLASS QUALITY

Type - Machined Webbed (Closed) End Slotted Angle Plate							
				Suburban		Quality Import	
Length-A (in.)	First Angle-B (in.)	Second Angle-C (in.)	Approx Shipping Weight	Order No.	Price	Order No.	Price
3	2-1/2	2	2 lbs	**-**	-	**NL50C1**	Price
3-1/2	3	2-1/2	3 lbs	**NL40C2USA**	Price	**NL50C2**	Price
4-1/2	3-1/2	3	4 lbs	**NL40C3USA**	Price	**NL50C3**	Price
6	5	4-1/2	9 lbs	**NL40C4USA**	Price	**NL50C4**	Price
7	5-1/2	4-1/2	11 lbs	**NL40C5USA**	Price	**NL50C5**	Price
8	6	5	14 lbs	**NL40C6USA**	Price	**NL50C6**	Price
9	7	6	18 lbs	**NL40C7USA**	Price	**NL50C7**	Price
10	8	6	25 lbs	**NL40C8USA**	Price	**NL50C8**	Price
12	9	8	44 lbs	**NL40C9USA**	Price	**NL50C9**	Price

Universal Right Angle Irons

Right Angle Irons can be used widely for fixture component as well as for checking squareness and parallelism. All faces, ends and edges are finished square and parallel.



American Made By Suburban Tool:
- Machine Finish Square & Parallel ±.002” per 6”
- Ground Finish Square within .0005” per 6”
- Parallel Within .00025” per 6”

Top Quality Import Shop Grade:
- Machine Finish Square & Parallel .004” per 6”
- Ground Finish Square within .001” per 6”
- Parallel Within .0005” per 6”

Suburban

WORLD CLASS QUALITY

Type - Machined Universal Right Angle Iron							
				Suburban		Quality Import	
Length-A (in.)	First Angle-B (in.)	Second Angle-C (in.)	Approx Shipping Weight	Order No.	Price	Order No.	Price
3-3/4	4	5	12 lbs	**NL40UR1MUSA**	Price	**NL50UR1M**	Price
4	4	6	15 lbs	**NL40UR2MUSA**	Price	**NL50UR2M**	Price
4	5	6	17 lbs	**NL40UR3MUSA**	Price	**NL50UR3M**	Price
4-1/2	5	8	23 lbs	**NL40UR4MUSA**	Price	**NL50UR4M**	Price
5	8	12	49 lbs	**NL40UR5MUSA**	Price	**NL50UR5M**	Price
5-1/2	7	10	40 lbs	**NL40UR6MUSA**	Price	**NL50UR6M**	Price
5-1/2	8	10	42 lbs	**NL40UR7MUSA**	Price	**NL50UR7M**	Price
6	6	8	37 lbs	**NL40UR8MUSA**	Price	**NL50UR8M**	Price
8	10	12	81 lbs	**NL40UR9MUSA**	Price	**NL50UR9M**	Price
8	9	16	97 lbs	**NL40UR10MUSA**	Price	**NL50UR10M**	Price
10	12	16	139 lbs	**-**	-	**NL50UR11M**	Price
12	12	24	218 lbs	**-**	-	**NL50UR12M**	Price

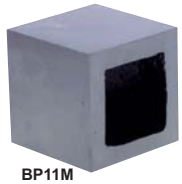
Suburban

WORLD CLASS QUALITY

Type - Precision Ground Universal Right Angle Iron							
				Suburban		Quality Import	
Length-A (in.)	First Angle-B (in.)	Second Angle-C (in.)	Approx Shipping Weight	Order No.	Price	Order No.	Price
3-3/4	4	5	12 lbs	**NL40UR21PUSA**	Price	**NL50UR21P**	Price
4	4	6	15 lbs	**NL40UR22PUSA**	Price	**NL50UR22P**	Price
4	5	6	17 lbs	**NL40UR23PUSA**	Price	**NL50UR23P**	Price
4-1/2	5	8	23 lbs	**NL40UR24PUSA**	Price	**NL50UR24P**	Price
5	8	12	49 lbs	**NL40UR25PUSA**	Price	**NL50UR25P**	Price
5-1/2	7	10	40 lbs	**NL40UR26PUSA**	Price	**NL50UR26P**	Price
5-1/2	8	10	42 lbs	**NL40UR27PUSA**	Price	**NL50UR27P**	Price
6	6	8	37 lbs	**NL40UR28PUSA**	Price	**NL50UR28P**	Price
8	10	12	81 lbs	**NL40UR29PUSA**	Price	**NL50UR29P**	Price

Box Parallels

They can also be used in sets for raising work parallel to a work surface because of its dimensional accuracy. All sides and ends finished parallel, flat and square.



BP11M



BP16M

American Made By Suburban Tool:
- Size Held Within ±.002”
- Machine Finish Square & Parallel .002” per 6”
- Ground Finish Square & Parallel Within .0005” per 6”

Top Quality Import Shop Grade:
- Machine Finish Square & Parallel .004” per 6”
- Ground Finish Square & Parallel Within .001” per 6”

Suburban

WORLD CLASS QUALITY

Type - Machined Box Parallel							
				Suburban		Quality Import	
Length-A (in.)	First Angle-B (in.)	Second Angle-C (in.)	Approx Shipping Weight	Order No.	Price	Order No.	Price
4	4	4	13 lbs	**NL40BP11MUSA**	Price	**NL50BP11M**	Price
4	4	6	16 lbs	**NL40BP12MUSA**	Price	**NL50BP12M**	Price
4	6	6	20 lbs	**NL40BP14MUSA**	Price	**NL50BP14M**	Price
5	10	10	75 lbs	**NL40BP17MUSA**	Price	**NL50BP17M**	Price
5	5	5	18 lbs	**NL40BP13MUSA**	Price	**NL50BP13M**	Price
6	12	12	119 lbs	**NL40BP18MUSA**	Price	**NL50BP18M**	Price
6	6	6	25 lbs	**NL40BP15MUSA**	Price	**NL50BP15M**	Price
6	6	8	40 lbs	**NL40BP16MUSA**	Price	**NL50BP16M**	Price
8	8	8	75 lbs	**NL40BP19MUSA**	Price	**NL50BP19M**	Price
10	10	10	123 lbs	**-**	-	**NL50BP20M**	Price

Suburban

WORLD CLASS QUALITY

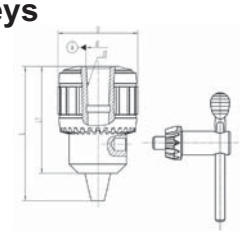
Type - Precision Ground Box Parallel							
				Suburban		Quality Import	
Length-A (in.)	First Angle-B (in.)	Second Angle-C (in.)	Approx Shipping Weight	Order No.	Price	Order No.	Price
4	4	4	13 lbs	**NL40BP21PUSA**	Price	**NL50BP21P**	Price
4	4	6	16 lbs	**NL40BP22PUSA**	Price	**NL50BP22P**	Price
4	6	6	20 lbs	**NL40BP24PUSA**	Price	**NL50BP24P**	Price
5	10	10	75 lbs	**NL40BP27PUSA**	Price	**NL50BP27P**	Price
5	5	5	18 lbs	**NL40BP23PUSA**	Price	**NL50BP23P**	Price
6	12	12	119 lbs	**NL40BP28PUSA**	Price	**NL50BP28P**	Price
6	6	6	25 lbs	**NL40BP25PUSA**	Price	**NL50BP25P**	Price
6	6	8	40 lbs	**NL40BP26PUSA**	Price	**NL50BP26P**	Price
8	8	8	75 lbs	**NL40BP29PUSA**	Price	**NL50BP29P**	Price
10	10	10	123 lbs	**-**	-	**NL50BP30P**	Price

Self Ejecting Safety Drill Chuck Keys



For Use With	Order No.	Price
0 Series	**HK41SK0**	Price
1 Series	**HK41SK1**	Price
2 Series	**HK41SK2**	Price
20N	**HK41SK5**	Price
3, 6 Series & 14N	**HK41SK3**	Price
30, 31 Series 8-1/2N	**HK41SK30**	Price
32, 33 Series & 11N	**HK41SK32**	Price
3333C	**HK41SK32C**	Price
36, 37 Series & 16, 18N	**HK41SK4**	Price
633C, 633D	**HK41SK3C**	Price
7 Series	**HK41SK7**	Price
DC8, SM8, 74K, 22BA, 23BA, 24BA, 26BA, 29A	**HK41SKK**	Price

RAPIDHOLD Chuck Keys



For Use With	Order No.	Price
Model No. 71000	**HL30DKP06T**	Price
Model No. 71001, 71051, 71052	**HL30DKP10T**	Price
Model No. 71002, 71003, 71004, 71053, 71054, 71055	**HL30DKP13T**	Price
Model No. 71005, 71006, 71056	**HL30DKP16T**	Price
Model No. 71007, 71008, 71057, 71058	**HL30DKP20T**	Price
Model No. 71009	**HL30DKP25T**	Price
Model No. 71302, 71303, 71304, 71305	**HL30DKS10S**	Price
Model No. 71306, 71307, 71308, 71309, 71310	**HL30DKS13S**	Price

Drill Chuck Keys for Plain & Ball Bearing Chucks

- These keys meet UL-987-4231 approval standards
- Keys are heat-treated & also plated





Handle - T-Handle		
For Use With	**Order No.**	**Price**
36 Series & 16, 18N	**HK503655**	Price
0 Series	**HK53K0**	Price
1 Series	**HK53K1**	Price
1/4 & 3/8 Multi-Craft	**HK53KG1**	Price
20N	**HK53K5**	Price

Handle - Thumb Handle		
For Use With	**Order No.**	**Price**
14N	**HK503651D**	Price
2 Series	**HK53K2**	Price
3, 6 Series & 14N	**HK53K3**	Price
30, 31 Series & 8-1/2N	**HK53K30**	Price
32, 33 Series & 11N	**HK53K32**	Price
36, 37 Series & 16, 18N	**HK53K4**	Price
7 Series	**HK53K7**	Price
DC8, SM8, 74K, 22BA, 23BA, 24BA, 26BA, 29A	**HK53KK**	Price

Lisle Master Chuck Keys

MADE IN THE USA

- Each master key as 4 sizes
- Strong neodymium magnets for attachment close to the worksite or toolbox
- Cast from alloy steel for strength
- Available in small or large chuck key
- The eight key sizes should cover most chucks that are available



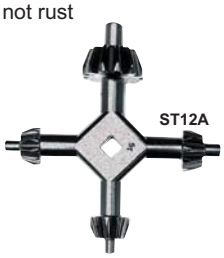
Size	Order No.	Price
4 Sizes for Most Med/Large Chucks	**KN6512060**	Price
4 Sizes For Most Small Chucks	**KN6512050**	Price

STONE TOOLS Master Chuck Keys

Features:

MADE IN THE USA

- Carbon or Stainless Steel Models
- Two sizes open 1/4 to 3/4”
- Open over 200 different chucks
- Master Chuck I - large key fits heavy duty 3/8 to 3/4” chucks (ST12/12A)
- Master Chuck II - smaller key fits 1/4 to light duty 1/2” chucks (ST13/13A)
- Stainless steel models offer extra wear resistants - does not rust





For Use With	Order No.	Price
1/4 to 1/2" Chucks	**ST21ST13**	Price
1/4 to 1/2" Chucks - Stainless Steel	**ST21ST13A**	Price
3/8 to 3/4" Chucks	**ST21ST12**	Price
3/8 to 3/4" Chucks - Stainless Steel	**ST21ST12A**	Price

Key Cad-De with Replaceable Pinions



For Use With	Order No.	Price
#1/K1, TB1/KG1, T4/K7, TB13/KK; Hardware & Industrial Chucks	**HK53CD2**	Price
T6/K3, T5/K32, #2/K32, #13/K30, Industrial Chucks	**HK53CD1**	Price

Key Cad-De Replacment Parts

Description	Order No.	Price
3/16 Screws	**HK531032S**	Price

Super Ball Bearing Heavy Duty Drill Chucks

- Hardened and ground for accuracy



Model No.	Capacity (in.)	Capacity (mm)	Mount	Key Used	Order No.	Price
0710	.040 - 3/8	1-10	2JT	K30	**HK550710**	Price
0715	.040 - 1/2	1-13	3JT	K3	**HK550715**	Price
0720	1/8 - 5/8	3-16	3JT	K3	**HK550720**	Price
0725	1/8 - 3/4	3-19	4JT	DC34KEY	**HK550725**	Price
0730	.200 - 1	.5-25	5JT	K5	**HK550730**	Price

ROHM Ball Bearing Industrial Chucks

- Bodies and jaws hardened and ground
- One piece gear/scroll ring eliminates loss of clamping torque
- Dependable and accurate performance
- Extended life



Model No.	Capacity (in.)	Mount	Key Used	Order No.	Price
BB13-3	1/32 - 1/2	3JT	K3	**HK60215000**	Price
BB16-3	1/32 - 5/8	3JT	K3	**HK60215001**	Price
BB20-4	3/16 - 3/4	4JT	K4	**HK60215002**	Price
BB26-5	3/16 - 1-1/32	5JT	K4	**HK60215003**	Price

Jacobs Super Chuck® Ball Bearing Chucks

Designed for close tolerance production drilling on precision equipment

- Specifically engineered for heavy-duty, close tolerance production drilling
- Adaptable to a wide range of production drilling equipment, jig borers, milling machines, lathes and radials
- Utilizing a ball thrust bearing to reduce friction in the chuck closing mechanism, it permits the application of more gripping force on drill shanks to maximize drilling torque
- Ball bearing construction maximizes gripping force and drilling accuracy
- Jaws center-ground for absolute straightness and alignment
- Through–hardened sleeve teeth plus hardened nose and keyholes provide outstanding wear resistance
- T.I.R. .003” Maximum at half capacity



Model No.	Capacity (in.)	Capacity (mm)	Mount	Key Used	Order No.	Price
8-1/2N	.040 - 1/4	0-6.4	2JT	K30	**HK5030209**	Price
11N	.040 - 3/8	0-10	2JT	K32	**HK5030215**	Price
14N	.040 - 1/2	0-13	3JT	K3	**HK5030221**	Price
16N	1/8 - 5/8	3-16	3JT	K4	**HK5030227**	Price
18N	1/8 - 3/4	3-20	4JT	K4	**HK5030233**	Price
20N	3/8 - 1	10-24	5JT	K5	**HK5030239**	Price

LFA Heavy Duty Super Ball Bearing Chucks

- All parts hardened and ground for accuracy
- Heavy duty holding
- New sliding ring provides friction free movement
- Made in France



Model No.	Capacity (in.)	Mount	Key Used	Order No.	Price
81BS-13A-J2	0 - 5/16	2JT	K30	**HK75881181BF**	Price
82BS-5A-J2	0 - 3/8	2JT	K32	**HK75881082BF**	Price
83S-6A-J3	0 - 1/2	3JT	K3	**HK75881183F**	Price
84S-6A-J3	0 - 5/8	3JT	K3	**HK75881184F**	Price
85BS-9A-J4	3/16 - 1-1/32	4JT	K4	**HK75881085BF**	Price
85S-9A-J4	1/16 - 3/4	4JT	K4	**HK75881085F**	Price

RAPIDHOLD Ball Bearing HD Industrial Drill Chucks

- Heavy duty ball bearing industrial design
- All parts are heat treated and ground within very tight limits
- High accuracy
- Super Ball bearing chucks are widely used on milling machines, lathes, jig bores and radial drilling machines
- Comes with a chuck key
- T.I.R. 0.003”



Model No.	Capacity English	Capacity Metric	Mount	Key Used	Order No.	Price
71000	1/32 - 3/8	1-10mm	2JT	DKP-10T	**HL3071000**	Price
71001	1/32 - 1/2	1-13mm	6JT	DKP-13T	**HL3071001**	Price
71002	1/32 - 1/2	1-13mm	33JT	DKP-13T	**HL3071002**	Price
71003	1/32 - 1/2	1-13mm	3JT	DKP-13T	**HL3071003**	Price
71004	1/8 - 5/8	3-16mm	3JT	DKP-16T	**HL3071004**	Price
71006	1/8 - 3/4	3-20mm	4JT	DKP-20T	**HL3071006**	Price
71005	1/32 - 5/8	1-16mm	3JT	DKP-16T	**HL3071005**	Price
71008	25/64 - 1	10-25mm	5JT	DKP-25T	**HL3071008**	Price
71007	3/16 - 3/4	5-20mm	3JT	DKP-20T	**HL3071007**	Price
71009	0 - 1/4	0.6-6.35mm	2JT	DKP-06T	**HL3071009**	Price

LFA Plain Bearing Heavy Duty Drill Chucks

- All parts hardened and precision crafted
- Plain bearing keyed type
- All models drilled for retaining screws



Model No.	Jacobs Equiv.	Capacity (in.)	Capacity (mm)	Tapered Mount	Key Used	Order No.	Price
80-0A	0A	0 - 5/32	0.3-4.0	0JT	K0	**HK75601080**	Price
81-1A	1A	0 - 1/4	0.3-6.5	1JT	K1	**HK75601081F**	Price
82-2A	2A	0 - 3/8	0.5-10.0	2JT	K7	**HK75601082F**	Price
43-6A	34-02	0 - 1/2	0.5-13.0	2JT	K2	**HK75601043F**	Price
43-6A	34-06	0 - 1/2	0.5-13.0	6JT	K3	**HK75601243F**	Price
43-6A	34-33	0 - 1/2	0.5-13.0	33JT	K32	**HK75601143F**	Price
43b-5A	33	1/16 - 1/2	1.5-13	33JT	K32	**HK75601143BF**	Price
84-6A	3A	1/32 - 5/8	0.5-16.0	3JT	K3	**HK75601184F**	Price
45-6A	36	3/16 - 3/4	5-20	3JT	K3	**HK75601145F**	Price

Geared Drill Chucks with Key

- 1/32 - 1/2” Capacity
- 3/16 - 3/4” Capacity Best Buy



Model No.	Capacity (in.)	Mount	Order No.	Price
DC12	1/32 - 1/2	6JT	**HK55DC12**	Price
DC12A	1/32 - 1/2	33JT	**HK55DC12A**	Price
DC34	3/16 - 3/4	3JT	**HK55DC34**	Price

RAPIDHOLD Plain Bearing Heavy Duty Industrial Drill Chucks

- Heavy duty ball bearing industrial design
- All parts are heat treated and ground within very tight limits
- High accuracy
- Chucks are widely used on drilling equipment like milling machines, lathes, jig boreres, radial drilling machines and woodworking machines
- Chuck Key Included
- T.I.R. 0.003”



Model No.	Capacity (in.)	Capacity (mm)	Mount	Key Used	Order No.	Price
71051	0 - 1/4	0.6-6.35mm	2JT	DKP-06T	**HL3071051**	Price
71052	1/32 - 3/8	1-10mm	3/8-24	DKP-10T	**HL3071052**	Price
71053	1/32 - 1/2	1-13mm	2JT	DKP-13T	**HL3071053**	Price
71054	1/32 - 1/2	1-13mm	6JT	DKP-13T	**HL3071054**	Price
71055	1/32 - 1/2	1-13mm	33JT	DKP-13T	**HL3071055**	Price
71056	1/32 - 5/8	1-16mm	3JT	DKP-16T	**HL3071056**	Price
71057	3/16 - 3/4	5-20mm	4JT	DKP-20T	**HL3071057**	Price
71058	3/16 - 3/4	5-20mm	3JT	DKP-20T	**HL3071058**	Price

Jacobs Heavy Duty Plain Bearing Chuck

Taper Mounted

- Jaws center ground for absolute straightness and alignment
- One piece sleeve eliminates crack between driving teeth, often found in other designs
- Through hardened sleeve teeth, plus hardened nose and keyholes provide outstanding wear resistance
- Each chuck 100% inspected for performance and precision
- T.I.R .004” maximum at half capacity
- Fluted sleeve standard except Model 34-33C, which is smooth and ground
- (2) Equipped with positive drive slot
- (3) Equipped with pin type positive drive
- (4) Equipped with locking collar - 1-1/16-20 thread, smooth sleeve



Model No.	Capacity (in.)	Mount	Key Used	Order No.	Price
0	.135 - 5/32	0JT	K0	**HK506200**	Price
1A	.040 - 1/4	1JT	K1	**HK506206**	Price
2A	.040 - 3/8	2JT	K2	**HK506214**	Price
34-02	.040 - 1/2	2JT	K3	**HK5014442**	Price
34-06	.040 - 1/2	6JT	K3	**HK506295**	Price
34-33	.040 - 1/2	33JT	K3	**HK5014445**	Price
3326A	.080 - 1/2	5/8 Straight	K32	**HK506291**	Price
34-33C(4)	.040 - 1/2	33JT	K3C	**HK5014451**	Price
33	.080 - 1/2	33JT	K32	**HK506279**	Price
3A	1/8 - 5/8	3JT	K3	**HK506223**	Price
33KD(3)	.080 - 1/2	33JT	K32	**HK506281**	Price
3KD(2)	1/8 - 5/8	3JT	K3	**HK506228**	Price
3PD(3)	1/8 - 5/8	3JT	K3	**HK506230**	Price
36	.180 - .800	3JT	K4	**HK506309**	Price
36KD(2)	.180 - .800	3JT	K4	**HK5014865**	Price

ROHM Key Type Drill Chucks

- Bodies and jaws hardened and precision ground
- One piece gear/scroll ring eliminates loss of clamping torque
- Extended life
- Fluted sleeve



Model No.	Capacity (in.)	Mount	Key	Order No.	Price
R1-1	1/64 - 1/4	1JT	K30	**HK60666537**	Price
R2-2	1/32 - 3/8	2JT	K30	**HK60666567**	Price
R3-12TH	1/16 - 1/2	1/2-20	K30	**HK60666575**	Price
R3-2	1/16 - 1/2	2JT	K30	**HK60666571**	Price
R3-33	1/16 - 1/2	33JT	K32	**HK60666572**	Price
R3-38TH	1/16 - 1/2	3/8-24	K30	**HK60666574**	Price
R3-6	1/16 - 1/2	6JT	K30	**HK60666573**	Price
R4-3	1/32 - 5/8	3JT	K3	**HK60666579**	Price
R8-38TH	1/32 - 3/8	3/8-24	K30	**HK60666565**	Price

LLAMBRICH USA Plain Bearing Drill Chucks with Key

- The one-piece gear ring and sleeve eliminates the possibility of the teeth breaking
- The jaws, gear ring and body are totally hardened to avoid wear and lengthen the life of the drill chuck
- Fits tools up to 19mm in diameter (3/4”)
- Machine fitting via JACOBS tapers and threaded mounts



Style - Heavy Duty Jacobs Taper						
Model No.	Capacity (in.)	Capacity (mm)	Mount	Key	Order No.	Price
L40131B	.031 - .394	0.8-10.0	2JT	K34	**HK85L40131B**	Price
L40116B	.059 - .512	1.5-13.0	2JT	K3	**HK85L40116B**	Price
L40117B	.059 - .512	1.5-13.0	6JT	K3	**HK85L40117B**	Price
L40118B	.059 - .512	1.5-13.0	33JT	K3	**HK85L40118B**	Price

Style - Medium Duty Jacobs Taper						
Model No.	Capacity (in.)	Capacity (mm)	Mount	Key	Order No.	Price
L40129B	.020 - .157	0.5-4.0	0JT	K0	**HK85L40129B**	Price
L40130B	.031 - .236	0.8-6.5	1JT	CK4	**HK85L40130B**	Price
L40132B	.031 - .394	0.8-10.0	1JT	K34	**HK85L40132B**	Price
L40133B	.031 - .394	0.8-10.0	2JT	K34	**HK85L40133B**	Price
L40134B	.059 - .512	1.5-13.0	33JT	K2	**HK85L40134B**	Price
L40113B	.059 - .630	1.5-16.0	3JT	K3	**HK85L40113B**	Price
L40120B	.125 - .75	3.0-20.0	3JT	K4	**HK85L40120B**	Price

Style - Heavy Duty Threaded Mount						
Model No.	Capacity (in.)	Capacity (mm)	Mount	Key	Order No.	Price
L40124B	.031 - .236	0.8-6.0	3/8-24	CK4	**HK85L40124B**	Price
L40139B	.031 - .394	0.8-10.0	3/8-24	K34	**HK85L40139B**	Price
L40125B	.031 - .394	0.8-10.0	1/2-20	K34	**HK85L40125B**	Price

Style - Medium Duty Threaded Mount						
Model No.	Capacity (in.)	Capacity (mm)	Mount	Key	Order No.	Price
L40137B	.020 - .157	0.5-4.0	5/16-24	K0	**HK85L40137B**	Price
L40138B	.031 - .236	0.8-6.5	3/8-24	CK4	**HK85L40138B**	Price
L40140B	.031 - .394	0.8-10.0	3/8-24	K34	**HK85L40140B**	Price
L40142B	.031 - .394	0.8-10.0	1/2-20	K34	**HK85L40142B**	Price
L40143B	.059 - .512	1.5-13.0	1/2-20	K2	**HK85L40143B**	Price
L40144B	.059 - .512	1.5-13.0	3/8-24	K2	**HK85L40144B**	Price
L40145B	.059 - .512	1.5-13.0	5/8-16	K2	**HK85L40145B**	Price
L40126B	.059 - .630	1.5-16.0	1/2-20	K3	**HK85L40126B**	Price
L40123B	.059 - .630	1.5-16.0	5/8-16	K3	**HK85L40123B**	Price
L40128B	.118 - .787	3.0-20.0	5/8-16	K4	**HK85L40128B**	Price
L40127B	.118 - .787	3.0-20.0	3/4-16	K4	**HK85L40127B**	Price

Drill Chucks with Shank & Key



Model No.	Capacity (in.)	Shank	Order No.	Price
DC1234	1/32 - 1/2	3/4 SS	**HK55DC1234**	Price
DC12R8	1/32 - 1/2	R8	**HK55DC12R8**	Price
DC3434A	3/16 - 3/4	3/4 SS	**HK55DC3434A**	Price
DC343A	3/16 - 3/4	3MT	**HK55DC343A**	Price
DC34R8A	3/16 - 3/4	R8	**HK55DC34R8A**	Price

Micro Drill Adapters with Drill Chuck

- Complete unit available with either a Albrecht Keyless Chuck (2) or Jacobs Bearing Geared Key Chuck (3)



Chuck No.	Capacity (in.)	Brand Name	Order No.	Price
0 w/Adapter	0 - 5/32	Jacobs	**HK50MDA0(3)**	Price
15J0 w/Adapter	0 - 1/16	Albrecht	**HK50MDA15J0(2)**	Price
30J0 w/Adapter	0 - 1/8	Albrecht	**HK50MDA30J0(2)**	Price
SU40 w/Adapter	0 - 5/32	Rohm	**HK50MDASU40(2)**	Price

Micro Drill Adapter Precision Drill Fixture

- Finger sensitive control
- Reduced drill breakage
- Easier small hole drilling using large high speed machinery
- 1/2” Straight shank
- 3/4” Travel
- Easy operation
- Grasp free turning ring, feed with gentle finger pressure, auto return upon release
- Has 0JT Male taper



Order No.	Price
HK50MDA	Price

Jacobs® Multi-Craft Medium Duty Chucks

- (1) Minimum capacities — Models JKP and JKT



Model No.	Capacity (in.)	Capacity (mm)	Mount	Key Used	Order No.	Price
30243	0 - 1/4	0-6.5	3/8-24	KG1	**HK5030243**	Price
30247	1/16 - 3/8	2-10	3/8-24	KG1	**HK5030247**	Price
30598	5/64 - 1/2	2-13	3/8-24	KK	**HK5030598**	Price
30602	5/64 - 1/2	2-13	1/2-20	KK	**HK5030602**	Price

Jacobs® Heavy Duty Plain Bearing Chucks

Thread Mounted



- Fluted sleeve standard on all models
- Center-ground jaws provide absolute straightness and alignment
- One piece sleeve designe elimiantes cracks between driving teeth
- Sleeve teech, nose piece and keyholes are through-hardened, providing outstanding wear resistance

Type - Heavy Duty Plain Bearing Drill Chuck					
Model No.	**Capacity (in.)**	**Mount**	**Key Used**	**Order No.**	**Price**
7BA 3/8	.040 - 1/4	3/8-24	K7	**HK506255**	Price
32BA 1/2	.040 - 3/8	1/2-20	K32	**HK508859**	Price
3B	1/8 - 5/8	1/2-20	K3	**HK5033351**	Price
3B 5/8	1/8 - 5/8	5/8-16	K3	**HK506232**	Price
36B 5/8	.180 - .800	5/8-16	K4	**HK506314**	Price
36B 3/4	.180 - .800	3/4-16	K4	**HK506316**	Price

Type - Medium Duty Plain Bearing Drill Chuck					
Model No.	**Capacity (in.)**	**Mount**	**Key Used**	**Order No.**	**Price**
OB 5/16	.135 - 5/32	5/16-24	K0	**HK506204**	Price
1B 3/8	.040 - 1/4	3/8-24	K1	**HK506208**	Price
2BA 3/8	.040 - 3/8	3/8-24	K2	**HK506219**	Price
41BA 1/2	.040 - 3/8	1/2-20	K30	**HK5031090**	Price
33BA 3/8	.080 - 1/2	3/8-24	K32	**HK506283**	Price
33BA 1/2	.080 - 1/2	1/2-20	K32	**HK50JCM6287**	Price
33BA 5/8	.080 - 1/2	5/8-16	K32	**HK506289**	Price

LFA Thread Mounted Chucks



- All parts hardened and precision crafted
- Plain bearing keyed type
- All models drilled for retaining screws

Model No.	Jacobs Equiv.	Capacity (in.)	Capacity (mm)	Threaded Mount	Key Used	Order No.	Price
81-1B	1B-3B8	0 - 1/4	0.3-6.5	3/8-24	K1	**HK75602081A**	Price
82-2B	2BA-3/8	0 - 3/8	0.5-10.0	3/8-24	K2	**HK75602082A**	Price
42-13B	31BA-3/8	0 - 3/8	0.5-10.0	3/8-24	K30	**HK75602042A**	Price
42-13B	31BA-1/2	0 - 3/8	0.5-10.0	1/2-20	K30	**HK75602142A**	Price
82b-5B	32BA-1/2	0 - 3/8	0.5-10.0	1/2-20	K32	**HK75602182BA**	Price
43b-5B	33BA-3/8	1/16 - 1/2	1.5-13	3/8-24	K32	**HK75602043BA**	Price
43b-5B	33BA-1/2	1/16 - 1/2	1.5-13	1/2-20	K32	**HK75602143BA**	Price
43b-5B	33BA-5/8	1/16 - 1/2	1.5-13	5/8-16	K32	**HK75602443BA**	Price

ROHM Key Type Drill Chucks



- Percussion drilling
- Drilling in steel and wood
- Screwing
- With through-hole for clockwise and anti-clockwise rotation
- Toothing according to DIN 6349

Size	Mount	Capacity Metric	Capacity Inch	Outside Dia.	OAL	Key used	Weight	Order No.	Price
10mm	1/2 - 20	1-10	.039-.393	1.32" / 33.5mm	2.42" / 61.5mm	S2A	.5130 lbs	**HK601261225**	Price
10mm	3/8 - 24	1-10	.039-.393	1.32" / 33.5mm	2.42" / 61.5mm	S2A	.5299 lbs	**HK601261226**	Price
13mm	1/2 - 20	1.5-13	.059-.511	1.32" / 33.5mm	2.93" / 74.5mm	S2A	.8332 lbs	**HK601261227**	Price
13mm	3/8 - 24	1.5-13	.059-.511	1.32" / 33.5mm	2.93" / 74.5mm	S2A	.8565 lbs	**HK601261228**	Price

Keyless Drill Chucks

- Accurately made hardened and ground
- For production line and toolroom usage
- Gripping force increases as load does, will not slip



Model No.	Capacity English	Mount	Order No.	Price
TDC-K8H1	0 - 5/16	1JT	**HK55K81**	Price
TDC-K10H2	0 - 3/8	2JT	**HK55K102**	Price
TDC-K10H33	0 - 3/8	33JT	**HK55K1033**	Price
TDC-K13H6	0 - 1/2	6JT	**HK55K136**	Price
TDC-K13H33	0 - 1/2	33JT	**HK55K1333**	Price
TDC-K16H6	0 - 5/8	6JT	**HK55K166**	Price

LLAMBRICHUSA Industrial Keyless Drill Chucks

- Drill chucks for medium duty industrial use, available with threaded mounts for professional hand held drilling machines and with tapered mounts for stationary drilling machines
- Automatic fittings for efficient quick change of tools
- Self-tightening mechanism automatically increases the grip in proportion to the increase in torque during the drilling and avoids the tool from slipping in clockwise rotation rotation
- Fits tools of up to 3/4" in diameter drill shank



Model No.	Capacity (in.)	Mount	Dia. (in.)	Length Open (in.)	Order No.	Price
L40158B	0 - 5/32	1JT	1.0200	2.17	**HK85L40158B**	Price
L40159B	0 - 1/4	1JT	1.3000	2.76	**HK85L40159B**	Price
L40163B	0 - 5/16	1JT	1.3400	2.76	**HK85L40163B**	Price
L40164B	0 - 5/16	2JT	1.3500	2.76	**HK85L40164B**	Price
L40221B	0 - 3/8	33JT	1.5400	3.15	**HK85L40221B**	Price
L40167B	0 - 3/8	2JT	1.6100	3.36	**HK85L40167B**	Price
L40168B	1/32 - 1/2	2JT	1.8500	4.03	**HK85L40168B**	Price
L40169B	1/32 - 1/2	33JT	1.8500	4.03	**HK85L40169B**	Price
L40170B	1/32 - 1/2	6JT	1.8500	4.03	**HK85L40170B**	Price
L40173B	1/8 - 5/8	33JT	2.0200	4.14	**HK85L40173B**	Price
L40174B	1/8 - 5/8	6JT	2.0200	4.14	**HK85L40174B**	Price
L40177B	3/16 - 3/4	3JT	2.5100	5.03	**HK85L40177B**	Price

RAPIDHOLD Precision Heavy Duty Industrial Keyless Drill Chucks

- Self tightening
- Extremely high accuracy
- All parts are heat treated and ground within very tight limits
- Chucks are widely used on a drilling equipment like milling machines, lathes, jig borers, radial drilling machines
- T.I.R. 0.002"



Model No.	Capacity (in.)	Capacity (mm)	Mount	Order No.	Price
71200	1/64 - 1/4	.2-6mm	1JT	**HL3071200**	Price
71203	1/64 - 3/8	.2-10mm	2JT	**HL3071203**	Price
71202	1/64 - 3/8	.2-10mm	33JT	**HL3071202**	Price
71204	1/64 - 1/2	.2-13mm	2JT	**HL3071204**	Price
71206	1/64 - 1/2	.2-13mm	6JT	**HL3071206**	Price
71205	1/64 - 1/2	.2-13mm	33JT	**HL3071205**	Price
71207	1/64 - 5/8	.2-16mm	6JT	**HL3071207**	Price
71208	1/64 - 3/4	.2-20mm	3JT	**HL3071208**	Price

RAPIDHOLD Standard Accuracy Heavy Duty Industrial Keyless Drill Chucks

- Self tightening
- Standard accuracy
- All parts are heat treated and ground within very tight limits
- Chucks are widely used on a drilling equipment like milling machines, lathes, jig borers, radial drilling machines
- T.I.R. 0.004"



Model No.	Capacity (mm)	Mount	Order No.	Price
71150	.2-6mm	1JT	**HL3071150**	Price
71152	.2-10mm	2JT	**HL3071152**	Price
71153	.2-13mm	2JT	**HL3071153**	Price
71157	.2-20mm	6JT	**HL3071157**	Price
71154	.2-13mm	33JT	**HL3071154**	Price
71155	.2-13mm	6JT	**HL3071155**	Price
71156	.2-16mm	3JT	**HL3071156**	Price

Porta Precision Industrial Keyless Chucks

- **Applications:** Through its permanent and automatic retightening, this proven design is ideal for high drill speeds and precision work with drills, boring mills and special drilling machines.
- Self tightening, no key required
- Due to tapered sleeve, tool and workpiece can be observed clearly
- Automatic retightening
- Only suitable for right-hand rotation
- Manufactured in Europe



Model No.	Capacity (in.)	Mount	Order No.	Price
P32J1	0 - 1/4	1JT	**HK70P32J1**	Price
P36J2	0 - 3/8	2JT	**HK70P36J2**	Price
P36J33	0 - 3/8	33JT	**HK70P36J33**	Price
P37J2	1/32 - 1/2	2JT	**HK70P37J2**	Price
P37J33	1/32 - 1/2	33JT	**HK70P37J33**	Price
P37J6	1/32 - 1/2	6JT	**HK70P37J6**	Price
P40J6	1/8 - 5/8	6JT	**HK70P40J6**	Price

RAPIDHOLD High Precision HD Nickel Plated Industrial Keyless Drill Chucks

- Self tightening
- Extremely high accuracy with high RPM
- Rigid & heavy-duty design
- Wide gripping capacity
- For use with all CNC machines
- T.I.R. 0.002"



Model No.	Capacity English	Mount	Capacity Metric	Order No.	Price
71300	1/64 - 1/8	0JT	.2-3mm	**HL3071300**	Price
71301	1/64 - 5/32	1JT	.2-4mm	**HL3071301**	Price
71302	1/64 - 1/4	1JT	.2-6mm	**HL3071302**	Price
71303	1/64 - 5/16	2JT	.2-8mm	**HL3071303**	Price
71304	1/64 - 3/8	2JT	.2-10mm	**HL3071304**	Price
71305	1/64 - 3/8	33JT	.2-10mm	**HL3071305**	Price
71306	1/64 - 1/2	2JT	.2-13mm	**HL3071306**	Price
71307	1/64 - 1/2	33JT	.2-13mm	**HL3071307**	Price
71308	1/64 - 1/2	6JT	.2-13mm	**HL3071308**	Price
71309	1/64 - 5/8	6JT	.2-16mm	**HL3071309**	Price
71310	1/64 - 3/4	3JT	.2-20mm	**HL3071310**	Price

ROHM EXTRA-RV 40 - Orange Line



- For corded and cordless drills with and without spindle stop
- Impact-resistant quick-action drill chuck
- With through-hole for clockwise and counterclockwise rotation
- Easy clamping and locking
- Radial locking device
- Impact-resistant
- Plastic design with radial locking
- Keyless clamping by turning the sleeve

Size	Mount	Capacity (mm)	Capacity Inch				Order No.	Price
10mm	1/2 - 20	1-10	.039-.393	1.68" / 42.7mm	2.36" / 60mm	.3571 lbs	**HK601261215**	Price
10mm	1/2 - 20	1-10	.039-.393	1.68" / 42.7mm	2.36" / 60mm	.3670 lbs	**HK601261216**	Price
10mm	3/8 - 24	1-10	.039-.393	1.68" / 42.7mm	2.36" / 60mm	.3809 lbs	**HK601261217**	Price
13mm	1/2 - 20	1.5-13	.059-.511	1.68" / 42.7mm	2.66" / 67.5mm	.4551 lbs	**HK601261213**	Price
13mm	1/2 - 20	1.5-13	.059-.511	1.68" / 42.7mm	2.66" / 67.5mm	.4576 lbs	**HK601261214**	Price
13mm	1/2 - 20	1.5-13	.059-.511	1.68" / 42.7mm	2.66" / 67.5mm	.5236 lbs	**HK601261211**	Price
13mm	1/2 - 20	1.5-13	.059-.511	1.68" / 42.7mm	2.66" / 67.5mm	.5364 lbs	**HK601261212**	Price

ROHM Keyless Chucks

Quick-Action Drill Chucks with Ball Bearing Self-Tightening High Precision Design



- Ideal for high drill speeds and precision work with drills, boring mills and special drilling machines
- Sharply tapered sleeve
- High Concentricity
- High clamping power — easy release
- Keyless; Long, service life; All hardened; Parts interchangeabl.
- Accuracy plus economy
- Made In Germany

Model No.	Capacity (in.)	Mount	Order No.	Price
SU40	0 - 5/32	0JT	**HK60SU40**	Price
SU61	0 - 1/4	1JT	**HK60SU61**	Price
SU102	0 - 3/8	2JT	**HK60SU102**	Price
SU103	0 - 3/8	33JT	**HK60SU103**	Price
SU132	1/32 - 1/2	2JT	**HK60SU132**	Price
SU136	1/32 - 1/2	6JT	**HK60SU136**	Price
SU166	1/8 - 5/8	6JT	**HK60SU166**	Price

ROHM Spiro Quick-Action Drill Chucks

- With Ball Bearing
- Self Tightening
- High Precision Design



Model No.	Capacity (in.)	Mount	Outside Dia.	Length Open	Order No.	Price
S6J1	0 - 1/4	1JT	28mm	62.5mm	**HK60S6J1**	Price

ALBRECHT Keyless Chucks



- Used on the finest precision drilling machinery where close tolerance drilling is essential
- All working parts are of alloy steel and expertly hardened making the Albrecht an ideal chuck for heavy duty drilling
- Designed for both toolroom and production machinery where accuracy, gripping power and the keyless features are desired
- Used today on high accuracy drill presses, jig borers, milling machines and production drilling equipment
- Model 15-J0 keyless drill chuck is especially designed for holding small diameter twist drills and has a micrometer graduation on its sleeve to facilitate the changing of the smallest drills
- Model 15-J0 has a maximum capacity of 1/16" and a minimum capacity of .008



Model No.	Capacity (in.)	Mount	Dia. (in.)	Length Open (in.)	Order No.	Price
15J0	0 to 1/16	0JT	3/4	1-15/32	**HK6515J0**	Price
30J0	0 to 1/8	0JT	15/16	1-47/64	**HK6530J0**	Price
30J1	0 to 1/8	1JT	15/16	1-47/64	**HK6530J1**	Price
65J1	0 to 1/4	1JT	1-11/32	2-7/16	**HK6565J1**	Price
100J2	0 to 3/8	2JT	1-11/16	3-5/32	**HK65100J2**	Price
100J33	0 to 3/8	33JT	1-11/16	3-5/32	**HK65100J33**	Price
130J2	1/32 to 1/2	2JT	1-31/32	3-9/16	**HK65130J2**	Price
130J33	1/32 to 1/2	33JT	1-31/32	3-9/16	**HK65130J33**	Price
130J6	1/32 to 1/2	6JT	1-31/32	3-9/16	**HK65130J6**	Price
160J6	1/8 to 5/8	6JT	2-7/32	3-3/4	**HK65160J6**	Price
1603416	1/8 to 5/8	3/4-16	2-7/32	3-3/4	**HK651603416**	Price

Classic Plus Keyless Drill Chucks with Integral Shank

- Integral shank design is more compact than a combined drill chuck and arbor
- Maximum RPM: 7,000



					RAPIDKUT		ALBRECHT		LLAMBRICHUSA	
					Rapidkut		Albrecht		Llambrich USA	
Shank	Model No.	Capacity (in.)	Weight (lbs.)	Capacity (mm)	Order No.	Price	Order No.	Price	Order No.	Price
5/8 SS	CP130-5/8	1/32 - 1/2	2.2	1-13	-	-	**HK6573050**	Price	**HK85L31412B**	Price
2MT	CP130-2MT	1/32 - 1/2	2.3	1-13	-	-	**HK6573010**	Price	**HK85L31408B**	Price
3MT	CP130-3MT	1/32 - 1/2	2.6	1-13	-	-	**HK6573020**	Price	**HK85L31409B**	Price
4MT	CP130-4MT	1/32 - 1/2	3.3	1-13	-	-	**HK6573030**	Price	**HK85L31410B**	Price
R8	CP130-R8	1/32 - 1/2	2.6	1-13	-	-	**HK6573040**	Price	**HK85L31411B**	Price
BT40	BT40DC13096M	1/32 - 1/2	3.9	1-13	**TS1124601**	Price	-	-	-	-
BT50	BT50DC13110M	1/32 - 1/2	9.7	1-13	**TS1125601**	Price	-	-	-	-
CAT40	CV40DC13M421	1/32 - 1/2	3.84	1-13	**TS1121603**	Price	-	-	-	-
CAT50	CV50DC13M421	1/32 - 1/2	7.85	1-13	**TS1122604**	Price	-	-	-	-

Taper Shank Arbors



		Rapidhold		Jacobs		Quality Import	
Shank	Jacobs Taper	Order No.	Price	Order No.	Price	Order No.	Price
1MT	0JT	HL3175001	Price	HK5004805	Price	-	-
1MT	1JT	HL3175002	Price	-	-	GN5311	Price
1MT	2JT	HL3175003	Price	HK507300	Price	GN5312	Price
1MT	33JT	HL3175004	Price	-	-	GN53133	Price
1MT	6JT	HL3175005	Price	HK507303	Price	GN5316	Price
2MT	0JT	HL3175006	Price	HK5004815	Price	-	-
2MT	1JT	HL3175007	Price	HK507306	Price	GN5321	Price
2MT	2JT	HL3175008	Price	HK507307	Price	GN5322	Price
2MT	33JT	HL3175009	Price	HK507312	Price	GN53233	Price
2MT	3JT	HL3175010	Price	HK507308	Price	GN5323	Price
2MT	4JT	HL3175011	Price	HK507309	Price	-	-
2MT	6JT	HL3175012	Price	HK507311	Price	GN5326	Price
3MT	1JT	HL3175013	Price	HK507313	Price	-	-
3MT	2JT	HL3175014	Price	HK507314	Price	GN5332	Price
3MT	33JT	HL3175015	Price	HK507319	Price	GN53333	Price
3MT	3JT	HL3175016	Price	HK507315	Price	GN5333	Price
3MT	4JT	HL3175017	Price	HK507316	Price	GN5334	Price
3MT	5JT	HL3175018	Price	HK507317	Price	-	-
3MT	6JT	HL3175019	Price	HK507318	Price	GN5336	Price
4MT	2JT	HL3175020	Price	HK507320	Price	-	-
4MT	33JT	HL3175021	Price	HK507325	Price	GN53433	Price
4MT	3JT	HL3175022	Price	HK507321	Price	GN5343	Price
4MT	4JT	HL3175023	Price	HK507322	Price	GN5344	Price
4MT	5JT	HL3175024	Price	HK507323	Price	-	-
4MT	6JT	HL3175025	Price	HK507324	Price	GN5346	Price
5MT	3JT	HL3175026	Price	HK507327	Price	-	-
5MT	4JT	HL3175027	Price	HK507328	Price	GN5354	Price

Threaded Taper Shank Arbors



		Rapidhold		Jacobs	
Shank	Thread Size	Order No.	Price	Order No.	Price
2MT	1/2-20	HL3175082	Price	HK507346	Price
2MT	3/8-24	HL3175081	Price	HK507345	Price
2MT	5/8-16	HL3175083	Price	HK507347	Price

Jacobs Chuck Removal Wedges

- For removal of chuck with tapered spindles

For Use With	Order No.	Price
All Jacobs Chucks with 1JT	HK5013266	Price
All Jacobs Chucks with 2JT	HK5013267	Price
All Jacobs Chucks with 3JT	HK5013268	Price
All Jacobs Chucks with 6JT	HK5013269	Price



Note: Removal of 4JT and 5JT requires stacking of No. 3 and No. 6 Wedge sets

Jacobs Jaw & Nut Repair Units

- For plain bearing key type chucks



For Chuck Model	Order No.	Price
33, 33BA, 3326A, 33KD, 33F, 33BA	HK507423	Price
34-02, 34-06, 34-33, 34-33C	HK507424	Price
36, 36B, 36KD, 36PD	HK507425	Price
3A, 3B, 3KD, 3PD	HK507417	Price

Jacobs Sleeves

- For plain bearing key type chucks



For Chuck Model	Order No.	Price
33, 33BA, 3326A, 33KD, 33BA	HK505016	Price
34-02, 34-06, 34-33, 34-33C	HK505046	Price
36, 36B, 36KD, 36PD	HK505066	Price
3A, 3B, 3KD, 3PD	HK504944	Price

Straight Shank Arbors



		Rapidhold		Jacobs		Quality Import	
Shank Dia. (in)	Jacobs Taper	Order No.	Price	Order No.	Price	Order No.	Price
1/2	0JT	HL3175041	Price	HK507348	Price	-	-
1/2	1JT	HL3175042	Price	HK507349	Price	GN53121	Price
1/2	2JT	HL3175043	Price	HK507350	Price	GN53122	Price
1/2	33JT	HL3175044	Price	HK507354	Price	GN531233	Price
1/2	3JT	HL3175045	Price	HK507351	Price	GN53123	Price
1/2	4JT	HL3175046	Price	-	-	GN53124	Price
1/2	6JT	HL3175047	Price	HK507353	Price	GN53126	Price
5/8	1JT	HL3175048	Price	-	-	GN53581	Price
5/8	2JT	HL3175049	Price	HK507356	Price	GN53582	Price
5/8	33JT	HL3175050	Price	HK507360	Price	GN535833	Price
5/8	3JT	HL3175051	Price	HK507357	Price	GN53583	Price
5/8	6JT	HL3175052	Price	HK507359	Price	GN53586	Price
3/4	2JT	HL3175053	Price	HK507361	Price	GN53342	Price
3/4	33JT	HL3175054	Price	HK507365	Price	GN533433	Price
3/4	3JT	HL3175055	Price	HK507362	Price	GN53343	Price
3/4	4JT	HL3175056	Price	-	-	GN53344	Price
3/4	6JT	HL3175057	Price	HK507364	Price	GN53346	Price
1	33JT	HL3175058	Price	-	-	GN531033	Price
1	3JT	HL3175059	Price	HK507367	Price	GN53103	Price
1	4JT	HL3175060	Price	-	-	GN53104	Price
1	6JT	HL3175061	Price	HK507368	Price	GN53106	Price

R-8 Shanks



	Rapidhold		Jacobs		Quality Import	
Chuck Taper	Order No.	Price	Order No.	Price	Order No.	Price
3JT	HL3175074	Price	HK507340	Price	GN53R8G3	Price
1JT	HL3175071	Price	-	-	GN53R8G1	Price
2JT	HL3175072	Price	HK507339	Price	GN53R8G2	Price
4JT	HL3175075	Price	HK507341	Price	-	-
6JT	HL3175076	Price	HK507342	Price	GN53R8G6	Price
33JT	HL3175073	Price	HK507343	Price	GN53R8G33	Price

ALBRECHT Jaws Only For Albrecht Chucks

Chuck Size	Order No.	Price
100J Drill Chucks	HK65U100J	Price
130J Drill Chucks	HK65U130J	Price
15J Drill Chucks	HK65U15J	Price
160J Drill Chucks	HK65U160J	Price
30J Drill Chucks	HK65U30J	Price
50J Drill Chucks	HK65U50J	Price
65J Drill Chucks	HK65U65J	Price
80J Drill Chucks	HK65U80J	Price

Jacobs Replacement Parts



	Ball Bearing / Super Chucks Replacement Part Service Kits For Older Model Chucks		Jaw and Nut Replacement Kit for Newer Models	
For Use With	Order No.	Price	Order No.	Price
8-1/2N Drill Chucks	HK5033416	Price	HK5030343	Price
11N Drill Chucks	HK5033417	Price	HK5030344	Price
14N Drill Chucks	HK5033418	Price	HK5030345	Price
16N Drill Chucks	HK5033419	Price	HK5030346	Price
18N Drill Chucks	HK5033420	Price	HK5030347	Price
20N Drill Chucks	HK5033421	Price	HK5030348	Price

Keyleashes for Drill Chuck Keys



For Use With	Order No.	Price
K0, K1, K7, KG	**HK503685**	Price
K30, K32, K2, KK	**HK503686**	Price

Knock-Out Drill Drifts

- Heavy duty forged



OAL (in.)	Thickness (in.)	Width at Hole (in.)	Order No.	Price
4-1/2	13/64	11/16	**GT8001**	Price
5-1/8	1/4	13/16	**GT8002**	Price
6-3/4	5/16	1-1/16	**GT8003**	Price
7-1/8	15/32	1-1/8	**GT8004**	Price

Safety Shield Chip Hook-R

- New safety orange shielded chip puller
- 5" Diameter shield
- 1" Diameter handle, 4-1/2" long
- 1/4" USA steel rod, 1-1/2" hook with 60° point standard



Hook Length (in)	Order No.	Price
18	**HF70SCH18**	Price
24	**HF70SCH24**	Price
30	**HF70SCH30**	Price

Morse Taper Drill Sleeve

Standard Sleeves:
- Toughened tang
- Ground externally
- Reamed internally

Hardened Sleeves:
- Case hardened throughout
- Ground internally and externally



		Hardened		Standard	
Inside Taper	Outside Taper	Order No.	Price	Order No.	Price
1MT	2MT	**GT51012**	Price	**GT50012**	Price
1MT	3MT	**GT51013**	Price	**GT50013**	Price
1MT	4MT	**GT51014**	Price	**GT50014**	Price
1MT	5MT	**GT51015**	Price	**GT50015**	Price
2MT	3MT	**GT51023**	Price	**GT50023**	Price
2MT	4MT	**GT51024**	Price	**GT50024**	Price
2MT	5MT	**GT51025**	Price	**GT50025**	Price
3MT	4MT	**GT51034**	Price	**GT50034**	Price
3MT	5MT	**GT51035**	Price	**GT50035**	Price
4MT	5MT	**GT51045**	Price	**GT50045**	Price
4MT	6MT	**GT51046**	Price	**GT50046**	Price
5MT	6MT	**GT51056**	Price	**GT50056**	Price

Jacobs Morse Taper Drill Sleeves

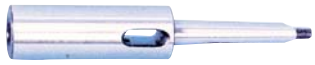
- Oil hardened and externally precision ground with hardened tang



Inside Taper	Outside Taper	Order No.	Price
1MT	2MT	**HK5130422**	Price
1MT	3MT	**HK5130424**	Price
1MT	4MT	**HK5130427**	Price
2MT	3MT	**HK5130423**	Price
2MT	4MT	**HK5130426**	Price
2MT	5MT	**HK5130430**	Price
3MT	4MT	**HK5130425**	Price
3MT	5MT	**HK5130429**	Price
4MT	5MT	**HK5130428**	Price
4MT	6MT	**HK5130639**	Price
5MT	6MT	**HK5130431**	Price

Morse Taper Extension Sockets

- Morse Taper Extension Socket



			Jacobs		Quality Import	
Inside Taper	Outside Taper	OAL (in.)	Order No.	Price	Order No.	Price
1MT	1MT	5-3/4	-	-	**GT60011**	Price
1MT	2MT	6-3/8	-	-	**GT60012**	Price
1MT	3MT	6-7/8	-	-	**GT60013**	Price
1MT	4MT	7-7/8	-	-	**GT60014**	Price
1MT	5MT	9-1/8	-	-	**GT60015**	Price
2MT	1MT	6-3/8	-	-	**GT60021**	Price
2MT	2MT	6-7/8	**HK5130446**	Price	**GT60022**	Price
2MT	3MT	7-5/8	**HK5130449**	Price	**GT60023**	Price
2MT	4MT	8-1/2	-	-	**GT60024**	Price
2MT	5MT	9-3/4	-	-	**GT60025**	Price
3MT	2MT	7-3/4	**HK5130447**	Price	**GT60032**	Price
3MT	3MT	8-1/2	**HK5130450**	Price	**GT60033**	Price
3MT	4MT	9-3/8	**HK5130452**	Price	**GT60034**	Price
3MT	5MT	10-5/8	-	-	**GT60035**	Price
4MT	3MT	9-3/8	**HK5130451**	Price	**GT60043**	Price
4MT	4MT	10-1/2	**HK5130453**	Price	**GT60044**	Price
4MT	5MT	11-7/8	**HK5130455**	Price	**GT60045**	Price
4MT	6MT	14	-	-	**GT60046**	Price
5MT	3MT	10-5/8	-	-	**GT60053**	Price
5MT	4MT	11-7/8	**HK5130454**	Price	**GT60054**	Price
5MT	5MT	13-1/4	**HK5130456**	Price	**GT60055**	Price
5MT	6MT	15-3/8	-	-	**GT60056**	Price
6MT	6MT	18-9/16	-	-	**GT60066**	Price

Long Extension Sockets

- Precision ground and completely hardened
- Extra length sockets to reach the more distant location for machining



Inside Taper	Outside Taper	OAL (in.)	Order No.	Price
1MT	2MT	10-3/16	**GT65812**	Price
2MT	2MT	11-9/16	**GT65822**	Price
2MT	3MT	12-5/16	**GT65823**	Price
2MT	4MT	13-5/16	**GT65824**	Price
3MT	3MT	14	**GT65833**	Price
3MT	4MT	15	**GT65834**	Price
4MT	3MT	15-15/16	**GT65843**	Price
4MT	4MT	16-15/16	**GT65844**	Price
5MT	5MT	20-13/16	**GT65855**	Price

Solid Sockets



- Soft series have a straight O.D. tapered inside and are externally ground
- Hard series sockets have a straight O.D. tapered inside and are internally & externally ground

			Hardened		Soft	
Inside Taper	Outside Dia. (in.)	OAL (in)	Order No.	Price	Order No.	Price
1MT	1	3-1/2	**GT59001**	Price	**GT58001**	Price
1MT	1-1/4	3-1/2	**GT59002**	Price	**GT58002**	Price
1MT	1-1/2	3-1/2	**GT59003**	Price	**GT58003**	Price
2MT	1	4	**GT59004**	Price	**GT58004**	Price
2MT	1-1/4	4	**GT59005**	Price	**GT58005**	Price
2MT	1-1/2	4	**GT59006**	Price	**GT58006**	Price
2MT	1-3/4	4	**GT59007**	Price	**GT58007**	Price
2MT	2	4	**GT59008**	Price	**GT58008**	Price
3MT	1-1/4	4-3/4	**GT59009**	Price	**GT58009**	Price
3MT	1-1/2	4-3/4	**GT59010**	Price	**GT58010**	Price
3MT	1-3/4	4-3/4	**GT59011**	Price	**GT58011**	Price
3MT	2	4-3/4	**GT59012**	Price	**GT58012**	Price
4MT	1-1/2	6	**GT59013**	Price	**GT58013**	Price
4MT	1-3/4	6	**GT59014**	Price	**GT58014**	Price
4MT	2	6	**GT59015**	Price	**GT58015**	Price
5MT	2-1/2	7-3/8	**GT59017**	Price	**GT58017**	Price
5MT	2-1/4	7-3/8	**GT59016**	Price	**GT58016**	Price

Rough Sockets

MADE IN THE USA

- Finished Morse taper inside and outside end
- Other end blank to allow turning to fit machine



Inside Taper	Outside Dia. (in.)	OAL (in.)	Order No.	Price
1MT	1-1/8	7-1/2	**GT7001**	Price
2MT	1-1/4	8	**GT7002**	Price
3MT	1-5/8	10	**GT7003**	Price
4MT	2	12-1/2	**GT7004**	Price
5MT	2-3/4	16	**GT7005**	Price

Split Sleeve Drill Drivers



Fractional — Letter — Wire Gage

- For straight shank tools
- Drill driver provides the means of adapting straight shank drill to morse taper spindles

Morse Taper Shank - 1		
Drill Size (in.)	Order No.	Price
1/16	**HA6071117**	Price
5/64	**HA6071125**	Price
1/8	**HA6071149**	Price
9/64, #28	**HA6071156**	Price
5/32	**HA6071162**	Price
11/64	**HA6071168**	Price
3/16	**HA6071174**	Price
13/64	**HA6071181**	Price
7/32	**HA6071186**	Price
15/64, A	**HA6071191**	Price
1/4, E	**HA6071196**	Price
17/64, H	**HA6071200**	Price
9/32, K	**HA6071205**	Price
19/64	**HA6071210**	Price
5/16	**HA6071213**	Price
21/64	**HA6071216**	Price
11/32	**HA6071219**	Price
23/64	**HA6071223**	Price
3/8	**HA6071225**	Price

Morse Taper Shank - 2		
Drill Size (in.)	Order No.	Price
1/16	**HA6072202**	Price
3/32, #42	**HA6072219**	Price
7/64	**HA6072227**	Price
1/8	**HA6072234**	Price
9/64, #28	**HA6072241**	Price
5/32	**HA6072247**	Price
11/64	**HA6072253**	Price
3/16	**HA6072259**	Price
13/64	**HA6072266**	Price
7/32, #2	**HA6072271**	Price
15/64, A	**HA6072276**	Price
1/4, E	**HA6072281**	Price
17/64, H	**HA6072285**	Price
9/32, K	**HA6072290**	Price

Morse Taper Shank - 2		
Drill Size (in.)	Order No.	Price
19/64	**HA6072295**	Price
5/16	**HA6072298**	Price
21/64	**HA6072301**	Price
11/32	**HA6072304**	Price
23/64	**HA6072308**	Price
3/8	**HA6072310**	Price
25/64	**HA6072313**	Price
13/32	**HA6072316**	Price
27/64	**HA6072318**	Price
7/16	**HA6072319**	Price
29/64	**HA6072320**	Price
15/32	**HA6072321**	Price
31/64	**HA6072322**	Price
1/2	**HA6072323**	Price
33/64	**HA6072324**	Price
17/32	**HA6072325**	Price
35/64	**HA6072326**	Price
9/16	**HA6072327**	Price

Morse Taper Shank - 3		
Drill Size (in.)	Order No.	Price
13/32	**HA6073005**	Price
27/64	**HA6073007**	Price
7/16	**HA6073008**	Price
29/64	**HA6073009**	Price
15/32	**HA6073010**	Price
31/64	**HA6073011**	Price
1/2	**HA6073012**	Price
33/64	**HA6073013**	Price
17/32	**HA6073014**	Price
9/16	**HA6073016**	Price
37/64	**HA6073017**	Price
19/32	**HA6073018**	Price
39/64	**HA6073019**	Price
5/8	**HA6073020**	Price
41/64	**HA6073021**	Price

Morse Taper Shank - 3		
Drill Size (in.)	Order No.	Price
21/32	**HA6073022**	Price
43/64	**HA6073023**	Price
11/16	**HA6073024**	Price
45/64	**HA6073025**	Price
23/32	**HA6073026**	Price
47/64	**HA6073027**	Price
3/4	**HA6073028**	Price

Morse Taper Shank - 4		
Drill Size (in.)	Order No.	Price
23/64	**HA6074009**	Price
37/64	**HA6074000**	Price
19/32	**HA6074001**	Price
39/64	**HA6074002**	Price
5/8	**HA6074003**	Price
41/64	**HA6074004**	Price
21/32	**HA6074005**	Price
43/64	**HA6074006**	Price
11/16	**HA6074007**	Price
45/64	**HA6074008**	Price
47/64	**HA6074010**	Price
3/4	**HA6074011**	Price
25/32	**HA6074013**	Price
51/64	**HA6074014**	Price
13/16	**HA6074015**	Price
53/64	**HA6074016**	Price
27/32	**HA6074017**	Price
7/8	**HA6074019**	Price
57/64	**HA6074020**	Price
59/64	**HA6074022**	Price
15/16	**HA6074023**	Price
61/64	**HA6074024**	Price
31/32	**HA6074025**	Price
63/64	**HA6074026**	Price
1	**HA6074027**	Price

R8 Round Collets



Rapidhold:
- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 7/16”-20
- .0005” T.I.R

Lyndex:
- Within .0005” TIR 1” from face
- All Collets have 7/16-20 drawbar threads

World Class Quality:
- For general shop uses
- .0005” TIR

RAPIDHOLD LYNDEX WORLD CLASS QUALITY

	Rapidhold		Lyndex		Quality Import	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/16	GP83004	Price	GP35004	Price	GP30004	Price
3/32	GP83006	Price	GP35006	Price	GP30006	Price
1/8	GP83008	Price	GP35008	Price	GP30008	Price
5/32	GP83010	Price	GP35010	Price	GP30010	Price
3/16	GP83012	Price	GP35012	Price	GP30012	Price
7/32	GP83014	Price	GP35014	Price	GP30014	Price
1/4	GP83016	Price	GP35016	Price	GP30016	Price
9/32	GP83018	Price	GP35018	Price	GP30018	Price
5/16	GP83020	Price	GP35020	Price	GP30020	Price
11/32	GP83022	Price	GP35022	Price	GP30022	Price
3/8	GP83024	Price	GP35024	Price	GP30024	Price
13/32	GP83026	Price	GP35026	Price	GP30026	Price
7/16	GP83028	Price	GP35028	Price	GP30028	Price
15/32	GP83030	Price	GP35030	Price	GP30030	Price
1/2	GP83032	Price	GP35032	Price	GP30032	Price
17/32	GP83034	Price	GP35034	Price	GP30034	Price
9/16	GP83036	Price	GP35036	Price	GP30036	Price
19/32	GP83038	Price	GP35038	Price	GP30038	Price
5/8	GP83040	Price	GP35040	Price	GP30040	Price
21/32	GP83042	Price	GP35042	Price	GP30042	Price
11/16	GP83044	Price	GP35044	Price	GP30044	Price
23/32	GP83046	Price	GP35046	Price	GP30046	Price
3/4	GP83048	Price	GP35048	Price	GP30048	Price
25/32	GP83050	Price	GP35050	Price	GP30050	Price
13/16	GP83052	Price	GP35052	Price	GP30052	Price
27/32	GP83054	Price	GP35054	Price	GP30054	Price
7/8	GP83056	Price	GP35056	Price	GP30056	Price
1	GP83064	Price	-	-	-	-

Metric R8 Collets



- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 7/16”-20
- .0005” T.I.R

RAPIDHOLD LYNDEX

	Rapidhold		Lyndex	
Size (in.)	Order No.	Price	Order No.	Price
2.0mm	GP832MM	Price	-	-
3.0mm	GP833MM	Price	GP32003	Price
4.0mm	GP834MM	Price	GP32004	Price
5.0mm	GP835MM	Price	GP32005	Price
6.0mm	GP836MM	Price	GP32006	Price
7.0mm	GP837MM	Price	-	-
8.0mm	GP838MM	Price	GP32008	Price
9.0mm	GP839MM	Price	-	-
10.0mm	GP8310MM	Price	GP32010	Price
11.0mm	GP8311MM	Price	-	-
12.0mm	GP8312MM	Price	GP32012	Price
13.0mm	GP8313MM	Price	-	-
14.0mm	GP8314MM	Price	GP32014	Price
15.0mm	GP8315MM	Price	GP32015	Price
16.0mm	GP8316MM	Price	GP32016	Price
17.0mm	GP8317MM	Price	-	-
18.0mm	GP8318MM	Price	GP32018	Price
19.0mm	GP8319MM	Price	-	-
20.0mm	GP8320MM	Price	-	-
21.0mm	GP8321MM	Price	-	-
22.0mm	GP8322MM	Price	-	-
23.0mm	GP8323MM	Price	-	-
24.0mm	GP8324MM	Price	-	-

RAPIDHOLD R8 Hex Collets



- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 7/16”-20
- .0005” T.I.R

Size (in.)	Order No.	Price
1/8	GP84008	Price
5/32	GP84010	Price
3/16	GP84012	Price
1/4	GP84016	Price
9/32	GP84018	Price
5/16	GP84020	Price
11/32	GP84022	Price
3/8	GP84024	Price
13/32	GP84026	Price
7/16	GP84028	Price
15/32	GP84030	Price

Size (in.)	Order No.	Price
1/2	GP84032	Price
17/32	GP84034	Price
9/16	GP84036	Price
19/32	GP84038	Price
5/8	GP84040	Price
21/32	GP84042	Price
11/16	GP84044	Price
23/32	GP84046	Price
3/4	GP84048	Price
25/32	GP84050	Price

RAPIDHOLD R8 Square Collets



- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 7/16”-20
- .002” T.I.R

Size (in.)	Order No.	Price
1/8	GP85008	Price
5/32	GP85010	Price
3/16	GP85012	Price
1/4	GP85016	Price
9/32	GP85018	Price
5/16	GP85020	Price
11/32	GP85022	Price

Size (in.)	Order No.	Price
3/8	GP85024	Price
13/32	GP85026	Price
7/16	GP85028	Price
15/32	GP85030	Price
1/2	GP85032	Price
17/32	GP85034	Price
9/16	GP85036	Price

RAPIDHOLD R8 Square Metric Collets



- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 7/16”-20
- .002” T.I.R

Size	Order No.	Price
3.0mm	GP853MM	Price
4.0mm	GP854MM	Price
5.0mm	GP855MM	Price
5.5mm	GP8555MM	Price
6.0mm	GP856MM	Price

Size	Order No.	Price
7.0mm	GP857MM	Price
8.0mm	GP858MM	Price
9.0mm	GP859MM	Price
9.5mm	GP8595MM	Price

RAPIDHOLD R8 Hex Metric Collets



- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 7/16”-20
- .0005” T.I.R

Size	Order No.	Price
3.0mm	GP843MM	Price
4.0mm	GP844MM	Price
5.0mm	GP845MM	Price
6.0mm	GP846MM	Price
7.0mm	GP847MM	Price
8.0mm	GP848MM	Price
9.0mm	GP849MM	Price
10.0mm	GP8410MM	Price
11.0mm	GP8411MM	Price
12.0mm	GP8412MM	Price

Size	Order No.	Price
13.0mm	GP8413MM	Price
13.5mm	GP84135MM	Price
14.0mm	GP8414MM	Price
15.0mm	GP8415MM	Price
16.0mm	GP8416MM	Price
17.0mm	GP8417MM	Price
17.5mm	GP84175MM	Price
18.0mm	GP8418MM	Price
19.0mm	GP8419MM	Price
20.0mm	GP8420MM	Price

R8 Collet Sets

Complete with Metal Stand

- Collets are made with hardened threaded bushing in back for long life
- R8 Collets DO NOT collapse
- Closed cover protects collets from chip at all times



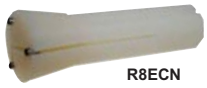
RAPIDHOLD LYNDEX WORLD CLASS QUALITY

			Rapidhold		Lyndex		Quality Import	
Size Range	No. of Collets	No. of Stands Incl.	Order No.	Price	Order No.	Price	Order No.	Price
1/16 - 3/4 x 16ths	12	1	-	-	GP70R8CR12P	Price	GP70R8CR12	Price
1/16 - 3/4 x 32nds	23	2	-	-	GP70R8CR23P	Price	GP70R8CR23	Price
1/16 to 7/8 x 16ths	14	1	GP872312214	Price	-	-	-	-
1/8 to 3/4 x 8ths	6	1	GP872312206	Price	-	-	-	-
2.0mm to 20.0mm x 1.0mm	19	1	GP872312219	Price	-	-	-	-
3mm - 18mm	11	1	-	-	GP70R8CR11MP	Price	-	-

RAPIDHOLD R8 Emergency Collets

- Can be drilled, bored or machined with HSS Tool bit
- Face & Pilot hole are soft to permit machining
- Internal Thread 7/16"-20


R8ECB


R8ECN


R8ECS

Material	Order No.	Price
Brass	GP87R8ECB	Price
Nylon	GP87R8ECN	Price
Steel	GP87R8ECS	Price

WORLD CLASS QUALITY Bridgeport Collet & Tool Tray

- This convenient tray will cut down set-up time and tool changing time
- Every operator works more efficiently when tools are neatly organized
- Easy to install, only a few minutes required to drill and tap two 1/4" holes in the base casting 1" below the degree ring
- Sturdy aluminum casting



Order No.	Price
GC51001	Price

End Mill Holders with R8 Shank

- Made of Alloy Forged Steel for a long durable service life
- Hardened to RC 56-60 and ground to ensure maximum accuracy
- Draw bar thread 7/16"-20



RAPIDKUT WORLD CLASS QUALITY

	Rapidkut		Quality Import	
Size (in.)	Order No.	Price	Order No.	Price
3/16	TS1127101	Price	GN50R8E316	Price
3/8	TS1127102	Price	GN50R8E38	Price
1/2	TS1127103	Price	GN50R8E12	Price
5/8	TS1127104	Price	GN50R8E58	Price
3/4	TS1127105	Price	GN50R8E34†	Price
7/8	TS1127106	Price	GN50R8E78†	Price
1	TS1127107	Price	GN50R8E1†	Price
1-1/4	-	-	GN50R8E114†	Price
1-1/2	-	-	GN50R8E112†	Price

†Single End Endmills Only.

WORLD CLASS QUALITY R8 Collet Stand

- Holds 12 Pcs.
- R8 Collets



Order No.	Price
GP70R8CR	Price

WORLD CLASS QUALITY Rotating R8 Collet Rack

- Rotates with finger touch for easy size selection



Holds	Model No.	Order No.	Price
11 Piece	R8-R11	GP70R8CRR	Price

WORLD CLASS QUALITY 8 Pc. R8 End Mill Holder Set

- Made of Alloy Forged Steel for a long durable service life
- Hardened to RC 56-60 and ground to ensure maximum accuracy
- Draw bar thread 7/16"-20



Sizes Included (in.)	Order No.	Price
3/16 thru 1-1/4	GN50RB8	Price

Shell End Mill Arbors with R8 Shank

- Made of Alloy Forged Steel for a long durable service life
- Hardened to RC 56-60 and ground to ensure maximum accuracy
- Draw bar thread 7/16”-20



		ETM		Quality Import	
Pilot Dia. (in.)	Size Range (in.)	Order No.	Price	Order No.	Price
1/2	1-1/4 to 1-1/2	**GN61R8S12**	Price	**GN51R8S12**	Price
3/4	1-3/4 to 2	-	-	**GN51R8S34**	Price
1	2-1/4 to 2-3/4	-	-	**GN51R8S1**	Price
1-1/4	3 to 3-1/2	-	-	**GN51R8S114**	Price
1-1/2	4 to 5	-	-	**GN51R8S112**	Price

5 Pc. R8 Shell End Mill Arbor Set

- Made of Alloy Forged Steel for a long durable service life
- Hardened to Rc 56-60 and ground to ensure maximum accuracy
- Draw bar thread 7/16”-20



Pilot Dia. (in.)	Order No.	Price
1/2 thru 1-1/2	**GN51RB5**	Price

Morse Taper Adapters for R8 Shank

- For changing from R8 to MT socket



Inside Taper	Order No.	Price
2MT	**GN52R8M2**	Price
3MT	**GN52R8M3**	Price

R8 Stub Milling Arbors

- Made of Alloy Forged Steel
- Hardened to RC 56-60 and ground to ensure maximum accuracy
- Pilot diameter is sized for precision fit with cutter and is keyed for positive drive
- Heavy duty locking LH nut and set of arbor spacers are included
- Draw bar thread 7/16”-20



Arbor Dia. (in)	Length Shoulder to Nut	Order No.	Price
1	2	**GN54R8STUB1**	Price
1-1/4	2	**GN54R8STUB114**	Price

Individual Fly Cutters

Straight Shank Cutters



Shank	Body Dia. (in.)	Toolbit Size (in.)	Order No.	Price
1/2	3/4	3/16	**GB50001**	Price
1/2	1-1/8	1/4	**GB50002**	Price
1/2	1-1/2	5/16	**GB50003**	Price
3/4	1-3/8	5/16	**GB50004**	Price
3/4	2	5/16	**GB50005**	Price
3/4	2-1/2	5/16	**GB50006**	Price
R8	2-1/2	3/8	**GB50010**	Price

Fly Cutter Sets

Counter Balanced

- Uses standard tool bit (not included)
- Makes wider cuts than end mills
- Faster speeds and better finishes
- **Sets have 3 fly cutters**



Toolbit Size (in.)	Shank Dia. (in.)	Body Dia. (in.)	Order No.	Price
3/16, 1/4, 5/16	1/2	3/4, 1-1/8, 1-1/2	**GB50008**	Price
3/16, 1/4, 5/16	3/4	1-3/8, 2, 2-1/2	**GB50007**	Price

5C Collets

Within .0005" TIR 1" from Face

Rapidhold:
- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 1.041"-24
- External Thread 1.242"-20
- .0005" T.I.R

Lyndex:
- Production quality
- Where tighter tolerances are required



LYNDEX RAPIDHOLD WORLD CLASS QUALITY

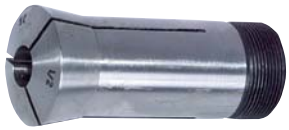
	Lyndex		Rapidhold		Quality Import	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3/64	GP45003	Price	GP80003	Price	-	-
1/16	GP45004	Price	GP80004	Price	GP40004	Price
5/64	GP45005	Price	GP80005	Price	GP40005	Price
3/32	GP45006	Price	GP80006	Price	GP40006	Price
7/64	GP45007	Price	GP80007	Price	GP40007	Price
1/8	GP45008	Price	GP80008	Price	GP40008	Price
9/64	GP45009	Price	GP80009	Price	GP40009	Price
5/32	GP45010	Price	GP80010	Price	GP40010	Price
11/64	GP45011	Price	GP80011	Price	GP40011	Price
3/16	GP45012	Price	GP80012	Price	GP40012	Price
13/64	GP45013	Price	GP80013	Price	GP40013	Price
7/32	GP45014	Price	GP80014	Price	GP40014	Price
15/64	GP45015	Price	GP80015	Price	GP40015	Price
1/4	GP45016	Price	GP80016	Price	GP40016	Price
17/64	GP45017	Price	GP80017	Price	GP40017	Price
9/32	GP45018	Price	GP80018	Price	GP40018	Price
19/64	GP45019	Price	GP80019	Price	GP40019	Price
5/16	GP45020	Price	GP80020	Price	GP40020	Price
21/64	GP45021	Price	GP80021	Price	GP40021	Price
11/32	GP45022	Price	GP80022	Price	GP40022	Price
23/64	GP45023	Price	GP80023	Price	GP40023	Price
3/8	GP45024	Price	GP80024	Price	GP40024	Price
25/64	GP45025	Price	GP80025	Price	GP40025	Price
13/32	GP45026	Price	GP80026	Price	GP40026	Price
27/64	GP45027	Price	GP80027	Price	GP40027	Price
7/16	GP45028	Price	GP80028	Price	GP40028	Price
29/64	GP45029	Price	GP80029	Price	GP40029	Price
15/32	GP45030	Price	GP80030	Price	GP40030	Price
31/64	GP45031	Price	GP80031	Price	GP40031	Price
1/2	GP45032	Price	GP80032	Price	GP40032	Price
33/64	GP45033	Price	GP80033	Price	GP40033	Price
17/32	GP45034	Price	GP80034	Price	GP40034	Price
35/64	GP45035	Price	GP80035	Price	GP40035	Price
9/16	GP45036	Price	GP80036	Price	GP40036	Price
37/64	GP45037	Price	GP80037	Price	GP40037	Price
19/32	GP45038	Price	GP80038	Price	GP40038	Price

LYNDEX RAPIDHOLD WORLD CLASS QUALITY

	Lyndex		Rapidhold		Quality Import	
Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
39/64	GP45039	Price	GP80039	Price	GP40039	Price
5/8	GP45040	Price	GP80040	Price	GP40040	Price
41/64	GP45041	Price	GP80041	Price	GP40041	Price
21/32	GP45042	Price	GP80042	Price	GP40042	Price
43/64	GP45043	Price	GP80043	Price	GP40043	Price
11/16	GP45044	Price	GP80044	Price	GP40044	Price
45/64	GP45045	Price	GP80045	Price	GP40045	Price
23/32	GP45046	Price	GP80046	Price	GP40046	Price
47/64	GP45047	Price	GP80047	Price	GP40047	Price
3/4	GP45048	Price	GP80048	Price	GP40048	Price
49/64	GP45049	Price	GP80049	Price	GP40049	Price
25/32	GP45050	Price	GP80050	Price	GP40050	Price
51/64	GP45051	Price	GP80051	Price	GP40051	Price
13/16	GP45052	Price	GP80052	Price	GP40052	Price
53/64	GP45053	Price	GP80053	Price	GP40053	Price
27/32	GP45054	Price	GP80054	Price	GP40054	Price
55/64	GP45055	Price	GP80055	Price	GP40055	Price
7/8	GP45056	Price	GP80056	Price	GP40056	Price
57/64	GP45057	Price	GP80057	Price	GP40057	Price
29/32	GP45058	Price	GP80058	Price	GP40058	Price
59/64	GP45059	Price	GP80059	Price	GP40059	Price
15/16	GP45060	Price	GP80060	Price	GP40060	Price
61/64	GP45061	Price	GP80061	Price	GP40061	Price
31/32	GP45062	Price	GP80062	Price	GP40062	Price
63/64	GP45063	Price	GP80063	Price	GP40063	Price
1	GP45100	Price	GP80064	Price	GP40100	Price
1-1/32	GP45102	Price	GP80102	Price	GP40102	Price
1-1/64	GP45101	Price	GP80101	Price	GP40101	Price
1-1/8	GP45108	Price	GP80108	Price	GP40108	Price
1-3/32	GP45106	Price	GP80106	Price	GP40106	Price
1-3/64	GP45103	Price	GP80103	Price	GP40103	Price
1-5/64	GP45105	Price	GP80105	Price	GP40105	Price
1-7/64	GP45107	Price	GP80107	Price	GP40107	Price
1-1/16	GP45104	Price	GP80104	Price	GP40104	Price
1/32	-	-	GP80002	Price	-	-

5C Metric Round Collets

- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 1.041"-24
- External Thread 1.242"-20
- .0005" T.I.R



RAPIDHOLD WORLD CLASS QUALITY

	Rapidhold		Quality Import	
Size	Order No.	Price	Order No.	Price
2.0mm	GP802MM	Price	-	-
3.0mm	GP803MM	Price	GP43003	Price
4.0mm	GP804MM	Price	GP43004	Price
5.0mm	GP805MM	Price	GP43005	Price
6.0mm	GP806MM	Price	GP43006	Price
7.0mm	GP807MM	Price	GP43007	Price
8.0mm	GP808MM	Price	GP43008	Price
9.0mm	GP809MM	Price	GP43009	Price
10.0mm	GP8010MM	Price	GP43010	Price
11.0mm	GP8011MM	Price	GP43011	Price
12.0mm	GP8012MM	Price	GP43012	Price
13.0mm	GP8013MM	Price	GP43013	Price
14.0mm	GP8014MM	Price	GP43014	Price
15.0mm	GP8015MM	Price	GP43015	Price
16.0mm	GP8016MM	Price	GP43016	Price

RAPIDHOLD WORLD CLASS QUALITY

	Rapidhold		Quality Import	
Size	Order No.	Price	Order No.	Price
17.0mm	GP8017MM	Price	GP43017	Price
18.0mm	GP8018MM	Price	GP43018	Price
19.0mm	GP8019MM	Price	-	-
20.0mm	GP8020MM	Price	GP43020	Price
21.0mm	GP8021MM	Price	-	-
22.0mm	GP8022MM	Price	GP43022	Price
23.0mm	GP8023MM	Price	-	-
24.0mm	GP8024MM	Price	GP43024	Price
25.0mm	GP8025MM	Price	GP43025	Price
26.0mm	GP8026MM	Price	-	-
27.0mm	GP8027MM	Price	-	-
28.0mm	GP8028MM	Price	-	-
29.0mm	GP8029MM	Price	-	-
30.0mm	GP8030MM	Price	-	-

5C Hex Collets

Sizes 1/8” to 7/8” x 16ths



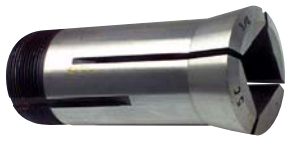
- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 1.041”-24
- External Thread 1.242”-20
- .0005” T.I.R

RAPIDHOLD™ WORLD CLASS QUALITY

	Rapidhold		Quality Import	
Size (in.)	Order No.	Price	Order No.	Price
1/8	**GP81008**	Price	**GP41008**	Price
5/32	**GP81010**	Price	**-**	-
3/16	**GP81012**	Price	**GP41012**	Price
7/32	**GP81014**	Price	**-**	-
1/4	**GP81016**	Price	**GP41016**	Price
9/32	**GP81018**	Price	**-**	-
5/16	**GP81020**	Price	**GP41020**	Price
11/32	**GP81022**	Price	**-**	-
3/8	**GP81024**	Price	**GP41024**	Price
13/32	**GP81026**	Price	**-**	-
7/16	**GP81028**	Price	**GP41028**	Price
15/32	**GP81030**	Price	**-**	-
1/2	**GP81032**	Price	**GP41032**	Price
17/32	**GP81034**	Price	**-**	-
9/16	**GP81036**	Price	**GP41036**	Price
19/32	**GP81038**	Price	**-**	-
5/8	**GP81040**	Price	**GP41040**	Price
21/32	**GP81042**	Price	**-**	-
11/16	**GP81044**	Price	**GP41044**	Price
23/32	**GP81046**	Price	**-**	-
3/4	**GP81048**	Price	**GP41048**	Price
25/32	**GP81050**	Price	**-**	-
13/16	**GP81052**	Price	**GP41052**	Price
27/32	**GP81054**	Price	**-**	-
7/8	**GP81056**	Price	**GP41056**	Price

5C Square Collets

Sizes 1/8” to 3/4” x 16ths



- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 1.041”-24
- External Thread 1.242”-20
- .002” T.I.R

RAPIDHOLD™ WORLD CLASS QUALITY

	Rapidhold		Quality Import	
Size (in.)	Order No.	Price	Order No.	Price
1/8	**GP82008**	Price	**GP42008**	Price
5/32	**GP82010**	Price	**-**	-
3/16	**GP82012**	Price	**GP42012**	Price
7/32	**GP82014**	Price	**-**	-
1/4	**GP82016**	Price	**GP42016**	Price
9/32	**GP82018**	Price	**-**	-
5/16	**GP82020**	Price	**GP42020**	Price
11/32	**GP82022**	Price	**-**	-
3/8	**GP82024**	Price	**GP42024**	Price
13/32	**GP82026**	Price	**-**	-
7/16	**GP82028**	Price	**GP42028**	Price
15/32	**GP82030**	Price	**-**	-
1/2	**GP82032**	Price	**GP42032**	Price
17/32	**GP82034**	Price	**-**	-
9/16	**GP82036**	Price	**GP42036**	Price
19/32	**GP82038**	Price	**-**	-
5/8	**GP82040**	Price	**GP42040**	Price
21/32	**GP82042**	Price	**-**	-
11/16	**GP82044**	Price	**GP42044**	Price
23/32	**GP82046**	Price	**-**	-
3/4	**GP82048**	Price	**GP42048**	Price

RAPIDHOLD™ 5C Metric Hex Collets



- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 1.041”-24
- External Thread 1.242”-20
- .0005” T.I.R

Size	Order No.	Price
3.0mm	**GP813MM**	Price
4.0mm	**GP814MM**	Price
5.0mm	**GP815MM**	Price
6.0mm	**GP816MM**	Price
7.0mm	**GP817MM**	Price
8.0mm	**GP818MM**	Price
9.0mm	**GP819MM**	Price
10.0mm	**GP8110MM**	Price
11.0mm	**GP8111MM**	Price
12.0mm	**GP8112MM**	Price
13.5mm	**GP81135MM**	Price
13.0mm	**GP8113MM**	Price
14.0mm	**GP8114MM**	Price
15.0mm	**GP8115MM**	Price
16.0mm	**GP8116MM**	Price
17.5mm	**GP81175MM**	Price
17.0mm	**GP8117MM**	Price
18.0mm	**GP8118MM**	Price
19.0mm	**GP8119MM**	Price

RAPIDHOLD™ 5C Square Metric Collets



- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 1.041”-24
- External Thread 1.242”-20
- .002” T.I.R

Size	Order No.	Price
9.5mm	**GP8295MM**	Price
3.0mm	**GP823MM**	Price
4.0mm	**GP824MM**	Price
5.0mm	**GP825MM**	Price
5.5mm	**GP8255MM**	Price
6.0mm	**GP826MM**	Price
7.0mm	**GP827MM**	Price
8.0mm	**GP828MM**	Price
9.0mm	**GP829MM**	Price
10.0mm	**GP8210MM**	Price
11.0mm	**GP8211MM**	Price
12.0mm	**GP8212MM**	Price
13.0mm	**GP8213MM**	Price
13.5mm	**GP82135MM**	Price
14.0mm	**GP8214MM**	Price
15.0mm	**GP8215MM**	Price
16.0mm	**GP8216MM**	Price
17.0mm	**GP8217MM**	Price
17.5mm	**GP82175MM**	Price
18.0mm	**GP8218MM**	Price
19.0mm	**GP8219MM**	Price

5C Collet Sets

- All 5C collets have external and internal threads
- Hardened & ground throught

Opening Shape - Hex Brand Name - Quality Import				
Size Range	No. of Collets	No. of Stands Incl.	Order No.	Price
1/8 - 7/8 x 16ths	13	1	GP705CCR13HP	Price

Opening Shape - Round Brand Name - Lyndex				
Size Range	No. of Collets	No. of Stands Incl.	Order No.	Price
1/16 - 1-1/8 x 16ths	18	1	GP705CCR18P	Price
1/16 - 1-1/8 x 32nds	35	2	GP705CCR35P	Price
1/16 - 1-1/8 x 64ths	69	3	GP705CCR69P	Price

Opening Shape - Round Brand Name - Quality Import				
Size Range	No. of Collets	No. of Stands Incl.	Order No.	Price
1/16 - 1-1/8 x 16ths	18	1	GP705CCR18	Price
1/16 - 1-1/8 x 32nds	35	2	GP705CCR35	Price
1/16 - 1-1/8 x 64ths	69	3	GP705CCR69	Price
3mm - 25mm	14	1	GP705CCR14MP	Price

5C Collet Stand

- Metric Rack
- Holds 30 Pcs. 5C Collets



Order No.	Price
GP705CCR	Price

5C Steel Emergency Collet

- Soft face for easy machining which allows operator to bore or shape collet as desired



	Rapidhold		Quality Import	
Material	Order No.	Price	Order No.	Price
Brass	GP875CEB	Price	-	-
Nylon	GP87ECEN	Price	-	-
Steel	GP875CES	Price	GP40EC5C	Price

5C Adjustable Threaded Collet Stop

- Fits all standard 5C Collets with internal threads
- The stop rod is adjustable to the desired chucking depth and locked in place by a hex nut



Item	For Collet Type	Order No.	Price
WORLD CLASS QUALITY	5C	JN50AC5	Price
MADE IN THE USA	5C	NB80Z9002	Price

5C Universal Collet Stops

- Converts standard 1" capacity lathe collets into solid stop or spring ejector stop collets without alteration of the standard collets



Item	For Collet Type	Order No.	Price
MADE IN THE USA	5C	NB80Z9003	Price
WORLD CLASS QUALITY	5C	JN50UCS5C	Price



Opening Shape - Round Brand Name - Rapidhold				
Size Range	No. of Collets	No. of Stands Incl.	Order No.	Price
1/16 to 1-1/8 by 16ths	18	1	GP872308218	Price
1/16 to 1-1/8 x 32nds	35	1 Rack	GP872308235	Price
1/16 to 1-1/8 x 64ths	69	1 Rack	GP872308269	Price

Opening Shape - Square Brand Name - Quality Import				
Size Range	No. of Collets	No. of Stands Incl.	Order No.	Price
1/8 - 3/4 x 16ths	11	1	GP705CCR11SP	Price

Front Loading 5C Collet Stop

- 24" Length (makes 12-20 stops)
- Quick changing
- Machinable
- Perfect for NC set-ups
- Low cost
- Excellent stop for rings & washers



Order No.	Price
SG7010105	Price

5C Hex & Square Collet Blocks

For standard 5C collets 1/16" to 1-1/16" capacity

- For fast set-ups on lathes, milling machines, surface grinders and drill presses
- These blocks will make 60° and 120° indexing a simple job
- Made of tool steel, hardened and ground square and parallel within .0005"
- For use with 5C collets
- Overall dimensions 2 x 2 x 3-1/2"



Type	For Collet Type	Order No.	Price
Collet Block Set	5C	JN50ST5C	Price
Extra Locking Nut	5C	JN50RN5C	Price
Hex Collet Block	5C	JN50HX5C	Price
Quick-Acting Lever Collet Closer	5C	JN50LV5C	Price
Square Collet Block	5C	JN50SQ5C	Price

MITEE-BITE PRODUCTS COMPANY Collet Keyway Wrenches

- Simplifies installing and removing a collet in your CNC lathe
- Made with a steel head and fins for strength
- The bright red handle is designed to be comfortable to the hand



For Collet Type	Fins	Order No.	Price
16C	3	SG701016C	Price
3J	4	SG701003J	Price
5C	3	SG701005C	Price

5C Step (Clutch) Collets

Face is soft to permit machining to specifications



Dia. of Head (in.)	Order No.	Price
2	**GP60SC2**	Price
3	**GP60SC3**	Price
4	**GP60SC4**	Price
5	**GP60SC5**	Price
6	**GP60SC6**	Price

4 Pc. Expanding Collet Set in Wooden Stand



Size Range (in.)	Order No.	Price
250 to 1.935	**GP565CEX**	Price

Internal Expanding 5C Collets

- Hold tolerance to within .005
- Fit standard 5C spindles
- Machinable head

Size Range (in.)	Order No.	Price
.250 to .460	**GP565CEX1**	Price
.437 to .800	**GP565CEX2**	Price
.750 to 1.435	**GP565CEX3**	Price
.750 to 1.935	**GP565CEX4**	Price

Expanding Arbors

- Used in lathes, milling machines, grinders, chucks, collets and fixtures
- All arbors approximately 4" overall length



	Generic USA		Quality Import	
Max. Size (in.)	Order No.	Price	Order No.	Price
1/4	**NB80Z9110**	Price	**GX6010250**	Price
3/8	**NB80Z9111**	Price	**GX6010375**	Price
1/2	**NB80Z9112**	Price	**GX6010500**	Price
5/8	**NB80Z9113**	Price	**GX6010625**	Price
3/4	**NB80Z9114**	Price	**GX6010750**	Price
7/8	**NB80Z9115**	Price	**GX6010875**	Price
1	**NB80Z9116**	Price	**GX6011000**	Price
1-1/4	**NB80Z9117**	Price	**GX6011250**	Price
1-1/2	**NB80Z9118**	Price	**GX6011500**	Price
1-3/4	**NB80Z9119**	Price	**GX6011750**	Price
2	**NB80Z9120**	Price	**GX6012000**	Price

Complete Sets

Pieces per Set	Size Range	Order No.	Price
3	1-1/2 to 2	**NB80Z9121**	Price
8	1/4 to 1-1/4	**GX601**	Price
8	1/4 to 1-1/4	**NB80Z9125**	Price

ROYAL PRODUCTS 5C Accu-Length™ Expanding Collets

With Dead Length Operation

- Precision ground body for maximum concentricity
- Concentricity of ±.0002" can be held
- Machinable head



Nominal Head Dia. (in.)	Head Length (in.)	Machinable Range (in.)	Order No.	Price
3/4	1	1/4 to 11/16	**GP5520100**	Price
1	1	7/16 to 15/16	**GP5520101**	Price
1-1/2	1	3/4 to 17/16	**GP5520102**	Price
1-1/2	1-1/2	3/4 to 17/16	**GP5520103**	Price
1-1/2	2	3/4 to 17/16	**GP5520104**	Price
2	1	3/4 to 1-15/16	**GP5520107**	Price
2	1-1/2	3/4 to 1-15/16	**GP5520108**	Price
2	2	3/4 to 1-15/16	**GP5520109**	Price
2-1/2	1	3/4 to 2-7/16	**GP5520112**	Price
3	1	3/4 to 2-15/16	**GP5520117**	Price

WORLD CLASS QUALITY Expanding Mandrels

Consists of tapered arbor and flexible expanding sleeve

- Made of high grade tool steel
- Precision ground to assure maximum concentricity
- Sizes obtained by moving sleeve along arbor
- Mandrels are hardened and ground



Size Range (in.)	Length of Arbor (in.)	Length of Sleeve (in.)	Sleeves Furnished	Order No.	Price
1/2 to 9/16	5	2-1/2	1	**GX51111**	Price
9/16 to 21/32	6	2-3/4	1	**GX51112**	Price
21/32 to 3/4	7	2-3/4	1	**GX51113**	Price
3/4 to 7/8	7	3-1/4	1	**GX51114**	Price
7/8 to 1	7	3-1/2	1	**GX51115**	Price
1 to 1-1/4	9	4	2	**GX51116**	Price
1-1/4 to 1-1/2	9	4	2	**GX51117**	Price
1-1/2 to 2	11-1/2	5	2	**GX51118**	Price

Expanding Mandrel Sets

Size Range (in.)	Pieces per Set	Order No.	Price
1 to 2	3	**GX51121**	Price
1/2 to 1	5	**GX51120**	Price
1/2 to 2	8	**GX51119**	Price

Case Not Included

5C Horizontal / Vertical Collet Fixture



- Hardened and ground spindle
- Two position heavy casting
- Collets are held dead length
- Quick-Acting lever type
- Base Width: 4-1/2”
- Base Length: 6”
- Overall Height: 4”

Order No.	Price
JN6071103	Price

Angle Collet Fixture

Uses Standard 5C Collets

All moving parts hardened, ground and honed



- Collet does not move up or down
- Retains positive relation to the base
- Can be adjusted or changed without disturbing your set-up
- For drilling, milling, grinding, tapping assembly, etc
- A must for every machine shop
- Height: 3-3/4”

Order No.	Price
JN50MSR1	Price

5C Vertical Collet Vise



- Mounted on ground flat base for vertical use only
- Uses any standard 5C collet for a capacity up to 1-1/8”round
- Also accepts hex and square collets
- Height: 4-3/8”
- Small movement of lever opens and closes collet

Order No.	Price
JN6071105	Price

5C Horizontal / Vertical Rapid Collet Indexer



- Fast and accurate indexing
- Accepts either standard 5C collets or a 5” chuck
- 4 positions provide for either 15, 30, 45, 60° divisions
- 5C Collets Not Included

Order No.	Price
JN6071101	Price

5C Indexing Spin Jig

- A multi-purpose machine indexing fixture designed to extend work capabilities of surface grinders, drill presses and all types of milling machines
- Plate is graduated by degrees to 360°
- Vernier to 10 min. accuracy .0005 ground lapped; 2” travel for flute grinding
- Standard 5C collets
- Capacity 1-1/8”
- Simple 1° indexing
- Spindle lock
- Hardened and ground spindle
- Spindle lock hole for tightening collet
- Index plate has 36 hole circle



Order No.	Price
MW50SJ5C	Price

Collet Holding Fixture For 5C Collets



- Collets held dead length
- Hardened and ground spindle two position — heavy casting
- Weight: 18 lbs.

MADE IN THE USA

Order No.	Price
JM5010C	Price

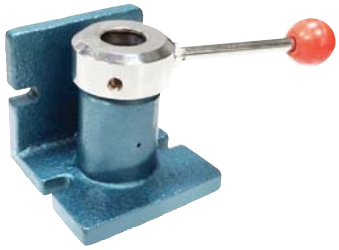
5C Positive Lock Collet Fixture



- Uses standard 5C collets
- With cam lock and a positive release
- Collet does not move up or down
- Retains positive relation to base
- Can be adjusted or changed without disturbing setup

Order No.	Price
JN6071102	Price

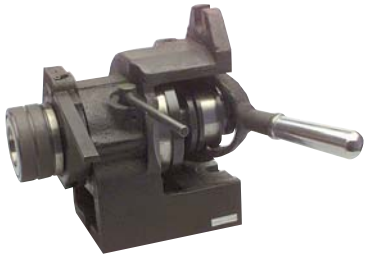
5C Horizontal / Vertical Collet Vise



- Mounted on an angle plate
- Uses any standard 5C collet, for a capacity up to 1-1/8 round
- A small movement of the lever opens and closes the collet

Order No.	Price
JN6071104	Price

5C Collet Horizontal/Vertical Indexing Fixture



- A rapid indexing fixture for use with both Collets (5C 1-1/8” capacity) and lathe chucks
- The latter may be fitted to the 2-1/4-8 threaded spindle
- Fixtures are designed to be mounted vertically or horizontally
- Indexing is accomplished by releasing the spring loaded index pin lever
- The spindle rotates freely until the next open space when the index pin engages again and locks the spindle
- Possible divisions are: 2, 3, 4, 6, 8, 12 and 24

Dimensions:

- Center Height: 4”
- Base: Horizontal 4” x 8”, Vertical 4” x 6”
- Overall Height: Horizontal 7-3/4”, Vertical 8”
- Shipping Weight: 30 lbs.

Order No.	Price
JJ55004	Price

Super Precision 5C Collet Chuck With Fine Adjustment



- For Mounting with Adapter Plates 0.0004" T.I.R.and 6000 RPM
- Used for turning, facing, boring, grinding and milling operations on center lathes and grinding machines
- The simple key operated scroll provides a uniform, distortion free clamping of the workpiece and low collet exchange time
- Four fine adjustment screws are used to set up the chuck on its mounting plate to get precision within .0004" T.I.R. on duplicate parts
- Body - made of high quality Forged Steel
- Forged Scroll – fully hardened and ground for longer life
- Pinions – hardened and ground. 5" Mounting plates (Adapters) A5, D3, D4, D5, Threaded 1" x 10 and 1-1/2" x 8 are available
- **Standard Accessories:** 1 Chuck wrench, 1 set of mounting bolts, 1 Allen Key
- **Uses Standard 5C Collets — Not Included**

Chuck Size (in.)	5C Collet Holding Cap.	Weight	Order No.	Price
5	1/16 to 1-1/8	12 lbs	**HK308620505**	Price

5C Collet Chuck



- .0008 T.I.R. & 6000 RPM
- Designed for use with 5C collets of all internal bore configurations
- Can be used for turning, facing, boring, grinding and milling operations on center lathes and grinding machines
- The simple key operated scroll makes for uniform, distortion free clamping of work-pieces as well as keeping the time required to change collets or work to a minimum
- Their simple design, rugged construction and fine workmanship assures high quality of chucks and long service life
- **Standard Accessories:** 1 Chuck wrench, 1 set of mounting bolts, 1 Allen key
- **Uses Standard 5C Collets — Not Included**

Chuck Size (in.)	5C Collet Holding Cap.	Weight	Order No.	Price
5	1/16 to 1-1/8	10 lbs	**JJ558620501**	Price

Kalamazoo 5C Collet Chuck



- For short runs using a 5C Collet
- Lock and release at the front
- Heavy-duty
- All steel — hardened and ground
- Drilled and tapped holes at rear of collet chuck for mounting to a plate

Dia. (in.)	Length (in.)	Weight	Order No.	Price
3	4	6 lbs	**JM501CC**	Price

Kalamazoo Universal Indexer

The Most Versatile Accessory for Your Shop



- Takes a 4" universal chuck — 3-jaw or 6-jaw or 5C collets
- Head can be angled from minus 0° to 100° plus
- Indexes quickly, easily — spindle locks in positive position
- Numerous combinations by changing ground indexing-spacer
- Can be dismantled in seconds for easy cleaning
- For drill presses, milling machines, grinders, layout work
- With 24 space ring less chuck

Type	Weight	Order No.	Price
Draw-in Nut for 5C Collets for Universal Indexer	1/4 lbs	**JM50AD5C**	Price
Index Ring, 20 space for Index Table	1/4 lbs	**JM50AR20**	Price
Index Ring, 36 Space for Index Table	1/4 lbs	**JM50AR36**	Price
Index Ring, Blank for Index Table	1/4 lbs	**JM50AR0**	Price
Standard Tailstock for Index Table	11 lbs	**JM50AT**	Price
Stub Arbor 1-10 Thread for Index Table	1 lb	**JM50AS**	Price
Universal-Indexer (less chuck) with 24 Space Ring	24 lbs	**JM50A1**	Price

Kalamazoo Index Fixture For 5C Collets



- For drilling, milling, grinding, and locating angles
- Index plate easily changed
- Precision ground spindle
- Plate can be bolted to top for drill bushing
- Use in vertical position with angle plate
- Rugged, quality built in Kalamazoo
- Model 5C complete with 24 space ring and 5C draw nut

Type	Weight	Order No.	Price
Index Ring, 20 space for Index Table	1/4 lbs	**JM50AR20**	Price
Index Ring, 36 Space for Index Table	1/4 lbs	**JM50AR36**	Price
Index Ring, Blank for Index Table	1/4 lbs	**JM50AR0**	Price
Lever Collet Closer for Index Table	1 lb	**JM50LC**	Price
Stub Arbor 1-10 Thread for Index Table	1 lb	**JM50AS**	Price
Standard Tailstock for Index Table	11 lbs	**JM50AT**	Price
Index fixture with 24 space ring & Drawbar	15 lbs	**JM505C**	Price

Kalamazoo Air Operated 5C Collet Holder



- Versatile
- Accurate
- Hardened and ground spindle
- Collets held dead length
- Two position
- For drill presses, milling machines and grinders
- Dimensions: 3-1/2" high, 4-3/4" diameter, 2-1/2" base to center line

Type	Weight	Order No.	Price
3 Way Lever Type Valve for 5C Collet Holder	1 lb	**JM50125V**	Price
Air-Operated 5C Collet Holder	7 lbs	**JM50A05C**	Price
Foot Operated Valve for 5C Collet Holder	6 lbs	**JM50AR62**	Price

heinrich Air Collet Fixture





- Uses standard 5-C type collets up to 1-1/16" diameter to hold round, hexagonal and square workpieces
- Can also be used with step chuck collets and expanding chucks for internal gripping
- Double acting, piston type air cylinder develops holding power 18 times air line pressure
- Maximum operating pressure 150 psi
- Has 1-7/64" hole completely through unit for bar feeds or dropping finished parts
- Base of fixture is relieved for chip removal and coolant flow

Description	Order No.	Price
1-1/16" Capacity-Complete with 4-Way Foot Pedal (No. 45-12C1) & 3 Hoses (No. 34-14)	**JC501AC**	Price
Air Hose	**JC503414**	Price
Fixture Only	**JC501ACA**	Price
Foot Pedal	**JC504512C1**	Price

heinrich High Speed Production Air Vises



- Holding Power 15x air pressure (1500 lbs. at 100 psi)
- Hands-free operation of vise
- Pressure regulator may be controlled to suit operators, accommodate jig and fixture components
- Furnished with foot pedal valve, fittings and necessary hoses
- Hollow base for clear drilling
- Quick positioning of jaw at any point within jaw opening
- V-block attachment available

Jaw Width (in.)	Jaw Opening (in.)	Jaw Depth of Bars (in.)	Shipping Weight	Order No.	Price
3-1/8	3	1-1/4	20 lbs	**JC5033**	Price
4-5/8	4	1-5/16	29 lbs	**JC5044**	Price

Harig "World Famous" Grind-All No. 1 Fixture

- Grinds various shaped punches up to 1-1/4" diameter
- Built for high precision work within ±.0001
- Radii generated with sliding V-block
- Multi-sides produced with 24 division index
- Constructed of hardened tool steel, with critical internal parts protected from grinding dust for long-lasting, accurate performance
- Complete with carrying case, work-holding V-block and 24 division indexing plate

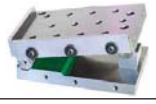
Specifications:

- V-Block Capacity: 1-1/4"
- Center height: 3.00"
- Index divisions: 24
- Accuracy: +/- .0001"
- Graduation: 360º
- Net weight: 12 lbs.



Order No.	Price
NJ60010100	Price

Optional Accessories For Harig Grind-All No. 1 Fixture

Item	Type	Order No.	Price
	Grind-All Fixture 4 x 6 Sine Accessory	NJ60055100	Price
	Grind-All Fixture 6" Hardened Face Plate	NJ601090	Price
	Grind-All Fixture Base Plate & Tailstock	NJ60015100	Price
	Grind-All Fixture Magnetic Chuck Accessory	NJ601040	Price
	Grind-All Fixture Radius Dresser Arm	NJ601052	Price

Suburban Master Grind™

- Twin-Dex combination 5C collet and V-block in one fixture
- Horizontal or vertical V-block mounting
- 72-Position index plate for hard index every five degrees ±15 arc seconds
- Two heavy duty 4" diameter tapered roller bearings in spindle
- Extra large 1-5/8" V-block capacity
- Built-in sine bar for setting angles between hard index locations
- Square and parallel within .0002"
- Maximum spindle runout .00005"
- Sine set compatible
- Fitted wooden case included
- Model MG5CVS1WBTS Master Grind, fitted base and tailstock complete



Base	Collet Style	Center Height (in.)	Overall Height (in.)	Thru Hole (in.)	Weight	Order No.	Price
4 x 5	5C	3	5-1/2	1-1/4	54 lbs	NJ50MG5CVS1WBTS	Price
4 x 5	5C	3	5-1/2	1-1/4	32 lbs	NJ50MG5CVS1	Price

Suburban Accessories for Master-Grind

Motor Drive Kit:

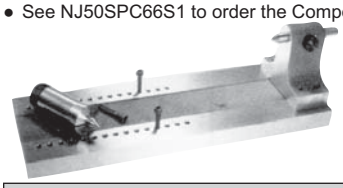
- 1/15 HP, reversible, variable speed, 60 to 300 RPM
- Includes mounting bracket, motor pulley, drive belt and screws
- Easy one-minute installation
- Motor mounts on either side of Master-Grind

Base Plate and Tailstock:

- Tailstock has 1/2" diameter x 60° spring-loaded center with locking screw
- Includes 1/2" 5C collet and steel 60° headstock center
- Base plate and edge guide are hardened and ground
- †NOTE: Factory fitting of Order No. MV5CVS1 to base plate and tailstock is required. This is included at no charge even when the base plate and tailstock is purchased separately from the index fixture.

Sine Plate or Compound Sine Plate:

- Attaches directly to Master-Grind with 2 screws, no clamps required
- Precision ground flat, square and parallel within .0002"
- .200" Minute steps on gage roll for setting small angles
- Made of steel hardened to RC58-62
- Two self-storing rails and one locking strap included
- See NJ50SP66S1 To Order the Sine Plate for Master-Grind
- See NJ50SPC66S1 to order the Compound Sine Plate for Master-Grind





Description	Weight	Order No.	Price
Base Plate and Tailstock for Master Grind	22 lbs	NJ50MG5BTS†	Price
Motor Drive Kit for Master Grind	5 lbs	NJ50MG5MD	Price

Suburban Collet Master

- Uses all standard 5C Collets
- 48 position index plate provides a hard stop every 7-1/2°
- Drawbar and fitted wooden case included
- Two sealed, preloaded ball bearings in spindle
- Hardened and ground base is held square and parallel to spindle.
- 1-1/8" Through hole
- Optional face plate and V-block for eccentric forms available
- Indexing accuracy ± 45 sec.



Base Size (in.)	Center Height (in.)	Overall Height	Spindle TIR	Order No.	Price
3-3/4 x 3-1/2	3-5/8	5-1/2	.0001	NJ50CM5C	Price

Face Plate & V-Block Accessory for Collet Master

- Case included

Description	Order No.	Price
Face Plate and V-block accessory with case	NJ50CM5CFPVB	Price

Suburban Mini-Master All Purpose Index Fixture

- 3" Height is ideal for small machine setups
- Weight only 4 pounds for easy handling
- 72-Position index plate allows an index every 5°
- 5/8" Through hole in spindle
- Uses standard ER-25 spring collets
- Spindle runs in two sealed preloaded bearings
- Maximum spindle runout .0002"
- Spindle can be secured by stop button for easy tightening of collets
- Hardened steel base plate is ground square and parallel with spindle axis within 0.0002"
- Fitted wooden case and collet wrench included



Order No.	Price
NJ50MM25R	Price

Harig Lectric-Centers Motorized Cylindrical Grinding Fixture

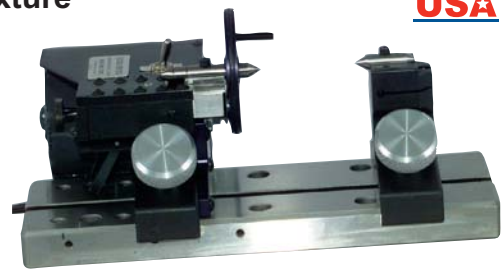
MADE IN THE USA

For external grinding on a surface grinder

- Quickly converts a surface grinder for cylindrical grinding applications and can also be used for critical inspection.
- The Dead Center design permits extremely close accuracies down to 50 millionths and less to be easily obtained
- Can be mounted directly on magnetic chuck or onto the optional 4" x 6" sine plate (Order No. NJ60-055100)
- Completely motorized for ease of stock removal
- Complete with diamond holder for wheel dressing, interchangeable male and female centers, adjustable headstock & tailstock and carrying case

Specifications:

- Swing: 6"
- Center distance: 7"
- Center height: 3"
- Accuracy: 0.000050 TIR
- Motor: 115Volt/1 Phase
- Speeds: 180 & 360 RPM
- Net weight: 20 lbs.



Order No.	Price
NJ60025100	Price

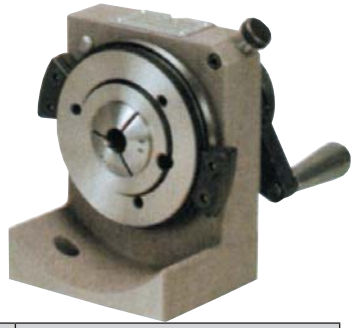
Harig Uni-Dex Ultra Precise Collet Fixture

- Hardened and ground throughout, its integral preloaded ball and race bearing, and 24 division index arrangement delivers extreme positioning accuracy and precision
- Magnetic chuck, face plate and 3-jaw chuck accessories
- Comes with carrying case

Specifications:

- Runout with 5-C collet - 0.000050
- Index accuracy: ±10 seconds
- Center height: 3"
- Thru hole: 1-1/4"
- Index divisions: 24
- Collet type: 5C & 5ST
- 3-Jaw chuck hole: 3/4"
- Weight: 10-1/2 lbs.

MADE IN THE USA



Order No.	Price
NJ60070100	Price

Harig Spin-Indexers

MADE IN THE USA

- Sturdy and dimensionally stable cast iron housing
- Large preloaded ball bearings are durable and accurate — ideal for motorization
- 5C collet holder ground in assembly to under 0.00001" runout
- 24 Division index plate with precision index pins locks in every 15° to +/- 30 seconds
- Draw sleeve for quick set-ups of collets and accessories
- Extended base for minimal deflection even with heavier parts
- 1/4" Diameter mounting hole on top of housing for diamond dresser



Specifications:

- Collet - 5C up to 1"
- Center height - 4-1/8"
- 24 division indexing - +/- 30 seconds
- Spindle runout - 0.00001"
- Spindle parallel to base - 0.0002 in 6"
- Motor - 1/15HP 110V AC
- Variable speed - 50-450 RPM
- Weight: 17 lbs.

Type	Order No.	Price
Manual Spin Indexer	NJ60122100	Price
Motorized Spin Indexer	NJ60120100	Price

World Class Quality End Mill Grinding Fixture

Features:

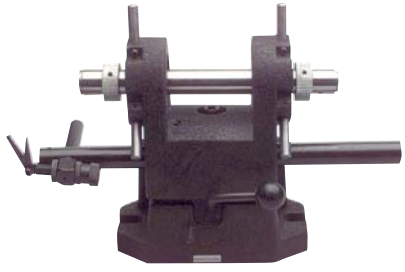
- Uses 5C Collets (no more bushings to lose) which means any shank size end mill from 1/16" to 1-1/8" can be ground
- Shell mills can be easily held with straight shank arbors
- The use of 5C Collets assures concentricity
- Solid positive ball stops with 15° spacing fast and easy set ups
- Grinds 2-3-4-6-8 and 12-fluted end mills and shellmills. Faces only!
- Clearance and relief angles are built into base
- Solid 2-1/2" x 4-1/2". Base ground on bottom for sure contact with magnet
- Black oxide finish



Order No.	Price
HN50RGF	Price

National End Mill Cutter Sharpener

- Sharpens saws, end mills, inserted blade cutters, etc
- Sharpens all end mills up to 2-1/2" Diameter; 1-1/4" Shank
  Rigid finger holder and bar for best precision finish
- Micrometer Dial for setting adjusting finger for cutting edge clearance
- Rocker Arm enables fast indexing and brings cutter to wheel



- Accepts cutters with diameters up to 12" and larger with use of riser blocks
- Spindle Bearings require no air, hydraulic or delicate adjustments
- Includes 2 spindles and 4 bushings to cover full range from 3/16" to 1-1/4" shank end mills
- Base size: 7-1/16" x 3-15/16"
- Weight: 35 lbs.

Order No.	Price
MW51550002	Price

Swivel Angle Plates

- Cast iron heavy duty construction
- Ground table surface
- 0-90° range
- Machined T-slots
- Precision made

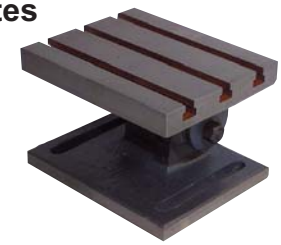


Table Size (in.)	Overall Height (in.)	Weight	Order No.	Price
10 x 12	8	112 lbs	**JJ60SAP1012**	Price

Adjustable Angle Plates - Tilting Tables

- Heavy and sturdy construction
- 0-90° Range (45° each way)
- Graduated in degrees
- Table surface is ground
- Machined T-slots



Table Size (in.)	Overall Height (in.)	Weight	Order No.	Price
5 x 7	3-3/4	21 lbs	**JJ60AAP57**	Price
7 x 10	5	45 lbs	**JJ60AAP710**	Price
10 x 15	6-1/2	93 lbs	**JJ60AAP1015**	Price

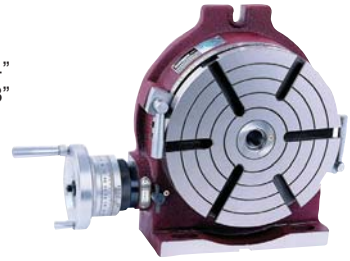
Horizontal/Vertical Rotary Tables

Specifications: (Note: Max. Variation is inches per second)

- Clamping surface flatness (concave); .0006”
- Cylindrical center bore concentricity; .0008”
- Taper center bore concentricity; .0008”
- Surface to base parallelism; .0008”
- Surface to angle face squareness; .0004”
- Surface to center slot squareness; .0008”

Accuracy:

- 6” & 8” Tables; 1 min., 20 sec.
- 10”, 12”, & 14” Tables; 45 sec.



Size (in.)	Horiz. Height (in.)	Vert. Height (in.)	Center Height (in.)	No. T-Slots	Center Hole	Weight	Order No.	Price
6	3.26	7.87	3.94	4	2MT	26.5 lbs	**JJ40HV6**	Price
8	4.13	10.43	5.31	4	3MT	66 lbs	**JJ40HV8**	Price
10	4.33	12.80	6.50	6	3MT	99 lbs	**JJ40HV10**	Price
12	5.04	15.38	7.68	6	4MT	182.6 lbs	**JJ40HV12**	Price
14	5.04	17.72	9.06	6	4MT	209 lbs	**JJ40HV14**	Price

Horizontal/Vertical Precision Rotary Tables

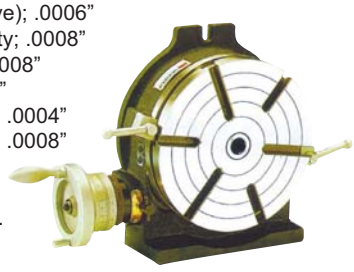
- Works as an index center in the vertical position as well as a conventional rotary table for circular cutting, angle setting, boring and spot facing
- 10-Second Vernier reading
- Disengageable worm gear permits rapid rotation
- Worm gear is hardened and ground
- Optional dividing plates and crank handle can be attached to the rotary table drive mechanism
- One rotation of handle equals 4”
- Made of Meehanite
- The base of the body, table surface and rotating parts are ground finished, permitting very smooth rotation

Specifications: (Note: Max. Variation is inches per second)

- Clamping surface flatness (concave); .0006”
- Cylindrical center bore concentricity; .0008”
- Taper center bore concentricity; .0008”
- Surface to base parallelism; .0008”
- Surface to angle face squareness; .0004”
- Surface to center slot squareness; .0008”

Accuracy:

- 4”, 6”, & 8” Tables; 1 min., 20 sec.
- 10”, 12”, 14”, & 16” Tables; 45 sec.
- 20” Tables; 40 sec.



Size (in.)	Horiz. Height (in.)	Vert. Height (in.)	Center Height (in.)	No. T-Slots	Center Hole	Weight	Order No.	Price
4	2.80	5.70	3.30	3	2MT	17 lbs	**JJ55LG4**	Price
6	3.10	7.80	3.90	3	2MT	29 lbs	**JJ55LG6**	Price
8	4.10	10.40	5.30	3	3MT	66 lbs	**JJ55LG8**	Price
10	4.50	12.80	6.50	6	3MT	103 lbs	**JJ55LG10**	Price
12	5.30	15.30	7.70	6	4MT	173 lbs	**JJ55LG12**	Price
14	5.50	17.72	9.10	6	4MT	233 lbs	**JJ55LG14**	Price

Horizontal/Vertical Simple Indexing Spacers

- The center hole is big to be suitable for large or long workpiece
- The simple spacer has a hardened and ground master plate that can index the special angle of 15°
- The simple spacer index includes a 3-jaw chuck, masking plates 2, 3, 4, 6, 8 and 12



Size (in.)	Weight	Order No.	Price
6	65 lbs	**JJ55CC6**	Price
8	114 lbs	**JJ55CC8**	Price

Replacement Chucks for Vertex Spacers

Supplied with:

- Master jaw and top jaws
- T-Wrench
- Mounting screws



Model No.	Chuck Size (in.)	Hole Size (in.)	Description	Order No.	Price
F3063R	6	1.575	Semi Steel Body	**HK15F3063R**	Price
F3083R	8	2.165	Semi Steel Body	**HK15F3083R**	Price
SF3063R	6	1.575	Steel Body	**HK15SF3063R**	Price
SF3083R	8	2.165	Steel Body	**HK15SF3083R**	Price

Simple & Super Indexing Spacers



- 24 Position master plate
- 360° Graduated ring
- Graduated ring with five minute vernier reading
- Worm gear reduction ratio is 1:90

Super Standard Accessories:

- 3-Jaw chuck
- Six masking plates (2, 3, 4, 6, 8, & 12 position)
- T-slotted face plate (8" or 10")

Simple Standard Accessories:

- 3-Jaw chuck
- Six masking plates (2, 3, 4, 6, 8, & 12 position)

	Simple Spacer		Super Spacer	
Size (in.)	Order No.	Price	Order No.	Price
6	**JJ40CC6**	Price	**JJ40CS6**	Price
8	**JJ40CC8**	Price	**JJ40CS8**	Price

Horizontal/Vertical Super Indexing Spacers



- Combines the advantages of the Simple Index with those of a worm-geared index
- Can carryout single-purpose indexing and indirect indexing using the worm-drive mechanism when mounted on a milling, boring or machine tool
- Disengaging the worm drive, the 24-notch master plate permits 2, 3, 4, 6, 8, 12 and 24 dividing in the same manner as the Simple Index
- When the chuck is removed the unit can be used as a horizontal and vertical type rotary table
- Operating handle to rotary table worm gear reduction ratio is 1:90
- Operating handle collar is graduated in one minute, and readings down to ten seconds can be set on the Vernier
- CS6 complete with 6" 3-jaw chuck; 2-pc. hardened and reversible jaw; 8" face flate and 6 masking plates
- CS8 complete with 8' 3-jaw chuck; 2-pc. hardened and reversible jaw; 10" face flate and 6 masking plates

Size (in.)	Weight	Order No.	Price
6	106 lbs	**JJ55CS6**	Price
8	167 lbs	**JJ55CS8**	Price

Horizontal/Vertical Super Spacers

With 6", 8" or 12" Precision Steel Body 3-Jaw Chuck



- Catch device allows you to perform basic indexing in divisions of 2, 3, 4, 6, 8, 12 & 24 without changing masking plates
- Designed for milling, drilling, jig boring and related machining operations
- Simple and compact construction provides for 2 types of dividing
- Angular indexing can be performed through the graduation ring from 0° to 360° in increments of 1°

Specifications:

- Indexing Accuracy - 2'
- Squareness (Base to Chuck) - .0008" Max.
- Parallelism Over Face - .0008" Max.
- Concentricity of Chuck - .0015 Tir.

Size (in.)	Hole Size (in.)	Order No.	Price
6	1.6	**JJ45609006**	Price
8	2.1	**JJ45609008**	Price
12	4	**JJ45609012**	Price

Optional Dividing Plates

- For CS-6 and CS-8 Super Spacer
- For LG-10 thru LG-14 Rotary Tables



For Use with Table Sizes (in.)	Order No.	Price
CS 6 & CS 8	**JJ55DP6**	Price
LG 10, 12, & 14	**JJ55DP10**	Price

Adjustable Tailstocks

- Adjustable height and angle of inclination for rotary tables and spacers



Spacer (in.)	Rotary Tables (in.)	Max. Height (in.)	Min. Height (in.)	Order No.	Price
N/A	4 & 6	4.3	2.95	**JJ55TS1**	Price
6	8	5.7	4.5	**JJ55TS2**	Price
8	10 & 12	7.8	5.1	**JJ55TS3**	Price
12	14	10.2	7.5	**JJ55TS4**	Price

Tailstocks & Dividing Plates

- **Note:** 14” Rotary table uses JJ40EDP2 Dividing Plates



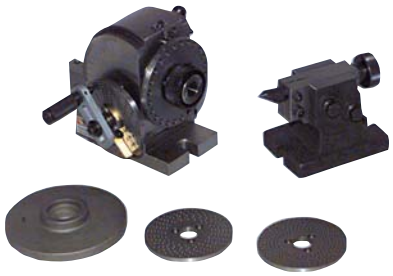


				Dividing Plate		Tail Stock	
For Super Spacers (in.)	For Rotary Tables (in.)	Max. Height (in.)	Min. Height (in.)	Order No.	Price	Order No.	Price
6	6	5.15	3.18	**JJ40EDP1**	Price	**JJ40ETS1**	Price
8	8, 10, 12	8.26	5.12	**JJ40EDP2**	Price	**JJ40ETS2**	Price
N/A	14	11.81	8.27	**-**	-	**JJ40ETS3**	Price

VERTEX Dividing Heads Semi Universal

Semi-Universal Index • B&S Type • Head Stock

- Can be used for direct and indirect indexing
- Differential indexing from 2-50 division and certain numbers up to 380 are possible
- Includes head, plates and tailstock



OAL (in.)	Width (in.)	Height (in.)	Tailstock Center Ht. (in.)	Center Hole	Spindle Thread	Weight	Order No.	Price
7-7/16	5-23/64	6-13/16	3-15/16	MT2	1-1/2-8	43 lbs	**JJ55BS0**	Price
11-17/32	6-9/64	8-21/32	5-3/64	MT3	1-1/2-8	71 lbs	**JJ55BS1**	Price

VERTEX Universal Indexing Center

- Head tilts from horizontal to 10° past vertical
- Position is read from a scale graduated in degrees
- Ratio of the indexing lever to the head is 40;1 or 9° per turn of the handle
- Includes dividing head, tailstock, change gears, spindle, dividing plates, flange, brackets and instruction manual



OAL (in.)	Height (in.)	Hole Size (in.)	Tailstock Center Ht. (in.)	Spindle Thread	Weight	Order No.	Price
14-13/32	9-13/64	5/8	5-9/32	2-1/4-8	160 lbs	**JJ55BS2**	Price

DORIAN TOOL 90° Angle Heads

- Fixed 90° angle head with 0-360° circular rotation
- Interchangeable spindle taper holder for CAT, ISO & BT spindles
- ER16 system designed for precision machining for small to medium tool applications
- ER25 & ER32 system designed to perform any CNC medium duty operations
- AAH-TP40 is designed to perform any CNC heavy duty operations



CAT50





CAT40



Taper - CAT40					
Model No.	Max. Torque	Max. RPM	Tool Holding	Order No.	Price
90CNC-AAH-ER16-CAT40	5 lb. ft.	0-4000 RPM	ER16	**GG3545968**	Price
90CNC-AAH-ER25-CAT40	15 lb. ft.	0-3500 RPM	ER25	**GG3545977**	Price
90CNC-AAH-ER32-CAT40	30 lb. ft.	0-3500 RPM	ER32	**GG3545986**	Price
90CNC-AAH-TP40-CAT40	29.5 lb. ft.	0-2000 RPM	CAT40	**GG3545936**	Price

Taper - CAT50					
Model No.	Max. Torque	Max. RPM	Tool Holding	Order No.	Price
90CNC-AAH-ER16-CAT50	5 lb. ft.	0-4000 RPM	ER16	**GG3545972**	Price
90CNC-AAH-ER25-CAT50	15 lb. ft.	0-3500 RPM	ER25	**GG3545981**	Price
90CNC-AAH-ER32-CAT50	30 lb. ft.	0-3500 RPM	ER32	**GG3545990**	Price
90CNC-AAH-TP40-CAT50	30 lb. ft.	0-2000 RPM	CAT40	**GG3545996**	Price

Universal CNC Adjustable Angle Heads

- Capable of machining in two axial positioning angles
- ER25 is designed to perform any CNC medium duty operations
- ER32 is designed to perform any CNC heavy duty operations
- Interchangeable spindle taper holder for CAT, ISO & BT Spindles



Taper - CAT40				
Model No.	Max. RPM	Tool Holding	Order No.	Price
PLCNC-AAH-ER25-CAT40	0-4000 RPM	ER25	**GG3545953**	Price
PLCNC-AAH-ER32-CAT40	0-3500 RPM	ER32	**GG3545943**	Price

Taper - CAT50				
Model No.	Max. RPM	Tool Holding	Order No.	Price
PLCNC-AAH-ER25-CAT50	0-4000 RPM	ER25	**GG3545957**	Price
PLCNC-AAH-ER32-CAT50	0-3500 RPM	ER32	**GG3545963**	Price

Quik-Set Z300 Presetter

- Economical
- Excellent quality
- Reduces tooling-up time
- Battery operated
- Large display numbers
- Preset tool diameters and lengths
- Supplied with CAT40 tool sleeve



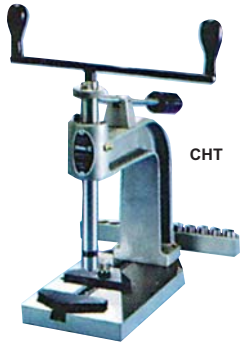
Model No.	Power Input	Measuring Method	Height Capacity	Accuracy	Dia. Capacity	Weight	Order No.	Price
Quik-Set-Z300	3 AA Batteries	Contact Probe	11.8	+/- .0005	9.8	67 lbs	**GG3542001**	Price
Quik-Set-Z400	4 AA Batteries	Contact Probe	15.75	+/- .0005	9.8	120 lbs	**FL3342030**	Price
Quik-Set-Z600	6 AA Batteries	Contact Probe	23.6	+/- .0005	23.6	150 lbs	**FL3342034**	Price
Quik-Set-XM	5 AA Batteries	Contact Probe	11.8	+/- .0005	15.75	120 lbs	**FL3342032**	Price

Hand Tappers

Assures straight perpendicular tapped holes.







Model Number	Brand Name	Table Size (WxL) (in.)	Clearance Height (in.)	Depth of Throat (in.)	Tap Cap. (adapters)	Weight (lbs.)	Order No.	Price
790 Mini Tapper	Cedarberg	6 x 8-1/2	3-3/4	4-1/2	#0 - 5/16 (7)	12	**EV55790**	Price
780 E-Z Tapper	Cedarberg	8 x 13	7	7-1/2	#8 - 3/4 (9)	35	**EV55780**	Price
CHT	Quality Import	6-1/2 x 12-1/2	7-7/8	7-1/2	#6 - 5/8 (9)	50	**EV56CHT**	Price

GTI ER Tapping Attachments ISO 9002

Application:
- Axial-float/tension/compression type for CNC milling machines and lathes with reversing motors and rigid tapping

Features:
- Compensates for machine feed and tap pitch variance
- Floating mechanism compensates for misalignment between tap and workpiece
- Right and left hand tapping
- Practical and efficient tap holding by the ER spring collet without using jaw drive
- Compact design for minimal clearance applications
- Heavy-duty design for high torque drive ensures the same accuracy as the tap itself



Type - GTI ER Integral Shank Tapping Attachment						
Model No.	Shank Size (in.)	Collet Style/ Fits	Tap Range (Fractional) (in.)	Tap Range (mm)	Order No.	Price
4500066	CAT40	ER16	#6 to 3/8	M3 to M10	**GM702300046**	Price
4500068	CAT40	ER32	1/4 to 3/4	M3 to M10	**GM702300047**	Price
4500071	CAT50	ER32	1/4 to 3/4	M3 to M10	**GM702300050**	Price
4500072	CAT50	ER40	5/16 to 1-1/8	M6 to M28	**GM702300051**	Price

Type - GTI ER Tapping Attachment					
Model No.	Shank Size (in.)	Collet Style/ Fits	Tap Range (Fractional) (in.)	Order No.	Price
4548089	5/8	ER11	#3 to 1/4	**GM702300003**	Price
4539028	3/4	ER16	#6 to 3/8	**GM702300011**	Price
4539025	3/4	ER20	#8 to 1/2	**GM702300013**	Price
4539027	1	ER25	#10 to 5/8	**GM702300015**	Price
4500060	1	ER32	1/4 to 3/4	**GM702300017**	Price
4500061	1-1/4	ER40	5/16 to 1-1/8	**GM702300019**	Price

TAPMATIC RX Series Tapping Heads

Self-Reversing Tapping Heads For Drill Presses & Milling Machines

- Pre-selective torque drive prevents tap breakage
- Heavy duty ball clutch
- Accurate depth control
- Re-entry cushion eliminates cross threading
- Higher production rates
- Longer tap life
- For right hand tapping only



Model No.	Collet Style	Mount	Capacity (in.)	Self Feed	Max. RPM	Order No.	Price
RX30	21700	33JT	0 - 1/4" (M1.4 - M6)	Min. .156 Max. .312	2000	**GJ50013033**	Price
RX30	21600	6JT	0 - 1/4" (M1.4 - M6)	Min. .156 Max. .312	2000	**GJ50013006**	Price
RX50	22200	33JT	#6 - 1/2" (M3 - M12) Pipe 1/16, 1/8	Min. .250 Max. .437	1500	**GJ50015033**	Price
RX50	22100	6JT	#6 - 1/2" (M3 - M12) Pipe 1/16, 1/8	Min. .250 Max. .437	1500	**GJ50015006**	Price
RX70	24100	3JT	#10 - 3/4" (M5 - M16)	Max. .562	1200	**GJ50017003**	Price

Reduce capacity 25% for roll form taps. Please order rubber-flex collets and arbors separately.

Rubber Flex Collets

Used for X, TC/DC-R, SPD & NSM Tapping Heads



Jacobs CHUCK TAPMATIC

				Jacobs		Tapmatic	
Model No.	Tap Size (in.)	Tap Range (in.)	Shank Size (in.)	Order No.	Price	Order No.	Price
J116	#0 - 1/4 Capacity	#0 - 8 Standard	.098 - .177	**HK509757**	Price	**GJ5021600**	Price
J117	#0 - 1/4 Capacity	#10 - 1/4 Standard	.177 - .256	**HK509758**	Price	**GJ5021700**	Price
J420	#6 - 1/2 Capacity	N/A	.194 - .318	**HK509747**	Price	**GJ5022000**	Price
J421	#6 - 1/2 Capacity	#0 - 1/4 Standard	.139 - .257	**HK509748**	Price	**GJ5022100**	Price
J422	#6 - 1/2 Capacity	1/4 - 1/2 Standard	.253 - .383	**HK509751**	Price	**GJ5022200**	Price
J423	#6 - 1/2 Capacity	N/A	.090 - .180	**HK509817**	Price	**GJ5022300**	Price
J440	#10 - 3/4 Capacity	5/16 - 5/8	.280 - .500	**HK509749**	Price	**GJ5024000**	Price
J441	#10 - 3/4 Capacity	#10 - 1/2 Standard	.176 - .383	**HK509750**	Price	**GJ5024100**	Price
J443	#10 - 3/4 Capacity	N/A	.110 - .280	**HK509867**	Price	**GJ5024300**	Price
J445	#10 - 3/4 Capacity	N/A	.393 - .590	**HK50J445**	Price	**GJ5024500**	Price
J461	1/2 - 1-1/8 Capacity	1/2 - 3/4	.360 - .630	**HK50J461**	Price	**GJ5026100**	Price
J462	1/2 - 1-1/8 Capacity	7/8 - 1-1/8	.630 - .900	**HK50J462**	Price	**GJ5026200**	Price

High Speed Tappers

Style E & F

- Balanced, heat-treated gear reversing mechanism minimizes strain and wear.
- Reverses at twice forward speed to increase productivity and avoid tap jamming.
- Extremely sensitive friction clutch engages conical surfaces of drive and reverse shells with smooth, "cushioned" action, allowing sensitive operator "feel"
- Assure automatic tap protection
- One-piece TRU-GRIP spindle assures true alignment
- Can be modified to be used in horizontal position
- Factory can easily alter any model for left-hand tapping
- **Collets not included—order separately below**



Style	Shank Size (in.)	Cap. Soft Material (in./mm, pipe)	Cap. Steel (in./mm)	Max. RPM	Order No.	Price
1E	1/2 Straight	0-1/4, M2-M6	0-#10, M2-M4	3000	**GH5011006**	Price
1E	1MT	0-1/4, M2-M6	0-#10, M2-M4	3000	**GH5011001**	Price
1E	2MT	0-1/4, M2-M6	0-#10, M2-M4	3000	**GH5011002**	Price
1E	3MT	0-1/4, M2-M6	0-#10, M2-M4	3000	**GH5011003**	Price
2E	1/2 Straight	#6 - 1/2, M4-M12, 1/8 Pipe	#6 - 5/16, M4-M8	2000	**GH5012006**	Price
2E	1MT	#6 - 1/2, M4-M12, 1/8 Pipe	#6 - 5/16, M4-M8	2000	**GH5012001**	Price
2E	2MT	#6 - 1/2, M4-M12, 1/8 Pipe	#6 - 5/16, M4-M8	2000	**GH5012002**	Price
2E	3MT	#6 - 1/2, M4-M12, 1/8 Pipe	#6 - 5/16, M4-M8	2000	**GH5012003**	Price
3E	3/4 Straight	#10-3/4, M6-M18, 1/4 Pipe	#10 - 1/2, M6-M12	1000	**GH5013006**	Price
3E	2MT	#10-3/4, M6-M18, 1/4 Pipe	#10 - 1/2, M6-M12	1000	**GH5013002**	Price
3E	3MT	#10-3/4, M6-M18, 1/4 Pipe	#10 - 1/2, M6-M12	1000	**GH5013003**	Price
3E	4MT	#1-3/4, M6-M18, 1/4 Pipe	#10 - 1/2, M6-M12	1000	**GH5013004**	Price
4F	3/4 Straight	1/4 - 1-1/8, M7-M28, 1/8-3/4 Pipe	1/4 - 1, M7-M22	800	**GH5014006**	Price
4F	2MT	1/4 - 1-1/8, M7-M28, 1/8-3/4 Pipe	1/4 - 1, M7-M22	800	**GH5014002**	Price
4F	3MT	1/4 - 1-1/8, M7-M28, 1/8-3/4 Pipe	1/4 - 1, M7-M22	800	**GH5014003**	Price
4F	4MT	1/4 - 1-1/8, M7-M28, 1/8-3/4 Pipe	1/4 - 1, M7-M22	800	**GH5014004**	Price
4F	5MT	1/4 - 1-1/8, M7-M28, 1/8-3/4 Pipe	1/4 - 1, M7-M22	800	**GH5014005**	Price

"Tru-Grip" Tap Collets

MADE IN THE USA



For Style "E & F" Tappers

Type - Pipe Tap				
	3E		4F	
Tap Size (in.)	Order No.	Price	Order No.	Price
1/8	**GH5053865**	Price	**GH5054865**	Price
1/4	**GH5053876**	Price	**GH5054876**	Price
3/8	**-**	-	**GH5054887**	Price
1/2	**-**	-	**GH5054885**	Price
3/4	**-**	-	**GH5054899**	Price

Type - SS Pipe Tap						
	2E		3E		4F	
Tap Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
1/8 SS Pipe	**GH5052845**	Price	**GH5053845**	Price	**GH5054845**	Price
3/8 SS Pipe	**GH5052839**	Price	**GH5053839**	Price	**GH5054839**	Price

Type - Tru-Tap										
	0E		1E		2E		3E		4F	
Tap Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
#6	**GH5050811**	Price	**GH5051811**	Price	**GH5052811**	Price	**-**	-	**-**	-
#8	**GH5050818**	Price	**GH5051818**	Price	**GH5052818**	Price	**GH5053818**	Price	**-**	-
#10	**GH5050824**	Price	**GH5051824**	Price	**GH5052824**	Price	**GH5053824**	Price	**-**	-
#12	**GH5050829**	Price	**GH5051829**	Price	**GH5052829**	Price	**GH5053829**	Price	**-**	-
#14	**GH5050835**	Price	**GH5051835**	Price	**GH5052835**	Price	**GH5053835**	Price	**-**	-
1/4	**GH5050838**	Price	**GH5051838**	Price	**GH5052838**	Price	**GH5053838**	Price	**GH5054838**	Price
9/32	**-**	-	**-**	-	**GH5052843**	Price	**GH5053843**	Price	**GH5054843**	Price
5/16	**-**	-	**-**	-	**GH5052848**	Price	**GH5053848**	Price	**GH5054848**	Price
3/8	**-**	-	**-**	-	**GH5052859**	Price	**GH5053859**	Price	**GH5054859**	Price
7/16	**-**	-	**-**	-	**GH5052849**	Price	**GH5053849**	Price	**GH5054849**	Price
1/2	**-**	-	**-**	-	**GH5052856**	Price	**GH5053856**	Price	**GH5054856**	Price
9/16	**-**	-	**-**	-	**-**	-	**GH5053863**	Price	**GH5054863**	Price
5/8	**-**	-	**-**	-	**-**	-	**GH5053869**	Price	**GH5054869**	Price
11/16	**-**	-	**-**	-	**-**	-	**GH5053874**	Price	**GH5054874**	Price
3/4	**-**	-	**-**	-	**-**	-	**GH5053878**	Price	**GH5054878**	Price
13/16	**-**	-	**-**	-	**-**	-	**-**	-	**GH5054883**	Price
7/8	**-**	-	**-**	-	**-**	-	**-**	-	**GH5054886**	Price
15/16	**-**	-	**-**	-	**-**	-	**-**	-	**GH5054891**	Price
1	**-**	-	**-**	-	**-**	-	**-**	-	**GH5054894**	Price
1-1/8	**-**	-	**-**	-	**-**	-	**-**	-	**GH5054898**	Price

Round Multiple Spindle Heads

- Multiple Spindle Drilling Heads drill up to 17 holes simultaneously in work areas up to 8” diameter, or 5” x 12” rectangular
- Multiple Tapping Attachments are designed for use with style 3AL Tapper and taps up to 17 holes at once
- Multiple Spindle Drilling Heads and tapping attachments standard equipment includes: unbored TEM-PLATE, wrenches, cover clamp and shank (as required)
- Spindle assemblies and collets sold separately
- Tapping head with base assembly
- Drilling head shown with optional cover clamp

33000 Series Tapping





33000 Series Drilling

					Round Multiple Speed Spindle Drilling Heads		Round Multiple Spindle Tapping Head	
Style	Gear Ratio	Max. Drivers	Work Area (in.)	Max. RPM	Order No.	Price	Order No.	Price
MJ	1:1	7	6	2200	**GH5033001**	Price	**GH5033005**	Price
MJ	1:2	6	6	1200	**GH5033002**	Price	**GH5033006**	Price
MK	1:1	9	8	2200	**GH5034001**	Price	**GH5034005**	Price
MK	1:2	8	8	1200	**GH5034002**	Price	**GH5034006**	Price
MP	1:1	10	8	2200	**GH5039001**	Price	**GH5039005**	Price
MQ	1:1	17	8	2200	**GH5040001**	Price	**GH5040005**	Price

TRU-GRIP Straight Shank Tapping Chucks

- Use on CNC machining centers, screw machines, automatic lathes and chuckers, CNC lathes and milling machines
- Eliminates tap breakage caused during machine reversal by automatically providing overtravel and compensating for improper feed ranges
- Provides excellent tapped holes
- Can be used in either rigid or reversing spindles
- Easily adapts to any machine with a 3/4”, or 1”, or 1-1/2” holder
- Order style “E”/“F” collets sold separately



Style - 2TG						
Tap Collet Series	Shank Size (in./ MT)	Collet OD (in.)	Projection (in.)	Cap. (in.)	Order No.	Price
2E	1/2 SS	1	2-1/8	#6 - 1/2"	**GH5057420**	Price
2E	1MT	1	2-1/8	#6 - 1/2"	**GH5057421**	Price
2E	2MT	1	2-1/8	#6 - 1/2"	**GH5057422**	Price

Style - 3TG						
Tap Collet Series	Shank Size (in./ MT)	Collet OD (in.)	Projection (in.)	Cap. (in.)	Order No.	Price
3E	9/16" SS	1-7/16	2-1/2	#10 - 3/4"	**GH5057430**	Price
3E	2MT	1-7/16	2-1/2	#10 - 3/4"	**GH5057432**	Price
3E	3MT	1-7/16	2-1/2	#10 - 3/4"	**GH5057433**	Price

Style - 4TG						
Tap Collet Series	Shank Size (in./ MT)	Collet OD (in.)	Projection (in.)	Cap. (in.)	Order No.	Price
4F	3/4 SS	2	3-1/8	1/4 - 1-1/8"	**GH5057440**	Price
4F	2MT	2	3-1/8	1/4 - 1-1/8"	**GH5057442**	Price
4F	3MT	2	3-1/8	1/4 - 1-1/8"	**GH5057443**	Price
4F	4MT	2	3-1/8	1/4 - 1-1/8"	**GH5057444**	Price

Rectangular Multiple Spindle Heads

Prices shown are for the multiple spindle heads only. Other prices will vary depending on your requirements. To determine the correct multiple spindle head for your application, please provide the work area, the size & number of holes and the type of material to be machined. Please also specify the make & model of the drill press to be used. Cover clamps for drilling heads are sold separately according to the style of drill press.



- Spindle assemblies and collets sold separately
- Driling head shown with optional cover clamp
- GH50-35003 shown

					Rectangular Multiple Speed Spindle Drilling Heads		Rectangular Multiple Spinde Tapping Head	
Style	Gear Ratio	Max. Drivers	Work Area (in.)	Max. RPM	Order No.	Price	Order No.	Price
ML	1:1	9	4 x 10	2000	**GH5035001**	Price	**GH5035005**	Price
ML	1:2	8	4 x 10	1200	**GH5035002**	Price	**GH5035006**	Price
MM	1:1	13	5 x 12	2000	**GH5036001**	Price	**GH5036005**	Price
MM	1:2	12	5 x 12	1200	**GH5036002**	Price	**GH5036006**	Price
MN	1:1	13	4 x 10	2000	**GH5037001**	Price	**GH5037005**	Price
MO	1:1	17	5 x 12	2000	**GH5038001**	Price	**GH5038005**	Price

Replacement Part

Universal Joint Assemblies†

- A solid hex, spring-loaded torque shaft connects the upper and lower pre-lubricated, booted universals (Remove the lower boot when using on 11/16” to 1/2” centers)



Order No.	Price
GH5033270	Price

†Included with Spindle Assemblies

TRU-GRIP Straight Shank Tension Tap Holders



Model No.	Capacity (in.)	Shank Dia. (in.)	Tool Length (in.)	Tension Travel (in.)	Tap Collet Series	Order No.	Price
57407	#0 - 1/4"	3/4	3-1/4	3/8	1E	**GH5057407**	Price
57410	#8 - 1/2	1	4-1/4	1/2	2E	**GH5057410**	Price
57413	#10 - 3/4"	1	4-7/8	5/8	3E	**GH5057413**	Price
57415	1/4 - 1	1-1/2	5-7/16	5/8	4F	**GH5057415**	Price

RAPIDHOLD® Rigid & Tension Compression Tapping Holders



- Produced according to AT3 specifications
- Tools are made of high quality steel
- Balanced by design
- No through coolant capability

Type - BT Rigid Tap Holders					
Shank	Adaptor Size	Nose Dia.	Gage Length	Order No.	Price
BT30	1	1.31	2.8	**TS1221936**	Price
BT30	2	1.97	3.7	**TS1221939**	Price
BT40	1	1.31	2.63	**TS1221937**	Price
BT40	2	1.97	3.54	**TS1221940**	Price
BT40	3	2.83	4.61	**TS1221942**	Price
BT50	1	1.31	3.07	**TS1221938**	Price
BT50	2	1.97	3.97	**TS1221941**	Price
BT50	3	2.83	4.8	**TS1221943**	Price

Type - BT Tension & Compression Tapping Holders					
Shank	Adaptor Size	Nose Dia.	Gage Length	Order No.	Price
BT30	1	1.50	2.48	**TS1221915**	Price
BT30	2	2.17	3.78	**TS1221918**	Price
BT40	1	1.50	2.68	**TS1221916**	Price
BT40	2	2.17	3.66	**TS1221919**	Price
BT40	3	3.11	5.43	**TS1221921**	Price
BT40	4	3.86	6.18	**TS1221923**	Price
BT50	1	1.50	3.15	**TS1221917**	Price
BT50	2	2.17	4.02	**TS1221920**	Price
BT50	3	3.11	5.31	**TS1221922**	Price
BT50	4	3.86	5.79	**TS1221924**	Price

Type - CAT Rigid Tap Holders					
Shank	Adaptor Size	Nose Dia.	Gage Length	Order No.	Price
CAT40	1	1.31	2.32	**TS1221904**	Price
CAT40	2	1.97	3.23	**TS1221905**	Price

Type - CAT Rigid Tap Holders					
Shank	Adaptor Size	Nose Dia.	Gage Length	Order No.	Price
CAT40	3	2.83	4.8	**TS1221906**	Price
CAT50	1	1.31	2.95	**TS1221910**	Price
CAT50	2	1.97	3.86	**TS1221911**	Price
CAT50	3	2.83	4.8	**TS1221912**	Price

Type - CAT Tension & Compression Tapping Holders					
Shank	Adaptor Size	Nose Dia.	Gage Length	Order No.	Price
CAT40	1	1.50	2.36	**TS1221901**	Price
CAT40	2	2.17	3.94	**TS1221902**	Price
CAT40	3	3.11	5.43	**TS1221903**	Price
CAT40	4	3.86	6.06	**TS1221913**	Price
CAT50	1	1.50	2.44	**TS1221907**	Price
CAT50	2	2.17	3.27	**TS1221908**	Price
CAT50	3	3.11	5.24	**TS1221909**	Price
CAT50	4	3.86	5.79	**TS1221914**	Price

Type - Straight Shank Rigid Tap Holders					
Shank	Adaptor Size	Nose Dia.	Gage Length	Order No.	Price
1	1	1.61	1.6	**TS1221952**	Price
1	2	2.36	2.5	**TS1221953**	Price
1-1/2	3	3.38	3.44	**TS1221954**	Price

Type - Straight Shank Tension & Compression Tapping Holders					
Shank	Adaptor Size	Nose Dia.	Gage Length	Order No.	Price
1	1	1.61	1.76	**TS1221932**	Price
1	2	2.36	2.52	**TS1221933**	Price
1-1/2	2	2.36	2.52	**TS1221934**	Price
1-1/2	3	3.38	3.85	**TS1221935**	Price

RAPIDHOLD® Tap Adapters

- Rigid – for through holes
- Tension/compression - provides protection against tap breakage and is the best solution for blind hole tapping



Adaptor Size - 1					
		Rigid		Tension/Compression	
Tap Range (Fractional)	Tap Range (Metric)	Order No.	Price	Order No.	Price
#0 to 6	-	**TS1329501**	Price	**TS1329527**	Price
#8	M4	**TS1329502**	Price	**TS1329528**	Price
#10	M5	**TS1329503**	Price	**TS1329529**	Price
#12	-	**TS1329504**	Price	**TS1329530**	Price
1/4	M6	**TS1329506**	Price	**TS1329532**	Price
5/16	M8	**TS1329507**	Price	**TS1329533**	Price
3/8	M10	**TS1329508**	Price	**TS1329534**	Price
7/16	M11	**TS1329509**	Price	**TS1329535**	Price
1/2	M12	**TS1329510**	Price	**TS1329536**	Price
9/16	M14	**TS1329511**	Price	**TS1329537**	Price
1/8 NPT	-	**TS1329505**	Price	**TS1329531**	Price

Adaptor Size - 2					
		Rigid		Tension/Compression	
Tap Range (Fractional)	Tap Range (Metric)	Order No.	Price	Order No.	Price
5/16	M8	**TS1329569**	Price	**TS1329539**	Price
3/8	M10	**TS1329570**	Price	**TS1329540**	Price
7/16	M11	**TS1329571**	Price	**TS1329542**	Price
1/2	M12	**TS1329572**	Price	**TS1329543**	Price
9/16	M14	**TS1329573**	Price	**TS1329545**	Price
5/8	M16	**TS1329514**	Price	**TS1329546**	Price

Adaptor Size - 2					
		Rigid		Tension/Compression	
Tap Range (Fractional)	Tap Range (Metric)	Order No.	Price	Order No.	Price
11/16	M18	**TS1329515**	Price	**TS1329547**	Price
3/4	-	**TS1329516**	Price	**TS1329548**	Price
13/16	M20	**TS1329517**	Price	**TS1329549**	Price
7/8	M22	**TS1329518**	Price	**TS1329550**	Price
1/4 NPT	-	**TS1329574**	Price	**TS1329538**	Price
3/8 NPT	-	**TS1329512**	Price	**TS1329541**	Price
1/2 NPT	-	**TS1329513**	Price	**TS1329544**	Price

Adaptor Size - 3					
		Rigid		Tension/Compression	
Tap Range (Fractional)	Tap Range (Metric)	Order No.	Price	Order No.	Price
1/2	M12, M12.5	**TS1329575**	Price	**TS1329565**	Price
9/16	M14	**TS1329576**	Price	**TS1329551**	Price
5/8	M16	**TS1329577**	Price	**TS1329552**	Price
11/16	M18	**TS1329578**	Price	**TS1329553**	Price
3/4	-	**TS1329579**	Price	**TS1329554**	Price
13/16	M20	**TS1329580**	Price	**TS1329566**	Price
7/8	M22	**TS1329520**	Price	**TS1329556**	Price
15/16	M24	**TS1329521**	Price	**TS1329557**	Price
1	M25	**TS1329522**	Price	**TS1329558**	Price
1-1/16 to 1-1/8	M27	**TS1329524**	Price	**TS1329560**	Price
1-3/16 to 1-1/4	M30	**TS1329525**	Price	**TS1329561**	Price
1-5/16 to 1-3/8	M33	**TS1329526**	Price	**TS1329562**	Price
3/8 NPT	-	**TS1329563**	Price	**TS1329567**	Price
1/2 NPT	-	**TS1329564**	Price	**TS1329568**	Price
3/4 NPT	-	**TS1329519**	Price	**TS1329555**	Price
1 NPT	-	**TS1329523**	Price	**TS1329559**	Price

Adaptor Size - 4			
		Rigid	
Tap Range (Fractional)	Tap Range (Metric)	Order No.	Price
1-1/2, 1-7/16	M36	**TS1329581**	Price
1-5/8	M39	**TS1329582**	Price
1-3/4	M42	**TS1329583**	Price
1-7/8	-	**TS1329584**	Price

F.O.B. Warren, MI

PARLEC Rigid Tapping Holders

- For use with popular Bilz style size and adapters
- Utilizes existing adapter inventory
- Rigid and tension-only shank available for use with sychronous tapping cycles
- Radial float improves thread quality and tap life
- Short projection maximizes workpiece size
- Adjustable short compression stroke ensures accurate depth control
- Free-floating tension stroke ensures thread size and quality
- Rugged alloy steel construction long trouble-free service life
- Coolant through up to 250 lbs. pressure



C4010TA3

Tap Range	Nose Dia.	Gage Length	Adaptor Size	Shank Size	Order No.	Price
0 - 9/16	1.39	3.15	1	CAT50	**GM92C5010TA3C**	Price
0 - 9/16	1.39	3.15	1	CAT50	**GM92C5010TR3C**	Price
0 - 9/16	1.39	3.96	1	CAT40	**GM92C4010TA3C**	Price
0 - 9/16	1.39	3.96	1	CAT40	**GM92C4010TR3C**	Price
1/4 - 7/8	2.18	3.86	2	CAT40	**GM92C4020TR4C**	Price
1/4 - 7/8	2.18	4.25	2	CAT50	**GM92C5020TA4C**	Price
1/4 - 7/8	2.18	4.25	2	CAT50	**GM92C5020TR4C**	Price
1/4 - 7/8	2.18	5.06	2	CAT40	**GM92C4020TA4C**	Price
9/16 - 1-3/8	3.29	5.65	3	CAT50	**GM92C5030FS5C**	Price
9/16 - 1-3/8	3.29	5.65	3	CAT50	**GM92C5030TA5C**	Price
9/16 - 1-3/8	3.29	6.46	3	CAT40	**GM92C4030FS5C**	Price

Tension & Compression

Tap Range	Nose Dia.	Gage Length	Adaptor Size	Shank Size	Order No.	Price
0 - 9/16	1.39	3.15	1	CAT50	**GM92C5010TA3C**	Price
0 - 9/16	1.39	3.96	1	CAT40	**GM92C4010TA3C**	Price
1/4 - 7/8	2.18	4.25	2	CAT50	**GM92C5020TA4C**	Price
1/4 - 7/8	2.18	5.06	2	CAT40	**GM92C4020TA4C**	Price
9/16 - 1-3/8	3.29	5.65	3	CAT50	**GM92C5030TA5C**	Price

PARLEC Tap Adapters

- **Rigid:** Best suited for through holes and in applications where tap breakage is not a concern
- **Torque Control:** Torque Control Adapters are the best solution for protecting your taps and work pieces from tap breakage. The prime application for Torque Control Adapters is Blind Hole Tapping and where Chip Evacuation is a concern



Adaptor Size - 1					
		Rigid Positive Tap Adaptor		Tension & Compression Tap Adaptors	
Tap Range (Fractional)	Tap Range (Metric)	Order No.	Price	Order No.	Price
#6	M1.6-M3.5	**GM921006**	Price	**GM9210T06**	Price
#8	M4	**GM92108**	Price	**GM9210T8**	Price
#10	M4.5, M5	**GM921010**	Price	**GM9210T10**	Price
#12	-	**GM921012**	Price	**GM9210T12**	Price
1/4	M6, M6.3	**GM9210025**	Price	**GM9210T025**	Price
5/16	M7, M8	**GM9210031**	Price	**GM9210T031**	Price
3/8	M10	**GM9210037**	Price	**GM9210T037**	Price
7/16	M11	**GM9210043**	Price	**GM9210T043**	Price
1/2	M12, M12.5	**GM9210050**	Price	**GM9210T050**	Price
9/16	M14	**GM9210056**	Price	**GM9210T056**	Price
1/8 NPT	-	**GM9210012N**	Price	**GM9210T012N**	Price

Adaptor Size - 2					
		Rigid Positive Tap Adaptor		Tension & Compression Tap Adaptors	
Tap Range (Fractional)	Tap Range (Metric)	Order No.	Price	Order No.	Price
5/16	M7, M8	**-**	-	**GM9220T031**	Price
3/8	M10	**GM9220037**	Price	**GM9220T037**	Price
7/16	M11	**GM9220043**	Price	**GM9220T043**	Price
1/2	M12, M12.5	**-**	-	**GM9220T050**	Price
9/16	M14	**GM9220056**	Price	**GM9220T056**	Price
5/8	M16	**GM9220062**	Price	**GM9220T062**	Price
11/16	M18	**GM9220068**	Price	**GM9220T068**	Price

Adaptor Size - 2					
		Rigid Positive Tap Adaptor		Tension & Compression Tap Adaptors	
Tap Range (Fractional)	Tap Range (Metric)	Order No.	Price	Order No.	Price
3/4	-	**GM9220075**	Price	**GM9220T075**	Price
13/16	M20	**GM922081**	Price	**GM9220T81**	Price
7/8	M22	**GM9220087**	Price	**GM9220T087**	Price
1/2 NPT	-	**GM9220050N**	Price	**GM9220T050N**	Price
1/4 NPT	-	**-**	-	**GM9220T025N**	Price
3/8 NPT	-	**GM9220037N**	Price	**GM9220T037N**	Price

Adaptor Size - 3					
		Rigid Positive Tap Adaptor		Tension & Compression Tap Adaptors	
Tap Range (Fractional)	Tap Range (Metric)	Order No.	Price	Order No.	Price
3/4	-	**-**	-	**GM9230T075**	Price
13/16	M20	**GM9230081**	Price	**-**	-
7/8	M22	**GM9230087**	Price	**GM9230T087**	Price
15/16	M24	**GM9230093**	Price	**GM9230T093**	Price
1	M25	**GM9230100**	Price	**GM9230T100**	Price
1-1/8	M27	**GM9230106**	Price	**GM9230T106**	Price
1-1/4	M30	**GM9230118**	Price	**GM9230T118**	Price
1-3/8	M33	**GM9230131**	Price	**GM9230T131**	Price
1/2 NPT	-	**GM9230050N**	Price	**-**	-
3/4 NPT	-	**GM9230075N**	Price	**GM9230T075N**	Price
1 NPT	-	**GM9230100N**	Price	**GM9230T100N**	Price

Tapping Collets - Inch



Rapidhold:
- 0.0004" T.I.R.
- High Qaulity Spring Steel
- Works with standard ER Collet chucks for synchronous Rigid Tapping Operations
- Replaces Tap Holders
- Tapping clearance is reduced
- Collet design locks tap shank

Rego-Fix:
- Interchangeable, with standard ER collet DIN 6499/ISO 15488
- No additional toolholders and clamping nuts necessary
- Wide product range, sizes: ER11 to 40
- Square for tight grip of tap, eliminates tap slippage in collets

Techniks:
- Reduced clearance requirements
- Special design locks square in slots
- Compatible with the standard collet chucks for ER, DR, RD, ESX, BR or DIN 6499 collet pockets
- The special square design locks flat-sided tap shanks into collet, preventing the tap from spinning inside the collet

Collet Style/Fits - ER11

		Rego-Fix	
Tap Size	Shank (in.)	Order No.	Price
#6	.141	GM20141103585	Price
#8	.168	GM20141104275	Price

Collet Style/Fits - ER16

		Rapidkut		Rego-Fix		Techniks	
Tap Size	Shank (in.)	Order No.	Price	Order No.	Price	Order No.	Price
#6	.141	TS2028801	Price	GM20141603585	Price	TE1205320141	Price
#8	.168	TS2028802	Price	GM20141604725	Price	TE1205320168	Price
#9	.194	-	-	GM20141604935	Price	-	-
#10	.194	TS2028803	Price	-	-	TE1205320194	Price
#12	.220	TS2028804	Price	GM20141605595	Price	TE1205320220	Price
#14	.255	-	-	GM20141606485	Price	-	-
1/4	.255	TS2028808	Price	-	-	TE1205320255	Price
5/16	.318	-	-	GM20141608085	Price	TE1205320318	Price
3/8	.381	-	-	-	-	TE1205320381	Price
7/16	.323	-	-	-	-	TE1205320323	Price
1/2	.367	-	-	-	-	TE1205320367	Price

Collet Style/Fits - ER20

		Rapidkut		Rego-Fix		Techniks	
Tap Size	Shank (in.)	Order No.	Price	Order No.	Price	Order No.	Price
#6	.141	TS2028815	Price	-	-	TE1205410141	Price
#8	.168	TS2028816	Price	GM20142004275	Price	TE1205410168	Price
#10	.194	TS2028817	Price	GM20142004935	Price	TE1205410194	Price
#12	.220	TS2028818	Price	GM20142005595	Price	TE1205410220	Price
#14	.255	-	-	GM20142006485	Price	-	-
1/4	.255	TS2028821	Price	-	-	TE1205410255	Price
5/16	.318	TS2028822	Price	GM20142008085	Price	-	-
3/8	.381	TS2028823	Price	GM20142009685	Price	TE1205410381	Price
7/16	.323	TS2028824	Price	GM20142008215	Price	TE1205410323	Price
1/2	.367	TS2028825	Price	GM20142009325	Price	TE1205410367	Price

Collet Style/Fits - ER25

		Rapidkut		Rego-Fix		Techniks	
Tap Size	Shank (in.)	Order No.	Price	Order No.	Price	Order No.	Price
#6	.141	TS2028831	Price	-	-	TE1205510141	Price
#8	.168	TS2028832	Price	GM20142504275	Price	TE1205510168	Price
#10	.194	TS2028833	Price	GM20142504935	Price	TE1205510194	Price
#12	.220	TS2028834	Price	GM20142505595	Price	TE1205510220	Price
#14	.255	-	-	GM20142506485	Price	-	-
1/4	.255	TS2028839	Price	-	-	TE1205510255	Price
5/16	.318	TS2028840	Price	GM20142508085	Price	-	-
3/8	.381	TS2028841	Price	GM20142509685	Price	TE1205510381	Price
7/16	.323	TS2028842	Price	GM20142508215	Price	TE1205510323	Price
1/2	.367	TS2028843	Price	GM20142509325	Price	TE1205510367	Price
9/16	.429	TS2028844	Price	GM20142510905	Price	TE1205510429	Price
5/8	.480	TS2028845	Price	GM20142512195	Price	TE1205510480	Price
11/16	.542	-	-	-	-	TE1205510542	Price
3/4	.590	-	-	GM20142514995	Price	-	-
1/8 NPT	.437	TS2028838	Price	GM20142511104	Price	TE1205510437	Price

Collet Style/Fits - ER32

		Rapidkut		Rego-Fix		Techniks	
Tap Size	Shank (in.)	Order No.	Price	Order No.	Price	Order No.	Price
#6	.141	TS2028851	Price	-	-	TE1205570141	Price
#8	.168	TS2028852	Price	GM20143204275	Price	TE1205570168	Price
#10	.194	TS2028853	Price	GM20143204935	Price	TE1205570194	Price
#12	.220	TS2028854	Price	GM20143205595	Price	TE1205570220	Price
1/4	.255	TS2028860	Price	GM20143206485	Price	TE1205570255	Price
5/16	.318	TS2028861	Price	GM20143208085	Price	TE1205570318	Price
3/8	.381	TS2028862	Price	GM20143209685	Price	TE1205570381	Price
7/16	.323	TS2028863	Price	GM20143208215	Price	TE1205570323	Price
1/2	.367	TS2028864	Price	GM20143209325	Price	TE1205570367	Price
9/16	.429	TS2028865	Price	GM20143210905	Price	TE1205570429	Price
5/8	.480	TS2028866	Price	GM20143212195	Price	TE1205570480	Price
11/16	.542	TS2028867	Price	GM20143213775	Price	TE1205570542	Price
3/4	.590	TS2028868	Price	GM20143214995	Price	TE1205570590	Price
13/16	.652	TS2028869	Price	GM20143216565	Price	TE1205570652	Price
1/8 NPT	.437	TS2028858	Price	GM20143211104	Price	TE1205570437	Price
1/4 NPT	.562	TS2028859	Price	GM20143214274	Price	TE1205570562	Price

Collet Style/Fits - ER40

		Rapidkut		Rego-Fix		Techniks	
Tap Size	Shank (in.)	Order No.	Price	Order No.	Price	Order No.	Price
#6	.141	TS2028881	Price	-	-	TE1205710141	Price
#8	.168	TS2028882	Price	-	-	TE1205710168	Price
#10	.194	TS2028883	Price	-	-	TE1205710194	Price
#12	.220	TS2028884	Price	-	-	TE1205710220	Price
#14	.255	-	-	GM20144006485	Price	-	-
1/4	.255	TS2028890	Price	-	-	TE1205710255	Price
5/16	.318	TS2028891	Price	GM20144008085	Price	TE1205710318	Price
3/8	.381	TS2028893	Price	GM20144009685	Price	TE1205710381	Price
7/16	.323	TS2028894	Price	GM20144008215	Price	TE1205710323	Price
1/2	.367	TS2028896	Price	GM20144009325	Price	TE1205710367	Price
9/16	.429	TS2028897	Price	GM20144010905	Price	TE1205710429	Price
5/8	.480	TS2028898	Price	GM20144012195	Price	TE1205710480	Price
11/16	.542	TS2028899	Price	GM20144013775	Price	TE1205710542	Price
3/4	.590	TS2028900	Price	GM20144014995	Price	TE1205710590	Price
13/16	.652	TS2028901	Price	GM20144016565	Price	TE1205710652	Price
7/8	.697	TS2028902	Price	GM20144017705	Price	TE1205710697	Price
15/16	.760	TS2028903	Price	GM20144019305	Price	-	-
1	.800	TS2028904	Price	GM20144020325	Price	TE1205710800	Price
1/8 NPT	.437	TS2028888	Price	GM20144011104	Price	TE1205710437	Price
1/4 NPT	.562	TS2028889	Price	GM20144014274	Price	TE1205710562	Price
3/8 NPT	.700	TS2028892	Price	GM20144017784	Price	TE1205710700	Price
1/2 NPT	.687	TS2028895	Price	GM20144017454	Price	TE1205710687	Price

Tapping Collets - Metric

Rego-Fix:

- Interchangeable, with standard ER collet DIN 6499/ISO 15488
- No additional toolholders and clamping nuts necessary
- Wide product range, sizes: ER11 to 40
- Square for tight grip of tap, eliminates tap slippage in collets



Techniks:

- Reduced clearance requirements
- Special design locks square in slots
- Compatible with the stanard collet chucks for ER, DR, RDd, ESX, BR or DIN 6499 collet pockets
- The special square design locks flat-sided tap shanks into collet, preventing the tap from spinning inside the collet

Collet Style/Fits - ER11

Tap Size	Shank	Brand Name	Order No.	Price
M 2.0	2.5mm	Rego-Fix	**GM20141102500**	Price
M 2.0	2.8mm	Rego-Fix	**GM20141102800**	Price
M 3.0	3.5mm	Rego-Fix	**GM20141103500**	Price
M 3.5	4mm JIS	Rego-Fix	**GM20141104002**	Price
M 3.5	4mm	Rego-Fix	**GM20141104000**	Price
M 4.0	4.5mm	Rego-Fix	**GM20141104500**	Price
M 4.5	5mm	Rego-Fix	**GM20141104935**	Price
M 5.0	5mm	Rego-Fix	**GM20141105002**	Price
M 8.0	6mm	Rego-Fix	**GM20141106000**	Price

Collet Style/Fits - ER16

Tap Size	Shank	Brand Name	Order No.	Price
M 2.0	2.8mm	Rego-Fix	**GM20141602800**	Price
M 2.0	3.5mm	Rego-Fix	**GM20141603500**	Price
M 3.0	3.5mm	Techniks	**TE1205330DIN**	Price
M 4.0	2.8mm	Techniks	**TE1205326DIN**	Price
M 4.0	4mm	Rego-Fix	**GM20141604002**	Price
M 4.0	4.5mm	Rego-Fix	**GM20141604500**	Price
M 4.0	4.5mm	Techniks	**TE1205336DIN**	Price
M 5.0	5mm	Rego-Fix	**GM20141605002**	Price
M 5.0	5.5mm	Rego-Fix	**GM20141605501**	Price
M 6.0	6mm	Rego-Fix	**GM20141606001**	Price
M 6.0	6mm	Rego-Fix	**GM20141606000**	Price
M 6.0	6.3mm	Rego-Fix	**GM20141606302**	Price
M 7.0	5.5mm	Rego-Fix	**GM20141605500**	Price
M 7.0 - M 8.0	6.2mm	Rego-Fix	**GM20141606201**	Price
M 8.0	8mm	Rego-Fix	**GM20141608000**	Price
M 8.0	8mm	Techniks	**TE1205350DIN**	Price
M 8.0	8.5mm JIS	Techniks	**TE1205352**	Price
M 9.0	9mm	Rego-Fix	**GM20141609000**	Price
M 9.0 - M 10.0	7mm	Rego-Fix	**GM20141607000**	Price
M 9.0	7.1mm	Rego-Fix	**GM20141607102**	Price
M 10.0	2.8mm	Techniks	**TE1205356DIN**	Price
M 12.0	8.5mm	Rego-Fix	**GM20141608501**	Price
M 12.0	9mm	Techniks	**TE1205354DIN**	Price

Collet Style/Fits - ER20

Tap Size	Shank	Brand Name	Order No.	Price
M 2.0	3.5mm	Rego-Fix	**GM20142003500**	Price
M 4.0	4mm	Rego-Fix	**GM20142004002**	Price
M 4.0	4.5mm	Rego-Fix	**GM20142004500**	Price
M 4.0	4.5mm	Techniks	**TE1205428DIN**	Price
M 5.0	5mm	Rego-Fix	**GM20142005002**	Price
M 5.0	5.5mm	Rego-Fix	**GM20142005501**	Price
M 5.0	6mm	Rego-Fix	**GM20142006000**	Price
M 5.0 - M 6.0	6mm	Techniks	**TE1205434DIN**	Price
M 6.0	6mm	Rego-Fix	**GM20142006001**	Price
M 6.0	6.3mm	Rego-Fix	**GM20142006302**	Price
M 7.0	5.5mm	Rego-Fix	**GM20142005500**	Price
M 7.0	6.2mm	Rego-Fix	**GM20142006201**	Price
M 7.0	7mm	Rego-Fix	**GM20142007000**	Price
M 7.0	7.1mm	Rego-Fix	**GM20142007102**	Price
M 8.0	8mm	Techniks	**TE1205442DIN**	Price
M 9.0	9mm	Rego-Fix	**GM20142009000**	Price
M 10.0	10mm	Rego-Fix	**GM20142010000**	Price
M 10.0	10mm	Techniks	**TE1205448DIN**	Price
M 11.0	8mm	Rego-Fix	**GM20142008000**	Price
M 12.0	9mm	Techniks	**TE1205446DIN**	Price
M 14.0	10.5mm	Rego-Fix	**GM20142010501**	Price
M 14.0	11mm	Rego-Fix	**GM20142011000**	Price
M 14.0	11.2mm	Rego-Fix	**GM20142011202**	Price
M 16.0	12mm	Rego-Fix	**GM20142012000**	Price
M 16.0	12mm	Techniks	**TE1205456DIN**	Price

Collet Style/Fits - ER25

Tap Size	Shank	Brand Name	Order No.	Price
M 4.0	4mm	Rego-Fix	**GM20142504002**	Price
M 4.0	4.5mm	Rego-Fix	**GM20142504500**	Price
M 4.0	4.5mm	Techniks	**TE1205526DIN**	Price
M 4.5	6mm	Rego-Fix	**GM20142506000**	Price
M 5.0	5mm	Rego-Fix	**GM20142505002**	Price
M 5.0	5.5mm	Rego-Fix	**GM20142505501**	Price
M 5.0 - M 6.0	6mm	Techniks	**TE1205534DIN**	Price

Collet Style/Fits - ER25

Tap Size	Shank	Brand Name	Order No.	Price
M 6.0	6mm	Rego-Fix	**GM20142506001**	Price
M 6.0	6.3mm	Rego-Fix	**GM20142506302**	Price
M 7.0	5.5mm	Rego-Fix	**GM20142505500**	Price
M 7.0	6.2mm	Rego-Fix	**GM20142506201**	Price
M 7.0	7mm	Rego-Fix	**GM20142507000**	Price
M 7.0	7.1mm	Rego-Fix	**GM20142507102**	Price
M 8.0	8mm	Techniks	**TE1205542DIN**	Price
M 9.0	9mm	Rego-Fix	**GM20142509000**	Price
M 10.0	7mm	Techniks	**TE1205540DIN**	Price
M 10.0	10mm	Rego-Fix	**GM20142510000**	Price
M 10.0	10mm	Techniks	**TE1205550DIN**	Price
M 10.0	10mm	Techniks	**TE1205550**	Price
M 11.0	8mm	Rego-Fix	**GM20142508000**	Price
M 12.0	8.5mm	Rego-Fix	**GM20142508501**	Price
M 12.0	9mm	Techniks	**TE1205548DIN**	Price
M 14.0	10.5mm	Rego-Fix	**GM20142510501**	Price
M 14.0	11mm	Techniks	**TE1205554DIN**	Price
M 14.0	11mm	Rego-Fix	**GM20142511000**	Price
M 14.0	11.2mm	Rego-Fix	**GM20142511202**	Price
M 16.0	12mm	Rego-Fix	**GM20142512000**	Price
M 16.0	12mm	Techniks	**TE1205558DIN**	Price
M 16.0	12.5mm	Rego-Fix	**GM20142512502**	Price
M 18.0	14mm	Rego-Fix	**GM20142514000**	Price
M 20.0	15mm	Rego-Fix	**GM20142515001**	Price
M 20.0	16mm	Rego-Fix	**GM20142516000**	Price

Collet Style/Fits - ER32

Tap Size	Shank	Brand Name	Order No.	Price
M 8.0	8mm	Techniks	**TE1205600DIN**	Price
M 4.0	4.5mm	Rego-Fix	**GM20143204500**	Price
M 4.0	4mm	Rego-Fix	**GM20143204002**	Price
M 4.0	4.5mm	Techniks	**TE1205586DIN**	Price
M 5.0	5.5mm	Rego-Fix	**GM20143205501**	Price
M 5.0	5mm	Rego-Fix	**GM20143205002**	Price
M 6.0	6mm	Rego-Fix	**GM20143206001**	Price
M 6.0	6mm	Rego-Fix	**GM20143206000**	Price
M 6.0	6.3mm	Rego-Fix	**GM20143206302**	Price
M 7.0	5.5mm	Rego-Fix	**GM20143205500**	Price
M 7.0	6.2mm	Rego-Fix	**GM20143206201**	Price
M 7.0	7mm	Rego-Fix	**GM20143207000**	Price
M 7.0	7.1mm	Rego-Fix	**GM20143207102**	Price
M 8.0	8mm	Rego-Fix	**GM20143208000**	Price
M 9.0	9mm	Rego-Fix	**GM20143209000**	Price
M 10.0	10mm	Rego-Fix	**GM20143210000**	Price
M 11.0	8mm	Techniks	**TE1205600JIS**	Price
M 10.0	10mm	Techniks	**TE1205606DIN**	Price
M 12.0	8.5mm	Rego-Fix	**GM20143208501**	Price
M 12.0	9mm	Techniks	**TE1205604DIN**	Price
M 14.0	10.5mm	Rego-Fix	**GM20143210501**	Price
M 14.0	11mm	Rego-Fix	**GM20143211000**	Price
M 14.0	11mm	Techniks	**TE1205610**	Price
M 14.0	11.2mm	Rego-Fix	**GM20143211202**	Price
M 16.0	12mm	Rego-Fix	**GM20143212000**	Price
M 16.0	12mm	Techniks	**TE1205614DIN**	Price
M 16.0	12.5mm	Rego-Fix	**GM20143212502**	Price
M 18.0	14mm	Rego-Fix	**GM20143214000**	Price
M 18.0	14mm	Techniks	**TE1205620DIN**	Price
M 20.0	15mm	Rego-Fix	**GM20143215001**	Price
M 20.0	16mm	Rego-Fix	**GM20143216000**	Price
M 20.0	16mm	Techniks	**TE1205624DIN**	Price
M 22.0	17mm	Rego-Fix	**GM20143217001**	Price
M 24.0	18mm	Rego-Fix	**GM20143218000**	Price
M 27.0	20mm	Rego-Fix	**GM20143220000**	Price

Collet Style/Fits - ER40

Tap Size	Shank	Brand Name	Order No.	Price
M 6.0	6mm	Rego-Fix	**GM20144006000**	Price
M 6.0	6mm	Rego-Fix	**GM20144006001**	Price
M 6.0	6.3mm	Rego-Fix	**GM20144006302**	Price
M 7.0	6.2mm	Rego-Fix	**GM20144006201**	Price
M 7.0	7mm	Rego-Fix	**GM20144007000**	Price
M 7.0	7.1mm	Rego-Fix	**GM20144007102**	Price
M 8.0	8mm	Rego-Fix	**GM20144008000**	Price
M 10.0	10mm	Rego-Fix	**GM20144010000**	Price
M 12.0	8.5mm	Rego-Fix	**GM20144008501**	Price
M 12.0	9mm	Rego-Fix	**GM20144009000**	Price
M 14.0	10.5mm	Rego-Fix	**GM20144010501**	Price
M 14.0	11mm	Rego-Fix	**GM20144011000**	Price
M 14.0	11.2mm	Rego-Fix	**GM20144011202**	Price
M 16.0	12mm	Rego-Fix	**GM20144012000**	Price
M 16.0	12.5mm	Rego-Fix	**GM20144012502**	Price
M 18.0	14mm	Rego-Fix	**GM20144014000**	Price
M 20.0	15mm	Rego-Fix	**GM20144015001**	Price
M 20.0	16mm	Rego-Fix	**GM20144016000**	Price
M 22.0	17mm	Rego-Fix	**GM20144017001**	Price
M 24.0	18mm	Rego-Fix	**GM20144018000**	Price
M 27.0	20mm	Rego-Fix	**GM20144020000**	Price
M 30.0	22mm	Rego-Fix	**GM20144022000**	Price

Split Sleeve Tap Drivers



- Square on tap shank engages with the broached square hole in the tap driver for a positive drive of the tap
- Made from high quality steel and properly heat treated

Tap Size (in.)	Morse Taper Shank	Order No.	Price
#0 to 6	1	**HA5271300**	Price
#8	1	**HA5271301**	Price
#10	1	**HA5271302**	Price
#12	1	**HA5271303**	Price
1/4	1	**HA5271320**	Price
1/4	2	**HA5272420**	Price
5/16	1	**HA5271321**	Price
5/16	2	**HA5272421**	Price
3/8	2	**HA5272423**	Price
3/8 Small Shank	1	**HA5271322**	Price
3/8 Small Shank	2	**HA5272422**	Price
7/16	2	**HA5272424**	Price
1/2	2	**HA5272425**	Price
1/2	3	**HA5273420**	Price
9/16	2	**HA5272426**	Price
9/16	3	**HA5273421**	Price
5/8	2	**HA5272427**	Price
5/8	3	**HA5273422**	Price
11/16	2	**HA5272428**	Price
11/16	3	**HA5273423**	Price
3/4	3	**HA5273424**	Price
3/4	4	**HA5274420**	Price
13/16	3	**HA5273426**	Price
7/8	3	**HA5273425**	Price
7/8	4	**HA5274421**	Price
1	4	**HA5274422**	Price
1-1/8	4	**HA5274423**	Price
1-1/8	5	**HA5275100**	Price
1-1/4	4	**HA5274424**	Price
1-1/4	5	**HA5275101**	Price
1-3/8	5	**HA5275102**	Price
1-1/2	5	**HA5275103**	Price
1-3/4	5	**HA5275104**	Price

Split Sleeve Pipe Tap Drivers



- Square on tap shank engages with the broached square hole in the tap driver for a positive drive of the tap
- Made from high quality steel and properly heat treated

Tap Size (in.)	Morse Taper Shank	Order No.	Price
1/16 NPT & 1/8 NPT Small Shank	2	**HA5372450**	Price
1/8 NPT Large Shank	2	**HA5372451**	Price
1/4 NPT	3	**HA5373450**	Price
3/8 NPT	4	**HA5374450**	Price
1/2 NPT	4	**HA5374451**	Price
3/4 NPT	4	**HA5374452**	Price
3/4 NPT	5	**HA5375110**	Price
1 NPT	5	**HA5375111**	Price
1-1/4 NPT	5	**HA5375112**	Price
1-1/2 NPT	5	**HA5375113**	Price

Safety Guard Collets



- Safety Guard Collets have a free running safety collar added to minimize accidental slippage when changing collets

Fits Chuck Type	Internal Taper	Collet Dia. (in.)	Order No.	Price
2	1MT	1-1/4	**GW5064121**	Price
2	2MT	1-1/4	**GW5064122**	Price
2	3MT	1-1/4	**GW5064123**	Price
3	1MT	1-11/16	**GW5064131**	Price
3	2MT	1-11/16	**GW5064132**	Price
3	3MT	1-11/16	**GW5064133**	Price
3	4MT	1-11/16	**GW5064134**	Price
4	1MT	2-3/8	**GW5064141**	Price
4	2MT	2-3/8	**GW5064142**	Price
4	3MT	2-3/8	**GW5064143**	Price
4	4MT	2-3/8	**GW5064144**	Price
4	5MT	2-3/8	**GW5064145**	Price

Magic Chucks



- For quick change tooling on single spindle machines
- Tool changes can be made without slowing or stopping machine
- Completely hardened and precision ground
- For vertical spindles
- A slight touch raises the large locking ring to release the collet and tool
- Magic chucks for horizontal spindles available

Chuck Type	Shank	Hole Dia. (in.)	Order No.	Price
1	1MT	15/16	**GW500101**	Price
1	2MT	15/16	**GW500102**	Price
1	3MT	15/16	**GW500103**	Price
1	4MT	15/16	**GW500104**	Price
2	2MT	1-1/4	**GW500202**	Price
2	3MT	1-1/4	**GW500203**	Price
2	4MT	1-1/4	**GW500204**	Price
2	5MT	1-1/4	**GW500205**	Price
3	3MT	1-11/16	**GW500303**	Price
3	4MT	1-11/16	**GW500304**	Price
3	5MT	1-11/16	**GW500305**	Price
4	4MT	2-3/8	**GW500404**	Price
4	5MT	2-3/8	**GW500405**	Price

Some items shelf worn • Less 30%

Collets for Magic Chucks



- Completely heat treated and precision ground
- Hole allows for use of standard Morse taper tooling

Fits Chuck Type	Internal Taper	Collet Dia. (in.)	Order No.	Price
1	1MT	15/16	**GW500501**	Price
1	2MT	15/16	**GW500502**	Price

Adjustable Adapter Assemblies



- Multiple spindles require the accuracy of precision turned Acme threads and the concentricity of a precisely ground O.D. and I.D.
- All adapters are produced to precise automotive standards to maintain maximum spindle performance and minimize tool runout

Outside Dia. (in.)	Inside Taper	Overall Length (in.)	Thread Length (in.)	Length of Flat (in.)	Nat'l Acme Thread (in.)	Min. Proj. (in.)	Axial Adj. (in.)	Woodruff Key Size (in.)	Order No.	Price
1/2	0MT	3	1-1/2	1-3/8	1/2-16	1/2	7/8	1/8 x 5/8	**GW5270700**	Price
5/8	1MT	3	1-1/2	1-3/8	5/8-16	1/2	7/8	5/32 x 5/8	**GW5270701**	Price
3/4	1MT	3	1-1/2	1-3/8	3/4-12	1/2	7/8	5/32 x 5/8	**GW5270711**	Price
7/8	2MT	3-5/8	1-5/8	1-7/8	7/8-12	5/8	1	3/16 x 3/4	**GW5270712**	Price
1	1MT	3-5/8	1-5/8	1-7/8	1-12	5/8	1	3/16 x 7/8	**GW5270721**	Price
1	2MT	3-5/8	1-5/8	1-7/8	1-12	5/8	1	3/16 x 7/8	**GW5270722**	Price
1-1/16	1MT	3-5/8	1-5/8	1-7/8	1-1/16-12	5/8	1	3/16 x 7/8	**GW5270731**	Price
1-1/16	2MT	3-5/8	1-5/8	1-7/8	1-1/16-12	5/8	1	3/16 x 7/8	**GW5270732**	Price
1-3/8	2MT	4-5/8	1-7/8	2-5/8	1-3/8-12	5/8	1-1/8	1/4 x 1	**GW5270742**	Price
1-3/8	3MT	4-5/8	1-7/8	2-5/8	1-3/8-12	5/8	1-1/8	1/4 x 1	**GW5270743**	Price
1-7/8	3MT	5-5/8	2-1/2	3	1-7/8-12	3/4	1-1/8	5/16 x 1-1/4	**GW5270753**	Price
1-7/8	4MT	5-5/8	2-1/2	3	1-7/8-12	3/4	1-1/8	5/16 x 1-1/4	**GW5270754**	Price

National Boring Heads

- Ideal for mill or jig bore operation
- These heads readily adapt to many different machines due to interchangeable shanks
- 2” and 3” Heads have large .001” reading dial screw
- 4” Heads have .0005” reading dial for fine adjustment



Head Dia. (in.)	OAL w/o Shank (in.)	Boring Bar Hole (in.)	Cir. Distance Between Holes (in.)	Offset (in.)	Threaded Back	Order No.	Price
2	2-15/32	1/2	5/8	5/8	7/8-20	**GE65NBH202**	Price
3	3-5/32	3/4	15/16	1	1-1/2-18	**GE65NBH203**	Price
4	3-3/4	1	1-1/4	1-5/8	1-1/2-18	**GE65NBH204**	Price

Criterion Model CB Round Styles

- Because of the two vertical and one horizontal hole, the merit of these heads lies in their versatility
- They feature a wide bar holder base to assure maximum rigidity
- As in all Criterion heads, they too feature direct dial screws
- The threaded shanks accept a variety of shanks
- Note: Other diameters and hole size options exist-call for price and availability



Actual Round Size (in.)	OAL (in.)	Boring Bar Hole Size (in.)	Offset (in.)	Thread	Order No.	Price
2	2-13/32	3/8	5/8	7/8-20	**GE60CB202A**	Price
2	2-13/32	1/2	5/8	7/8-20	**GE60CB202B**	Price
3	3-5/32	3/4	1	1-1/2-18	**GE60CB203D**	Price
4	3-3/4	1	1-5/8	1-1/2-18	**GE60CB204E**	Price

Criterion Model S Square Style

- These heads have threaded backs that will accept a variety of shanks
- The micrometer adjusting screws are direct reading with 50 graduations on the dial of the GE60S112 and 100 graduations on the dial of the GE60S3 or GE60S3C
- Note: Other diameters and hole size options exist-call for price and availability



Actual Square Size (in.)	OAL (in.)	Boring Bar Hole Round Size (in.)	Offset (in.)	Thread	Order No.	Price
1-1/2 Square	2-1/4	1/2	9/16	7/8-20	**GE60S112**	Price
3 Square	2-15/16	1	1-1/2	1-1/2-18	**GE60S3**	Price

Criterion 3FHB Boring and Facing Head

- Ideal tool for performing those difficult facing, grooving, backfacing and counterboring operations on work pieces too large to turn or too bulky to handle safely
- Automatic feed is in the forward mode and is actuated by holding a knurled feed-ring
- To return to starting position a hex wrench is inserted in the end of the micrometer screw and manually reversed
- Features a gear drive that generates a continuous feed rate of .003” per revolution
- To prevent damage to the gear train, a specially designed detent clutch automatically disengages when a pre-set stop is reached or when cutting pressures become excessive
- A 1-1/2-18 threaded back permits the use of any of the 1-1/2-18 threaded shanks and adapters shown above



Threaded Back	Body Dia. (in.)	Height (in.)	Offset or Travel (in.)	Boring Bar Hole Size (in.)	Cross Hole Dia. Bar Dia.	Feed Rate	Order No.	Price
1-1/2-18	3	3-7/8	7/8	3/4	3/4	.003 per rev.	**GE603FHB**	Price

Precision Boring Heads with Integrated Shanks

- Entirely manufactured in the USA
- Available in R-8, 3/4” or 1” shanks
- Precision hardened steel
- 2”, 2-1/2” and 3” Body diameter
- Direct reading .001” micrometer dial screw
- Boring capacity up to 4”

MADE IN THE USA



Shank Style - R-8 Shank								
Head Dia. (in.)	Shank Dia. (in.)	Hole Dia. (in.)	Offset Travel (in.)	Vertical Hole Spacing (in.)	Shank Length (in.)	OAL (in.)	Order No.	Price
2	R-8	3/8	3/4	5/8	4	6-7/16	**GE70BHR8A**	Price
2-1/2	R-8	1/2	3/4	3/4	4	7-3/16	**GE70BHR8B**	Price
2-1/2	R-8	5/8	3/4	3/4	4	7-3/16	**GE70BHR8C**	Price
3	R-8	3/4	1-1/4	15/16	4	7-1/2	**GE70BHR8D**	Price

Shank Style - Straight Shank								
Head Dia. (in.)	Shank Dia. (in.)	Hole Dia. (in.)	Offset Travel (in.)	Vertical Hole Spacing (in.)	Shank Length (in.)	OAL (in.)	Order No.	Price
2	3/4	3/8	3/4	5/8	2-5/8	5-1/16	**GE70BH34A**	Price
2-1/2	3/4	1/2	3/4	3/4	2-5/8	5-13/16	**GE70BH34B**	Price
2-1/2	3/4	5/8	3/4	3/4	2-5/8	5-13/16	**GE70BH34C**	Price
3	1	3/4	1-1/4	15/16	2-5/8	6-1/8	**GE70BH1D**	Price

Threaded Shanks For 7/8-20 & 1-1/2-18 Mount



	1-1/2-18 Mount		7/8-20 Mount	
Description	Order No.	Price	Order No.	Price
1/2 Straight Shank	**GE65NBS08**	Price	**GE65NBS07**	Price
3/4 Straight Shank	**GE65NBS10**	Price	**GE65NBS09**	Price
1 Straight Shank	**GE65NBS12**	Price	**GE65NBS11**	Price
1-1/4 Straight Shank	**GE65NBS13**	Price	**-**	-

	1-1/2-18 Mount		7/8-20 Mount	
Description	Order No.	Price	Order No.	Price
1-1/2 Straight Shank	**GE65NBS14**	Price	**-**	-
3 Morse Taper Shank	**GE65NBS04**	Price	**GE65NBS03**	Price
4 Morse Taper Shank	**GE65NBS06**	Price	**GE65NBS05**	Price
Bridgeport R-8 Shank	**GE65NBS02**	Price	**GE65NBS01**	Price

ALLIED MACHINE & ENGINEERING CORP Criterion Shanks and Adapters with 7/8-20 Thread

- For use with the following units with 7/8-20 threaded backs - S-1-1/2, S-2, DBL-202 and SL-202 boring heads, and the CB2 series Cri-Bore bars



Shank Style	Order No.	Price
1/2" Round Straight Shank	**GE6020032**	Price
5/8" Round, Straight Shank	**GE6020033**	Price
3/4" Round, Straight Shank	**GE6020034**	Price
1" Round, Straight Shank	**GE6020061**	Price
2MT Tang	**GE6020027**	Price
3MT Tang	**GE6020028**	Price
4MT Tang	**GE6020029**	Price
2MT with Draw Bar	**GE6020017**	Price
R8	**GE6020055**	Price
30 NMTB	**GE6020120**	Price
40 NMTB	**GE6020121**	Price
CAT 40	**GE60CB2CV40**	Price
CAT 50	**GE60CB2CV50**	Price

ALLIED MACHINE & ENGINEERING CORP Criterion Shanks and Adapters with 1-1/2-18 Thread

- For use with the following units with 1-1/2-18 threaded backs - S-3, DBL-204, SL-203, SL-204, TS-250, 3F-HB boring heads, fly bar #44 and #66, fly cutters FC-34 and FC-44 and the CB3 series Cri-Bore bars



Shank Style	Order No.	Price
3/4" Round, Straight Shank	**GE6020015**	Price
1-1/4" Round, Straight Shank	**GE6020065**	Price
1-1/2" Round, Straight Shank	**GE6020059**	Price
2" Round, Straight Shank	**GE6020006**	Price
3MT	**GE6020007**	Price
4MT	**GE6020008**	Price
5MT	**GE6020009**	Price
R8	**GE6020063**	Price
30 NMTB	**GE6020122**	Price
40 NMTB	**GE6020123**	Price
50 NMTB	**GE6020124**	Price
CAT40	**GE60CB3CV40**	Price
CAT 50	**GE60CB3CV50**	Price

NATIONAL R-8 Shank Boring Head Sets

- R-8 Shank Boring Head Sets
- Ideal for mill or jig bore operation
- These heads readily add to many different machines due to interchangeable shanks.
- 2” and 3” Heads have large .001” reading dial screw



Includes	Order No.	Price
2" Boring Head, R8 Shank and 9pc 1/2" Shank Carbide Tipped Boring Bar Set	**GE65NBH202S**	Price
3" Boring Head, R8 Shank and 9pc 3/4" Shank Carbide Tipped Boring Bar Set	**GE65NBH203S**	Price

ALLIED MACHINE & ENGINEERING CORP Criterion Bridgeport Boring Head Sets

MADE IN THE USA

Criterion Machine Works has made available a number of boring head sets specifically selected for Bridgeport Mills. These sets include a standard Criterion Boring Head with an R-8 shank and a wide range of boring tools and boring bars. The boring tools are available in either a C-2 or C-6 grade of carbide. C-6 Standard, C-2 by special order only.

GE601100A Set

This set covers a boring range of 1/8” to 8-5/8” and consists of the following items.

- 1- CB-202 boring head
- 1- R-8 shank
- 1- SBT-125B boring tool 1/8” bore diameter
- 1- SBT-187B boring tool 3/16” bore diameter
- 1- SBT-250B boring tool 1/4” bore diameter
- 1- SBT-312B boring tool 5/16” bore diameter
- 1- SBT-375B boring tool 3/8” bore diameter
- 1- SBT-500B boring tool 1/2” bore diameter



GE601100A



GE601300A Set

This set covers a boring range of 1/2” to 11” and consists of the following items.

- 1- CB-203 boring head
- 1- R-8 shank
- 1- SBT-500D boring tool 1/2” bore diameter
- 1- SBT-625D boring tool 5/8” bore diameter
- 1- SBT-750D boring tool 3/4” bore diameter
- 1- SBT-1000D boring tool 1” bore diameter
- 1- SBT-1250D boring tool 1-1/4” bore diameter
- 1- SBT-500B boring tool 1/2” bore diameter



GE601300A



Thread	Body Dia. Bar (in.)	Bar Dia. (in.)	Order No.	Price
7/8-20	2	1/2	**GE601100A**	Price
1-1/2-18	3	3/4	**GE601300A**	Price

ALLIED MACHINE & ENGINEERING CORP Criterion Micro Adjusting CNC Boring Kits

- Excellent for close tolerance bores
- Total range of micro adjustment is .006" on diameter
- Ground to AT3 Taper Tolerance
- Through the spindle coolant capable
- Boring Bars
- CBT Style uncoated micro grain carbide
- TA Style carbide insert, 4 flat design
- Comes with custom molded plastic case
- All kits includes toolholder, adapter, boring bars & carbide inserts



						CAT40		CAT50	
Thread (in.)	Bar Dia. (in.)	OAL (in.)	Min. Bore Dia. (in.)	Max. Bore Dia. (in.)	Boring Head No.	Order No.	Price	Order No.	Price
7/8-20	1/8, 3/8	3	.060	2.500	CB-1500AMA	**GE60KIT150040**	Price	**GE60KIT150050**	Price
1-1/2-18	1/8, 3/8	3-3/8	.060	3.250	CB-2500BMA	**GE60KIT250040**	Price	**GE60KIT250050**	Price
1-1/2-18	1/4, 3/8, 1/2, 3/4	3-3/8	.120	5.125	CB-3000DMA	**GE60KIT300040**	Price	**GE60KIT300050**	Price

TECHNIKS Boring Kits

- Dial adjustable 0.0001" increments
- Rhombic or triangular inserts

Rhombic Kit Includes:

- 1 Pc. EPMT 1.5_
- 3 Pcs. CCMT 21.5_
- 3 Pcs. CCMT 32.5_

Triangular Kit Includes:

- 2 Pcs. TCMT 1.2_
- 3 Pcs. TCMT 1.8_
- 2 Pcs. TCMT 32.5_

New!



Max. Range	Description	Order No.	Price
.314 to 3.94	Triangle Modular Boring Kit	**TE106991235**	Price
.314 to 6.69	Rhombic Modular Boring Kit	**TE106991230**	Price
.314 to 8.27	Triangle Modular Boring Kit	**TE106991240**	Price

PARLEC Balanceable Modular Boring Kit

Diameter Range .354" - 1.890" (9mm-48mm)

- The Balanceable Modular Boring Kit comes equipped with 1 EACH of items shown below with exception of inserts which is 4 of each. Kit also includes a complete balancing guide to ensure the highest-level of precision possible
- Shanks not included Order shanks separately

Type	Order No.	Price
Boring Kit	**GM95BTKPC6S948B**	Price
Boring Bars	**GM91BSS10**	Price
Boring Bars	**GM91BSS12**	Price
Boring Bars	**GM91BSS14**	Price
Boring Bars	**GM91BSS625**	Price
Boring Bars	**GM91BSS8**	Price
Boring Kit Case	**GM98902152**	Price
Boring Noses	**GM91BN10X13**	Price
Boring Noses	**GM91BN12X17**	Price
Boring Noses	**GM91BN14X21**	Price
Boring Noses	**GM91BN16X25**	Price
Boring Noses	**GM91BN16X29**	Price
Boring Noses	**GM91BN16X33**	Price
Boring Noses	**GM91BN16X37**	Price
Boring Noses	**GM91BN16X41**	Price
Boring Noses	**GM91BN8X9**	Price



Type	Order No.	Price
Reduction Bushings	**GM9162RB08MM**	Price
Reduction Bushings	**GM9162RB10MM**	Price
Reduction Bushings	**GM9162RB12MM**	Price
Reduction Bushings	**GM9162RB14MM**	Price
Wrenches	**GM91018002**	Price
Wrenches	**GM91018105**	Price
Wrenches	**GM9189410**	Price
Wrenches	**GM9189412**	Price
Wrenches	**GM9189414**	Price
Wrenches	**GM918946**	Price
Wrenches	**GM918948**	Price
Wrenches	**GM98018206**	Price

TG Style Collet Holders

Rapidhold:
- All collet chucks are supplied with depth set screws
- Collet seat taper T.I.R. greater than 0.0002”
- Produced according to AT3 specifications
- Tools are made of a high quality steel
- Through the spindle coolant capability
- Dynamically balanced to G6.3 @ 15,000 RPM
- All balanced tools are supplied with QA certificate



Parlec:
- Constructed of alloy steel for long, durable service life
- Hardened to RC 52-56 to avoid damaging collet chuck threads
- Collet seat taper T.I.R. greater than .0002”
- Collet face within .06 of nut face for maximum rigidity
- Through-spindle coolant capability
- Parsymmetry™ design for high-speed operation

Techniks:
- .0002” concentricity or less from shank to bore
- Black oxide prior to finish grind
- External threads are finished ground for best collet nut concentricity
- Will work with any TG75 series collet

Briney:
- .0002” concentricity or less from taper shank to bore
- Black oxide prior to finish grind
- External threads are finished ground for best collet nut concentricity

Shank - BT40

Nose Dia. (in.)	Head Length/ Projection (in.)	Collet Style	Brand Name	Order No.	Price
1.97	2.75	TG75	Rapidhold	**RH2224301R**	Price
2.36	3.15	TG100	Rapidhold	**RH2224303R**	Price
2.36	3.94	TG100	Rapidhold	**RH2224305R**	Price
2.36	5.90	TG100	Rapidhold	**RH2224307R**	Price

Shank - BT50

Nose Dia. (in.)	Head Length/ Projection (in.)	Collet Style	Brand Name	Order No.	Price
2.36	3.54	TG100	Rapidhold	**RH2225301R**	Price
2.36	5.90	TG100	Rapidhold	**RH2225302R**	Price

Shank - CAT40

Nose Dia. (in.)	Head Length/ Projection (in.)	Collet Style	Brand Name	Order No.	Price
1.88	2.75	TG75	Techniks	**TE1223008**	Price
1.97	2.54	TG75	Rapidhold	**RH2221301R**	Price
1.97	5.79	TG75	Rapidhold	**RH2221303R**	Price
2.10	3.00	TG75	Parlec	**GM96C4075SC3**	Price
2.36	2.76	TG100	Rapidhold	**RH2221306R**	Price
2.36	3	TG100	Techniks	**TE1223014**	Price
2.36	3.76	TG100	Rapidhold	**RH2221308R**	Price
2.36	4	TG100	Techniks	**TE1223016**	Price
2.36	5.76	TG100	Rapidhold	**RH2221310R**	Price
2.36	6	TG100	Techniks	**TE1223018**	Price
2.44	3.00	TG100	Parlec	**GM96C4010SC3**	Price
2.44	5.00	TG100	Parlec	**GM96C4010SC5**	Price
3.43	4.88	TG150	Parlec	**GM96C4015SC4**	Price

Shank - CAT50

Nose Dia. (in.)	Head Length/ Projection (in.)	Collet Style	Brand Name	Order No.	Price
1.97	2.54	TG75	Rapidhold	**RH2222302R**	Price
2.36	3.26	TG100	Rapidhold	**RH2222308R**	Price
2.44	3.00	TG100	Parlec	**GM96C5010SC3**	Price
2.44	3.50	TG100	Parlec	**GM96C5010SC4**	Price
2.44	4.00	TG100	Rapidhold	**RH2222309R**	Price
2.44	5.50	TG100	Parlec	**GM96C5010SC5**	Price
3.43	3.00	TG150	Parlec	**GM96C5015SC3**	Price
3.43	3.50	TG150	Parlec	**GM96C5015SC4**	Price

Shank - Extensions

Nose Dia. (in.)	Head Length/ Projection (in.)	Collet Style	Brand Name	Order No.	Price
1.50	4.00	TG75	Briney	**GM30SS125CH075**	Price
1.78	6.00	TG100	Briney	**GM30SS150CH100**	Price
2.53	6.00	TG150	Briney	**GM30SS200CH150**	Price

Shank - NMTB30

Nose Dia. (in.)	Head Length/ Projection (in.)	Collet Style	Brand Name	Order No.	Price
2.080	.421	TG75	Briney	**GM30NMTB30CH075**	Price

Shank - NMTB40

Nose Dia. (in.)	Head Length/ Projection (in.)	Collet Style	Brand Name	Order No.	Price
1.950	.390	TG75	Briney	**GM30NMTB40CH075**	Price
2.480	.390	TG100	Briney	**GM30NMTB40CH100**	Price

Shank - NMTB50

Nose Dia. (in.)	Head Length/ Projection (in.)	Collet Style	Brand Name	Order No.	Price
2.480	.594	TG100	Briney	**GM30NMTB50CH100**	Price

Double Angle (DA Type) Collet Holders

Parlec:
- Collet seat taper T.I.R. ≤ .0004”
- Through spindle coolant capability
- Parsymmetry™ design for high speed operation

Rapidkut:
- Balanced by design
- Through spindle coolant capability
- Dynamically balanced to G6.3 @ 15,000 RPM

Techniks:
- .0002” concentricty or less from shank to bore
- Black oxide prior to finish grind
- Extrenal threads are finished ground for best collet nut concentricity
- Will work with any DA200 series collet

Briney:
- .0002” concentricty or less from taper shank to bore
- Black oxide prior to finish grind
- Extrenal threads are finished ground for best collet nut concentricity







Collet Style - DA100

Shank	Nose Dia. (in)	Head Length/ Projection(in)	OAL (in.)	Brand Name	Order No.	Price
1	.870	.875	7.500	Briney	**GM30SS100DA100**	Price

Collet Style - DA180

Shank	Nose Dia. (in)	Head Length/ Projection(in)	OAL (in.)	Brand Name	Order No.	Price
NMTB30	1.700	.421	5.688	Briney	**GM30NMTB30DA180**	Price
CAT40	1.44	5.15	-	Parlec	**GM96C4018DC5**	Price
CAT40	3.00	2.95	-	Parlec	**GM96C4018DC2**	Price
CAT50	1.44	3.38	-	Parlec	**GM96C5018DC3**	Price
CAT50	1.44	6.15	-	Parlec	**GM96C5018DC6**	Price
CAT50	1.44	8.15	-	Parlec	**GM96C5018DC8**	Price
CAT40	1.44	3.38	-	Parlec	**GM96C4018DC3**	Price
CAT50	1.73	6.00	10.76	Rapidhold	**TS1022402**	Price
CAT50	1.73	3.00	7.76	Rapidhold	**TS1022401**	Price

Collet Style - DA200

Shank	Nose Dia. (in)	Head Length/ Projection(in)	OAL (in.)	Brand Name	Order No.	Price
3/4	.605	.687	7.230	Briney	**GM30SS075DA200**	Price
NMTB30	1.130	.421	5.688	Briney	**GM30NMTB30DA200**	Price
CAT40	.810	3.00	-	Parlec	**GM96C4020DC3**	Price
CAT40	.810	5.00	-	Parlec	**GM96C4020DC5**	Price
CAT40	1.11	2.73	-	Parlec	**GM96C4020DC2**	Price
CAT40	1.15	3.00	6.44	Rapidhold	**TS1021403**	Price

Collet Style - DA300

Shank	Nose Dia. (in)	Head Length/ Projection(in)	OAL (in.)	Brand Name	Order No.	Price
1/2	.560	1.50	6.81	Rapidhold	**RH2226401R**	Price
1/2	.390	.500	6.880	Briney	**GM30SS050DA300**	Price
NMTB30	.860	.421	4.308	Briney	**GM30NMTB30DA300**	Price
1/2	.560	1.50	6.81	Rapidhold	**TS1026401**	Price

Individual TG Style Collets



Specifications:

- TG Collets are produced with silicium chrome steel 46±2
- Precision ground with CNC machines
- Tested with high precision inspection and gaging equipment
- TG Collets achieve greater grip strength than double angle collets
- Clamping range is 1/64”

TECHNIKS PARLEC

Collet Style - TG75				
ID Size (in.)	Order No.	Price	Order No.	Price
3/32	TE1304008332	Price	GM9975093	Price
7/64	TE1304008764	Price	GM9975109	Price
1/8	TE130400818	Price	GM9975125	Price
9/64	TE1304008964	Price	GM9975140	Price
5/32	TE1304008532	Price	GM9975156	Price
11/64	TE13040081164	Price	GM9975171	Price
3/16	TE1304008316	Price	GM9975187	Price
13/64	TE13040081364	Price	GM9975203	Price
7/32	TE1304008732	Price	GM9975218	Price
15/64	TE13040081564	Price	GM9975234	Price
1/4	TE130400814	Price	GM9975250	Price
17/64	TE13040081764	Price	GM9975265	Price
9/32	TE1304008932	Price	GM9975281	Price
19/64	TE13040081964	Price	GM9975296	Price
5/16	TE1304008516	Price	GM9975312	Price
21/64	TE13040082164	Price	GM9975328	Price
11/32	TE13040081132	Price	GM9975343	Price
23/64	TE13040082364	Price	GM9975359	Price
3/8	TE1304008838	Price	GM9975375	Price
25/64	TE13040082564	Price	GM9975390	Price
13/32	TE13040081332	Price	GM9975406	Price
27/64	TE13040082764	Price	GM9975421	Price
7/16	TE1304008716	Price	GM9975437	Price
29/64	TE13040082964	Price	GM9975453	Price
15/32	TE13040081532	Price	GM9975468	Price
31/64	TE13040083164	Price	GM9975484	Price
1/2	TE130400812	Price	GM9975500	Price
33/64	TE13040083364	Price	GM9975515	Price
17/32	TE13040081732	Price	GM9975531	Price
35/64	TE13040083564	Price	GM9975546	Price
9/16	TE1304008916	Price	GM9975562	Price
37/64	TE13040083764	Price	GM9975578	Price
19/32	TE13040081932	Price	GM9975593	Price
39/64	TE13040083964	Price	GM9975609	Price
5/8	TE130400858	Price	GM9975625	Price
41/64	TE13040084164	Price	GM9975640	Price
21/32	TE13040082132	Price	GM9975656	Price
43/64	TE13040084364	Price	GM9975671	Price
11/16	TE13040081116	Price	GM9975687	Price
45/64	TE13040084564	Price	GM9975703	Price
23/32	TE13040082332	Price	GM9975718	Price
47/64	TE13040084764	Price	GM9975734	Price
3/4	TE130400834	Price	GM9975750	Price

TECHNIKS PARLEC

Collet Style - TG100				
ID Size (in.)	Order No.	Price	Order No.	Price
3/32	TE1304010332	Price	GM99100094	Price
7/64	TE1304010764	Price	GM99100110	Price
1/8	TE130401018	Price	GM99100126	Price
9/64	TE1304010964	Price	GM99100141	Price
5/32	TE1304010532	Price	GM99100157	Price
11/64	TE13040101164	Price	GM99100172	Price
3/16	TE1304010316	Price	GM99100188	Price
13/64	TE13040101364	Price	GM99100204	Price
7/32	TE1304010732	Price	GM99100219	Price
15/64	TE13040101564	Price	GM99100235	Price
1/4	TE130401014	Price	GM99100251	Price
17/64	TE13040101764	Price	GM99100266	Price
9/32	TE1304010932	Price	GM99100282	Price
19/64	TE13040101964	Price	GM99100297	Price
5/16	TE1304010516	Price	GM99100313	Price
21/64	TE13040102164	Price	GM99100329	Price
11/32	TE13040101132	Price	GM99100344	Price
23/64	TE13040102364	Price	GM99100360	Price
3/8	TE130401038	Price	GM99100375	Price
25/64	TE13040102564	Price	GM99100390	Price
13/32	TE13040101332	Price	GM99100407	Price
27/64	TE13040102764	Price	GM99100421	Price
7/16	TE1304010716	Price	GM99100437	Price
29/64	TE13040102964	Price	GM99100453	Price
15/32	TE13040101532	Price	GM99100468	Price
31/64	TE13040103164	Price	GM99100484	Price

TECHNIKS PARLEC

Collet Style - TG100				
ID Size (in.)	Order No.	Price	Order No.	Price
1/2	TE130401012	Price	GM99100500	Price
33/64	TE13040103364	Price	GM99100515	Price
17/32	TE13040101732	Price	GM99100531	Price
35/64	TE13040103564	Price	GM99100546	Price
9/16	TE1304010916	Price	GM99100562	Price
37/64	TE13040103764	Price	GM99100578	Price
19/32	TE13040101932	Price	GM99100593	Price
39/64	TE13040103964	Price	GM99100609	Price
5/8	TE130401058	Price	GM99100625	Price
41/64	TE13040104164	Price	GM99100640	Price
21/32	TE13040102132	Price	GM99100656	Price
43/64	TE13040104364	Price	GM99100671	Price
11/16	TE13040101116	Price	GM99100687	Price
45/64	TE13040104564	Price	GM99100703	Price
23/32	TE13040102332	Price	GM99100718	Price
47/64	TE13040104764	Price	GM99100734	Price
3/4	TE130401034	Price	GM99100750	Price
49/64	TE13040104964	Price	GM99100765	Price
25/32	TE13040102532	Price	GM99100781	Price
51/64	TE13040105164	Price	GM99100796	Price
13/16	TE13040101316	Price	GM99100812	Price
53/64	TE13040105364	Price	GM99100828	Price
27/32	TE13040102732	Price	GM99100843	Price
55/64	TE13040105564	Price	GM99100859	Price
7/8	TE130401078	Price	GM99100875	Price
57/64	TE13040105764	Price	GM99100890	Price
29/32	TE13040102932	Price	GM99100906	Price
59/64	TE13040105964	Price	GM99100921	Price
15/16	TE13040101516	Price	GM99100937	Price
61/64	TE13040106164	Price	GM99100953	Price
31/32	TE13040103132	Price	GM99100968	Price
63/64	TE13040106364	Price	GM99100984	Price
1	TE13040101	Price	GM991001000	Price

TECHNIKS PARLEC

Collet Style - TG150				
ID Size (in.)	Order No.	Price	Order No.	Price
1/2	TE130401112	Price	GM99150500	Price
33/64	TE13040113364	Price	GM99150515	Price
17/32	TE13040111732	Price	GM99150531	Price
35/64	TE13040113564	Price	GM99150546	Price
9/16	TE1304011916	Price	GM99150562	Price
37/64	TE13040113764	Price	GM99150578	Price
19/32	TE13040111932	Price	GM99150593	Price
39/64	TE13040113964	Price	GM99150609	Price
5/8	TE130401158	Price	GM99150625	Price
41/64	TE13040114164	Price	GM99150640	Price
21/32	TE13040112132	Price	GM99150656	Price
43/64	TE13040114364	Price	GM99150671	Price
11/16	TE13040111116	Price	GM99150687	Price
45/64	TE13040114564	Price	GM99150703	Price
23/32	TE13040112332	Price	GM99150718	Price
47/64	TE13040114764	Price	GM99150734	Price
3/4	TE130401134	Price	GM99150750	Price
49/64	TE13040114964	Price	GM99150765	Price
25/32	TE13040112532	Price	GM99150781	Price
51/64	TE13040115164	Price	GM99150796	Price
13/16	TE13040111316	Price	GM99150812	Price
53/64	TE13040115364	Price	GM99150828	Price
27/32	TE13040112732	Price	GM99150843	Price
55/64	TE13040115564	Price	GM99150859	Price
7/8	TE130401178	Price	GM99150875	Price
57/64	TE13040115764	Price	GM99150890	Price
29/32	TE13040112932	Price	GM99150906	Price
59/64	TE13040115964	Price	GM99150921	Price
15/16	TE13040111516	Price	GM99150937	Price
61/64	TE13040116164	Price	GM99150953	Price
31/32	TE13040113132	Price	GM99150968	Price
63/64	TE13040116364	Price	GM99150984	Price
1	TE13040111	Price	GM991501000	Price

R8 Shank ER Collet Holders

- Run out O.D. - I.D. Max. 0.003
- Superior surface finish Ra 0.0004
- 7/16-20 Drawbar thread



Collet Style	Nose Dia. (in.)	Head Length/Projection	Order No.	Price
ER16	1.11	1.50	EH4500503	Price
ER32	1.56	1.56	EH4500501	Price
ER40	2.75	2.75	EH4500502	Price

Individual Double Angle (DA Style) Collets

- DA collets are produced with silicium chrome steel
- Quenched and tempered RC 46±2
- Precision ground with CNC machines
- Double angle collets may be successfully employed for most routine job assignments



TECHNIKS PARLEC

Collet Style - 100DA				
ID Size (in.)	Order No.	Price	Order No.	Price
3/64	TE1301610364	Price	GM99100046	Price
1/16	TE1301610116	Price	GM99100062	Price
5/64	TE1301610564	Price	GM99100078	Price
3/32	TE1301610332	Price	GM99100093	Price
7/64	TE1301610764	Price	GM99100109	Price
1/8	TE130161018	Price	GM99100125	Price
9/64	TE1301610964	Price	GM99100140	Price
5/32	TE1301610532	Price	GM99100156	Price
11/64	TE13016101164	Price	GM99100171	Price
3/16	TE1301610316	Price	GM99100187	Price
13/64	TE13016101364	Price	GM99100203	Price
7/32	TE1301610732	Price	GM99100218	Price
15/64	TE13016101564	Price	GM99100234	Price
1/4	TE130161014	Price	GM99100250	Price
17/64	TE13016101764	Price	GM99100265	Price
9/32	TE1301610932	Price	GM99100281	Price
19/64	TE13016101964	Price	GM99100296	Price
5/16	TE1301610516	Price	GM99100312	Price
21/64	TE13016102164	Price	GM99100328	Price
11/32	TE13016101132	Price	GM99100343	Price
23/64	TE13016102364	Price	GM99100359	Price
3/8	TE130161038	Price	GM99100376	Price
25/64	TE13016102564	Price	GM99100391	Price
27/64	TE13016102764	Price	GM99100422	Price
7/16	TE1301610716	Price	GM99100438	Price
29/64	TE13016102964	Price	GM99100454	Price
15/32	TE13016101532	Price	GM99100469	Price
31/64	TE13016103164	Price	GM99100485	Price
1/2	TE130161012	Price	GM99100501	Price
17/32	TE13016101732	Price	GM99100532	Price
35/64	TE13016103564	Price	GM99100547	Price
9/16	TE1301610916	Price	GM99100563	Price
13/32	TE13016101332	Price	-	-
33/64	TE13016103364	Price	-	-

TECHNIKS PARLEC

Collet Style - 180DA				
ID Size (in.)	Order No.	Price	Order No.	Price
3/64	TE1301618364	Price	GM99180046	Price
1/16	TE1301618116	Price	GM99180062	Price
5/64	-	-	GM99180078	Price
3/32	TE1301618332	Price	GM99180093	Price
7/64	TE1301618764	Price	GM99180109	Price
1/8	TE130161818	Price	GM99180125	Price
9/64	TE1301618964	Price	GM99180140	Price
5/32	TE1301618532	Price	GM99180156	Price
11/64	TE13016181164	Price	GM99180171	Price
3/16	TE1301618316	Price	GM99180187	Price
13/64	TE13016181364	Price	GM99180203	Price
7/32	TE1301618732	Price	GM99180218	Price
15/64	TE13016181564	Price	GM99180234	Price
1/4	TE130161814	Price	GM99180250	Price
17/64	TE13016181764	Price	GM99180265	Price
9/32	TE1301618932	Price	GM99180281	Price
19/64	TE13016181964	Price	GM99180296	Price
5/16	TE1301618516	Price	GM99180312	Price
21/64	TE13016182164	Price	GM99180328	Price
11/32	TE13016181132	Price	GM99180343	Price
23/64	TE13016182364	Price	GM99180359	Price
3/8	TE130161838	Price	GM99180375	Price
25/64	TE13016182564	Price	GM99180390	Price
13/32	TE13016181332	Price	GM99180406	Price
27/64	TE13016182764	Price	GM99180421	Price

Morse Taper Shank ER Collet Holder

- Made of high grade tool steel
- Hardened and precision ground
- Meets or exceeds Federal Specs.



Collet Style	Taper	Nose Dia. (in.)	Head Length/ Projection (in.)	Order No.	Price
ER32	3MT	2.84	4.86	EH4501813	Price
ER40	4MT	2.84	4.86	EH4501815	Price
ER40	5MT	2.84	5.29	EH4501816	Price
ER40	3MT	2.48	3.00	EH4501814	Price

TECHNIKS PARLEC

Collet Style - 180DA				
ID Size (in.)	Order No.	Price	Order No.	Price
7/16	TE1301618716	Price	GM99180437	Price
29/64	TE13016182964	Price	GM99180453	Price
15/32	TE13016181532	Price	GM99180468	Price
31/64	TE13016183164	Price	GM99180484	Price
1/2	TE130161812	Price	GM99180500	Price
33/64	TE13016183364	Price	GM99180515	Price
17/32	TE13016181732	Price	GM99180531	Price
35/64	TE13016183564	Price	GM99180546	Price
9/16	TE1301618916	Price	GM99180562	Price
37/64	TE13016183764	Price	GM99180578	Price
19/32	TE1301618193	Price	GM99180593	Price
39/64	TE13016183964	Price	GM99180609	Price
5/8	TE130161858	Price	GM99180625	Price
41/64	TE13016184164	Price	GM99180640	Price
21/32	TE13016182132	Price	GM99180656	Price
43/64	TE13016184364	Price	GM99180671	Price
11/16	TE13016181116	Price	GM99180687	Price
45/64	TE13016184564	Price	GM99180703	Price
23/32	TE13016182332	Price	GM99180718	Price
47/64	TE13016184764	Price	GM99180734	Price
3/4	TE130161834	Price	GM99180750	Price

TECHNIKS PARLEC

Collet Style - 200DA				
ID Size (in.)	Order No.	Price	Order No.	Price
3/64	TE1301620364	Price	GM99200046	Price
1/16	TE1301620116	Price	GM99200062	Price
5/64	TE1301620564	Price	GM99200078	Price
3/32	TE1301620332	Price	GM99200093	Price
7/64	TE1301620764	Price	GM99200109	Price
1/8	TE130162018	Price	GM99200125	Price
9/64	TE1301620964	Price	GM99200140	Price
5/32	TE1301620532	Price	GM99200156	Price
11/64	TE13016201164	Price	GM99200171	Price
3/16	TE1301620316	Price	GM99200187	Price
13/64	TE13016201364	Price	GM99200203	Price
7/32	TE1301620732	Price	GM99200218	Price
15/64	TE13016201564	Price	GM99200234	Price
1/4	TE130162014	Price	GM99200250	Price
17/64	TE13016201764	Price	GM99200265	Price
9/32	TE1301620932	Price	GM99200281	Price
19/64	TE13016201964	Price	GM99200296	Price
5/16	TE1301620516	Price	GM99200312	Price
21/64	TE13016202164	Price	GM99200328	Price
11/32	TE13016201132	Price	GM99200343	Price
23/64	TE13016202364	Price	GM99200359	Price
3/8	TE130162038	Price	GM99200375	Price
25/64	-	-	GM99200390	Price

TECHNIKS PARLEC

Collet Style - 300DA				
ID Size (in.)	Order No.	Price	Order No.	Price
1/32	TE13300031	Price	-	-
3/64	TE1301630364	Price	GM99300046	Price
1/16	TE1301630116	Price	GM99300062	Price
3/32	TE1301630332	Price	GM99300093	Price
5/64	TE1301630564	Price	GM99300078	Price
7/64	TE1301630764	Price	GM99300109	Price
1/8	TE130163018	Price	GM99300125	Price
9/64	TE1301630964	Price	GM99300140	Price
11/64	TE13016301164	Price	GM99300171	Price
5/32	TE1301630532	Price	GM99300156	Price
3/16	TE1301630316	Price	GM99300187	Price
13/64	TE13016301364	Price	GM99300203	Price
7/32	TE1301630732	Price	GM99300218	Price
15/64	TE13016301564	Price	GM99300234	Price
1/4	TE130163014	Price	GM99300250	Price

NMTB Shank ER Collet Holder

- Run out O.D. - I.D. Max. 0.003
- Mass symmetrical design
- Superior surface finish Ra 0.0004
- Taper accuracy DIn standard 85% fitness



Collet Style - ER16				
Nose Dia. (in.)	Head Length/Projection (in.)	Brand Name	Order No.	Price
1.11	6.00	ETM	GM70690074	Price
1.11	6.00	Quality Import	GM80160503	Price

Collet Style - ER32				
Nose Dia. (in.)	Head Length/Projection (in.)	Brand Name	Order No.	Price
2.00	2.12	Iscar	EH4548032	Price

Collet Style - ER40				
Nose Dia. (in.)	Head Length/Projection (in.)	Brand Name	Order No.	Price
2.48	2.12	Iscar	EH4548087	Price
2.48	2.25	Iscar	EH4501735	Price

RAPIDHOLD BT40 ER Style Collet Holders



- Produced according to AT3 specifications
- Tools are made of a high quality alloy steel
- Collet seat taper T.I.R. greater than 0.0002”
- Through the spindle coolant capability
- Dynamically balanced to G6.5 @ 15,000 RPM
- All collet chucks are supplied with depth set screws
- All balanced tools are supplied with QA certificate

Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	4.72	**RH2224201R**	Price
ER25	1.57	2.75	**RH2224203R**	Price
ER25	1.66	4.72	**RH2224205R**	Price
ER32	1.97	2.75	**RH2224207R**	Price
ER32	1.97	4.72	**RH2224209R**	Price
ER40	2.49	3.15	**RH2224212R**	Price
ER40	2.49	4.72	**RH2224214R**	Price

TECHNIKS BT40 ER Style Collet Holders



- Balanced to 25,000 RPM at G2.5 tolerance
- They are individually lab tested for accuracy and balance and come with their individual performance report
- Techniks holders achieve 0.0001” or less T.I.R. as measured from the taper to the collet pocket

Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	70mm	**TE1216151**	Price
ER16	1.11	100mm	**TE1216153**	Price
ER16	1.11	125mm	**TE1216155**	Price
ER16	1.11	150mm	**TE1216157**	Price
ER16	1.11	180mm	**TE1216158**	Price
ER20	1.34	70mm	**TE1216159**	Price
ER20	1.34	100mm	**TE1216162**	Price
ER20	1.34	135mm	**TE1216165**	Price
ER20	1.34	150mm	**TE1216167**	Price
ER25	1.57	70mm	**TE1216169**	Price
ER25	1.57	100mm	**TE1216171**	Price
ER25	1.57	150mm	**TE1216175**	Price
ER32	1.97	70mm	**TE1216177**	Price
ER32	1.97	100mm	**TE1216179**	Price
ER32	1.97	150mm	**TE1216181**	Price
ER40	2.49	80mm	**TE1216183**	Price
ER40	2.49	100mm	**TE1216185**	Price
ER40	2.49	150mm	**TE1216189**	Price

BT50 Shank ER Collet Holders



- Case hardened to 58-62 HRc
- Pre-balanced to G2.5 @ 22,000 RPM’s
- T.I.R. from the collet cavity to the holder taper 0.0001” or better
- Lot Numbers for lot traceability
- Through the spindle coolant or through the flange version available
- BT & CAT+ have Hi-Q clamping nut included
- AT3 or beter tapers guaranteed
- Superior surface finish at 0.25Ra for better fit and accuracy
- Swiss made to ISO 90001
- Big Plus System - Licensed by Big Daishowa

Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	3.93	**GM20415011650**	Price
ER16	1.11	3.93	**GM20415011653**	Price
ER16	1.11	6.30	**GM20415011680**	Price
ER16	1.11	6.30	**GM20415011683**	Price
ER20	1.34	3.93	**GM20415012053**	Price
ER20	1.34	3.93	**GM20415012050**	Price
ER25	1.57	3.93	**GM20415012553**	Price
ER25	1.57	3.93	**GM20415012550**	Price
ER25	1.57	6.30	**GM20415012583**	Price
ER25	1.57	6.30	**GM20415012580**	Price
ER32	1.97	3.93	**GM20415013253**	Price
ER32	1.97	3.93	**GM20415013250**	Price
ER32	1.97	6.30	**GM20415013283**	Price
ER40	2.49	3.93	**GM20415014053**	Price
ER40	2.49	6.30	**GM20415014083**	Price

BT40 Shank ER Collet Holders



- Case hardened to 58-62 HRc
- Pre-balanced to G2.5 @ 22,000 RPM’s
- T.I.R. from the collet cavity to the holder taper 0.0001” or better
- Lot Numbers for lot traceability
- Through the spindle coolant or through the flange version available
- BT & CAT+ have Hi-Q clamping nut included
- AT3 or beter tapers guaranteed
- Superior surface finish at 0.25Ra for better fit and accuracy
- Swiss made to ISO 90001
- Big Plus System - Licensed by Big Daishowa

Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER11	.750	3.93	**GM20414011150**	Price
ER11	.750	6.30	**GM20414011180**	Price
ER16	1.11	2.75	**GM20414011630**	Price
ER16	1.11	2.75	**GM20414011633**	Price
ER16	1.11	3.93	**GM20414011653**	Price
ER16	1.11	3.93	**GM20414011650**	Price
ER16	1.11	6.30	**GM20414011683**	Price
ER16	1.11	6.30	**GM20414011680**	Price
ER16	1.11	8.66	**GM2088411305**	Price
ER16	1.11	10.20	**GM2088411309**	Price
ER16	1.11	11.80	**GM2088411313**	Price
ER16	1.11	12.60	**GM2088411315**	Price
ER16	1.11	14.17	**GM2088411319**	Price
ER16	1.11	15.75	**GM2088411323**	Price
ER20	1.34	2.75	**GM20414012030**	Price
ER20	1.34	2.75	**GM20414012033**	Price
ER20	1.34	3.93	**GM20414012053**	Price
ER20	1.34	3.93	**GM20414012050**	Price
ER20	1.34	6.30	**GM20414012080**	Price
ER20	1.34	6.30	**GM20414012083**	Price
ER25	1.57	2.75	**GM20414012530**	Price
ER25	1.57	2.75	**GM20414012533**	Price
ER25	1.57	3.93	**GM20414012550**	Price
ER25	1.57	3.93	**GM20414012553**	Price
ER25	1.57	6.30	**GM20414012580**	Price
ER25	1.57	6.30	**GM20414012583**	Price
ER32	1.97	2.75	**GM20414013233**	Price
ER32	1.97	2.75	**GM20414013230**	Price
ER32	1.97	3.93	**GM20414013253**	Price
ER32	1.97	3.93	**GM20414013250**	Price
ER32	1.97	6.30	**GM20414013283**	Price
ER32	1.97	6.30	**GM20414013280**	Price
ER32	1.97	8.90	**GM2088411605**	Price
ER32	1.97	12.80	**GM2088411615**	Price
ER40	2.49	3.93	**GM20414014053**	Price
ER40	2.49	3.93	**GM20414014050**	Price
ER40	2.49	6.30	**GM20414014083**	Price
ER40	2.49	6.30	**GM20414014080**	Price

RAPIDHOLD BT50 ER Style Collet Holders



- Produced according to AT3 specifications
- Tools are made of a high quality alloy steel
- Collet seat taper T.I.R. greater than 0.0002”
- Through the spindle coolant capability
- Dynamically balanced to G6.5 @ 15,000 RPM
- All collet chucks are supplied with depth set screws
- All balanced tools are supplied with QA certificate

Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	3.93	**RH2225201R**	Price
ER16	1.11	5.90	**RH2225202R**	Price
ER32	1.97	2.75	**RH2225203R**	Price
ER40	2.49	3.15	**RH2225204R**	Price

BT50 Shank ER Collet Holders

- Balanced to 25,000 RPM at G2.5 tolerance
- They are individually lab tested for accuracy and balance and come with their individual performance report
- Techniks holders achieve 0.0001" or less T.I.R. as measured from the taper to the collet pocket



Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	70mm	**TE1216251**	Price
ER16	1.11	90mm	**TE1216252**	Price
ER16	1.11	105mm	**TE1216253**	Price
ER16	1.11	135mm	**TE1216254**	Price
ER16	1.11	150mm	**TE1216255**	Price
ER20	1.34	90mm	**TE1216263**	Price
ER20	1.34	105mm	**TE1216265**	Price
ER20	1.34	135mm	**TE1216267**	Price
ER20	1.34	165mm	**TE1216271**	Price
ER25	1.57	105mm	**TE1216275**	Price
ER25	1.57	135mm	**TE1216277**	Price
ER25	1.57	165mm	**TE1216279**	Price
ER32	1.97	80mm	**TE1216281**	Price
ER32	1.97	120mm	**TE1216283**	Price
ER32	1.97	150mm	**TE1216284**	Price
ER40	2.49	80mm	**TE1216285**	Price
ER40	2.49	135mm	**TE1216289**	Price

RAPIDHOLD CAT40 ER Style Collet Holders

- Taper Shank ground to AT3 accuracy or better
- Taper to Taper Runout <0.0002"
- Balanced G2.5 @ 20,000 RPM
- Coolant thru the spindle and DIN AD+B thru the flange capable



Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER11	.79	2.50	**RH2221197R**	Price
ER11	.79	4.00	**RH2221198R**	Price
ER11	.79	6.00	**RH2221199R**	Price
ER16	1.11	2.50	**RH2221201R**	Price
ER16	1.11	4.00	**RH2221202R**	Price
ER16	1.11	5.00	**RH2221203R**	Price
ER20	1.34	6.00	**RH2221206R**	Price
ER16	1.11	6.00	**RH2221229R**	Price
ER16	1.11	8.00	**RH2221230R**	Price
ER20	1.34	2.50	**RH2221204R**	Price
ER20	1.34	4.00	**RH2221205R**	Price
ER20	1.34	8.00	**RH2221234R**	Price
ER25	1.66	2.50	**RH2221207R**	Price
ER25	1.66	4.00	**RH2221208R**	Price
ER25	1.66	6.00	**RH2221209R**	Price
ER25	1.66	8.00	**RH2221237R**	Price
ER32	1.97	2.75	**RH2221210R**	Price
ER32	1.97	4.00	**RH2221211R**	Price
ER32	1.97	6.00	**RH2221212R**	Price
ER32	1.97	8.00	**RH2221240R**	Price
ER40	2.49	3.00	**RH2221213R**	Price
ER40	2.49	6.00	**RH2221214R**	Price
ER40	2.49	8.00	**RH2221244R**	Price

CAT40 ER Style Collet Holders

- Balance rings
- Run out O.D. - I.D. Max. 0.003
- Mass symmetrical design
- For high spindle speed from 20,000 RPM
- Superior surface finish Ra 0.0004
- Taper accuracy DIn standard 85% fitness



Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	2.75	**GM66304016**	Price
ER16	1.11	3.93	**GM66304116**	Price
ER16	1.11	5.90	**GM66304216**	Price
ER32	1.97	2.56	**GM66304032**	Price
ER32	1.97	4.00	**GM66304132**	Price
ER32	1.97	6.00	**GM66304232**	Price
ER40	2.49	3.35	**GM66304040**	Price
ER40	2.49	4.00	**GM66304140**	Price

CAT40 Shank ER Collet Holders

- Case hardened to 58-62 HRc
- Pre-balanced to G2.5 @ 22,000 RPM's
- T.I.R. from the collet cavity to the holder taper 0.0001" or better
- Lot Numbers for lot traceability
- Through the spindle coolant or through the flange version available
- BT & CAT+ have Hi-Q clamping nut included
- AT3 or beter tapers guaranteed
- Superior surface finish at 0.25Ra for better fit and accuracy
- Swiss made to ISO 90001
- Big Plus System - Licensed by Big Daishowa



Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER11	.79	3.00	**GM20434011134**	Price
ER11	.79	3.00	**GM20434011131**	Price
ER11	.79	6.00	**GM20434011174**	Price
ER11	.79	6.00	**GM20434011171**	Price
ER16	1.11	3.00	**GM20434011634**	Price
ER16	1.11	3.00	**GM20434011631**	Price
ER16	1.11	4.00	**GM20434011654**	Price
ER16	1.11	4.00	**GM20434011651**	Price
ER16	1.11	6.00	**GM20434011671**	Price
ER16	1.11	6.00	**GM20434011674**	Price
ER16	1.11	8.00	**GM20884313031**	Price
ER16	1.11	12.00	**GM20884313131**	Price
ER16	1.11	14.00	**GM20884313181**	Price
ER20	1.34	3.00	**GM20434012031**	Price
ER20	1.34	4.00	**GM20434012051**	Price
ER20	1.34	6.00	**GM20434012071**	Price
ER25	1.66	4.00	**GM20434012551**	Price
ER25	1.66	6.00	**GM20434012571**	Price
ER25	1.66	6.00	**GM20434012574**	Price
ER32	1.97	3.00	**GM20434013231**	Price
ER32	1.97	4.00	**GM20434013254**	Price
ER32	1.97	4.00	**GM20434013251**	Price
ER32	1.97	5.00	**GM20434013261**	Price
ER32	1.97	6.00	**GM20434013274**	Price
ER32	1.97	6.00	**GM20434013271**	Price
ER32	1.97	10.00	**GM20884316081**	Price
ER32	1.97	14.00	**GM20885316181**	Price
ER40	2.49	3.50	**GM20434014044**	Price
ER40	2.49	3.50	**GM20434014041**	Price
ER40	2.49	6.00	**GM20434014074**	Price
ER40	2.49	6.00	**GM20434014071**	Price

CAT40 ER Style Collet Holders

- Balanced to 25,000 RPM at G2.5 tolerance
- They are individually lab tested for accuracy and balance and come with their individual performance report
- Techniks holders achieve 0.0001” or less T.I.R. as measured from the taper to the collet pocket



Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	2.75	**TE1222225**	Price
ER16	1.11	4.00	**TE1222227**	Price
ER16	1.11	6.00	**TE1222231**	Price
ER16	1.11	8.00	**TE1222233**	Price
ER20	1.34	2.75	**TE1222235**	Price
ER20	1.34	4.00	**TE1222237**	Price
ER20	1.34	6.00	**TE1222239**	Price
ER25	1.66	2.50	**TE122224325**	Price
ER25	1.66	2.75	**TE1222243**	Price
ER25	1.66	4.00	**TE1222245**	Price

Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER25	1.66	6.00	**TE1222247**	Price
ER25	1.66	8.00	**TE1222251**	Price
ER32	1.97	2.75	**TE1222253**	Price
ER32	1.97	4.00	**TE1222255**	Price
ER32	1.97	6.00	**TE1222257**	Price
ER32	1.97	8.00	**TE1222259**	Price
ER40	2.49	3.15	**TE1222261**	Price
ER40	2.49	4.00	**TE1222263**	Price
ER40	2.49	6.00	**TE1222265**	Price

RAPIDHOLD CAT50 ER Style Collet Holders

- Taper Shank ground to AT3 accuracy or better
- Taper to Taper Runout <0.0002”
- Balanced G2.5 @ 15,000 RPM
- Coolant thru the spindle and DIN AD+B thru the flange capable



Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	4.00	**RH2222201R**	Price
ER16	1.11	6.00	**RH2222202R**	Price
ER16	1.11	8.00	**RH2222230R**	Price
ER20	1.34	4.00	**RH2222203R**	Price
ER20	1.34	6.00	**RH2222204R**	Price
ER20	1.34	8.00	**RH2222235R**	Price
ER25	1.66	4.00	**RH2222205R**	Price
ER25	1.66	8.00	**RH2222239R**	Price

Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER25	1.97	6.00	**RH2222206R**	Price
ER32	1.97	4.00	**RH2222207R**	Price
ER32	1.97	6.00	**RH2222208R**	Price
ER32	1.97	8.00	**RH2222243R**	Price
ER32	1.97	12.00	**RH2222244R**	Price
ER40	2.49	4.00	**RH2222209R**	Price
ER40	2.49	6.00	**RH2222210R**	Price
ER40	2.49	8.00	**RH2222249R**	Price

CAT50 ER Style Collet Holders

- Balance rings
- Run out O.D. - I.D. Max. 0.003
- Mass symmetrical design
- For high spindle speed from 20,000 RPM
- Superior surface finish Ra 0.0004
- Taper accuracy DIn standard 85% fitness



Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	5.90	**GM66305216**	Price
ER16	1.11	8.00	**GM664501617**	Price
ER16	2.09	3.93	**GM66305116**	Price
ER20	1.34	3.93	**GM664501491**	Price
ER20	1.34	5.90	**GM664501496**	Price
ER20	1.34	8.00	**GM664501618**	Price
ER25	1.66	6.00	**GM664501620**	Price
ER25	1.66	6.00	**GM664505093**	Price
ER25	1.66	8.00	**GM664501621**	Price
ER25	1.97	4.00	**GM664501619**	Price
ER32	1.97	.374	**GM664501654**	Price
ER32	1.97	4.00	**GM66305032**	Price

Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER32	1.97	4.00	**GM664501607**	Price
ER32	1.97	6.00	**GM66305132**	Price
ER32	1.97	6.00	**GM664501637**	Price
ER32	1.97	8.00	**GM664509213**	Price
ER40	1.97	.374	**GM664501660**	Price
ER40	2.49	4.00	**GM66305040**	Price
ER40	2.49	4.00	**GM664501608**	Price
ER40	2.49	6.00	**GM664501562**	Price
ER40	2.49	6.00	**GM66305140**	Price
ER40	2.49	8.00	**GM664501558**	Price
ER50	3.07	4.00	**GM664501493**	Price

CAT50 Shank ER Collet Holders

- Case hardened to 58-62 HRc
- Pre-balanced to G2.5 @ 22,000 RPM's
- T.I.R. from the collet cavity to the holder taper 0.0001" or better
- Lot Numbers for lot traceability
- Through the spindle coolant or through the flange version available
- BT & CAT+ have Hi-Q clamping nut included
- AT3 or beter tapers guaranteed
- Superior surface finish at 0.25Ra for better fit and accuracy
- Swiss made to ISO 90001
- Big Plus System - Licensed by Big Daishowa



Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	4.00	**GM20435011651**	Price
ER16	1.11	4.00	**GM20435011654**	Price
ER16	1.11	6.00	**GM20435011674**	Price
ER16	1.11	6.00	**GM20435011671**	Price
ER16	1.11	8.00	**GM20885313031**	Price
ER20	1.34	4.00	**GM20435012051**	Price
ER20	1.34	4.00	**GM20435012054**	Price
ER20	1.34	6.00	**GM20435012074**	Price
ER20	1.34	6.00	**GM20435012071**	Price
ER25	1.57	4.00	**GM20435012554**	Price
ER25	1.57	6.00	**GM20435012574**	Price

Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER25	1.66	4.00	**GM20435012551**	Price
ER25	1.66	6.00	**GM20435012571**	Price
ER32	1.97	4.00	**GM20435013254**	Price
ER32	1.97	4.00	**GM20435013251**	Price
ER32	1.97	6.00	**GM20435013271**	Price
ER32	1.97	6.00	**GM20435013274**	Price
ER32	1.97	10.00	**GM20885316081**	Price
ER40	2.36	6.00	**GM20435014074**	Price
ER40	2.49	4.00	**GM20435014054**	Price
ER40	2.49	4.00	**GM20435014051**	Price
ER40	2.49	6.00	**GM20435014071**	Price

CAT50 ER Style Collet Holders

- Balanced to 25,000 RPM at G2.5 tolerance
- They are individually lab tested for accuracy and balance and come with their individual performance report
- Techniks holders achieve 0.0001" or less T.I.R. as measured from the taper to the collet pocket



Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	1.11	4.00	**TE1222281**	Price
ER16	1.11	6.00	**TE1222285**	Price
ER16	1.11	8.00	**TE1222287**	Price
ER20	1.34	4.00	**TE1222291**	Price
ER20	1.34	6.00	**TE1222293**	Price
ER20	1.34	8.00	**TE1222295**	Price
ER25	1.97	4.00	**TE1222303**	Price
ER25	1.97	6.00	**TE1222305**	Price

Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER25	1.97	8.00	**TE1222307**	Price
ER25	1.97	9.00	**TE12223079**	Price
ER32	1.97	4.00	**TE1222311**	Price
ER32	1.97	6.00	**TE1222313**	Price
ER32	1.97	8.00	**TE1222317**	Price
ER40	2.49	4.00	**TE1222321**	Price
ER40	2.49	6.00	**TE1222325**	Price
ER50	3.07	8.00	**TE1222337**	Price

Zero-Z ER Style Collet Holders

- The Zero-Z is pre-balanced to G2.5 at 22,000 rpm
- For added clamping force, the Zero-Z comes standard with REGO-FIX'S unique AX Hi-Q clamping nut.



Shank	Nose Dia. (in.)	Projection (in.)	Collet Style	Order No.	Price
BT30	-	.866	ERA20	**GM20213012007**	Price
BT40	-	1.06	ER32	**GM20214013207**	Price
CAT40	1.58	.750	ER32	**GM20234013200**	Price
CAT50	1.97	.750	ER40	**GM20235014007**	Price

F.O.B. Factory

RAPIDHOLD Straight Shank ER Collet Holders

- Produced according to AT3 specifications
- Tools are made of a high quality alloy steel
- Collet seat taper T.I.R. greater than 0.0002”
- Through the spindle coolant capability
- Dynamically balanced to G6.5 @ 15,000 RPM
- All collet chucks are supplied with depth set screws
- All balanced tools are supplied with QA certificate



Type - 1” Straight Shank Collet Chuck				
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER20	1.38	1.42	**RH2226203R**	Price
ER25	1.66	1.57	**RH2226204R**	Price
ER32	1.97	2.03	**RH2226207R**	Price
ER40	2.48	2.56	**RH2226208R**	Price
ER40	2.48	2.56	**RH2226209R**	Price

Type - 1/2” Straight Shank Collet chuck				
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER11	.630	1.27	**RH2226201R**	Price

Type - 1-1/4” Straight Shank Collet Chuck				
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER32	1.97	2.03	**RH2226210R**	Price
ER32	1.97	2.03	**RH2226211R**	Price
ER40	2.48	2.56	**RH2226212R**	Price
ER40	2.48	2.56	**RH2226213R**	Price

Type - 3/4” Straight Shank Collet Chuck				
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	.870	1.24	**RH2226202R**	Price
ER32	1.97	2.03	**RH2226206R**	Price

ETM Straight Shank ER Collet Holders

- Balance rings
- Run out O.D. - I.D. Max. 0.003
- Mass symmetrical design
- For high spindle speed from 20,000 RPM
- Superior surface finish Ra 0.0004
- Taper accuracy DIn standard 85% fitness



Type - 1” Straight Shank Collet Chuck					
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	OAL (in.)	Order No.	Price
ER32	2.00	1.97	4.00	**GM70690005**	Price
ER40	2.38	2.38	4.70	**GM70690028**	Price

Type - 1/2” Straight Shank Collet Chuck					
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	OAL (in.)	Order No.	Price
ER11	.875	4.00	4.75	**GM70690096**	Price
ER16	.625	4.00	5.48	**GM70690064**	Price

Type - 1-1/4” Straight Shank Collet Chuck					
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	OAL (in.)	Order No.	Price
ER32	2.00	2.38	4.30	**GM70690006**	Price
ER40	2.38	2.38	4.70	**GM70690029**	Price

Type - 3/4” Straight Shank Collet Chuck					
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	OAL (in.)	Order No.	Price
ER11	.750	2.50	3.23	**GM70690093**	Price
ER11	.750	4.00	4.75	**GM70690094**	Price
ER11	.750	6.00	6.75	**GM70690095**	Price
ER16	.875	2.50	3.50	**GM70690063**	Price
ER16	.875	4.00	5.00	**GM70690066**	Price
ER16	.875	6.00	7.00	**GM70690067**	Price

Type - 3/4” Straight Shank Collet Chuck					
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	OAL (in.)	Order No.	Price
ER16	1.11	2.50	3.70	**GM70690060**	Price
ER16	1.11	4.00	5.20	**GM70690061**	Price
ER16	1.11	6.00	7.20	**GM70690062**	Price
ER20	.875	4.00	5.65	**GM70690033**	Price
ER20	1.11	2.50	4.00	**GM70690038**	Price
ER20	1.11	6.00	7.50	**GM70690034**	Price
ER20	1.34	2.50	4.15	**GM70690039**	Price
ER20	1.34	4.00	5.65	**GM70690031**	Price
ER20	1.34	6.00	7.65	**GM70690032**	Price
ER25	1.66	2.00	3.80	**GM70690046**	Price
ER25	1.66	4.00	5.80	**GM70690047**	Price
ER32	2.00	2.12	4.125	**GM70690004**	Price

Type - 5/8” Straight Shank Collet Chuck					
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	OAL (in.)	Order No.	Price
ER11	.625	2.50	3.25	**GM70690097**	Price
ER11	.625	4.00	4.75	**GM70690098**	Price
ER11	.625	6.00	6.75	**GM70690099**	Price
ER16	.875	1.25	2.65	**GM70690065**	Price

Briney Straight Shank ER Collet Holders

- .0002” concentricty or less from shank to bore
- Black oxide prior to finish grind
- Extrenal threads are finished ground for best collet nut concentricity
- Will work with any ER32 series collet



Type - 1” Straight Shank Collet Chuck				
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER20	.980	4.00	**GM30SS100BR20**	Price
ER25	1.25	4.00	**GM30SS100BR25**	Price

Type - 1/2” Straight Shank Collet Chuck				
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER11	.500	3.50	**GM30SS050BR1166**	Price

Type - 1-1/2” Straight Shank Collet Chuck				
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
TG100	1.78	6.00	**GM30SS150CH100**	Price

Type - 1-1/2” Straight Shank Collet Chuck				
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
TG150	2.53	6.00	**GM30SS200CH150**	Price

Type - 1-1/4” Straight Shank Collet Chuck				
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER25	1.57	4.00	**GM30SS125BR32**	Price

Type - 3/4” Straight Shank Collet Chuck				
Collet Style	Nose Dia. (in.)	Head Length/Projection (in.)	Order No.	Price
ER16	.744	4.00	**GM30SS075BR16**	Price

Individual Inch ER Spring Collets



- ER spring collets are the only clamping collet system for combined milling, drilling, reaming, tapping and boring
- ER collets concentricity guaranteed to .0004”
- Wide holding range of each collet requires fewer collets and changes - guarantees that undersize cutting tools can be held without sacrificing accuracy or gripping power
- Unique self-releasing system eliminates sticking
- Flute holding capabilities for highest concentricity and clamping power
- ER mini-collet chucks allow for machining in tight locations with reduced outside nose diameter
- Clamping range is .039”

Collet Style/Fits - ER8				
	Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price
1/16	GM20110801592	Price	GM7004208116	Price
1/8	GM20110803182	Price	GM700420818	Price
3/16	GM20110804762	Price	GM7004208316	Price

Collet Style/Fits - ER11										
	Rapidkut		Rego-Fix		Techniks		ETM		Parlec	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1mm	-	-	-	-	-	-	GM401101	Price	GM9911039	Price
1/16	TS1727700	Price	GM20111101592	Price	GM70701102	Price	GM401102	Price	GM9911078	Price
3/32	TS1727701	Price	GM20111102382	Price	GM70701103	Price	GM401103	Price	GM9911098	Price
1/8	TS1727702	Price	GM20111103182	Price	GM70701104	Price	GM401104	Price	GM9911137	Price
5/32	TS1727703	Price	GM20111103972	Price	GM7004211532	Price	-	-	-	-
3/16	TS1727704	Price	GM20111104762	Price	GM70701105	Price	GM401106	Price	GM9911196	Price
7/32	TS1727705	Price	GM20111105562	Price	GM70701106	Price	GM401107	Price	GM9911236	Price
1/4	TS1727706	Price	GM20111106352	Price	GM70701107	Price	GM401108	Price	GM9911255	Price
9/32	-	-	-	-	GM7004211932	Price	-	-	-	-

Collet Style/Fits - ER16										
	Rapidkut		Rego-Fix		Techniks		ETM		Parlec	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1mm	-	-	-	-	GM70701601	Price	GM401601	Price	-	-
1/16	TS1728001	Price	GM20111601592	Price	GM70701612	Price	GM401602	Price	GM9916062	Price
3/32	TS1728002	Price	GM20111602382	Price	GM70701623	Price	GM401603	Price	GM9916093	Price
7/64	-	-	-	-	GM7004216764	Price	-	-	-	-
1/8	TS1728003	Price	GM20111603182	Price	GM70701634	Price	GM401604	Price	GM9916125	Price
9/64	-	-	-	-	GM7004216964	Price	-	-	-	-
5/32	TS1728004	Price	GM20111603972	Price	GM7004216532	Price	-	-	-	-
3/16	TS1728005	Price	GM20111604762	Price	GM70701645	Price	GM401606	Price	GM9916187	Price
7/32	TS1728006	Price	GM20111605562	Price	GM70701656	Price	GM401607	Price	GM9916218	Price
1/4	TS1728007	Price	GM20111606352	Price	GM70701667	Price	GM401608	Price	GM9916250	Price
9/32	TS1728008	Price	GM20111607142	Price	GM7004216932	Price	-	-	-	-
5/16	TS1728009	Price	GM20111607942	Price	GM70701678	Price	GM401610	Price	GM9916312	Price
11/32	TS1728010	Price	GM20111608732	Price	GM70701689	Price	GM401611	Price	GM9916343	Price
3/8	TS1728011	Price	GM20111609532	Price	GM70701690	Price	GM401612	Price	GM9916375	Price
13/32	TS1728012	Price	GM20111610322	Price	GM70042161332	Price	-	-	-	-

Collet Style/Fits - ER20										
	Rapidkut		Rego-Fix		Techniks		ETM		Parlec	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	-	-	-	-	GM70702012	Price	GM402002	Price	GM9920062	Price
3/32	TS1728038	Price	-	-	GM70702023	Price	GM402003	Price	GM9920093	Price
1/8	TS1728039	Price	GM20112003182	Price	GM70702034	Price	GM402004	Price	GM9920125	Price
5/32	TS1728040	Price	-	-	GM70702040	Price	-	-	-	-
3/16	TS1728041	Price	GM20112004762	Price	GM70702045	Price	GM402006	Price	GM9920187	Price
7/32	TS1728042	Price	-	-	GM70702056	Price	GM402007	Price	GM9920218	Price
1/4	TS1728043	Price	GM20112006352	Price	GM70702067	Price	GM402008	Price	GM9920250	Price
9/32	TS1728044	Price	-	-	GM7004220932	Price	-	-	-	-
5/16	TS1728045	Price	GM20112007942	Price	GM70702078	Price	GM402010	Price	GM9920312	Price
11/32	TS1728046	Price	-	-	GM70702089	Price	GM402011	Price	GM9920343	Price
3/8	TS1728047	Price	GM20112009532	Price	GM70702090	Price	GM402012	Price	GM9920375	Price
13/32	TS1728048	Price	-	-	GM70702101	Price	GM402013	Price	GM9920406	Price
7/16	TS1728049	Price	GM20112011112	Price	GM70702112	Price	GM402014	Price	GM9920437	Price
15/32	TS1728050	Price	-	-	GM70702120	Price	-	-	-	-
1/2	TS1728051	Price	GM20112012702	Price	GM70702123	Price	GM402016	Price	GM9920500	Price

Collet Style/Fits - ER25										
	Rapidkut		Rego-Fix		Techniks		ETM		Parlec	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	TS1728071	Price	-	-	GM70702502	Price	GM402502	Price	GM9925062	Price
3/32	TS1728072	Price	-	-	GM70702503	Price	GM402503	Price	GM9925093	Price
1/8	TS1728073	Price	GM20112503182	Price	GM70702504	Price	GM402504	Price	GM9925125	Price
5/32	TS1728074	Price	-	-	GM7004225532	Price	-	-	-	-
3/16	TS1728075	Price	GM20112504762	Price	GM70702505	Price	GM402506	Price	GM9925187	Price

Individual Inch ER Spring Collets (cont.)

Collet Style/Fits - ER25										
	Rapidkut		Rego-Fix		Techniks		ETM		Parlec	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
7/32	TS1728076	Price	-	-	GM70702506	Price	GM402507	Price	GM9925218	Price
1/4	TS1728077	Price	GM20112506352	Price	GM70702507	Price	GM402508	Price	GM9925250	Price
9/32	TS1728078	Price	-	-	GM7004225932	Price	-	-	-	-
5/16	TS1728079	Price	GM20112507942	Price	GM70702508	Price	GM402510	Price	GM9925312	Price
11/32	TS1728080	Price	-	-	GM70702509	Price	GM402511	Price	GM9925343	Price
3/8	TS1728081	Price	GM20112509532	Price	GM70702510	Price	GM402512	Price	GM9925375	Price
13/32	TS1728082	Price	-	-	GM70702511	Price	GM402513	Price	GM9925406	Price
7/16	TS1728083	Price	GM20112511112	Price	GM70702512	Price	GM402514	Price	GM9925437	Price
15/32	TS1728084	Price	-	-	GM70702517	Price	-	-	-	-
1/2	TS1728085	Price	GM20112512702	Price	GM70702513	Price	GM402516	Price	GM9925500	Price
17/32	TS1728086	Price	-	-	GM70702514	Price	GM402517	Price	-	-
9/16	TS1728087	Price	GM20112514292	Price	GM70702515	Price	GM402518	Price	GM9925625	Price
19/32	TS1728088	Price	-	-	GM70042251932	Price	-	-	-	-
5/8	TS1728089	Price	GM20112515882	Price	GM70702516	Price	-	-	GM9925626	Price
3/4	-	-	-	-	GM700422534	Price	-	-	-	-

Collet Style/Fits - ER32										
	Rapidkut		Rego-Fix		Techniks		ETM		Parlec	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	-	-	-	-	GM7004232116	Price	-	-	-	-
3/32	-	-	-	-	GM70703023	Price	GM403203	Price	GM9932093	Price
1/8	TS1728111	Price	GM20113203182	Price	GM70703034	Price	GM403204	Price	GM9932125	Price
5/32	TS1728112	Price	-	-	GM7004232532	Price	-	-	-	-
3/16	TS1728113	Price	GM20113204762	Price	GM70703045	Price	GM403206	Price	GM9932187	Price
7/32	TS1728114	Price	-	-	GM70703056	Price	GM403207	Price	GM9932218	Price
1/4	TS1728115	Price	GM20113206352	Price	GM70703067	Price	GM403208	Price	GM9932250	Price
9/32	TS1728116	Price	-	-	GM7004232932	Price	-	-	-	-
5/16	TS1728117	Price	GM20113207942	Price	GM70703078	Price	GM403210	Price	GM9932312	Price
11/32	TS1728118	Price	-	-	GM70703089	Price	GM403211	Price	GM9932343	Price
3/8	TS1728119	Price	GM20113209532	Price	GM70703090	Price	GM403212	Price	GM9932375	Price
13/32	TS1728120	Price	-	-	GM70703101	Price	GM403213	Price	GM9932406	Price
7/16	TS1728121	Price	GM20113211112	Price	GM70703112	Price	GM403214	Price	GM9932437	Price
15/32	TS1728122	Price	-	-	GM70703120	Price	-	-	-	-
1/2	TS1728123	Price	GM20113212702	Price	GM70703123	Price	GM403216	Price	GM9932500	Price
17/32	TS1728124	Price	-	-	GM70703134	Price	GM403217	Price	GM9932219	Price
9/16	TS1728125	Price	GM20113214292	Price	GM70703145	Price	GM403218	Price	GM9932562	Price
19/32	TS1728126	Price	-	-	GM70703150	Price	-	-	-	-
5/8	TS1728127	Price	GM20113215882	Price	GM70703156	Price	GM403220	Price	GM9932625	Price
21/32	TS1728128	Price	-	-	GM70703167	Price	GM403221	Price	GM9932656	Price
11/16	TS1728129	Price	GM20113217462	Price	GM70703178	Price	GM403222	Price	GM9932687	Price
23/32	TS1728130	Price	-	-	GM70042322332	Price	-	-	-	-
3/4	TS1728131	Price	GM20113219052	Price	GM70703189	Price	GM403224	Price	GM9932750	Price
25/32	TS1728132	Price	-	-	GM70703190	Price	GM403225	Price	GM9932781	Price
13/16	TS1728133	Price	GM20113220642	Price	GM70042321316	Price	-	-	-	-

Collet Style/Fits - ER40										
	Rapidkut		Rego-Fix		Techniks		ETM		Parlec	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	TS1728158	Price	GM20114003182	Price	GM70704034	Price	GM404004	Price	GM9940125	Price
5/32	TS1728159	Price	-	-	GM7004240532	Price	-	-	-	-
3/16	TS1728160	Price	GM20114004762	Price	GM70704045	Price	GM404006	Price	GM9940187	Price
7/32	TS1728161	Price	-	-	GM70704056	Price	GM404007	Price	GM9940218	Price
1/4	TS1728162	Price	GM20114006352	Price	GM70704067	Price	GM404008	Price	GM9940250	Price
9/32	TS1728163	Price	-	-	GM7004240932	Price	-	-	-	-
5/16	TS1728164	Price	GM20114007942	Price	GM70704078	Price	GM404010	Price	GM9940312	Price
11/32	TS1728165	Price	-	-	GM70704089	Price	GM404011	Price	GM9940343	Price
3/8	TS1728166	Price	GM20114009532	Price	GM70704090	Price	GM404012	Price	GM9940375	Price
13/32	TS1728167	Price	-	-	GM70704101	Price	GM404013	Price	GM9940406	Price
7/16	TS1728168	Price	GM20114011112	Price	GM70704112	Price	GM404014	Price	GM9940437	Price
15/32	TS1728169	Price	-	-	GM70042401532	Price	-	-	-	-
17/32	TS1728171	Price	-	-	GM70704134	Price	GM404017	Price	GM9940531	Price
1/2	TS1728170	Price	GM20114012702	Price	GM70704123	Price	GM404016	Price	GM9940500	Price
9/16	TS1728172	Price	GM20114014292	Price	GM70704145	Price	GM404018	Price	GM9940562	Price
19/32	TS1728173	Price	-	-	GM70042401932	Price	-	-	-	-
5/8	TS1728174	Price	GM20114015882	Price	GM70704156	Price	GM404020	Price	GM9940625	Price
21/32	TS1728175	Price	-	-	GM70704167	Price	GM404021	Price	-	-
11/16	TS1728176	Price	GM20114017462	Price	GM70704178	Price	GM404022	Price	GM9940656	Price
23/32	TS1728177	Price	-	-	GM70042402332	Price	-	-	-	-
3/4	TS1728178	Price	GM20114019052	Price	GM70704189	Price	GM404024	Price	GM9940750	Price
25/32	TS1728179	Price	-	-	GM70704190	Price	GM404025	Price	GM9940781	Price
13/16	TS1728180	Price	GM20114020642	Price	GM70704201	Price	GM404026	Price	GM9940812	Price
27/32	TS1728181	Price	-	-	GM70704212	Price	GM404027	Price	GM9940843	Price
7/8	TS1728182	Price	GM20114022232	Price	GM70704223	Price	GM404028	Price	GM9940875	Price
29/32	TS1728183	Price	-	-	GM70042402932	Price	-	-	-	-

Individual Inch ER Spring Collets (cont.)

Collet Style/Fits - ER40										
	Rapidkut		Rego-Fix		Techniks		ETM		Parlec	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
15/16	TS1728184	Price	-	-	GM70704234	Price	GM404030	Price	GM9940937	Price
31/32	TS1728185	Price	-	-	GM70704245	Price	GM404031	Price	GM9940968	Price
1	TS1728186	Price	GM20114025402	Price	GM70704256	Price	GM404032	Price	GM99401000	Price

Collet Style/Fits - ER50				
	Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price
3/16	GM20115006000	Price	-	-
1/4	GM20115008000	Price	-	-
3/8	GM20115010000	Price	-	-
7/16	GM20115012000	Price	-	-
1/2	GM20115014000	Price	GM700425500	Price
5/8	GM20115016000	Price	GM700425058	Price
11/16	GM20115018000	Price	-	-
3/4	GM20115020000	Price	GM700425750	Price
13/16	GM20115022000	Price	-	-
7/8	GM20115024000	Price	GM700425078	Price
31/32	GM20115025000	Price	-	-
1	GM20115026000	Price	GM70042501	Price
1-1/16	GM20115028000	Price	-	-
1-1/8	GM20115030000	Price	-	-
1-1/4	GM20115032000	Price	GM7004250114	Price
1-5/16	GM20115034000	Price	-	-
1-3/8	GM20115036000	Price	-	-

Individual Metric ER Spring Collets



Features:

- ER Spring Collets are the only Clamping Collet System for combined milling, drilling, reaming, tapping and boring
- ER Collets concentricity guaranteed to .0004”
- Wide holding range of each collet requires fewer collets and changes - guarantees that undersize cutting tools can be held without sacrificing accuracy or gripping power
- Uniqure self-releasing system elimiates sticking
- Flute holding capabilities for highest concentricity and clamping power
- ER Mini-Collet Chucks allow for machining in tight locations with reduced outside nose diameter
- Clamping range is .039”

Collet Style/Fits - ER8				
	Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price
1mm	GM20110801000	Price	GM7042081MM	Price
1.5mm	GM20110801500	Price	GM70420815MM	Price
2mm	GM20110802000	Price	GM7042082MM	Price
2.5mm	GM20110802500	Price	GM70420825MM	Price
3mm	GM20110803000	Price	GM7042083MM	Price
3.5mm	GM20110803500	Price	GM70420835MM	Price
4mm	GM20110804000	Price	GM7042084MM	Price
4.5mm	GM20110804500	Price	GM70420845MM	Price
5mm	GM20110805000	Price	GM7042085MM	Price

Collet Style/Fits - ER11						
	Rapidkut		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price
1mm	TS1727714	Price	GM20111101000	Price	GM7042111MM	Price
1.5mm	TS1727715	Price	GM20111101500	Price	GM70421115MM	Price
2mm	TS1727716	Price	GM20111102000	Price	GM7042112MM	Price
2.5mm	TS1727717	Price	GM20111102500	Price	GM70421125MM	Price
3mm	TS1727718	Price	GM20111103000	Price	GM7042113MM	Price
3.5mm	TS1727719	Price	GM20111103500	Price	GM70421135MM	Price
4mm	TS1727720	Price	GM20111104000	Price	GM7042114MM	Price
4.5mm	TS1727721	Price	GM20111104500	Price	GM70421145MM	Price
5mm	TS1727722	Price	GM20111105000	Price	GM7042115MM	Price
5.5mm	TS1727723	Price	GM20111105500	Price	GM70421155MM	Price
6mm	TS1727724	Price	GM20111106000	Price	GM7042116MM	Price
6.5mm	TS1727725	Price	GM20111106500	Price	GM70421165MM	Price
7mm	TS1727726	Price	GM20111107000	Price	GM7042117MM	Price

Individual Metric ER Spring Collets (cont.)

Collet Style/Fits - ER16								
	Parlec		Rapidkut		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1mm	GM9916039	Price	TS1728016	Price	GM20111601000	Price	-	-
1.5mm	-	-	TS1728017	Price	GM20111601500	Price	GM70421615MM	Price
2mm	GM9916078	Price	TS1728018	Price	GM20111602000	Price	GM7042162MM	Price
2.5mm	-	-	TS1728019	Price	GM20111602500	Price	GM70421625MM	Price
3mm	GM9916118	Price	TS1728020	Price	GM20111603000	Price	GM7042163MM	Price
3.5mm	-	-	TS1728021	Price	GM20111603500	Price	GM70421635MM	Price
4mm	GM9916157	Price	TS1728022	Price	GM20111604000	Price	GM7042164MM	Price
4.5mm	-	-	TS1728023	Price	GM20111604500	Price	GM70421645MM	Price
5mm	GM9916196	Price	TS1728024	Price	GM20111605000	Price	GM7042165MM	Price
5.5mm	-	-	TS1728025	Price	GM20111605500	Price	GM70421655MM	Price
6mm	GM9916236	Price	TS1728026	Price	GM20111606000	Price	GM7042166MM	Price
6.5mm	-	-	TS1728027	Price	GM20111606500	Price	GM70421665MM	Price
7mm	GM9916275	Price	TS1728028	Price	GM20111607000	Price	GM7042167MM	Price
7.5mm	-	-	TS1728029	Price	GM20111607500	Price	GM70421675MM	Price
8mm	GM9916315	Price	TS1728030	Price	GM20111608000	Price	GM7042168MM	Price
8.5mm	-	-	TS1728031	Price	GM20111608500	Price	GM70421685MM	Price
9mm	GM9916354	Price	TS1728032	Price	GM20111609000	Price	GM7042169MM	Price
9.5mm	-	-	TS1728033	Price	GM20111609500	Price	GM70421695MM	Price
10mm	GM9916393	Price	TS1728034	Price	GM20111610000	Price	GM70421610MM	Price

Collet Style/Fits - ER20						
	Rapidkut		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price
1mm	TS1728055	Price	GM20112001000	Price	GM700422001	Price
1.5mm	-	-	GM20112001500	Price	GM7004220015	Price
2mm	TS1728056	Price	GM20112002000	Price	GM7042202MM	Price
2.5mm	-	-	GM20112002500	Price	GM70422025MM	Price
3mm	TS1728057	Price	GM20112003000	Price	GM7042203MM	Price
3.5mm	-	-	GM20112003500	Price	GM70422035MM	Price
4mm	TS1728058	Price	GM20112004000	Price	GM7042204MM	Price
4.5mm	-	-	GM20112004500	Price	GM70422045MM	Price
5mm	TS1728059	Price	GM20112005000	Price	GM7042205MM	Price
5.5mm	-	-	GM20112005500	Price	GM70422055MM	Price
6mm	TS1728060	Price	GM20112006000	Price	GM7042206MM	Price
6.5mm	-	-	GM20112006500	Price	GM70422065MM	Price
7mm	TS1728061	Price	GM20112007000	Price	GM7042207MM	Price
7.5mm	-	-	GM20112007500	Price	GM70422075MM	Price
8mm	TS1728062	Price	GM20112008000	Price	GM7042208MM	Price
8.5mm	-	-	GM20112008500	Price	GM70422085MM	Price
9mm	TS1728063	Price	GM20112009000	Price	GM7042209MM	Price
9.5mm	-	-	GM20112009500	Price	GM70422095MM	Price
10mm	TS1728064	Price	GM20112010000	Price	GM70422010MM	Price
10.5mm	-	-	GM20112010500	Price	GM704220105MM	Price
11mm	TS1728065	Price	GM20112011000	Price	GM70422011MM	Price
11.5mm	-	-	GM20112011500	Price	GM704220115MM	Price
12mm	TS1728066	Price	GM20112012000	Price	GM70422012MM	Price
12.5mm	-	-	GM20112012500	Price	GM704220125MM	Price
13mm	TS1728067	Price	GM20112013000	Price	GM70422013MM	Price
13.5mm	-	-	-	-	GM704220135MM	Price
14mm	-	-	-	-	GM70422014MM	Price

Collet Style/Fits - ER25						
	Rapidkut		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price
1mm	-	-	GM20112501000	Price	-	-
1.5mm	-	-	GM20112501500	Price	-	-
2mm	TS1728093	Price	GM20112502000	Price	GM7042252MM	Price
2.5mm	-	-	GM20112502500	Price	GM70422525MM	Price
3mm	TS1728094	Price	GM20112503000	Price	GM7042253MM	Price
3.5mm	-	-	GM20112503500	Price	GM70422535MM	Price
4mm	TS1728095	Price	GM20112504000	Price	GM7042254MM	Price
4.5mm	-	-	GM20112504500	Price	GM70422545MM	Price
5mm	TS1728096	Price	GM20112505000	Price	GM7042255MM	Price

Individual Metric ER Spring Collets (cont.)

Collet Style/Fits - ER25						
	Rapidkut		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price
5.5mm	-	-	GM20112505500	Price	-	-
6mm	TS1728097	Price	GM20112506000	Price	GM7042256MM	Price
6.5mm	-	-	GM20112506500	Price	-	-
7mm	TS1728098	Price	GM20112507000	Price	GM7042257MM	Price
7.5mm	-	-	GM20112507500	Price	-	-
8mm	TS1728099	Price	GM20112508000	Price	GM7042258MM	Price
8.5mm	-	-	GM20112508500	Price	-	-
9mm	TS1728100	Price	GM20112509000	Price	GM7042259MM	Price
9.5mm	-	-	GM20112509500	Price	-	-
10mm	TS1728101	Price	GM20112510000	Price	GM70422510MM	Price
10.5mm	-	-	GM20112510500	Price	-	-
11mm	TS1728102	Price	GM20112511000	Price	GM70422511MM	Price
11.5mm	-	-	GM20112511500	Price	-	-
12mm	TS1728103	Price	GM20112512000	Price	GM70422512MM	Price
12.5mm	-	-	GM20112512500	Price	-	-
13mm	TS1728104	Price	GM20112513000	Price	GM70422513MM	Price
13.5mm	-	-	GM20112513500	Price	-	-
14mm	TS1728105	Price	GM20112514000	Price	GM70422514MM	Price
14.5mm	-	-	GM20112514500	Price	-	-
15mm	TS1728106	Price	GM20112515000	Price	GM70422515MM	Price
15.5mm	-	-	GM20112515500	Price	-	-
16mm	TS1728107	Price	GM20112516000	Price	GM70422516MM	Price
17mm	-	-	GM20112517000	Price	GM70422517MM	Price

Collet Style/Fits - ER32								
	Parlec		Rapidkut		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
2mm	-	-	-	-	GM20113202000	Price	-	-
2.5mm	-	-	-	-	GM20113202500	Price	-	-
3mm	-	-	TS1728137	Price	GM20113203000	Price	GM7042323MM	Price
3.5mm	-	-	-	-	GM20113203500	Price	GM70423235MM	Price
4mm	-	-	TS1728138	Price	GM20113204000	Price	GM7042324MM	Price
4.5mm	-	-	-	-	GM20113204500	Price	GM70423245MM	Price
5mm	-	-	TS1728139	Price	GM20113205000	Price	GM7042325MM	Price
5.5mm	-	-	-	-	GM20113205500	Price	GM70423255MM	Price
6mm	-	-	TS1728140	Price	GM20113206000	Price	GM7042326MM	Price
6.5mm	-	-	-	-	GM20113206500	Price	GM70423265MM	Price
7mm	-	-	TS1728141	Price	GM20113207000	Price	GM7042327MM	Price
7.5mm	-	-	-	-	GM20113207500	Price	GM70423275MM	Price
8mm	-	-	TS1728142	Price	GM20113208000	Price	GM7042328MM	Price
8.5mm	-	-	-	-	GM20113208500	Price	GM70423285MM	Price
9mm	-	-	TS1728143	Price	GM20113209000	Price	GM7042329MM	Price
9.5mm	-	-	-	-	GM20113209500	Price	GM70423295MM	Price
10mm	-	-	TS1728144	Price	GM20113210000	Price	GM70423210MM	Price
10.5mm	-	-	-	-	GM20113210500	Price	GM704232105MM	Price
11mm	GM9932433	Price	TS1728145	Price	GM20113211000	Price	GM70423211MM	Price
11.5mm	-	-	-	-	GM20113211500	Price	GM704232115MM	Price
12mm	GM9932472	Price	TS1728146	Price	GM20113212000	Price	GM70423212MM	Price
12.5mm	-	-	-	-	GM20113212500	Price	GM704232125MM	Price
13mm	GM9932511	Price	TS1728147	Price	GM20113213000	Price	GM70423213MM	Price
13.5mm	-	-	-	-	GM20113213500	Price	GM704232135MM	Price
14mm	GM9932551	Price	TS1728148	Price	GM20113214000	Price	GM70423214MM	Price
14.5mm	-	-	-	-	GM20113214500	Price	GM704232145MM	Price
15mm	GM9932590	Price	TS1728149	Price	GM20113215000	Price	GM70423215MM	Price
15.5mm	-	-	-	-	GM20113215500	Price	GM704232155MM	Price
16mm	GM9932630	Price	TS1728150	Price	GM20113216000	Price	GM70423216MM	Price
16.5mm	-	-	-	-	GM20113216500	Price	GM704232165MM	Price
17mm	GM9932669	Price	TS1728151	Price	GM20113217000	Price	GM70423217MM	Price
17.5mm	-	-	-	-	GM20113217500	Price	GM704232175MM	Price
18mm	GM9932708	Price	TS1728152	Price	GM20113218000	Price	GM70423218MM	Price
18.5mm	-	-	-	-	GM20113218500	Price	GM704232185MM	Price
19mm	GM9932748	Price	TS1728153	Price	GM20113219000	Price	GM70423219MM	Price
19.5mm	-	-	-	-	GM20113219500	Price	GM704232195MM	Price
20mm	GM9932787	Price	TS1728154	Price	GM20113220000	Price	GM70423220MM	Price
21mm	-	-	-	-	GM20113221000	Price	GM70423221MM	Price
22mm	-	-	-	-	GM20113222000	Price	-	-

Individual Metric ER Spring Collets (cont.)

Collet Style/Fits - ER40						
	Rapidkut		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price
3mm	-	-	GM20114003000	Price	-	-
3.5mm	-	-	GM20114003500	Price	-	-
4mm	TS1728190	Price	GM20114004000	Price	GM7042404MM	Price
4.5mm	-	-	GM20114004500	Price	-	-
5mm	TS1728191	Price	GM20114005000	Price	GM7042405MM	Price
5.5mm	-	-	GM20114005500	Price	-	-
6mm	TS1728192	Price	GM20114006000	Price	GM7042406MM	Price
6.5mm	-	-	GM20114006500	Price	-	-
7mm	TS1728193	Price	GM20114007000	Price	GM7042407MM	Price
7.5mm	-	-	GM20114007500	Price	-	-
8mm	TS1728194	Price	GM20114008000	Price	GM7042408MM	Price
8.5mm	-	-	GM20114008500	Price	-	-
9mm	TS1728195	Price	GM20114009000	Price	GM7042409MM	Price
9.5mm	-	-	GM20114009500	Price	-	-
10mm	TS1728196	Price	GM20114010000	Price	GM70424010MM	Price
10.5mm	-	-	GM20114010500	Price	-	-
11mm	TS1728197	Price	GM20114011000	Price	GM70424011MM	Price
11.5mm	-	-	GM20114011500	Price	-	-
12mm	TS1728198	Price	GM20114012000	Price	GM70424012MM	Price
12.5mm	-	-	GM20114012500	Price	-	-
13mm	TS1728199	Price	GM20114013000	Price	GM70424013MM	Price
13.5mm	-	-	GM20114013500	Price	-	-
14mm	TS1728200	Price	GM20114014000	Price	GM70424014MM	Price
14.5mm	-	-	GM20114014500	Price	-	-
15mm	TS1728201	Price	GM20114015000	Price	GM70424015MM	Price
15.5mm	-	-	GM20114015500	Price	-	-
16mm	TS1728202	Price	GM20114016000	Price	GM70424016MM	Price
16.5mm	-	-	GM20114016500	Price	-	-
17mm	TS1728203	Price	GM20114017000	Price	GM70424017MM	Price
17.5mm	-	-	GM20114017500	Price	-	-
18mm	TS1728204	Price	GM20114018000	Price	GM70424018MM	Price
18.5mm	-	-	GM20114018500	Price	-	-
19mm	TS1728205	Price	GM20114019000	Price	GM70424019MM	Price
19.5mm	-	-	GM20114019500	Price	-	-
20mm	TS1728206	Price	GM20114020000	Price	GM70424020MM	Price
20.5mm	-	-	GM20114020500	Price	-	-
21mm	TS1728207	Price	GM20114021000	Price	GM70424021MM	Price
21.5mm	-	-	GM20114021500	Price	-	-
22mm	TS1728208	Price	GM20114022000	Price	GM70424022MM	Price
22.5mm	-	-	GM20114022500	Price	-	-
23mm	TS1728209	Price	GM20114023000	Price	GM70424023MM	Price
23.5mm	-	-	GM20114023500	Price	-	-
24mm	TS1728210	Price	GM20114024000	Price	GM70424024MM	Price
24.5mm	-	-	GM20114024500	Price	-	-
25mm	TS1728211	Price	GM20114025000	Price	GM70424025MM	Price
25.5mm	-	-	GM20114025500	Price	-	-
26mm	TS1728212	Price	GM20114026000	Price	GM70424026MM	Price
27mm	-	-	GM20114027000	Price	GM70424027MM	Price
28mm	-	-	GM20114028000	Price	-	-
29mm	-	-	GM20114029000	Price	-	-
30mm	-	-	GM20114030000	Price	-	-

Collet Style/Fits - ER50		
	Techniks	
ID	Order No.	Price
6mm	GM700425006	Price
7mm	GM700425007	Price
8mm	GM700425008	Price
9mm	GM700425009	Price
10mm	GM700425010	Price
12mm	GM700425012	Price
14mm	GM700425014	Price
16mm	GM700425016	Price
18mm	GM700425018	Price

Collet Style/Fits - ER50		
	Techniks	
ID	Order No.	Price
20mm	GM700425020	Price
22mm	GM700425022	Price
24mm	GM700425024	Price
26mm	GM700425026	Price
28mm	GM700425028	Price
29mm	GM700425029	Price
30mm	GM700425030	Price
32mm	GM700425032	Price
34mm	GM700425034	Price

ER / TG / DA Collet Sets
in Wooden Tray

Collet Style - ER8				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
3	1/16 - 3/16	Rego-Fix	GM20110800002	Price
9	.7mm - 5mm	Rego-Fix	GM20110800000	Price
9	1mm - 5mm	Techniks	GM70701198	Price

Collet Style - ER11				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
13	.5mm - 7mm	Rego-Fix	GM20111100000	Price
13	1mm - 7mm	Rapidhold	TS1727729	Price
13	1mm - 7mm	Techniks	GM70701200	Price
7	.5mm - 7mm	Parlec	GM99S013	Price
7	1/16 - 1/4	Rapidhold	TS1727710	Price
7	1/16 - 1/4	Rego-Fix	GM20111100002	Price
7	1/32 - 1/4	ETM	GM405011	Price
7	1/32 - 1/4	Techniks	GM70701199	Price

Collet Style - ER16				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
10	.5mm - 10mm	Parlec	GM99S010	Price
10	.5mm - 10mm	Rego-Fix	GM20111600000	Price
10	1/32 - 3/8	ETM	GM405016	Price
10	1/32 - 3/8	Techniks	GM70701699	Price
10	1mm - 10mm	Rapidhold	TS1728035	Price
10	1mm - 10mm	Techniks	GM70701700	Price
10	3/32 - 3/8	Techniks	GM6904543IS	Price
12	1/16 - 13/32	Rapidhold	TS1728013	Price
12	1/16 -13/32	Parlec	GM99ER16S012	Price
12	1/16 -13/32	Rego-Fix	GM20111600002	Price
8	3mm - 10mm	Techniks	GM6904543MS	Price

Collet Style - ER20				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
11	2mm - 13mm	Techniks	GM6904544MS	Price
12	1/16 - 1/2	ETM	GM405020	Price
12	1/16 - 1/2	Techniks	GM70702199	Price
12	1mm - 13mm	Parlec	GM99S012	Price
12	1mm - 13mm	Rego-Fix	GM20112000000	Price
12	2mm - 13mm	Rapidhold	TS1728068	Price
12	2mm - 13mm	Techniks	GM70702200	Price
12	5/32 - 1/2	Techniks	GM6904544IS	Price
14	3/32 - 1/2	Parlec	GM99ER20S014	Price
7	1/8 - 1/2	Rego-Fix	GM20112000002	Price
8	3/32, 1/8 - 1/2	Rapidhold	TS1728052	Price

Collet Style - ER25				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
10	3/32, 1/8 - 5/8	Rapidhold	TS1728090	Price
14	3mm - 16mm	Techniks	GM6904545MS	Price
14	7/32 - 3/4	Techniks	GM6904545IS	Price
15	1/16 - 5/8	ETM	GM405025	Price
15	1mm - 16mm	Parlec	GM99S015	Price
15	1mm - 16mm	Rego-Fix	GM20112500000	Price
15	2mm - 16mm	Rapidhold	TS1728108	Price
15	2mm - 16mm	Techniks	GM70702600	Price
16	5/32 - 5/8	Techniks	GM70702599	Price
9	1/8 - 5/8	Rego-Fix	GM20112500002	Price

Collet Style - ER32				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
12	1/8 - 13/16	Rapidhold	TS1728134	Price
12	1/8 - 13/16	Rego-Fix	GM20113200002	Price
18	2mm - 20mm	Parlec	GM99S018	Price
18	2mm - 20mm	Rego-Fix	GM20113200000	Price
18	3/32 - 3/4	ETM	GM405032	Price

rego fix Swiss Precision Tools

Collet Trays

- Storage overview
- Collet bore diameters are marked on the tray
- Chemical and oil resistant

Collet Style - Inch			
No. of Collets	Type	Order No.	Price
3	ER8	GM20712108300	Price
7	ER11	GM20712111300	Price
7	ER20	GM20712120300	Price
9	ER25	GM20712125300	Price
12	ER16	GM20712116300	Price
12	ER32	GM20712132300	Price
14	ER40	GM20712140300	Price



Collet Style - ER32				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
18	3mm - 16mm	Techniks	GM6904546MS	Price
18	3mm - 20mm	Rapidhold	TS1728155	Price
18	3mm - 20mm	Techniks	GM70704000	Price
18	7/32 - 3/4	Techniks	GM6904546IS	Price
18	7/32 - 3/4	Techniks	GM70703999	Price
21	1/8 - 3/4	Parlec	GM99ER32S022	Price

Collet Style - ER40				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
13	1/8 - 1	Techniks	GM70704999	Price
14	1/8 - 1	Rego-Fix	GM20114000002	Price
14	2mm - 16mm	Techniks	GM6904547MS	Price
15	1/8 - 1	Rapidhold	TS1728187	Price
15	3/8 - 1	Techniks	GM6904547IS	Price
23	1/8 - 1	ETM	GM405040	Price
23	3mm - 26mm	Rego-Fix	GM20114000000	Price
23	4mm - 26mm	Parlec	GM99S023	Price
23	4mm - 26mm	Rapidhold	TS1728213	Price
23	4mm - 26mm	Techniks	GM70705000	Price

Collet Style - ER50				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
10	3/32 - 3/8	Techniks	GM6904548IS	Price
12	4mm - 34mm	Rego-Fix	GM20115000000	Price
17	6mm - 34mm	Techniks	GM70706000	Price

Collet Style - DA100				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
15	1/8 - 9/16	Techniks	TE130161015S	Price
21	1/4 - 9/16	Techniks	TE130161021S	Price
29	1/8 - 9/16	Techniks	TE130161029S	Price
33	1/16 - 9/16	Techniks	TE130161033S	Price
8	1/8 - 9/16	Techniks	TE13016108S	Price

Collet Style - DA180				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
17	1/4 - 3/4	Techniks	TE130161817S	Price
21	1/8 - 3/4	Techniks	TE130161821S	Price
33	1/4 - 3/4	Techniks	TE130161833S	Price
41	1/8 - 3/4	Techniks	TE130161841S	Price
9	1/4 - 3/4	Techniks	TE13016189S	Price

Collet Style - DA200				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
17	1/8 - 3/8	Techniks	TE130162017S	Price
21	1/16 - 3/8	Techniks	TE130162021S	Price
9	1/8 - 3/8	Techniks	TE13016209S	Price

Collet Style - DA300				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
14	3/64 - 1/4	Techniks	TE130163014S	Price
7	1/16 - 1/4	Techniks	TE13016307S	Price

Collet Style - TG100				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
15	1/8 - 1	Techniks	TE130401015S	Price
41	3/8 - 1	Techniks	TE130401041S	Price

Collet Style - TG75				
No. of Collets	Size Range (in.)	Brand Name	Order No.	Price
11	1/8 - 3/4	Techniks	TE130400811S	Price
22	1/8 - 3/4	Techniks	TE130400822S	Price
43	1/8 - 3/4	Techniks	TE130400843S	Price



Collet Style - Metric			
No. of Collets	Type	Order No.	Price
9	ER8	GM20712108000	Price
13	ER11	GM20712111000	Price
10	ER16	GM20712116000	Price
12	ER20	GM20712120000	Price
15	ER25	GM20712125000	Price
18	ER32	GM20712132000	Price
40	ER40	GM20712140000	Price
12	ER50	GM20712150000	Price

Ultra Precision Collets - Inch

RAPIDHOLD ULTRA PRECISION COLLETS:

- Inch & Metric sizes
- Made with high quality bearing steel and heat treated for high flexibilty and long life
- Made in DIN6499 - 0..0002" T.I.R.
- Wide clamping range with 0.02 - 0.039" collapsibility

REGO-FIX ER ULTRA PRECISION COLLETS:

- High precision collets combine the advantages of DIN 6499/ ISO 15488 A + B
- T.I.R. ≤ 5µm over the entire clamping range
- Clamping range from diameter 0.2mm up to 36mm

PARLEC ER GRADE AA 5 MICRON COLLETS:

- Evenly distributed cutting edges for high performace machining .0002" (5 micron) gage tolerance
- Exceeds DIN requirements
- 12 slots, deburred and polished
- Increased grip force with reduced friction to collet seat



Collet Style/Fits - ER8		
	Rego-Fix	
ID	Order No.	Price
1/16	GM20110801593	Price
1/8	GM20110803183	Price
3/16	GM20110804763	Price

Collet Style/Fits - ER11						
	Parlec		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price
1/16	GM935UMER110062	Price	GM20111101593	Price	TE14UP04211116	Price
3/32	GM935UMER110093	Price	GM20111102383	Price	TE14UP04211332	Price
1/8	GM935UMER110125	Price	GM20111103183	Price	TE14UP0421118	Price
5/32	GM935UMER110156	Price	GM20111103973	Price	TE14UP04211532	Price
3/16	GM935UMER110187	Price	GM20111104763	Price	TE14UP04211316	Price
7/32	GM935UMER110218	Price	GM20111105563	Price	TE14UP04211732	Price
1/4	GM935UMER110250	Price	GM20111106353	Price	TE14UP0421114	Price

Collet Style/Fits - ER16								
	Rapidkut		Parlec		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	TS1828216	Price	GM935UMER160062	Price	GM20111601593	94.00	TE14UP04216116	Price
3/32	TS1828217	Price	GM935UMER160093	Price	GM20111602383	76.00	TE14UP04216332	Price
1/8	TS1828218	Price	GM935UMER160125	Price	GM20111603183	66.00	TE14UP0421618	Price
5/32	TS1828219	Price	GM935UMER160156	Price	GM20111603973	66.00	TE14UP04216532	Price
3/16	TS1828220	Price	GM935UMER160187	Price	GM20111604763	66.00	TE14UP04216316	Price
7/32	TS1828221	Price	GM935UMER160218	Price	GM20111605563	66.00	TE14UP04216732	Price
1/4	TS1828222	Price	GM935UMER160250	Price	GM20111606353	66.00	TE14UP0421614	Price
9/32	TS1828223	Price	GM935UMER160281	Price	GM20111607143	66.00	TE14UP04216932	Price
5/16	TS1828224	Price	GM935UMER160312	Price	GM20111607943	66.00	TE14UP04216516	Price
11/32	TS1828225	Price	GM935UMER160343	Price	GM20111608733	66.00	TE14UP042161132	Price
3/8	TS1828226	Price	GM935UMER160375	Price	GM20111609533	66.00	TE14UP0421638	Price
13/32	TS1828227	Price	GM935UMER160406	Price	GM20111610323	66.00	TE14UP042161332	Price

Collet Style/Fits - ER20								
	Rapidkut		Parlec		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	-	-	-	-	-	-	TE14UP04220116	Price
3/32	TS1828253	Price	-	-	-	-	TE14UP04220332	Price
1/8	TS1828254	Price	GM935UMER200125	Price	GM20112003183	Price	TE14UP0422018	Price
5/32	TS1828255	Price	-	-	-	-	TE14UP04220532	Price
3/16	TS1828256	Price	GM935UMER200187	Price	GM20112004763	Price	TE14UP04220316	Price
7/32	TS1828257	Price	-	-	-	-	TE14UP04220732	Price
1/4	TS1828258	Price	GM935UMER200250	Price	GM20112006353	Price	TE14UP0422014	Price
9/32	TS1828259	Price	-	-	-	-	TE14UP04220932	Price
5/16	TS1828260	Price	GM935UMER200312	Price	GM20112007943	Price	TE14UP04220516	Price
11/32	TS1828261	Price	-	-	-	-	TE14UP042201132	Price
3/8	TS1828262	Price	GM935UMER200375	Price	GM20112009533	Price	TE14UP0422038	Price
13/32	TS1828263	Price	-	-	-	-	TE14UP042201332	Price
7/16	TS1828264	Price	GM935UMER200437	Price	-	-	TE14UP04220716	Price
15/32	TS1828265	Price	-	-	-	-	TE14UP042201532	Price
1/2	TS1828266	Price	GM935UMER200500	Price	GM20112012703	Price	TE14UP0422012	Price

Ultra Precision Collets - Inch (cont.)

Collet Style/Fits - ER25								
	Rapidkut		Parlec		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/16	TS1828286	Price	-	-	-	-	TE14UP04225116	Price
3/32	TS1828287	Price	-	-	-	-	TE14UP04225332	Price
1/8	TS1828288	Price	GM935UMER250125	Price	GM20112503183	Price	TE14UP0422518	Price
5/32	TS1828289	Price	-	-	-	-	TE14UP04225532	Price
3/16	TS1828290	Price	GM935UMER250187	Price	GM20112504763	Price	TE14UP04225316	Price
7/32	TS1828291	Price	-	-	-	-	TE14UP04225732	Price
1/4	TS1828292	Price	GM935UMER250250	Price	GM20112506353	Price	TE14UP0422514	Price
9/32	TS1828293	Price	-	-	-	-	TE14UP04225932	Price
5/16	TS1828294	Price	GM935UMER250312	Price	GM20112507943	Price	TE14UP04225516	Price
11/32	TS1828295	Price	-	-	-	-	TE14UP042251132	Price
3/8	TS1828296	Price	GM935UMER250375	Price	GM20112509533	Price	TE14UP0422538	Price
13/32	TS1828297	Price	-	-	-	-	-	-
7/16	TS1828298	Price	GM935UMER250437	Price	GM20112511113	Price	TE14UP04225716	Price
15/32	TS1828299	Price	-	-	-	-	TE14UP042251532	Price
1/2	TS1828300	Price	GM935UMER250500	Price	GM20112512703	Price	TE14UP0422512	Price
17/32	TS1828301	Price	-	-	-	-	TE14UP042251732	Price
9/16	TS1828302	Price	GM935UMER250562	Price	GM20112514293	Price	TE14UP04225916	Price
19/32	TS1828303	Price	-	-	-	-	TE14UP042251932	Price
5/8	TS1828304	Price	GM935UMER250625	Price	GM20112515883	Price	TE14UP0422558	Price

Collet Style/Fits - ER32								
	Rapidkut		Parlec		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/32	-	-	-	-	-	-	TE14UP04232332	Price
1/8	TS1828326	Price	GM935UMER320125	Price	GM20113203183	Price	TE14UP0423218	Price
5/32	TS1828327	Price	Price	-	-	-	TE14UP04232532	Price
3/16	TS1828328	Price	Price	Price	GM20113204763	Price	TE14UP04232316	Price
7/32	TS1828329	Price	Price	-	-	-	TE14UP04232732	Price
1/4	TS1828330	Price	Price	Price	GM20113206353	Price	TE14UP0423214	Price
9/32	TS1828331	Price	Price	-	-	-	TE14UP04232932	Price
5/16	TS1828332	Price	Price	Price	GM20113207943	Price	TE14UP04232516	Price
11/32	TS1828333	Price	Price	-	-	-	TE14UP042321132	Price
3/8	TS1828334	Price	Price	Price	GM20113209533	Price	TE14UP0423238	Price
13/32	TS1828335	Price	Price	-	-	-	TE14UP042321332	Price
7/16	TS1828336	Price	Price	Price	GM20113211113	Price	TE14UP04232716	Price
15/32	TS1828337	Price	Price	-	-	-	TE14UP042321532	Price
1/2	TS1828338	Price	Price	Price	GM20113212703	Price	TE14UP0423212	Price
17/32	TS1828339	Price	Price	-	-	-	TE14UP042321732	Price
9/16	TS1828340	Price	Price	Price	GM20113214293	Price	TE14UP04232916	Price
19/32	TS1828341	Price	Price	-	-	-	TE14UP042321932	Price
5/8	TS1828342	Price	Price	Price	GM20113215883	Price	TE14UP0423258	Price
21/32	TS1828343	Price	Price	-	-	-	TE14UP042322132	Price
11/16	TS1828344	Price	Price	Price	GM20113217463	Price	TE14UP042321116	Price
23/32	TS1828345	Price	Price	-	-	-	TE14UP042322332	Price
3/4	TS1828346	Price	Price	Price	GM20113219053	Price	TE14UP0423234	Price
13/16	TS1828348	Price	Price	Price	GM20113220643	Price	TE14UP042321316	Price
25/32	TS1828347	Price	Price	-	-	-	TE14UP042322532	Price

Collet Style/Fits - ER40								
	Rapidkut		Parlec		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	TS1828373	Price	GM935UMER400125	Price	GM20114003183	Price	TE14UP0424018	Price
5/32	TS1828374	Price	-	-	-	-	TE14UP04240532	Price
3/16	TS1828375	Price	GM935UMER400187	Price	GM20114004763	Price	TE14UP04240316	Price
7/32	TS1828376	Price	-	-	-	-	TE14UP04240732	Price
1/4	TS1828377	Price	GM935UMER400250	Price	GM20114006353	Price	TE14UP0424014	Price
9/32	TS1828378	Price	-	-	-	-	TE14UP04240932	Price
5/16	TS1828379	Price	GM935UMER400312	Price	GM20114007943	Price	TE14UP04240516	Price
11/32	TS1828380	Price	-	-	-	-	TE14UP042401132	Price
3/8	TS1828381	Price	GM935UMER400375	Price	GM20114009533	Price	TE14UP0424038	Price
13/32	TS1828382	Price	-	-	-	-	TE14UP042401332	Price
7/16	TS1828383	Price	GM935UMER400437	Price	GM20114011113	Price	TE14UP04240716	Price
15/32	TS1828384	Price	-	-	-	-	TE14UP042401532	Price
1/2	TS1828385	Price	GM935UMER400500	Price	GM20114012703	Price	TE14UP0424012	Price
17/32	TS1828386	Price	-	-	-	-	TE14UP042401732	Price
9/16	TS1828387	Price	GM935UMER400590	Price	GM20114014293	Price	TE14UP04240916	Price
5/8	TS1828389	Price	GM935UMER400625	Price	GM20114015883	Price	TE14UP0424058	Price
11/16	TS1828391	Price	GM935UMER400687	Price	GM20114017463	Price	TE14UP042401116	Price
3/4	TS1828393	Price	GM935UMER400750	Price	GM20114019053	Price	TE14UP0424034	Price
25/32	TS1828394	Price	-	-	-	-	TE14UP042402532	Price
13/16	TS1828395	Price	GM935UMER400812	Price	GM20114020643	Price	TE14UP042401316	Price
27/32	TS1828396	Price	-	-	-	-	TE14UP042402732	Price
7/8	TS1828397	Price	GM935UMER400875	Price	GM20114022233	Price	TE14UP0424078	Price
29/32	TS1828398	Price	-	-	-	-	TE14UP042402932	Price
15/16	TS1828399	Price	-	-	-	-	TE14UP042401516	Price
31/32	TS1828400	Price	-	-	-	-	TE14UP042403132	Price
1	TS1828401	Price	GM935UMER401000	Price	GM20114025403	Price	TE14UP042401	Price

Ultra Precision Collets - Inch (cont.)

Collet Style/Fits - ER50		
	Rego-Fix	
ID	Order No.	Price
31/32	GM20115025001	Price
3/16	GM20115006001	Price
1/4	GM20115008001	Price
3/8	GM20115010001	Price
7/16	GM20115012001	Price
1/2	GM20115014001	Price
5/8	GM20115016001	Price
11/16	GM20115018001	Price

Collet Style/Fits - ER50		
	Rego-Fix	
ID	Order No.	Price
3/4	GM20115020001	Price
13/16	GM20115022001	Price
7/8	GM20115024001	Price
1	GM20115026001	Price
1-1/16	GM20115028001	Price
1-1/8	GM20115030001	Price
1-1/4	GM20115032001	Price
1-5/16	GM20115034001	Price
1-3/8	GM20115036001	Price

Ultra Precision Collets - Metric

REGO-FIX ER ULTRA PRECISION COLLETS:

- High precision collets combine the advantages of DIN 6499/ISO 15488 A + B
- T.I.R. ≤ 5µm over the entire clamping range
- Clamping range from diameter 0.2mm up to 36mm

PARLEC GRADE AA 5 MICRON COLLETS:

- Evenly distributed cutting edges for high performace machining .0002" (5 micron) gage tolerance
- Exceeds DIN requirements
- 12 slots, deburred and polished
- Increased grip force with reduced friction to collet seat



Collet Style/Fits - ER8		
	Rego-Fix	
ID	Order No.	Price
1mm	GM20110801001	Price
1.5mm	GM20110801501	Price
2mm	GM20110802001	Price
2.5mm	GM20110802501	Price
3mm	GM20110803001	Price
3.5mm	GM20110803501	Price
4mm	GM20110804001	Price
4.5mm	GM20110804501	Price
5mm	GM20110805001	Price

Collet Style/Fits - ER11				
	Parlec		Rego-Fix	
ID	Order No.	Price	Order No.	Price
1mm	GM935UMER110039	Price	GM20111101001	Price
1.5mm	GM935UMER110059	Price	GM20111101501	Price
2mm	GM935UMER110078	Price	GM20111102001	Price
2.5mm	GM935UMER110098	Price	GM20111102501	Price
3mm	GM935UMER110118	Price	GM20111103001	Price
3.5mm	GM935UMER110137	Price	GM20111103501	Price
4mm	GM935UMER110157	Price	GM20111104001	Price
4.5mm	GM935UMER110177	Price	GM20111104501	Price
5mm	GM935UMER110196	Price	GM20111105001	Price
5.5mm	GM935UMER110216	Price	GM20111105501	Price
6mm	GM935UMER110236	Price	GM20111106001	Price
6.5mm	GM935UMER110255	Price	GM20111106501	Price
7mm	GM935UMER110275	Price	GM20111107001	Price

Collet Style/Fits - ER16						
	Parlec		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price
1mm	GM935UMER160039	Price	GM20111601001	Price	TE14UP0421601	Price
1.5mm	-	-	GM20111601501	Price	-	-
2mm	GM935UMER160078	Price	GM20111602001	Price	-	-
2.5mm	-	-	GM20111602501	Price	-	-
3mm	GM935UMER160118	Price	GM20111603001	Price	-	-
3.5mm	-	-	GM20111603501	Price	-	-
4mm	GM935UMER160157	Price	GM20111604001	Price	-	-
4.5mm	-	-	GM20111604501	Price	-	-
5mm	GM935UMER160196	Price	GM20111605001	Price	-	-
5.5mm	-	-	GM20111605501	Price	-	-

Collet Style/Fits - ER16						
	Parlec		Rego-Fix		Techniks	
ID	Order No.	Price	Order No.	Price	Order No.	Price
6mm	GM935UMER160236	48.50	GM20111606001	Price	-	-
6.5mm	-	-	GM20111606501	Price	-	-
7mm	GM935UMER160275	48.50	GM20111607001	Price	-	-
7.5mm	-	-	GM20111607501	Price	-	-
8mm	GM935UMER160315	48.50	GM20111608001	Price	-	-
8.5mm	-	-	GM20111608501	Price	-	-
9mm	GM935UMER160354	48.50	GM20111609001	Price	-	-
9.5mm	-	-	GM20111609501	Price	-	-
10mm	GM935UMER160393	48.50	GM20111610001	Price	-	-

Collet Style/Fits - ER20				
	Parlec		Rego-Fix	
ID	Order No.	Price	Order No.	Price
1mm	-	-	GM20112001001	Price
1.5mm	-	-	GM20112001501	Price
2mm	GM935UMER200078	Price	GM20112002001	Price
2.5mm	-	-	GM20112002501	Price
3mm	GM935UMER200118	Price	GM20112003001	Price
3.5mm	-	-	GM20112003501	Price
4mm	GM935UMER200157	Price	GM20112004001	Price
4.5mm	-	-	GM20112004501	Price
5mm	GM935UMER200196	Price	GM20112005001	Price
5.5mm	-	-	GM20112005501	Price
6mm	GM935UMER200236	Price	GM20112006001	Price
6.5mm	-	-	GM20112006501	Price
7mm	GM935UMER200275	Price	GM20112007001	Price
7.5mm	-	-	GM20112007501	Price
8mm	GM935UMER200315	Price	GM20112008001	Price
8.5mm	-	-	GM20112008501	Price
9mm	GM935UMER200354	Price	GM20112009001	Price
9.5mm	-	-	GM20112009501	Price
10mm	GM935UMER200393	Price	GM20112010001	Price
10.5mm	-	-	GM20112010501	Price
11mm	GM935UMER200433	Price	GM20112011001	Price
11.5mm	-	-	GM20112011501	Price
12mm	GM935UMER200472	Price	GM20112012001	Price
12.5mm	-	-	GM20112012501	Price
13mm	GM935UMER200511	Price	GM20112013001	Price

Ultra Precision Collets - Metric (cont.)

PARLEC rego fix Swiss Precision Tools

Collet Style/Fits - ER25				
	Parlec		Rego-Fix	
ID	Order No.	Price	Order No.	Price
1mm	-	-	GM20112501001	Price
1.5mm	-	-	GM20112501501	Price
2mm	GM935UMER250078	Price	GM20112502001	Price
2.5mm	-	-	GM2012502501	Price
3mm	GM935UMER250118	Price	GM20112503001	Price
3.5mm	-	-	GM20112503501	Price
4mm	GM935UMER250157	Price	GM20112504001	Price
4.5mm	-	-	GM20112504501	Price
5mm	GM935UMER250196	Price	GM20112505001	Price
5.5mm	-	-	GM20112505501	Price
6mm	GM935UMER250236	Price	GM20112506001	Price
6.5mm	-	-	GM20112506501	Price
7mm	GM935UMER250275	Price	GM20112507001	Price
7.5mm	-	-	GM20112507501	Price
8mm	GM935UMER250315	Price	GM20112508001	Price
8.5mm	-	-	GM20112508501	Price
9mm	GM935UMER250354	Price	GM20112509001	Price
9.5mm	-	-	GM20112509501	Price
10mm	GM935UMER250393	Price	GM20112510001	Price
10.5mm	-	-	GM20112510501	Price
11mm	GM935UMER250433	Price	GM20112511001	Price
11.5mm	-	-	GM20112511501	Price
12mm	GM935UMER250472	Price	GM20112512001	Price
12.5mm	-	-	GM20112512501	Price
13mm	GM935UMER250511	Price	GM20112513001	Price
13.5mm	-	-	GM20112513501	Price
14mm	GM935UMER250551	Price	GM20112514001	Price
14.5mm	-	-	GM20112514501	Price
15mm	GM935UMER250590	Price	GM20112515001	Price
15.5mm	-	-	GM20112515501	Price
16mm	GM935UMER250630	Price	GM20112516001	Price
17mm	-	-	GM20112517001	Price

PARLEC rego fix Swiss Precision Tools

Collet Style/Fits - ER32				
	Parlec		Rego-Fix	
ID	Order No.	Price	Order No.	Price
2mm	-	-	GM20113202001	Price
2.5mm	-	-	GM20113202501	Price
3mm	GM935UMER320118	Price	GM20113203001	Price
3.5mm	-	-	GM20113203501	Price
4mm	GM935UMER320157	Price	GM20113204001	Price
4.5mm	-	-	GM20113204501	Price
5mm	GM935UMER320196	Price	GM20113205001	Price
5.5mm	-	-	GM20113205501	Price
6mm	GM935UMER320236	Price	GM20113206001	Price
6.5mm	-	-	GM20113206501	Price
7mm	GM935UMER320275	Price	GM20113207001	Price
7.5mm	-	-	GM20113207501	Price
8mm	GM935UMER320315	Price	GM20113208001	Price
8.5mm	-	-	GM20113208501	Price
9mm	GM935UMER320354	Price	GM20113209001	Price
9.5mm	-	-	GM20113209501	Price
10mm	GM935UMER320393	Price	GM20113210001	Price
10.5mm	-	-	GM20113210501	Price
11mm	GM935UMER320433	Price	GM20113211001	Price
11.5mm	-	-	GM20113211501	Price
12mm	GM935UMER320472	Price	GM20113212001	Price
12.5mm	-	-	GM20113212501	Price
13mm	GM935UMER320511	Price	GM20113213001	Price
13.5mm	-	-	GM20113213501	Price
14mm	GM935UMER320551	Price	GM20113214001	Price
14.5mm	-	-	GM20113214501	Price
15mm	GM935UMER320590	Price	GM20113215001	Price
15.5mm	-	-	GM20113215501	Price
16mm	GM935UMER320630	Price	GM20113216001	Price

PARLEC rego fix Swiss Precision Tools

Collet Style/Fits - ER32				
	Parlec		Rego-Fix	
ID	Order No.	Price	Order No.	Price
16.5mm	-	-	GM20113216501	Price
17mm	GM935UMER320669	Price	GM20113217001	Price
17.5mm	-	-	GM20113217501	Price
18mm	GM935UMER320708	Price	GM20113218001	Price
18.5mm	-	-	GM20113218501	Price
19mm	GM935UMER320748	Price	GM20113219001	Price
19.5mm	-	-	GM20113219501	Price
20mm	GM935UMER320787	Price	GM20113220001	Price
21mm	-	-	GM20113221001	Price
22mm	-	-	GM20113222001	Price

PARLEC rego fix Swiss Precision Tools

Collet Style/Fits - ER40				
	Parlec		Rego-Fix	
ID	Order No.	Price	Order No.	Price
3mm	-	-	GM20114003001	Price
3.5mm	-	-	GM20114003501	Price
4mm	GM935UMER400157	Price	GM20114004001	Price
4.5mm	-	-	GM20114004501	Price
5mm	GM935UMER400196	Price	GM20114005001	Price
5.5mm	-	-	GM20114005501	Price
6mm	GM935UMER400236	Price	GM20114006001	Price
6.5mm	-	-	GM20114006501	Price
7mm	GM935UMER400275	Price	GM20114007001	Price
7.5mm	-	-	GM20114007501	Price
8mm	GM935UMER400315	Price	GM20114008001	Price
8.5mm	-	-	GM20114008501	Price
9mm	GM935UMER400354	Price	GM20114009001	Price
9.5mm	-	-	GM20114009501	Price
10mm	GM935UMER400393	Price	GM20114010001	Price
10.5mm	-	-	GM20114010501	Price
11mm	GM935UMER400433	Price	GM20114011001	Price
11.5mm	-	-	GM20114011501	Price
12mm	GM935UMER400472	Price	GM20114012001	Price
12.5mm	-	-	GM20114012501	Price
13mm	GM935UMER400511	Price	GM20114013001	Price
13.5mm	-	-	GM20114013501	Price
14mm	GM935UMER400551	Price	GM20114014001	Price
14.5mm	-	-	GM20114014501	Price
15mm	GM935UMER400562	Price	GM20114015001	Price
15.5mm	-	-	GM20114015501	Price
16mm	GM935UMER400630	Price	GM20114016001	Price
16.5mm	-	-	GM20114016501	Price
17mm	GM935UMER400669	Price	GM20114017001	Price
17.5mm	-	-	GM20114017501	Price
18mm	GM935UMER400708	Price	GM20114018001	Price
18.5mm	-	-	GM20114018501	Price
19mm	GM935UMER400748	Price	GM20114019001	Price
19.5mm	-	-	GM20114019501	Price
20mm	GM935UMER400787	Price	GM20114020001	Price
20.5mm	-	-	GM20114020501	Price
21mm	GM935UMER400826	Price	GM20114021001	Price
21.5mm	-	-	GM20114021501	Price
22mm	GM935UMER400866	Price	GM20114022001	Price
22.5mm	-	-	GM20114022501	Price
23mm	GM935UMER400905	Price	GM20114023001	Price
23.5mm	-	-	GM20114023501	Price
24mm	GM935UMER400944	Price	GM20114024001	Price
24.5mm	-	-	GM20114024501	Price
25mm	GM935UMER400984	Price	GM20114025001	Price
25.5mm	-	-	GM20114025501	Price
26mm	GM935UMER401023	Price	GM20114026001	Price
27mm	-	-	GM20114027001	Price
28mm	-	-	GM20114028001	Price
29mm	-	-	GM20114029001	Price
30mm	-	-	GM20114030001	Price

Ultra Precision Collet Sets

RAPIDHOLD:
- Inch & Metric sizes
- Made with high quality Bearing Steel and heat treated for high flexibility and long life
- Made in DIN6499 - 0..0002" T.I.R.
- Wide clamping range with 0.02 - 0.039" collapsibility

REGO-FIX:
- High precision collets combine the advantages of DIN 6499/ISO 15488 A + B
- T.I.R. ≤ 5µm over the entire clamping range
- Clamping range from diameter 0.2mm up to 36mm

TECHNIKS:
- Made from high-carbon bearing steel and heat treated for improved flexibility and longer life
- .0002" T.I.R. or better
- Clamping range .039"



RAPIDHOLD™ | rego fix Swiss Precision Tools | TECHNIKS

Type - UP Inch Collet Set								
			Rapidhold		Rego-Fix		Techniks	
No. of Collets	Collet Style	Size Range	Order No.	Price	Order No.	Price	Order No.	Price
3	ER8	1/16 - 3/16	-	-	**GM20110800003**	Price	-	-
7	ER11	1/16 - 1/4	-	-	**GM20111100003**	Price	**TE14UP04208**	Price
7	ER20	1/8 - 1/2	-	-	**GM20112000003**	Price	-	-
8	ER20	3/32 - 1/2	**TS1828267**	Price	-	-	-	-
9	ER25	1/8 - 5/8	-	-	**GM20112500003**	Price	-	-
10	ER16	3/32 - 3/8	-	-	-	-	**TE14UP04209**	Price
10	ER25	1/8 - 5/8	**TS1828305**	Price	-	-	-	-
12	ER16	1/16 - 13/32	**TS1828228**	Price	**GM20111600003**	Price	-	-
12	ER20	5/32 - 1/2	-	-	-	-	**TE14UP04210**	Price
12	ER32	1/8 - 13/16	**TS1828349**	Price	**GM20113200003**	Price	-	-
13	ER40	1/8 - 1	-	-	-	-	**TE14UP04213**	Price
14	ER40	1/8 - 1	-	-	**GM20114000003**	Price	-	-
15	ER40	1/8 - 1	**TS1828402**	Price	-	-	-	-
16	ER25	5/32 - 5/8	-	-	-	-	**TE14UP04211**	Price
18	ER32	7/32 - 3/4	-	-	-	-	**TE14UP04212**	Price

rego fix Swiss Precision Tools

Type - UP Metric Collet Set				
			Rego-Fix	
No. of Collets	Collet Style	Size Range	Order No.	Price
8	ER20	2mm - 12mm	**GM20112000001**	Price
9	ER8	.7mm - 5mm	**GM20110800001**	Price
10	ER16	.5mm - 10mm	**GM20111600001**	Price
12	ER50	4mm - 34mm	**GM20115000001**	Price

rego fix Swiss Precision Tools

Type - UP Metric Collet Set				
			Rego-Fix	
No. of Collets	Collet Style	Size Range	Order No.	Price
13	ER11	1mm - 7mm	**GM20111100001**	Price
15	ER25	2mm - 16mm	**GM20112500001**	Price
18	ER32	3mm - 20mm	**GM20113200001**	Price
23	ER40	3mm - 26mm	**GM20114000001**	Price

ER Steel Sealed Coolant Spring Collet

Rapidhold:
- Collet Accuracy: 0.0003" - 0.0004" T.I.R.
- Maximum allowable pressure - 1500 - 2000 PSI
- Made with spring steel

ETM:
- High pressure coolant supply up to 1450 PSI
- DIN6499
- Hard touch coating

Techniks:
- Sealed to 2000 PSI
- No plugs to fail
- Protects tool holder from contaminants

Rego Fix DM Collets
- T.I.R. 0.0002" or better - Guaranteed at 4D over full clamping range
- Seals coolant up to 2000 PSI
- Superior surface finish
- Lot traceability
- Patented design
- Easty to read size markings



rego fix Swiss Precision Tools

Collet Style/Fits - ER11		
	Rego-Fix	
ID (in.)	Order No.	Price
3/16	**GM20121104762**	Price
7/32	**GM20121105562**	Price
1/4	**GM20121106352**	Price
1/8	**GM20121103182**	Price

RAPIDHOLD™ | ETM | rego fix Swiss Precision Tools | TECHNIKS

Collet Style/Fits - ER16								
	Rapidkut		ETM		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/32	-	-	-	-	-	-	**GM69C16006**	Price
1/8	**TS1928501**	Price	**GM40S16120159**	Price	**GM20121603182**	Price	**GM69C16008**	Price
5/32	**TS1928502**	Price	-	-	**GM20121603972**	Price	**GM69C16010**	Price

ER Steel Sealed Coolant Spring Collet (cont.)



RAPIDHOLD ETM rego fix Swiss Precision Tools TECHNIKS

Collet Style/Fits - ER16								
	Rapidkut		ETM		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/16	TS1928503	Price	GM40S16159199	Price	GM20121604762	Price	GM69C16012	Price
7/32	TS1928504	Price	GM40S16199238	Price	GM20121605562	Price	GM69C16014	Price
1/4	TS1928505	Price	GM40S16238278	Price	GM20121606352	Price	GM69C16016	Price
9/32	TS1928506	Price	-	-	GM20121607142	Price	GM69C16018	Price
5/16	TS1928507	Price	GM40S16278317	Price	GM20121607942	Price	GM69C16020	Price
11/32	TS1928508	Price	GM40S16317356	Price	GM20121608732	Price	GM69C16022	Price
3/8	TS1928509	Price	GM40S16356396	Price	GM20121609532	Price	GM69C16024	Price
13/32	TS1928510	Price	-	-	GM20121610322	Price	GM69C16026	Price

RAPIDHOLD ETM rego fix Swiss Precision Tools TECHNIKS

Collet Style/Fits - ER20								
	Rapidkut		ETM		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
11/32	TS1928541	Price	GM40S20317356	Price	GM20122008732	Price	GM69C20022	Price
5/32	TS1928535	Price	-	-	GM20122003972	Price	GM69C20010	Price
7/32	TS1928537	Price	GM40S20199238	Price	GM20122005562	Price	GM69C20014	Price
9/32	TS1928539	Price	-	-	GM20122007142	Price	GM69C20018	Price
1/8	TS1928534	Price	GM40S20120159	Price	GM20122003182	Price	GM69C20008	Price
13/32	TS1928543	Price	GM40S20396435	Price	GM20122010322	Price	GM69C20026	Price
15/32	TS1928545	Price	-	-	GM20122011912	Price	GM69C20030	Price
3/16	TS1928536	Price	GM40S20159199	Price	GM20122004762	Price	GM69C20012	Price
1/4	TS1928538	Price	GM40S20238278	Price	GM20122006352	Price	GM69C20016	Price
5/16	TS1928540	Price	GM40S20278317	Price	GM20122007942	Price	GM69C20020	Price
3/8	TS1928542	Price	GM40S20356396	Price	GM20122009532	Price	GM69C20024	Price
7/16	TS1928544	Price	GM40S20435474	Price	GM20122011112	Price	GM69C20028	Price
1/2	TS1928546	Price	GM40S20474514	Price	GM20122012702	Price	GM69C20032	Price

RAPIDHOLD ETM rego fix Swiss Precision Tools TECHNIKS

Collet Style/Fits - ER25								
	Rapidkut		ETM		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
7/32	TS1928569	Price	GM40S25199238	Price	GM20122505562	Price	GM69C25014	Price
9/32	TS1928571	Price	-	-	GM20122507142	Price	GM69C25018	Price
11/32	TS1928573	Price	GM40S25317356	Price	GM20122508732	Price	GM69C25022	Price
13/32	TS1928575	Price	GM40S25396435	Price	GM20122510322	Price	GM69C25026	Price
15/32	TS1928577	Price	-	-	GM20122511912	Price	GM69C25030	Price
17/32	TS1928579	Price	GM40S25514553	Price	GM20122513492	Price	GM69C25034	Price
19/32	TS1928581	Price	-	-	GM20122515082	Price	GM69C25038	Price
1/8	TS1928566	Price	GM40S25120159	Price	-	-	-	-
5/32	TS1928567	Price	-	-	-	-	-	-
3/16	TS1928568	Price	GM40S25159199	Price	-	-	GM69C25012	Price
1/4	TS1928570	Price	GM40S25238278	Price	GM20122506352	Price	GM69C25016	Price
5/16	TS1928572	Price	GM40S25278317	Price	GM20122507942	Price	GM69C25020	Price
3/8	TS1928574	Price	GM40S25356396	Price	GM20122509532	Price	GM69C25024	Price
7/16	TS1928576	Price	GM40S25435474	Price	GM20122511112	Price	GM69C25028	Price
1/2	TS1928578	Price	GM40S25474514	Price	GM20122512702	Price	GM69C25032	Price
9/16	TS1928580	Price	GM40S25553593	Price	GM20122514292	Price	GM69C25036	Price
5/8	TS1928582	Price	GM40S25593632	Price	GM20122515882	Price	GM69C25040	Price

RAPIDHOLD ETM rego fix Swiss Precision Tools TECHNIKS

Collet Style/Fits - ER32								
	Rapidkut		ETM		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
9/32	TS1928610	Price	-	-	GM20123207142	Price	GM69C32018	Price
11/32	TS1928612	Price	GM40S32317356	Price	GM20123208732	Price	GM69C32022	Price
13/32	TS1928614	Price	GM40S32396435	Price	GM20123210322	Price	GM69C32026	Price
15/32	TS1928616	Price	-	-	GM20123211912	Price	GM69C32030	Price
17/32	TS1928618	Price	GM40S32514553	Price	GM20123213492	Price	GM69C32034	Price
19/32	TS1928620	Price	-	-	GM20123215082	Price	GM69C32038	Price
1/8	TS1928605	Price	GM40S32120159	Price	-	-	-	-
21/32	TS1928622	Price	GM40S32632671	Price	GM20123216672	Price	GM69C32042	Price
5/32	TS1928606	Price	-	-	-	-	-	-
23/32	TS1928624	Price	-	-	GM20123218262	Price	GM69C32046	Price
3/16	TS1928607	Price	GM40S32159199	Price	-	-	GM6904546316	Price
7/32	TS1928608	Price	GM40S32199238	Price	-	-	GM6904546732	Price
15/64	-	-	-	-	-	-	GM69045461564	Price

ER Steel Sealed Coolant Spring Collet (cont.)



Collet Style/Fits - ER32								
	Rapidkut		ETM		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/4	TS1928609	Price	GM40S32238278	Price	GM20123206352	Price	GM69C32016	Price
17/64	-	-	-	-	-	-	GM69045461764	Price
5/16	TS1928611	Price	GM40S32278317	Price	GM20123207942	Price	GM69C32020	Price
3/8	TS1928613	Price	GM40S32356396	Price	GM20123209532	Price	GM69C32024	Price
27/64	-	-	-	-	-	-	GM69045462764	Price
7/16	TS1928615	Price	GM40S32435474	Price	GM20123211112	Price	GM69C32028	Price
1/2	TS1928617	Price	GM40S32474514	Price	GM20123212702	Price	GM69C32032	Price
35/64	-	-	-	-	-	-	GM69045463564	Price
9/16	TS1928619	Price	GM40S32553593	Price	GM20123214292	Price	GM69C32036	Price
5/8	TS1928621	Price	GM40S32593632	Price	GM20123215882	Price	GM69C32040	Price
11/16	TS1928623	Price	GM40S32671711	Price	GM20123217462	Price	GM69C32044	Price
3/4	TS1928625	Price	-	-	GM20123219052	Price	GM69C32048	Price
25/32	TS1928626	Price	GM40S32750789	Price	-	-	GM69045462532	Price
13/16	TS1928627	Price	-	-	-	-	-	-

Collet Style/Fits - ER40								
	Rapidkut		ETM		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
1/8	TS1928654	Price	GM40S40120159	Price	-	-	-	-
5/32	TS1928655	Price	-	-	-	-	-	-
3/16	TS1928656	Price	GM40S40159199	Price	-	-	-	-
7/32	TS1928657	Price	GM40S40199238	Price	-	-	-	-
1/4	TS1928658	Price	GM40S40238278	Price	GM20124006352	Price	GM690454714	Price
9/32	TS1928659	Price	-	-	-	-	GM6904547932	Price
5/16	TS1928660	Price	GM40S40278317	Price	GM20124007942	Price	GM6904547516	Price
11/32	TS1928661	Price	GM40S40317356	Price	-	-	GM69045471132	Price
3/8	TS1928662	Price	GM40S40356396	Price	GM20124009532	Price	GM69C40024	Price
13/32	TS1928663	Price	GM40S40396435	Price	-	-	GM69C40026	Price
7/16	TS1928664	Price	GM40S40435474	Price	GM20124011112	Price	GM69C40028	Price
15/32	TS1928665	Price	-	-	-	-	GM69C40030	Price
1/2	TS1928666	Price	GM40S40474514	Price	GM20124012702	Price	GM69C40032	Price
17/32	TS1928667	Price	GM40S40514553	Price	-	-	GM69C40034	Price
9/16	TS1928668	Price	GM40S40553593	Price	GM20124014292	Price	GM69C40036	Price
19/32	TS1928669	Price	-	-	-	-	GM69C40038	Price
5/8	TS1928670	Price	GM40S40593632	Price	GM20124015882	Price	GM69C40040	Price
21/32	TS1928671	Price	GM40S40632671	Price	-	-	GM69C40042	Price
11/16	TS1928672	Price	GM40S40671711	Price	GM20124017462	Price	GM69C40044	Price
23/32	TS1928673	Price	-	-	-	-	GM69C40046	Price
3/4	TS1928674	Price	GM40S40711750	Price	GM20124019052	Price	GM69C40048	Price
25/32	TS1928675	Price	GM40S40750789	Price	-	-	GM69045472532	Price
13/16	TS1928676	Price	GM40S40789829	Price	GM20124020642	Price	GM69045471316	Price
27/32	TS1928677	Price	GM40S40829868	Price	-	-	-	-
7/8	TS1928678	Price	GM40S40868907	Price	GM20124022232	Price	GM69C40056	Price
29/32	TS1928679	Price	-	-	-	-	-	-
15/16	TS1928680	Price	GM40S40907947	Price	-	-	GM69045471516	Price
31/32	TS1928681	Price	GM40S40947986	Price	-	-	-	-
1	TS1928682	Price	GM40S409861025	Price	GM20124025402	Price	GM69C40100	Price

Collet Style/Fits - ER50		
	Techniks	
ID (in.)	Order No.	Price
1	GM69045481	Price
1/2	GM690454812	Price
1/4	GM690454814	Price
1-1/4	GM6904548114	Price
1-1/8	GM6904548118	Price

Collet Style/Fits - ER50		
	Techniks	
ID (in.)	Order No.	Price
1-3/8	GM6904548138	Price
3/4	GM690454834	Price
3/8	GM690454838	Price
5/8	GM690454858	Price
7/8	GM690454878	Price

ER Metric Steel Sealed Coolant Spring Collets

Rapidhold:
- Collet accuracy: 0.0003” - 0.0004” T.I.R.
- Maximum allowable pressure: 1500 - 2000 PSI
- Made with spring steel

Techniks:
- Sealed to 2000 PSI
- No plugs to fail
- Protects tool holder from contaminants

Rego Fix:
- Made to DIN 6499 / ISO 15488
- T.I.R. ≤6 µm over the entire clamping range
- Clamping range from 2.93 - 6.35mm diameter
- Metallic sealed up to 300 bar coolant pressure
- Clamping range smaller to the standard collets



Collet Style/Fits - ER11-DM		
	Rego-Fix	
ID (in.)	Order No.	Price
3mm	GM20121103000	Price
4mm	GM20121104000	Price
5mm	GM20121105000	Price
6mm	GM20121106000	Price
7mm	GM20121107000	Price

Collet Style/Fits - ER16						
	Rapidhold		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3mm	TS1928515	Price	GM20121603000	Price	GM69C163MM	Price
4mm	TS1928517	Price	GM20121604000	Price	GM69C164MM	Price
5mm	TS1928519	Price	GM20121605000	Price	GM69C165MM	Price
6mm	TS1928521	Price	GM20121606000	Price	GM69C166MM	Price
3.5mm	TS1928516	Price	-	-	-	-
7mm	TS1928523	Price	GM20121607000	Price	GM69C167MM	Price
8mm	TS1928525	Price	GM20121608000	Price	GM69C168MM	Price
9mm	TS1928527	Price	GM20121609000	Price	GM69C169MM	Price
10mm	TS1928529	Price	GM20121610000	Price	GM69C1610MM	Price
4.5mm	TS1928518	Price	-	-	-	-
5.5mm	TS1928520	Price	-	-	-	-
6.5mm	TS1928522	Price	-	-	-	-
7.5mm	TS1928524	Price	-	-	-	-
8.5mm	TS1928526	Price	-	-	-	-
9.5mm	TS1928528	Price	-	-	-	-

Collet Style/Fits - ER20						
	Rapidhold		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3mm	TS1928551	Price	GM20122003000	Price	GM69C203MM	Price
4mm	TS1928552	Price	GM20122004000	Price	GM69C204MM	Price
5mm	TS1928553	Price	GM20122005000	Price	GM69C205MM	Price
6mm	TS1928554	Price	GM20122006000	Price	GM69C206MM	Price
7mm	TS1928555	Price	GM20122007000	Price	GM69C207MM	Price
8mm	TS1928556	Price	GM20122008000	Price	GM69C208MM	Price
9mm	TS1928557	Price	GM20122009000	Price	GM69C209MM	Price
10mm	TS1928558	Price	GM20122010000	Price	GM69C2010MM	Price
11mm	TS1928559	Price	GM20122011000	Price	GM69C2011MM	Price
12mm	TS1928560	Price	GM20122012000	Price	GM69C2012MM	Price
13mm	TS1928561	Price	GM20122013000	Price	GM69C2013MM	Price
14mm	-	-	-	-	GM69C2014MM	Price

Collet Style/Fits - ER25						
	Rapidhold		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3mm	TS1928587	Price	-	-	GM69C253MM	Price
4mm	TS1928588	Price	-	-	GM69C254MM	Price
5mm	TS1928589	Price	-	-	GM69C255MM	Price
6mm	TS1928590	Price	GM20122506000	Price	GM69C256MM	Price
7mm	TS1928591	Price	GM20122507000	Price	GM69C257MM	Price
8mm	TS1928592	Price	GM20122508000	Price	GM69C258MM	Price
9mm	TS1928593	Price	GM20122509000	Price	GM69C259MM	Price
10mm	TS1928594	Price	GM20122510000	Price	GM69C2510MM	Price
11mm	TS1928595	Price	GM20122511000	Price	GM69C2511MM	Price
12mm	TS1928596	Price	GM20122512000	Price	GM69C2512MM	Price
13mm	TS1928597	Price	GM20122513000	Price	GM69C2513MM	Price

Collet Style/Fits - ER25						
	Rapidhold		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price
14mm	TS1928598	37.80	GM20122514000	79.00	GM69C2514MM	49.00
15mm	TS1928599	37.80	GM20122515000	79.00	GM69C2515MM	49.00
16mm	TS1928600	37.80	GM20122516000	79.00	GM69C2516MM	49.00

Collet Style/Fits - ER32						
	Rapidhold		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price
3mm	TS1928632	Price	-	-	GM69C323MM	Price
4mm	TS1928633	Price	-	-	GM69C324MM	Price
5mm	TS1928634	Price	-	-	GM69C325MM	Price
6mm	TS1928635	Price	GM20123206000	Price	GM69C326MM	Price
7mm	TS1928636	Price	GM20123207000	Price	GM69C327MM	Price
8mm	TS1928637	Price	GM20123208000	Price	GM69C328MM	Price
9mm	TS1928638	Price	GM20123209000	Price	GM69C329MM	Price
10mm	TS1928639	Price	GM20123210000	Price	GM69C3210MM	Price
11mm	TS1928640	Price	GM20123211000	Price	GM69C3211MM	Price
12mm	TS1928641	Price	GM20123212000	Price	GM69C3212MM	Price
13mm	TS1928642	Price	GM20123213000	Price	GM69C3213MM	Price
14mm	TS1928643	Price	GM20123214000	Price	GM69C3214MM	Price
15mm	TS1928644	Price	GM20123215000	Price	GM69C3215MM	Price
16mm	TS1928645	Price	GM20123216000	Price	GM69C3216MM	Price
17mm	TS1928646	Price	GM20123217000	Price	GM69C3217MM	Price
18mm	TS1928647	Price	GM20123218000	Price	GM69C3218MM	Price
19mm	TS1928648	Price	GM20123219000	Price	GM69C3219MM	Price
20mm	TS1928649	Price	GM20123220000	Price	GM69C3220MM	Price

Collet Style/Fits - ER40						
	Rapidhold		Rego-Fix		Techniks	
ID (in.)	Order No.	Price	Order No.	Price	Order No.	Price
4mm	TS1928687	Price	-	-	-	-
5mm	TS1928688	Price	-	-	GM69C405MM	Price
6mm	TS1928689	Price	GM20124006000	Price	GM69C406MM	Price
7mm	TS1928690	Price	-	-	GM69C407MM	Price
8mm	TS1928691	Price	GM20124008000	Price	GM69C408MM	Price
9mm	TS1928692	Price	-	-	GM69C409MM	Price
10mm	TS1928693	Price	GM20124010000	Price	GM69C4010MM	Price
11mm	TS1928694	Price	GM20124011000	Price	GM69C4011MM	Price
12mm	TS1928695	Price	GM20124012000	Price	GM69C4012MM	Price
13mm	TS1928696	Price	GM20124013000	Price	GM69C4013MM	Price
14mm	TS1928697	Price	GM20124014000	Price	GM69C4014MM	Price
15mm	TS1928698	Price	GM20124015000	Price	GM69C4015MM	Price
16mm	TS1928699	Price	GM20124016000	Price	GM69C4016MM	Price
17mm	TS1928700	Price	GM20124017000	Price	GM69C4017MM	Price
18mm	TS1928701	Price	GM20124018000	Price	GM69C4018MM	Price
19mm	TS1928702	Price	GM20124019000	Price	GM69C4019MM	Price
20mm	TS1928703	Price	GM20124020000	Price	GM69C4020MM	Price
21mm	TS1928704	Price	GM20124021000	Price	GM69C4021MM	Price
22mm	TS1928705	Price	GM20124022000	Price	-	-
23mm	TS1928706	Price	GM20124023000	Price	-	-
24mm	TS1928707	Price	GM20124024000	Price	-	-
25mm	TS1928708	Price	GM20124025000	Price	GM69C4025MM	Price
26mm	TS1928709	Price	GM20124026000	Price	GM69C4026MM	Price

DM Metallic Sealed Collet Sets

- Made to DIN 6499/ISO 15488
- T.I.R. ≤ 6 µm over the entire claming range
- Clamping range from diameter 2.75-7.00 mm
- Metallic sealed up to 300 bar coolant pressure
- Clamping range smaller to the standard collets



Size Range	Collet Style	No. of Collets	Order No.	Price
.1250 - .2500	ER11	4	GM20121100002	Price
.1250 - .3750	ER16	5	GM20121600002	Price
.1250 - .5000	ER20	7	GM20122000002	Price
.2500 - .6250	ER25	7	GM20122500002	Price
.2500 - .7500	ER32	9	GM20123200002	Price
.3556 - 1000	ER40	10	GM20124000002	Price
3mm - 10mm	ER16	8	GM20121600000	Price
3mm - 13mm	ER20	11	GM20122000000	Price
3mm - 7mm	ER11	5	GM20121100000	Price
6mm - 16mm	ER25	6	GM20122500000	Price
6mm - 20mm	ER32	8	GM20123200000	Price
6mm - 26mm	ER40	12	GM20124000000	Price

RAPIDHOLD™ Wrenches





For Collet Type - DA100		
Size	**Order No.**	**Price**
15/16	**TS1029033**	Price
1	**TS1029034**	Price

For Collet Type - DA180		
Size	**Order No.**	**Price**
1-3/16	**TS1029035**	Price
1-1/2	**TS1029036**	Price

For Collet Type - DA200		
Size	**Order No.**	**Price**
3/4	**TS1029032**	Price

For Collet Type - DA300		
Size	**Order No.**	**Price**
1/2	**TS1029031**	Price

For Collet Type - ER11		
Size	**Order No.**	**Price**
.63	**TS1029001**	Price

For Collet Type - ER16		
Size	**Order No.**	**Price**
.87	**TS1029002**	Price
1.10	**TS1029039**	Price

For Collet Type - ER20		
Size	**Order No.**	**Price**
1.34	**TS1029040**	Price

For Collet Type - ER25		
Size	**Order No.**	**Price**
1.65	**TS1029003**	Price
1.65	**TS1029004**	Price

For Collet Type - ER32		
Size	**Order No.**	**Price**
-	**TS1029043**	Price
1.97	**TS1029006**	Price
1.97	**TS1029005**	Price

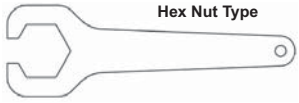
For Collet Type - ER40		
Size	**Order No.**	**Price**
2.48	**TS1029008**	Price
2.48	**TS1029007**	Price

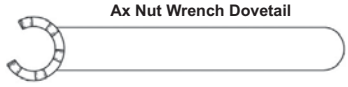
For Collet Type - TG100		
Size	**Order No.**	**Price**
2-1/4	**TS1029038**	Price
2.44	**TS1029010**	Price

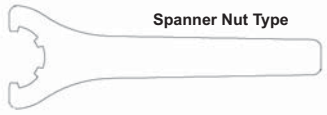
For Collet Type - TG150		
Size	**Order No.**	**Price**
3.54	**TS1029011**	Price

For Collet Type - TG75		
Size	**Order No.**	**Price**
1-7/8	**TS1029037**	Price
1.97	**TS1029009**	Price

rego-fix Swiss Precision Tools Spanner Wrenches











For Collet Type - ER11		
Type	**Order No.**	**Price**
Spanner Wrench	**GM20711511000**	Price
Spanner Wrench - Dovetail	**GM20711711000**	Price
Spanner Wrench - Hex	**GM20711211010**	Price
Spanner Wrench - Mini	**GM20711311000**	Price
Spanner Wrench - MS Slotted	**GM20711411000**	Price

For Collet Type - ER16		
Type	**Order No.**	**Price**
Spanner Wrench	**GM20711116000**	Price
Spanner Wrench	**GM20711516000**	Price
Spanner Wrench - Dovetail	**GM20711716000**	Price
Spanner Wrench - Hex	**GM20711216010**	Price
Spanner Wrench - Mini	**GM20711316000**	Price
Spanner Wrench - MS Slotted	**GM20711416000**	Price

For Collet Type - ER20		
Type	**Order No.**	**Price**
Spanner Wrench	**GM20711120000**	Price
Spanner Wrench	**GM20711520000**	Price
Spanner Wrench - Dovetail	**GM20711720000**	Price
Spanner Wrench - Hex	**GM20711220010**	Price
Spanner Wrench - Mini	**GM20711320000**	Price
Spanner Wrench - MS Slotted	**GM20711420000**	Price

For Collet Type - ER25		
Type	**Order No.**	**Price**
Spanner Wrench	**GM20711125000**	Price
Spanner Wrench	**GM20711525000**	Price
Spanner Wrench - Dovetail	**GM20711725000**	Price
Spanner Wrench - Mini	**GM20711325000**	Price

For Collet Type - ER32		
Type	**Order No.**	**Price**
Spanner Wrench	**GM20711132000**	Price
Spanner Wrench	**GM20711532000**	Price
Spanner Wrench - Dovetail	**GM20711732000**	Price

For Collet Type - ER40		
Type	**Order No.**	**Price**
Spanner Wrench	**GM20711140000**	Price
Spanner Wrench - Dovetail	**GM20711740000**	Price

For Collet Type - ER50		
Type	**Order No.**	**Price**
Spanner Wrench	**GM20711150000**	Price

For Collet Type - ER8		
Type	**Order No.**	**Price**
Spanner Wrench - Mini	**GM20711308000**	Price
Spanner Wrench - MS Slotted	**GM20711408000**	Price

ER Torque Wrench Heads *New!*



Type - A-E					
Description	Height (in.)	Length (in.)	Size	Order No.	Price
AE16 Torque Wrench Head - Spanner Nut	2.17	2.44	16	**GM20715116000**	Price
AE20 Torque Wrench Head - Spanner Nut	2.36	2.44	20	**GM20715120000**	Price
AE25 Torque Wrench Head - Spanner Nut	2.76	2.83	25	**GM20715125000**	Price
AE32 Torque Wrench Head - Spanner Nut	3.15	2.83	32	**GM20715132000**	Price
AE40 Torque Wrench Head - Spanner Nut	3.78	3.23	40	**GM20715140000**	Price
AE50 Torque Wrench Head - Spanner Nut	4.37	3.70	50	**GM20715150000**	Price

Type - A-EAX					
Description	Height (in.)	Length (in.)	Size	Order No.	Price
AE11 AX Torque Wrench Head - Dovetail	.63	2.44	11	**GM20715711000**	Price
AE16 AX Torque Wrench Head - Dovetail	.87	2.48	16	**GM20715716000**	Price
AE20 AX Torque Wrench Head - Dovetail	1.02	2.52	20	**GM20715720000**	Price
AE25 AX Torque Wrench Head - Dovetail	1.14	3.66	25	**GM20715725000**	Price
AE32 AX Torque Wrench Head - Dovetail	1.46	3.74	32	**GM20715732000**	Price
AE40 AX Torque Wrench Head - Dovetail	1.85	3.90	40	**GM20715740000**	Price

Type - A-EM					
Description	Height (in.)	Length (in.)	Size	Order No.	Price
AE11 M Torque Wrench Head - Mini-Nut	.67	2.13	11	**GM20715311000**	Price
AE16 M Torque Wrench Head - Mini-Nut	.87	2.20	16	**GM20715316000**	Price
AE20 M Torque Wrench Head - Mini-Nut	1.14	2.68	20	**GM20715320000**	Price

Type - A-EM					
Description	Height (in.)	Length (in.)	Size	Order No.	Price
AE25 M Torque Wrench Head - Mini-Nut	1.42	2.76	25	**GM20715325000**	Price
AE8 M Torque Wrench Head - Mini-Nut	.47	2.09	8	**GM20715308000**	Price

Type - A-EMS					
Description	Height (in.)	Length (in.)	Size	Order No.	Price
AE11 MS Torque Wrench Head - Mini-High Speed Nut	.87	2.24	11	**GM20715411000**	Price
AE16 MS Torque Wrench Head - Mini-High Speed Nut	1.30	2.36	16	**GM20715416000**	Price
AE20 MS Torque Wrench Head - Mini-High Speed Nut	1.65	2.87	20	**GM20715420000**	Price
AE8 MS Torque Wrench Head - Mini-High Speed Nut	.75	2.01	8	**GM20715408000**	Price

Type - A-EP					
Description	Height (in.)	Length (in.)	Size	Order No.	Price
AE11 P Torque Wrench Head - Hex	1.26	2.24	11	**GM20715211010**	Price
AE16 P Torque Wrench Head - Hex	1.73	2.76	16	**GM20715216010**	Price
AE20 P Torque Wrench Head - Hex	2.05	3.15	20	**GM20715220010**	Price

Torque Wrenches

- Fully adjustable torque wrench bodies with setting lock
- Scale readout in ft-lbs and Nm
- Interchangeable wrench heads
- Length based on torque rating

New!



Description	Length (in.)	Torque Range	System	Order No.	Price
Torco-Fix I 10-50Nm	13.19	5,0-50,0 Nm	ER micRun	**GM20715005050**	Price
Torco-Fix II 40-200 Nm	18.31	20.0-200,0 Nm	ER PowRgrip micRun	**GM20715020200**	Price
Torco-Fix III 60-300Nm	22.24	60,0-300,0 Nm	ER micRun	**GM20715060300**	Price
Torque Wrench Large	21.46	45,0-220,0 ft/lbs	ER	**GM20802060300**	Price
Torque Wrench Medium	13.39	15,0-80,0 ft/lbs	ER	**GM20802020100**	Price
Torque Wrench Micro	13.19	2,0-25,0 ft/lbs	ER	**GM20715002025**	Price
Torque Wrench Small	11.81	7,5-37,0 ft/lbs	ER	**GM20802010050**	Price

RAPIDHOLD™ Top Clamping Nuts



Hex Slim



Round Slim



Hex



Round

Type - Hex		
For Collet Type	Order No.	Price
ER16	**TS1029026**	Price
ER20	**TS1029025**	Price
ER32	**TS1029018**	Price
ER40	**TS1029019**	Price
TG100	**TS1029029**	Price
TG150	**TS1029030**	Price
TG75	**TS1029042**	Price

Type - Hex Slim		
For Collet Type	Order No.	Price
DA100	**TS1029049**	Price
DA180	**TS1029050**	Price
DA200	**TS1029051**	Price
DA300	**TS1029052**	Price

Type - Round		
For Collet Type	Order No.	Price
DA100	**TS1029014**	Price
DA180	**TS1029016**	Price
DA200	**TS1029017**	Price
ER20	**TS1029027**	Price
ER25	**TS1029022**	Price
ER32	**TS1029023**	Price
ER40	**TS1029024**	Price
TG100	**TS1029013**	Price
TG150	**TS1029015**	Price
TG75	**TS1029012**	Price

Type - Round Mini		
For Collet Type	Order No.	Price
ER11	**TS1029020**	Price
ER16	**TS1029021**	Price

Top Clamping Nuts



Hex



Mini

Type - Hex		
For Collet Type	Order No.	Price
ER11	**EH4513073**	Price
ER16	**EH4513023**	Price
ER20	**EH4513025**	Price
ER25	**EH4513026**	Price
ER32	**EH4513027**	Price
ER40	**EH4513028**	Price

Type - Mini		
For Collet Type	Order No.	Price
ER11	**EH4513072**	Price
ER16	**EH4513001**	Price
ER20	**EH4513003**	Price

ER System Clamping Nuts



- Hi-Q®/ER Clamping nuts with corrosion resistant surface are standard on all REGO-FIX® ER toolholders
- Hi-Q®/ERC Clamping nut is intended for use with the sealing disk system DS/ER and the coolant flush system KS/ER. These systems allow the use of all standard ER collets, ultra precision collets and tapping collets to be used in coolant applications. Up to 2000PSI Coolant pressure. Peripheral cooling of non-coolant through tools
- HI-Q®/ERC11 clamping nut is a one piece nut and disk system with built in o-ring seal for coolant through tools. Does not require sealing disks. Up to 2000PSI Coolant pressure. Intergrated seal prevents dirt and chips from entering collet
- HI-Q®/ERAX Clamping nut is used for floating chucks and other ER toolholders with internal thread
- HI-Q®/ERAXC / ERBC / ERMC Clamping nuts are intended for use with the sealing disk systems DS/ER and the cool flush system KS/ER. The disk system allows the use of all standard ER collets, ultra precision collets and the tapping collets for coolant through tools
- HI-Q®/ERB Clamping nut is a friction-bearing nut that offers the highest clamping force available
- HI-Q®/ERM Mini Clamping nut is recommended for use where minimal external diametes are important

Features:

- Collet locking to keep collet from coming out during assembly
- Balanced by design for high speed machining
- Special corrosion resistant treatment to redude friction between collet and nut, increases clamping force by up to 120%

Type - ER			
Collet Style	**Style**	**Order No.**	**Price**
ER11	Hi-Q / ER11 Standard Nut	**GM20341100000**	Price
ER11	Hi-Q / ER11MS Nut for Highest RPM	**GM20321150000**	Price
ER16	Hi-Q / ER16 Standard Nut	**GM20341600000**	Price
ER16	Hi-Q / ER16MS Nut for Highest RPM	**GM20321650000**	Price
ER20	Hi-Q / ER20 Standard Nut	**GM20342000000**	Price
ER20	Hi-Q / ER20MS Nut for Highest RPM	**GM20322050000**	Price
ER25	Hi-Q / ER25 Standard Nut	**GM20342500000**	Price
ER25	Hi-Q/ ER25 Brng/Coolant Nut	**GM20342540000**	Price
ER32	Hi-Q / ER32 Standard Nut	**GM20343200000**	Price
ER40	Hi-Q / ER40 Standard Nut	**GM20344000000**	Price
ER50	Hi-Q / ER50 Standard Nut	**GM20345000000**	Price
ER8	Hi-Q / ER8MS Nut for Highest RPM	**GM20320850000**	Price

Type - ERAX			
Collet Style	**Style**	**Order No.**	**Price**
ER11	Hi-Q / ERAX11 External Nut	**GM20331160000**	Price
ER16	Hi-Q / ERAX16 External Nut	**GM20331660000**	Price
ER20	Hi-Q / ERAX20 External Nut	**GM20332060000**	Price
ER25	Hi-Q / ERAX25 External Nut	**GM20332560000**	Price
ER32	Hi-Q / ERAX32 External Nut	**GM20333260000**	Price
ER40	Hi-Q / ERAX40 External Nut	**GM20334060000**	Price

Type - ERAXC			
Collet Style	**Style**	**Order No.**	**Price**
ER16	Hi-Q / ERAXC16 External/Coolant Nut	**GM20331670000**	Price
ER20	Hi-Q / ERAXC20 External/Coolant Nut	**GM20332070000**	Price
ER25	Hi-Q / ERAXC25 External/Coolant Nut	**GM20332570000**	Price
ER32	Hi-Q / ERAXC32 External/Coolant Nut	**GM20333270000**	Price
ER40	Hi-Q / ERAXC40 External/Coolant Nut	**GM20334070000**	Price

Type - ERB			
Collet Style	**Style**	**Order No.**	**Price**
ER16	Hi-Q / ERB16 Bearing Nut	**GM20341630000**	Price
ER20	Hi-Q / ERB20 Bearing Nut	**GM20342030000**	Price
ER25	Hi-Q / ERB25 Bearing Nut	**GM20342530000**	Price
ER32	Hi-Q / ERB32 Bearing Nut	**GM20343230000**	Price
ER40	Hi-Q / ERB40 Bearing Nut	**GM20344030000**	Price
ER50	Hi-Q / ERB50 Bearing Nut	**GM20345030000**	Price

Type - ERBC			
Collet Style	**Style**	**Order No.**	**Price**
ER16	Hi-Q / ERBC16 Brng/Coolant Nut	**GM20341640000**	Price
ER20	Hi-Q / ERBC20 Brng/Coolant Nut	**GM20342040000**	Price

Type - ERBC			
Collet Style	**Style**	**Order No.**	**Price**
ER32	Hi-Q / ERBC32 Brng/Coolant Nut	**GM20343240000**	Price
ER40	Hi-Q / ERBC40 Bearing/Coolant Nut	**GM20344040000**	Price

Type - ERC			
Collet Style	**Style**	**Order No.**	**Price**
ER11	Hi-Q / ERC11 3.5-3mm Coolant Nut	**GM20341120350**	Price
ER11	Hi-Q / ERC11 3-2.5mm Coolant Nut	**GM20341120300**	Price
ER11	Hi-Q / ERC11 4.5-4mm Coolant Nut	**GM20341120450**	Price
ER11	Hi-Q / ERC11 4-3.5mm Coolant Nut	**GM20341120400**	Price
ER11	Hi-Q / ERC11 5.5-5mm Coolant Nut	**GM20341120550**	Price
ER11	Hi-Q / ERC11 5-4.5mm Coolant Nut	**GM20341120500**	Price
ER11	Hi-Q / ERC11 6.5-6mm Coolant Nut	**GM20341120650**	Price
ER11	Hi-Q / ERC11 6-5.5mm Coolant Nut	**GM20341120600**	Price
ER11	Hi-Q / ERC11 7-6.5mm Coolant Nut	**GM20341120700**	Price
ER16	Hi-Q / ERC16 Coolant Nut	**GM20341620000**	Price
ER20	Hi-Q / ERC20 Coolant Nut	**GM20342020000**	Price
ER25	Hi-Q / ERC25 Coolant Nut	**GM20342520000**	Price
ER32	Hi-Q / ERC32 Coolant Nut	**GM20343220000**	Price
ER40	Hi-Q / ERC40 Coolant Nut	**GM20344020000**	Price

Type - ERM			
Collet Style	**Style**	**Order No.**	**Price**
ER11	Hi-Q / ERM11 Min. Ext. Dia. Nut	**GM20351100000**	Price
ER16	Hi-Q / ERM16 Min. Ext. Dia. Nut	**GM20351600000**	Price
ER20	Hi-Q / ERM20 Min. Ext. Dia. Nut	**GM20352000000**	Price
ER25	Hi-Q / ERM25 Min. Ext. Dia. Nut	**GM20352500000**	Price
ER8	Hi-Q / ERM8 Min. Ext. Dia. Nut	**GM20350800000**	Price

Type - ERMC			
Collet Style	**Style**	**Order No.**	**Price**
ER11	Hi-Q / ERMC11 3.5-3mm Nut	**GM20351120350**	Price
ER11	Hi-Q / ERMC11 3-2.5mm Nut	**GM20351120300**	Price
ER11	Hi-Q / ERMC11 4.5-4mm Nut	**GM20351120450**	Price
ER11	Hi-Q / ERMC11 4-3.5mm Nut	**GM20351120400**	Price
ER11	Hi-Q / ERMC11 5.5-5mm Nut	**GM20351120550**	Price
ER11	Hi-Q / ERMC11 5-4.5mm Nut	**GM20351120500**	Price
ER11	Hi-Q / ERMC11 6.5-6mm Nut	**GM20351120650**	Price
ER11	Hi-Q / ERMC11 6-5.5mm Nut	**GM20351120600**	Price
ER11	Hi-Q / ERMC11 7-6.5mm Nut	**GM20351120700**	Price
ER16	Hi-Q / ERMC16 Min. Ext. Dia/Int. Coolant Nut	**GM20351620000**	Price
ER25	Hi-Q / ERMC25 Min. Ext. Dia/Int. Coolant Nut	**GM20352520000**	Price

ER Power Coat Coolant Nuts



- Increase holding power up to 75%
- Balanced to 25,000 RPM
- Reduce T.I.R. and extend tool life up to 20%
- Use with Rapidkut coolant Rings

Description	Collet Style	Order No.	Price
Use with Coolant Rings	ER16	**GM69ER16PC**	Price
Use with Coolant Rings	ER20	**GM69ER20PC**	Price
Use with Coolant Rings	ER25	**GM69ER25PC**	Price
Use with Coolant Rings	ER32	**GM69ER32PC**	Price
Use with Coolant Rings	ER40	**GM69ER40PC**	Price

ER System Collet Coolant Rings



Techniks:
- Seals up to 1,500 PSI
- Use with precision ER collets
- Seals collet pocket from contamination
- Use with Technik Power Coat coolant nuts

Rego-Fix:
- Seals up to 2,000 PSI
- Seals collet pocket from contamination
- Work with all REGO-FIX coolant nuts
- 0.5mm Sealing range per disk
- Made in Switzerland to ISO 9001/ISO 14001

ASSEMBLING: Insert the small diameter of the disk into the center of the coolant nut and apply even pressure until the disk is properly seated into the nut. The disk must be flush with the outside of the nut and the marking on the disk must be seen inside the nut

REMOVING: To remove the disk, simply press on the outside of the disk evenly until it snaps out

Collet Style - ER16

	Rego-Fix		Techniks	
Size Range	Order No.	Price	Order No.	Price
2.5mm - 3mm	GM20391600300	Price	-	-
3mm - 3.5mm	GM20391600350	Price	GM69CR1635	Price
3.5mm - 4mm	GM20391600400	Price	GM69CR1640	Price
4mm - 4.5mm	GM20391600450	Price	GM69CR1645	Price
4.5mm - 5mm	GM20391600500	Price	GM69CR1650	Price
5mm - 5.5mm	GM20391600550	Price	GM69CR1655	Price
5.5mm - 6mm	GM20391600600	Price	GM69CR1660	Price
6mm - 6.5mm	GM20391600650	Price	GM69CR1665	Price
6.5mm - 7mm	GM20391600700	Price	GM69CR1670	Price
7mm - 7.5mm	GM20391600750	Price	GM69CR1675	Price
7.5mm - 8mm	GM20391600800	Price	GM69CR1680	Price
8mm - 8.5mm	GM20391600850	Price	GM69CR1685	Price
8.5mm - 9mm	GM20391600900	Price	GM69CR1690	Price
9mm - 9.5mm	GM20391600950	Price	GM69CR1695	Price
9.5mm - 10mm	GM20391601000	Price	GM69CR16100	Price

Collet Style - ER20

	Rego-Fix		Techniks	
Size Range	Order No.	Price	Order No.	Price
2.5mm - 3mm	GM20392000300	Price	-	-
3mm - 3.5mm	GM20392000350	Price	GM69CR2035	Price
3.5mm - 4mm	GM20392000400	Price	GM69CR2040	Price
4mm - 4.5mm	GM20392000450	Price	GM69CR2045	Price
4.5mm - 5mm	GM20392000500	Price	GM69CR2050	Price
5mm - 5.5mm	GM20392000550	Price	GM69CR2055	Price
5.5mm - 6mm	GM20392000600	Price	GM69CR2060	Price
6mm - 6.5mm	GM20392000650	Price	GM69CR2065	Price
6.5mm - 7mm	GM20392000700	Price	GM69CR2070	Price
7mm - 7.5mm	GM20392000750	Price	GM69CR2075	Price
7.5mm - 8mm	GM20392000800	Price	GM69CR2080	Price
8mm - 8.5mm	GM20392000850	Price	GM69CR2085	Price
8.5mm - 9mm	GM20392000900	Price	GM69CR2090	Price
9mm - 9.5mm	GM20392000950	Price	GM69CR2095	Price
9.5mm - 10mm	GM20392001000	Price	GM69CR20100	Price
10mm - 10.5mm	GM20392001050	Price	GM69CR20105	Price
10.5mm - 11mm	GM20392001100	Price	GM69CR20110	Price
11mm - 11.5mm	GM20392001150	Price	GM69CR20115	Price
11.5mm - 12mm	GM20392001200	Price	GM69CR20120	Price
12mm - 12.5mm	GM20392001250	Price	GM69CR20125	Price
12.5mm - 13mm	GM20392001300	Price	GM69CR20130	Price

Collet Style - ER25

	Rego-Fix		Techniks	
Size Range	Order No.	Price	Order No.	Price
2.5mm - 3mm	GM20392500300	Price	-	-
3mm - 3.5mm	GM20392500350	Price	GM69CR2535	Price
3.5mm - 4mm	GM20392500400	Price	GM69CR2540	Price
4mm - 4.5mm	GM20392500450	Price	GM69CR2545	Price
4.5mm - 5mm	GM20392500500	Price	GM69CR2550	Price
5mm - 5.5mm	GM20392500550	Price	GM69CR2555	Price
5.5mm - 6mm	GM20392500600	Price	GM69CR2560	Price
6mm - 6.5mm	GM20392500650	Price	GM69CR2565	Price
6.5mm - 7mm	GM20392500700	Price	GM69CR2570	Price
7mm - 7.5mm	GM20392500750	Price	GM69CR2575	Price
7.5mm - 8mm	GM20392500800	Price	GM69CR2580	Price
8mm - 8.5mm	GM20392500850	Price	GM69CR2585	Price
8.5mm - 9mm	GM20392500900	Price	GM69CR2590	Price
9mm - 9.5mm	GM20392500950	Price	GM69CR2595	Price
9.5mm - 10mm	GM20392501000	Price	GM69CR25100	Price
10mm - 10.5mm	GM20392501050	Price	GM69CR25105	Price
10.5mm - 11mm	GM20392501100	Price	GM69CR25110	Price
11mm - 11.5mm	GM20392501150	Price	GM69CR25115	Price
11.5mm - 12mm	GM20392501200	Price	GM69CR25120	Price
12mm - 12.5mm	GM20392501250	Price	GM69CR25125	Price
12.5mm - 13mm	GM20392501300	Price	GM69CR25130	Price
13mm - 13.5mm	GM20392501350	Price	GM69CR25135	Price
13.5mm - 14mm	GM20392501400	Price	GM69CR25140	Price
14mm - 14.5mm	GM20392501450	Price	GM69CR25145	Price

Collet Style - ER25

	Rego-Fix		Techniks	
Size Range	Order No.	Price	Order No.	Price
14.5mm - 15mm	GM20392501500	Price	GM69CR25150	Price
15mm - 15.5mm	GM20392501550	Price	GM69CR25155	Price
15.5mm - 16mm	GM20392501600	Price	GM69CR25160	Price

Collet Style - ER32

	Rego-Fix		Techniks	
Size Range	Order No.	Price	Order No.	Price
2.5mm - 3mm	GM20393200300	Price	-	-
3mm - 3.5mm	GM20393200350	Price	GM69CR3235	Price
3.5mm - 4mm	GM20393200400	Price	GM69CR3240	Price
4mm - 4.5mm	GM20393200450	Price	GM69CR3245	Price
4.5mm - 5mm	GM20393200500	Price	GM69CR3250	Price
5mm - 5.5mm	GM20393200550	Price	GM69CR3255	Price
5.5mm - 6mm	GM20393200600	Price	GM69CR3260	Price
6mm - 6.5mm	GM20393200650	Price	GM69CR3265	Price
6.5mm - 7mm	GM20393200700	Price	GM69CR3270	Price
7mm - 7.5mm	GM20393200750	Price	GM69CR3275	Price
7.5mm - 8mm	GM20393200800	Price	GM69CR3280	Price
8mm - 8.5mm	GM20393200850	Price	GM69CR3285	Price
8.5mm - 9mm	GM20393200900	Price	GM69CR3290	Price
9mm - 9.5mm	GM20393200950	Price	GM69CR3295	Price
9.5mm - 10mm	GM20393201000	Price	GM69CR32100	Price
10mm - 10.5mm	GM20393201050	Price	GM69CR32105	Price
10.5mm - 11mm	GM20393201100	Price	GM69CR32110	Price
11mm - 11.5mm	GM20393201150	Price	GM69CR32115	Price
11.5mm - 12mm	GM20393201200	Price	GM69CR32120	Price
12mm - 12.5mm	GM20393201250	Price	GM69CR32125	Price
12.5mm - 13mm	GM20393201300	Price	GM69CR32130	Price
13mm - 13.5mm	GM20393201350	Price	GM69CR32135	Price
13.5mm - 14mm	GM20393201400	Price	GM69CR32140	Price
14mm - 14.5mm	GM20393201450	Price	GM69CR32145	Price
14.5mm - 15mm	GM20393201500	Price	GM69CR32150	Price
15mm - 15.5mm	GM20393201550	Price	GM69CR32155	Price
15.5mm - 16mm	GM20393201600	Price	GM69CR32160	Price
16mm - 16.5mm	GM20393201650	Price	GM69CR32165	Price
16.5mm - 17mm	GM20393201700	Price	GM69CR32170	Price
17mm - 17.5mm	GM20393201750	Price	GM69CR32175	Price
17.5mm - 18mm	GM20393201800	Price	GM69CR32180	Price
18mm - 18.5mm	GM20393201850	Price	GM69CR32185	Price
18.5mm - 19mm	GM20393201900	Price	GM69CR32190	Price
19mm - 19.5mm	GM20393201950	Price	GM69CR32195	Price
19.5mm - 20mm	GM20393202000	Price	GM69CR32200	Price

Collet Style - ER40

	Rego-Fix		Techniks	
Size Range	Order No.	Price	Order No.	Price
2.5mm - 3mm	GM20394000300	Price	-	-
3mm - 3.5mm	GM20394000350	Price	GM69CR4035	Price
3.5mm - 4mm	GM20394000400	Price	GM69CR4040	Price
4mm - 4.5mm	GM20394000450	Price	GM69CR4045	Price
4.5mm - 5mm	GM20394000500	Price	GM69CR4050	Price
5mm - 5.5mm	GM20394000550	Price	GM69CR4055	Price
5.5mm - 6mm	GM20394000600	Price	GM69CR4060	Price
6mm - 6.5mm	GM20394000650	Price	GM69CR4065	Price
6.5mm - 7mm	GM20394000700	Price	GM69CR4070	Price
7mm - 7.5mm	GM20394000750	Price	GM69CR4075	Price
7.5mm - 8mm	GM20394000800	Price	GM69CR4080	Price
8mm - 8.5mm	GM20394000850	Price	GM69CR4085	Price
8.5mm - 9mm	GM20394000900	Price	GM69CR4090	Price
9mm - 9.5mm	GM20394000950	Price	GM69CR4095	Price
9.5mm - 10mm	GM20394001000	Price	GM69CR40100	Price
10mm - 10.5mm	GM20394001050	Price	GM69CR40105	Price
10.5mm - 11mm	GM20394001100	Price	GM69CR40110	Price
11mm - 11.5mm	GM20394001150	Price	GM69CR40115	Price
11.5mm - 12mm	GM20394001200	Price	GM69CR40120	Price
12mm - 12.5mm	GM20394001250	Price	GM69CR40125	Price
12.5mm - 13mm	GM20394001300	Price	GM69CR40130	Price
13mm - 13.5mm	GM20394001350	Price	GM69CR40135	Price
13.5mm - 14mm	GM20394001400	Price	GM69CR40140	Price
14mm - 14.5mm	GM20394001450	Price	GM69CR40145	Price
14.5mm - 15mm	GM20394001500	Price	GM69CR40150	Price
15mm - 15.5mm	GM20394001550	Price	GM69CR40155	Price
15.5mm - 16mm	GM20394001600	Price	GM69CR40160	Price
16mm - 16.5mm	GM20394001650	Price	GM69CR40165	Price
16.5mm - 17mm	GM20394001700	Price	GM69CR40170	Price
17mm - 17.5mm	GM20394001750	Price	GM69CR40175	Price
17.5mm - 18mm	GM20394001800	Price	GM69CR40180	Price
18mm - 18.5mm	GM20394001850	Price	GM69CR40185	Price
18.5mm - 19mm	GM20394001900	Price	GM69CR40190	Price
19mm - 19.5mm	GM20394001950	Price	GM69CR40195	Price
19.5mm - 20mm	GM20394002000	Price	GM69CR40200	Price
20mm - 20.5mm	GM20394002050	Price	GM69CR40205	Price
20.5mm - 21mm	GM20394002100	Price	GM69CR40210	Price
21mm - 21.5mm	GM20394002150	Price	GM69CR40215	Price
21.5mm - 22mm	GM20394002200	Price	GM69CR40220	Price
22mm - 22.5mm	GM20394002250	Price	GM69CR40225	Price
22.5mm - 23mm	GM20394002300	Price	GM69CR40230	Price
23mm - 23.5mm	GM20394002350	Price	GM69CR40235	Price
23.5mm - 24mm	GM20394002400	Price	GM69CR40240	Price
24mm - 24.5mm	GM20394002450	Price	GM69CR40245	Price
24.5mm - 25mm	GM20394002500	Price	GM69CR40250	Price
25mm - 25.5mm	GM20394002550	Price	GM69CR40255	Price
25.5mm - 26mm	GM20394002600	Price	GM69CR40260	Price

Briney Eccentric Bore Tool Holders

- Tru Position eccentric bore tool holders have a special proven grinding technique design that dramatically reduces total indicator runout (T.I.R.)
- Average .0001” concentricity finished tool holders with eccentric ID guaranteed .0002” (note tool must be installed)
- Tool pulls within .0001” of centerline once set screw is tightened
- Holders are offset .0003”
- ISO 9001 certified

MADE IN THE USA



Shank - CAT40			
Size (in./mm)	Gage Length (in.)	Order No.	Price
1/8	2.500	GM30V40E012250	Price
3/16	2.500	GM30V40E018250	Price
3/16	6.000	GM30V40E018600	Price
1/4	2.500	GM30V40E025250	Price
1/4	4.500	GM30V40E025450	Price
1/4	6.000	GM30V40E025600	Price
5/16	2.500	GM30V40E031250	Price
3/8	2.500	GM30V40E038250	Price
3/8	4.500	GM30V40E038450	Price
3/8	6.000	GM30V40E038600	Price
7/16	2.500	GM30V40E044250	Price
1/2	1.750	GM30V40E050175	Price
1/2	2.625	GM30V40E050262	Price
1/2	4.500	GM30V40E050450	Price
1/2	6.000	GM30V40E050600	Price
5/8	1.750	GM30V40E062175	Price
5/8	3.750	GM30V40E062375	Price
5/8	4.750	GM30V40E062475	Price
5/8	6.000	GM30V40E062600	Price
3/4	1.750	GM30V40E075175	Price
3/4	3.750	GM30V40E075375	Price
3/4	4.750	GM30V40E075475	Price
3/4	6.000	GM30V40E075600	Price
7/8	4.000	GM30V40E088400	Price
1	1.750	GM30V40E100175	Price
1	3.000	GM30V40E100300	Price
1	4.000	GM30V40E100400	Price
1	6.000	GM30V40E100600	Price
1-1/4	2.000	GM30V40E125200	Price
1-1/4	4.250	GM30V40E125425	Price
1-1/4	6.000	GM30V40E125600	Price
1-1/2	4.625	GM30V40E150462	Price
8mm	2.500	GM30V40E8MM250	Price
10mm	2.500	GM30V40E10MM250	Price
12mm	2.625	GM30V40E12MM262	Price
16mm	3.750	GM30V40E16MM375	Price
20mm	3.750	GM30V40E20MM375	Price

Shank - CAT50			
Size (in./mm)	Gage Length (in.)	Order No.	Price
3/16	2.500	GM30V50E018250	Price
3/16	4.500	GM30V50E018450	Price
3/16	6.500	GM30V50E018650	Price
1/4	2.500	GM30V50E025250	Price
1/4	4.500	GM30V50E025450	Price
1/4	6.500	GM30V50E025650	Price
5/16	2.500	GM30V50E031250	Price

Shank - CAT50			
Size (in./mm)	Gage Length (in.)	Order No.	Price
5/16	4.500	GM30V50E031450	Price
5/16	6.500	GM30V50E031650	Price
3/8	2.500	GM30V50E038250	Price
3/8	4.500	GM30V50E038450	Price
3/8	6.500	GM30V50E038650	Price
7/16	2.500	GM30V50E044250	Price
7/16	4.500	GM30V50E044450	Price
1/2	2.620	GM30V50E050262	Price
1/2	4.620	GM30V50E050462	Price
1/2	6.620	GM30V50E050662	Price
5/8	2.060	GM30V50E062206	Price
5/8	3.750	GM30V50E062375	Price
5/8	5.750	GM30V50E062575	Price
5/8	7.750	GM30V50E062775	Price
3/4	2.060	GM30V50E075206	Price
3/4	3.750	GM30V50E075375	Price
3/4	5.750	GM30V50E075575	Price
3/4	7.750	GM30V50E075775	Price
7/8	3.750	GM30V50E088375	Price
7/8	5.750	GM30V50E088575	Price
1	2.250	GM30V50E100225	Price
1	4.000	GM30V50E100400	Price
1	6.000	GM30V50E100600	Price
1	8.000	GM30V50E100800	Price
1-1/4	2.250	GM30V50E125225	Price
1-1/4	4.000	GM30V50E125400	Price
1-1/4	6.000	GM30V50E125600	Price
1-1/4	8.000	GM30V50E125800	Price
1-1/2	2.750	GM30V50E150275	Price
1-1/2	4.000	GM30V50E150400	Price
1-1/2	6.000	GM30V50E150600	Price
1-1/2	8.000	GM30V50E150800	Price
1-3/4	4.000	GM30V50E175400	Price
2	5.620	GM30V50E200562	Price
2	7.620	GM30V50E200762	Price
2	9.620	GM30V50E200962	Price
6mm	2.500	GM30V50E6MM250	Price
8mm	2.500	GM30V50E8MM250	Price
10mm	2.500	GM30V50E10MM250	Price
12mm	2.620	GM30V50E12MM262	Price
16mm	3.750	GM30V50E16MM262	Price
20mm	3.750	GM30V50E20MM375	Price
25mm	4.000	GM30V50E25MM400	Price
32mm	4.000	GM30V50E32MM400	Price
40mm	4.000	GM30V50E40MM400	Price

RAPIDHOLD™ BT30 V-Flange End Mill Holders



- Produced according to AT3 specifications
- Tools are made of a high quality alloy steel
- End mill socket T.I.R. .0002”
- Through the spindle coolant capability
- Hole diameters are made in H5 class
- Dynamically balanced to G6.3 @ 20,000 RPM
- All balanced tools are supplied with QA certificate

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
1/8	.690	3	**RH2623101R**	Price
3/16	.690	2.36	**RH2623102R**	Price
1/4	1.000	2.36	**RH2623103R**	Price
5/16	1.000	2.36	**RH2623104R**	Price
3/8	1.000	2.36	**RH2623105R**	Price
1/2	1.380	2.36	**RH2623106R**	Price
5/8	1.633	2.36	**RH2623107R**	Price
3/4	1.750	2.36	**RH2623108R**	Price

RAPIDHOLD™ BT40 V-Flange End Mill Holders



- Produced according to AT3 specifications
- Tools are made of a high quality alloy steel
- End mill socket T.I.R. .0002”
- Through the spindle coolant capability
- Hole diameters are made in H5 class
- Dynamically balanced to G6.3 @ 20,000 RPM
- All balanced tools are supplied with QA certificate

Size (in.)	Nose (in.)	Gage Length (in.0	Order No.	Price
1/4	1.000	2.56	**RH2624101R**	Price
5/16	1.000	2.56	**RH2624102R**	Price
3/8	1.000	2.56	**RH2624103R**	Price
1/2	1.380	2.56	**RH2624104R**	Price
1/2	1.380	4	**RH2624105R**	Price
5/8	1.633	2.56	**RH2624106R**	Price
3/4	1.750	2.37	**RH2624108R**	Price
3/4	1.750	2.56	**RH2624109R**	Price
7/8	2.000	3.35	**RH2624110R**	Price
1	2.000	3.74	**RH2624112R**	Price
1	2.000	5	**RH2624113R**	Price

ETM BT40 V-Flange End Mill Holders



- Run out accuracy .0002
- Taper class AT3
- Hardness 58-60 HRc
- N5 Taper Finish

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
3/16	.984	1.930	**GM604503646**	Price
1/4	1.000	2.370	**GM604592940**	Price
3/8	1.374	2.560	**GM604501151**	Price
1/2	1.656	2.560	**GM604591047**	Price
5/8	1.890	1.750	**GM604592750**	Price
3/4	2.050	1.750	**GM604592950**	Price
1	2.480	1.750	**GM604592970**	Price
1-1/4	2.480	2.000	**GM604592609**	Price
1-1/2	3.150	4.620	**GM604501154**	Price

TECHNIKS BT30 V-Flange End Mill Holders



- Precision machined to an Industry Leading H5 standard I.D. hole tolerance
- Balanced to 15,000 RPM to save spindle bearing life and the Taper is ground to AT3 standard for maximum spindle contact
- Each holder is lab certified with an individual report to ensure quality

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
1/8	.680	2.360	**TE121713018**	Price
3/16	.680	2.360	**TE1217130316**	Price
1/4	.780	2.360	**TE121713014**	Price
3/8	1.000	2.360	**TE121713038**	Price
7/16	1.120	2.360	**TE1217130716**	Price
1/2	1.250	2.360	**TE121713012**	Price
5/8	1.500	2.360	**TE121713058**	Price
3/4	1.750	2.360	**TE121713034**	Price

TECHNIKS BT40 V-Flange End Mill Holders



- Precision machined to an Industry Leading H5 standard I.D. hole tolerance
- Balanced to 15,000 RPM to save spindle bearing life and the Taper is ground to AT3 standard for maximum spindle contact
- Each holder is lab certified with an individual report to ensure quality

Size (in.)	Nose (in.)	Gage Length (in.0	Order No.	Price
1/8	.680	2.500	**TE121714018**	Price
3/16	.680	2.500	**TE1217140316**	Price
1/4	.780	2.500	**TE121714014**	Price
1/4	.780	4.000	**TE1217140144**	Price
5/16	.880	2.500	**TE1217140516**	Price
3/8	1.000	2.500	**TE121714038**	Price
7/16	1.120	2.500	**TE1217140716**	Price
1/2	1.250	2.500	**TE121714012**	Price
1/2	1.250	2.500	**TE121714012F**	Price
1/2	1.250	4.000	**TE1217140124**	Price
5/8	1.500	2.500	**TE121714058**	Price
3/4	1.750	2.500	**TE121714034**	Price
1-1/4	2.500	3.560	**TE1217140114**	Price
1-1/2	2.500	3.560	**TE1217140112**	Price

RAPIDHOLD™ BT50 V-Flange End Mill Holders



- Produced according to AT3 specifications
- Tools are made of a high quality alloy steel
- End mill socket T.I.R. .0002”
- Through the spindle coolant capability
- Hole diameters are made in H5 class
- Dynamically balanced to G6.3 @ 20,000 RPM
- All balanced tools are supplied with QA certificate

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
1/2	1.380	2.952	**RH2625101R**	Price
3/4	1.750	2.952	**RH2625102R**	Price
1	2.000	4.13	**RH2625103R**	Price
1	2.000	6	**RH2625104R**	Price
1-1/4	2.500	4.13	**RH2625105R**	Price
1-1/4	2.500	6	**RH2625106R**	Price
1-1/2	2.750	4.13	**RH2625107R**	Price
2	3.750	5.31	**RH2625108R**	Price

BT50 V-Flange End Mill Holders

- Precision machined to an Industry Leading H5 standard I.D. hole tolerance
- Balanced to 15,000 RPM to save spindle bearing life and the Taper is ground to AT3 standard for maximum spindle contact
- Each holder is lab certified with an individual report to ensure quality



Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
1/4	.780	3.000	**TE121715014**	Price
3/8	1.000	2.750	**TE121715038**	Price
1/2	1.250	3.000	**TE121715012**	Price
5/8	1.500	3.000	**TE121715058**	Price
3/4	1.750	3.000	**TE121715034**	Price
1	2.000	4.500	**TE1217150145**	Price
1-1/4	2.500	4.500	**TE121715011445**	Price

BT50 V-Flange End Mill Holders

- Run out accuracy .0002
- Taper class AT3
- Hardness 58-60 HRc
- N5 Taper Finish



Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
1/2	1.656	3.937	**GM604592990**	Price
5/8	1.890	3.937	**GM604593020**	Price
3/4	2.050	3.937	**GM604593030**	Price
1	2.550	4.500	**GM604590426**	Price
1-1/4	2.830	4.500	**GM604590436**	Price

RAPIDHOLD CAT40 V-Flange End Mill Holders

- Produced according to AT3 specifications
- Tools are made of a high quality alloy steel
- End mill socket T.I.R. .0002”
- Through the spindle coolant capability
- Hole diameters are made in H5 class
- Dynamically balanced to 2.5 @ 25,000 RPM



Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
1/8	.690	1.38	**RH2621127R**	Price
1/8	.690	4.5	**RH2621101R**	Price
3/16	.690	1.38	**RH2621128R**	Price
3/16	.690	2.5	**RH2621102R**	Price
3/16	.690	4.5	**RH2621103R**	Price
3/16	.690	6	**RH2621145R**	Price
1/4	.780	1.38	**RH2621129R**	Price
1/4	.780	4.5	**RH2621105R**	Price
1/4	.780	6	**RH2621148R**	Price
1/4	1.000	2.5	**RH2621104R**	Price
5/16	1.000	1.38	**RH2621130R**	Price
5/16	1.000	4.5	**RH2621106R**	Price
3/8	1.000	1.38	**RH2621131R**	Price
3/8	1.000	2.5	**RH2621107R**	Price
3/8	1.000	4.5	**RH2621108R**	Price
3/8	1.000	6.5	**RH2621109R**	Price
3/8	1.000	8	**RH2621151R**	Price
7/16	1.250	1.75	**RH2621132R**	Price
7/16	1.250	4.5	**RH2621110R**	Price
1/2	1.250	4.62	**RH2621112R**	Price
1/2	1.250	6.62	**RH2621113R**	Price
1/2	1.250	8	**RH2621154R**	Price
1/2	1.380	2.62	**RH2621111R**	Price

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
1/2	1.750	1.75	**RH2621133R**	Price
5/8	1.500	3.75	**RH2621114R**	Price
5/8	1.633	5.75	**RH2621115R**	Price
5/8	1.630	8	**RH2621157R**	Price
5/8	1.750	1.75	**RH2621134R**	Price
3/4	1.750	1.75	**RH2621135R**	Price
3/4	1.750	3.75	**RH2621116R**	Price
3/4	1.750	5.75	**RH2621117R**	Price
3/4	1.750	8	**RH2621160R**	Price
7/8	1.880	1.75	**RH2621136R**	Price
7/8	2.000	4	**RH2621118R**	Price
7/8	1.880	6	**RH2621119R**	Price
1	1.750	1.75	**RH2621137R**	Price
1	2.000	4	**RH2621121R**	Price
1	2.000	6	**RH2621122R**	Price
1	2.000	8	**RH2621163R**	Price
1-1/4	2.250	2	**RH2621138R**	Price
1-1/4	2.500	4.25	**RH2621123R**	Price
1-1/4	2.500	6.25	**RH2621124R**	Price
1-1/4	2.500	8	**RH2621166R**	Price
1-1/2	2.750	4.62	**RH2621125R**	Price
1-1/2	2.750	6.63	**RH2621126R**	Price
1-1/2	2.750	8	**RH2621169R**	Price

CAT40 V-Flange End Mill Holders

- Precision machined to an Industry Leading H5 standard I.D. hole tolerance
- Balanced to 15,000 RPM to save spindle bearing life and the Taper is ground to AT3 standard for maximum spindle contact
- Each holder is lab certified with an individual report to ensure quality



Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
1/8	.690	2.370	**TE1222907**	Price
1/8	.690	6.000	**TE12229076**	Price
1/8	.750	1.750	**TE1222907175**	Price
1/8	.780	5.000	**TE1222907500RR**	Price
3/16	.690	2.500	**TE1222909**	Price
3/16	.690	6.000	**TE12229096B**	Price
3/16	.690	6.000	**TE12229096FB**	Price
3/16	.690	6.000	**TE12229096**	Price
3/16	.780	4.720	**TE1222909472RR**	Price
3/16	.795	1.750	**TE1222909175**	Price
1/4	.780	2.500	**TE122291125**	Price
1/4	.780	2.500	**TE122291125F**	Price
1/4	.780	2.500	**TE122291125FB**	Price
1/4	.780	2.500	**TE122291125B**	Price
1/4	.780	3.000	**TE1222911F**	Price
1/4	.780	3.000	**TE1222911**	Price
1/4	.780	4.000	**TE12229114FB**	Price
1/4	.780	4.720	**TE1222911472RR**	Price
1/4	.780	6.000	**TE12229116FB**	Price
1/4	.780	6.000	**TE12229116B**	Price
1/4	.780	6.000	**TE12229116**	Price
1/4	.795	1.750	**TE1222911175**	Price
3/8	.880	1.750	**TE1222915175**	Price

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
5/16	.880	1.750	**TE1222913175**	Price
5/16	.880	2.500	**TE122291325**	Price
5/16	.880	2.500	**TE122291325F**	Price
5/16	.880	3.000	**TE1222913**	Price
5/16	.880	3.000	**TE1222913F**	Price
5/16	.860	4.720	**TE1222913472RR**	Price
5/16	.880	6.000	**TE12229136FB**	Price
3/8	1.000	2.500	**TE122291525**	Price
3/8	1.000	2.500	**TE122291525B**	Price
3/8	1.000	2.500	**TE122291525FB**	Price
3/8	1.000	2.500	**TE122291525F**	Price
3/8	1.000	3.000	**TE1222915F**	Price
3/8	1.000	4.000	**TE12229154B**	Price
3/8	1.000	4.720	**TE1222915472RR**	Price
3/8	1.000	5.000	**TE12229155F**	Price
3/8	1.000	5.000	**TE12229155**	Price
3/8	1.000	5.000	**TE12229155FB**	Price
7/16	1.120	1.750	**TE1222916175**	Price
7/16	1.120	2.500	**TE122291671625**	Price
7/16	1.120	2.500	**TE122291671625F**	Price
1/2	1.250	2.500	**TE122291725**	Price
1/2	1.250	2.500	**TE122291725B**	Price
1/2	1.250	2.500	**TE122291725FB**	Price

CAT40 V-Flange End Mill Holders (cont.)



Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
1/2	1.250	2.625	**TE1222917263**	Price
1/2	1.250	3.000	**TE1222917**	Price
1/2	1.250	3.000	**TE1222917B**	Price
1/2	1.250	3.000	**TE1222917F**	Price
1/2	1.250	4.000	**TE12229174FB**	Price
1/2	1.250	4.000	**TE12229174B**	Price
1/2	1.250	4.630	**TE1222917463**	Price
1/2	1.380	4.720	**TE1222917472RR**	Price
1/2	1.500	1.750	**TE1222917175**	Price
5/8	1.500	1.750	**TE1222919175F**	Price
5/8	1.500	1.750	**TE1222919175**	Price
5/8	1.500	1.750	**TE1222919175FB**	Price
5/8	1.500	3.000	**TE1222919**	Price
5/8	1.500	3.000	**TE1222919F**	Price
5/8	1.500	3.000	**TE1222919B**	Price
5/8	1.500	3.750	**TE1222920**	Price
5/8	1.500	4.000	**TE12229194B**	Price
5/8	1.500	5.750	**TE1222920575**	Price
5/8	1.500	6.000	**TE12229206FB**	Price
3/4	1.750	1.750	**TE1222921175B**	Price
3/4	1.750	1.750	**TE1222921175F**	Price
3/4	1.750	1.750	**TE1222921175**	Price
3/4	1.750	3.000	**TE12229213B**	Price
3/4	1.750	3.000	**TE12229213**	Price
3/4	1.750	3.000	**TE12229213FB**	Price
3/4	1.750	3.000	**TE12229213F**	Price
3/4	1.750	3.500	**TE1222921**	Price

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
3/4	1.750	4.000	**TE12229214B**	Price
3/4	1.750	5.000	**TE12229215**	Price
3/4	1.750	5.000	**TE12229215F**	Price
7/8	1.880	3.500	**TE1222923**	Price
1	2.000	1.750	**TE1222925175F**	Price
1	2.000	1.750	**TE1222925A175**	Price
1	2.000	3.000	**TE12229253**	Price
1	2.000	4.000	**TE1222925**	Price
1	2.000	4.000	**TE1222925F**	Price
1	2.000	4.000	**TE1222925B**	Price
1	2.000	4.000	**TE1222925FB**	Price
1	2.000	6.000	**TE12229256**	Price
1	2.500	6.000	**TE12229276**	Price
1-1/4	2.500	2.000	**TE1222927A2**	Price
1-1/4	2.500	4.000	**TE12229274**	Price
1-1/4	2.500	4.600	**TE1222927F**	Price
1-1/4	2.500	4.600	**TE1222927**	Price
1-1/2	2.500	4.500	**TE1222929**	Price
1-1/2	2.500	4.500	**TE1222929F**	Price
6mm	25mm	2.500	**TE1222963**	Price
8mm	28mm	2.500	**TE1222965**	Price
10mm	35mm	2.500	**TE1222967**	Price
12mm	42mm	2.500	**TE1222969**	Price
16mm	48mm	2.500	**TE1222971**	Price
20mm	52mm	3.000	**TE1222973**	Price
25mm	65mm	4.000	**TE1222975**	Price
32mm	72mm	4.000	**TE1222977**	Price

CAT40 V-Flange End Mill Holders

- Run out accuracy .0002
- Taper class AT3
- Hardness 58-60 HRc
- N5 Taper Finish



Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
3/16	.875	2.500	**GM60314003**	Price
1/4	1.000	2.500	**GM604501458**	Price
3/8	1.250	2.500	**GM60314006**	Price
3/8	1.500	1.750	**GM604501467**	Price
1/2	1.500	1.750	**GM60314208**	Price
1/2	1.750	2.620	**GM60314008**	Price
1/2	1.750	2.625	**GM604505423**	Price
5/8	1.500	1.750	**GM60314210**	Price
5/8	1.750	3.750	**GM60314010**	Price
3/4	1.750	1.750	**GM60314212**	Price
3/4	1.750	3.750	**GM604501644**	Price

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
3/4	1.750	3.750	**GM60314012**	Price
7/8	2.062	4.000	**GM60314014**	Price
1	2.000	1.750	**GM60314216**	Price
1	2.000	1.750	**GM604506553**	Price
1	2.500	4.000	**GM60314016**	Price
1	2.550	4.000	**GM604501610**	Price
1-1/4	2.250	2.000	**GM60314220**	Price
1-1/4	2.750	4.250	**GM604501611**	Price
1-1/4	2.750	4.250	**GM60314020**	Price
1-1/2	3.150	4.620	**GM60314024**	Price
1-1/2	3.150	4.625	**GM604501645**	Price

RAPIDHOLD CAT50 V-Flange End Mill Holders

- Produced according to AT3 specifications
- Tools are made of a high quality alloy steel
- End mill socket T.I.R. .0002”
- Through the spindle coolant capability
- Hole diameters are made in H5 class
- Dynamically balanced to G6.3 @ 20,000 RPM
- All balanced tools are supplied with QA certificate



Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
1	2.000	4	**RH2622119R**	Price
1	2.000	6	**RH2622120R**	Price
1	2.000	8	**RH2622150R**	Price
1/2	1.380	2.62	**RH2622110R**	Price
1/2	1.380	4.62	**RH2622111R**	Price
1/2	1.380	6.62	**RH2622112R**	Price
1/2	1.380	8	**RH2622141R**	Price
1/4	.780	4.5	**RH2622104R**	Price
1/4	.780	8	**RH2622135R**	Price
1/4	1.000	2.5	**RH2622103R**	Price
1-1/2	2.750	4.62	**RH2622123R**	Price
1-1/2	2.750	6.62	**RH2622124R**	Price
1-1/2	2.750	8	**RH2622156R**	Price
1-1/4	2.500	4.25	**RH2622121R**	Price
1-1/4	2.500	6.25	**RH2622122R**	Price
1-1/4	2.500	8	**RH2622153R**	Price
2	3.940	5.62	**RH2622125R**	Price
2	3.940	8	**RH2622159R**	Price

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
3/16	.690	2.5	**RH2622101R**	Price
3/16	.690	4.5	**RH2622102R**	Price
3/4	1.750	3.75	**RH2622115R**	Price
3/4	1.750	5.75	**RH2622116R**	Price
3/4	1.750	8	**RH2622147R**	Price
3/8	1.000	2.5	**RH2622106R**	Price
3/8	1.000	4.5	**RH2622107R**	Price
3/8	1.000	6.5	**RH2622108R**	Price
3/8	1.000	8	**RH2622138R**	Price
5/16	1.000	4.5	**RH2622105R**	Price
5/8	1.630	8	**RH2622144R**	Price
5/8	1.633	3.75	**RH2622113R**	Price
5/8	1.633	5.75	**RH2622114R**	Price
7/16	1.250	1.75	**RH2622126R**	Price
7/16	1.250	4.5	**RH2622109R**	Price
7/8	2.000	4	**RH2622117R**	Price
7/8	2.000	6	**RH2622118R**	Price

CAT50 V-Flange End Mill Holders

- Precision machined to an Industry Leading H5 standard I.D. hole tolerance
- Balanced to 15,000 RPM to save spindle bearing life and the Taper is ground to AT3 standard for maximum spindle contact
- Each holder is lab certified with an individual report to ensure quality



Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
9/16	1.500	1.440	**TE1222939916144**	Price
9/16	1.500	3.000	**TE12229399163**	Price
1/4	.780	2.500	**TE122293125B**	Price
1/4	.780	4.000	**TE1222931**	Price
1/4	.780	4.000	**TE1222931B**	Price
1/4	.780	4.000	**TE1222931F**	Price
1/4	.780	6.000	**TE12229316B**	Price
1/4	.780	6.500	**TE122293165RR**	Price
1/4	.984	2.500	**TE1222931212**	Price
5/16	.880	4.000	**TE1222933**	Price
3/8	1.000	2.500	**TE122293525B**	Price
3/8	1.000	4.000	**TE1222935**	Price
3/8	1.000	4.000	**TE1222935F**	Price
3/8	1.000	4.000	**TE1222935B**	Price
3/8	1.000	6.000	**TE12229356B**	Price
3/8	1.000	6.000	**TE12229356**	Price
3/8	1.000	6.500	**TE122293565RR**	Price
3/8	1.000	8.000	**TE12229358B**	Price
3/8	1.000	8.000	**TE12229368**	Price
3/8	1.250	2.500	**TE1222935212**	Price
1/2	1.250	2.625	**TE12229372625B**	Price
1/2	1.250	4.000	**TE1222937**	Price
1/2	1.250	4.000	**TE1222937B**	Price
1/2	1.250	4.000	**TE1222937F**	Price
1/2	1.250	6.000	**TE12229376B**	Price
1/2	1.250	6.000	**TE12229376F**	Price
1/2	1.250	6.000	**TE12229376**	Price
1/2	1.250	8.000	**TE12229378**	Price
1/2	1.250	8.000	**TE12229378B**	Price
1/2	1.250	8.000	**TE12229378F**	Price
1/2	1.380	6.500	**TE122293765RR**	Price
1/2	1.500	2.670	**TE1222937258**	Price
5/8	1.500	1.440	**TE1222939144**	Price
5/8	1.500	3.000	**TE12229393B**	Price
5/8	1.500	3.000	**TE12229393**	Price
5/8	1.500	4.000	**TE1222939**	Price
5/8	1.500	4.000	**TE1222939B**	Price
5/8	1.500	4.000	**TE1222939F**	Price
5/8	1.500	7.250	**TE1222939725RR**	Price
5/8	1.500	8.000	**TE12229398**	Price
3/4	1.750	1.440	**TE1222941144B**	Price
3/4	1.750	1.440	**TE1222941144**	Price
3/4	1.750	3.000	**TE12229413**	Price
3/4	1.750	3.000	**TE12229413F**	Price
3/4	1.750	3.000	**TE12229413B**	Price
3/4	1.750	4.000	**TE1222941**	Price

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
3/4	1.750	4.000	**TE1222941F**	Price
3/4	1.750	4.000	**TE1222941B**	Price
3/4	1.750	5.750	**TE1222941575**	Price
3/4	1.750	6.000	**TE12229416**	Price
3/4	1.750	6.000	**TE12229416B**	Price
3/4	1.750	7.250	**TE1222941725RR**	Price
3/4	1.750	8.000	**TE12229418B**	Price
3/4	1.750	8.000	**TE12229418**	Price
7/8	1.880	4.000	**TE1222943**	Price
7/8	1.880	6.000	**TE12229436**	Price
7/8	1.880	6.000	**TE12229436B**	Price
7/8	2.000	8.000	**TE12229438B**	Price
1	2.000	2.625	**TE1222945262**	Price
1	2.000	2.625	**TE1222945262F**	Price
1	2.000	4.000	**TE1222945**	Price
1	2.000	4.000	**TE1222945F**	Price
1	2.000	4.000	**TE1222945B**	Price
1	2.000	6.000	**TE12229456B**	Price
1	2.000	6.000	**TE12229456**	Price
1	2.000	8.000	**TE12229468B**	Price
1	2.000	8.000	**TE12229458RR**	Price
1	2.000	8.000	**TE12229468**	Price
1-1/4	2.500	2.625	**TE1222947262**	Price
1-1/4	2.500	2.625	**TE1222947262B**	Price
1-1/4	2.500	4.600	**TE1222947**	Price
1-1/4	2.500	4.600	**TE1222947F**	Price
1-1/4	2.500	4.600	**TE1222947B**	Price
1-1/4	2.500	6.000	**TE12229476B**	Price
1-1/4	2.500	6.000	**TE12229476**	Price
1-1/4	2.500	8.000	**TE12229478B**	Price
1-1/4	2.500	8.000	**TE12229478**	Price
1-1/2	2.500	4.600	**TE1222949**	Price
1-1/2	2.500	4.600	**TE1222949F**	Price
1-1/2	2.500	4.600	**TE1222949B**	Price
1-1/2	2.750	2.000	**TE12229492**	Price
2	3.750	6.000	**TE1222951**	Price
2	3.750	6.000	**TE1222951B**	Price
6mm	25mm	4.000	**TE1222981**	Price
8mm	28mm	4.000	**TE1222983**	Price
10mm	35mm	4.000	**TE1222985**	Price
12mm	42mm	4.000	**TE1222987**	Price
16mm	48mm	4.000	**TE1222989**	Price
20mm	52mm	3.000	**TE1222990**	Price
25mm	65mm	4.000	**TE1222993**	Price
32mm	72mm	4.600	**TE1222996**	Price

CAT50 V-Flange End Mill Holders

- Run out accuracy .0002
- Taper class AT3
- Hardness 58-60 HRc
- N5 Taper Finish



Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
5/8	1.500	1.750	**GM60314210**	Price
1/4	1.000	2.500	**GM604501502**	Price
1/4	1.000	4.500	**GM604501510**	Price
1/4	1.000	6.250	**GM604501519**	Price
3/8	1.250	2.500	**GM60315006**	Price
3/8	1.250	4.500	**GM60315106**	Price
3/8	1.250	6.500	**GM60315206**	Price
1/2	1.750	2.620	**GM60315008**	Price
1/2	1.750	4.620	**GM60315108**	Price
1/2	1.750	6.625	**GM604501521**	Price
5/8	1.750	3.750	**GM60315010**	Price
5/8	1.750	3.750	**GM604503852**	Price
5/8	1.750	5.750	**GM60315110**	Price
5/8	1.750	7.750	**GM60315210**	Price
3/4	1.750	3.750	**GM60315012**	Price

Size (in.)	Nose (in.)	Gage Length (in.)	Order No.	Price
3/4	1.750	5.750	**GM60315112**	Price
3/4	1.750	7.750	**GM60315212**	Price
3/4	1.770	3.750	**GM604501667**	Price
7/8	2.000	3.750	**GM60315014**	Price
1	2.500	4.000	**GM60315016**	Price
1	2.500	6.000	**GM60315116**	Price
1	2.500	8.000	**GM60315216**	Price
1	2.550	4.000	**GM604501612**	Price
1-1/4	2.750	4.000	**GM604501613**	Price
1-1/4	2.750	6.000	**GM60315120**	Price
1-1/4	2.750	8.000	**GM60315220**	Price
1-1/2	3.150	4.000	**GM604501614**	Price
1-1/2	3.150	4.000	**GM60315024**	Price
1-1/2	3.150	6.000	**GM60315124**	Price
2	3.750	5.620	**GM60315032**	Price

PARLEC CAT50 V-Flange End Mill Holders



- Endmill Holder
- Constructed of alloy steel for long, durable service life
- Hardened to RC 56-60 for long service life
- End mill socket T.I.R. greater than .0002”

Size (in.)	Nose	Gage Length	Order No.	Price
1/8	.690	2.500	**GM96C5001EM2**	Price
3/16	.690	2.500	**GM96C5018EM2**	Price
1/4	.880	2.500	**GM96C5002EM2**	Price
5/16	1.000	2.500	**GM96C5031EM2**	Price
3/8	1.000	2.500	**GM96C5037EM2**	Price
3/8	1.000	4.500	**GM96C5037EM4**	Price
3/8	1.000	6.500	**GM96C5037EM6**	Price
3/8	1.000	8.000	**GM96C5037EM8**	Price
7/16	1.250	2.620	**GM96C5043EM2**	Price
1/2	1.250	2.620	**GM96C5050EM2**	Price
1/2	1.250	4.620	**GM96C5050EM4**	Price
1/2	1.250	6.620	**GM96C5050EM6**	Price
1/2	1.250	8.000	**GM96C5050EM8**	Price
9/16	1.500	2.620	**GM96C5056EM2**	Price
5/8	1.500	3.750	**GM96C5062EM3**	Price
5/8	1.500	5.750	**GM96C5062EM5**	Price
5/8	1.500	7.750	**GM96C5062EM7**	Price
3/4	1.750	3.750	**GM96C5075EM3**	Price
3/4	1.750	5.750	**GM96C5075EM5**	Price
3/4	1.750	7.750	**GM96C5075EM7**	Price
3/4	2.750	1.620	**GM96C5075EM1**	Price
7/8	1.880	3.750	**GM96C5087EM3**	Price
7/8	1.880	5.750	**GM96C5087EM5**	Price
7/8	1.880	7.750	**GM96C5087EM7**	Price
1	2.000	4.000	**GM96C5010EM4**	Price
1	2.000	6.000	**GM96C5010EM6**	Price
1	2.000	8.000	**GM96C5010EM8**	Price
1	2.750	1.620	**GM96C5010EM1**	Price
1-1/4	2.500	4.000	**GM96C5012EM4**	Price
1-1/4	2.500	6.000	**GM96C5012EM6**	Price
1-1/4	2.500	8.000	**GM96C5012EM8**	Price
1-1/4	2.750	2.620	**GM96C5012EM2**	Price
1-1/2	2.750	2.620	**GM96C5015EM2**	Price
1-1/2	2.750	4.000	**GM96C5015EM4**	Price
1-1/2	2.750	6.000	**GM96C5015EM6**	Price
1-1/2	2.750	8.000	**GM96C5015EM8**	Price
2	3.750	5.620	**GM96C5020EM5**	Price
10mm	1.000	2.500	**GM96C50M10EM2**	Price
12mm	1.250	2.620	**GM96C50M12EM2**	Price
16mm	1.500	3.750	**GM96C50M16EM3**	Price
20mm	1.750	3.750	**GM96C50M20EM3**	Price
25mm	2.000	4.000	**GM96C50M25EM4**	Price
32mm	2.500	4.000	**GM96C50M32EM4**	Price

WORLD CLASS QUALITY NST / NMTB40 Endmill Holders

- Precision End Mill Holders
- Accepts single or double end end mills except where noted



Shank - NST40				
Size (in.)	Nose	Gage Length	Order No.	Price
3/16	.688	2.312	**GM5140316**	Price
3/8	1.000	2.312	**GM514038**	Price
1/2	1.578	2.312	**GM514012**	Price
5/8	1.578	2.312	**GM514058**	Price
3/4	1.578	2.312	**GM514034**	Price
7/8	2.484	2.937	**GM514078**	Price
1	2.484	2.937	**GM51401**	Price
1-1/4	2.484	2.937	**GM5140114†**	Price
1-1/2	2.953	3.062	**GM5140112†**	Price

Shank - NST50				
Size (in.)	Nose	Gage Length	Order No.	Price
3/16	.875	2.297	**GM5150316**	Price
3/8	1.070	2.797	**GM515038**	Price
1/2	1.578	2.797	**GM515012**	Price
5/8	1.578	2.797	**GM515058**	Price
3/4	1.656	2.797	**GM515034**	Price
7/8	1.875	2.797	**GM515078**	Price
1	2.375	2.797	**GM51501**	Price
1-1/4	2.484	2.797	**GM5150114†**	Price
1-1/2	2.828	2.797	**GM5150112†**	Price
2	3.843	3.984	**GM51502†**	Price
2-1/2	4.922	4.765	**GM5150212†**	Price

† Single End Endmills only

Briney NMTB End Mill Adapters



- Tru Position Design - A special eccentric grind technique reduces runout to .0002” when tool is installed into holder
- Twice the tool life you can get with any other end mill holder, plus half the tooling replacemnet expense because tools last longer due to even chip load and less chatter due to Briney`s special grind process
- Fewer passes to mill slots because of improved on-center rotation, saving time and improving machining quality
- Black oxide prior to finish grind

Shank - NMTB30							
Model No.	Bore ID (in.)	Nose Dia. (in.)	Gage Length (in.)	OAI (in.)	Pull Stud Thread	Order No.	Price
NMTB30E-018-175	3/16	.688	1.750	4.438	1/2-13 UNC-2B	**GM30NMTB30E018**	Price
NMTB30E-025-175	1/4	.875	1.750	4.438	1/2-13 UNC-2B	**GM30NMTB30E025**	Price
NMTB30E-038-175	3/8	1.000	1.750	4.438	1/2-13 UNC-2B	**GM30NMTB30E038**	Price
NMTB30E-050-175	1/2	1.250	1.750	4.438	1/2-13 UNC-2B	**GM30NMTB30E050**	Price
NMTB30E-062-175	5/8	1.440	1.750	4.438	1/2-13 UNC-2B	**GM30NMTB30E062**	Price
NMTB30E-075-213	3/4	1.750	2.125	4.813	1/2-13 UNC-2B	**GM30NMTB30E075**	Price
NMTB30E-100-275	1	2.000	2.750	5.438	1/2-13 UNC-2B	**GM30NMTB30E100**	Price

Shank - NMTB40							
Model No.	Bore ID (in.)	Nose Dia. (in.)	Gage Length (in.)	OAI (in.)	Pull Stud Thread	Order No.	Price
NMTB40E-018-231	3/16	.688	2.312	6.000	5/8-11 UNC-2B	**GM30NMTB40E018**	Price
NMTB40E-025-231	1/4	.875	2.312	6.000	5/8-11 UNC-2B	**GM30NMTB40E025**	Price
NMTB40E-038-231	3/8	1.000	2.312	6.000	5/8-11 UNC-2B	**GM30NMTB40E038**	Price
NMTB40E-050-231	1/2	1.250	2.312	6.000	5/8-11 UNC-2B	**GM30NMTB40E050**	Price
NMTB40E-062-231	5/8	1.500	2.312	6.000	5/8-11 UNC-2B	**GM30NMTB40E062**	Price
NMTB40E-075-231	3/4	1.750	2.312	6.000	5/8-11 UNC-2B	**GM30NMTB40E075**	Price
NMTB40E-100-300	1	1.900	3.000	6.688	5/8-11 UNC-2B	**GM30NMTB40E100**	Price
NMTB40E-125-306	1-1/4	2.500	3.062	6.750	5/8-11 UNC-2B	**GM30NMTB40E125**	Price

Shank - NMTB50							
Model No.	Bore ID (in.)	Nose Dia. (in.)	Gage Length (in.)	OAI (in.)	Pull Stud Thread	Order No.	Price
NMTB50E-038-275	3/8	1.000	2.750	7.750	1-8 UNC-2B	**GM30NMTB50E038**	Price
NMTB50E-050-275	1/2	1.250	2.750	7.750	1-8 UNC-2B	**GM30NMTB50E050**	Price
NMTB50E-062-275	5/8	1.500	2.750	7.750	1-8 UNC-2B	**GM30NMTB50E062**	Price
NMTB50E-075-275	3/4	1.750	2.750	7.750	1-8 UNC-2B	**GM30NMTB50E075**	Price
NMTB50E-100-275	1	2.000	2.750	7.750	1-8 UNC-2B	**GM30NMTB50E100**	Price
NMTB50E-125-275	1-1/4	2.500	2.750	7.750	1-8 UNC-2B	**GM30NMTB50E125**	Price
NMTB50E-150-350	1-1/2	2.750	3.500	8.500	1-8 UNC-2B	**GM30NMTB50E150**	Price
NMTB50E-200-475	2	3.750	4.750	9.750	1-8 UNC-2B	**GM30NMTB50E200**	Price

RAPIDHOLD™ CAT V-Flange Jacobs Taper Arbors

- Produced according to AT3 specifications
- Tools are made of high quality steel
- Balanced by design
- Not coolant thru capable
- Jacobs taper T.I.R. 0.0002”



		CAT40		CAT50	
Chuck Taper	Gage Length (in.)	Order No.	Price	Order No.	Price
2JT	1.5	**RH2322650**	Price	**RH2322655**	Price
2JT	2.5	**RH2321604**	Price	**-**	-
33JT	1.5	**RH2322652**	Price	**RH2322657**	Price
33JT	2.5	**RH2321606**	Price	**RH2322607**	Price
3JT	1.5	**RH2322651**	Price	**RH2322656**	Price
3JT	2.8	**RH2321605**	Price	**RH2322606**	Price
4JT	1.5	**RH2322653**	Price	**RH2322658**	Price
4JT	2.5	**RH2321607**	Price	**RH2322608**	Price
5JT	1.5	**-**	-	**RH2322659**	Price
6JT	1.5	**RH2322654**	Price	**RH2322660**	Price
6JT	2.5	**RH2321608**	Price	**-**	-

TECHNIKS CAT V-Flange Jacobs Taper Arbors

- Taper ground to AT3 Accuracy
- The holders are low cost and offer superior accuracy



		CAT40		CAT50	
Chuck Taper	Gage Length (in.)	Order No.	Price	Order No.	Price
2JT	1.57	**TE1222511**	Price	**TE1222521**	Price
33JT	1.57	**TE1222515**	Price	**TE1222525**	Price
3JT	1.57	**TE1222512**	Price	**TE1222527**	Price
4JT	1.57	**-**	-	**TE1222529**	Price
5JT	1.57	**-**	-	**TE1222531**	Price
6JT	1.57	**TE1222513**	Price	**TE1222523**	Price

PARLEC CAT V-Flange Jacobs Taper Arbors

- Constructed of alloy steel for long, durable service life
- Hardened to RC 56-60 for long service life
- Shiny taper with black oxide finish
- Taper T.I.R. ≤ .0004″
- Parsymmetry™ design for high-speed operation



		CAT40		CAT50	
Chuck Taper	Gage Length (in.)	Order No.	Price	Order No.	Price
2JT	1.5	**GM96C4002JT1**	Price	**GM96C5002JT1**	Price
33JT	1.5	**GM96C4033JT1**	Price	**GM96C5033JT1**	Price
3JT	1.5	**GM96C4003JT1**	Price	**GM96C5003JT1**	Price
4JT	1.5	**GM96C4004JT1**	Price	**GM96C5004JT1**	Price
6JT	1.5	**-**	-	**GM96C5006JT1**	Price

Briney NMTB Jacobs Taper Adapters

- Built from certified materials that can be traced backed to the mill
- The tapers are gournd to an AT2 to AT3 resuling in maximum spindle contact
- Long life due to internal specialized heat treat processess
- ISO 9001:2008 policies and practices
- .0002” concentricty or less from taper shank to arbor diameter
- Black oxide prior to finish grind



Mount	Nose Dia. (in.)	Flange Dia. (in.)	Flange Thickness (in.)	Thread	Order No.	Price
NMTB30	.488	1.810	.344	1/2-13 UNC-2B	**GM30NTMB30JT2**	Price
NMTB30	.561	1.810	.344	1/2-13 UNC-2B	**GM30NTMB30JT33**	Price
NMTB30	.746	1.810	.344	1/2-13 UNC-2B	**GM30NTMB30JT3**	Price
NMTB40	.488	2.500	.313	5/8-11 UNC-2B	**GM30NMTB40JT2**	Price
NMTB40	.561	2.500	.313	5/8-11 UNC-2B	**GM30NMTB40JT33**	Price
NMTB40	.624	2.500	.313	5/8-11 UNC-2B	**GM30NMTB40JT6**	Price
NMTB40	.746	2.500	.313	5/8-11 UNC-2B	**GM30NMTB40JT3**	Price
NMTB40	1.037	2.500	.313	5/8-11 UNC-2B	**GM30NMTB40JT4**	Price
NMTB50	.488	3.500	.453	1-8 UNC-2B	**GM30NMTB50JT2**	Price
NMTB50	.561	3.500	.453	1-8 UNC-2B	**GM30NMTB50JT33**	Price
NMTB50	.624	3.500	.453	1-8 UNC-2B	**GM30NMTB50JT6**	Price
NMTB50	1.037	3.500	.453	1-8 UNC-2B	**GM30NMTB50JT4**	Price

RAPIDHOLD V-Flange Morse Taper Adapters

- Balanced by design
- No thru coolant capability
- Recommended for tools with a Morse taper and tang



	CAT40			CAT50		
Inside Taper	Gage Length (in.)	Order No.	Price	Gage Length (in.)	Order No.	Price
1MT	1.7500	**RH2421609**	Price	-	**-**	-
2MT	2.4400	**RH2421610**	Price	2.0000	**RH2422610**	Price
3MT	3.0000	**RH2421611**	Price	2.5000	**RH2422611**	Price
4MT	3.8800	**RH2421612**	Price	3.3800	**RH2422612**	Price
5MT	-	**-**	-	3.7500	**RH2422613**	Price

TECHNIKS V-Flange Morse Taper Adapters

- Taper ground to AT3 accuracy or better
- .0002" runout from taper to tool pocket
- Each holder lab certified for accuracy



	CAT40			CAT50		
Inside Taper	Gage Length (in.)	Order No.	Price	Gage Length (in.)	Order No.	Price
1MT	1.7500	**TE1222611**	Price	-	**-**	-
2MT	2.0000	**TE1222613**	Price	2.3622	**TE1222623**	Price
3MT	2.7500	**TE1222615**	Price	2.5600	**TE1222625**	Price
4MT	3.7500	**TE1222617**	Price	3.7500	**TE1222627**	Price
5MT	-	**-**	-	4.1300	**TE1222629**	Price

PARLEC V-Flange Morse Taper Adapters

- Constructed of alloy steel
- Hardened to RC 56-60
- Shiny taper with black oxide finish
- Taper T.I.R. .0002"
- Parsymmetry™ design for high-speed operation
- Plastic bumper protects spindle and holder during tool changes - Available on NMTB 40 and 50 holders only



	CAT40			CAT50		
Inside Taper	Gage Length	Order No.	Price	Gage Length	Order No.	Price
1MT	1.7500	**GM96C4001MT1**	Price	1.5000	**GM96C5001MT1**	Price
2MT	1.7500	**GM96C4002MT1**	Price	1.7500	**GM96C5002MT1**	Price
3MT	2.5000	**GM96C4003MT2**	Price	2.5000	**GM96C5003MT2**	Price
4MT	3.5000	**GM96C4004MT3**	Price	3.1800	**GM96C5004MT3**	Price
5MT	-	**-**	-	4.7500	**GM96C5005MT4**	Price

ETM V-Flange Morse Taper Adapters

- Taper T.I.R. .0002"
- Hardened to RC 56-60



	CAT40			CAT50		
Inside Taper	Gage Length (in.)	Order No.	Price	Gage Length (in.)	Order No.	Price
1MT	1.7500	**GM62334001**	Price	1.5000	**GM62335001**	Price
2MT	2.2500	**GM62334002**	Price	2.0000	**GM62335002**	Price
3MT	2.7500	**GM62334003**	Price	2.5000	**GM62335003**	Price
4MT	3.6300	**GM62334004**	Price	3.3800	**GM62335004**	Price
5MT	-	**-**	-	3.7500	**GM62335005**	Price

Briney V-Flange Morse Taper Adapters

- .0002" concentricty or less from taper shank to test diameter
- Certified with actual dimensions etched on the test bar
- For inspection of machine spindle runout
- Ships in wooden storage case



	NMTB40			NMTB50		
Inside Taper	Gage Length	Order No.	Price	Gage Length	Order No.	Price
2MT	1.250	**GM30NMTB40MT2**	Price	2.440	**GM30NMTB50MT2**	Price
3MT	1.620	**GM30NMTB40MT3**	Price	1.625	**GM30NMTB50MT3**	Price
4MT	3.500	**GM30NMTB40MT4**	Price	3.750	**GM30NMTB50MT4**	Price

BT30 V-Flange Shell Mill Holders

- Offers H6 arbor tolerance for less chatter and better tool life
- Lab certified for dimensional accuracy
- The taper is ground to AT3 tolerance for maximum spindle contact



Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
3/4	1.18	**TE1216611**	Price
1	1.77	**TE1216612**	Price
1-1/4	1.77	**TE1216614**	Price

BT40 V-Flange Shell Mill Holders

- Offers H6 arbor tolerance for less chatter and better tool life
- Lab certified for dimensional accuracy
- The taper is ground to AT3 tolerance for maximum spindle contact



Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
3/4	1.00	**TE121661534**	Price
3/4	4.00	**TE12166154**	Price
3/4	6.00	**TE12166156**	Price
1	1.77	**TE1216615**	Price
1	3.54	**TE1216617**	Price
1-1/4	1.77	**TE1216620**	Price
1-1/2	2.36	**TE1216626**	Price
1-1/4	4.00	**TE12166204**	Price

BT50 V-Flange Shell Mill Holders

- Offers H6 arbor tolerance for less chatter and better tool life
- Lab certified for dimensional accuracy
- The taper is ground to AT3 tolerance for maximum spindle contact



Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
1	1.77	**TE1216639**	Price
1-1/2	1.77	**TE1216645**	Price
1	3.00	**TE12166393**	Price
1-1/4	1.77	**TE1216642**	Price
2	2.95	**TE1216648**	Price

RAPIDHOLD BT40 V-Flange Shell Mill Holders

- Produced according to AT3 specifications
- Tools are made of high quality alloy steel
- Shell end mill pilot T.I.R. ≤ .0002”
- Thru the spindle coolant capability (Except R8 Style)
- Constructed of alloy steel



Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
1	1.77	**RH2524502R**	Price
1-1/2	2.36	**RH2524504R**	Price
1-1/4	2.36	**RH2524503R**	Price
3/4	1.77	**RH2524501R**	Price
3/4	1.77	**RH2524505R**	Price

RAPIDHOLD BT50 V-Flange Shell Mill Holders

- Produced according to AT3 specifications
- Tools are made of high quality alloy steel
- Shell end mill pilot T.I.R. ≤ .0002”
- Thru the spindle coolant capability (Except R8 Style)
- Constructed of alloy steel



Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
1	1.77	**RH2525502R**	Price
1	4.00	**RH2525503R**	Price
1-1/2	1.77	**RH2525505R**	Price
1-1/2	4.00	**RH2525506R**	Price
1-1/4	4.00	**RH2525504R**	Price
2	2.36	**RH2525507R**	Price
2	4.00	**RH2525508R**	Price
3/4	4.00	**RH2525501R**	Price

CAT40 & CAT50 V-Flange Shell Mill Holders

- Nose configuration does not conform to ANSI specifications
- Tool Holder designed for Fadal machining center



Shank - CAT40			
Pilot Dia. (in.)	**Gage Length (in.)**	**Order No.**	**Price**
1/2	1.38	**GM62324008**	Price
3/4	1.38	**GM62324012**	Price
1	2.00	**GM62324016**	Price
1-1/2	2.41	**GM62324024**	Price

Shank - CAT50			
Pilot Dia. (in.)	**Gage Length (in.)**	**Order No.**	**Price**
3/4	1.50	**GM62325012**	Price
1	4.00	**GM62325116**	Price
1-1/4	1.50	**GM62325020**	Price
1-1/4	3.50	**GM62325120**	Price
1-1/2	2.41	**GM62325024**	Price
2	2.41	**GM62325032**	Price
2-1/2	2.41	**GM62325040**	Price

RAPIDHOLD™ CAT40 & CAT50 V-Flange Shell Mill Holders

- Produced according to AT3 specifications
- Tools are made of high quality alloy steel
- Shell end mill pilot T.I.R. ≤ .0002”
- Thru the spindle coolant capability (Except R8 Style)
- Constructed of alloy steel



Shank - CAT40			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
1	2.06	**RH2521504R**	Price
1	4.00	**RH2521505R**	Price
1/2	1.38	**RH2521501R**	Price
1-1/2	2.42	**RH2521508R**	Price
1-1/2	4.00	**RH2521509R**	Price
1-1/4	2.13	**RH2521506R**	Price
1-1/4	4.00	**RH2521507R**	Price
3/4	1.38	**RH2521502R**	Price
3/4	3.50	**RH2521503R**	Price

Shank - CAT50			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
1	2.06	**RH2522506R**	Price
1	4.00	**RH2522507R**	Price

Shank - CAT50			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
1	6.00	**RH2522508R**	Price
1/2	1.38	**RH2522501R**	Price
1/2	3.50	**RH2522502R**	Price
1-1/2	2.41	**RH2522512R**	Price
1-1/2	4.00	**RH2522513R**	Price
1-1/2	6.00	**RH2522514R**	Price
1-1/4	2.12	**RH2522509R**	Price
1-1/4	4.00	**RH2522510R**	Price
1-1/4	6.00	**RH2522511R**	Price
3/4	1.38	**RH2522503R**	Price
3/4	3.50	**RH2522504R**	Price
3/4	6.00	**RH2522505R**	Price

TECHNIKS CAT40 & CAT50 V-Flange Shell Mill Holders

- Offers H6 arbor tolerance for less chatter and better tool life
- Lab certified for dimensional accuracy
- The taper is ground to AT3 tolerance for maximum spindle contact



Shank - CAT40			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
1/2	1.38	**TE1222709**	Price
1/2	4.00	**TE12227094**	Price
3/4	1.38	**TE1222711**	Price
3/4	4.00	**TE12227114**	Price
3/4	6.00	**TE12227116**	Price
1	2.00	**TE1222713**	Price
1	4.00	**TE12227134**	Price
1	6.00	**TE12227136**	Price
1-1/4	2.21	**TE1222715**	Price
1-1/4	4.00	**TE12227154**	Price
1-1/4	6.00	**TE12227156**	Price
1-1/2	2.21	**TE1222717**	Price
1-1/2	4.00	**TE12227174**	Price

Shank - CAT50			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
1/2	1.50	**TE1222719**	Price
3/4	1.50	**TE1222721**	Price
3/4	3.50	**TE122272135**	Price

Shank - CAT50			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
3/4	5.50	**TE122272155**	Price
3/4	8.00	**TE12227218**	Price
3/4	10.0	**TE122272110**	Price
1	2.00	**TE1222723**	Price
1	4.00	**TE12227234**	Price
1	6.00	**TE12227236**	Price
1	8.00	**TE12227238**	Price
1	10.0	**TE122272310**	Price
1-1/4	1.50	**TE1222725**	Price
1-1/4	3.50	**TE122272535**	Price
1-1/4	6.00	**TE12227256**	Price
1-1/4	8.00	**TE12227258**	Price
1-1/2	.94	**TE12227278**	Price
1-1/2	2.41	**TE1222727**	Price
1-1/2	4.00	**TE12227274**	Price
1-1/2	6.00	**TE12227276**	Price
2	2.41	**TE1222729**	Price
2	4.00	**TE12227294**	Price

PARLEC CAT40 & CAT50 V-Flange Shell Mill Holders

- Shiney taper with black oxide finish
- Parsymmetry™ design for high speed operation



Shank - CAT40			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
-	1.00	**GM96C4010SM1**	Price
-	1.38	**GM96C4075SM1**	Price
-	1.50	**GM96C4075SM2**	Price
-	1.62	**GM96C4012SM1**	Price
-	2.00	**GM96C4010SM2**	Price
-	2.41	**GM96C4015SM2**	Price
-	4.00	**GM96C4010SM4**	Price
-	4.00	**GM96C4012SM4**	Price
-	4.00	**GM96C4015SM4**	Price
-	4.00	**GM96C4075SM4**	Price

Shank - CAT50			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
-	1.50	**GM96C5012SM1**	Price
-	1.50	**GM96C5075SM1**	Price

Shank - CAT50			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
-	2.00	**GM96C5010SM2**	Price
-	2.41	**GM96C5015SM2**	Price
-	2.41	**GM96C5020SM2**	Price
-	2.41	**GM96C5025SM2**	Price
-	3.50	**GM96C5012SM3**	Price
-	3.50	**GM96C5075SM3**	Price
-	4.00	**GM96C5015SM4**	Price
-	4.00	**GM96C5020SM4**	Price
-	4.00	**GM96C5025SM4**	Price
-	5.50	**GM96C5012SM5**	Price
-	5.50	**GM96C5075SM5**	Price
-	6.00	**GM96C5010SM6**	Price
-	6.00	**GM96C5015SM6**	Price
-	6.00	**GM96C5020SM6**	Price
-	6.00	**GM96C5025SM6**	Price

WORLD CLASS QUALITY NST / NMTB V-Flange Shell Mill Holders

- Quality Import standard grade for most shop requirements both styles are hardened & ground

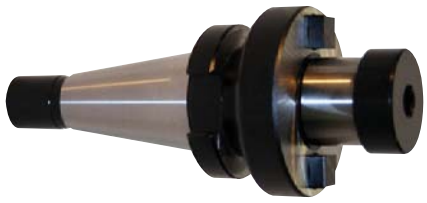


Shank - NST / NMTB40			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
3/4	1.52	**GL504034C58**	Price
1	1.60	**GL5041C78**	Price
1-1/2	2.11	**GL504112C78**	Price
1-1/4	2.11	**GL504114C78**	Price

Shank - NST / NMTB50			
Pilot Dia. (in.)	Gage Length (in.)	Order No.	Price
3/4	1.66	**GL505034C58**	Price
1	1.74	**GL5051C78**	Price
1-1/4	2.25	**GL505114C78**	Price
1-1/2	2.25	**GL505112C78**	Price
2-1/2	2.09	**GL505212C78**	Price
2	3.12	**GL5052C78**	Price

Briney NMTB Shell Mill Holders

- .0002" concentricty or less from taper shank to arbor diameter
- Black oxide prior to finish grind
- Holder is drilled thru for thru coolant - recommend screw from facemill manufacturer for proper plumbing if coolant needs to be plumbed thru cutter



Shank - NMTB30				
Pilot Dia. (in.)	Gage Length (in.)	Thread Size	Order No.	Price
1	1.312	1/2-13 UNC-2B	**GM30NMTB30SM100**	Price
3/4	1.312	1/2-13 UNC-2B	**GM30NMTB30SM075**	Price

Shank - NMTB40				
Pilot Dia. (in.)	Gage Length (in.)	Thread Size	Order No.	Price
1	1.500	5/8-11 UNC-2B	**GM30NMTB40SM100**	Price
1-1/2	2.400	5/8-11 UNC-2B	**GM30NMTB40SM150**	Price
1-1/4	1.500	5/8-11 UNC-2B	**GM30NMTB40SM125**	Price
3/4	1.500	5/8-11 UNC-2B	**GM30NMTB40SM075**	Price

Shank - NMTB50				
Pilot Dia. (in.)	Gage Length (in.)	Thread Size	Order No.	Price
1	1.500	1-8 UNC-2B	**GM30NMTB50SM100**	Price
1-1/2	2.400	1-8 UNC-2B	**GM30NMTB50SM150**	Price
1-1/4	1.500	1-8 UNC-2B	**GM30NMTB50SM125**	Price
2	2.400	1-8 UNC-2B	**GM30NMTB50SM200**	Price
3/4	1.500	1-8 UNC-2B	**GM30NMTB50SM075**	Price

Shell End Mill Arbor Screws

- Compatible with all face mills
- Coolant thru screws up to 1500 PSI



Type - Shell End Mill Replacement Screw				
			Quality Import	
For Pilot Dia. (in.)	Thread Size (in.)	Head Dia. (in.)	Order No.	Price
1/2	1/4-28	5/8	**GR5201**	Price
3/4	3/8-24	7/8	**GR5202**	Price
1	1/2-20	1-3/16	**GR5203**	Price
2	1-14	2.50	**GR5206**	Price
1-1/2	3/4-16	1-7/8	**GR5205**	Price
1-1/4	5/8-18	1.50	**GR5204**	Price

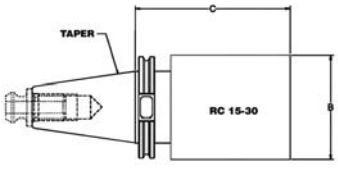
Type - Shell Mill Arbor Screw				
			Techniks	
For Pilot Dia. (in.)	Thread Size (in.)	Head Dia. (in.)	Order No.	Price
1	1/2-20	1-3/16	**TE12WF1**	Price
1/2	1/4-28	5/8	**TE12WF05**	Price
1-1/2	3/4-16	1-7/8	**TE12WF15**	Price
1-1/4	5/8-18	1-1/2	**TE12WF125**	Price

Type - Shell Mill Arbor Screw				
			Techniks	
For Pilot Dia. (in.)	Thread Size (in.)	Head Dia. (in.)	Order No.	Price
1-1/4	5/8-18	1-7/8	**TE12WF1254**	Price
2	1-14	2	**TE12WF2**	Price
2-1/2	1-14	2-1/2	**TE12WF25**	Price
3/4	3/8-24	7/8	**TE12WF075**	Price

Type - Shell Mill Arbor Screw - Coolant Thru				
			Techniks	
For Pilot Dia. (in.)	Thread Size (in.)	Head Dia. (in.)	Order No.	Price
1	1/2-20	1-3/16	**TE12WFC11**	Price
1/2	1/4-28	5/8	**TE12WFC105**	Price
1-1/2	3/4-16	1-7/8	**TE12WFC115**	Price
1-1/4	5/8-18	1-1/2	**TE12WFC1125**	Price
2	1-14	2-1/2	**TE12WFC12**	Price
2-1/2	1-14	3-1/8	**TE12WFC125**	Price
3/4	3/8-24	7/8	**TE12WFC1075**	Price

PARLEC CAT V-Flange Blank Bars

- Constructed of ANSI 8620 steel for long, durable service life
- Taper hardened to RC 56-60 for long service life
- Body hardened to RC 15-30 to allow for machining
- Shiny taper with black oxide finish for the best combination of accuracy and durability
- Parsymmetry™ design for high-speed operation





Nose Dia. B (in.)	Gage Length C (in.)	Order No.	Price
2.75	8.0000	**GM96C5027BB8**	Price
4	7.0000	**GM96C5040BB7**	Price
4	11.0000	**GM96C5040BB1**	Price
6.12	7.0000	**GM96C5061BB7**	Price

Briney Precision Test Bars

- .0002" concentricty or less from taper shank to test diameter
- Certified with actual dimensions etched on the test bar
- For inspection of machine spindle runout
- Ships in wooden storage case



Model No.	Outside Dia. (in.)	Gage Length (in.)	OAL (in.)	Taper	Order No.	Price
BT30PTB-150-800	1.50	8.00	9.906	BT30	**GM30PTB150800**	Price
BT50PTB-200-1200	2.00	12.00	16.008	BT50	**GM30BT50PTB200**	Price
V40PTB-200-1000	2.00	10.00	12.687	CAT40	**GM30V40PTB20010**	Price
V50PTB-200-1200	2.00	12.00	16.000	CAT50	**GM30PTB2001200**	Price
HSK50APTB-150--800	1.50	8.00	8.980	HSK50A	**GM30APTB150800**	Price
HSK63APTB-200-1000	2.00	10.00	11.256	HSK63A	**GM30HSK63APTB20**	Price
HSK80APTB-200-1000	2.00	10.00	11.571	HSK80A	**GM30HSK80APTB20**	Price
HSK100APTB-200-1200	2.00	12.00	13.965	HSK100A	**GM30HSK100APTB2**	Price

Capto-Compatible ER Chucks

- Balance to 25,000 RPM at G2.5
- T.I.R. 0.0001” or better
- PowerCOAT Nut Included
- Compatible with the Capto tool system
- Techniks products are not affiliated with or endorsed by Sandvik AB

New!

- Handles a wide range of machining tasks without having to buy dedicated toolholders
- Simply choose the right size collet for the job, set tool depth, and tighten the collet nut and pull stud to the proper torque using a torque wrench and tightening fixutre
- Certified for accuracy and balance
- Each holder comes with a complete lab report



Model No.	Collet Series	Gage Length	Nose Dia.	Order No.	Price
143.123.08.600	ER8	6	12mm	**TE1214312308600**	Price
143.123.11.600	ER11	6	19mm	**TE1214312311600**	Price
141.122.16.070	ER16	70mm	28mm	**TE1214112216070**	Price
142.122.16.100	ER16	100mm	28mm	**TE1214212216100**	Price
143.123.16.600	ER16	6	22mm	**TE1214312316600**	Price
143.122.16.100	ER16	100mm	28mm	**TE1214312216100**	Price
143.123.20.600	ER20	6	28mm	**TE1214312320600**	Price

Model No.	Collet Series	Gage Length	Nose Dia.	Order No.	Price
141.122.25.052	ER25	52mm	42mm	**TE1214112225052**	Price
142.122.25.055	ER25	55mm	42mm	**TE1214212225055**	Price
143.122.25.060	ER25	60mm	42mm	**TE1214312225060**	Price
141.122.32.054	ER32	54mm	50mm	**TE1214112232054**	Price
142.122.32.057	ER32	57mm	50mm	**TE1214212232057**	Price
143.122.32.070	ER32	70mm	50mm	**TE1214312232070**	Price
143.122.40.065	ER40	65mm	63mm	**TE1214312240065**	Price

C4 & C6 End Mill Holders

- For turn/mill machines that accept “C” style toolholders
- Balanced to 15,000 RPM at G6.3 tolerance
- Each holder is individually lab tested and certified for quality and accuracy and comes with it’s own report
- Coolant-thru spindle is a standard feature



New!

Mount - C4				
Description (in.)	Nose Diameter (in.)	Bore ID (in.)	Order No.	Price
C4 x SLB 5/16 - 1.97	.88	.3125	**TE1214165355197**	Price
C4 x SLN 1/2 - 2.17	1.25	.5	**TE1214165358217**	Price
C4 x SLN 1/4 - 1.97	.78	.25	**TE1214165354197**	Price
C4 x SLN 3/8 - 1.97	1	.375	**TE1214165356197**	Price
C4 x SLN 5/8 - 2.17	1.5	.625	**TE1214165361217**	Price

Mount - C6				
Description (in.)	Nose Diameter (in.)	Bore ID (in.)	Order No.	Price
C6 x SLN 1 - 3.15	2	1	**TE1214365368315**	Price
C6 x SLN 1/2 - 2.36	1.25	.5	**TE1214365358236**	Price
C6 x SLN 1/4 - 2.16	.78	.25	**TE1214365354217**	Price
C6 x SLN 3/4 - 2.56	1.75	.75	**TE1214365364256**	Price
C6 x SLN 3/8 - 2.36	1	.375	**TE1214365356236**	Price
C6 x SLN 5/16 - 2.17	.88	.3125	**TE1214365355217**	Price
C6 x SLN 5/8 - 2.56	1.5	.625	**TE1214365361256**	Price

C4 & C6 SlimFit Holders

- For turn/mill machines that accept “C” style toolholders
- Balanced to 25,000 RPM at G2.5 tolerance
- T.I.R. is 0.0001” or better
- Nose diameter is only 0.55” for better performance in tight spaces
- Each holder is individually lab tested and certified for quality and accuracy and comes with it’s own report
- Coolant-thru is a standard feature



Model No.	Description	Nose Dia. (in.)	Order No.	Price
141.648.06.075	C4 x SBL 6-75mm	.55	**TE1214164806075**	Price
143.648.06.080	C6 x SBL 6-80mm	.55	**TE1214364806080**	Price

Capto Face Mill Arbor

- For turn/mill machines that accept “C” style toolholders
- Techniks Certified for accuracy & balance and backed by performance guarantee
- Compatible with coolant-thru face mills
- H6 arbor tolerance for less chatter and better cutter life



Model No.	Description (in.)	Nose Dia. (in.)	Order No.	Price
141.151.64.100	C4 x FMA 3/4-1	.88	**TE1214115164100**	Price
142.151.68.157	C5 x FMA 1 - 1.57	1.24	**TE1214215168157**	Price
143.151.64.100	C6 x FMA 3/4 - 1	.88	**TE1214315164100**	Price
143.151.68.200	C6 x FMA 1 - 2	1.24	**TE1214315168200**	Price
143.151.72.200	C6 x FMA 1-1/4 - 2	1.614	**TE1214315172200**	Price

Capto C6 Turning Tools

- High accuracy for best repeatability
- Turning, boring, threading, grooving
- Recommend LT1000 grade inserts









Mount - C6, MCLN							
Model No.	Description	Nose Dia.	Projection length	OAL	Insert	Order No.	Price
143.475.12L.065	C6-MCLNL-DX12	63mm	65mm	103mm	CN__43_	**TE1214347512L06**	Price
143.475.12R.065	C6-MCLNR-DX12	63mm	65mm	103mm	CN__43_	**TE1214347512R06**	Price

Mount - C6, MDJN							
Model No.	Description	Nose Dia.	Projection length	OAL	Insert	Order No.	Price
143.476.15L.075	C6-MDJNL-EX15	63mm	75mm	113mm	DN__43_	**TE1214347615L07**	Price
143.476.15R.075	C6-MDJNR-EX15	63mm	75mm	113mm	DN__43_	**TE1214347615R07**	Price

Mount - C6, MDNN							
Model No.	Description	Nose Dia.	Projection length	OAL	Insert	Order No.	Price
143.481.15N.100	C6-MDNNN-H15	63mm	100mm	138mm	DN__43_	**TE1214348115N10**	Price

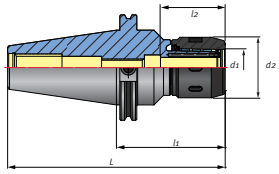
Mount - C6, MVLN							
Model No.	Description	Nose Dia.	Projection length	OAL	Insert	Order No.	Price
143.479.16L.075	C6-MVLNL-EX16	63mm	75mm	113mm	VN__33_	**TE1214347916L07**	Price
143.479.16R.075	C6-MVLNR-EX16	63mm	75mm	113mm	VN__33_	**TE1214347916R07**	Price

Mount - C6, MWLN							
Model No.	Description	Nose Dia.	Projection length	OAL	Insert	Order No.	Price
143.478.08L.065	C6-MWLNL-DX08	63mm	65mm	103mm	WN__43_	**TE1214347808L06**	Price
143.478.08R.065	C6-MWLNR-DX08	63mm	65mm	103mm	WN__43_	**TE1214347808R06**	Price

CAT40 & CAT50 High Performance Milling Chucks

- Grips shank up to 5X tighter than ER40 holders
- Nut seals against the flange when properly tightened (prevents overtightening)
- CoolBLAST coolant-thru is standard on all milling chucks

New!





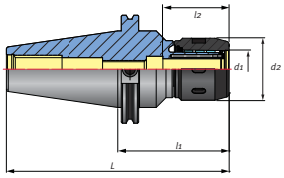
Shank Size - CAT40							
"L" (in.)	"L1" (in.)	"L2" ((in.)	Sleeve O.D (in.)	"D2" (in.)	Holding Power	Order No.	Price
6.69	4	2.38	3/4	2.24	350 ft/lbs	**TE1223202G**	Price
6.89	4.2	2.38	1-1/4	2.8	500 ft/lbs	**TE1223210G**	Price

Shank Size - CAT50							
"L" (in.)	"L1" (in.)	"L2" ((in.)	Sleeve O.D (in.)	"D2" (in.)	Holding Power	Order No.	Price
8	4	2.38	3/4	2.24	350 ft/lbs	**TE1223214G**	Price
8.13	4.13	2.38	1-1/4	2.8	500 ft/lbs	**TE1223222G**	Price

CAT40 & CAT50 Dual Drive Milling Chucks

- One-piece design for Dual-contact spindles
- Grips shank up to 5X tighter than ER40 holders
- Nut seals against the flange when properly tightened (prevents overtightening)

New!





Shank - CAT40							
Model No.	OAL (in.)	Gage Length (in.)	Dim. L1 (in.)	Dim. D1 (in.)	Nose Dia. (in.)	Order No.	Price
43.463G.64.400	6.69	4.00	2.38	.75	2.24	**TE1273202G**	Price
43.463G.72.420	6.89	4.20	2.38	1.25	2.80	**TE1273210G**	Price

Shank - CAT50							
Model No.	OAL (in.)	Gage Length (in.)	Dim. L1 (in.)	Dim. D1 (in.)	Nose Dia. (in.)	Order No.	Price
44.463G.64.400	8.00	4.00	2.38	.75	2.24	**TE1273214G**	Price
44.463G.72.413	8.13	4.13	2.38	1.25	2.80	**TE12472413G**	Price

Reduction Sleeves

- For inch and metric shanks
- T.I.R. only .0001”
- All surfaces precision ground for maximum accuracy

New!



Sleeve OD (in.) - 3/4		
Size (in./mm)	Order No.	Price
1/8	**TE128412618**	Price
3/16	**TE1284126316**	Price
1/4	**TE1284126250**	Price
17/64	**TE12841261764**	Price
5/16	**TE1284126516**	Price
3/8	**TE128412638**	Price
7/16	**TE1284126716**	Price
1/2	**TE1284126500**	Price
9/16	**TE1284126916**	Price
5/8	**TE128412658**	Price
11/32	**TE12841261132**	Price
25/64	**TE12841262564**	Price
15/32	**TE12841261532**	Price
37/64	**TE12841263764**	Price
6mm	**TE128412606**	Price
7mm	**TE128412607**	Price
8mm	**TE128412608**	Price
10mm	**TE128412610**	Price
11mm	**TE128412611**	Price
10.5mm	**TE1284126105**	Price
12mm	**TE128412612**	Price
13mm	**TE128412613**	Price

Sleeve OD (in.) - 3/4		
Size (in./mm)	Order No.	Price
14mm	**TE128412614**	Price
16mm	**TE128412616**	Price

Sleeve OD (in.) - 1-1/4		
Size (in./mm)	Order No.	Price
1/8	**TE1284127125**	Price
3/16	**TE1284127316**	Price
1/4	**TE1284127250**	Price
5/16	**TE1284127516**	Price
3/8	**TE128412738**	Price
7/16	**TE1284127716**	Price
1/2	**TE1284127500**	Price
9/16	**TE1284127916**	Price
5/8	**TE128412758**	Price
11/16	**TE12841271116**	Price
23/32	**TE12841272332**	Price
3/4	**TE128412734**	Price
13/16	**TE12841271316**	Price
7/8	**TE128412778**	Price
1.0	**TE12841271**	Price
8mm	**TE128412708**	Price
10mm	**TE128412710**	Price
12mm	**TE128412712**	Price
14mm	**TE128412714**	Price
15mm	**TE128412715**	Price
16mm	**TE128412716**	Price
18mm	**TE128412718**	Price
20mm	**TE128412720**	Price
21mm	**TE128412721**	Price
23mm	**TE128412723**	Price
25mm	**TE128412725**	Price

HAIMER Power Collet Chucks

- Chuck body fine balanced G2.5, 25,000 1 / Min
- All functional surfaces fine-machined
- Taper tolerance AT3
- Coolant Supply Form ADB
- High runout accuracy .003mm at 3xD with Haimer Power Collets
- Also for Standard ER ISO 15488 / DIN 6499
- Note: When using standard ER collet gage length will get longer



Mount - CAT40			
Collet Style	Gage Length (in.)	Order No.	Price
ER16	2.76	**HA7040720163**	Price
ER16	3.94	**HA7040721163**	Price
ER16	6.3	**HA7040722163**	Price
ER25	2.76	**HA7040720253**	Price
ER25	3.94	**HA7040721253**	Price
ER25	6.3	**HA7040722253**	Price
ER32	2.76	**HA7040720323**	Price
ER32	3.94	**HA7040721323**	Price
ER32	6.3	**HA7040722323**	Price

Mount - CAT50			
Collet Style	Gage Length (in.)	Order No.	Price
ER16	2.76	**HA7050720163**	Price
ER16	3.94	**HA7050721163**	Price
ER16	5.12	**HA7050724163**	Price
ER16	6.3	**HA7050722163**	Price
ER25	2.76	**HA7050720253**	Price
ER25	3.94	**HA7050721253**	Price

Mount - CAT50			
Collet Style	Gage Length (in.)	Order No.	Price
ER25	5.12	**HA7050724253**	Price
ER25	6.3	**HA7050722253**	Price
ER32	2.76	**HA7050720323**	Price
ER32	3.94	**HA7050721323**	Price
ER32	5.12	**HA7050724323**	Price
ER32	6.3	**HA7050722323**	Price

Mount - HSK-A63			
Collet Style	Gage Length (in.)	Order No.	Price
ER16	3.94	**HA70A63020163**	Price
ER25	3.94	**HA70A63020253**	Price
ER32	3.94	**HA70A63020323**	Price

HAIMER Power Collets for Power Chucks

- High runout accuracy .00012” at 3xD
- Superior clamping strength
- Fits Haimer Power Collet Chucks
- For cylindrical shanks with tolerance h10



Collet Style - ER16		
ID/Square (in./mm)	Order No.	Price
1/4	**HA708116314Z**	Price
1/8	**HA708116318Z**	Price
10mm	**HA708116310**	Price
2mm	**HA708116302**	Price
3/16	**HA7081163316Z**	Price
3/8	**HA708116338Z**	Price
3mm	**HA708116303**	Price
4.5mm	**HA7081163045**	Price
4mm	**HA708116304**	Price
5/16	**HA7081163516Z**	Price
5mm	**HA708116305**	Price
6mm	**HA708116306**	Price
8mm	**HA708116308**	Price

Collet Style - ER25		
ID/Square (in./mm)	Order No.	Price
1/2	**HA708125312Z**	189.00
1/4	**HA708125314Z**	189.00
1/8	**HA708125318Z**	189.00
10mm	**HA708125310**	189.00
12mm	**HA708125312**	189.00
14mm	**HA708125314**	189.00
16mm	**HA708125316**	189.00
2mm	**HA708125302**	189.00
3/16	**HA7081253316Z**	189.00
3/8	**HA708125338Z**	189.00
3mm	**HA708125303**	189.00
4mm	**HA708125304**	189.00
5/16	**HA7081253516Z**	189.00
5/8	**HA708125358Z**	189.00
5mm	**HA708125305**	189.00
6mm	**HA708125306**	189.00

Collet Style - ER25		
ID/Square (in./mm)	Order No.	Price
7/16	**HA7081253716Z**	189.00
8mm	**HA708125308**	189.00
9/16	**HA7081253916Z**	189.00

Collet Style - ER32		
ID/Square (in./mm)	Order No.	Price
1/2	**HA708132312Z**	Price
1/4	**HA708132314Z**	Price
1/8	**HA708132318Z**	Price
10mm	**HA708132310**	Price
12mm	**HA708132312**	Price
14mm	**HA708132314**	Price
16mm	**HA708132316**	Price
18mm	**HA708132318**	Price
20mm	**HA708132320**	Price
2mm	**HA708132302**	Price
3/16	**HA7081323316Z**	Price
3/4	**HA708132334Z**	Price
3/8	**HA708132338Z**	Price
3mm	**HA708132303**	Price
4mm	**HA708132304**	Price
5/16	**HA7081323516Z**	Price
5/8	**HA708132358Z**	Price
5mm	**HA708132305**	Price
6mm	**HA708132306**	Price
7/16	**HA7081323716Z**	Price
8mm	**HA708132308**	Price
9/16	**HA7081323916Z**	Price

HAIMER Power Collets with Safe-Lock

Collet Style - ER25		
ID/Square (in./mm)	Order No.	Price
1/2	HA708125312Z7	Price
10mm	HA7081253107	Price
12mm	HA7081253127	Price
14mm	HA7081253147	Price
16mm	HA7081253167	Price
3/8	HA708125338Z7	Price
5/8	HA708125358Z7	Price
6mm	HA7081253067	Price
8mm	HA7081253087	Price

Collet Style - ER32		
ID/Square (in./mm)	Order No.	Price
1/2	HA708132312Z7	Price
10mm	HA7081323107	Price
12mm	HA7081323127	Price
14mm	HA7081323147	Price



Collet Style - ER32		
ID/Square (in./mm)	Order No.	Price
16mm	HA7081323167	Price
18mm	HA7081323187	Price
20mm	HA7081323207	Price
3/4	HA708132334Z7	Price
3/8	HA708132338Z7	Price
5/8	HA708132358Z7	Price
6mm	HA7081323067	Price
8mm	HA7081323087	Price

HAIMER Power Collet Sets

- 3-micron accuracy
- Superior Clamping Strength
- Fits HAIMER Power collet chucks



Collet Style	Size Range	Order No.	Price
ER16	2mm - 10mm	HA708116300	Price
ER25	2mm - 16mm	HA708125300	Price
ER32	2mm - 20mm	HA708132300	Price

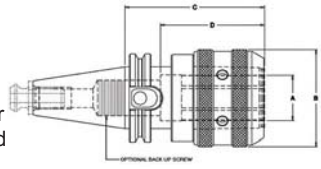
HAIMER Power Chuck Wrenches



For Collet Type	Order No.	Price
ER16	HA708465016	Price
ER25	HA708465025	Price
ER32	HA708465032	Price

PARLEC V-Flange Power Milling Chucks

- Constructed of alloy steel for long, durable service life
- Hardened to RC 56-60 for long service life
- Shiny taper with black oxide finish for the best combination of accuracy and durability
- End mill socket T.I.R.≤.0002”
- Through-spindle coolant capability
- Parsymmetry™ design for high-speed operation
- Flange-entry coolant is available on request





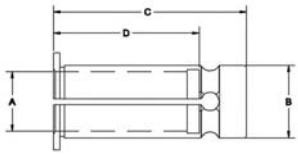
Shank Size - CAT40					
A (in.)	Nose-B (in.)	Projection-C (in.)	Bushing Used	Order No.	Price
3/4	2.1900	2.4800	75MC	GM97C4075MC2	Price
3/4	2.1900	3.7100	75MC	GM97C4075MC3	Price
1-1/4	2-3/4	4.1300	12MC	GM97C4012MC4	Price

Shank Size - CAT50					
A (in.)	Nose-B (in.)	Projection-C (in.)	Bushing Used	Order No.	Price
1-1/4	2-3/4	4.1300	12MC	GM97C5012MC4	Price
1-1/4	2-3/4	6.0000	12MC	GM97C5012MC6	Price

PARLEC Power Milling Chuck Bushings



12MCRB-100



Sleeve - 12MC				
Sleeve ID-A (in.)	Sleeve OD-B (in.)	C (in.)	Order No.	Price
1/8	1-1/4	2-3/4	GM9712MCRB188	Price
1/4	1-1/4	2-3/4	GM9712MCRB250	Price
5/16	1-1/4	2-3/4	GM9712MCRB313	Price
3/8	1-1/4	2-3/4	GM9712MCRB375	Price
1/2	1-1/4	2-3/4	GM9712MCRB500	Price
9/16	1-1/4	2-3/4	GM9712MCRB563	Price
5/8	1-1/4	2-3/4	GM9712MCRB625	Price
3/4	1-1/4	2-3/4	GM9712MCRB750	Price
7/8	1-1/4	2-3/4	GM9712MCRB875	Price
1	1-1/4	2-3/4	GM9712MCRB100	Price

Sleeve - 75MC				
Sleeve ID-A (in.)	Sleeve OD-B (in.)	C (in.)	Order No.	Price
3/16	3/4	2	GM9775MCRB188	Price
1/4	3/4	2	GM9775MCRB250	Price
5/16	3/4	2	GM9775MCRB313	Price
3/8	3/4	2	GM9775MCRB375	Price
1/2	3/4	2	GM9775MCRB500	Price
9/16	3/4	2	GM9775MCRB563	Price
5/8	3/4	2	GM9775MCRB625	Price

SCHUNK Milling Chuck Holders

TENDO Benifits:

- Maximum true running and repeat accuracy greater than 0.003 mm
- Excellent vibration damping
- Improved surface quality
- Prevents chipping of tool cutting edge
- Versatile clamping range thanks to intermediate sleeves
- Accurate length presetting axially or radially
- Easy handling - without peripheral equipment tools are changed within seconds
- Precision-balanced as standard G 2.5 / 25000 1/min.

SINO Benefits:

- Universal toolholders is designed for multi-purpose use based on the expansion technology
- Vibration-damping design
- Micro-blowouts at the lip of the tool are reduced to a minimum.
- Improved surface quality of the workpiece
- Flexible clamping range due to use of intermediate sleeves
- Concentricity 0.005 mm measured in the clamping bore
- Precision-balanced as standard G 6.3 / 15000 1/min

Sino





Tendo

Type - SINO-R, Universal Holder					
Shank Size (in.)	Sleeve (in.)	Nose Dia. (in.)	Projection (in.)	Order No.	Price
CAT40	1/2	1.54	73.1mm	**HF80209612**	Price
CAT40	3/4	1.91	78mm	**HF80209614**	Price
CAT40	1	1.91	100mm	**HF80209613**	Price
CAT40	1-1/4	2.5600	115mm	**HF80209615**	Price
CAT50	3/4	1.91	95mm	**HF80209634**	Price
CAT50	1	1.91	95mm	**HF80209635**	Price
CAT50	1-1/4	2.5600	90mm	**HF80209636**	Price

Type - TENDO-EC, Hydraulic Holder					
Shank Size (in.)	Sleeve (in.)	Nose Dia. (in.)	Projection (in.)	Order No.	Price
BT40	12mm	1.65	58mm	**HF80206434**	Price
BT40	20mm	1.94	72.5mm	**HF80206436**	Price
BT50	12mm	1.65	69mm	**HF80206444**	Price
BT50	20mm	1.94	83.5mm	**HF80206446**	Price
BT50	32mm	2.8300	90mm	**HF80206448**	Price
CAT40	3/4	1.94	64.5mm	**HF80206466**	Price
CAT50	1-1/4	2.8400	81mm	**HF80203947**	Price
CAT40	20mm	1.94	64.5mm	**HF80206486**	Price
CAT50	32mm	2.8400	81mm	**HF80203988**	Price

SCHUNK Milling Chuck Sleeves

Sealed Intermediate Sleeves:

- For internal coolant supply
- Closed Collar
- Coolant proof up to Max. 80 bar

Slotted Intermediate Sleeves:

- Peripheral Cooling
- Collar Slotted
- Not coolant proof





Type - Sealed				
Model No.	Sleeve ID (in./mm)	Sleeve OD (in.)	Order No.	Price
224386	1/8	3/4	**HF80224386**	Price
224387	3/16	3/4	**HF80224387**	Price
224388	1/4	3/4	**HF80224388**	Price
224389	5/16	3/4	**HF80224389**	Price
224390	3/8	3/4	**HF80224390**	Price
224391	7/16	3/4	**HF80224391**	Price
224392	1/2	3/4	**HF80224392**	Price
224393	9/16	3/4	**HF80224393**	Price
224394	5/8	3/4	**HF80224394**	Price
224395	3mm	3/4	**HF80224395**	Price
224396	4mm	3/4	**HF80224396**	Price
224397	5mm	3/4	**HF80224397**	Price
224398	6mm	3/4	**HF80224398**	Price
224399	8mm	3/4	**HF80224399**	Price
224400	10mm	3/4	**HF80224400**	Price
224401	12mm	3/4	**HF80224401**	Price
224402	14mm	3/4	**HF80224402**	Price
224404	1/4	1-1/4	**HF80224404**	Price
224405	5/16	1-1/4	**HF80224405**	Price
224406	3/8	1-1/4	**HF80224406**	Price
224407	7/16	1-1/4	**HF80224407**	Price
224408	1/2	1-1/4	**HF80224408**	Price
224409	9/16	1-1/4	**HF80224409**	Price
224410	5/8	1-1/4	**HF80224410**	Price
224411	11/16	1-1/4	**HF80224411**	Price
224412	3/4	1-1/4	**HF80224412**	Price
224414	7/8	1-1/4	**HF80224414**	Price
224415	15/16	1-1/4	**HF80224415**	Price
224416	1	1-1/4	**HF80224416**	Price
224421	8mm	1-1/4	**HF80224421**	Price
224422	10mm	1-1/4	**HF80224422**	Price
224423	12mm	1-1/4	**HF80224423**	Price
224424	14mm	1-1/4	**HF80224424**	Price
224425	16mm	1-1/4	**HF80224425**	Price
224426	18mm	1-1/4	**HF80224426**	Price
224427	20mm	1-1/4	**HF80224427**	Price
224428	25mm	1-1/4	**HF80224428**	Price

Type - Slotted				
Model No.	Sleeve ID (in./mm)	Sleeve OD (in.)	Order No.	Price
217960	1/8	3/4	**HF80217960**	Price
217961	3/16	3/4	**HF80217961**	Price
217962	1/4	3/4	**HF80217962**	Price
217963	5/16	3/4	**HF80217963**	Price
217964	3/8	3/4	**HF80217964**	Price
217965	7/16	3/4	**HF80217965**	Price
217966	1/2	3/4	**HF80217966**	Price
217967	9/16	3/4	**HF80217967**	Price
217968	5/8	3/4	**HF80217968**	Price
217969	3mm	3/4	**HF80217969**	Price
217970	4mm	3/4	**HF80217970**	Price
217972	6mm	3/4	**HF80217972**	Price
217973	8mm	3/4	**HF80217973**	Price
217974	10mm	3/4	**HF80217974**	Price
217975	12mm	3/4	**HF80217975**	Price
217976	14mm	3/4	**HF80217976**	Price
217980	1/4	1-1/4	**HF80217980**	Price
217981	5/16	1-1/4	**HF80217981**	Price
217982	3/8	1-1/4	**HF80217982**	Price
217984	1/2	1-1/4	**HF80217984**	Price
217985	9/16	1-1/4	**HF80217985**	Price
217986	5/8	1-1/4	**HF80217986**	Price
217987	11/16	1-1/4	**HF80217987**	Price
217988	3/4	1-1/4	**HF80217988**	Price
217990	7/8	1-1/4	**HF80217990**	Price
217992	1	1-1/4	**HF80217992**	Price
218010	20mm	1-1/4	**HF80218010**	Price
218011	25mm	1-1/4	**HF80218011**	Price

HAIMER CAT40, CAT50 Shrink Chucks - Standard Version

- Shrink fit chuck suitable to all kind of shrink fit units
- Fine balanced to G2.5 at 25,000 RPM
- Certified AT3 Taper
- High runout accuracy 3µm
- Heat resistant hot-working steel
- Hardened 54-2 HRC
- For HSS and solid carbide tools
- Shank tolerance h6
- With threaded holes in order to balance with balancing screws
- Cool Jet coolant bores that can be sealed included
- Made in Germany



Shank - CAT40			
Bore Dia. (in./mm)	Gage Length (in./mm)	Order No.	Price
1/8	3.15	**HA714084018Z**	Price
3/16	3.15	**HA7140840316Z**	Price
1/4	3.15	**HA714084014Z4**	Price
1/4	5.12	**HA714084414Z4**	Price
1/4	6.3	**HA714084214Z4**	Price
5/16	3.15	**HA7140840516Z4**	Price
5/16	5.12	**HA7140844516Z4**	Price
5/16	6.3	**HA7140842516Z4**	Price
3/8	3.15	**HA714084038Z4**	Price
3/8	5.12	**HA714084438Z4**	Price
3/8	6.3	**HA714084238Z4**	Price
7/16	3.15	**HA7140840716Z4**	Price
7/16	5.12	**HA7140844716Z4**	Price
7/16	6.3	**HA7140842716Z4**	Price
1/2	3.15	**HA714084012Z4**	Price
1/2	5.12	**HA714084412Z4**	Price
1/2	5.12	**HA714084412Z36**	Price
1/2	6.3	**HA714084212Z4**	Price
5/8	3.15	**HA714084058Z4**	Price
5/8	5.12	**HA714084458Z4**	Price
5/8	6.3	**HA714084258Z4**	Price
3/4	3.15	**HA714084034Z4**	Price
3/4	5.12	**HA714084434Z4**	Price
3/4	5.12	**HA714084434Z36**	Price
3/4	6.3	**HA714084234Z4**	Price
7/8	3.15	**HA714084078Z4**	Price
7/8	5.12	**HA714084478Z4**	Price
7/8	6.3	**HA714084278Z4**	Price
1	3.94	**HA71408401Z4**	Price
1	5.12	**HA71408441Z4**	Price
1	6.3	**HA71408421Z4**	Price
1-1/4	5.12	**HA7140844114Z4**	Price
1-1/4	6.3	**HA7140842114Z4**	Price
1-1/4	3.94	**HA7140840114Z4**	Price
3mm	80mm	**HA714084003**	Price
4mm	80mm	**HA714084004**	Price
5mm	80mm	**HA714084005**	Price
6mm	80mm	**HA7140840064**	Price
6mm	130mm	**HA7140844064**	Price
6mm	160mm	**HA7140842064**	Price
8mm	80mm	**HA7140840084**	Price
8mm	130mm	**HA7140844084**	Price
8mm	160mm	**HA7140842084**	Price
10mm	80mm	**HA7140840104**	Price
10mm	160mm	**HA7140842104**	Price
12mm	80mm	**HA7140840124**	Price
12mm	130mm	**HA7140844124**	Price
12mm	160mm	**HA7140842124**	Price
14mm	80mm	**HA7140840144**	Price
14mm	130mm	**HA7140844144**	Price
14mm	160mm	**HA7140842144**	Price
16mm	80mm	**HA7140840164**	Price

Shank - CAT40			
Bore Dia. (in./mm)	Gage Length (in./mm)	Order No.	Price
16mm	130mm	**HA7140844164**	Price
16mm	160mm	**HA7140842164**	Price
20mm	80mm	**HA7140840204**	Price
20mm	130mm	**HA7140844204**	Price
20mm	160mm	**HA7140842204**	Price
25mm	100mm	**HA7140840254**	Price
25mm	130mm	**HA7140844254**	Price
25mm	160mm	**HA7140842254**	Price
32mm	100mm	**HA7140840324**	Price
32mm	130mm	**HA7140844324**	Price

Shank - CAT50			
Bore Dia. (in./mm)	Gage Length (in./mm)	Order No.	Price
1/4	3.15	**HA715084014Z4**	Price
1/4	5.12	**HA715084414Z4**	Price
1/4	6.3	**HA715084214Z4**	Price
5/16	3.15	**HA7150840516Z3**	Price
5/16	3.15	**HA7150840516Z26**	Price
5/16	3.15	**HA7150840516Z4**	Price
5/16	5.12	**HA7150844516Z4**	Price
5/16	6.3	**HA7150842516Z4**	Price
3/8	3.15	**HA715084038Z4**	Price
3/8	3.15	**HA715084038Z3**	Price
3/8	3.15	**HA715084038Z36**	Price
3/8	5.12	**HA715084438Z4**	Price
3/8	6.3	**HA715084238Z4**	Price
7/16	3.15	**HA7150840716Z4**	Price
7/16	5.12	**HA7150844716Z4**	Price
7/16	6.3	**HA7150842716Z4**	Price
1/2	3.15	**HA715084012Z4**	Price
1/2	5.12	**HA715084412Z4**	Price
1/2	6.3	**HA715084212Z4**	Price
5/8	3.15	**HA715084058Z4**	Price
5/8	3.15	**HA715084058Z3**	Price
5/8	3.15	**HA715084058Z36**	Price
5/8	3.15	**HA715084058Z37**	Price
5/8	5.12	**HA715084458Z4**	Price
5/8	6.3	**HA715084258Z4**	Price
3/4	3.15	**HA715084034Z26**	Price
3/4	3.15	**HA715084034Z4**	Price
3/4	5.12	**HA715084434Z4**	Price
3/4	6.3	**HA715084234Z4**	Price
7/8	5.12	**HA715084478Z4**	Price
7/8	6.3	**HA715084278Z4**	Price
1	3.94	**HA71508401Z4**	Price
1	5.12	**HA71508441Z4**	Price
1	6.3	**HA71508421Z4**	Price
1-1/4	3.54	**HA7150850114Z67**	Price
1-1/4	3.54	**HA7150850114Z6**	Price
1-1/4	3.94	**HA7150840114Z4**	Price
1-1/4	5.12	**HA7150844114Z4**	Price
1-1/4	6.3	**HA7150842114Z4**	Price
1-1/2	3.94	**HA7150850112Z6**	Price
1-1/2	3.94	**HA7150850112Z67**	Price

F.O.B. Factory

HAIMER CAT40, CAT50 Power Shrink Chucks

The Power Shrink Chuck is the shrink fit chuck for highest machining capacity in high-speed manufacturing. The optimized design combines high rigidity with dampening vibrations, therefore giving more protection to machines, spindles and tools.

- Shrink fit chuck suitable to all inductive shrink fit units
- Precesion AT3 Tolerance Shank
- Balanced to G2.5 at 25,000 RPM or U



Shank - CAT40			
Bore Dia. (in./mm)	Gage Length (in./mm)	Order No.	Price
1/4	2.56	**HA714084514Z3**	Price
1/4	2.56	**HA714084514Z36**	Price
1/4	5.12	**HA714084414Z3**	Price
1/4	6.3	**HA714084214Z3**	Price
5/16	2.56	**HA7140845516Z3**	Price
5/16	5.12	**HA7140844516Z3**	Price
5/16	6.3	**HA7140842516Z3**	Price
3/8	2.56	**HA714084538Z3**	Price
3/8	2.56	**HA714084538Z36**	Price
3/8	5.12	**HA71408438Z3**	Price
3/8	6.3	**HA714084238Z36**	Price
3/8	6.3	**HA714084238Z3**	Price
1/2	2.56	**HA714084512Z3**	Price
1/2	2.56	**HA714084512Z37**	Price
1/2	2.56	**HA714084512Z36**	Price
1/2	3.15	**HA714084012Z26**	Price
1/2	5.12	**HA714084412Z3**	Price
1/2	5.12	**HA714084412Z37**	Price
1/2	6.3	**HA714084212Z37**	Price
1/2	6.3	**HA71408212Z3**	Price
1/2	6.3	**HA714084212Z26**	Price
5/8	2.56	**HA714084558Z37**	Price
5/8	2.56	**HA714084558Z3**	Price
5/8	5.12	**HA714084458Z37**	Price
5/8	5.12	**HA714084458Z3**	Price
5/8	6.3	**HA714084258Z37**	Price
3/4	2.56	**HA714084534Z37**	Price
5/8	6.3	**HA7140842583**	Price
3/4	2.56	**HA714084534Z3**	Price
3/4	2.56	**HA714084534Z36**	Price
3/4	5.12	**HA714084434Z37**	Price
3/4	5.12	**HA714084434Z3**	Price
3/4	6.3	**HA714084234Z36**	Price
3/4	6.3	**HA714084234Z37**	Price
3/4	6.3	**HA714084234Z3**	Price
1	2.56	**HA71408451Z37**	Price
6mm	65mm	**HA7140845063**	Price
6mm	130mm	**HA7140844063**	Price
6mm	160mm	**HA7140842063**	Price
8mm	65mm	**HA7140845083**	Price
8mm	130mm	**HA7140844083**	Price
10mm	65mm	**HA7140845103**	Price
10mm	130mm	**HA7140844103**	Price
8mm	160mm	**HA7140842083**	Price
10mm	130mm	**HA7140844104**	Price
10mm	160mm	**HA7140842103**	Price
12mm	65mm	**HA7140845123**	Price
12mm	65mm	**HA71408451237**	Price
12mm	130mm	**HA7140844123**	Price
12mm	130mm	**HA71408441237**	Price
12mm	160mm	**HA71408421237**	Price
12mm	160mm	**HA7140842123**	Price
16mm	65mm	**HA7140845163**	Price
16mm	65mm	**HA71408451637**	Price
16mm	130mm	**HA71408441637**	Price
16mm	130mm	**HA7140844163**	Price
16mm	160mm	**HA71408421637**	Price
16mm	160mm	**HA7140842163**	Price
20mm	65mm	**HA71408452037**	Price
20mm	65mm	**HA7140845203**	Price
20mm	130mm	**HA71408442037**	Price
20mm	130mm	**HA7140844203**	Price

Shank - CAT40			
Bore Dia. (in./mm)	Gage Length (in./mm)	Order No.	Price
20mm	160mm	**HA7140842203**	Price
20mm	160mm	**HA71408422037**	Price
25mm	75mm	**HA71408452537**	Price
25mm	75mm	**HA7140845253**	Price

Shank - CAT50			
Bore Dia. (in./mm)	Gage Length (in./mm)	Order No.	Price
3/4	7.87	**HA715084634Z3**	Price
1/4	3.15	**HA7150840142Z6**	Price
1/4	3.15	**HA715084014Z3**	Price
1/4	3.15	**HA715084014Z36**	Price
1/4	6.3	**HA715084214Z3**	Price
1/4	6.3	**HA715084214Z36**	Price
1/4	7.87	**HA715084614Z3**	Price
5/16	6.3	**HA7150842516Z3**	Price
3/8	6.3	**HA715084238Z3**	Price
3/8	7.87	**HA715084638Z3**	Price
1/2	3.15	**HA715084012Z3**	Price
1/2	3.15	**HA715084012Z36**	Price
1/2	3.15	**HA715084012Z37**	Price
1/2	6.3	**HA715084212Z37**	Price
1/2	6.3	**HA715084212Z36**	Price
1/2	6.3	**HA715084212Z3**	Price
1/2	7.87	**HA715084612Z37**	Price
1/2	7.87	**HA715084612Z3**	Price
1/2	7.87	**HA715084612Z38**	Price
1/2	7.87	**HA715084612Z36**	Price
5/8	6.3	**HA715084258Z37**	Price
5/8	6.3	**HA715084258Z3**	Price
5/8	6.3	**HA715084238Z36**	Price
5/8	6.3	**HA715084258Z36**	Price
5/8	7.87	**HA715084658Z37**	Price
5/8	7.87	**HA715084658Z3**	Price
3/4	3.15	**HA715085058Z6**	Price
3/4	3.15	**HA715084034Z36**	Price
3/4	3.15	**HA715084034Z3**	Price
3/4	3.15	**HA715084034Z37**	Price
3/4	3.15	**HA715084034Z38**	Price
3/4	3.35	**HA715085034Z6**	Price
3/4	3.35	**HA715085034Z67**	Price
3/4	6.3	**HA715084234Z37**	Price
3/4	6.3	**HA715084234Z36**	Price
3/4	6.3	**HA715084234Z3**	Price
3/4	6.3	**HA715084234Z38**	Price
3/4	7.87	**HA715084634Z37**	Price
3/4	7.87	**HA715084634Z36**	Price
1	3.54	**HA71508501Z6**	Price
1	3.54	**HA71508501Z67**	Price
1	3.94	**HA71508401Z37**	Price
1	3.94	**HA71508401Z3**	Price
1	6.3	**HA71508421Z3**	Price
1	6.3	**HA71508421Z37**	Price
1	7.87	**HA715084613Z3**	Price
1	7.87	**HA71508461Z37**	Price
2	5.51	**HA71508502Z6**	Price
2	5.51	**HA71508502Z67**	Price
20mm	85mm	**HA7150850206**	Price

Briney Shrink Fit Tool Holders

One of the original pioneers that introduced Shrink-Fit Tool Holders to the world now offer you choices. Whichever it may be, the original USA-ANSI Design Shrink-Fit Tool Holder or the newer European-DIN Design Shrink-Fit Tool Holder.

By Manufacturing both designs, Briney is instantly compatiable with our competitor's induction units and accessories.



USA-ANSI Standard

- 3° Nose angle
- Shorter bearing surface
- No back-up screw
- Superior holding force
- Consistent wall thickness throughout entire design
- **DIN Standard Available**

MADE IN THE USA

Shank - CAT 40				
Bore Dia. (in./mm)	Gage Length (in.)	Standard	Order No.	Price
1/8	2.750	ANSI	**GM3012275**	Price
1/8	4.000	ANSI	**GM3012400**	Price
3/16	2.950	ANSI	**GM3018275**	Price
3/16	4.000	ANSI	**GM3018400**	Price
3/16	6.000	ANSI	**GM3018600**	Price
1/4	2.750	ANSI	**GM3025275**	Price
1/4	4.000	ANSI	**GM3025400**	Price
1/4	6.000	ANSI	**GM3025600**	Price
5/16	2.750	ANSI	**GM3031275**	Price
5/16	4.000	ANSI	**GM3031400**	Price
5/16	6.000	ANSI	**GM3031600**	Price
3/8	2.750	ANSI	**GM3038275**	Price
3/8	4.000	ANSI	**GM3038400**	Price
3/8	6.000	ANSI	**GM3038600**	Price
1/2	2.750	ANSI	**GM3050275**	Price
1/2	4.000	ANSI	**GM3050400**	Price
1/2	6.000	ANSI	**GM3050600**	Price
5/8	2.750	ANSI	**GM3062275**	Price
5/8	4.000	ANSI	**GM3062400**	Price
5/8	6.000	ANSI	**GM3062600**	Price
3/4	2.750	ANSI	**GM3075275**	Price
3/4	4.000	ANSI	**GM3075400**	Price
3/4	6.000	ANSI	**GM3075600**	Price
7/8	2.750	ANSI	**GM3088275**	Price
7/8	6.000	ANSI	**GM3088600**	Price
1	2.750	ANSI	**GM30100275**	Price
1	4.000	ANSI	**GM30100400**	Price
1	6.000	ANSI	**GM30100600**	Price
1-1/4	2.750	ANSI	**GM30125275**	Price
1-1/4	4.000	ANSI	**GM30125400**	Price
1-1/4	6.000	ANSI	**GM30125600**	Price
6mm	2.756	ANSI	**GM306M70**	Price
6mm	3.937	ANSI	**GM306M100**	Price
8mm	2.756	ANSI	**GM308M70**	Price
8mm	3.937	ANSI	**GM308M100**	Price
10mm	2.756	ANSI	**GM3010M70**	Price
10mm	3.937	ANSI	**GM3010M100**	Price
12mm	2.756	ANSI	**GM3012M70**	Price
12mm	3.937	ANSI	**GM3012M100**	Price
14mm	2.756	ANSI	**GM3014M70**	Price
14mm	3.937	ANSI	**GM3014M100**	Price
16mm	2.756	ANSI	**GM3016M70**	Price
16mm	3.937	ANSI	**GM3016M100**	Price
18mm	2.756	ANSI	**GM3018M70**	Price
18mm	3.937	ANSI	**GM3018M100**	Price
20mm	2.756	ANSI	**GM3020M70**	Price
20mm	3.937	ANSI	**GM3020M100**	Price

Shank - CAT 40				
Bore Dia. (in./mm)	Gage Length (in.)	Standard	Order No.	Price
32mm	2.756	ANSI	**GM3032M70**	Price
32mm	3.937	ANSI	**GM3032M100**	Price

Shank - CAT 50				
Bore Dia. (in./mm)	Gage Length (in.)	Standard	Order No.	Price
1/8	3.000	ANSI	**GM3012300**	Price
1/8	4.000	ANSI	**GM301240050**	Price
3/16	3.000	ANSI	**GM3018300**	Price
3/16	4.000	ANSI	**GM301840050**	Price
3/16	5.000	ANSI	**GM3018500**	Price
3/16	7.000	ANSI	**GM3018700**	Price
1/4	3.000	ANSI	**GM3025300**	Price
1/4	4.000	ANSI	**GM302540050**	Price
1/4	5.000	ANSI	**GM3025500**	Price
1/4	7.000	ANSI	**GM3025700**	Price
5/16	3.000	ANSI	**GM3031300**	Price
3/8	4.000	ANSI	**GM303840050**	Price
3/8	5.000	ANSI	**GM3038500**	Price
3/8	7.000	ANSI	**GM3038700**	Price
1/2	3.000	ANSI	**GM3050300**	Price
1/2	4.000	ANSI	**GM305040050**	Price
1/2	5.000	ANSI	**GM3050500**	Price
1/2	7.000	ANSI	**GM3050700**	Price
5/8	3.000	ANSI	**GM3062300**	Price
5/8	4.000	ANSI	**GM306240050**	Price
5/8	5.000	ANSI	**GM3062500**	Price
5/8	7.000	ANSI	**GM3062700**	Price
3/4	3.000	ANSI	**GM3075300**	Price
3/4	4.000	ANSI	**GM307540050**	Price
3/4	5.000	ANSI	**GM3075500**	Price
3/4	7.000	ANSI	**GM3075700**	Price
7/8	3.000	ANSI	**GM3088300**	Price
7/8	7.000	ANSI	**GM3088700**	Price
1	3.000	ANSI	**GM30100300**	Price
1	4.000	ANSI	**GM3010040050**	Price
1	5.000	ANSI	**GM30100500**	Price
1	7.000	ANSI	**GM30100700**	Price
1-1/4	3.000	ANSI	**GM30125300**	Price
1-1/4	4.000	ANSI	**GM3012540050**	Price
1-1/4	5.000	ANSI	**GM30125500**	Price
1-1/4	7.000	ANSI	**GM30125700**	Price
1-1/2	3.000	ANSI	**GM30150300**	Price
1-1/2	4.000	ANSI	**GM30150400**	Price
1-1/2	5.000	ANSI	**GM30150500**	Price
1-1/2	7.000	ANSI	**GM30150700**	Price
6mm	2.950	ANSI	**GM306M75**	Price
6mm	3.937	ANSI	**GM306M10050**	Price
8mm	2.950	ANSI	**GM308M75**	Price
8mm	3.937	ANSI	**GM308M10050**	Price
10mm	2.950	ANSI	**GM3010M75**	Price
10mm	3.937	ANSI	**GM3010M10050**	Price
12mm	2.950	ANSI	**GM3012M75**	Price
12mm	3.937	ANSI	**GM3012M10050**	Price
14mm	2.950	ANSI	**GM3014M75**	Price
14mm	3.937	ANSI	**GM3014M10050**	Price
16mm	2.750	ANSI	**GM3016M75**	Price
16mm	3.937	ANSI	**GM3016M10050**	Price
18mm	2.950	ANSI	**GM3018M75**	Price
18mm	3.937	ANSI	**GM3018M10050**	Price
20mm	2.950	ANSI	**GM3020M75**	Price
20mm	3.937	ANSI	**GM3020M10050**	Price
25mm	2.950	ANSI	**GM3025M75**	Price
25mm	3.937	ANSI	**GM3025M100**	Price
32mm	2.950	ANSI	**GM3032M75**	Price
32mm	3.937	ANSI	**GM3032M10050**	Price

PARLEC Shrink Fit Tool Holders

- Improved concentricity
- Improved balance design with no moving pieces
- Low Centrifugal Forces due to low holder mass
- For maximum gripping power with exceptional concentricity
- Concentricity of ≤.0001" with tool shrunk in holder
- Chip load distributed evenly along cutting edge of tool which results in longer tool life
- Constructed of double tempered Tool Steel for exceptional durability and cycle life. With proper use, toolholder life should exceed that of standard end mill holders
- Tool is gripped 360° along the entire length of bore resulting in an evenly distributed clamping force
- Short projections are possible because no mechanical clamping devices are used. This results in greater rigidity and resistance to bending
- Simple and fast to use. The total time elapsed to remove one cutting tool and insert another is less than 10 seconds
- Through-spindle coolant capability
- Coolant through holders require no special backup screws or seals. The interference fit between the ID of the tool holder and cutting tool shank forms the seal, preventing the coolant from flowing anywhere else except through the coolant grooves
- The use of Heat Shrink Tooling allows for greater speeds and feeds, better finishes, increased tool life, and increased productivity due to its High Speed Machining capability and simplicity of use



Shank - BT40			
Bore Diameter A (in./mm)	Gage Length B (in./mm)	Order No.	Price
1	3.940	**GM94BT40103949**	Price
1	6.300	**GM94BT40106309**	Price
1/2	3.540	**GM94BT40503549**	Price
1/2	6.300	**GM94BT40506309**	Price
1/4	3.540	**GM94BT40253549**	Price
1/4	6.300	**GM94BT40256309**	Price
1/8	3.540	**GM94BT40013549**	Price
1-1/4	3.940	**GM94BT40123949**	Price
1-1/4	6.300	**GM94BT40126309**	Price
3/16	3.540	**GM94BT40183549**	Price
3/4	3.540	**GM94BT40753549**	Price
3/4	6.300	**GM94BT40756309**	Price
3/8	3.540	**GM94BT40383549**	Price
3/8	6.300	**GM94BT40386309**	Price
5/16	3.540	**GM94BT40313549**	Price
5/16	6.300	**GM94BT40316309**	Price
5/8	3.540	**GM94BT40623549**	Price
5/8	6.300	**GM94BT40626309**	Price
7/16	3.540	**GM94BT40433549**	Price
7/16	6.300	**GM94BT40436309**	Price
7/8	3.540	**GM94BT40883549**	Price
7/8	6.300	**GM94BT40886309**	Price

Shank - CAT40			
Bore Diameter A (in./mm)	Gage Length B (in./mm)	Order No.	Price
1	3.940	**GM94C40103949**	Price
1	6.300	**GM94C40106309**	Price
1/2	3.150	**GM94C40503159**	Price
1/2	6.300	**GM94C40506309**	Price
1/4	3.150	**GM94C40253159**	Price
1/4	6.300	**GM94C40256309**	Price
1/8	3.150	**GM94C40013159**	Price
1-1/4	3.940	**GM94C40123949**	Price
1-1/4	6.300	**GM94C40126309**	Price
16mm	80mm	**GM94C40M16809**	Price
25mm	100mm	**GM94C40M251009**	Price
3/16	3.150	**GM94C40183159**	Price
3/4	3.150	**GM94C40753159**	Price
3/4	6.300	**GM94C40756309**	Price
3/8	3.150	**GM94C40383159**	Price
3/8	6.300	**GM94C40386309**	Price
32mm	100mm	**GM94C40M321009**	Price

Shank - CAT40			
Bore Diameter A (in./mm)	Gage Length B (in./mm)	Order No.	Price
5/16	3.150	**GM94C40313159**	Price
5/16	6.300	**GM94C40316309**	Price
5/8	3.150	**GM94C40623159**	Price
5/8	6.300	**GM94C40626309**	Price
6mm	80mm	**GM94C40M06809**	Price

Shank - CAT50			
Bore Diameter A (in./mm)	Gage Length B (in./mm)	Order No.	Price
1	3.940	**GM94C50103949**	Price
1	6.300	**GM94C50106309**	Price
1/2	3.150	**GM94C50503159**	Price
1/2	6.300	**GM94C50506309**	Price
1/4	3.150	**GM94C50253159**	Price
1/4	6.300	**GM94C50256309**	Price
10mm	160mm	**GM94C50M101609**	Price
1-1/4	3.940	**GM94C50123949**	Price
1-1/4	6.300	**GM94C50126309**	Price
12mm	160mm	**GM94C50M121609**	Price
12mm	80mm	**GM94C50M12809**	Price
3/4	3.150	**GM94C50753159**	Price
3/4	6.300	**GM94C50756309**	Price
3/8	3.150	**GM94C50383159**	Price
3/8	6.300	**GM94C50386309**	Price
5/16	3.150	**GM94C50313159**	Price
5/16	6.300	**GM94C50316309**	Price
5/8	3.150	**GM94C50623159**	Price
5/8	6.300	**GM94C50626309**	Price
8mm	80mm	**GM94C50M08809**	Price

HAIMER UNO Tool Presetters

New!







Type - UNO Tool Presetter Premium							
Model No.	Max. Tool Dia. (in.)	Max. Snap Gauge Tool Dia. (in.)	Max. Tool Length Z-Axis (in.)	Max. Tool Weight	Weight	Order No.	Price
M-G1120.US	15.75	3.93	15.75 / 27.56	66 lbs	562 lbs	**HA72MG1120US**	Price

Type - UNO Tool Presetter Smart							
Model No.	Max. Tool Dia. (in.)	Max. Snap Gauge Tool Dia. (in.)	Max. Tool Length Z-Axis (in.)	Max. Tool Weight	Weight	Order No.	Price
M-G1110.US	15.75	-	15.75 / 27.56	66 lbs	562 lbs	**HA72MG1110US**	Price

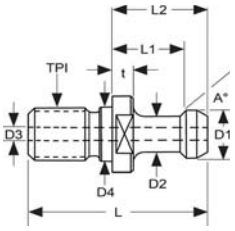
Type - UNO Tool Pressetter Automatic Drive							
Model No.	Max. Tool Dia. (in.)	Max. Snap Gauge Tool Dia. (in.)	Max. Tool Length Z-Axis (in.)	Max. Tool Weight	Weight	Order No.	Price
M-G1160.US	15.75	3.93	15.75 / 27.56	66 lbs	562 lbs	**HA72MG1160US**	Price

F.O.B. Villa Park, IL • Ships by Truck

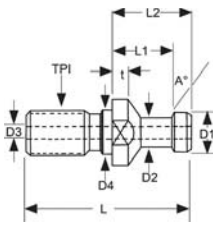
RAPIDHOLD Retention Knobs

- Our retention knobs are made out of 8620 Alloy Steel
- Hardened to 60HRC
- Black Oxide coating for rust protection
- All contact surfaces are precision ground

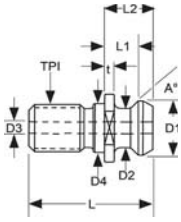
New!



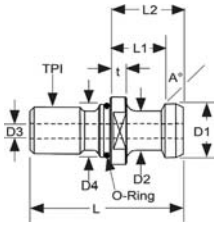
Style 1



Style 2



Style 4



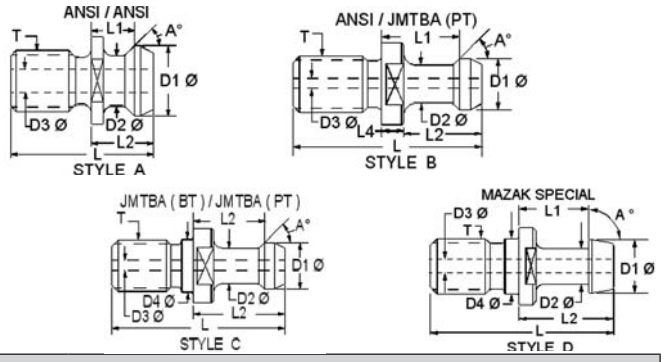
Style 4

Toolholder - CAT40												
For Use With	Thru Coolant	Style	TPI	Angle	Knob Dia. (in.)	Neck Dia. (in.)	Hole Dia. (in.)	Pilot Dia. (in.)	OAL (in.)	Dim. L1 (in.)	Dim. L2 (in.)	Order No.	Price
BRIDGEPORT, LEADWELL	NA	1	5/8-11	45°	.589	.392	-	.636	2.250	.988	1.264	**HF6047305**	Price
FADAL, DMG, HURCO	Coolant	4	5/8-11	45°	.740	.490	.281	.636	1.620	.440	.640	**HF6047286**	Price
HAAS, CHEVALIER, FEELER, FRYER, JOHNFORD	Coolant	1	5/8-11	45°	.589	.392	.200	.636	2.250	.988	1.264	**HF6047313**	Price
HAAS, CHEVALIER, FEELER, FRYER, JOHNFORD	NA	1	5/8-11	45°	.589	.392	-	.636	2.250	.988	1.264	**HF6047304**	Price
KITAMURA, DOOSAN, HYUNDAI KIA	Coolant	2	5/8-11	15°	.747	.549	.281	.641	2.004	.787	1.024	**HF6047343**	Price
MAKINO	Coolant	5	5/8-11	15°	.746	.549	.236	.641	2.008	.792	1.028	**HF6047359**	Price
MAKINO, MITSUBISHI, ENSHU, HITACHI, KIRA, OKUMA, MILLTRONICS	NA	1	5/8-11	60°	.589	.392	-	.636	2.250	.988	1.264	**HF6047386**	Price
MAZAK, FADAL, DMG, HURCO	Coolant	4	5/8-11	45°	.740	.490	.280	.641	1.620	.440	.640	**HF6047288**	Price
MAZAK, FADAL, DMG, HURCO	NA	4	5/8-11	45°	.740	.490	-	.636	1.620	.440	.640	**HF6047287**	Price
MORI SEIKI	Coolant	2	5/8-11	15°	.747	.548	.281	.641	2.004	.787	1.024	**HF6047387**	Price
MORI SEIKI, OKK, KIRA	NA	1	5/8-11	90°	.589	.392	-	.636	2.250	.988	1.264	**HF6047831**	Price

Toolholder - CAT50												
For Use With	Thru Coolant	Style	TPI	Angle	Knob Dia. (in.)	Neck Dia. (in.)	Hole Dia. (in.)	Pilot Dia. (in.)	OAL (in.)	Dim. L1 (in.)	Dim. L2 (in.)	Order No.	Price
DOOSAN, HYUNDAI KIA	Coolant	1	1-8	45°	.903	.668	.390	1.026	3.355	1.384	1.778	**HF6047317**	Price
HAAS, MILLTRONICS, VIPER, ENSHU, AWEA	Coolant	1	1-8	45°	.903	.668	.312	1.026	3.355	1.384	1.778	**HF6047308**	Price
HAAS, MILLTRONICS, VIPER, ENSHU, AWEA	NA	1	1-8	45°	.903	.668	-	1.026	3.355	1.384	1.778	**HF6047309**	Price
MAKINO	Coolant	1	1-8	45°	.903	.668	.236	1.026	3.353	1.384	1.778	**HF6047318**	Price
MAZAK, DMG, G&L, HURCO, FADAL	Coolant	4	1-8	45°	1.14	.820	.468	1.026	2.575	.700	1.000	**HF6047291**	Price
MAZAK, DMG, G&L, HURCO, FADAL, WALTER GRINDERS	NA	4	1-8	45°	1.14	.820	-	1.026	2.575	.700	1.000	**HF6047292**	Price
MORI SEIKI, OKK, YANG	NA	1	1-8	90°	.903	.668	-	1.026	3.350	1.384	1.778	**HF6047389**	Price
OKK	Coolant	1	1-8	90°	.903	.668	.250	1.026	3.350	1.384	1.778	**HF6047320**	Price
OKUMA, HITACHI, SNK, TOSHIBA	Coolant	1	1-8	60°	.903	.668	.335	1.026	3.355	1.384	1.778	**HF6047319**	Price
OKUMA, HITACHI, SNK, TOSHIBA	NA	1	1-8	60°	.903	.668	-	1.026	3.355	1.384	1.778	**HF6047306**	Price
TOYODA	Coolant	1	1-8	45°	.903	.668	.236	1.030	3.353	1.384	1.778	**HF6047388**	Price

Retention Knobs

- High Torque (HT) and High Torque High Strength (HTHS0 retention knobs will increase production 10 to 40%, reduce set-up times, reduce polishing times, increase spindle life, improve finishes and increase tool life
- HT knobs are manufactured from AISI 8620H material
- HS and HTSHS knobs are made from AISI 9310H
- HT and HTHS knobs will fit any toolholder made to industry standards
- HT and HTHS retentionknbos should be installed according to the manufacturer's torque chart provided with each knob using a retention knob socket and torque wrench
- Marked with serieal numbers



Tool Shank - BT30												
Style	TPI	Angle (Deg.)	Knob Dia. (in.)	Hole (in.)	Pilot (in.)	Shoulder (in.)	Dim. L1 (in.)	Dim. L2 (in.)	Flange (in.)	Socket No.	Order No.	Price
B	M12 x 1.75	45	.431	-	.492	.648	.707	.904	.195	RKW30M	**GM8531109HTHS**	Price
B	M12 x 1.75	45	.431	.098	.492	.648	.707	.904	.195	RKW30M	**GM8531109CHTHS**	Price
B	M12 x 1.75	60	.431	-	.492	.648	.707	.904	.195	RKW30M	**GM8525084AHTHS**	Price
B	M12 x 1.75	60	.431	-	.492	.648	.707	.904	.195	RKW30M	**GM8531109AHTHS**	Price
B	M12 x 1.75	60	.431	.098	.492	.648	.707	.904	.195	RKW30M	**GM8525084ACHTHS**	Price
B	M12 x 1.75	60	.431	.098	.492	.648	.707	.904	.195	RKW30M	**GM8531109ACHTHS**	Price

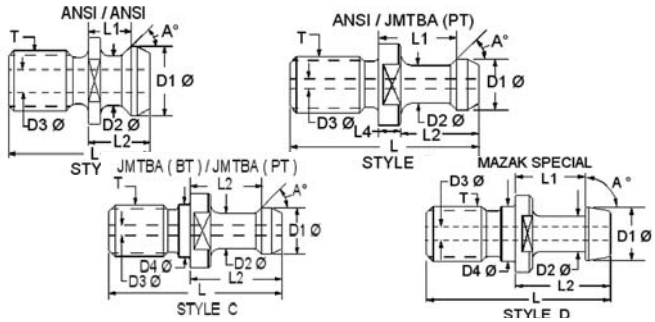
Tool Shank - BT40												
Style	TPI	Angle (Deg.)	Knob Dia. (in.)	Hole (in.)	Pilot (in.)	Shoulder (in.)	Dim. L1 (in.)	Dim. L2 (in.)	Flange (in.)	Socket No.	Order No.	Price
A	M16 x 2.0	45	.74	.217	.669	.93	.552	.752	.234	RKW40	**GM8511126AHTHS**	Price
A	M16 x 2.0	45	.74	.236	.669	.93	.440	.640	.12	RKW40	**GM8511122AHTHS**	Price
B	M16 x 2.0	45	.589	-	.669	.923	1.1	1.376	.234	RKW40	**GM8531113HTHS**	Price
B	M16 x 2.0	45	.589	.157	.669	.923	1.1	1.376	.234	RKW40	**GM8531113DHTHS**	Price
B	M16 x 2.0	60	.589	-	.669	.923	1.1	1.376	.234	RKW40	**GM8531113AHTHS**	Price
B	M16 x 2.0	60	.589	.157	.669	.923	1.1	1.376	.234	RKW40	**GM8531113EHTHS**	Price
B	M16 x 2.0	90	.589	-	.669	.923	1.1	1.376	.234	RKW40	**GM8531113BHTHS**	Price
B	M16 x 2.0	90	.589	.157	.669	.923	1.1	1.376	.234	RKW40	**GM8531113FHTHS**	Price
D	M16 x 2.0	15	.746	.236	.669	.903	.904	1.14	.274	RKW40	**GM8531677HTHS**	Price
D	M16 x 2.0	15	.746	.236	.669	.903	.904	1.14	.274	RKW40	**GM8532913HTHS**	Price

Tool Shank - BT50												
Style	TPI	Angle (Deg.)	Knob Dia. (in.)	Hole (in.)	Pilot (in.)	Shoulder (in.)	Dim. L1 (in.)	Dim. L2 (in.)	Flange (in.)	Socket No.	Order No.	Price
A	M24 x 3.0	45	1.14	.468	.984	1.43	.700	1	.2	RKW50	**GM8511144AHT**	Price
B	M24 x 3.0	45	.903	-	.94	1.492	1.376	1.77	.392	RKW50M	**GM8531117HT**	Price
B	M24 x 3.0	45	.903	.236	.984	1.492	1.376	1.77	.392	RKW50M	**GM8531643HT**	Price
B	M24 x 3.0	60	.903	-	.984	1.492	1.376	1.77	.392	RKW50M	**GM8531117AHT**	Price
B	M24 x 3.0	60	.903	-	.984	1.492	1.376	1.77	.392	RKW50M	**GM8531117AHTHS**	Price
B	M24 x 3.0	60	.903	.312	.984	1.492	1.376	1.77	.392	RKW50M	**GM8531843HT**	Price
B	M24 x 3.0	60	.903	.312	.984	1.492	1.376	1.77	.392	RKW50M	**GM8531843HTHS**	Price
B	M24 x X3.0	90	.903	-	.984	1.492	1.376	1.77	.392	RKW50M	**GM8531117BHT**	Price
C	M24 x 3.0	15	1.101	.453	.983	1.413	.984	1.339	.196	RKW50M	**GM8571144HT**	Price

Tool Shank - CAT40												
Style	TPI	Angle (Deg.)	Knob Dia. (in.)	Hole (in.)	Pilot (in.)	Shoulder (in.)	Dim. L1 (in.)	Dim. L2 (in.)	Flange (in.)	Socket No.	Order No.	Price
A	5/8 - 11	45	.74	-	.636	.944	.440	.640	.12	RKW40	**GM8511123HTHS**	Price
A	5/8 - 11	45	.74	.156	.64	.862	.44	.64	.118	RKW40	**GM8532760HTHS**	Price
A	5/8 - 11	45	.74	.236	.636	.944	.440	.640	.12	RKW40	**GM8511122HTHS**	Price
A	5/8 - 11	45	.74	.236	.64	.862	.440	.640	.12	RKW40	**GM8531226HTHS**	Price
B	5/8 - 11	45	.588	-	.641	.938	.988	1.264	.124	RKW40	**GM8532114HTHS**	Price
B	5/8 - 11	45	.588	.116	0.61	.903	.988	1.264	.124	RKW40	**GM8532130HTHS**	Price
B	5/8 - 11	45	.588	.157	.641	.938	.988	1.264	.124	RKW40	**GM8532114CHTHS**	Price
B	5/8 - 11	45	.589	.157	.636	.938	.988	1.264	.234	RKW40	**GM8531514HTHS**	Price
B	5/8 - 11	45	.594	-	.64	.875	1.139	1.438	.187	RKW40M	**GM8517122HTHS**	Price
B	5/8 - 11	45	.594	.157	.64	.875	1.139	1.438	.187	RKW40M	**GM8517123HTHS**	Price
B	5/8 - 11	60	.589	-	.636	.903	.988	1.264	.234	RKW40	**GM8531114AHTHS**	Price
B	5/8 - 11	60	.589	.138	.636	.903	.988	1.264	.234	RKW40	**GM8531814AHTHS**	Price
B	5/8 - 11	90	.589	-	.636	.903	.988	1.264	.234	RKW40	**GM8531114BHTHS**	Price
B	5/8 - 11	90	.589	-	.636	.938	.707	.982	.194	RKW40	**GM8532414BHTHS**	Price
B	5/8 - 11	90	.589	.157	.636	.938	.988	1.264	.234	RKW40	**GM8535030HTHS**	Price
C	5/8 - 11	15	.747	.236	.605	.902	.787	1.024	.157	RKW40	**GM8571123HTHS**	Price
C	5/8 - 11	15	.747	.236	.641	.902	.787	1.024	.157	RKW40	**GM8575022HTHS**	Price
D	5/8 - 11	15	.746	-	.641	.903	.792	1.028	.276	RKW40	**GM8531616HTHS**	Price
D	5/8 - 11	15	.746	.217	.641	.902	.787	1.024	.158	RKW40	**GM8551023HTHS**	Price
D	5/8 - 11	15	.746	.236	.641	.903	.792	1.028	.276	RKW40	**GM8531617HTHS**	Price

Retention Knobs

- High Torque (HT) and High Torque High Strength (HTHS0 retention knobs will increase production 10 to 40%, reduce set-up times, reduce polishing times, increase spindle life, improve finishes and increase tool life
- HT knobs are manufactured from AISI 8620H material
- HS and HTSHS knobs are made from AISI 9310H
- HT and HTHS knobs will fit any toolholder made to industry standards
- HT and HTHS retentionknbos should be installed according to the manufacturer's torque chart provided with each knob using a retention knob socket and torque wrench
- Marked with serieal numbers

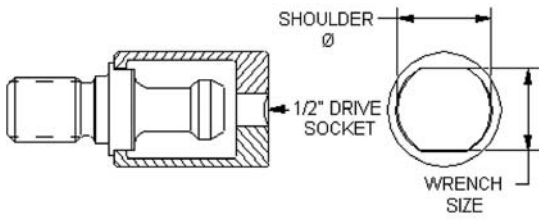


Tool Shank - CAT50												
Style	TPI	Angle (Deg.)	Knob Dia. (in.)	Hole (in.)	Pilot (in.)	Shoulder (in.)	Dim. L1 (in.)	Dim. L2 (in.)	Flange (in.)	Socket No.	Order No.	Price
A	1-8	45	1.14	-	1.036	1.438	.700	1	.2	RKW50	**GM8511146HT**	Price
A	1-8	45	1.14	.39	1.036	1.43	.700	1	.2	RKW50	**GM8531275HT**	Price
A	1-8	45	1.14	.468	1.036	1.43	.700	1	.2	RKW50	**GM8511144HT**	Price
A	1-8	45	1.14	.468	1.036	1.43	.700	1	.2	RKW50	**GM8511144HTHS**	Price
B	1-8	45	.903	-	1.026	1.438	1.384	1.778	.392	RKW50	**GM8531118HTHS**	Price
B	1-8	45	.903	.236	1.026	1.438	1.384	1.778	.392	RKW50	**GM8531647HT**	Price
B	1-8	45	.903	.236	1.026	1.438	1.384	1.778	.392	RKW50	**GM8531647HTHS**	Price
B	1-8	45	.903	.236	1.031	1.438	1.384	1.778	.4	RKW50	**GM8531553HT**	Price
B	1-8	45	.903	.236	1.031	1.438	1.384	1.778	.4	RKW50	**GM8531553HTHS**	Price
B	1-8	45	.903	.312	1.026	1.438	1.384	1.778	.392	RKW50	**GM8531118DHTHS**	Price
B	1-8	45	.903	.39	1.026	1.438	1.384	1.778	.392	RKW50	**GM8531645HTHS**	Price
B	1-8	60	.903	-	1.026	1.438	1.384	1.778	.392	RKW50	**GM8531118AHT**	Price
B	1-8	60	.903	.236	1.023	1.438	1.384	1.778	.392	RKW50	**GM8532749HT**	Price
B	1-8	60	.903	.236	1.023	1.438	1.384	1.778	.392	RKW50	**GM8532749HTHS**	Price
B	1-8	60	.903	.335	1.026	1.438	1.384	1.778	.392	RKW50	**GM8531844AHTHS**	Price
B	1-8	90	.903	-	1.026	1.438	1.384	1.778	.392	RKW50	**GM8531118BHT**	Price
B	1-8	90	.903	-	1.026	1.438	1.384	1.778	.392	RKW50	**GM8531118BHTHS**	Price
B	1-8	90	.903	.25	1.026	1.438	1.384	1.778	.392	RKW50	**GM8534218BHTHS**	Price
B	1-8	90	.903	.315	1.03	1.438	1.384	1.778	.392	RKW50	**GM8534275HTHS**	Price
B	1-8	90	.942	-	N/A	1.415	.903	1.218	.197	RKW50M	**GM8532418BHT**	Price
B	1-8	90	.942	.25	N/A	1.415	.903	1.218	.197	RKW50M	**GM8532419BHT**	Price
C	1-8	15	1.101	.455	1.031	1.413	.984	1.338	.197	RKW50M	**GM8571145HT**	Price
C	1-8	15	1.101	.455	1.031	1.413	.984	1.338	.197	RKW50M	**GM8571145HTHS**	Price
D	1-8	15	1.1	.392	1.031	1.438	.99	1.344	.274	RKW50	**GM8531558HT**	Price
D	1-8	15	1.1	.392	1.031	1.438	.99	1.344	.274	RKW50	**GM8531558HTHS**	Price

Retention Knob Sockets

- Sockets aid in the installation and removal of Retention Knobs
- Ideal tightness is achieved, without rounding off the corners of the Retention Knob
- Note: Some Retention Knobs have mixed standards - Check the shoulder and Wrench Sizes carefully when selecting a Socket to fit other Retention Knobs not listed above
- Lifetime Guarantee
- Saves Time
- Sockets have 1/2" drive – ideal tightness is achieved

MADE IN THE USA



Max. Flat (in.)	Max. Torque (ft./lb.)	Order No.	Price
.511	40	**GM85RKW30M**	Price
.535	40	**GM85RKW30**	Price
.556	40	**GM85RKW30D**	Price
.711	85	**GM85RKW40M**	Price
.755	85	**GM85RKW40**	Price

Max. Flat (in.)	Max. Torque (ft./lb.)	Order No.	Price
.95	100	**GM85RKW45M**	Price
1.004	100	**GM85RKW45**	Price
1.185	110	**GM85RKW50M**	Price
1.255	110	**GM85RKW50**	Price

Toolholder Vises

- Mounts horizontal or vertical
- Access both ends of toolholder
- Solid vise type grip
- Durable anodize finish
- Mounts to bench or toolcart
- Will not damage toolholder
- Handle ratchets for convenience

MADE IN THE USA



Use with Taper	Order No.	Price
BT40	**GM68MM40BT**	Price
BT50	**GM68MM50BT**	Price
CAT40	**GM68MM40V**	Price
CAT50	**GM68MM50V**	Price

Rotary Tool Clamps

- 6-Position 45° Mounting Fixture
- Multiple use on ISO, Caterpillar and BT shanks
- Easy access for combined assembly of cutting tool and pull stud in one position
- Hardened and ground internal taper
- Tool holder secured by safety clamp screw
- Compact design for easy mounting on work table or tool cart



For	Order No.	Price
40 Taper	**GM68499540**	Price
50 Taper	**GM68499550**	Price

Spindle Cleaners

- Plastic molded handle
- Cleaning strips resist oil and grease
- Cleans oil and grease build up in spindles
- Easy to use



Taper Size	Order No.	Price
#30, R8	**GK35230**	Price
#40, 5C	**GK35240**	Price
#50	**GK35250**	Price
HSK63	**GK35H063**	Price

SpinLMate® Taper Socket Cleaning Tools

- Quickest, surest safest method available for cleaning spindle and adapter sockets, tool presetter sockets and tool storage pockets
- It cleans the entire length of the taper socket in 3 seconds or less and insures a solid, concentric, repeatable cutting tool to spindle connection
- Complete tool includes 1 'ST' Blade Set and 1 'VR' Blade Set

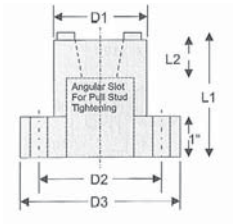
MADE IN THE USA



Taper	Order No.	Price
#30, R8	**GK4555090**	Price
#40, 5C	**GK4555110**	Price
#50	**GK4555150**	Price

RAPIDHOLD™ CNC Tightening Fixtures

- Multiple usage on toolholder shank CAT, BT, NMTB & ISO
- Enables strong gripping power of cutting tools
- Access both ends of toolholders simultaneously
- Secures maximum protection of toolholder
- Tools can be mounted in vertical and horizontal positions
- High quality compact and rigid design for mounting on work table or tool cart

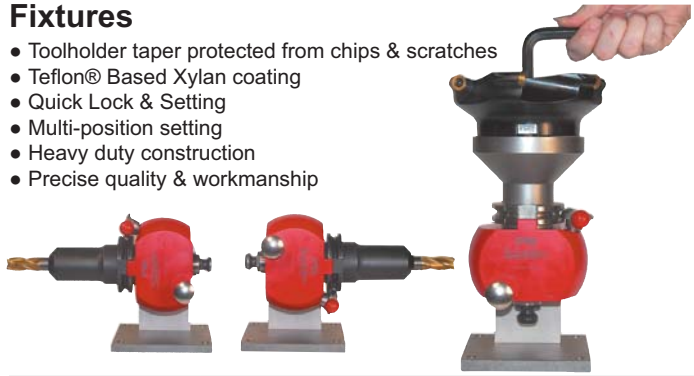




Collet Style	D1 (in.)	D2 PCD (in.)	Flange Dia. D3 (in.)	Flange Thickness	Total Hgt. L1 (in.)	L2 (in.)	Order No.	Price
CAT/BT30	3.50	4.25	5	1.00	4.50	1.55	**TS1029901**	Price
CAT/BT40	3.50	4.25	5	1.00	5.5	2.15	**TS1029902**	Price
CAT/BT50	5.25	6.00	6	1.00	7.5	3.50	**TS1029903**	Price

Dorian Tool Smart Tool-Setter Tightening Fixtures

- Toolholder taper protected from chips & scratches
- Teflon® Based Xylan coating
- Quick Lock & Setting
- Multi-position setting
- Heavy duty construction
- Precise quality & workmanship



Model No.	ID of Liners	Order No.	Price
DSTSCH-030	BT-30	**GG3536000**	Price
DSTSCH-040	CAT40/BT40	**GG3536001**	Price
DSTSCH-050	CAT50/BT50	**GG3536002**	Price
DSTSCH-063	HSK-063	**GG3536003**	Price
DSTSCH-100	HSK-100	**GG3536004**	Price

Replacement Blades

MADE IN THE USA

Color - Black For Use With - 'ST' Standard Use		
Taper	**Order No.**	**Price**
#30, R8	**GK4572340**	Price
#40, 5C	**GK4572360**	Price
#50	**GK4572460**	Price

Color - Red For Use With - 'EP' Polishing		
Taper	**Order No.**	**Price**
#30, R8	**GK4574340**	Price
#40, 5C	**GK4574360**	Price
#50	**GK4574460**	Price

Color - Yellow For Use With - 'VR' Shredding		
Taper	**Order No.**	**Price**
#30, R8	**GK4573340**	Price
#40, 5C	**GK4573360**	Price
#50	**GK4573460**	Price

Super-Precision Intro-Pro Sets

MADE IN THE USA



The deluxe, affordable beginner's set built by the world's #1 quick change tool post manufacturer.

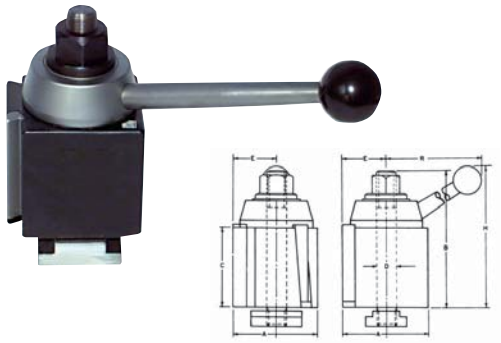
- Precision-engineered to ensure repetitive accuracy
- Advanced design provides built-in quick tool changing, versatility with positive rigidity to meet the most exacting working tolerances
- Quickly and easily installed on any engine lathe, bench or CNC lathe for a wide range of operations - from fine precision work to heavy duty cutting

Set Includes:

- Super Precision Tool Post
- #1 Turning & Facing Holder
- #2 Boring, Turning & Facing Holder

Series	Swing	Holders Included	Order No.	Price
AXA	Up to 12	AXA1, AXA2	**GG30AXAIP**	Price
BXA	10 to 15	BXA1, BXA2	**GG30BXAIP**	Price
CXA	13 to 18	CXA1, CXA2	**GG30CXAIP**	Price
CA	14 to 20	CA1, CA2	**GG30CAIP**	Price
DA	17 to 48	DA1, DA2	**GG30DAIP**	Price

Super Precision Tool Posts



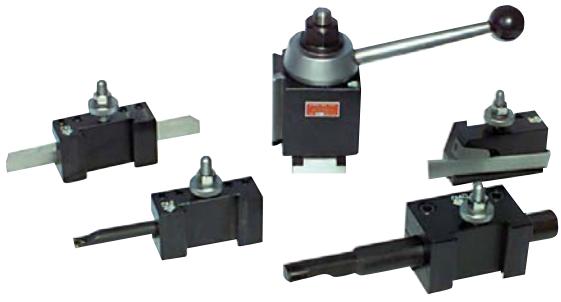
- Precision engineered to assure repetitive accuracy
- Advanced design provides built in quick tool changing versatility with positive rigidity to meet the most exacting working tolerances
- Quickly and easily installed on any engine lathe, bench or turret lathe, for a wide range of operations — from fine precision work to heavy duty cutting - Series AXA, BXA, CXA, CA, DA and EA

Features:

- Guaranteed lasting repetitive accuracy to within millionths
- Only a second to change tools
- Rugged — no chatter or vibration
- No time wasted with shims
- Unlimited versatility
- Safe and simple to operate

Series	A (in.)	B (in.)	D (in.)	E (in.)	H (in.)	R (in.)	Swing (in.)	Order No.	Price
AXA	2.500	3-7/8	9/16	1-3/4	4-11/16	5-3/4	Up to 12	**GG3010000**	Price
BXA	3.000	4-5/8	5/8	1-5/8	5-9/16	7-5/16	10 to 15	**GG3020000**	Price
CXA	3.500	5-1/8	3/4	1-7/8	6-1/8	7-7/8	13 to18	**GG3030000**	Price
CA	4.000	6-1/4	7/8	2-1/8	7	9	14 to 20	**GG3040000**	Price
DA	5.000	7-1/8	1.000	2-11/16	8-3/4	10-7/8	17 to 48	**GG3050000**	Price
EA	6.000	8-1/2	1-1/4	3-1/8	10	13	25 to 48	**GG3060000**	Price

Quick Change Tool Post & Four Holder Sets



AXA, BXA, CXA, CA, DA and EA Sets Include:

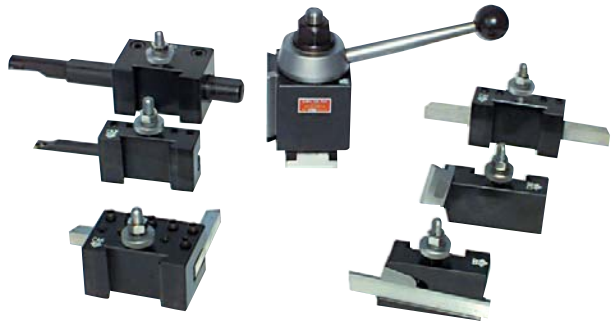
- 1 Tool post and 4 holders
- No. 1 turning and facing holder
- No. 2 boring, turning and facing holder
- No. 4 heavy-duty boring bar holder
- No. 7 universal parting blade holder

Series	Swing (in.)	Order No.	Price
BXA	10 to 15	**GG3021000**	Price
CXA	13 to 18	**GG3031000**	Price
CA	14 to 20	**GG3041000**	Price
DA	17 to 48	**GG3051000**	Price
EA	25 to 48	**GG3061000**	Price

Quick Change Tool Post & Six Holder Sets

AXA, BXA, CXA and CA Sets Include:
- 1 Tool post and 6 holders
- No. 1 turning and facing holder
- No. 2 boring, turning and facing holder
- No. 4 heavy-duty boring bar holder
- No. 6 multiple tool holder
- No. 7 universal parting blade holder
- No. 8 threading holder

DA Sets Include:
- Holders No. 1, 2, 41, 6 and 8
- No. 16 turning and facing holder for carbide inserts

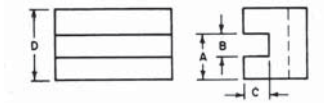


Series	Swing (in.)	Order No.	Price
AXA	Up to 12	**GG3011100**	Price
BXA	10 to 15	**GG3021100**	Price
CXA	13 to 18	**GG3031100**	Price
CA	14 to 20	**GG3041100**	Price
DA	17 to 48	**GG3051100**	Price

Set supplied with screw wrenches less cutting tools.

No. 1 Turning & Facing Holders

- Takes various sizes of bits
- Turning and facing tools can be locked in together
- Saves time and labor when changing operations

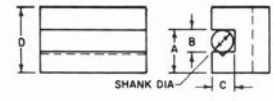




Series	A (in.)	B (in.)	C (in.)	D (in.)	Tool Bit	Order No.	Price
MXA	13/16	1/2	23/64	1-1/8	1/4 to 1/2	**GG30MXA1**	Price
AXA-AX	15/16	1/2	7/16	1-1/2	3/16 - 1/2	**GG3010001**	Price
BXA-BX	1-1/8	5/8	1/2	1-3/4	1/4 - 5/8	**GG3020001**	Price
CXA-CX	1-7/16	3/4	5/8	2-1/8	1/2 - 3/4	**GG3030001**	Price
CA	1-11/16	1	3/4	2-1/2	1/2 - 1	**GG3040001**	Price
DA	2-3/16	1-1/4	1	3-1/8	1/2 - 1-1/4	**GG3050001**	Price
EA	2-11/16	1-1/2	1-1/4	4	3/4 - 1-1/2	**GG3060001**	Price

No. 2 Boring, Turning & Facing Holders

- "V" groove holds round shank boring bars and tools as well as square tool bits

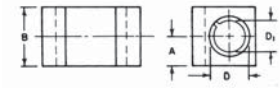




Series	A (in.)	B (in.)	Shank-C (in.)	D (in.)	Tool Bit	Order No.	Price
MXA	13/16	1/2	23/64	1-1/8	1/4 to 1/2	**GG30MXA2**	Price
AXA-AX	15/16	1/2	7/16	1-1/2	3/16 - 1/2	**GG3010002**	Price
BXA-BX	1-1/8	5/8	1/2	1-3/4	1/4 - 5/8	**GG3020002**	Price
CXA-CX	1-7/16	3/4	3/4	2-1/8	1/2 - 3/4	**GG3030002**	Price
CA	1-11/16	1	13/16	2-1/2	1/2 - 1	**GG3040002**	Price
DA	2-3/16	1-1/4	1	3-1/8	1/2 - 1-1/4	**GG3050002**	Price
EA	2-11/16	1-1/2	1-1/4	4	3/4 - 1-1/2	**GG3060002**	Price

No. 4 Heavy Duty Boring Bar Holders

- Equipped with a split bushing to accommodate a boring bar of a smaller diameter
- It grips bar with extreme rigidity, cuts smoothly without chatter

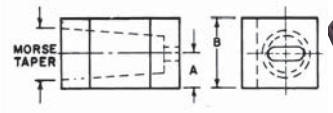




Series	A (in.)	B (in.)	D (in.)	D1 (in.)	Order No.	Price
MXA	1/2	1-1/8	1/2	-	**GG30MXA4**	Price
AXA-AX	3/4	1-1/2	3/4	5/8	**GG3010004**	Price
BXA-BX	1	2	1	3/4	**GG3020004**	Price
CXA-CX	1	2	1	3/4	**GG3030004**	Price
CA	1-3/8	2-3/4	1-1/4	1	**GG3040004**	Price
DA	1-5/8	3-1/4	1-1/2	1-1/4	**GG3050004**	Price
EA	2-1/4	4-1/2	2-1/2	2	**GG3060004**	Price

No. 5 Morse Taper Holders for Drilling

- Drills with carriage by using power feed instead of tail stock
- Easily centered

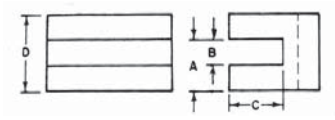




Series	A (in.)	B (in.)	Taper Hole	Order No.	Price
AXA-AX	3/4	1-1/2	2 MT	**GG3010005**	Price
BXA-BX	7/8	1-3/4	2 MT	**GG3020005**	Price
CXA-CX	1	2	3 MT	**GG3030005**	Price
CA	1-1/4	2-1/2	3 MT	**GG3040005**	Price
DA	1-9/16	3-1/8	4 MT	**GG3050005**	Price
EA	1-5/8	3-1/4	5 MT	**GG3060005**	Price

No. 6 Multiple Tool Holders

- Versatile, ideal for repetitive work; for gang set-ups or form tools

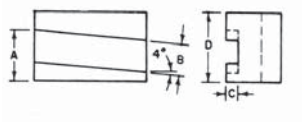




Series	A (in.)	B (in.)	C (in.)	D (in.)	Tool Bit	Order No.	Price
AXA-AX	1	1/2	1-1/8	1-9/16	1/4 - 1/2	**GG3010006**	Price
BXA-BX	1-1/16	1/2	1-9/16	1-3/4	1/4 - 1/2	**GG3020006**	Price
CXA-CX	1-5/16	5/8	1-7/16	2-1/8	3/8 - 5/8	**GG3030006**	Price
CA	1-9/16	3/4	1-7/8	2-1/2	1/2 - 3/4	**GG3040006**	Price
DA	2-1/8	1	2-1/8	3-1/4	1/2 - 1	**GG3050006**	Price
EA	2-5/8	1-1/4	2-5/8	4	3/4 - 1-1/4	**GG3060006**	Price

No. 7 Universal Parting Blade Tool Holders

- For bevel and T-type blades
- Enables you to cut-off close to chuck
- Absence of vibration prevents breaking blades



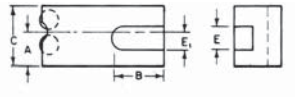


Series	A (in.)	B (in.)	C (in.)	D (in.)	Blade Height	Order No.	Price
MXA	23/32	1/2	1/8	1-3/8	1/2	**GG30MXA7**	Price
AXA-AX	13/16	1/2	3/16	1-1/2	1/2	**GG3010007**	Price
BXA-BX	1	11/16	3/16	1-3/4	11/16	**GG3020007**	Price
CXA-CX	1-3/16	3/4	3/16	2	3/4	**GG3030007**	Price
CA	1-7/16	7/8	1/4	2-1/2	7/8	**GG3040007**	Price
DA	1-3/4	1-1/8	1/4	2-3/4	1-1/8	**GG3050007**	Price
EA	1-7/8	1-1/8	1/4	3	1-1/8	**GG3060007**	Price

***No. 7 Holders are only for use with T-type blades; or with bevel (wedge shape) blades having parallel top and bottom edges**

No. 10 Knurling, Turning & Facing Holders

- Supplied with a set of high speed precision ground and lapped medium diamond knurls





Series	A (in.)	B (in.)	C (in.)	E (in.)	E1 (in.)	Tool Bit	Order No.	Price
MXA	5/8	1-13/16	1-3/16	1/2	7/16	1/2	**GG30MXA10**	Price
AXA-AX	7/8	2-1/2	1-9/16	1/2	3/8	3/16 to 1/2	**GG3010010**	Price
BXA-BX	1	2-5/8	1-3/4	5/8	1/2	1/4 to 5/8	**GG3020010**	Price
CXA-CX	1-3/16	3-1/8	2	3/4	5/8	1/2 to 3/4	**GG3030010**	Price
CA	1-7/16	3-3/4	2-1/2	1	3/4	1/2 to 1	**GG3040010**	Price
DA	1-7/8	4-1/2	3-1/8	1-1/4	1	1/2 to 1-1/4	**GG3050010**	Price

Tool Posts & Holders

Description - No. 1 Turning Tool Holder			
Tool Cap.	**Swing**	**Order No.**	**Price**
3/16 to 1/2	Capacity-Up to 12" Swing	**GG55740101**	Price
1/4 to 5/8	Capacity-10 to 15" Swing	**GG55740201**	Price
1/2 to 3/4	Capacity-13 to 18" Swing	**GG55740301**	Price
1/2 to 1	Capacity-14 to 20" Swing	**GG55740401**	Price

Description - No. 2 Boring, Turning & Facing Tool Holder			
Tool Cap.	**Swing**	**Order No.**	**Price**
3/16 to 1/2	Capacity-Up to 12" Swing	**GG55740102**	Price
1/4 to 5/8	Capacity-10 to 15" Swing	**GG55740202**	Price
1/2 to 3/4	Capacity-13 to 18" Swing	**GG55740302**	Price
1/2 to 1	Capacity-14 to 20" Swing	**GG55740402**	Price

Description - No. 4 Boring Bar Tool Holder			
Tool Cap.	**Swing**	**Order No.**	**Price**
5/8 x 3/4	Capacity-Up to 12" Swing	**GG55740104**	Price
3/4 x 1	Capacity-10 to 15" Swing	**GG55740204**	Price
3/4 x 1	Capacity-13 to 18" Swing	**GG55740304**	Price
1 x 1-1/4	Capacity-14 to 20" Swing	**GG55740404**	Price

Description - No. 5 Morse Taper Tool Holder			
Tool Cap.	**Swing**	**Order No.**	**Price**
2 MT	Capacity-Up to 12" Swing	**GG55740105**	Price
2 MT	Capacity-10 to 15" Swing	**GG55740205**	Price
3 MT	Capacity-13 to 18" Swing	**GG55740305**	Price
3 MT	Capacity-14 to 20" Swing	**GG55740405**	Price

Description - No. 7 Universal Parting Blade Tool Holder			
Tool Cap.	**Swing**	**Order No.**	**Price**
1/2	Capacity-Up to 12" Swing	**GG55740107**	Price
11/16	Capacity-10 to 15" Swing	**GG55740207**	Price
3/4	Capacity-13 to 18" Swing	**GG55740307**	Price
7/8	Capacity-14 to 20" Swing	**GG55740407**	Price

Description - No. 10 Knurling, Facing, & Turning Tool Holder			
Tool Cap.	**Swing**	**Order No.**	**Price**
3/16 x 1/2	Capacity-Up to 12" Swing	**GG55740110**	Price
1/4 x 5/8	Capacity-10 to 15" Swing	**GG55740210**	Price
1/2 x 3/4	Capacity-13 to 18" Swing	**GG55740310**	Price
1/2 x 1	Capacity-14 to 20" Swing	**GG55740410**	Price

Description - No. 41 Boring Bar Tool Holder - Larger Capacity			
Tool Cap.	**Swing**	**Order No.**	**Price**
3/4 x 1	Capacity-Up to 12" Swing	**GG55740141**	Price
1x 1-1/4	Capacity-10 to 15" Swing	**GG55740241**	Price
1x 1-1/4	Capacity-13 to 18" Swing	**GG55740341**	Price
1-1/4 x 1-1/2	Capacity-14 to 20" Swing	**GG55740441**	Price

Description - No. 53 Morse Taper Tool Holder - Larger Taper			
Tool Cap.	**Swing**	**Order No.**	**Price**
3 MT	Capacity-Up to 12" Swing	**GG55740153**	Price
3 MT	Capacity-10 to 15" Swing	**GG55740253**	Price
4 MT	Capacity-13 to 18" Swing	**GG55740354**	Price
4 MT	Capacity-14 to 20" Swing	**GG55740454**	Price

Description - Piston Type Tool Post			
Tool Cap.	**Swing**	**Order No.**	**Price**
-	Capacity-Up to 12" Swing	**GG55740100**	Price
-	Capacity-10 to 15" Swing	**GG55740200**	Price
-	Capacity-13 to 18" Swing	**GG55740300**	Price
-	Capacity-14 to 20" Swing	**GG55740400**	Price

Description - Wedge Type Tool Post			
Tool Cap.	**Swing**	**Order No.**	**Price**
-	Capacity-Up to 12" Swing	**GG55740111**	Price
-	Capacity-10 to 15" Swing	**GG55740222**	Price
-	Capacity-13 to 18" Swing	**GG55740333**	Price
-	Capacity-14 to 20" Swing	**GG55740444**	Price

Piston Type Tool Post:
- Instant changing from one operation to another.
- A knurled nut on each tool holder provides for exact height adjustment, entirely eliminating the use of shims.



Wedge Type Tool Post:
- Wedge type tool posts are precision engineered to assure repetitive accuracy.



Interchangable with Aloris, Yuasa, and Phase II:
- All working parts hardened & ground
- Maximum rigidity for chatter-free performance
- No time wasted with shims
- Increases productivity of all lathe operations
- Completely sealed for maintenance-free operation
- Change tools in seconds

No. 1 Turning and Facing Tool Holder:
- Takes various sizes of bits
- Turning and facing tools can be locked in together



No. 2 Boring, Turning and Facing Tool Holder:
- "V" groove holds round shank boring bars and tools, as well as square tool bits



No. 4 & No. 41 Larger Capacity Heavy Duty Boring Bar Tool Holder:
- Equipped with a split bushing to accommodate a boring bar of smaller diameter



No. 5 & No. 53 Larger Taper Morse Taper Tool Holder:
- Drills with carriage by using power feed instead of tailstock



No. 7 Universal Parting Blade Tool Holder:
- For bevel as well as T-cut Blades
- Enables you to cut-off close to chuck



No. 10 Knurling, Facing and Turning Tool Holder:
- For turning and facing, as well as knurling
- Supplied with a set of high speed medium diamond knurls

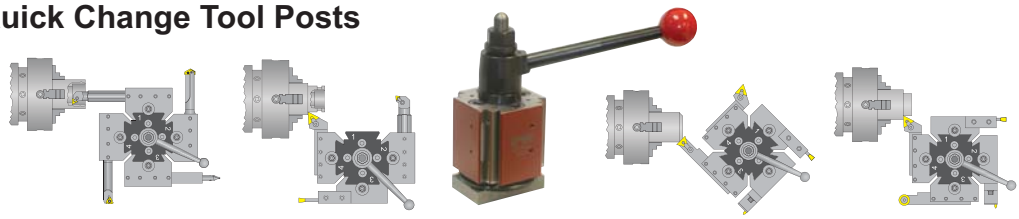


Tool Posts & Holders (Sets)

		Capacity-Up to 12" Swing		Capacity-10 to 15" Swing		Capacity-13 to 18" Swing		Capacity-14 to 20" Swing	
Holders Included	**Description**	**Order No.**	**Price**	**Order No.**	**Price**	**Order No.**	**Price**	**Order No.**	**Price**
Numbers 1, 2, 4, 7 & 10	Piston Type Set	**GG55741100**	Price	**GG55741200**	Price	**GG55741300**	Price	**GG55741400**	Price
Numbers 1, 2, 4, 7 & 10	Wedge Type Set	**GG55741111**	Price	**GG55741222**	Price	**GG55741333**	Price	**GG55741444**	Price

Quadra® Indexing Quick Change Tool Posts

- 4 Tool Holders Lock Simultaneously
- Indexing repeatability of .000005”
- Toolholder locking repeatability of .0001”
- Ideal for prototype or high production
- Ideal for roughing and finishing
- Indexes every 15°
- Quick and Versatile for any operation



Lathe Swing Over Bed (in.)	A (in.)	B (in.)	D (in.)	T-Tool Capacity (in.)	Optimum C.H. (in.)	Order No.	Price
Up to 12	2.500	2.570	.500	1/2 to 3/4	1.422	**GG35QITP25**	Price
13 to 15	3.000	3.205	.500	5/8 to 1	1.747	**GG35QITP30**	Price
16 to 20	4.000	4.070	.750	1 to 1-1/4	2.202	**GG35QITP40**	Price
17 to 32	5.000	5.230	1.000	1-1/4 to 1-1/2	2.995	**GG35QITP50**	Price
Over 25 XHD	6.000	5.615	1.125	1-1/2	3.440	**GG35QITP60**	Price

Super Quick Change Standard Sets

- (1) Tool Post
- (4) Holders
- Tooling Not Included



Lathe Swing (in.)	Set Includes	Order No.	Price
Up to 12	Tool Post: SDN25AXA, Holders; D25AXA-1, D25AXA-2, D25AXA-4-CNC, D25 AXA-7-71C	**GG35SDN25AXASS**	Price
13 to 15	Tool Post; SDN30BXA, Holders; D30BXA-1, D30BXA-2, D30BXA-4-CNC, D30BXA-7-71C	**GG35SDN30BXASS**	Price
14 to 17	Tool Post; SDN35CXA, Holders; D35CXA-1, D35CXA-2, D35CXA-4-CNC, D35CXA-7-71C	**GG35SDN35CXASS**	Price
16 to 20	Tool Post; SDN40CA, Holders; D40CA-1, D40CA-2, D40CA-4-CNC, D40CA-7-71C	**GG35SDN40CASS**	Price
17 to 32	Tool Post; SDN50DA, Holders; D50DA-1, D50DA-2, D50DA-4-CNC, D50DA-7-71C	**GG35SDN50DASS**	Price
Over 25	Tool Post; SDN60EA, Holders; D60EA-1, D60EA-2, D60EA-4-CNC, D60EA-7-71C	**GG35SDN60EASS**	Price

Super Quick Change Tool Post First Time Buyers Sets

- Zero Backlash
- Triple Action Wedge Style Locking System
- Precise Repeatability within .0001”
- 15° Locking Handle Position Adjustment
- Fully interchangeable with most industry standard tool posts

MADE IN THE USA



Super Quick Change Tool Post First Time Buyers Set Includes:

- Tool Post
- #1 Turning & Facing Holder
- #2 Turning, Facing & Boring Holder
- #7-71C Cut-Off Holder
- #881 Threading & Grooving Holder
- Also includes 1 Square Shank Tool, 1 Boring Bar, 1 Cut-off Blade, 1 Internal Threading Bar, and 5 inserts

Tooling & Carbide Inserts Included

Lathe Swing (in.)	Set Includes	Order No.	Price
Up to 12	No. 1, 2, 7-71C, 881	**GG35SD25AXAFTB**	Price
13 to 15	No. 1, 2, 7-71C, 881	**GG35SD30BXAFTB**	Price

Lathe Swing (in.)	Set Includes	Order No.	Price
14 to 17	No. 1, 2, 7-71C, 881	**GG35SD35CXAFTB**	Price
16 to 20	No. 1, 2, 7-71C, 881	**GG35SD40CAFTB**	Price

F.O.B. Factory

Quadra Index Tool Post First Time Buyer Sets

For the Relentless Machinist Pursuing High Productivity and Accuracy

- Maintenance Free
- Absolute Zero Backlash
- Four Quick Change Tool Holders Locked Simultaneously
- Repetitive Accuracy within Millionths
- Patented Locking System Eliminates the Traditional Worm Gear and Gib



Quadra Index Tool Post First Time Buyers Set Includes:

- Tool Post
- #1 Turning & Facing Holder
- #2 Turning, Facing & Boring Holder
- # 7-71C Cut-Off Holder
- #881 Threading & Grooving Holder
- Also includes 1 Square Shank Tool, 1 Boring Bar, 1 Cut-off Blade, 1 Internal Threading Bar, and 5 inserts

Tooling & Carbide Inserts Included

Swing (in.)	Set Includes	Order No.	Price
13 to 15	No. 1, 2, 7-71C, 881	**GG35QITP30FTB**	Price
14 to 17	No. 1, 2, 7-71C, 881	**GG35QITP35FTB**	Price

Swing (in.)	Set Includes	Order No.	Price
16 to 20	No. 1, 2, 7-71C, 881	**GG35QITP40FTB**	Price
Up to 12	No. 1, 2, 7-71C, 881	**GG35QITP25FTB**	Price

Triple Action Wedge Lock Tool Posts



- Zero backlash
- Precise repeatablity within .0001
- 15° Locking handle position adjustment
- Industry standard interchangeable holders

Swing (in.)	A (in.)	B (in.)	D (in.)	T - Tool Capacity (in.)	Optimum C.H. (in.)	Thread	Order No.	Price
25 & Up	6.000	5.000	1.125	1-1/2	3.000	1-1/8-12	**GG35SD60EA**	Price
Up to 12	2.625	2.500	.500	1/2 - 3/4	1.250	1/2-20	**GG35SD25AXA**	Price
13 to 15	3.000	2.750	.625	5/8 - 1	1.312	5/8-18	**GG35SD30BXA**	Price
14 to 17	3.500	3.250	.750	3/4 - 1	1.625	3/4-16	**GG35SD35CXA**	Price
16 to 20	4.000	3.750	.875	1 - 1-1/4	1.937	7/8-14	**GG35SD40CA**	Price
17 to 32	5.000	4.625	1.000	1-1/4 - 1-1/2	2.562	1-14	**GG35SD50DA**	Price

Triple Action Wedge-Lock System

Description - 5C Collet Holder				
Item	**Tool Cap. (in.)**	**Series**	**Order No.**	**Price**
	5C Collet	D25AXA	**GG35D25AXA36**	Price
	5C Collet	D30BXA	**GG35D30BXA36**	Price
	5C Collet	D35CXA	**GG35D35CXA36**	Price
	5C Collet	D40CA	**GG35D40CA36**	Price

Description - Dovetail Drill Chuck Holder				
Item	**Tool Cap. (in.)**	**Series**	**Order No.**	**Price**
	0 - 12	D25AXA	**GG35D25AXA35**	Price
	0 - 12	D30BXA	**GG35D30BXA35**	Price
	0 - 12	D35CXA	**GG35D35CXA35**	Price
	0 - 12	D40CA	**GG35D40CA35**	Price

Description - Extra HD Cut-Off Blade Toolholder				
Item	**Tool Cap. (in.)**	**Series**	**Order No.**	**Price**
	19-2 Blade	D25AXA	**GG35D25AXA771C**	Price
	19-2 Blade	D30BXA	**GG35D30BXA771C**	Price
	26-2 to 26-6 Blades	D35CXA	**GG35D35CXA771C**	Price
	26-2 to 26-6 Blades	D40CA	**GG35D40CA771C**	Price
	32-3 to 32-9 Blades	D50DA	**GG35D50DA771C**	Price
	32-3 to 32-9 Blades	D60EA	**GG35D60EA771C**	Price

Description - Extra Heavy Duty Boring				
Item	**Tool Cap. (in.)**	**Series**	**Order No.**	**Price**
	1-1/4	D35CXA	**GG35D35CXA41**	Price
	1-1/2	D40CA	**GG35D40CA41**	Price
	2	D50DA	**GG35D50DA41**	Price
	2-1/2	D60EA	**GG35D60EA41**	Price

Description - Heavy Duty Boring				
Item	**Tool Cap. (in.)**	**Series**	**Order No.**	**Price**
	3/4	D25AXA	**GG35D25AXA4**	Price
	1	D30BXA	**GG35D30BXA4**	Price
	1	D35CXA	**GG35D35CXA4**	Price
	1-1/4	D40CA	**GG35D40CA4**	Price
	1-1/2	D50DA	**GG35D50DA4**	Price

Description - ID & OD Threading				
Item	**Tool Cap. (in.)**	**Series**	**Order No.**	**Price**
	OnEdge	D25AXA	**GG35D25AXA881**	Price
	OnEdge	D30BXA	**GG35D30BXA881**	Price
	OnEdge	D35CXA	**GG35D35CXA881**	Price
	OnEdge	D40CA	**GG35D40CA881**	Price

Description - Morse Taper				
Item	**Tool Cap. (in.)**	**Series**	**Order No.**	**Price**
	4 MT	D35CXA	**GG35D35CXA5**	Price
	4 MT	D40CA	**GG35D40CA5**	Price
	5 MT	D50DA	**GG35D50DA5**	Price
	5 MT	D60EA	**GG35D60EA5**	Price

Description - Turning & Facing				
Item	**Tool Cap. (in.)**	**Series**	**Order No.**	**Price**
	1/2 to 3/4	D25AXA	**GG35D25AXA1**	Price
	5/8 to 1	D30BXA	**GG35D30BXA1**	Price
	3/4 to 1	D35CXA	**GG35D35CXA1**	Price
	1 to 1-1/4	D40CA	**GG35D40CA1**	Price
	1-1/4 to 1-1/2	D50DA	**GG35D50DA1**	Price
	1-1/2	D60EA	**GG35D60EA1**	Price

Description - Turning, Facing & Boring				
Item	**Tool Cap. (in.)**	**Series**	**Order No.**	**Price**
	1/2 to 3/4	D25AXA	**GG35D25AXA2**	Price
	5/8 to 1	D30BXA	**GG35D30BXA2**	Price
	3/4 to 1	D35CXA	**GG35D35CXA2**	Price
	1 to 1-1/4	D40CA	**GG35D40CA2**	Price
	1-1/4 to 1-1/2	D50DA	**GG35D50DA2**	Price
	1-1/2	D60EA	**GG35D60EA2**	Price

Modular Knurling Tools

Cutting Type:
- Exerts less pressure on the part
- Creates chips
- Runs at higher speeds and feeds than forming type knurling tools
- Use sharp corner knurl wheels
- For diamond patterns only

Forming Type:
- Exerts a lot of pressure on the part
- Displaces material to form the knurl
- Straddle type pinches the material with top and bottom wheels and eliminates side pressure
- Ideal for long slender, thin walled, unsupported or poorly supported parts; or whenever part deflection due to side pressure is a concern
- On all forming type knurling tools use beveled edge knurl wheels

Warnings:
- **SCKN, SSCK, SWFKT & HDSWFKT** - May cause deflections on small part diameters, and too much pressure on large diameters
- **KTW109 (Heavy Duty & Shoulder)** - This tool has the capability to adjust the wheels until they touch, but physically applying a knurl on small diameters may not be possible
- **KTO109-40 & KTW109-40** - Physically applying a knurl on small diameters may not be possible

Style - Double Wheel Forming - Diameter Range Greater than 5/16" Includes - Set of Beveled diagonal high speed beveled TiN coated knurl wheels, 25 TPI for a male diamond pattern

Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	CNC-75-4-M	20646	3/4	M	GG35KPS31125C	**GG35CNC754M**	Price
	CNC-100-4-M	20648	1	M	GG35KPS31125C	**GG35CNC1004M**	Price
	CNC-125-4-M	20650	1-1/4	M	GG35KPS31125C	**GG35CNC1254M**	Price

Style - Extra Heavy Duty 60° Diamond Cutting - Diameter Range Greater than 2" Includes - Set of Full Face straight high speed TiN coated knurl wheels, 25 TPI for a male diamond pattern

Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	CNC-75-3-M	20610	3/4	MS	GG35KPS31100C	**GG35CNC753M**	Price
	CNC-100-3-M	20620	1 x 1	MS	GG35KPS31100C	**GG35CNC1003M**	Price
	CNC-125-3-M	20630	1-1/4	MS	GG35KPS31100C	**GG35CNC1253M**	Price

Style - Heavy Duty 60° Diamond Cutting - Diameter Range 1" to 5" Includes - Set of Full Faced straight high speed knurl wheels, 25 TPI for a male diamond pattern

Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	CNC-75-2-R	20510	3/4	RS	GG35KPS2587C	**GG35CNC752R**	Price
	CNC-100-2-R	20520	1	RS	GG35KPS2587C	**GG35CNC1002R**	Price
	CNC-125-2-R	20530	1-1/4	RS	GG35KPS2587C	**GG35CNC1252R**	Price

Style - KTO109-40 - Heavy Duty Style Straddle Square Shank Includes - Set of Beveled diagonal high speed TiN coated knurl wheels for a male diamond pattern, 25 TPI

Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	KTO109-100-40-P	22869	1 x 4	O*	-	**GG35KTO10910040**	Price
	KTO109-25-40-O	22870	1-1/4 x 4	O*	-	**GG35KTO10912540**	Price

Style - KTW109 - Heavy Duty Style Straddle Square Shank Includes - Set of Beveled diagonal high speed TiN coated knurl wheels for a male diamond pattern, 25 TPI

Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	KTW109-100-15-M	22816	1 x 1-1/2	M*	-	**GG3522816**	Price
	KTW109-100-25-M	22824	1 x 2-1/2	M*	-	**GG35KTW10910025**	Price
	KTW109-125-15-M	22818	1-1/4 x 1-1/2	M*	-	**GG35KTW10912515**	Price
	KTW109-125-25-M	22826	1-1/4 x 2-1/2	M*	-	**GG35KTW10901252**	Price
	KTW109-75-15-M	22814	3/4 x 1-1/2	M*	-	**GG35KTW1097515M**	Price
	KTW109-75-25-M	22823	3/4 x 2-1/2	M*	-	**GG35KTW1097525M**	Price

Style - KTW109 - Shoulder Style Straddle Square Shank Forming Includes - Set of Beveled diagonal high speed TiN coated knurl wheels for a male diamond pattern, 25 TPI

Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	KTW109-100-15-4	22833	1 x 1-1/2	SW4*	-	**GG35KTW10910015**	Price
	KTW109-125-25-4	22843	1-1/4 x 2-1/2	SW4*	-	**GG35KTW10912525**	Price
	KTW109-75-15-4	22832	3/4 x 1-1/2	SW4*	-	**GG35KTW10975154**	Price
	KTW109-75-25-4	22841	3/4 x 2-1/2	SW4*	-	**GG35KTW10975254**	Price

Style - KTW109-40 - Shoulder Style Straddle Square shank Includes - Set of Beveled diagonal high speed TiN coated knurl wheels for a male diamond pattern, 25 TPI

Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	KTW109-100-40-4	22873	1 x 4	SW4*	-	**GG35KTW10910040**	Price
	KTW109-125-40-4	22874	1-1/4 x 4	SW4*	-	**GG35KTW10912540**	Price

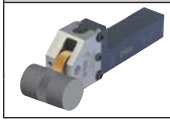
Style - Light Duty 60° Diamond Cutting - Diameter Range 1/2" to 1-1/2" Includes - Set of Full Faced straight high speed TiN coated knurl wheels, 30 TPI for a male diamond pattern

Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	CNC-75-1-2	20410	3/4	SW2S	GG35PSW20S	**GG35CNC7512**	Price
	CNC-100-1-2	20420	1	SW2S	GG35PSW20S	**GG35CNC10012**	Price
	CNC-125-1-2	20430	1-1/4	SWS2	GG35PSW20S	**GG35CNC12512**	Price

Modular Knurling Tools (cont.)

Style - SCKN - Self Centering Includes - Set of beveled diagonal high speed knurl wheels, 30TIP*, 25 TPI**							
Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	SCKN-125-DW-M	22141	1-1/4	M**	GG35KPS31100	**GG35SCK125M**	Price
	SCKN-162-DW-D	22115	5/8	D*	GG35KPS1850	**GG35SCKN162DWD**	Price
	SCKN-38-DW-D	22151	3/8	D*	GG35KPS1850	**GG35SCKN38DWD**	Price
	SCKN-75-DW-M	22121	3/4	M**	GG35KPS1850	**GG35SCK75M**	Price
	SCKN-100-DW-M	22131	1	M**	GG35KPS31100	**GG35SCK100M**	Price
	SCKN-50-DW-D	22111	1/2	D*	GG35KPS1850	**GG35SCK50D**	Price

Style - Shoulder Forming - Diameter Range Greater than 5/16" Includes - Set of Beveled diagonal high speed beveled TiN coated knurl wheels, 25 TPI for a male diamond pattern							
Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	CNC-75-6-4	20780	3/4	SW4	GG35SW4OP2S	**GG35CNC7564**	Price
	CNC-100-6-4	20790	1 x 1	SW4	GG35SW4OP2S	**GG35CNC10064**	Price
	CNC-125-6-4	20800	1-1/4	SW4	GG35SW4OP2S	**GG35CNC12564**	Price

Style - Single Wheel Forming - Unlimited Diameter Range Includes - One Beveled straight high speed beveled TiN coated knurl wheel, 25 TPI for a straight pattern							
Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	CNC-100-5-O	20720	1	O	GG35KPS31125C	**GG35CNC1005O**	Price
	CNC-125-5-O	20730	1-1/4	O	GG35KPS31125C	**GG35CNC1255O**	Price
	CNC-75-5-O	20710	3/4	O	GG35KPS31125C	**GG35CNC755O**	Price

Style - SSCK - Shoulder Self Centering Includes - Set of Beveled diagonal high speed TiN coated knurl wheels, 30 TPI*, 25 TPI**							
Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	SSCK-125-DW-4	22260	1-1/4	SW4**	GG35SW40P2S	**GG35SSCK1254**	Price
	SSCK-162-DW-2	22218	5/8	SW2*	GG35SW20P2S	**GG35SSCK162DW2**	Price
	SSCK-38-DW-2	22210	3/8	SW2*	GG35SW20P2S	**GG35SSCK382**	Price
	SSCK-50-DW-2	22220	1/2	SW2*	GG35SW20P2S	**GG35SSCK502**	Price
	SSCK-75-DW-4	22240	3/4	SW4**	GG35SW40P2S	**GG35SSCK754**	Price
	SSCK-100-DW-4	22250	1	SW4**	GG35SW40P2S	**GG35SSCK1004**	Price

Style - Straddle Forming - Diameter Range up to 1" Includes - Set of Beveled diagonal high speed beveled TiN coated knurl wheels, 30 TPI for a male diamond pattern							
Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	CNC-75-7-R	20910	3/4	R	GG35KPS2562C	**GG35CNC757R**	Price
	CNC-100-7-R	20920	1 x 1	R	GG35KPS2562C	**GG35CNC1007R**	Price
	CNC-125-7-R	20930	1-1/4	R	GG35KPS2562C	**GG35CNC1257R**	Price

Style - SWFKT & HDSWFKT - Single Wheel Fixed Forming Includes - One straight high speed beveled TiN coated knurl wheel, 30 TIP*, 25 TPI**							
Item	Description	Model No.	Shank Size	Knurl Wheel Type	Knurl Pin Set No.	Order No.	Price
	DWFKT-38-D	21720	3/8	D*	GG35KPS1850	**GG35SWFKT38D**	Price
	HDSWFKT-75-O	21810	3/4	O**	GG35KPS31100C	**GG3521810**	Price
	SWFKT-125-O	21760	1-1/4	O**	GG3528950	**GG35SWFTK125O**	Price
	SWFKT-162-D	21765	5/8	D*	GG3528950	**GG3521765**	Price
	SWFKT-50-D	21730	1/2	D*	GG35KPS1850	**GG35SWFKT50D**	Price
	SWFKT-75-M	21740	3/4	M**	GG35KPS3175	**GG35SWFKT75M**	Price
	SWFKT-100-O	21750	1 x 1	O**	GG35KPS3175	**GG35SWFKT100O**	Price

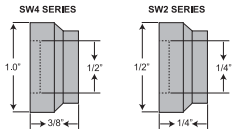
Replacement Knurl Pin Sets

Knurling Tool	Order No.	Price
GG35-CNC752R, GG35-CNC1002R, GG35-CNC1252R	**GG35KPS2587C**	Price
GG35-CNC753M, GG35-CNC1003M, GG35-CNC1253M	**GG35KPS31100C**	Price
GG35-CNC7564, GG35-CNC10064, GGET-CNC12564, GG35-SSCK754, GG35-SSCK1004	**GG35SW40P2S**	Price
GG35-CNC757R, GGET-CNC1007R, GG35-CNC1257R	**GG35KPS2562C**	Price
GG35-SCK100M, GG35-3SHKT75M, GG35-3SHKT100M	**GG35KPS31100**	Price
GG35-SSCK502	**GG35SW20P2S**	Price
GG35-SWFKT50D, GG35-SCK50D, GG35-3SHKT50D	**GG35KPS1850**	Price
GG35-SWFKT75M, GG35-SWFKT100O, GG35-SCK75M	**GG35KPS3175**	Price

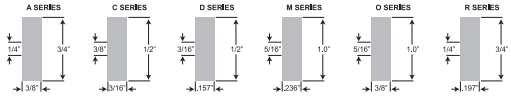
Dorian Tool Knurls

MADE IN THE USA









- "SW" knurling wheels are technically designed to knurl against a square shoulder
- With super precise workmanship, the wheels are made of heat treated High Cobalt Steel to withstand severe knurling operation
- Knurl wheels are Titanium Nitrating coated to reduce the co-efficient of friction when knurling, increasing the quality and the force of knurling as well as the life of the knurl wheels
- All SW Series knurl wheels are available only in cobalt and tin coated
- Tools Used On "SW2" Series: SCNC-37, 50, 162-1-2, CNC-75, 100, 125-1-2, SCNC-37K, 50, 162-6-2, SCNCKH-1-2, SCNCKH-6-2, CNCKH-1-2, SSCK38-2, SSCK-50-2
- Tools Used On "SW4" Series: SSCK-75-4, SSCK-100-4, SSCK-125-4, KTW109-75-2-4, KTW109-100-2-4, KTW109-100-3-4, KTW109-125-3-4
- Circular Pitch Knurls are made to extremely high standards from the finest materials available
- Knurls are individually hob cut and lapped to a smooth hard finish to give longer life and impart a smooth clean surface to the knurled part
- Knurls available in High Speed, Cobalt, TIC/N - Coated, beveled, and diametral pitch
- Tools Used On "D" Series: SCNC-37-7-D, SCNC-50-7-D, SCNC-162-7-3, SCNCKH-7-D, 3SHKT-50-D, 3SHKT-162-D, SCK5-50-D
- Tools Used On "M" Series: CNC-75, 100, 125-3-M, CNCKH-3-M, SCK-75, 100, 125-M, 3SHKT-75, 100, 125-M
- Tools Used On "O" Series: CNC-75-5-O, CNC-100-5-O, CNC-125-5-O, CNCKH-5-O
- Tools Used On "R" Series: CNC-75-2-4, CNC-100-2-4, CNC-125-2-4, CNCKH-2, CNC-75-7, CNC-100-7, CNC-125-7

Series - D

		Diagonal Left Circular		Diagonal Right Circular		Straight Circular	
Teeth Per In. TPI	Material	Order No.	Price	Order No.	Price	Order No.	Price
16	Cobalt	GG35DDL16CB	Price	GG35DDR16CB	Price	-	-
16	High Speed Steel	GG35DDL16HS	Price	GG35DDR16HS	Price	-	-
-	-	GG35DDL20HS	Price	GG35DDR20HS	Price	-	-
25	Cobalt	GG35DDL25CB	Price	GG35DDR25CB	Price	GG35DS25C	Price
25	High Speed Steel	GG35DDL25HS	Price	GG35DDR25HS	Price	GG35DS25HS	Price
30	Cobalt	GG3525143	Price	GG3525089	Price	GG35DS30C	Price
30	High Speed Steel	GG35DDL30HS	Price	GG35DDR30HS	Price	GG35DS30HS	Price
-	-	-	-	-	-	GG35DS35C	Price
35	High Speed Steel	GG35DDL35HS	Price	GG35DDR35HS	Price	-	-
40	High Speed Steel	GG35DDL40HS	Price	GG35DDR40HS	Price	-	-

Series - M

		Diagonal Left Circular		Diagonal Right Circular		Straight Circular	
Teeth Per In. TPI	Material	Order No.	Price	Order No.	Price	Order No.	Price
12	Cobalt	GG35MDL12CB	Price	GG35MDR12CB	Price	GG35MS12C	Price
12	High Speed Steel	GG35MDL12HS	Price	GG35MDR12HS	Price	GG35MS12HS	Price
14	Cobalt	GG35MDL14CB	Price	GG35MDR14CB	Price	GG35MS14C	Price
14	High Speed Steel	GG35MDL14HS	Price	GG35MDR14HS	Price	GG35MS14HS	Price
16	Cobalt	GG35MDL16CB	Price	GG35MDR16CB	Price	GG35MS16C	Price
16	High Speed Steel	GG3525474	Price	GG3525408	Price	GG35MS16HS	Price
20	Cobalt	GG3525477	Price	GG35MDR20CB	Price	GG35MS20C	Price
-	-	GG35MDL20HS	Price	GG35MDR20HS	Price	-	-
25	Cobalt	GG3525479	Price	GG3525413	Price	GG35MS25C	Price
25	High Speed Steel	GG3525478	Price	GG3525412	Price	GG35MS25HS	Price
30	Cobalt	GG35MDL30CB	Price	GG35MDR30CB	Price	GG35MS30C	Price
30	High Speed Steel	GG35MDL30HS	Price	GG35MDR30HS	Price	GG35MS30HS	Price
35	High Speed Steel	-	-	-	-	GG35MS35HS	Price

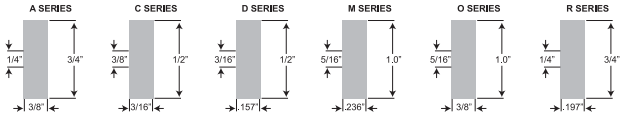
Series - O

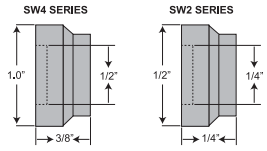
		Diagonal Left Circular		Diagonal Right Circular		Straight Circular	
Teeth Per In. TPI	Material	Order No.	Price	Order No.	Price	Order No.	Price
12	High Speed Steel	GG35ODL12HS	Price	GG35ODR12HS	Price	GG35OS12HS	Price
14	Cobalt	-	-	-	-	GG35OS14C	Price
14	High Speed Steel	-	-	-	-	GG35OS14HS	Price
16	Cobalt	-	-	-	-	GG35OS16C	Price
16	High Speed Steel	-	-	-	-	GG35OS16HS	Price
20	Cobalt	-	-	-	-	GG35OS20C	Price
-	-	GG35ODL20HS	Price	GG35ODR20HS	Price	GG35OS20HS	Price
25	Cobalt	GG35ODL25C	Price	GG35ODR25C	Price	GG35OS25C	Price
25	High Speed Steel	GG35ODL25HS	Price	GG35ODR25HS	Price	GG35OS25HS	Price
30	Cobalt	-	-	-	-	GG35OS30C	Price
30	High Speed Steel	-	-	-	-	GG35OS30HS	Price
-	-	-	-	-	-	GG35OS35C	Price
35	High Speed Steel	-	-	-	-	GG35OS35HS	Price

Knurls (cont.)

MADE IN THE USA







Series - R							
		Diagonal Left		Diagonal Right		Straight	
		Circular		Circular		Circular	
Teeth Per In. TPI	Material	Order No.	Price	Order No.	Price	Order No.	Price
12	Cobalt	-	-	-	-	GG35RS12C	Price
12	High Speed Steel	-	-	-	-	GG35RS12HS	Price
14	Cobalt	-	-	-	-	GG35RS14C	Price
14	High Speed Steel	-	-	-	-	GG35RS14HS	Price
16	High Speed Steel	-	-	-	-	GG35RS16HS	Price
16	Cobalt	-	-	-	-	GG35RS16C	Price
20	Cobalt	-	-	-	-	GG35RS20C	Price
-	-	-	-	-	-	GG35RS20HS	Price
25	Cobalt	-	-	-	-	GG35RS25C	Price
25	High Speed Steel	GG35RDL25HSB	Price	-	-	-	-
30	Cobalt	-	-	-	-	GG35RS30C	Price
30	High Speed Steel	-	-	-	-	GG35RS30HS	Price
-	-	-	-	-	-	GG35RS35C	Price
35	High Speed Steel	-	-	-	-	GG35RS35HS	Price
-	-	-	-	-	-	GG35RS40C	Price

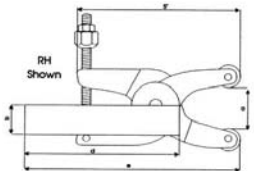
Series - SW2							
		Diagonal Left		Diagonal Right		Straight	
		Diametral		Diametral		Diametral	
Teeth Per In. TPI	Material	Order No.	Price	Order No.	Price	Order No.	Price
16	Cobalt	-	-	-	-	GG35SW2S16C	Price
16	High Speed Steel	-	-	-	-	GG35SW2S16HS	Price
20	Cobalt	GG35SW2L20CB	Price	GG35SW2R20CB	Price	GG35SW2S20C	Price
-	-	-	-	-	-	GG3527403	Price
25	Cobalt	GG35SW2L25CB	Price	GG35SW2R25CB	Price	GG35SW2S25C	Price
25	High Speed Steel	GG35SW2L25HS	Price	GG35SW2R25HS	Price	GG35SW2S25HS	Price
30	Cobalt	GG35SW2L30CB	Price	GG35SW2R30CB	Price	GG35SW2S30C	Price
30	High Speed Steel	GG35SW2L30HS	Price	GG35SW2R30HS	Price	GG3527407	Price
-	-	-	-	-	-	GG35SW2S35C	Price
-	-	-	-	-	-	GG35SW2S40C	Price
40	High Speed Steel	-	-	-	-	GG35SW2S40HS	Price

Series - SW4							
		Diagonal Left		Diagonal Right		Straight	
		Diametral		Diametral		Diametral	
Teeth Per In. TPI	Material	Order No.	Price	Order No.	Price	Order No.	Price
14	Cobalt	GG35SW4L14CB	Price	GG35SW4R14CB	Price	GG35SW4S14C	Price
14	High Speed Steel	GG35SW4L14HS	Price	GG35SW4R14HS	Price	GG35SW4S14HS	Price
16	Cobalt	GG35SW4L16CB	Price	GG35SW4R16CB	Price	GG35SW4S16C	Price
16	High Speed Steel	GG35SW4L16HS	Price	GG35SW4R16HS	Price	GG35SW4S16HS	Price
20	Cobalt	GG35SW4L20CB	Price	GG35SW4R20CB	Price	GG35SW4S20C	Price
-	-	GG3528140	Price	GG3528086	Price	GG3528005	Price
25	Cobalt	GG3528143	Price	GG3528089	Price	GG35SW4S25C	Price
25	High Speed Steel	GG3528142	Price	GG3528088	Price	GG3528007	Price
30	Cobalt	GG35SW4L30CB	Price	GG35SW4R30CB	Price	GG35SW4S30C	Price
30	High Speed Steel	GG3528144	Price	GG3528090	Price	GG35SW4S30HS	Price
-	-	-	-	-	-	GG35SW4S35C	Price
-	-	-	-	-	-	GG35SW4S40C	Price
40	High Speed Steel	-	-	-	-	GG35SW4S40HS	Price

EAGLE ROCK TECHNOLOGIES, INC. The "New" Generation of Wettstein™ USA Scissor Type Knurling Tools

- Machine: Manual or CNC Lathe
- Capacity: 0-2-1/8"
- Knurl size: Style E 3/4" x 3/8" x 1/4"
- Knurl patterns: Straight (2 knurls AA) Diamond, Male (1 knurl BL, 1 knurl BR)
- Knurls included: 1 Set (1 knurl BL and 1 knurl BR) Medium pitch, Diamond pattern)





Shank Style - Center					
Shank Size (a) (in.)	Shank Length (c) (in.)	OAL (d) (in.)	f (in.)	Order No.	Price
5/8	3	6	3	**GG40A1440625CE**	Price

Shank Style - Left Hand					
Shank Size (a) (in.)	Shank Length (c) (in.)	OAL (d) (in.)	f (in.)	Order No.	Price
5/8 x 5/8	3	6	3	**GG40A1440625LE**	Price
3/4 x 3/4	5	7	3	**GG40A1440750LE**	Price
1 x 1	5	7	3	**GG40A1441000LE**	Price

Shank Style - Right Hand					
Shank Size (a) (in.)	Shank Length (c) (in.)	OAL (d) (in.)	f (in.)	Order No.	Price
5/8 x 5/8	3	6	3	**GG40A1440625RE**	Price
3/4 x 3/4	5	7	3	**GG40A1440750RE**	Price
1 x 1	5	7	3	**GG40A1441000RE**	Price

Shank Style - Round			
Shank Size (a) (in.)	f (in.)	Order No.	Price
3/4	7	**GG40A1440750DE**	Price
1	7	**GG40A1441000DE**	Price

EAGLE ROCK TECHNOLOGIES, INC. Bump Type A1-30 Solid & Round Shank Knurling Tools

A1-30 Solid, 1 Pc., CNC Shank Bump Type Knurling Tool:

- Our exclusive offset shank allows for virtually no turret overhang of the knurls
- Since the knurl head is on the side of the holder, you can insert the tool in your turret with as little (or as much) overhang as you want
- Head is self-centering to accommodate for any misalignment
- Includes one set of a Medium pitch, Diamond pattern (BL and BR) knurls



A1-30 Round CNC Shank Bump Type Knurling Tool:

- Head is self-centering to accommodate for any misalignment
- Can also be used for Internal Knurling
- Includes one set of Medium pitch, Diamond pattern (BL and BR) knurls

Shank Style - Left Hand				
Shank Size (in.)	Knurl Wheel Size (in.)	OAL (in.)	Order No.	Price
1/2 x 1	B-1/2 x 3/16 x 3/16	5-3/4	**GG40A1300500LB**	Price
5/8 x 5/8	C-5/8 x 1/4 x 1/4	5-3/4	**GG40A1300625LC**	Price
3/4 x 3/4	E-3/4 x 3/8 x 1/4	5-3/4	**GG40A1300750LE**	Price
1 x 1	E-3/4 x 3/8 x 1/4	5-3/4	**GG40A1301000LE**	Price

Shank Style - Right Hand				
Shank Size (in.)	Knurl Wheel Size (in.)	OAL (in.)	Order No.	Price
1/2 x 1	B-1/2 x 3/16 x 3/16	5-3/4	**GG40A1300500RB**	Price
5/8 x 5/8	C-5/8 x 1/4 x 1/4	5-3/4	**GG40A1300625RC**	Price
3/4 x 3/4	E-3/4 x 3/8 x 1/4	5-3/4	**GG40A1300750RE**	Price
1 x 1	E-3/4 x 3/8 x 1/4	5-3/4	**GG40A1301000RE**	Price

Shank Style - Round				
Shank Size (in.)	Knurl Wheel Size (in.)	OAL (in.)	Order No.	Price
1/2	B-1/2 x 3/16 x 3/16	6	**GG40A1300500B**	Price
5/8	C-5/8 x 1/4 x 1/4	6	**GG40A1300625C**	Price
3/4	E-3/4 x 3/8 x 1/4	7	**GG40A1300750E**	Price
1	E-3/4 x 3/8 x 1/4	7	**GG40A1301000E**	Price
1-1/4	E-3/4 x 3/8 x 1/4	7	**GG40A1301250E**	Price
1-1/2	E-3/4 x 3/8 x 1/4	7	**GG40A1301500E**	Price

EAGLE ROCK TECHNOLOGIES, INC. Bump Type Knurling Tool With CNC Shanks

- Available in either left or right hand shanks
- Each holder includes on medium pitch, straight (AA) pattern knurl



			Left		Right	
Shank Size (in.)	Knurl Wheel Size (in.)	OAL (in.)	Order No.	Price	Order No.	Price
5/16 x 3/8	A-5/16 x 5/32 x 1/8	5	**GG40A1290312LA**	Price	**GG40A1290312RA**	Price
3/8 x 3/8	A-5/16 x 5/32 x 1/8	3	**GG40A1290375LA**	Price	**GG40A1290375RA**	Price
1/2 x 1/2	B-1/2 x 3/16 x 3/16	3-1/2	**GG40A1290500LB**	Price	**GG40A1290500RB**	Price
5/8 x 5/8	C-5/8 x 1/4 x 1/2	4	**GG40A1290625LC**	Price	**GG40A1290625RC**	Price
3/4 x 3/4	E-3/4 x 3/8 x 1/4	4-1/2	**GG40A1290750LE**	Price	**GG40A1290750RE**	Price
3/4 x 1	G-3/4 x 1/2 x 1/4	4-1/2	**GG40A1290750LG**	Price	**GG40A1290750RG**	Price
1 x 1	E-3/4 x 3/8 x 1/4	6	**GG40A1291000LE**	Price	**GG40A1291000RE**	Price
1 x 1	K-1 x 3/8 x 5/16	6	**GG40A1291000LK**	Price	**GG40A1291000RK**	Price
1 x 1-1/4	J-1-1/4 x 1/2 x 1/2	6	**GG40A1291000LJ**	Price	**GG40A1291000RJ**	Price

EAGLE ROCK TECHNOLOGIES, INC. Swivel Head with 2 Knurls

- The A1-71 is arguably one of the most popular knurling tools in the world
- Guaranteed to outlive and outperform any of the imported knockoffs
- Each A1-71 includes (1) set Medium pitch, Diamond pattern (BL and BR) knurls

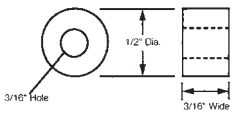


Shank Size (in.)	Knurl Wheel Size	Order No.	Price
5/16 x 3/4	AJ- 5/8 x 5/16 x 7/32	**GG40A1710750AJ**	Price
3/8 x 7/8	AJ- 5/8 x 5/16 x 7/32	**GG40A1710875AJ**	Price
1/2 x 1-1/8	E- 3/4 x 3/8 x 1/4	**GG40A1711125E**	Price
5/8 x 1-3/8	E- 3/4 x 3/8 x 1/4	**GG40A1711375E**	Price
7/8 x 1-3/4	K- 1 x 3/8 x 5/16	**GG40A1711750K**	Price

Circular Pitch Knurls

- The circular Pitch Knurl System is the older system and has been in use many years
- The spacing of the teeth is measured by the number of teeth per inch (TPI) around the circumference
- Knurling can be done with many types of holders made for knurling or with any holder (or machine) made for thread rolling

EP Series



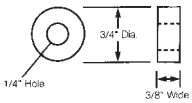
Right Hand 

Left Hand 

Straight 

		Left Hand Spiral		Right Hand Spiral		Straight	
Teeth Per Inch	Included Tooth Angle (deg.)	Order No.	Price	Order No.	Price	Order No.	Price
16	90	**SE40EPL216**	Price	**SE40EPR216**	Price	**SE40EPS216**	Price
20	90	**SE40EPL220**	Price	**SE40EPR220**	Price	**SE40EPS220**	Price
25	90	**SE40EPL225**	Price	**SE40EPR225**	Price	**SE40EPS225**	Price
30	90	**SE40EPL230**	Price	**SE40EPR230**	Price	**SE40EPS230**	Price
35	90	**SE40EPL235**	Price	**SE40EPR235**	Price	**SE40EPS235**	Price

KP Series



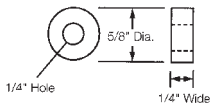
Right Hand 

Left Hand 

Straight 

		Left Hand Spiral		Right Hand Spiral		Straight	
Teeth Per Inch	Included Tooth Angle (deg.)	Order No.	Price	Order No.	Price	Order No.	Price
12	90	**SE40KPL212**	Price	**SE40KPR212**	Price	**SE40KPS212**	Price
14	90	**SE40KPL214**	Price	**SE40KPR214**	Price	**SE40KPS214**	Price
16	90	**SE40KPL216**	Price	**SE40KPR216**	Price	**SE40KPS216**	Price
20	90	**SE40KPL220**	Price	**SE40KPR220**	Price	**SE40KPS220**	Price
21	90	**SE40KPL221**	Price	**SE40KPR221**	Price	**SE40KPS221**	Price
25	90	**SE40KPL225**	Price	**SE40KPR225**	Price	**SE40KPS225**	Price
30	90	**SE40KPL230**	Price	**SE40KPR230**	Price	**SE40KPS230**	Price
33	90	**SE40KPL233**	Price	**SE40KPR233**	Price	**SE40KPS233**	Price
35	90	**SE40KPL235**	Price	**SE40KPR235**	Price	**SE40KPS235**	Price
40	90	**SE40KPL240**	Price	**SE40KPR240**	Price	**SE40KPS240**	Price

GK Series



Right Hand 

Left Hand 

Straight 

		Left Hand Spiral		Right Hand Spiral		Straight	
Teeth Per Inch	Included Tooth Angle (deg.)	Order No.	Price	Order No.	Price	Order No.	Price
12	90	**SE40GKL212**	Price	**SE40GKR212**	Price	**SE40GKS212**	Price
16	90	**SE40GKL216**	Price	**SE40GKR216**	Price	**SE40GKS216**	Price
20	90	**SE40GKL220**	Price	**SE40GKR220**	Price	**SE40GKS220**	Price
25	90	**SE40GKL225**	Price	**SE40GKR225**	Price	**SE40GKS225**	Price
30	90	**SE40GKL230**	Price	**SE40GKR230**	Price	**SE40GKS230**	Price
35	90	**SE40GKL235**	Price	**SE40GKR235**	Price	**SE40GKS235**	Price
40	90	**SE40GKL240**	Price	**SE40GKR240**	Price	**SE40GKS240**	Price

DUMORE CORPORATION Quality is our legacy Model 14 - Tool Post Grinder with Integral Spindle 1/4HP

Internal & External Grinding Capabilities

MADE IN THE USA

- Designed specifically for internal and external grinding on home-shop lathes
- Supplied with 1/8" chuck mounted wheels, pulley, belt, mounting post, tee-bolt, wheel collars, general purpose wheels and steel carrying case
- For lathes up to 7" swing
- Grinding speeds 10,000 RPM and 22,500 RPM
- External grinding capacity 1/8" - 2" diameter wheels
- Internal grinding capacity: 1/2" min., 2-1/4" max depth
- Tool Post Grinder complete, 115 V AC/DC



Order No.	Price
RL9514011	Price

DUMORE CORPORATION Quality is our legacy External & Internal Grinding Kit

Kit Includes:

- Tool post grinder
- 8 Insert Spindles: 5T-200, TX, TC, 5N-158, TN-3, TN-4, TN-5 & TN-6
- 3 External grinding wheels
- 4 Mounted wheels
- 2 Internal grinding wheels
- Diamond wheel dresser
- Pulleys
- Belts
- Carrying case

MADE IN THE USA



Motor	Order No.	Price
1/2 HP	**RL955750T**	Price
3/4 HP	**RL955775T**	Price

External Grinding Kit

Kit Includes:

- Tool post grinder
- External 5X-350 grinding spindle
- 3 General purpose grinding wheels
- Diamond wheel dresser
- Pulleys
- Belts
- Carrying case

MADE IN THE USA



Motor	Order No.	Price
1/2 HP	**RL955750X**	Price
3/4 HP	**RL955775X**	Price

Model 12 - Tool Post Grinder with Interchangeable Spindle - 1HP

MADE IN THE USA

- A natural for large heavy work and continuous operation
- Interchangeable spindles for external and internal grinding avaible
- 8" Diameter wheel capacity
- Flat-belt drive, vertical spindle adjustment
- Comes with pulleys, flat-belts, belt guard, mounting post, T-bolt, wheel guard and diamond dresser
- For lates with 20" or larger swing



Description	Order No.	Price
115V, 60Hz, Single Phace, AC Only	**RL9512011†**	Price
220/440V, 50/60 Hz, 3PH, AC Only	**RL9512022†**	Price

Model 57 - Tool Post Grinder with Interchangeable Spindle - 1/2HP & 3/4HP

- 6" Diameter external grinding wheel
- Internal grinding up to 18" deep at 1-7/8" diameter
- Comes with belts, pulleys, belt guard, T-bolt, mounting post, diamond dresser, wrench set and carrying case
- For lathes with swings from 9" to 20"

MADE IN THE USA



Style	Order No.	Price
1/2 HP Induction Motor, 115V, 60 Hz, AC Only	**RL9557021**	Price
3/4 HP Univeral Motor, 115V, AC/DC	**RL9557031**	Price

Model 25 - Tool Post Grinder with Interchangeable Spindle - 3HP

MADE IN THE USA

- Handles large external and surface grinding jobs by coverting any standard machine tool into a big capacity grinder
- Mounts on lathes 20" or larger, heavy duty milling machines, planers, boring mills, etc.
- Equipped with built-in magnetic starter, overload protector and grease-sealed bearings
- Holds up to 12" diameter wheels
- For internal grinding uses Series 12 spindles



Style	Order No.	Price
220V, 50/60 Hz, 3PH, AC Only	**RL9525022‡**	Price

Tool Post Spindles

- SPINDLE SELECTOR CHART (Must be ordered separately for Model 12, 25 & 57 Grinders)
- When ordering 12N internal and 12X external spindles for the Model 25 Grinder, order Adapter Kit Order No. 858-0035. Kit contains correct belts and pulleys.
- When ordering 25X external spindles for the Model 12 Grinder, order Adapter Kit Order No. 858-0034. Kit contains correct belts, pulleys and 12" wheel guard.

Type - External Spindle

Style	For Grinder Series	Max. Recommended Speed	Max. Wheel Size	Wheel Bore	Order No.	Price
2-BRG. EXT.	12 & 25	8000	8	.750	**RL9512X350**	Price
2-BRG. EXT.	25	4000	12	1.250	**RL9525X250**	Price
2-BRG. EXT.	57	15000	-	1.250	**RL955X450**	Price
2-BRG. EXT.	57	15000	6	.500	**RL955X350**	Price

Type - Insert Spindle

Style	For Grinder Series	Max. Recommended Speed	Max. Wheel Size	Wheel Bore	Order No.	Price
-	57	42500	-	-	**RL955T200**	Price
Insert	5T-200	15000	1	.125	**RL95TN4**	Price
Insert	5T-200	15000	1	.125	**RL95TN6**	Price
Insert	5T-200	15000	5	.375	**RL95TX**	Price

Type - Insert Spindle

Style	For Grinder Series	Max. Recommended Speed	Max. Wheel Size	Wheel Bore	Order No.	Price
Insert	5T-200	32500	1-1/2	.250	**RL95TN158**	Price
Insert	5T-200	42500	3/4	1/8 & 1/4 Shanks	**RL95TC**	Price

Type - Internal Spindle

Style	For Grinder Series	Max. Recommended Speed	Max. Wheel Size	Wheel Bore	Order No.	Price
3-BRG. INT.	-	8000	5	.500	**RL9512N308**	Price
3-BRG. INT.	57	15000	2-1/2	.375	**RL955N309**	Price
3-BRG. INT.	57	15000	2-1/2	.375	**RL955N315**	Price

Dumore Grinding Wheels

- General-purpose, for steels of hardness up to Rockwell C-45 (Other grades available for non-ferrous, stainless and for steels of RC-45 and higher. Price on Application)

Dia. (in.)	Thickness (in.)	Arbor Hole (in.)	Recess	Grit	Order No.	Price
5/8	1/4	1/8	1/4 x 1/8	60	**RL957740005**	Price
3/4	1/4	1/8	1/4 x 1/8	60	**RL957740008**	Price
3/4	1/2	1/4	-	46	**RL957740010**	Price
1	1/4	1/8	1/4 x 1/8	60	**RL957740018**	Price
1	1/4	1/4	-	46	**RL957740019**	Price
1	1	1/4	1/2 x 3/8	46	**RL957740021**	Price
1-1/4	1/4	1/4	-	46	**RL957740024**	Price
1-1/2	1/4	1/4	-	46	**RL957740029**	Price
1-1/2	1/2	1/4	5/8 x 1/4	46	**RL957740031**	Price
1-1/2	1	1/4	5/8 x 3/8	46	**RL957740034**	Price
2	1/4	1/4	-	54	**RL957740040**	Price
2	1/4	1/4	-	80	**RL957740041**	Price
2	3/8	3/8	-	46	**RL957740047**	Price
2	3/8	3/8	-	61	**RL957740046**	Price
2	1/2	3/8	-	54	**RL957740050**	Price
2	1	3/8	1-1/4 x 1/2	46	**RL957740053**	Price
2-1/2	1/4	1/4	-	46	**RL957740061**	Price
2-1/2	3/8	3/8	-	46	**RL957740065**	Price
2-1/2	1/2	1/2	-	46	**RL957740066**	Price



Dia. (in.)	Thickness (in.)	Arbor Hole (in.)	Recess	Grit	Order No.	Price
3	3/8	3/8	-	46	**RL957740073**	Price
3	1/2	3/8	-	46	**RL957740078**	Price
3	1/2	1/2	-	46	**RL957740213**	Price
3	3/4	1/2	-	46	**RL957740083**	Price
3	1	3/8	2 x 1/2	46	**RL957740086**	Price
4	1/2	3/8	-	46	**RL957740098**	Price
4	1/2	1/2	-	46	**RL957740103**	Price
5	3/8	3/8	-	46	**RL957740110**	Price
5	1/2	3/8	-	46	**RL957740111**	Price
5	1/2	1/2	-	46	**RL957740117**	Price
6	1/2	1/2	-	46	**RL957740126**	Price

RAPIDHOLD™ Toolholder CNC Bushings

- **C Style Tool Holder Bushing:** Elongated slot, universal style, designed to fit all types of Set-screw configurations
- **J Style Tool Holder Bushing:** Two hole style requires precise alignment of set screws
- **B Style Tool Holder Bushing:** Split style, shorter length, clamp on flat; bushing collapses to hold tool
- **CV Style VDI Tool Holder Bushing:** Designed to fit the form E2 VDI boring bar holder
- Clearance holes to clamp directly on the tool
- Used to adapt drills, boring bars, and other tools


B Style


C Style


CV Style

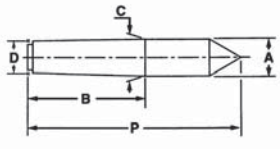

J Style

		B		C		CV		DD		J		Z	
Outside Dia. (in)	Inside Dia. (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3/4	3/8	-	-	RH2180166	Price	-	-	-	-	-	-	-	-
3/4	1/2	-	-	RH2180167	Price	-	-	-	-	-	-	-	-
1	3/8	-	-	RH2180168	Price	-	-	-	-	-	-	-	-
1	1/2	RH2180115	Price	RH2180169	Price	-	-	-	-	RH2180240	Price	-	-
1	5/8	RH2180116	Price	RH2180170	Price	-	-	-	-	RH2180241	Price	-	-
1	3/4	RH2180117	Price	RH2180171	Price	-	-	-	-	RH2180242	Price	-	-
1-1/4	1/4	-	-	-	-	RH2180220	Price	-	-	-	-	-	-
1-1/4	3/8	RH2180118	Price	RH2180172	Price	RH2180221	Price	-	-	RH2180243	Price	RH21Z1250375	Price
1-1/4	1/2	RH2180119	Price	RH2180173	Price	RH2180222	Price	-	-	RH2180244	Price	RH21Z1250500	Price
1-1/4	5/8	RH2180120	Price	RH2180174	Price	RH2180223	Price	-	-	RH2180245	Price	RH21Z1250625	Price
1-1/4	3/4	RH2180121	Price	RH2180175	Price	RH2180224	Price	-	-	RH2180246	Price	RH21Z1250750	Price
1-1/4	7/8	RH2180122	Price	RH2180176	Price	RH2180225	Price	-	-	RH2180247	Price	RH21Z1250875	Price
1-1/4	1	RH2180123	Price	RH2180177	Price	RH2180226	Price	-	-	RH2180248	Price	RH21Z1251000	Price
1-1/2	1/4	-	-	-	-	RH2180227	Price	-	-	-	-	-	-
1-1/2	3/8	RH2180124	Price	RH2180178	Price	RH2180228	Price	RH21DD1500375	Price	RH2180249	Price	RH21Z1500375	Price
1-1/2	1/2	RH2180125	Price	RH2180179	Price	RH2180229	Price	RH21DD1500500	Price	RH2180250	Price	RH21Z1500500	Price
1-1/2	5/8	RH2180126	Price	RH2180180	Price	RH2180230	Price	RH21DD1500625	Price	RH2180251	Price	RH21Z1500625	Price
1-1/2	3/4	RH2180127	Price	RH2180181	Price	RH2180231	Price	RH21DD1500750	Price	RH2180252	Price	RH21Z1500750	Price
1-1/2	1	RH2180129	Price	RH2180183	Price	RH2180233	Price	RH21DD1501000	Price	RH2180254	Price	RH21Z1501000	Price
1-1/2	7/8	RH2180128	Price	RH2180182	Price	RH2180232	Price	RH21DD1500875	Price	RH2180253	Price	RH21Z1500875	Price
1-1/2	1-1/4	RH2180130	Price	RH2180184	Price	RH2180234	Price	RH21DD1501250	Price	RH2180255	Price	RH21Z1501250	Price
1-3/4	1/2	RH2180131	Price	RH2180185	Price	-	-	RH21DD1750500	Price	RH2180256	Price	RH21Z1750500	Price
1-3/4	5/8	RH2180132	Price	RH2180186	Price	-	-	RH21DD1750625	Price	RH2180257	Price	RH21Z1750625	Price
1-3/4	3/4	RH2180133	Price	RH2180187	Price	-	-	RH21DD1750750	Price	RH2180258	Price	RH21Z1750750	Price
1-3/4	7/8	RH2180134	Price	RH2180188	Price	-	-	RH21DD1750875	Price	RH2180259	Price	-	-
1-3/4	1	RH2180135	Price	RH2180189	Price	-	-	RH21DD1751000	Price	RH2180260	Price	RH21Z1751000	Price
1-3/4	1-1/4	RH2180136	Price	RH2180190	Price	-	-	RH21DD1751250	Price	RH2180261	Price	RH21Z1751250	Price
1-3/4	1-1/2	RH2180137	Price	RH2180191	Price	-	-	RH21DD1751500	Price	RH2180262	Price	-	-
2	1/2	RH2180138	Price	RH2180192	Price	-	-	RH21DD2000500	Price	RH2180263	Price	RH21Z2000500	Price
2	5/8	RH2180139	Price	RH2180193	Price	-	-	RH21DD2000625	Price	RH2180264	Price	-	-
2	3/4	RH2180140	Price	RH2180194	Price	-	-	RH21DD2000750	Price	RH2180265	Price	RH21Z2000750	Price
2	7/8	RH2180141	Price	RH2180195	Price	-	-	RH21DD2000875	Price	RH2180266	Price	RH21Z2000875	Price
2	1	RH2180142	Price	RH2180196	Price	-	-	RH21DD2001000	Price	RH2180267	Price	RH21Z2001000	Price
2	1-1/4	RH2180143	Price	RH2180197	Price	-	-	RH21DD2001250	Price	RH2180268	Price	RH21Z2001250	Price
2	1-1/2	RH2180144	Price	RH2180198	Price	-	-	RH21DD2001500	Price	RH2180269	Price	RH21Z2001500	Price
2	1-3/4	RH2180145	Price	RH2180199	Price	-	-	RH21DD2001750	Price	RH2180270	Price	-	-
2-1/2	1/2	RH2180146	Price	RH2180200	Price	-	-	-	-	RH2180271	Price	-	-
2-1/2	5/8	RH2180147	Price	RH2180201	Price	-	-	-	-	RH2180272	Price	-	-
2-1/2	3/4	RH2180148	Price	RH2180202	Price	-	-	RH21DD2500750	Price	RH2180273	Price	-	-
2-1/2	7/8	RH2180149	Price	RH2180203	Price	-	-	RH21DD2500875	Price	RH2180274	Price	-	-
2-1/2	1	RH2180150	Price	RH2180204	Price	-	-	RH21DD2501000	Price	RH2180275	Price	-	-
2-1/2	1-1/4	RH2180151	Price	RH2180205	Price	-	-	RH21DD2501250	Price	RH2180276	Price	-	-
2-1/2	1-1/2	RH2180152	Price	RH2180206	Price	-	-	RH21DD2501500	Price	RH2180277	Price	-	-
2-1/2	1-3/4	RH2180153	Price	RH2180207	Price	-	-	RH21DD2501750	Price	RH2180278	Price	-	-
2-1/2	2	RH2180154	Price	RH2180208	Price	-	-	RH21DD2502000	Price	RH2180279	Price	-	-
2-1/2	2-1/4	RH2180155	Price	RH2180209	Price	-	-	-	-	RH2180280	Price	-	-

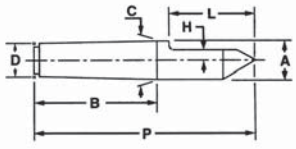
Riten High Speed & Carbide Tipped Dead Centers

- Accuracy guaranteed to ±.00005
- Through-harded to 61-63 Rc for extra reginds
- Carbide tipped dead centers are harrdened only on the knockout ends
- Riten full service, repair, and guarantee apply
- Applying a Moly EP632 grease on the point will reduce friction and wear

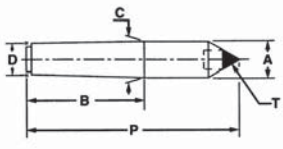




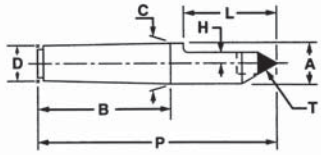
Style 1 - Steel Full Center



Style 2 - Steel Half Center



Style 3 - Carbide Tipped Full Center



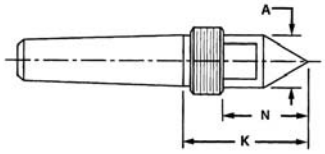
Style 4 - Carbide Tipped Half Center

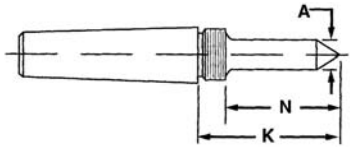
Description - Morse Taper Style - Full										
								Carbide Tipped		High Speed	
Taper	P (in.)	B (in.)	C/A (in.)	D (in.)	T* (in.)	H (in.)	L (in.)	Order No.	Price	Order No.	Price
1 MT	3-5/16	2-1/8	.475	.369	1/4	1/8	1	**HK2271013**	Price	**HK2271011**	Price
2 MT	4-3/16	2-9/16	.700	.572	3/8	3/16	1-3/8	**HK2271023**	Price	**HK2271021**	Price
3 MT	5-1/4	3-3/16	.938	.778	1/2	1/4	1-11/16	**HK2271033**	Price	**HK2271031**	Price
4 MT	6-3/4	4-1/16	1.231	1.020	1/2	1/4	2-1/4	**HK2271043**	Price	**HK2271041**	Price
5 MT	8-1/2	5-3/16	1.748	1.475	5/8	3/8	2-3/4	**HK2271053**	Price	**HK2271051**	Price
6 MT	11-1/2	7-1/4	2.494	2.116	7/8	1/2	3-1/2	**HK2271063**	Price	**HK2271061**	Price
7 MT	15	10	3.270	2.750	1	3/4	4	-	-	**HK2271071**	Price

Description - Morse Taper Style - Half										
								Carbide Tipped		High Speed	
Taper	P (in.)	B (in.)	C/A (in.)	D (in.)	T* (in.)	H (in.)	L (in.)	Order No.	Price	Order No.	Price
1 MT	3-5/16	2-1/8	.475	.369	1/4	1/8	1	**HK2271014**	Price	**HK2271012**	Price
2 MT	4-3/16	2-9/16	.700	.572	3/8	3/16	1-3/8	**HK2271024**	Price	**HK2271022**	Price
3 MT	5-1/4	3-3/16	.938	.778	1/2	1/4	1-11/16	**HK2271034**	Price	**HK2271032**	Price
4 MT	6-3/4	4-1/16	1.231	1.020	1/2	1/4	2-1/4	**HK2271044**	Price	**HK2271042**	Price
5 MT	8-1/2	5-3/16	1.748	1.475	5/8	3/8	2-3/4	**HK2271054**	Price	**HK2271052**	Price
6 MT	11-1/2	7-1/4	2.494	2.116	7/8	1/2	3-1/2	**HK2271064**	Price	**HK2271062**	Price
7 MT	15	10	3.270	2.750	1	3/4	4	-	-	**HK2271072**	Price

Riten High Speed Steel Tipped CNC Dead Centers

- Accuracy guaranteed to .0001 T.I.R.
- Through-hardened to 61-63 Rc.
- Works on all CNC machines.
- Meets the rigid requirements of CNC turning
- Riten full service, repair, and guarantee apply



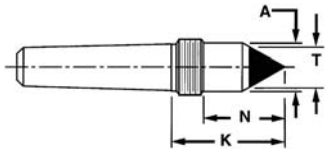


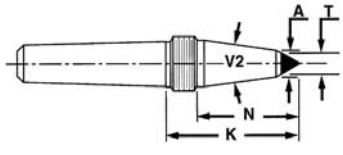
Point Style - High Speed Type 1						
Taper	A (in.)	N (in.)	K (in.)	Threads	Order No.	Price
2 MT	3/8	1-1/4	1-11/16	7/8-14	**HK2268102**	Price
3 MT	1/2	2	2-7/16	7/8-14	**HK2268103**	Price
3 MT	3/4	2	2-7/16	7/8-14	**HK2268123**	Price
3 MT	3/8	1-1/4	1-11/16	7/8-14	**HK2268113**	Price
4 MT	1	2-1/4	2-7/8	1-1/8-12	**HK2268124**	Price
4 MT	1/2	2	2-5/8	1-1/8-12	**HK2268114**	Price
4 MT	5/8	2-1/4	2-7/8	1-1/8-12	**HK2268104**	Price
5 MT	1/2	2	2-15/16	1-5/8-12	**HK2268115**	Price
5 MT	1-1/4	2-1/2	3-7/16	1-5/8-12	**HK2268125**	Price
5 MT	7/8	2-1/2	3-7/16	1-5/8-12	**HK2268105**	Price
6 MT	1-3/4	3-11/16	5-5/16	2-1/2-12	**HK2268106**	Price

Point Style - High Speed Type 2						
Taper	A (in.)	N (in.)	K (in.)	Threads	Order No.	Price
3 MT	1	1-5/8	2-3/8	1-1/8-12	**HK2268603**	Price
4 MT	1-1/4	2-1/32	2-15/16	1-3/8-12	**HK2268604**	Price
5 MT	1-3/4	2-15/32	3-5/8	1-7/8-12	**HK2268605**	Price
6 MT	2-1/4	3-11/16	5-5/16	2-1/2-12	**HK2268606**	Price

Riten Carbide Tipped Morse Taper CNC Dead Centers

- Knockout ends are hardened on carbide tipped dead centers
- Applying a Moly EP632 grease on the point will reduce friction and wear
- Accuracy guaranteed to .0001 T.I.R.
- Meets the rigid requirements of CNC turning
- Works on all CNC machines
- Riten full service, repair, and guarantee apply





Point Style - Carbide Tipped Type 3								
Taper	T* (in.)	A (in.)	N (in.)	K (in.)	V2	Threads	Order No.	Price
3 MT	3/8	1/2	2	2-5/8	20 Degree	1-1/8-12	**HK2268923**	Price
4 MT	1/2	5/8	2-9/32	3-3/32	20 Degree	1-3/8-12	**HK2268924**	Price
5 MT	1/2	5/8	2-1/2	3-7/16	20 Degree	1-5/8-12	**HK2268925**	Price

Point Style - Carbide Tipped Type 4								
Taper	T* (in.)	A (in.)	N (in.)	K (in.)	V2	Threads	Order No.	Price
3 MT	3/4	1	15/8	2-3/8	-	1-1/8-12	**HK2268913**	Price
4 MT	1	1-1/4	2	2-29/32	-	1-3/8-12	**HK2268914**	Price
5 MT	1-1/4	1-3/4	2- 1/2	3-21/32	-	1-7/8-12	**HK2268915**	Price

Riten CNC Dead Center Nuts

Threads	Order No.	Price
7/8-14	**HK2281031**	Price
1-1/8-12	**HK2281041**	Price
1-3/8-12	**HK2286041**	Price
1-5/8-12	**HK2281051**	Price
1-7/8-12	**HK2286051**	Price
2-1/2-12	**HK2286061**	Price

Carbide Tipped Lathe Centers - Full Centers • Half Centers


Half Center

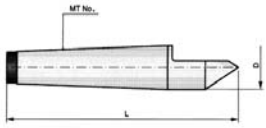

Full Center

		Full		Half	
Taper	OAL (in.)	Order No.	Price	Order No.	Price
1 MT	3-5/16	**GZ52M1**	Price	**GZ53MH1**	Price
2 MT	4-3/16	**GZ52M2**	Price	**GZ53MH2**	Price
3 MT	5-1/4	**GZ52M3**	Price	**GZ53MH3**	Price
4 MT	6-3/4	**GZ52M4**	Price	**GZ53MH4**	Price
5 MT	8-1/2	**GZ52M5**	Price	**GZ53MH5**	Price
6 MT	11-1/2	**GZ52M6**	Price	-	-

Half Dead Centers

- T.I.R. 0.0002”
- Case hardened to 61-63HRC





New!



Point Style - Carbide Tipped					
Taper	L (in.)	D (in.)	E (in.)	Order No.	Price
1 MT	3.15	.48	.28	**HK313541001P**	Price
2 MT	3.94	.71	.28	**HK313541002P**	Price
3 MT	4.92	.95	.43	**HK313541003P**	Price
4 MT	6.30	1.24	.55	**HK313541004P**	Price
5 MT	7.87	1.76	.71	**HK313541005P**	Price

Point Style - Carbon Steel					
Taper	L (in.)	D (in.)	E (in.)	Order No.	Price
2 MT	3.94	.71	.28	**HK313540002P**	Price
3 MT	4.92	.95	.43	**HK313540003P**	Price
4 MT	6.30	1.24	.55	**HK313540004P**	Price

Lathe Centers

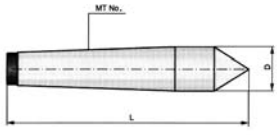
- 60° Point angle
- Precision made
- Hardened & ground to closest tolerances
- High speed steel



Taper	OAL (in.)	Order No.	Price
1 MT	3-3/16	**GZ51M1**	Price
2 MT	3-15/16	**GZ51M2**	Price
3 MT	4-15/16	**GZ51M3**	Price
4 MT	6-5/16	**GZ51M4**	Price
5 MT	7-7/8	**GZ51M5**	Price
6 MT	11	**GZ51M6**	Price

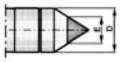
Dead Centers

- T.I.R. 0.0002”
- Case hardened to 61-63HRC





New!



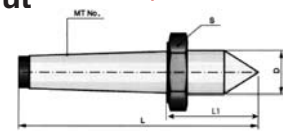
- Ball Bearing Steel					
Taper	L (in.)	D (in.)	E (in.)	Order No.	Price
1 MT	3.15	0.48	.28	**HK313555005P**	Price
2 MT	3.94	0.71	.28	**HK313555010P**	Price
3 MT	4.92	0.95	.43	**HK313555015P**	Price
4 MT	6.3	1.24	.55	**HK313555020P**	Price
5 MT	7.87	1.76	.71	**HK313555025P**	Price
6 MT	10.63	2.51	.71	**HK313555030P**	Price

- Carbide Tipped					
Taper	L (in.)	D (in.)	E (in.)	Order No.	Price
1 MT	3.15	0.48	.28	**HK313550005P**	Price
2 MT	3.94	0.71	.28	**HK313550010P**	Price
3 MT	4.92	0.95	.43	**HK313550015P**	Price
4 MT	6.3	1.24	.55	**HK313550020P**	Price
5 MT	7.87	1.76	.71	**HK313550025P**	Price
6 MT	10.63	2.51	.71	**HK313550030P**	Price

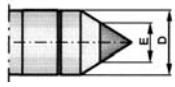
Dead Centers with Nut

New!

- T.I.R. 0.0002”
- Case hardened to 61-63HRC
- Threaded and provided with the nut to remove the center from a tailstock





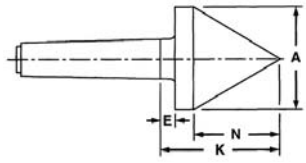


Point Style - Alloy Steel							
Mount	L (in.)	D (in.)	E (in.)	L1 (in.)	Threads	Order No.	Price
3 MT	5.43	.95	.43	1.95	M27 x 1.5 Nut	**HK313545003P**	Price
4 MT	6.89	1.24	.55	2.45	M36 x 1.5 Nut	**HK313545004P**	Price
5 MT	8.54	1.76	.71	3.05	M48 x 1.5 Nut	**HK313545005P**	Price
6 MT	11.42	2.51	.71	3.80	M68 x 1.5 Nut	**HK313545006P**	Price

Point Style - Carbide Tipped							
Mount	L (in.)	D (in.)	E (in.)	L1 (in.)	Threads	Order No.	Price
3 MT	5.43	.95	.43	1.95	M27 x 1.5 Nut	**HK313546003P**	Price
4 MT	6.89	1.24	.55	2.45	M36 x 1.5 Nut	**HK313546004P**	Price
5 MT	8.54	1.76	.71	3.05	M48 x 1.5 Nut	**HK313546005P**	Price
6 MT	11.42	2.51	.71	3.80	M68 x 1.5 Nut	**HK313546006P**	Price

Morse Taper Pipe Nose Dead Centers

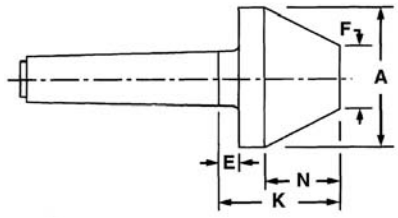
- Accuracy guaranteed to .0001 T.I.R.
- Through-hardened to 61-63 Rc.
- Riten full service, repair, and guarantee apply



Taper	A (in.)	N (in.)	E (in.)	K (in.)	Order No.	Price
3 MT	2-3/4	2.381	1/2	3.380	**HK2266103**	Price
4 MT	2-3/4	2.381	1/2	3.380	**HK2266104**	Price
5 MT	3-1/2	3.031	1/2	4.030	**HK2266105**	Price

Morse Taper Bull Nose Dead Centers

- Guaranteed to .0001 T.I.R.
- Through-hardened to 61-63 Rc.
- Riten full service, repair, and guarantee apply

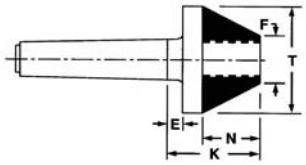


Taper	A (in.)	F (in.)	N (in.)	E (in.)	K (in.)	Order No.	Price
2 MT	2-1/8	1	.974	1/2	1-31/32	**HK2266602**	Price
2 MT	2-1/8	1/2	1.407	1/2	2-13/32	**HK2266502**	Price
3 MT	2-3/4	1	1.515	1/2	2-33/64	**HK2266603**	Price
3 MT	2-3/4	1/2	1.948	1/2	2-61/64	**HK2266503**	Price
3 MT	2-3/4	1-1/2	1.082	1/2	2-5/64	**HK2266703**	Price
4 MT	2-3/4	1	1.515	1/2	2-33/64	**HK2266604**	Price
4 MT	2-3/4	1/2	1.948	1/2	2-15/16	**HK2266504**	Price
4 MT	2-3/4	1-1/2	1.082	1/2	2-5/64	**HK2266704**	Price
5 MT	3-1/2	1	2.165	1/2	3-11/64	**HK2266505**	Price
5 MT	3-1/2	2	1.299	1/2	2-19/64	**HK2266605**	Price

Riten Fast Trak Special Carbide Bull Nose Dead Centers

- Accuracy guaranteed to.0001 T.I.R.
- Through-hardened to 61-63 Rc
- Other tapers available
- Both steel and carbide centers
- Hardened knockout ends
- Riten full service and repair
- Additional tapers and carbide tips are available from our semi-finished inventories

MADE IN THE USA

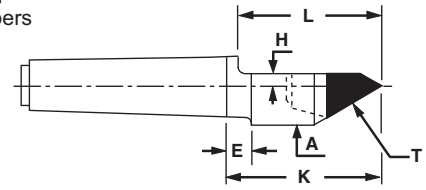




Taper	T (in.)	F (in.)	N (in.)	E (in.)	K (in.)	Order No.	Price
3 MT	1-3/4	3/4	.87	1/2	1.86	**HK2266901**	Price
3 MT	2	3/4	1.08	1/2	2.08	**HK2266902**	Price
3 MT	2-1/2	1	1.30	1/2	2.30	**HK2266903**	Price
3 MT	2-3/4	1	1.52	1/2	2.51	**HK2266904**	Price
4 MT	1-3/4	3/4	.87	1/2	1.86	**HK2266905**	Price
4 MT	2	3/4	1.08	1/2	2.08	**HK2266906**	Price
4 MT	2-1/2	1	1.30	1/2	2.30	**HK2266907**	Price
4 MT	2-3/4	1	1.52	1/2	2.51	**HK2266908**	Price
5 MT	1-3/4	3/4	.87	1/2	2.64	**HK2266909**	Price
5 MT	2	3/4	1.08	1/2	2.08	**HK2266910**	Price
5 MT	2-1/2	1	1.30	1/2	2.30	**HK2266911**	Price
5 MT	2-3/4	1	1.52	1/2	2.51	**HK2266912**	Price

Riten Large Carbide Point Imperial Half Dead Centers

- Accuracy guaranteed to ± .00005
- Covers the widest range of center hole sizes
- Eliminates the need for special centers
- Also availabe in other tapers

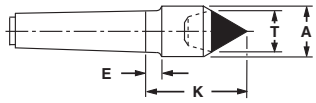




Taper	H (in.)	L (in.)	Order No.	Price
2 MT	1/8	1-7/8	**HK2269502**	Price
3 MT	1/8	1-11/16	**HK2269503**	Price
4 MT	1/4	2-1/4	**HK2269504**	Price
5 MT	1/4	2-3/4	**HK2269505**	Price

Riten Large Carbide Point Imperial Dead Centers

- Accuracy guaranteed to ±.00005
- Covers the widest range of center hole sizes
- Eliminates the need for special centers
- Increased center hole range
- Extra regrinds and longer wear
- Also available in other tapers



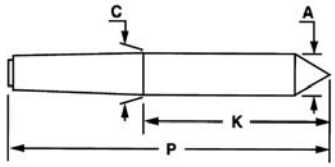


Description - Morse Taper						
Taper	T* (in.)	A (in.)	K (in.)	E (in.)	Order No.	Price
2 MT	15/16	1-3/16	2-3/8	3/8	**HK2269102**	Price
3 MT	15/16	1-3/16	2-3/8	3/8	**HK2269103**	Price
4 MT	1-1/4	1-3/4	2-11/16	1/2	**HK2269104**	Price
5 MT	1-1/4	1-3/4	3-5/16	-	**HK2269105**	Price

***Carbide Diameter**

Riten Long Series Full Dead Centers - High Speed Steel

- Accuracy guaranteed to ± .00005
- Through-hardened to 61-63 Rc.
- Riten full service and repair
- Applying a Moly EP632 greas on the point will reduce friction and wear





Description - Morse Taper					
Taper	P (in.)	K (in.)	C/A (in.)	Order No.	Price
2 MT	5-3/16	2-5/8	.700	**HK2264502**	Price
2 MT	6-3/4	4-3/16	.700	**HK2264602**	Price
3 MT	6-1/4	3-1/16	.938	**HK2264503**	Price
3 MT	6-3/4	3-9/16	.938	**HK2264603**	Price
4 MT	7-3/4	3-11/16	1.231	**HK2264504**	Price
4 MT	8-1/4	4-3/16	1.231	**HK2264604**	Price
5 MT	9-1/2	4-5/16	1.748	**HK2264505**	Price
5 MT	10	4-3/16	1.748	**HK2264605**	Price
6 MT	12-1/2	5-1/4	2.494	**HK2264506**	Price
6 MT	13	5-3/4	2.494	**HK2264606**	Price

Carriers for Grinding Machines & Light Lathes



- Made of malleable iron

Individual Size (in.)	Order No.	Price
1/4	**SE51025**	Price
3/8	**SE51037**	Price
1/2	**SE51050**	Price
5/8	**SE51062**	Price
3/4	**SE51075**	Price
1	**SE51100**	Price
1-1/4	**SE51125**	Price
1-1/2	**SE51150**	Price
1-3/4	**SE51175**	Price
2	**SE51200**	Price
2-1/2	**SE51250**	Price
3	**SE51300**	Price
3-1/2	**SE51350**	Price
4	**SE51400**	Price

Grinding Carrier Sets



Description	Sizes (in.)	Order No.	Price
Set of 6 Grinding Carriers	1/4 to 1	**SE51GD6**	Price
Set of 10 Grinding Carriers	1/4 to 2	**SE51GD10**	Price

Forged Lathe Dogs

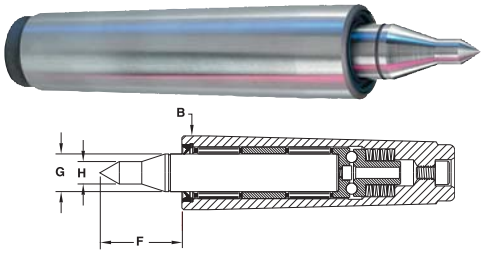
Available with bent dog or straight dog

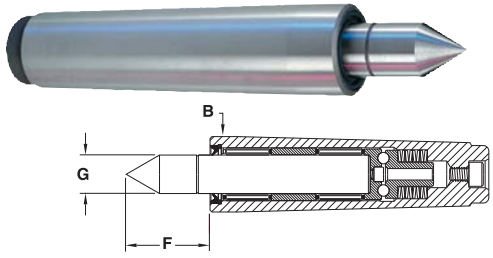


Capacity (in.)	Order No.	Price
1/2	**SE52050**	Price
3/4	**SE52075**	Price
1	**SE52100**	Price
1-1/4	**SE52125**	Price
1-1/2	**SE52150**	Price
1-3/4	**SE52175**	Price
2	**SE52200**	Price
2-1/2	**SE52250**	Price
3	**SE52300**	Price
4	**SE52400**	Price

Spring Type Live Centers - Standard & CNC Point

- Unique spring-loaded point compensates for workpiece thermal expansion
- ±0.00005" TIR guaranteed
- Low-profile design provides outstanding tool clearance
- Heavy disc springs ensure that the point remains seated in the workpiece
- Point and shank are hardened for strength and durability





Point Style - CNC										
Taper	B (in.)	Head Length-F (in.)	G (in.)	H (in.)	Spring Travel	Max. Suggested RPM	Weight of Workpiece	Thrust Load	Order No.	Price
2 MT	.700	7/8	3/8	3/16	1/8	5000	150 lbs	150 lbs	**HK2610532**	Price
3 MT	.938	1-5/32	9/16	1/4	5/32	5000	260 lbs	315 lbs	**HK2610533**	Price
4 MT	1.231	1-3/8	5/8	3/8	3/16	4500	580 lbs	435 lbs	**HK2610534**	Price
5 MT	1.748	2	1-3/32	1/2	3/16	4500	1050 lbs	785 lbs	**HK2610535**	Price

Point Style - Standard										
Taper	B (in.)	Head Length-F (in.)	G (in.)	H (in.)	Spring Travel	Max. Suggested RPM	Weight of Workpiece	Thrust Load	Order No.	Price
2 MT	.700	7/8	3/8	-	1/8	5000	540 lbs	150 lbs	**HK2610522**	Price
3 MT	.938	1-5/32	9/16	-	5/32	5000	940 lbs	315 lbs	**HK2610523**	Price
4 MT	1.231	1-3/8	5/8	-	3/16	4500	1400 lbs	435 lbs	**HK2610524**	Price
5 MT	1.748	2	1-3/32	-	3/16	4500	2300 lbs	785 lbs	**HK2610525**	Price

RAPIDHOLD Super Precision Live Center Sets, Heavy Duty

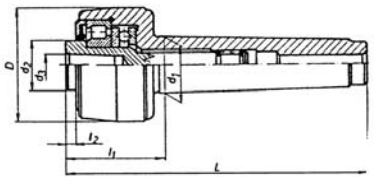


- Triple bearing heavy duty design
- All centers are provided with the precision bearings
- One piece body made of high quality of forged alloy steel, hardened to 60HRC and precisely ground
- Every set comes with the main body and 7 different shape inserts and ejecting wedge
- Complete with strong metal or plastic case
- .0002" T.I.R.

Morse Taper No.	Head Dia. (in.)	Head Length (in.)	Max. RPM	Radial Load	OAL (in.)	Order No.	Price
2 MT	1.417	2.700	5500	660 lbs	4.331	**HL2061011**	Price
3 MT	1.850	3.661	4500	880 lbs	5.709	**HL2061012**	Price
4 MT	2.165	4.094	4000	2640 lbs	6.772	**HL2061013**	Price
5 MT	-	5.295	3000	4400 lbs	8.504	**HL2061014**	Price

Live Center Sets

- Body of live centers and inserts are made of forgings, hardened and precisely ground
- Sets are provided with the main body and seven different style inserts in a wooden case
- Precision high quality bearings
- Special sealing ring protects the bearings from coolant and dust
- Inserts are easily interchangeable



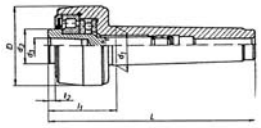


Morse Taper	Max. RPM	Weight w/o Insert (Approx.)	Accuracy	Radial Load	L (in.)	L1 (in.)	L2 (in.)	D (in.)	d1 (in.)	d2 (in.)	d3 (in.)	Order No.	Price
2 MT	5000	.98 lbs	.0002	220 lbs	4.055	1.540	.177	1.570	.700	.710	.280	**HK30570002**	Price
3 MT	4000	2.02 lbs	.0008	440 lbs	5.217	2.030	.197	2.200	.938	.980	.470	**HK30570003**	Price
4 MT	3000	3.71 lbs	.0008	880 lbs	6.220	2.190	.217	2.520	1.231	1.100	.590	**HK30570004**	Price
5 MT	2500	8 lbs	.0012	1770 lbs	7.815	2.720	.256	3.350	1.748	1.610	.870	**HK30570005**	Price
6 MT	2000	25.4 lbs	.0012	3550 lbs	10.846	3.700	.256	5.120	2.494	2.480	1.89	**HK30570006**	Price

Inserts For Live Centers

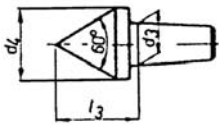
Type No. 8847 - Body Only

Taper	Order No.	Price
2 MT	**HK30570102**	Price
3 MT	**HK30570103**	Price
4 MT	**HK30570104**	Price
5 MT	**HK30570105**	Price
6 MT	**HK30570106**	Price



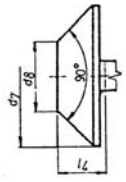
Type No.8848 - 60° Extended Male Point

Taper	L3 (in.)	d3 (in.)	d4 (in.)	Order No.	Price
2 MT	.750	.280	.590	**HK30570202**	Price
3 MT	.980	.470	.790	**HK30570203**	Price
4 MT	1.180	.590	.980	**HK30570204**	Price
5 MT	1.460	.870	1.260	**HK30570205**	Price
6 MT	1.730	1.890	1.420	**HK30570206**	Price



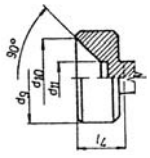
Type No. 8850 - 90° Large Bull Nose Point

Taper	d6 (in.)	L4 (in.)	D6 (in.)	Order No.	Price
2 MT	.510	1.500	.710	**HK30570402**	Price
3 MT	.790	2.480	1.300	**HK30570403**	Price
4 MT	.910	2.760	1.380	**HK30570404**	Price
5 MT	1.100	3.150	1.500	**HK30570405**	Price
6 MT	1.340	3.940	1.970	**HK30570406**	Price



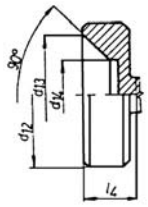
Type No. 8851 - 90° Standard Female Point

Taper	d5 (in.)	L4 (in.)	D6 (in.)	Order No.	Price
2 MT	.510	.870	.310	**HK30570502**	Price
3 MT	.790	1.420	.470	**HK30570503**	Price
4 MT	.910	1.770	.670	**HK30570504**	Price



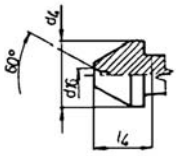
Type No. 8852 - 90° Large Female Point

Taper	d5 (in.)	L4 (in.)	D6 (in.)	Order No.	Price
2 MT	.510	1.180	.590	**HK30570602**	Price
3 MT	.790	1.770	.870	**HK30570603**	Price
4 MT	.910	2.480	1.180	**HK30570604**	Price
5 MT	1.100	2.760	1.420	**HK30570605**	Price



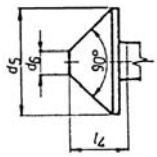
Type No. 8853 - 60° Standard Male Point

Taper	L4 (in.)	d16 (in.)	d4 (in.)	Order No.	Price
2 MT	.510	.049	.590	**HK30570702**	Price
3 MT	.790	.049	.790	**HK30570703**	Price
4 MT	.910	.098	.980	**HK30570704**	Price
5 MT	1.100	.098	1.260	**HK30570705**	Price



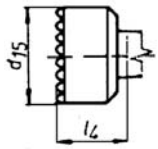
Type No. 8849 - 90° Small Bull Nose Point

Taper	d5 (in.)	L4 (in.)	D6 (in.)	Order No.	Price
2 MT	.510	.870	.120	**HK30570302**	Price
3 MT	.790	1.420	.240	**HK30570303**	Price
4 MT	.910	1.770	.390	**HK30570304**	Price



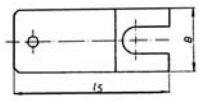
Type No. 8854 - Flat Knurled Point

Taper	L4 (in.)	d15 (in.)	Order No.	Price
2 MT	.510	.710	**HK30570802**	Price
3 MT	.790	.980	**HK30570803**	Price
4 MT	.910	1.260	**HK30570804**	Price



Type No. 8855 - Extractor

Taper	L5 (in.)	B (in.)	Order No.	Price
2 MT	2.360	.790	**HK30570902**	Price
3 MT	3.150	1.18	**HK30570903**	Price
4 MT	3.940	1.57	**HK30570904**	Price
5 MT	4.720	1.97	**HK30570905**	Price
6 MT	6.30	2.36	**HK30570906**	Price



Double Bearing Live Centers

- 60° Included Angle
- Medium duty for general shop applications



Morse Taper	Point Dia. (in.)	Load Capacity	Order No.	Price
1 MT	25/32	556 lbs	**HK28R1**	Price
2 MT	15/16	756 lbs	**HK28R2**	Price
3 MT	1-1/16	858 lbs	**HK28R3**	Price
4 MT	1-7/32	1051 lbs	**HK28R4**	Price
5 MT	1-1/2	1397 lbs	**HK28R5**	Price

Triple Bearing Live Centers

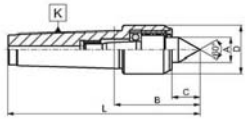
- Labyrinth packing and oil seal
- Preloaded triple bearings
- Running-in period of approximately 250 hours



Morse Taper	Tip Dia. (in.)	Point Dia. (in.)	Max. RPM	Load Capacity	Order No.	Price
1 MT	.670	.669	6700	200 lbs	**HK28RM1**	Price
2 MT	.870	.870	6400	600 lbs	**HK28RM2**	Price
3 MT	1.18	1.180	5000	900 lbs	**HK28RM3**	Price
4 MT	1.38	1.370	4100	1800 lbs	**HK28RM4**	Price
5 MT	1.77	1.770	3400	3000 lbs	**HK28RM5**	Price
6 MT	2.36	2.36	2700	7500 lbs	**HK28RM6**	Price

Slim Casing Live Centers

- For counter-clamping workpieces on turning and grinding machines
- Suited for cramped work area between center point and workpiece
- Enlarged work area and better workpiece accessibility thanks to narrow casing diameter
- Maximum rigidity at high speeds
- Maximum concentricity deviation of 0.0002" for maximum precision





New!

Style - Slim Casing								
Taper	L (in.)	A (in.)	B (in.)	C (in.)	D (in.)	Max. RPM	Order No.	Price
2 MT	4.9606	.5906	2.4409	.7087	1.2598	7000	**HK313560002P**	Price
3 MT	5.6299	.5906	2.4409	.7087	1.3386	7000	**HK313560003P**	Price
4 MT	7.0079	.7874	2.9724	.9843	1.6535	6300	**HK313560004P**	Price
5 MT	9.1535	1.1811	4.0551	1.3386	2.2835	4300	**HK313560005P**	Price
6 MT	12.7559	1.6535	5.5709	1.9291	3.1496	3000	**HK313560006P**	Price

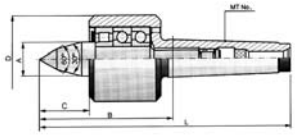
Style - Slim Casing Ext Spindle								
Taper	L (in.)	A (in.)	B (in.)	C (in.)	D (in.)	Max. RPM	Order No.	Price
2 MT	5.3937	.5906	2.8740	1.1417	1.2598	7000	**HK313561002P**	Price
3 MT	6.1417	.5906	2.9528	1.2205	1.2205	7000	**HK313561003P**	Price
4 MT	7.5197	.7874	3.4843	1.4961	1.4961	6300	**HK313561004P**	Price
5 MT	9.8425	1.1811	4.7441	2.0276	2.0276	4300	**HK313561005P**	Price
6 MT	13.6220	1.6535	6.4370	2.7953	2.7953	3000	**HK313561006P**	Price

No Quad-Bearing Live Centers

- Heavy duty
- High speed
- T.I.R. 0.0002"



New!

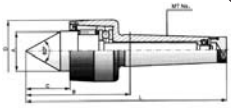


Taper	L (in.)	A (in.)	B (in.)	C (in.)	D (in.)	Max. RPM	Order No.	Price
4 MT	8.62	1.1	4.58	1.91	2.76	7000	**HK313566004P**	Price
5 MT	11	1.57	5.87	2.64	3.47	6000	**HK313566005P**	Price

Adjustable Live Centers

- Adjustable, ultra precision radial bearing reduces run out to minimum after much use
- Heavy duty
- Triple bearing
- T.I.R. 0.00012"





New!

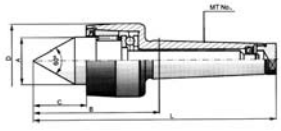
Taper	L (in.)	A (in.)	B (in.)	C (in.)	D (in.)	Max. RPM	Thrust Load	Order No.	Price
2 MT	5.41	.91	2.87	1.02	1.73	8000	90	**HK313567002P**	Price
3 MT	6.53	1.1	3.37	1.26	1.89	6000	170	**HK313567003P**	Price
4 MT	7.89	1.53	3.88	1.69	2.36	4500	350	**HK313567004P**	Price
5 MT	9.8	1.77	4.7	2.01	2.76	4000	550	**HK313567005P**	Price
6 MT	12.64	2.4	5.47	2.44	3.7	3000	1200	**HK313567006P**	Price

Precision Live Centers

New!

- Each center hardened and ground from one single piece of forging
- Spindles are made of high quality alloy steel, heat treated to RC 60-62
- Each live center provided with 3 selected heavy duty precision bearings
- Each bearing is specifically protected against dust and coolant





Style - Precision									
Taper	L (in.)	A (in.)	B (in.)	C (in.)	D (in.)	Accuracy	Max. RPM	Order No.	Price
1 MT	4.07	.59	1.97	.7	1.5	.0003	5000	**HK313565001P**	Price
2 MT	4.74	.7	2.22	.87	1.57	.0003	5000	**HK313565002P**	Price
3 MT	6.14	.98	2.95	1.12	2.2	.0003	4000	**HK313565003P**	Price
4 MT	7.24	1.1	3.21	1.24	2.52	.0003	3000	**HK313565004P**	Price
5 MT	9.33	1.61	4.23	1.77	3.35	.0004	2500	**HK313565005P**	Price
6 MT	13.13	2.48	5.96	2.52	5.12	.0004	2000	**HK313565006P**	Price
7 MT	17.6	2.95	7.74	2.89	5.91	.0004	1000	**HK313565007P**	Price

Style - Super Precision									
Taper	L (in.)	A (in.)	B (in.)	C (in.)	D (in.)	Accuracy	Max. RPM	Order No.	Price
1 MT	4.07	.59	1.97	.7	1.5	.0002	5000	**HK313565101P**	Price
2 MT	4.74	.7	2.22	.87	1.57	.0001	5000	**HK313565102P**	Price
3 MT	6.14	.98	2.95	1.12	2.2	.0001	4000	**HK313565103P**	Price
4 MT	7.24	1.1	3.21	1.24	2.52	.0001	3000	**HK313565104P**	Price
5 MT	9.33	1.61	4.23	1.77	3.35	.0002	2500	**HK313565105P**	Price
6 MT	13.13	2.48	5.96	2.52	5.12	.0002	2000	**HK313565106P**	Price

RAPIDHOLD Super Precision Live Centers, Heavy Duty



- Triple bearing heavy duty design
- All centers are provided with the precision bearings
- One piece body made of high quality of forged alloy steel, hardened to 60HRC and precisely ground
- Bearings are protected by a special steel ring
- .0002" T.I.R.

Morse Taper No.	Head Dia. (in.)	Tip Dia. (in.)	Point Length (in.)	OAL (in.)	Max. RPM	Head Length (in.)	Max. Load	Weight	Order No.	Price
1 MT	1.338	.709	.866	4.48	6000	2.402	88 lbs	.64 lbs	**HL2061000**	Price
2 MT	1.417	.866	1.024	4.941	5500	2.697	660 lbs	.88 lbs	**HL2061001**	Price
3 MT	1.850	1.181	1.378	6.516	4500	3.661	880 lbs	1.94 lbs	**HL2061002**	Price
4 MT	2.283	1.378	1.575	7.736	4000	4.094	2640 lbs	3.23 lbs	**HL2061003**	Price
5 MT	2.677	1.772	2.008	9.685	3000	5.295	4400 lbs	6.86 lbs	**HL2061004**	Price
6 MT	3.543	2.362	2.559	12.64	2000	5.472	8800 lbs	17.2 lbs	**HL2061005**	Price

ROYAL PRODUCTS Value-Turn™ Live Centers

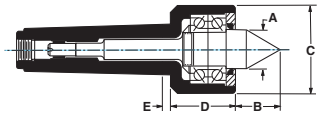
MADE IN THE USA

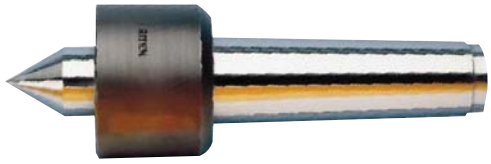


- A sturdy low-cost center designed for general medium-duty turning applications
- ±0.00005" T.I.R. guaranteed
- Precision three-bearing design enables the Royal Value-Turn® to achieve both high RPM's and solid load ratings
- Head is hardened for strength and durability

Taper†	Head Dia. (in.)	Head Length (in.)	Point Length (in.)	Point Dia. (in.)	Max. RPM	Radial Load	Thrust Load	Order No.	Price
2 MT	1-11/16	1-9/16	7/8	3/4	5000	390 lbs	3730 lbs	**HK2610852**	Price
3 MT	1-11/16	1-9/16	7/8	3/4	5000	390 lbs	3730 lbs	**HK2610853**	Price
4 MT	2-7/16	2-1/32	1-3/16	1-1/8	4500	750 lbs	4990 lbs	**HK2610854**	Price
5 MT	2-7/16	2-1/32	1-3/16	1-1/8	4500	750 lbs	4990 lbs	**HK2610855**	Price

Riten Live Standard Point Centers





- Accuracy guaranteed to ±.00005 T.I.R.
- Heavy duty bearing design
- Points are through-hardened to 61-63 Rc.
- Full length spindle for extra rigidity
- Bodies are heat treated for additional strength
- Double row of angular contact bearings for superior performance
- Riten full service, repair, and guarantee apply

Taper	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max. RPM	Radial Load	Order No.	Price
2 MT	1	1-1/4	2-3/8	1-3/4	1/4	4000	440 lbs	**HK2248602**	Price
3 MT	1	1-1/4	2-3/8	1-3/4	1/4	4000	1100 lbs	**HK2248603**	Price
4 MT	1-3/8	1-1/2	3	1-31/32	3/8	4000	2100 lbs	**HK2248604**	Price
5 MT	1-3/8	1-13/16	3-1/16	2-9/32	9/32	5000	2800 lbs	**HK2248605**	Price

ROHM Live Centers

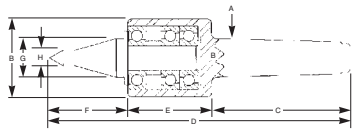


- High runout accuracy
- Triple bearing method
- Center hardened, repeated regrinding at will
- Long life due to splash water groove, improved life-time lubrication and closed toleranced bearing seat
- Lower itnerference shape due to slim housing

Morse Taper	Head Length	Head Dia.	Point Length	Order No.	Price
3 MT	82,5mm	55mm	30,3mm	**HK801267217**	Price
4 MT	101,5mm	68,5mm	39,8mm	**HK801267218**	Price
5 MT	128mm	88,5mm	49,3mm	**HK801267219**	Price

Liberty & Watts CNC Live Centers Triple Bearing Type

- Triple bearing design helps overcome excessive thrust problems
- Accuracy: .0001 T.I.R.
- Points hardened and ground
- Specially designed point provides tool clearance often needed on N/C lathes



Taper	B (in.)	C (in.)	D (in.)	E (in.)	G (in.)	H (in.)	Radial/Thrust Load	Order No.	Price
3 MT	1-3/4	3-7/16	6-7/8	1-11/16	7/8	3/8	1110 lbs	**HK2612963**	Price
4 MT	2-1/2	4-7/16	9-5/8	2-11/16	1-1/4	1/2	1860 lbs	**HK2612964**	Price
5 MT	2-1/2	5-9/16	10-3/4	2-11/16	1-1/4	1/2	1860 lbs	**HK2612965**	Price

RAPIDHOLD™ Live Centers



101 Series:

- Machined from one piece of forging, hardened and precisely ground
- Three precision high-quality bearings are protected by a special Steel shield and neoprene seal
- Live centers are lubricated with a special grease and do not require any additional lubrication

102 Series:

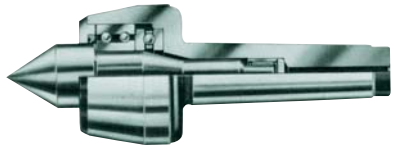
- Machined from one piece of forging, hardened and precisely ground
- Three precision, high-quality bearings are protected by a special Steel shield and neoprene seal
- Adjustable, ultra precision radial bearing reduces run out to minimum after much use
- Easy to adjust

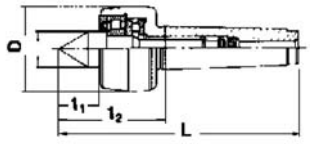
Style - 101 Series Ball/Roller Bearing										
Morse Taper No.	OAL (in.)	Accuracy	Point Dia. (in.)	Head Length (in.)	Head Dia. (in.)	Point Length (in.)	Max. RPM	Radial Load	Order No.	Price
1 MT	4.055	.0003	.5906	1.260	1.4961	.7087	5000	220 lbs	**HL2161050**	Price
2 MT	4.724	.0002	.7087	1.258	1.5748	.8661	5000	462 lbs	**HL2161051**	Price
3 MT	6.142	.0002	.9843	1.681	2.2047	1.1220	4000	924 lbs	**HL2161052**	Price
4 MT	7.244	.0002	1.2590	1.819	2.5197	1.2402	3000	1848 lbs	**HL2161053**	Price
5 MT	9.331	.0002	1.6142	2.261	3.3465	1.7717	2500	4400 lbs	**HL2161054**	Price
6 MT	13.110	.0003	2.4803	3.245	5.1181	2.5197	2000	7700 lbs	**HL2161055**	Price

Style - 102 Series Ball/Needle Bearing										
Morse Taper No.	OAL (in.)	Accuracy	Point Dia. (in.)	Head Length (in.)	Head Dia. (in.)	Point Length (in.)	Max. RPM	Radial Load	Order No.	Price
2 MT	5.3937	.0003	.9055	1.712	1.7323	1.0236	8000	220 lbs	**HL2161060**	Price
3 MT	6.5354	.0002	1.1024	1.956	1.8898	1.2598	6000	440 lbs	**HL2161061**	Price
4 MT	7.7165	.0002	1.3730	1.845	2.3622	1.6929	4500	880 lbs	**HL2161062**	Price
5 MT	9.6850	.0002	1.9685	2.221	2.9528	2.1654	4000	1430 lbs	**HL2161063**	Price
6 MT	12.480	.0002	2.4016	2.574	3.5433	2.4409	3000	3080 lbs	**HL2161064**	Price

Live Centers

- Made of hardened steel and ground for high accuracy
- Precision high quality bearings





Taper	Accuracy	Radial Load	D (in.)	L (in.)	1z (in.)	1x (in.)	Max. RPM	Order No.	Price
1 MT	.0002	220 lbs	1.500	4.07	0.67	1.95	5000	**HK3088111**	Price
2 MT	.0001	460 lbs	1.570	4.74	0.85	2.220	5000	**HK3088112**	Price
3 MT	.0001	925 lbs	2.200	6.14	1.08	2.950	4000	**HK3088113**	Price
4 MT	.0001	1850 lbs	2.520	7.24	1.32	3.35	3000	**HK3088114**	Price
5 MT	.0002	4400 lbs	3.350	9.33	1.73	4.25	2500	**HK3088115**	Price
6 MT	.0002	7700 lbs	5.120	13.13	2.520	5.960	2000	**HK3088116**	Price

ROHM Slim Standard, Slim Extended, Slim Extended Profiled Live Centers

- Splash water groove
- Close toleranced bearing seat
- Slim housing
- Body hardened and ground
- Center hardened
- Triple bearing method
- High runout accuracy
- Life-time lubrication
- Heavy duty



Style - Slim Extended				
Mount	Max. RPM	Max. Workpiece Weight (lbs)	Order No.	Price
2 MT	7000	170	**HK80362080**	Price
3 MT	7000	340	**HK80362081**	Price
4 MT	6300	700	**HK80362082**	Price
5 MT	4300	1400	**HK80362083**	Price
6 MT	3000	3000	**HK80362084**	Price

Style - Slim Extended Profiled				
Mount	Max. RPM	Max. Workpiece Weight (lbs)	Order No.	Price
2 MT	7000	50	**HK801241695**	Price
3 MT	7000	100	**HK801243505**	Price

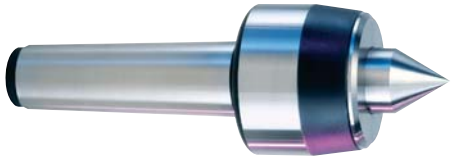
Style - Slim Extended Profiled				
Mount	Max. RPM	Max. Workpiece Weight (lbs)	Order No.	Price
4 MT	6300	150	**HK801243507**	Price
5 MT	4300	180	**HK801243509**	Price

Style - Slim Standard				
Mount	Max. RPM	Max. Workpiece Weight (lbs)	Order No.	Price
2 MT	7000	200	**HK805336**	Price
3 MT	7000	400	**HK805429**	Price
4 MT	6300	800	**HK805469**	Price
5 MT	4300	1600	**HK805490**	Price
6 MT	3000	3500	**HK805547**	Price

ROYAL PRODUCTS Heavy Duty Spindle Type Live Centers



- An excellent heavy-duty live center designed to handle most turning applications
- ±0.00005" T.I.R guaranteed
- Heavy-duty precision bearings provide exceptional thrust and radial load capacities
- The substantial point extends into the shank where it is supported by a large needle bearing for increased strength and rigidity
- Bearing life is significantly extended with the exclusive Royal Roto-Shield™ coolant slinger and upgraded, long-life, spring-loaded seal that is resistant to abrasion, high temperatures and virtually all metalworking fluids
- Body and point are hardened for strength and durability
- On the CNC model, the extended point provides great tool clearance





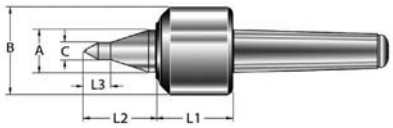
Point Style - CNC										
Taper	Head Dia. (in.)	Head Length (in.)	Point Length (in.)	Point Dia. (in.)	Tip Dia. (in.)	Max. RPM	Radial Load	Thrust Load	Order No.	Price
2 MT	1-3/4	1-7/16	1-3/8	7/8	3/8	6000	375 lbs	2360 lbs	**HK2610212**	Price
3 MT	2-3/8	1-3/4	1-7/8	1	3/8	5000	740 lbs	3900 lbs	**HK2610213**	Price
4 MT	2-3/4	1-31/32	2-7/32	1-1/4	1/2	4500	1120 lbs	4050 lbs	**HK2610214**	Price
5 MT	3-1/2	2-13/16	2-5/8	1-1/2	1/2	3500	1930 lbs	5700 lbs	**HK2610215**	Price

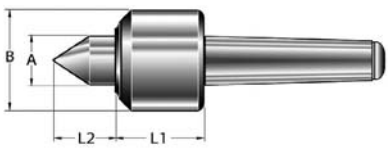
Point Style - Standard										
Taper	Head Dia. (in.)	Head Length (in.)	Point Length (in.)	Point Dia. (in.)	Tip Dia. (in.)	Max. RPM	Radial Load	Thrust Load	Order No.	Price
2 MT	1-3/4	1-7/16	1-1/32	7/8	-	6000	725 lbs	2360 lbs	**HK2610102**	Price
3 MT	2-3/8	1-3/4	1-1/4	1	-	5000	970 lbs	3900 lbs	**HK2610103**	Price
4 MT	2-3/4	1-31/32	1-1/2	1-1/4	-	4500	1720 lbs	4050 lbs	**HK2610104**	Price
5 MT	3-1/2	2-13/16	1-7/8	1-1/2	-	3500	3260 lbs	5700 lbs	**HK2610105**	Price
6 MT	4-5/32	3-5/32	2-5/32	2	-	3500	4080 lbs	6000 lbs	**HK2610106**	Price

DORIAN TOOL Perfetta™ Precision Live Centers with .00007" Max. Runout

Finally, A Live Center With Taper Bearings!!!

- Taper bearings are used in the design of lathe headstocks to support the spindle
- Heavy-duty bearing type to support radial and axial forces

Style - 60° Extended Medium Slim Steel Point												
Item	Description	A (in.)	B. (in.)	C (in.)	L1 (in.)	L2 (in.)	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs.)	Thrust Load	Order No.	Price
	PLC-PRE-EMSSP-MT2	.87	1.89	.31	1.65	1.26	2 MT	6000	2200	792 lbs	**FL3248266**	Price
	PLC-PRE-EMSSP-MT4	1.14	2.40	.47	2.00	1.97	4 MT	4000	1078	1320 lbs	**FL3248268**	Price
	PLC-PRE-EMSSP-MTS	.87	2.17	.39	1.69	1.57	3 MT	5000	572	1144 lbs	**FL3248267**	Price

Style - 60° Standard Steel Point												
Item	Description	A (in.)	B. (in.)	C (in.)	L1 (in.)	L2 (in.)	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs.)	Thrust Load	Order No.	Price
	PLC-PRE-S60-MT1	.63	1.49	-	1.45	.79	1 MT	8500	110	365 lbs	**GG3548200**	Price
	PLC-PRE-S60-MT2	.87	1.89	-	1.65	.98	2 MT	6000	220	792 lbs	**GG3548201**	Price
	PLC-PRE-S60-MT3	.87	2.17	-	1.69	1.06	3 MT	5000	572	1144 lbs	**GG3548202**	Price
	PLC-PRE-S60-MT4	1.14	2.40	-	2.0	1.49	4 MT	4000	1078	1320 lbs	**GG3548203**	Price
	PLC-PRE-S60-MT5	1.49	3.15	-	2.16	1.77	5 MT	3000	1672	1430 lbs	**GG3548204**	Price
	PLC-PRE-S60-MT6	1.65	3.70	-	2.67	2.00	6 MT	2500	3388	3300 lbs	**GG3548205**	Price

Perfetta™ Quattro Forte Heavy Duty Live Center

Finally, A Live Center With Taper Bearings!!!

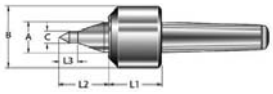
The First Choice Technology

- Taper bearings are used in the design of lathe headstocks to support the spindle
- Heavy-duty bearing type to support radial and axial forces

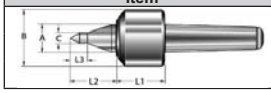
Features:

- Precision Concentricity T.I.R. .00015
- Heavy-duty precision quad bearings
- Bearings permanently lubricated
- Chromium-Molybdenum Alloy Steel
- Surface heat treated to 62Rc and precision ground manual lathes

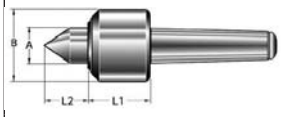
Style - 60° Extended Large Steel Point

Item	Description	A (in.)	B (in.)	C (in.)	L1 (in.)	L2 (in.)	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs.)	Thrust Load (lbs.)	Order No.	Price
	PLC-HAD-ELSP-MT5	1.50	3.15	.47	2.32	2.68	5 MT	4400	4400	2640 lbs	**FL3248279**	Price
	PLC-HAD-ELSP-MT6	1.65	4.26	.63	3.47	2.76	6 MT	10560	10560	3300 lbs	**FL3248280**	Price
	PLC-HDA-3LSP-MT4	1.14	2.40	.31	2.01	1.97	4 MT	3300	3300	1320 lbs	**FL3248278**	Price
	PLC-HDA-ELSP-MT3	.87	2.17	.23	1.69	1.57	3 MT	2090	2090	1144 lbs	**FL3248277**	Price

Style - 60° Extended Medium Slim Steel Point

Item	Description	A (in.)	B (in.)	C (in.)	L1 (in.)	L2 (in.)	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs.)	Thrust Load (lbs.)	Order No.	Price
	PLC-HDA-EMSSP-MT4	1.14	2.40	.47	2.01	1.97	4 MT	3300	3300	1320 lbs	**FL3248274**	Price
	PLC-HDA-EMSSP-MT5	1.50	3.15	.62	2.32	2.68	5 MT	4400	4400	2640 lbs	**FL3248275**	Price
	PLC-HDA-EMSSP-MTS	.87	2.17	.39	1.69	1.57	3 MT	2090	2090	1144 lbs	**FL3248273**	Price

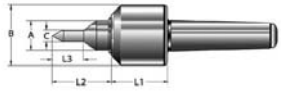
Style - 60° Standard Steel Point

Item	Description	A (in.)	B (in.)	C (in.)	L1 (in.)	L2 (in.)	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs.)	Thrust Load (lbs.)	Order No.	Price
	PLC-HDA-S60-MT2	.87	2.01	-	1.69	.99	2 MT	7500	506	1012 lbs	**GG3548206**	Price
	PLC-HDA-S60-MT3	.87	2.17	-	1.69	1.10	3 MT	6000	2090	1144 lbs	**GG3548207**	Price
	PLC-HDA-S60-MT4	1.14	2.40	-	2.01	1.50	4 MT	4500	3300	1320 lbs	**GG3548208**	Price
	PLC-HDA-S60-MT5	1.50	3.15	-	2.32	1.85	5 MT	2800	4400	2460 lbs	**GG3548209**	Price
	PLC-HDA-S60-MT6	1.65	4.26	-	3.47	2.17	6 MT	2000	10560	3300 lbs	**GG3548210**	Price
	PLC-HDA-S60-MT6	2.36	5.44	-	4.57	2.40	6 MT	1700	19800	6600 lbs	**GG3548211**	Price

CNC High Speed Heavy Duty Live Centers

- Precise Concentricity T.I.R. 0.0001
- High Speed Precision Bearings
- Three Permanently Lubricated Bearings
- Sealed with Lip Seal and Locked with a Flange Shield
- Chromium-Molybdenum Alloy Steel
- Surface Heat Treated to 62 Rc and Precision Ground

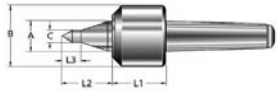
Style - 60 Deg Extended Large Slim Steel or Carbide Point

Item	Description	A (in.)	B (in.)	C (in.)	L1 (in.)	L2 (in.)	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs)	Thrust Load	Order No.	Price
	PLC-CNC-ELSSP-MT3	.87	2.17	.47	1.85	1.65	3 MT	7000	1386	1144 lbs	**FL3248608**	Price
	PLC-CNC-ELSSP-MT4	1.14	2.40	.55	2.17	2.00	4 MT	5500	1883	1438 lbs	**FL3248609**	Price
	PLC-CNC-ELSSP-MT5	1.50	3.15	.70	2.48	2.20	5 MT	4500	2860	2486 lbs	**FL3248610**	Price
	PLC-CNC-ELSSP-MT6	1.65	3.66	.78	2.48	2.20	6 MT	3200	3740	2508 lbs	**FL3248611**	Price

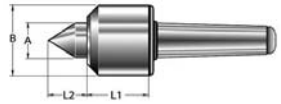
Style - 60 Deg Extended Medium Slim Steel or Carbide Point

Item	Description	A (in.)	B (in.)	C (in.)	L1 (in.)	L2 (in.)	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs)	Thrust Load	Order No.	Price
	PLC-CNC-EMSSP-MT4	1.14	2.40	.47	2.17	2.01	4 MT	55000	1883	1438 lbs	**FL3248283**	Price
	PLC-CNC-EMSSP-MT5	1.50	3.15	.62	2.48	2.21	5 MT	45000	2860	2486 lbs	**FL3248284**	Price
	PLC-CNC-EMSSP-MT6	1.65	3.66	.70	3.46	3.07	6 MT	3200	3740	2508 lbs	**FL3248285**	Price
	PLC-CNC-INT-MT3-SET MMP-MT3	.87	2.17	.39	1.85	1.65	3 MT	7000	1386	1144 lbs	**FL3248282**	Price

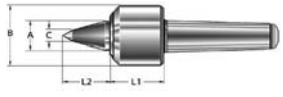
Style - 60 Deg Extended Small Slim Steel or Carbide Point

Item	Description	A (in.)	B (in.)	C (in.)	L1 (in.)	L2 (in.)	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs)	Thrust Load	Order No.	Price
	PLC-CNC-ESSSP-MT3	.87	2.17	.27	1.85	1.65	3 MT	7000	1386	1144 lbs	**FL3248600**	Price
	PLC-CNC-ESSSP-MT4	1.14	2.40	.31	2.17	2.00	4 MT	5500	1883	1438 lbs	**FL3248601**	Price
	PLC-CNC-ESSSP-MT5	1.50	3.15	.39	2.48	2.24	5 MT	4500	2860	2486 lbs	**FL3248602**	Price
	PLC-CNC-ESSSP-MT6	1.65	3.66	.39	2.48	3.11	6 MT	3200	3740	2508 lbs	**FL3248603**	Price

Style - 60 Deg Standard Steel or Carbide Point

Item	Description	A (in.)	B (in.)	C (in.)	L1 (in.)	L2 (in.)	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs)	Thrust Load	Order No.	Price
	PLC-CNC-S60-MT3	.87	2.17	-	1.85	1.10	3 MT	7000	1386	1144 lbs	**FL3248220**	Price
	PLC-CNC-S60-MT4	1.14	2.40	-	2.17	1.58	4 MT	55000	1883	1438 lbs	**FL3248221**	Price
	PLC-CNC-S60-MT5	1.50	3.15	-	2.48	1.89	5 MT	45000	2860	2486 lbs	**FL3248222**	Price
	PLC-CNC-S60-MT6	1.65	3.66	-	2.88	2.17	6 MT	3200	3740	2508 lbs	**FL3248223**	Price

Style - 60° Exteded Large Steel or Carbide Point

Item	Description	A (in.)	B (in.)	C (in.)	L1 (in.)	L2 (in.)	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs)	Thrust Load	Order No.	Price
	PLC-CNC-ELSP-MT3	.87	2.17	.23	1.85	1.65	3 MT	7000	1386	1386 lbs	**FL3248232**	Price
	PLC-CNC-ELSP-MT4	1.14	2.40	.31	2.17	2.01	4 MT	5500	1883	1883 lbs	**FL3248233**	Price
	PLC-CNC-ELSP-MT5	1.50	3.15	.39	2.48	2.21	5 MT	4500	2860	2860 lbs	**FL3248234**	Price
	PLC-CNC-ELSP-MT6	1.65	3.66	.47	2.88	3.47	6 MT	3200	3740	3740 lbs	**FL3248235**	Price

F.O.B. Factory

Extra Heavy Duty Modular Bull Nose Live Centers



- Precision Ground Taper Nose .0001" T.I.R. Between Nose and Morse Taper Shank
- High Precision Double Needle Bearings support the Extended Spindle Body
- Heavy Duty Thrus-Bearing for Heavy Axial Loads
- Lip Seal prevents coolant from entering the live center

Model No.	Morse Taper	Max. RPM	Max. Workpiece Weight (lbs.)	Thrust Load	Order No.	Price
PLC-HDA-BN-MT3	3 MT	6000	2090	1144 lbs	**FL3248400**	Price
PLC-HDA-BN-MT4	4 MT	4500	3300	1320 lbs	**FL3248401**	Price
PLC-HDA-BN-MT5	5 MT	2800	4400	2640 lbs	**FL3248402**	Price
PLC-HDA-BN-MT6	6 MT	2000	10560	3300 lbs	**FL3248403**	Price
PLC-HDA-BN-MT6X	6 MT	1700	19800	6600 lbs	**FL3248404**	Price

CNC Modular Bull Nose Dead Centers



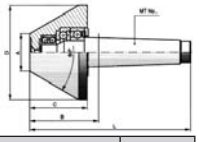
Model No.	Morse Taper	Order No.	Price
PLC-CNC-BNDC-MT3	3 MT	**FL3248406**	Price
PLC-CNC-BNDC-MT4	4 MT	**FL3248407**	Price
PLC-CNC-BNDC-MT5	5 MT	**FL3248408**	Price
PLC-CNC-BNDC-MT6	6 MT	**FL3248409**	Price

Bull Nose Live Centers



- Centers are designed to hold pipe and hollow work
- Triple bearing design
- Three matched bearings are preloaded at the factory
- Good thrust and radial capabilities
- Bearings are protected by a special seal
- Head is made of high quality alloy steel and heat treated to RC 61-63
- 60 degree head angle

New!

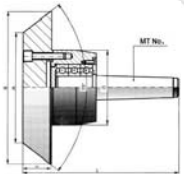


Taper	L (in.)	A (in.)	B (in.)	C (in.)	D (in.)	Accuracy	Max. RPM	Order No.	Price
1 MT	3.66	0.79	1.56	1.38	1.97	.0003	5000	**HK313575010P**	Price
2 MT	4.11	1.18	1.6	1.38	2.36	.0003	5000	**HK313575020P**	Price
2 MT	4.84	1.18	2.32	2.09	3.15	.0003	4500	**HK313575021P**	Price
3 MT	5.51	1.18	2.32	2.09	3.15	.0003	4500	**HK313575030P**	Price
3 MT	5.83	1.57	2.64	2.4	3.93	.0003	3000	**HK313575031P**	Price
4 MT	6.73	1.57	2.7	2.4	3.93	.0003	3000	**HK313575040P**	Price
4 MT	7.09	2.76	3.05	2.76	5.51	.0004	3000	**HK313575042P**	Price
5 MT	8.15	3.94	3.05	2.76	6.69	.0008	2000	**HK313575051P**	Price
6 MT	11.73	7.09	4.57	4.21	11.5	.002	1000	**HK313575060P**	Price

Pipe Live Centers with Interchangeable Heads



- Designed for using with intechangeable tapered heads or with 3", 4", and 5" front mounting, self-centering chucks
- Triple bearing design
- All parts are made of steel, hardened and precision ground

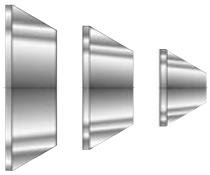


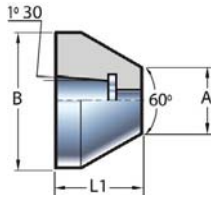
New!

Taper	L (in.)	A (in.)	B (in.)	D (in.)	W (in.)	Order No.	Price
3 MT	7.09	5.7	7.87	3.07	1.57	**HK3135730302P**	Price
4 MT	8.11	3.74	5.9	3.86	1.57	**HK3135730401P**	Price
4 MT	8.11	5.7	7.87	3.86	1.57	**HK3135730402P**	Price
4 MT	8.11	7.68	9.84	3.86	1.57	**HK3135730403P**	Price
5 MT	9.52	5.70	7.87	4.84	1.57	**HK3135730502P**	Price
5 MT	9.52	7.68	9.84	4.84	1.57	**HK3135730503P**	Price
5 MT	9.52	9.65	11.81	4.84	1.57	**HK3135730504P**	Price

Modular Bull Nose Head Adapters

- 60° Nose Taper





Description	Point Dia. (in.)	Head Dia. (in.)	Head Length (in.)	Order No.	Price
PLCBN-HA-0177-0386	1.77	3.86	2.17	**FL3248420**	Price
PLCBN-HA-0374-0583	3.74	5.83	2.17	**FL3248421**	Price
PLCBN-HA-0571-0780	5.71	7.80	2.17	**FL3248422**	Price
PLCBN-HA-0768-0977	7.68	9.77	2.17	**FL3248423**	Price
PLCBN-HA-0965-1174	9.65	11.74	2.17	**FL3248424**	Price
PLCBN-HA-1162-1371	11.62	13.71	2.17	**FL3248425**	Price
PLCBN-HA-1359-1568	13.59	15.68	2.17	**FL3248426**	Price
PLCBN-HA-1556-1765	15.56	17.65	2.17	**FL3248427**	Price
PLCBN-HA-1753-1962	17.53	19.62	2.17	**FL3248428**	Price
PLCBN-HA-1950-2147	19.50	21.47	2.17	**FL3248429**	Price
PLCBN-HA-2147-2364	21.47	23.64	2.17	**FL3248430**	Price

Live Pipe Centers

- 60° Tip

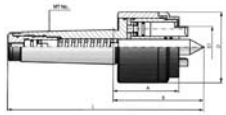


Morse Taper	Max. RPM	Max. Workpiece Weight (lbs.)	Thrust Load	Order No.	Price
4 MT	4500	7700	3372 lbs	**GG3548390**	Price
5 MT	4500	7700	3372 lbs	**GG3548391**	Price
6 MT	4500	7700	3372 lbs	**GG3548392**	Price

Face Drivers

- Fully automatic

New!

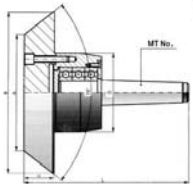




Taper	L (in.)	A (in.)	B (in.)	D (in.)	D1 (in.)	Max. Workpiece Wt. (lbs)	Order No.	Price
4 MT	7.28	2.52	3.15	2.68	1.18 - 1.97	121	**HK313590041P**	Price
5 MT	9.94	3.39	4.45	3.54	2.05 - 4.72	220	**HK313590054P**	Price

Rotating Bodies

- Steel body construction with hardened and ground scroll and pinions
- Hardened and ground MT shank
- Sealed ball bearings, lubrication through roller





New!

Taper	C (in.)	L (in.)	D (in.)	L3 (in.)	M	Accuracy	Max. RPM	Order No.	Price
2 MT	-	6.41	3.07	-	-	.002	4000	**HK313573032P**	Price
3 MT	-	7.09	3.07	-	-	.002	4000	**HK313573033P**	Price
3 MT	-	7.2	3.85	-	-	.002	3500	**HK313573043P**	Price
3 MT	-	7.55	4.84	-	-	.002	3200	**HK313573053P**	Price
4 MT	-	8.11	3.86	-	-	.002	3500	**HK313573044P**	Price
4 MT	-	8.46	4.84	-	-	.002	3200	**HK313573054P**	Price
5 MT	-	6.3	9.52	-	-	.002	3000	**HK313573065P**	Price
5 MT	-	9.52	4.84	-	-	.002	3200	**HK313573055P**	Price
5 MT	0.138	8.386	7.874	3.032	M10	.001	2800	**HK313573085P**	Price
6 MT	0.177	11.378	9.842	3.858	M12	.001	2500	**HK313573106P**	Price

ROYAL PRODUCTS High Precision Quad Bearing Live Centers

- Great for grinding and tight tolerance turning
- ±0.00005" T.I.R. guaranteed
- Three precision angular contact bearings are secured to the point with a locknut to form a rigid, preloaded assembly
- The point extends into the body where it is supported by a needle roller bearing, which further increases rigidity, reduces point deflection, and dampens vibration
- Bearing life is significantly extended with the exclusive Royal Roto-Shield™ coolant slinger and upgraded, long-life, spring-loaded seal that is resistant to abrasion, high temperatures and virtually all metalworking fluids
- Low profile head provides excellent tool clearance
- Body and point are hardened for strength and durability



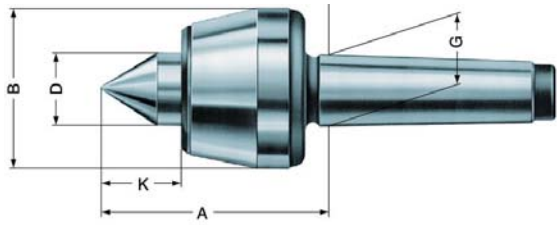
Point Style - CNC										
Taper	Head Dia. (in.)	Head Length (in.)	Point Length (in.)	Point Dia. (in.)	Tip Dia. (in.)	Max. RPM	Radial Load	Thrust Load	Order No.	Price
3 MT	1.70	2.120	1.75	.880	.380	6000	465 lbs	1270 lbs	**HK2610663**	Price
4 MT	2.45	2.780	2.35	1.250	.500	5000	1230 lbs	2150 lbs	**HK2610664**	Price
5 MT	2.45	2.780	2.35	1.250	.500	5000	1230 lbs	2150 lbs	**HK2610665**	Price

Point Style - Standard										
Taper	Head Dia. (in.)	Head Length (in.)	Point Length (in.)	Point Dia. (in.)	Tip Dia. (in.)	Max. RPM	Radial Load	Thrust Load	Order No.	Price
3 MT	1.70	2.120	1.07	.880	-	6000	885 lbs	1270 lbs	**HK2610413**	Price
4 MT	2.45	2.780	1.47	1.250	-	5000	2240 lbs	2150 lbs	**HK2610414**	Price
5 MT	2.45	2.780	1.47	1.250	-	5000	2240 lbs	2150 lbs	**HK2610415**	Price
5 MT HD	3.82	3.890	2.31	2.00	-	3000	5240 lbs	5300 lbs	**HK2610445**	Price

ROHM Revolving Tailstock Centers

Type 604 H body hardened and ground

- Triple bearing method
- High runout accuracy
- Heavy duty
- High speeds
- Long life



Taper	Radial Load	Accuracy (in.)	Max. RPM	A (in.)	B (in.)	D (in.)	K (in.)	Order No.	Price
3 MT	1100 lbs	.0002	5000	3.130	2.362	.984	1.220	**HK8042776**	Price
4 MT	1760 lbs	.0002	3800	4.035	2.756	1.260	1.614	**HK8042175**	Price
5 MT	4400 lbs	.0002	3000	5.079	3.543	1.575	1.988	**HK8042843**	Price
6 MT	7700 lbs	.0004	2600	5.984	4.134	1.969	2.264	**HK8043532**	Price

ROHM Revolving Tailstock Centers

Type 604 HVL with extended live center

- Triple bearing method
- High runout accuracy
- Heavy duty
- High speeds
- Long life

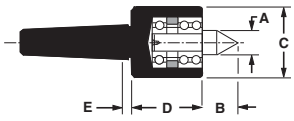


Taper	Radial Load	Accuracy (in.)	Max. RPM	Head Length (in.)	Head Dia. (in.)	Tip Dia. (in.)	Point Length (in.)	Order No.	Price
3 MT	880 lbs	.0002	5000	3.760	2.362	.472	1.850	**HK8058670**	Price
4 MT	1100 lbs	.0002	3800	4.508	2.756	.551	2.087	**HK8058671**	Price
5 MT	2640 lbs	.0002	3000	5.650	3.543	.630	2.559	**HK8058672**	Price
6 MT	5500 lbs	.0004	2600	6.791	4.134	.709	3.071	**HK8058673**	Price

Riten Econo Tri Bearing Tracer Point Live Centers

- Accuracy guaranteed to ±.0002 T.I.R.
- Three rows of bearings
- Points are through-hardened to 61-63 Rc.
- Sealed bearings lubricated for life, protected against contaminants and coolant



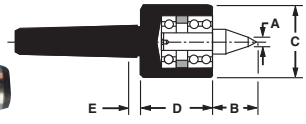


Taper	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Radial Load	Order No.	Price
2 MT	3/8	1-1/4	1-5/8	1-5/8	1/4	300 lbs	**HK2244902**	Price
3 MT	3/8	1-1/2	2	1-15/16	1/4	300 lbs	**HK2244903**	Price
4 MT	1/2	2	2-3/8	2-1/4	1/4	900 lbs	**HK2244904**	Price
5 MT	1/2	2	2-3/8	2-1/4	1/4	900 lbs	**HK2244905**	Price

Riten Econo Tri Bearing Standard Point Live Centers

- Accuracy guaranteed to ±.0002 T.I.R.
- Three rows of bearings
- Points are through-hardened to 61-63 Rc.
- Sealed bearings lubricated for life, protected against contaminants and coolant



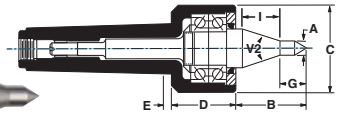


Taper	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max. RPM	Radial Load	Order No.	Price
2 MT	9/16	13/16	1-5/8	1-5/8	1/4	2500	300 lbs	**HK2244102**	Price
3 MT	13/16	1	2	1-15/16	1/4	2500	500 lbs	**HK2244103**	Price
4 MT	1	1-1/4	2-3/8	2-1/4	1/4	2500	1100 lbs	**HK2244104**	Price
5 MT	1	1-1/4	2-3/8	2-1/4	1/4	2500	1100 lbs	**HK2244105**	Price

Riten Live Long Point Centers

- Accuracy guaranteed to ±.00005 T.I.R.
- Heavy duty bearing design
- Points are through-hardened to 61-63 Rc.
- Full length spindle for extra rigidity
- Bodies are heat treated for additional strength
- Double row of angular contact bearings for superior performance
- Riten full service, repair, and guarantee apply

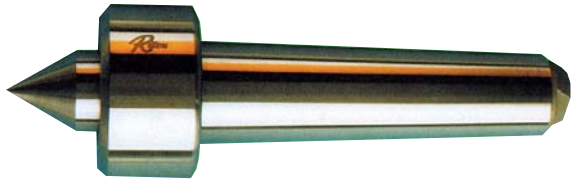




Taper	A (in.)	B (in.)	G (in.)	V2	I	Radial Load	Order No.	Price
2 MT	3/8	1-7/8	5/8	34 Degree	1-21/32	310 lbs	**HK2248102**	Price
3 MT	3/8	1-7/8	5/8	34 Degree	1-21/32	640 lbs	**HK2248103**	Price
4 MT	1/2	2-7/32	13/16	34 Degree	2	1100 lbs	**HK2248104**	Price
5 MT	1/2	2-1/2	15/16	44 Degree	2	1100 lbs	**HK2248105**	Price

Riten Super Accurate Live Centers

- The ultimate live center for grinding is provided by Riten's unique design
- Ideal for precision grinding applications
- Accuracy guaranteed to ±.00005 T.I.R.
- Compact design
- Extended points available
- Ideal for grinding
- 1000 RPM maximum - For all Super Accurate
- Riten full service, repair, and guarantee apply

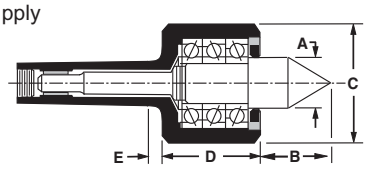


Mount Type - Morse Taper								
Taper	Point Dia. (in.)	Point Length (in.)	Head Dia. (in.)	Head Length (in.)	Neck Width (in.)	Max. W.P. Weight	Order No.	Price
2 MT	3/4	13/16	1-1/4	3/4	3/32	400 lbs	**HK2212102**	Price
3 MT	7/8	1-1/16	1-11/16	15/16	3/16	1000 lbs	**HK2212103**	Price
4 MT	1	1	2-1/8	1-3/16	1/4	1800 lbs	**HK2212104**	Price
6 MT	2-1/8	2-1/8	4-3/16	2-1/2	5/16	6000 lbs	**HK2212106**	Price

Mount Type - Straight Shank								
Taper	Point Dia. (in.)	Point Length (in.)	Head Dia. (in.)	Head Length (in.)	Neck Width (in.)	Max. W.P. Weight	Order No.	Price
1/2 SS	1/2	9/16	1-1/4	3/4	2-1/4	100 lbs	**HK2212301**	Price
3/4 SS	1/2	9/16	1-1/4	3/4	2-3/4	440 lbs	**HK2212302**	Price
1 SS	7/8	1	1-11/16	15/16	5	1000 lbs	**HK2212304**	Price
1-1/4 SS	1	1	2-1/8	1-3/16	5	1800 lbs	**HK2212305**	Price

Riten Advantage Live Centers

- Accuracy guaranteed to ±.00005 T.I.R.
- Heavy duty Tri-bearing design
- Points are through-hardened to 61-63 Rc.
- Three angular contact bearings for superior performance
- Full length spindle for extra rigidity
- Bodies are heat treated for additional strength
- Riten full service and repair supply





Taper	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Max. RPM	Radial Load	Order No.	Price
2 MT	7/8	1-1/8	1-3/4	2-5/8	3/8	5000	880 lbs	**HK2251602**	Price
3 MT	7/8	1-1/8	1-3/4	2-5/8	3/8	5000	920 lbs	**HK2251603**	Price
4 MT	1-1/8	2	2-7/8	3-3/16	1/2	4200	2200 lbs	**HK2251604**	Price
5 MT	1-1/8	2	2-7/8	3-3/16	1/2	4200	4400 lbs	**HK2251605**	Price
6 MT	1-7/8	2-1/4	3-3/4	3-27/32	1/2	4000	6500 lbs	**HK2251606**	Price

ROYAL PRODUCTS Versa-Turn Live Centers

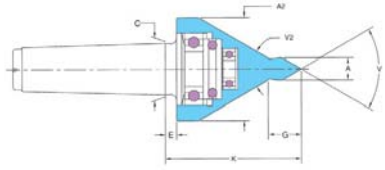
- A great multi-purpose live center designed to handle most common turning jobs
- Extended point provides good tool clearance
- Bull head is great for tubes and parts with large center holes
- ±0.00005" T.I.R. guaranteed on both sections of rotating point
- The Royal Versa-Turn is extremely free turning — excellent for thin parts that can't take high thrust loads
- Head and shank are hardened for strength and durability



Taper	Head Dia. (in.)	Head Length (in.)	Point Length (in.)	Point Dia. (in.)	Max. RPM	Radial Load	Thrust Load	Order No.	Price
2 MT	2-1/8	2-3/16	3/4	1/2	5000	330 lbs	2160 lbs	**HK2610831**	Price
3 MT	2-1/8	2-3/16	3/4	1/2	5000	330 lbs	2160 lbs	**HK2610832**	Price
3 MT HD	2-1/2	2-9/16	15/16	5/8	4000	685 lbs	5000 lbs	**HK2610833**	Price
4 MT	2-1/2	2-9/16	15/16	5/8	4000	685 lbs	5000 lbs	**HK2610834**	Price
4 MT HD	3-3/8	3-1/8	1-1/8	3/4	3500	1165 lbs	5700 lbs	**HK2610835**	Price
5 MT	3-3/8	3-1/8	1-1/8	3/4	3500	1165 lbs	5700 lbs	**HK2610836**	Price

Riten Multi-Use Live Centers

- Ideal for general machine shop use
- Can be used when machining thin-walled workpieces or general shaft work applications
- The versatility of this center makes it a "must have" tool when your center needs change frequently
- Accurate to ±.0001 T.I.R.
- Great for manual lathe applications
- Riten full service, repair, and guarantee apply



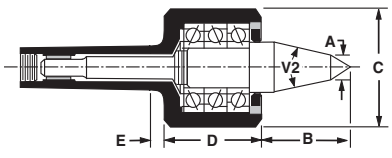


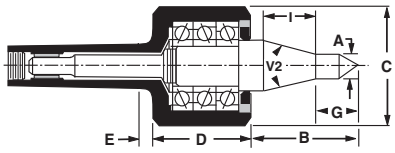
Taper	A (in.)	A2 (in.)	F (in.)	G (in.)	K (in.)	V	Max. RPM	Radial Load	Order No.	Price
2 MT	1/2	2-1/4	1/4	3/4	3-3/16	60 Degree	5000	330 lbs	**HK2260222**	Price
3 MT	1/2	2-1/4	1/4	3/4	3-3/16	60 Degree	5000	330 lbs	**HK2260223**	Price
3 MT	5/8	2-5/8	1/4	15/16	3-3/16	60 Degree	4000	685 lbs	**HK2260263**	Price
4 MT	3/4	3-1/2	3/8	1-1/8	3-7/8	60 Degree	3500	1165 lbs	**HK2260354**	Price
4 MT	5/8	2-5/8	3/8	15/16	3-7/8	60 Degree	4000	685 lbs	**HK2260264**	Price
5 MT	3/4	3-1/2	3/8	1-1/8	4-5/8	60 Degree	3500	1165 lbs	**HK2260355**	Price

Riten Advantage Live Centers - Tracer & Long Points

- Accuracy guaranteed to ± .00005
- Heavy-duty Tri-bearing design
- Points are through-hardened to 61-63 Rc
- Three angular contact bearings for superior performance
- Full length spindle for extra rigidity
- Bodies are heat treated for additional strength
- Riten full service and repair apply







Point Style - Long Point										
Taper	A (in.)	B (in.)	C (in.)	D (in.)	I (in.)	V2	Max. RPM	Radial Load	Order No.	Price
2 MT	3/8	2	3/4	2-5/8	1-11/16	30 Degree	-	310 lbs	**HK2251102**	Price
3 MT	3/8	2	3/4	2-5/8	1-11/16	30 Degree	-	310 lbs	**HK2251103**	Price
4 MT	1/2	2-1/2	15/16	3-3/16	2-1/16	30 Degree	-	1100 lbs	**HK2251104**	Price
5 MT	1/2	2-1/2	15/16	3-3/16	2-1/16	39 Degree	-	1100 lbs	**HK2251105**	Price

Point Style - Tracer										
Taper	A (in.)	B (in.)	C (in.)	D (in.)	I (in.)	V2	Max. RPM	Radial Load	Order No.	Price
2 MT	3/8	1-3/4	1-3/4	2-5/8	3/8	30 Degree	5000	750 lbs	**HK2251902**	Price
3 MT	3/8	1-3/4	1-3/4	2-5/8	3/8	30 Degree	5000	750 lbs	**HK2251903**	Price
4 MT	9/16	2-1/16	2-7/8	3-3/16	1/2	30 Degree	4200	1700 lbs	**HK2251904**	Price
5 MT	9/16	2-1/16	2-7/8	3-3/16	1/2	30 Degree	4200	1700 lbs	**HK2251905**	Price
6 MT	5/8	2-25/32	3-3/4	3-27/32	1/2	30 Degree	4000	7100 lbs	**HK2251906**	Price

ROHM Type 680-50 Face Drivers

- Basic body with Morse Taper Slip on driving discs
- Slip on driving discs
- Clamping diamter 0.315 to 3.150 inches
- All basic bodies without centers



Taper	Weight (lbs.)	Order No.	Price
3 MT	3.52	**HK8088173**	Price
4 MT	3.96	**HK8088174**	Price
5 MT	6.16	**HK8088175**	Price

ROHM Type 680-55 Face Drivers

- Basic body with Morse Taper
- Slip on driving discs
- All basic bodies without centers
- Clamping diameter 0.315 to 3.150 inches
- With draw-off nut



Taper	Weight (lbs.)	Order No.	Price
3 MT	3.96	**HK8088177**	Price
4 MT	4.84	**HK8088178**	Price
5 MT	6.6	**HK8088179**	Price

ROHM Type 680-65 Face Drivers

- Basic body for clamping in lathe chuck
- With spring set
- Slip on driving discs
- All basic bodies without centers
- Clamping diameter 0.315 to 3.150 inches



Dia. (in.)	Weight (lbs.)	Order No.	Price
3.35	5.06	**HK8088074**	Price

ROHM Type 681-85 Face Drivers

- Basic body with short taper
- Slip on driving discs
- All basic bodies without centers
- Clamping diameter 0.315 to 3.150 inches
- Mechanical compensation
- With spring set



Taper	Weight (lbs.)	Order No.	Price
A5	14.3	**HK80313905**	Price
A6	15.4	**HK80313906**	Price
A8	17.82	**HK80313907**	Price

ROHM Type 680-60 Flange Type

- Basic body flange type with cylindrical center mount
- Slip on driving discs
- All basic bodies without centers
- Clamping diameter 0.315 to 3.150 inches
- Dia. 3.937, with spring set



Dia. (in.)	Weight (lbs.)	Order No.	Price
3.937	16.06	**HK8088046**	Price

ROHM Type 688-87 Adapter Plates

- Adapter plates without spring set (for CoA, type 680-60 and CoK)
- Slip on driving discs
- All basic bodies without centers
- Clamping diameter 0.315 to 3.150 inches



Taper	Weight	Order No.	Price
A5	4.5 kg	**HK8088485**	Price
A6	5.8 kg	**HK8088486**	Price
A8	10.7 kg	**HK8088487**	Price
A11	22 kg	**HK8088488**	Price
D1-6	5.8 kg	**HK8088496**	Price
D1-8	10.7 kg	**HK8088497**	Price
D1-11	22 kg	**HK8088498**	Price

DORIAN TOOL Positive Pipe Drivers

- Heat treated alloy steel
- Holds the driving blades with a positive rake
- Blade slots are 45° to maximize grip & driving force

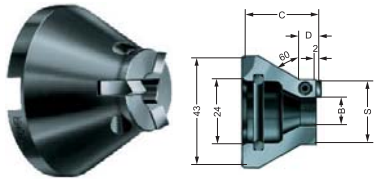


Description	Dia. (in.)	Center Dia. (in.)	Clamping Dia. (in.)	Inside Dia. (in.)	No. of Blades Included	Order No.	Price
DPD045-150	5.91	1.77	2.76	-	6	**GG3548540**	Price
DPD095-200	7.87	3.74	4.72	1.81	6	**GG3548541**	Price
DPD195-300	11.81	7.68	7.76	4.06	9	**GG3548542**	Price
DPD295-400	15.75	11.61	7.76	4.06	12	**GG3548543**	Price
DPD395-500	19.69	15.55	11.69	7.99	12	**GG3548544**	Price
DPD495-600	23.62	19.49	11.69	7.99	15	**GG3548545**	Price

680 Series Interchangeable Metal Driving Discs

6 x 3.2mm Plates

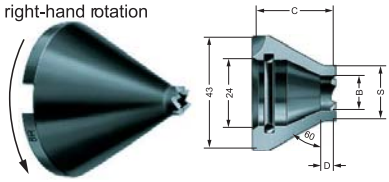
						LH Rotation Driving Disc		RH Rotation Driving Disc	
Clamping Dia. (in.)	Turning Dia. (in.)	B (in.)	C (in.)	D (in.)	Center Dia. (in.)	Order No.	Price	Order No.	Price
.787	.827 - 1.575	.276	1.181	.197	.236	**HK8089085**	Price	**HK8089065**	Price
.984	1.024 - 1.969	.433	1.181	.315	.394	**HK8089086**	Price	**HK8089066**	Price
1.260	1.299 - 2.520	.689	1.181	.394	.630	**HK8089087**	Price	**HK8089067**	Price



680 Series Integral Tooth Driving Discs

One Piece Design

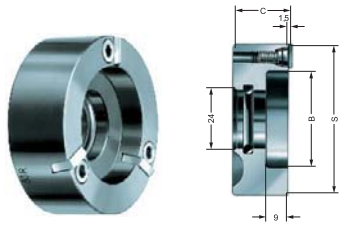
						LH Rotation Driving Disc		RH Rotation Driving Disc	
Clamping Dia. (in.)	Turning Dia. (in.)	B (in.)	C (in.)	D (in.)	Center Dia. (in.)	Order No.	Price	Order No.	Price
.315	.354 - .630	.177	1.496	.157	.157	**HK8088081**	Price	**HK8088061**	Price
.394	.433 - .787	.177	1.496	.157	.157	**HK8088082**	Price	**HK8088062**	Price
.472	.512 - .945	.276	1.417	.157	.236	**HK8088083**	Price	**HK8088063**	Price
.629	.669 - 1.260	.433	1.299	.157	.394	**HK8088084**	Price	**HK8088064**	Price
.787	.827 - 1.575	.512	1.181	.157	.472	**HK8088085**	Price	**HK8088065**	Price
.984	1.024 - 1.969	.669	1.181	.315	.630	**HK8088086**	Price	**HK8088066**	Price
1.260	1.299 - 2.520	.866	1.181	.394	.630	**HK8088087**	Price	**HK8088067**	Price



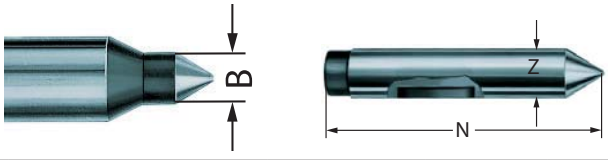
680 Series 4 Sided Interchangeable Driving Discs

9.5 x 3.2mm Plates

						LH Rotation Driving Disc		RH Rotation Driving Disc	
Clamping Dia. (in.)	Turning Dia. (in.)	B (in.)	C (in.)	D (in.)	Center Dia. (in.)	Order No.	Price	Order No.	Price
1.575	1.614 - 3.150	.787	.945	.394	.630	**HK8088088**	Price	**HK8088068**	Price
1.969	2.008 - 3.937	1.102	.945	-	.630	**HK8088089**	Price	**HK8088069**	Price
2.480	2.520 - 4.961	1.614	.945	-	.630	**HK8088090**	Price	**HK8088070**	Price
3.150	3.189 - 6.299	2.283	.945	-	.630	**HK8088091**	Price	**HK8088071**	Price

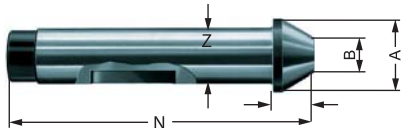


Standard Centers for Face Drivers



Series	Nose (B)	Center Dia. (Z)	Center Length (N)	Order No.	Price
680-40	.157	.630	3.54	**HK8088351**	Price
680-40	.236	.630	3.54	**HK8088352**	Price
680-40	.394	.630	3.54	**HK8088353**	Price
680-40	.472	.630	3.54	**HK8088354**	Price
680-40	.630	.630	3.54	**HK8088355**	Price

Standard Centers with Head for Face Drivers



Series	Nose (B)	Taper (A)	Center Dia. (Z)	Center Length (N)	Order No.	Price
680-45	.394	.827	.630	3.54	**HK8086619**	Price
680-45	.630	1.06	.630	3.54	**HK8086620**	Price
680-45	.905	1.34	.630	3.54	**HK80688878**	Price
680-45	1.14	1.58	.630	3.54	**HK8086621**	Price
680-45	1.46	1.89	.630	3.54	**HK80688880**	Price

Set Screws & O-Rings

Type - Face Driver O-Ring		
Size	Order No.	Price
21.82 x 3.53mm	**HK806252**	Price

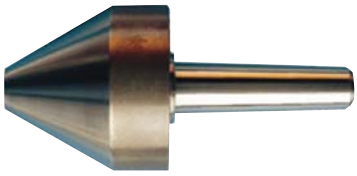
Type - Face Driver Set Screw		
Size	Order No.	Price
M4 x 6mm	**HK80234695**	Price
M5 x 8mm	**HK8048205**	Price
M5 x 8mm	**HK8088205**	Price

Replacement Drive Plates

Size	Order No.	Price
6 x 3.2mm	**HK8088810**	Price
9.5 x 3.2mm	**HK8088209**	Price

Roughing Bull Nose Live Centers

- For heavy cuts
- Designed for working large piece parts, castings and forgings
- Large workpiece center holes

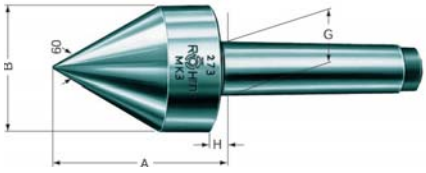


Style - Extra Heavy Duty							
Taper	Head Dia. (in.)	Point Dia. (in.)	Neck Width (in.)	Head Length (in.)	Radial Load (lbs.)	Order No.	Price
5 MT	10-1/2	5	7/16	7-7/16	7000 lbs	**HK2256105**	Price
5 MT	9	4	15/32	6-5/8	7000 lbs	**HK2256945**	Price
6 MT	10-1/2	5	7/16	7-7/16	15000 lbs	**HK2256106**	Price
6 MT	12	6	7/16	7-7/16	15000 lbs	**HK2256126**	Price
6 MT	9	4	15/32	6-5/8	12000 lbs	**HK2256946**	Price
7 MT	10-1/2	5	7/16	7-7/16	15000 lbs	**HK2256107**	Price
7 MT	12	6	7/16	7-7/16	15000 lbs	**HK2256127**	Price

Style - Heavy Duty							
Taper	Head Dia. (in.)	Point Dia. (in.)	Neck Width (in.)	Head Length (in.)	Radial Load (lbs.)	Order No.	Price
2 MT	4	1	3/8	4-9/32	2000 lbs	**HK2256412**	Price
3 MT	4	1	3/8	4-9/32	3800 lbs	**HK2256413**	Price
3 MT	5	2	3/8	3-13/16	3800 lbs	**HK2256523**	Price
3 MT	6-1/2	3	3/8	3-29/32	3800 lbs	**HK2256633**	Price
4 MT	4	1	3/8	4-9/32	4800 lbs	**HK2256414**	Price
4 MT	5	2	3/8	3-13/16	4800 lbs	**HK2256524**	Price
4 MT	6-1/2	3	3/8	3-29/32	4800 lbs	**HK2256634**	Price
5 MT	4	1	3/8	4-9/32	4800 lbs	**HK2256415**	Price
5 MT	5	2	3/8	3-13/16	4800 lbs	**HK2256525**	Price
5 MT	6-1/2	3	3/8	3-29/32	4800 lbs	**HK2256635**	Price
6 MT	6-1/2	3	25/32	4-5/16	4800 lbs	**HK2256636**	Price

Heavy Duty Pipe Nose Live Centers

- Full 60° taper
- Hardened body, shaft and taper
- Heavy duty
- Combination live center and tube center
- High runout accuracy



Taper	A (in.)	B (in.)	G (in.)	Radial Load	Order No.	Price
2 MT	2.402	1.654	.700	440 lbs	**HK80010613**	Price
3 MT	3.110	2.205	.938	880 lbs	**HK80010635**	Price
4 MT	3.937	2.520	1.231	1760 lbs	**HK80010638**	Price
5 MT	4.547	3.071	1.748	3520 lbs	**HK80010642**	Price

Heavy Duty Pipe Nose Live Centers

- One center fits a wide range of sizes
- For the best support and chatter-free parts, choose a center where the part will seat as close to the large diameter as possible
- Accuracy guaranteed to .00025 T.I.R.
- For use with pipe, tubing, and thin walled piece parts

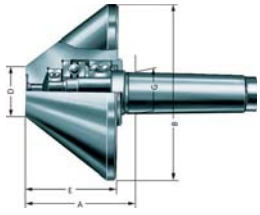


Taper	Head Dia. (in.)	Neck Width (in.)	Head Length (in.)	Radial Load	Order No.	Price
2 MT	2-1/2	5/16	3-3/4	260 lbs	**HK2265252**	Price
3 MT	2-1/2	5/16	3-3/4	260 lbs	**HK2265253**	Price
3 MT	3-1/2	7/16	4-29/32	1500 lbs	**HK2265353**	Price
3 MT	4-1/2	7/16	4-7/8	1500 lbs	**HK2265453**	Price
4 MT	2-1/2	5/16	3-3/4	260 lbs	**HK2265254**	Price
4 MT	3-1/2	7/16	4-29/32	1500 lbs	**HK2265354**	Price
4 MT	4-1/2	7/16	4-7/8	1500 lbs	**HK2265454**	Price
5 MT	3-1/2	7/16	4-29/32	1500 lbs	**HK2265355**	Price
5 MT	4-1/2	7/16	4-7/8	1500 lbs	**HK2265455**	Price
5 MT	5-1/2	3/8	6-5/16	4500 lbs	**HK2265555**	Price
6 MT	5-1/2	3/8	6-5/16	4500 lbs	**HK2265556**	Price

Watts & Liberty Bull Nose Live Centers

60° and 75° Included Angle

- Heavy duty bearings for high load bearing capacity
- Hardened body, shaft and taper
- High runout accuracy
- Truncated 60° and 75° taper
- For machining of tubes and pipes



Brand Name - Rohm Point Style - 60 Degree Bull Nose							
Taper	A (in./ lbs.)	B (in.)	D (in.)	E (in.)	Radial Load (lbs.)	Order No.	Price
2 MT	2.559 lbs	1.969	.787	2.047	440 lbs	**HK80301616**	Price
3 MT	3.031 lbs	3.150	1.181	2.520	880 lbs	**HK80301557**	Price
3 MT	3.799 lbs	4.724	1.181	3.268	1320 lbs	**HK80221605**	Price
4 MT	3.091 lbs	3.150	1.181	2.520	880 lbs	**HK80301558**	Price
4 MT	3.858 lbs	4.724	1.181	3.268	1760 lbs	**HK80044023**	Price
5 MT	3.898 lbs	4.724	1.181	3.268	1760 lbs	**HK80090483**	Price

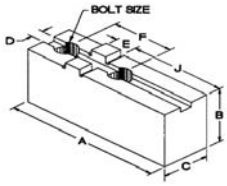
Brand Name - Rohm Point Style - 75 Degree Bull Nose							
Taper	A (in./ lbs.)	B (in.)	D (in.)	E (in.)	Radial Load (lbs.)	Order No.	Price
4 MT	4.213 lbs	6.693	1.969	3.543	2640 lbs	**HK80062299**	Price
5 MT	4.173 lbs	6.693	1.969	3.543	3520 lbs	**HK80063614**	Price
5 MT	5.768 lbs	9.843	2.953	5.118	4400 lbs	**HK80063662**	Price
6 MT	7.244 lbs	13.780	4.724	6.614	8800 lbs	**HK80063680**	Price

Brand Name - Royal Products Point Style - 75 Degree Bull Nose							
Taper	A (in./ lbs.)	B (in.)	D (in.)	E (in.)	Radial Load (lbs.)	Order No.	Price
6 MT	-	10	4	-	6000 lbs	**HK2612949**	Price

Brand Name - Watts Point Style - 60 Degree Bull Nose							
Taper	A (in./ lbs.)	B (in.)	D (in.)	E (in.)	Radial Load (lbs.)	Order No.	Price
2 MT	1500 lbs	-	1-1/4	4	2740 lbs	**HK25B24**	Price

H&R Mfg. and Supply, Inc. Medium Duty Soft Top Jaws
American Standard Tongue & Groove (A.S.T.G.)

MADE IN THE USA



- For Chucks Made by Bergman, Bison, Buck, Cushman, Huron, Rohm, Forkhardt, Pratt Burnerd America, SCA, SP, W&S, Nobel & Yuasa
- All Jaws are made from 1018 mild steel
- **PRICED EACH SOLD ONLY IN MATCHED SETS OF 3**

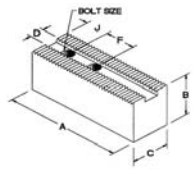
Description - Extra Height											
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Bolt (in.)	J (in.)	Style	Order No.	Price
-	3-3/8	3-3/8	8	.313	.500	1.750	-	2-3/16	-	**HF70HR8MEH0P**	Price
12	5-3/8	3-7/8	12	.500	.750	2.500	-	3-1/8	Medium Duty Soft Top Jaw	**HF70HR12MEHO**	Price
12	5-3/8	3-7/8	1-3/4	.500	.750	2.500	-	3-1/8	Medium Duty Soft Top Jaw	**HF70HR12MEH0P**	Price
15	6-1/4	3-13/16	15	.500	.750	3.000	-	3-5/8	Medium Duty Soft Top Jaw	**HF70HR15MEHO**	Price
18	6-3/8	4-13/16	18	.500	.750	3.000	-	3-3/4	Medium Duty Soft Top Jaw	**HF70HR18MEHO**	Price
8	3-3/4	3-3/8	8	.313	.500	1.750	-	2-3/16	Medium Duty Soft Top Jaw	**HF70HR8MEHO**	Price
6	2-5/8	3-3/8	1-1/4	.313	.500	1.500	3/8	1-1/8	Regular Jaw	**HF70HR471**	Price
6	3-3/16	3-3/8	1-1/4	.313	.500	1.500	3/8	1-11/16	Pointed Jaw	**HF70HR483P**	Price
8**	3-1/2	3-3/8	1-1/4	.313	.500	1.750	3/8	1-5/8	Regular Jaw	**HF70HR474**	Price
8**	3-15/16	3-3/8	1-1/4	.313	.500	1.750	3/8	2-1/4	Pointed Jaw	**HF70HR486P**	Price
10**	4-1/4	3-3/8	1-1/2	.500	.750	2.120	1/2	1-15/16	Regular Jaw	**HF70HR476**	Price
10**	4-13/16	3-3/8	1-1/2	.500	.750	2.120	1/2	2-11/16	Pointed Jaw	**HF70HR488P**	Price
12**	4-7/8	3-7/8	1-3/4	.500	.750	2.500	1/2	2-5/16	Regular Jaw	**HF70HR478**	Price
12**	5-3/4	3-7/8	1-3/4	.500	.750	2.500	1/2	3-3/8	Pointed Jaw	**HF70HR490P**	Price
15***	7-1/4	3-13/16	2	.500	.750	3.000	5/8	4-1/2	Pointed Jaw	**HF70HR495P**	Price
18-21***	5-5/8	3-13/16	2	.500	.750	3.000	3/4	2-3/4	Regular Jaw	**HF70HR481†**	Price
15***	5-5/8	3-13/16	2	.500	.750	3.000	5/8	2-3/4	Regular Jaw	**HF70HR480**	Price
18-21***	7-1/4	4-13/16	2-1/2	.500	.750	3.000	3/4	4-1/2	Pointed Jaw	**HF70HR520P†**	Price
24-36***	5-5/8	4-13/16	2-1/2	.500	.750	3.000	3/4	2-3/4	Regular Jaw	**HF70HR482†**	Price

Description - Standard Height											
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Bolt (in.)	J (in.)	Style	Order No.	Price
10	3-5/16	1-7/8	10	.500	.750	2.125	-	Center	Medium Duty Soft Top Jaw	**HF70HR10MSH**	Price
12	4-1/2	2-1/8	12	.500	.750	2.500	-	Center	Medium Duty Soft Top Jaw	**HF70HR12MSH**	Price
12	5-3/8	2-1/8	12	.500	.750	2.500	-	3-1/8	Medium Duty Soft Top Jaw	**HF70HR12MSHO**	Price
12	5-3/8	2-1/8	1-3/4	.500	.750	2.500	-	3-1/8	Medium Duty Soft Top Jaw	**HF70HR12MSH0P**	Price
15	6-1/4	2-5/16	15	.500	.750	3.000	-	3-5/8	Medium Duty Soft Top Jaw	**HF70HR15MSHO**	Price
16-20	6-1/4	3.00	16-20	1.004	-	1.562	-	1-7/16	Serrated Soft Top Jaw	**HF70HR4016**	Price
16-20	8	3.00	16-20	1.004	-	1.562	-	1-3/8	Serrated Soft Top Jaw	**HF70HR4216**	Price
18	6-3/8	2-13-16	18	.500	.750	3.000	-	3-3/4	Medium Duty Soft Top Jaw	**HF70HR18MSHO**	Price
21	7	2-1/2	21	.984	-	2.362	-	1.550	Serrated Soft Top Jaw	**HF70HR21325**	Price
25-31 1/2	11	3-1/2	25-31 1/2	1.181	-	2.500	-	1.500	Serrated Soft Top Jaw	**HF70HR4225**	Price
6	3-1/4	1-3/8	6	.313	.500	1.500	-	1-13/16	Medium Duty Soft Top Jaw	**HF70HR6MSHO**	Price
8	3-3/4	1-7/8	8	.313	.500	1.750	-	2-3/16	Medium Duty Soft Jaws	**HF70HR8MSH0P**	Price
8	3-3/4	1-7/8	8	.313	.500	1.750	-	2-3/16	Medium Duty Soft Top Jaw	**HF70HR8MSHO**	Price
6	2-5/8	1-5/8	1-1/4	.313	.500	1.500	3/8	1-1/8	Regular Jaw	**HF70HR447**	Price
6	3-3/16	1-5/8	1-1/4	.313	.500	1.500	3/8	1-11/16	Pointed Jaw	**HF70HR459P**	Price
10**	4-1/4	1-7/8	1-1/2	.500	.750	2.120	1/2	1-15/16	Regular Jaw	**HF70HR452**	Price
10**	4-13/16	1-7/8	1-1/2	.500	.750	2.120	1/2	2-11/16	Pointed Jaw	**HF70HR464P**	Price
12**	4-7/8	2-3/8	1-3/4	.500	.750	2.500	1/2	2-5/16	Regular Jaw	**HF70HR454**	Price
12**	5-3/4	2-3/8	1-3/4	.500	.750	2.500	1/2	3-3/8	Pointed Jaw	**HF70HR466P**	Price
15***	5-5/8	2-5/16	2	.500	.750	3.000	5/8	2-3/4	Regular Jaw	**HF70HR456**	Price
15***	7-1/4	2-5/16	2	.500	.750	3.000	5/8	4-1/2	Pointed Jaw	**HF70HR468P**	Price
18-21***	5-5/8	2-5/16	2	.500	.750	3.000	3/4	2-3/4	Regular Jaw	**HF70HR457†**	Price
18-21***	7-1/4	3-5/16	2-1/2	.500	.750	3.000	3/4	4-1/2	Pointed Jaw	**HF70HR519P†**	Price
24-36***	5-5/8	3-5/16	2-1/2	.500	.750	3.000	3/4	2-3/4	Regular Jaw	**HF70HR458†**	Price
8**	3-1/2	1-5/8	1-1/4	.313	.500	1.750	3/8	1-5/8	Regular Jaw	**HF70HR450**	Price
8**	3-15/16	1-5/8	1-1/4	.313	.500	1.750	3/8	2-1/4	Pointed Jaw	**HF70HR462P**	Price

P=Pointed Jaw **=1/8" Tongue Height *=3/16" Tongue Height †Medium Duty and Heavy Duty Jaws are the Same**

H&R Mfg. and Supply, Inc. Metric Serrated Square & Pointed Soft Jaws
1.5mm (.0591) @ 60 Degree Serration (2 Holes)





- For Chucks Made by Kitagawa, Matsumoto, Howa & Seike
- All Jaws are made from 1018 mild steel
- Acme and Square serrated keyed hard top jaws and soft jaws available
- **PRICED EACH SOLD ONLY IN MATCHED SETS OF 3**

Style - Pointed Jaw						
Chuck Size (in.)	B (in.)	C (in.)	J (in.)	Bolt	Order No.	Price
10	2-1/2	10	.650	-	**HF70HR82500P**	Price
15/18	2-1/2	15	1.400	-	**HF70HR15525OP**	Price
4	1	1	.375	5mm	**HF70HR4K10P**	Price
5	1-1/2	1	-	8mm	**HF70HR13515P**	Price
6	1-1/2	1-1/4	.438	10mm	**HF70HR6K15P**	Price
6	2.00	1-1/4	.438	10mm	**HF70HR6K20P**	Price
6	3.00	1-1/4	.438	10mm	**HF70HR6K30P**	Price
6	1-1/2	1	.438	8mm	**HF70HR6B15P**	Price
6	2.00	1	.438	8mm	**HF70HR6B20P**	Price
8	2.00	1-1/2	.781	1/2	**HF70HR149200P**	Price
10	2.00	1-3/4	.650	1/2	**HF70HR8220OP**	Price
10	2-1/2	1-3/4	.650	1/2	**HF70HR8225OP**	Price
12	2.00	2	1.188	9/16	**HF70HR108200P**	Price
12	2-1/2	2	1.188	16mm	**HF70HR11225OP**	Price

Style - Regular Jaw						
Chuck Size (in.)	B (in.)	C (in.)	J (in.)	Bolt	Order No.	Price
10	5	10	.650	-	**HF70HR8250**	Price
12	5	12	-	-	**HF70HR11250**	Price
8	1-1/2	1-1/2	.781	1/2	**HF70HR14915**	Price
8	2.00	1-1/2	.781	1/2	**HF70HR14920**	Price

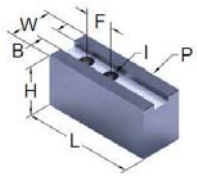
Style - Regular Jaw						
Chuck Size (in.)	B (in.)	C (in.)	J (in.)	Bolt	Order No.	Price
8	2-1/2	1-1/2	.781	1/2	**HF70HR14925**	Price
8	3-1/2	1-1/2	.781	1/2	**HF70HR14935**	Price
12	2-1/2	2	1.190	5/8	**HF70HR14725**	Price
10	2.00	1-3/4	.650	1/2	**HF70HR8220**	Price
10	2-1/2	1-3/4	.650	1/2	**HF70HR8225**	Price
10	3-1/2	1-3/4	.650	1/2	**HF70HR8235**	Price
12	2.00	2	1.188	9/16	**HF70HR10820**	Price
12	2-1/2	2	1.188	9/16	**HF70HR10825**	Price
12	3-1/2	2	1.188	9/16	**HF70HR10835**	Price
12	5.00	2	1.188	9/16	**HF70HR10850**	Price
15	2-1/2	2-1/2	1.400	20mm	**HF70HR15525**	Price
15	3-1/2	2-1/2	1.400	20mm	**HF70HR15535**	Price
15	5.00	2-1/2	1.400	20mm	**HF70HR15550**	Price
12	2-1/2	2	1.188	16mm	**HF70HR11225**	Price
12	3-1/2	2	1.188	16mm	**HF70HR11235**	Price

Style - Serrated Soft Top Jaw						
Chuck Size (in.)	B (in.)	C (in.)	J (in.)	Bolt	Order No.	Price
15/18	2-1/2	15	1.250	-	**HF70HR15325**	Price
15/18	5.00	15	1.250	-	**HF70HR15350**	Price

P=Pointed Jaw

DillonManufacturing, Inc. Metric Serrated Pointed Soft Jaws

1.5mm (0.591) @ 60 Degree Serration (2 Holes)

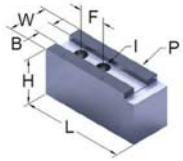


- For Chucks Made by Kitagawa, Matsumoto, Howa & Seike
- All Jaws are made from 1018 mild steel
- Acme and Square serrated keyed hard top jaws and soft jaws available
- **PRICED EACH SOLD ONLY IN MATCHED SETS OF 3**

Chuck Size (in.)	A (in.)	B (in.)	C (in.)	F (in.)	Bolt	Order No.	Price
6	1.50	.472	1.25	.787	M10	**DM85KW6P**	Price
6	3.00	.472	1.25	.787	M10	**DM85KW6HP**	Price
6.5	1.50	.433	1.25	.984	M8	**DM85MK3NE65P**	Price
6.5	3.00	.433	1.25	.984	M8	**DM85MK3NE65HP**	Price
8	2.00	.630	1.50	.984	M12	**DM85HW27M8P**	Price
8	3.00	.551	1.50	.984	M12	**DM85KW83HP**	Price
8	4.00	.630	1.50	.984	M12	**DM85HW27M8HP**	Price
10	2.00	.709	1.75	1.181	M14	**DM85HW27M10P**	Price
10	2.00	.630	1.50	1.260	M12	**DM85MK4NE600P**	Price
10	3.00	.630	1.75	1.181	M12	**DM85KW103HP**	Price
10	4.00	.630	1.50	1.260	M12	**DM85MK4NE600HP**	Price
12	2.00	.709	2.00	1.181	M14	**DM85KW12P**	Price
12	2.00	.827	2.00	1.181	M16	**DM85KW12BP**	Price
12	3.00	.827	2.00	1.181	M16	**DM85KW12B3HP**	Price
12	2.50	.709	2.00	1.181	M14	**DM85KW1255LP**	Price
12	2.50	.827	2.00	1.377	M16	**DM85HW27M12P**	Price
12	4.00	.827	2.00	1.377	M16	**DM85HW27M12HP**	Price
12	4.00	.709	2.00	1.181	M14	**DM85KW12HP**	Price
12	4.00	.827	2.00	1.181	M16	**DM85KW12BHP**	Price
12	4.00	.709	2.00	1.181	M14	**DM85KW1255LHP**	Price
15	2.50	.866	2.50	1.690	M20	**DM85KW15K25HP**	Price
15	3.00	1.004	2.50	1.690	M20	**DM85KW15BP**	Price
15	3.00	.866	2.50	1.690	M20	**DM85KW15KP**	Price
15	4.00	.866	2.50	1.690	M20	**DM85KW15K4HP**	Price
15	4.00	1.004	2.50	1.690	M20	**DM85KW15B4HP**	Price
15	5.00	1.004	2.50	1.690	M20	**DM85KW15BHP**	Price
15	5.00	.866	2.50	1.690	M20	**DM85KW15KHP**	Price

DillonManufacturing, Inc. Metric Serrated Square Soft Jaws

1.5mm (0.591) @ 60 Degree Serration (2 Holes)

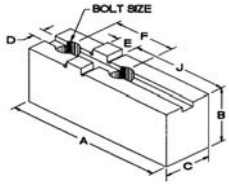


- For Chuck Brands Kitagawa, Samchully, Howa, Matsumoto (MMK), LMC and Autostrong
- All jaws made from1018 mild steel
- All jaws sold individually

Chuck Size (in.)	A (in.)	B (in.)	C (in.)	F (in.)	Bolt	Order No.	Price
6	1.50	.472	1.25	.787	M10	**DM85KW6**	Price
6	3.00	.472	1.25	.787	M10	**DM85KW6H**	Price
6.5	1.50	.433	1.25	.984	M8	**DM85MK3NE65**	Price
6.5	3.00	.433	1.25	.984	M8	**DM85MK3NE65H**	Price
8	2.00	.630	1.50	.984	M12	**DM85HW27M8**	Price
8	4.00	.630	1.50	.984	M12	**DM85HW27M8H**	Price
8	2.00	.551	1.50	.984	M12	**DM85KW8**	Price
8	3.00	.551	1.50	.984	M12	**DM85KW83H**	Price
8	4.00	.551	1.50	.984	M12	**DM85KW8H**	Price
10	2.00	.709	1.75	1.181	M14	**DM85HW27M10**	Price
10	4.00	.709	1.75	1.181	M14	**DM85HW27M10H**	Price
10	4.00	.630	1.75	1.181	M12	**DM85KW10H**	Price
10	3.00	.630	1.75	1.181	M12	**DM85KW103H**	Price
10	2.00	.630	1.50	1.260	M12	**DM85MK4NE600**	Price
10	4.00	.630	1.50	1.260	M12	**DM85MK4NE600H**	Price
12	2.50	.827	2.00	1.377	M16	**DM85HW27M12**	Price
12	4.00	.827	2.00	1.377	M16	**DM85HW27M12H**	Price
12	2.00	.709	2.00	1.181	M14	**DM85KW12**	Price
12	2.50	.709	2.00	1.181	M14	**DM85KW1255L**	Price
12	4.00	.709	2.00	1.181	M14	**DM85KW1255LH**	Price
12	2.00	.827	2.00	1.181	M16	**DM85KW12B**	Price
12	3.00	.827	2.00	1.181	M16	**DM85KW12B3H**	Price
12	2.50	.827	2.00	1.181	M16	**DM85KW12B55L**	Price
12	4.00	.827	2.00	1.181	M16	**DM85KW12B55LH**	Price
12	4.00	.709	2.00	1.181	M14	**DM85KW12H**	Price
15	3.00	1.004	2.50	1.690	M20	**DM85KW15B**	Price
15	4.00	1.004	2.50	1.690	M20	**DM85KW15B4H**	Price
15	5.00	1.004	2.50	1.690	M20	**DM85KW15BH**	Price
15	3.00	.866	2.50	1.690	M20	**DM85KW15K**	Price
15	2.50	.866	2.50	1.690	M20	**DM85KW15K25H**	Price
15	4.00	.866	2.50	1.690	M20	**DM85KW15K4H**	Price
15	5.00	.866	2.50	1.690	M20	**DM85KW15KH**	Price

H&R Mfg. and Supply, Inc. Heavy Duty Soft Top Jaws
American Standard Tongue & Groove (A.S.T.G.)

MADE IN THE USA



- For Chucks Made by Bergman, Bison, Buck, Cushman, Huron, Rohm, Forkhardt, Pratt Burnerd America, SCA, SP, W&S, Nobel & Yuasa
- All Jaws are made from 1018 mild steel

PRICED EACH SOLD ONLY IN MATCHED SETS OF 3

Description - Extra Height											
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Bolt (in.)	J (in.)	Style	Order No.	Price
10	4-5/8	3-7/8	10	.500	.750	2.125	-	2-5/8	Heavy Duty Soft Top Jaw	HF70HR10HEHO	Price
15	6-1/4	4-13/16	15	.500	.750	3.000	-	3-5/8	Heavy Duty Soft Top Jaw	HF70HR15HEHO	Price
21	6	3-5/16	3	1.250	1.531	3.000	-	2-5/8	Pointed Jaw	HF70HR21ACSH	Price
8	3-3/4	3-3/8	8	.313	.500	1.750	-	2-3/16	Heavy Duty Soft Top Jaw	HF70HR8HEHO	Price
18-21***	5-5/8	3-13/16	2	.500	.750	3.000	3/4	2-3/4	Regular Jaw	HF70HR481†	Price
10**	4-1/2	3-7/8	1-3/4	.500	.750	2.120	5/8	1-15/16	Regular Jaw	HF70HR477	Price
10**	4-13/16	3-7/8	1-3/4	.500	.750	2.120	5/8	2-11/16	Pointed Jaw	HF70HR489P	Price
12**	4-7/8	3-7/8	2	.500	.750	2.500	5/8	2-5/16	Regular Jaw	HF70HR479	Price
12**	5-3/4	3-7/8	2	.500	.750	2.500	5/8	3-3/8	Pointed Jaw	HF70HR491P	Price
15-36***	7-1/4	3-13/16	2	.500	.750	3.000	3/4	4-1/2	Pointed Jaw	HF70HR496P	Price
6**	2-5/8	3-3/8	1-1/4	.313	.500	1.500	7/16	1-1/8	Regular Jaw	HF70HR472	Price
6**	3-3/16	3-3/8	1-1/4	.313	.500	1.500	7/16	1-11/16	Pointed Jaw	HF70HR484P	Price
8**	3-1/2	3-3/8	1-1/2	.313	.500	1.750	1/2	1-5/8	Regular Jaw	HF70HR475	Price
8**	3-15/16	3-3/8	1-1/2	.313	.500	1.750	1/2	2-1/4	Pointed Jaw	HF70HR487P	Price

Description - Standard Height											
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Bolt (in.)	J (in.)	Style	Order No.	Price
10	4-1/8	2-5/16	10	.750	1.031	1.750	-	2-1/8	Serrated Soft Top Jaw	HF70HR10ACSH	Price
10	4-5/8	1-7/8	10	.500	.750	2.125	-	2-5/8	Heavy Duty Soft Top Jaw	HF70HR10HSHO	Price
12	5-1/8	2-5/16	12	.875	1.031	2.000	-	2-7/8	Serrated Soft Top Jaw	HF70HR12ACSH	Price
12	5-3/8	2-1/8	12	.500	.750	2.500	-	3-1/8	Heavy Duty Soft Top Jaw	HF70HR12HSHO	Price
15	6	3-5/16	15/18	1.000	1.531	2.500	-	2-5/8	Serrated Soft Top Jaw	HF70HR15ACSH	Price
15	6-1/4	2-5/16	15	.500	.750	3.000	-	3-5/8	Heavy Duty Soft Top Jaw	HF70HR15HSHO	Price
18	6-3/8	2-13/16	18	.500	.750	3.000	-	3-3/4	Heavy Duty Soft Top Jaw	HF70HR18HSHO	Price
6	3-1/4	1-3/8	6	.313	.500	1.500	-	1-13/16	Heavy Duty Soft Top Jaw	HF70HR6HSHO	Price
10**	4-1/2	2-3/8	1-3/4	.500	.750	2.120	5/8	1-15/16	Regular Jaw	HF70HR453	Price
10**	4-13/16	2-3/8	1-3/4	.500	.750	2.120	5/8	2-11/16	Pointed Jaw	HF70HR465P	Price
12**	4-7/8	2-3/8	2	.500	.750	2.500	5/8	2-5/16	Regular Jaw	HF70HR455	Price
12**	5-3/4	2-3/8	2	.500	.750	2.500	5/8	3-3/8	Pointed Jaw	HF70HR467P	Price
15-36***	7-1/4	2-5/16	2	.500	.750	3.000	3/4	4-1/2	Pointed Jaw	HF70HR469P	Price
18-21***	5-5/8	2-5/16	2	.500	.750	3.000	3/4	2-3/4	Regular Jaw	HF70HR457†	Price
6**	2-5/8	1-5/8	1-1/4	.313	.500	1.500	7/16	1-1/8	Regular Jaw	HF70HR448	Price
6**	3-3/16	1-5/8	1-1/4	.313	.500	1.500	7/16	1-11/16	Pointed Jaw	HF70HR460P	Price
8**	3-1/2	1-7/8	1-1/2	.313	.500	1.750	1/2	1-5/8	Regular Jaw	HF70HR451	Price
8**	3-15/16	1-7/8	1-1/2	.313	.500	1.750	1/2	2-1/4	Pointed Jaw	HF70HR463P	Price

P=Pointed Jaw **=1/8" Tongue Height *=3/16" Tongue Height †Medium duty and heavy duty jaws are the same**

Dillon Manufacturing, Inc. Full Wrap Aluminum Jaws

- For Chuck Brands Kitagawa, Samchully, Howa, Matsumoto (MMK), LMC and Autostrong
- All Full Grip jaws are sold in sets of three pieces

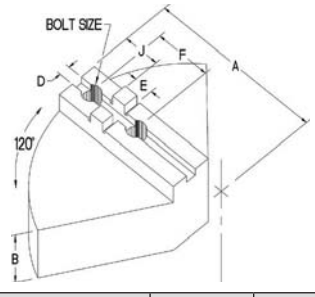


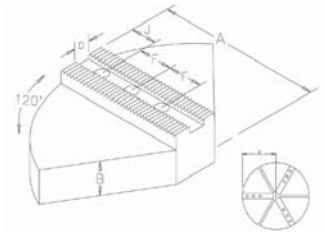
Chuck Size (in.)	B (in.)	F (in.)	Order No.	Price
6	.472	.787	DM85KW6FG	Price
6	.472	.787	DM85KW6HFG	Price
6.5	.433	.984	DM85MK3NE65FG	Price
6.5	.433	.984	DM85MK3NE65HFG	Price
8	.551	.984	DM85KW8HFG	Price
8	.630	.984	DM85HW27M8FG	Price
8	.630	.984	DM85HW27M8HFG	Price
10	.630	1.181	DM85KW10HFG	Price
10	.630	1.260	DM85MK4NE600FG	Price
10	.630	1.260	DM85MK4NE600HFG	Price
10	.709	1.181	DM85HW27M10FG	Price
10	.709	1.181	DM85HW27M10HFG	Price
12	.709	1.181	DM85KW12HFG	Price
12	.709	1.181	DM85KW12FG	Price
12	.827	1.181	DM85KW12BHFG	Price
12	.827	1.377	DM85HW27M12FG	Price
12	.827	1.377	DM85HW27M12HFG	Price
15	.866	1.690	DM85KW15KFG	Price
15	1.004	1.690	DM85KW15BFG	Price
15	1.004	1.690	DM85KW15BHFG	Price
15	.866	1.690	DM85KW15KHFG	Price

H&R Mfg. and Supply, Inc. Full Wrap Aluminum Jaws

- Full wrap jaws are used for round and thin wall parts where pressure is applied around the entire part I.D. & O.D.
- They are NOT made out of castings, therefore there are NO sand pockets, resulting in a better quality product
- **1.5mm (.0591) @ 60° Serration for:** Kitagawa, Nikko, Matsumoto, Howa & Seike

PRICED EACH SOLD ONLY IN MATCHED SETS OF 3

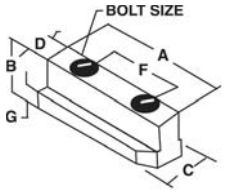




Chuck Size (in.)	B (in.)	F (in.)	Order No.	Price
6	.433	.969	HF70HR6B2AL	Price
6	.475	.787	HF70HR6K2AL	Price
8	.551	1.000	HF70HR1492AL	Price
10	.630	1.181	HF70HR822AL	Price
12	.709	1.181	HF70HR1082AL	Price
12	.827	1.181	HF70HR1122AL	Price

DillonManufacturing, Inc. Jaw Nuts

- **PRICED EACH SOLD INDIVIDUALLY**
- Jaw Nuts comes with screws
- Made from 4140 PHT

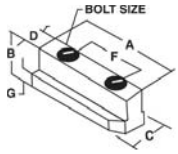


Chuck Size	F (in.)	Order No.	Price
6	.787	DM85KW6JN	Price
6	.787	DM85KW6JN7	Price
6.5	.984	DM85MK3NE65JN	Price
8	.984	DM85KW8JN	Price
8	.984	DM85KW8JN9	Price
8	.984	DM85HW27M8JN	Price
10	1.181	DM85KW10JN	Price
10	1.181	DM85HW27M10JN	Price
10	1.181	DM85KW10JN11	Price
12	1.181	DM85KW12JN	Price
12	1.181	DM85KW12BJN	Price
10	1.260	DM85MK4NE600JN	Price
12	1.181	DM85BB212JN	Price
12	1.377	DM85HW27M12JN	Price
15	1.690	DM85BB218JN	Price
15	1.690	DM85KW15BJN	Price
15	1.690	DM85KW15KJN	Price

Metric jaw nuts also available and in stock

H&R Mfg. and Supply, Inc. Jaw Nuts

- **PRICED EACH SOLD INDIVIDUALLY**

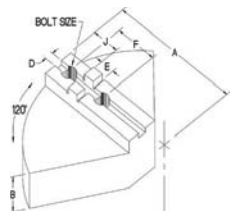


Chuck Size (in.)	Dim. F (in.)	Order No.	Price
6	.787	HF70HRJN206M	Price
6	.787	HF70HRJN6KA	Price
6	.787	HF70HRJN6KM	Price
6	.969	HF70HRJN6BA	Price
6	.969	HF70HRJN6BM	Price
8	1.000	HF70HRJN208A	Price
8	1.000	HF70HRJN208M	Price
8	1.000	HF70HRJN149A	Price
8	1.000	HF70HRJN149M	Price
10	.984	HF70HRJN81M	Price
10	1.181	HF70HRJN210A	Price
10	1.181	HF70HRJN210M	Price
10	1.181	HF70HRJN82A	Price
10	1.181	HF70HRJN82M	Price
10	1.578	HF70HRJN95M	Price
12	1.181	HF70HRJN112A	Price
12	1.181	HF70HRJN112M	Price
12	1.181	HF70HRJN108A	Price
12	1.181	HF70HRJN108M	Price
15	1.690	HF70HRJN115M	Price
15	1.690	HF70HRJN115A	Price
15	1.690	HF70HRJN155M	Price
15	1.690	HF70HRJN155A	Price

H&R Mfg. and Supply, Inc. Full Wrap Jaws

MADE IN THE USA

A.S.T.G. Medium Duty Full Wrap Alum Jaws Tongue & Groove (1/8" Tongue Height)



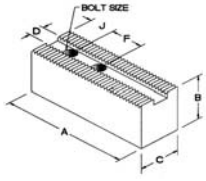
- For: Berman, Bison, Buck, Cushmen, Huron, Rohm,Forkhardt, Pratt Burnerd America, SCA, S.P., W&S, Nobel & Yuasa
- Full wrap jaws are used for round and thin wall parts where pressure is applied around the entire part I.D. & O.D.
- NOT made out of castings, therefore there are NO sand pockets, resulting in a better quality product
- Cast iron and steel available—Call for more information

PRICED EACH SOLD ONLY IN MATCHED SETS OF 3

Chuck Size (in.)	A (in.)	B (in.)	D (in.)	J (in.)	F (in.)	E (in.)	Bolt (in.)	Order No.	Price
6	3	2.00	.313	Center	1.500	.500	3/8	HF70HR6MSH2AL	Price
8	4	2.00	.313	Center	1.750	.500	3/8	HF70HR8MSH2AL	Price
10	5	2.00	.500	1-1/2	2.125	.750	1/2	HF70HR10MSH2AL	Price
12	6	2.00	.500	2	2.500	.750	1/2	HF70HR12MSH2AL	Price

H&R Mfg. and Supply, Inc. Serrated Soft Top Jaws Each 1/16" @ 90°

MADE IN THE USA



- For Cushman, Gamet, Erickson, Powerhold, Rohm, Forkhardt, Autoblok and SMW

PRICED EACH SOLD ONLY IN MATCHED SETS OF 3

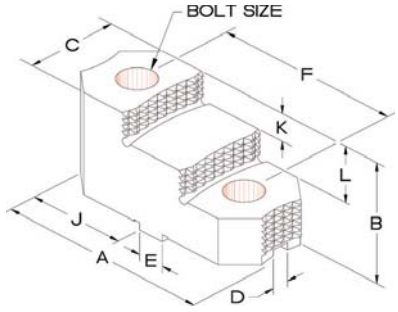
No. of Holes - 2									
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	Bolt Size (in.)	J (in.)	Order No.	Price
11-12	4-3/4	3.00	11-12	.827	1.125	-	1.187	HF70HRWB12	Price
5-6	3-1/8	1-1/2	1-1/4	.433	.718	5/16	.437	HF70HR6JSH	Price
5-6	3-1/8	3.00	1-1/4	.433	.718	5/16	.437	HF70HR6JEH	Price

No. of Holes - 3									
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	Bolt Size (in.)	J (in.)	Order No.	Price
8-10	4-1/4	2.00	1-1/2	.551	.875	3/8	.562	HF70HR10JSH	Price
8-10	4-1/4	2.00	1-1/2	.669	.875	1/2	.500	HF701282P	Price
8-10	4-1/4	3-1/2	1-1/2	.551	.875	3/8	.562	HF70HR10JEH	Price
8-10	4-1/4	3-1/2	1-1/2	.669	.875	1/2	.500	HF7012835P	Price
8-10	4-5/8	3-1/2	1-3/4	.788	1.187	1/2	.625	HF70HR11JEH	Price
8-10	4-5/8	2.00	1-3/4	.788	1.187	1/2	.625	HF70HR11JSH	Price
10-12.5	5-1/4	2-1/2	2	.827	1.187	1/2	.625	HF701212525P	Price
10-12.5	5-1/4	3-1/2	2	.827	1.187	1/2	.625	HF701212535P	Price
10-12.5	5-1/4	5.00	2	.827	1.187	1/2	.625	HF70121255P	Price
11-12	5-1/4	2-1/2	1-3/4	.788	1.187	1/2	.625	HF70HR12JSH	Price
11-12	5-1/4	3-1/2	1-3/4	.788	1.187	1/2	.625	HF70HR12JEH	Price
14-15	6-5/8	2-1/2	1-3/4	.826	1.562	5/8	.750	HF70HR15JSH	Price
14-15	6-5/8	3-1/2	1-3/4	.826	1.562	5/8	.750	HF70HR15JEH	Price

H&R Mfg. and Supply, Inc. Medium & Heavy Duty Hard Top Jaws
American Standard Tongue & Groove (A.S.T.G.)

- For Bergman, Bison, Buck, Cushman, Huron , Rohm, Forkhardt, Pratt Burnerd America, SCA, SP, W & S, Nobel & Yuasa
- † All "STGRT" Style Jaws have Horizontal Serrations only

PRICED EACH SOLD ONLY IN MATCHED SETS OF 3



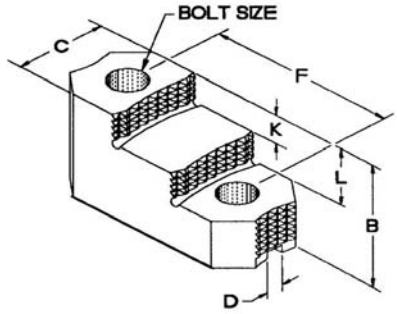
Style - Heavy Duty 2-Step Rev Hard Jaw												
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	J (in.)	K (in.)	L (in.)	Bolt (in.)	Order No.	Price
8	3.286	1.969	1-1/2	.313	.500	1.750	1.375	.530	.910	1/2	**HF708HTGRJ**	Price
10	3.920	2.469	1-3/4	.500	.750	2.125	1.563	.650	1.300	5/8	**HF7010HTGRJ**	Price
12	4.550	2.469	1-3/4	.500	.750	2.500	1.875	.650	1.300	5/8	**HF7012HTGRJ**	Price
15-24	5.350	3.469	2-1/2	.500	.750	3.000	2-1/4	.950	1.900	3/4	**HF7015HTGRJ**	Price
24 - 36	6.942	3.969	3	.500	.750	3.000	3-3/4	1.000	2.000	3/4	**HF7024HTGRJ**	Price
24 - 36	6.942	3.969	3	.500	.750	3.000	3-3/4	1.000	2.000	7/8	**HF7028HTGRJ**	Price

Style - Medium Duty 2-Step Rev Hard Jaw												
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	J (in.)	K (in.)	L (in.)	Bolt (in.)	Order No.	Price
6	2.788	1.969	1-1/2	.313	.500	1.500	1.125	.530	1.060	3/8	**HF706MTGRJ**	Price
8	3.270	1.625	1.000	.313	.500	1.750	1.375	.375	.750	3/8	**HF708STGRJ†**	Price
8	3.286	1.969	1-1/2	.313	.500	1.750	1.375	.530	1.060	3/8	**HF708MTGRJ**	Price
10	3.750	2.000	1.250	.500	.750	2.125	1.563	.500	1.000	1/2	**HF7010STGRJ†**	Price
10	3.920	2.469	1-3/4	.500	.750	2.125	1.563	.650	1.300	1/2	**HF7010MTGRJ**	Price
12	4.550	2.250	1.250	.500	.750	2.500	1.875	.625	1.250	1/2	**HF7012STGRJ†**	Price
12	4.550	2.469	1-3/4	.500	.750	2.500	1.875	.650	1.300	1/2	**HF7012MTGRJ**	Price
15 & Up	5.260	2.750	1.500	.500	.750	3.000	2-1/4	.735	1.469	5/8	**HF7015STGRJ†**	Price
15 & Up	5.350	3.469	2-1/2	.500	.750	3.000	2-1/4	.950	1.900	5/8	**HF7015MTGRJ**	Price

H&R Mfg. and Supply, Inc. Serrated Hard Top Jaws 1/16" @ 90°

- For Cushman, Gamet, Erickson, Power Hold, Rohm, Autoblok, Forkhardt, SMW and Pratt Burnerd

PRICED EACH SOLD ONLY IN MATCHED SETS OF 3



Description - Hard Jaws										
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	K (in.)	L (in.)	Bolt (in.)	Order No.	Price
6-1/2	3	2.00	1-1/4	.551	.865	3/8	3/4	3/8	**HF70HR1165RJ**	Price
8	3-1/2	1-31/32	1-1/2	.669	.945	.530	1.060	1/2	**HF70HR118RJ**	Price
10-12	4-7/8	2-15/32	1-3/4	.827	1.181	.650	1.300	1/2	**HF70HR11125RJ**	Price

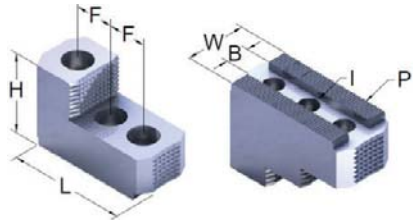
Description - Others										
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	K (in.)	L (in.)	Bolt (in.)	Order No.	Price
5-6	3	2.00	1-1/4	.433	.719	1/2	1.000	5/16	**HF70HR6JSHRJ**	Price
8-10	3-1/2	2.00	1-1/2	.551	.875	1/2	1.000	3/8	**HF70HR10JSHRJ**	Price
11-12	4-1/4	2-15/32	1-3/4	.788	1.181	.650	1.300	1/2	**HF70HR12JSHRJ**	Price
14-15	4-7/8	2-15/32	1-3/4	.827	1.562	.650	1.300	5/8	**HF70HR15JSHRJ**	Price
18	6-1/2	3-15/32	2-1/2	1.181	1.970	.950	1.900	3/4	**HF70HR18HDRJ**	Price

Description - Pratt Burnerd										
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	K (in.)	L (in.)	Bolt (in.)	Order No.	Price
6-1/2	3	2.00	1-1/4	.510	.719	3/8	3/4	5/16	**HF70HR1665RJ**	Price
8	3-9/16	2.00	1-1/2	.669	.875	3/8	3/4	3/8	**HF70HR168RJ**	Price
10	4-1/4	2-1/2	1-1/2	.827	.980	1/2	1.000	1/2	**HF70HR1610RJ**	Price

DillonManufacturing, Inc. Metric Serrated Single Step Reversible Hard Jaws

1.5mm (.0591) @ 60° Serration

- For Chucks Made by Kitagawa, Matsumoto, Howa & Seike, PBA, Autoblok, Schunk, Strong
- All Jaws are made from 1018 mild steel
- **PRICED EACH SOLD ONLY IN MATCHED SETS OF 3**

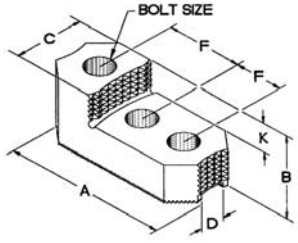


Chuck Size (in.)	A (in.)	B (in.)	C (in.)	F (in.)	L (in.)	Bolt	Order No.	Price
6	1.50	.472	1.25	.787	2.750	M10	**DM85KW61RJ**	Price
6	1.625	.433	1.125	.984	3.00	M8	**DM85MK3NE651RJ**	Price
8	2.00	.551	1.50	.984	3.625	M12	**DM85KW81RJ**	Price
8	2.00	.630	1.50	.984	3.25	M12	**DM85HW27M81RJ**	Price
10	2.50	.630	1.75	1.181	4.25	M12	**DM85KW101RJ**	Price
10	3.00	.630	1.50	1.260	4.213	1/2	**DM85MK4NE6001RJ**	Price
12	2.50	.827	2.00	1.377	4.375	M16	**DM85HW27M121RJ**	Price
12	2.50	.709	2.00	1.181	4.25	M14	**DM85KW121RJ**	Price
12	2.50	.827	2.00	1.181	4.25	M16	**DM85KW12B1RJ**	Price
15	3.50	1.004	2.50	1.690	5.875	M20	**DM85KW15B1RJ**	Price
15	3.50	.866	2.50	1.690	5.875	M20	**DM85KW15K1RJ**	Price

H&R Mfg. and Supply, Inc. Metric Serrated Single Step Reversible Hard Jaws

1.5mm (.0591) @ 60° Serration

- For Chucks Made by Kitagawa, Matsumoto, Howa & Seike, PBA, Autoblok, Schunk, Strong
- All Jaws are made from 1018 mild steel
- **PRICED EACH SOLD ONLY IN MATCHED SETS OF 3**



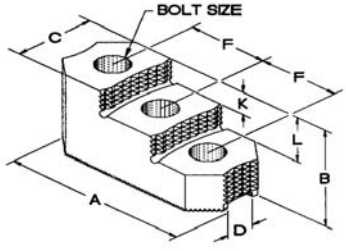
Chuck Size	A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	K (in.)	Bolt	Order No.	Price
6" Matsumoto	3	2.00	1-1/4	.433	.969	1.000	8mm	**HF70HR6BRJSS**	Price
8" Kitagawa (208)	3-1/2	2.00	1-1/4	.551	1.000	1.030	12mm	**HF70HR149RJSS**	Price
B-10 Kitagawa	4-1/4	2-1/2	1-3/4	.630	1.181	1.250	12mm	**HF70HR82RJSS**	Price
12" (B-12)	4-7/8	2-1/2	2	.710	1.181	1.300	14mm	**HF70HR108RJSS**	Price
12" (B-212)	4-7/8	2-1/2	2	.827	1.181	1.300	16mm	**HF70HR112RJSS**	Price
15" (B-15)	5-1/2	3-1/2	2-1/2	.866	1.690	1.900	20mm	**HF70HR155RJSS**	Price
15" (B-215)	5-1/2	3-1/2	2-1/2	1.000	1.690	1.900	20mm	**HF70HR115RJSS**	Price

H&R Mfg. and Supply, Inc. Metric Serrated Double Step Reversible Hard Jaws

1.5mm (.0591) @ 60° Serration

- For Chucks Mde by Kitagawa, Matsumoto, Howa & Seike, PBA, Autoblok, Schunk, Strong
- All Jaws are made from 1018 mild steel

PRICED EACH SOLD ONLY IN MATCHED SETS OF 3

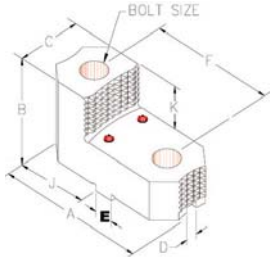


Chuck Size	A (in.)	B (in.)	C (in.)	D (in.)	F (in.)	K (in.)	L (in.)	Bolt	Order No.	Price
6" Kitagawa	3	2.00	1-1/4	.472	.787	.500	1.000	10mm	**HF70HR6KRJ**	Price
6" Matsumoto	3	2.00	1-1/4	.433	.969	.500	1.000	8mm	**HF70HR6BRJ**	Price
8" Kitagawa (208)	3-1/2	2.00	1-1/2	.551	1.000	.530	1.060	12mm	**HF70HR149RJ**	Price
B-10 Kitagawa	4-1/4	2-1/2	1-3/4	.630	1.181	.650	1.300	12mm	**HF70HR82RJ**	Price
12" (B-12)	4-7/8	2-1/2	2	.710	1.181	.650	1.300	14mm	**HF70HR108RJ**	Price
12" (B-212)	4-7/8	2-1/2	2	.827	1.181	.650	1.300	16mm	**HF70HR112RJ**	Price
15" (B-15)	5-1/2	3-1/2	2-1/2	.866	1.690	.950	1.900	20mm	**HF70HR155RJ**	Price
15" (B-215)	5-1/2	3-1/2	2-1/2	1.000	1.690	.950	1.900	20mm	**HF70HR115RJ**	Price

H&R Mfg. and Supply, Inc. A.S.T.G. Single Step Heavy Duty Reversible Hard Jaw

- For Bergman, Bison, Buck, Cushman, Huron, Rohm, Forkhardt, Pratt Burnerd America, SCA, SP, W & S, Nobel & Yuasa

PRICED EACH SOLD ONLY IN MATCHED SETS OF 3



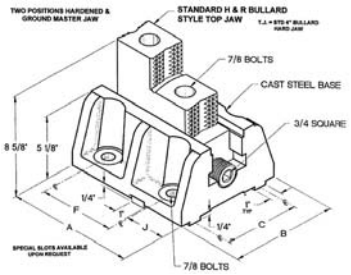
Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	J (in.)	L (in.)	Bolt (in.)	Order No.	Price
12	4.550	2.469	2	.500	.750	2.500	1.875	1.262	5/8	**HF7012HTGRJSS**	Price
15-24	5.350	3.469	2-1/2	.500	.750	3.000	2-1/4	1.900	3/4	**HF7015HTGRJSS**	Price
24 - 36	6.960	3.750	3	.500	.750	3.000	3-3/4	2.000	3/4	**HF7024HTGRJSS**	Price
24 - 36	6.960	3.750	3	.500	.750	3.000	3-3/4	2.000	7/8	**HF7028HTGRJSS**	Price

H&R Mfg. and Supply, Inc. 4 Pc. Boring Mill Jaws Set

Replaceable Standard Top Jaws (Soft Jaws Available) - Bullard Tooling

- Hardened thrust bearing & operating screw for extended wear
- **SOLD ONLY IN MATCHED SETS OF 4**

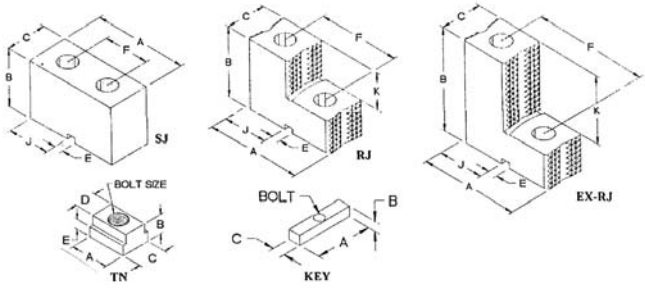
MADE IN THE USA



Size A (in.)	B (in.)	C (in.)	F (in.)	J (in.)	Top Jaw Positions	Order No.	Price
8	8-5/8	6	4.000	3-1/2	1	**HF70HRBM86TJ**	Price
8	8-5/8	7	4.000	3-1/2	1	**HF70HRBM87TJ**	Price
10	8-5/8	6	6.000	3	2	**HF70HRBM106TJ**	Price
10	8-5/8	7	6.000	3	2	**HF70HRBM107TJ**	Price
12	10	6	7.000	3-1/2	2	**HF70HRBM126TJ**	Price
12	10	7	7.000	3-1/2	2	**HF70HRBM127TJ**	Price
14	12	6	9.000	3-1/2	3	**HF70HRBM146TJ**	Price
14	12	7	9.000	3-1/2	3	**HF70HRBM147TJ**	Price

H&R Mfg. and Supply, Inc. Bullard Jaws

MADE IN THE USA



A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	J (in.)	K (in.)	Bolt (in.)	Order No.	Price
1-3/4	1	1-1/2	.975	.520	-	-	-	7/8-9	**HF70HRBULTN†**	Price
2-5/8	1/2	5/8	-	-	-	-	-	5/16	**HF70HRBULKEY††**	Price
6-5/8	4.00	3	-	5/8	3.250	3	2	7/8	**HF70HRBULRJ**	Price
6-5/8	4.00	3	-	5/8	3.250	Center	-	7/8	**HF70HRBULSJ**	Price
6-5/8	6.00	3	-	5/8	3.250	3	4	7/8	**HF70HRBULEHRJ**	Price

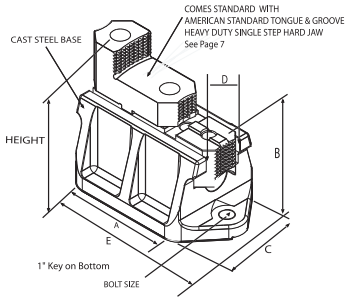
†TNut ††Key

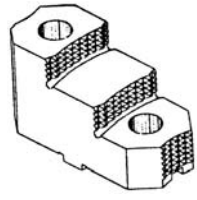
H&R Mfg. and Supply, Inc. Steel Face Plate Jaws

Steel Face Plate Includes Single Step Jaw

- Face plate jaws are special order only
- **SOLD ONLY IN MATCHED SETS OF 4**

MADE IN THE USA





Size A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Bolt Size (in.)	Bolt Centers (in.)	Order No.	Price
6	4.500	5.500	2.000	8.500	5/8	7.00	**HF70FPJ6**	Price
8	4.500	5.500	2.250	10.500	3/4	9.00	**HF70FPJ8**	Price

Fine Adjustment Steel Body Chucks

Bison Features:
- .0004" Accuracy
- Scroll & Jaws hardened and ground
- Three hardened and ground pinions
- 4 Micro adjustment screws provide .0004 T.I.R. repeatability
- 15-3/4" & UP chucks have 8 micro adjustment screws
- Extremely high gripping concentricity
- 2 Pc. top jaws are American Standard Tongue & Groove.
- 4" HAS 2 SETS SOLID JAWS

Toolmex Features:
- .0006" T.I.R. Repeatability
- Fine adjustment with 4 micro adjustment screws
- 16", 20" and 25" diameter chucks with 3 jaws and 6 jaws use 8 micro adjustment screws



TOOLMEX Industrial Solutions

Number of Jaws - 3						
			TMX		Bison	
Chuck Size (in.)	Hole Size (in.)	Max. RPM	Order No.	Price	Order No.	Price
4	.787	6300	-	-	**HK308660400**	Price
5	1.378	5500	**HK3138660500P**	Price	**HK308660500**	Price
6	1.654	4600	**HK3138660600P**	Price	**HK308660600**	Price
8	2.165	4000	**HK3138660800P**	Price	**HK308660800**	Price
10	2.992	3500	**HK3138661000P**	Price	**HK308661000**	Price
12	4.055	2800	**HK3138661200P**	Price	**HK308661200**	Price
16	5.354	2000	**HK3138661600P**	Price	**HK308661600**	Price
20	7.480	1300	-	-	**HK308662000**	Price
25	9.921	1000	**HK3138662500P**	Price	**HK308662500**	Price
20	7.48	1300	**HK3138662000P**	Price	-	-

TOOLMEX Industrial Solutions

Number of Jaws - 4				
			TMX	
Chuck Size (in.)	Hole Size (in.)	Max. RPM	Order No.	Price
6	1.654	4600	**HK3138470600P**	Price
8	2.165	4000	**HK3138470800P**	Price

TOOLMEX Industrial Solutions

Number of Jaws - 4			
	TMX		
Chuck Size (in.)	Hole Size (in.)	Max. RPM	Order No.	Price
10	2.992	3500	**HK3138471000P**	Price
12	4.055	2800	**HK3138471200P**	Price
16	5.354	2000	**HK3138471600P**	Price

TOOLMEX Industrial Solutions

Number of Jaws - 6						
			TMX		Bison	
Chuck Size (in.)	Hole Size (in.)	Max. RPM	Order No.	Price	Order No.	Price
4	.787	4000	-	-	**HK308688040**	Price
5	1.378	3800	**HK3138680500P**	Price	**HK308680500**	Price
6	1.654	3200	**HK3138680600P**	Price	**HK308680600**	Price
8	2.165	2800	**HK3138680800P**	Price	**HK308680800**	Price
10	2.992	2400	**HK3138681000P**	Price	**HK308681000**	Price
12	4.055	1900	**HK3138681200P**	Price	**HK308681200**	Price
16	5.354	1400	**HK3138681600P**	Price	**HK308681600**	Price
20	7.480	900	-	-	**HK308682000**	Price
25	9.921	700	**HK3138682500P**	Price	**HK308682500**	Price
20	7.48	900	**HK3138682000P**	Price	-	-

BTC Fine Adjustment Steel & Semi Steel Body Chucks

Features:
- .0005" Accuracy (BTC)
- Scroll & Jaws hardened and ground
- Three hardened and ground pinions
- 4 Micro adjustment screws provide .0004 T.I.R. repeatability
- 15-3/4" & UP chucks have 8 micro adjustment screws
- Extremely high gripping concentricity
- 2 Pc. top jaws are American Standard Tongue & Groove



No. of Jaws - 3							
				Semi Steel Body		Steel Body	
Chuck Size (in.)	Hole Size (in.)	Max. RPM	Weight	Order No.	Price	Order No.	Price
4	1.024	4000	10 lbs	**HK151043**	Price	**HK15S1043**	Price
5	1.299	3500	15 lbs	**HK151053R**	Price	**HK15S1053R**	Price
6	1.535	3400	19 lbs	**HK151063R**	Price	**HK15S1063R**	Price
8	2.264	3100	50 lbs	**HK151083R**	Price	**HK15S1083R**	Price
10	2.835	2700	70 lbs	**HK151103R**	Price	**HK15S1103R**	Price
12	3.268	2200	116 lbs	**HK151123R**	Price	**HK15S1123R**	Price
15	4.252	1800	200 lbs	**HK151153R**	Price	**HK15S1153R**	Price

No. of Jaws - 6							
				Semi Steel Body		Steel Body	
Chuck Size (in.)	Hole Size (in.)	Max. RPM	Weight	Order No.	Price	Order No.	Price
6	1.535	2500	19 lbs	**HK151066R**	Price	**HK15S1066R**	Price
8	2.264	2200	50 lbs	**HK151086R**	Price	**HK15S1086R**	Price
10	2.835	1900	70 lbs	**HK151106R**	Price	**HK15S1106R**	Price
12	3.268	1500	116 lbs	**HK151126R**	Price	**HK15S1126R**	Price
15	4.252	1300	200 lbs	**HK151156R**	Price	**HK15S1156R**	Price

3-Jaw Type "A" Direct Mount Semi-Steel Lathe Chucks

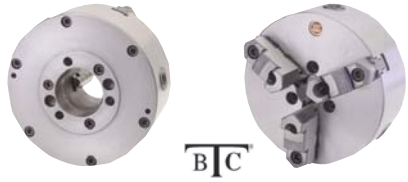
BTC Features:
- Master jaws and top jaws
- T-wrench
- Mounting screws
- Although an A1 type spindle nose has both inner and outer tapped holes, Style A1 chucks utilize the inner holes, and will NOT fit on an A2 type spindle.
- Style A2 chucks use the outer tapped holes, and WILL fit on either A1 or A2 type spindles

Bison Features:
- Steel body accuracy .0015
- Semi-Steel body accuracy .003
- 2 Pc. American jaws
- 2 Pc. Reversible jaws
- "A" Type mount shown



			Bison		BTC	
Chuck Size (in.)	Mount	Hole Size (in.)	Order No.	Price	Order No.	Price
6	A1-5	1.653	**HK308010615**	Price	-	-
8	A1-5	1.575	-	-	**HK156083A5R**	Price

3-Jaw Type "A" Direct Mount Semi-Steel Lathe Chucks (cont.)



			Bison		BTC	
Chuck Size (in.)	Mount	Hole Size (in.)	Order No.	Price	Order No.	Price
8	A1-5	1.653	**HK308010815**	Price	**-**	-
8	A1-6	2.165	**HK308010816**	Price	**-**	-
10	A1-6	2.165	**HK308011016**	Price	**HK156103A6R**	Price
10	A1-8	2.992	**HK308011018**	Price	**-**	-
10	A2-5	2.992	**HK308011015**	Price	**-**	-
10	A2-6	3.150	**-**	-	**HK156103A26R**	Price
12	A1-6	2.165	**-**	-	**HK156123A6R**	Price
12	A1-8	3.071	**-**	-	**HK156123A8R**	Price
12	A1-8	3.150	**HK308011218**	Price	**-**	-
12	A2-6	4.055	**HK308011216**	Price	**-**	-
15	A2-8	5.315	**-**	-	**HK156153A28R**	Price
15	A2-11	5.315	**-**	-	**HK156153A211R**	Price
16	A1-11	5.110	**HK308011619**	Price	**-**	-
16	A2-6	4.055	**HK308011616**	Price	**-**	-
16	A2-8	5.340	**HK308011618**	Price	**-**	-
20	A2-11	7.480	**HK308012029**	Price	**HK156203A211R**	Price
20	A1-15	7.874	**-**	-	**HK156203A15R**	Price
20	A2-8	5.354	**-**	-	**HK156203A28R**	Price
25	A1-20	12.500	**-**	-	**HK156253A20R**	Price
25	A2-11	7.500	**HK308012511**	Price	**HK156253A211R**	Price
25	A2-15	9.920	**HK308012515**	Price	**-**	-
25	A2-15	10.236	**-**	-	**HK156253A215R**	Price
32	A2-20	12.500	**HK308013220**	Price	**-**	-

3-Jaw Type "D" Direct Mount Semi Steel Lathe Chucks

BTC Features:
- Master jaws and top jaws
- T-wrench
- Mounting screws

Bison Features:
- 2 Pc. Reversible jaws

Toolmex Features:
- Drop forged and hardened to 28HRc with jaws hardened to 50 HRc



			BTC		TMX		Bison	
Chuck Size (in.)	Mount	Hole Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price
6	D1-3	1.575	**HK156063D3**	Price	**-**	-	**-**	-
6	D1-3	1.653	**-**	-	**-**	-	**HK308030633**	Price
6	D1-4	1.575	**HK156063D4**	Price	**-**	-	**-**	-
6	D1-4	1.653	**-**	-	**-**	-	**HK308030634**	Price
6	D1-5	1.575	**HK156063D5**	Price	**-**	-	**-**	-
8	D1-3	2.170	**-**	-	**-**	-	**HK308030833**	Price
8	D1-4	1.969	**HK156083D4**	Price	**-**	-	**-**	-
8	D1-4	2.170	**-**	-	**HK3138230834P**	Price	**HK308030834**	Price
8	D1-5	1.969	**HK156083D5**	Price	**-**	-	**-**	-
8	D1-5	2.165	**-**	-	**-**	-	**HK308030835**	Price
8	D1-6	1.969	**HK156083D6**	Price	**-**	-	**-**	-
8	D1-6	2.165	**-**	-	**HK3138230836P**	Price	**HK308030836**	Price
10	D1-5	2.400	**HK156103D5**	Price	**-**	-	**-**	-
10	D1-5	2.992	**-**	-	**-**	-	**HK308031035**	Price
10	D1-6	2.756	**HK156103D6**	Price	**-**	-	**-**	-
10	D1-6	2.992	**-**	-	**HK3138231036P**	Price	**HK308031036**	Price
10	D1-8	2.992	**-**	-	**HK3138231038P**	Price	**HK308031038**	Price
10	D1-8	3.150	**HK156103D8**	Price	**-**	-	**-**	-
12	D1-6	3.937	**HK156123D6**	Price	**-**	-	**-**	-
12	D1-6	4.055	**-**	-	**HK3138231236P**	Price	**HK308031236**	Price
12	D1-8	3.937	**HK156123D8**	Price	**-**	-	**-**	-
12	D1-8	4.173	**-**	-	**HK3138231238P**	Price	**HK308031238**	Price
12	D1-11	3.937	**HK156123D11**	Price	**-**	-	**-**	-
12	D1-11	4.055	**-**	-	**HK3138231239P**	Price	**HK308031239**	Price
15	D1-8	5.118	**HK156153D8**	Price	**-**	-	**-**	-
15	D1-11	5.315	**HK156153D11**	Price	**-**	-	**-**	-
16	D1-6	5.340	**-**	-	**-**	-	**HK308031636**	Price
16	D1-8	5.354	**-**	-	**HK3138231638P**	Price	**HK308031638**	Price
16	D1-11	5.354	**-**	-	**HK3138231639P**	Price	**HK308031639**	Price
20	D1-8	5.120	**HK156203D8**	Price	**-**	-	**-**	-
20	D1-8	5.354	**-**	-	**-**	-	**HK308032038**	Price
20	D1-11	7.480	**HK156203D11**	Price	**HK3138232039P**	Price	**HK308032039**	Price
20	D1-15	8.268	**HK156203D15**	Price	**-**	-	**-**	-
25	D1-8	5.120	**HK156253D8**	Price	**-**	-	**-**	-
25	D1-11	7.480	**HK156253D11**	Price	**-**	-	**-**	-
25	D1-11	7.600	**-**	-	**HK3138232539P**	Price	**HK308032539**	Price

3-Jaw Type "A" Direct Mount Steel Body Lathe Chucks



BTC Features:
- Master jaws and top jaws
- T-wrench
- Mounting screws
- Although an A1 type spindle nose has both inner and outer tapped holes, Style A1 chucks utilize the inner holes, and will NOT fit on an A2 type spindle
- Style A2 chucks use the outer tapped holes, and WILL fit on either A1 or A2 type spindles

Bison Features:
- Steel body accuracy .0015
- Semi-Steel body accuracy .003
- 2 Pc. American jaws
- 2 Pc. Reversible jaws
- "A" Type mount shown

			BTC		Bison	
Chuck Size (in.)	Mount	Hole Size (in.)	Order No.	Price	Order No.	Price
6	A1-5	1.653	-	-	**HK308210615**	Price
8	A1-5	1.653	-	-	**HK308210815**	Price
8	A1-6	2.170	-	-	**HK308210816**	Price
8	A2-5	2.559	**HK15S6083A25R**	Price	-	-
8	A2-6	2.559	**HK15S6083A26R**	Price	-	-
10	A1-6	2.165	**HK15S6103A16R**	Price	**HK308211016**	Price
10	A1-8	2.992	-	-	**HK308211018**	Price
12	A1-6	2.165	**HK15S6123A16R**	Price	-	-
12	A1-8	3.071	**HK15S6123A18R**	Price	-	-
12	A1-8	3.150	-	-	**HK308211228**	Price
12	A2-6	4.055	-	-	**HK308211226**	Price
15	A2-8	5.315	**HK15S6153A28R**	Price	-	-
15	A2-11	5.315	**HK15S6153A211R**	Price	-	-
16	A1-11	5.110	-	-	**HK308211629**	Price
16	A2-8	5.340	-	-	**HK308211628**	Price
20	A1-15	5.354	**HK15S6203A15R**	Price	-	-
20	A2-8	5.340	**HK15S6203A28R**	Price	**HK308212028**	Price
20	A2-11	7.480	**HK15S6203A211R**	Price	**HK308212029**	Price
25	A1-20	12.500	**HK15S6253A120R**	Price	-	-
25	A2-11	7.480	**HK15S6253A211R**	Price	**HK308212529**	Price
25	A2-15	9.921	-	-	**HK308212530**	Price
25	A2-15	10.236	**HK15S6253A215R**	Price	-	-

3-Jaw Type "D" Direct Mount Steel Lathe Chucks



BTC Features:
- Master jaws and top jaws
- T-wrench
- Mounting screws

Bison Features:
- 2 Pc. Reversible jaws

			BTC		Bison	
Chuck Size (in.)	Mount	Hole Size (in.)	Order No.	Price	Order No.	Price
6	D1-3	1.653	-	-	**HK308230633**	Price
6	D1-4	1.575	**HK15S6063D4**	Price	-	-
6	D1-4	1.653	-	-	**HK308230634**	Price
8	D1-4	1.969	**HK15S6083D4**	Price	-	-
8	D1-5	2.170	-	-	**HK308230835**	Price
8	D1-6	1.969	**HK15S6083D6**	Price	-	-
8	D1-6	2.170	-	-	**HK308230836**	Price
10	D1-6	2.756	**HK15S6103D6**	Price	-	-
10	D1-6	2.992	-	-	**HK308231036**	Price
10	D1-8	2.992	-	-	**HK308231038**	Price
10	D1-8	3.150	**HK15S6103D8**	Price	-	-
12	D1-6	3.937	**HK15S6123D6**	Price	-	-
12	D1-6	4.055	-	-	**HK308231236**	Price
12	D1-8	3.937	**HK15S6123D8**	Price	-	-
12	D1-8	4.055	-	-	**HK308231238**	Price
12	D1-11	4.055	-	-	**HK308231239**	Price
15	D1-8	5.118	**HK15S6153D8**	Price	-	-
15	D1-11	5.315	**HK15S6153D11**	Price	-	-
16	D1-8	5.340	-	-	**HK308231638**	Price
16	D1-11	5.340	-	-	**HK308231639**	Price
20	D1-8	5.350	**HK15S6203D8**	Price	-	-
20	D1-8	5.354	-	-	**HK308232038**	Price
20	D1-11	7.480	**HK15S6203D11**	Price	**HK308232039**	Price
25	D1-8	5.354	-	-	**HK308232538**	Price
25	D1-11	7.480	**HK15S6253D11**	Price	-	-
25	D1-11	7.600	-	-	**HK308232539**	Price

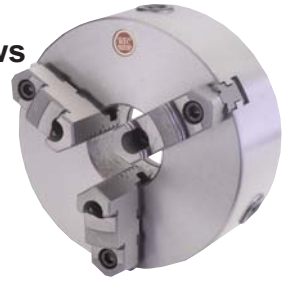
ROHM 3-Jaw D1 Direct Mount Lathe Scroll Chucks ZSU



- Self-centering
- Jaws can be moved across the entire clamping range
- Workpieces with different diameters can be clamped without changing or shifting the jaws
- Vibration isolatin body made of steel
- Scroll drop-forged, balanced, hardened
- With base jaws and reversible hard top jaws

Chuck Dia. (in.)	Mount	Hole Size (in.)	Max. RPM	Weight	Order No.	Price
6	D1-4	1.654	3600	18.9125 lbs	**HK80105882**	Price
8	D1-6	2.165	3000	34.4875 lbs	**HK80106346**	Price
10	D1-6	2.992	2500	66.75 lbs	**HK80106386**	Price
10	D1-8	2.992	2500	66.75 lbs	**HK80106402**	Price
12-1/2	D1-6	4.055	2000	112.25 lbs	**HK80106442**	Price
12-1/2	D1-8	4.055	2000	112.25 lbs	**HK80106458**	Price

BTC 3 Jaw Self Centering Scroll Chucks- Flatback Top Reversible Jaws



- American standard two-piece tongue and groove Jaws
- Scroll and jaws hardened and ground
- Top reversible jaws
- Semi-steel & steel body styles

Supplied With:
- Master jaws and top jaws
- T-wrench
- Mounting screws

Description - Semi Steel Body				
Chuck Size	Hole Size (in.)	Weight	Order No.	Price
5	1.181	14 lbs	**HK153053R**	Price
6	1.575	21 lbs	**HK153063R**	Price
8	2.559	39 lbs	**HK153083R**	Price
10	3.150	56 lbs	**HK153103R**	Price
12	3.937	99 lbs	**HK153123R**	Price
15	5.315	122 lbs	**HK153153R**	Price
20	8.268	320 lbs	**HK153203R**	Price
25	10.630	510 lbs	**HK153253R**	Price
32	15.157	556 lbs	**HK153323R**	Price

Description - Steel Body				
Chuck Size	Hole Size (in.)	Weight	Order No.	Price
5	1.181	14 lbs	**HK15S3053R**	Price
6	1.575	21 lbs	**HK15S3063R**	Price
8	2.559	39 lbs	**HK15S3083R**	Price
10	3.150	56 lbs	**HK15S3103R**	Price
12	3.937	99 lbs	**HK15S3123R**	Price
15	5.315	122 lbs	**HK15S3153R**	Price
20	8.268	320 lbs	**HK15S3203R**	Price
25	10.630	510 lbs	**HK15S3253R**	Price
32	15.157	556 lbs	**HK15S3323R**	Price

BTC 3 Jaw Self Centering Scroll Chucks- Flatback Solid Hard Jaws



- Scroll and jaws hardened and ground
- Semi-steel body

Supplied With:
- 2 Sets of solid hard jaws (1 internal and 1 external)
- T-wrench
- Mounting screws

Chuck Size	Hole Size (in.)	Weight	Order No.	Price
3	.630	5 lbs	**HK155033**	Price
4	.866	8 lbs	**HK155043**	Price
5	1.181	14 lbs	**HK155053**	Price
6	1.575	21 lbs	**HK155063**	Price
8	2.559	36 lbs	**HK155083**	Price
10	3.150	56 lbs	**HK155103**	Price
12	3.937	109 lbs	**HK155123**	Price
15	5.315	145 lbs	**HK155153**	Price

3-Jaw Semi Steel Hardened & Solid Jaw Plain Back Chucks



Features:
- 1 Set of hard solid ID jaws
- 1 Set of hard solid OD jaws
- 1 Chuck wrench
- 1 Set of mounting bolts
- 2 Hex keys
- Eye bolts for chuck sizes 16” and larger
- Scroll and jaws hardened and precision ground
- Accuracy varies with size: 0.0006-0.003

Chuck Size (in.)	Hole Size (in.)	Weight	Order No.	Price
3	.630	3.1 lbs	**HK308100300**	Price
4	.790	6 lbs	**HK308100400**	Price
5	1.260	11 lbs	**HK308100500**	Price
6	1.653	22 lbs	**HK308100600**	Price
8	2.170	39 lbs	**HK308100800**	Price

Chuck Size (in.)	Hole Size (in.)	Weight	Order No.	Price
10	2.992	64 lbs	**HK308101000**	Price
12	4.055	111 lbs	**HK308101200**	Price
16	5.340	188 lbs	**HK308101600**	Price
20	7.480	320 lbs	**HK308102000**	Price
25	9.921	551 lbs	**HK308102500**	Price

SAMCHULLY MACHINERY CO. LTD. 3-Jaw Manual Chucks



- Front Mounting Scroll Design
- 2 Pc. Jaw Design
- External Clamping 4mm - 180mm
- Internal Clamping 56mm - 170mm
- 35000 Max RPM
- Handle Torque 107.9 Nm (11kgf)

Chuck Dia. (in.)	Thru Hole Dia. (in.)	Grip Range Min. (in.)	Grip Range Max. (in.)	Max. Gripping Force (lbs)	Max. RPM	Order No.	Price
7.559	2.244	0.157	7.087	6969	3500	**SC60FTC190CF**	Price
9.134	2.953	0.197	8.661	8318	2900	**SC60FTC230CF**	Price
10.748	3.504	0.197	10.236	10341	2500	**SC60FTC273CF**	Price
12.205	3.937	0.394	11.811	12364	2200	**SC60FTC310**	Price
18.11	7.48	1.575	16.142	14612	1200	**SC60FTC460**	Price
24.016	10.827	5.118	22.677	17984	850	**SC60FTC610**	Price
31.89	14.764	10.63	31.89	24728	650	**SC60FTC810**	Price
39.37	22.835	13.386	38.976	24728	470	**SC60FTC1000**	Price

3-Jaw Semi Steel Plain Back Chucks



Features:
- 1 Set of hard master jaws
- 1 Set of hard top reversible jaws
- 1 Chuck wrench
- 1 Set of mounting bolts
- 2 Hex keys
- Eye bolts for chuck sizes 16” diameter and larger
- Scroll and jaws hardened and precision ground
- Accuracy varies with size: 0.0006-0.003

Chuck Size (in.)	Hole Size (in.)	Order No.	Price
5	1.260	**HK308000500**	Price
6	1.653	**HK308000600**	Price
8	2.170	**HK308000800**	Price
10	2.992	**HK308001000**	Price
12	4.060	**HK308001200**	Price
16	5.354	**HK308001600**	Price

Chuck Size (in.)	Hole Size (in.)	Order No.	Price
20	7.480	**HK308002000**	Price
25	9.920	**HK308002500**	Price
32	10.500	**HK308003200**	Price

3-Jaw Steel Plain Back Chucks



Bison Features:
- 1 Set of hard master jaws
- 1 Set of hard top reversible jaws
- 1 Chuck wrench
- 1 Set of mounting bolts
- 2 Hex keys
- Eye bolts for chuck sizes 16” diameter and larger
- Scroll and jaws hardened and precision ground
- Accuracy varies with size: 0.0006-0.0024

Toolmex Features:
- Statically balanced to ultra-high tolerance levels
- Chuck bodies are drop forged and hardened to 28 HRc with jaws hardenend to 50 HRc

TOOLMEX Industrial Solutions

Chuck Size (in.)	Hole Size (in.)	TMX Order No.	TMX Price	Bison Order No.	Bison Price
5	1.260	-	-	**HK308200500**	Price
6	1.654	**HK3138200600P**	Price	**HK308200600**	Price
8	2.170	**HK3138200800P**	Price	**HK308200800**	Price
10	2.992	**HK3138201000P**	Price	**HK308201000**	Price
12	4.055	**HK3138201200P**	Price	**HK308201200**	Price

TOOLMEX Industrial Solutions

Chuck Size (in.)	Hole Size (in.)	TMX Order No.	TMX Price	Bison Order No.	Bison Price
16	5.354	**HK3138201600P**	Price	**HK308201600**	Price
20	7.480	**HK3138202000P**	Price	**HK308202000**	Price
25	9.921	**HK3138202500P**	Price	**HK308202500**	Price
32	10.500	-	-	**HK308203200**	Price

ROHM 3-Jaw Geared Scroll Chucks ZG

- Self-centering
- Jaws can be moved across the entire clamping range
- Workpieces with different diameters can be clamped without changing or shifting the jaws
- Vibration isolatin body made of iron cast
- Scroll drop-forged, balanced, hardened
- With one set of outward stepped jaws and one set of inward stepped jaws



Chuck Dia. (in.)	Hole Size (in.)	Max. RPM	Weight	Order No.	Price
4	.787	4500	6.4525 lbs	**HK80101781**	Price
5	1.260	4000	10.0125 lbs	**HK80101628**	Price
6	1.654	3600	18.245 lbs	**HK80100300**	Price
8	2.165	3000	32.485 lbs	**HK80100000**	Price
10	2.992	2500	57.1825 lbs	**HK80100200**	Price
12-1/2	4.055	2000	124.6 lbs	**HK80101248**	Price

ROHM 3-Jaw Lathe Scroll Chucks ZSU

- Self-centering
- Jaws can be moved across the entire clamping range
- Workpieces with different diameters can be clamped without changing or shifting the jaws
- Vibration isolatin body made of steel
- Scroll drop-forged, balanced, hardened
- With base jaws and reversible hard top jaws



Chuck Dia. (in.)	Hole Size	Max. RPM	Weight	Order No.	Price
4	.787	4500	6.4525 lbs	**HK80101788**	Price
5	1.260	4000	98.345 lbs	**HK80101678**	Price
6	1.654	3600	18.245 lbs	**HK80100725**	Price
8	2.165	3000	32.485 lbs	**HK80100189**	Price
10	2.992	2500	57.1825 lbs	**HK80100541**	Price
12-1/2	4.055	2000	98.345 lbs	**HK80101350**	Price

ROHM 4-Jaw Geared Scroll Chucks ZG

- Self-centering
- Jaws can be moved across the entire clamping range
- Workpieces with different diameters can be clamped without changing or shifting the jaws
- Vibration isolatin body made of iron cast
- Scroll drop-forged, balanced, hardened
- With one set of outward stepped jaws and one set of inward stepped jaws



Chuck Dia. (in.)	Hole Size (in.)	Max. RPM	Weight	Order No.	Price
4	.787	4500	6.4525 lbs	**HK80102129**	Price
5	1.260	4000	10.0125 lbs	**HK80106074**	Price
6	1.654	3600	18.245 lbs	**HK80100325**	Price
8	2.165	3000	32.485 lbs	**HK80100465**	Price
10	2.992	2500	57.1825 lbs	**HK80100834**	Price
12-1/2	4.055	2000	98.345 lbs	**HK80101567**	Price

BTC 4 Jaw Semi Steel Self Centering Scroll Chucks

Flatback Solid Jaws or Top Reversible Jaws

CAUTION: Jaws can not be operated separately

- These chucks have jaws that are operated on a scroll
- Not to be confused with four jaw independent chucks

Supplied With:

- 2 Sets of hard solid jaws (1 internal and 1 external) or top reversible jaws
- T-wrench
- Mounting screws



Chuck Size (in.)	Hole Size (in.)	Weight	Order No.	Price
5	1.181	18 lbs	**HK157054**	Price
6	1.575	22 lbs	**HK157064**	Price
6	1.575	22 lbs	**HK157064R**	Price
8	2.559	34 lbs	**HK157084**	Price
8	2.559	34 lbs	**HK157084R**	Price
10	3.150	58 lbs	**HK157104**	Price
10	3.150	51 lbs	**HK157104R**	Price
12	3.937	104 lbs	**HK157124R**	Price
15	5.315	140 lbs	**HK157154R**	Price
20	8.268	265 lbs	**HK157204R**	Price
25	10.630	467 lbs	**HK157254R**	Price

4-Jaw Combination Flatback Top Reversible & Solid Jaw Chucks



- Semi steel
- Self centering and independent type enable the jaws to achieve a self centering clamping and be adjusted seperately
- T-wrench
- Mounting Screws

			4J Combination Chuck Solid Jaws		4J Combination Chuck Top Rev. Jaws	
Chuck Size (in.)	Hole Size (in.)	Weight	Order No.	Price	Order No.	Price
6	1.654	37 lbs	**HK15F064**	Price	**HK15F064R**	Price
8	2.559	45 lbs	**HK15F084**	Price	**HK15F084R**	Price
10	3.15	68 lbs	**HK15F104**	Price	**-**	-
12	3.937	106 lbs	**HK15F124**	Price	**HK15F124R**	Price

4-Jaw Medium Duty Independent Lathe Chucks With Hardened Reversible Jaws

Economy & Quality - Plain Back Chuck



- Cast iron body
- Thrust bearings and operating screws made of hardened steel
- All chucks come standard with 1 Set of solid reversible jaws and wrench
- † Steel Body †† Amer. Std. 2 Pc. jaw

Chuck Dia. (in.)	Hole Size (in.)	Approx. Weight	Order No.	Price
3-1/2	.984	5 lbs	**HK308500300†**	Price
5	1.023	8 lbs	**HK308500500†**	Price
6	1.653	10 lbs	**HK308500600†**	Price
8	1.968	31 lbs	**HK308500800**	Price
10	2.559	55 lbs	**HK308501000**	Price
12	3.149	86 lbs	**HK308501200**	Price

Chuck Dia. (in.)	Hole Size (in.)	Approx. Weight	Order No.	Price
16	3.937	135 lbs	**HK308501600**	Price
20	4.921	232 lbs	**HK308502000**	Price
25	6.299	360 lbs	**HK308502500**	Price
32	10.500	600 lbs	**HK308503300**	Price
32	7.874	700 lbs	**HK308503200**	Price
36	7.480	950 lbs	**HK308503622††**	Price

4-Jaw Medium Duty Independent Lathe Chucks With Hardened Reversible Jaws

Economy & Quality - Plain Back Chuck



Bison Features:

- Cast iron body
- Thrust bearings and operating screws made of hardened steel
- All chucks come standard with 1 Set of solid reversible jaws and wrench
- † Steel Body †† Amer. Std. 2 Pc. jaw

Toolmex Features:

- Forged steel bodies at 28 HRc
- Hard solid reversible jaws are made of alloy then hardened and ground
- Operating screws are hardened and ground
- Chucks 10” and larger have T-slots
- 1 Set of hard solid reversible jaws
- 1 Chuck wrench
- 1 Set of mounting bolts

TOOLMEX Industrial Solutions

			TMX		Bison	
Chuck Dia. (in.)	Hole Size (in.)	Approx. Weight	Order No.	Price	Order No.	Price
3-1/2	.984	5 lbs	**-**	-	**HK308500300†**	Price
5	1.024	8 lbs	**HK3138550501P**	Price	**HK308500500†**	Price
6	1.654	10 lbs	**HK3138550601P**	Price	**HK308500600†**	Price
8	1.970	31 lbs	**HK3138550800P**	Price	**HK308500800**	Price
10	2.560	55 lbs	**HK3138551000P**	Price	**HK308501000**	Price
12	3.150	106 lbs	**HK3138551200P**	Price	**HK308501200**	Price

TOOLMEX Industrial Solutions

			TMX		Bison	
Chuck Dia. (in.)	Hole Size (in.)	Approx. Weight	Order No.	Price	Order No.	Price
16	3.940	188 lbs	**HK3138551600P**	Price	**HK308501600**	Price
20	4.921	333 lbs	**HK3138552000P**	Price	**HK308502000**	Price
25	6.300	360 lbs	**HK3138552500P**	Price	**HK308502500**	Price
32	7.874	600 lbs	**-**	-	**HK308503300**	Price
32	7.874	700 lbs	**-**	-	**HK308503200**	Price
36	7.480	950 lbs	**-**	-	**HK308503622††**	Price

4-Jaw Plain Back Chucks



Bison Features:

- 1 Set of hard master jaws
- 1 Set of hard top reversible jaws
- 1 Chuck wrench
- 1 Set of mounting bolts
- 2 Hex keys
- Eye bolts for chuck sizes 16” and larger

Toolmex Features:

- 1 Set of hard master jaws
- 1 Set of hard top reversible jaws
- 1 Chuck wrench
- 1 Set of mounting botls
- Eye bolts for chuck sizes 15-3/4” diameter and larger

Type - Semi-Steel Lathe Chuck			
		Bison	
Chuck Size (in.)	Hole Size (in.)	Order No.	Price
5	1.260	**HK308400500**	Price
6	1.653	**HK308400600**	Price
8	2.165	**HK308400800**	Price
10	2.992	**HK308401000**	Price
12	4.060	**HK308401200**	Price
16	5.354	**HK308401600**	Price
20	7.480	**HK308402000**	Price

TOOLMEX Industrial Solutions

Type - Steel Body Self-Centering Lathe Chuck					
		Bison		TMX	
Chuck Size (in.)	Hole Size (in.)	Order No.	Price	Order No.	Price
6	1.653	**HK308410600**	Price	**HK3138410600P**	Price
10	2.992	**HK308411000**	Price	**HK3138411000P**	Price
12	4.055	**HK308411200**	Price	**HK3138411200P**	Price
16	5.354	**HK308411600**	Price	**HK3138411600P**	Price
20	7.480	**HK308412000**	Price	**-**	-
25	9.921	**HK308412500**	Price	**-**	-
5	1.260	**-**	-	**HK3138410500P**	Price
8	2.165	**-**	-	**HK3138410800P**	Price

4-Jaw Plain Back, Forged Steel Body Lathe Chuck

Bison Features:
- All chucks 10" and above have T-slots
- Forged steel body
- Heavy duty 4-jaw independent chucks are designed to grip round or odd shaped work

Standard Accessories:
- 2 Pc. reversible jaws (hard top jaws and hard master jaws)
- (1) Wrench
- (1) Set of clamping bolts

Toolmex Features:
- Forged steel bodies at 28 HRc for durability and rigidity
- 2 Pc. hard reversible American Standard Tonge and Groove jaws are made of high quality alloy then hardened and ground
- Chucks 10" and larger have T-slots

Standard Accessories:
- 2 Pc. reversible jaws (hard top jaws and hard master jaws)
- (1) Wrench
- (1) Set of mounting bolts



		Bison		TMX	
Chuck Size (in.)	Hole Size (in.)	Order No.	Price	Order No.	Price
8	1.970	**HK308550800F**	Price	**HK3138550800P**	Price
10	2.560	**HK308551000F**	Price	**HK3138551000P**	Price
12	3.150	**HK308551200F**	Price	**HK3138551200P**	Price
16	3.940	**HK308551600F**	Price	**HK3138551600P**	Price
20	4.921	**HK308552000F**	Price	**HK3138552000P**	Price

		Bison		TMX	
Chuck Size (in.)	Hole Size (in.)	Order No.	Price	Order No.	Price
25	6.300	**HK308552500F**	Price	**HK3138552500P**	Price
32	7.870	**HK308553200F**	Price	**-**	-
36	7.480	**HK308553600F**	Price	**-**	-
40	7.480	**HK308554000F**	Price	**-**	-
49	7.480	**HK308554900F**	Price	**-**	-

4-Jaw Independent Direct Mount Chuck Type D

Forged Steel

- All chucks 10" and above have T-slots
- Forged steel body

Standard Accessories:
- 2 Pc. reversible jaws (hard top jaws and hard master jaws)
- (1) Wrench
- (1) Set of clamping bolts

Toolmex Features:
- Designed to grip round or odd shaped work pieces
- Hard top and master jaws are made of high quality alloy steel then hardened and ground
- All 4-Jaw independent chucks 10" and above have t-slots



			Bison		TMX	
Chuck Size (in.)	Hole Size (in.)	Mount	Order No.	Price	Order No.	Price
8	1.968	D1-3	**-**	-	**HK3138570833P**	Price
8	1.968	D1-4	**HK308570834F**	Price	**HK3138570834P**	Price
8	1.968	D1-5	**HK308570835F**	Price	**-**	-
8	1.968	D1-6	**HK308570836F**	Price	**-**	-
10	2.560	D1-5	**HK308571035F**	Price	**-**	-
10	2.560	D1-6	**HK308571036F**	Price	**HK3138571036P**	Price
10	2.560	D1-8	**HK308571038F**	Price	**-**	-
12	3.150	D1-6	**HK308571236F**	Price	**HK3138571236P**	Price
12	3.150	D1-8	**HK308571238F**	Price	**HK3138571238P**	Price
16	3.937	D1-6	**HK308571636F**	Price	**HK3138571636P**	Price
16	3.937	D1-8	**HK308571638F**	Price	**HK3138571638P**	Price

			Bison		TMX	
Chuck Size (in.)	Hole Size (in.)	Mount	Order No.	Price	Order No.	Price
16	3.937	D1-9	**-**	-	**HK3138571639P**	Price
16	3.937	D1-11	**HK308571639F**	Price	**-**	-
20	4.921	D1-8	**HK308572038F**	Price	**HK3138572038P**	Price
20	4.921	D1-11	**HK308572039F**	Price	**HK3138572039P**	Price
25	4.921	D1-8	**HK308572538F**	Price	**-**	-
25	6.300	D1-8	**-**	-	**HK3138572538P**	Price
25	6.300	D1-11	**HK308572539F**	Price	**HK3138572539P**	Price
25	6.300	D1-15	**HK308572540F**	Price	**-**	-
32	7.560	D1-11	**HK308573239F**	Price	**-**	-
32	7.480	D1-15	**HK308573240F**	Price	**-**	-

Self-Ejecting Lathe Chuck Keys

- Made to fit all makes of lathe chucks
- Meets all safety specificaions



Size of Square (in.)	OAL (in.)	Handle Length (in.)	Order No.	Price
7/32	2-3/8	3-1/8	**HK40125**	Price
1/4	3-1/2	4	**HK40126**	Price
9/32	4-1/2	5	**HK40128**	Price
5/16	4-1/2	5	**HK40128A**	Price
3/8	3	6	**HK40129**	Price
3/8	5-1/2	6	**HK40129A**	Price
13/32	3-3/4	6	**HK40130**	Price
13/32	8-1/8	6	**HK40131**	Price
7/16	6	10	**HK40132A**	Price
15/32	8-1/16	10	**HK40132B**	Price
1/2	5-1/8	8	**HK40133**	Price
1/2	8-1/16	12	**HK40134**	Price

Size of Square (in.)	OAL (in.)	Handle Length (in.)	Order No.	Price
1/2	11	11-1/2	**HK40135**	Price
1/2	14-5/8	11-1/2	**HK40136**	Price
1/2	18-1/2	11-1/2	**HK40137**	Price
9/16	5-1/8	12	**HK40138**	Price
9/16	8-9/16	11-1/2	**HK40139**	Price
9/16	9-7/16	14	**HK40140**	Price
9/16	11/16	11-1/2	**HK40141**	Price
9/16	13-13/16	11-1/2	**HK40142**	Price
9/16	17	18	**HK40143**	Price
5/8	10-1/4	20	**HK40145**	Price
11/16	12	14	**HK40146**	Price
3/4	9-7/8	18	**HK40147**	Price

4-Jaw Independent Chucks Direct Mount Type "D" Solid Jaws or Top Reversible Jaws

- Chucks have jaws that are operated individully to allow solid gripping of oddly shaped work pieces
- Semi-Steel or Steel Body Style

Supplied With:

- One piece solid reversible jaws or top reversible jaws
- T-Wrench
- Mounting screws
- T- Slots in 12” and larger



Type - 4 Jaw Independent Direct Mount - Type D (Solid)					
Chuck Size (in.)	Mount	Hole Size (in.)	Weight	Order No.	Price
6	D1-3	1.772	23 lbs	**HK154064D3**	Price
8	D1-3	1.772	35 lbs	**HK154084D3**	Price
8	D1-4	2.205	35 lbs	**HK154084D4**	Price
8	D1-5	2.205	36 lbs	**HK154084D5**	Price
8	D1-6	1.812	37 lbs	**HK154084D6**	Price
10	D1-5	2.953	51 lbs	**HK154104D5**	Price
10	D1-6	2.953	51 lbs	**HK154104D6**	Price
10	D1-8	2.953	51 lbs	**HK154104D8**	Price
12	D1-6	3.740	100 lbs	**HK154124D6**	Price
12	D1-8	3.740	100 lbs	**HK154124D8**	Price
14	D1-6	3.740	125 lbs	**HK154144D6**	Price
14	D1-8	3.740	125 lbs	**HK154144D8**	Price
16	D1-6	3.740	139 lbs	**HK154164D6**	Price
16	D1-8	4.921	139 lbs	**HK154164D8**	Price
16	D1-11	4.921	139 lbs	**HK154164D11**	Price
20	D1-8	5.354	227 lbs	**HK154204D8**	Price
20	D1-11	6.300	227 lbs	**HK154204D11**	Price
20	D1-15	6.300	227 lbs	**HK154204D15**	Price
25	D1-8	7.087	358 lbs	**HK154254D8**	Price
25	D1-11	7.087	358 lbs	**HK154254D11**	Price
25	D1-15	7.087	358 lbs	**HK154254D15**	Price

Type - 4 Jaw Independent Direct Mount - Type D (Top Reversible)					
Chuck Size (in.)	Mount	Hole Size (in.)	Weight	Order No.	Price
25	D1-11	7.087	358 lbs	**HK15S4254D11R**	Price
6	D1-3	1.772	23 lbs	**HK154064D3R**	Price
8	D1-3	1.772	35 lbs	**HK154084D3R**	Price
8	D1-4	2.205	35 lbs	**HK15S4084D4R**	Price
8	D1-4	2.205	35 lbs	**HK154084D4R**	Price

Type - 4 Jaw Independent Direct Mount - Type D (Top Reversible)					
Chuck Size (in.)	Mount	Hole Size (in.)	Weight	Order No.	Price
8	D1-5	2.205	36 lbs	**HK154084D5R**	Price
8	D1-6	2.205	37 lbs	**HK154084D6R**	Price
10	D1-5	2.953	51 lbs	**HK154104D5R**	Price
10	D1-6	2.953	51 lbs	**HK15S4104D6R**	Price
10	D1-6	2.953	51 lbs	**HK154104D6R**	Price
10	D1-8	2.953	51 lbs	**HK15S4104D8R**	Price
10	D1-8	2.953	51 lbs	**HK154104D8R**	Price
12	D1-6	3.740	100 lbs	**HK15S4124D6R**	Price
12	D1-6	3.740	100 lbs	**HK154124D6R**	Price
12	D1-8	3.740	100 lbs	**HK15S4124D8R**	Price
12	D1-8	3.740	100 lbs	**HK154124D8R**	Price
14	D1-6	3.740	125 lbs	**HK154144D6R**	Price
14	D1-8	3.740	125 lbs	**HK154144D8R**	Price
16	D1-6	3.740	139 lbs	**HK15S4164D6R**	Price
16	D1-6	3.740	139 lbs	**HK154164D6R**	Price
16	D1-8	4.921	139 lbs	**HK15S4164D8R**	Price
16	D1-8	4.921	139 lbs	**HK154164D8R**	Price
16	D1-11	4.921	139 lbs	**HK15S4164D11R**	Price
16	D1-11	4.921	139 lbs	**HK154164D11R**	Price
20	D1-8	5.354	227 lbs	**HK15S4204D8R**	Price
20	D1-8	5.354	227 lbs	**HK154204D8R**	Price
20	D1-11	6.300	227 lbs	**HK15S4204D11R**	Price
20	D1-11	6.300	227 lbs	**HK154204D11R**	Price
20	D1-15	6.300	227 lbs	**HK154204D15R**	Price
25	D1-8	7.087	358 lbs	**HK154254D8R**	Price
25	D1-8	7.087	358 lbs	**HK15S4254D8R**	Price
25	D1-11	7.087	358 lbs	**HK154254D11R**	Price
25	D1-15	7.087	358 lbs	**HK154254D15R**	Price

4-Jaw Independent Type "D1" Direct Mount Chucks - Hard Solid Reversible Jaws

Bison Features:

- Semi steel body
- Designed to grip round or odd shaped work
- Hard solid reversible jaws
- All chucks with diameters of 10” and larger have T-slots

Standard Accessories:

- (1) Set of hard solid reversible jaws
- (1) Wrench
- (1) Set of clamping bolts



Chuck Size (in.)	Mount	Hole Size (in.)	Order No.	Price
8	D1-3	1.970	**HK308530833**	Price
8	D1-4	1.970	**HK308530834**	Price
8	D1-5	1.970	**HK308530835**	Price
10	D1-4	2.360	**HK308531034**	Price
10	D1-5	2.360	**HK308531035**	Price
10	D1-6	2.360	**HK308531036**	Price
12	D1-6	3.150	**HK308531236**	Price

Chuck Size (in.)	Mount	Hole Size (in.)	Order No.	Price
12	D1-8	3.150	**HK308531238**	Price
16	D1-6	3.940	**HK308531636**	Price
16	D1-8	3.940	**HK308531638**	Price
16	D1-11	3.940	**HK308531639**	Price
20	D1-8	4.920	**HK308532038**	Price
20	D1-11	4.920	**HK308532039**	Price
25	D1-11	6.300	**HK308532539**	Price

4-Jaw Independent Chucks Direct Mount Type "A" Solid Jaws or Top Reversible Jaws

- Chucks have jaws that are operated individully to allow solid gripping of oddly shaped work pieces
- Steel Body



Supplied With:

- One piece solid reversible jaws or top reversible jaws
- T-Wrench
- Mounting screws
- T- Slots in 12” and larger

Type - 4 Jaw Independent Direct Mount - Type A (Top Reversible)					
Chuck Size (in.)	Mount	Hole Size (in.)	Weight	Order No.	Price
8	A2-5	2.205	35 lbs	**HK15S4084A5R**	Price
10	A2-6	2.953	51 lbs	**HK15S4104A6R**	Price
12	A2-6	3.740	100 lbs	**HK15S4124A6R**	Price
12	A2-8	3.740	100 lbs	**HK15S4124A8R**	Price
16	A2-6	4.921	139 lbs	**HK15S4164A6R**	Price
16	A2-8	4.921	139 lbs	**HK15S4164A8R**	Price

Type - 4 Jaw Independent Direct Mount - Type A (Top Reversible)					
Chuck Size (in.)	Mount	Hole Size (in.)	Weight	Order No.	Price
20	A2-8	5.354	265 lbs	**HK15S4204A8R**	Price
20	A2-11	5.354	265 lbs	**HK15S4204A11R**	Price
25	A2-11	7.500	385 lbs	**HK15S4254A11R**	Price
25	A2-15	10.500	385 lbs	**HK15S4254A15R**	Price
25	A2-20	12.500	385 lbs	**HK15S4254A20R**	Price
32	A2-11	7.283	587 lbs	**HK15S4324A11R**	Price
32	A2-15	8.268	567 lbs	**HK15S4324A15R**	Price

4-Jaw Independent Type "A" Direct Mount Hard Solid Reversible Jaws



BTC Features:
- Chucks have jaws that are operated individully to allow solid gripping of oddly shaped work pieces
- Semi-steel or Steel Body Styles

Supplied With:
- One piece solid reversible jaws or top reversible jaws
- T-Wrench
- Mounting screws
- T- Slots in 12” and larger

Bison Features:
- Semi steel body
- Type A2 spindle has a 1 bolt pattern, outside the taper, only an A2 chuck will fit
- All chucks 10” and above have T-slots

Standard Accessories:
- (1) Set of hard solid reversible jaws
- (1) Wrench
- (1) Set of clamping bolts

		Bison			BTC		
Chuck Size (in.)	Mount	Hole Size	Order No.	Price	Hole Size	Order No.	Price
8	A2-4	-	-	-	2.205	**HK154084A4**	Price
8	A2-5	1.969	**HK308510815**	Price	-	-	-
8	A2-6	1.969	**HK308510816**	Price	-	-	-
10	A2-5	2.559	**HK308511025**	Price	2.953	**HK154104A5**	Price
10	A2-6	2.559	**HK308511016**	Price	2.953	**HK154104A6**	Price
10	A2-8	2.559	**HK308511018**	Price	-	-	-
12	A2-5	3.150	**HK308511215**	Price	-	-	-
12	A2-6	3.150	**HK308511226**	Price	3.740	**HK154124A6**	Price
12	A2-8	3.150	**HK308511218**	Price	3.740	**HK154124A8**	Price
16	A2-5	-	-	-	3.110	**HK154164A5**	Price
16	A2-6	3.937	**HK308511626**	Price	3.740	**HK154164A6**	Price
16	A2-8	3.937	**HK308511628**	Price	4.921	**HK154164A8**	Price
16	A2-11	3.937	**HK308511619**	Price	-	-	-
20	A2-8	-	-	-	5.354	**HK154204A8**	Price
20	A2-11	4.921	**HK308512019**	Price	6.299	**HK154204A11**	Price
25	A2-11	6.299	**HK308512519**	Price	7.500	**HK154254A11**	Price
25	A2-15	-	-	-	10.500	**HK154254A15**	Price
25	A2-20	-	-	-	12.500	**HK154254A20**	Price
32	A2-11	6.299	**HK308513219**	Price	7.283	**HK154324A11**	Price
32	A2-15	-	-	-	8.268	**HK154324A15**	Price
32	A2-20	12.500	**HK308513220**	Price	-	-	-

4-Jaw Independent Type "A" Direct Mount Chucks

TMX Features:
- Designed to grip round or odd shaped work pieces
- Hard top and master jaws are made of high quality alloy steel then hardened and ground
- All 4-Jaw independent chucks 10” and above have t-slots

Supplied With:
- Solid Jaws

BTC Features:
- Chucks have jaws that are operated individully to allow solid gripping of oddly shaped work pieces
- Semi-steel or Steel Body Styles

Supplied With:
- One piece solid reversible jaws or top reversible jaws
- T-Wrench
- Mounting screws
- T- Slots in 12” and larger

Bison Features:
- Forged steel body
- Type A1 spindle has a 2 bolt hole pattern, inside and outside the taper, either and A1 or A2 chuck will fit
- Type A2 spindle has a 1 bolt pattern, outside the taper, only an A2 chuck will fit
- All chucks 10” and above have T

Bison Accessories:
- 2 Pc. reversible jaws (hard top jaws and hard master jaws)
- (1) Wrench
- (1) Set of clamping bolts



		Bison			TMX			BTC		
Chuck Size (in.)	Mount	Hole Size (in.)	Order No.	Price	Hole Size (in.)	Order No.	Price	Hole Size (in.)	Order No.	Price
8	A2-4	-	-	-	-	-	-	2.205	**HK154084A4R**	Price
8	A2-6	1.97	**HK308560816F**	Price	1.968	**HK3138560816P**	Price	-	-	-
10	A2-5	-	-	-	-	-	-	2.953	**HK154104A5R**	Price
10	A2-6	2.559	**HK308561016F**	Price	2.559	**HK3138561016P**	Price	2.953	**HK154104A6R**	Price
10	A2-8	2.559	**HK308561018F**	Price	2.559	**HK3138561018P**	Price	-	-	-
12	A2-5	-	-	-	-	-	-	3.110	**HK154164A5R**	Price
12	A2-6	3.150	**HK308561216F**	Price	3.15	**HK3138561216P**	Price	3.740	**HK154124A6R**	Price
12	A2-8	3.150	**HK308561218F**	Price	3.15	**HK3138561218P**	Price	3.740	**HK154124A8R**	Price
16	A2-6	3.937	**HK308561616F**	Price	3.937	**HK3138561616P**	Price	3.740	**HK154164A6R**	Price
16	A2-8	3.937	**HK308561618F**	Price	3.937	**HK3138561618P**	Price	4.921	**HK154164A8R**	Price
16	A2-11	3.937	**HK308561619F**	Price	3.937	**HK3138561619P**	Price	-	-	-
20	A2-8	4.921	**HK308562018F**	Price	4.921	**HK3138562018P**	Price	5.354	**HK154204A8R**	Price
20	A2-11	4.921	**HK308562019F**	Price	4.921	**HK3138562019P**	Price	6.299	**HK154204A11R**	Price
20	A2-15	-	-	-	4.921	**HK3138562020P**	Price	-	-	-
25	A2-11	6.299	**HK308562519F**	Price	6.299	**HK3138562519P**	Price	7.500	**HK154254A11R**	Price
25	A2-15	6.299	**HK308562520F**	Price	6.299	**HK3138562520P**	Price	10.500	**HK154254A15R**	Price
25	A2-20	-	-	-	-	-	-	12.500	**HK154254A20R**	Price
32	A2-11	7.87	**HK308563219F**	Price	-	-	-	7.283	**HK154324A11R**	Price
32	A2-15	7.87	**HK308563220F**	Price	-	-	-	8.268	**HK154324A15R**	Price
32	A2-20	7.87	**HK308563229F**	Price	-	-	-	-	-	-

Front Mounting 3 & 4-Jaw Self-Centering Scroll Chucks



Bison Features:
- Two-piece hard reversible jaws
- Scroll and jaws are hardened and ground

BTC Features:
- American standard two-piece tongue and groove Jaws
- Scroll and jaws hardened and ground
- Top reversible jaws

Supplied With:
- Master jaws and top jaws
- T-wrench
- Mounting screws

Toolmex Features:
- Forged steel bodies for durability and rigidity
- Two-piece hard reversible American Standard Tongue and Groove jaws are made of high quality alloy steel then hardened and ground

BTC

Number of Jaws - 3 Type - Semi-Steel Lathe Chuck					
		BTC		Bison	
Chuck Size (in.)	Hole Size (in.)	Order No.	Price	Order No.	Price
5	1.259	-	-	**HK308120500**	Price
6	1.575	**HK15F3063R**	Price	-	-
6	1.654	-	-	**HK308120600**	Price
8	2.165	**HK15F3083R**	Price	**HK308120800**	Price
10	2.992	**HK15F3103R**	Price	**HK308121000**	Price
12	4.055	**HK15F3123R**	Price	**HK308121200**	Price
15	5.315	**HK15F3153R**	Price	-	-
16	5.354	-	-	**HK308121600**	Price
20	8.268	**HK15F3203R**	Price	-	-
25	10.630	**HK15F3253R**	Price	-	-

BTC TOOLMEX Industrial Solutions

Number of Jaws - 3 Type - Steel Body Lathe Chuck					
		BTC		TMX	
Chuck Size (in.)	Hole Size (in.)	Order No.	Price	Order No.	Price
5	1.260	-	-	**HK3138130500P**	Price
6	1.575	**HK15SF3063R**	Price	**HK3138130600P**	Price
8	2.165	**HK15SF3083R**	Price	**HK3138130800P**	Price
10	2.992	**HK15SF3103R**	Price	**HK3138131000P**	Price
12	4.055	**HK15SF3123R**	Price	**HK3138131200P**	Price
15	5.315	**HK15SF3153R**	Price	-	-
16	5.354	-	-	**HK3138131600P**	Price
16	8.661	-	-	**HK3138191600P**	Price
20	8.268	**HK15SF3203R**	Price	**HK3138132000P**	Price
25	10.630	**HK15SF3253R**	Price	**HK3138132500P**	Price
21	12.598	-	-	**HK3138192000P**	Price

TOOLMEX Industrial Solutions

Number of Jaws - 4 Type - Semi-Steel Lathe Chuck			
		Bison	
Chuck Size (in.)	Hole Size (in.)	Order No.	Price
5	1.259	**HK308140500**	Price
6	1.654	**HK308140600**	Price
8	2.165	**HK308140800**	Price
10	2.992	**HK308141000**	Price
12	4.055	**HK308141200**	Price
16	5.354	**HK308141600**	Price

Number of Jaws - 4 Type - Steel Body Lathe Chuck			
		TMX	
Chuck Size (in.)	Hole Size (in.)	Order No.	Price
6	1.654	**HK3138140600P**	Price
8	2.165	**HK3138140800P**	Price
10	2.992	**HK3138141000P**	Price
12	4.055	**HK3138141200P**	Price
16	5.354	**HK3138141600P**	Price
20	7.480	**HK3138142000P**	Price

3-Jaw Semi Steel Body Front Mounting Chucks



Features:
- Can be mounted directly on 3/6 slot rotary tables or on a base plate when the rotary table has 3/6 or 4/8 T-slots
- Base plates are designed for use with all rotary tables and other devices where back mounting chucks cannot be used
- Can also be mounted to a rough machined backplate, but will require machining of bolt hold patterns and projections for finished assembly

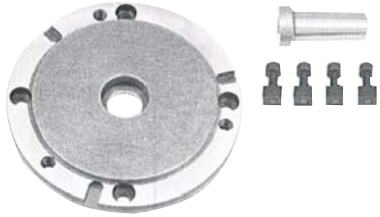
Supplied With:
- 2 Pc. Jaw Chucks: 1 set each Hard Master and Reversible Hard Top Jaws
- Solid Jaw Chucks: 1 set each solid ID and OD jaws
- 1 Chuck wrench
- 1 Set of mounting bolts
- Eye bolts for chuck sizes 16” and largert

TOOLMEX Industrial Solutions

		Bison		TMX	
Chuck Size (in.)	Hole Size (in.)	Order No.	Price	Order No.	Price
3	.630	-	-	**HK3138130301P**	Price
4	.787	**HK308110400**	Price	**HK3138130401P**	Price
5	1.260	**HK308110500**	Price	**HK3138130501P**	Price
6	1.654	**HK308110600**	Price	**HK3138130601P**	Price
8	2.165	**HK308110800**	Price	**HK3138130801P**	Price
10	2.992	**HK308111000**	Price	**HK3138131001P**	Price
12	4.055	**HK308111200**	Price	-	-

Fully Machined Adapters for Rotary Tables

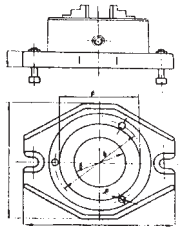
- **Standard:** For fixturing and mounting 3 & 4-jaw lathe chucks
- **Set-Tru:** for 3, 4 & 6-Jaw Set-Tru Chucks
- Supplied with 4 Mounting Bolts, T-Nuts and 1 Mt Pin

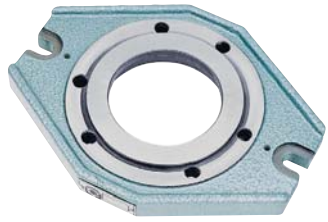


		Set-Tru		Standard	
Chuck Size (in.)	Plate Thickness	Order No.	Price	Order No.	Price
5	.57	**HK30872605**	Price	**HK30872305**	Price
6	.79	**HK30872606**	Price	**HK30872306**	Price
8	.87	**HK30872608**	Price	**HK30872308**	Price
10	.98	**HK30872610**	Price	**HK30872310**	Price
12	1.18	**HK30872612**	Price	**HK30872312**	Price
16	1.26	**HK30872616**	Price	**HK30872316**	Price

Base Plates for Lathe Chucks

- Designed for use with Bison 2,3 & 4 Jaw, Set Tru Lathe Chucks (Back Mount Only) with a semi-steel or forged steel body
- Ideal for milling and drilling operations
- Supplied with two mounting bolts with T-nuts, two T-Slot keys and chuck wrench with sliding T-Bar
- Chucks are sold separately





Set-Tru

Chuck Size (in.)	A (in.)	B (in.)	h (in.)	D (in.)	E (in.)	F (in.)	d (in.)	Wt. (lbs.)	Order No.	Price
6	9.843	7.48	1.10	3.386	5.511	2.36	.433	10.3	**HK30630606**	Price
8	11.81	9.252	1.26	4.331	6.929	2.76	.433	16.2	**HK30630608**	Price
10	13.78	11.49	1.26	5.708	8.818	3.94	.551	25	**HK30630610**	Price
12	16.77	14.25	1.57	7.087	11.259	4.72	.669	35.3	**HK30630612**	Price
16	20.47	17.72	1.89	11.750	6.750	4.72	.669	51.2	**HK30630616**	Price

Standard

Chuck Size (in.)	A (in,)	B (in.)	h (in.)	D (in.)	E (in.)	F (in.)	d (in.)	Wt. (lbs.)	Order No.	Price
6	9.843	7.48	1.10	4.921	5.512	3.15	.433	10.3	**HK30630006**	Price
8	11.81	9.252	1.26	6.299	6.929	3.93	.433	16.2	**HK30630008**	Price
10	13.78	11.49	1.26	7.874	8.819	3.93	.551	25	**HK30630010**	Price
12	16.77	14.25	1.57	10.236	11.260	6.69	.669	35.3	**HK30630012**	Price
16	20.47	17.72	1.89	12.992	12.992	14.25	.669	51.2	**HK30630016**	Price

3-Jaw Scroll Chucks with 2 Sets of Solid Jaws

- Plain back
- New Surplus





Chuck Size (in.)	Hole Size	Order No.	Price
3	.629	**HK35303**	Price
4	.787	**HK35304**	Price
6	1.653	**HK35306**	Price
8	2.165	**HK35308**	Price

3-Jaw Scroll Chucks with 2 Pc. Top Reversible Jaws Flat (Plain) Back & Direct Mount

- New Surplus



Chuck Size (in.)	Mount	Order No.	Price
6	Plain Back	**HK35306TJ**	Price
8	D-4	**HK35308D4**	Price
10	Plain Back	**HK35310TJ**	Price
12	Plain Back	**HK35312TJ**	Price
15	Plain Back	**HK35315TJ**	Price
20	Plain Back	**HK35320TJ**	Price

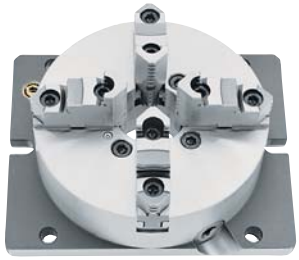
4-Jaw Self-Centering Machine Fixtures

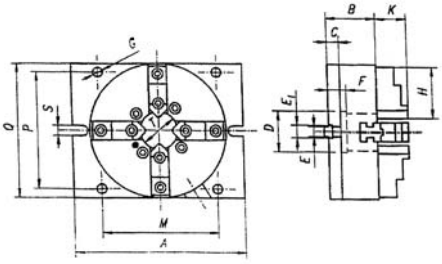
Low Profile Forged Steel Body - Rectangular Base

- Ideal for all types of milling, grinding, drilling and tapping operations
- All surfaces are hardened and precision ground, square and parallel to an accuracy of 0.0008”
- Precision steel body 4-jaw Bison scroll chuck guarantees repeatability within 0.0004”
- American standard 2 Pc. Tongue & Groove jaws
- Ideal for pallet applications

Standard Accessories:

- 1 Set of two-piece reversible jaws (hard top & hard master jaws)
- 1 Ratchet wrench, 1 angled wrench
- 1 Set of mounting bolts with T-nuts





Chuck Size (in.)	(A) (in.)	(Q) (in.)	(B) (in.)	(K) (in.)	(C) (in.)	(D) (in.)	(E) (in.)	(E1) (in.)	(F) (in.)	(G) (in.)	(H) (in.)	(M=P) (in.)	(S) (in.)	(T) (in.)	OD Clamping Range	ID Clamping Range	Order No.	Price
6	8.460	6.50	2.460	1.690	0.709	1.772	.551	.709	0.98	.330	2.640	5.669	.55	1.653	.118 - 6.300	1.650 - 5.750	**HK30640006**	Price
8	9.840	7.87	2.840	1.770	7.09	0.709	.551	.709	1.06	.551	3.150	6.850	.55	2.170	.157 - 7.870	1.970 - 7.480	**HK30640008**	Price
10	12.200	10.0	3.270	2.050	0.846	3.150	.708	.709	1.260	.630	3.740	8.583	.71	2.992	.197 - 9.840	2.280 - 9.250	**HK30640010**	Price

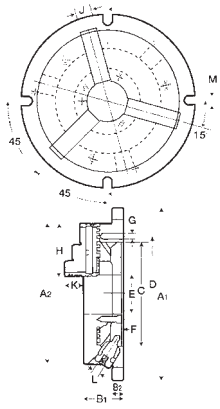
Pratt Burnerd America
Atlas Workholding

NBK Super Thin Round Chucks

The Ultimate Low Profile 3-Jaw Universal Chuck

- Three operating pinions positioned at a 45° angle for easier operation
- Sizes available: 6, 8, 10 and 12 inch diameter
- Easy installation with flange type mounting
- Accurate - .001” repetability on duplicate parts using the nominated pinion
- Ideal for Drill Presses, Standard Mills, Vertical Machining Centers, Angle Plates, Tombstones and Grinding Machines
- American Standard hard top and master jaws
- 1 Year Warranty

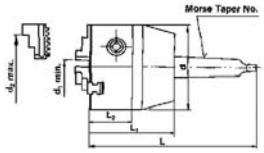


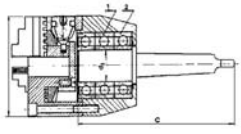


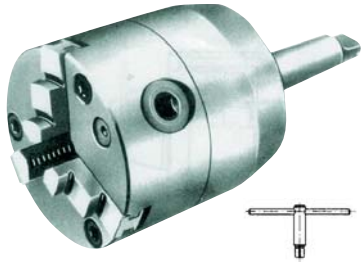
Chuck Size (in.)	Gripping Cap. External	Gripping Cap. Internal	Weight	Order No.	Price
6	Min. .31 / Max 6.30	Min. 1.89 / Max. 5.91	27 lbs	**HF50NBK6**	Price
8	Min. .43 / Max. 7.87	Min. 2.44 / Max. 7.48	42 lbs	**HF50NBK8**	Price
10	Min. .47 / Max. 9.84	Min. 2.83 / Max. 9.41	64 lbs	**HF50NBK10**	Price
12	Min. .59 / Max. 11.81	Min. 3.38 / Max. 11.41	103 lbs	**HF50NBK12**	Price

3-Jaw Self-Centering Rotating Chucks with Morse Taper Shanks

- These chucks are used in tailstocks for jobs where centers cannot be used (ex.—machining of tube)
- Steel body
- Hardened and ground scroll and pinions
- Hardened and ground MT spindle
- Sealed ball bearings: lubrication through oiler
- **Standard Accessories:** 2 sets of hard solid jaws/ inside and outside/1 wrench



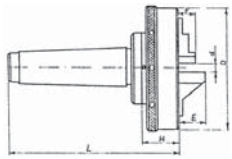




Chuck Size (in.)	Morse Taper No.	dz min. (in.)	dx max. (in.)	L (in.)	Lz (in.)	Lx (in.)	C (in.)	Max. Speed RPM	Weight	Order No.	Price
3	2MT	.080	2.800	9.63	3.540	1.730	5.040	4000	8 lbs	**HK308600300**	Price
4	3MT	.120	3.660	8.09	3.980	2.000	6.020	3500	13.5 lbs	**HK308600400**	Price
5	4MT	.120	4.920	9.45	4.570	2.200	7.320	3200	24.5 lbs	**HK308600500**	Price
6	5MT	.120	6.300	11.77	5.240	2.560	9.307	3000	33.7 lbs	**HK308600600**	Price
5*	4MT	.120	4.920	9.63	4.570	2.200	7.320	3200	24.5 lbs	**HK308650500**	Price

Morse Taper Adapters for Bison Quick Clamping Scroll Chucks

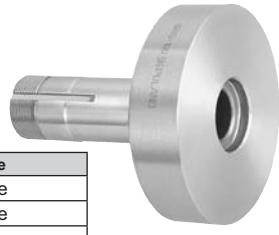
- T.I.R. for 4" .001" for 5" & 6" .0006"
- Diam. 5" & 6" with adjustable body





Mount	Chuck Dia. D (in.)	L (in.)	H (in.)	Draw Bar Threads	3-Jaw F (in.)	6- Jaw E (in.)	3-Jaw d min-max (in.)	6-Jaw d min-max (in.)	Order No.	Price
3 MT	4	5.51	1.57	3/8-16	.67	.98	.0787-1.22	.0591-1.22	**HK30913403**	Price
3 MT	5	5.60	1.89	3/8-16	.79	1.42	.0984-1.46	.0787-1.46	**HK30913503**	Price
4 MT	4	6.41	1.57	1/2-13	.67	.98	.0787-1.22	.0591-1.22	**HK30913404**	Price
4 MT	5	6.50	1.89	1/2-13	.79	1.42	.0984-1.46	.0787-1.46	**HK30913504**	Price
5 MT	6	7.68	2.05	5/8-11	1.30	1.42	.0984-2.00	.1181-2.00	**HK30913605**	Price

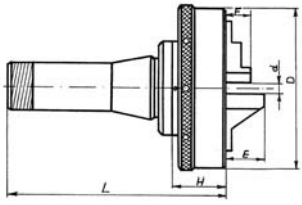
5C Soft Blank Adapters



Total Length (in.)	Flange Dia. (in.)	Flange Thickness (in.)	Hole Dia. (in.)	Order No.	Price
4.41	4	1.00	.866	**HK30909304**	Price
4.41	5	1.00	.866	**HK30909305**	Price
4.41	6	1.22	.866	**HK30909306**	Price

5C Adapter for 3 & 6-Jaw Quick Clamping Chucks

- T.I.R. 3" & 4" 0.001"
- 5" & 6" 0.0006"
- Adapters & Chucks Sold Separately
- Diam. 5" & 6" with adjustable body Thru-Hole Diam. .866"



Chuck Diam. D (in.)	L (in.)	H (in.)	3-Jaw F (in.)	6-Jaw E (in.)	3-Jaw d min-max (in.)	6-Jaw d min-max (in.)	Order No.	Price
5	5.74	1.89	.79	1.42	.0984-1.46	.0787-1.46	**HK30910605**	Price
6	5.82	2.05	1.30	1.42	.0984-2.00	.1181-2.00	**HK30910606**	Price

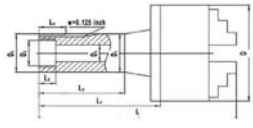
5C Precision Chucks

3 & 4 Jaw

- 5C Precision chucks eliminate the problem of having to tear down a collet set-up
- Easily switch to a 3 or 4 jaw chuck when collets aren't applicable
- Works with any 5C tooling
- Semi-steel

Supplied With:

- 2 Sets of hard jaws (3-Jaw chucks)
- 1 Set reversible jaws (4-Jaw chucks)
- T-wrench





Chuck Style - Four Jaw Independent Chucks				
Chuck Size (in.)	D3 (in.)	Weight	Order No.	Price
3	.765	6 lbs	**HK155C034**	Price
4	.765	12 lbs	**HK155C044**	Price

Chuck Style - Three Jaw Scroll Chucks				
Chuck Size (in.)	D3 (in.)	Weight	Order No.	Price
3	.765	7 lbs	**HK155C033**	Price
4	.765	11 lbs	**HK155C043**	Price

5C Fixture Adapters for SET-TRU Chucks

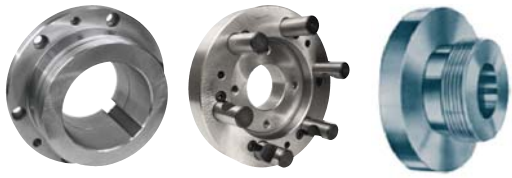
- Back plates and SET-TRU chucks sold separately



Chuck Dia. D (in.)	L (in.)	H (in.)	E (in.)	M min-max (in.)	N max (in.)	Order No.	Price
4	7.29	2.68	.67	.12-1.30	3.66	**HK30912304**	Price
5	7.12	2.362	1.58	.12-1.97	4.92	**HK30912305**	Price
6	7.95	2.677	1.71	.12-2.52	6.30	**HK30912306**	Price

Steel Adapter Plates for Adjustable Chucks

- Fully Finished Precision Steel Adapters, No Machining Required
- Generic USA machined to fit Bison
- Bison adapters are interchangeable
- BTC adapters for BTC, Buck and PBA Chucks
- BPA adapters for PBA Setrite and Atlas easy set chucks



Mount - 1-1/2-8			
Chuck Size (in.)	Brand Name	Order No.	Price
4	Bison	**HK30876042**	Price
5	Bison	**HK30876052**	Price
5	PBA	**HF500505041**	Price
6	Bison	**HK30876062**	Price
6	BTC	**HK16TH950**	Price
6	PBA	**HF500605041**	Price
8	Bison	**HK30876082**	Price
8	PBA	**HF500805041**	Price

Mount - 1-3/4-8			
Chuck Size (in.)	Brand Name	Order No.	Price
5	PBA	**HF500505042**	Price
6	PBA	**HF500605042**	Price
8	PBA	**HF500805042**	Price

Mount - 2-1/4-8			
Chuck Size (in.)	Brand Name	Order No.	Price
5	Bison	**HK30876056**	Price
5	PBA	**HF500505043**	Price
6	Bison	**HK30876066**	Price
6	BTC	**HK16TH955**	Price
6	PBA	**HF500605043**	Price
8	Bison	**HK30876083**	Price
8	PBA	**HF500805043**	Price
8-1/4	BTC	**HK16TH985**	Price
10	BTC	**HK16TH994**	Price

Mount - 2-3/16-10			
Chuck Size (in.)	Brand Name	Order No.	Price
5	Bison	**HK30876054**	Price
5	BTC	**HK16HS120**	Price
5	Generic USA	**HK16MH055**	Price
5	PBA	**HF500505045**	Price
6	Bison	**HK30876064**	Price
6	BTC	**HK16HS276**	Price
6	Generic USA	**HK16MH065**	Price
6	PBA	**HF500605045**	Price

Mount - 2-3/8-6			
Chuck Size (in.)	Brand Name	Order No.	Price
6	BTC	**HK16TH958**	Price
6	PBA	**HF500605046**	Price
8	Bison	**HK30876084**	Price
8	PBA	**HF500805046**	Price
8-1/4	BTC	**HK16TH986**	Price
10	BTC	**HK16TH995**	Price
12	BTC	**HK16TH997**	Price

Mount - 4° Taper			
Chuck Size (in.)	Brand Name	Order No.	Price
5	BTC	**HK16HS790**	Price
5	Generic USA	**HK16MH054**	Price
5	PBA	**HF500505044**	Price
6	BTC	**HK16HS357**	Price
6	Generic USA	**HK16MH064**	Price
6	PBA	**HF500605044**	Price

Mount - A-11			
Chuck Size (in.)	Brand Name	Order No.	Price
12	Bison	**HK30874129**	Price
12	BTC	**HK16AS317**	Price
12	SCA	**HK1612GSA11**	Price
15	BTC	**HK16AS349**	Price
15	PBA	**HF501505013**	Price
15 - 18	SCA	**HK161518GSA11**	Price
16	Bison	**HK30874169**	Price
18	PBA	**HF501805013**	Price
20	Bison	**HK30874209**	Price
21	BTC	**HK15AS350**	Price
24	PBA	**HF502405013**	Price
25	Bison	**HK30874259**	Price

Mount - A-15			
Chuck Size (in.)	Brand Name	Order No.	Price
15	BTC	**HK16AS350**	Price
15	SCA	**HK161518GSA15**	Price

Mount - A-15			
Chuck Size (in.)	Brand Name	Order No.	Price
20	Bison	**HK30874215**	Price
21	SCA	**HK162124GSA15**	Price
24	PBA	**HF502405014**	Price
25	Bison	**HK30874260**	Price

Mount - A-20			
Chuck Size (in.)	Brand Name	Order No.	Price
21 - 24	SCA	**HK162124GSA20**	Price
25	Bison	**HK30874265**	Price

Mount - A2-11			
Chuck Size (in.)	Brand Name	Order No.	Price
12	TMX	**HK313874129P**	Price
16	TMX	**HK313874169P**	Price
20	TMX	**HK313874209P**	Price
25	TMX	**HK313874259P**	Price

Mount - A2-15			
Chuck Size (in.)	Brand Name	Order No.	Price
20	TMX	**HK313874215P**	Price
25	TMX	**HK313874260P**	Price

Mount - A2-4			
Chuck Size (in.)	Brand Name	Order No.	Price
5	TMX	**HK313874054P**	Price

Mount - A2-5			
Chuck Size (in.)	Brand Name	Order No.	Price
10	TMX	**HK313874105P**	Price
5	TMX	**HK313874055P**	Price
6	TMX	**HK313874065P**	Price
8	TMX	**HK313874085P**	Price

Mount - A2-6			
Chuck Size (in.)	Brand Name	Order No.	Price
10	TMX	**HK313874106P**	Price
12	TMX	**HK313874126P**	Price
16	TMX	**HK313874166P**	Price
5	TMX	**HK313874056P**	Price
6	TMX	**HK313874066P**	Price
8	TMX	**HK313874086P**	Price

Mount - A2-8			
Chuck Size (in.)	Brand Name	Order No.	Price
10	TMX	**HK313874108P**	Price
12	TMX	**HK313874128P**	Price
16	TMX	**HK313874168P**	Price
20	TMX	**HK313874208P**	Price
25	TMX	**HK313874258P**	Price

Mount - A-4			
Chuck Size (in.)	Brand Name	Order No.	Price
5	Bison	**HK30874054**	Price
6	BTC	**HK16AS301**	Price
6	PBA	**HF500605009**	Price
6	SCA	**HK166GSA4**	Price

Mount - A-5			
Chuck Size (in.)	Brand Name	Order No.	Price
5	Bison	**HK30874055**	Price
6	Bison	**HK30874065**	Price
6	BTC	**HK16AS302**	Price
6	PBA	**HF500605010**	Price
6	SCA	**HK166GSA5**	Price
8	Bison	**HK30874085**	Price
8	PBA	**HF500805010**	Price
8	SCA	**HK168GSA5**	Price
8-1/4	BTC	**HK16AS307**	Price
10	Bison	**HK30874105**	Price
10	BTC	**HK16AS311**	Price
10	PBA	**HF501005010**	Price
10	SCA	**HK1610GSA5**	Price

Steel Adapter Plates for Adjustable Chucks (cont.)



Mount - A-6			
Chuck Size (in.)	Brand Name	Order No.	Price
5	Bison	**HK30874056**	Price
6	Bison	**HK30874066**	Price
6	BTC	**HK16AS303**	Price
8	Bison	**HK30874086**	Price
8	PBA	**HF500805011**	Price
8	SCA	**HK168GSA6**	Price
8-1/4	BTC	**HK16AS308**	Price
10	Bison	**HK30874106**	Price
10	BTC	**HK16AS312**	Price
10	PBA	**HF501005011**	Price
10	SCA	**HK1610GSA6**	Price
12	Bison	**HK30874126**	Price
12	BTC	**HK16AS315**	Price
12	PBA	**HF501205011**	Price
12	SCA	**HK1612GSA6**	Price
15	BTC	**HK16AS343**	Price
15 - 18	SCA	**HK161518GSA6**	Price
16	Bison	**HK30874166**	Price

Mount - A-8			
Chuck Size (in.)	Brand Name	Order No.	Price
6	BTC	**HK16AS336**	Price
8-1/4	BTC	**HK16AS309**	Price
10	Bison	**HK30874108**	Price
10	BTC	**HK16AS313**	Price
10	PBA	**HF501005012**	Price
10	SCA	**HK1610GSA8**	Price
12	Bison	**HK30874128**	Price
12	BTC	**HK16AS316**	Price
12	PBA	**HF501205012**	Price
12	SCA	**HK1612GSA8**	Price
15	BTC	**HK16AS344**	Price
15	PBA	**HF501505012**	Price
15 - 18	SCA	**HK161518GSA8**	Price
16	Bison	**HK30874168**	Price
18	PBA	**HF501805012**	Price
20	Bison	**HK30874208**	Price
25	Bison	**HK30874258**	Price

Mount - Blank			
Chuck Size (in.)	Brand Name	Order No.	Price
5	PBA	**HF500505040**	Price
6	PBA	**HF500605040**	Price
8	PBA	**HF500805040**	Price
10	PBA	**HF501005040**	Price
12	PBA	**HF501205040**	Price

Mount - D-11			
Chuck Size (in.)	Brand Name	Order No.	Price
12	Bison	**HK30875129**	Price
12	BTC	**HK16CD273**	Price
12	PBA	**HF501205025**	Price
12	SCA	**HK1612GSD11**	Price
15	BTC	**HK16CD266**	Price
15	PBA	**HF501505025**	Price
15 - 18	SCA	**HK161518GSD11**	Price
16	Bison	**HK30875169**	Price
18	PBA	**HF501805025**	Price
20	Bison	**HK30875209**	Price
21	BTC	**HK16CD272**	Price
21 - 24	SCA	**HK162124GSD11**	Price
24	PBA	**HF502405025**	Price
25	Bison	**HK30875259**	Price

Mount - D1-11			
Chuck Size (in.)	Brand Name	Order No.	Price
12	TMX	**HK313875129P**	Price
16	TMX	**HK313875169P**	Price
20	TMX	**HK313875209P**	Price
25	TMX	**HK313875259P**	Price

Mount - D1-15			
Chuck Size (in.)	Brand Name	Order No.	Price
20	TMX	**HK313875215P**	Price

Mount - D1-3			
Chuck Size (in.)	Brand Name	Order No.	Price
5	TMX	**HK313875053P**	Price
6	TMX	**HK313875063P**	Price
8	TMX	**HK313875083P**	Price

Mount - D1-4			
Chuck Size (in.)	Brand Name	Order No.	Price
10	TMX	**HK313875104P**	Price
5	TMX	**HK313875054P**	Price
6	TMX	**HK313875064P**	Price
8	TMX	**HK313875084P**	Price

Mount - D-15			
Chuck Size (in.)	Brand Name	Order No.	Price
20	Bison	**HK30875215**	Price
21	BTC	**HK16CD274**	Price
21 - 24	SCA	**HK162124GSD15**	Price

Mount - D1-5			
Chuck Size (in.)	Brand Name	Order No.	Price
10	TMX	**HK313875105P**	Price
5	TMX	**HK313875055P**	Price
6	TMX	**HK313875065P**	Price
8	TMX	**HK313875085P**	Price

Mount - D1-6			
Chuck Size (in.)	Brand Name	Order No.	Price
10	TMX	**HK313875106P**	Price
12	TMX	**HK313875126P**	Price
16	TMX	**HK313875166P**	Price
5	TMX	**HK313875056P**	Price
6	TMX	**HK313875066P**	Price
8	TMX	**HK313875086P**	Price

Mount - D1-8			
Chuck Size (in.)	Brand Name	Order No.	Price
10	TMX	**HK313875108P**	Price
12	TMX	**HK313875128P**	Price
16	TMX	**HK313875168P**	Price
20	TMX	**HK313875208P**	Price
25	TMX	**HK313875258P**	Price
5	TMX	**HK313875058P**	Price
6	TMX	**HK313875068P**	Price
8	TMX	**HK313875088P**	Price

Mount - D-3			
Chuck Size (in.)	Brand Name	Order No.	Price
4	Bison	**HK30875043**	Price
5	Bison	**HK30875053**	Price
6	Bison	**HK30875063**	Price
6	BTC	**HK16CD203**	Price
6	PBA	**HF500605020**	Price
8	Bison	**HK30875083**	Price
8	PBA	**HF500805020**	Price
8-1/4	BTC	**HK16CD220**	Price

Mount - D-4			
Chuck Size (in.)	Brand Name	Order No.	Price
4	Bison	**HK30875044**	Price
5	Bison	**HK30875054**	Price
6	Bison	**HK30875064**	Price
6	BTC	**HK16CD201**	Price
6	PBA	**HF500605021**	Price
8	Bison	**HK30875084**	Price
8	PBA	**HF500805021**	Price
8	SCA	**HK168GSD4**	Price
8-1/4	BTC	**HK16CD204**	Price
10	Bison	**HK30875104**	Price
10	BTC	**HK16CD219**	Price
10	PBA	**HF501005021**	Price
10	SCA	**HK1610GSD4**	Price

Steel Adapter Plates for Adjustable Chucks (cont.)



Mount - D-5			
Chuck Size (in.)	Brand Name	Order No.	Price
5	Bison	**HK30875055**	Price
6	Bison	**HK30875065**	Price
6	BTC	**HK16CD202**	Price
6	PBA	**HF500605022**	Price
8	Bison	**HK30875085**	Price
8	PBA	**HF500805022**	Price
8	SCA	**HK168GSD5**	Price
8-1/4	BTC	**HK16CD208**	Price
10	Bison	**HK30875105**	Price
10	BTC	**HK16CD210**	Price
10	PBA	**HF501005022**	Price
10	SCA	**HK1610GSD5**	Price
12	BTC	**HK16CD213**	Price
12	SCA	**HK1612GSD5**	Price

Mount - D-6			
Chuck Size (in.)	Brand Name	Order No.	Price
5	Bison	**HK30875056**	Price
6	Bison	**HK30875066**	Price
6	BTC	**HK16CD206**	Price
8	Bison	**HK30875086**	Price
8	PBA	**HF500805023**	Price
8	SCA	**HK168GSD6**	Price
8-1/4	BTC	**HK16CD209**	Price
10	Bison	**HK30875106**	Price
10	BTC	**HK16CD211**	Price
10	PBA	**HF501005023**	Price
10	SCA	**HK1610GSD6**	Price
12	Bison	**HK30875126**	Price
12	BTC	**HK16CD214**	Price
12	PBA	**HF501205023**	Price
15	BTC	**HK16CD238**	Price
15	PBA	**HF501505023**	Price
16	Bison	**HK30875166**	Price

Mount - D-8			
Chuck Size (in.)	Brand Name	Order No.	Price
5	Bison	**HK30875058**	Price
6	BTC	**HK16CD247**	Price
8	Bison	**HK30875088**	Price
8-1/4	BTC	**HK16CD207**	Price
10	Bison	**HK30875108**	Price
10	BTC	**HK16CD212**	Price
10	PBA	**HF501005024**	Price
10	SCA	**HK1610GSD8**	Price
12	Bison	**HK30875128**	Price
12	BTC	**HK16CD215**	Price
12	PBA	**HF501205024**	Price
15	BTC	**HK16CD267**	Price
15	PBA	**HF501505024**	Price
15 - 18	SCA	**HK161518GSD8**	Price
16	Bison	**HK30875168**	Price
20	Bison	**HK30875208**	Price
21	BTC	**HK16CD271**	Price
21 - 24	SCA	**HK162124GSD8**	Price
24	PBA	**HF502405024**	Price
25	Bison	**HK30875258**	Price

Mount - DIN11			
Chuck Size (in.)	Brand Name	Order No.	Price
16	Bison	**HK30920169**	Price
20	Bison	**HK30920209**	Price
25	Bison	**HK30920259**	Price

Mount - DIN6			
Chuck Size (in.)	Brand Name	Order No.	Price
6	Bison	**HK30920066**	Price
8	Bison	**HK30920086**	Price
10	Bison	**HK30920106**	Price

Mount - DIN8			
Chuck Size (in.)	Brand Name	Order No.	Price
12	Bison	**HK30920128**	Price
16	Bison	**HK30920168**	Price

Mount - L0			
Chuck Size (in.)	Brand Name	Order No.	Price
6	Bison	**HK308799062**	Price
6	BTC	**HK16LT101**	Price

Mount - L0			
Chuck Size (in.)	Brand Name	Order No.	Price
6	PBA	**HF500605032**	Price
8	PBA	**HF500805032**	Price
8-1/4	BTC	**HK16LT109**	Price
10	Bison	**HK308799102**	Price
10	BTC	**HK16LT112**	Price
10	PBA	**HF501005032**	Price
12	Bison	**HK308799122**	Price
12	BTC	**HK16LT115**	Price
12	PBA	**HF501205032**	Price
12	SCA	**HK1612GSL0**	Price

Mount - L00			
Chuck Size (in.)	Brand Name	Order No.	Price
5	Bison	**HK308799051**	Price
6	Bison	**HK308799061**	Price
6	BTC	**HK16LT100**	Price
6	PBA	**HF500605031**	Price
8	Bison	**HK308799081**	Price
8	PBA	**HF500805031**	Price
8-1/4	BTC	**HK16LT108**	Price
10	Bison	**HK308799101**	Price
10	BTC	**HK16LT111**	Price
10	PBA	**HF501005031**	Price

Mount - L1			
Chuck Size (in.)	Brand Name	Order No.	Price
8	Bison	**HK308799083**	Price
8	PBA	**HF500805033**	Price
8-1/4	BTC	**HK16LT110**	Price
10	Bison	**HK308799103**	Price
10	BTC	**HK16LT113**	Price
10	PBA	**HF501005033**	Price
10	SCA	**HK1610GSL1**	Price
12	Bison	**HK308799123**	Price
12	BTC	**HK16LT116**	Price
12	PBA	**HF501205033**	Price
12	SCA	**HK1612GSL1**	Price
15	BTC	**HK16LT176**	Price
15	PBA	**HF501505033**	Price
15 - 18	SCA	**HK161518GSL1**	Price
16	Bison	**HK308799163**	Price
18	PBA	**HF501805033**	Price
24	PBA	**HF502405033**	Price

Mount - L2			
Chuck Size (in.)	Brand Name	Order No.	Price
10	BTC	**HK16LT114**	Price
10	PBA	**HF501005034**	Price
10	SCA	**HK1610GSL2**	Price
12	PBA	**HF501205034**	Price
12	SCA	**HK1612GSL2**	Price
15	BTC	**HK16LT177**	Price
15	PBA	**HF501505034**	Price
15 - 18	SCA	**HK161518GSL2**	Price
16	Bison	**HK308799164**	Price
18	PBA	**HF501805034**	Price
20	Bison	**HK308799264**	Price
21 - 24	SCA	**HK162124GSL2**	Price
24	PBA	**HF502405034**	Price

Mount - L3			
Chuck Size (in.)	Brand Name	Order No.	Price
15	BTC	**HK16LT178**	Price
15	PBA	**HF501505035**	Price
15 - 18	SCA	**HK161518GSL3**	Price
16	Bison	**HK308799165**	Price
18	PBA	**HF501805035**	Price
21 - 24	SCA	**HK162124GSL3**	Price
24	PBA	**HF502405035**	Price

Adapter Plates for 3 & 4-Jaw Plain Back Scroll & Independent Chucks

- Generic USA Type D & A-1 standard without Thru-Hole



To Fit Spindle - 1-1/2-8			
Chuck Dia. (in.)	Brand Name	Order No.	Price
6	Generic USA	**HK160600THD**	Price
8	Generic USA	**HK160800150B**	Price

To Fit Spindle - 2-1/4-8			
Chuck Dia. (in.)	Brand Name	Order No.	Price
8	Generic USA	**HK160800225B**	Price
10	Generic USA	**HK161000225B**	Price

To Fit Spindle - 2-3/16-10			
Chuck Dia. (in.)	Brand Name	Order No.	Price
5	Generic USA	**HK16MH055B**	Price
6	Generic USA	**HK16MH065B**	Price

To Fit Spindle - 2-3/16-10 Hardinge			
Chuck Dia. (in.)	Brand Name	Order No.	Price
6	Generic USA	**HK160600HT**	Price

To Fit Spindle - 4° Taper			
Chuck Dia. (in.)	Brand Name	Order No.	Price
5	Generic USA	**HK16MH054B**	Price
6	Generic USA	**HK16MH064B**	Price

To Fit Spindle - 4° Taper Hardinge			
Chuck Dia. (in.)	Brand Name	Order No.	Price
6	Generic USA	**HK1606004D**	Price

To Fit Spindle - A-11			
Chuck Dia. (in.)	Brand Name	Order No.	Price
12-1/2	Generic USA	**HK16MA060**	Price
15-3/4	Generic USA	**HK16MA075**	Price
18	Generic USA	**HK16MA111**	Price
20-1/2	Generic USA	**HK16MA119**	Price
25	Generic USA	**HK16MA211**	Price

To Fit Spindle - A-15			
Chuck Dia. (in.)	Brand Name	Order No.	Price
15-3/4	Generic USA	**HK16MA095**	Price
18	Generic USA	**HK16MA115**	Price
20-1/2	Generic USA	**HK16MA121**	Price
25	Generic USA	**HK16MA215**	Price

To Fit Spindle - A-20			
Chuck Dia. (in.)	Brand Name	Order No.	Price
20-1/2	Generic USA	**HK16MA120**	Price
25	Generic USA	**HK16MA220**	Price

To Fit Spindle - A2-11			
Chuck Dia. (in.)	Brand Name	Order No.	Price
16	TMX	**HK313873169P**	Price
20	TMX	**HK313873209P**	Price

To Fit Spindle - A2-15			
Chuck Dia. (in.)	Brand Name	Order No.	Price
20	TMX	**HK313873215P**	Price
25	TMX	**HK313873260P**	Price

To Fit Spindle - A2-5			
Chuck Dia. (in.)	Brand Name	Order No.	Price
8	TMX	**HK313873085P**	Price

To Fit Spindle - A2-6			
Chuck Dia. (in.)	Brand Name	Order No.	Price
10	TMX	**HK313873106P**	Price
12	TMX	**HK313873126P**	Price
16	TMX	**HK313873166P**	Price
8	TMX	**HK313873086P**	Price

To Fit Spindle - A2-8			
Chuck Dia. (in.)	Brand Name	Order No.	Price
12	TMX	**HK313873128P**	Price
16	TMX	**HK313873168P**	Price
20	TMX	**HK313873208P**	Price

To Fit Spindle - A-4			
Chuck Dia. (in.)	Brand Name	Order No.	Price
6	Generic USA	**HK16MA005**	Price

To Fit Spindle - A-5			
Chuck Dia. (in.)	Brand Name	Order No.	Price
6	Generic USA	**HK16MA010**	Price
8-1/4	Generic USA	**HK16MA025**	Price
10-1/2	Generic USA	**HK16MA039**	Price

To Fit Spindle - A-6			
Chuck Dia. (in.)	Brand Name	Order No.	Price
8-1/4	Generic USA	**HK16MA035**	Price
10-1/2	Generic USA	**HK16MA040**	Price
12-1/2	Generic USA	**HK16MA050**	Price
15-3/4	Generic USA	**HK16MA069**	Price

To Fit Spindle - A-8			
Chuck Dia. (in.)	Brand Name	Order No.	Price
10-1/2	Generic USA	**HK16MA045**	Price
12-1/2	Generic USA	**HK16MA055**	Price
15-3/4	Generic USA	**HK16MA070**	Price
18	Generic USA	**HK16MA108**	Price
20-1/2	Generic USA	**HK16MA118**	Price
25	Generic USA	**HK16MA208**	Price

To Fit Spindle - D-11			
Chuck Dia. (in.)	Brand Name	Order No.	Price
12	Bison	**HK30878129F**	Price
12-1/2	Generic USA	**HK16MD060**	Price
15-3/4	Generic USA	**HK16MD075**	Price
16	Bison	**HK30878169F**	Price
20	Generic USA	**HK16MD085**	Price
25	Bison	**HK30878259F**	Price
25	Generic USA	**HK16MD095**	Price

To Fit Spindle - D1-11			
Chuck Dia. (in.)	Brand Name	Order No.	Price
12	TMX	**HK313878129P**	Price
16	TMX	**HK313878169P**	Price
20	TMX	**HK313878209P**	Price
25	TMX	**HK313878259P**	Price

To Fit Spindle - D1-15			
Chuck Dia. (in.)	Brand Name	Order No.	Price
25	TMX	**HK313878265P**	Price

To Fit Spindle - D1-3			
Chuck Dia. (in.)	Brand Name	Order No.	Price
6	TMX	**HK313878063P**	Price

To Fit Spindle - D1-4			
Chuck Dia. (in.)	Brand Name	Order No.	Price
6	TMX	**HK313878064P**	Price
8	TMX	**HK313878084P**	Price
8	TMX	**HK3138789084P**	Price

Adapter Plates for 3 & 4-Jaw Plain Back Scroll & Independent Chucks (cont.)



To Fit Spindle - D-15			
Chuck Dia. (in.)	Brand Name	Order No.	Price
15-3/4	Generic USA	**HK16MD079**	Price
20	Generic USA	**HK16MD089**	Price
25	Generic USA	**HK16MD099**	Price
25	Bison	**HK30878265F**	Price

To Fit Spindle - D1-5			
Chuck Dia. (in.)	Brand Name	Order No.	Price
10	TMX	**HK313878105P**	Price
6	TMX	**HK313878065P**	Price
8	TMX	**HK313878085P**	Price

To Fit Spindle - D1-6			
Chuck Dia. (in.)	Brand Name	Order No.	Price
10	TMX	**HK313878106P**	Price
10	TMX	**HK3138789106P**	Price
12	TMX	**HK313878126P**	Price
16	TMX	**HK313878166P**	Price
6	TMX	**HK313878066P**	Price
8	TMX	**HK313878086P**	Price

To Fit Spindle - D1-8			
Chuck Dia. (in.)	Brand Name	Order No.	Price
10	TMX	**HK313878108P**	Price
12	TMX	**HK313878128P**	Price
16	TMX	**HK313878168P**	Price
20	TMX	**HK313878208P**	Price
25	TMX	**HK313878258P**	Price

To Fit Spindle - D-3			
Chuck Dia. (in.)	Brand Name	Order No.	Price
6	Generic USA	**HK16MD003**	Price
8	Bison	**HK30878083F**	Price
8-1/4	Generic USA	**HK16MD015**	Price
10-1/2	Generic USA	**HK16MD300**	Price

To Fit Spindle - D-4			
Chuck Dia. (in.)	Brand Name	Order No.	Price
6	Bison	**HK30878064F**	Price
6	Generic USA	**HK16MD005**	Price
8	Bison	**HK30878084F**	Price
8-1/4	Generic USA	**HK16MD020**	Price
10-1/2	Generic USA	**HK16MD400**	Price

To Fit Spindle - D-5			
Chuck Dia. (in.)	Brand Name	Order No.	Price
6	Bison	**HK30878065F**	Price
6	Generic USA	**HK16MD010**	Price
8	Bison	**HK30878085F**	Price
8-1/4	Generic USA	**HK16MD025**	Price
10	Bison	**HK30878105F**	Price
10-1/2	Generic USA	**HK16MD035**	Price
12-1/2	Generic USA	**HK16MD049**	Price

To Fit Spindle - D-6			
Chuck Dia. (in.)	Brand Name	Order No.	Price
8	Bison	**HK30878086F**	Price
8-1/4	Generic USA	**HK16MD030**	Price
10	Bison	**HK30878106F**	Price
10-1/2	Generic USA	**HK16MD040**	Price
12	Bison	**HK30878126F**	Price

To Fit Spindle - D-6			
Chuck Dia. (in.)	Brand Name	Order No.	Price
12-1/2	Generic USA	**HK16MD050**	Price
15-3/4	Generic USA	**HK16MD065**	Price
16	Bison	**HK30878166F**	Price

To Fit Spindle - D-8			
Chuck Dia. (in.)	Brand Name	Order No.	Price
10	Bison	**HK30878108F**	Price
10-1/2	Generic USA	**HK16MD045**	Price
12	Bison	**HK30878128F**	Price
12-1/2	Generic USA	**HK16MD055**	Price
15-3/4	Generic USA	**HK16MD070**	Price
16	Bison	**HK30878168F**	Price
20	Bison	**HK30878208F**	Price
20	Generic USA	**HK16MD080**	Price
25	Bison	**HK30878258F**	Price
25	Generic USA	**HK16MD090**	Price

To Fit Spindle - DIN11			
Chuck Dia. (in.)	Brand Name	Order No.	Price
12-1/2	Generic USA	**HK1612DIN11**	Price
15-3/4	Generic USA	**HK1615DIN11**	Price

To Fit Spindle - DIN5			
Chuck Dia. (in.)	Brand Name	Order No.	Price
8-1/4	Generic USA	**HK168DIN5**	Price

To Fit Spindle - DIN6			
Chuck Dia. (in.)	Brand Name	Order No.	Price
8-1/4	Generic USA	**HK168DIN6**	Price
10-1/2	Generic USA	**HK1610DIN6**	Price
12-1/2	Generic USA	**HK1612DIN6**	Price

To Fit Spindle - DIN8			
Chuck Dia. (in.)	Brand Name	Order No.	Price
10-1/2	Generic USA	**HK1610DIN8**	Price
12-1/2	Generic USA	**HK1612DIN8**	Price
15-3/4	Generic USA	**HK1615DIN8**	Price

To Fit Spindle - L0			
Chuck Dia. (in.)	Brand Name	Order No.	Price
10-1/2	Generic USA	**HK16ML040**	Price

To Fit Spindle - L00			
Chuck Dia. (in.)	Brand Name	Order No.	Price
10-1/2	Generic USA	**HK16ML035**	Price

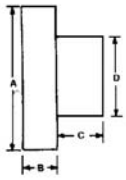
To Fit Spindle - L1			
Chuck Dia. (in.)	Brand Name	Order No.	Price
8-1/4	Generic USA	**HK16ML030**	Price
12-1/2	Generic USA	**HK16ML060**	Price
15-3/4	Generic USA	**HK16ML075**	Price

To Fit Spindle - L2			
Chuck Dia. (in.)	Brand Name	Order No.	Price
10-1/2	Generic USA	**HK16ML050**	Price
12-1/2	Generic USA	**HK16ML065**	Price
15-3/4	Generic USA	**HK16ML080**	Price
20	Generic USA	**HK16ML090**	Price
25	Generic USA	**HK16ML100**	Price

To Fit Spindle - L3			
Chuck Dia. (in.)	Brand Name	Order No.	Price
20	Generic USA	**HK16ML095**	Price
25	Generic USA	**HK16ML105**	Price

Machineable Cast Iron Adapter Plates for 3-Jaw & 4-Jaw Lathe Chucks

Rough Casting Adapters



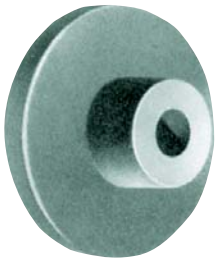


Plate Dia. (A) (in.)	Plate Thk. (B) (in.)	Flange Depth (C) (in.)	Spindle Dia. (D) (in.)	Thru Hole	Order No.	Price
5-3/8	7/8	2-1/4	3-3/8	5/8	**HK30870105**	Price
6-3/4	1	2-1/4	3-3/8	1	**HK30870106**	Price
8-1/4	1	2-1/2	3-3/4	1	**HK30870108**	Price
10-1/4	1-1/4	3-5/8	4-3/8	1-1/2	**HK30870110**	Price
12-3/4	1-1/4	4	6-1/2	2	**HK30870112**	Price
16-1/8	2-1/8	5-1/8	9	2-3/4	**HK30870116**	Price

Machineable Cast Iron Adapter Plates for 3-Jaw & 4-Jaw Lathe Chucks

Threaded Adapters

- Semi-finished for plain back lathe chucks

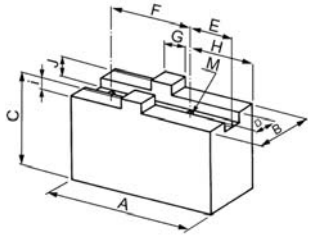


Thd. Size (in.)	Plate Dia. (A) (in.)	Plate Thk. (B) (in.)	Flange Depth (C) (in.)	Spindle Dia. (D) (in.)	Order No.	Price
1-10	4	5/8	3/4	2-5/8	**HK30871041**	Price
1-10	5	5/8	3/4	2-5/8	**HK30871051**	Price
1-1/2-8	4	5/8	3/4	2-5/8	**HK30871042**	Price
1-1/2-8	5	5/8	3/4	2-5/8	**HK30871052**	Price
1-1/2-8	6-1/2	11/16	21/32	3-5/32	**HK30871062**	Price
1-1/2-8	8	25/32	63/64	3-5/8	**HK30871082**	Price
2-1/4-8	6-1/2	11/16	21/32	3-5/32	**HK30871063**	Price
2-1/4-8	8	25/32	63/64	3-5/8	**HK30871083**	Price
2-1/4-8	10	29/32	1-3/32	4-1/8	**HK30871103**	Price
2-3/8-6	12-27/64	1-7/64	1-11/64	6-1/2	**HK30871124**	Price
2-3/8-6	8	25/32	63/64	3-5/8	**HK30871084**	Price
2-3/8-6	10	29/32	1-3/32	4-1/8	**HK30871104**	Price

Soft Top Jaws for Scroll / Independent Chucks

- Sold as each
- Made in Poland

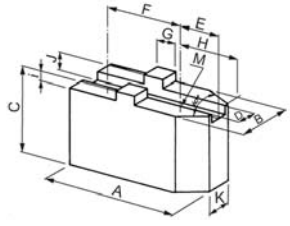




Chuck Size (in.)	No. of Jaws	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	I (in.)	J (in.)	K (in.)	M (in.)	Order No.	Price
5	3 or 4	2.52	.866	1.52	.313	0.591	1-1/4	.50	1	.126	.283	–	5/16 - 18	**HK313884305P**	Price
6	3 or 4	3.071	1	1.634	.313	0.839	1-1/2	.50	1.339	.126	.283	.118	3/8 - 16	**HK313884306P**	Price
8	3 or 4	3.543	1.063	1.713	.313	0.949	1-3/4	.50	1.575	.126	.283	.197	3/8 - 16	**HK313884308P**	Price
10	3 or 4	4.173	1.28	2.028	.500	1.083	2-1/8	.75	1.772	.126	.283	.315	1/2 - 13	**HK313884310P**	Price
12	3 or 4	4.724	1.457	2.165	.500	1.209	2-1/2	.75	2.087	.248	.283	.394	1/2 - 13	**HK313884312P**	Price
16	3 or 4	5.512	1.654	2.539	.500	1.344	3	.75	2.48	.248	.406	.512	5/8 - 11	**HK313884316P**	Price
20	3 or 4	5.512	1.654	2.933	.500	1.354	3	.75	2.48	.248	.406	.59	3/4 - 10	**HK313884320P**	Price
25	3 or 4	6.299	2.047	3.288	.500	1.354	3	.75	2.48	.248	.406	.669	3/4 - 10	**HK313884325P**	Price
36-49	N/A	6.299	2.047	3.288	.500	1.354	3	.75	2.48	.248	.406	-	3/4-10	**HK313884332P**	Price

Soft Top Jaws for Scroll Chucks

- Sold as each
- Soft Top Jaws for 6-Jaw Chucks
- Made in Poland



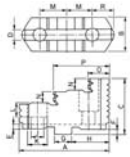


Chuck Size (in.)	No. of Jaws	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	I (in.)	J (in.)	K (in.)	M (in.)	Order No.	Price
6	6	3.071	1	1.634	.313	.839	1-1/2	.50	1.339	.126	.283	.118	3/8 - 16	**HK313884606P**	Price
8	6	3.543	1.063	1.713	.313	.949	1-3/4	.50	1.575	.126	.283	.197	3/8 - 16	**HK313884608P**	Price
10	6	4.173	1.28	2.028	.500	1.083	2-1/8	.75	1.772	.126	.283	.315	1/2 - 13	**HK313884610P**	Price
12	6	4.724	1.457	2.165	.500	1.209	2-1/2	.75	2.087	.248	.283	.394	1/2 - 13	**HK313884612P**	Price
16	6	5.512	1.654	2.539	.500	1.344	3	.75	2.48	.248	.406	.512	5/8 - 11	**HK313884616P**	Price
20	6	5.512	1.654	2.933	.500	1.354	3	.75	2.48	.248	.406	.59	3/4 - 10	**HK313884620P**	Price
25	6	6.299	2.047	3.288	.500	1.354	3	.75	2.48	.248	.406	.669	3/4 - 10	**HK313884625P**	Price

Hard Top Jaws for Scroll Chucks

New!

- American Standard Tongue and Groove Jaws
- Jaws are made of high quality alloy steel then hardened and ground
- Sold as Set Only
- Hardened to 50 HRc
- Made In Europe





No. of Jaws - 3

Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	K (in.)	M (in.)	N (in.)	O (in.)	P (in.)	Order No.	Price
5	2.205	.866	1.516	.313	0.157	0.126	.50	57/64	.350	.59	5/8	.315	.57	1.38	**HK313883305P**	Price
6	2.638	.984	1.634	.313	0.157	0.126	.50	1-1/8	.430	.71	3/4	.335	.71	1.63	**HK313883306P**	Price
8	3.174	1.063	1.713	.313	0.157	0.126	.50	1-3/8	.430	.71	7/8	.374	.85	2.01	**HK313883308P**	Price
10	3.74	1.28	2.023	.500	0.157	0.126	.75	1-9/16	.550	.78	1-1/16	.472	.96	2.32	**HK313883310P**	Price
12	4.331	1.457	2.165	.500	0.157	0.126	.75	1-7/8	.550	.78	1-1/4	.512	1.04	2.68	**HK313883312P**	Price
16	5	1.654	2.539	.500	0.157	0.248	.75	2-1/4	.710	1	1-1/2	.532	1.06	3.01	**HK313883316P**	Price
20	5	1.654	2.933	.500	0.157	0.248	.75	2-1/4	.870	1.3	1-1/2	.689	1.97	3.46	**HK313883320P**	Price
25	5	2.047	3.228	.500	0.157	0.248	.75	2-1/4	.870	1.3	1-1/2	.827	2.01	3.5	**HK313883325P**	Price

No. of Jaws - 4

Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	K (in.)	M (in.)	N (in.)	O (in.)	P (in.)	Order No.	Price
5	2.205	.866	1.516	.313	0.157	0.126	.50	57/64	.350	.59	5/8	.315	.57	1.38	**HK313883405P**	Price
6	2.638	.984	1.634	.313	0.157	0.126	.50	1-1/8	.430	.71	3/4	.335	.71	1.63	**HK313883406P**	Price
8	3.174	1.063	1.713	.313	0.157	0.126	.50	1-3/8	.430	.71	7/8	.374	.85	2.01	**HK313883408P**	Price
10	3.74	1.28	2.023	.500	0.157	0.126	.75	1-9/16	.550	.78	1-1/16	.472	.96	2.32	**HK313883410P**	Price
12	4.331	1.457	2.165	.500	0.157	0.126	.75	1-7/8	.550	.78	1-1/4	.512	1.04	2.68	**HK313883412P**	Price
16	5	1.654	2.539	.500	0.157	0.248	.75	2-1/4	.710	1	1-1/2	.532	1.06	3.01	**HK313883416P**	Price
20	5	1.654	2.933	.500	0.157	0.248	.75	2-1/4	.870	1.3	1-1/2	.689	1.97	3.46	**HK313883420P**	Price
25	5	2.047	3.228	.500	0.157	0.248	.75	2-1/4	.870	1.3	1-1/2	.827	2.01	3.5	**HK313883425P**	Price

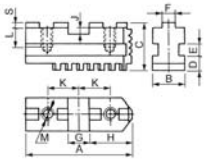
No. of Jaws - 6

Chuck Size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	K (in.)	M (in.)	N (in.)	O (in.)	P (in.)	Order No.	Price
5	2.205	.866	1.516	.313	0.157	0.126	.50	57/64	.350	.59	5/8	.315	.57	1.38	**HK313883605P**	Price
6	2.638	.984	1.634	.313	0.157	0.126	.50	1-1/8	.430	.71	3/4	.335	.71	1.63	**HK313883606P**	Price
8	3.174	1.063	1.713	.313	0.157	0.126	.50	1-3/8	.430	.71	7/8	.374	.85	2.01	**HK313883608P**	Price
10	3.74	1.28	2.023	.500	0.157	0.126	.75	1-9/16	.550	.78	1-1/16	.472	.96	2.32	**HK313883610P**	Price
12	4.331	1.457	2.165	.500	0.157	0.126	.75	1-7/8	.550	.78	1-1/4	.512	1.04	2.68	**HK313883612P**	Price
16	5	1.654	2.539	.500	0.157	0.248	.75	2-1/4	.710	1	1-1/2	.532	1.06	3.01	**HK313883616P**	Price
20	5	1.654	2.933	.500	0.157	0.248	.75	2-1/4	.870	1.3	1-1/2	.689	1.97	3.46	**HK313883620P**	Price
25	5	2.047	3.228	.500	0.157	0.248	.75	2-1/4	.870	1.3	1-1/2	.827	2.01	3.5	**HK313883625P**	Price

Hard Master Jaws for Scroll Chucks

New!

- American Standard Tongue & Groove Jaws
- Hardened to 50 HRc
- Sold in Sets Only
- Made in Poland







No. of Jaws - 2

Chuck Size (in.)	A (in.)	B (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	K (in.)	L (in.)	M (in.)	Order No.	Price
6	2.559	0.787	.315	.315	5/16	.50	1-1/8	.158	3/4	.551	3/8 - 16	**HK313885206P**	Price
8	3.110	0.984	.354	.394	5/16	.50	1-3/8	.158	7/8	.551	3/8 - 16	**HK313885208P**	Price
10	3.622	1.102	.433	.472	1/2	.75	1-9/16	.158	1-1/16	.630	1/2 - 13	**HK313885210P**	Price
12	4.331	1.26	.500	.472	1/2	.75	1-7/8	.158	1-1/4	.630	1/2 - 13	**HK313885212P**	Price
16	5.118	1.417	.591	.551	1/2	.75	2-1/4	.284	1-1/2	.866	5/8 - 11	**HK313885216P**	Price

No. of Jaws - 3

Chuck Size (in.)	A (in.)	B (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	K (in.)	L (in.)	M (in.)	Order No.	Price
5	2.126	0.787	.315	.315	5/16	.50	57/64	.158	5/8	.472	5/16 - 18	**HK313885305P**	Price
6	2.559	0.787	.315	.315	5/16	.50	1-1/8	.158	3/4	.551	3/8 - 16	**HK313885306P**	Price
8	3.110	0.984	.354	.394	5/16	.50	1-3/8	.158	7/8	.551	3/8 - 16	**HK313885308P**	Price
10	3.622	1.102	.433	.472	1/2	.75	1-9/16	.158	1-1/16	.630	1/2 - 13	**HK313885310P**	Price
12	4.331	1.26	.500	.472	1/2	.75	1-7/8	.158	1-1/4	.630	1/2 - 13	**HK313885312P**	Price
16	5.118	1.417	.591	.551	1/2	.75	2-1/4	.284	1-1/2	.866	5/8 - 11	**HK313885316P**	Price
20	6.535	1.575	.630	.551	1/2	.75	2-1/4	.284	1-1/2	1.26	3/4 - 10	**HK313885320P**	Price
25	8.268	1.968	.630	.551	1/2	.75	2-1/4	.284	1-1/2	1.26	3/4 - 10	**HK313885325P**	Price

No. of Jaws - 4

Chuck Size (in.)	A (in.)	B (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	K (in.)	L (in.)	M (in.)	Order No.	Price
5	2.126	0.787	.315	.315	5/16	.50	57/64	.158	5/8	.472	5/16 - 18	**HK313885405P**	Price
6	2.559	0.787	.315	.315	5/16	.50	1-1/8	.158	3/4	.551	3/8 - 16	**HK313885406P**	Price
8	3.110	0.984	.354	.394	5/16	.50	1-3/8	.158	7/8	.551	3/8 - 16	**HK313885408P**	Price
10	3.622	1.102	.433	.472	1/2	.75	1-9/16	.158	1-1/16	.630	1/2 - 13	**HK313885410P**	Price
12	4.331	1.26	.500	.472	1/2	.75	1-7/8	.158	1-1/4	.630	1/2 - 13	**HK313885412P**	Price
16	5.118	1.417	.591	.551	1/2	.75	2-1/4	.284	1-1/2	.866	5/8 - 11	**HK313885416P**	Price
20	6.535	1.575	.630	.551	1/2	.75	2-1/4	.284	1-1/2	1.26	3/4 - 10	**HK313885420P**	Price
25	8.268	1.968	.630	.551	1/2	.75	2-1/4	.284	1-1/2	1.26	3/4 - 10	**HK313885425P**	Price

No. of Jaws - 6

Chuck Size (in.)	A (in.)	B (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	K (in.)	L (in.)	M (in.)	Order No.	Price
5	2.126	0.787	.315	.315	5/16	.50	57/64	.158	5/8	.472	5/16 - 18	**HK313885605P**	Price
6	2.559	0.787	.315	.315	5/16	.50	1-1/8	.158	3/4	.551	3/8 - 16	**HK313885606P**	Price
8	3.110	0.984	.354	.394	5/16	.50	1-3/8	.158	7/8	.551	3/8 - 16	**HK313885608P**	Price
10	3.622	1.102	.433	.472	1/2	.75	1-9/16	.158	1-1/16	.630	1/2 - 13	**HK313885610P**	Price
12	4.331	1.26	.500	.472	1/2	.75	1-7/8	.158	1-1/4	.630	1/2 - 13	**HK313885612P**	Price
16	5.118	1.417	.591	.551	1/2	.75	2-1/4	.284	1-1/2	.866	5/8 - 11	**HK313885616P**	Price
20	6.535	1.575	.630	.551	1/2	.75	2-1/4	.284	1-1/2	1.26	3/4 - 10	**HK313885620P**	Price
25	8.268	1.968	.630	.551	1/2	.75	2-1/4	.284	1-1/2	1.26	3/4 - 10	**HK313885625P**	Price

Spare Parts for Bison Self-Centering Chucks

Scroll & Pinion for Standard Steel Body or Set -Tru Chucks





- For Bison Chucks only
- Sold by the piece

	Pinion (Standard)		Pinion (Steel)		Scroll (Standard)		Scroll (Steel)	
Chuck Size (in.)	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price
3	**HK30886303**	Price	**-**	-	**HK30887303**	Price	**-**	-
4	**HK30886304**	Price	**-**	-	**HK30887304**	Price	**-**	-
5	**HK30886305**	Price	**HK30886505**	Price	**HK30887305**	Price	**HK30887505**	Price
6	**HK30886306**	Price	**HK30886506**	Price	**HK30887306**	Price	**HK30887506**	Price
8	**HK30886308**	Price	**HK30886508**	Price	**HK30887308**	Price	**HK30887508**	Price
10	**HK30886310**	Price	**HK30886510**	Price	**HK30887310**	Price	**HK30887510**	Price
12	**HK30886312**	Price	**HK30886512**	Price	**HK30887312**	Price	**HK30887512**	Price
16	**HK30886316**	Price	**HK30886516**	Price	**HK30887316**	Price	**HK30887516**	Price
20	**HK30886320**	Price	**HK30886520**	Price	**HK30887320**	Price	**HK30887520**	Price
25	**HK30886325**	Price	**HK30886525**	Price	**HK30887325**	Price	**HK30887525**	Price
32	**HK30886332**	Price	**-**	-	**HK30887332**	Price	**-**	-

Spare Parts for Bison Self-Centering Chucks

Hard Master Jaws for 3-Jaw



- For Bison Chucks Only
- Sold in Sets of 3

Chuck Size (in.)	Order No.	Price
5	**HK30885305**	Price
6	**HK30885306**	Price
8	**HK30885308**	Price
10	**HK30885310**	Price
12	**HK30885312**	Price
16	**HK30885316**	Price
20	**HK30885320**	Price
25	**HK30885325**	Price

Spare Parts for Bison Self-Centering Chucks

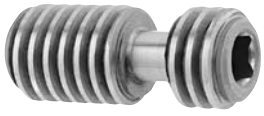
Hard Master Jaws for 6-Jaw



- For Bison Chucks Only
- Sold in Sets of 6

Chuck Size (in.)	Order No.	Price
5	**HK30885605**	Price
6	**HK30885606**	Price
8	**HK30885608**	Price
10	**HK30885610**	Price
12	**HK30885612**	Price
16	**HK30885616**	Price
20	**HK30885620**	Price
25	**HK30885625**	Price

Operating Screws

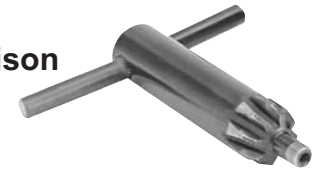


- For Bison Independent Chucks

Chuck Size (in.)	Order No.	Price
3	**HK30890603**	Price
5 - 6	**HK30890606**	Price
8	**HK30890608**	Price
10	**HK30890610**	Price
12	**HK30890612**	Price
16	**HK30890616**	Price
20	**HK30890620**	Price
25	**HK30890625**	Price
32	**HK30890632**	Price
36	**HK30890636**	Price
40	**HK30890640**	Price
49	**HK30890649**	Price

Spare Parts for Bison Self-Centering Chucks

Lathe Chuck Wrench



Sold by the piece

Chuck Size (in.)	Size of Square	Order No.	Price
2	-	**HK30889002**	Price
3 & 3-1/2	0.24	**HK30889003**	Price
4 - 5	0.35	**HK30889005**	Price
6 - 8	0.43	**HK30889008**	Price
10 - 12	0.55	**HK30889012**	Price
16	0.67	**HK30889016**	Price
20 - 25	0.75	**HK30889025**	Price
32	0.75	**HK30889032**	Price

Self-Ejecting Lathe Chuck Keys



- Made to fit all makes of lathe chucks
- Meets all safety specificaions

Size of Square (in.)	OAL (in.)	Handle Length (in.)	Order No.	Price
7/32	2-3/8	3-1/8	**HK40125**	Price
1/4	3-1/2	4	**HK40126**	Price
9/32	4-1/2	5	**HK40128**	Price
5/16	4-1/2	5	**HK40128A**	Price
3/8	3	6	**HK40129**	Price
3/8	5-1/2	6	**HK40129A**	Price
13/32	3-3/4	6	**HK40130**	Price
13/32	8-1/8	6	**HK40131**	Price
7/16	6	10	**HK40132A**	Price
15/32	8-1/16	10	**HK40132B**	Price
1/2	5-1/8	8	**HK40133**	Price
1/2	8-1/16	12	**HK40134**	Price
1/2	11	11-1/2	**HK40135**	Price
1/2	14-5/8	11-1/2	**HK40136**	Price
1/2	18-1/2	11-1/2	**HK40137**	Price
9/16	5-1/8	12	**HK40138**	Price
9/16	8-9/16	11-1/2	**HK40139**	Price
9/16	9-7/16	14	**HK40140**	Price
9/16	11/16	11-1/2	**HK40141**	Price
9/16	13-13/16	11-1/2	**HK40142**	Price
9/16	17	18	**HK40143**	Price
5/8	10-1/4	20	**HK40145**	Price
11/16	12	14	**HK40146**	Price
3/4	9-7/8	18	**HK40147**	Price

Chuck Grease



- 1/2 lbs. container
- For Bison Manual and Power Chucks

Order No.	Price
HK30799025	Price

Hazard Code: 58

H&R Mfg. and Supply, Inc. Square End Chuck Wrenches with Handle

- Handle lengths are designed for maximum twisting load
- WARRANTY IS VOID if handle extension (Cheater Pipe) is used or has been used with wrenches and/or any modification made to wrench



Type - Square Double End Lathe Chuck Wrench					
Square (in)	Handle Dia. (in.)	Handle Length (in.)	Head Length (in)	Order No.	Price
5/8	3/4	18	5	**HF70625500B**	Price
3/4	1	24	6	**HF70750600B**	Price
7/8	1	24	6-1/2	**HF70875650B**	Price
1	1	24	6-1/2	**HF701000650B**	Price

Type - Square End Lathe Chuck Wrench					
Square (in)	Handle Dia. (in.)	Handle Length (in.)	Head Length (in)	Order No.	Price
1/4	1/2	7	3-1/2	**HF70250350A**	Price
1/4	1/2	7	7	**HF70250700A**	Price
5/16	1/2	7	4	**HF70312400A**	Price
5/16	1/2	7	8	**HF70312800A**	Price
3/8	1/2	7	4	**HF70375400A**	Price
3/8	1/2	7	8	**HF70375800A**	Price
.400	1/2	10	4	**HF70400400A**	Price
.400	1/2	10	8	**HF70400800A**	Price
7/16	1/2	12	4	**HF70438400A**	Price
7/16	1/2	12	8	**HF70438800A**	Price
1/2	3/4	18	5	**HF70500500A**	Price
1/2	3/4	18	7-1/2	**HF70500750A**	Price
1/2	3/4	18	10	**HF705001000A**	Price
9/16	3/4	18	5	**HF70563500A**	Price
9/16	3/4	18	7-1/2	**HF70563750A**	Price
9/16	3/4	18	10	**HF705631000A**	Price

Hard Solid ID Jaws

- For Bison scroll chucks



For Chuck Size (in.)	Order No.	Price
8	**HK30881308**	Price
10	**HK30881310**	Price
12	**HK30881312**	Price
16	**HK30881316**	Price
20	**HK30881320**	Price
25	**HK30881325**	Price

Soft Solid Jaws

- Blank jaws for Bison scroll chucks



For Chuck Size (in.)	Order No.	Price
5	**HK30882405**	Price
6	**HK30882406**	Price
8	**HK30882408**	Price
10	**HK30882410**	Price
12	**HK30882312**	Price
12	**HK30882412**	Price
16	**HK30882316**	Price
16	**HK30882416**	Price
20	**HK30882420**	Price
25	**HK30882425**	Price

OD Hard Solid Jaws for 3 Jaw Chucks

- Sold in sets



For Chuck Size (in.)	Weight	Order No.	Price
5	1.2 lbs	**HK30880305**	Price
6	2.4 lbs	**HK30880306**	Price
8	3.2 lbs	**HK30880308**	Price
12	8.7 lbs	**HK30880312**	Price
16	15.65 lbs	**HK30880316**	Price
20	22.8 lbs	**HK30880320**	Price
25	41.8 lbs	**HK30880325**	Price

Bison Hard Solid Reversible Jaw Sets

- For Bison 4-Jaw Independent Chucks
- Priced each



Chuck Size (in.)	Order No.	Price
3	**HK308901030**	Price
5-6	**HK308901060**	Price
10	**HK308901100**	Price
12	**HK308901120**	Price

Chuck Size (in.)	Order No.	Price
16	**HK308901160**	Price
20	**HK308901200**	Price
25	**HK308901250**	Price
32	**HK308901320**	Price

Type - Square End Lathe Chuck Wrench					
Square (in)	Handle Dia. (in.)	Handle Length (in.)	Head Length (in)	Order No.	Price
5/8	3/4	18	5	**HF70625500A**	Price
5/8	3/4	18	7-1/2	**HF70625750A**	Price
5/8	3/4	18	10	**HF706251000A**	Price
11/16	3/4	18	5	**HF70688500A**	Price
11/16	3/4	18	7-1/2	**HF70688750A**	Price
11/16	3/4	18	10	**HF706881000A**	Price
3/4	1	24	5	**HF70750500A**	Price
3/4	1	24	7-1/2	**HF70750750A**	Price
3/4	1	24	10	**HF708501000A**	Price
7/8	1	24	5	**HF70875500A**	Price
7/8	1	24	7-1/2	**HF70875750A**	Price
1	1	24	5	**HF701000500A**	Price
1	1	24	7-1/2	**HF701000750A**	Price
1	1	24	10	**HF7010001000A**	Price

Type - Square Hex End Lathe Chuck Wrench					
Square (in)	Handle Dia. (in.)	Handle Length (in.)	Head Length (in)	Order No.	Price
1/2	3/4	18	10	**HF705001000C**	Price
9/16	3/4	18	10	**HF705631000C**	Price
5/8	3/4	18	5	**HF7062500C**	Price
3/4	1	24	10	**HF707501000C**	Price
7/8	1	24	5	**HF70875500C**	Price

Hard Top and Master Jaws

- For Bison Independent Chucks
- Priced each





	Hard Top Jaw		Master Jaw	
Chuck Size (in.)	Order No.	Price	Order No.	Price
8	**HK30890208**	Price	**HK30890308**	Price
10	**HK30890210**	Price	**HK30890310**	Price
12	**HK30890212**	Price	**HK30890312**	Price
16	**-**	-	**HK30890316**	Price
20	**HK30890220**	Price	**HK30890320**	Price
25	**HK30890225**	Price	**HK30890325**	Price
32	**-**	-	**HK30890332**	Price
36, 40, 49	**-**	-	**HK30890336**	Price

Soft Solid Jaw Sets

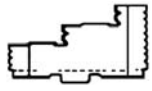
- 4 Jaws per set
- For Bison Combination Chucks



Chuck Size (in.)	Order No.	Price
8	**HK30891308**	Price
10	**HK30891310**	Price
12	**HK30891312**	Price
16	**HK30891316**	Price
20	**HK30891320**	Price
25	**HK30891325**	Price

Hard Top Jaws for 3 & 6-Jaw Chucks

American Standard Medium Duty



- 3-Jaw sold in sets of 3
- 6-Jaw sold in set of 6

	3-Jaw		6-Jaw	
Chuck Size (in.)	Order No.	Price	Order No.	Price
5	**HK30883305**	Price	**HK30883605**	Price
6	**HK30883306**	Price	**HK30883606**	Price
8	**HK30883308**	Price	**HK30883608**	Price
10	**HK30883310**	Price	**HK30883610**	Price
12	**HK30883312**	Price	**HK30883612**	Price
16	**HK30883316**	Price	**HK30883616**	Price
20	**HK30883320**	Price	**HK30883620**	Price
25	**-**	-	**HK30883625**	Price
25 and 32	**HK30883325**	Price	**-**	-

Large Through-Hole 3-Jaw Self-Centering Scroll Chucks

Light to Medium Duty

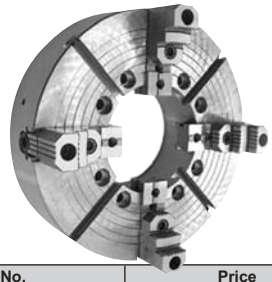


Features:
- Two-piece reversible American Standard Tongue and Groove Jaws
- Designed for pipe machining or pope welding cut-off operations
- Used on lathes, rotary tables and welding devices
- Jaws, scroll plate and three pinions carefully heat treated and ground
- Balanced scroll

Standard Accessories:
- 1 Set of master jaws
- 1 Wrench
- 1 Set of mounting bolts

Chuck Size (in.)	Hole Size (in.)	Max. RPM	Weight	Order No.	Price
16	8.660	500	127 lbs	**HK308191600**	Price
20	12.600	350	167 lbs	**HK308192000**	Price
26	15.980	250	285 lbs	**HK308192600**	Price

Extra Heavy Duty 4-Jaw Independent Chucks



Features:
- 1 Set of two-piece reversible jaws
- 1 Wrench
- 1 Set of mounting bolts
- 2 Allen keys
- Eye bolts

Chuck Size (in.)	Mount	Hole Size (in.)	Weight	Order No.	Price
20	A15	8.000	414 lbs	**HK308592043**	Price
25	A15	10.500	684 lbs	**HK308592543**	Price
25	A20	12.550	662 lbs	**HK308592555**	Price
28	A15	10.500	915 lbs	**HK308592845**	Price
28	A20	12.550	873 lbs	**HK308592853**	Price
28	D11	7.500	993 lbs	**HK308596839**	Price

SAMCHULLY MACHINERY CO. LTD. 3-Jaw Quick Change Jaw Power Chucks



- Change all 3 Jaws in less than One Minute
- Built In Safetly Mechanism prevents Jaw Movement
- High Alloy Steel Material
- High T.I.R. Accuracy

Model No.	Chuck Dia. (in.)	Jaw Stroke (in.)	Plunger Stroke (in.)	Max. Gripping Force (lbs)	Max. Speed (RPM)	No. of Jaws	Net Weight (lbs)	Order No.	Price
QJC206	6.496	0.449	.449	10116	6000	3	29	**SC60QJC206**	Price
QJC206A5	6.496	0.449	.449	10116	6000	3	33	**SC60QJC206A5**	Price
QJC208	8.465	0.567	.567	22480	5500	3	53	**SC60QJC208**	Price
QJC208A6	8.465	0.567	.567	22480	5500	3	56	**SC60QJC208A6**	Price
QJC210	10.236	0.63	.630	25852	4000	3	93	**SC60QJC210**	Price
QJC210A6	10.236	0.63	.630	25852	4000	3	108	**SC60QJC210A6**	Price
QJC210A8	10.236	0.63	.630	25852	4000	3	105	**SC60QJC210A8**	Price
QJC212	12.402	0.63	.630	35968	3600	3	146	**SC60QJC212**	Price
QJC212A6	12.402	0.63	.630	35968	3600	3	172	**SC60QJC212A6**	Price
QJC212A8	12.402	0.63	.630	35968	3600	3	165	**SC60QJC212A8**	Price
QJC215	15.748	0.669	.669	53952	3500	3	240	**SC60QJC215**	Price
QJC215A11	15.748	0.669	.669	53952	3500	3	256	**SC60QJC215A11**	Price
QJC215A8	15.748	0.669	.669	53952	3500	3	271	**SC60QJC215A8**	Price
QJC220	19.685	0.787	.787	53952	2200	3	496	**SC60QJC220**	Price
QJC220A11	19.685	0.787	.787	53952	2200	3	534	**SC60QJC220A11**	Price
QJC220A15	19.685	0.787	.787	53952	2200	3	553	**SC60QJC220A15**	Price

SAMCHULLY MACHINERY CO., LTD. 3-Jaw Hydraulic Chuck

- Standard high-speed 3-jaw wedge-style open-center power chuck
- Direct replacement for Kitagawa Model B-208



Model No.	Chuck Dia. (in.)	Grip Range Min. (in.)	Grip Range Max. (in.)	Jaw Stroke Dia. (in.)	Plunger Stroke (in.)	Thru Hole Dia. (in.)	Max. Gripping Force (lbs)	Max. RPM	Max. Hydraulic Pressure	Order No.	Price
HS05	5.315	0.472	5.315	0.213	.394	1.299	8092	7000	3.43(35.0)	**SC60HS05**	Price
HS05	5.315	0.472	5.315	0.213	.394	1.299	8092	7000	3.43(35.0)	**SC60HS05**	Price
HS06	6.654	0.591	6.654	0.217	.472	1.811	12813	6000	2.8(28.6)	**SC60HS06**	Price
HS06	6.654	0.591	6.654	0.217	.472	1.811	12813	6000	2.8(28.6)	**SC60HS06**	Price
HS06A5	6.654	0.591	6.654	0.217	.472	1.811	12813	6000	-	**SC60HS06A5**	Price
HS06A5	6.654	0.591	6.654	0.217	.472	1.811	12813	6000	-	**SC60HS06A5**	Price
HS08	8.268	0.512	8.268	0.291	.630	2.047	19332	5000	2.65(27)	**SC60HS08**	Price
HS08	8.268	0.512	8.268	0.291	.630	2.047	19332	5000	2.65(27)	**SC60HS08**	Price
HS08A6	8.268	0.512	8.268	0.291	.630	2.047	19332	5000	-	**SC60HS08A6**	Price
HS08A6	8.268	0.512	8.268	0.291	.630	2.047	19332	5000	-	**SC60HS08A6**	Price
HS10	10	1.22	10	0.346	.748	3.031	24952	4200	2.7(27.5)	**SC60HS10**	Price
HS10	10	1.22	10	0.346	.748	3.031	24952	4200	2.7(27.5)	**SC60HS10**	Price
HS10A6	10	1.22	10	0.346	.748	3.031	24952	4200	-	**SC60HS10A6**	Price
HS10A6	10	1.22	10	0.346	.748	3.031	24952	4200	-	**SC60HS10A6**	Price
HS10A8	10	1.22	10	0.346	.748	3.031	24952	4200	-	**SC60HS10A8**	Price
HS10A8	10	1.22	10	0.346	.748	3.031	24952	4200	-	**SC60HS10A8**	Price
HS12	11.969	1.339	11.969	0.417	.906	3.583	32371	3300	2.7(27.5)	**SC60HS12**	Price
HS12	11.969	1.339	11.969	0.417	.906	3.583	32371	3300	2.7(27.5)	**SC60HS12**	Price
HS12A6	11.969	1.339	11.969	0.417	.906	3.583	32371	3300	-	**SC60HS12A6**	Price
HS12A6	11.969	1.339	11.969	0.417	.906	3.583	32371	3300	-	**SC60HS12A6**	Price
HS12A8	11.969	1.339	11.969	0.417	.906	3.583	32371	3300	-	**SC60HS12A8**	Price
HS12A8	11.969	1.339	11.969	0.417	.906	3.583	32371	3300	-	**SC60HS12A8**	Price

SAMCHULLY MACHINERY CO., LTD. 3-Jaw Wedge Style Power Chucks

- Open Center Design
- Replaces Kitigawa B-16
- A11 Spindle Adapter



Model No.	Chuck Dia. (in.)	Grip Range Min. (in.)	Thru Hole Dia. (in.)	Grip Range Max. (in.)	Jaw Stroke Dia. (in.)	Plunger Stroke (in.)	Max. Gripping Force (lbs)	Max. RPM	Order No.	Price
HCH15	15	1.181	4.626	15	0.417	.906	40464	2500	**SC60HCH15**	Price
HCH15A8	15	1.181	4.626	15	0.417	.906	40464	2500	**SC60HCH15A8**	Price
HCH15A11	15	1.181	4.626	15	0.417	.906	40464	2500	**SC60HCH15A11**	Price
HCH18	17.717	1.181	4.626	17.717	0.417	.906	40464	2000	**SC60HCH18**	Price
HCH18A11	17.717	1.181	4.626	17.717	0.417	.906	40464	2000	**SC60HCH18A11**	Price

SAMCHULLY Hard & Soft Jaws for HS & HCH Power Chucks



Type - Hard Jaws		
Description	**Order No.**	**Price**
For HCH-15 B-15 Power Chuck	**SC60HB15A1**	Price
For HCH-21 B-21 Power Chuck	**SC60HB18B2**	Price
For HS-06 B-206 Power Chuck	**SC60HB06A1**	Price
For HS-08 B-208 Power Chuck	**SC60HB08A1**	Price
For HS-10 B-210 Power Chuck	**SC60HB10A1**	Price
For HS-12 B-212 Power Chuck	**SC60HB12N1**	Price

Type - Soft Jaws		
Description	**Order No.**	**Price**
For HCH-15 B-15 Power Chuck	**SC60SB15C1**	Price
For HCH-21 B-21 Power Chuck	**SC60SB18A2**	Price
For HS-12 B-212 Power Chuck	**SC60SB12N1**	Price

TOOLMEX Industrial Solutions 3-Jaw Closed Center Direct Mount Power Chucks



- Supplied with spindle mounting plate, set of soft top jaws, set of t-nuts, wrenches for chuck installation and operation
- Low cost direct replacement for major OE brands
- High performance and great value
- Use existing top jaws 1.5mm x 60° serrations
- Hardened and ground critical surfaces for long life and high accuracy
- 1 Year Warranty

Chuck Dia. (in.)	Jaw Stroke (in.)	Plunger Stroke (in.)	Max. Gripping Force (lbs)	Max. Speed (RPM)	Net Weight (lbs)	Spindle Nose	Gripping Range Min. (in.)	Gripping Range Max. (in.)	Chuck Height	No. of Jaws	Order No.	Price
6	.362	.787	14167	6000	200	A2-5	.748	6.490	3.300	3	**HK3137610605**	Price
8	.346	.827	17990	4800	200	A2-6	.906	8.268	3.810	3	**HK3137610806**	Price
10	.346	.984	25861	4100	200	A2-8	.944	10.000	4.010	3	**HK3137611008**	Price
12	.413	1.180	35306	3400	200	A2-8	1.020	11.968	4.640	3	**HK3137611208**	Price
15	.732	1.378	32797	2100	250	A2-11	2.360	15.000	4.920	3	**HK3137611511**	Price
18	.732	1.378	32797	1700	350	A2-11	2.360	17.990	4.920	3	**HK3137611811**	Price
21	.732	1.378	43283	1500	500	A2-15	4.331	20.866	5.510	3	**HK3137612115**	Price
24	.732	1.378	43283	1200	700	A2-15	4.331	24.000	5.510	3	**HK3137612415**	Price

F.O.B. Schaumburg, IL

TOOLMEX Industrial Solutions 3-Jaw Direct Mount Power Chuck

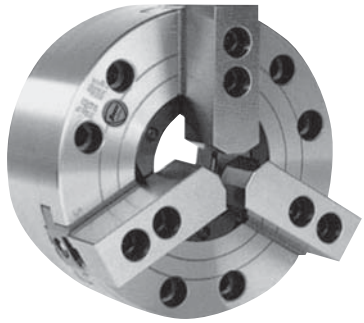


- Supplied with spindle mounting plate, Semi-finished draw nut, draw nut wrench, set of soft top jaws, set of t-nuts, wrenches for chuck installation and operation.
- Low cost direct replacement for major OE brands
- High performance and great value
- Use existing top jaws 1.5mm x 60° serrations
- Hardened and ground critical surfaces for long life and high accuracy
- Large thru hole
- 1 Year Warranty

Chuck Dia. (in.)	Through Hole Dia. (in.)	Jaw Stroke Dia. (in.)	Plunger Stroke	Max. Gripping Force (lbs)	Max. Speed (RPM)	Net Weight (lbs)	Spindle Nose	Gripping Range Min. (in.)	Gripping Range Max. (in.)	Chuck Height (in.)	No. of Jaws	Order No.	Price
6	1.811	.216	.512	14167	6000	33.8	A2-5	.512	6.654	3.543	3	**HK3137810650**	Price
8	2.047	.299	.709	21159	5000	58.1	A2-6	.433	8.268	4.055	3	**HK3137810860**	Price
10	3.032	.335	.787	28088	4200	90	A2-6	1.220	10.000	4.449	3	**HK3137811060**	Price
10	3.032	.335	.787	28088	4200	95	A2-8	1.220	10.000	4.449	3	**HK3137811080**	Price
12	3.583	.402	.945	33071	3300	149	A2-8	1.339	11.968	5.000	3	**HK3137811280**	Price
15	4.646	.417	.906	40467	2500	296	A2-11	1.181	15.000	5.866	3	**HK3137811511**	Price
18	4.646	.417	.906	40467	2000	400	A2-11	1.181	17.716	5.866	3	**HK3137811811**	Price
21	5.512	.417	.906	52606	1700	650	A2-15	3.425	20.866	6.339	3	**HK3137812115**	Price
24	6.496	.409	.906	52606	1400	800	A2-15	4.331	24.016	6.693	3	**HK3137812415**	Price

F.O.B. Schaumburg, IL

TOOLMEX Industrial Solutions 3-Jaw Extra Large Hole Direct Mount Power Chuck



- Supplied with spindle mounting plate, semi-finished draw nut, draw nut wrench, set of soft top jaws, set of t-nuts, wrenches for chuck installation and operation
- Low cost direct replacement for major OE brands
- High performance and great value
- Use existing top jaws 1.5mm x 60° serrations
- Hardened and ground critical surfaces for long life and high accuracy
- Large thru hole
- 1 Year Warranty

Chuck Dia. (in.)	Through Hole Dia. (in.)	Jaw Stroke Dia. (in.)	Plunger Stroke (in.)	Max. Gripping Force (lbs)	Max. Speed (RPM)	Net Weight (lbs)	Spindle Nose	Gripping Range Min. (in.)	Gripping Range Max. (in.)	Chuck Height (in.)	No. of Jaws	Order No.	Price
8	2.590	.299	.709	21159	5000	61.7	A2-6	.433	8.268	4.370	3	**HK3137710860**	Price
10	3.220	.334	.787	26986	4200	85	A2-6	1.220	10.000	4.449	3	**HK3137711060**	Price
10	3.220	.334	.787	26986	4200	98	A2-8	1.220	10.000	4.449	3	**HK3137711080**	Price

F.O.B. Schaumburg, IL

Machinery



Abrasive Cut-Off Saws K41-K43
Acu-Rite Readout Boxes K117
Air Compressors K85-K92
Arbor Presses K77-K79
Automatic Bandsaws K36
Bandsaws K22-K39
Belt Sanders K71
Belt & Discs Sanders K72-K73
Belt Grinders K73-K76
Bench Grinders K58-K62
Bench Grinder Stands K65
Bevel Machines. K69
Buffers K62-K64
Cold Saws K39-K40
CNC Bandsaws K39
Deburring Machines K92-K94
Disc Sanders K70, K77
Digital Readouts K111-K16
Drill Grinders & Sharpeners K66-K69
Drill Presses K16-K21
Drill Press Guards K16
Double Column Saws K36, K39
Double Miter Bandsaw K25, K31, K33
EVS Drill Press K20
EVS Lathes K15-K16
EVS Mills K5-K7
Fabricating K44-K55
Geared Head Drill Press K20
Glass Scales K116-K117
Gravity Feed Bandsaw K22
Horizontal Bandsaw K25-K37
Horizontal Milling Machine K5
Hydraulic Presses K79-K84
Interface Cables K117
Iron Workers K52-K55
Knife Sharpeners K66
Lathes K8-K16
Leveling Mounts K101-K102
Machine Covers K102
Mill/Drill Machines K2
Milling Machine Accessories K2, K3, K103-K117
Milling Machines K3-K7
Miter Bandsaws K25-K26, K31-K37
Phase Converters K109-K110
Plate Beveler K69
Polishing Machines K92-K94
Porta Power K84
Power Feeds & Power Drawbars K2, K106-K109
R8 Right Angle Attachment K105
Radial Drilling Machines K21
Radius Roller K84
Roller Tables K101
Sand Blasting K94-K98
Sanders K70-K77
Semi Auto Bandsaw K34-K35
Single Stage Air Compressors K85-K88
Step Pulley Drill Press K16-K18
Step Pulley Mills K3
Stock Stands K99-K100
Surface Grinders K56-K58
Tilt Frame Saws K37-K38
Tool Sharpeners K66
Two Stage Air Compressors K89-K92
Variable Speed Drill Press K19
Vertical Bandsaw K22-K25
Voltage Stabilizer K110
Wood/Metal Bandsaw K22

PRM Bench Milling & Drilling Machines

Used in many prototype shops, labs, maintenance shops . . . even home use.

- Versatile and multi-purpose machine can be used for drilling, milling and even tapping
- Has features of many larger mills, sturdy construction, headstock swings 360° and moves up and down on column to meet various job requirements, R8 taper spindle, bronze adjustable leadscrew nuts, large cast tables with T-slots, heavy duty tapered roller bearings to support the spindle, hinged belt cover allows speedy belt changes, satin finish easy to read dials, positive easy to read depth gauge
- RF25, RF311 & RF313 are step pulley heads
- RF40 is gear head
- RF313PFS equipped with powerfeed on the spindle
- 1 Year parts warranty

Standard Equipment:

- Manual reversing switch, tilting vise, shell end mill cutter, cutter arbor, 1/2" drill chuck, drill chuck arbor, service tools and instructions

Optional Accessories:

- Steel cabinet stand (shown below)
- Powerfeed for table (shown below)


RF311


RF25


RF40

Model No.	Table Size (in.)	X-Axis (Table Travel) (in.)	Y-Axis (Saddle Travel) (in.)	Quill Travel (in.)	Spindle Speeds (RPM)	Motor	Weight	Order No.	Price
RF25	7-1/2 x 23	14.5	6.25	4	(12) 110-2580	1HP, 110V/220V, 1PH Prewired 110V	440 lbs	**RL80RF25**	1943.00
RF311	8 x 28	19.75	7	5	(12) 140-2500	2HP, 110V/220V, 1PH Prewired 110V	600 lbs	**RL80RF311**	2847.50
RF313	8 x 28	19.75	7	5	(12) 140-2500	2HP, 220V/440V, 3PH Prewired 220V	600 lbs	**RL80RF313**	2847.50
RF313PFS	8 x 28	19.75	7	5	(12) 140-2500	2HP, 220V/440V, 3PH Prewired 220V	600 lbs	**RL80RF313PFS**	3075.30
RF40	8 x 28	16	9	5	(6) 60-1500	1HP, 110V/220V, 1PH Prewired 110V	665 lbs	**RL80RF40**	3741.28

F.O.B. Warren, MI • Ships by truck • Above Mill-Drill machines are pictured with the optional cabinet steel stand. • NOT CSA APPROVED

PRM Steel Cabinet Stand

Fits all Table Top Mills Shown

- Size: 23-1/4" wide x 31-1/4" deep x 28-1/2" tall



Weight	Order No.	Price
68 lbs	**RL80RFS**	314.90

PRM Mill/Drill Powerfeed

- For bench milling and drilling style machines
- 0-270 RPM
- 2.8:1 Drive gear rate
- 560 in/lb Maximum torque



Weight	Order No.	Price
15 lbs	**RL80RF30BPFT**	574.86

PALMGREN INC Geared Head Milling Machines



- Variable speed gear head milling machine delivers precision, power and versatility to handle a wide range of small workpiece metalworking applications
- The all gear drive transmission delivers full power at any speed
- Equipped with a high performance brushless DC motor permanent current control and infinitely variable speed
- Rigid box column with hardened and ground hand scraped dovetail ways
- All gear drive transmission with 2 step gear box
- The milling head can be tilted right or left up to 90 degrees
- Cross slide table is precision ground with t-slots, adjustable limit stops, scale and two metal adjusting hand wheels
- Interlocking spindle safety guard
- Draw bar
- Safety electrical system with emergency stop button and 24 volts at all the switches
- Two Stage Gearing Motor
- Swing Away Safety Shield with Micro Switch
- Depth stop
- 3 Year Warranty

New!

Model No.	Drill Cap. (in.)	End Mill Cap. (in.)	Face Mill Cap. (in.)	Spindle Speeds	Spindle Taper	Motor	Weight	Order No.	Price
BF16V	5/8	13/16	2-1/2	100-3000	2MT	5/8HP, 240V, 1PH	172 lbs	**JB559680159**	2167.25
BF20	5/8	3/4	2-1/2	90-3000	2MT	1.2HP, 115V, 1PH	227 lbs	**JB559680164**	3527.75
BF46	1-3/16	1-1/4	3	115-3000	R-8	3HP, 230V, 1PH	1059 lbs	**JB559680166**	11027.66

F.O.B. Chicago, IL • Ships by Truck

PALMGREN INC Stands for Mill Drills



- Heavy duty steel floor stand made of heavy gauge steel for added stability

New!

Model No.	For Use With	Weight	Order No.	Price
70107	Floor Stand for BF16 & BF20 Mills	-	**JB559670107**	676.83
70108	Floor Stand for 9680159 Mill	-	**JB559670108**	2051.00
70109	Floor Stand for 9682122	200 lbs	**JB559670109**	904.50

PRM 9" x 49" Table Step Pulley Knee Type Milling Machine



- Step pulley machines are the answer for maintenance shops, job shops, repair shops, light production and school needs
- A quality mill that meets or exceeds the industries standards, that is within even the strictest of budgets
- 1 Year Warranty Parts

Standard Equipment:

- Draw bar
- One shot lubrication pump
- Rubber splash guard
- Tool box, tools and manual

Table Size (in.)	X-Axis (Table Travel) (in.)	Y-Axis (Saddle Travel) (in.)	Spindle Taper	Spindle Speeds	Motor	Weight	Order No.	Price
9 x 49	33	13-1/4	R-8	(16 STEP) 60-4200 RPM	3HP, 220V, 3PH	2200 lbs	**PR70949SP**	6432.00

F.O.B. Warren, MI • Ships by truck • Not CSA approved

Bridgeport by HARDINGE 9" x 49" Table Variable Speed Vertical Milling Machine

- Series I Standard Mill is the original milling, drilling and boring machine
- Series I Knee Mill is the most popular mill ever made with over 370,000 machines built over the past 70-plus years

Features:

- One-shot lubrication system
- Chrome-plated ways and gibs
- Color machine tool gray
- Class 7 precision spindle & anti-friction bearings
- Built-in fine powered quill downfeed
- Rapid adjusting-fine position micrometer (educated nut)
- OSHA approved standard cutter guard
- 1 Year Warranty Parts



Table Size (in.)	X-Axis (Table Travel) (in.)	Y-Axis (Saddle Travel) (in.)	Z-Axis (Knee Travel) (in.)	Spindle Taper	Spindle Speeds (RPM)	Motor	Weight	Order No.	Price
9 x 49	37.5	12	16	R-8	60-4300	3HP, 230V, 3PH	1950 lbs	**RL30C3061101C**	21741.50
9 x 49	37.5	12	16	R-8	60-4300	3HP, 460V, 3PH	1950 lbs	**RL30C30611014**	21741.50

F.O.B. Warren, MI • Ships by truck • NOT CSA APPROVED

PRM 9" x 50" Table Variable Speed Knee Type Milling Machine

Features:

- Meehanite casting
- Hard chromed ways (X & Y Axis)
- Spindle unit made from one piece alloy steel, supported by two precision angular contact and one ball bearing to ensure rigidity
- Spindle inner taper hardened and precision ground
- Dynamically balanced pulleys and precision bearings
- Spindle back gear running in grease packed housing to ensure fatigue strength and low noise
- Chrome coated and mirror ground finished quill
- Rigid head tilting system greatly increases the stability and rigidity when vertical head tilted at all angles, front and back. 6 T-bolts to lock knuckle to ram instead of 3
- Unique double nuts and backlash adjusting design, contact face enlarged ensuring accuracy over time and easy backlash adjustment.
- One shot lube
- Front and rear way covers
- Tool kit
- 1 Year Warranty Parts



Model No.	Table Size (in.)	X-Axis (Table Travel) (in.)	Y-Axis (Saddle Travel) (in.)	Z-Axis (Knee Travel) (in.)	Spindle Taper	Spindle Speeds RPM	Motor	Weight	Order No.	Price
950	9 x 50	38	12	16	R-8	60-4500	3HP, 220V/440V, 3PH	2300 lbs	**PR70950**	9246.00

F.O.B. Warren, MI • Ships by truck • Not CSA approved

PALMGREN INC 9.843 x 43.3" Horizontal Milling Machine

- Universal horizontal milling machine features a rigid knee and column construction and has the ability to do either horizontal or vertical milling
- Equipped with a power table feed, vertical spindle attachment and a wide range of spindle speeds
- Internally ribbed, box column
- Precision ground and t-slotted table
- Flame hardened to RC 50-54, precision ground and hand scraped ways
- One-shot lubrication system delivers metered oil to slideways and leadscrews
- Heavy duty 3 v-belt drive system delivers full power to the drive gear box and spindle
- The speed gear box is make up of hardened and ground gears running in an oil bath
- The table can be positioned by means of manual hand wheels or it is equipped with a gear driven power feed on the “X” axis / longitudinal travel
- Three speed settings plus rapid advance movement
- “Z” axis has motorized rapid elevating assist
- A vertical spindle head attachment can transform the horizontal machine to a vertical machine quickly
- The head can be disassembled and mounted in position easily via the machine mounted vertical head bracket
- Flood coolant system and chip tray

New!



Model No.	Table Size (in.)	X-Axis (Table Travel) (in.)	Y-Axis (Saddle Travel) (in.)	Z-Axis (Knee Travel) (in.)	Horizontal Spindle	Spindle Nose	Weight	Order No.	Price
9680163	43.307 x 9.843	27.5	9.84	17.32	3HP	CAT 40	2200 lbs	**JB559680163**	27717.90

ACER 9" x 49" Table Electronic Variable Speed Vertical Milling Machines

Features:

- 3 HP Spindle Vector A/C Inverter Drive Motor
- Toshiba A/C Frequency Inverter Control
- Electro/mechanical Brake
- Precision Ball Bearing Spindle
- Chrome Plated & Precision Ground Spindle Quill
- Table surface and all ways on machine are hardened and ground to HRC-52 hardness
- Turcite B lining on saddle ways make X & Y movement smooth and easy
- Rigid Meehanite GA-50 Casting
- Protective automotive paint ensures life long appearance
- 1 Year Warranty Parts

Standard Equipment:

- Reversing Switch
- One-Shot Lubrication System
- Way Covers
- Overload Protection
- Service Tools
- Instruction and Parts Manual
- 220V Unit can operate on single phase power



Model No.	Table Size (in.)	X-Axis (Table Travel) (in.)	Y-Axis (Saddle Travel) (in.)	Z-Axis (Knee Travel) (in.)	Spindle Taper	Spindle Speeds (RPM)	Motor	Weight	Order No.	Price
3EVSII49	9 x 49	34	12	16	R-8	EVS-AC Inverter 60 to 4500	3HP, 220V, 3PH	2450 lbs	**RA603EVSII49**	11993.00
3EVSII494	9 x 49	34	12	16	R-8	EVS-AC Inverter 60 to 4500	3HP, 440V, 3PH	2450 lbs	**RA603EVSII494**	12395.00

F.O.B. Orange, CA • Ships by truck

10" x 50" Table Electronic Variable Speed Milling Machine



Features:

- Yaskawa compact AC inverter drive
- Inverter Duty, High Energy - High Efficiency Motors for lower utility costs, save up to 35%
- Centrally located controls for ease of operation
- Immediate response speed control (0-full speed in 4 sec.)
- Full range RPM selection.
- Electronic inverter controlled braking for reduced set-up time
- “Turcite-B” inserted guideways for extended machine life
- Complete electrics with low voltage controls for safer machine operation
- Fan cooled electrical enclosure
- Heavy “Meehanite” cast iron construction for excellent damping
- Huge hardened steel box ways on knee
- Built in coolant system
- One shot lubrication
- 1 Year Warranty on Parts & Labor, 6 Months on all Electrical

Model No.	Table Size (in.)	X-Axis (Table Travel) (in.)	Y-Axis (Saddle Travel) (in.)	Z-Axis (Knee Travel) (in.)	Spindle Taper	Spindle Speeds (RPM)	Motor	Weight	Order No.	Price
EVS350B	10 x 50	36	16	18.5	R-8	Inf. Variable 0-4300	3HP, 220V, 3PH	2675 lbs	**PY80EVS350B**	16743.30

F.O.B. Oklahoma City, OK • Ships by truck

10" x 54" Table Boxway Electronic Variable Speed Milling Machines



Features:

- No variable speed belts means no slippage
- Vector type AC frequency inverter drive
- Square Boxways
- Electro/mechanical brake stops spindle immediately
- Table parallelism tolerance guaranteed within 0.0008″ every 20″
- Knee and ram movement guaranteed within 0.0008″ every 12″
- Class 7 precision spingle bearings - 3 pieces - run-out guaranteed to within 0.00015″
- Table surface and all ways on machine are hardened and ground to HRC-52 hardness
- Turcite B lining on saddle ways make X & Y movement smooth and easy
- Chrome plated X & Y leadscrews (HRC 60°) features a double nut backlash compensator
- True Meehanite casting
- Protective automotive paint
- Full one year warranty on all parts and service
- 220V Unit can operate on single phase power

Standard Equipment:

- Reversing Switch
- One-Shot Lubrication System
- Way Covers
- Overload Protection
- Service Tools
- Instruction and Parts Manual

Model No.	Table Size (in.)	X-Axis (Table Travel) (in.)	Y-Axis (Saddle Travel) (in.)	Z-Axis (Knee Travel) (in.)	Spindle Taper	Spindle Speeds (RPM)	Motor	Weight	Order No.	Price
3VKH54	10 x 54	36.5	17	19	R-8	EVS-AC Inverter 60 to 4500	3HP, 220V, 3PH	3300 lbs	**RA603VKH54**	15209.00
3VKH544	10 x 54	36.5	17	19	R-8	EVS-AC Inverter 60 to 4500	3HP, 440V, 3PH	3300 lbs	**RA603VKH544**	15745.00

F.O.B. Orange, CA • Ships by truck

11" x 52" Table Electronic Variable Speed Milling Machine

Features:
- Inverter Duty, High Energy - High Efficiency Motors for lower utility costs, save up to 35%
- Centrally located controls for ease of operation
- Immediate response speed control (0-full speed in 4 sec.)
- Full range RPM selection.
- Electronic inverter controlled braking for reduced set-up time
- “Turcite-B” inserted guideways for extended machine life
- Complete electrics with low voltage controls for safer machine operation
- Yaskawa compact AC inverter drive
- Fan cooled electrical enclosure
- Heavy “Meehanite” cast iron construction for excellent damping
- Huge box ways on knee
- 1 Year Warranty Parts and Labor, 6 Months on all Electrical

Standard Equipment Includes:
- Built in coolant system
- Power feed on knee
- One shot lubrication
- Power drawbar
- Worklight



Model No.	Table Size (in.)	X-Axis (Table Travel) (in.)	Y-Axis (Saddle Travel) (in.)	Z-Axis (Knee Travel) (in.)	Spindle Taper	Spindle Speeds (RPM)	Motor	Weight	Order No.	Price
EVS550B	11 x 52	32	16	22	NST #40	Inf. Variable 0-3650	5HP, 220V, 3PH	3740 lbs	**PY80EVS550B**	23443.30

F.O.B. Oklahoma City, OK • Ships by truck

12" x 60" Table Electronic Variable Speed Vertical Milling Machines

Features:
- Inverter Control Variable Speeds: Toshiba
- Precision Grinding Head Housing; Electric Brake
- Precision Spindle with ABEC-7 Bearing
- Chrome Plated & Precision Ground Spindle Quill
- Precision X, Y Axis & Knee by Hardened & Ground Square Ways to HRC 52
- Rigid Meehanite GA-50 Casting
- 220V Unit can operate on single phase power
- 1 Year Warranty Parts

Standard Equipment:
- Coolant System
- Halogen Light
- X & Y Axis with Power Feeds
- Motorized Knee for rapid up and down
- Automatic Lubrication System
- Tool Box with Tools
- Chip Pan
- Safety Handwheels with Handles
- Electric Cabinet and Ergonomic Control Panel



6VK

Model No.	Table Size (in.)	X-Axis (Table Travel) (in.)	Y-Axis (Saddle Travel) (in.)	Z-Axis (Knee Travel) (in.)	Spindle Taper	Spindle Speeds (RPM)	Motor	Weight	Order No.	Price
6VK	12 x 60	47-1/4	15	19-3/4	CAT40	EVS-AC Inverter 50 to 3750	5HP, 220V, 3PH	4960 lbs	**RA606VK**	25393.00
6VK440	12 x 60	47-1/4	15	19-3/4	CAT40	EVS-AC Inverter 50 to 3750	5HP, 440V, 3PH	4960 lbs	**RA606VK440**	25929.00

F.O.B. Orange, CA • Ships by truck

Bench Lathes



- Bench model engine lathes deliver the precision, power and versatility to handle a wide range of turning operations normally found in much larger machines
- Heavy cast construction, smooth power transmission with helical gears, hardened and ground ways all designed to give you years of trouble free, precise turning
- Built and inspected to DIN 8606 toolmakers precision lathe standard
- 1 Year Warranty Parts
- 7" x 12" Machine shown

Standard Equipment:

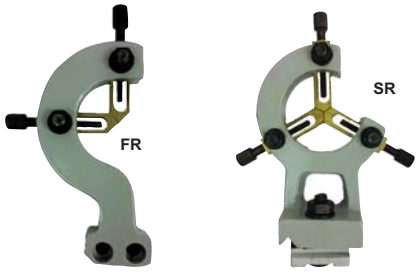
- 3 Jaw lathe chuck
- Safety chuck and tool post guards
- 4 Way tool post
- Centers
- Chip tray

Model No.	Distance Between Centers (in.)	Motor	Spindle Hole Dia. (in.)	Swing (in.)	Weight	Order No.	Price
712	11.811	3/4HP, 115V, 1PH	.827	7	146 lbs	**PR71712**	1692.25
920	21.654	1HP, 115V, 1PH	.827	9.843	342 lbs	**PR71920**	2478.10

F.O.B. Warren, MI • Ships by truck • Not CSA approved

Bench Lathe Accessories

- Cast iron body and lock
- Brass supports
- Steel bolts and nuts



Type	Order No.	Price
Follow Rest for Order Number PR71712 Bench Lathe	**PR71712FR**	113.90
Steady Rest for Order Number PR71712 Bench Lathe	**PR71712SR**	100.50
Follow Rest for Order Number PR71920 Bench Lathe	**PR71920FR**	113.90
Steady Rest for Order Number PR71920 Bench Lathe	**PR71920SR**	100.50

F.O.B. Warren, MI

Stands for Bench Top Lathes



Type	Order No.	Price
Machine Floor Stand with Shelves and Doors for Order Number PR71712 Bench Lathe	**PR71712STAND**	560.40
Machine Floor Stand with Shelves and Doors for Order Number PR71920 Bench Lathe	**PR71920STAND**	560.40
Machine Floor Stand with Shelves and Doors for Order Number PR711127 Bench Lathe/ Mill Combo Unit	**PR711127STAND**	558.15

Bench Lathe/Mill Combo Unit

Mill Specifications:

- Motor: 3/4 HP, 115V, 1PH
- 2MT spindle with draw bar
- Spindle travel: 1.969"
- Table size: 4-3/4" x 15-3/4"

Lathe Specifications:

- Swing: 11.024"
- Center to center distance: 27.6"
- Spindle bore: 1.024"
- Motor: 1HP, 115V, 1PH
- Weight: 562 lbs.
- 1 Year Warranty Parts
- Machine shown on optional floor stand - Order Number PR711127STAND
- Not CSA approved

Standard Accessories:

- 3 Jaw chuck, dead center, change gears set, splash guard, 4 way tool post, chuck guard



Motor	Distance Between Centers	Spindle Hole Dia.	Swing	Order No.	Price
1HP, 115V, 1PH	27.559	1.024	11.024	**PR711127**	4813.15

F.O.B. Warren, MI • Ships by truck

PRM 13" x 40" Precision Light Duty Engine Lathe with Stand

Features:
- Precision ground and supersonic frequency hardened bedway
- Headstock gears are made of high quality steel ground and hardened
- Spindle is supported with precision roller bearing
- 1 Year Warranty Parts

Standard Equipment:
- 3-Jaw chuck
- 4-Jaw chuck
- 3MT dead center
- Face plate
- Steady rest, follow rest, change gear set
- Full length splash guard
- Halogen work light
- Toolbox with tools



Model No.	Swing (in.)	Distance Between Centers (in.)	Cross Slide Travel (in.)	Swing Over Gap (in.)	Spindle Hole Dia. (in.)	Spindle Type	Spindle Speeds	Motor	Weight	Order No.	Price
1342	13	42.5	5	18.5	1-1/2	D1-4	(18) 65-1810 RPM	2HP, 110/220V, Prewired 110V, 1PH	1175 lbs	**PR751342**	4120.50

F.O.B. Warren, MI • Ships by truck • Not CSA approved

ACER 14" x 40" High Speed Precision Geared Head Toolroom Lathes

Features:
- Full high tensile cast iron (FC25) bed and headstock
- Quick change inch and metric gearbox
- Induction hardened and ground bedways
- Electro magnetic controller switch
- 1 Year Warranty Parts

Standard Equipment:
- 6" 3-Jaw Chuck
- Steady Rest
- Micrometer Stop
- Splash Guard
- 4-Way Toolpost
- Face Plate
- Foot Brake System
- Coolant System
- Halogen Light
- Tools and Toolbox
- Instructions and Parts Manual



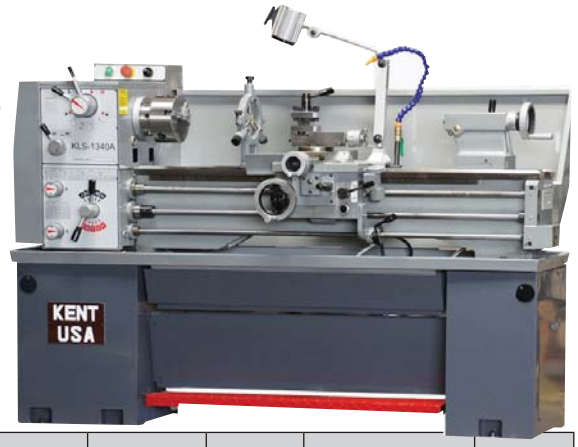
Model No.	Swing (in.)	Swing Over Gap (in.)	Swing Over Crosslide (in.)	Distance Between Centers (in.)	Spindle Hole Dia. (in.)	Spindle Type	Spindle Speeds	Motor	Weight	Order No.	Price
D1440G	14	21	9	40	1-9/16	D1-4	(9) 80-2000 RPM	3HP, 220V, 3PH	2320 lbs	**RA60D1440G2**	14137.00
D1440G4	14	21	9	40	1-9/16	D1-4	(9) 80-2000 RPM	3HP, 440V, 3PH	2320 lbs	**RA60D1440G4**	14137.00

F.O.B. Orange, CA • Ships by truck • NOT CSA APPROVED

KENT USA 13" x 40" Geared Head Lathe

Features:
- Hardened and ground gears in headstock
- Jog button for easy gear changes
- V-Way bed design
- Inch/Metric threading capability
- Foot Brake
- 1 Year Warranty Parts

Standard Equipment:
- 6” 3-Jaw direct mount chuck with top reversing jaws
- 8” 4-Jaw chuck with D1-4 back plate
- 12” Face Plate
- 4-Position tool post
- Steady rest and Follow rest
- Thread Dial
- Coolant system
- Full length splash guard
- Worklight



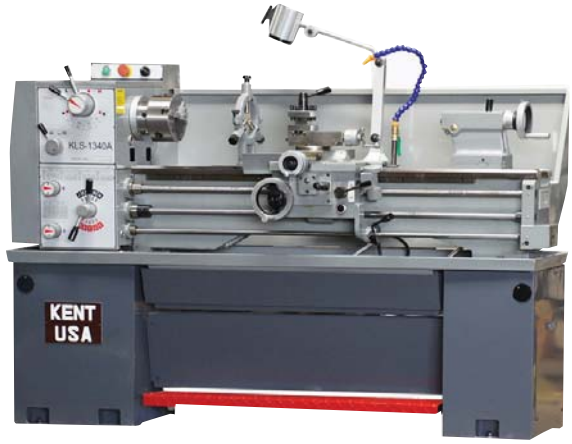
Model No.	Swing (in.)	Distance Between Centers (in.)	Swing Over Crosslide (in.)	Cross Slide Travel (in.)	Spindle Hole Dia. (in.)	Spindle Type	Spindle Speeds	Motor	Weight	Order No.	Price
KLS1340A	13	40	7-1/4	6-1/2	1-1/2	D1-4 Camlock	(8) 70 to 2000 RPM	2HP, 220V, 1PH	1300 lbs	**RA65KLS1340A**	7035.00

F.O.B. Tustin, CA • Ships by truck • NOT CSA APPROVED

KENT USA 14" x 40" Geared Head Lathe

Features:
- Hardened and ground gears in headstock
- Jog button for easy gear changes
- V-Way bed design
- Inch/Metric threading capability
- Foot Brake
- 1 Year Warranty Parts

Standard Equipment:
- 6” 3-Jaw direct mount chuck with top reversing jaws
- 8” 4-Jaw chuck with D1-4 back plate
- 12” Face Plate
- 4-Position tool post
- Steady rest and Follow rest
- Thread Dial
- Coolant system
- Full length splash guard
- Worklight



Model No.	Swing (in.)	Distance Between Centers (in.)	Swing Over Crosslide (in.)	Cross Slide Travel (in.)	Spindle Hole Dia. (in.)	Spindle Type	Spindle Speeds	Motor	Weight	Order No.	Price
KLS1440A	14	40	8-5/8	7	1-1/2	D1-4 Camlock	(16) 45-1800 RPM	3HP, 230V, 3PH	1900 lbs	**RA65KLS1440A**	9782.00

F.O.B. Tustin, CA • Ships by truck • NOT CSA APPROVED

KENT USA 13" x 40" Heavy Duty Geared Head Toolroom Lathe

Features:
- Dual Inch and Metric Dials with Dual Threading Capability
- Jog button for easy gear changes
- Foot brake
- Hardened and ground gears and bedways
- 1 Year Warranty Parts

Standard Equipment:
- 7” 3-Jaw chuck
- Steady Rest
- Follow Rest
- 4-Position tool post
- Coolant system
- Full length splash guard
- Halogen worklight
- Thread chasing dial
- Micro Stop
- Tool box with standard tools



Model No.	Swing (in.)	Swing Over Gap (in.)	Swing Over Crosslide (in.)	Distance Between Centers (in.)	Cross Slide Travel (in.)	Spindle Type	Spindle Hole Dia. (in.)	Spindle Speeds	Metric Pitch Threads	Inch Pitch Threads	Tailstock Taper	Motor	Weight	Order No.	Price
TRL1340	13-3/8	20	8-1/4	40	7	D1-4 Camlock	1-5/8	50-2570	(39) .2-14mm	(45) 2-72 TPI	3MT	5HP, 220V Only	2200 lbs	**RA65TRL1340**	15410.00

F.O.B. Tustin, CA • Ships by truck • NOT CSA APPROVED

KENT USA 16" x 40" Engine Lathe

Features:
- Hardened and ground gears and bedways
- Cast iron machine bedways with full one piece cast base and front loading chip tray for easier cleaning
- Foot brake
- T-slot compound
- Inch/metric reading on dials
- 1 Year Warranty

Standard Equipment:
- 3-Jaw chuck (9")
- Chuck cover
- Steady rest
- Follow rest
- 4-positioin tool post
- Coolant system
- Full-length splash guard
- Halogen work light
- Carriage stop
- Thread chasing dial
- Toolbox with standard tool



Model No.	Swing (in.)	Swing Over Gap (in.)	Distance Between Centers (in.)	Cross slide travel (in.)	Spindle	Spindle Hole Dia. (in.)	Spindle Speeds	Tailstock Taper	Motor	Weight	Order No.	Price
RML1640T	16-3/16	23	40	8-11/16	D1-6	2-1/16	(12) 36-1800 RPM	4MT	5HP, 220/440V, 3PH	3960 lbs	**RA65RML1640T**	19430.00

F.O.B. Tuscan, CA • Ships by Truck • NOT CSA APPROVED

SUMMIT 16-3" Precision Heavy Duty Engine Lathes

Features:
- Hardened and ground bedways
- Removable gap
- Inch/mm threads
- Feed reversing at the apron
- Hardened and ground cross slide ways
- 4 Way rapid traverse
- Single lever control for feeds and rapids
- Full length splash gruard
- Sliding chuck guard with limit switch
- 1 Year Warranty on Parts & Labor - 6 Months on Electrical

Standard Equipment:
- Thread dial
- Steady rest with roller tips
- Follow rest
- Coolant system
- 3-Jaw chuck (10")
- Carriage stop
- Work light
- Taper Attachement



Model No.	Swing (in.)	Swing Over Gap (in.)	Distance Between Centers (in.)	Cross Slide Travel (in.)	Spindle Type	Spindle Hole Dia. (in.)	Spindle Speeds	Tailstock Taper	Motor	Weight	Order No.	Price
16340	16	25-1/8	40	11-3/8	D1-8	3	(21) 20-2000 RPM	5MT	10HP, 220V, 3PH	5720 lbs	**PY8016340**	42866.60
16360	16	25-1/8	60	11-3/8	D1-8	3	(21) 20-2000 RPM	5MT	10HP, 220V, 3PH	6050 lbs	**PY8016360**	44206.60
16380	16	25-1/8	80	11-3/8	D1-8	3	(21) 20-2000 RPM	5MT	10HP, 220V, 3PH	6380 lbs	**PY8016380**	45546.60

F.O.B. Oklahoma City, OK • Ships by truck • NOT CSA APPROVED

KENT USA 17" Heavy Duty Large Spindle Bore Lathe

Features:
- Spindle Jog Button Control
- Solid full length casting base with front loading chip tray
- Adjustable Over-load feed clutches
- Quick reversal feed from apron
- Full length safety foot brake
- One shot lubrication for Apron, Carriage and Bed Ways
- Multi-position adjustable feed position stops
- Inch/Metric Heavy Duty Two Speed Tailstock
- Dual Inch/Metric Dials
- 1 Year Warranty

Standard Equipment:
- 10" 3-Jaw chuck
- Steady and follow rest
- Chuck cover
- Halogen worklight
- Thread chasing dial
- 4-Position tool post
- Coolant system
- Full-length splash guard
- 3-Position carriage stop
- Bed mount carriage stop



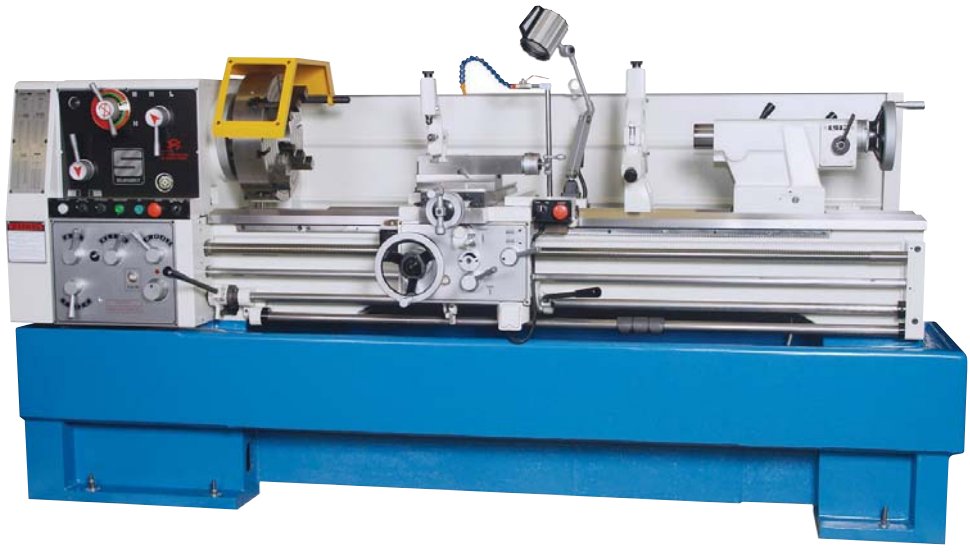
Model No.	Swing	Swing Over Gap (in.)	Swing Over Crosslide (in.)	Distance Between Centers (in.)	Cross Slide Travel (in.)	Spindle Speeds	Spindle Typ	Spindle Hole Dia. (in.)	Metric Pitch Threads	Inch Pitch Threads	Tailstock Taper	Motor	Weight	Order No.	Price
ML1740T	17	-	10-7/8	40	10	(12) 38-1800 RPM	D1-6 Camlock	3-1/8	(39) .2-14mm	(45) 2-72 TPI	4MT	7.5HP	4500 lbs	**RA65M1740**	24723.00

F.O.B. Tuscan, CA • Ships by Truck • NOT CSA APPROVED

SUMMIT 18-3" Precision Metal Lathes

Features:
- Inch and metric threading
- Removable gap
- T-slotted compound
- Hardened and precision ground bed ways
- All cast iron construction
- Clutched headstock
- Four way rapid traverse
- Two speed tailstock
- Forced lubrication to the headstock carriage and bedways
- Electric brake
- 1 Year Warranty Parts & Labor, 6 Months on all Electrical

Standard Equipment:
- 12" 3-Jaw chuck
- Steady rest
- Follow rest
- Full length splash guard
- Halogen work light
- Taper attachment
- Coolant system
- Thread dial
- 4 Position carriage stop



Model No.	Swing (in.)	Distance Between Centers (in.)	Swing over gap (in.)	Cross slide travel (in.)	Spindle Type	Spindle Hole Dia. (in.)	Spindle Speeds (RPM)	Motor	Weight	Order No.	Price
18340	18-1/4	40	28	11-1/2	D1-8	3-1/8	(12) 32-1500 RPM	10HP, 220/440V, 3PH	4730 lbs	**PY8018340A**	36166.60
18360	18-1/4	60	28	11-1/2	D1-8	3-1/8	(12) 32-1500 RPM	10HP, 220/440V, 3PH	5390 lbs	**PY8018360A**	37506.60
18380	18-1/4	80	28	11-1/2	D1-8	3-1/8	(12) 32-1500 RPM	10HP, 220/440V, 3PH	6600 lbs	**PY8018380A**	38846.60

F.O.B. Oklahoma City, OK • Ships by flat bed truck only • NOT CSA APPROVED

KENT USA 20" Heavy Duty Large Spindle Bore Lathes

Features:
- Spindle Jog Button Control
- Solid full length casting base with front loading chip tray
- Adjustable Over-load feed clutches
- Quick reversal feed from apron
- Full length safety foot brake
- One shot lubrication for Apron, Carriage and Bed Ways
- Multi-position adjustable feed position stops
- Inch/Metric Heavy Duty Two Speed Tailstock
- Dual Inch/Metric Dials
- 1 Year Warranty

Standard Equipment:
- 10” 3-Jaw chuck
- Steady and follow rest
- Chuck cover
- Halogen worklight
- Thread chasing dial
- 4-Position tool post
- Coolant system
- Full-length splash guard
- 3-Position carriage stop
- Bed mount carriage stop



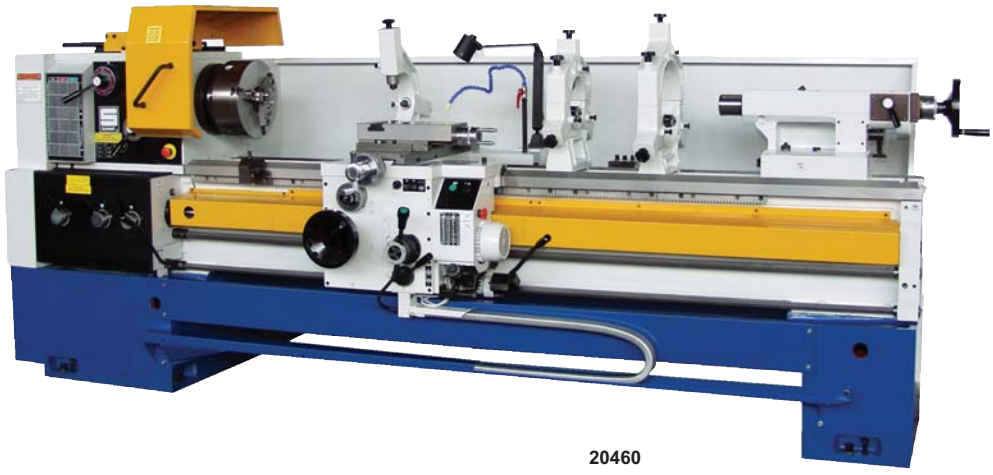
Model No.	Swing (in.)	Swing Over Gap (in.)	Distance Between Centers (in.)	Cross Slide Travel (in.)	Spindle Speeds	Spindle Type	Spindle Hole Dia. (in.)	Tailstock Taper	Motor	Weight	Order No.	Price
ML2060T	20	27-1/2	60	12	(12) 36-1800 RPM	D1-6 Camlock	3-1/8	4MT	7.5HP	5400 lbs	**RA65M2060T**	27470.00

F.O.B. Tuscan, CA • Ships by Truck • NOT CSA APPROVED

SUMMIT 20" Heavy Duty Large Spindle Lathes

Features:
- Removable gap
- Inch/metric threads
- Conveniently located controls
- Feed reversing at the apron
- 4-way rapid traverse
- Single lever control for feeds and rapids
- Full length splash guard
- 2 Speed tailstock
- 1 Year Warranty Parts & Labor, 6 Months on all Electrical

Standard Equipment:
- Thread dial
- Standard steady rest with roller tips
- Extra capacity steady rest with roller tips
- Follow rest
- Coolant system
- Taper attachment
- 3-Jaw chuck
- Carriage stop
- Work light



20460

Model No.	Swing (in.)	Distance Between Centers (in.)	Cross Slide Travel (in.)	Spindle Type	Spindle Hole Dia. (in.)	Spindle Speeds	Tailstock Taper	Motor	Weight	Order No.	Price
20460	20-1/4	60	11-3/8	D1-8	4-1/8	(15) 11.5-1400 RPM	5MT	10HP, 220V, 3PH	8600 lbs	**PY8020460**	57606.60
20480	20-1/4	80	11-3/8	D1-8	4-1/8	(15) 11.5-1400 RPM	5MT	10HP, 220V, 3PH	9000 lbs	**PY8020480**	60286.60
204120	20-1/4	120	11-3/8	D1-8	4-1/8	(15) 11.5-1400 RPM	5MT	10HP, 220V, 3PH	9200 lbs	**PY80204120**	64306.60

F.O.B. Oklahoma City, OK. • Ships by flat bed truck only • NOT CSA APPROVED

24" Large Spindle Lathes

Features:

- Removable gap
- Inch/metric threads
- Conveniently located controls
- Feed reversing at the apron
- 4-Way rapid traverse
- Single lever control for feeds and rapids
- Full length splash guard
- 2 Speed tailstock
- 1 Year Warranty on Parts & Labor - 6 Months on all Electrical

Standard Equipment:

- Thread dial
- Standard steady rest with roller tips
- Extra capacity steady rest with roller tips
- Follow rest
- Coolant system
- Taper attachment
- 3-Jaw chuck
- Carriage stop
- Work light



Model No.	Swing (in.)	Distance Between Centers (in.)	Cross Slide Travel (in.)	Spindle Type	Spindle Hole Dia. (in.)	Spindle Speeds	Tailstock Taper	Motor	Weight	Order No.	Price
24460	25	60	12-1/8	D1-8	4-1/8	(21) 20-1250 RPM	5MT	15HP, 220V, 3PH	8600 lbs	**PY8024460**	64306.60
24480	25	80	12-1/8	D1-8	4-1/8	(21) 20-1250 RPM	5MT	15HP, 220V, 3PH	9000 lbs	**PY8024480**	66986.60
244120	25	120	12-1/8	D1-8	4-1/8	(21) 20-1250 RPM	5MT	15HP, 220V, 3PH	9200 lbs	**PY80244120**	71006.60

F.O.B. Oklahoma City, OK • Ships by flat bed truck only • NOT CSA APPROVED

28" Large Spindle Lathes

Features:

- Removable gap
- Inch/metric threads
- Conveniently located controls
- Feed reversing at the apron
- 4-Way rapid traverse
- Single lever control for feeds and rapids
- Full length splash guard
- 2 Speed tailstock
- 1 Year Warranty on Parts & Labor - 6 Months on all Electrical

Standard Equipment:

- Thread dial, Standard steady rest with roller tips, Extra capacity steady rest with roller tips, Follow rest, Coolant system, Taper attachment, 3-Jaw chuck, Carriage stop, Work light



Model No.	Swing (in.)	Distance Between Centers (in.)	Cross Slide Travel (in.)	Spindle Type	Spindle Hole Dia. (in.)	Spindle Speeds	Tailstock Taper	Motor	Weight	Order No.	Price
28460	28-1/2	60	15-1/4	D1-8	4-1/8	(21) 20-1250 RPM	5MT	15HP, 220V, 3PH	7300 lbs	**PY8028460**	71006.60
28480	28-1/2	80	15-1/4	D1-8	4-1/8	(21) 20-1250 RPM	5MT	15HP, 220V, 3PH	7700 lbs	**PY8028480**	73686.60
284120	28-1/2	120	15-/14	D1-8	4-1/8	(21) 20-1250 RPM	5MT	15HP, 220V, 3PH	8300 lbs	**PY80284120**	77706.60
284160	28-1/2	160	15-1/4	D1-8	4-1/8	(21) 20-1250 RPM	5MT	15HP, 220V, 3PH	8900 lbs	**PY80284160**	83066.60

F.O.B. Oklahoma City, OK • Ships by flat bed truck only • NOT CSA APPROVED

KENT USA High Precision Electronic Variable Speed Toolroom Lathe

Features:
- AC-Frequency Inverter Drive Main Spindle
- Inch and Metric Threading Capability
- Kick-Out Mechanism for setting position stops during threading operations
- Builty in 5C Collet Closer with 1-1/16" thru collet capacity
- Collet holders with swing-out mechanism in base cabinet
- Variable electric feeds for longitudinal and cross travels
- Quick engage/release mechanism slide compound
- 1 Year Warranty

Standard Equipment:
- 6" 3-Jaw chuck
- 4° Adapter Plate to fit 3 or 4 jaw chuck
- 5C Collet closer
- Collet holder in cabinet
- Coolant system
- Halogen work light
- Leveling bolts/pads
- One-shot lubrication
- Inch/Metric threading



Model No.	Spindle Hole Dia. (in.)	Spindle Type	Swing (in.)	Swing Over Crosslide (in.)	Distance Between Centers (in.)	Spindle Speeds	Tailstock Taper	Motor	Weight	Order No.	Price
CTL-618EVS	1-1/16	5C	11	6	18	0-4000 RPM (infinitely variable)	2MT	3HP, 230V, 3PH	2300 lbs	**RA65CTS618EVS**	34170.00

F.O.B. Tustin, CA • Ships by truck • NOT CSA APPROVED

KENT USA 14" x 40" EVS AC Frequency Drive Toolroom Lathe

Features:
- Frequency drive spindle motor capable of running on single phase power
- Digital Display
- Infinitely variable spindle speeds
- Hardened and ground gears and bedways
- Cast Iron machine bedways with full one piece cast base and front loading chip tray
- Foot brake
- Inch/Metric reading dials
- 1 Year Warranty Parts

Standard Equipment:
- 9" 3-Jaw chuck
- Chuck cover
- Steady rest
- Follow rest
- 4-Posititon tool post
- Coolant system
- Full-length spalsh guard
- Halogen worklight
- Carriage stop
- Thread chasing dial
- Micro Stop
- Toolbox with standard tools



Model No.	Swing (in.)	Swing Over Gap (in.)	Distance Between Centers (in.)	Cross Slide Travel (in.)	Spindle Type	Spindle Hole Dia. (in.)	Spindle Speeds	Tailstock Taper	Motor	Weight	Order No.	Price
RML1440VT	14-3/16	21	40	8-11/16	D1-6	2-1/16	50-2750 RPM	4MT	5HP, 230V, 3PH	3630 lbs	**RA65RML1440VT**	22713.00

F.O.B. Tustin, CA • Ships by truck • NOT CSA APPROVED

ACER Electronic Variable Speed E Lathes With Constant Surface Speed & Newall DRO

- Constant Surface Speed - Provides an output that can be applied to an AC inverter spindle drive
- The system uses a DRO and the Precision Scale feedback to automatically control spindle RPM with the Highest Accuracy

Advantages of Constant Surface Speed:

- Optimum surface cutting speeds improving tool life
- Better surface finishes
- Includes a Digital Readout as Standard Equipment
- 1 Year Warranty Parts



1440GEVS2


1760GEVS2

Model No.	Swing (in.)	Swing Over Gap (in.)	Swing Over Crosslide (in.)	Distance Between Centers (in.)	Spindle Type	Spindle Hole Dia. (in.)	Spindle Speeds	Cross Slide Travel (in.)	Tailstock Taper	Metric Pitch Threads	Inch Pitch Threads	Motor	Weight	Order No.	Price
1440GEVS	14	20-3/4	8-3/4	40	D1-4	1-1/2	36-2200 RPM (Infinite)	8-5/8	3MT	(30) .4-7mm	(32) 3-56 TPI	3HP, 220V	1520 lbs	**RA601440GEVS2**	17621.00
1440GEVS4	14	20-3/4	8-3/4	40	D1-4	1-1/2	36-2200 RPM (Infinite)	8-5/8	3MT	(30) .4-7mm	(32) 3-56 TPI	3HP, 440V	1520 lbs	**RA601440GEVS4**	18291.00
1740GEVS	17	26	9-5/8	40	D1-6	2-1/4	25-2200 RPM (Infinite)	8-5/8	4MT	(22) .5-7mm	(36) 4-56 TPI	7.5HP, 220V	3500 lbs	**RA601740GEVS2**	27135.00
1760GEVS	17	26	9-5/8	60	D1-6	2-1/4	25-2200 RPM (Infinite)	8-5/8	4MT	(22) .5-7mm	(36) 4-56 TPI	7.5HP, 220V	3950 lbs	**RA601760GEVS2**	29279.00
1760GEVS4	17	26	9-5/8	60	D1-6	2-1/4	25-2200 RPM (Infinite)	8-5/8	4MT	(22) .5-7mm	(36) 4-56 TPI	7.5HP, 440V	3950 lbs	**RA601760GEVS4**	30083.00

F.O.B. Anaheim, CA. • Ships by truck • NOT CSA APPROVED

PRM Drill Press Guards

- Give full protection from quill to drill point by the smooth telescopic action of the guards
- They collapse as the drill penetrates the workpiece, returning to extended position when spindle is raised
- Complies with BS EN 292 Safety of Machinery guard guidlines
- Clear vision for safe operation
- Rapid adjustment for drill length
- Fast access for cutting tool changes



Model No.	Max Chuck Dia. (in.)	Lower Spindle Bearing Collar Dia. (in.)	Quill Dia. (in.)	Max. Stroke (in)	Min. Stroke (in.)	Order No.	Price
15012	2-3/4	1-3/4 to 3-1/2	1-3/4 to 3-1/2	7	4-5/16	**PR6915012**	199.90
15023	2-5/8	1-3/4 to 3-1/2	1-3/4 to 3-1/2	10-1/2	4-3/4	**PR6915023**	205.45
15024	3	1-3/4 to 3-1/2	1-3/4 to 3-1/2	7	4-7/16	**PR6915024**	199.90
15025	2-1/8	1-3/4 to 3	1-3/4 to 3	6-1/4	3-1/2	**PR6915025**	98.25

F.O.B. Warren, MI

SHOP FOX 8-1/2" Bench Top Drill Presses

- Model W1667 8-1/2'' Oscillating Drill Press is a drill press and an oscillating sander in one compact machine
- A sanding spindle is included for use with drums ranging in size from 1" to 2" diameter and 4-1/4" long
- The W1667 is packaged with a drill chuck, motor and paddle switch with removable safety key



Model No.	Drilling Capacity (in.)	Spindle Taper	Motor	Range of Speeds	Weight	Order No.	Price
W1667	1/2	33JT	1/2HP, 110V, 1PH	(5) 620, 1100, 1720, 2340, 3100 RPM	54 lbs	**PY65W1667**	281.40

F.O.B. Birmingham, WA

PALMGREN Step Pulley Bench Model Drill Presses

- Features a heavy cast iron drill head, base and table
- The work table height is adjustable using rack and pinion
- Table can be tilted 45° to the right or left and rotates 360° around the column
- Precision ground slotted work table and base for secure, accurate mounting of fixturing and work pieces
- Other features include enclosed ball bearing quill assembly, quick belt tensioning mechanism and front mounted safety paddle switch
- 3 Year Warranty



Model No.	Swing (in.)	Drilling Capacity (in.)	Spindle Taper	Range of Speeds	Table Size (in.)	Motor	Weight	Order No.	Price
80110A	10	1/2	33JT	(5) 620-3100	7-13/16 x 7-13/16	1/3HP, 115V	51 lbs	**JB5580110A**	276.04
9680221	13	Ø 24 mm / .945"	2MT	(7) 430-4000	11.024 x 11.811	1HP, 115V, 1PH	185 lbs	**JB559680221**	2811.25
80150	13-1/4	1/2	33JT	(16) 244-3386	8-5/8 x 9-7/16	1/3HP, 120V	123 lbs	**JB5580150**	499.35
80155	15	5/8	2MT	(16) 138-3476	11-1/2 Xx13	1/2HP, 120V	185 lbs	**JB5580155**	947.92
9680215	16	Ø 28 mm / 1.103"	3MT	(16) 145-4800	13.386 x 14.173	1HP, 115V, 1PH	300 lbs	**JB559680215**	3246.42

F.O.B. Chicago, IL • Ships by Truck

PRM 16" Step Pulley Floor Model Drill Presses

Features:

- For all applications with high quality features found only in expensive high performance machines
- Model RF400HC features and comes with an “X” - “Y” milling table
- The “X” - “Y” milling table provides the drilling and tapping of multiple holes in any direction
- 1 Year Warranty Parts





Model No.	Swing (in.)	Drilling Cap. (in.)	Spindle Taper	Spindle Travel (in.)	Range of Speeds	Table Size (in.)	Table Travel ("X" - in.)	Cross Travel ("Y" - in.)	Motor	Weight	Order No.	Price
RF400HSR8	16	1-1/2	R8	5	(12) 120 - 2500 RPM	14 X 16	-	-	1-1/2HP, 220/440V, 3PH	660 lbs	**RL80RF400HSR8**	2747.00
RF400HCR8	16	1-1/2	R8	5	(12) 120 - 2500 RPM	7-1/2 X 23	14-1/2	6-1/4	1-1/2HP, 220/440V, 3PH	660 lbs	**RL80RF400HCR8**	2941.30

F.O.B. Warren, MI • Ships by truck • NOT CSA Approved

DAKE Heavy Duty Step Pulley Floor Model Drill Presses



Features:

- A locking handle hub with convenient dial-in adjustment and an easy-to-read scale for fast, accurate, and repeatable depth setting changes
- Massive cast head, machined column and sturdy cast base reduces vibration
- Morse taper spindle is standard as well as drill chucks with key
- CE safety electrical package features: push button on/off switch, emergency stop button, low voltage controls, thermal overload, interlock safety switch for belt cover, and adjustable Plexiglass chip and chuck guard
- 1 Year Warranty Parts
- Model TB-16 is a bench model

Model No.	Drilling Cap. (in.)	Motor	Spindle Taper	Table Size (in.)	Range of Speeds (RPM)	Spindle Travel (in.)	Column Dia. (in.)	Weight	Order No.	Price
TB-16	5/8	1/2HP, 110V	2MT	11-3/4 x 11-3/4	240 - 3400	3-1/8	3-1/8	175 lbs	**RK50TB16**	1541.00
SB-16	5/8	1/2HP, 110 Volt	2MT	11-3/4 x 11-3/4	240 - 3400	3-1/8	3-1/8	230 lbs	**RK50SB16**	2137.30
SB-25	1	1HP, 110V, 1PH	3MT	13-3/4 x 13-3/4	270 - 2000	5	3-5/8	397 lbs	**RK50SB25**	2914.50
SB-2521	1	1HP, 220V, 1PH	3MT	13-3/4 x 13-3/4	270 - 2000	5	3-5/8	397 lbs	**RK50SB2521**	2914.50
SB-252	1	1HP, 220V, 3PH	3MT	13-3/4 x 13-3/4	270 - 2000	5	3-5/8	397 lbs	**RK50SB252**	2914.50
SB-25440	1	1HP, 440V, 3PH	3MT	13-3/4 x 13-3/4	270 - 2000	5	3-5/8	397 lbs	**RK50SB25440**	4174.10
SB-32	1-1/4	2HP, 220V, 3PH	4MT	15-3/4 x 15-3/4	270 - 2290	5-1/2	4	483 lbs	**RK50SB32**	3718.50
SB-32-440	1-1/4	2HP, 440V, 3PH	4MT	15-3/4 x 15-3/4	270 - 2290	5-1/2	4	483 lbs	**RK50SB32440**	4978.10

F.O.B. Grand Haven, MI • Ships by truck • NOT CSA APPROVED

PALMGREN Floor Model Step Pulley Drill Presses



- Constructed to provide a solid base for all your drilling operations, and offer a greater range of spindle speeds than any others in their class
- They have the weight and rigidity to maintain the built-in tight tolerances required for metalworking applications
- Fully enclosed spindle with spaced bearings for maximum spindle support and accurate drilling operations
- Maximum spindle run out of 0.0005”
- Extended quill/spindle travel ideal for deep hole applications
- LED readout for spindle speeds
- Quick change vertical depth stop for accurate, repeatable feed length
- Includes chuck with key and arbor
- Rack and pinion table raiser
- Table tilts 45 degrees right and left and rotates 360 degrees around the column
- Front mounted industrial paddle type power switch
- 3 Year Warranty

Model No.	Swing (in.)	Drilling Cap. (in.)	Spindle Taper	Range of Speeds	Table Size (in.)	Motor	Weight	Order No.	Price
9680177	17	7/8	2MT	(16) 138 - 3476 RPM	14-3/8 x 14-3/8	1HP, 120/240, 1PH	183 lbs	**JB559680177**	1083.26
9680178	17	7/8	2MT	(16) 138 - 3476 RPM	14-3/8 x 14-3/8	1HP, 240, 3PH	183 lbs	**JB559680178**	1100.21
9680210	20	1-1/4	3MT	(16) 120 - 3605 RPM	19-1/4 x 18-3/4	1-1/2HP, 240V, 3PH	274 lbs	**JB559680210**	1608.00
9680214	16	1.103	3MT	150 - 4000 RPM	13.386 x 14.173	1HP, 115V, 1PH	1309 lbs	**JB559680214**	3481.25
9680216	22	Ø 34 mm / 1.336"	4MT	-	16.535 x 15.748	3HP, 230V, 3PH	605 lbs	**JB559680216**	4883.63
9680156	15	5/8	2MT	(16) 138 - 3476	11-1/2 x 13	1/2HP, 120/240V	162 lbs	**JB5580156**	988.79
9680207	20	1-1/4	3MT	(16) 120 - 3605	19-1/4 x 18-3/4	1-1/2HP, 120/240V	274 lbs	**JB5580207**	1592.46

F.O.B. Chicago, IL • Ships by Truck

PRM 20" Variable Speed Drill Presses



Features:

- Offers built-in features found only in other higher priced machines
- Has rugged, heavy-duty cast iron construction with ground steel column
- Features variable speed two-speed motor to give an optimum of various spindle speeds
- Foward & reverse switch installed for tapping
- Wired 220V 3PH ONLY
- Model 20VSDTPF has mechanical power feed on the spindle with 4 feed rates of .004", .006", .009" & .012" IPR
- 1 Year parts warranty

Model No.	Drilling Cap. (in.)	Range of Speeds (Variable)	Spindle Taper	Spindle Travel (in.)	Table Size (in.)	Column Dia. (in.)	Motor	Weight	Order No.	Price
20VSDT	1-1/2 Cast Iron, 1 Steel	150 - 2000 RPM	3MT	6-1/2	22 x 19-1/2	4	2HP, 220V, 3PH	650 lbs	**RL8920VSDT**	4514.03
20VSDTPF	1-1/2 Cast Iron, 1 Steel	150 - 2000 RPM	3MT	6-1/2	22 x 19-1/2	4	2HP, 220V, 3PH	650 lbs	**RL8920VSDTPF**	5695.80

F.O.B. Warren, MI • Ships by truck • Not CSA Approved

Clausing 20" Variable Speed Drill Presses



Features:

- Superior performance for metalworking – Production rated 1-1/4" in cast iron, 7/8" in steel
- Infinitely variable speed countershaft drive
- All drill presses have a #3 Morse Taper spindle and 6-1/2" spindle travel
- Heavy-duty precision head...all bearing surfaces are precision bored simultaneously for exact alignment
- Eight ball bearings support drive and spindle
- Precision ground oil through tables...handle big workpieces easer
- 22" x 19" Table
- Shipping weight: 630 lbs.
- Proudly Made in the USA
- 1 Year Warranty

MADE IN THE USA

Model No.	Swing (in.)	Drilling Cap. (in.)	Spindle Taper	Range of Speeds	Table Size (in.)	Motor	Weight	Order No.	Price
2272	20	1-1/4	3MT	300 - 2000	22 x 19	1-1/2 HP, 115/230V, 1PH	630 lbs	**RF602272**	6566.00
2274	20	1-1/8	3MT	300 - 2000	22 x 19	1-1/2HP, 230/460V, 3PH	630 lbs	**RF602274**	6566.00
2275	20	1-1/4	3MT	200 - 1300	22 x 19	1-1/2 HP, 208/230/460V, 3PH	630 lbs	**RF602275**	6566.00
2276	20	1-1/8	3MT	150 - 2000	22 x 19	3/4 & 1-1/2HP, 230V only, 3PH	630 lbs	**RF602276**	6934.50
2277	20	1-1/8	3MT	150 - 2000	22 x 19	3/4 & 1-1/2HP, 440V only, 3PH	630 lbs	**RF602277**	6934.50

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

PALMGREN Variable Speed Floor Drill Presses



- With the Palmgren 20" variable speed drill press you can dial the best rpm for the tool and material while the job is running
- Simple hand wheel adjustment sets the speeds and immediate rpm reading appears on the front face of the machine
- The heavy duty cast iron construction forms a solid base for all your drilling operations with an oversized precision machined drill head, extended quill travel and a 4-1/2" column the Palmgren 20" variable speed drill
- Full bearing support with radial thrust and ball bearings
- LED Spindle speed readout
- Front mounted positive control depth stop
- Large precision ground t-slotted table with coolant trough
- Front or side operated rack and pinion table raiser
- Table rotates 360 degrees around the column
- 3 Year Warranty

New!

Model No.	Table Size (in.)	Drilling Cap. (in.)	Column Dia. (in.)	Spindle Taper	Motor	Weight	Order No.	Price
9680175	16.535 x 15.748	Ø 34 mm / 1.336"	4.528"	4MT	3HP, 230V, 1PH	640 lbs	**JB559680175**	6070.20
9680217	13.386 x 14.173	1.104	3.622	3MT	2HP, 230V, 1PH	311 lbs	**JB559680217**	5667.13

F.O.B. Chicago, IL • Ships by Truck

DAKE Electronic Variable Speed Drill Presses



- Locking handle hub with convenient dial-in adjustment and an easy to read scale
- Large diameter sturdy spindle for rigid drilling has four bearing points for smooth operation
- Machined table and base surfaces with t-slots for mounting and fixturing
- Forward and reverse selector switch for tapping applications
- Model SB-250V automatically advances to preset depth, bottoms out, and returns automatically (Spindle Power Downfeed)
- CE safety electrical package features push button on/off switch, emergency stop button, low voltage controls, thermal overload, and interlock safety switch for belt cover
- Latest frequency inverter technology for easy speed changes and concentrated torque

Model No.	Drilling Capacity (in.)	Spindle Travel (in.)	Spindle Taper	Swing (in.)	Table Size (in.)	Motor	Range of Speeds	Column Dia. (in.)	Weight	Order No.	Price
TB-16V	5/8	3-1/8	2MT	14-1/8	11-3/4 x 11-3/4	1/2HP, 110V, 1PH	Mechanical Variator 340 - 4000	3-1/8	175 lbs	**RK50TB16V**	2137.30
SB-250V	1	5	3MT	18	15-3/4 x 15-3/4	1.5HP, 110 Volt 1PH	Variable 68-1380	3-5/8	483 lbs	**RK50SB250V**	4891.00
SB-25V	1	5	3MT	18	13-3/4 x 13-3/4	2HP, 110 Volt 1PH	Variable 46-3550	3-5/8	397 lbs	**RK50SB25V**	3584.50
SB-32V	1-1/4	5-1/4	4MT	18	15-3/4 x 15-3/4	2HP, 110 Volt 1PH	Variable 46-3473	4	483 lbs	**RK50SB32V**	4281.30

F.O.B. Grand Haven MI • Ships by Truck

Ellis Electronic Variable Speed Drilling & Tapping Machine



Features:

- 2 HP motor with A.C. inverter
- Electronic Infinitely Variable Speed
- Machine can tap 3/4” holes (N.C.)
- High torque at all speeds even in forward or reverse
- Continuous speed while in operation
- Instantaneous reversing for tapping
- Can tap right or left hand threads
- Variable speed from 0-1200 RPM
- Ball bearing chuck, drill bit and machine vise shown on machines are optional
- Three Machines in One – Tapping Machine, Drilling Machine, Reaming Machine
- Machines comes standard with power downfeed on spindle
- 1 Year Warranty

Model No.	Drills to Center (in.)	Drilling Cap. (in.)	Spindle Taper	Quill Dia. (in.)	Column Dia. (in.)	Spindle Travel (in.)	Spindle to Table (Max.) (in.)	Table Size (in.)	Motor	Weight	Order No.	Price
9400	18-1/2	1-1/4 Cast Iron, 1-1/16 Steel	3MT	3	4	5-3/8	27-1/4	15-7/8 x 17-7/8	2HP, 110V, 1PH	675 lbs	**PV559400**	5106.35

F.O.B. Verona, WI • Ships by Truck • NOT CSA APPROVED

PRM 24" Gear Head Drilling & Tapping Machines



Features:

- Foot operated reversing switch for “Hands Free” tapping
- Built-in drill ejector, large massive ground table with coolant trough, automatic power feed head, machine and ground base, built-in hand crank on head and table crank for ease of raising and lowering including parts list and instruction book
- 1 Year Warranty Parts

Model No.	Drilling Cap. (in.)	Tapping Cap. (in.)	Column Dia. (in.)	Swing (in.)	Spindle Taper	Spindle Travel (in.)	Range of Speeds (RPM)	Table Size (in.)	Motor	Weight	Order No.	Price
S24B220	1-1/2	-	5-1/2	24	4MT	6-5/8	80 - 950 RPM	22-1/4 x 18-5/16	3/4 & 1-1/2HP, 220V, 3PH	860 lbs	**PX70S24B220**	6421.30
S24B440	1-1/2	1-1/4	5-1/2	24	4MT	6-5/8	80 - 950 RPM	22-1/4 x 18-5/16	3/4 & 1-1/2HP, 440V, 3PH	860 lbs	**PX70S24B440**	6421.30

F.O.B. Warren, MI • Ships by truck • NOT CSA APPROVED

15" Arm Mini Radial Drilling Machine

- Step pulley belt change head has 10 speed changes for smaller/larger jobs
- Can handle many functions where a standard drill press just isn't large enough
- Forward and reversing is standard
- Machine is equipped with a two speed motor, 3/4 and 1-1/2 HP and is wired for 230 voltage, 3 phase only
- 1 Year parts warranty



Model No.	Drilling Cap. Steel (in.)	Drilling Cap. Cast Iron (in.)	Tapping Cap. Steel (in.)	Tapping Cap. Cast Iron (in.)	Column Dia. (in.)	Travel of Head (in.)	Travel of Arm (in.)	Table Dim. (in.)	Spindle Taper	Quill Travel (in.)	Spindle Speeds (RPM)	Motor	Weight	Order No.	Price
RF-35	1.26	1.26	5/8	5/8	4-1/2	15	15	17-1/2 x 22	3MT	5	170 - 3000	3/4 & 1-1/2HP, 230V, 3PH	660 lbs	**RL80RF35**	3876.62

F.O.B. Warren, MI • Ships by truck • Not CSA approved

Optional Equipment For RF-35 Mini Radial Drill

Model No.	Type	Order No.	Price
RF35BT	Box Table for RF35	**RL80RF35BT**	495.73
RF35CS	Cabinet Stand for RF35	**RL80RF35CS**	375.13

Radial Drilling Machines

Features:

- High speed nickel chrome steel gears mounted on splined steel shafts turning in anti-friction bearings
- Columns are designed for maximum rigidity and minimum deflection while machining
- Arm is ribbed to avoid stress from twisting
- Carbon steel spindle is spline driven and loaded with large diameter taper roller bearings for maximum accuracy
- Coolant tank is incorporated into the base casting
- 1 Year Warranty Parts

Standard Equipment:

- 4MT spindle taper, heavy duty non-tilting large box table, coolant system built into base, work light, 3-phase heavy duty motor and electric controls with overload protection



TPR1230

Model No.	Drilling Cap. Steel (in.)	Drilling Cap. Cast Iron (in.)	Tapping Cap. Steel (in.)	Tapping Cap. Cast Iron (in.)	Column Dia. (in.)	Travel of Head (in.)	Travel of Arm (in.)	Table Dia. (in.)	Quill Travel (in.)	Spindle Speeds (RPM)	Feed Rates	Motor	Weight	Order No.	Price
TPR720A	1-1/2	2	3/4	1	8-1/4	20-7/8	23-13/16	17-23/32 x 13-25/32 x 13-13/32	8-1/4	88 - 1500	.002, .004, .006	2HP, 220V, 3PH	2530 lbs	**RL84TPR720A**	13747.10
TRP820A	1-1/2	2	3/4	1	8-1/4	24-7/16	25-9/16	19-3/4 x 15-3/4 x 15-3/8	8-1/4	88 - 1500	.002, .004, .006	2HP, 220V, 3PH	3080 lbs	**RL84TPR820A**	14492.10
TPR1230	1-5/8	2-3/16	1	1-1/2	11-3/16	35	34-5/8	27-5/8 x 19-5/8 x 15-3/4	9-7/8	44 - 1500	.002, .004, .006	2HP, 220V, 3PH	5620 lbs	**RL84TPR1230**	25119.65

F.O.B. Warren, MI • Ships by truck • Not CSA approved

ROLL-IN SAW Vertical Metal Cutting Bandsaw

Features:

- For contour & profile cuts as well as rip cuts and angle cuts
- Gravity feed system - Power Feed Table permits 11” cuts as standard equipment
- Variable speed controls
- Safety powerfeed foot pedal
- Hydraulic Feed Regulator (assures chatter free cuts)
- 1 Year Warranty

MADE IN THE USA



Model No.	Capacity (in.)	Blade Speeds	Blade Length	Blade Width (in.)	Motor	Weight	Order No.	Price
EF-1459	8 x 14	70 - 525 SFPM	10'	1/4 - 3/4	1HP, 110V, 1PH	585 lbs	**RF5010001**	7094.90
EF-1459	8 x 14	70 - 525 SFPM	10'	1/4 - 3/4	1HP, 220V, 1PH	585 lbs	**RF5010002**	7094.90
EF-1459	8 x 14	70 - 525 SFPM	10'	1/4 - 3/4	1HP, 220V, 3PH	585 lbs	**RF5010003**	7094.90
EF-1459	8 x 14	70 - 525 SFPM	10'	1/4 - 3/4	1HP, 440V, 3PH	585 lbs	**RF5010004**	7094.90

F.O.B. Cleveland, OH • Ships by truck • NOT CSA APPROVED

SHOP FOX 18" Wood/Metal Bandsaw

Features:

- 18” Throat x 12” height cutting capacity
- Variable frequency drive speed control with digital readout
- Infinitely variable blade speeds
- Speed control dial for on-the-fly speed changes
- Inverter motor technology can run on 220 volt, single phase power
- Two year warranty



Model No.	Throat (in.)	Blade Length (in.)	Blade Widths (in.)	Blade Speeds	Table Size (in.)	Motor	Weight	Order No.	Price
M1113	18	11'1"	1/8-1	150 - 3000 SFPM	18 x 24	1.5HP, 220V, 1PH, 1725 RPM	375 lbs	**PY65M113**	3551.00

F.O.B. Birmingham, WA • Ships By Truck • Not CSA Approved

PRM Vertical Bandsaws

Features:

- Light to heavy duty vertical bandsaws for most applications
- Variable speed
- V-Type saw guides & inserts
- Blade welder with integrated annealing unit
- Blade shear & grinder
- Chip blower & jet
- Low voltage worklight
- 15° Four-way tilt table
- Low voltage controls
- One blade & blade guard
- Tool box
- Complete instruction & parts manual
- KB45 and KV50 have blade speed tachometer and blade tension indicator
- Completely guarded
- Magnetic controls with low voltage transformer
- 1 Year Warranty Parts



KB45

Model No.	Capacity (in.)	Throat (in.)	Table Size (in.)	Blade Speed (Variable)	Blade Length (in.)	Blade Width (in.)	Motor	Weight	Floor Space Req. (L x W x H) (in.)	Order No.	Price
KB30	7 x 12	12	19-1/2 x 15-3/4	65 - 260 SFPM	8' 3"	5/8	1/2HP, 110V, 1PH	595 lbs	32-1/2 x 18-3/4 x 64-1/2	**RF66KB30**	2833.70
KB36	8 x 14	14	19-1/2 x 15-3/4	70 - 280 SFPM	9' 5"	5/8	1HP, 115V, 1PH	660 lbs	35-1/2 x 18-3/4 x 67-3/4	**RF66KB361**	3543.90
KB36	8 x 14	14	19-1/2 x 15-3/4	70 - 280 SFPM	9' 5"	5/8	1HP, 220V, 3PH	660 lbs	35-1/2 x 18-3/4 x 67-3/4	**RF66KB363**	3543.90
KB45	9 x 18	18	23-1/2 x 19-1/2	65 - 375 SFPM	11' 9"	5/8	1HP, 220V, 3PH	882 lbs	40 x 27-1/2 x 76-3/4	**RF66KB45**	4254.10
KV50	12 x 20	20-1/2	23-1/2 x 19-1/2	65 - 1600 SFPM	12' 7"	5/8	2HP, 220V, 3PH	970 lbs	41-3/8 x 23-1/4 x 81-1/2	**RF66KV50**	6100.65

F.O.B. Warren, MI • Ships by truck • NOT CSA APPROVED

DAKE Vertical Bandsaws

Features:

- Digital tachometer
- Blade speed / pitch selector guide
- Work Light
- Bi-Metal Blade
- Blade tension indicator
- Blade welder / grinder / shear
- Variable Speeds with 82 – 3,950 feet per minute speed range
- Chip blower
- Blade brush
- Heavy cast table with chip clearance grooves
- Rip Fence
- Four-way tilt table
- Low voltage controls, main power lock out switch and door limit switches
- Heavy-duty quiet running two speed gear box

New!



Type - Vertical Bandsaw									
Model No.	Table Size (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds	Throat (in.)	Motor	Weight	Order No.	Price
V-16	21-1/2 x 24	123.5"	5/8	82 - 3950 FPM	15-1/2	2HP, 230V, 3PH	904 lbs	**RF459870302**	9225.50
V-26	23-1/2 x 27-1/2	184"	1	50 - 415 Low / 550 - 5000 High FPM	26	3HP, 230V, 3PH	1540 lbs	**RF459870312**	15036.35

Type - Vertical Bandsaw w/Transformer									
Model No.	Table Size (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds	Throat (in.)	Motor	Weight	Order No.	Price
V-16 w/Transformer	21-1/2 x 24	123.5"	5/8	82 - 3950 FPM	15-1/2	2HP, 460V, 3PH	904 lbs	**RF4598703024**	10560.67
V-26 w/Transformer	23-1/2 x 27-1/2	184"	1	50 - 415 Low / 550 - 5000 High FPM	26	3HP, 460V, 3PH	1540 lbs	**RF4598703124**	15995.12

F.O.B. Grand Haven, MI • Ships by truck • NOT CSA APPROVED

DAKE Vertical Metal Cutting Bandsaw

Features:

- Variable speed
- Gravity feed table
- Tilt table
- Easy blade change design
- Work light
- Speed selector dial
- RF4588071 Welder included
- 440 Volt available at additional charge
- RF4588070 Shown without optional welder
- Proudly Made in the USA
- 1 Year Warranty



Model No.	Capacity (in.)	Throat (in.)	Table Size (in.)	Blade Speeds	Blade Length (in.)	Blade Width (in.)	Motor	Weight	Floor Space Req. (L x W x H) (in.)	Order No.	Price
TM	12 x 19	19-1/2	24 x 24	50 - 500 SFPM	12' 6"	1/4 - 1	1.5HP, 220 Only, 3PH	1150 lbs	40 x 32 x 80	**RF4588070**	14054.86
TM	12 x 19	19-1/2	24 x 24	50 - 500 SFPM	12' 6"	1/4 - 1	1.5HP, 220 Only, 3PH	1150 lbs	40 x 32 x 80	**RF4588071**	17968.06

F.O.B. Grand Haven, MI • Ships by Truck • NOT CSA APPROVED

marvel 20" Vertical Metal Cutting Bandsaw

Features:

- Handwheel and lock for movement of upper guide arm
- Universal V-type carbide blade quides (1/8" to 1")
- Blade tensions indicator
- Chip blower
- Welder 3/4" capacity
- Grinder annealer
- Rubber coated wheels
- Two speed transmission
- 40" Work height
- Worklights
- 1 Year Warranty



Model No.	Capacity (in.)	Blade Widths (in.)	Blade Length	Blade Speeds	Table Size (in.)	Motor	Weight	Order No.	Price
S20V	12 x 20	1/8 - 1	13' 4"	50 - 415 SFPM, 550 - 5000 SFPM	22-1/2 x 27-1/2	3HP, 220V/440V	1300 lbs	**RF40S20V**	14956.85

F.O.B. Oskosh, WI • Ships by Truck • NOT CSA APPROVED

ROLL-IN SAW 20" Journeyman Bandsaw with Gravity Feeding Table

Features:

- For contour & profile cuts as well as rip cuts and angle cuts
- Gravity fede system- Power Feed Table permits 11" cuts as standard equipment
- Variable speed controls
- Safety powerfeed foot pedal
- Hydraulic Feed Regulator (assures chatter free cuts)
- 1 Year Warranty



Model No.	Capacity (in.)	Throat (in.)	Blade Length (in.)	Blade Widths (in.)	Blade Guide	Blade Speeds	Table Size (in.)	Motor	Floor Space Req. (L x W x H) (in.)	Weight	Order No.	Price
JM-1220	12 x 20	20	12' 10"	1/8 - 1	1/4 to 3/4	70 - 500 SFPM	24-1/4 x 24-1/4	2HP, 220V, 3PH	30 x 46 x 80	1010 lbs	**RF5020003**	13202.65
JM-1220	12 x 20	20	12' 10"	1/8 - 1	1/4 to 3/4	70 - 500 SFPM	24-1/4 x 24-1/4	2HP, 440V, 3PH	30 x 46 x 80	1010 lbs	**RF5020004**	13202.65

F.O.B. Cleveland, OH • Ships by Truck • NOT CSA APPROVED

COSEN Vertical Contour Bandsaws

Model VCS-1000 Features:

- Cast aluminum work table
- Crowned and rubber capped wheels
- Inverter-controlled blade speed
- Fully adjustable tungsten carbide blade guides
- Blade tensioning wheel built-in
- Work light
- Rip fence
- Main table tilts 15° L/R
- +/- 10° fore/aft table tile
- Secondary table - stationary
- Chip blower
- 2 Year Warranty Parts, 1 Year Warranty Labor

Model VCS-600 Features:

- Fully adjustable tungsten carbide blade guides (included) covers all blade sizes
- Cast aluminum work table
- Rubber capped wheels
- Inverter-controlled blade speed
- Work light
- Post elevating hand wheel
- Rip fense
- Table tilts 15° L/R
- +/- 10° fore/aft table tilt
- Chip blower
- Blade tensioning wheel built-in

Model VCS-600H Features:

- Cast aluminum work table
- Cast wheels are rubber capped
- Inverter-controlled blade speed
- Fully adjustable tungsten carbide blade guides
- Blade tensioning wheel built-in
- Band break switch
- Work light
- Post elevating hand wheel
- Rip fence
- Table tilts 15° L/R
- Two tee slots in tabletop
- Hydraulic table feed rate control
- Band mist lubricator



Model No.	Capacity (in.)	Blade Length (in.)	Blade Widths (in.)	Blade Speeds	Motor	Floor Space Req. (L x W x H)	Weight	Order No.	Price
VCS-600	12	14-1/8	1/16 to 1	97-1748 SFPM	3HP	52.75 x 37.125 x 81.5	1342 lbs	**PX40VCS600**	11919.30
VCH-600H	13	14-1/8	1/16 to 1	97-1748 SFPM	3HP	52.75 x 37.125 x 81.5	1542 lbs	**PX40VCS600H**	19959.30
VCH-1000	13	1/8 to 1-1/4	1/8 to 1-1/4	100-1750 SFPM	3HP	72 x 40 x 108	11764 lbs	**PX40VCS1000**	21299.30

F.O.B. Charlotte, NC • Ships by Truck

Wellsaw 20" Vertical Metal Cutting Bandsaw

Features:

- Extra wide range of the dial in variable speed system allows cutting of various materials (wood, plastic, aluminium, composite, ferrous & non-ferrous metals)
- Special blade guides rotate 90° to allow sawing from the side of the machine -can make cuts of unlimited length
- Specify Voltage - Available in single or three phase
- Blade Guides- six sealed roller bearings
- Available with 24" under the guide
- Available with blade guides for 1" blade
- 2 Year Warranty

MADE IN THE USA

Standard Equipment:

- Flexible Machine Arm Light
- Magnetic Starter with 115 Volt Circuit
- Blade Tension Indicator
- Two-Speed Transmission
- Blade Speed Indicator
- Heavy-Duty Roller Guides
- 1/2" General Purpose Blade
- Chip Blower



Model No.	Capacity (in.)	Blade Speeds	Blade Length (in.)	Blade Width (in.)	Throat (in.)	Table Size (in.)	Motor	Weight	Floor Space Req. (L x W x H) (in.)	Order No.	Price
DL V20F-732	20	45 - 3000 SFPM	14' 9"	3/16 - 3/4	20	26 x 26	1.5HP, ODP, 115V, 1PH	915 lbs	48 x 32 x 91-1/2	**PW50DLV20F731**	12954.05
DL V20F-776	20	45 - 3000 SFPM	14' 9"	3/16 - 3/4	20	26 x 26	2HP ODP, 208V, 1PH	915 lbs	48 x 32 x 91-1/2	**PW50DLV20F776**	12954.05
DL V20F-748	20	45 - 3000 SFPM	14' 9"	3/16 - 3/4	20	26 x 26	2HP ODP, 230V, 1PH	915 lbs	48 x 32 x 91-1/2	**PW50DLV20F748**	12954.05
DL V20F-749	20	45 - 3000 SFPM	14' 9"	3/16 - 3/4	20	26 x 26	3HP TEFC, 208V, 3PH	915 lbs	48 x 32 x 91-1/2	**PW50DLV20F749**	12954.05
V20	20 x 16	30 - 3000 SFPM	14' 9"	3/16 - 3/4	20	26 x 26	3HP TEFC, 220V, 3PH	915 lbs	48 x 32 x 83-1/2	**PW50V20**	12954.05
DL V20F-751	20	45 - 3000 SFPM	14' 9"	3/16 - 3/4	20	26 x 26	3HP TEFC, 460V, 3PH	915 lbs	48 x 32 x 91-1/2	**PW50DLV20F751**	12954.05

F.O.B. Kalamazoo, MI • Ships by Truck • NOT CSA APPROVED

HEMSAW Round Cap Manual Bandsaws

Features:

- Dry Cutting
- Easy Blade Tensioning (NG120XL w/ Clutch Safety)
- Manual Head Tilt
- Manual Pull-Down
- Manual Vise
- One-Way 45° Miter (782XLH & NG160ABS); One-Way 60° Miter (NG120XL)
- Variable Speed (NG120XL & NG160ABS)
- NG Reverse Band Rotation (NG120XL & NG160ABS)







Model No.	Round Cap. @ 90°	Rectangle Cap. @ 45°	Rectangle Cap. @ 90°	Blade Speeds	Blade Length (in.)	Motor	Weight	Order No.	Price
782XLH	4.1	2.5"W x 2.3"H Left	3.9"W x 3.3"H	130-265	52-1/2	2 Speed, 115V, 1PH	35 lbs	**PW70782XLH**	668.70
ABS105	4.1	2.5"W x 2.3"H Left	3.9"W x 3.3"H	130-265	52-1/2	2 Speed, 115V, 1PH	40 lbs	**PW70ABS105**	1070.70
ABSNG120XL	4.7	3"W x 3.1"H Left	4.7"W x 4.0"H	98-265	56-3/4	1.7HP, 115V, 1PH	45 lbs	**PW70ABSNG120XL**	1981.90
ABSNG160	5.9	4.7"W x 3.9"H Left	6.2"W x 5.5"H	89-245	68-1/4	2.7HP, 115V, 1PH	85 lbs	**PW70NG160ABS**	2941.30
N215XL	6.6	5.9"W x 4.3"H Left	7.7"W x 5"H	265	84-1/4	1 Speed, 220V, 1PH	352 lbs	**PW70N215XL**	5059.85
NG120XL	4.7	3"W x 3.1"H Left	4.7"W x 4.0"H	98-265	56-3/4	1.7HP, 115V, 1PH	39 lbs	**PW70NG120XL**	1732.65
NG160	5.9	4.7"W x 3.9"H Left	6.2"W x 5.5"H	89-245	68-1/4	2.7HP, 115V, 1PH	77 lbs	**PW70NG160**	2566.10

HEMSAW Hydraulic Double Miter Bandsaw

- Dual 45 Degrees Miter
- One-Way 60 Degrees Miter
- Adjustable Feed Rate & Cutting Pressure
- Hydraulic Adjustable Vise
- 2-Speed Motor
- Hard-Stop Measuring Device
- Moveable Control Console w/ 40" Umbilical
- Miter Scale
- Heavy-Duty Sealed Pivot Bearing Point
- Full Capacity Cutting Surface
- Flood Coolant System



Model No.	Round Cap. @ 90°	Rectangle Cap. @ 45°	Rectangle Cap. @ 90°	Blade Speeds	Blade Length (in.)	Motor	Weight	Order No.	Price
260BSA	8.7"	5.9"W x 5.9"H Left, 3.9"W x 4.7H right	10.2"W x 5.9"H	160-285	96-1/2	1.4HP, 220V, 3PH	706 lbs	**PW71260BSA**	10579.30

F.O.B. Factory • Ships By Truck

HEM SAW Work Table

- For use with HEM model 782XLH Band Saw
- Allows HEM 782XLH Band Saw to Vertical Cut



Order No.	Price
PW70F007075	179.60

HEM SAW Roller Stand

- For use with Hem Saw 260BSA saw
- Size: 4 ft.



Order No.	Price
PW71U001113	830.80

HEM SAW Jobby Stand

- Jobby stand for Hem Saw utility band saws



Order No.	Price
PW70F007133	194.30

PALMGREN 6" Mitre Bandsaw

Features:

- A bench top band saw comes with large cutting capacities
- Easy to move and position where needed
- The miter head swivels and locks for fast, easy miter cutting
- Heavy duty base with integrated vise
- Ergonomic hand grip and switch
- Electronic variable speed direct drive motor
- Adjustable tension feed control
- Work stop
- Push button power on/off switch
- 3 Year Warranty

New!



Model No.	Blade Size (in.)	Blade Speeds	Overall Dimensions (in.)	Motor	Weight	Order No.	Price
9683306	.51 x .003 x 70.27	115-280 SFPM	20.87 x 18 x 35.43	1.5HP, 115V, 1PH	85 lbs	JB559683306	1338.66

F.O.B. Chicago, IL • Ships by Truck

PALMGREN Miter Band Saw Floor Stand

- For use with 9683306

New!



Order No.	Price
JB559670106	278.72

F.O.B. Chicago, IL

COSEN Mitering Horizontal Bandsaws

Model MH-270M Features:

- Built-in integral coolant system
- Blade cleaning chip brush
- Stepless variable blade speed
- Adjustable material stopper
- 60° swivel frame design
- Hardened worm gear
- Carbide insert and bearing to enhance blade support
- Hydraulic feed control with on/off valve
- Heavy duty quick clamp/release vise
- AutoCut mode with large feed rate control valve
- Quick Approach mode with release trigger

Model MH-300DM Features:

- Hydraulic cylinder plus precision ground hinge support
- Swivel frame design
- Built-in integral coolant system
- Direct drive gearbox
- 1.6 HP motor
- Carbide blade guides with roller bearings
- Two additional guides enhance blade support
- Cast-iron rigid guide arms
- Blade tensioning system fitted with indicator gauge
- Blade brush to remove chips
- Heavy duty quick clamp/release vise
- Adjustable down feed rate control with on/off valve

Model MH-350DM Features:

- Hydraulic cylinder plus precision ground hinge support
- Swivel frame design
- Large rugged base
- 1.5 HP motor
- Direct drive type gearbox
- Carbide blade guides with roller bearings
- Two additional guides
- Rigid guide arms
- Blade tensioning system fitted with indicator gage
- Integral coolant system
- Blade brush to remove chips from blade gullet
- Down feed rate control with on/off valve
- Quick clamping/releasing vise
- 2 Year Warranty Parts, 1 Year Warranty Labor

New!



Model No.	Style	Capacity (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds	Motor	Floor Space Req. (L x W x H)	Weight	Order No.	Price
MH-270M	Swivel Head	8.85	97-5/8	1	Variable 125-250 FPM	1-1/2HP, 220V, 1 or 3PH	52 x 28 x 52.2	550 lbs	PX40MH270M	5085.30
MH-300DM	Pivot Head	10.2	116	1	Variable 125-250 FPM	1-1/2HP, 220V, 3PH	59 x 61	704 lbs	PX40MH300DM	8033.30
MH-350DM	Manual Head	10.2	120.3	1	Variable 118-236 FPM	1-1/2HP, 220V/460V, 3PH	58 x 64 x 68	1014 lbs	PX40MH350DM	9373.30

F.O.B. Charlotte, NC • Ships by Truck

Wellsaw 6" x 13" Horizontal Bandsaw

Features:

- Hydraulic Feed Control with Adjustable Counterbalance Spring
- Ball Bearing Blade Guides
- Perimeter Ring Gear Blade Drive
- Rite-Tension® Band Tensioning Device
- Wet Cutting System
- Overload and under voltage Protection
- Quick Acting Vise, Adjustable Stock Stop
- Auto Shut-Off at End of Cut
- OSHA Blade Guarding
- 1 Year Warranty

MADE IN THE USA



Model No.	Capacity (in.)	Blade Speeds (SFPM)	Blade Length (ft/in.)	Blade Widths (in.)	Motor	Weight	Order No.	Price
613	6 x 13	50, 90, 160, 250	8' 3"	3/4	1HP, 115V/230V, 1PH or 230/460 3PH	650 lbs	**PW50613**	7442.90

F.O.B. Kalamazoo, MI • Ships by truck

PRM 7" x 12" Horizontal-Vertical Medium Duty Non-Production Portable Bandsaw

Features:

- Hydraulic cylinder for adjustment of head pressure
- Horizontal and vertical cutting
- Four blade speeds
- Vise can miter 45° and 90°
- Blade tensioning adjustment, adjustable ball bearing blade guides
- Guarded automatic shut-off switch
- 1 Year Warranty Parts

Standard Equipment:

- One 3/4" saw blade, casters, coolant system, vertical table, adjustable stock stop, blade brush, heavy duty 1 HP motor, instructions & parts manual
- Complete & ready to run



Model No.	Capacity (in.)	Blade Speeds (4)	Blade Length (in.)	Blade Width (in.)	Motor	Weight	Order No.	Price
UC180AJ	7 x 12	86, 132, 178, 260 SFPM	7' 9"	3/4	1HP, 110V/220V, 1PH	286 lbs	**RF80UC180AJ**	1526.93

F.O.B. Warren, MI • Ships by Truck • NOT CSA APPROVED

DAKE 7" x 12" Intermediate Duty Horizonal Bandsaw

Features:

- Quick release valve
- Hydraulic controlled, gravity head feed with combination head speed flow control/ head lock valve
- Horizontally mounted guide arms for more rigidity and straightest cuts
- Cast one piece head frame
- Cast lip and grooved designed wheels
- Low voltage controls with thermo overload protection
- V-Belt and step pulleys for fast speed changes
- Mechanical blade tensioning
- Converts for vertical use
- Self contained coolant system
- 1 Year Warranty



Model No.	Round Cap. @ 90° (in.)	Rectangle Cap.@ 90° (in.)	Round Cap.@ 45° (in.)	Rectangle Cap.@ 45° (in.)	Blade Length (in.)	Blade Widths (in.)	Blade Speeds (in.)	Motor	Weight	Order No.	Price
SE712	7	7 x 12	4	3-3/4 x 5-1/2	7' 9"	3/4	(4) 85 - 235 SFPM	3/4HP, 1PH	350 lbs	**RF5183100**	2677.45

F.O.B. Grand Haven, MI • Ships by Truck • NOT CSA APPROVED

W.F. WELLS 7" x 11" Horizontal Bandsaw

MADE IN THE USA

Features:
- Rugged, dependable general utility machine
- Ideal tool for work in the field or in plants for construction and maintenance
- 1 Year Warranty

Standard Equipment:
- 3/4" Bi-Metal Blade, Carbide Blade Guides, Built-In Coolant System, Manually Controlled 45° Swivel Vise, Manually Controlled Blade Tension, Blade Powered Rotary Cleaning Brush, Electrics to NFPA 79 Standards, Automatic End-Of-Cut Shutdown, Operator Manual and Parts List, Hydraulic Oil



Model No.	Blade Length	Blade Widths (in.)	Blade Speeds	Rectangle Cap.@ 90°	Round Cap.@ 45°	Motor	Weight	Order No.	Price
AC-7	7' 10"	3/4	55, 90, 145, 180 SFPM	7 x 11	4 x 4.75	3/4HP	305 lbs	**PW55AC7**	7663.06

F.O.B. Three Rivers, MI • Ships by Truck • NOT CSA Approved

KALAMAZOO Wet Cutting Horizontal Bandsaw

Features:
- 4 Speed step step pulley with worm gear speed reducer, worm shaft is hardened and ground
- Totally enclosed transmission
- Heavy-duty hydraulic cylinder with precision ground hinge support
- Pan shaped base with built-in coolant & hydraulic system
- Cast iron bed
- Carbide blade guides with roller bearings
- Two additional bearings to support blade from the top
- Recirculating coolant system with application through both guides
- Valve controlled hydraulic cylinder controls feed and cutting rate and can be adjusted for different types and sizes of material
- Adjustable stock stop
- Simplified control switches mounted on saw head
- Cast iron quick acting 0-45° vise with manual leadscrew clamping system
- Tool box, leveling pads, and an additional wire brush
- 2 Year Limited Warranty



Model No.	Round Cap. @ 45°	Round Cap. @ 90°	Rectangle Cap. @ 45°	Rectangle Cap. @ 90°	Blade Length (in.)	Blade Widths (in.)	Blade Speeds	Motor	Weight	Order No.	Price
KC812W	7-1/2	8	6 x 9	7 x 14	8' 11"	1	(4) 59, 96, 155, 260 SFPM	1HP, 110V/220V, 1PH	580 lbs	**RF60KC812W**	4609.60

F.O.B. Kalamazoo, MI • Ships by Truck • NOT CSA APPROVED

Wellsaw 9-1/2" x 11" Portable Horizontal-Vertical Bandsaw

Features:
- 3 Speed v-belt pulley drive
- Adjustable pressure gravity feed
- Converts from horizontal to vertical work
- Available in dry or wet-cutting models
- Automatic shut-off
- Thermal overload motor protection
- 2 Year Warranty

Standard Equipment:
- Stock stop assembly, Quick acting adjustable vise, Vertical work table, Ball bearing blade guides and Mobile wheel kit

MADE IN THE USA



58B

Model No.	Round Cap. @ 90° (in.)	Rectangle Cap. @ 90° (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds (3)	Motor	Weight	Order No.	Price
58BD (DRY)	9.5	9.5 x 11	7' 9"	1/2	76, 141, 268 SFPM	1/2HP, 115V, 1PH	350 lbs	**PW5058BD**	5042.42
58BW (WET)	9.5	9.5 x 11	7' 9"	1/2	76, 141, 268 SFPM	1/2HP, 115V, 1PH	365 lbs	**PW5058BW**	5383.32

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

DAKE 9" x 12" Intermediate Duty Horizonal Bandsaw



Features:

- Quick release valve
- Hydraulic controlled, gravity head feed with combination head speed flow control/ head lock valve
- Horizontally mounted guide arms for more rigidity and straightest cuts
- Cast one piece head frame
- Cast lip and grooved designed wheels
- Low voltage controls with thermo overload protection
- V-Belt and step pulleys for fast speed changes
- Mechanical blade tensioning
- Self contained coolant system
- Combination Roller and Carbide Guides
- 1 Year Warranty

Model No.	Round Cap. @ 90° (in.)	Rectangle Cap.@ 90° (in.)	Round Cap.@ 45° (in.)	Rectangle Cap.@ 45° (in.)	Blade Length (in.)	Blade Widths (in.)	Blade Speeds (in.)	Motor	Weight	Order No.	Price
SE912	9	9 x 12	3-1/2	3-1/2 x 7-1/2	8' - 10-1/2"	1	(4) 98 - 328 SFPM	1HP, 1PH	500 lbs	**RF5183101**	4097.85

F.O.B. Grand Haven, MI • Ships by Truck • NOT CSA APPROVED

COSEN Manual Pivot Bandsaw

Model MH-1016JA Features:

New!



- Presicision ground hinge guides the saw frame through out cutting cycle
- Quick set up vise enables miter cutting at desired angles
- Hydraulic shuttle vise assembly
- Built-in coolant & hydraulic systems
- Carbide blade guides reduce wear on blade guides and blade
- Rigid guide arms on a dovetail slide greatly reduces vibration, achieving a better cutting result
- Integral coolant system
- Down feed rate control
- Cast iron vises
- 2 Year Warranty Parts, 1 Year Warranty Labor

Model No.	Capacity (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds	Motor	Floor Space Req. (L x W x H)	Weight	Order No.	Price
MH-1016JA	10	11	1	95, 150, 213, 321 SFPM	2HP	69 x 28 x 42.5	1010 lbs	**PX40MH1016JA**	5621.30

F.O.B. Charlotte, NC • Ships by Truck

PRM 9" x 16" Non-Production Horizontal Wet-Cut Medium Duty Bandsaw

Standard Equipment/Features:



- Cast iron construction
- 90° to 45° Quick acting mitering vise, built-in wet coolant tank and pump
- Adjustable roller bearing
- Blade guides
- Full hydraulic downfeed regulator
- Magnetic controls
- 1 Year parts warranty

Model No.	Capacity (in.)	Blade Speeds	Blade Length (in.)	Blade Width (in.)	Motor	Weight	Order No.	Price
THB916A	9 x 16	(4) 82, 132, 178, 235 SFPM	10'	1	1.5HP, 110V/220V, 1PH	625 lbs	**RF80THB916A**	3657.53

F.O.B. Warren, MI • Ships by truck • Not CSA approved

Manual Swivel Head Mitering Horizontal Bandsaw

Model MH-460M Features:

- Heavy duty hydraulic cylinder plus precsion ground hinge support and guide
- Specially designed heavy-duty cast iron swivel center features straight and miter cuts from 90 to 30 degrees
- Large rugged base with build-in coolant & hydraulic systems
- 2 HP motor, heavy-duty reducer, and variable step drive assembly
- 4-speed transmission is equipped with the best worm gear speed reducer
- Carbide blade guides with roller bearings
- The rigid guide arms are mounted on an extra wide precision ground dovetail slide
- Two additional guides located on a central axis
- Integral coolant system
- Blade brush to remove ships from blade gullet
- Down feed rate & cutting pressure control
- Cast iron vises with replaceable extension plate
- Secure clamping via a dependable manual lead screw system with anti-slip hand wheel
- 2 Year Warranty Parts, 1 Year Warranty Labor

New!



Model No.	Capacity (in.)	Blade Length (in.)	Blade Widths (in.)	Blade Speeds	Motor	Floor Space Req. (L x W x H)	Weight	Order No.	Price
MH-460M	10	11' 5"	1	95, 150, 213, 321 SFPM	2HP	48 x 76 x 66.9	1320 lbs	**PX40MH460M**	8033.30

F.O.B. Charlotte, NC • Ships by Truck

Wellsaw® 10" x 16" Capacity Horizontal Wet Cutting Bandsaw

Features:

- 4 Speed V-belt pulley drive
- Counter balance spring with hydraulic variable feedrate
- "Rite Tension"® blade tensioning system
- Magnetic starter with 110 Volt controls
- Automatic shut-off
- 2 Year Warranty

Standard Equipment Includes:

- Carbide guides with back-up rollers, Wet-cutting coolant system, Quick acting adjustable vise and Stock stop assembly

MADE IN THE USA



Model No.	Round Cap. @ 90° (in.)	Rectangle Cap. @ 90° (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds	Motor	Weight	Order No.	Price
1016	10.5	10 x 16	11' 6"	1	50, 100, 175, 275 SFPM	2HP, 220V/440V, 3PH	900 lbs	**PW501016**	9928.60

F.O.B. Kalamazoo, MI • Ships by truck • Specify Voltage • NOT CSA APPROVED

W.F. WELLS® 10" x 16" Variable Speed Horizontal Wet Cutting Bandsaw

Standard Equipment:

- Carbide blade guides, rotary blade brush, built-in coolant system, quick acting 45° vise, hydraulic controlled rate descent, quick and easy blade change, manually controlled blade tension and conforms to NFPA-79 electrics standards with low voltage protection - Also available in single phase
- 1 Year Warranty
- Specify Voltage

MADE IN THE USA



Model No.	Capacity (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds	Bed Height (in.)	Motor	Weight	Floor Space Required (L x W x H)	Order No.	Price
L-10	10 x 16	11' 6"	1	Variable 70 - 380 SFPM	28-1/4	3HP, 230V/460V, 3PH	850 lbs	43 x 81 x 63	**PW55L10**	12350.38

F.O.B. Three River, MI • Ships by Flatbed Truck Only

Wellsaw 13" x 18" Variable Speed Horizontal Bandsaw

Features:

- Rite Tension® blade tensioning system
- Infinite variable speed drive
- Gravity/Hydraulic, spring counter balance feed control
- Automatic shut-off
- Specify Voltage
- 2 Year Warranty

MADE IN THE USA

Standard Equipment Includes:

- Combination carbide guides with rollers, Magnetic starter with 110 Volt controls, Stock stop assembly, Quick acting adjustable vise, Coolant system and Complete guarding



Model No.	Round Cap. @ 90° (in.)	Rectangle Cap. @ 90° (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speed (Variable)	Motor	Weight	Order No.	Price
1318	13	13 x 18	12' 6"	1	70 - 375 SFPM	3HP, 220/440V, 3PH	950 lbs	**PW501318**	11732.50

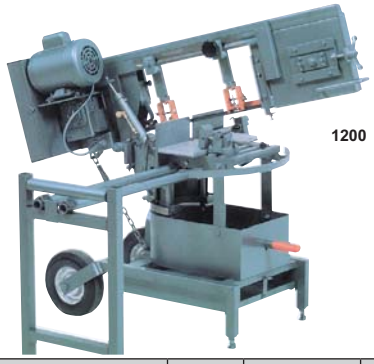
F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

Ellis Horizontal Miter Cutting Bandsaws

Features:

- Head moves left or right for angle cutting
- Stock remains in one position for all cuts
- One step conversion from horizontal to vertical
- Built-in protractor for fast and accurate selection of angles
- Hydraulic cylinder controls head pressure
- Automatic shutoff
- Removeable chip tray
- 1600S Includes screw type vise
- Deluxe quick adjusting vise
- #1500, #1600, #1800, #2000 Shown with optional stock stand
- 1 Year Warranty

MADE IN THE USA



Model No.	Round Cap. @ 90° (in.)	Round Cap. @ 45° (in.)	Rectangle Cap. @ 90° (in.)	Rectangle Cap. @ 45° (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds	Motor	Weight	Order No.	Price
1200	8	6	10	6	8' 6"	5/8	70, 135, 250 FPM	3/4HP, 110V/220V, 1PH	385 lbs	**PV551200**	4680.25
1500	10	6-7/8	11	7-1/4	9' 6"	3/4	70 - 250 SFPM	3/4HP, 110V, 1PH	435 lbs	**PV551500**	4822.30
1600	10	6-7/8	11	7-1/4	10'	1	70 - 250 SFPM	3/4HP, 110V, 1PH	475 lbs	**PV551600**	4964.30
1600S	10	6-7/8	11	7-1/4	10'	1	70 - 250 SFPM	3/4HP, 110V, 1PH	475 lbs	**PV551600S**	5390.45
1800	11	9	14	9.5	11'	1	70 - 250 SFPM	1HP, 110V/220V, 1PH	650 lbs	**PV551800**	5610.60
2000	11	11	17	11	12'	1	70 - 250 SFPM	1.5HP, 220V, 1PH	800 lbs	**PV552000**	6526.75
3000	13-1/2	12	19	13	13' 6"	1	80 - 220 FPM	2HP, 220V, 1PH	1000 lbs	**PV553000**	7094.90

F.O.B. Verona, WI • Ships by truck • NOT CSA APPROVED

PRM 10" x 18" Double Miter Bandsaw

Features:

- Conveniently located operator control panel
- Variable speed drive
- Top load blade
- Adjustable blade guides with 6 contact points using cam follower bearings and carbide pads
- Counter balanced hydraulic feed system
- Chip blade brush
- Coolant system with adjustable flow through the guides
- Adjustable work stop
- Miters 60° to the left and 45° to the right
- Rapid acting vise



Model No.	Round Cap. @ 45°	Round Cap. @ 60°	Rectangle Cap. @ 45°	Rectangle Cap. @ 60°	Blade Size (in.)	Blade Speeds	Motor	Weight	Order No.	Price
83310	10	8	10 x 11	5 x 8	1.06 x .035 x 132	98 - 393 SFPM	2HP, 220V, 3PH	1165 lbs	**PX651018**	10182.70

F.O.B. Warren, MI • Ships By Truck • Not CSA Approved

ROLL-IN SAW 12" x 12" "Spider" Miter-Cutting Horizontal Bandsaw

Features:

- Saw head swivels 60º in either direction
- Cuts 6" rounds or square at 60°
- Variable hydraulic cylinder controls saw head feedrate
- Automatic shut-off at end of cut
- Available in wet (HW1212) or dry (HM1212) cutting models
- Adjustable cast iron guide arms
- 1 Year Limited Warranty

MADE IN THE USA

Standard Equipment Includes:

- Eight gallon coolant tank with adjustable fluid flow control on Model No. HW-1212) only, quick acting adjustable vise, carbide guide inserts, blade cleaning brush and safety magnetic starter switch



HW1212

Model No.	Round Cap. @ 90° (in.)	Round Cap. @ 45° (in.)	Rectangle Cap. @ 90° (in.)	Rectangle Cap. @ 45° (in.)	Blade Speeds	Blade Size (in.)	Blade Width (in.)	Motor	Weight	Order No.	Price
HM-1212	12	8	12 x 10	9 x 10	(3) 70 - 140 - 270 SFPM	11' 8"	1	1HP, 110V/220V, 1PH	700 lbs	**RF50HM1212**	8657.35
HW-1212	12	8	12 x 10	9 x 10	(3) 70 - 140 - 270 SFPM	11' 8"	1	1HP, 110V/220V, 1PH	700 lbs	**RF50HW1212**	9225.50

F.O.B. Cleveland, Ohio • Ships by truck • NOT CSA APPROVED

Wellsaw 13" x 16" Swivel Head Wet Cutting Miter Cutting Bandsaw

Features:

- Saw head swivels to make miter cuts from 0° to 60°
- Cuts 8" round at 60°
- No need to swing stock or adjust vise jaws
- Turntable pivots on precision ball bearings
- Rite Tensioning® blade tensioning
- Infinitely variable speed drive
- Gravity hydraulic variable feedrate
- Available in single phase
- 2 Year Warranty

MADE IN THE USA

Standard Equipment:

- 5' x 18" Infeed roller conveyor, Worklight included (not shown), Combination carbide guides with rollers, 8 Gallon wet cutting system, Stock stop assembly, Powered blade brush and Magnetic starter with 115 Volt controls



Model No.	Round Cap. @ 90° (in.)	Round Cap. @ 45° (in.)	Rectangle Cap. @ 90° (in.)	Rectangle Cap. @ 45° (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speed (Variable)	Motor	Weight	Order No.	Price
1316S	13	11-1/2	13 x 16	13 x 11.5	12' 6"	1	70 - 375 SFPM	3HP, 208V/230V/460V, 3PH	1555 lbs	**PW501316S**	16377.21

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

PRM 13" x 19" Horizontal Miter Bandsaw

Features:

- Conveniently located operator control panel
- Variable speed drive
- Top load blade
- Adjustable blade guides with 6 contact points using cam follower bearings and carbide pads
- Counter balanced hydraulic feed system
- Chip blade brush
- Coolant system with adjustable flow through the guides
- Adjustable work stop
- Miters 60° to the left and 45° to the right
- Rapid acting vise



Model No.	Round Cap. @ 45°	Round Cap. @ 60°	Rectangle Cap. @ 45°	Rectangle Cap. @ 60°	Blade Size (in.)	Blade Speeds	Motor	Weight	Order No.	Price
83313	11	6-7/8	13 x 11	10 x 6-7/8	1.06 x .035 x 150"	98 - 393 SFPM	2HP, 220V, 3PH	1301 lbs	**PX651319**	13333.00

F.O.B. Warren, MI • Ships By Truck • Not CSA Approved

marvel 13" x 18" Dual Mitering Horizontal Bandsaw

Features:

- Unique sliding vise design that repositions vise for mitering
- Quick adjusting vise jaw
- Hydraulic down feed with auto head lift
- Heavy duty steel plate base
- Swing Arm control console
- Carbide blade guides with roller bearings
- Powered chip brush
- 1/8 HP coolant pump with flushing hose
- Blade speeds 90, 140, 220, 320 SFPM
- 2 Year Warranty Parts & Labor



Model No.	Round Cap. @ 45° (in.)	Round Capacity @ 60° (in.)	Round Cap. @ 90° (in.)	Rectangle Cap. @ 45° (in.)	Rectangle Cap. @ 60° (in.)	Rectangle Cap. @ 90° (in.)	Blade Length (in.)	Blade Width (in.)	Motor	Weight	Order No.	Price
S3303	13	9.5	13	11 x 12	11 x 8	12 x 18	13' 6"	1	3HP, 220/440V, 3PH	1800 lbs	**RF40S3303**	16192.60

F.O.B. Oskosh, WI • Ships by truck • NOT CSA APPROVED

ROLL-IN SAW 14" x 18" Miter-Cutting Horizontal Bandsaw

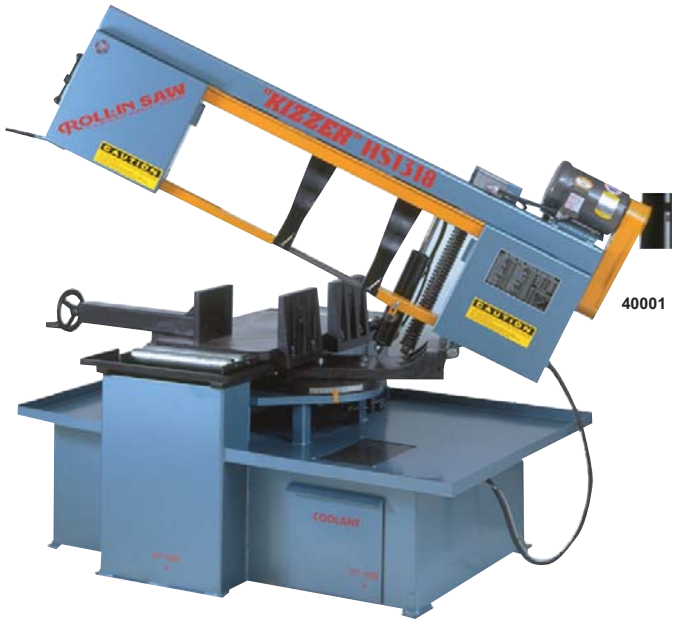
Features:

- Horizontal saw head pivots 45° right and 45° left
- Quick acting vise can be mounted on either side to accommodate material to be cut
- Variable hydraulic cylinder to control saw head feedrate
- Table workload capacity of 3500 lbs.
- Automatic shutoff at the end of cut
- Adjustable cast iron guide arms
- Easily accessible control box
- Outstanding quality since 1940
- 1 Year Limited Warranty

Standard Equipment:

- Carbide guide inserts, 4 roller infeed material loading conveyor, 4 roller outfeed material unloading conveyor, 8 Gallon capacity flood coolant system, blade cleaning brush and safety magnetic starter

MADE IN THE USA



40001

Model No.	Capacity (in.)	Round Cap. @ 90° (in.)	Round Cap. @ 45° (in.)	Rectangle Cap. @ 90° (in.)	Rectangle Cap. @ 45° (in.)	Blade Size (in.)	Blade Width (in.)	Blade Speeds	Motor	Weight	Order No.	Price
HS-1418	14 x 18	14	12	14 x 18	12 x 14	13' 10"	1	(3) 70 - 140 - 270 SFPM	2HP, 220V, 3PH	1600 lbs	**RF5040001**	14338.95
HS-1418	14 x 18	14	12	14 x 18	12 x 14	13' 10"	1	(3) 70 - 140 - 270 SFPM	2HP, 440V, 3PH	1600 lbs	**RF5040002**	14338.95

F.O.B. Cleveland, Ohio • Ships by truck • NOT CSA APPROVED

Semi-Automatic Swivel Head Mitering Horizontal Bandsaw

Model SH-460M Features:

- Precision ground hinge guide saw frame through cutting cycle
- Heavy-duty cast iron swivel center features straight and miter cuts from 90 to 30 degrees
- Built-in coolant & hydraulic systems
- Carbide blade guides
- Rigid guide arms on an dovetail slide reduces vibration, achieving a better cutting result
- Downfeed rate & cutting pressure control
- Cast iron vises
- 2 Year Warranty Parts, 1 Year Warranty Labor

New!



Model No.	Round Cap. @ 45°	Round Cap. @ 90°	Rectangle Cap. @ 45°	Rectangle Cap. @ 90°	Blade Length	Blade Widths (in.)	Blade Speeds	Motor	Weight	Order No.	Price
SH-460M	9	10	9 x 9	9 x 18.1	11'6"	1	95, 150, 213, 321 SFPM	2HP	1450 lbs	**PX40SH460M**	9775.30

F.O.B. Charlotte, NC • Ships by Truck

Semi-Automatic Horizontal Pivot Bandsaw

Model SH-250R Features:

- Smooth and consistent downfeed accomplished via universal ball joint support
- Gearbox designed to accept high lateral pressure (no thermal distortion)
- Infinitely variable blade speed
- Carbide blade guides
- Rigid guide arms on an dovetail slide allows easy adjustment of guide arms
- Integral coolant system
- Downfeed rate & cutting pressure control
- Front and rear hardened wear strips
- 2 Year Warranty Parts, 1 Year Warranty Labor

New!



Model No.	Capacity (in.)	Blade Length (in.)	Blade Widths (in.)	Blade Speeds	Motor	Floor Space Req. (L x W x H)	Weight	Order No.	Price
SH-250R	10	11	1	75, 121, 190, 305 SFPM	2HP	72 x 35 x 45	1276 lbs	**PX40SH250R**	10311.30

Semi-Automatic Mitering Horizontal Pivot Bandsaw

Model SH-500M Features:

- Swivel sawhead allows cutting at any angle between 0° (straight cut) and 60° (miter cut)
- Hard stops at 0°, 45°, and 60° for quick angle set up
- Integral coolant system
- Blade drive equipped with variable pully drive
- Infinitely variable blade speed system - 3 HP drive
- Carbide guides
- Synchronized blade brush
- Work height selector
- Built-in adjustable material stop
- Full stroke machine vise
- Optional Micro Droplet Applicator replaces traditional flood coolant system
- 2 Year Warranty Parts, 1 Year Warranty Labor

New!



Model No.	Round Cap. @ 45°	Round Cap. @ 90°	Rectangle Cap. @ 45°	Rectangle Cap. @ 90°	Blade Length (in.)	Blade Widths (in.)	Blade Speeds	Motor	Weight	Order No.	Price
SH-500M	12	13	11 x 12	11 x 19.7	13' 7"	1	Four speed pulley drive: 60 Hz: 75, 117, 166, 247FPM	3HP	2178 lbs	**PX40SH500M**	16059.90

F.O.B. Charlotte, NC • Ships by Truck

Bandsaw Accessories

New!

Style	Order No.	Price
10' heavy Duty Roller Table For Models: MH460M, MH1016JA, SH250R, SH460M, SH500M	**PX41RT1019**	3745.30
3' Roller Table for Models: MH460M, MH1016JA, SH250R	**PX415AJC700051M**	1199.30
5' Heavy Duty Roller Table For Models: MH460M, MH1016JA, SH250R, SH460M, SH500M	**PX41RT519**	2405.30
7' Heavy Duty Table with Vertical Alighnment Rollers for Models: MH460M, MH1016JA, SH-250R	**PX4105RC44602M**	2673.30
Buck Boost Transformer for Models: MH460M, MH1016JA, SH250R, SH460M, SH500M	**PX41BUCKBOOST**	1333.30
Laser Light Assembly For Model: VCH1000	**PX41LASER**	3343.30
Micro Droplet Applicator For Model: SH500M	**PX41MDASH500M**	3343.30
Portable Blade Welder For Models: VCS600, VCH600H, VCH1000	**PX41WELDER**	2003.30
Voltage Change 460V MH For Models: MH460M, MH1016JA	**PX41460VMH**	797.30
Voltage Change 480V MH For Model MH-350DM Only	**PX41480VMH350M**	1199.30
Voltage Change to 220V, 1PH with Static Phase Converter For Models: MH460M, MH1016JA	**PX41220V1PH**	1065.30
Voltage Changer 460V SH for Models: SH250R, SH460M, SH500M	**PX41460VSH**	931.30

F.O.B. Charlotte, NC • Ships by Truck

Wellsaw® 1316S-SA Semi-Automatic Bandsaw

Features:

- Provides the strength and precision of our popular swivel head saw with the convenience of true semiautomatic operation
- The factory programed PLC manages the saw head and bed vise improving both safety and productivity
- True swivel head
- Cuts from 0° to 60°
- Hydraulic feed control
- Flood coolant system, worklight and 5 ft. infeed conveyor are all standard
- Variable Bandspeed
- Full cycle, automatic control of the saw frame and vise jaw
- Full function control panel for manual control of all functions
- Positive feed control for increased performance on oversized pieces
- Available in single phase
- 5 Ft. infeed conveyor not shown
- 2 Year Warranty

MADE IN THE USA



Model No.	Capacity (in.)	Rectangle Cap. @ 45°	Rectangle Cap. @ 60°	Blade Length	Blade Widths (in.)	Blade Speeds	Motor	Weight	Order No.	Price
1316S-SA	13 x 16	13 x 11-1/2	8-1/2 x 8	12' 6"	1	70 - 375 SFPM	3HP, 220/440V, 3PH	1800 lbs	**PW501316SSA**	23180.93

F.O.B. Kalamazoo, MI • Ships by truck

Wellsaw® 1318-SA Semi-Automatic Bandsaw

- PLC Controlled, full cycle semi-automatic operation
- Variable hydraulic feed rate control
- Spring loaded carbide guides with rollers
- Combination reduction gearbox and perimeter ring gear blade drive
- Infinitely variable blade speeds
- Rite-Tension® blade tensioning device
- Wet cuttying system
- 110 Volts at controls
- Overload and undervoltage protection
- Quick acting vise/air powered
- Adjustable stock stop
- Auto shut-off at end of cut
- OSHA blade guarding
- Shown with optional infeed conveyor
- 2 Year Warranty

MADE IN THE USA



Model No.	Capacity	Round Cap. @ 90°	Rectangle Cap. @ 45°	Rectangle Cap. @ 90°	Blade Widths (in.)	Blade Length	Blade Speeds	Motor	Weight	Order No.	Price
1318-SA	13" x 18"	13"	11" x 9-1/2"	13" x 18"	1	12'6"	70-375 SFPM	220V, 3HP, 3PH	955 lbs.	**PW501318SA**	18976.54
1318-SA440	13" x 18"	13"	11" x 9-1/2"	13" x 18"	1	12'6"	70-375 SFPM	440V, 3HP, 3PH	955 lbs	**PW501318SA440**	18976.54

F.O.B. Factory • Ships by Truck

Horizontal SNC Automatic Saw with Shuttle Vise

Features:

- Smart NC-100 (SNC100) technology provides most of the benefits with NC controlled saws
- SNC100 controls are programmable up to 100 different jobs including quantity and length of cut
- The control automatically compensates for Kerf loss after data input and requires no manual calculation of number of times to index

New!



Model No.	Round Cap. @ 90°	Rectangle Cap. @ 90°	Square Cap. @ 90°	Blade Length	Blade Widths	Blade Speeds	Motor	Weight	Order No.	Price
C-260NC	10.2	-	10.2	12'	1.3	20-100 m/min (66-328 ft/min)	5HP	3300 lbs	**PX41C260NC**	32019.30

F.O.B. Charlotte, NC • Ships by Truck

Horizontal Automatic Saw

Features:

- Fully automatic
- Twin column
- Hydraulic vice control
- Bundle cutting clamps
- NC programable controller
- Hydraulic powered chip conveyor and nesting fixture
- Roller table

New!



Model No.	Round Cap. @ 90°	Rectangle Cap. @ 90°	Square Cap. @ 90°	Blade Length	Blade Widths	Blade Speeds	Motor	Weight	Order No.	Price
C-320NC	12.6	15 x 12.6	12.6	13'9"	1.3	20-100 m/min	5HP	4850 lbs	**PX41C320NC**	38719.30

F.O.B. Charlotte, NC • Ships by Truck

SNC Horizontal Automatic Saw with Shuttle Vise

Features:

- Smart NC-100 (SNC100) technology provides most of the benefits with NC controlled saws
- SNC100 controls are programmable up to 100 different jobs including quantity and length of cut
- The control automatically compensates for Kerf loss after data input and requires no manual calculation of number of times to index

New!



Model No.	Round Cap. @ 90°	Rectangle Cap. @ 90°	Square Cap. @ 90°	Blade Length	Blade Widths	Blade Speeds	Motor	Weight	Order No.	Price
C-325NC	12.8	12.8 x 15	12.8	12'5"	1.3	20-100 mmin	5HP	3960 lbs	**PX41C325NC**	34703.35

F.O.B. Charlotte, NC • Ships by Truck

High-Speed, Heavy Duty, Fully-Automatic Horizontal Production Bandsaws

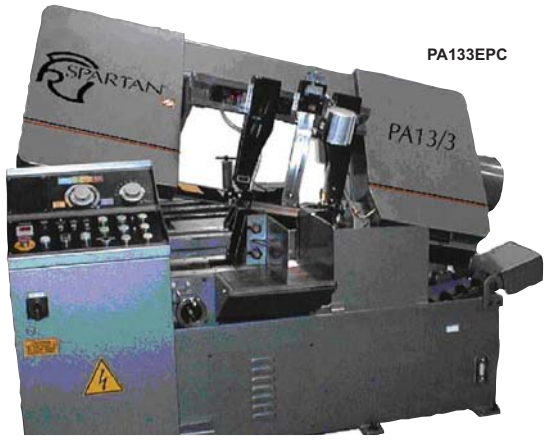
Features:

- Automatic hydraulic shuttle barfeed
- Hydraulic blade tensioning
- Infinitely variable saw blade speeds through an A/C inverter drive & worm gear transmission with an electric tachometer
- Digital cut length settings and piece counter, on PA10/3
- 0 to 300 lbs. positive hydraulic infinitely variable feed force pressure
- Motion detector which shuts down in the event of a blade failure
- Out of stock switch and work light
- Combination roller bearing and carbide blade guides chip auger
- Fully stroking hydraulic split vise jaws ideal for bundle cutting
- EPC control has touch pad length input for 9 jobs
- 5 Gallons of coolant
- Specify 230 or 460 voltage - Other voltages are optional
- 2 Year Warranty Parts & Labor

PA103EPC



PA133EPC



Model No.	Capacity (in.)	Round Cap. @ 90° (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds	Motor	Weight	Order No.	Price
PA10/3	8 x 12	10 x 12	11' 6"	1-1/4	Variable 60 - 330 SFPM	5HP, 230/460V	3400 lbs	**RF40PA10**	36859.40
PA10/3EPC	8 x 12	10 x 12	11' 6"	1-1/4	Variable 60 - 330 SFPM	5HP, 230/460V	3400 lbs	**RF40PA103EPC**	38705.90
PA13/3EPC	13 x 14	13	13' 6"	1-1/4	Variable 80 - 450 SFPM	5HP, 230/460V	4200 lbs	**RF40PA133EPC**	45381.80
PA18/3EPC	14 x 18	18 x 18	15' 4"	1-1/2	Variable 80 - 450 SFPM	7.5HP, 230/460V	5300 lbs	**RF40PA183EPC**	58165.40

F.O.B. Factory • Ships by truck • NOT CSA APPROVED

Mark II Bandsaws

Features:

- Miters 45° left or right
- Does not have a power tilt
- Quick-action vise
- Maximum opening: 18”
- Feed range: 0-140 lbs.
- Automatic stops
- Work light
- Coolant system: 21 gallon capacity
- Cast iron table & cartridge
- Flushing hose & power chip brush
- Carbide guide system
- Blade tension indicator
- Electrical equipment conforms to NFPA-79
- Welded edge saw blade
- 5 Gallons of coolant
- 2 Year Parts & Labor Warranty



MADE IN THE USA

Model No.	Rectangle Cap. @ 90° (in.)	Rectangle Cap. @ 45° (in.)	Rectangle Cap. @ 60° (in.)	Capacity in 3° Forward Canted Position (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds	Table Size (in.)	Motor	Weight	Order No.	Price
Mark 8 II	18 x 22	18 x 12-3/4	N/A	N/A	14' 6"	1	50 - 450 SFPM	24-1/4 x 33	5HP, 220V, 3PH	2870 lbs	**RF4082**	32314.10
Mark 8 II	18 x 22	18 x 12-3/4	N/A	N/A	14' 6"	1	50 - 450 SFPM	24-1/4 x 33	5HP, 440V, 3PH	2870 lbs	**RF4084**	32314.10

F.O.B. Oskosh, WI • Ships by truck • Not available in Minnesota • NOT CSA APPROVED

Mark III Electronic Variable Speed Bandsaws

Features:

- EVS 5HP vector drive
- A/C inverter motor
- Miters 60° left & right
- Quick-action vise: maximum opening 18”
- Automatic stops
- Work light
- Coolant system: 21 gallon capacity
- Cast iron table & cartridge
- Flushing hose & power chip brush
- Carbide guide system
- Blade tension indicator
- Electrical equipment conforms to NFPA-79
- Welded edge saw blade
- 5 Gallons of coolant
- Saw blade: 1-1/4” wide
- Feed range: 0 to 250 lbs.
- Automatic column return and the column can be adjusted to either straight or 3° forward canted approach angle for increased cutting efficiency of structural materials
- Models 81112, 81112PT & 81114PT include power tilt head
- 2 Year Parts & Labor Warranty



Model No.	Rectangle Cap. @ 90°	Rectangle Cap. @ 45°	Rectangle Cap. @ 60°	Capacity in 3° forward canted position (in.)	Blade Length (in.)	Blade Widths (in.)	Blade Speeds	Table Size (in.)	Motor	Weight	Order No.	Price
Mark 8 III	18 x 22	Left 18 x 13 Right 18 x 14.5	Left 18 x 7.3 Right 18 x 9.7	17.5 x 22	15' 4"	1-1/4	50 - 450 SFPM	24-1/4 x 33	5HP, 220V, 3PH	2870 lbs	**RF4081112**	40268.35
Mark 8 III	18 x 22	Left 18 x 13 Right 18 x 14.5	Left 18 x 7.3 Right 18 x 9.7	17.5 x 22	15' 4"	1-1/4	50 - 450 SFPM	24-1/4 x 33	5HP, 440V, 3PH	2870 lbs	**RF4081114**	40268.35
Mark 8 III PT	18 x 22	Left 18 x 13 Right 18 x 14.5	Left 18 x 7.3 Right 18 x 9.7	17.5 x 22	15' 4"	1-1/4	50 - 450 SFPM	24-1/4 x 33	5HP, 220V, 3PH	2870 lbs	**RF4081112PT**	44067.95
Mark 8 III PT	18 x 22	Left 18 x 13 Right 18 x 14.5	Left 18 x 7.3 Right 18 x 9.7	17.5 x 22	15' 4"	1-1/4	50 - 450 SFPM	24-1/4 x 33	5HP, 440V, 3PH	2870 lbs	**RF4081114PT**	44067.95

F.O.B. Oskosh, WI • Ships by truck • Not available in Minnesota • NOT CSA APPROVED

9" x 18" Semi-Automatic Double Column type Horizontal Cut-Off Bandsaws

Standard Equipment:

- Double column type Semi-Automatic up & down
- Carbide guides with back-up
- Ball bearings
- Full coolant system
- Fully hydraulic controlled saw head up and down rate decent
- Uniform feed rate and cutting pressure
- Quick and easy blade change
- Manually controlled blade tension
- Conforms to NFPA-79 electrics standards
- Also available in single phase
- 1 Year Warranty
- Specify Voltage



Model No.	Capacity (in.)	Blade Length (in.)	Blade Width (in.)	Blade Speeds (in.)	Bed Height (in.)	Motor	Weight	Floor Space Req. (L x W x H) (in.)	Order No.	Price
W-9-1	9 x 18	11' 6"	1	Variable 70 - 380 SFPM	26	3HP, 230V, 3PH	950 lbs	43 x 81 x 63	**PW55W91**	17889.94
W-91-440	9 x 18	11' 6"	1	Variable 70 - 380 SFPM	26	3HP, 460V, 3PH	950 lbs	43 x 81 x 63	**PW55W91440**	17889.94

F.O.B. Three Rivers, MI • Ships by Flat Bed Truck Only • NOT CSA APPROVED

W.F. WELLS Horizontal CNC Automatic Bandsaws

Features:

- Shuttle Type Barfeed & Built-In Flood Coolant Systems
- Fully Automatic CNC Barfeed
- Digital Membrane Screen Controls (Models F161A & W914A)
- Color Touch Screen Controls (Models F1620A & F1620HA)
- 99 + Job Selection (Models F161A & W914A)
- 500 + Job Selection (Model F1620HA)
- 999 + Job Selection (Model F1620A)
- Machine Diagnostics & Program Prompting
- Automatic Kerf Compensation
- Out-Of-Stock Shut-Down (Models F161A & W914A)
- Automatic end of cut shutdown (Models F1620A & F1620HA)
- Manual Blade Tension (Models F161A & W914A)
- Digital Blade speed indicator (Models F1620A & F1620HA)
- Hydraulic blade tension (Models F1620A & F1620HA)
- Variable Vise Pressure
- Blade Break/Stall Switch
- NFPA 79 Electrics
- Electronic Door Interlocks
- Specify Voltage
- 1 Year Warranty

MADE IN THE USA


F161ACNC


F1620ACNC


F1620HACNC


W914ACNC

Capacity (in.)	Blade Length (in.)	Blade Widths (in.)	Blade Speed(s)	Motor	Weight	Order No.	Price
9 x 14	11' 6"	1	70 - 380 SFPM	3HP Variable Speed, 220V, 3PH	2100 lbs	**PW55W914ACNC**	39764.10
9 x 14	11' 6"	1	70 - 380 SFPM	3HP Variable Speed, 460V, 3PH	2100 lbs	**PW55W914ACNC460**	39764.10
16 x 18	15'	1-1/4	60 - 425 SFPM	7.5HP Variable Speed	3250 lbs	**PW55F161ACNC**	52547.70
16 x 20	15'	1-1/4	60 - 500 SFPM	7.5HP-AC Inverter Drive	4000 lbs	**PW55F1620ACNC**	66389.50
16 x 20	16' 8"	1-1/2	60 - 500 SFPM	10HP-AC Inverter Drive	4500 lbs	**PW55F1620HACNC**	76275.48

F.O.B. Three Rivers, MI • Ships by Flat Bed Truck Only • NOT CSA Approved

PALMGREN Cold Saws

- Ideal for very precise, burr free cuts in low and high carbon steels and medium gauge tubes and profiles
- The pivot head design allows for fast, accurate miter cuts
- Advanced gear box design utilizing hardened and ground gears with a high quality bronze worm gear running in an oil bath
- Built in coolant system lubricates the blade for smooth mill cut finish
- A centrally tensioning anti-burr vises securely clamps the work piece on both sides of the blade with equal clamping force and holds the work piece in-between 4 jaw faces
- The adjustment of the saw head for miter cutting is fast and easy with the saw head pivoting both to the right and left of center
- The 9683130 bench model can use either a 9"/225mm or 10" /250mm blade
- The 9683131 is a floor model with a compact heavy duty steel base with lockable door and shelf
- It is equipped with a built-in clutch to protect the gear box and blade from breakage
- 3 Year Warranty



Model No.	Overall Dim. (in.)	Round Solid Cap. @ 45°	Sq. Tube Cap. @ 45°	Max. Vise Opening (in.)	Motor	Weight	Order No.	Price
9683130	30 x 20 x 24	2.665	2.469 x 2.469	4	1HP, 115V, 1PH	440 lbs	**JB559683130**	2544.66
9683131	61 x 36 x 36	4.331	3.750 x 3.740	5.315	2 & 3HP, 230V, 3PH	518 lbs	**JB559683131**	5914.09

F.O.B. Chicago, IL • Ships by Truck

Scotchman Metal Fabricating Solutions — Slow Speed Cold Saws for Cutting Ferrous Materials

Features:
- **11" Model Features:** Two cutting speeds (30 & 60 S.F.P.M.) and (1) 10-3/4" HSS blade
- **14" Model Features:** Two cutting speeds (22 & 44 S.F.P.M.) and (1) 12-1/2" HSS blade
- High speed for non-ferrous material
- Single Phase, Single Speed Saws are also available in all models - Call for Details
- PK Model denotes Air Operated Clamp for material vise
- 3 Year Warranty

Standard Equipment:
- Double self-centering vise with miter capabilities - 45° left and 45° to the right, (7) gallon coolant system, (1) gallon coolant, with chip drawer and Hand operated trigger switch

MADE IN THE USA



CPO350LT220

Model No.	Blade Size (in)	Blade Speed(s)	Round Tube Cap. @ 45° (in.)	Solid Round Cap. @ 45° (in.)	Rectangle Tube Cap. @ 45° (in.)	Rectangle Tube Cap @ 90° (in.)	Maximum Vise Opening (in.)	Motor	Weight	Order No.	Price
CPO275LT220	10-3/4 x 1-1/4	30/60 SFPM	2	1	3 x 2	3 x 2-3/8	4	3/4 & 1.5HP, 220V, 3PH	400 lbs	**RE55CPO275LT220**	7363.30
CPO275LT440	10-3/4 x 1-1/4	30/60 SFPM	2	1	3 x 2	3 x 2-3/8	4	3/4 & 1.5HP, 440V, 3PH	400 lbs	**RE55CPO275LT440**	7363.30
CPO275LTPK	10-3/4 x 1-1/4	30/60 SFPM	2	1	3 x 2	3 x 2-3/8	4	3/4 & 1.5HP, 220/440V, 3PH	400 lbs	**RE55CPO275LTPK**	8569.30
CPO350LT220	14 x 1-9/16	22/44 SFPM	4	1-3/4	4 x 4	5-1/2 x 4	6	1 & 2HP, 220V, 3PH	500 lbs	**RE55CPO350LT220**	8435.30
CPO350LT440	14 x 1-9/16	22/44 SFPM	4	1-3/4	4 x 4	5-1/2 x 4	6	1 & 2HP, 440V, 3PH	500 lbs	**RE55CPO350LT440**	8435.30
CPO350LTPK	14 x 1-9/16	22/44 SFPM	4	1-3/4	4 x 4	5-1/2 x 4	6	1 & 2HP, 220V/440V, 3PH	500 lbs	**RE55CPO350LTPK**	9641.30

F.O.B. Phillip, SD • Ships by truck • NOT CSA APPROVED

KALAMAZOO Industries Inc. — 14" High Speed Non-Ferrous Shop Saw (Aluminum & Brass)
14" Dry Steel Cutting, Mild Steel (1/4" wall thickness only)

Features:
- Non-ferrous saw for cutting aluminum, brass, plastic KM14HS
- 14" Dry Cut Mitre Saw for Steel KM14SC
- Miters 45° left or right
- Uses Carbide tipped steel blade - **not included**
- 1" Spindle
- Twin v-belt drive
- Dual Cam-lock vise
- OSHA safety blade guard
- Cast Iron construction
- 1 Year Warranty

MADE IN THE USA



KM14HS/KM14SC

Model No.	Blade Size (in.)	Blade Speed (RPM)	Capacity at 45°	Capacity at 90°	Motor	Weight	Order No.	Price
KM14HS1	14	4400 RPM	4" Solids, 4 x 3.5" Shapes	4.5 Solids	5HP, 220V, 1PH	450 lbs	**PT50KM14HS1**	5326.50
KM14HS	14	4400 RPM	4" Solids, 4 x 3.5" Shapes	4.5 Solids	5HP, 220V/440V, 3PH	450 lbs	**PT50KM14HS**	4924.50
KM14SC1	14	1300 RPM	4" Solids, 4" x 3.5" Shapes	4.5 Solids	5HP, 220V, 1PH	450 lbs	**PT50KM14SC1**	5286.30
KM14SC	14	1300 RPM	4" Solids, 4" x 3.5" Shapes	4.5 Solids	5HP, 220V/440V, 3PH	450 lbs	**PT50KM14SC**	4924.50

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

KALAMAZOO Industries Inc. 7" & 8" Abrasive Cut-Off Saws

Cast Iron Base • Rigid Alignment

Features:

- Spark deflectors, front & rear, standard (K8B)
- Abrasive cut-off wheels not included
- Adjustable work length stop and down stop furnished (K7B)
- Abrasive cut-off wheels not included
- 1 Year Warranty

MADE IN THE USA


K8B1

Wheel Size (in.) - 7 x 1/2 Hole							
Model No.	Motor	Capacity (Solid Round) (in.)	Capacity (Pipe) (in.)	Vise Type	Weight	Order No.	Price
K7B	1HP, 110V/220V, 1PH	1	2	Manual Vise	75 lbs	**PT50K7B1**	958.10

Wheel Size (in.) - 8 x 1/2 Hole							
Model No.	Motor	Capacity (Solid Round) (in.)	Capacity (Pipe) (in.)	Vise Type	Weight	Order No.	Price
K8B	3HP, 110V/220V, 1PH	1-1/2	2	Manual Vise	90 lbs	**PT50K8B1**	1125.60
K8B	3HP, 220V/440V, 3PH	1-1/2	2	Manual Vise	90 lbs	**PT50K8B3**	1125.60

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

KALAMAZOO Industries Inc. 10" Abrasive Cut-Off Saws

Features:

- Quick-lock swivel vise opens 4”
- Adjustable work length stop
- Down stop
- Dust chute
- Wheel size: 10” x 5/8” hole
- Abrasive cut-off wheels not included
- 1 Year Warranty

MADE IN THE USA


K10B3

Model No.	Motor	Capacity (Solid Round) (in.)	Capacity (Pipe) (in.)	Style	Vise Type	Weight	Order No.	Price
K10B	3HP, 110V/220V, 1PH	1-1/2	2-1/2	Bench	Swivel Vise	110 lbs	**PT50K10B1**	1333.30
K10B	3HP, 220V/440V, 3PH	1-1/2	2-1/2	Bench	Swivel Vise	110 lbs	**PT50K10B3**	1306.50
K10S	3HP, 110V/220V, 1PH	1-1/2	2-1/2	Floor	Swivel Vise	170 lbs	**PT50K10S1**	1567.80
K10S	3HP, 220V/440V, 3PH	1-1/2	2-1/2	Floor	Swivel Vise	170 lbs	**PT50K10S3**	1527.60
K10SF	3HP, 110V/220V, 1PH	1-1/2	2-1/2	Floor	Chain Vise	180 lbs.	**PT50K10SF1**	1809.00
K10SF	3HP, 220V/440V, 3PH	1-1/2	2-1/2	Floor	Chain Vise	180 lbs	**PT50K10SF3**	1775.50

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

KALAMAZOO Industries Inc. 12" & 14" Abrasive Cut-Off Saws

Features:

- Extra heavy cast iron base and arm trunnion
- Sealed ball bearings
- Positive quick lock swivel vise
- Abrasive cut-off wheels not included
- 1 Year Warranty

MADE IN THE USA


K12-14SS

Wheel Size (in.) - 12 x 1 Hole								
Model No.	Motor	Capacity (Solid Round) (in.)	Capacity (Pipe) (in.)	Style	Vise Type	Weight	Order No.	Price
K12SS3	5HP, 220V/440V, 3PH	2-1/2	3	Floor	Swivel Vise	265 lbs	**PT50K12SS3**	2844.85

Wheel Size (in.) - 14 x 1 Hole								
Model No.	Motor	Capacity (Solid Round) (in.)	Capacity (Pipe) (in.)	Style	Vise Type	Weight	Order No.	Price
K14B1	5HP, 220V, 1PH	2-1/2	3	Bench	Swivel Vise	210 lbs	**PT50K14B1**	3108.80
K14SS1	5HP, 220V, 1PH	2-1/2	3	Floor	Swivel Vise	270 lbs	**PT50K14SS1**	3329.90
K14SSF1	5HP, 220V, 1PH	2-1/2	3	Floor	Chain Vise	275 lbs	**PT50K14SSF1**	3571.10
K14B3	5HP, 220V/440V, 3PH	2-1/2	3	Bench	Swivel Vise	210 lbs	**PT50K14B3**	2747.00
K14SS3	5HP, 220V/440V, 3PH	2-1/2	3	Floor	Swivel Vise	270 lbs	**PT50K14SS3**	2968.10
K14SSF3	5HP, 220V/440V, 3PH	2-1/2	3	Floor	Chain Vise	275 lbs	**PT50K14SSF3**	3209.30

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

KALAMAZOO Industries Inc. Miter Abrasive Cut-Off Saws

Model KM10 10” Miter Saw Features:
- Bench Model Only
- 5/8” Arbor Hole
- Angles from 0° to 45°– Either way
- Positive index holes–Up and down stops
- Two Cam-Lock vises–Lever- lock for table
- Does not include 10” Abrasive Wheel
- Model 12M Stand fits KM10 Saw
- 1 Year Warranty

Model KM16-18 16” – 18” Miter Saw Features:
- 1” Arbor Hole
- Miters either direction 45°
- Two cam vises
- Low voltage manual starter. DRY MODEL ONLY.
- Does not include 16” or 18” Abrasive Wheel
- 1 Year Warranty

Model KM14 14” Miter Saw Features:
- 1” Arbor Hole
- Angles 0° to 45° – either way
- Front lever lock
- Heavy-duty stand
- Specify voltage
- Standard Abrasive Blade Cut-off Saw
- Does not include 14” Abrasive Wheel
- 1 Year Warranty

MADE IN THE USA

Model KM 20-22 20” – 22” Miter Saw Features:
- Angles 0° – 45° both ways
- 1” Arbor Hole
- Rugged Steel Base
- Air operated chain vise
- Does not include 20” or 22” Abrasive Wheel
- 1 Year Warranty

KM10



KM14



KM20-22



KM16-18



Model No.	Blade Size (in.)	Blade Speed	Capacity @ 90° (in.)	Capacity @ 45° (in.)	Motor	Weight	Order No.	Price
KM10-1	10	3450 RPM	1-1/2 Solids, 2-1/2 Shapes	1" Solids, 2" Shapes	3HP, 1PH	220 lbs	**PT50KM101**	1922.90
KM10-3	10	3450 RPM	1-1/2 Solids, 2-1/2 Shapes	1" Solids, 2" Shapes	3HP, 3PH	220 lbs	**PT50KM103**	1922.90
KM14-1	14	4400 RPM	3.5 Solids	2-1/2" Solid, 3" Pipe	5HP, 1PH	360 lbs	**PT50KM141**	4549.30
KM14-3	14	4400 RPM	3.5 Solids	2-1/2" Solid, 3" Pipe	5HP, 3PH	360 lbs	**PT50KM143**	4187.50
KM16-18	16 - 18	2500 RPM	3 Solid, 4-1/2 Pipe & Shapes	2-1/2" Solids,4" Pipe & Shapes	10HP, 3PH	650 lbs	**PT50KM1618**	5628.00
KM20-22/15	20 - 22	2500 RPM	4 Solid, 6 Shapes	3" Solid, 5" Shapes	15HP, 3PH	1000 lbs	**PT50KM202215**	9614.50
KM20-22/20	20 - 22	2500 RPM	4 Solid, 6 Shapes	3" Solid, 5" Shapes	20HP, 3PH	1295 lbs	**PT50KM202220**	10619.50

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

KALAMAZOO Industries Inc. 12"-14" Wet Saw

Features:
- Heavy-duty cast iron arm and trunnion
- Heavy-duty base
- Magnetic switch
- Coolant system, 10 gallon
- Two cam lock vises
- Splash guards
- Does not include 12” or 14” Abrasive Wheel
- 1 Year Warranty

MADE IN THE USA



Model No.	Blade Size (in.)	Blade Speed	Round Tube Cap. (in.)	Square Tube Cap. (in.)	Solid Round Cap. (in.)	Motor	Weight	Order No.	Price
K12-14W	12 - 14	2200 RPM	3	3	2-1/2	5HP, 220V/440V, 3PH	590 lbs	**PT50K1214W**	5795.50

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

KALAMAZOO Industries Inc. 16"-18" Abrasive Cut-Off Saw

Features:
- Rugged cast iron trunnion and overarm super rigid, super accurate
- Fast, foot-operated roller-chain vise
- Sealed ball bearings
- Heavy-duty guards, efficient spark chute
- Abrasive cut-off wheels not included
- 1 Year Warranty

Specifications:
- Capacity: Solid Bar 3", Pipe, other shapes 4"
- Table: 16" W x 28" D
- Wheel arbor diameter: 1"
- Vise: Foot operated, roller-chain
- Drive motor: 3 phase, 10 HP, TEFC
- Weight: 625 lbs.
- Specify Voltage when ordering

MADE IN THE USA



Order No.	Price
PT50K1618	4080.30

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

KALAMAZOO Industries Inc. 20" Abrasive Cut-Off Saw

Features:
- Rugged cast iron trunnion and overarm — super rigid, super accurate
- Fast, foot-operated roller-chain vise
- 1" wheel arbor, sealed ball bearings
- Heavy-duty guards, efficient spark chute
- 18" Wide x 30" Deep Table
- Abrasive cut-off wheels not included
- 1 Year Warranty

MADE IN THE USA

K20SSF15



Model No.	Motor	Capacity (Solid Round) (in.)	Capacity (Shapes) (in.)	Style	Vise Type	Weight	Order No.	Price
K20SSF-15	15HP, 220V/440V, 3PH	4	6	Floor	Foot Operated RollerChain Vise	600 lbs	**PT50K20SSF15**	5092.00
K20SSF-20	20HP, 220V/440V, 3PH	4	6	Floor	Foot Operated RollerChain Vise	700 lbs	**PT50K20SSF20**	6063.50

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

KALAMAZOO Industries Inc. 26" Abrasive Cut-Off Saw

Features:
- Cog belt drive
- Heavy duty guard
- Cuts angles up to 45° by shifting fence
- Abrasive cut-off wheels not included
- 1 Year Warranty

MADE IN THE USA

Specifications:
- Down stop: Solid 5", Shapes 8", Channels 12"
- 1" Wheel Arbor Diameter
- Table 32" W x 42" D x 26" H
- Two cam vises 4-1/2" H
- Drive motor 20 HP, Specify Voltage
- Spindle speed 1800 RPM
- Opening in guard 9" x 16"
- Weight 900 lbs.



Order No.	Price
PT50K26S	14492.10

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

KALAMAZOO Industries Inc. Floor Stands

Description	Order No.	Price
Steel Stand for 10" Miter Saw only. Weight: 82 lbs.	**PT5012M**	388.60
Steel stand for 7" saw, 4" belt sander. Weight: 62 lbs.	**PT5012P**	234.50
Steel stand, open top, for 10" saw. Weight: 48 lbs.	**PT5012O**	234.50
Steel stand, tray top for coolant, 7, 8 & 10". Weight: 82 lbs.	**PT5012W**	422.10



MADE IN THE USA

KALAMAZOO Industries Inc. Work Stops

- Automatically clears work as wheel is advanced

MADE IN THE USA

Model No.	Order No.	Price
KWL	**PT50KWL**	475.70
WL20	**PT50WL20**	428.80
WS10	**PT50WS10**	241.20

Heck Tube & Pipe Notcher

- Make perfect fit 90° notches
- Easy, one-pull on the handle will produce accurate saddle notches for weld fit-up
- Notch up to schedule 40 pipe
- Portable and easy-to-mount to any surface or bench vise
- No set-up needed, simply insert pipe Into correct die size hole and pull down on the handle



Die Sizes (in.)	Order No.	Price
1/4, 3/8, 1/2 Pipe; 3/8, 1/2, 3/4 Tube	**HV60WFN1**	418.07
3/4, 1, 1-1/4 Pipe; 1, 1-3/8, 1-5/8 Tube	**HV60WFN2**	567.37
1-1/2, 2 Pipe; 2, 2-3/8 Tube	**HV60WFN3**	682.85

F.O.B. Factory

Heck Pipe & Tube Bending Kit

- Make smooth, kink-free bends easy
- Rugged cast iron construction
- Threaded adjustment
- Extension handle
- Mount to a bench top or clamp in a vise
- Kit includes storage case, cast iron base, handle cast iron dies 3/8", 1/2", 5/8", 9/16", 3/4", 7/8" for rounds and 3/4", 1" for square tube
- Weight: 70 lbs.





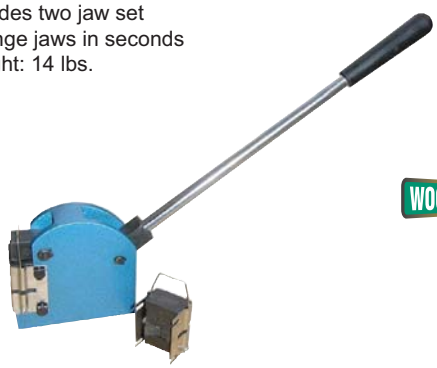


Order No.	Price
HV60SPBENDKIT	376.26

F.O.B. Factory

Heck Shrinker-Stretcher

- Ideal for creating repair panels for wheel openings, windshields, etc.
- Produce curves as tight as 3" radius
- Cast iron frame
- Works mild steel up to 18 gallon and aluminum up to 16 gallon
- Drilled bottom for bench mounting or clamp in a bench vise
- Includes two jaw set
- Change jaws in seconds
- Weight: 14 lbs.





Order No.	Price
HV60WFSS10	274.53

F.O.B. Factory

World Class Quality Portable Bench Shear

- Lever action
- Shear sheet steel bars and rods
- Blades are hardened and tempered for longer life



Model No.	Blade Length (in.)	Overall Dim. (in.)	Handle Length (in.)	Cutting Cap. (Flats) (in.)	Cutting Cap. (Rounds) (in.)	Weight	Order No.	Price
1460	6	10-1/8 x 5-1/16 x 14-1/8	27	3/16	3/8	29 lbs	**NE601460**	132.15
1461	8	12-7/8 x 5-1/2 x 15-7/8	30	1/4	15/32	45 lbs	**NE601461**	162.15
1462	10	15-1/16 x 6 x 16-3/4	30	1/4	15/32	52 lbs	**NE601462**	180.10
1463	12	18 x 6 x 16-3/4	30	1/4	15/32	58 lbs	**NE601463**	195.10

F.O.B. Warren, MI

8" & 12" Plate Shears

- Extended handle for maximum leverage
- Ground and hardened knives
- Mount to floor or sturdy workbench
- 2 Year Warranty

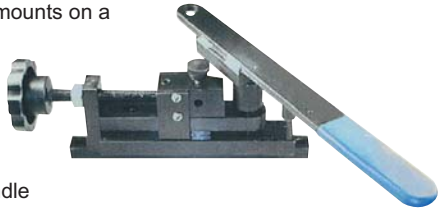


Model No.	Cap. (Mild Steel) (in.)	Cutting Cap. (Flats) (in.)	Cutting Cap. (Rounds) (in.)	Cutting Length (in.)	Handle Length (in.)	Weight	Order No.	Price
M1040	3/16	3/8	1/2	8	24	52 lbs	**PY65M1040**	160.80
M1041	3/16	3/16	1/2	12	32	64 lbs	**PY65M1041**	241.20

F.O.B. Factory

Universal Bender

- Forms wire, flat metal and tubing into clamps, handles, brackets, hooks, coils and more
- Makes sharp angle bends in wire and rod up to 5/16” diameter and in flat metal to 1” x 1/8”
- Steel construction, weighs 6 lbs
- Fits into a tool box and mounts on a bench or vise
- Includes circle pins for 3/16”, 1/4”, 1/2” diameter circles, 1” diameter circle die, form pin follower, sharp angle die, gage and handle
- Shipping weight 9 lbs



Order No.	Price
PK801305040	135.65

F.O.B. Warren, MI

Bench Punch

- Punches holes up to 1/2” through stock up to 1/8” thick
- 8” throat depth
- 1/4” Punch and Die set included
- Shipping weight: 42 lbs
- See web site for punch & dies

MADE IN THE USA



Order No.	Price
JC506	754.80

F.O.B. Factory

16 Gauge Notcher

- Bench Top Model
- Shown with the Optional Floor Stand (Order # PK501618S)

Standard Equipment:

- Heavy cast iron frame
- Large surface ground table with inlaid scales
- Front gauges
- Reversible upper blades
- Finger guard
- Adjustable stroke

MADE IN THE USA



Capacity	Max. Notch	Weight	Order No.	Price
16 Gauge	6" x 6" x 90°	170 lbs	**PK501618**	1199.30

F.O.B. McMinnville, TN • Ships by truck

Stand for 1618 Notcher

MADE IN THE USA

Model No.	Type	Order No.	Price
1618S	Floor Stand for Tennsmith 1618 Notcher	**PK501618S**	395.30

Sheet Metal Universal Box & Pan Brakes

- Removable fingers
- Maximum gauge capacities are applicable when using mild steel
- Using galvanized steel lowers the maximum gauge capacity



Model No.	Cap. (Mild Steel)	Cap. (Stainless Steel)	Working Length (in.)	Finger Widths (in.)	Weight	Order No.	Price
1304816	16 Gauge	20 Gauge	48-1/4	2, 3, 4	363 lbs	**PK801304816**	1039.85
1304822	22 Gauge	26 Gauge	48-1/4	2, 3, 4	330 lbs	**PK801304822**	803.75

F.O.B. Warren, MI • Ships by truck

Bench Model Universal Box & Pan Brakes

Features:

- 16 Finger segments
- 2 Beam levers for workpiece alignment
- Counter balanced brake allowing bends up to 135°
- 2 Year Warranty



Model No.	Cap. (Mild Steel)	Working Length (in.)	Finger Widths (in.)	Weight	Order No.	Price
M1043	16 Gauge	48	2 - 4	365 lbs	**PY65M1043**	1192.60

F.O.B. Springfield, MO • Ships by truck

NATIONAL Hand Brakes

- Precise bed and beam alignment
- Cast iron counterweights
- Stop rods for repeat bends
- Precision bearings on apron
- Heavy duty truss rods and brakes
- Streamlined design
- Suitable for many types of metal forming operations
- All body sections are steel welded
- Model S4816 is a Bench Model - Optional Stand is available
- 3 Year Warranty



N9616

Model No.	Working Length (in.)	Capacity (Mild Steel)	Weight	Order No.	Price
N4812	49	12 Gauge	1050 lbs	**PK55N4812**	4947.30
N7212	73	12 Gauge	1800 lbs	**PK55N7212**	5540.90
N9614	97	14 Gauge	1750 lbs	**PK55N9614**	6204.20
N12014	121	14 Gauge	3200 lbs	**PK55N12014**	8474.20
S4816	48-1/4	16 Gauge	470 lbs	**PK55S4816**	1675.00
N9616	97	16 Gauge	1600 lbs	**PK55N9616**	5507.40
N12016	121	16 Gauge	2800 lbs	**PK55N12016**	7948.90

F.O.B. Smartt, TN • Ships by truck

TENNSMITH Heavy Duty Hand Brakes

- Brakes are a welded steel plate construction utilizing heavy side frames and truss bars, high tensile strength steel hinge pins, bronze oilite bearings and grease fittings
- All 16 gauge and up brakes feature a removeable apron insert permitting 1/4-inch reverse bends in lighter materials
- Upperleaf and nose bar have a wide range of adjustment for different material thickness of radii.
- Standard equipment includes an apron stop for repeat bends, ductile steel clamp handles and counterweights
- The 22 gauge brakes are a lighter version brake better suited for contractors and remote job sites
- Universal brakes have removeable case hardened fingers for box and pan bending
- 3 Year Warranty



HB9716

Cap. (Mild Steel)	Working Length (in.)	Max. Lift Of Beam (in.)	Min. Flange @ Capacity (in.)	Min. Reverse Bend (in.)	Weight	Order No.	Price
18 Gauge	97	1-7/8	1	1/4	1385 lbs	**PK50HB9718**	5319.80
18 Gauge	121	1-7/8	1	1/4	2300 lbs	**PK50HB12118**	7684.90
16 Gauge	73	1-7/8	1	1/4	1200 lbs	**PK50HB7316**	5025.00
16 Gauge	97	1-7/8	1	1/4	1675 lbs	**PK50HB9716**	6030.00
16 Gauge	121	2-1/4	1	1/4	2875 lbs	**PK50HB12116**	9145.50

F.O.B. McMinnville, TN • Ships by truck

TENNSMITH Standard Box & Pan Hand Brakes

- Brakes are a welded steel plate construction utilizing heavy side frames and truss bars, high tensile strength steel hinge pins, bronze oilite bearings and grease fittings
- All 16 gauge and up brakes feature a removeable apron insert permitting 1/4-inch reverse bends in lighter materials
- Upperleaf and nose bar have a wide range of adjustment for different material thickness of radii.
- Standard equipment includes an apron stop for repeat bends, ductile steel clamp handles and counterweights
- The 22 gauge brakes are a lighter version brake better suited for contractors and remote job sites
- All 48" Brakes Listed are Bench Top Models
- Optional Steel Stand (Order Number PK5048S)
- 3 Year Warranty

MADE IN THE USA



S4822

Model No.	Working Length (in.)	Capacity-Mild Steel (gauge)	Weight	Order No.	Price
HBS4816	48-1/4	16 Gauge	460 lbs	**PK50HBS4816**	1735.30
S48-22	48-1/4	22 Gauge	220 lbs	**PK50S4822**	931.30

F.O.B. McMinnville, TN • Ships by truck

TENNSMITH Universal Box & Pan Hand Brakes

- Brakes are a welded steel plate construction utilizing heavy side frames and truss bars, high tensile strength steel hinge pins, bronze oilite bearings and grease fittings
- All 16 gauge and up brakes feature a removeable apron insert permitting 1/4-inch reverse bends in lighter materials
- Upperleaf and nose bar have a wide range of adjustment for different material thickness of radii.
- Standard equipment includes an apron stop for repeat bends, ductile steel clamp handles and counterweights
- The 22 gauge brakes are a lighter version brake better suited for contractors and remote job sites
- Universal brakes have removeable case hardened fingers for box and pan bending
- Model PK50HBU4816S includes stand
- All 48" Brakes Listed are Bench Top Models
- Optional Steel Stand (Order Number PK5048S)
- 3 Year Warranty

MADE IN THE USA



HBU4816

Model No.	Working Length (in.)	Cap. (Mild Steel)	Max. Depth of Box (in.)	Finger Widths (in.)	Weight	Order No.	Price
HBU48-16	48-1/4	16 Gauge	4	2, 3, 4	495 lbs	**PK50HBU4816**	1989.90
HBU48-16S	48-1/4	16 Gauge	4	2, 3, 4	590 lbs	**PK50HBU4816S**	2278.00
U48-22	48-1/4	22 Gauge	3	2, 3, 4	280 lbs	**PK50U4822**	1199.30

F.O.B. McMinnville TN • Ships by truck

Stands for Box & Pan Brakes

Brand Name	Comments	Weight	Order No.	Price
National	Floor Stand for U4816 Universal Box & Pan Brake	100 lbs	**PK55NS48**	314.90
Jet	For Model BP2248N, BP1648N	95 lbs	**PY60754200**	440.86
Quality Import	Floor stand for 48" Brakes	66 lbs	**PK801304899**	241.20
Tennsmith	Floor Stand for 48" Hand Brake	95 lbs	**PK5048S**	328.30

NATIONAL Universal Box & Pan Brakes

Features:

- Precise bed and beam alignment
- Cast iron counterweights
- Stop rods for repeat bends
- Precision bearings on apron
- Heavy duty truss rods and brakes
- Streamlined design
- Suitable for many types of metal forming operations
- All body sections are steel welded
- Model U4816 is a Bench Model - Optional Stand is available
- 3 Year Warranty

MADE IN THE USA



U4812

Model No.	Working Length (in.)	Cap. (Mild Steel)	Max. Depth of Box (in.)	Finger Widths (in.)	Weight	Order No.	Price
U4812	49	12 Gauge	4	2, 3, 4	1150 lbs	**PK55U4812**	5507.40
U4816	48-1/4	16 Gauge	4	2, 3, 4	500 lbs	**PK55U4816**	1811.70
U7212	73	12 Gauge	4	2, 3, 4	2100 lbs	**PK55U7212**	6831.35
U7216	73	16 Gauge	4	2, 3, 4	1850 lbs	**PK55U7216**	6271.20
U9616	97	16 Gauge	4	2, 3, 4	2200 lbs	**PK55U9616**	7390.10

F.O.B. Smartt, TN • Ships by truck

NATIONAL Heavy Duty Universal Box & Pan Brakes

Features:

- Precise bed and beam alignment
- Cast iron counterweights
- Stop rods for repeat bends
- Precision bearings on apron
- Heavy duty truss rods and brakes
- Streamlined design
- Suitable for many types of metal forming operations
- All body sections are steel welded
- 3 Year Warranty

MADE IN THE USA



U64812

Model No.	Working Length (in.)	Cap. (Mild Steel)	Max. Depth of Box (in.)	Finger Widths (in.)	Weight	Order No.	Price
U64812	49	12 Gauge	6	3, 4, 5	1900 lbs	**PK55U64812**	7108.70
U67212	73	12 Gauge	6	3, 4, 5, 6	2530 lbs	**PK55U67212**	8297.30
U69614	97	14 Gauge	6	3, 4, 5, 6	2800 lbs	**PK55U69614**	10182.70
U612016	121	16 Gauge	6	3, 4, 5, 6	3200 lbs	**PK55U612016**	11503.90

F.O.B. Smartt, TN • Ships by truck

TENNSMITH Heavy Duty Box & Pan Hand Brakes

- Brakes are a welded steel plate construction utilizing heavy side frames and truss bars, high tensile strength steel hinge pins, bronze oilite bearings and grease fittings
- All 16 gauge and up brakes feature a removeable apron insert permitting 1/4-inch reverse bends in lighter materials
- Upperleaf and nose bar have a wide range of adjustment for different material thickness of radii.
- Standard equipment includes an apron stop for repeat bends, ductile steel clamp handles and counterweights
- The 22 gauge brakes are a lighter version brake better suited for contractors and remote job sites
- Universal brakes have removeable case hardened fingers for box and pan bending
- 3 Year Warranty

MADE IN THE USA



HBU4812

Model No.	Working Length (in.)	Cap. (Mild Steel)	Max. Depth of Box (in.)	Finger Widths (in.)	Weight	Order No.	Price
F6-48-12	48-1/4	12 Gauge	6	3, 4, 5	1900 lbs	**PK50HBU48126**	7591.10
HBU48-12	48-1/4	12 Gauge	4	2, 3, 4	1330 lbs	**PK50HBU4812**	5762.00
F6-72-12	72	12 Gauge	6	3, 4, 5	2825 lbs	**PK50HBU72126**	9112.00
HBU72-16	72-1/4	16 Gauge	4	2, 3, 4	1700 lbs	**PK50HBU7216**	6465.50

F.O.B. McMinnville, TN • Ships by truck

TENNSMITH 16 Gauge Manual Foot Squaring Shear

Features:

- Heavy cast iron frame
- Surface ground bed
- Positive pedal stop
- Specially ground alloy blades
- Adjustable hold down tension
- Line of cut visibility
- Double locking back gage with embossed scales and knurled wheels for fine adjustment
- Front extension arms with stop
- Bevel gage
- Graduated side scales
- 3 Year Warranty

MADE IN THE USA



52

Model No.	Cap. (Mild Steel)	Cutting Length (in.)	Back Gage Range (in.)	Weight	Dimensions (L x W x H in.)	Order No.	Price
36	16 Gauge	37	30	700 lbs	46-1/2 x 27 x 42	**PK5036**	3028.40
52	16 Gauge	52-1/4	30	950 lbs	61 x 36 x 42	**PK5052**	4013.30

F.O.B. McMinnville, TN • Ships by truck

NATIONAL 52" 16 Gauge Metal Shear

Features:

- Designed for precise shearing through 16 gauge mild steel
- Recommended for shearing aluminum, plastic, copper, brass and lead.
- All cast iron body with four cutting edge high carbon, high chromium blades
- Back gauges
- Table gauges
- Spring actuated hold down
- Front arm extentions
- Bottom treadle safety stop
- 3 Year Warranty

MADE IN THE USA

Machine Specs:

- Model Number N5216
- Cutting Length: 52”
- Capacity (Mild Steel)(Gauge): 16
- Weight: 980 lbs



Order No.	Price
PK55N5216	4609.60

F.O.B. Smartt, TN • Ships by truck

TENNSMITH 16 Gauge Air & Hydraulic Sheet Metal Shears



MADE IN THE USA

52H Hydraulic Standard Equipment:

- Heavy cast iron frame, surface ground bed, industrial quality tie rod type hydraulic cylinders, heavy duty 3 HP motor, 10 gallon tank with sight gauge and thermometer, variable volume, pressure compensated vane pump, pressure gauge, low voltage shrouded foot switch, neoprene padded holddown feet, stroke counter, double locking back gauge with embossed scales and knurled wheels for fine adjustment, front extension arms with stop, bevel gauge, graduated side scales

36A and 52A Air Standard Equipment:

- Heavy cast iron frame, surface ground bed, industrial quality tie rod type pneumatic cylinders, foot operated air valve control, pressure regulator with gauge, oiler/condenser cups, neoprene padded holddown feet, stroke counter, double locking back gauge with embossed scales and knurled wheels for fine adjustment, front extension arms with stop, bevel gauge, graduated side scales
- 3 Year Warranty

Type - Air Sheet Metal Shear									
Model No.	Cap. (Mild Steel)	Cutting Length (in.)	Back Gage Range (in.)	Approx. Strokes per Minute	Recommended PSI	Weight	Dimensions (L x W x H in.)	Order No.	Price
36A	16 Gauge	37	30	40	65	800 lbs	46-1/4 x 24 x 42	**PK5036A**	5896.00
52A	16 Gauge	52-1/4	30	40	65	1065 lbs	61 x 25 x 42	**PK5052A**	7537.50

Type - Hydraulic Sheet Metal Shear								
Model No.	Cap. (Mild Steel)	Cutting Length (in.)	Back Gage Range (in.)	Approx. Strokes per Minute	Weight	Dimensions (L x W x H in.)	Order No.	Price
52H	16 Gauge	52-1/4	30	60	1300 lbs	61 x 25 x 42	**PK5052H**	9179.00

F.O.B. McMinnville, TN • Ships by truck

NATIONAL Mechanical, Air & Hydraullic Sheet Metal Shears

MADE IN THE USA

Features:

- All shears feature cast iron body, front arm extensions, back gauges, table gauges and four cutting edge high-carbon, high-chromium blades.
- Air Shears: Come with heavy duty foot switch (NA Models)
- Hydraulic Shears: Fully integrated hydraulic unit, Pilot operated-pressure relief valve, Heavy duty double acting cylinders (NH Models)
- NM Models Mechanical
- 3 Year Warranty



NM410



NA4825



NA5212

Type - Air Sheet Metal Shear						
Model No.	Cutting Length (in.)	Cap. (Mild Steel)	Recommended PSI	Weight	Order No.	Price
NA5212	52	12 Gauge	100	1600 lbs	**PK55NA5212**	10867.40
NA5216	52	16 Gauge	100	1400 lbs	**PK55NA5216**	8645.70

Type - Hydraulic Sheet Metal Shear						
Model No.	Cutting Length (in.)	Cap. (Mild Steel)	Motor	Weight	Order No.	Price
NH3612	36	12 Gauge	3HP	1200 lbs	**PK55NH3612**	11071.10
NH4825	48	1/4	7.5HP	5000 lbs	**PK55NH4825**	24500.60
NH5210	52"	10 Gauge	5HP	1950 lbs	**PK55NH5210**	15889.75
NH5212	52	12 Gauge	3HP	1600 lbs	**PK55NH5212**	13107.90
NH5216	52	16 Gauge	3HP	1400 lbs	**PK55NH5216**	10107.65
NH7225	72	1/4	7.5HP	6000 lbs	**PK55NH7225**	31641.45
NH9625	96	1/4	7.5HP	9000 lbs	**PK55NH9625**	38340.10
NH12025	120	1/4	7.5HP	11000 lbs	**PK55NH12025**	44622.00
NM410	49	10 Gauge	7.5HP	3600 lbs	**PK55NM410**	21105.00
NM610	73	10 Gauge	7.5HP	4900 lbs	**PK55NM610**	28568.80
NM810	97	10 Gauge	7.5HP	6850 lbs	**PK55NM810**	36850.00
NM1014	121	14 Gauge	7.5HP	6100 lbs	**PK55NM1014**	44193.20

F.O.B. Smartt, TN • Ships by truck

TENNSMITH Manual Slip Rolls

- Precision turned, ground and polished high carbon steel rolls, heavy cast iron end frames, wire grooves machined in rolls, reference scales, front mounted handle to lift the upper roll for material removal
- Models SR24 & SR36 are Bench Top Slip Rolls
- Model SR48 Gearing Features a 4:1 Reduction Ratio
- Shown with optional stand
- 3 Year Warranty

MADE IN THE USA

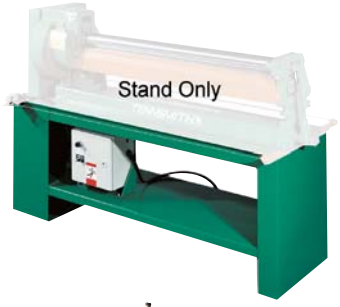


Model No.	Capacity (Mild Steel)	Max. Forming Length (in.)	Wire Grooves (in.)	Weight	Order No.	Price
SR24	20 Gauge	24	3/16, 1/4, 5/16	190 lbs	**PK50SR24**	1098.80
SR36	22 Gauge	36	3/16, 1/4, 5/16	250 lbs	**PK50SR36**	1259.60
SR42	24 Gauge	42	3/16, 1/4, 5/16	270 lbs	**PK50SR42**	1400.30
SR48	16 Gauge	49	3/8, 1/2, 5/8	775 lbs	**PK50SR48**	4991.50

F.O.B. McMinnville, TN • Ships by truck

TENNSMITH Stands for Manual Slip Rolls

MADE IN THE USA



Model No.	Comments	Order No.	Price
SR24S	Floor Stand for Tennsmith SR24 Slip Roll	**PK50SR24S**	381.90
SR36S	Floor Stand for Tennsmith SR36 Slip Roll	**PK50SR36S**	435.50
SR42S	Floor Stand for Tennsmith Model SR42	**PK50SR42S**	469.00
SR48S	Floor Stand for Tennsmith SR48 Slip Roll	**PK50SR48S**	716.90

F.O.B. McMinnville, TN • Ships by truck

NATIONAL 48" Power Slip Roll

- 3” Power roll is designed for simple operation
- Standard with forward and reverse drum switch
- Quick release upper roll
- Positive chain drive
- Heavy duty gear box
- Front guard for additional safety
- Heavy duty stand is standard
- Extra heavy duty end frames with quick release handle on the right front for speedy production forming
- Drive train is powered with a heavy duty precision reduction gear box to assure durability and long life
- The electric panel and gear box are housed in a ventilated stand for protection
- 3 Year Warranty

MADE IN THE USA



Model No.	Cap. (Mild Steel)	Max. Forming Length (in.)	No. & Dia. of Roll	Wire Grooves (in.)	Motor	Weight	Order No.	Price
NR4816	16 Gauge	48-1/4	(3) 3" Rolls	Optional	1HP, 208/220/440V, 3PH,	970 lbs	**PK55NR4816**	9062.45

F.O.B. Smart, TN • Ships by truck

TENNSMITH 48" Power Slip Roll

- The SR48P powered slip roll has the productivety advantage of electric powered drive for production forming of curved parts and tubes made of 16-gauge and lighter sheet metal
- Drive power is supplied by a heavy duty, industrial quality gear reduction motor and roller chain directly to gear train
- Roll drive is controlled by a toggle action, shrouded foot pedal for instant forward and reverse action
- Drive motor is equipped with an electromagnetic brake to prevent roll creep and over formimg
- 3 Year Warranty

MADE IN THE USA



Model No.	Cap. (Mild Steel)	Max. Forming Length (in.)	Dia. of Roll	Wire Grooves (in.)	Motor	Weight	Order No.	Price
SR48P	16 Gauge	49	3"	3/8, 1/2, 5/8	3/4HP, 230/460V, 3PH	1100 lbs	**PK50SR48P**	10311.30

F.O.B. McMinnville TN • Ships by Truck

marvel Single Cylinder 5 Station Ironworkers



Standard Equipment:

- (5) Sets of Punches: 9/16, 11/16, 13/16, 15/16, 1-1/16”
- (5) Sets of Dies: 19/32, 23/32, 27/32, 31/32, 1-3/32”
- CPD Series: 20 punch, 55 die
- Magnetic Base Work Light
- Scrap Boxes at Punching and Notching Stations
- Hydraulic Hold-Downs at Shearing Station
- Adjustable Back Gauge - Electric (3’)
- Adjustable Stroke Depth at Punch Station
- Full-Control Foot Pedals
- 2 Piece Gauging Table at Punch Station
- Keyed Punch Holder for Shaped Tooling
- 2 Year Parts / 1 Year Labor Warranty

Model No.	Tonnage	Throat (in.)	Angle Shear 45°	Angle Shear 90°	Flat Bar Shear (in.)	Rod Shear (in.)	Square Bar Shear (in.)	Motor	Weight	Order No.	Price
MSIW66S	66	8-5/8	3 x 5/16	4 x 4 x 7/16	12 x 9/16	1-1/2	1-3/8 x 1-3/8	5HP, 220V, 3PH	3175 lbs	**RF40MSIW66S**	19743.60
MSIW66S4	66	8-5/8	3 x 5/16	4 x 4 x 7/16	12 x 9/16	1-1/2	1-3/8 x 1-3/8	5HP, 440V, 3PH	3175 lbs	**RF40MSIW66S4**	19743.60

F.O.B. Oshkosh, WI • Ships by truck

marvel Dual Cylinder 5 Station Ironworkers



Standard Equipment:

- (5) Sets of Punches: 9/16, 11/16, 13/16, 15/16, 1-1/16”
- (5) Sets of Dies: 19/32, 23/32, 27/32, 31/32, 1-3/32”
- CPD Series: 26 punch, 62 die
- Magnetic Base Work Light
- Adjustable Electric Back Gauge
- Electric Back Gauge (3’)
- 24 Volt DC Control Voltage
- Scrap Boxes at Punching and Notching Stations
- Adjustable Stroke Depth at Punch Station
- (2) Full-Control Foot Pedals
- (2) Hole Die Holders
- 2 Piece Gauging Table at Punch Station
- Keyed Punch Holder for Shaped Tooling
- 2 Year Parts / 1 Year Labor Warranty

Model No.	Tonnage	Throat	Angle Shear 45°	Angle Shear 90°	Flat Bar Shear (in.)	Rod Shear (in.)	Square Bar Shear (in.)	Motor	Weight	Order No.	Price
MSIW60D	60	10	2-1/2 x 2-1/2 x 3/8	4 x 4 x1/2	8 x 3/4	1-1/2	1-1/2 x 1-1/2	7.5HP, 220V, 3PH	3350 lbs	**RF40MSIW60D**	20595.80
MSIW60D4	60	10	2-1/2 x 2-1/2 x 3/8	4 x 4 x1/2	8 x 3/4	1-1/2	1-1/2 x 1-1/2	7.5HP, 440V, 3PH	3350 lbs	**RF40MSIW60D4**	20595.80
MSIW71D2	71	12	2-1/2 x 2-1/2 x 3/8	5 x 5 x 1/2	12 x 3/4	1-3/4	1-3/4 x 1-3/4	7.5HP, 220V, 3PH	3520 lbs	**RF40MSIW71D2**	25425.20
MSIW71D4	71	12	2-1/2 x 2-1/2 x 3/8	5 x 5 x 1/2	12 x 3/4	1-3/4	1-3/4 x 1-3/4	7.5HP, 440V, 3PH	3520 lbs	**RF40MSIW71D4**	25425.20
MSIW93D	93	14	3 x 3 x 5/16	6 x 6 x 1/2	14 x 3/4	2	2 x 2	10HP, 220V, 3PH	5110 lbs	**RF40MSIW93D**	32527.20
MSIW93D4	93	14	3 x 3 x 5/16	6 x 6 x 1/2	14 x 3/4	2	2 x 2	10HP, 440V, 3PH	5110 lbs	**RF40MSIW93D4**	32527.20
MSIW126D	126	14	3 x 3 x 3/8	6 x 6 x 5/8	14 x 1	2	2 x 2	15HP, 220V, 3PH	6550 lbs	**RF40MSIW126D**	39061.00
MSIW126D4	126	14	3 x 3 x 3/8	6 x 6 x 5/8	14 x 1	2	2 x 2	15HP, 440V, 3PH	6550 lbs	**RF40MSIW126D4**	39061.00
MSIW126DX	126	24	3 x 3 x 3/8	6 x 6 x 5/8	14 x 1	2	2 x 2	15HP, 220V, 3PH	7650 lbs	**RF40MSIW126DX**	48151.60
MSIW126DX	126	24	3 x 3 x 3/8	6 x 6 x 5/8	14 x 1	2	2 x 2	15HP, 440V, 3PH	7650 lbs	**RF40MSIW126DX4**	48151.60
MSIW192DX	192	24-9/16	3 x 3 x 3/8	8 x 8 x3/4	16 x 1	2-1/4	2 x 2	15HP, 220V, 3PH	13200 lbs	**RF40MSIW192DX**	75139.20
MSWI-W192DX4	192	24-9/16	3 x 3 x 3/8	8 x 8 x3/4	16 x 1	2-1/4	2 x 2	15HP, 440V, 3PH	13200 lbs	**RF40MSIW192DX4**	75139.20

F.O.B. Oshkosh, WI • Ships by truck

25 Ton Ironworkers

- Two Workstations: (1) Punch, (1) Open - Customize your ironworker with 10 optional attachments
- 10 interchangeable attachments
- ANSI B11.5-1988(O2) Compliant Guarding
- Integrated E-Stop, Lock-out/Tag-out
- Optimzed workstation heights for improved efficiency
- 1 Year Warranty

New!

MADE IN THE USA



Model No.	Punch Capacity (in.)	Motor	Weight	Order No.	Price
IW25-1P120	1" Dia. in 5/16	120V, 1PH	1200 lbs	**RE75IW251P120**	8574.66
IW25-1P230	1" Dia. in 5/16	230V, 1PH	1200 lbs	**RE75IW251P230**	8574.66

F.O.B. Albert Lea, MN • Ships by Truck

40 Ton Ironworkers

- Four Workstations: (3) Standard - Punch, Flat Bar Shear & Angle Shear; (1) Open - Customize your ironworker with 10 optional attachments
- 10 interchangeable attachments available
- Available with PowerLink™ System (AC400 Models)
- ANSI B11.5-1988(O2) Compliant Guarding
- ETL/UL Approved Controls
- Integrated E-Stop, Lock-out/Tag-out
- Optimized workstation heights for improved efficiency
- Electric foot pedals with integrated jog control
- Adjustable electric stroke control
- 1 Year Warranty

New!

MADE IN THE USA



Model No.	Angle Shear (in.)	Flat Bar Shear (in.)	Punch Capacity (in.)	Motor	Weight	Order No.	Price
IW40-1P230	3 x 3 x 1/4	3/8 x 10, 1/2 x 6	1" Dia. in 1/2	230V, 1PH	1900 lbs	**RE75IW401P230**	12460.66
IW40-1P230-AC400	3 x 3 x 1/4	3/8 x 10, 1/2 x 6	1" Dia. in 1/2	230V, 1PH	1900 lbs	**RE75IW401P230PK**	13398.66
IW40-3P230	3 x 3 x 1/4	3/8 x 10, 1/2 x 6	1" Dia. in 1/2	230V, 3PH	1900 lbs	**RE75IW403P230**	12058.66
IW40-3P230-AC400	3 x 3 x 1/4	3/8 x 10, 1/2 x 6	1" Dia. in 1/2	230V, 3PH	1900 lbs	**RE75IW403P230PK**	13800.66
IW40-3P460	3 x 3 x 1/4	3/8 x 10, 1/2 x 6	1" Dia. in 1/2	460V, 3PH	1900 lbs	**RE75IW403P460**	12058.66
IW40-3P460-AC400	3 x 3 x 1/4	3/8 x 10, 1/2 x 6	1" Dia. in 1/2	460V, 3PH	1900 lbs	**RE75IW403P460PK**	13398.66

F.O.B. Albert Lea, MN • Ships by Truck

50 & 55 Ton Ironworkes

New!

Features:

- 50 Ton - Four Workstations: (4) Standard - Punch, Flat Bar Shear, Angle Shear & Coper Notcher
- 50 Ton - 9 additional attachments available
- 55 Ton - Four Workstations: (3) Standard - Punch, Flat Bar Shear & Angle Shear; (1) Open - Customize your ironworker with 10 optional attachments
- 55 Ton - 10 interchangeable attachments available
- Available with PowerLink™ System (AC500 Models)
- ANSI B11.5-1988(O2) Compliant Guarding
- ETL/UI Approved Controls
- Integrated E-Stop, Lock-out/Tag-out
- Optimized workstation heights for improved efficiency
- Electric foot pedals with integrated jog control
- Adjustable stroke control
- 1 Year Warranty

MADE IN THE USA



Tonnage - 50							
Model No.	**Angle Shear (in.)**	**Flat Bar Shear (in.)**	**Punch Capacity (in.)**	**Motor**	**Weight**	**Order No.**	**Price**
IW50-1P230	3 x 3 x 3/8, 4 x 4 x 1/4	1/2 x 10, 3/4 x 4	1" Dia. in 5/8	230V, 1PH	2020 lbs	**RE75IW501P230**	14202.66
IW50-1P230-AC500	3 x 3 x 3/8, 4 x 4 x 1/4	1/2 x 10, 3/4 x 4	1" Dia. in 5/8	230V, 1PH	2020 lbs	**RE75IW501P230A**	15542.66
IW50-3P230	3 x 3 x 3/8, 4 x 4 x 1/4	1/2 x 10, 3/4 x 4	1" Dia. in 5/8	230V, 3PH	2020 lbs	**RE75IW503P230**	13800.66
IW50-3P230-AC500	3 x 3 x 3/8, 4 x 4 x 1/4	1/2 x 10, 3/4 x 4	1" Dia. in 5/8	230V, 3PH	2020 lbs	**RE75IW503P230A**	15140.66
IW50-3P460	3 x 3 x 3/8, 4 x 4 x 1/4	1/2 x 10, 3/4 x 4	1" Dia. in 5/8	460V, 3PH	2020 lbs	**RE75IW503P460**	13934.66
IW50-3P460-AC500	3 x 3 x 3/8, 4 x 4 x 1/4	1/2 x 10, 3/4 x 4	1" Dia. in 5/8	460V, 3PH	2020 lbs	**RE75IW503P460A**	15274.66

Tonnage - 55							
Model No.	**Angle Shear (in.)**	**Flat Bar Shear (in.)**	**Punch Capacity (in.)**	**Motor**	**Weight**	**Order No.**	**Price**
IW55-1P230	3 x 3 x 3/8, 4 x 4 x 1/4	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	230V, 1PH	2480 lbs	**RE75IW551P230**	15140.66
IW55-1P230-AC500	3 x 3 x 3/8, 4 x 4 x 1/4	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	230V, 1PH	2480 lbs	**RE75IW551P230A**	16480.66
IW55-3P230	3 x 3 x 3/8, 4 x 4 x 1/4	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	230V, 3H	2480 lbs	**RE75IW553P230**	14738.66
IW55-3P230-AC500	3 x 3 x 3/8, 4 x 4 x 1/4	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	230V, 3PH	2480 lbs	**RE75IW553P230A**	16078.66
IW55-3P460	3 x 3 x 3/8, 4 x 4 x 1/4	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	460V, 3PH	2480 lbs	**RE75IW553P460**	14872.66
IW55-3P460-AC500	3 x 3 x 3/8, 4 x 4 x 1/4	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	460V, 3PH	2480 lbs	**RE75IW553P460A**	16212.66

F.O.B. Albert Lea, MN • Ships by Truck

60 & 65 Ton Ironworkers

New!

Features:

- 60 Ton - Four Workstations: (4) Standard - Punch, Flat Bar Shear, Angle Shear & Coper Notcher
- 60 Ton - 9 additional attachments available
- 65 Ton - Five Workstations: (4) Standard - Punch, Flat Bar Shear & Angle Shear; (1) Open - Customize your ironworker with 10 optional attachments
- 65 Ton - 10 interchangeable attachments available
- Available with PowerLink™ System (AC500 & AC700 Models)
- ANSI B11.5-1988(O2) Compliant Guarding
- ETL/UI Approved Controls
- Integrated E-Stop, Lock-out/Tag-out
- Optimized workstation heights for improved efficiency
- Electric foot pedals with integrated jog control
- Adjustable stroke control
- 1 Year Warranty

MADE IN THE USA



Tonnage - 60								
Model No.	Angle Shear (in.)	Coper Notcher (in.)	Flat Bar Shear (in.)	Punch Capacity (in.)	Motor	Weight	Order No.	Price
IW60-1P230	3 x 3 x 1/2, 4 x 4 x 3/8	3/8	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	230V, 1PH	2550 lbs	**RE75IW601P230**	16882.66
IW60-1P230-AC500	3 x 3 x 1/2, 4 x 4 x 3/8	3/8	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	230V, 1PH	2550 lbs	**RE75IW601P230A**	18222.66
IW60-3P230	3 x 3 x 1/2, 4 x 4 x 3/8	3/8	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	230V, 3PH	2550 lbs	**RE75IW603P230**	16480.66
IW60-3P230-AC500	3 x 3 x 1/2, 4 x 4 x 3/8	3/8	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	230V, 3PH	2550 lbs	**RE75IW603P230A**	17820.66
IW60-3P460	3 x 3 x 1/2, 4 x 4 x 3/8	3/8	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	460V, 3PH	2550 lbs	**RE75IW603P460**	16614.66
IW60-3P460-AC500	3 x 3 x 1/2, 4 x 4 x 3/8	3/8	3/8 x 14, 1/2 x 12, 3/4 x 4	1-1/16 Dia. in 5/8	460V, 3PH	2550 lbs	**RE75IW603P460A**	17954.66

Tonnage - 65								
Model No.	Angle Shear (in.)	Coper Notcher (in.)	Flat Bar Shear (in.)	Punch Capacity (in.)	Motor	Weight	Order No.	Price
IW65-1P230	5 x 5 x 3/8	3/8	3/8 x 24, 1/2x 14, 1 x 4	1-1/16 Dia. in 3/4	230V, 1PH	4750 lbs	**RE75IW651P230**	26932.66
IW65-1P230-AC700	5 x 5 x 3/8	3/8	3/8 x 24, 1/2x 14, 1 x 4	1-1/16 Dia. in 3/4	230V, 1PH	4750 lbs	**RE75IW651P230A**	28406.66
IW65-3P230	5 x 5 x 3/8	3/8	3/8 x 24, 1/2x 14, 1 x 4	1-1/16 Dia. in 3/4	230V, 3PH	4750 lbs	**RE75IW653P230**	26396.66
IW65-3P230-AC600	5 x 5 x 3/8	3/8	3/8 x 24, 1/2x 14, 1 x 4	1-1/16 Dia. in 3/4	230V, 3PH	4750 lbs	**RE75IW653P230A**	27870.66
IW65-3P460	5 x 5 x 3/8	3/8	3/8 x 24, 1/2x 14, 1 x 4	1-1/16 Dia. in 3/4	460V, 3PH	4750 lbs	**RE75IW653P460**	26664.66
IW65-3P460-AC600	5 x 5 x 3/8	3/8	3/8 x 24, 1/2x 14, 1 x 4	1-1/16 Dia. in 3/4	460V, 3PH	4750 lbs	**RE75IW653P460A**	28138.66

F.O.B. Albert Lea, MN • Ships by Truck

75 Ton Ironworkers

MADE IN THE USA

Features:

- Four Workstations: (4) Standard - Punch, Flat Bar Shear, Angle Shear & Coper Notcher
- 9 additional attachments available
- Available with PowerLink™ System (AC600 & AC700 Models)
- ANSI B11.5-1988(O2) Compliant Guarding
- ETL/UI Approved Controls
- Integrated E-Stop, Lock-out/Tag-out
- Optimized workstation heights for improved efficiency
- Electric foot pedals with integrated jog control
- Adjustable stroke control
- 1 Year Warranty

New!



Model No.	Coper Notcher (in.)	Flat Bar Shear (in.)	Punch Caacity (in.)	Motor	Weight	Order No.	Price
IW75-1P230	1/2	1/2 x 14, 3/4 x 10	1-1/16 Dia. in 7/8	230V, 1PH	4100 lbs	**RE75IW751P230**	26128.66
IW75-1P230-AC700	1/2	1/2 x 14, 3/4 x 10	1-1/16 Dia. in 7/8	230V, 1PH	4100 lbs	**RE75IW751P230A**	26932.66
IW75-3P230	1/2	1/2 x 14, 3/4 x 10	1-1/16 Dia. in 7/8	230V, 3PH	4100 lbs	**RE75IW753P230**	25458.66
IW75-3P230-AC600	1/2	1/2 x 14, 3/4 x 10	1-1/16 Dia. in 7/8	230V, 3PH	4100 lbs	**RE75IW753P230A**	27602.66
IW75-3P460	1/2	1/2 x 14, 3/4 x 10	1-1/16 Dia. in 7/8	460V, 3PH	4100 lbs	**RE75IW753P460**	25324.66
IW75-3P460-AC600	1/2	1/2 x 14, 3/4 x 10	1-1/16 Dia. in 7/8	460V, 3PH	4100 lbs	**RE75IW753P460A**	26798.66

F.O.B. Albert Lea, MN • Ships by Truck

100 Ton Ironworkers

Features:

- Four Workstations: (3) Standard - Punch, Flat Bar Shear, Angle Shear; (1) Open - Customize your ironworker with 10 optional attachments
- 10 additional attachments available
- Available with PowerLink™ System (AC600 & AC700 Models)
- ANSI B11.5-1988(O2) Compliant Guarding
- ETL/UI Approved Controls
- Integrated E-Stop, Lock-out/Tag-out
- Optimized workstation heights for improved efficiency
- Electric foot pedals with integrated jog control
- Adjustable stroke control
- 1 Year Warrant



Model No.	Angle Shear (in.)	Flat Bar Shear (in.)	Punch Capacity (in.)	Motor	Weight	Order No.	Price
IW100-1P230	6 x 6 x 1/2	3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	230V, 1PH	4650 lbs	**RE75IW1001P230**	30818.66
IW100-1P230-AC700	6 x 6 x 1/2	3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	230V 1PH	4650 lbs	**RE75IW1001P230A**	32292.66
IW100-3P230	6 x 6 x 1/2	3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	230V, 3PH	4650 lbs	**RE75IW1003P230**	30416.66
IW100-3P230-AC600	6 x 6 x 1/2	3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	230V, 3PH	4650 lbs	**RE75IW1003P230A**	31890.66
IW100-3P460	6 x 6 x 1/2	3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	460V, 3PH	4650 lbs	**RE75IW1003P460**	30684.66
IW100-3P460-AC600	6 x 6 x 1/2	3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	460V, 3PH	4650 lbs	**RE75IW1003P460A**	32158.66

F.O.B. Albert Lea, MN • Ships by Truck

100 Ton Deluxe Ironworkers

Features:

- Five Workstations: (5) Standard - Punch, Flat Bar Shear, Angle Shear, Coper Notch & Rod Shear
- 9 additional attachments available
- Available with PowerLink™ System (AC600 & AC700 Models)
- ANSI B11.5-1988(O2) Compliant Guarding
- ETL/UI Approved Controls
- Integrated E-Stop, Lock-out/Tag-out
- Optimized workstation heights for improved efficiency
- Electric foot pedals with integrated jog control
- Adjustable stroke control
- 1 Year Warrant



Model No.	Coper Notcher (in.)	Flat Bar Shear (in.)	Punch Capacity (in.)	Motor	Weight	Order No.	Price
IW100DX-1P230	1/2	1/2 x 18, 3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	230V, 1PH	5180 lbs	**RE75DX1P230**	40600.66
IW100DX-1P230-AC700	1/2	1/2 x 18, 3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	230V, 1PH	5180 lbs	**RE75DX1P230AC**	42342.66
IW100DX-3P230	1/2	1/2 x 18, 3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	230V, 3PH	5180 lbs	**RE75DX3P230**	38188.66
IW100DX-3P230-AC600	1/2	1/2 x 18, 3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	230V, 3PH	5180 lbs	**RE75DX3P230AC**	39930.66
IW100DX-3P460	1/2	1/2 x 18, 3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	460V, 3PH	5180 lbs	**RE75DX3P460**	37652.66
IW100DX-3P460-AC600	1/2	1/2 x 18, 3/4 x 14, 1 x 10	1-1/16 Dia. in 1"	460V, 3PH	5180 lbs	**RE75DX3P460AC**	39394.66

F.O.B. Albert Lea, MN • Ships by Truck

ELITE 110 Ton Ironworkers

- Superior performance and design excellence in this robust new series of Ironworkers
- 1 Year Warranty



Model No.	Angle Shear (in.)	Flat Bar Shear (in.)	Punch Capacity (in.)	Motor	Weight	Order No.	Price
ELT110-1P230	6 x 6 x 1/2	3/4 x 14, 1 x 12	1-3/8 Dia. in 1"	230V, 1PH	5380 lbs	**RE751101P230**	41002.66
ELT110-3P230	6 x 6 x 1/2	3/4 x 14, 1 x 12	1-3/8 Dia. in 1"	230V, 3PH	5380 lbs	**RE751103P230**	40600.66
ELT110-3P460	6 x 6 x 1/2	3/4 x 14, 1 x 12	1-3/8 Dia. in 1"	460V, 3PH	5380 lbs	**RE751103P460**	40868.66

F.O.B. Albert Lea, MN • Ships by Truck

PALMGREN INC 6" x 12" Manual Bench Surface Grinder

Features:
- Meehanite cast iron construction
- Precision steel balls produce extremely smooth operation of table along the ways
- Hand scraped ways
- Spindle and motor are a direct drive design and are dynamically balanced minimum vibration
- Swarf guard
- Large easy to read dials
- Spiral bevel gear for easy vertical movement of the spindle head
- JB559670109 Steel Floor Stand (Not Included)
- 3 Year Warranty

New!



Model No.	Table Size (in.90	Spindle Motor (in.)	Max. Grinder Wheel Size (in.)	Max. Grinding Length (in.)	Max. Grinding Width (in.)	Crossfeed (in.)	Motor	Weight	Order No.	Price
82122	6 x 12	3/4	7 x 1/2 x 1-1/4	12-1/2	6-11/16	.001	3HP, 115V, 1PH	450 lbs	**JB559682122**	6365.00

F.O.B. Chicago, IL • Ships by Truck

PRM 6" x 18" Surface Grinder

Features:
- Fuselage base with new box design and reinforcing rib, reinforced the rigid structure of the machine, to improve the stability of the machine
- Scientific design vacuuming, cleaning the mouth angle of inclination of 45 degrees, and can be adjusted up or down to ensure optimum suction power
- Imported P4 high precision spindle
- Imported high precision bearing
- Direct casting dust, dust-tight design is easily deformable plasticdust and other can not match. Dust is directly related to the merits of precision machine tools and machine

New!



Model No.	Table Size (in.)	Spindle Motor	Max. Grinder Wheel Size (in.)	Max. Grinding Length (in.)	Max. Grinding Width (in.)	Crossfeed (in.)	Spindle Speed (RPM)	Weight	Order No.	Price
M618B	6 x 18	1.5HP	7.08 x .629 x 1.25	18.7	62.29	.00079 / .196	3600	1874 lbs	**PR65M618B**	10050.00

KENT USA 6" x 18" Hand Feed Surface Grinder

Features:
- Elevated H-Frame column design
- 21" spindle to table clearance under the wheel
- High precision flange-mount cartridge type spindle
- High accuracy ABEC-7 spindle bearings
- Cable driven table with roller balls on hardened steel way
- Centralized one-shot lubrication
- 1 Year Warranty

Standard Equipment:
- One 8" x 1" x 1-1/4" Grinding wheel
- 6" x 18" Permanent magnetic chuck
- Flood coolant system
- Diamond-tipped table dresser
- Wheel flange adapter
- Leveling bolts and pads



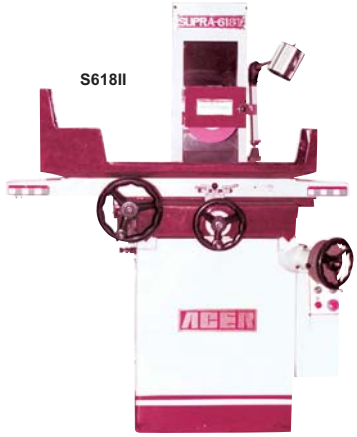
Model No.	Table Size (in.)	Longitudinal Table Travel (in.)	Cross Transverse Travel (in.)	Downfeed (in.)	Crossfeed (in.)	Max. Grinder Wheel Size (in.)	Spindle Motor	Weight	Order No.	Price
KSG618	6 x 18	19-1/2	6-3/4	.0005	.001	8 x 1 x 1-1/4	2HP, 230V, 3PH	2600 lbs	**RA67KGS618**	10653.00

F.O.B. Tustin, CA • Ships by Truck • NOT CSA APPROVED

ACER 6" x 18" Surface Grinders

Features:
- Spindle runout within 0.00008”
- Meehanite castings including: saddle with double-vee turcite ways
- Cog-type timing belt drive system ball-rolling table ways/“Turcite B” way (AH model)
- 24-Volt safety control
- Push-button starter with overload protection
- 19-5/16” Workpiece height
- Model S618II is a manual surface grinder with Ball Bearing Ways
- 1 Year Warranty

Standard Equipment:
- Auto Lubrication, Halogen Work Light, Diamond Dresser, Tool Box, and Complete Instruction & Parts Manual



Model No.	Max. Grinding Length (in.)	Max. Grinding Width (in.)	Cross Transverse Travel (in.)	Crossfeed (in.)	Longitudinal Table Travel (in.)	Downfeed (in.)	Auto Transverse Increment	Spindle Speed (RPM)	Spindle Motor	Table Size (in.)	Magnetic Chuck Size (in.)	Max. Grinder Wheel Size (in.)	Weight	Order No.	Price
S618II	19	7	7	.0005	19	.0001	.07 - 0.4	3450	2HP, 220V, 3PH	6 x 18	6 x 18	8 x 1/2 x 1-1/4	1870 lbs	**RA60S618II**	11323.00
S618II440	18	7	7	.0005	19	.0001	.07 - 0.4	3450	2HP, 440V, 3PH	6 x 18	6 x 18	8 x 1/2 x 1-1/4	1870 lbs	**RA60S618II440**	11323.00

F.O.B. Orange, CA • Ships by truck • NOT CSA APPROVED

CHEVALIER 6" x 18" Precision Handfeed Surface Grinder

Features:
- 2HP low vibration spindle motor
- Spindle run-out within 0.00006”
- High precision cartridge-type spindle equipped with 4 pieces of class 7 angular contact ball bearings
- Hardened & ground table guideways with steel balls
- Patented, continuous loop, steel core reinforced and cog timing belt system
- Flatness is guaranteed to be within 0.0001” for the entire working surface
- Saddle travels on hand scraped double V guideways, laminated with Turcite-B
- Table handwheel can be indexed for ease of operation
- Automatic continuous lube system with oil flow indicator on column
- Meehanite casting
- 1 Year Warranty



Model No.	Table Size (in.)	Longitudinal Table Travel (in.)	Cross Transverse Travel (in.)	Spindle Motor	Spindle Speed (RPM)	Weight	Order No.	Price
FSG618M	6 x 18	19	7	2HP, 230/460V, 3PH	3450	1500 lbs	**RA40FSG618M**	11859.00

F.O.B. Sante Fe Springs, CA • Ships By Truck • NOT CSA APPROVED

PALMGREN INC. 8" x 18" Surface Grinder

Features:
- Meehanite cast iron construction
- High precision cartridge type spindle
- Runout at the spindle nose taper is less than 0.000070” (0.0020mm) T.I.R.
- Double V hand scraped and Turcite B coated way system on both the table longitudinal and cross feed
- Precision steel balls produce extremely smooth operation of the table along the ways
- Automatic lubrication system
- Spindle and motor are a direct drive one piece design
- 3 Year Warranty

New!



Model No.	Table Size (in.)	Max. Grinder Wheel Size (in.)	Max. Grinding Length (in.)	Max. Grinding Width (in.)	Crossfeed (in.)	Motor	Weight	Order No.	Price
82123	8 x 18	7 x 1/2 x 1-1/4	18-3/4	7-7/8	.0005	2HP, 230V, 3PH	1765 lbs	**JB559682123**	19490.30

F.O.B. Chicago, IL • Ships By Truck

Clausing 8" x 18" Manual Surface Grinder

Features:
- High precision cartridge spindle
- Anti-wear guide ways coated with “TURCITE-B”
- Enlarged column and base create high stability & rigidity
- Automatic lube system to lubricate lead-screws and guideways for greater longevity
- Timing belt table drive which has enclosed high tensile steel cores that ensure more smooth table movement and longevity
- Base tool cabinet for storage of tools, fixtures and manuals
- Heavy-Duty cast iron construction
- 2 Year Limited Warranty



Model No.	Max. Grindiing Lenght (in.)	Max. Grinding Width (in.)	Cross Transverse Travel (in.)	Crossfeed (in.)	Longitudinal Table Travel (in.)	Downfeed (in.)	Spindle Speed (RPM)	Spindle Motor	Table Size (in.)	Magnetic Chuck Size (in.)	Max. Grinder Wheel Size (in.)	Weight	Order No.	Price
CSG818H	19	9.375	9-3/4	.001	20	.0002	3450	2HP, 440V, 3PH	8 x 18	10 x 20	8 x 1/2 - 3/4 x 1-1/4	2200 lbs	**RF58CSG818H**	16059.90
CSG818H4	19	9.375	9-3/4	.001	20	.0002	3450	2HP, 220V, 3PH	8 x 18	10 x 20	8 x 1/2 - 3/4 x 1-1/4	2200 lbs	**RF58CSG818H4**	16059.90

F.O.B. Kalamazoo, MI • Ships by truck • NOT CSA APPROVED

ACER 8" x 18" High Precision Surface Grinder

Feautres:
- 2-Axis auto movement
- Ball rolling table
- Auto lubricator
- Precision “Trucite-B” crossfeed ways
- Meehanite casting base
- 1 Year Warranty

Standard Equipment:
- Wheel balancing base
- Grinding wheel
- Diamond dresser
- Toolbox with tools
- Wheel balancing arbor
- Wheel flange
- Halogen worklight
- Splash guard



S818AHII

Model No.	Longitudinal Table Travel (in.)	Max. Grinding Length (in.)	Max. Grinder Wheel Size (in.)	Downfeed (in.)	Crossfeed (in.)	Motor	Weight	Order No.	Price
S818AH-II	21	19	8 x 1/2 x 1-1/4	.0001	9	3HP, 220V, 3PH	2850 lbs	**RA60S818AHII**	20435.00
S818AHII440	21	19	8 x 1/2 x 1-1/4	.0001	9	3HP, 440V. 3PH	2850 lbs	**RA60S818AHII4**	20703.00

F.O.B. Orange, CA • Ships by Truck • NOT CSA APPROVED

PRM 6" & 8" Grinders

Features:
- Built in light
- Adjustable safety shield
- Tool Rest
- Cooling tray
- 1 Ea. - 36 Grit and 60 Grit Aluminum Oxide grinding wheels
- CSA Approved
- One Year Warranty



Model No.	Wheel Size	RPM	Motor	Weight	Order No.	Price
G6	6"OD x 3/4"W x 1/2" Hole	3450	1/2HP, 120V	25 lbs.	**PR80G6**	107.15
G8	8"OD x 1"W x 5/8" Hole	3450	3/4HP, 120V	33 bls.	**PR80G8**	133.95

F.O.B. Warren, MI.

DEWALT 6" & 8" Grinders

- 6” Grinder has a powerful 5/8 HP induction motor and runs at 3,450 RPM
- 8” Grinder has a powerful 3/4 HP induction motor and runs at 3,600 RPM
- Rugged cast iron base and motor housing
- Grinder includes: Precision machined aluminum tool rests, 36 and 60 grit wheels, eye shields, spark deflectors, and wrench
- 1 Year Warranty



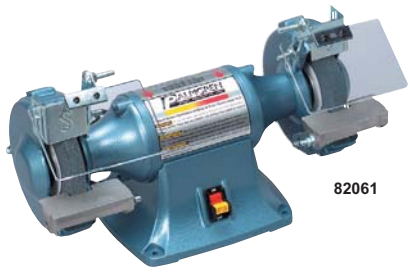
DW756

Model No.	Wheel Size (in.)	RPM	Motor	Weight	Order No.	Price
DW756	6 x 3/4 x 1/2	3450	5/8HP	29 lbs	**PD20DW756**	204.37
DW758	8 x 1 x 5/8	3600	3/4HP	40 lbs	**PD20DW758**	279.54

F.O.B. Warren, MI • NOT CSA APPROVED

PALMGREN INC Bench Grinders

- Palmgren's bench grinders are designed and built with high-quality motors for heavy duty use and long duty cycles
- Our stated horsepower is actual sustained horsepower under 100% loads with less than 1% loss from stated RPMs at same 100% loads
- Designed to do more, a Palmgren bench grinder provides you with 4 to 7 times longer duty cycles under load and 8 times less speed degradation than any other competitor
- Palmgren's line up of industrial grade bench grinders provide smooth, quiet power for all grinding, cleaning, deburring, chamfering and sharpening jobs
- Designed to handle heavy stock removal to finishing applications these powerful units are built for continuous, efficient use all day, every day
- Extended wheel-to-wheel clearance which allows longer items to be ground easily
- Dynamically balanced rotors and sealed bearings minimize vibration and ensure smooth running
- Large adjustable tool rests for safe, efficient tilt and angle grinding
- Adjustable safety eye shields and spark guards easily positioned with hurricane bolt
- Maximum performance, accuracy and value 9682061 comes with wheel guards with no dust collection ports
- Units fit Item # 9670101 or Item # 9686000 tool stands
- 3 Year Warranty
- F.O.B. WARREN, MI


82061

Model No.	Wheel Size (in.)	RPM	Motor	Agency Approvals	Weight	Order No.	Price
82061	6 x 3/4 x 1/2	3450	1/3HP, 115/230V, 1PH	CSA, NRTL/C,OSHA	28 lbs	**JB5582061**	155.44
82071	7 x 1 x 5/8	3450	1/2HP, 120/240V, 1PH	CSA, NRTL/C,OSHA	54 lbs	**JB5582071**	268.00
82081	8 x 1 x 5/8	3450	3/4HP, 120/240V, 1PH	CSA, NRTL/C,OSHA	60 lbs	**JB5582081**	310.88
82082	8 x 1 x 5/8	1725	3/4HP, 220/440V, 3PH	OSHA	60 lbs	**JB5582082**	310.88
82101	10 x 1 x 1	1725	1HP, 115/230V, 1PH	CSA, NRTL/C,OSHA	111 lbs	**JB5582101**	628.46
82102	10 x 1 x 1	3450	1HP, 220/440V, 3PH	OSHA	111 lbs	**JB5582102**	628.46

F.O.B. Chicago, IL • NOT CSA APPROVED

PALMGREN INC Heavy Duty Variable Speed Bench Grinders

New!

- Deluxe variable speed bench grinders deliver the power, precision and versatility
- At maximum rpm's they are built for heavy material removal, deburring and chamfering applications
- At the lower rpm range they effectively handle the more delicate cleaning, polishing, sharpening and other finishing operations
- Equipped with the latest technology variable speed inverter
- Powerful, heavy-duty capacitor motors
- LED speed readout with "soft" touch on/off and variable speed control pad
- 3 hard speed switch settings 900 / 1800 / 3600 RPM for the 6" & 8" models and 900 / 1800 / 2400 RPM for the 10" model
- Press the high or low switch button on touch pad to variably adjust the speed up or down in 100 RPM increments
- Dynamically balanced rotors and sealed bearings
- Extended wheel to wheel clearance
- Large adjustable tool rests
- Adjustable safety eye shields and spark guards
- Exclusive single port dust collection
- Units fit Item # 9670101 or Item # 9686000 tool stands
- 3 Year Warranty



Model No.	Wheel Size (in.0	RPM	Motor	Features	Weight	Order No.	Price
82096	6 x 3/4 x 1/2	900 - 3600	1/2HP, 115/240V, 1PH	Dust Collector	40 lbs	**JB559682096**	455.60
82097	8 x 1 x 5/8	900 - 3600	1HP, 115/240V, 1PH	Dust Collector	60 lbs	**JB559682097**	692.78
82098	10 x 1 x 1	900 - 2400	1.5HP, 115/240V, 1PH	Dust Collector	115 lbs	**JB559682098**	1152.40

F.O.B. Chicago, IL • Ships by Truck

PALMGREN INC Heavy Duty Bench Grinders

- POWERGRIND-XP™ are the next generation in bench grinders
- They provide more horsepower, torque and value added features delivering high productivity grinding solutions
- A cut above the rest POWERGRIND-XP industrial grade bench grinders provide smooth, quiet power for all your bench top grinding and finishing needs
- Industrial grade capacitor motors
- Dynamically balanced rotors and sealed bearings to minimize vibration and ensure smooth running
- Extended wheel-to-wheel clearance which allows longer items to be ground and finished easily
- Large adjustable tool rests easily adjusted with hurricane bolts for safe, accurate grinding
- Comes with three tool rests – (2) standard flat top and (1) V-grooved top for sharpening drill bits with 118° drill point angle and 6" and 8" bench grinders include a wheel dresser
- 36 and 120 grit grinding wheels
- 3 Year Warranty

New!



Model No.	Wheel Size (in.)	RPM	Motor	Features	Weight	Order No.	Price
82072	6 x 3/4 x 1	3450	1/2HP, 115/230V, 1PH	Dust Collector	43 lbs	**JB559682072**	301.50
82073	8 x 1 x 5/8	3450	1HP, 225/230V, 1PH	Dust Collector	55 lbs	**JB559682073**	556.10
82074	8 x 1 x 5/8	3450	1HP, 230/460V, 3PH	Dust Collector	55 lbs	**JB559682074**	576.20
82075	10 x 1 x 1	1725	1.5HP, 115/230V, 1PH	Dust Collector	115 lbs	**JB559682075**	1005.00
82076	10 x 1 x 1	1725	1.75HP, 230/460V, 3PH	Dust Collector	113 lbs	**JB559682076**	1045.20
82077	12 x 2 x 1-1/4	1725	3HP, 230/460V, 3PH	Dust Collector	270 lbs	**JB559682077**	1949.70

F.O.B. Chicago, IL • Ships by Truck

PRM Heavy Duty Bench Grinders

Features:
- Adjustable tool rest
- Adjustable spark arrestors
- Adjustable eye shields
- Locking toggle on/off switch
- Single port dust collection system (8” & 10” models only)
- One 36 grit and one 60 grit grinding wheel
- CSA listed, OSHA compliant
- 1 Year parts warranty



PR738

Model No.	Wheel Size	RPM	Motor	Weight	Order No.	Price
6	6 x 3/4 x 1/2	3450	1/3HP 115/230V 1PH	32 lbs	**PR736**	153.00
8	8 x 1 x 5/8	3450	3/4HP 115/230V, 1PH	63 lbs	**PR738**	272.40
10	10 x 1 x 1	1725	1HP 115/230V 1PH	121 lbs	**PR7310**	497.90

F.O.B. Warren, MI • Not CSA approved • 6” UPS • 8” UPS Dimensional • 10” Ships By Truck

BALDOR Industrial Bench Grinders

MADE IN THE USA

Features:
- Pressed Stamped Steel Guards and Tool Rests (models 712, 612E, 712E)
- Cast iron wheel grinders & tool rest on all other grinders
- Models with E exhaust type units
- 3 Year Warranty

Standrd Equipment:
- (1) Coarse Grit and (1) Medium Grit Grinding Wheel
- On/Off Switches
- Single Phase Grinders are supplied with a Power Cord and Plug, 3 Phase are not


612

Model No.	Wheel Size (in.)	Motor	RPM	Agency Approvals	Weight	Order No.	Price
712	7 x 1 x 5/8	1/2HP, 115V, 1PH	3600	UL - CSA	46 lbs	**PP50712**	793.28
712E	7 x 1 x 5/8	1/2HP, 115V, 1PH	3600	UL - CSA	71 lbs	**PP50712E**	928.62
7306	7 x 1 x 5/8	1/2HP, 115/230V, 1PH	1800	UL	71 lbs	**PP507306**	1005.00
7307	7 x 1 x 5/8	1/2HP, 115/230V, 1PH	3600	UL - CSA	70 lbs	**PP507307**	1005.00
7308	7 x 1 x 5/8	1/2HP, 208-230/460V, 3PH	1800	UL - CSA	71 lbs	**PP507308**	1005.00
7309	7 x 1 x 5/8	1/2HP, 208-230/460V, 3PH	3600	UL - CSA	72 lbs	**PP507309**	1005.00
8100W	8 x 1 x 3/4	3/4HP, 115/230V, 1PH	1800	UL	99 lbs	**PP508100W**	1522.24
8102W	8 x 1 x 3/4	3/4HP, 208-230/460V, 3PH	1800	UL - CSA	98 lbs	**PP508102W**	1474.00
8107W	8 x 1 x 3/4	3/4HP, 115/230V, 1PH	3600	UL	99 lbs	**PP508107W**	1522.24
8123W	8 x 1 x 3/4	3/4HP, 208-230/460V, 3PH	3600	UL - CSA	99 lbs	**PP508123W**	1474.00
8125W	8 x 1 x 3/4	3/4HP, 575V, 3PH	3600	UL	99 lbs	**PP508125W**	1474.00
105W	10 x 1 x 7/8	1.5HP, 575V, 3PH	1800	UL - CSA	133 lbs	**PP50105W**	1913.52
1021W	10 x 1 x 7/8	1.5HP, 208-230/460V, 3PH	1800	UL - CSA	134 lbs	**PP501021W**	1913.52
1022W	10 x 1 x 7/8	1HP, 115/230V, 1PH	1800	UL	133 lbs	**PP501022W**	1941.66

F.O.B. Warren, MI • Ships by truck

BALDOR Industrial Deluxe Bench Grinders

Features:
- Cast Iron Tool Rests
- Wheel Guards
- Start/Stop Switches
- Single Phase units include a Power Cord with Plug, Three Phase do not
- 3 Year Warranty

MADE IN THE USA

Standard Equipment:
- (1) Coarse Grit and (1) Medium Grit Grinding Wheels
- Water Pot
- Tool Tray
- Two Lighted Eye Shields (wired through the On/Off Switch on Single Phase Units)


7307D

Model No.	Wheel Size (in.)	Motor	RPM	Agency Approvals	Weight	Order No.	Price
7306D	7 x 1 x 5/8	1/2HP, 115/230V, 1PH	1800	UL	85 lbs	**PP507306D**	1264.96
7307D	7 x 1 x 5/8	1/2HP, 115/230V, 1PH	3600	UL	85 lbs	**PP507307D**	1264.96
7309D	7 x 1 x 5/8	1/2HP, 208-230/460V, 3PH	3600	UL - CSA	88 lbs	**PP507309D**	1264.96
8100WD	8 x 1 x 3/4	3/4HP, 115/230V, 1PH	1800	UL	110 lbs	**PP508100WD**	1736.64
8102WD	8 x 1 x 3/4	3/4HP, 208-230/460V, 3PH	1800	UL - CSA	111 lbs	**PP508102WD**	1709.84
8107WD	8 x 1 x 3/4	3/4HP, 115/230V, 1PH	3600	UL	111 lbs	**PP508107WD**	1736.64
8123WD	8 x 1 x 3/4	3/4HP, 208-230/460V, 3PH	3600	UL - CSA	112 lbs	**PP508123WD**	1709.84
1021WD	10 x 1 x 7/8	1.5HP, 208-230/460V, 3PH	1800	UL - CSA	146 lbs	**PP501021WD**	2192.24
1022WD	10 x 1 x 7/8	1HP, 115/230V, 1PH	1800	UL	145 lbs	**PP501022WD**	2223.06

F.O.B. Warren, MI • Ships by truck

BALDOR 12" Exhaust Type Industrial Grinders

Features:

- Built for heavy-duty grinding
- Cast iron exhaust-type guards accommodate a 5” diameter vent pipe
- Adjustable cast iron tool-rest, stamp steel spark-arrestors and eyeshields
- Manual starter with overload protection
- Includes lighted GA9 eyeshields
- All units connected at the factory for 230 volts, except 129W, which is rated 575 volts
- Pedestal, water pot and tool trays optional
- 1215W shown with optional pedestal, water pot and tool trays
- Designed to comply with OSHA standards under normal usage
- 3 Year Warranty


1215W

MADE IN THE USA

Model No.	Motor	RPM	Wheel Size (in.)	Agency Approvals	Weight	Order No.	Price
1217W	2HP, 115/230V, 1PH	1800	12 x 2 x 1-1/4	UR	259 lbs	**PP501217W**	4623.00
1215W	2HP, 208-230/460V, 3PH	1500 / 1800	12 x 2 x 1-1/4	UR	253 lbs	**PP501215W**	4365.72
1216W	3HP, 208-230,460V, 3PH	1500 / 1800	12 x 2 x 1-1/4	UR	254 lbs	**PP501216W**	4519.82
129W	3HP, 575V, 3PH	3000 / 3600	12 x 2 x 1-1/4	UR	256 lbs	**PP50129W**	4519.82

F.O.B. Factory • Ships by truck

PALMGREN INC 12" Bench Grinder with Pedestal

- Designed and built with high-quality motors
- Our stated horsepower is actual sustained horsepower under 100% loads with less than 1% loss from stated RPMs at same 100% loads
- Provides you with 4 to 7 times longer duty cycles under load and 8 times less speed degradation
- Provides smooth, quiet power for all grinding, cleaning, deburring, chamfering and sharpening jobs
- Extended wheel-to-wheel clearance
- Dynamically balanced rotors and sealed bearings
- Large adjustable tool rests for safe, efficient tilt and angle grinding
- Adjustable safety eye shields and spark guards easily positioned with hurricane bolt
- Maximum performance, accuracy and value
- 12” model comes standard with pedestal floor stand
- Units fit Item #9670101 or Item #9686000 tool stands
- 3 Year Warranty

New!



Model No.	Wheel Size (in.)	RPM	Motor	Features	Weight	Order No.	Price
82121	12 x 2 x 1-1/4	1725	2HP, 220V, 1PH	Dust Collector	286 lbs	**JB559682121**	1439.16

F.O.B. Chicago, IL • Ships by Truck

BALDOR 14" Exhaust Type Industrial Grinders

Features:

- Built for heavy-duty grinding
- Cast iron exhaust-type guards accommodate a 5” diameter vent pipe
- Adjustable cast iron tool-rest, stamp steel spark-arrestors and eyeshields
- Manual starter with overload protection
- Includes lighted GA9 eyeshields
- Pedestal, water pot and tool trays optional
- 1407W shown with optional pedestal, water pot and tool trays
- Designed to comply with OSHA standards under normal usage
- 3 Year Warranty against Motor Burnout


1408W

MADE IN THE USA

Model No.	Motor	RPM	Wheel Size (in.)	Agency Approvals	Weight	Order No.	Price
1406W	5HP, 230V, 3PH	1500 / 1800	14 x 3 x 1-1/4	UR	359 lbs	**PP501406W**	5599.86
1410W	5HP, 460V, 3PH	1500 / 1800	14 x 3 x 1-1/4	UR	362 lbs	**PP501410W**	5599.86
1408W	5HP, 575V, 3PH	1500 / 1800	14 x 3 x 1-1/4	UR	358 lbs	**PP501408W**	5599.86
1407W	7.5HP, 230V, 3PH	1500 / 1800	14 x 3 x 1-1/4	UR	372 lbs	**PP501407W**	6109.06
1411W	7.5HP, 460V, 3PH	1500 / 1800	14 x 3 x 1-1/4	UR	381 lbs	**PP501411W**	6109.06
1409W	7.5HP, 575V, 3PH	1500 / 1800	14 x 3 x 1-1/4	UR	374 lbs	**PP501409W**	6109.06

F.O.B. Factory • Ships by truck

BALDOR Diamond Wheel Tool Grinder

MADE IN THE USA

Features:

- Cast iron construction
- Locked double row bearings maximum runout of .002
- Diamond Cup Wheel: 6" x 3/4" x 1-1/4"
- Large tool tables with protractor type tool support
- Light water pot with spout and faucet
- Reversing Switch
- Diamond wheels sold separately
- 3 Year Warranty



Model No.	Motor	RPM	Agency Approvals	Weight	Order No.	Price
522	1/2HP, 115V, 1PH	3600	UL	108 lbs	**PP50522**	2442.82
532	1/2HP, 208-230/460V, 3PH	3600	UL	109 lbs	**PP50532**	2442.82

F.O.B. Factory • Ships by truck

BALDOR Carbide Grinder

Features:

- Cast iron construction
- Large tool tables with protractor type tool support
- Light and water pot with spout and faucet
- Reversing Switch
- Wheel size: 6" x 1" x 4" with 1-1/4 center plate hole
- Wheels sold separately
- 3 Year Warranty

MADE IN THE USA



Model No.	Motor	RPM	Agency Approvals	Weight	Order No.	Price
500	1/2HP, 115V, 1PH	3600	UL	109 lbs	**PP50500**	2173.48
510	1/2HP, 208-230/460V, 3PH	3600	UL	109 lbs	**PP50510**	2173.48

F.O.B. Factory • Ships by truck

BALDOR Grinder/Buffers

Features:

- Dual purpose for grinding & buffing
- All Models 3600 RPM
- Single phase units supplied with switch, 8′ long 3 conductor cord & plug
- Three phase units furnished less cord & plug
- Supplied with 1-36 Grit wheel & 1-.014 wire wheel (Models 662, 7351, 762, 762E, 8250W, 8252W)
- Supplied with 1-36 Grit wheel & 1- 60 Grit wheel (Models 662E & 673E)
- Rubber feet to minimize vibration
- 3 Year Warranty

MADE IN THE USA



Model No.	Motor	Supplied With	Wheel Size (in.)	Agency Approvals	Weight	Order No.	Price
762	1/2HP, 115V, 1PH	Supplied w/ Non exhaust guards, Pressed Steel Tool Rest	7 x 1 x 5/8	UL - CSA	42 lbs	**PP50762**	793.28
762E	1/2HP, 115V, 1PH	Supplied w/ Cast Iron Exhaust type guards, Pressed Steel Tool Rest	7 x 1 x 5/8	UL - CSA	69 lbs	**PP50762E**	928.62
7351	1/2HP, 115/230V, 1PH	Supplied w/ Cast Iron Exhaust type guards, Cast Iron Tool Rest	7 x 1 x 5/8	UL - CSA	68 lbs	**PP507351**	1005.00
8250W	3/4HP, 115/230V, 1PH	Supplied w/ Cast Iron Exhaust type guards, Cast Iron Tool Rest	8 x 1 x 3/4	UL	97 lbs	**PP508250W**	1522.24
8252W	3/4HP, 208-230/460V, 3PH	Supplied w/ Cast Iron Exhaust type guards, Cast Iron Tool Rest	8 x 1 x 3/4	UL	94 lbs	**PP508252W**	1474.00

F.O.B. Factory • Ships by truck

PALMGREN INC. 6" & 8" Buffer

- Palmgren's buffing machines easily remove scratches and other imperfections, brings out the natural luster of the metal, and can effectively clean, polish, finish, and buff a wide variety of materials
- Each unit is equipped with a strong, powerful motor that supplies the necessary torque for start-up and operation under load
- Large diameter armature shaft with shielded bearings for smooth operation
- Heavy duty cast iron construction for vibration free operation
- CSA approved OSHA compliant
- Units fit 9670101 tool stand
- 3 Year Warranty
- F.O.B. WARREN, MI

NOTE: Buffers do not include Buffing Wheels



Model No.	Shaft Dia. (in.)	RPM	Motor	Weight	Order No.	Price
82063	1/2	3450	1/2HP, 120V, 1PH	22 lbs	**JB5582063**	195.64
82083	5/8	3450	3/4HP, 120V, 1PH	38 lbs	**JB5582083**	301.50

F.O.B. Warren, MI

PALMGREN INC Variable Speed Buffers

New!

- Delivers the power, precision and versatility
- At maximum rpm's they are built for intermediate blending, polishing and surface conditioning applications
- At the lower rpm range they effectively handle the more delicate final finishing, polishing, buffing and surface finish refinement operations
- Equipped with the latest technology variable speed inverter delivering a broad range of continuous speeds
- Powerful, heavy-duty capacitor motors provide additional torque and provide plenty of power at all speeds without any loss of rpm's at full load
- LED speed readout with "soft" touch on/off and variable speed control pad
- 3 hard speed switch settings 900 / 1800 / 3600 RPM for the 6" and 8" models and 900 / 1800 / 3000 RPM for the 10" model
- Press the high or low switch button on touch pad to variably adjust the speed up or down in 100 RPM increments from the hard rpm setting
- Dynamically balanced rotors and sealed bearings
- Extended wheel to wheel clearance
- Units fit Item #9670101 or Item #9686000 tool stands
- 3 Year Warranty



Model No.	Size (in.)	RPM	Motor	Features	Order No.	Price
82106	6	900 - 3600	3/4HP, 115/240V	Variable Speed	**JB559682106**	324.28
82107	8	900 - 3600	1HP, 115/240V	Variable Speed	**JB559682107**	348.40
82108	10	900 - 3600	1.5HP, 115/240V	Variable Speed	**JB559682108**	732.98

F.O.B. Chicago, IL • Ships by Truck

PALMGREN INC Bench Grinder Buffer

- Designed to handle heavy rock stock removal to finishing and polishing operations
- These grinder/buffers come with capacitor motors
- Dynamically balanced rotor and sealed bearings
- OSHA compliant wheel guard
- Open flanged shaft
- Wheel guard with dust collection can be found on the 8" model
- Includes 36 grit grinding wheel, 0.014˝ wire wheel, one wheel guard and tool rest, spiral cotton buffing wheel and mounting spacers
- Units fit Item #9670101 or Item #9686000 tool stands
- 3 Year Warranty



New!

Model No.	Size (in.)	RPM	Motor	Features	Weight	Order No.	Price
82068	6	3450	1/3HP 115/230V, 1/2PH	Dust Collector	25 lbs	**JB559682068**	251.92
82069	8	3450	3/4HP, 115/230V	-	49 lbs	**JB559682069**	326.96

PALMGREN INC Dual Head Buffers

- Buffing machines easily remove scratches and other imperfections, brings out the natural luster of the metal, and can effectively clean, polish, finish, and buff a wide variety of materials
- Each unit is equipped with a strong, powerful motor that supplies the necessary torque for start-up and operation under load
- Large diameter armature shaft with shielded bearings for smooth operation
- Heavy duty cast iron construction for vibration free operation
- CSA approved OSHA compliant
- Units fit 9670101 tool stand
- 3 Year Warranty

New!



Model No.	Size (in.)	RPM	Motor	Features	Weight	Order No.	Price
82093	10	3450	1.5HP, 120V	2 Speed	24 lbs	**JB559682093**	848.22
82094	12	3500	230V, 3PH	2 Speed Dual Head	230 lbs	**JB559682094**	7797.46
82095	16	3500	230V, 3PH	2 Speed Dual Head	585 lbs	**JB559682095**	15308.16

F.O.B. Chicago, IL • Ships by Truck

BALDOR Industrial Buffers

Features:

- Buffers are designed for use with soft cloth wheels ONLY - Specific burring applications may require the addition of operator safety devices - Consult with a safety engineer before installation
- Model No. 111, 114 332B and 333B come with a power cord, plug & Switch - Factory wired for 115 voltage
- Models 334B, 330B, 409B and 412B are supplied with Start/Stop switch, wired for 208-230 voltage
- Models 407B and 410B come with a Switch but less cord & plug - Factory wired for 115 volt
- Models 1250, 1251, 1252 and 1253 are supplied with a Manual Starter -Specify voltage
- Models 1453, 1454, 1457 and 1458 are supplied with a Magnetic Starter - Specify voltage
- Flanges and nuts included
- Wheels not included
- Pedestals sold separately
- 3 Year Warranty Against Motor Burnout
- PP50-1458 is shown but does not include Pedestal (PP50GA20)

MADE IN THE USA


1458

Model No.	Size (in.)	Motor	RPM	Shaft Dia. (in.)	Weight	Order No.	Price
111	6	1/3HP, 115V, 1PH	3600	1/2	25 lbs	**PP50111**	553.42
114	6	1/4HP, 115V, 1PH	1800	1/2	24 lbs	**PP50114**	553.42
330B	8	3/4HP, 208-230/460V, 3PH	3600	3/4	56 lbs	**PP50330B**	1061.28
332B	8	3/4HP, 115/230V, 1PH	1800	3/4	55 lbs	**PP50332B**	1086.74
333B	8	3/4HP, 115/230V, 1PH	3600	3/4	56 lbs	**PP50333B**	1086.74
334B	8	3/4HP, 208-230/460V, 3PH	1800	3/4	54 lbs	**PP50334B**	1061.28
407B	10	1HP, 115/230V, 1PH	1800	7/8	60 lbs	**PP50407B**	1441.84
409B	10	1-1/2HP, 208-230/460V, 3PH	1800	7/8	59 lbs	**PP50409B**	1384.22
410B	10	1-1/2HP, 115/230V, 1PH	3600	7/8	61 lbs	**PP50410B**	1417.72
412B	10	1-1/2HP, 208-230/460V, 3PH	3600	7/8	62 lbs	**PP50412B**	1384.22
1250	12	2HP, 115/230V, 1PH	1800	1-1/4	164 lbs	**PP501250**	3339.28
1251	12	2HP, 115/230V, 1PH	3600	1-1/4	160 lbs	**PP501251**	3244.14
1252	12	3HP, 208-230/460V, 3PH	1800	1-1/4	156 lbs	**PP501252**	3065.92
1253	12	3HP, 208-230/460V, 3PH	3600	1-1/4	156 lbs	**PP501253**	2978.82
1457	14	5HP, 230V, 3PH	1200	1-1/4	228 lbs	**PP501457**	4476.94
1458	14	5HP, 230V, 3PH	1800	1-1/4	218 lbs	**PP501458**	3810.96
1454	14	7-1/2HP, 230V, 3PH	1800	1-1/4	229 lbs	**PP501454**	4255.84
1453	14	7-1/2HP, 230V, 3PH	3600	1-1/4	223 lbs	**PP501453**	4028.04

F.O.B Facotry • Ships by truck

BALDOR Dust Control Accessory Units

Features:

- Powered w/1/2 HP TEFC single phase Baldor motor w/cord, switch & plug - Call for additional information
- Powered w/1 HP TEFC, 208-230/460 volt, 3 phase motor, less cord, switch & plug
- 1 Phase units include cord, switch and plug
- 3 Phase units do not include cord, switch and plug
- 3 Year Warranty

MADE IN THE USA


DC10

Model No.	Grinding Wheel Max. (in.)	Motor	Weight	Order No.	Price
DC7	7 x 1	1/2HP, TEFC, 115V, 1PH	60 lbs	**PP50DC7**	1961.76
DC8	8 x 1	1/2HP, TEFC, 115V, 1PH	62 lbs	**PP50DC8**	1961.76
DC10	10 x 1	1/2HP, TEFC, 115V, 1PH	60 lbs	**PP50DC10**	1961.76
DC12	12 x 2	1/2HP, TEFC, 115V, 1PH	62 lbs	**PP50DC12**	2131.94
DC143	14 x 3	1HP, TEFC, 208-230V/460V, 3PH	73 lbs	**PP50DC143**	3478.64

F.O.B. Factory • Ships by truck

BALDOR Replacement Filter Bags

MADE IN THE USA

Model No.	For Use With	Order No.	Price
ARB1	DC7, 8, 10 & 12	**PP50ARB1**	203.68
ARB2	DC14-3	**PP50ARB2**	309.54

BALDOR Grinder Buffer Accessories



Model No.	Description	Weight	Order No.	Price
GA3	Water Pot for GA20 Pedestal. Capacity 3 pints	7 lbs	**PP50GA3**	217.08
GA4	Tool Tray for GA20 Pedestal. 12"x6"	6 lbs	**PP50GA4**	250.58
GA7	Diamond Nib for GA8 (7/16" diameter x 1" long)	1 lb	**PP50GA7**	191.62
GA8	Wheel with Diamond Nib	1 lb	**PP50GA8**	703.50
GA9	Lighted Eyeshield (pair, less bulb and on/off switch) Mounts to Baldor grinders except tool & belt grinders. 115V only UL/CSA certified.	5 lbs	**PP50GA9**	276.04
GA9S	Lighted Eyeshields with on/off switch less 60 watt bulb. 115 volt only	6 lbs	**PP50GA9S**	306.86
GA10	Eyeshields (pair) 5" x 4" Impact resistent polycarbonate. Fits Baldor 6" grinders & model 712, 712R, 762 & 762R	1 lb	**PP50GA10**	125.96
GA11	Eyeshields (pair) 6" x 4" Impact resistent polycarbonate. Fits Baldor grinders 7" thru 14"	2 lbs	**PP50GA11**	132.66
GA24	Water Pot w/ swivel arm & bracket, for 623E, 632E, 612E, 662E, 712E, 762E & ALL 8" & 10" GRINDERS	1 lb	**PP50GA24**	80.40
GA25	Tool Tray for 623E, 632E, 612E, 662E, 712E, 762E & ALL 8" & 10" GRINDERS	9 lbs	**PP50GA25**	79.06
AB248	Abrasive belt 2" x 48" 80 Grit	1 lb	**PP50AB248**	42.88

BALDOR Grinder & Buffer Accessories

Model No.	Description	Weight	Order No.	Price
GA14	Steel shelf stand, For 6",7",8" & 10" grinders, carbide & diamond wheel grinders, 1/2 HP thru 1-1/2 HP buffers.	64 lbs	**PP50GA14**	494.46
GA16	Cast Iron Pedestal, For 6", 7", 8" & 10" grinders, carbide & diamond wheel grinders, 1/4 HP thru 1-1/2 HP buffers & belt grinders.	62 lbs	**PP50GA16**	655.26
GA20	Cast Iron Pedestal For 8", 10", 12" & 14" grinders and 3/4 HP thru 7-1/2 HP buffers.	125 lbs	**PP50GA20**	1076.02

F.O.B. Factory • Ships by truck



PALMGREN Bench Grinder Tool Stand

- For 6”, 7”, 8” and 10” grinders and buffers
- Heavy-duty cast iron with a 3-1/2” steel column
- Built-in water pot for quenching
- Height: 31-3/4”
- Base Size: 18-1/2” dia.
- Weight: 60 lbs.



Order No.	Price
JB5570101	169.38

PRM Heavy Duty Pedestal Stand

- Constructed of heavy cast iron
- 3-1/2” Steel column
- Fits most 6”, 7”, 8” and 10” grinders and buffers
- Built in water pot
- Base length: 16-1/4”
- Base width: 14-1/2”
- Height range: 32-9/16”
- Top length: 10-5/8”
- Top width: 10-5/8”
- Weight: 70 lbs

New!



Order No.	Price
PR903022	141.95

F.O.B. Warren, MI

Tool Table

- Butcher Block finish table top
- Dimensions: 29”L x 13”W x 3”T
- Height: 27” - 37”
- Weight: 30 lbs.
- Weight Capacity: 300 lbs.

New!



Order No.	Price
PR903086	118.60

Work Sharp Knife & Tool Sharpener

Includes:

- Work sharp power platform
- Belt sharpening module
- Kitchen knife guide: 40°
- Outdoor knife guide: 50° (Pocket knives, Hunting knives, Serrated knives, Scissors)
- Abrasvie belt kit (P80 Coarse belt, P220 Medium belt, 6000 Fine honing belt)
- Quickstart guide
- Instructional DVD





Order No.	Price
PM71WSKTS	107.15

Drill Doctor The Drill Bit Sharpener 350X

Feaurers:

- Sharpens bits in less than 60 seconds
- Easy, front-loading chuck
- Sharpens 3/32” – 1/2” standard-twist and masonry bits
- Sharpens high-speed steel, cobalt, carbide, and TiN-coated bits
- Simplified alignment and sharpening procedures
- User-replaceable diamond sharpening wheel
- Durable construction
- 15,000 RPM, 1.75 amp, 120Volt Motor
- 3 Year Warranty



Order No.	Price
PM71DD350X	80.35

F.O.B. Warren, MI • NOT CSA APPROVED

WS3000 Wood Tool Sharpener

- Work Sharp is an air cooled, dry sharpening system that uses maintenance free 150mm tempered glass wheels for adhereing PSA abrasives to
- Precise and repeatable sharpening port enables sharpening of 20, 25, 30, and 35 degree angles
- No jigs needed, just select angle and sharpen; lapping abrasive in sharpening port increases burr removal and speeds sharpening
- Forced air-cooling and the sharpening port heat sink allow for higher material removal rates without affecting the steel temper



Model No.	RPM	Motor	Weight	Order No.	Price
WS3000	580	1/5HP	16 lbs	PM71WS3000	267.95

Belt Kit

For use with Knife & Tool Sharpener only

Kit Includes:

- (2) P80 Coarse Grit Belts
- (2) P220 Medium Grit Belts
- (2) 6000 Fine Grit Belts



Order No.	Price
PM71WSSA0002012	20.05

Drill Doctor The Drill Bit Sharpener 500X

Features:

- Sharpens 3/32” – 1/2” standard-twist and masonry bits
- Sharpens high-speed steel, cobalt, carbide, and TiN-coated bits
- Creates exclusive Quad Cut™ split-point bits for faster penetration and less drill bit “wandering”
- Quick Change diamond sharpening wheel, no tools needed
- Variable alignment lets you adjust chisel and relief angles
- 15,000 RPM, 1.75 amp, 120 Volt Motor
- 3 Year Warranty



Order No.	Price
PM71DD500X	174.15

F.O.B.Warren, MI • NOT CSA APPROVED

Drill Doctor The Drill Bit Sharpener 750X

Features:

- Sharpens 3/32” – 3/4” bits with one heavy-duty chuck
- Custom Point—choose any angle from 115° to 140°
- Adjustable Material Take-Off (MTO) so you can touch up a slightly dull bit or deep grind a heavily damaged bit
- Includes durable carrying case
- 15,000 RPM, 1.75 amp, 120 Volt Motor
- 3 Year Warranty



Order No.	Price
PM71DD750X	207.65

F.O.B. Warren, MI • NOT CSA APPROVED

Drill Doctor The Drill Bit Sharpener Drill Doctor Accessories

Description	Used with Model	Order No.	Price
Optianal Left Hand Chuck	DD500X & DD750X	**PM71DA02105PF**	53.55
Optional Large Capacity 3/4" Chuck	DD500X & DD750X	**PM71DA70100PF**	53.55
Std. 100-Grit Diamond Wheel	DD350X, DD500X, DD750X	**PM71DA31325GF**	33.45
Std. 180-Grit Diamond Wheel	DD350X, DD500X, DD750X	**PM71DA31320GF**	33.45

DAREX V390 Drill Bit Sharpener

Features:

- Perfect choice for shops that need a sharpener for intermittent use
- Sharpens most drill bits in less than 60 seconds
- Sharpens 1/8” – 3/4” drill bits; HSS, cobalt, TiN-coated, split-point
- Choose point angle from 118° – 140°
- Grinding wheel never needs dressing; sharpens drills 2,000 times before replacement
- No coolant necessary
- Attaches to your vacuum system to contain dust and debris
- Motor: 15 Volt, 4.5 amp, 1/4 HP, 60 hz, 3450 RPM
- Size: 12” x 11” x 9”
- Weight: 25 lbs.
- 3 Year Warranty



Order No.	Price
PM70V390	2007.35

F.O.B. Ashland, OR • NOT CSA APPROVED

DAREX Darex V390 Accessories

Description	Order No.	Price
V-190/290 Diamond 180 Grit Wheel	**PM70PP11110GF**	344.40
Morse Taper Chuck	**PM70SA11638TA**	381.90
Optional 180-Grit Diamond Wheel	**PM70PP11115GF**	277.40
Standard 180-Grit CBN Wheel	**PM70PP11125GF**	277.40

DAREX XT-3000 Drill Bit Sharpener

Features:

- Sharpen a wide variety of point styles in-house for pennies a drill
- Rock solid, heavy-duty machine sharpens all day, everyday
- Attachments interchange in seconds, make adjustments without tools
- Sharpens drills 1/8” – 13/16”; HSS, cobalt, TiN-coated, split-point; attachments for other styles
- Choose point angle from 118°–150°
- Unlimited maximum drill length, two-in. minimum
- Includes 2 grinding wheels—sharpening and split point
- Adjustable point splitting and point relief
- Grinding wheel never needs dressing; sharpens drills 2,000 times before replacement
- No coolant necessary
- Includes vacuum port and grit tray
- Motor: 115 Volt, 2.3 amp, 1/4 HP, 60 hz, 3450 RPM.
- Rated for continuous duty.
- Size: 16” x 16” x 10”
- Weight: 78 lbs.
- 3 Year Warranty



Order No.	Price
PM70XT3000	4821.35

F.O.B. Ashland, OR • Ships by truck • NOT CSA APPROVED

DAREX XT-3000 Accessories

Model No.	Comments	Description	Order No.	Price
PP16050GF	For use with XT3000	180 Grit CBN Grit Wheel	**PM70PP16050GF**	615.10
PP16052GF	For use with XT3000	180 Grit Diamond Grind Wheel	**PM70PP16052GF**	615.10
PP16060GF	For use with XT3000	100 Grit CBN Split Point Wheel	**PM70PP16060GF**	534.70
PP16062GF	For use with XT3000	260 Grit Diamond Split Point Wheel	**PM70PP16062GF**	534.70
SA17010TA	For use with XT3000	Auto Geared Chuck 3-12 MM for XT3000	**PM70SA17010TA**	534.70
SA17025TA	For use with XT3000	Auto Geared Chuck 12-21 MM for XT3000	**PM70SA17025TA**	534.70
LEX100	Used with LEX150, LEX200 & LEX250	XY Table Attachment Adaptor	**PM70100**	467.70

Model No.	Comments	Description	Order No.	Price
LEX050	-	Large Drill Attachment Chuck included (13/16" to 1-13/16")	**PM70050**	936.70
LEX150	Requires LEX100 Attachment	Countersink Attachment	**PM70150**	762.50
LEX200	Requires LEX100 Attachment	Sheet Metal (Brad Point) Attachment	**PM70200**	561.50
LEX250	Requires LEX100 Attachment	Step Drill Attachment	**PM70250**	682.10
LEX300	-	90° - 120° Point Attachment	**PM70300**	802.70

DAREX XT-3000 Automated Sharpening System

- XT-3000 is now available with an Automated Sharpening System
- Increase productivity by controlled cycle times and pre-drill set up
- The Auto XT-3000 makes sharpening drills even easier, simply insert the chuck and press start
- LCD screen displays valuable information and can be set to display in 5 different languages

Features:

- Automated Grinding System
- Sharpening Intelligence
- Manual Sharpening Screen
- Work Piece Calculator
- Electronic system usage tracker
- Retro Fits to Existing Sharpeners
- User Friendly Operating System
- Quiet
- Vacuum Port Connection
- Weight: 78 lbs.



Order No.	Price
PM70XT3000A	6161.35

F.O.B. Ashland, OR • Ships by truck

DAREX Auto Sharpening Attachments for XT3000 Machine

- Automated sharpening fixture allows you to increase productivity by controlled cycle times and pre-drill setup
- This attachment is easy to use, simply insert the chuck and press start
- Screen displays the number of drills sharpened
- You can purchase the Automated Sharpening System in 3 configurations and can be installed on any past or present XT-3000

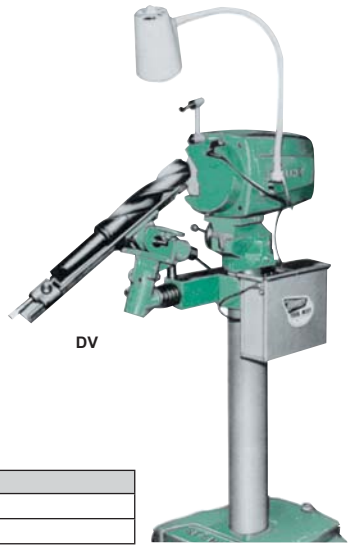


Description	Order No.	Price
Auto Attachment 115v 3 -12MM Auto Geared Chuck Included (.118 - .472)	**PM70LEX400**	2010.00
Auto Attachment 115v 12 -21MM Auto Geared Chuck Included (.472 - .826)	**PM70LEX450**	2010.00
Auto Attachment 115v 3 -21MM (1) 3-12mm (.118 - .472) & (1) 12 -21mm (.472 - .826) Auto Geared Chuck Included	**PM70LEX500**	2410.70

STERLING Drill Grinder

Standard Equipment:

- Sharpens 90° to 140° included angle on 1/8" to 2-1/2", 2, 3 and 4 Flute Drills
- Grinding wheel, diamond dresser, work light, toggle switch, cord and plug, and micrometer head.
- Positive conical clearance
- "V" Block method of holding the drill is simple,positive and eliminates chucks and collets
- Worklight, Drill & Coolant Unit Shown in Picture are Optional



DV

Motor	Order No.	Price
3/4HP, 110V, 1PH	**PM60DV**	4824.00
3/4HP, 220V, 3PH	**PM60DV3**	5092.00

F.O.B. Eau Clair, WI • Ships by truck • NOT CSA APPROVED

Optional STERLING Drill Grinder Accessories

Model No.	Description	Order No.	Price
66260160024	Diamond Wheel Dresser	**PM60DB3**	96.65
DB-103-2	DB-103-2 Neoprene Boot	**PM60DB1032**	53.60
DG501	60 Grit S/C Grinding Wheel	**PM60DG501**	127.30
DG502	120 Grit S/C Grinding Wheel	**PM60DG502**	127.30
DG546	46 Grit A/O Grinding Wheel	**PM60DG546**	96.50
DG560	60 Grit A/O Grinding Wheel	**PM60DG560**	96.50
DG570	70 Grit A/O Grinding Wheel	**PM60DG570**	96.50
DV45	45 Deg Drill Stop	**PM60DV45**	17.45
DV50	50 Deg Drill Stop	**PM60DV50**	17.45
DV55	55 Deg Drill Stop	**PM60DV55**	17.45
DV59	59 Deg Drill Stop	**PM60DV59**	17.45
DV65	65 Deg Drill Stop	**PM60DV65**	17.45
DV70	70 Deg Drill Stop	**PM60DV70**	17.45
MCU	Mist Coolant Unit	**PM60MCU**	254.60
MCUK	Mist Coolant Unit Kit	**PM60MCUK**	308.20

Heck INDUSTRIES, INC. Bevel-Mill®

MADE IN THE USA

- Plate bevelers for weld preparation
- Fast, accurate cutting and easy to Use
- Adjustable bevel angle 15-45°
- Special design BALDOR 110 volt motors
- Uses standard square carbide Inserts with 4 cutting edges - Order No. FF7050150 Model 7000 & 8000 - Order No. FF7050175 Model 9000
- Includes carbide cutters, pipe beveling attachment, bevel lube and instructions





Max. Bevel Depth (in.)	V-Block Length (in.)	Motor	Weight	Order No.	Price
3/8	8	1/2HP, 110V, 1PH	28 lbs	**HV607000**	2501.51
5/8	8	1HP, 110V, 1PH	42 lbs	**HV608000**	3337.67
7/8	21	1-1/2HP, 110V, 1PH	80 lbs	**HV609000**	4034.47

F.O.B. Hartland, MI

12" Disc Sander

Features:
- 0-45° Table Tilt
- 12” Cast Aluminum Disc
- Precision Ground Cast Iron Table
- Table size 6” W x 17” L
- Safety Key Operated Switch
- CSA Approved
- Includes 1- 12” Sanding Disc
- One Year Warranty



Model No.	Disc Size (in.)	Disc Speed	Motor	Weight	Order No.	Price
DS12B	12	1450 RPM	1HP, 120V	70 lbs.	**PR78DS12B**	267.95

F.O.B. Warren, MI.

12" Disc Sander

2 Year Warranty

Features:
- 0-45° Table Tilt
- Disc: 12” cast aluminum
- Precision ground cast iron table
- Table size: 17-1/2” W x 8-1/4” D
- Ball bearing construction
- Safety key operated switch
- 2” OD dust port
- Footprint: 13” W x 10” D
- Overall height: 13-1/2”
- All machines are supplied with (1) sanding disc



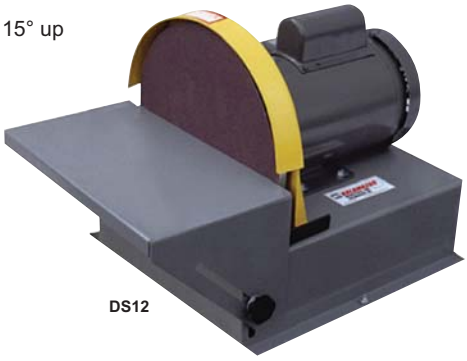
Model No.	Disc Size (in.)	Disc Speed	Motor	Weight	Order No.	Price
W1828	12	1725 RPM	1HP, 110V, 1PH, 60 Hz	75 lbs	**PY65W1828**	442.20

F.O.B. Factory • Ships by truck • NOT CSA APPROVED

10" & 12" Disc Sanders

Features:
- Heavy-duty, all steel
- Tilt table, 45° down - 15° up
- Miter gauge options
- 1 Year Warranty
- Ups Dimensional Weight Shipping Rates Apply

MADE IN THE USA



DS12

Model No.	Disc Size (in.)	Motor	Weight	Order No.	Price
DS10	10	1/2HP, 1PH	48 lbs	**PT50DS10**	616.40
DS12	12	1HP, 1PH	85 lbs	**PT50DS12**	1085.40

F.O.B. Kalamazoo, MI

10" & 12" Disc Sanders with Vacuum Base

Features:
- Steel work table tilts down to 45° and up to 90°
- Access door in the vacuum base
- Cloth bag filter
- Disc sander complete with enclosed stand and vacuum dust collector
- 100 CFM vacuum base
- Miter guage optional
- 1 Year Warranty

MADE IN THE USA



Model No.	Disc Size (in.)	Motor	Weight	Order No.	Price
DS10V	10	1/2HP, 1PH	110 lbs	**PT50DS10V**	1413.70
DS12V	12	1HP, 1PH	150 lbs	**PT50DS12V**	1889.40

F.O.B. Kalamazoo, MI • Ships by truck

15" Disc Sander with Brake

Machine Specs:
- Motor: 1-1/2HP, 220V, Single Phase, 1725 RPM, 12A
- Table Tilt: +15 to -45°
- Table Size: 20”W x 12”D
- Floor to Table Height: 37”
- Dust port: 21/2”
- Footprint: 26”W x 201/2”D
- Overall Height: 46”
- Approximate Shipping Weight: 194 lbs

Features:
- Precision ground cast iron table and disc
- Ball bearing construction
- Powder-coated finish
- Safety switch with disabling key



Order No.	Price
PY65W1815	1668.30

F.O.B. Factory • Ships by Truck

1" x 42" Belt Sander

Features:
- 1" x 42" Belt
- 1/3HP 120/240V 1PH
- 1800 RPM
- Belt can be positioned vertically, horizontally or at any angle in between
- Guarding OSHA & ANSI Compliant
- Front Mounted On/Off Paddle Switch
- Weight: 45 lbs.
- 1 Year parts warranty



Order No.	Price
PR72142	295.85

F.O.B Warren, MI • UPS Dimensional Weight shipping rates apply

2" x 48" Belt Sander

Features:
- 2" x 48" Belt
- 3/4HP 120/240V 1PH
- 4500 RPM
- Belt can be positioned vertically, horizontally or at any angle in between
- Guarding OSHA & ANSI Compliant
- Front Mounted On/Off Paddle Switch
- Weight: 56 lbs.
- 1 Year parts warranty



Order No.	Price
PR72248	457.70

F.O.B Warren, MI • UPS Dimensional Weight shipping rates apply

4" x 36" Belt Sander

Features:
- 4" x 36" Belt
- 3/4HP 120/240V 1PH
- 3600 RPM
- Belt can be positioned vertically, horizontally or at any angle in between
- Guarding OSHA & ANSI Compliant
- Front Mounted On/Off Paddle Switch
- Weight: 72 lbs.
- 1 Year parts warranty



Order No.	Price
PR72436	613.95

F.O.B Warren, MI • UPS Dimensional Weight shipping rates apply

1" x 42" Belt Sander

Features:
- 1" x 42" Belt
- 1/4 HP, 1-Phase
- Contact Wheel
- Tilt Table
- Weight: 25 lbs.
- 1 Year Warranty

MADE IN THE USA



Order No.	Price
PT501SM	422.10

F.O.B. Kalamazoo, MI

2" x 48" Belt Sander

Features:
- **NEW DESIGN!**
- 2" x 48" belt
- Direct drive
- 1/2 HP, 1-Phase motor and switch
- Model 2FS comes without a Motor
- 5" Contact wheel
- Tilt table and removable platen
- Full hinged guard for quick belt change
- Multi-position vertical or horizontal position
- Model 2FSM is shown with Motor
- 1 Year Warranty

MADE IN THE USA



Model No.	Weight	Order No.	Price
2FS	26 lbs	**PT502FS**	428.80
2FSM	75 lbs	**PT502FSM**	623.10

F.O.B. Kalamazoo, MI

4" x 36" Belt Sander

Features:
- Variable horizontal or vertical position
- Easy side door opening for fast belt change
- Full OSHA guarding
- Vacuum dust collector - Also available
- Model S4S Kalamazoo Bench Model Shown
- 1 Year Warranty

MADE IN THE USA



Model No.	Description	Motor	Weight	Order No.	Price
S4S	Bench Model Only	1/2HP, 1PH	54 lbs	**PT50S4S**	931.30
S4SV	Floor model with dust collector	1/2HP, 1PH	120 lbs	**PT50S4SV**	1728.60

F.O.B. Kalamazoo, MI • Ships by truck

KALAMAZOO Industries Inc. 6" x 48" Belt Sander

- Variable position
- Direct drive (coupling)
- Cast-iron frame
- Quick-belt release
- Full safety guard
- Heavy-duty steel stand (models S6MS1, S6MS3)
- Manual switch
- Reversible platen tilt work table
- Model S6MS-3 Kalamazoo Belt Sander is shown with Steel Stand
- Model S6MW-1 is wet sanding unit
- 1 Year Warranty

MADE IN THE USA



Model No.	Belt Size (in.)	Style	Motor	Weight	Order No.	Price
S6M-1	6 x 48	Bench	3HP, 110V/220V, 1PH	150 lbs	**PT50S6M1**	2170.80
S6M-3	6 x 48	Bench	3HP, 220V/440V, 3PH	150 lbs	**PT50S6M3**	2170.80
S6MS-1	6 x 48	Floor	3HP, 110V/220V, 1PH	200 lbs	**PT50S6MS1**	2405.30
S6MS-3	6 x 48	Floor	3HP, 220V/440V, 3PH	200 lbs	**PT50S6MS3**	2405.30
S6MW-1	6 x 48	Floor	3HP, 220V, 1PH	475 lbs	**PT50S6MW1**	4683.30

F.O.B. Kalamazoo, MI • Ships by truck

PALMGREN Industrial Bench Top Sander

Features:

- Disc & belt tables tilt
- Horizontal-vertical belt
- 1" or 2" x 42" Belt, 6" Disc
- 1/3 HP, 3.5 amp motor, 120V; Belt speed 4400 FPM, Disc 3450 RPM
- Includes 1" & 2" belts, 6" disc, miter gauge, workstop
- Weight: 30 lbs.
- 2 Year Warranty



Order No.	Price
JB5581061	310.88

F.O.B. Chicago, IL • Ships by truck • NOT CSA Approved

KALAMAZOO Industries Inc. 4" x 36" Belt Sander & 10" Disc Sander

- Model DS10-4 does NOT come with a Belt Guard
- Model DS10-4S is shown in the Picture and comes with a Full Safety Belt Guard
- 1 Year Warranty

MADE IN THE USA



Model No.	Belt Size (in.)	Disc Size (in.)	Motor	Weight	Order No.	Price
DS10-4	4 x 36	10	1/2HP, 1PH	115 lbs	**PT50DS104**	1400.30
DS10-4S	4 x 36	10	1/2HP, 1PH	115 lbs	**PT50DS104S**	1440.50

F.O.B. Kalamazoo, MI • Ships by Truck

PRM 6" x 48" Belt and 9" Disc Sander

Features:

- 6" x 48" Belt, 2700 SFPM
- Belt Table Work Surface: 5-7/8" x 9-7/8"
- 9" Disc, 3450 RPM
- Disc Table Size: 5-7/8" x 11-3/4"
- Miter Gauge
- 1HP, 120V, 1PH Motor
- SP Locking Rocker Switch
- Open Stand (included)
- 22"W x 26-1/2"D x 55"H
- Weight: 125 lbs.
- 1 Year parts warranty



Order No.	Price
PR726489	740.10

F.O.B Warren MI • Ships by truck

PRM 6" x 48" Belt and 10" Disc Sander

Features:

- 6 x 48" Belt, 1650 SFPM
- Belt Table Work Surface 6" x 10-1/4"
- 10" Disc, 2100 RPM
- Disc Table Size 7" x 16"
- Miter Gauge
- 1.HP, 120/240V, 1PH Motor
- 120V SP Switch
- Fully Enclosed Stand
- 23-1/2"W x 21"D x 55-1/2"H
- Weight: 218 lbs.
- 1 Year parts warranty



Order No.	Price
PR7264810	1218.95

F.O.B Warren MI • Ships by truck

PRM 6" x 48" Belt and 12" Disc Sander

Features:
- 6” x 48” Belt, 1570 SFPM
- Belt Table Work Surface 6” x 10-1/4”
- 12” Disc, 2000 RPM
- Disc Table Size 7” x 16”
- Miter Gauge
- 1.5HP, 120/240V, 1PH Motor
- 120V SP Switch
- Fully Enclosed Stand
- 23-1/2”W x 21”D x 55-1/2”H
- Weight: 225 lbs.
- 1 Year parts warranty



Order No.	Price
PR7264812	1989.20

F.O.B Warren MI • Ships by truck

SHOP FOX Belt & Disc, Light to Medium Duty Combination Sander

Features:
- Precision ground computer balanced discs
- Cast iron tables
- Quick change belt release
- Powder coated paint
- Miter gauge
- All ball bearing construction
- Dust ports
- 0 - 45° Table tilt
- Belt speed 1878 FPM, Disc 1725 RPM
- All machines are supplied with (1) sanding belt and/or (1) sanding disc
- 2 Year Warranty



Model No.	Belt Size (in.)	Disc Size (in.)	Motor	Weight	Order No.	Price
W1712	6 x 48	12	1.5HP, 110V, 1PH	178 lbs	**PY65W1712**	1125.60

F.O.B. Factory • Ships by truck • CSA Approved

KALAMAZOO Industries Inc. Heavy Duty Combination Sanders

Features:
- 8” x 14” Tilting Steel Table on disc side
- 6” x 10” Cast Iron Table on belt side
- TEFC Motor
- Built-in Dust Collector (Models S612V1 & S612V3)
- Enclosed Stand
- Variable Position
- Manual switch and overload protection
- 1 Year Warranty

MADE IN THE USA



Model No.	Belt Size (in.)	Disc Size (in.)	Motor	Weight	Order No.	Price
S612-1	6 x 48	12	3HP, 1PH	285 lbs	**PT50S6121**	3182.50
S612-3	6 x 48	12	3HP, 3PH	285 lbs	**PT50S6123**	3182.50
S612V-1	6 x 48	12	3HP, 1PH	295 lbs	**PT50S612V1**	3450.50
S612V-3	6 x 48	12	3HP, 3PH	295 lbs	**PT50S612V3**	3450.50

F.O.B. Kalamazoo, MI • Ships by truck

KALAMAZOO Industries Inc. 2" x 7" Combination Grinder/Sander

Features:
- Two machines in one
- Motor: 1/2 HP, 110V, 1 Phase
- 7” Bench grinder
- 2” x 48” Belt sander
- Use in vertical or horizontal position
- Tilt table
- Contact wheel
- Removable platen
- Weight: 50 lbs.
- 1 Year Warranty

MADE IN THE USA



Model No.	Order No.	Price
2SK7	**PT502SK7**	958.10

F.O.B. Kalamazoo, MI.

BALDOR Stationary Abrasive Belt Grinder

Features:
- Supplied with start/stop switch
- 8′ Long 3-conductor cord & plug
- Connected for 115 Volts
- Belt size: 2” x 48”
- 3 Year Warranty

MADE IN THE USA



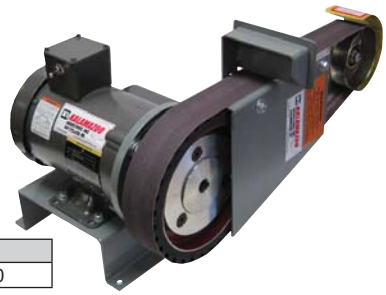
Model No.	Motor	RPM	Agency Approvals	Weight	Order No.	Price
2048-151D	1.5HP, 115V/230V Prewired 115V, 1PH	3600	UL	88 lbs	**PP502048151D**	2500.44
2048-153D	1.5HP, 208-230V/460V, 3PH	3600	UL	76 lbs	**PP502048153D**	2382.52

F.O.B. Factory • Ships by truck

KALAMAZOO Industries Inc 2" x 48" Belt Sander

MADE IN THE USA

Features:
- 8 x 2" Serrated 70 duro contact wheel
- Multi-position grinder from vertical to horizontal
- 7200 Surface speed allows for quick metal removal with minimal heat



Model No.	Belt Size (in.)	SFPM	Motor	Weight	Order No.	Price
BG248	2 x 48	7225	1/2HP, 110V, 1PH	50 lbs	**PT50BG248**	1199.30

F.O.B. Kalamazoo, MI

BURR KING 1-1/2" x 60" Belt Grinder

Features:
- Uses 1 1/2" or 2" Sanding Belts
- Single Speed 8000 SFPM
- Vari-Speed Model (760MC150V), 0 to 8000 SFPM
- Cast aluminum frame construction
- Patented tracking device
- Sealed double row ball bearings in all wheels
- Four types of grinding: 1) Contact Wheel 2) Work Table 3) Loose Belt 4) Platen Grinding
- V-belt driven—Safety Belt Guards
- All single phase machines are completely ready to run
- Three-phase models have magnetic starter installed/no cord provided
- Magnetic switch available on all 3 phase models
- 1 Year Warranty

MADE IN THE USA

760MC150A



Model No.	Belt Size (in.)	Motor	Weight	Order No.	Price
760MC150A	1-1/2 x 60	1.5HP, 120V, 1PH	90 lbs	**PT55760MC150A**	3300.42
760MC150V	1-1/2 x 60	1.5HP, 220V, 1PH, VS	115 lbs	**PT55760MC150V**	4456.84
760MC200B	1-1/2 x 60	2HP, 230V, 3PH	112 lbs	**PT55760MC200B**	4249.14
760MC300B	1-1/2 x 60	3HP, 230V, 3PH	123 lbs	**PT55760MC300B**	4397.88

F.O.B. Warsaw, MO • Ships by truck

BURR KING 2" x 48" Belt Grinder

Features:
- Single Speed 6000 SFPM
- Vari-Speed Model is 0 to 4000 SFPM (482MC100V)
- Cast aluminum frame construction
- Patented tracking device
- Sealed double row ball bearings in all wheels.
- Four types of grinding:1) Contact Wheel 2) Work Table 3) Loose Belt 4) Platen Grinding
- V-belt driven—Safety Belt Guards
- All single phase machines are completely ready to run
- Three-phase have magnetic starter installed, no cord provided
- All machines and accessories manufactured in the U.S.A. since 1951
- 1 Year Warranty

MADE IN THE USA

482MC100A



Model No.	Belt Size (in.)	Motor	Weight	Order No.	Price
482MC100A	2 x 48	1HP, 230V, 1PH	80 lbs	**PT55482MC100A**	2753.70
482MC100V	2 x 48	1HP, 110V, 1PH	100 lbs	**PT55482MC100V**	4348.30

F.O.B. Warsaw, MO • Ships by truck

BURR KING 2-1/2" x 60" Belt Grinder

Features:
- Available in 2-1/2" x 60 " or 4" x 60" Models
- Single Speed 8000 SFPM is standard on the 2-1/2" and 6500 SFPM is standard on the 4" Grinder
- Vari-Speed 0 to 8000SFPM is only available on the 2-1/2" Grinder.(960250150V)
- The Versatile 960 Series Head rotates 360° in the vertical or horizontal position and will fit the Cross-Slide of a Lathe for Tool Post Grinding
- Cast aluminum frame construction
- Patented tracking device
- Sealed double row ball bearings in all wheels
- Four types of grinding:1) Contact Wheel 2) Work Table 3) Loose Belt 4) Platen Grinding
- V-belt driven—Safety Belt Guards
- All single phase machines are completely ready to run
- Three-phase models have magnetic starter installed, no cor provided
- All machines and accessories manufactured in the U.S.A. since 1951
- 1 Year Warranty

MADE IN THE USA

960250150A



Model No.	Belt Size (in.)	Motor	Weight	Order No.	Price
960250150A	2-1/2 x 60	1.5HP, 230V, 1PH	95 lbs	**PT55960250150A**	3437.10
960250150V	2-1/2 x 60	1.5HP, 220V, 1PH, VS,	115 lbs	**PT55960250150V**	4714.12
960250200B	2-1/2 x 60	2HP, 230V, 3PH	110 lbs	**PT55960250200B**	4598.88
960250300B	2-1/2 x 60	3HP, 230V, 3PH	130 lbs	**PT55960250300B**	4837.40
960400300B	4 x 60	3HP, 230V, 3PH	135 lbs	**PT55960400300B**	5404.22

F.O.B. Warsaw, MO • Ships by truck

Ellis 2-1/2" x 60" Belt Grinding Machine



Features:
- Reduced grinding time
- Dependable and safe
- Low noise level
- **Grinds:** Mild steel, tool steel, stainless steel, aluminum, brass, copper, hardened steel

Model No.	Belt Size (in.)	RPM	Motor	Weight	Order No.	Price
6000	2-1/2 x 60	3450	1 HP Special Duty 110/208/230 1PH	185 lbs	**PV556000K**	2123.50

F.O.B. Verona, WI • Ships By Truck

KALAMAZOO Industries Inc. 4" x 60" HD Direct Drive Belt Sander



S460D

Features:
- Available in dry or wet models
- 4" x 17" Reversible platen
- 4" x 6" Cast-iron table
- Full OSHA guarded
- Easy tracking
- Quick belt change
- Manual toggle switch
- Model S460D Bench Model Shown
- 1 Year Warranty

MADE IN THE USA

Model No.	Description	Motor	Weight	Style	Order No.	Price
S460D	Dry Sanding, Bench Model Only	1HP, 1PH or 3PH (specify voltage)	160 lbs	Bench	**PT50S460D**	1943.00
S460W	Wet Sanding, Floor Model w/Stand. Avail Vert. or Horiz.	3HP, 1PH or 3PH (specify voltage)	240 lbs	Floor	**PT50S460W**	3303.10

F.O.B. Kalamazoo, MI • Ships by truck

PALMGREN INC 2" Speed Dual Station Belt



- With two belt heads you get the ultimate flexibility from roughing, to intermediate grinding and blending, to final finishing and polishing
- This high quality finishing machine is built and equipped with the operational features
- Production duty 2-speed motor
- Direct drive design with oversized shaft and bearings
- Enclosed adjustable guarding
- Spark shields
- Simple easy belt tensioning and tracking
- Belt heads mounted to an oversized motor shaft with sealed bearings
- Lower drum guard
- Belt head adjusts vertically, horizontally and any position in-between
- Graphite pad on platen for smooth belt operation and longer belt life
- 3 Year Warranty

New!

Model No.	Belt Size (in.)	RPM	Motor	Weight	Order No.	Price
82415	2 x 78-3/4	1750 & 3500	2.5HP, 230V, 3PH	330 lbs	**JB559682415**	14068.66

F.O.B. Chicago, IL • Ships by Truck

PALMGREN INC 3" x 79" Abrasive Belt Grinder



- Ideal for shaping, forming, snagging, deburring, chamfering and finishing operations
- These belt grinders can be quickly converted from heavy stock removal and grinding, to finishing operations by simply changing the belt
- The machines come with a large serrated contact tire for removing heavy stock or cleaning up work pieces and a large graphite covered platen for the shaping and finishing of flat pieces
- Generous spark box delivers added operator safety
- Advanced belt tracking design
- Belt enclosure prevents dust from escaping by effectively ventilating the contact tire, drive wheel and belt with air circulation from the machine
- Eye shield ensures user safety
- Motor overload protection with conveniently positioned emergency on/off switch
- Dual dust collection ports located on the front and back of the machine
- Adjustable height of the contact tire
- Sanding belt 60 grit and wrench
- 3 Year Warranty

New!

Model No.	Belt Size (in.)	RPM	SFPM	Motor	Weight	Order No.	Price
BSM75	3 x 78-3/4	3600	6494	4HP, 230V	225 lbs	**JB559682406**	2211.00

F.O.B. Chicago, IL • Ships by Truck

PALMGREN INC 6" x 79" Belt Grinder

- Ideal for shaping, forming, snagging, deburring, chamfering and finishing operations
- These belt grinders can be quickly converted from heavy stock removal and grinding, to finishing operations by simply changing the belt
- The machines come with a large serrated contact tire for removing heavy stock or cleaning up work pieces and a large graphite covered platen for the shaping and finishing of flat pieces
- Generous spark box delivers added operator safety
- Advanced belt tracking design
- Belt enclosure prevents dust from escaping by effectively ventilating the contact tire, drive wheel and belt with air circulation from the machine
- Eye shield ensures user safety
- Motor overload protection with conveniently positioned emergency on/off switch
- Dual dust collection ports located on the front and back of the machine
- Adjustable height of the contact tire
- Sanding belt 60 grit and wrench
- 3 Year Warranty



Model No.	Belt Size (in.)	RPM	SFPM	Motor	Weight	Order No.	Price
BSM150	6 x 78-3/4	3600	6494	5HP, 230V, 3PH	275 lbs	**JB559682417**	4067.24

F.O.B. Chicago, IL • Ships by Truck

PALMGREN INC 8" x 69" Belt Grinder

- Can be quickly converted from heavy stock removal to finishing operations by simply changing the belt
- Ideal choice for all you shaping, forming, snagging, deburring, chamfering and finishing operations
- Production duty 2-speed motor
- Direct drive design with oversized shaft and bearings
- Fully enclosed adjustable guarding
- Tool rest
- Simple easy belt tension and tracking
- Belt is mounted to an oversized motor shaft with sealed bearings
- Lower drive drum is ribbed 60 Duro rubber coated for maximum belt traction
- Lower drum guard
- Belt head adjusts vertically, horizontally and any position in-between
- Hardened steel platen with extra-large work area for flat long parts
- 3” dust port
- Safety electrical system: white power on light, green machine running light, 2-speed hi/low drum switch, push button on/off power switch with keyed lock-out, emergency stop push button with electronic brake and 24 volts at all switches
- Heavy duty steel floor stand with hinged door, internal storage and anti-vibration foot pads
- 3 Year Warranty



Model No.	Belt Size (in.)	RPM	Motor	Weight	Order No.	Price
82416	8 x 69	1750 & 3500	4HP, 230V, 3PH	255 lbs	**JB559682416**	10979.63

F.O.B. Chicago, IL • Ships by Truck

PALMGREN INC 8" x 24" Belt & Disc Finishing Machine

- Production duty – 2 speed motors effectively finish all types of materials
- Direct drive design with oversized drive shaft and bearings
- Fully enclosed adjustable guarding for both the belt and the disc
- Adjustable eye shields
- Adjustable tables up and down and angles for precision finishing of both plain and compound miters
- Safety electrical system: white power on light, green machine running light, 2 speed hi/low drum switch, on/off push button power switch with keyed lock-out, emergency stop button with electronic brake and 24 volts at all switches
- 3” dust collection ports
- Heavy duty steel floor stand with hinged door, internal storage and anti-vibration foot pads
- 3 Year Warranty



Model No.	Belt Size (in.)	RPM	Belt Speed (SFPM)	Disc Size (in.)	Disc Speed (SFPM)	Motor	Weight	Order No.	Price
82414	8 x 69	875 & 1750	12135 & 2475	24	1235 & 2475	2.5HP, 230V, 3PH	530 lbs	**JB559682414**	20406.19

F.O.B. Chicago, IL • Ships by Truck

BURR KING 20" Heavy Duty Disc Sander/Grinder

Features:
- 460 Volt available
- Elevating/tilting work table
- Heavy cast iron/aluminum billet disc
- Precision machined and balanced
- Less control options
- 1 Year Warranty

MADE IN THE USA

Other Options Available:
- Miter attachment
- Magnetic starter
- Forward – reverse switch
- Motor disc brake
- Variable speed machines 170-1725 RPM are also available



Motor	Disc Size (in.)	Features	Weight	Order No.	Price
3HP, 230V, 3PH	20	Includes forward/reverse switch, motor disc brake, no mag starter	615 lbs	**PT5522100**	10800.40
3HP, 230V, 3PH	20	Includes forward/reverse switch, motor/disc brake and mag starter	610 lbs	**PT5523100**	11361.86
3HP, 230V, 3PH	20	Less controls/switches/mag starter	585 lbs	**PT5520100**	9069.12

F.O.B. Warsaw, MO • Ships by truck

PALMGREN 24" Disc Finishing Machine

Features:
- Production duty motor
- Direct drive design with oversized drive shaft and sealed bearings
- Fully enclosed adjustable guarding
- Adjustable table
- Safety electrical system: white power on light, green machine running light, drum start/ stop switch, on/off push button power switch with keyed lock-out, emergency stop button with electronic brake and 24 volts at all switches
- 3” dust collection port
- Heavy duty steel floor stand with hinged door, internal storage and anti-vibration foot pads
- 3 Year Warranty

New!

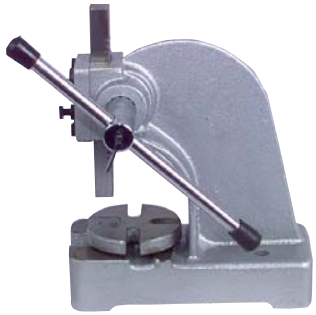


Model No.	Table Size (in.)	Table Tilt	Amps	RPM	Disc Size (in.)	Disc Speed (SPFM)	Motor	Weight	Order No.	Price
81313	9 x 25.5	+ 90°	11.8	1185	24	7425	4HP, 230V, 3PH	300 lbs	**JB559681313**	14068.66

F.O.B. Chicago, IL • Ships by Truck

World Class Single Leverage Arbor Presses

Features:
- For all production and assembly applications
- Precision cut steel rams and pinions
- Semi-steel frames
- Heavy casting
- 4 Position anvil



Model No.	Cap. (tons)	Leverage Ratio	Max. Work Dia. (in.)	Height (in.)	Throat	Weight	Order No.	Price
1/2	1/2	20:1	6-1/2	10	2-3/4	23 lbs	**RK800**	74.80
1	1	20:1	8	13	3-1/2	35 lbs	**RK801**	106.25
2	2	25:1	12	18	6	82 lbs	**RK802**	224.80
3	3	20:1	12	23	6	140 lbs	**RK803**	355.10
5	5	25:1	17	35	8-1/2	400 lbs	**RK805**	1224.05

F.O.B. Warren, MI

PALMGREN INC Single Leverage Arbor Presses

Features:
- Includes removable rotating machined anvil with 4 slots
- 3 Bit punch set
- One ton model features speed wheel
- Floor stand available for 2-4 Ton Models
- 2 Year Warranty



Model No.	Cap. (ton.)	Leverage Ratio	Max. Work Dia. (in.)	Height (in.)	Throat (in.)	Weight	Order No.	Price
61051	1/2	18:1:1	7-1/2	9-1/4	3-3/4	19 lbs	**JB5561051**	105.32
61101	1	18:0:1	8	11	4	34 lbs	**JB5561101**	154.50
61201	2	19:0:1	12	15-1/8	6	70 lbs	**JB5561201**	317.25
61301	3	16:9:1	12-1/2	21-1/2	6-1/4	135 lbs	**JB5561301**	495.00
61401	4	25.7:1	16-3/4	27-1/8	6-7/8	207 lbs	**JB5561401**	983.16

F.O.B. Chicago, IL

DAKE Single Leverage Arbor Presses

Features:
- For light production and assembly work
- Most models have a large base opening and slotted table plate for arbor work
- Models X and Y have a solid square table
- Pedestals available for Models Y, O and 1
- 1 Year Warranty



Model No.	Cap. (tons)	Leverage Ratio	Max. Work Dia. (in.)	Height (in.)	Throat (in.)	Weight	Order No.	Price
00	1	25:1	7	9-3/8	3-1/2	25 lbs	**RK5001004**	422.10
X	1	25:1	7	9	3-1/2	25 lbs	**RK5001001**	422.10
0	1-1/2	32:1	9	14-1/2	4-1/2	65 lbs	**RK5001005**	609.70
Y	1-1/2	32:1	9	14-1/2	4-1/2	60 lbs	**RK5001002**	609.70
1	3	36:1	14	19	7	130 lbs	**RK5001006**	931.30

F.O.B. Grand Haven, MI

Dake & Palmgren Ratchet Lever Arbor Presses

Palmgren Features:
- More clearance over table
- Higher Leverage
- Counter weighted for rapid handle return
- Features speed wheel
- 2 Year Warranty

Dake Features:
- Ratchet device permits lever to be used in the most convenient position
- Handwheel advances ram quickly to work
- Counter weight returns lever quickly after downstroke
- 1 Year Warranty





Item	Model No.	Cap. (tons)	Leverage Ratio	Max. Work Dia. (in.)	Height (in.)	Throat (in.)	Weight	Order No.	Price
DAKE a JSJ business	1-3/4	3	48:1	14	18-1/2	7	125 lbs	**RK5002007**	1407.00
	1-1/2	3	48:1	14	19	7	145 lbs	**RK5002001**	1306.50
	1-1/2B	3	48:1	14	28	7	196 lbs	**RK5002002**	2077.00
	1-1/2C	3	48:1	35	24-3/8	17-1/2	425 lbs	**RK5002003**	3685.00
	3A	5	55:1	20	28-1/2	10	450 lbs	**RK5002004**	4187.50
	4M	5	55:1	20	58	10	1045 lbs	**RK5002006**	8019.90
PALMGREN INC	61302	3	38:6:1	13-3/4	27-3/4	6-7/8	230 lbs	**JB5561302**	1088.62

Palmegren F.O.B. Chicago, IL • Dake F.O.B. Grand Haven, MI • Both Ships by truck

Compound Leverage Arbor Presses

Features:
- Compound leverage mechanism allows great pressure application with minimum effort
- Sliding pin easily converts press from compound to single leverage
- Pedestals available for most models
- 1 Year Warranty

MADE IN THE USA



Model No.	Cap. (tons)	Leverage Ratio	Max. Work Dia. (in.)	Height (in.)	Throat (in.)	Weight	Order No.	Price
2	6	66:1	15-1/2	26	7-3/4	280 lbs	**RK5003004**	3236.10
2-1/2	6	66:1	15-1/2	32-1/2	7-3/4	315 lbs	**RK5003003**	3249.50
3	12	112:1	20	35-1/2	10	640 lbs	**RK5003005**	6331.50
4	12	112:1	20	62	10	1350 lbs	**RK5003007**	9775.30
5	15	150:1	24-1/2	64-1/2	12-1/4	1800 lbs	**RK5003008**	18083.30

F.O.B. Grand Haven, MI • Ships by truck

Manual Arbor Press Stands

Model No.	Brand Name	Type	Order No.	Price
1003	Dake	Pedestal Only for Y & O Arbor Presses	**RK5001003**	469.00
1007	Dake	Pedestal Only for 1 & 1-1/2 Arbor Presses	**RK5001007**	770.50
2005	Dake	Pedestal Only for 3A Arbor Presses	**RK5002005**	1199.30
3002	Dake	Pedestal Only for 1-1/2B, 2, 2B & 2-1/2 Arbor Presses	**RK5003002**	770.50
3006	Dake	Pedestal Only for 3 Arbor Presses	**RK5003006**	1239.50
70103	Palmgren	Stand for 2 & 4 ton Palmgren Presses Only	**JB5570103**	386.05

12 Ton Capacity Hydraulic Shop Presses

Features:
- All welded steel construction
- Heavy duty return springs for fast ram retraction
- Reinforced head plate
- Bed plates, bearing punch and bearing shield included as standard equipment
- 1712BP Bench Top Model
- 1 Year Warranty

MADE IN THE USA



Model No.	Height (in.)	Inside Width (in.)	Base Width (in.)	Ram Travel (in.)	Weight	Order No.	Price
1712BP	37	20	24	5	95 lbs	**RK851712BP**	489.10
1712	61-3/4	20	24	5	200 lbs	**RK851712**	668.00

F.O.B. Warren, MI • Ships By Truck

10 & 20 Ton Hand Hydraulic Presses

Features:
- Available both in the B-10 Bench Model and the F-10 Floor Model
- Furnished with a flat ram nose for pressing and a step reduced ram nose for bushing work
- Hydraulic pressing cylinder can be located right or left
- Adjustable table
- Table plates and v-blocks are also furnished for many other pressuring applications
- 1 Year Warranty

Force Model Features:
- Longer stroke for greater versatility
- Large diameter pump piston for rapid ram travel
- Pump is side mounted for ease of operation
- Made in Italy



Model No.	Cap. (tons)	Ram Travel (in.)	Min. Ram to Table (in.)	Max. Ram To Table (in.)	Width Between Uprights (in.)	Base (in.)	Height (in.)	Weight	Order No.	Price
B-10	10	6	4	16	16-3/4	23 x 18	36	165 lbs	**RK5072200**	422.10
F-10	10	6	0-4	38	16-3/4	24 x 28	60	225 lbs	**RK5072210**	690.10
Force 10M	10	6	7	36	20	31 x 19	71	350 lbs	**RK5072001**	3450.50
Force 20M	20	6	4-1/2	34-1/2	20	31 x 19	71	485 lbs	**RK5072002**	4522.50
972220	20	8	4	39	23	-	74	283 lbs	**RK50972220**	1065.30

F.O.B. Grand Haven, MI • Ships by truck

Hand Operated Hydraulic Presses

H Model Features:

- Rapid screw traverse of ram permits quick, easy movement of the ram by means of a convenient handwheel
- Adjustable table with self-locking hoist
- Movable workhead is roller mounted (except Model No. 25H)
- Made in USA
- 1 Year Warranty on all Dake Presses



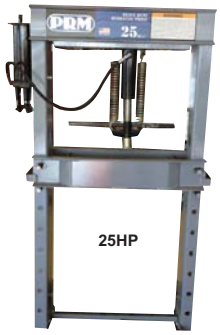
Model No.	Cap. (tons)	Ram Travel (in.)	Height (in.)	Max. Work Width (in.)	Max. Work Height (in.)	Weight	Order No.	Price
25H	25	5	76	33-1/2	39	450 lbs	**RK5007001**	4442.10
50H	50	4	85	32-3/4	40	810 lbs	**RK5007002**	5963.00
75H	75	4-1/2	87	44	36	1245 lbs	**RK5007003**	7202.50

F.O.B. Grand Haven, MI • Ships by truck

25, 50, & 100 Ton Hydraulic Presses

- Heavy duty, American made 836, 3/8 gauge steel
- All welded frame construction with sliding head
- Pumps include safety overload valve and a bypass system which prevents the ram from being over extended and stops the press from going beyond its rated capacity
- Hydraulic gauge protects against shock load and measures US and metric tons of force applied to components being pressed
- 1 Year parts warranty







Model No.	Type	Capacity (Tons)	Ram Travel (in.)	Max. Work Height (in.)	Base (W x D) (in.)	Height (in.)	Weight	Order No.	Price
50HP	Hydraulic Press	50	12	40	42 x 34	80	880 lbs	**PR7450HP**	2479.00
25HP	Hydraulic Press-Hand Operated	25	7	40	34 x 24	66	326 lbs	**PR7425HP**	1139.00
50AO	Hydraulic Press-Air Operated	50	12	40	42 x 34	80	880 lbs	**PR7450AO**	5561.00
100EP	Hydraulic Press-Electric	100	7	42	46 x 48	78	1100 lbs	**PR74100EP**	13031.50

F.O.B. Warren, MI • Ships by Truck

25 Ton Hydraulic H-Frame Press

- Large daylight with open sides for easy loading
- Moveable work head for maximum versatility that incorporates rollers and allows for easy positioning across the length of the cross bar
- Adjustable work bed with friction brake winch

New!



Model No.	Cylinder Stroke (in.)	Pump Type	Pump Model	Overall Ht. (in.)	Overall Width (in.)	Foot Length (in.)	Max. Pressure	Weight	Order No.	Price
IAS2514	14.25	Air	GA90	72.25	32	30	10000 PSI	433 lbs	**KL71IAS2514**	6536.55

ENERPAC 25 Ton IP Series H-Frame Press

Features:
- Quality welded frame for maximum strength and long life
- Exclusive “hydra-Lift” bed for effortless adjustment of the vertical daylight
- Roller head design is standard to allow movement and locking of the cylinder from side to side

New!



Model No.	Capacity (Tons)	Stroke (in.)	Power Source	Max. Operating Pressure	Overall Height (in.)	Overall Width (in.)	Max. Work Height (in.)	Min. Work Height (in.)	Max. Work Width (in.)	Foot Length	Weight	Order No.	Price
IPE-2510	25	14	Electric	10000 PSI	76	40.5	54.5	7	29	30	690 lbs	**KL70406524**	15928.58

Hydraulic Shop Presses

Features:
- All welded steel construction
- 4” chrome ram
- Air power for greater speed
- Manual high pressure pump
- Table range from 1.5” to 33”
- Bed plates, bearing punch and bearing shield inlcluded as standard equipment

1720PR



Model No.	Type	Capacity (Tons)	Ram Travel (in.)	Base (in.)	Inside Width (in.)	Height (in.)	Weight	Order No.	Price
1720	Hydraulic Shop Press - Hand Operated	20	5-1/8	24	20-1/2	66-1/2	256 lbs	**RK851720**	850.90
1720PR	Hyrdaulic Shop Press - Ram	20	5-1/8	24	20-1/2	66-1/2	530 lbs	**RK851720PR**	1005.00
1740	Hydraulic Shop Press - Pump & Ram	40	6-3/4	32	32	76-1/4	513 lbs	**RK851740**	2224.40
1750	Hydraulic Shop Press - Pump & Ram	50	6-3/4	35	35	74	513 lbs	**RK851750**	2673.30
17100	Hydraulic Shop Press - Air Operated	100	7	36	34	78	1550 lbs	**RK8517100**	7363.30
17100EP	Hydraulic Shop Press - Electric	100	7	35	35	78	1600 lbs	**RK8517100EP**	10230.90
17150	Hyrdaulic Shop Press - Ram	150	7	36	36	78	1550 lbs	**RK8517150**	12696.50

F.O.B. Warren, MI • Ships by Truck

DAKE Air Operated Presses

Features:
- Air operation eliminates the need for hand pumping
- Safety valve protects against overloads
- Movable workhead is roller mounted on ball bearings for off-center work
- Rapid ram approach quickly moves ram to work to save production time
- Stroke indicator ensures accurate ram control
- By-pass hole eliminates excessive ram extension
- Adjustable table permits easy vertical movement by means of self-lockiong hoist

Standard Equipment:
- Frame
- 2 Steel V-Blocks
- Flat Ram Nose
- Stroke Indicator
- Safety Relief Valve
- Workhead
- 2 Steel Table Plates
- Pressure Gauge
- Self Lockiong Table Hoist



Model No.	Capacity (Tons)	Ram Travel (in.)	Height (in.)	Max. Ram to Table (in.)	Min. Ram to Table (in.)	Ram Speed (IPM)	Base (in.)	Weight	Order No.	Price
6-225	25	10	81	36	1	6	42-1/2 x 30	750 lbs	**RK50906225**	12395.00
6-250	50	10	87	40	5	3	43-1/2 x 36	1100 lbs	**RK50906250**	12830.50
6-275	75	10	86	36	6	2	55 x 36	15000 lbs	**RK50906275**	13232.50
6-425	25	10	81	36	1	10	42-1/2 x 30	800 lbs	**RK5006425**	13647.90
6-450	50	10	87	40	5	5	43-1/2 x 36	1150 lbs	**RK5006450**	14103.50
6-475	75	10	86	36	6	3-1/2	55 x 36	1550 lbs	**RK5006475**	14539.00
6-650	150	16	35	30	10	1	66 x 42	3000 lbs	**RK50906650**	23919.00
6-850	150	16	95	30	10	2	66 x 42	3050 lbs	**RK5006850**	25185.30
6-900	200	16	100	30	6	2	64 x 48	4380 lbs	**RK50906900**	40803.00

F.O.B. Grand Haven, MI • Ships by Truck

Electrically-Operated Hydraulic Press

Features:

- One hand ram positioning with throttling hydraulic valve control
- Force 40, 70 and 100 have rapid ram advance - speed shifts automatically when contact is made
- 40 and 70 ton models have two submersible centrifugal pumps, 100 ton model has three pumps
- All electrical controls are low voltage
- Made in Italy
- 1 Year Warranty





Model No.	Cap. (tons)	Motor	Ram Speed (ipm)	Ram Travel (in.)	Min. Ram To Table (in.)	Max. Ram To Table (in.)	Width Between Uprights (in.)	Base (in.)	Height (in.)	Weight	Order No.	Price
Force 10DA	10	1HP, 110V	20	10	4	40	20	29-3/4 x 24	80	300 lbs	**RK5009205**	4174.10
Force 25DA	25	1HP, 110V	10	10	8	44	28	30 x 38	88	570 lbs	**RK5009215**	5594.50
Force 40	40	2HP, 220V	7	19	7	32	35	63 x 37	88	1210 lbs	**RK5072003**	14036.50
Force 40-4	40	2HP, 440V	7	19	7	32	35	63 x 37	88	1210 lbs	**RK50720034**	14036.50
Force 50DA	50	1HP, 110/220V	11	16	10	42	44	55 x 36	94	1330 lbs	**RK5009250**	9078.50
Force 70	70	2HP, 220V	4	19	7-1/4	32	35	63 x 27	88	1595 lbs	**RK5072004**	17788.50
Force 70-4	70	2HP, 440V	4	19	7-1/4	32	35	63 x 27	88	1595 lbs	**RK50720044**	17788.50
Force 100	100	3HP, 220/V	3	19	7-7/8	35	41	75 x 33	106	2940 lbs	**RK5072005**	21138.50
Force 100-4	100	3HP, 440V	3	19	7-7/8	35	41	98 x 47	106	2940 lbs	**RK50720054**	21138.50
Force 150-4	150	4HP, 440V	7	19	14	35	59	98 x 47	106	5711 lbs	**RK5097201624**	47503.00
Force 150	150	4HP, 220/440V	7	19	14	35	59	98 x 47	106	5711 lbs	**RK509720162**	47503.00
Force 200	200	4HP, 220/440V	7	19	9	35	14	103 x 48	114	8467 lbs	**RK509720172**	76373.30
Force 200-4	200	4HP, 440V	7	19	9	35	14	103 x 48	114	8467 lbs	**RK5097201724**	76373.30

F.O.B. Grand Haven, MI • Ships by truck

Elec-Draulic I Hydraulic Presses

Features:

- Single acting cylinder permits a pressing ram action, not retracting
- Rapid ram approach quickly moves the ram to work to save production time
- Variable ram speed allows precise control of ram travel and pressure
- Stroke indicator ensures accurate ram control
- Adjustable table with self-locking hoist
- Movable workhead is roller mounted

MADE IN THE USA



Model No.	Cap. (tons)	Height (in.)	Ram Travel (in.)	Ram Speed (ipm)	Max. Work Width (in.)	Max. Work Height (in.)	Width Between Table Channels (in.)	Weight	Order No.	Price
5-050	50	87	10	7	32-3/4	40	7-1/4	1320 lbs	**RK5005050**	19262.50
5-050-4	50	87	10	7	32-3/4	40	7-1/4	1320 lbs	**RK50050504**	19262.50
5-075	75	87	10	5	44	36	8-1/4	1650 lbs	**RK5005075**	21004.50
5-075-4	75	87	10	5	44	36	8-1/4	1650 lbs	**RK50050754**	21004.50
5-150	150	95	16	2-3/4	48	30	12-1/4	3000 lbs	**RK5005150**	28106.50
5-150-4	150	95	16	2-3/4	48	30	12-1/4	3000 lbs	**RK50051504**	28106.50
5-200	200	100	16	2-3/4	-	-	-	4380 lbs	**RK50905200**	42210.00
5-200-4	200	100	16	2-3/4	-	-	-	4380 lbs	**RK509052004**	42210.00

F.O.B. Grand Haven, MI • Ships by Truck

Elec-Draulic II Hydraulic Presses

Features:

- Double acting cylinder permits pulling as well as pressing ram action
- Variable ram speed allows precise control of ram travel and pressure
- Side Frame mounted control allows convenient control when the workhead is out of the operators reach
- Adjustable table with self-locking hoist

MADE IN THE USA





Model No.	Cap. (tons)	Height (in.)	Ram Tramel (in.)	Ram Speed (ipm)	Max. Work Width (in.)	Max. Work Height (in.)	Width Between Table Channels (in.)	Weight	Order No.	Price
8-025	25	83	10	15	32-3/4	46-3/4	7-1/4	1060 lbs	**RK5008025**	18927.50
8-025-4	25	83	10	15	32-3/4	46-3/4	7-1/4	1060 lbs	**RK50080254**	18927.50
8-050	50	86	10	8	32-3/4	45-1/8	7-1/4	1360 lbs	**RK5008050**	23115.00
80-050-4	50	86	10	8	32-3/4	45-1/8	7-1/4	1360 lbs	**RK50080504**	23115.00
8-075	75	86	10	5	44	37-5/8	8-1/4	1950 lbs	**RK5008075**	25192.00
8-075-4	75	86	10	5	44	37-5/8	8-1/4	1950 lbs	**RK50080754**	25192.00
8-150	150	95	16	17	48	31-3/4	12-1/4	3620 lbs	**RK5008150**	35007.50
8-150-4	150	95	16	17	48	31-3/4	12-1/4	3620 lbs	**RK50081504**	35007.50
8-200	200	106	16	8	-	-	-	6100 lbs	**RK50908200**	70350.00
8-200-4	200	106	16	8	-	-	-	6100 lbs	**RK509082004**	70350.00

F.O.B. Grand Haven, MI • Ships by Truck

20 Ton Shop Presses

MADE IN THE USA

New!

- Compact and powerful
- Heavy duty 3/8" steel construction
- Cylinder with 2" Ram and 6-1/4" Stroke
- Rolling cylinder provides maximum versatility
- Working area of 10-1/2 x 20"
- Easy to use Hand/Jog Controls
- Quick Disconnect Hoses
- Hydraulic-Assist Table Height Adjustment
- Unique open sided design allows material to pass through the frame
- Power it up with an Edwards Ironworker with factory installed Hydraulic Accessory Pack or an Edwards Porta Power 5HP, 2750 psi portable power unit. Check out the 12" Press Brake Tooling, bump-die tooling, the 6 Piece Press Tooling Set and the Press Brake Back Gauge
- 1 Year Warranty



Model No.	Cylinder	Stroke (in.)	Working Area (in.)	Motor	Weight	Order No.	Price
HAT2000	2 Ram	6-1/4	10-1/2 x 20	5HP	392 lbs	**RE75HAT2000**	3080.66
HAT2010	2 Ram	6-1/4	10-1/2 x 20	5HP, 230V, 1PH	392 lbs	**RE75HAT2010**	7368.66
HAT2020	2 Ram	6-1/4	10-1/2 x 20	5HP, 230V, 3PH	392 lbs	**RE75HAT2020**	7100.66
HAT2030	2 Ram	6-1/4	10-1/2 x 20	5HP, 460V, 3PH	392 lbs	**RE75HAT2030**	7100.66

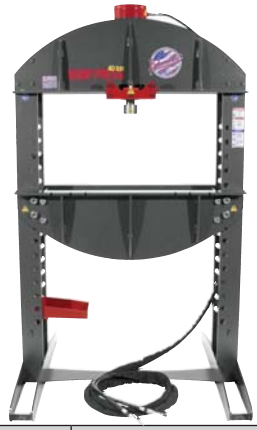
F.O.B. Albert Lea, MN • Ships by Truck

40 Ton Bench Model Presses

MADE IN THE USA

New!

- Rolling cylinder provides maximum versatility
- Unique open sided design allows material to pass through the frame
- Easy to use Hand/Jog Controls
- Quick connect hoses deliver "plug & play" operation
- Optional Tooling: Press Brake Tooling, 6 Piece Press Tooling Set, Back Gauge
- Models 4010, 4020 & 4030 include Portable Power Unit
- 1 Year Warranty



Model No.	Cylinder	Stroke (in.)	Working Area (in.)	Motor	Weight	Order No.	Price
HAT4000	4 Ram	12-1/4	38 x 40-1/2	5HP	1430 lbs	**RE75HAT4000**	6564.66
HAT4010	4 Ram	12-1/4	38 x 40-1/2	5HP, 230V, 1PH	1430 lbs	**RE75HAT4010**	10718.66
HAT4020	4 Ram	12-1/4	38 x 40-1/2	5HP, 230V, 3PH	1430 lbs	**RE75HAT4020**	10450.66
HAT4030	4 Ram	12-1/4	38 x 40-1/2	5HP, 460V, 3PH	1430 lbs	**RE75HAT4030**	10450.66

F.O.B. Albert Lea, MN • Ships by Truck

60 Ton Shop Presses

MADE IN THE USA

- Rolling cylinder provides maximum versatility
- Unique open sided design allows material to pass through the frame
- Convenient, effortless foot control for ease of uses
- Quick connect hoses deliver "plug & play" operation
- Optional Tooling: Press Brake Tooling, 6 Piece Press Tooling Set, Back Gauge
- Models 8010, 8020 & 8030 include Portable Power Unit
- 1 Year Warranty

New!



Model No.	Cylinder	Stroke (in.)	Working Area (in.)	Motor	Weight	Order No.	Price
HAT8000	4 Ram	12-1/4	39-1/4 x 42	5HP	2550 lbs	**RE75HAT8000**	10718.66
HAT8010	4 Ram	12-1/4	39-1/4 x 42	5HP, 230V, 1PH	2550 lbs	**RE75HAT8010**	15408.66
HAT8020	4 Ram	12-1/4	39-1/4 x 42	5HP, 230V, 3PH	2550 lbs	**RE75HAT8020**	15140.66
HAT8030	4 Ram	12-1/4	39-1/4 x 42	5HP, 460V, 3PH	2550 lbs	**RE75HAT8030**	15140.66

F.O.B. Albert Lea, MN • Ships by Truck

60 Ton Shop Presses with PLC

- PLC provides added versatility and saves time
- Rolling cylinder provides maximum versatility
- Unique open sided design allows material to pass through the frame
- Convenient, effortless foot control for ease of use
- Quick connect hoses deliver “plug & play” operation
- Optional Tooling: Press Brake Tooling, 6 Piece Press Tooling Set, Back Gauge

Programmable Logic Control (PLC):

- Improve your productivity to 50%
- Provides adjustable up/down stroke control
- Adjustable PSI
- Magnetic control box mounts anywhere on the shop press

New!

MADE IN THE USA



Type - Shop Press with PLC							
Model No.	Cylinder	Stroke	Working Area (in.)	Motor	Weight	Order No.	Price
HAT8050	4 Ram	12-1/4	39-1/4 x 42	5HP	2550 lbs	**RE75HAT8050**	14068.66

Type - Shop Press with PLC and Portable Power Unit							
Model No.	Cylinder	Stroke	Working Area (in.)	Motor	Weight	Order No.	Price
HAT8060	4 Ram	12-1/4	39-1/4 x 42	5HP, 230V, 1PH	2550 lbs	**RE75HAT8060**	18490.66
HAT8070	4 Ram	12-1/4	39-1/4 x 42	5HP, 230V, 3PH	2550 lbs	**RE75HAT8070**	18088.66
HAT8080	4 Ram	12-1/4	39-1/4 x 42	5HP, 460V, 3PH	2550 lbs	**RE75HAT8080**	18088.66

F.O.B. Albert Lea, MN • Ships by Truck

110 Ton Shop Presses

- Rolling cylinder provides maximum versatility
- Unique open sided design allows material to pass through the frame
- Convenient, effortless foot control for ease of uses
- Quick connect hoses deliver “plug & play” operation
- Optional Tooling: Press Brake Tooling, 6 Piece Press Tooling Set, Back Gauge
- 1 Year Warranty

Programmable Logic Control (PLC):

- Improve your productivity to 50%
- Provides adjustable up/down stroke control
- Adjustable PSI
- Magnetic control box mounts anywhere on the shop press

New!

MADE IN THE USA



Type - Shop Press				
Model No.	Motor	Weight	Order No.	Price
HAT9000	5HP	2690 lbs	**RE75HAT9000**	15810.66

Type - Shop Press w/ Porta-Power				
Model No.	Motor	Weight	Order No.	Price
HAT9010	5HP, 230V, 1PH	2690 lbs	**RE75HAT9010**	20098.66
HAT9020	5HP, 230V, 3PH	2690 lbs	**RE75HAT9020**	19830.66
HAT9030	5HP, 460V, 3PH	2690 lbs	**RE75HAT9030**	19830.66

Type - Shop Press w/ Porta-Power and PLC				
Model No.	Motor	Weight	Order No.	Price
HAT9060	5HP, 230V, 1PH	2690 lbs	**RE75HAT9060**	23850.66
HAT9070	5HP, 230V, 3PH	2690 lbs	**RE75HAT9070**	23582.66
HAT9080	5HP, 460V, 3PH	2690 lbs	**RE75HAT9080**	23582.66

Type - Shop Press with PLC				
Model No.	Motor	Weight	Order No.	Price
HAT9050	5HP, 230V, 3PH	2690 lbs	**RE75HAT9050**	19428.66

F.O.B. Albert Lea, MN • Ships by Truck

20 Ton Radius Rollers

- Quick-connect hydraulic tool
- Plug it into your Edwards ironworker with the Hydraulic Accessory Pack or power it seperately with an Edwards Porta-Power
- Designed for medium to heavy material
- Models 5010, 5020 & 5030 include Portable Power Unit
- 1 Year Warranty

New!

MADE IN THE USA



Model No.	Weight	Order No.	Price
HAT5000	1700 lbs	**RE75HAT5000**	10048.66
HAT5010	1700 lbs	**RE75HAT5010**	14470.66
HAT5020	1700 lbs	**RE75HAT5020**	14202.66
HAT5030	1700 lbs	**RE75HAT5030**	14202.66

F.O.B. Albert Lea, MN • Ships by Truck

Porta Power

- 2750 psi portable power unit is an additional power source for your Edwards Hydraulic Accessory Tools
- With several different power options the Porta Power is compact, mobile, and is set up to accommodate all of Edwards’ quick-connect Hydraulic Accessory Tools
- 1 Year Warranty

New!

MADE IN THE USA



Model No.	Motor	Weight	Order No.	Price
HAT001	5HP, 230V, 1PH	400 lbs	**RE75HAT001**	5358.66
HAT002	5HP, 230V, 3PH	400 lbs	**RE75HAT002**	5090.66
HAT004	5HP, 460V, 3PH	400 lbs	**RE75HAT004**	5090.66

F.O.B. Albert Lea, MN • Ships by Truck

10 Ton Benders

MADE IN THE USA

- Plug + Play Operation
- Horizontal or Vertical Operating Positions
- Proximity Switch Allows Easy, Repeatable Bends
- Heavy-Duty Rolling Stand Easy-to-Use Hand/Jog Controls
- Quick-connect hydraulic tool to greatly expand your fabrication capabilities
- Designed for medium to heavy material, the Edwards 10 Ton Bender powers through 2" (I.D.) Schedule 40 pipe, 2-1/2" (O.D.) tube and 2" square tube quickly and accurately

New!

- Click to view Tube Dies
- Click to view Pipe Dies
- Click to view Square Dies
- Power it up with an Edwards Ironworker with factory installed Hydraulic Accessory Pack or an Edwards Porta Power 5hp, 2750psi, portable power unit
- Models 1010, 1020 & 1030 include Portable Power Unit
- 1 Year Warranty



Model Number	Capacity Sq. (in.)	Pipe Size Capacity (in.)	Size (in.)	Motor	Weight	Order No.	Price
HAT1000	2" (OD) 1/4	2" (ID) Schedule 40	40-1/2" H x 36-1/2" W x 42" D	5HP	600 lbs	**RE75HAT1000**	3080.66
HAT1010	2" (OD) 1/4	2" (ID) Schedule 40	40-1/2" H x 36-1/2" W x 42" D	5HP, 230V, 1PH	600 lbs	**RE75HAT1010**	7368.66
HAT1020	2" (OD) 1/4	2" (ID) Schedule 40	40-1/2" H x 36-1/2" W x 42" D	5HP, 230V, 3PH	600 lbs	**RE75HAT1020**	7100.66
HAT1030	2" (OD) 1/4	2" (ID) Schedule 40	40-1/2" H x 36-1/2" W x 42" D	5HP, 460V, 3PH	1000 lbs	**RE75HAT1030**	6066.98

F.O.B. Albert Lea, MN • Ships by Truck

Direct Drive Series Air Compressors

Features:

- Compact design and very lightweight
- Die casting aluminium pump with cast iron sleeve
- Thermal overload protection
- Oil-less means maintenance free, no oil required
- For home and farm applications



Model No.	Tank	Max PSI	Motor	Weight	Order No.	Price
LA5706	1.5 Gallon / Oil-Less Hotdog Tank	150	1.5HP Peak/1HP Running, 115V, 1PH	35 lbs	**PW40LA5706**	234.50

F.O.B. Warren, MI • Ships by Truck

Contractor Series Air Compressors

Features:

- Direct drive unit has splash lubricated pump with cast iron sleeve for longer life
- Manual reset overload protection
- Dual Control Start/Stop Control with Pressure Switch or Constant Speed Operation for Electric Belt Drive Unit
- Idle Down Throttle Control For Gas Belt Drive Unit
- For farms and professional contractors



DP2022S

Model No.	Tank	Max PSI	Motor	Weight	Order No.	Price
DP2022S	4 Gallon / Twin Stack	150	2HP, 115V, 1PH	77 lbs	**PW40DP2022S**	395.30
PUP2008MDS	8 Gallon / Twin Tank Wheel Barrow Type	150	2HP, 115V 1PH	170 lbs	**PW40PUP2008MDS**	959.45

F.O.B. Warren, MI • Ships by Truck

Single Stage Air Compressors

- Cast iron, twin cylinder, oil lubricated pump (models DXCMPA1982054, DXCMLA1983054 & DXCMLA3706056)
- Heavy duty induction motor
- Pre-attached pneumatic tires (models DXCMPA1982054 & DXCMLA1983054)
- Shipped with synthetic oil
- Quick set regulator, tank and working pressure gages, on/off switch (models DXCMPA1982054, DXCMLA1983054 & DXCMLA3706056)
- Integrated control panel includes: tank and working pressure gauges, air flow regulator, two quick connect air outlets and pressure relief valve (model DXCMLA4708065 only)
- Full metal belt guard (model DXCMLA4708065)
- UL & CSA certified
- ASME certified tank
- Two year warranty



CMLA1983054

Style - Horizontal							
Model No.	Tank (Gal.)	Motor	SFCM	Max. PSi	Weight	Order No.	Price
DXCMPA1982054	20	1.9HP, 120V	7.0 SCFM @ 40 PSI 5.7 SCFM @ 90 PSI	155	166 lbs	**PT60CMPA1982054**	946.44

Style - Vertical							
Model No.	Tank (Gal.)	Motor	SFCM	Max. PSi	Weight	Order No.	Price
DXCMLA1983054	30	1.9HP, 120V	7.0 SCFM @ 40 PSI 5.7 SCFM @ 90 PSI	155	190 lbs	**PT60CMLA1983054**	990.39
DXCMLA3706056	60	3.7HP, 240V	13.4 SCFM @ 40 PSI 11.5 SCFM @ 90 PSI	155	248 lbs	**PT60CMLA3706056**	1136.86
DXCMLA4708065	80	4.7HP, 240V	16.1 SCFM @ 40 PSI 14.0 SCFM @ 90 PSI	155	350 lbs	**PT60CMLA4708065**	1929.47

F.O.B. Springfield, MN • Ships by Truck

Powermate Single Stage Air Compressors

PT60-PLD1581519 Features:
- 200 Max PSI for longer air tool run times and increased project efficiency
- Long life oil free pump
- 7” wheels for shop/job site protability

PT60-PP1682066MN Features:
- One-piece cast iron crankcase
- Thermally stable cast iron cylinder body
- Aluminum head and machined cast iron valve plate
- Durable stainless steel reed valves
- Oil level sight glass
- Easily accessible oil fill
- 10” cast iron balanced flywheel
- Heavy duy induction motor
- Dual voltage motor wired for standard 120 volt
- Equipped with quick-set regulator, tank and tool pressure gauges, quick connect air outlet and on/off switch

PT60-PLA4708065 Features:
- High air flow,
- Cast iron, three cylinder, oil lubricated pump
- Heavy duty, 240 volt induction motor
- Large capacity, 80 gallon ASME air receiver
- Wired formed belt guard for more efficient cooling
- Shipped with synthetic oil

PT60-PLA1683066 Features:
- Heavy duty induction motor
- Portable tank equipped with pneumatic tires
- Dual voltage motor is wired for standard 120 volt outlet
- Fully assembled and equipped with quick-set regulator, tank and tool pressure gauges, quick connect air outlet and on/off switch

PT60-PLA3706056 Features:
- Cast iron twin cylinder pump
- Heavy duty induction motor
- Shipped with synthetic oil for optimum performance and long life
- Equipped with pressure gauge and on/off switch


PLA3706056


PP1682066MN

Style - Horizontal							
Model No.	Tank	Motor	SFCM	Max. PSI	Weight	Order No.	Price
PP1682066.MN	20	1.6HP, 120V, 1PH	6.2 SCFM @ 40 PSI 5.3 SCFM @ 90 PSI	135	159 lbs	**PT60PP1682066MN**	771.97

Style - Vertical							
Model No.	Tank	Motor	SFCM	Max. PSI	Weight	Order No.	Price
PLD1581519	15	1.5HP, 120V, 1PH	5.0 SCFM @ 40 PSI 4.0 SCFM @ 90 PSI	200	99 lbs	**PT60PLD1581519**	415.40
PLA1683066	30	1.6HP, 120V, 1PH	6.2 SCFM @ 40 PSI 5.3 SCFM @ 90 PSI	155	154 lbs	**PT60PLA1683066**	913.75
PLA3706056	60	3.7HP, 240V, 1PH	13.4 SCFM @ 40 PSI 11.5 SCFM @ 90 PSI	155	228 lbs	**PT60PLA3706056**	1043.46
PLA4708065	80	4.7HP, 240V, 1PH	16.1 SCFM @ 40 PSI 14.0 SCFM @ 90 PSI	155	345 lbs	**PT60PLA4708065**	1731.75

F.O.B. Springfield, MN • Ships by Truck

Hi-Flo Single Stage Cast Iron Air Compressors

- High air flow, single stage - 14 CFM @ 90 PSI
- Cast iron, three cylinder, oil lubricated pump features
- One-piece cast iron crankcase
- Full cast iron cylinder body
- Durable Swedish stainless steel flex leaf valves
- Oil level sight glass
- Easily accessible oil fill
- 12” Cast iron balanced flywheel
- Large intake filter/silencers
- Heavy duty induction motor
- Shipped with synthetic oil
- Wire formed belt guard for more efficient cooling (Models ILA4546065 & ILA4708065.01)
- Full metal guard (Model ila4708065)
- UL & CSA CERTIFIED
- ASME certified tank
- Two year limited warranty


ILA4546065

Model No.	Tank (Gal.)	Motor	SFCM	Max PSI	Weight	Order No.	Price
ILA4546065	60	4.7HP, 240V, 1PH	16.1 SCFM @ 40 PSI 14.0 SCFM @ 90 PSI	155	287 lbs	**PT60ILA4546065**	1599.76
ILA4708065	80	4.5HP, 230V, 1PH	16.1 SCFM @ 40 PSI 14.0 SCFM @ 90 PSI	155	350 lbs	**PT60ILA4708065**	1776.44
ILA4708065.01	80	4.7HP, 240V, 1PH	16.1 SCFM @ 40 PSI 14.0 SCFM @ 90 PSI	155	354 lbs	**PT60LA470806501**	1574.49

F.O.B. Springfield, MN • Ships by Truck

Super Hi-Flo Single Stage Cast Iron Air Compressors

- Super High air flow, single stage - 18 CFM @ 90 PSI
- Cast iron, three cylinder, oil lubricated pump features
- One-piece cast iron crankcase
- Full cast iron cylinder body
- Durable Swedish stainless steel flex leaf valves
- Oil level sight glass
- Easily accessible oil fill
- 16” Cast iron balanced flywheel
- Large intake filter/silencers
- TOPS Protects the motor from voltage fluctuations
- FATBOY Low profile 60-gallon tank (Model ILA5746080)
- Shipped with synthetic oil
- Uniquely designed metal guard
- UL & CSA CERTIFIED
- ASME certified tank
- Two year limited warranty


ILA5148080

Model No.	Tank (Gal.)	Motor	SFCM	Max PSI	Weight	Order No.	Price
ILA5746080	60	5.7HP, 240V, 1PH	20.6 SCFM @ 40 PSI 18.1 SCFM @ 90 PSI	155	353 lbs	**PT60ILA5746080**	1937.51
ILA5148080	80	5.5HP, 240V, 1PH	20.6 SCFM @ 40 PSI 18.1 SCFM @ 90 PSI	155	410 lbs	**PT60ILA5148080**	2101.39

F.O.B. Springfield, MN • Ships by Truck

Single Stage Portable Air Compressors

- Oil lubricated belt drive technology provides quiet operation, Less noise than direct drive air compressors (Models IP1982013 & IL1983013)
- Long lasting twin cylinder pump combines cast iron cylinders with aluminum cooling fins (Models IP1982013 & IL1983013)
- One-piece cast iron crankcase (Models IL1682066. MN, IP1682066.MN, ILA1683066, IPA1882054 & ILA1883054)
- Thermally stable cast iron cylinder body (Models IL1682066.MN, IP1682066.MN, ILA1683066, IPA1882054 & ILA1883054)
- Aluminum head & machined cast iron valve plate (Models IL1682066.MN, IP1682066.MN & ILA1683066)
- Aluminum head & valve plate (Models IPA1882054 & ILA1883054)
- Automotive style ball bearings Models IL1682066. MN, IP1682066.MN, ILA1683066, IPA1882054 & ILA1883054)
- Durable stainless steel reed valves Models IL1682066. MN, IP1682066.MN, ILA1683066, IPA1882054 & ILA1883054)
- Oil level sight glass Models IL1682066.MN, IP1682066. MN, ILA1683066, IPA1882054 & ILA1883054)
- Easily accessible oil fill Models IL1682066.MN, IP1682066.MN, ILA1683066, IPA1882054 & ILA1883054)
- 10” Cast iron balanced flywheel (Models IL1682066. MN, IP1682066.MN & ILA1683066)
- 12” Cast iron balanced flywheel (Models IPA1882054 & ILA1883054)
- Heavy duty induction motor for maximum performance and efficiency
- Equipped with quick-set regulator, tank and tool pressure gauges, quick connect air outlet and on/off switch (Models IL1682066.MN, IP1682066.MN & ILA1683066)
- Shipped with synthetic oil (Models IPA1882054 & ILA1883054)
- Equipped with quick-set regulator, tank and working pressure gauges, and on/off switch (Models IPA1882054, IP1982013, IL1983013, & ILA1883054)
- UL & CSA CERTIFIED
- ASME certified tank
- Two year limited warranty



ILA1683066



IP1982013

Model No.	Tank (Gal.)	Motor	SFCM	Max PSI	Weight	Order No.	Price
IL1682066.MN	20	1.6HP, 120V	6.2 SCFM @ 40 PSI 5.3 SCFM @ 90 PSI	135	159 lbs	**PT60IL1682066MN**	771.97
IL1983013	30	1.9HP, 120V	7.1 SCFM @ 40 PSI 5.7 SCFM @ 90 PSI	130	170 lbs	**PT60IL1983013**	989.46
ILA1683066	30	1.6HP, 120V	6.2 SCFM @ 40 PSI 5.3 SCFM @ 90 PSI	155	154 lbs	**PT60ILA1683066**	913.75
ILA1883054	30	1.9HP, 120V	7.0 SCFM @ 40 PSI 5.7 SCFM @ 90 PSI	155	185 lbs	**PT60ILA1883054**	965.40
IP1682066.MN	20	1.6HP, 120V	6.2 SCFM @ 40 PSI 5.3 SCFM @ 90 PSI	135	159 lbs	**PT60IP1682066MN**	771.97
IP1982013	20	1.9HP, 120V	7.1 SCFM @ 40 PSI 5.7 SCFM @ 90 PSI	130	144 lbs	**PT60IP1982013**	881.45
IPA1882054	20	1.9HP, 120V	7.0 SCFM @ 40 PSI 5.7 SCFM @ 90 PSI	155	166 lbs	**PT60IPA1882054**	881.25

F.O.B. Springfield, MN • Ships by Truck

Single Stage Stationary Air Compressors

- One-piece cast iron crankcase (Model ILA3606056)
- Thermally stable cast iron cylinder body (Model ILA3606056)
- Aluminum head & valve plate (Model ILA3606056)
- Automotive style ball bearings (Model ILA3606056)
- Durable Swedish stainless steel reed valves (Model ILA3606056)
- Oil level sight glass (Model ILA3606056)
- Easily accessible oil fill (Model ILA3606056)
- 12” Cast iron balanced flywheel (Model ILA3606056)
- Heavy duty induction motor
- Shipped with synthetic oil (Model ILA3606056)
- Equipped with pressure gauge and on/off switch
- Single stage, oil lubricated, belt drive technology (Model IL3106016)
- Long lasting twin cylinder pump combines cast iron cylinders with aluminum cooling fins to reduce heat, maximize CFM, and extend pump life (Model IL3106016)
- Splash type lubrication (Model IL3106016)
- Flex leaf valve system (Model IL3106016)
- UL & CSA CERTIFIED
- ASME certified tank
- Two year limited warranty



IL3106016

Model No.	Tank (Gal.)	Motor	SFCM	Max PSI	Weight	Order No.	Price
IL3106016	60	3.1HP, 240V, 1PH	12.3 SCFM @ 40 PSI 10.3 SCFM @ 90 PSI	130	215 lbs	**PT60IL3106016**	1025.37
ILA3606056	60	3.7HP, 240V, 1PH	13.4 SCFM @ 40 PSI 11.5 SCFM @ 90 PSI	155	228 lbs	**PT60ILA3606056**	1043.46

F.O.B. Springfield, MN • Ships by Truck

Professional Series Single Stage Air Compressors

Features:

- 100% Durable Cast Iron Pump
- Splash Type Lubrication
- Swedish steel valve for long life
- Manual Reset Overload Protection
- ASME approved tanks
- For professional and automotive use



PP6060V



PK5020VP



PK5020

Model No.	Tank	AFCM	Max PSI	Motor	Weight	Order No.	Price
PK2011VP	11 Gallon / Vetical-Portable	-	150	2HP Peak/1HP Running, 115V, 1PH	113 lbs	**PW40PK2011VP**	451.60
PK020	20 Gallon / Horizontal	5.5 @ 90 PSI	125	5HP Peak/2HP Running, 115/230V, 1PH	160 lbs	**PW40PK020**	696.80
PK5020VP	20 Gallon / Vertical	5.5 @ 90 PSI	125	5HP Peak/2HP Running, 115/230V, 1PH	180 lbs	**PW40PK5020VP**	675.40
PK6560V	60 Gallon / Vertical	18 @ 90 PSI	125	6HP Peak/4.5HP Running, 230V, 1PH	325 lbs	**PW40PK6560V**	1267.65
PP6060V	60 Gallon / Vertical	10.5 @ 90 PSI	125	6HP Peak/3HP Running, 230V, 1PH	285 lbs	**PW40PP6060V**	825.45

F.O.B. Warren, MI • Ships by truck

Ingersoll Rand Single Stage Compressors

- 100% Duty cycle for the toughest applications
- Maximum air power 135 P.S.I. operating pressure
- 100% Cast iron design for extended pump life
- Thermal overload motor protection
- No magnetic starter required
- Quiet operation
- Model SS3J55GH gas unit with honda engine
- 1 Year Warranty

MADE IN THE USA



SS5L5



SS3R1GM



SS3F2GM

Model No.	Motor	ACFM	Tank	Start-Up Kit	Weight	Order No.	Price
SS3J55GH	5-1/2HP Gas Engine	11.8 @ 90 PSI	8 Gallon / Horizontal	97339501	175 lbs	**PR55SS3J55GH**	2046.45
SS3F2GM	2HP, 115V, 1PH	5.7 @ 90 PSI	30 Gallon / Horizontal	97338099	185 lbs	**PR55SS3F2GM**	1457.00
SS3L3	3HP, 230V, 1PH	11.3 @ 90 PSI	60 Gallon / Vertical	97338099	300 lbs	**PR55SS3L3**	1294.65
SS5L5	5HP, 230V, 1PH	18.1 @ 90 PSI	60 Gallon / Vertical	20100251	300 lbs	**PR55SS5L5**	1982.00

F.O.B. Campbellsville, KY • Ships by truck • NOT CSA APPROVED

DEWALT Two Stage Air Compressors

- Cast iron, twin cylinder, oil lubricated pump (Models DXCMPA1982054, DXCMLA1983054 & DXCMLA3706056)
- Heavy duty induction motor
- Pre-attached pneumatic tires (Models DXCMPA1982054 & DXCMLA1983054)
- Shipped with synthetic oil
- Quick set regulator, tank and working pressure gages, on/off switch (Models DXCMPA1982054, DXCMLA1983054 and DXCMLA3706056)
- Integrated control panel includes: Tank and working pressure gauges, Air flow regulator, two quick connect air outlets and Pressure relief valve (Model DXCMLA4708065 only)
- Full metal belt guard (Model DXCMLA4708065)
- UL & CSA CERTIFIED
- ASME certified tank
- Two year limited warranty



XCMV5048055

Model No.	Tank (Gal.)	Motor	AFCM	Max. PSI	Weight	Order No.	Price
DXCMV5018055	80	5HP, 230V, 1PH	17.0 SCFM @ 100 PSI 16.2 SCFM @ 175 PSI	175	570 lbs	**PT60XCMV5018055**	3130.11
DXCMV5048055	80	5HP, 230V, 1PH	17.9 SCFM 100 PSI 17.0 SCFM @ 175 PSI	175	470 lbs	**PT60XCMV5048055**	2598.80
DXCMV5048055.1	80	5HP, 230V, 1PH	17.9 SCFM 100 PSI 17.0 SCFM @ 175 PSI	175	455 lbs	**PT60CMV50480551**	2448.65
DXCMV7518075	80	7.5HP, 230V, 1PH	22.1 SCFM @ 100 PSI 21.2 SCFM @ 175 PSI	175	623 lbs	**PT60XCMV7518075**	3611.84

F.O.B. Springfield, MN • Ships by Truck

5HP Two Stage Cast Iron Industrial Air Compressors

- Patented piston design
- Cast iron cylinder head with patented deep-groove directional cooling fins
- Precision bored cylinders
- Patented cast iron flywheel design
- Baldor industrial class electric motor
- 4 Pole 1750 RPM UL certified NEMA rated (Model IV5038055)
- 4 Pole 1725 RPM UL certified NEMA rated (Models IV5018055, IV5008055 & IV5016055)
- Pre-wired and mounted magnetic starter (Models IV5018055, IV5038055 & IV5016055)
- Tops® motor (Thermal overload protection system) protects motor from voltage fluctuations (Model IV5048055 only)
- Integrated control panel includes: Tank and working pressure gauges, Air flow regulator, two quick connect air outlets and Pressure relief valve (Model IV5048055 only)
- Extended tank drain valve, ball valve and vibration isolators (Models IV5008055, IV5038055, IV5016055 & IV5018055)
- ASME certified tank
- Two year limited warranty


IV5008055

Model No.	Tank (Gal.)	Motor	SFCM	Max PSI	Weight	Order No.	Price
IV5008055	80	5HP, 230V, 1PH	17.0 SCFM @ 100 PSI 16.2 SCFM @ 175 PSI	175	675 lbs	**PT60IV5008055**	2451.54
IV5018055	80	5HP, 230V, 1PH	17.0 SCFM @ 100 PSI 16.2 SCFM @ 175 PSI	175	705 lbs	**PT60IV5018055**	2884.75
IV5038055	80	5HP, 230V, 3PH	17.0 SCFM @ 100 PSI 16.2 SCFM @ 175 PSI	175	705 lbs	**PT60IV5038055**	3004.41
IV5048055	80	5HP, 230V, 1PH	17.9 SCFM 100 PSI 17.0 SCFM @ 175 PSI	175	475 lbs	**PT60IV5048055**	2401.15

F.O.B. Springfield, MN • Ships by Truck

Two Stage 7.5 HP Stationary Air Compressors

- Patented piston design
- Cast iron cylinder head with patented deep-groove directional cooling fins
- Precision bored cylinders
- Patented cast iron flywheel design
- Baldor industrial class electric motor
- 4 Pole 1725 RPM UL certified NEMA rated (Models IV7518075 & IH7519975
- 4 Pole 1770 RPM UL certified NEMA rated (Models IV7538075, IV7568075, IH7569975 & IH7539975)
- Pre-wired and mounted magnetic starter
- Extended tank drain valve, ball valve and vibration isolators
- ASME certified tank
- 2 Year limited warranty


IV7518075

Style - Horizontal							
Model No.	Tank (Gal.)	Motor	SFCM	Max PSI	Weight	Order No.	Price
IH7519975	120	7.5HP, 230V, 1PH	22.1 SCFM @ 100 PSI 21.2 SCFM @ 175 PSI	175	935 lbs	**PT60IH7519975**	3927.14
IH7539975	120	7.5HP, 230V, 3PH	22.1 SCFM @ 100 PSI 21.2 SCFM @ 175 PSI	175	935 lbs	**PT60IH7539975**	3740.29

Style - Vertical							
Model No.	Tank (Gal.)	Motor	SFCM	Max PSI	Weight	Order No.	Price
IV7518075	80	7.5HP, 230V, 1PH	22.1 SCFM @ 100 PSI 21.2 SCFM @ 175 PSI	175	715 lbs	**PT60IV7518075**	3318.78
IV7538075	80	7.5HP, 230V, 3PH	22.1 SCFM @ 100 PSI 21.2 SCFM @ 175 PSI	175	715 lbs	**PT60IV7538075**	3640.58
IV7568075	80	7.5HP, 460V, 3PH	22.1 SCFM @ 100 PSI 21.2 SCFM @ 175 PSI	175	715 lbs	**PT60IV7568075**	3640.58

F.O.B. Springfield, MN • Ships by Truck

PUMA Two Stage Air Compressors

Features:

- Heavy Duty Two Stage High Efficient Air Compressors
- 100% Cast Iron Pump for Performance and Durability
- ASME Approved Tanks
- For commercial and industrial applications
- Model TN5080VM does not come with magnetic sarter
- Magnetic starter mounted and wired on all other units



TN5080VM



TE7580VM

Model No.	Tank	ACFM	Max PSI	Motor	Weight	Order No.	Price
TN5080VM	80 Gallon / Vertical	12.5 @ 100 PSI	175	5HP, 230V, 1PH	500 lbs	**PW40TN5080VM**	2113.20
TK5080VM	80 Gallon / Vertical	19.2 @ 100 PSI	175	5HP, 230V, 1PH	530 lbs	**PW40TK5080VM**	2190.90
TE7580VM	80 Gallon / Vertical	24.8 @ 100 PSI	175	5HP, 230V, 1PH	533 lbs	**PW40TE7580VM**	2509.85
TK100120VM3	120 Gallon / Vertical	36.3 @ 100 PSI	175	7.5HP, 230V, 3PH	950 lbs	**PW40TK100120VM3**	4196.90
TUK100120M3	120 Gallon / Horizontall	36.3 @ 100 PSI	175	10HP, 230V, 3PH	954 lbs	**PW40TUK100120M3**	3892.70

F.O.B. Warren, MI • Ships by truck

Ingersoll Rand Type 30 Two Stage Industrial Rated Reciprocating Air Compressors

Features:

- 100% Duty cycle for the toughest applications
- 100% Cast iron design
- Maximum air power 175 P.S.I. operating pressure
- Maximum air delivery of CFM (cubic feet minute)
- Magnetic motor starter & overload protection
- Factory direct on-site service available
- Optional 2 year pump warranty with purchase of a Start-up kit. Includes synthetic oil and air filters
- 1 Year Warranty
- Model 2340L51 medium duty for home and garage shop applications

MADE IN THE USA



2475N753MS



2475N51MS



2475F11G

Model No.	Motor	ACFM	Tank	Start-Up Kit	Weight	Order No.	Price
2475F12.5G	13HP Gas Engine	24 @ 175 PSI	30 Gallon / Horizontal	32305872	485 lbs	**PR552475F11G**	4646.80
2340L5	5HP, 230V, 1PH	14.3 @ 175 PSI	60 Gallon / Vertical	32305880	400 lbs	**PR552340L51**	2629.30
2340L5	5HP, 230V, 3PH	14.3 @ 175 PSI	60 Gallon / Vertical	32305880	400 lbs	**PR552340L53**	2629.30
2475N5	5HP, 230V, 1PH	17 @ 175 PSI	80 Gallon / Vertical	32305880	550 lbs	**PR552475N51MS**	4079.60
2475N5	5HP, 230/460V, 3PH	17 @ 175 PSI	80 Gallon / Vertical	32305880	550 lbs	**PR552475N53MS**	4079.60
2475N7.5	7.5HP, 230V, 1PH	24.2 @ 175 PSI	80 Gallon / Vertical	32305880	724 lbs	**PR552475N751MS**	4422.15
2475N7.5	7.52HP, 230/460V, 3PH	24.2 @ 175 PSI	80 Gallon / Vertical	32305880	724 lbs	**PR552475N753MS**	4422.15

F.O.B. Campbellsville, KY • Ships by truck • NOT CSA APPROVED

Ingersoll Rand Start-Up Oil Kits

MADE IN THE USA

Start-Up Kit	Used With	Haz Code	Order No.	Price
20100251	SS5L5	HAZ57	**PR5520100251**	140.20
32305872	2475F12.5G	HAZ57	**PR5532305872**	264.75
32305880	2340L5, 2475N5, 2475N7.5, 2475F11.5GKA	HAZ57	**PR5532305880**	223.15
32305898	2545E10VFP, 2545E10FP, 7100E15VFP, 7100E15FP	HAZ57	**PR5532305898**	226.95
97338099	SS3F2-GM, SS3L3	HAZ57	**PR5597338099**	75.65
97339501	SS3J5.5GH-WB	HAZ57	**PR5597339501**	151.30

NOT CSA Approved

120 Gallon Two Stage Air Compressors

Features:

- Patented Pump Design Provides for a Cooler Running Pump
- Patented piston design for improved compression efficiency
- Cast iron cylinder head with patented deep-grove directional cooling fins
- Precision bored cylinders with patented asymmetrical cooling fins
- Balanced flywheel with large glass-filled composite fan for improved pump cooling
- 4 Pole, 1770 RPM, UL certified, NEMA rated
- Equipped with pre-wired and mounted magnetic starter
- ASME certified tank
- Two year limited warranty



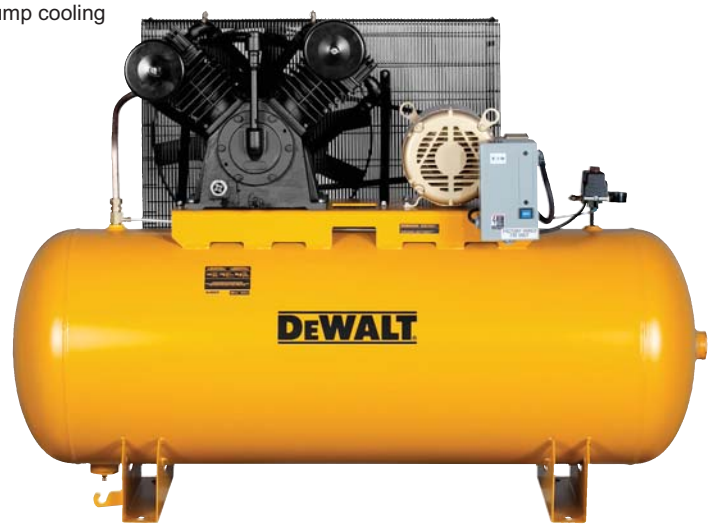
Style - Horizontal							
Model No.	Tank (Gal.)	AFCM	Motor	Max PSI	Weight	Order No.	Price
IH9919910	120	35.0 SCFM @ 100 PSI 33.6 SCFM @ 175 PSI	10HP, 230V, 3PH	175	991 lbs	**PT60IH9919910**	4289.54
IH9929910	120	35.0 SCFM @ 100 PSI 33.6 SCFM @ 175 PSI	10HP, 200V, 3PH	175	991 lbs	**PT60IH9929910**	4232.12
IH9969910	120	35.0 SCFM @ 100 PSI 33.6 SCFM @ 175 PSI	10HP, 460V, 3PH	175	991 lbs	**PT60IH9969910**	4725.38

Style - Vertical							
Model No.	Tank (Gal.)	AFCM	Motor	Max PSI	Weight	Order No.	Price
IV9919910	120	35.0 SCFM @ 100 PSI 33.6 SCFM @ 175 PSI	10HP, 230V, 3PH	175	1025 lbs	**PT60IV9919910**	4949.29
IV9969910	120	35.0 SCFM @ 100 PSI 33.6 SCFM @ 175 PSI	10HP, 460V, 3PH	175	1025 lbs	**PT60IV9969910**	4949.29

F.O.B. Springfield, MN • Ships by Truck

120 Gallon Two Stage Cast Iron Air Compressor

- Patented piston design for improved compression efficiency
- Cast iron cylinder head with patented deep-grove directional cooling fins
- Precision bored cylinders with patented asymmetrical cooling fins
- Balanced flywheel with large glass-filled composite fan for improved pump cooling
- Baldor industrial class motor
- 4 Pole, 1750 RPM, UL certified, NEMA rated
- Uniquely designed metal belt guard
- Equipped with pre-wired and mounted magnetic starter



Model No.	Tank (Gal.)	Motor	AFCM	Max PSI	Weight	Order No.	Price
DXCMH9919910	120	10HP, 230V, 3PH	35.0 SCFM @ 100 PSI 33.6 SCFM @ 175 PSI	175	920 lbs	**PT60XCMH9919910**	4916.13

F.O.B. Springfield, MN • Ships By Truck

Ingersoll Rand 120 Gallon Type 30 Two Stage Air Compressors

Equipment Included:

- 120 Gallon tank standard
- Low oil level protection
- Air-cooled after-cooler to remove 75% of condensate
- Electric automatic tank drain for condensate disposal
- Magnetic starter
- Dual control — constant speed or automatic start/stop
- Specify 230 or 460 Voltage
- Type 30 Value line "V" - series are the same as above but doesn't include low oil switch & dual control
- 1 Year Warranty

MADE IN THE USA



Model No.	Motor	ACFM	Tank	Start-Up Kit	Weight	Order No.	Price
2545E10	10HP, 230/460V	35 @ 175 PSI	35 @ 175 PSI	32305898	835 lbs	**PR552545E10**	5202.90
2545E10VFP	10HP, 230/460V	35 @ 175 PSI	120 Gallon / Horizontal	32305898	835 lbs	**PR552545E10VFP**	5734.55
2545E10FP	10HP, 230/460V	35.2 @ 175 PSI	35 @ 175 PSI	32305898	652 lbs	**PR552545E10FP**	7707.55
7100E15FP	15HP, 230/460V	50.5 @ 175 PSI	120 Gallon / Horizontal	32305898	1100 lbs	**PR557100E15FP**	10414.70
7100E15VFP	15HP, 230/460V	50.5 @ 175 PSI	120 Gallon / Horizontal	32305898	1040 lbs	**PR557100E15VFP**	7632.00
15TE15FP	15HP, 230/460V	60.2 @ 175 PSI	120 Gallon / Horizontal	32305906	1450 lbs	**PR5515TE15FP**	12579.00

F.O.B. Campbellsville, KY • Ships by truck • NOT CSA APPROVED

BURR KING VibraKing® Mass Finishing Bowls

Features:

- Built-in flow-through drain for use wet or dry
- 1/10HP Motor has adjustable amplitude to provide a range of finishing needs from gentle to aggressive and is ideal for small parts
- Runs on 115 Volt/1 phase

Burr King will run your parts and return to you a finished part with media recommendations, machine, and a time study. Call for details.

MADE IN THE USA



Capacity	Weight	Order No.	Price
10 Quarts	32 lbs	**PT55150S**	1161.78
20 Quarts	35 lbs	**PT55200S**	1404.32

F.O.B. Warsaw, MO

BURR KING Vibra KING® Bench Top Bowl Combi Paks

- Flow-through design
- Heavy Polymer bowl
- High Energy
- Power cord and switch
- Units come with a Standpak 5000 and Filter Pak 4001B

MADE IN THE USA



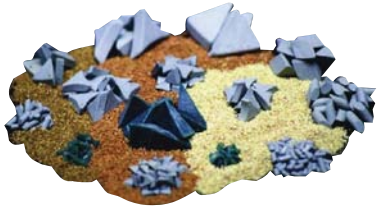
Model No.	Motor	Tank	Weight	Order No.	Price
150	1/10HP, 115V, 1PH	10 Quart	125 lbs	**PT5515010**	2767.10
200	1/10HP, 115V, 1PH	20 Quart	91 lbs	**PT5520010**	2950.68

F.O.B. Warsaw, MO • Ships by truck

BURR KING Media Starter Kits for Mass Finishing Bowls

MADE IN THE USA

- SK150S Kit Includes: 25 lbs. 5/8" x 1/4", Tri-Star, (AC3S), P20, 1-quart BKS-60 soap and 1-quart anti-rust, 32 lbs., Hazard Code: 58
- SK200S Kit Includes: 50 lbs. 5/8" x 1/4", Tri-Star, (AC3S), P20, 1-quart BKS-60 soap and 1-quart anti-rust, 56 lbs., Hazard Code: 58



Model No.	Order No.	Price
SK150S	**PT55SK150S**	129.95
SK200S	**PT55SK200S**	190.21

F.O.B. Warsaw, MO

BURR KING VibraKing® Stand Pak 5000

The Perfect Mate for Burr King Model, 150S and 200S Vibratory Bowls

- Filter Pak 4000 may be mounted internally for full flow through system
- Built in 0-6 hour process timer with "Hold On" function
- Built in duplex, 115 VAC 10 Amp receptacle timer controlled
- Easy open access panel
- Heavy steel construction provides a solid base for good vibration action
- Space saving 16" x 20" x 21" size
- Shipping weight: 60 lbs.
- Complete with power cord and plug

MADE IN THE USA



Order No.	Price
PT555000	1141.68

F.O.B. Warsaw, MO

VibraKing® Mass Finishing Chambers

- Hush quiet design – 3db or less
- No-walk bolt-free design when loaded
- Rugged, welded steel construction
- Nema, UL, CSA, listed motors, controls & electrics
- Urethane interiors – liquid tight
- Integrated, metered compound/liquid delivery system
- Easy access outlet for quick media unloading and changing
- Pump and bucket assembly included

MADE IN THE USA



M451

Model No.	Tank Cap	Max. Part Length (in.)	Media Load Cap.	Part Load Cap. (lbs)	Motor	Inside Tub Dim. (in.)	Weight	Order No.	Price
25100	2.5 Cubic Feet	19	150 lbs	100	3/4HP, 110/220V, 1PH	15W x 16D x 19L	390 lbs	**PT55M251**	7966.30
45100	4.5 Cubic Feet	34	250 lbs	225	1-1/2HP, 110/220V, 1PH	15W x 16D x 34L	475 lbs	**PT55M451**	9145.50
85103	8.5 Cubic Feet	36	450 lbs	450	3HP, 220/400V, 3PH	20W x 20D x 36L	675 lbs	**PT55M853**	16941.62

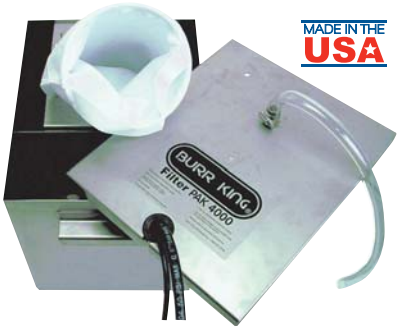
F.O.B. Warsaw, MO • Ships by truck

VibraKing® Filter Pak 4001

The Perfect Mate for VibraKing® Vibratory Chambers

- Delivers clean, continuously filtered, compound to the vibratory chamber for a super effective flow through system
- Traps and holds particles and debris in inexpensive, easily disposable 5 to 100 Micron mesh filters
- Baffle divider between pump and filter chambers
- 140 GPH pump complete with cord and plug
- 10 Gallon plus capacity
- Stainless steel, rust free construction
- Convenient, space saving 12” x 14” x 15” size
- Shipping weight: 30 lbs.

MADE IN THE USA



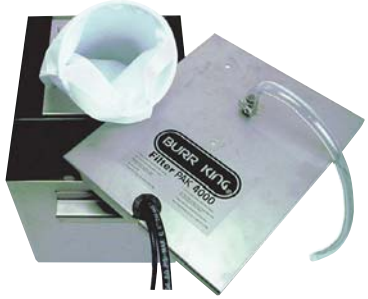
Order No.	Price
PT554001	743.70

F.O.B. Warsaw, MO

Vibra KING® Chamber Combi Paks

- Hush quiet design – 3db or less
- No-walk bolt-free design when loaded
- Rugged, welded steel construction
- Nema, UL, CSA, listed motors, controls & electrics
- Urethane interiors – liquid tight
- Integrated, metered compound/liquid delivery system
- Easy access outlet for quick media unloading and changing
- Pump and bucket assembly included
- Units include Filter Pak 4001 (Models 25110 & 45110) Model 85110 comes with Filter Pak 8000, Sound Damping Lid
- Model 85110 includes Mag. Starter

MADE IN THE USA



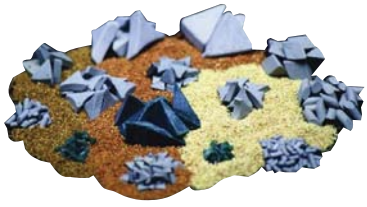
Model No.	Motor	Tank	Weight	Order No.	Price
25	3/4HP, 120V, 1PH	2.5 Cubic Feet	550 lbs	**PT5525110**	9221.88
45	1-1/2HP, 120V, 1PH	4.5 Cubic Feet	740 lbs	**PT5545110**	10335.42
80	3HP, 120V, 3PH	8.5 Cubic Feet	1140 lbs	**PT5585110**	21339.50

F.O.B. Warsaw, MO • Ships by truck

Media Starter Kits For Mass Finishing Chambers

MADE IN THE USA

- SK25 Includes: 150lbs of Tri-Star 5/8 x 1/4 (AC3S), P-20, 1 gallon of BK-60 soap, 1 gallon AR-60 anti-rust
- SK45 Includes: 250lbs of Tri-Star 1-1/8 x 3/8 (AC3S), P-20, 1 gallon of BK-60 soap, 1 gallon AR-60 anti-rust
- SK85 Includes: 450lbs of Tri-Star 1-1/8 x 3/8 (AC3S), P-20, 1 gallon of BK-60 soap, 1 gallon AR-60 anti-rust
- Hazard Code: 58



Model No.	Order No.	Price
SK25	**PT55SK25**	561.76
SK45	**PT55SK45**	897.13
SK85	**PT55SK85**	1567.89

F.O.B. Warsaw, MO

Vibratory Accessories

- BKS-60 low suds soap for most non ferrous applications
- AR-60 low suds soap with anti-rust for most ferrous applications. Provides temporary rust protection.



AR60



BKS60

Model No.	Order No.	Price
AR-60	**PT55AR60**	29.43
BKS-60	**PT55BKS60**	30.89

F.O.B. Warsaw, MO

KALAMAZOO Industries Inc. Vibratory Finisher

Features:
- 3.3 Cubic ft., 50 capacity
- Motor 1 HP, 110 V, 1 PH
- Steel tub with cast urethane lining
- Vibra action rotates media
- Quiet operation
- 500 lbs. Capacity
- Compact design
- Rugged construction
- Portable - on wheels
- Easy to load and unload
- Weight 640 lbs.

MADE IN THE USA



Model No.	Cabinet Dim. (in.)	Order No.	Price
KVF3	36W x 27D x 36H	**PT50KVF3**	5353.30

F.O.B. Kalamazoo, MI • Ships by Truck

SPEED BLASTER GRAVITY FEED MEDIA BLASTER Gravity Feed High Efficiency Blaster

- Powerful, hand held & easy to use
- Fully adjustable material control valve meters sand flow precisely
- Gravity forces the particles into a hardened steel mixing chamber, where they practically hit warp speed passing through a space age ceramic nozzle
- Adjustable sand flow
- Ceramic nozzle
- Safety vented tank
- Replaceable hardened steel mixing chamber
- Medium to fine abrasive sand
- Cannot use glass bead



Order No.	Price
PA55007R	129.45

F.O.B. Warren, MI

Hot Spot™ Spot Blaster Recovery System

- Attaches to Speed Blaster in seconds
- Recovers blast media, saving time, money and clean-up
- Complete with 4 blast cones



Order No.	Price
PA552020	82.55

F.O.B. Warren, MI

Cyclone Manufacturing Pressure Blast System

Features:
- Air Requirement: 23 cfm @ 100 psi
- Nozzle Size: 1/8” Ceramic
- Hose Size: 10’ x 1/2” ID Blast Hose
- ASME Code Pressure Vessel



Model No.	Capacity (lbs.)	Weight	Order No.	Price
PT100	100	69 lbs	**RB75PT100**	932.65

F.O.B. Dowagiac, MI • Ships by Truck

SHOP FOX 20 Gallon Portable Sandblaster

Specifications:
- Max. pressure: 60-125 PSI
- Blasting hose length: 8’
- Tank size: 20 gallons
- Fill port: 1”
- Tip bore sizes: 9/64”, 1/8”, 7/64”, 3/32”
- Approximate shipping weight: 45 lbs.

Includes:
- Heavy-duty feed hose, fittings, pressure gauge, pressure relief valve, blasting hood, funnel & four ceramic replacement tips



Order No.	Price
PY65M1115	335.00

F.O.B. Warren, MI • Ships by Truck

Cyclone Manufacturing Front Opening Sand Blasters

- Full top opening top means larger capacity
- Constructed of 16 gauge welded steel
- Foot operated blast system

MADE IN THE USA



Model No.	Cabinet Dim. (in.)	Operating System	Motor	Window Opening (in.)	Weight	Order No.	Price
FO5428	52W x 41D x 64H	Trigger; 14 CFM	110V	25 x 10	275 lbs	**RB75FO5428**	1511.55
FO5428DC	52W x 41D x 64H	Trigger; 14 CFM	110V	25 x 10	275 lbs	**RB75FO5428DC**	1792.95

F.O.B. Dowagiac, MI • Ships by Truck

TRINCO™ Standard Model Dry Blast Cabinets

- Model 20BP Bench Model and the Model 20BPS Floor Model with a Stand are ideal for cleaning small parts - rated for 12 CFM, 75-85 PSI and can be operated with a 3HP air compressor
- Model No. 24BP and the No. 30BP Blasting Cabinets are Stand Alone Floor Models with all the standard features found in all of Trinco's famous dry blast units
- 1 Year Warranty

MADE IN THE USA



24BP



20BP

Model No.	Cabinet Dim. (in.)	Tub Dim. (in.)	Operating Pressure	Window Opening (in.)	Weight	Order No.	Price
20BP	21W x 33D x 38-1/2H	20W x 18D x 18H	12 CFM @ 80 PSI	20 x 13	133 lbs	**PA5020BP**	884.40
20BPS	21W x 33D x 38-1/2H	20W x 18D x 18H	12 CFM @ 80 PSI	20 x 13	133 lbs	**PA5020BPS**	1105.50
24BP	26W x 18D x 62H	24W x 18D x 23H	12 CFM @ 80 PSI	24 x 15	230 lbs	**PA5024BP**	1273.00
30BP	32W x 20D x 62H	30W x 20D x 23H	12 CFM @ 80 PSI	30 x 13	240 lbs	**PA5030BP**	1440.50

F.O.B. Warren, MI • Ships by Truck

Cyclone Manufacturing Side & Top Opening Blast Equipment

- DC-1500 90 CFM Dust Collector
- 1 Year Warranty

MADE IN THE USA



3824



6035



3624HD

Model No.	Tub Dim. (in.)	Operating System	Window Opening (in.)	Side Door Opening (in.)	Dust Collection System	Weight	Order No.	Price
3624	36W x 24D x 24H	Trigger; 14 CFM @ 100 PSI	10 x 25	18 x 12	DC1500 90 CFM Dust VacTop & Side Opening	215 lbs	**RB753624**	1333.30
3824	38W x 24D x 24H	Foot Pedal; 14 CFM @ 100 PSI	10 x 25	19 x 16	DC1500 90 CFM Full Top & Side Open	250 lbs	**RB753824**	1526.30

F.O.B. Dowagiac, MI • Ships by Truck

TRINCO™ Master Model Dry Blast Cabinets

- Master Models with the BP-2 100 CFM Dust Collectors are designed for intermittent blasting operations or for light to medium amounts of blasting
- BP Dust Collector vacuums the dust and contamination form the cabinet
- Media is then recycled from the gun system to the hopper and back to the gun system
- The BP-2 Dust Collector is well suited for most types or media
- Fluorescent lighting to eliminate shadows and minimize energy consumptio.
- Large 12” x 24” safety glass windows for excellent visibility and increased efficienc.
- Air pressure regulator and gage
- Double floor 1/8” expandex steel plus carbon screen
- Come with standard BP-2 100 CFM dust collector
- 1 Year Warranty







MADE IN THE USA

Model No.	Cabinet Dim. (in.)	Tub Dim. (in.)	Operating Pressure	Window Opening (in.)	Side Door Opening (in.)	Weight	Order No.	Price
36BP	38W x 25D x 64H	36W x 24D x 23H	25 CFM @ 80 PSI	36 x 13	17 x 11	300 lbs	**PA5036BP**	1574.50
4040BP	45W x 66D x 71H	40W x 40D x 31H	25 CFM @ 80 PSI	40 x 40	20 x 30	560 lbs	**PA504040BP**	2968.10
4224BP	70W x 38D x 65H	42W x 24D x 24H	25 CFM @ 80 PSI	42 x 24	11 x 11	430 lbs	**PA504224BP**	2110.50
4824BP	53W x 38D x 65H	48W x 24D x 24H	25 CFM @ 80 PSI	48 x 24	11 x 11	430 lbs	**PA504824BP**	2378.50
4848BP	52W x 25D x 64H	48W x 48D x 31H	25 CFM @ 80 PSI	48 x 13	17 x 16	380 lbs	**PA504848BP**	3618.00
48BP	52W x 25D x 64H	48W x 24D x 23H	25 CFM @ 80 PSI	48 x 13	17 x 16	380 lbs	**PA5048BP**	1842.50
6024BP	65W x 38D x 65H	60W x 24D x 31H	25 CFM @ 80 PSI	60 x 24	17 x 16	490 lbs	**PA506024BP**	3008.30
6048BP	65W x 74D x 71H	60W x 48D x 31H	25 CFM @ 80 PSI	60 x 48	20 x 36	740 lbs	**PA506048BP**	4750.30

F.O.B. Warren, MI • Ships by truck

Cyclone Manufacturing Full Top & Side Opening Blast Equipment

- DC-1500 90 CFM Dust Collector
- 1 Year Warranty

MADE IN THE USA











Model No.	Tub Dim. (in.)	Operating System	Window Opening (in.)	Side Door Opening (in.)	Dust Collection System	Weight	Order No.	Price
FT3624	36W x 24D x 23H	Trigger; 14 CFM	25 x 10	-	DC1500 90 CFM Dust Vac Full Top Open Only	250 lbs	**RB75FT3624**	1263.65
FT48	48W x 26D x 23H	Trigger; 14 CFM @ 70-90 PSI	45 X 11.5	-	-	350 lbs	**RB75FT48**	1545.05
4040	42W x 39D x 30H	Foot Pedal; 14 CFM @ 100 PSI	10 x 25	18 x 28	DC1500 90 CFM Dust Vac Full Top & Side Open	345 lbs	**RB754040**	2342.35
4224	42W x 24D x 24H	Trigger; 14 CFM @ 100 PSI	10 x 25	18 x 12	DC1500 90 CFM Dust Vac Full Top & Side Open	245 lbs	**RB754224**	1543.70
4826	48W x 26D x 24H	Foot Pedal; 14 CFM @ 100 PSI	10 x 25	18 x 12	DC1500 90 CFM Dust Vac Full Top & Side Open	275 lbs	**RB754826**	1786.25

F.O.B. Dowagiac, MI • Ships by truck

TRINCO™ Deluxe Blast Cleaning Systems Dust Collectors

Provides Superior High Efficient Dust Filtration

- Available on Master Models 36 and larger
- These units are equipped with 600 CFM abrasive separator
- Features include superior dust filtration, a drawer for dust disposal and a shaker mechanism for efficient bag cleaning (16 tubular filter bags) which replaces standard dust bag on abrasive separators, air vibrator, water filter, and blow off gun
- 400 CFM pull through enclosed dust collector
- 1 Year Warranty

MADE IN THE USA



4848D

Model No.	Cabinet Dim. (in.)	Tub Dim. (in.)	Operating Pressure	Window Opening (in.)	Side Door Opening (in.)	Abrasive Separator	Weight	Order No.	Price
36D	38W x 25D x 64H	36W x 24D x 23H	25 CFM @ 80 PSI	36 x 13	17 x 11	300 CFM	610 lbs	**PA5036D**	3798.90
4040D	45W x 66D x 71H	40W x 40D x 31H	25 CFM @ 80 PSI	40 x 40	20 x 30	600 CFM	1020 lbs	**PA504040D**	5601.20
4224D	70W x 38D x 65H	42W x 24D x 24H	25 CFM @ 80 PSI	42 x 24	11 x 11	300 CFM	710 lbs	**PA504224D**	4261.20
4824D	53W x 38D x 65H	48W x 24D x 24H	25 CFM @ 80 PSI	48 x 24	11 x 11	300 CFM	740 lbs	**PA504824D**	4522.50
4848D	53W x 74D x 76H	48W x 48D x 36H	25 CFM @ 80 PSI	12 x 24	20 x 36	600 CFM	1100 lbs	**PA504848D**	6264.50
48D	52W x 25D x 64H	48W x 24D x 23H	25 CFM @ 80 PSI	48 x 13	17 x 16	300 CFM	690 lbs	**PA5048D**	3999.90
6024D	65W x 38D x 65H	60W x 24D x 31H	25 CFM @ 80 PSI	60 x 24	17 x 16	600 CFM	950 lbs	**PA506024D**	5654.80
6048D	65W x 74D x 71H	60W x 48D x 31H	25 CFM @ 80 PSI	60 x 48	20 x 36	600 CFM	1250 lbs	**PA506048D**	7376.70

F.O.B. Warren, MI • Ships by truck

TRINCO™ Master Model Dry Blasters With Abrasive Separators

- Designed to keep media free of contaminants
- During blasting, media is suctioned into the abrasive separator, where the dust and contaminants are removed and exhausted into a filter bag
- The cleaned media then returns to the cabinet for reblasting.
- Ideal for blasting painted, rusted, and corroded parts.

300 CFM Abrasive Separator

- Is available on Models 36 through 48” x 24” Split Level
- Is suited for medium to heavy amounts of blasting where media separation is needed
- Is suited for use with glass beads or other “fine” media only

600 CFM Abrasive Separator

- Is available on Models 40” x 40” Split Level and larger
- Is suited for medium to heavy amounts of blasting where media separation is needed
- Is suited for use with most types of media including glass beads and aluminum oxide
- 1 Year Warranty

450 CFM Abrasive Separators

- Available for all Models 36 through 48 x 30 Split Level Balsters and used in medium to heavy blasting where seraration is needed and can be used with Glass Beads or Aluminum Oxide. Call for Details.

MADE IN THE USA



4224AS

Model No.	Cabinet Dim. (in.)	Tub Dim. (in.)	Operating Pressure	Window Opening (in.)	Side Door Opening (in.)	Abrasive Separator	Weight	Order No.	Price
36AS	38W x 25D x 64H	36W x 24D x 23H	25 CFM @ 80 PSI	36 x 13	17 x 11	300 CFM	300 lbs	**PA5036AS**	2726.90
4040AS	45W x 66D x 71H	40W x 40D x 31H	25 CFM @ 80 PSI	40 x 40	20 x 30	600 CFM	740 lbs	**PA504040AS**	4468.90
4224AS	70W x 38D x 65H	42W x 24D x 24H	25 CFM @ 80 PSI	42 x 24	11 x 11	300 CFM	430 lbs	**PA504224AS**	3202.60
4824AS	53W x 38D x 65H	48W x 24D x 24H	25 CFM @ 80 PSI	48 x 24	11 x 11	300 CFM	460 lbs	**PA504824AS**	3450.50
4848AS	53W x 74D x 71H	48W x 48D x 31H	25 CFM @ 80 PSI	48 x 48	20 x 36	600 CFM	830 lbs	**PA504848AS**	5125.50
48AS	52W x 25D x 64H	48W x 24D x 23H	25 CFM @ 80 PSI	48 x 13	17 x 16	300 CFM	380 lbs	**PA5048AS**	2934.60
6024AS	65W x 38D x 65H	60W x 24D x 24H	25 CFM @ 80 PSI	60 x 24	17 x 16	600 CFM	670 lbs	**PA506024AS**	4549.30
6048AS	65W x 74D x 71H	60W x 48D x 31H	25 CFM @ 80 PSI	60 x 48	20 x 36	600 CFM	970 lbs	**PA506048AS**	6197.50

F.O.B. Warren, MI • Ships by truck

TRINCO™ Dry Blast Media

TRIN-MIXES: Trinco's exclusive combination of glass bead and aluminum oxide delivers fast and efficient cutting action while maintaining close tolerance and a fine satin finish.
TRIN-MIX #4: The finest, it is ideal for removing light-to-medium contamination from tools, precision parts, molds, and dies. A general purpose media which is used in a wide range of applications from texturing plastic injection molds to providing appealing finishes on exposed stainless steel and aluminum surfaces.
TRIN-MIX #2: More aggressive and faster cleaning, Trin-Mix 2 leaves a slightly rougher finish. Ideal for heavier contamination. Dimensional changes of .001 may occur.
RAD-MIX: Most aggressive. Developed for radiator cleaning. It is ideal for removing tough contamination from surfaces with a minus .001 inch tolerance or better.
NUT SHELLS: Soft aggregate used in removal of foreign matter or coatings from surfaces without etching, scratching or marring cleaned areas. Applications include delicate molds, armatures and electric motors prior to rewinding.
SILICON CARBIDE: Extremely hard but friable abrasive used in blasting, grinding and polishing very hard materials, i.e. granite, ceramics, glass, marble. May be used on soft resilient plastics. Meets ANSI standard B74.12-1976. It comes in a full range of sizes.
TRIN-BLAST ALUMINUM OXIDE: The fastest abrasive for general blasting, dimensional changes of .001 to .002 may occur. Guaranteed First Quality Virgin Grain meets ANSI standard B74.12-1976, Military Standard A21380-B. Consistent, resistant to breakdown, very low iron content. It comes in a full range of sizes.
TRIN-BEADS GLASS BEADS: Ideal for removing foreign matter from workpiece, without removing base metal, changing dimensions, contaminating parts or overstressing. Full range of sizes are available.
- 50 Lb. box sizes



Media Type - Aluminum Oxide			
Model No.	Description	Order No.	Price
12 Grit	Aluminum Oxide Trin-Blast	**PA5012GRIT**	103.20
16 Grit	Aluminum Oxide Trin-Blast	**PA5016GRIT**	103.20
24 Grit	Aluminum Oxide Trin-Blast	**PA5024GRIT**	103.20
36 Grit	Aluminum Oxide Trin-Blast	**PA5036GRIT**	103.20
50 Grit	Aluminum Oxide Trin-Blast	**PA5050GRIT**	103.20
54 Grit	Aluminum Oxide Trin-Blast	**PA5054GRIT**	103.20
80 Grit	Aluminum Oxide Trin-Blast	**PA5080GRIT**	105.90
100 Grit	Aluminum Oxide Trin-Blast	**PA50100GRIT**	109.90
120 Grit	Aluminum Oxide Trin-Blast	**PA50120GRIT**	109.90
150 Grit	Aluminum Oxide Trin-Blast	**PA50150GRIT**	109.90
180 Grit	Aluminum Oxide Trin-Blast	**PA50180GRIT**	113.90
220 Grit	Aluminum Oxide Trin-Blast	**PA50220GRIT**	113.90
240 Grit	Aluminum Oxide Trin-Blast	**PA50240GRIT**	113.90

Media Type - Glass Bead			
Model No.	Description	Order No.	Price
BT3	Glass Trin-Beads	**PA50BT3**	81.75
BT4	Glass Trin-Beads	**PA50BT4**	81.75
BT5	Glass Trin-Beads	**PA50BT5**	81.75
BT6	Glass Trin-Beads	**PA50BT6**	81.75
BT7	Glass Trin-Beads	**PA50BT7**	80.40
BT8	Glass Trin-Beads	**PA50BT8**	80.40
BT9	Glass Trin-Beads	**PA50BT9**	77.75

Media Type - Glass Bead			
Model No.	Description	Order No.	Price
BT10	Glass Trin-Beads	**PA50BT10**	77.75
BT11	Glass Trin-Beads	**PA50BT11**	77.75
BT12	Glass Trin-Beads	**PA50BT12**	77.75
BT13	Glass Trin-Beads	**PA50BT13**	77.75

Media Type - Rad-Mix			
Model No.	Description	Order No.	Price
RAD-MIX	Trin -Mix	**PA50RADMIX**	115.25

Media Type - Silicon Carbide			
Model No.	Description	Order No.	Price
46/70 Coarse	Silicon Carbide	**PA504670**	162.15
60/120 Fine	Silicon Carbide	**PA5060120**	163.50

Media Type - Trin-Mix			
Model No.	Description	Order No.	Price
Fine - #4	Trin-Mix	**PA504**	100.50
Heavy - #2	Trin-Mix	**PA502**	104.55

Media Type - Walnut Shell			
Model No.	Description	Order No.	Price
6/10 - Heavy	6/10 Walnut Shells	**PA5061050**	63.00
10/12 - Medium	10/12 Walnut Shells	**PA50101250**	63.00
12/20 - Medium Light	12/20 Walnut Shells	**PA50122050**	63.00
20/30 Light	20/30 Walnut Shells	**PA50203050**	63.00

TRINCO™ Replacement Parts


22025


247


230


280


261

Model No.	Description	Order No.	Price
2-00001	Air Hose Coupled and End fitting, Black	**PA50201**	11.10
2-00012	Carbon Screen (Fine Mesh) for Model 36	**PA50212**	22.80
2-00020	Expandex Floor Model 24 (Wide Mesh)	**PA50220**	21.45
2-00044	Gasketing 1 x 1/2"	**PA50244**	1.70
2-00048	Gloves Heavyweight, Neoprene 6 x 24 (1pr)	**PA50248**	22.80
2-00049	Gloves Anti-Static Rubber 6 x 24 (1pr)	**PA50249**	67.00
2-00050	Air Jet Assem. G-100 Gun, 12CFM	**PA50250**	20.10
2-00051	Air Jet Assem. G-34-L Gun, 12CFM	**PA50251**	20.10
2-00052	Air Jet Assem. G-34-L Gun, 25CFM	**PA50252**	20.10
2-00053	Air Jet Assem. G-34-L Gun, 45CFM	**PA50253**	20.10
2-00060	Gun w Air Jet less nozzle, 9/16" I.D. 12CFM	**PA50260**	50.95
2-00070	Nozzle, Carbide, 9/16" O.D. (For G-100 Gun, 6 or 12 CFM)	**PA50270**	25.50
2-00082	Lamp Shields, 12" x 25"	**PA50282**	12.10
2-00083	Motor and Turbine Assembly for BP Dust Collector	**PA50283**	97.15
2-00093	Vacuum Hose, 2 1/2" I.D. for BP (Less Grommets)	**PA50293**	38.85
2-00094	Vacuum Hose, 4" I.D. for BP (Less Hose End)	**PA50294**	26.80
2-00106	6 x 12 Acetate Windows (6 pack)	**PA502106**	16.10
2-00118	Filter Cone for CDB Dust Collector	**PA502118**	16.75
2-00119	Filter/Secondary Small for BP Dust Collector	**PA502119**	0.60

Model No.	Description	Order No.	Price
2-00120	Filter, Fiber Glass Roll for BP Units	**PA502120**	1.70
2-00121	Foot Pedal Valve Only (for safety enclosed foot pedal)	**PA502121**	70.35
2-00130	Air Jet Assem. G-100 Gun, 6CFM	**PA502130**	20.10
2-00292	Underlayment Pre Cut 12 x 19-1/2 (10pk)	**PA502292**	5.70
4-00105	Windows, 12" x 19 1/2" Safety Laminated Glass	**PA504105**	32.20
6-00008	Filter Bag, 450/600 CFM	**PA50608**	77.75
2-00030	BP Filter Bag	**PA50230**	18.80
2-00047	Gloves Heavyweight, Rubber 6 x 24 (1pr)	**PA50247**	30.85
2-00061	Gun w Air Jet less nozzle, 3/4" I.D. 25CFM	**PA50261**	60.30
2-00071	Nozzle, Carbide, 3/4" O.D. (For G-34-L Gun, 12 or 25 CFM	**PA50271**	28.15
2-00080	Lamp, Fluorescent (U-Shaped)	**PA50280**	18.80
2-00092	Underlayment (to protect 12" x 24" Window - 10 Ft Roll)	**PA50292**	7.05
2-00095	5/8" ID HD Siphon Hose (per ft.)	**PA50295**	1.70
2-00107	12 x 19-1/2" Acetate Window Pack of 3	**PA502107**	20.10
2-00109	12 x 24" Lexon Window	**PA502109**	16.10
2-00110	12 x 24" Safety Glass Window	**PA502110**	35.55
2-00144	Anti-Static Wrist Band	**PA502144**	69.70
2-02025	Gloves, Blue Gauntlet 8 x 30 (1pr)	**PA5022025**	53.60
2-00192	Underlayment Pre Cut 12 x 24 (10pk)	**PA502192**	6.05

Cyclone Manufacturing Dust Collection Systems

DC1500
- CFM Rating: 90
- Electrical: 110 Volt
- Overall Dimensions: 53.5"H x 16.5" Diameter
- Construction: Polyethylene
- Filters: Weighted Cloth Bag & Paper Cartridge

DC4000
- CFM Rating: 400
- Electrical: 110 Volt
- Overall Dimensions: 19"H x 19" x 60"H
- Construction: 16 Gauge Welded Steel
- Filters: Paper Cartridge
- Misc. Common carrier only, 225 lbs.

MADE IN THE USA


DC1500


DC4000

Model No.	Order No.	Price
DC1500	**RB75DC1500**	329.65
DC4000	**RB75DC4000**	1460.60

F.O.B. Dowagiac, MI • Ships by truck

PRM Light Duty Adjustable Roller Stand

- Folds flat for storage
- All steel construction
- Height: 25” - 41”
- Roller Dimensions: 2”
- Weight Capacity: 130 lbs
- Shipping Weight: 12.5 lbs

New!



Order No.	Price
PR903088	38.90

F.O.B. Warren, MI

PRM Heavy Duty Roller Stand

- Hand knobs for fast height adjustment
- Height: 27” - 43”
- Roller Dimensions: 2”
- Weight Capacity: 175 lbs
- Shipping Weight: 14 lbs

New!



Order No.	Price
PR903087	73.00

F.O.B. Warren, MI

PALMGREN Material Support Stand

- Chrome-plated, 2” x 14” ball bearing roller head designed to smoothly move up to 2,000 lbs. of flat stock.
- Height Range: 23” - 38-1/2”
- Base Size: 15” x 16-1/2”
- Weight: 47 lbs.



Order No.	Price
JB5570141	223.78

PALMGREN Material Support Stand

- Two chrome-plated, 2” x 5” ball bearing roller head designed to smoothly move up to 2,000 lbs. of round stock.
- Height Range: 23” - 38-1/2”
- Base Size: 15” x 16-1/2”
- Weight: 47 lbs.



Order No.	Price
JB5570181	230.48

PRM Support Stands

- Designed for heavy loads of flat stock
- Height Adjustment: 23” - 38.5”
- Roller Dimensions: 2” x 14”
- Weight Capacity: 2000 lbs
- Weight 47 lbs



Order No.	Price
PR903020	100.30

F.O.B. Warren, MI

PRM V-Roller Support Stand

- Designed for heavy loads of flat stock
- Height Adjustment: 26” - 40.750”
- Roller Dimensions: 2” x 5”
- Weight Capacity: 2000 lbs
- Weight: 50 lbs

New!



Order No.	Price
PR903025	126.80

F.O.B. Warren, MI

MIDCO Stock Stands

1000 lbs. Capacity on 12” Centers

- Roller bar to hold rounds & squares, fully adjustable from 19″-50″ in height, fits almost any bandsaw,15” Rollers, weighs only 20 lbs. and 23 lbs.



Model No.	Height Adjustment (in.)	Type	Order No.	Price
MM1053	28 - 50	Hi Jack	**RF85MM1053**	167.45
MM1153	20 - 36	Lo Jack	**RF85MM1153**	167.45

F.O.B. Factory • Ships by truck

V-Roller Supports

- Two dual bearing, galvanized steel rollers with heavy-duty hex axle
- Non-skid leveling feet
- Exclusive wedge-lock inner support design



Height Adjustment (in.)	Roller Dim. (in.)	Weight Capacity	Order No.	Price
22 to 32	6 x 1-7/8	500 lbs	**RF81HSV15**	187.60
26.5 to 43.5	6 x 1-7/8	500 lbs	**RF81HSV18**	187.60

Straight Roller Supports

- Dual bearing, galvanized steel roller
- Non-skid leveling feet
- Exclusive wedge-lock inner support design



Height Adjustment (in.)	Roller Dim. (in.)	Weight Capacity	Order No.	Price
22 to 32	16W x 1.9 dia.	500 lbs	**RF81HSS15**	187.60
28 to 45.5	16W x 1.9 dia.	500 lbs	**RF81HSS18**	187.60

V-Roller Stands With Ball Bearing

- Two adjustable steel roller balls
- Non-skid leveling feet
- Exclusive wedge-lock inner support design



Height Adjustment (in.)	Roller Dim. (in.)	Weight Capacity	Order No.	Price
22 to 32	6 x 1-1/4 Ball	500 lbs	**RF81HVR15**	221.10
28 to 45.5	6 x 1-1/4 Ball	500 lbs	**RF81HVR18**	221.10

Midco Heavy Duty Pipe Jacks (Stock Stands)

Features:

- “Hi Jacks” which adjust in height from 28” to 50”
- “Lo Jacks” adjustable from 20”- 36”
- Seven different pipe jacks heads styles
- Durable all steel construction
- Steel pipe legs
- Drop Stop™ hand protector, and interchangeable parts
- Quickly adjusts to position and lock to the height you want with a turn of a setscrew



Type - Hi Jack						
Model No.	**Comments**	**Height Adjustment (in.)**	**Weight Capacity (lbs.)**	**Weight**	**Order No.**	**Price**
MM1051	w/Vee Head	28 - 50	3200	22 lbs	**RF85MM1051**	136.95
MM1052	w/Roller Head	28 - 50	2000	20 lbs	**RF85MM1052**	156.35
MM1054	w/Stainless Steel Rollers	28 - 50	2000	23 lbs	**RF85MM1054**	192.90
MM1055	w/Stainless Steel Vee Head	28 - 50	2000	23 lbs	**RF85MM1055**	177.10
MM1056	w/Ball Transfer Head	28 - 50	1000	24 lbs	**RF85MM1056**	262.00
MM1057	w/Rubber Wheels	28 - 50	1000	21 lbs	**RF85MM1057**	162.75

Type - Lo Jack						
Model No.	**Comments**	**Height Adjustment (in.)**	**Weight Capacity (lbs.)**	**Weight**	**Order No.**	**Price**
MM1151	w/Vee Head	20 - 36	3200	19 lbs	**RF85MM1151**	136.95
MM1152	w/Roller Head	20 - 36	2000	17 lbs	**RF85MM1152**	156.35
MM1154	w/Stainless Steel Rollers	20 - 36	2000	22 lbs	**RF85MM1154**	192.90

Ships by truck

9" Roller Table

- Steel Construction
- 9 solid ball bearing rollers
- Each leg independently adjustable
- Dimensions: 15” x 65”
- Height: 24” - 44”
- Rolelr Dimensions: 2.4”
- Weight Capacity 500 lbs
- Shipping Weight 51 lbs.

New!



Order No.	Price
PR903080	189.75

F.O.B. Warren, MI

18-1/2" Roller Table

- Steel Construction
- 9 Solid ball bearing rollers
- Each leg independently adjustable
- Dimensions: 18.5” x 65”
- Height: 25.5” - 43”
- Roller Dimensions: 2.4”
- Weight Capacity 440 lbs
- Shipping Weight: 64 lbs

New!



Order No.	Price
PR903085	254.50

F.O.B. Warren, MI

Roller Table

- 9 ball bearing rollers
- All-steel welded construction
- Measures 19” x 65” long
- Height adjusts from 26-3/8” to 44-1/8”
- Weight: 78 lbs.
- Weight capacity: 1,000 lbs.



Order No.	Price
PY65D2271	341.70

Leveling Jacks

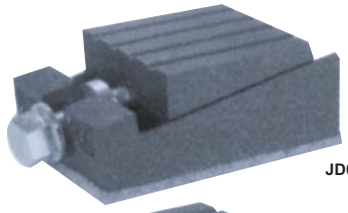
Wedge Action Leveling Jack Features:

- Lower surface of wedge is specially contoured to float laterally within concave base unit, automatically conpensating for uneven floor conditions up to 5° of slope
- Wedge action allows easy adjustment of height (1/4” - 3/8”) with the turn of a wrench
- Two-piece design that provides solid support from 3,000 to 9,000 lbs./ft.
- Low-profile leveling jack is ideal for applications constricted by reduced height

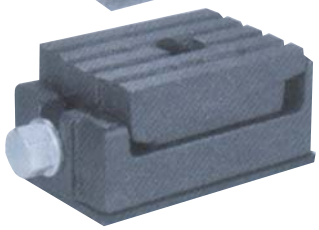
MADE IN THE USA

Vertical Motion Leveling Jack Features:

- Three-piece design combines the advantages of a wedge-action jack with vertical lift capabilities in one unique and practical unit
- Level and support up to 30,000 lbs./ft.
- For precision machine leveling and support



JD0



JH15

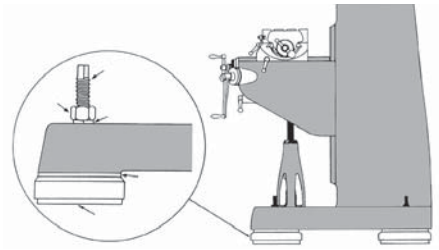
Model No.	Recommended Max Lifting Weight (lbs.)	Rise (in.)	Size (H x W x L) (in.)	Anchor Bolt Hole Dia. (in.)	Type	Weight	Order No.	Price
60200	3000	1/4	1-1/8 x 3-1/2 x 6	-	Wedge Action Leveling Jack	5 lbs	**SR70JD0**	176.30
60201	9000	3/8	2-1/4 x 3-1/2 x 6	-	Wedge Action Leveling Jack	11 lbs	**SR70JD2**	205.15
60202	15000	3/16	2-3/8 x 3-1/2 x 6	1	Vertical Motion Leveling Jack	11 lbs	**SR70JH15**	239.60
60203	20000	1/4	2-3/4 x 3-1/2 x 6	1-1/8	Vertical Motion Leveling Jack	14 lbs	**SR70JH20**	268.55
60204	30000	1/4	2-3/4 x 3-1/2 x 6	1-1/8	Vertical Motion Leveling Jack	14 lbs	**SR70JH30**	283.70

Both models shown with optional Vibration-Absorbing Mounting Pad.

UNISORB® Level-Rite® Machinery Mounts For Hollow Base Machines

- Designed for hollow bases as found on certain models of mills, lathes, grinders and other machines
- Provides vibration control, leveling and support
- Pads are made from engineered felt to reduce vibration and noise
- Pads provide an extremely high coefficient-of-friction between the pad and the floor surface to provide maximum protection against machine movement without physical anchoring
- Pads are unaffected by oils and solutions used in manufacturing plants

MADE IN THE USA



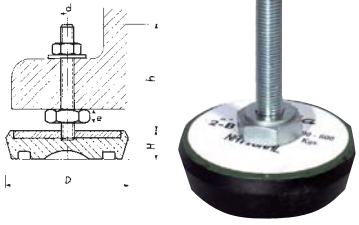
Model No.	Max. Width Across Machine Base (in.)	Distance Between Bolts (in.)	Order No.	Price
BP2500	23-3/4	19-1/4 - 20 -3/4	**SR55BP2500**	479.25
BP5000	26-1/4	23-1/4 - 24-3/4	**SR55BP5000**	620.85
BP5000S	31-1/4	25-1/4 - 26-3/4	**SR55BP5000S**	713.45

†Fits most Bridgeport Machines

Machinery Mounts

- Extra tough rigid design
- Solid finest quality rubber base
- Extra tough support screw
- Complete range of sizes with long screw length
- Supplied with bolts, nuts and washers

WORLD CLASS QUALITY



Load per Mount (lbs)	Base Dia. (D) (in.)	Bolt Length (d) (in.)	Height of Mount Base (H) (in.)	Thread Size	Total Height (F) (in.)	Order No.	Price
20 - 180	2-3/8	2-1/8	11/16	10mm	4	**SR6000B**	15.75
180 - 300	3	2-11/16	13/16	12mm	5	**SR600B**	22.75
300 - 700	3-3/8	3-3/16	1	12mm	5	**SR601B**	27.70
700 - 1200	4-5/16	4	1-1/8	16mm	5	**SR602B**	34.05
1200 - 2000	5	4-3/4	1-3/16	16mm	6	**SR603B**	45.65
2000 - 3300	5-7/8	5-5/8	1-5/16	16mm	7	**SR604B**	59.40

Tool Saver Machine Covers

- Made from rugged, skip-coated, cotton sheeting
- Breathable, yet water-resistant
- Rubberized magnet sewn into each corner



Size (in.)	Order No.	Price
Small - 27 x 36	**RF81TS9036**	31.85
Medium - 36 x 56	**RF81TS9056**	40.20
Large - 56 x 72	**RF81TS9072**	68.70
Jumbo - 72 x 112	**RF81TS9112**	95.45

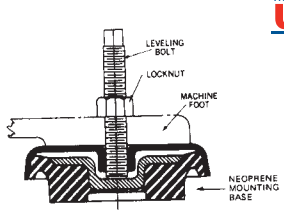
MONROE Machinery Leveling Mounts

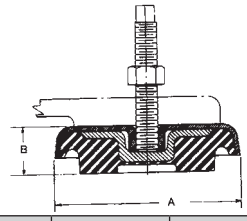
Features:

- No special foundations
- Easy leveling
- Isolate shock and vibration
- Maximum mobility
- Reduce noise levels
- Meets OSHA anchoring standards



MADE IN THE USA





Load per Mount (lbs.)	Outside Dia. (A) (in.)	Free Height (B) (in.)	Thread Size (in.)	Bolt Length (in.)	Order No.	Price
30 - 100	2	1	1/4-28	1.75	**SR50LM0B**	33.25
100 - 300	3.125	1.5	3/8-24	3	**SR50LM1B**	48.85
300 - 500	4.75	1.5	1/2-13	5	**SR50LM3B**	51.70
1000 - 4200	6.312	1.625	3/4-10	5	**SR50LM5B**	104.40

MONROE Leveling Pads

MADE IN THE USA

Socket Type Features:

- Leveling pads swivel 10° each side of the centerline to adjust to uneven surfaces
- Large-diameter pad design assures solid support
- Hardened ball prevents galling and forms to its own seat
- Zinc plated and gold plated to resist rust



Stud Type (with Jam Nut) Features:

- Offering many leveling applications, the integral stud allows vertical adjustment to compensate for uneven floors
- Jam nut secures the adjustment
- Pad swivels 10° in all directions and automatically adjusts to uneven surfaces
- Pad is zinc plated and gold plated to resist rust



Type - Socket								
Thread Size (A) (in.)	Hex Across Flats (B) (in.)	Height of Mount Base (C) (in.)	Base Dia. (D) (in.)	Bolt Length (E) (in.)	Total Height (F) (in.)	Load per Mount (lbs)	Order No.	Price
3/8-16	5/8	7/8	1-1/4	3/16	7/8	3750	**SR50P304B**	7.40
1/2-13	3/4	1-1/8	1-7/8	1/4	1-1/8	5000	**SR50P306B**	10.35
5/8-11	7/8	1-1/8	2-1/2	5/16	2-1/2	6000	**SR50P308B**	16.30
3/4-10	1-1/16	1-1/2	3	1/2	3	7200	**SR50P310B**	20.45

Type - Stud								
Thread Size (A) (in.)	Hex Across Flats (B) (in.)	Height of Mount Base (C) (in.)	Base Dia. (D) (in.)	Bolt Length (E) (in.)	Total Height (F) (in.)	Load per Mount (lbs)	Order No.	Price
3/8-16	5/8	7/8	1-1/4	2-1/32	2-7/8	3750	**SR50P304S**	8.80
1/2-13	3/4	1-1/8	1-7/8	1-31/32	3-1/8	5000	**SR50P306S**	11.60
5/8-11	7/8	1-1/8	2-1/2	1-15/16	2-1/2	6000	**SR50P308S**	15.50
3/4-10	1-1/16	1-1/2	3	1-31/32	3	7200	**SR50P310S**	24.40

Production Work Stop

- Use on your table for vertical or horizontal set ups
- 1/2” Clamping hole fits T-slot Nut and 1/2” Stud
- 7” Overall height, with 3/8” diameter stop rod



For Use With	Order No.	Price
1/2" Stud	**HT71EPWS1**	34.60

Protective Way Covers

For Series I and Series II Mills

- Protects the table bed and ways from damage
- Easily installed
- Acts as a wiper for front and rear knee
- 15.5”W x 29.5”L & 16” x 2”H
- Sold as a set
- Hole drilling reqired to fit Bridgeport Machines (JF70WAY)



WAY

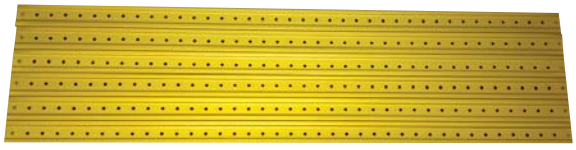


BAP000300

Style	Order No.	Price
Series I	**JF70WAY**	82.25
Series I	**RL35BAP000300**	145.20
Series II	**RL351680352**	147.40

6 Pc. Milling T-Slot Cover Set - 5/8"

- Anodized Aluminum T-Slot table guard inserts
- Save time from cleaning, speedy and convenient to enhance working efficiency
- Drilled for coolant drainage
- 6 Per package approximately 16” long each



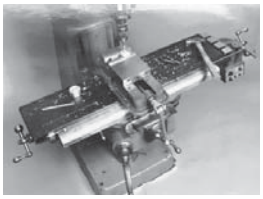
Model No.	For Use With	Order No.	Price
MSCSET	5/8" T-Slot Milling Tables	**JF70MSCSET**	52.30

CEDARBERG Table Guard & Tote

MADE IN THE USA

- Keep your tools in easy reach
- Stops chips from falling into T-slots
- Easy way to carry your tools from work bench to machine
- Specially grooved to fit right into table’s T-slots





Order No.	Price
LV508706001	33.90

Two-Life Drawbars™

- To Obtain “second life” after end wears out, cut off at “V” notch and remove large spacer
- Two drawbars in one
- Back-Up Advantage
- Prevents excessive downtime
- Longer hex head
- Extended thread length
- Black oxide coated



Model No.	Hex Length (in)	Bar Length (in)	Thread Size (in)	Use With	Order No.	Price
1026	4-1/4	18-1/4	7/16-20	Variable Speed Type Milling Machine	**RL401026**	27.00
1027	7-1/4	18-1/4	7/16-20	Right Angle Attachment	**RL401027**	27.80
1028	1-1/2	18-1/4	7/16-20	Step Pulley Type Milling Machine	**RL401028**	27.00
1803	4-1/4	18-1/2	7/16-20	Webb Champ, Comet Mill	**RL401803**	41.60
1806	9	18-1/2	7/16-20	F-20 Romi Mill	**RL401806**	41.60
1807	5-3/8	18-5/8	7/16-20	Kondia Mill	**RL401807**	41.60
1808	7-1/4	18-1/4	7/16-20	Lagun Mill	**RL401808**	41.60
1818	7-1/4	18-1/4	7/16-20	Wells Index	**RL401818**	41.60
1825	7-5/8	19-3/8	1/2-13	Kondia	**RL401825**	67.15

Milling Machine Drawbars

- Standard drawbars to fit most knee mill type machines



Item	For Use With	Order No.	Price
MADE IN THE USA	1J Step Pulley Mills	**NB80Z9004**	28.30
	2J Variable Speed Mills	**NB80Z9005**	32.10
	Lagun Variable Speed Mills	**NB80Z9005LAG**	46.25
	Most Model Mills Foreign or Domestic	**NB80Z9005UNIV**	79.60
DORIAN TOOL	Alliant Sharp	**GG35SDBAS**	54.67
	Bridgeport 1J Step Pulley	**GG35SDB1J**	47.44
	Bridgeport 2J Variable Speed	**GG35SDB2J**	51.46
	Index Lagun	**GG35SDBIL**	57.89
Bridgeport by HARDINGE	Bridgeport J Head	**RL352193502**	40.20
	Bridgeport Right Angle Attachment	**RL352183921**	49.58
	Bridgeport 2J Head	**RL352183920**	120.60

ACER Riser Blocks

- Obtain more clearance for very large work-pieces by using riser blocks
- Bolts included

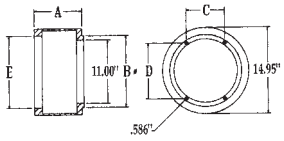


Size (in.)	Order No.	Price
4	**RA59MO139**	696.80
6	**RA59MO140**	777.20
8	**RA59MO150**	810.70

MADE IN THE USA Riser Blocks for Milling Machines

- Bolts are required for installation
- Spiders are optional
- 1701 & 1702 For old style 9" x 48" Bridgeport only
- All 9" x 49" Bridgeport use millport model
- Millport also fits a variety of other Taiwan type mills such as Acer, Alliant & more
- Risers are light gray color only - DOES NOT match Bridgeport gray color





Use With	Dim. A (in.)	Dim. B (in.)	Dim. C (in.)	Dim. D (in.)	Dim. E (in.)	Order No.	Price
Bridgeport	4	12.492	6.670	9.630	12.502	**JF711701**	554.60
Bridgeport	6	12.492	6.670	9.630	12.502	**JF711702**	597.20
Kondia	6	12.793	6.310	10.030	12.810	**JF710370282**	597.20
Lagun	4	12.518	6.750	9.626	12.521	**JF710370375**	554.60
Lagun	6	12.518	6.750	9.626	12.521	**JF710370376**	597.20
Millport or Similar Taiwan Mill	4	12.481	6.670	9.634	12.496	**JF710370238**	554.60
Millport	6	12.481	6.670	9.634	12.496	**JF710370239**	597.20

F.O.B. Factory

Spiders & Bolts

- Spiders and Bolts for Milling Machine Riser Blocks

Type - Bolt			
For Use With	**Size (in.)**	**Order No.**	**Price**
Bridgeport 1701	4	**JF711248L**	14.95
Bridgeport 1702	6	**JF711248XL**	18.00
Clausing/Kondia 0370282	6	**JF710370308**	39.00
Lagun Mill 0370375	4	**JF710370379**	19.25
Lagun Mill 0370376	6	**JF710370380**	19.25
Millport or Similar Taiwan Mill 0370238	4	**JF710370242**	39.00
Millport or Similar Taiwan Mill 0370239	6	**JF710370243**	39.00

Type - Spider		
For Use With	**Order No.**	**Price**
Bridgeport	**JF711243**	70.70
Lagun	**JF710370382**	68.30
Millport or Similar Taiwan Mill	**JF710370108**	68.30

Bridgeport by HARDINGE Down Feed Handle Assembly

- Heavy-duty—will not bend or break
- Replacement for conventional down feed handle
- For J or 2J style machines



Order No.	Price
RL352201033	64.32

Quill-Feed Speed Handle For Bridgeport Milling Machines Only

Does not fit Import Mills

- Time-saving accessory for Bridgeport operations
- No more pulling off and resetting the quill-feed handle for any repositioning
- Flick of the wrist retracts pin from index plate of the quill-feed mechanism and lets you move handle into any desired position
- Speeds operations considerably
- Replaces conventional feed handle in seconds
- No holes to be drilled
- Heavy duty construction, handle will not bend or break



Order No.	Price
NB80Z9900	50.15

"Twin-Grip" Quill Feed Speed Handles

- Eliminate the need to pull off and reset the quill feed handle
- A simple turn of the hand will retract the pins from the index plate of the quill feed mechanism and lets the operator move the handle into any desired postition
- Replace standard feed handles within seconds
- No holes to be drilled
- Rugged all steel construction
- 5 Year Warranty



For Use With	Order No.	Price
Atlas Clausing, Acra, Chevalier	**RL400837**	55.55
Bridgeport	**RL401021**	36.90
Bridgeport Series 4HP	**RL400875**	148.80
Kondia	**RL400030**	55.55
Lagun, Sharp	**RL400024**	55.55
Millport, Supermax	**RL400230**	55.55
SWI, Acer, Alliant	**RL400337**	55.55

The Educated Nut

- Adjust your quill depth in seconds with our depth stop nut
- The push button releases the nut for repositioning, .001" micrometer adjustments by rotating the nut
- A proven time-saver — 8 hours or more per month
- Easy installation — fits domestic or imported mills with 1/2-20 threaded stop rod

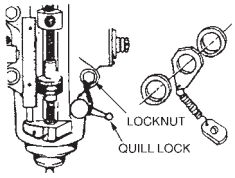


Order No.	Price
SG801220	56.55

Quill Free

- Economical way to prevent the quill lock handle from falling and putting drag on the quill
- Provides positive lock engagement and eliminates all drag
- Strong spring and custom hardware included





Order No.	Price
NB80Z8700	16.75

R8 Right Angle Attachment

- Designed to simplify right angle work by reducing the need of special tooling and difficult fixturing, ideal for cavities and pocket jobs
- Ductile Iron Body
- Precision Hardened & Ground Spiral Bevel Gears
- Sealed High Speed Bearings
- 1.33 to 1 Gear Ratio
- Grease Fitting
- Alignment Flats on 2 Sides
- R-8 Spindle to fit Collets and/or Arbors
- Drawbars sold separately
- For 3-3/8" quill
- 4140 Material



Order No.	Price
GG35MMRAAR8	1705.28

Special Draw Bar for R8 Milling Attachment

- 4140 Material

Model No.	Machine Type	Hex Length (in.)	Bar Length (in.)	Order No.	Price
ADBRA-190	Alliant-Sharp	9.5	18	**GG35ADBRA190**	77.18
BDBRA-2J800	Bridgeport, Kondia	8.5	18	**GG35BDBRA2J800**	67.54
ILDBRA-110	Index Lagun	11.5	18	**GG35ILDBRA110**	73.97

Quick Quill Stop

Fast, Precise, Economical

- Fast On-Off clip action
- Easy and rapid quill depth setting
- Rigid and positive clamping
- Increase productivity — reduce cost
- Fits all Bridgeport type mills or any 1/2-20 stop rod



Item	Model No.	Order No.	Price
MADE IN THE USA	Z9006	**NB80Z9006**	30.35
WORLD CLASS QUALITY	QS1	**NE60QS1**	16.45

Center It

- Enables the drilling of round pieces parallel & centered
- 7/16" Groove with 118° angle lets you bottom drill bit to center v-block and bolt in place
- 5"L x 4"W x 1-3/4"H
- Grooves on the outer sides eliminate slippage



Order No.	Price
HT60CIT	22.25

Swing-Away Adjustable Safety Guard

- Designed specifically for use on mill/drill machines, vertical turret milling machines and larger size drilling machines
- Shields are intended to deliver protection by deflecting chips, sparks, coolant or lubricants away from operator
- Unit is made of strong cast iron brackets and high impact polycarbonate
- Height clearance is easily adjusted with convenient locking knobs located on the mounting bracket
- Large shield easily swings in or out
- Size: 16"L x 13.5"W x 8"H
- Weight: 9 lbs.



Order No.	Price
PR6915035	163.05

Maxi Torque-Rite Power Drawbar Kits

- Fits Bridgeport and all similar milling machines
- Installs in just minutes on most machines with R-8, taper spindle
- Changes a tool in seconds
- Can deliver 40 to 50 foot/lbs.of torque, not 15 to 25 like the competition
- Will virtually eliminate tool slippage in collets on heavy cuts
- 1 Year Warranty
- **Kit Includes:** air filter, regulator & lubricator, drawbar, extra long air hoses, and all mounting hardware

MADE IN THE USA



Model No.	Use With	Order No.	Price
TR100SP	Step-Pulley Mills	**HT82TR100SP**	864.05
TR100	Bridgeport Variable Speed Mills (R8)	**HT82TR100**	801.35
TR100DB105	PRM Model (R8) Spindle Mill	**HT82TR100DB105**	801.35
TR100DB164	For Jet Model JTM4VS and Clausing Atlas 2VS08, 3VS08 Machines (R8)	**HT82TR100DB164**	801.35
TR100DB273	All 3V Style Acer Mils	**HT82TR100DB273**	801.35
TR100DB285	For Acer Manual Machines CAT 40 Spindle	**HT82TR100DB285**	801.35
TR100DB286	For Kent Models KTM3VKF & KTM4VKF Machines (R8)	**HT82TR100DB286**	801.35
TR100DB289	For Kent Model KTM5VKF Machines (NMTB 40)	**HT82TR100DB289**	801.35
TR100DB325	For Jet Model JTM1050 Machines (R8)	**HT82TR100DB325**	801.35
TR100DB343	For Summit VS350 (R8) Machines	**HT82TR100DB343**	801.35

KURT Power Lock Mechanical Drawbars

- A simple hand motion draws the pneumatic impact wrench onto the drawbar for positive torquing and untorquing
- Operates on standard 80 PSI, 3 CFM air supply
- Drawbar, tailored to fit your machine
- All mounting hardware
- Easy to understand installation
- Air filter and lubricator, regulator & gage unit
- 1 Year Warranty

MADE IN THE USA

KURT 360° Advantage



Model No.	Use With	Order No.	Price
AR6001	Acer 3VK	**HT80AR6001**	1029.87
BR6000	Bridgeport 2J	**HT80BR6000**	969.95
CL8400	Kondia, FV1, FV300	**HT80CL8400**	1093.98
MDBKIT40	Clausing 4VSQ	**HT80MDBKIT40**	1120.45
MDBKITR8V	Atlas 2VS, 3VS	**HT80MDBKITR8V**	1068.89
RL6100	Lagun FTV1, FTV2	**HT80RL6100**	1060.53
SH6600	Sharp HMV	**HT80SH6600**	1126.03

KURT Power Lock Automatic Drawbars

- Designed to change tools in just seconds
- Draws tool holders into the spindle taper & throws them accurately & consistently at the touch of a button
- Installs on most manual & CNC mills with either R-8 or 30 & 40 tapers
- Operates on standard 80 PSI, 3 CFM air supply
- Safety interlock to prevent accidental engagement
- Drawbar, tailored to fit your machine
- Pneumatic tool change system with air filter & lubricator, regulator & gage unit
- All mounting hardware
- 1 Year Warranty

KURT 360° Advantage

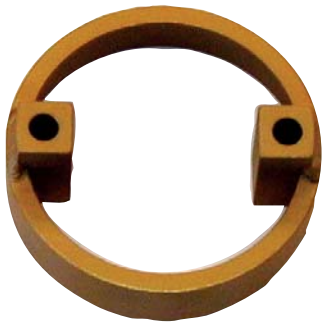
MADE IN THE USA



Model No.	Use With	Order No.	Price
BR1000	Bridgeport 2J	**HT80BR1000**	1162.26
CL3400	Clausing, Kondia, FV1, FV300	**HT80CL3400**	1475.82
DBKIT40	Clausing 4VSQ	**HT80DBKIT40**	1279.32
DBKITR8	Atlas 2VS, 3VS	**HT80DBKITR8**	1194.32
RL1100	Lagun FTV1, FTV2	**HT80RL1100**	1250.06
SH1600	Sharp LMV	**HT80SH1600**	1233.34
SM1401	Willis WM2VS, 1050,& 1250	**HT80SM1401**	1411.72
WE2700	Acer 3VK	**HT80WE2700**	1446.56

Nose Ring for 40 Taper Power Drawbar

- Drive dog extension kits allow the operator to align tool holders on drive dogs before engaging power drawbar, allowing for maximum thread engagement
- Works on both #40 & CAT40 Taper Spindles
- Kit contains: 1-Nose ring with extended drive dogs, 2) 5/16-18 x 1-1/4" S.H.C.S., 2) M8-1.25 X 30MM S.H.C.S.



Order No.	Price
HT82NOSERING	62.75

Replacement Drawbars

Replacement Drawbars for Maxi Torque-Rite Power Drawbars



Replacement Drawbar For	Order No.	Price
TR100DB100	**HT82DB100**	76.65
TR100DB145	**HT82DB2001454**	76.65
TR100DB164	**HT82164**	76.65

Replacement Drawbar For	Order No.	Price
TR100DB273	**HT82273**	76.65
TR100DB285	**HT82285**	76.65
TR100DB286	**HT82286**	76.65
TR100DB289	**HT82289**	76.65
TR100DB325	**HT82325**	76.65
TR100DB343	**HT82343**	76.65

KURT Replacement Drawbars for Power Drawbar Units



MADE IN THE USA

KURT 360° Advantage

Model No.	Use With	Order No.	Price
60001	BR1000 & BR6000	**HT8060001**	133.79
60008	SM1401 & SM6401	**HT8060008**	188.14
60013	RL1100 & RL6100	**HT8060013**	176.99
60016	SH1600	**HT8060016**	189.53
60017	SH6600	**HT8060017**	210.43

Model No.	Use With	Order No.	Price
60045	AR1000 & AR6000	**HT8060045**	151.90
60055	CL3400 & CL8400	**HT8060055**	183.96
DIYR8	DBKITR8	**HT80DIYR8**	93.37
DIYT40	DBKIT40	**HT80DIYT40**	172.81

PRM Powerfeeds

- Maximum Torque: 650 in/lbs
- Voltage 110V 50/60Hz
- Speed Range 0 to 200 RPM
- Mounts to almost any Bridgeport style knee mill
- Mounting hardware included

New!



Model No.	Description	Order No.	Price
AL-510X	X-Axis	**PR67510X**	636.50
AL-510Y	Y-Axis	**PR67510Y**	636.50
AL-510Z	Z-Axis	**PR67510Z**	636.50

SERVO Feeds —The Finest Variable Speed Mill Feed Available

- 1 Year Warranty
- JD80M0206140 & JD80M0206150 (M0206) Replacement for Bridgeport model 6F or 8F motor hangs down and back at 45° angle, shaft stops at edge of table
- BELOW PRICES DO NOT INCLUDE INSTALLATION

Type 140 Features:
- Variable Speed Range: 3/4 to 25 IPM
- Rapid Traverse: 35 IPM
- Torque Rating: 140 FPM

Type 150 Features:
- Variable Speed Range: 3/4 to 35 IPM
- Rapid Traverse: 35 IPM
- Torque Rating: 150 FPM

MADE IN THE USA

Knee Feed Type 200 Variable Speed Features:
- For lifting the heaviest knees on the market
- Variable Speed Range: .05 to 12.0 IPM
- Rapid Traverse: 15 IPM
- Torque Rating: 200 FPM



Type - 140				
Model No.	**Description**	**For Use With**	**Order No.**	**Price**
M-9108-140	X-Axis Table Feed	Acer 3VS & 3VK, Kent 3VK, 4VK & 5VK	**JD80M9108140**	1042.55
M-9109-140	X-Axis Table Feed	Birmingham 942, 1050, Kent 2S	**JD80M9109140**	1058.60
M-0206-140	X-Axis Table Feed	Bridgeport (replaces electronic feed)	**JD80M0206140**	1309.20
M-0200-140	X-Axis Table Feed	Bridgeport Series 1	**JD80M0200140**	971.50
M-2500-140	X, Y & Z Axis Powerfeed	General Purpose	**JD80M2500140**	920.60
M-9508-140	Y-Axis Cross Feed	Acer 3VS & 3VK, Kent 3VK, 4VK & 5VK	**JD80M9508140**	1234.15
M-0250-140	Y-Axis Cross Feed	Bridgeport 12" Cross Travel	**JD80M0250140**	1074.70
M-9810-140	Z-Axis	Acer 3VS & 3VK	**JD80M9810140**	1263.65
M-9811-140	Z-Axis	Acer 3VS & 3VK after 1992	**JD80M9811140**	1278.40
M-2380-140	Z-Axis	Birmingham 942,1050	**JD80M2380140**	1230.15
M-0280-140	Z-Axis Knee Feed	Bridgeport	**JD80M0280140**	1078.70

Type - 150				
Model No.	**Description**	**For Use With**	**Order No.**	**Price**
ECF-150	Base Feed No Mounting Hardware	-	**JD80ECF150**	980.90
M-9108-150	X-Axis Table Feed	Acer 3VS & 3VK, Kent 3VK, 4VK & 5VK	**JD80M9108150**	1202.00
M-9109-150	X-Axis Table Feed	Birmingham 942, 1050, Kent 2S	**JD80M9109150**	1216.75
M-0206-150	X-Axis Table Feed	Bridgeport (replaces electronic feed)	**JD80M0206150**	1468.65
M-0200-150	X-Axis Table Feed	Bridgeport Series 1	**JD80M0200150**	1105.50
M-2500-150	X, Y & Z Axis Powerfeed	General Purpose	**JD80M2500150**	1080.05
M-9508-150	Y-Axis Cross Feed	Acer 3VS & 3VK, Kent 3VK, 4VK & 5VK	**JD80M9508150**	1392.30
M-0250-150	Y-Axis Cross Feed	Bridgeport 12" Cross Travel	**JD80M0250150**	1208.70

Type - 200				
Model No.	**Description**	**For Use With**	**Order No.**	**Price**
M-9810-200	Z-Axis Knee Feed	Acer 3VS & 3VK	**JD80M9810200**	1341.35
M-9811-200	Z-Axis Knee Feed	Acer 3VS & 3VK after 1992	**JD80M9811200**	1354.75
M-2380-200	Z-Axis Knee Feed	Birmingham 942 & 1050	**JD80M2380200**	1306.50
M-0280-200	Z-Axis Knee Feed	Bridgeport Series I	**JD80M0280200**	1155.10
M-3580-200	Z-Axis Knee Feed	Clausing 400EVS, 450EVS & 500EVS	**JD80M3580200**	1250.25
M-2500-200	Z-Axis Knee Feed	General Purpose	**JD80M2500200**	997.00
M-5580-200	Z-Axis Knee Feed	Kent 2S	**JD80M5580200**	1345.40
M-9808-200	Z-Axis Knee Feed	Kent 3VK, 4VK & 5VK	**JD80M9808200**	1420.40
M-1380-200	Z-Axis Knee Feed	Kondia G & FV-1	**JD80M1380200**	1250.25
M-4380-200	Z-Axis Knee Feed	Sharp HMV, OMV, QMV1 & QMV2	**JD80M4380200**	1433.80

Power Feed Accessories

MADE IN THE USA

Model No.	Description	Order No.	Price
KP-0620SHKIT	Safety Handle Kit	**JD80620SH**	221.10
KP-0640SXKIT	Shaft Extension Kit	**JD80640SX**	482.40
KP-0660MSKIT	Limit Switch Kit	**JD80660MS**	120.60

Align Power Feeds



- Easily mounts to almost any Bridgeport type knee mill, no modification necessary
- Circuit panel is designed to accept replaceable insert type connectors
- Nylon clutch has built-in torque release to prevent damage in the case of too much resistance

Standard Equipment:

- On/off switch, forward, reverse, rapid traverse, jog button, 8' line cord, plug & mounting hardware

AL500 Features:

- Speed range: 0 to 160 RPM
- Bevel Drive Gear Rate: 4.8:1
- Torque rating: 780 IN-LB (900Kgf/cm)
- Power: 1 Amp/1 Phase/110 Volt
- Weight: 15 lbs.

Model No.	Description	Order No.	Price
AL500SX	X-Axis	**JD30AL500SX**	762.50
AL500SY	Y-Axis	**JD30AL500SY**	762.50
AL500SZ	Z-Axis	**JD30AL500SZ**	762.50

Phase-A-Matic Static Phase Converters

MADE IN THE USA

Runs Motor Loads Only at 2/3 Rated HP



How To Size:

- The largest motor on your machine must fall within the minimum and maximum range of the converter
- Do not order a larger unit or heavy duty model thinking it will give more horsepower

When To Use Heavy Duty:

- Heavy starting loads (lathes, flywheel driven equipment,etc.)
- Instant reversing, frequent starting, jogging
- Air compressors (motor pulley must be reduced by 1/3 in diameter)

Heavily Loaded Equipment:

- For pumps, fans, blowers, direct-drive compressors, or equipment requiring greater than 2/3 of its rated HP, you must USE A PHASE-A-MATIC™ ROTARY CONVERTER.

Type - Regular Duty Static Phase Converter				
Model No.	**HP Range (in.)**	**Weight**	**Order No.**	**Price**
PAM-100	1/3 to 3/4	3 lbs	**RD30PAM100**	187.60
PAM-200	3/4 to 1-1/2	3 lbs	**RD30PAM200**	201.00
PAM-300	1 to 3	3 lbs	**RD30PAM300**	227.80
PAM-600	3 to 5	3 lbs	**RD30PAM600**	281.40
PAM-900	4 to 8	3 lbs	**RD30PAM900**	308.20

Type - Heavy Duty Static Phase Converter				
Model No.	**HP Range (in.)**	**Weight**	**Order No.**	**Price**
PAM-100HD	1/3 to 3/4	3 lbs	**RD30PAM100HD**	227.80
PAM-200HD	3/4 to 1-1/2	3 lbs	**RD30PAM200HD**	254.60
PAM-300HD	1 to 3	3 lbs	**RD30PAM300HD**	281.40
PAM-600HD	3 to 5	4 lbs	**RD30PAM600HD**	375.20
PAM-900HD	4 to 8	4 lbs	**RD30PAM900HD**	415.40
PAM-1200HD	8 to 12	5 lbs	**RD30PAM1200HD**	562.80
PAM-1800HD	12 to 18	20 lbs	**RD30PAM1800HD**	1005.00
PAM-3600HD	20 to 30	30 lbs	**RD30PAM3600HD**	1407.00
PAM-5000HD	30 to 50	40 lbs	**RD30PAM5000HD**	2144.00

MADE IN THE USA Phase-A-Matic Rotary Phase Converters

Full Power Converter - Resistive & Motor Loads

Features:

- Heavily loaded applications
- Multi-motor operation
- Multi-speed applications
- No changing motors or switch gear
- Full 12 month warranty
- Easy to install
- No interference to TV, Computers, etc.
- In stock for immediate delivery
- For larger sizes or 460V operation, consult factory
- Heavy load applications also 460V models


R2

NOTE:

- For long, heavy starting loads, instant reversing, momentarily overloaded motors, or imported equipment, contact factory, or refer to Application Guidelines RTN.
- Voltage Stabilizer available for high line voltage & voltage sensitive equipment such as CNC/PLC 's

Model No.	Horse Power	Weight	Order No.	Price
R-1	1	35 lbs	**RD30R1**	830.80
R-2	2	43 lbs	**RD30R2**	978.20
R-3	3	63 lbs	**RD30R3**	1125.60
R-5	5	70 lbs	**RD30R5**	1407.00
R-7	7	106 lbs	**RD30R7**	1943.00
R-10	10	126 lbs	**RD30R10**	2546.00
R-15	15	208 lbs	**RD30R15**	3350.00
R-20	20	240 lbs	**RD30R20**	4020.00
R-25	25	296 lbs	**RD30R25**	4824.00
R-30	30	320 lbs	**RD30R30**	5360.00
R-40	40	448 lbs	**RD30R40**	6566.00
R-50	50	480 lbs	**RD30R50**	7906.00
R-100	100	960 lbs	**RD30R100**	14606.00

F.O.B. Palmdale, CA

MADE IN THE USA Phase-A-Matic Voltage Stabilizer

- For CNC and other voltage sensitive equipment
- A Voltage Stabilizer, Rotary Converter COMBINATION, when properly sized, provides the necessary voltage balance of close to +/-5% or less between legs and helping to keep output voltage stable during peak loads, helping CNC and other voltage sensitive equipment to operate properly
- Most CNC machines require a Voltage Stabilizer, Rotary Converter COMBINATION sized 1-1/2 to 2 sizes larger than the spindle motor to accomadate the extra amps for starting, instant reversing, and for the servos, hydraulics, etc



VS1

Model No.	Horse Power	Weight	Order No.	Price
VS-1	1	9 lbs	**RD30VS1**	368.50
VS-2	2	10 lbs	**RD30VS2**	402.00
VS-3	3	14 lbs	**RD30VS3**	469.00
VS-5	5	17 lbs	**RD30VS5**	603.00
VS-7	7-1/2	19 lbs	**RD30VS712**	737.00
VS-10	10	25 lbs	**RD30VS10**	871.00
VS-15	15	30 lbs	**RD30VS15**	1139.00
VS-20	20	45 lbs	**RD30VS20**	1809.00
VS-25	25	63 lbs	**RD30VS25**	2211.00
VS-30	30	75 lbs	**RD30VS30**	2546.00
VS-40	40	80 lbs	**RD30VS40**	2814.00
VS-50	50	90 lbs	**RD30VS50**	3752.00
VS-100	100	180 lbs	**RD30VS100**	6566.00

One Tube SDR Grease for Rotary Phase Converters

Order No.	Price
RD30SDR	24.15

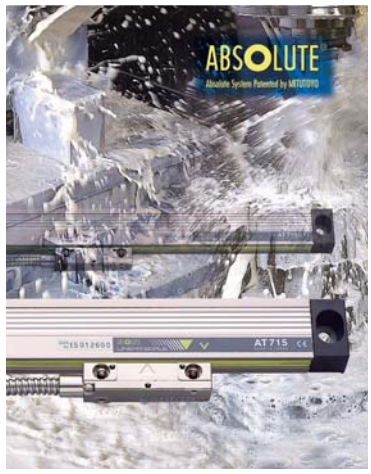
Hazard Code: 57



Mitutoyo AT715 IP67 ABS-DRO Systems

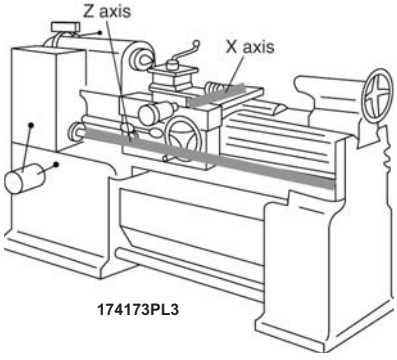
with Submersible Oil and Coolant Proof Magnetic Scales

- Use a new Electromagnetic Induction Detection method for improved reliability and contamination protection
- True Absolute Scale Technology means your original part datum point is never lost, even after power down.
- Increased production by putting the coolant where it's needed, without having to worry about scale damage
- Less downtime for maintenance.



Mitutoyo Absolute DRO System Lathe Packages

- KA-200 counter
- AT116 and AT715 linear sclae combinations (with cables)
- Mounting bracket kit
- Counter tray
- Additional extension calbe (2m) include in 60" and 72 " packages
- 5 Year Warranty



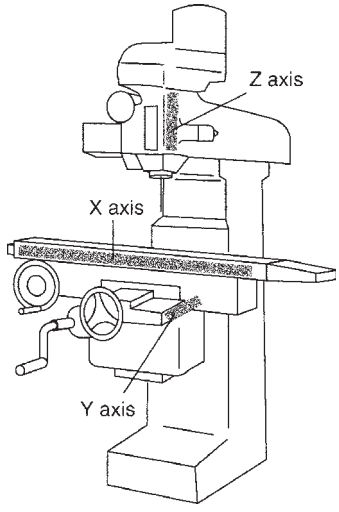
174173PL3

Travel (in.)	Order No.	Price
6 x 36	**MT85174173PL2**	2733.60
8 x 40	**MT85174173PL3**	2251.20
8 x 48	**MT85174173PL17**	2733.60
10 x 40	**MT85174173PL4**	2251.20
10 x 48	**MT85174173PL6**	2733.60
10 x 60	**MT85174173PL7**	2211.00
12 x 60	**MT85174173PL29**	2211.00
12 x 72	**MT85174173PL8**	2733.60
14 x 60	**MT85174173PL35**	2733.60

F.O.B. Factory

Mitutoyo Absolute DRO System Mill Packages

- DRO Mill Package is supplied with a 2-Axis KA counter, scales and mounting hardware
- 5 Year Warranty



Travel	Order No.	Price
12 x 36	**MT85174173PM2K**	2178.10
16 x 36	**MT85174173PM5K**	1996.60

F.O.B. Factory

Mitutoyo Quill Kit

Easy Installation Fits Most Vertical Knee Mills

- Easy to read LCD with resolution of .0005" / 0.01mm
- Push button controls for inch/mm, zero-set and on/off
- Powered by a single SR-44 battery which lasts about 1 year with normal use
- SPC output for data transmission to data processors or LED remote display box
- Digimatic quill kit complete with brackets & scale for Bridgeport type machines



Order No.	Price
MT85053906	415.40

Mitutoyo KA Counters Only

- Preset
- Inch/mm
- 1/2 Calculation
- 10 Tool off sets
- Diameter display
- Zero approach machining
- Pitch approach machining
- Bolt hole circle calculation
- Detection reference (with AT100 series scales)
- Touch signal probe set and hold (with AT100 series scales)
- Standard Resolution .0005"/.0002"/.0001"/.00005" 0.005mm/0.002mm/0.001mm
- 5 Year Warranty



174173A

Travel	Order No.	Price
3 Axis KA Counter	**MT85174175A**	1157.80
PK-A14 with KA Counter & Tray	**MT8564PKA086A**	8549.20

FAGOR 20i Prokit Mill Packages

Features:
- Bolt-hole drilling
- Linear drilling calculation
- Tool radius compensation
- Part centering
- Up to 20 part zeros (datum points)
- Part angle
- Corner rounding / machining of arcs
- Two year warranty





Machine Travels (in.)	Description	Order No.	Price
12 x 30	For Milling Applications	**MS45PROKIT1**	1874.66
12 x 36	For Milling Applications	**MS45PROKIT2**	1874.66
16 x 32	For Milling Applications	**MS45PROKIT3**	1874.66
16 x 36	For Milling Applications	**MS45PROKIT5**	2031.44
18 x 40	For Milling Applications	**MS45PROKIT4**	2031.44

FAGOR 20i LED Prokit Lathe Packages

Features:
- Tool Offset
- Radius/Diameter
- Scaling, Preset/Reset
- 20 Work Offset Points
- Absolute/Incremental
- Travel Limit set up
- Linear Error Compensation
- Advance Error Detection System
- Two year warranty



Machine Travel (in.)	Description	Order No.	Price
6 x 36	For Lathe Applications	**MS45PROKITT1**	2282.02
8 x 40	For Lathe Applications	**MS45PROKITT4**	2351.70
10 x 60	For Lathe Applications	**MS45PROKITT14**	2941.30
10 x 80	For Lathe Applications	**MS45PROKITT17**	3521.52
12 x 60	For Lathe Applications	**MS45PROKITT24**	2978.82
12 x 80	For Lathe Applications	**MS45PROKITT27**	3600.58
14 x 40	For Lathe Applications	**MS45PROKITT32**	2470.96
14 x 60	For Lathe Applications	**MS45PROKITT35**	3020.36
14 x 80	For Lathe Applications	**MS45PROKITT38**	3686.34
18 x 120	For Lathe Applications	**MS45PROKITT56**	5090.66

Additional Shipping Charges May Apply

FAGOR 40i TFT Color Prokit Lathe Packages

- Taper calculation
- Combination of the Z1 and Z2 axis
- 16 Datum points
- Two year warranty



Machine Travel (in.)	Description	Order No.	Price
8 x 40	For Lathe Applications	**MS45PROKITTC4**	2978.82
10 x 40	For Lathe Applications	**MS45PROKITTC11**	3020.36
10 x 52	For Lathe Applications	**MS45PROKITTC13**	3333.92
10 x 60	For Lathe Applications	**MS45PROKITTC14**	3443.80
12 x 60	For Lathe Applications	**MS45PROKITTC24**	3521.52
12 x 80	For Lathe Applications	**MS45PROKITTC27**	4234.40

FAGOR 40i TFT 2-Axis Color Prokit Mill Digital Readout Packages

Features:

- CE and UL certified
- Linear and angular axis
- Feedback signal monitoring
- Linear and multi-point compensation
- Radius or diameter display
- Preset and zero setting of the axis
- Incremental and distance-coded reference marks
- Tool radius compensation
- Direct mm/inch conversion
- Absolute / Incremental measurement
- Calculator
- 3D color display of tool path
- Bolt-hole drilling calculation
- Linear drilling calculation
- 2 Year Warranty



Travel (in.)	Description	Order No.	Price
12 x 30	For Milling Applications	**MS45PROKITMC1**	2588.88
12 x 36	For Milling Applications	**MS45PROKITMC2**	2588.88
16 x 32	For Milling Applications	**MS45PROKITMC3**	2588.88
16 x 36	For Milling Applications	**MS45PROKITMC5**	2658.56

Additional Shipping Charges May Apply • F.O.B. Elk Grove, IL

FAGOR 40i TFT Milling 3-Axis Digital Readout Packages

Features:

- Display - 5.7" Color TFT screen
- Linear and angular axis
- Feedback signal monitoring
- Linear and multi-point compensation
- Radius or diameter display
- Preset and zero setting of the axis
- Incremental and distance-coded reference marks
- Tool radius compensation
- 3D color display of tool path
- Bolt-hole drilling calculation
- Linear drilling calculation
- Q = Quill on order number
- K = Knee on order number
- 2 Year Warranty



Style - Knee			
Machine Travels (in.)	**Description**	**Order No.**	**Price**
12 x 36 x 16	For Milling Applications	**MS45MC023XK**	3350.00
16 x 36 x 16	For Milling Applications	**MS45MC053XK**	3433.08

Style - Quill			
Machine Travels (in.)	**Description**	**Order No.**	**Price**
12 x 30 x 6	For Milling Applications	**MS45MC013XQ**	3130.24
12 x 36 x 6	For Milling Applications	**MS45MC023XQ**	3130.24
14 x 36 x 6	For Milling Applications	**MS45MC083XQ**	3177.14
16 x 32 x 6	For Milling Applications	**MS45MC033XQ**	3130.24
16 x 36 x 6	For Milling Applications	**MS45MC053XQ**	3207.96
18 x 40 x 6	For Milling Applications	**MS45MC043XQ**	3207.96

F.O.B. Factory

NEWALL NMS300 Digital Readouts

- Spherosyn300 Scales (3 ax package with quill includes Microsyn300)
- Scale Guards
- NMS300 Reader Heads
- Scale Support Brackets
- Reader Head Mounting Bracket Kit; Two axis packages will include BPK01 (Metric); Three axis with knee will include BPK01 and KBK01 (Metric); Three axis with quill will include BPK01 and QBK01 (Metric)
- Display Mounting Arm
- Features
- 2 or 3 Axis
- Multiple Language
- 4 User Defineable Function Keys
- Absolute/Incremental operation
- Axis Pre-Set / Zero reset
- Inch/mm conversion
- Linear/segmented Error Compensation
- DigiFind/Refernce mark
- Centre Find
- Undo Function



New!

Application - Milling Style - 2 Axis		
Travel	**Order No.**	**Price**
12 x 30	**MS33301230XXBK1**	1467.30
12 x 36	**MS33301236XXBK1**	1467.30
14 x 36	**MS33301436XXBK1**	1467.30
16 x 36	**MS33301636XXBK1**	1467.30

Application - Milling Style - 3 Axis w/Knee		
Travel	**Order No.**	**Price**
12 x 30 x 16	**MS3330123016BK2**	1953.75
12 x 36 x 16	**MS3330123616BK2**	1953.75
14 x 36 x 16	**MS3330143616BK2**	1953.75
16 x 36 x 16	**MS3330163616BK2**	1953.75

Application - Milling Style - 3 Axis w/Quill		
Travel	**Order No.**	**Price**
12 x 30 x 6	**MS3330123006BK3**	1953.75
12 x 36 x 6	**MS3330123606BK3**	1953.75
14 x 36 x 6	**MS3330143606BK3**	1953.75
16 x 36 x 6	**MS3330163606BK3**	1953.75

NEWALL NMS300 Digital Readouts (cont.)

Application - Turning Style - Microsyn Serial		
Travel	Order No.	Price
6 x 40	MS3330640XXLP2	1762.10
6 x 60	MS3330660XXLP2	1908.20
6 x 72	MS3330672XXLP2	2055.60
6 x 80	MS3330680XXLP2	2203.00
6 x 120	MS3332006XXLP2	2878.35
8 x 40	MS3330840XXLP2	1762.10
8 x 60	MS3330860XXLP2	1908.20
8 x 72	MS3330872XXLP2	2055.60
8 x 80	MS3330880XXLP2	2203.00
8 x 120	MS3332008XXLP2	2878.35
10 x 40	MS3331040XXLP2	1762.10
10 x 60	MS3331060XXLP2	1908.20
10 x 72	MS3331072XXLP2	2055.60
10 x 80	MS3331080XXLP2	2203.00
10 x 120	MS3332010XXLP2	2878.35
12 x 60	MS3331260XXLP2	1908.20
12 x 72	MS3331272XXLP2	2055.60
12 x 80	MS3331280XXLP2	2203.00
12 x 120	MS3332012XXLP2	2878.35
14 x 60	MS3331460XXLP2	1908.20

Application - Turning Style - Microsyn Serial		
Travel	Order No.	Price
14 x 72	MS3331472XXLP2	2055.60
14 x 80	MS3331480XXLP2	2203.00
14 x 120	MS3332014XXLP2	2878.35

Application - Turning Style - Spherosyn Serial		
Travel	Order No.	Price
6 x 40	MS33330640XXLP1	1762.10
6 x 60	MS3330660XXLP1	1908.20
6 x 72	MS3330672XXLP1	2055.60
6 x 80	MS3330680XXLP1	2203.00
6 x 120	MS3332006XXLP1	2878.35
8 x 40	MS3330840XXLP1	1762.10
8 x 60	MS3330860XXLP1	1908.20
8 x 72	MS3330872XXLP1	2055.60
8 x 80	MS3330880XXLP1	2203.00
8 x 120	MS3332008XXLP1	2878.35
10 x 40	MS3331040XXLP1	1762.10
10 x 60	MS3331060XXLP1	1908.20
10 x 72	MS3331072XXLP1	2055.60
10 x 80	MS3331080XXLP1	2203.00
10 x 120	MS3332010XXLP1	2878.35

New!



Application - Turning Style - Spherosyn Serial		
Travel	Order No.	Price
12 x 60	MS3331260XXLP1	1908.20
12 x 72	MS3331272XXLP1	2055.60
12 x 80	MS3331280XXLP1	2203.00
12 x 120	MS3332012XXLP1	2878.35
14 x 60	MS3331460XXLP1	1908.20
14 x 72	MS3331472XXLP1	2055.60
14 x 80	MS3331480XXLP1	2203.00
14 x 120	MS3332014XXLP1	2878.35

NEWALL NMS800 Digital Readouts

- NMS800 DRO Display - 2 Axis
- Encoder Assemblies
- Spherosyn Serial Reader Heads
- Spherosyn® Serial Scales
- Scale Support Brackets
- Mounting Bracket Kit
- Display Moutning Arm
- NMS800 Features
- Datum preset/reset
- Inch/mm
- Abs/Inc
- Ref location
- 1/2 Function
- Linear and segmented error comp per axis
- Radius/diameter axis setting



New!

- RPM display for rotary encoder input
- Standard calculator functions
- Tool change (new operation); Sets the current tool type, offsets, diameter, etc
- Display message (new operation);Will display a text message to the screen (mainly for use in Jobs)
- Bolt hole/PCD;Selectable start and end angle (for full or partial circles)
- Line/Grid; Selectable angle; Selectable number of holes X direction (line); Optional number of holes Y direction (grid)
- Arc contour/Incline; Selectable plane (X-Y, Y-Z, X-Z); X-Y plane would be like current Arc contour; Y-Z and X-Z would cover incline (arc going up instead of flat)
- Taper calculator
- Slot; Selectable start point, orientation (X or Y axis) and length; Slot width determined by current tool diameter
- Pocket/Island; Selectable width, height and location; Pocket will compensate tool inside W and H; Island will compensate tool outside W and H
- Lathe vectoring

Application - Milling Style - 2 Axis		
Travel	Order No.	Price
12 x 24	MS331224XXBK1	2252.55
12 x 30	MS331230XXBK1	2298.10
12 x 36	MS331236XXBK1	2298.10
16 x 30	MS331630XXBK1	2298.10
16 x 36	MS331636XXBK1	2298.10
16 x 40	MS331640XXBK1	2298.10

Application - Milling Style - 3 Axis w/Knee		
Travel	Order No.	Price
12 x 24 x 16	MS33122416BK2	3068.60
12 x 30 x 16	MS33123016BK2	3130.25
12 x 36 x 16	MS33123616BK2	3130.25
16 x 30 x 16	MS33163016BK3	3130.25
16 x 36 x 16	MS33163616BK3	3130.25
16 x 40 x 16	MS33164016BK3	3130.25

Application - Milling Style - 3 Axis w/Quill		
Travel	Order No.	Price
12 x 2 x 6	MS33122406BK3	3068.60
12 x 30 x 6	MS33123006BK3	3130.25
12 x 36 x 6	MS33123606BK3	3130.25
16 x 30 x 6	MS33163006BK3	3130.25
16 x 36 x 6	MS33163606BK3	3130.25
16 x 40 x 6	MS33164006BK3	3130.25

Application - Turning Style - Microsyn Serial		
Travel	Order No.	Price
6 x 40	MS33800640XXLP2	3053.90
6 x 50	MS33800650XXLP2	3284.35
6 x 60	MS33800660XXLP2	3620.70
8 x 40	MS33800840XXLP2	3053.90
8 x 50	MS33800850XXLP2	3284.35
8 x 60	MS33800860XXLP2	3620.70
8 x 72	MS33800872XXLP2	4091.05
8 x 80	MS33800880XXLP2	4404.60
10 x 40	MS33801040XXLP2	3053.90
10 x 50	MS33801050XXLP2	3284.35
10 x 60	MS33801060XXLP2	3620.70
10 x 72	MS33801072XXLP2	4091.05
10 x 80	MS33801080XXLP2	4404.60
10 x 100	MS33810010XXLP2	5252.80

Application - Turning Style - Microsyn Serial		
Travel	Order No.	Price
12 x 60	MS33801260XXLP2	3620.70
12 x 72	MS33801272XXLP2	4091.05
12 x 80	MS33801280XXLP2	4404.60
12 x 100	MS33810012XXLP2	5264.90
12 x 120	MS33812012XXLP2	6023.30
12 x 160	MS33816012XXLP2	7362.00
12 x 200	MS33820012XXLP2	9231.30
14 x 60	MS33801460XXLP2	3620.70
14 x 72	MS33801472XXLP2	4091.05
14 x 80	MS33801480XXLP2	4404.60
14 x 100	MS33810014XXLP2	5252.80
14 x 120	MS33812014XXLP2	6023.30
14 x 160	MS33816014XXLP2	7362.00
14 x 200	MS33820014XXLP2	9231.30
14 x 240	MS33824014XXLP2	9842.30
16 x 100	MS33810016XXLP2	5252.80
16 x 120	MS33812016XXLP2	6023.30
16 x 160	MS33816016XXLP2	7362.00
16 x 200	MS33820016XXLP2	9231.30
16 x 240	MS33824016XXLP2	9842.30
18 x 160	MS33816018XXLP2	7363.30
18 x 200	MS33820018XXLP2	9231.30
18 x 240	MS33824018XXLP2	9842.30
20 x 120	MS33812020XXLP2	6023.30
20 x 160	MS33816020XXLP2	7362.00
20 x 200	MS33820020XXLP2	9231.30
20 x 240	MS33824020XXLP2	9842.30
22 x 160	MS33816022XXLP2	7362.00
22 x 200	MS33820022XXLP2	9231.30
22 x 240	MS33824022XXLP2	9842.30

Application - Turning Style - Spherosyn Serial		
Travel	Order No.	Price
6 x 40	MS33800640XXLP1	3053.90
6 x 50	MS33800650XXLP1	3284.35
6 x 60	MS33800660XXLP1	3620.70
8 x 40	MS33800840XXLP1	3053.90
8 x 50	MS33800850XXLP1	3284.35
8 x 60	MS33800860XXLP1	3620.70

Application - Turning Style - Spherosyn Serial		
Travel	Order No.	Price
8 x 72	MS33800872XXLP1	4091.05
8 x 80	MS33800880XXLP1	4404.60
10 x 40	MS33801040XXLP1	3053.90
10 x 50	MS33801050XXLP1	3284.35
10 x 60	MS33801060XXLP1	3620.70
10 x 72	MS33801072XXLP1	4091.05
10 x 80	MS33801080XXLP1	4404.60
10 x 100	MS33810010XXLP1	5252.80
12 x 60	MS33801260XXLP1	3620.70
12 x 72	MS33801272XXLP1	4091.05
12 x 80	MS33801280XXLP1	4404.60
12 x 100	MS33810012XXLP1	5264.90
12 x 120	MS33812012XXLP1	6023.30
12 x 160	MS33816012XXLP1	7362.00
12 x 200	MS33820012XXLP1	9231.30
14 x 60	MS33801460XXLP1	3620.70
14 x 72	MS33801472XXLP1	4091.05
14 x 80	MS33801480XXLP1	4404.60
14 x 100	MS33810014XXLP1	5252.80
14 x 120	MS33812014XXLP1	6023.30
14 x 160	MS33816014XXLP1	7362.00
14 x 200	MS33820014XXLP1	9231.30
14 x 240	MS33824014XXLP1	9842.30
16 x 100	MS33810016XXLP1	5252.80
16 x 120	MS33812016XXLP1	6023.30
16 x 160	MS33816016XXLP1	7362.00
16 x 200	MS33820016XXLP1	9231.30
16 x 240	MS33824016XXLP1	9842.30
18 x 160	MS33816018XXLP1	7363.30
18 x 200	MS33820018XXLP1	9231.30
18 x 240	MS33824018XXLP1	9842.30
20 x 120	MS33812020XXLP1	6023.30
20 x 160	MS33816020XXLP1	7362.00
20 x 200	MS33820020XXLP1	9231.30
20 x 240	MS33824020XXLP1	9842.30
22 x 160	MS33816022XXLP1	7362.00
22 x 200	MS33820022XXLP1	9231.30
22 x 240	MS33824022XXLP1	9842.30

ACU-RITE DRO102 Digital Readouts

- 7” TFT color display
- USB Type C data interface
- Feed rate display
- Mulitple language supports
- Absolute/Incremental
- Help function
- Zero reset
- Instant inch/mm conversion
- Counter diagnostics
- Encoder input linear or rotary
- 2 Year Warranty

New!



Application - Grinding		
Machine Travel (in.)	Order No.	Price
6 x 12	**HC01G1020612**	2973.50
6 x 18	**HC01G1020618**	3182.50
8 x 16	**HC01G1020816**	3037.80
8 x 18	**HC01G1020818**	3182.50
8 x 20	**HC01G1020820**	3297.75
10 x 20	**HC01G1021020**	3316.50
12 x 20	**HC01G1021220**	3316.50
12 x 24	**HC01G1021224**	3390.20

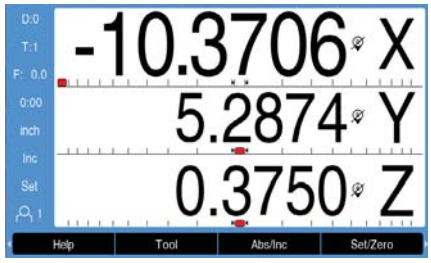
Application - Milling		
Machine Travel (in.)	Order No.	Price
8 x 18	**HC01M1020818**	2003.30
12 x 30	**HC01M1021230**	2003.30
12 x 36	**HC01M1021236**	2003.30
13 x 35	**HC01M1021335**	2003.30
13 x 36	**HC01M1021336**	2003.30
16 x 36	**HC01M1021636**	2003.30
16 x 40	**HC01M1021640**	2003.30

Application - Turning		
Machine Travel (in.)	Order No.	Price
8 x 40	**HC01T1020840**	2438.80
8 x 60	**HC01T1020860**	2978.85
10 x 36	**HC01T1021036**	2312.85
10 x 40	**HC01T1021040**	2458.90
10 x 54	**HC01T1021054**	2864.95
10 x 60	**HC01T1021060**	3002.95
10 x 78	**HC01T1021078**	3595.25
12 x 40	**HC01T1021240**	2475.00
12 x 60	**HC01T1021260**	3015.00
12 x 78	**HC01T1021278**	3610.00
14 x 60	**HC01T1021460**	3053.90
14 x 78	**HC01T1021478**	3646.15
16 x 60	**HC01T1021660**	3120.90
16 x 84	**HC01T1021684**	3887.35
16 x 120	**HC01T1021693**	5007.60

ACU-RITE DRO203 Digital Readout Packages

- 7” TFT Color Display
- USB Type C Data Interface
- Job Clock
- Feed Rate Display
- Multiple Language Supports
- Absolute/Incremental
- Graphic Pos aid for Near Zero Warning with Graphics
- Help Function
- 16 Tool Offsets / Diameter
- Preset and Zero Reset
- 4 Function Calculator / Trig Calculator / RPM
- Instance inc/mm Conversion
- Position-TracTM (Recalls last data after power loss) / RM
- Multiple Datums
- Scale Factor (Allows for part shrinkage / expansion)
- Counter Diagnostics
- Encoder Input Linear or Rotary
- Linear / Non-Linear Compensation up to ±9,999 ppm
- Backlash Compensation
- 2 Year Warranty

New!



Application - Grinding		
Machine Travels (in.)	Order No.	Price
6 x 12	**HC02G2030612**	3509.50
6 x 18	**HC02G2030618**	3718.50
8 x 16	**HC02G2030816**	3573.80
8 x 18	**HC02G2030818**	3718.50
8 x 20	**HC02G2030820**	3833.75
10 x 20	**HC02G2031020**	3852.50
12 x 20	**HC02G2031220**	3852.50
12 x 24	**HC02G2031224**	3926.20

Application - Milling		
Machine Travels (in.)	Order No.	Price
13 x 32	**HC02M2031332**	2472.30
13 x 35	**HC02M2031335**	2539.30
13 x 36	**HC02M2031336**	2539.30
14 x 36	**HC02M2031436**	2472.30
16 x 36	**HC02M2031636**	2539.30
16 x 40	**HC02M2031640**	2606.30

Application - Turning		
Machine Travels (in.)	Order No.	Price
8 x 40	**HC02T2030840**	2974.80
8 x 60	**HC02T2030860**	3514.85
10 x 40	**HC02T2031040**	2994.90

Application - Turning		
Machine Travels (in.)	Order No.	Price
10 x 60	**HC02T2031060**	3538.95
10 x 78	**HC02T2031078**	4131.25
10 x 100	**HC02T2031091**	4795.90
10 x 110	**HC02T2031092**	5112.10
10 x 120	**HC02T2031093**	5427.00
12 x 40	**HC02T2031240**	3011.00
12 x 60	**HC02T2031260**	3551.00
12 x 78	**HC02T2031278**	4146.00
12 x 120	**HC02T2031293**	5440.40
14 x 40	**HC02T2031440**	3047.20
14 x 60	**HC02T2031460**	3589.90
14 x 78	**HC02T2031478**	4182.15
14 x 100	**HC02T2031491**	4848.15
14 x 110	**HC02T2031492**	5163.05
14 x 120	**HC02T2031493**	5476.60
16 x 60	**HC02T2031660**	3656.90
16 x 78	**HC02T2031678**	4246.50
16 x 120	**HC02T2031693**	5543.60
18 x 60	**HC02T2031860**	4322.85
18 x 120	**HC02T2031893**	5724.50
20 x 120	**HC02T2032093**	5830.35

ACU-RITE® DRO303 Digital Readout Packages

New!



- 7" TFT color display
- USB type C data interface
- Job clock
- Feed rate display
- Multiple language supports
- Absolute/incremental
- Graphic pos aid for near zero warning with graphics
- Help function
- 99 Tool offsets / diameter
- Preset and zero reset
- 4 Function calculator / trig calculator / RPM
- Instance in/mm conversion
- Position-Tract™ (recalls last data after power loss) / RM
- Advanced skew compensation
- Multiple datums
- Multiple display views DRO1 & DRO2
- Part program storage (load, save, import, export)
- Scale factor (allows for part shrinkage / expansion)
- Counter diagnostics
- Encoder input linear or rotary
- Linear / non-linear compensation up to ±9,999 PPM
- Backlash compensation
- Measured value out allows data to be output when probing
- Remote switch allows data output and a remote zero
- 2 Year Warranty

Application - Grinding		
Machine Travel (in.)	Order No.	Price
10 x 20	**HC02G3031020**	4388.50
12 x 20	**HC02G3031220**	4388.50
12 x 24	**HC02G3031224**	4462.20
6 x 12	**HC02G3030612**	4045.50
6 x 18	**HC02G3030618**	4254.50
8 x 16	**HC02G3030816**	4109.80
8 x 18	**HC02G3030818**	4254.50
8 x 20	**HC02G3030820**	4369.75

Application - Milling		
Machine Travel (in.)	Order No.	Price
13 x 32	**HC02M3031332**	3008.30
13 x 35	**HC02M3031335**	3075.30
13 x 36	**HC02M3031336**	3075.30
16 x 36	**HC02M3031636**	3075.30
16 x 40	**HC02M3031640**	3142.30
18 x 36	**HC02M3031836**	3075.30
18 x 40	**HC02M3031840**	3142.30

Application - Turning		
Machine Travel (in.)	Order No.	Price
10 x 100	**HC02T3031091**	5331.90
10 x 120	**HC02T3031093**	5963.00
10 x 40	**HC02T3031040**	3530.90
10 x 60	**HC02T3031060**	4074.95
10 x 78	**HC02T3031078**	4667.25

Application - Turning		
Machine Travel (in.)	Order No.	Price
12 x 100	**HC02T3031291**	5346.60
12 x 120	**HC02T3031293**	5976.40
12 x 40	**HC02T3031240**	3547.00
12 x 60	**HC02T3031260**	4087.00
12 x 78	**HC02T3031278**	4682.00
14 x 100	**HC02T3031491**	5384.15
14 x 120	**HC02T3031493**	6012.60
14 x 40	**HC02T3031440**	3583.20
14 x 60	**HC02T3031460**	4125.90
14 x 78	**HC02T3031478**	4718.15
16 x 100	**HC02T3031691**	5448.45
16 x 120	**HC02T3031693**	6079.60
16 x 40	**HC02T3031640**	3513.50
16 x 60	**HC02T3031660**	4192.90
16 x 78	**HC02T3031678**	4782.50
18 x 120	**HC02T3031893**	6260.50
18 x 60	**HC02T3031860**	4858.85
20 x 120	**HC02T3032093**	6366.35
6 x 40	**HC02T3030640**	3438.45
6 x 60	**HC02T3030660**	3994.55
8 x 40	**HC02T3030840**	3510.80
8 x 60	**HC02T3030860**	4050.85

ACU-RITE® Precision Glass Scales

SENC 150 PRECISION GLASS SCALES:

- The SENC 150 precision glass scale, designed to satisfy a wide range of application needs, incorporates the latest innovation in roller bearing technology for reduced backlash and greater scale travel life
- It also features a highly integrated scanning sensor that provides superior contamination resistance
- Scales 65" and over include Backup Spars
- Scales over 42" may require Extension Cables
- Note total overall scale length equals measuring length plus 6.375" (161.9mm). Actual Travel is 1-3/4" Longer than the Measuring Length. Except the 32" scale which has a total travel of only 31.125".

Features:

- Resolutions of .00005" (1µm) and .0002" (5µm)
- Travel lengths from 2" - 120"
- Reader Head and Armor Cable
- Vinyl cable available
- Flexible mounting features
- Position-Trac™ Home Reference System
- 2 Year Warranty

MADE IN THE USA



	1UM(.00005")		5UM(.0002")		Backup Spar	
Machine Travels (in.)	Order No.	Price	Order No.	Price	Order No.	Price
2	-	-	-	-	**MS31385102000**	42.90
4	-	-	**MS3155811504**	494.50	**MS31385104000**	45.60
6	**MS3155811106**	887.10	**MS3155811506**	514.60	**MS31385106000**	49.60
8	**MS3155811108**	887.10	**MS3155811508**	521.30	**MS31385108000**	50.95
10	**MS3155811110**	907.20	**MS3155811510**	541.40	**MS31385110000**	57.65
12	**MS3155811112**	907.20	**MS3155811512**	548.10	**MS31385112000**	61.65
13	**MS3155811113**	907.20	**MS3155811513**	548.10	**MS31385113000**	61.65
14	**MS3155811114**	928.65	**MS3155811514**	595.00	**MS31385114000**	64.35
16	**MS3155811116**	972.85	**MS3155811516**	643.20	**MS31385116000**	69.70
18	**MS3155811118**	1116.25	**MS3155811518**	679.40	**MS31385118000**	73.70
20	**MS3155811120**	1231.50	**MS3155811520**	700.85	**MS31385120000**	76.40

ACU-RITE® Precision Glass Scales (cont.)

MADE IN THE USA



	1UM(.00005")		5UM(.0002")		Backup Spar	
Machine Travels (in.)	Order No.	Price	Order No.	Price	Order No.	Price
24	**MS3155811124**	1302.50	**MS3155811524**	777.20	**MS31385124000**	101.85
26	**MS3155811126**	1390.95	**MS3155811526**	820.10	**MS31385126000**	111.25
28	**MS3155811128**	1428.45	**MS3155811528**	838.85	**MS31385128000**	113.90
30	**MS3155811130**	1445.90	**MS3155811530**	884.40	**MS31385130000**	117.95
31	-	-	-	-	**MS31385131000**	120.60
31.5	**MS31558111315**	1445.90	**MS31558115315**	884.40	-	-
32	**MS3155811132**	1445.90	**MS3155811532**	884.40	**MS31385132000**	120.60
35	**MS3155811135**	1819.75	**MS3155811535**	972.85	**MS31385135000**	121.95
36	**MS3155811136**	1819.75	**MS3155811536**	972.85	**MS31385136000**	126.00
38	**MS3155811138**	1897.45	**MS3155811538**	1027.80	**MS31385138000**	130.00
40	**MS3155811140**	1975.20	**MS3155811540**	1086.75	**MS31385140000**	134.00
42	**MS3155811142**	2172.15	**MS3155811542**	1202.00	**MS31385142000**	136.70
48	**MS3155812148**	2472.30	**MS3155812548**	1370.85	**MS31385148000**	150.10
52	**MS3155812152**	2556.75	**MS3155812552**	1466.00	**MS31385152000**	152.80
54	**MS3155812154**	2587.55	**MS3155812554**	1539.70	**MS31385154000**	156.80
60	**MS3155812160**	2801.95	**MS3155812560**	1810.35	**MS31385160000**	171.55
65	**MS3155812165**	3474.65	**MS3155812565**	1999.30	-	-
72	**MS3155812172**	3865.90	**MS3155812572**	2225.75	-	-
78	**MS3155812178**	4195.55	**MS3155812578**	2421.40	-	-
84	**MS3155812184**	4526.55	**MS3155812584**	2614.35	-	-
90	**MS3155812190**	4858.85	**MS3155812590**	2811.35	-	-
91	**MS3155812191**	5468.55	**MS3155812591**	3162.40	-	-
92	**MS3155812192**	6082.30	**MS3155812592**	3517.50	-	-

From the moment you power up your MILLPWR$^{G2®}$ system, you'll know it was built with convenience in mind. From the exceptional clarity of a large full-color LCD display to the added advantage of full 3D contouring capabilities and menu-prompted conversational programming, essential functions are only a key stroke away. Use MILLPWR$^{G2®}$ as a full function digital readout system, a programmable CNC control or both. It's powerful enough to handle any job and easy enough for anyone to operate. No prior programming experience necessary.

ACU-RITE® Interface Cables for Scales & Consoles

- Used to run SENC 150 Scales with old systems and old scales with different consoles
- 2 Year Warranty

MADE IN THE USA



Description	Comments	Order No.	Price
D9 to D9 Interface Cable	Used to interface Millmate or TurnMate scales with a VUE or 200S for Milling, Turning and Grinding Readout	**MS30385210103**	104.55
D9 to MS Interface Cable	Used to interface an SENC 150 Scale with an ACU-RITE II, ACU-RITE III, Qwikcount, Master-G, Master-MP, Master-TP, Turnvision or MillVision Readout	**MS30385210102**	104.55
Digital to Analog Interface Cable	Used to interface Millmate or Turnmate with 5um SENC 150 (note this cable will only work with 5um SENC 150 Scales)	**MS30385210104**	91.15
MS-D9 Differential Signal Interface Cable	Used to interface Mini scales, Old AR-5 Scales or Old AR-10 PLUS Scales with a VUE, 200S, DRO 200E or 300S Readout	**MS30385210101**	104.55

DRO102, DR203, DR303 Grinding, Milling, Turning Readout Boxes

Series - 100		
Description	Order No.	Price
For Grinding Applications	**HC01119725201**	770.50
For Milling, Turning, Grinding Applications	**HC01119725202**	904.50
For Milling, Turning, Grinding Applications	**HC01119725203**	1038.50

Series - 203		
Description	Order No.	Price
For Milling, Turning, Grinding Applications	**HC02119725001**	1172.50

Series - 300		
Description	Order No.	Price
For Milling, Turning, Grinding Applications	**HC02119725101**	1708.50
For Milling, Turning, Grinding Applications	**HC02119725102**	1842.50



1-2-3 & 2-4-6 BLOCKS D185
3-FLUTE MICROMETER D11
3-IN-1
Oil G42
3-JAW SCROLL CHUCKS WITH 2 PIECE REVERSIBLE JAWS
Lathe Chucks J288
3/8 DRIVE SOCKETS SETS F50
30TH EDITION MACHINERY'S HANDBOOKS D208
32A & 32AR TOOL ROOM WHEELS C8-C11, C13
32A TOOL ROOM WHEELS C8-C10, C12
3D ALIGNMENT INDICATOR D49
3M . . . . .
Absorbents H101-H102
Adhesive Back (PSA) C115-C116
Adhesives G54
Bristle Brush & Disc C139
Cartridge Respirators H20
Coated Abrasive Belts C92
Coated Abrasive Flap Discs C99
Coated Abrasive Resin Fibre & PSA Discs C113, C129
Coated Abrasive Rolls & Sheets C96
Cubitron II C60, C129
Cubitron II Resin Fibre Discs C113
Cut-Off Wheels C59-60
Depressed Center Wheels C59-60
Diamond & CBN Wheels C41
Ear Muffs H23-H25
Ear Plug H21
Faceshields H14
Film Discs C116
Goggles H11
Green Corps Abrasives C59
Hard Hats H26
Head Protection H26
Headgear H14
Hearing Protection H21, H23-H25
Lighted Safety Glasses H10
Magnifiers H9
Masks & Filters H17-H20
Readers H9
Resin Fibre Discs C113, C129
Respirator Filters H20
Respirators H17-H20
Safety Glasses & Goggles H2-H3, H9-H11
Scotch-Brite Cut & Polish Rolls C96, C131
Scotch-Brite Discs & Belts C133, C139
Scotch-Brite Hand Pads & Rolls C96, C131
Scotch-Brite Wheels C143
Sorbents H101-H102
Stick-On Discs C115-C116
Sweeping Compounds H101
Tab Film Discs C116
Tape H117-H120
Welding Helmets H97
3M Cubitron II C113
4-JAW SELF-CENTERING MACHINE FIXTURES
Lathe Chucks J289
5-FLUTE MICROMETER D11
5C COLLET FIXTURES J169-J170
5C COLLET INDEXER J169-J170
5C COLLET VISE J169-J170
5C COLLETS, ACCESSORIES
5C Collets J165-J166, J168
Accu-Length Expanding Collets 5C J168
Adjustable Threaded Collet Stop J167
Air Operated 5C Collet Holder J170
Collet Chuck J170
Collet Sets J167
Collet Stand J167
Collet Stop Front Loading, 5C J167
Hex Collets J166
Internal Expanding Collet Set J168
Internal Expanding Collets, Individual J168
Metric Hex Collets J166
Metric Round Collets J165
Square Collets J166
Steel Emergency Collet 5C J167
Step (Clutch) Collets 5C J168
Universal Collet Stop J167
5SG ABRASIVES C13, C19
A & D SCALES D105
A-2 FLAT STOCK J54-J55
A-2 FLAT STOCK OVERSIZE J57-J58
ABANAKI
Aerator G29
Coolant Refresher G29
Skimmers G28-G30
ABRASIVE BANDS C86
ABRASIVE BELT & DISC SANDERS K70-K75, K77
ABRASIVE BELT GRINDERS K62, K73, K77
ABRASIVE BELT MACHINES
(Also See Belt Grinders or Sanders) E16, E19-E20
ABRASIVE BLASTERS K94-K98
ABRASIVE COMPOUNDS C166
ABRASIVE CUT-OFF SAWS
Bench Top Type K41
Hand Held E12-E13
Kalamazoo K41-K43
ABRASIVE DISC GRINDERS K77
ABRASIVE DRY BLAST UNITS
Cyclone K95-K96, K98
Shop Fox K94
Trinco K95-K97
ABRASIVE FINISHING CHAMBERS
Burr-King K92-K93
Kalamazoo K94
ABRASIVE MEDIA K98
ABRASIVE SPONGES C85
ABRASIVE STICKS C36
ABRASIVES
32A & 32AR Tool Room Wheels C8-C11, C13
Adhesive Back Discs C115-C116, C118-C119, C121
Back-Up Pads C108-109, C118, C125, C141
Belts C87-C92, C94, C132-C133
Bench & Pedestal Wheels C25-C27
Bench Rolls C95
Bench Stones C67
Blocks & Sticks C74
Boat Bricks C73
Bore Polishers, Cleaners C147-C148, C152-C153
Boron Carbide Dressing Sticks C36
Boron Carbide Hand Lapper C67
Buff & Blend Products C71, C96, C131-C138, C140, C142-C143
Buffing Flap Discs C167
Buffing Products C71, C167-C169
Burr-RX Disc Brush Drive Arbor C164
Burr-RX Heavy Duty Narrow Face Wheels C164
Burr-RX Small Hub Wheels C164
Burr-RX Tube Brushes C163
Carbide Abrasives C43
Cartridge Rolls, Mandrels C51, C84-C85, C168
CBN Wheels, Mandrels C38, C42, C46
Centerless Grinding Wheels C27
Centerless Wheels C27-28
Ceramic Tool Room Wheels C13, C18, C20
Chop Saws C54
Cloth Discs C115, C121 C123
Cloth Sheets C96-C97
Clover Abrasive Compounds C166
Coated Abrasive Dressings C93
Combination Sharpening Stones C67, C69-C70
Combo Wheels C57
Compounds, Finishing C166
Cones C76
Cones & Plugs C21, C24, C76
Convolute Wheels C142-C144
Cotton Reinforced Abrasives C78
Cup & End Brushes C151
Cup Wheels C21-C23, C38, C40-C42
Cut-Off Wheels C47-C50, C52-61, C63, C65
Cut-Off Wheels, Adapters C48-51, C58
Cutting Wheels C56
Cylindrical Grinding Wheels C29
Deburring Wheels C137, C142-C146
Depressed Center Adapters C51
Depressed Center Wheels C43, C51, C54-C55, C58-C64, C142
Diamond Dressers C34-C35
Diamond Files C45
Diamond Hand Pads C44
Diamond Hones & Sharpening Stones C44, C66-C67
Diamond Mandrels C46
Diamond Polishing Compounds C166
Diamond Quick Change Disc C44
Diamond Saws, Adapters C39, C43
Diamond Wheels C38-C41
Diamond X Blades C43
Dish Wheels C22, C38, C41-C42
Dressers C32-C37, C39
Dressing Sticks C36, C40
Emery Cloth Sheets C97
Feed Regulating Wheels C29
File Belts C87-C92, C130, C132-C133
Film Disc C116
Film Discs C116
Film-Backed C120
Finishing Paper C85
Finishing Sticks C70
Flap Bands C105
Flap Discs C98-C104, C114-C115, C138-C140, C168
Flap Rolls C167
Flap Wheels, Brushes C105-C107, C130
Flex-Hone C148
Green Silicon (GC) Carbide Wheels C23-C27
Grinding Wheels C54, C56-C57, C65, C114
Grip-On Paper Discs C119
Hand Pads C96, C131
Hook & Loop C120
Hub Wheels C164
Interleaf Flap Discs C140
Interleaf Flap Wheels C139-C140
Lapping Compounds C166
Metal Back Wheels C23
Mini Brushes C132
Mini Flap Discs C100
Mini Flap Wheels C168
Mini Grind R Discs C114
Mold Polishing Stones C72-C73
Mounted Flap Wheel Brushes C168
Mounted Flap Wheels C105, C107, C168
Mounted Points C79-C83
Narrow Face Hub Wheels C164
Non-Reinforced Cut-Off Wheels C52
Non-Woven Abrasives C71, C96, C130-C147
Nylon Filament Brushes, Adapters C149-C151, C162-C163
Paper Back Discs C116-C118
Paper Discs C119
Pink Tool Room Wheels C13-C14, C23
Point Mandrels C51, C76
Points C76
Polishing Compound C167
Porous Tool Room Wheels C13
Portable Belts C88-C91, C94, C130, C132-C133
PSA Discs, Holder C109, C117-C119
PSA Discs, Holder E15
PSA Sheets, Strips C85, C117
Quick-Change Discs, Holders C71, C78, C105, C108, C122-C130, C133, C135-C137, C141-C142, C169
Quick-Change Flap Discs C98, C104, C122, C167-C168
Quick-Change Resin Fibre Discs C110, C113
Radial & Cup Wire Wheels C151
Reinforced Cut-Off Wheels C47, C49-C50, C52-C55, C58-C59
Resin Fibre Discs C110-C113, C127, C129
Roughneck Wheels C57
Rubber Sanding Drums C86
Rubberized Abrasives C51, C74, C76-C77, C84
Ruby Grain Wheels C13, C15
Sand Screen Sheets C97
Sanding Discs C120
Sanding Sponges C85
Segments C31
Semi-Flex Disc C140
Sharpening Stones C66-70

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Sheets C96-97
Shell Mill Holder Disc Brushes C164
Shop Rolls C94-C95
Snagging Wheels C21, C65
Spiral Bands C86
Sponges C85
Stick-On Discs C115-C116, C119, C121
Stick-On Sheets, Strips C85

Surface Condition Products C96, C131-137, C139-C147
Surface Grinding Discs C137
Surface Grinding Wheels C14-15, C20, C24, C137
Tab Film Discs C116
Threaded Flap Wheels C105
Tiger Cut-Off Wheels C56
Tiger Grinding Wheels C65
Tiger X Flap Disc Brush C104
Tool Post Wheels C21, C49
Tool Room Grinding Wheels C3-C7, C13-C14, C22-C23
Tool Room Sticks C68, C70
Trimkut Discs C114
Trimmable Flap Wheels C105
Ultracut True Wheels C56
Unitized Wheels C142-C143, C145-C146
Unmounted Flap Wheels C106-C107, C168
Velcro Backed Discs C117
Wet/Dry Paper Sheets C96-C97
Wheel Adapters C7, C51, C59, C106, C168
Wheel Arbor C167
Wheels C38-C42, C56, C75
Whetstones C67
White Tool Room Wheels C3-6, C22
Wire Wheels, Brushes C152-C162
Wolverine Flap Discs C30, C104

ABSORBENTS
3M H101-H102
Breg H103
Kits H103
Oil Dri H101-H103

AC/DC TESTER D139-D140
ACCU-LUBE FLUIDS G4, G13-G14

ACER MACHINES
EVS Lathes K16
Geared-Head Lathes K9
Milling Machines K5-K7
Riser Blocks K104
Surface Grinders K57-K58

ACME PITCH GAGES D201-D202

ACU-RITE
Digital Readouts K115-K118
Interface Cables K118
Precision Glass Scales K117-K118

ADAPTER PLATES FOR PLAIN BACK 4-JAW CHUCKS . . . . .
Back Plates/Adapters J294-J295

ADAPTERS
Collets for Magic Chucks J184
Depressed Center Wheels C51
Diamond Saws C43
Milling Machine K105
Nampower Brushes C162
Sopko C7

ADHESIVE BACK RULES D156
ADHESIVE BACKED ABRASIVE DISCS C115-C116, C118-C119, C121

ADHESIVES
Epoxy G53-G55
J-B Weld G55
Rubber & Gasket G54
Spray Adhesives G53-G54
Super Glue G53

ADJUSTABLE BLADE REAMERS A134
ADJUSTABLE DIES A218-A219
ADJUSTABLE PARALLELS D181, D184
ADJUSTABLE RATCHETING WRENCH F13
ADJUSTABLE STANDS I76

ADJUSTABLE WRENCHES
Clik-Stop F14
Cushion Grip F13, F15
Pipe F154
Sets F14-F15
Spanner F16
Spud F14
Standard F13-F14

AGS
Grease For Belts C93
Lubricating Grease G31

AIR Pneumatic Tools E49
AIR COMPRESSOR OIL G13

AIR COMPRESSORS
Air Compressors K85-K92
Dewalt K85, K89, K91
Industrial Air K86-K87, K89, K91
Ingersoll Rand K88, K90, K92
Puma K85, K88, K90

AIR FLO LUBRICANTS E13, E48
AIR HARDENING FLAT STOCK J54-J55, J57-J58

AIR HOSE
Air Supreme E49
Bulk E48
Coilhose Pneumatics E55-E57
Connectors, Couplers, Fittings E45, E48, E51-E55
Cut To Length E46-E48
Nylon, Polyurethane E47
Reels E49-E52
Rubber E48-E49
Self Storing E45
Thermoplastic E46
Tubing, Nylon & Polyurethane E47
Whip & Snubber E49
Whip Hoses E54, E56-E57

AIR HOSE ACCESSORIES E46-E48
Air Hose Reel E49
AIR INFLATORS E55

AIR KING
Fans H74
Fans & Blowers H74

AIR MOVERS, CIRCULATORS H73-H74
AIRMASTER FANS H73

AIR POWER DRAWBARS
Kurt Mfg K106-K107
Maxi Torque-Rite K106

AIR SUPREME
Drills E3-E4
Shears & Nibblers E16-E17, E24, E49

AIR TOOL LUBRICANTS G13

AIR TOOLS, ACCESSORIES
Abrasive Belt Tool E19-E20
Air Couplers, Fittings, Hose, Reels E50-E52
Air Filters, Lubricators, Regulators E55-E57
Air Hose Reel E49
Air Line Connectors E12
Air Presses K79-K80
Air Supreme E3-E4, E9, E13, E23, E39, E42
Air Turbine E31
Angle E10, E15
Arbors E12
Blow Guns E43-E44
Buffers E18
Clamps E46
Compressors K85-K92
Connectors, Couplers, Fittings E45, E51-E52, E54
Contact Arms E19
Cut Off Tools E12-E13
Die E9-E13, E32
Drills E3-E4
Dynabrade E10-E12, E18
Dynaswivel E12
Filers E12, E24
Florida Pneumatic E13, E24
Grinders, Die E9-E13, E32
Grinders, Hand E9-E13, E23, E31-E32
Gunslinger E44
Hand Crank Reel E50
Hose E45-E47
Hose Crimper E46
Impacts, Ratchets E37-E41
Kits E13
Legacy E43, E51
Lubricant E13, E48
Nibblers E24
Pencil Grinders, Engravers, Scribers E24, E32
Polishers E14, E16, E20
Power Drawbars K106-K107
Rewind Reel E50
Sanders, Belt E14, E16, E19-E20
Sanders, Disc, Orbital E12-E13, E15-E16, E18
Saws E34
Scalers E42
Shears E24
Start Up Oil Kits K90
Tool Balancers E52
Tubing, Nylon & Polyurethane E47
Turbine E32

AIR TURBINE, TOOLS & ACCESSORIES
Grinders, Hand E31

AIRCRAFT EXTENSION DRILLS A40-A42
AISLE MARKING TAPE H119

AKRO-MILS
Bin Storage Cabinets I39
Carts I40, I52
Dividers I39, I41
Storage Bins I39-I43

ALBRECHT
Chuck Jaws J159
Keyless Chucks J158
Keyless Drill Chucks with Integral Shank J158

ALIGN POWER FEEDS K109
ALIGNMENT INDICATORS D49

ALLIED SPADE DRILLS & HOLDERS
Adapters A91, A101
Blades, Gen2 T-A A93-A100
Blades, High Performance TiN A91
Blades, Universal A90
Flat Bottom A90, A93, A100
Holders, Gen3Sys A103
Holders, T-A Coolant Thru A101-A102
Holders, Universal A92, A101
Rotary Coolant Adapters A101
Taper Shank Holders A92

ALLOY, FINE PROOF & FIXTURING D128

ALORIS
Quick Change Holders J240-J241
Tool Posts, Sets J239-J240

ALUMINUM OXIDE COATED ABRASIVES
Belts C91-C92, C94
Cartridge Rolls C51, C84
Fibre Discs C111-C112
Flap Wheels & Discs C98, C106
Quick-Change Discs C122-C129
Rolls C96
Sheets C97
Spiral Bands C86

ALUMINUM RIVET ASSORTMENTS
Maintenance Kits J6

ALUMINUM SQUARES D155-D156

ALVORD POLK TOOL
Counterbores A124, A126
Reamers A137

AMP METERS D139-D140
ANAEROBICS G52

ANCHORS
Drop In J36

ANGLE J134
ANGLE BLOCKS D180-D182
ANGLE DRESSERS C32-C33
ANGLE GAGES D193

ANGLE GRINDERS
Adapters C155
Dynabrade E10, E21-E22

ANGLE HEADS J175-J176
ANGLE METERS, PROTRACTORS D153, D156, D164-D167

ANGLE PLATES
Box Parallels J152
Plain Angle Plates J151
Procheck D180
Right Angle Irons J152
Slotted Angle Plates J151
Suburban Tool J148

ANGLE SANDERS E15, E17, E21-E22
ANNULAR CUTTERS Hole . . . . . E85, E89 , E91
ANTI-SEIZE CHEMICALS G44

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

ANVIL KITS
Indicators D61, D64
Micrometers & Sets D18
APEX BRAND
Adjustable Wrenches, Sets F13-F14
Ball Pein Hammers F131
Bits, Sets F95, F98, F101-F102
Bolt Cutters F27
Cable Cutters F27
Claw Hammer F132
Diagonal Cutters F22
End Cutters F33
File Handles F182
Files, Sets F172-F175
Hex Bit Sockets, Sets F110
Needle Nose Pliers F24
Scissors F164
Shears F164
Slip Joint Pliers F17
Snips F29
Sockets, Sets F43, F50, F60
Spanner Wrenches F16
Strap Cutters F27
Tape Measures D159-D161
Tool Sets F43
APEX DRIVE TOOLS F98
APRONS H32-H33
APT CARBIDE
Boring Heads, Shanks J185
Indexable Boring Bars B38
Indexable End Mills B72-B73
ARBOR PRESSES
Dake K78-K80, K82
National K78-K79
Palmgren K78-K79
Press Right K79, K81
PRM K80
ARBOR SHIMS J48-J49
ARBOR SPACERS J48-J49
ARBOR SPACES WITH KEYWAYS
Milling Arbors & Accessories J49
ARBORS
Diamond Saw C43
Saw . . . . . A363 , C43
Shell Reamer A137-A138
ARKANSAS STONES C69
Hex Bit Sockets, Sets F110
Sockets, Sets F48, F50
ARROW
Staple Guns, Staples F166
Wiring Tacker F166
ASHBURN
Cleaners & Degreasers G46-G47
Coalescer G18
Coolant Rejuvenator G18
Coolants G8, G19
Cutting Fluids G2
Cutting Oils G5
Degreasers G45
Dragin Pump G19
Honing Oil G13
Hydraulic Oil G41
Layout Dye Remover G57
Layout Dyes G57
Lube, Penetrating G40
Mike-O-Blue G57
Parts Washer, Degreaser G50
Premixer G18
Protectant G42
Protective Metal Coating G42
Soluble Oil G9
Tapping Fluids G2, G5-G8, G41
Wax Sticks G31
ASPHALT & GREEN CONCRETE CUTTING DIAMOND SAW BLADES C39
ASSEMBLIES
Coilhose Pneumatics E55-E57
ATB OSBORN FILIMENT BRUSHES
Nylon Filament Brushes Adapters C165
AUDIBLE EDGE FINDERS D204
AUTO FUSE ASSORTMENTS
Maintenance Kits J3
AUTOMATIC BANDSAWS
Marvel K38
Spartan K37
W.F. Wells K39
Wellsaw K35
AUTOMATIC DRAIN VALVES E57
AUTOMATIC POWER DRAWBARS K106-K107
AUTOMATIC SURFACE GRINDERS
Acer K57
AVIATION SNIPS F28
AVOS SEE THRU ABRASIVE DISCS C122
AWLS F141
AXIAL SUPPORTS D61-D62, D64
AZ ABRASIVE WHEELS C16-C17
BACK PLATES/ADAPTERS
5C Adapter for 3 & 6-Jaw Quick Clamping Chucks J290
5C Adapters for 4, 5 & 6 SET-TRU Chucks J290
5C Soft Blank Adapters J290
Adapter Plates for Plain Back 4-Jaw Chucks J294-J295
Base Plates for Set Tru Lathe Chucks J288
Base Plates for Standard Lathe Chucks J288
Fully Machined Adapters for Rotary Tables J288
Machineable Cast Iron Adapter Plates J296
Morse Taper Adapters for Quick Clamping Scroll Chucks J290
Steel Adapter Plates for Adjustable Chucks J291-J293
BACK PLUNGER INDICATORS D57
BACK SUPPORTS H30
Back Scratcher H34
BACK UP PADS, ABRASIVES
Back-Up Pads C108-C109, C117-C118, C125, C135, C141
BAGS (TOOL)
Ergodyne I18-I19
PRM PRO I18
Proto I18-I19
Rubbermaid I19
BAHCO (SNAP-ON INDUSTRIAL BRANDS)
Bandsaw Blades E76-E77
Hacksaw Blades E58
Hole Saws E87
Jigsaw & Reciprocating Blades E59
Reciprocating Saw Blades E59
Adjustable Wrenches, Sets F13
File Cards F182
File Handles F182
Files, Sets F172, F175, F178-F179
Hacksaw Blades F171
Hacksaws F170
Hand Files F172-F173
Screwdrivers, Sets F119-F120
Swiss Pattern Needle Files F178-F180
BAKER
Back Plunger Indicators D57
Dial Indicators D26, D42
Test Indicators, Points D51
BALACLAVA
Winter Face Protection H28
BALANCERS, TOOL E52
BALDOR
Bench Grinder Accessories K65
Bench Grinders K60-K62, K65, K73
Buffers K64
Carbide Grinders K62, K73
Grinders K64
BALL ANVIL MICROMETERS D10-D11
BALL ATTACHMENTS, MICROMETERS D18
BALL END HEX KEYS, SETS
Bondhus F84-F87, F89-F90
Eklind F84-F88, F90
Tekton F90
Wiha F84-F85, F87, F89-F90
BALL PEIN HAMMERS F131
BALL PLUNGERS
Te-Co J79-J82
BALL SWIVELS AIR COUPLERS E54
BALL, INSPECTION D125-D126
BAND-ADE COOLANT E66
BANDANAS H34
BANDSAW BLADE CHIP BRUSHES (WHEEL)
Bandsaw Blades E78
BANDSAW BLADE TACHOMETER D137, E70, E78
BANDSAW BLADES
Bahco (Snap-On Industrial) E36, E74, E76-E78
Carbide Tipped E74
Carbon E72, E81-E82
Cobalt (M42) Bi-Metal E36, E68-E71, E74-E80
Hem Saw E72
Lenox E36, E61-E67
M.K. Morse E36, E81
Portable E36
Starrett E36, E68-E71
BANDSAWS
Accessories K34
Automatic K37-K39
Clausing/Kalamazoo K28
CNC K39
Cosen K24, K26, K29-K30, K34, K36
Dake K23-K24, K27, K29
Double Column K38
Double Mitering K31
Ellis K31
Gravity Feed K22
Hem Saw K25-K26
Hercules K33
Horizontal K23, K26-K39
Horizontal Double Miter K25
Jobby Stand K26
Kalamazoo K28
Kasto K35
Manual Round Cap K25
Mark III K38
Marvel K24, K33, K37-K38
Miter Cut K24, K26, K29-K38
PRM K23, K27, K29, K31-K32
Roll-In Saw K22, K24, K32-K33
Roller Table K26
Semi-Automatic K30, K32, K35, K38
Shop Fox K22
Spartan K37
Stock Stands K65, K99, K101
Tilt Frame K37, K39
Trade-Master K24
Vertical K22-K25, K27-K28
W.F. Wells K28, K30, K38-K39
Wellsaw K24-K25, K27-K28, K30-K32, K35
Woodworking K22
Work Table K26
Work-A-Matic K22
BAR CLAMP J111
BAR CRADLES I78
BARCOR GAGES D102
BARRIER Fence H30
BARRY MOUNTS K102
BARS
Die Setters F135
Pinch F134
Pry F64, F134-F136, F184
Ripping F135-F136
BASE PLATES FOR SET TRU LATHE CHUCKS
Back Plates/Adapters J288
BASE PLATES FOR STANDARD LATHE CHUCKS
Back Plates/Adapters J288
BASES (MAGNETIC)
Indicator Bases D70-D78, D80, D86
BATH TISSUE H116
BATTERIES
Energizer H65
Rayovac H65
BAUSCH & LOMB OPTICAL
Eye Loupes D174
Lens Cleaning D174, H15
Magnifiers D174
BAYCO
Cord Reels H68-H69, H76
Dual Lights H58, H64
Extension Cord Holders H76
Flashlights H55-H59, H61, H63-H64, H67
Floodlights H59
Head Lamps H63-H64, H67

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

LED Area Light H69
LED Work Lights H69
Reel Lights H68
Tower Extension Lights H69
Trouble Lights H68
Work Lights H67-H69
BEAM CLAMPS I76
BEAR-TEX NON-WOVEN ABRASIVES
Discs C136
Hand Pads & Bench Rolls C131
BELT & DISC GRINDERS K62, K73-K74, K77
BELT DRESSING C93, G5-G7, G31-G32
BELT GRINDERS
Baldor K62, K173
Burr King K74, K77
Ellis K75
BELT KIT K66
BELT SANDERS
Baldor K62, K73
Burr-King K174, K77
Ellis K75
Kalamazoo K70-K75
Palmgren K72
Pneumatic E16, E19-E20
Universal Tool E16
BELTS, ABRASIVE
Coated Abrasives C89-C92, C94
Surface Conditioning C132-C133
BENCH & STAND SANDING BELTS C88, C92
BENCH BLOCK D200
BENCH CENTERS D131
BENCH GRINDER ACCESSORIES K65
BENCH GRINDER STANDS K65
BENCH GRINDERS
Baldor K60-K62, K64-K65, K73
Darex K66
DeWalt K58
Palmgren K59, K61-K63
PRM K58, K60
BENCH GRINDING WHEELS C25-C27
BENCH ROLLS, ABRASIVES
Shop Rolls C94-C95
BENCH SHEARS & NIBBLERS K44-K45
BENCH TOP ARBOR PRESSES K77-K80
BENCH TOP CUT-OFF SAWS
Kalamazoo K41
BENCH TOP DRILL PRESSES
Palmgren K17
PRM K17
Shop Fox K16
BENCH TOP GRINDERS K58-K65, K70-K74
BENCH TOP HAND PUNCHES K45
BENCH TOP LATHES
PRM K8
BENCH TOP MILLS
PRM K2
BENCH TOP SANDERS K70-K75
BENCH TOP SHEET METAL
Brakes, Rolls & Shears K46-K48, K51
BEND-A-LIGHTS Lights D170, H56
BENDERS
Edwards K85
Sheet Metal K44, K46-K49, K51
Tube & Pipe K44
BESSEY
Auto-Adjust Toggle Clamps J64
C-Clamps 540 Series Ductile Alloy J104
C-Clamps Black Oxide Deep Forge J105
C-Clamps Drop Forged Light Duty J104
C-Clamps Hi Vis Deep Forged J109
Drill Press Vises J130
EZS Clamps J111
General Purpose Vise J123
L-Clamps J107-J108
Light Duty Clamp On Vise J131
MightyMini Steel Clamps J107
Multi Purpose Vise J124
Multi Purpose Vise Jaws J125
Pipe Clamps J110
Rite Hite Self Positioning Hold Down Clamps J99
Steel Spring Clamps J111
Toggle Clamp Service Parts J73
Vacuum Base Vise J131
Welding Clamps J109-J110
Workshop Vise J131
Cutters F159
BEVEL MILL K69
BEVEL PROTRACTORS D92
BEVELED MACHINE WASHERS
Clamping Components J30
BIBS H33
BIG BORE LATHES
Kent K13
Summit K11-K14
BIN CARTS I40
BIN STORAGE CABINETS
Akro-Mils I39
Durham Accessories I33
PRM PRO I21
BINS I32-I33, I39-I43
BISON
3 & 4-Jaw Front Mount Self-Centering Scroll Chucks J287
3-Jaw A Mount Chucks J279
3-Jaw A Mount Chucks J277-J278
3-Jaw D Mount Chucks J278-J279
3-Jaw Plain Back Scroll Chucks J281
3-Jaw Self-Centering Rotating Chucks with Morse Taper Shank J289
3-Jaw Semi Steel Solid Jaw J287
4-Jaw Forged Steel Independent Lathe Chucks J284
4-Jaw Forged Steel Plain Back J284
4-Jaw Independent Chuck Parts J298-J299
4-Jaw Independent Chucks Direct Mount Type A J286
4-Jaw Independent Chucks Direct Mount Type D J285
4-Jaw Medium Duty - Plain Back Chucks J283
4-Jaw Plain Back Scroll Chucks J283
5C Adapter for 3 & 6-Jaw Quick Clamping Chucks J290
5C Adapters for 4, 5 & 6 Set-Tru Chucks J290
5C Collet Chuck J170
5C Soft Blank Adapters J290
Blank Jaws J299
Chuck Grease J298
Fine Adjustment Steel Body Chucks J277
Hard Solid Jaws ID J299
Hard Top Jaws for 3 & 6-Jaw Chucks J299
Indexers, Super Spacers J174
Large Through-Hole 3-Jaw Self-Centering Scroll Chucks J300
Live Center Set J257
Live Centers J260
Morse Taper Adapters for Quick Clamping Scroll Chucks J290
Scroll & Pinion for Self-Centering Chucks J298
Spare Parts for Self-Centering Chucks J298
Type 8847 Inserts J257
Type 8848 Inserts J257
Type 8849 Inserts J257
Type 8850 Inserts J257
Type 8851 Inserts J257
Type 8852 Inserts J257
Type 8853 Inserts J257
Type 8854 Inserts J257
Type 8855 Inserts J257
Wrenches for Self-Centering Chucks J298
BIT HOLDERS F97, F99
BITS, SETS
Adaptors F99
Apex F95, F98, F101-F102
Balldriver F100
Fastener Drive F96, F99-F100, F103-F105, F108, F110, F117
Hex F100, F104
Impact Driver F104
Phillips F97
Precision F104, F117
PRM Pro F96
Security F104
Slotted F99
Socket Head F100
Square F100
Wiha F96, F117
BLACKGUARD VERMONT GAGE PINS D117
BLADE MICROMETERS D12
BLADES
Abrasive C54
Bandsaw E36, E61-E72, E76-E77, E82
Carbide Tipped Circular Sawblades E36
Carbide Tipped Cut-Off B130
Diamond C39, C43
Indexable Cut-Off Blades . B74-B75, B100, IMC4, IMC6, IMC9, IMC13, IMC17-IMC18
Metal Saw A361, A363
Reciprocating Saw Blades E59
Utility Knife F162
BLAKE Co-Axial Indicators D49
BLANKETS
Fire H121
Welding H96
BLANKS
Drill & Reamer A32-A33
BLAST CABINETS K94-K98
BLASTER CHEMICALS
Brake Bleeder G43
BLAZE (NORTON) CERAMIC ABRASIVES
Belts C90
Fibre Discs C110
Quick-Change Discs C123
BLIND HOLE SPOTTERS F148
BLOCKS
1-2-3 & 2-4-6 . . . . . D185
Angle D180-D182
Indexable Cut-Off Blocks IMC5, IMC8, IMC93
V-Blocks D175-D179, D181, D184, J150
BLOHM, CHAIN INDICATOR HOLDER D77
BLOW GUNS
Coilhose Pneumatics E43
Guardaire E44
Legacy E43
BLOWER, HAND HELD E2
BLUE TEMPERED SHIM STOCK J46
BLUEFIRE (NORTON) ZIRCONIA ALUMINUM ABRASIVES C123
BOAT RUBS, BRICKS (STONES) C73
BOLLE SAFETY EYEWEAR **H4-H14**
BOLT CUTTERS F27
BONDHUS
Ball Driver Screwdrivers F85
Ball End Drivers F84, F90
Balldriver Bits F100
Balldriver Fold-Ups F90
Hex Bit Sockets, Sets F105
Hex Pro Sets F89
Prohold F105
Star Drivers F91
T-Handles, Sets F87, F89
Torque Control Tools F83
Torx Fold-Ups F90
BONNETS, POLISHING C167
BOOKS, REFERENCE D207-D210
BORE GAGES, ACCESSORES D88, D95, D97-D98, D100, D102
Sets D97
Insize D97
BORE POLISHERS, CLEANERS C147-C148, C152-C153
BORE SETTING GAGES D95
BORESCOPE D133-D135
BORING BARS, INDEXABLE
Criterion B37
Dorian B39-B42, B44-B49, B98
Everede B60-B61
Ingersoll IMC63-IMC64
Iscar B38, IMC12, IMC14-IMC15
Rapidkut B34-B36, B94
Turning Sets B32
Ultra-Dex B50-B58
BORING BARS, SOLID
APT J185, B38
Borite B116, B118
Carbide Tipped B37, B39, B116-B119
Cobalt B37, B116
Criterion B37, B39, B117

Double End B117
Everede B59
Flynn B116-B117
Micro 100 . . . . . B109-B110, B118-B119
Rapdikut B108
Single End B117
Small Hole B111-B113, B118-B119
Tool Bit Bars B117
BORING HEAD
APT Carbide J185
Criterion J185-J187
National J185-J186
Parlec J187
Techniks J187
BORITE BORING TOOLS
Boring Bars & Tools B33, B37, B116-B118
BORON CARBIDE DRESSING STICKS C36
BORON CARBIDE HAND LAPPERS C67
BOSCH POWER TOOLS
Drills E4-E5
Grinders E21-E22
Sanders E14, E21-E22
Saws E35
BOTTLE JACKS 68
BOX PARALLELS
Angle Plates J152
BOX WRENCHES
Double F9
Obstruction F9
Offset F9
BRAKE TRUING DEVICE, DRESSERS C32
BRAKES K46-K47
BRASS Feelers J44
BRASS EXTRA THICK FLAT WASHERS
Clamping Components J31
BRASS HAMMERS F133
BRASS SHIM STOCK J46
BRASS WIRE WHEELS C161
BRAZED CARBIDE TOOL BITS B120-B127
BREG
Spill Absorbents H103
BREWER DESIGN
Chairs and Stools, Accessories I58-I59
BRICK CHISEL F139
BRIDGE REAMERS A137
BRIDGEPORT MACHINES
Collet & Tool Tray J163
Digital Readouts K111-K118
Knee Mills K4
Milling Machine Accessories K104
Power Feeds K108-K109
BRIGHT STAR
Flashlights H59-H62
Head Lamps H63
Lanterns H62
BRIGHTBOY MOUNTED POINTS C84
BRIGHTON BEST
Button Head Socket Cap Screws J16
Dowel Pins J24
Dowel Pins Metric J25
Flat Head Screws J18
Pressure Pipe Plugs J19
Shoulder Screws/Bolts J22-J23
Socket Cap Screws J12-J14
Socket Head Cap Screws Metric J14-J15
Socket Set Screws Cup Point J19-J21
Socket Set Screws Cup Point Metric J21-J22
Socket Shoulder Screws Metric J22
BRINEY
Collet Holders J195
Eccentric Bore Tool Holders J215
Jacobs Taper Adapters J221
NMTB End Mill Adapters J220
NMTB Shell Mill Holders J225
Precision Test Bars J225
Shrink Fit Tool Holders J233
Taper Adapters J222
BRISTLE BRUSH & DISC
3M C139
BROACHES & SETS A364-A366
BRONZE WIRE WHEELS C161
BROOMS
Braces H104-H105
Brackets H104-H105
Floor H104-H105
Handles H104-H106
Indoor/Outdoor H104-H105
BROWN & SHARPE
1-2-3 Blocks D185
Angle Block Sets D180
Bases, Stands, Magnetic D71, D75-D76
Caliper Accessories D40
Calipers D30, D32
Calipers, Accessories D30, D32
Combination Squares D149-D150
Depth Micrometers D24
Dial Indicators D42
Edge Finders D204
Electronic D30, D32
Gage Ball Set D125
Indicator Sets D42, D79, D83
Internal Micrometers D100
Micrometer Stand D18
Micrometers & Sets D4, D6, D14, D100
Parallels D182-D184
Pin Vises D206
Reamers A136
Rules D150
Sine Bars D180
Small Hole Gages D190
Telescoping Gage D189
Test Indicators D55
Test Indicators, Points D55, D67
V-Blocks D176
Wiggler Sets D205
Wireless Measurement D88
Scribers F141
BRUSH DRIVE ARBORS C158
BRUSH RESEARCH HONES AND BRUSHES C148-C151, C162
BRUSHES
Abrasive Nylon Filament C139, C149-C151, C162-C163, C165
Adapters C162, C165
Burr-RX Tube C163
Chip H106
End Wire C152-154, C157, C161, H106
Floor H106
Oil H106
Scratch H106
Shell Mill Holder Disc C164
Tiger X Flap Disc C104
Wire Wheel, Tube C152-C155, C157, C159
BTC
3 & 4-Jaw 5C Precision Chucks J290
3 & 4-Jaw Front Mount Self-Centering Scroll Chucks J287
3-Jaw A Mount Chucks J277-J279
3-Jaw D Mount Chucks J278-J279
3-Jaw Self Centering Scroll Chucks J280
4-Jaw Comination Flatback Chucks J283
4-Jaw Independent Chucks Direct Mount Type A J285-J286
4-Jaw Independent Chucks Direct Mount Type D J285
4-Jaw Self Centering Scroll Chucks J282
Fine Adjustment Steel Body Chucks J277
Replacement Chucks for Vertex Spacers J173
BUCKETS H107
BUFF & BLEND PRODUCTS C71, C96, C131-C140, C143, C169
BUFFERS K62-K64, K73
Dynabrade E18
Hand E18
BUFFING WHEELS, COMPOUND C71, C167-C169
BULBS
Dazor H80
Replacement H80
BULLSEYE LEVEL D163
BUMP CAPS H26
BURR-BIT A105, A367-A375
BURR-KING
Belt & Disc Grinders K74, K77
Bench Top Bowl Combi Paks K92
Chamber Combi Paks K93
Deburring Machines K92-K93
Polishing Machines K92-K93
BURRS
Aluminum Cut A373
Carbide A367-A373, A375
Die Cut A377
Dispenser I45
Dispenser A375
Grinding A367-A375, A377
HSS A374
Rapidkut A367-A372, A374
Router A375-A377
Sets A373, A375
BUSHINGS
CNC Toolholder Bushings J252
Drill Bushings J59-J63
Indicator Stem D62
Pin Gage D116
BUTT CANS, SMOKING H108
BUTTON HEAD SOCKET CAP SCREWS J16-J17
C WASHERS
Clamping Components J30
C.H. HANSON
Holders F152
Stamps F152
Stencils F152
Tags F152
CABINETS
Aerosol I28-I29, I32
Countertop I47
Cylinder Storage I28
Durham I22, I24, I27-I29, I32
Edsal I25, I27-I29, I50-I51
Flammable Liquid I28-I29
Kennedy I2-I3, I6-I7, I9-I11, I47
Lyon I25-I26, I28-I29
Mobile Work Centers I51
PRM PRO I21
Spill Control I29
Standing I47
Ventilated I24
Waterloo I4, I8, I11, I23
Wire & Terminal I32
Worktop I47
CABLE CUTTERS F27
CABLE TIE EXPRESS
Adhesive Mounting Bases J8
Cable Clamps J8
Cold Weather Cable Ties J10
Colored Cable Ties J9
Fluorescent Cable Ties J9
Heavy Duty Cable Ties J10
Metal Detectable Cable Ties J10
Miniature Cable Ties J9
Mounting Hole Cable Ties J8
Nylon Peel Cable Ties J10
Releasable Cable Ties J10
Standard Cable Ties J10
CABLE TIES
Adhesive Mounting Bases J8
Cable Clamps J8
Cable Tie Express J8-J10
Cold Weather J10
Colored J9
Fluorescent J9
Heavy Duty J10
Miniature J9
Mounting Hole J8
Nylon Peel J10
Releasable J10
Standard J10
Thomas & Betts J11
CABLE TIES CUTTER J11
CALIBRATION MASTERS D19, D38
CALIPER & MICROMETER SETS D81-D82, D84, D86
CALIPER ACCESSORIES
Fowler D40
Mitutoyo D39
Procheck D7, D18-D19, D38-D40, D46, D88, D203
CALIPER EXTENDERS D38
CALIPER TYPE MICROMETERS D7, D17

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

CALIPERS
Brown & Sharpe D30, D32
Calipers D22, D28-D37
Dial D34-D37
Digital D22, D32
Dividers D191-D192
Electronic D28-D34
Flat Leg D191
Fowler D29, D31, D35-D36, D84
Heavy Duty D34-D35
Hermaphrodite D191-D192
Inside D191-D192
Insize D29, D36
Mitutoyo D34, D82
Outside D191-D192
Procheck D22, D28, D31-D34, D80, D82
Snap D34
Solar D30
Spring D191-D192
Starrett D35
Vernier D32, D36-D37
Water Resistant D33
CALIPER & MICROMETER SETS D81-D82, D84, D86
CAMEL GRINDING WHEELS (CGW)
32A Wheels C12
AZ Wheels C16-C17
Back-Up Pads C109
Bench & Pedestal Wheels C27
Bench Grinding Wheels C27
Buffing Flap Discs C167
Centerless Cylindrical Feed Regulating Wheels C30
Centerless, Cylindrical Feed C28-C29
Ceramic Wheels (AS3) C20, C22
Chop Saw Blades C53-C54
Cones & Plugs C21
Cup Wheels C21-C23
Cut-Off Wheels C50, C53-C55, C58, C61
Cylindrical Grinding Wheels C29
Depressed Center Wheels C43, C54-55, C58, C61
Diamond X Blades C43
Diamond X Depressed Center Wheels C43
Drum Sander, Portable C160
EZ-Strip Wheels C140
Flap Discs C102-C103, C140
Flap Wheel Drums C160
Flap Wheels C106, C160
Interleaf Flap Discs C140
Internal Wheels C24
Metal Back Grinding Wheels C23
Pink Tool Room Wheels C14, C23
Polishing Compound C167
Porous Grinding Wheels C17
Reinforced Cut-Off Wheels C50, C53-C55, C58
Resin Fibre Discs C112
Ruby Grain Wheels C15
Semi-Flex Disc C140
Shop Rolls C94
Snagging Wheels C21
Surface Grinding Discs C137
Surface Grinding Wheels C12, C14-C17, C20, C24, C137
Tool Room Grinding Wheels . . . C3-C6, C14, C17, C23
Trimmable Back Flap Discs C103
White Wheels C3-6
CAMILLUS
Folding Knives F157
Hatchet F127
Machete F157
Saw F157
CANTILEVER RACKING I78
CANS H108
Oil G37
Safety Cans H122
Waste H109
CAPSCREW COUNTERBORES
Cobalt A124-A126
High Speed Steel A124-A126
Metric A124-A126
Multi-Tool A125
TiN Coated A124, A126
CARBIDE
Abrasive Tools C43
Boring Bars & Tools B37, B39, B59, B61, B111-B113, B116-B119
Burrs A367-A373, A375
Combined Drills & Countersinks A107-A109, A111
Countersinks A114-A122
Drill-Mills A345-A346
Drills A6, A58, A66-A67, A69, A71-A84
Drills, Center & Spotting A108-A109, A111
Drills, Hard Steel A6, A58
Drills, Hi-Roc A66
Drills, Hi-Tuff A66
Drills, High Performance A66, A69, A71, A73-A79, A81-A84
Drills, Jobber A6, A58, A62-A63
Drills, Screw Machine A64-A66, A69
Drills, Spade A65, A69
Drills, Spotting A108, A110-A111
Drills, Straight Flute A66-A67
Drills, Twister A71, A75, A78, A81, A83
End Mill Sets A278, A280
End Mills A257-A259, A261-A266, A268-A271, A273-A275, A277-A300, A302, A304-A310, A313-A316, A318-A319, A321-A325, A329-A330, A333-A334, A336-A337, A339-A344, A347-A348, A376
End Mills, 2-Flute A279, A281, A285-A288, A290, A319
End Mills, 3-Flute A266, A283-A285, A289-A290, A305, A343
End Mills, 4-Flute A310, A313, A322
End Mills, 5-Flute A316, A323-A325, A330, A336-A337
End Mills, 6 & 8-Flute A325
End Mills, 6-Flute A336-A337
End Mills, 7-Flute A339-A340
End Mills, 9-Flute A341
End Mills, 11-Flute A341
End Mills, 13-Flute A341
End Mills, Aluminum Cutting A278, A280-A290, A323, A343
End Mills, Ball Nose A261-A264, A274-A278, A283-A284, A289-A290, A292, A297-A299, A302, A304-A307, A316, A318, A321-A322
End Mills, Corner Rounding A347-A348, A376
End Mills, Die Mold A304-A307, A321
End Mills, Double End A263-A264, A277-A278
End Mills, General Purpose A257, A261, A263-A266, A268, A273-A274, A277-A278, A305, A319, A321
End Mills, High Helix A323, A325
End Mills, High Performance A283, A292, A297-A299, A302, A305-A309, A314, A316-A319, A321-A322, A325, A330, A334, A340
End Mills, Metric A265-A266, A283, A304-A307, A321
End Mills, Miniature A263-A264, A266, A277-A278, A291, A293-A296, A298-A300
End Mills, Rib Processing A304-A307, A321
End Mills, Rougher/Finisher A340, A342, A344
End Mills, Roughing A280, A316, A342, A344
End Mills, Stub A277
End Mills, Variable Helix A308-A309, A316, A330
Grooving Tools B109-B113, B117-B119
Jobber Drills A61-A63
Keyseat Cutters A350
Marking Cutters A346
Reamers A140-A145
Routers A348, A375-A377
Spotting Drills A110-A111
Thread Mills . . . . . A212-A214 , B115, B119
Threading Tools . . . . . A212 , B104, B106-B107, B115
Tool Holders B109-B110
CARBIDE BLANKS
Engraving B128
Micro 100 . . . . . B131
Rectangular B132
Round B131, B133
Split-End Extended Length B128
Split-End Regular B128
Standard Blanks B133
CARBIDE BURRS A367-A373
CARBIDE FILES F182
CARBIDE GRINDERS
Baldor K62, K73
CARBIDE GROOVING INSERTS
Rapidkut Top Notch B93
CARBIDE ROUTERS A375-A377
CARBIDE SANDING WHEELS C43
CARBIDE THREADING INSERTS,
Rapidkut Top Notch B96
Tool-Flo B83-B85
CARBIDE TIPPED
Bandsaw Blades E74
Boring Bars B37
Boring Bars & Tools B37, B117
Counterbores A127
Cut-Off Blades B130
Dead Centers J254
End Mills A254
Hammer Drills A60
Hard Steel Drills A6, A58
Jobber Drills & Sets A5-A6, A58
Keyseat Cutters A349-A350
Masonry Drills & Sets A59-A60
Milling Cutter A356, A359
Reamers A132, A138-A140
Saws, Circular A360
Shell Reamers A137-A138
Side Milling Cutters A356, A359
T-Slot Cutters A352
Taper Length Drills A59
Taper Shank Drills A59
Tool Bits B125
CARBO COOL GRINDING WHEELS C13
CARBORUNDUM
32AR Tool Room Wheels C10-C11
Abrasive Sponge C85
Belts C88-C90
Bench & Pedestal Wheels C25
Carbo Cool Porous Wheels C13
Ceramic Tool Room Wheels C13, C18
Cup & Dish Wheels C22
Cut-Off Wheels C53
Depressed Center Wheels C64
Disc Rolls C119
Flap Discs C101
Green Silicon (GC) Carbide Wheels C23-C25
Grip-On Paper Discs C119
Metal Back Grinding Wheels C23
Non-Reinforced Cut-Off Wheels C52
Porous Tool Room Wheels C13
PSA Strips C85
Reinforced Cut-Off Wheels C49-C50, C52-C53
Resin Fibre Discs C112
Segments C31
Shop Rolls C95
Tool Room Wheels, 32AR Abrasive (High Performance) C10-C11
White Tool Room Wheels C3-C6, C22
Zirconia Aluminum Abrasives C88
CARHARTT
Safety Glasses H4, H7-H8
CARBINEER CLIP KEY & TOOL HOLDERS D168
CARMEX
Thread Mills A214, B119
Threading Inserts B101-B102
Threading Sets B101
Threading Tools B101-B102
CARTRIDGE ROLL TEST KIT C85
CARTRIDGE ROLLS C51, C84-C85, C167-C168
CARTS
Cleaning H107
Maintenance I9
Service I53-I54
Tool I48-I49, I59
CARTS
Utility I40, I52-I54
CASTERS I13-I14
CAST IRON STRAIGHT EDGES D154
CAULK GUNS G37
CAUTION TAPE H119

CBN . . . . .
Files C45
Mandrels & Pins C46
Wheels C38, C41-C42
CDI (SNAP-ON INDUSTRIAL BRANDS)
Multitorq Torque Data System F81
Torque Pre-set Wrenches F81
Torque Screwdrivers F81
Torque Wrenches F78-F81
CEDARBERG
Misting Systems G23
CENTER DRILLS A107-A111
CENTER FINDERS D204-D205
CENTER GAGES D102
CENTER LINE GAGES D40
CENTER PUNCHES F141, F143
CENTER SQUARES D200
CENTERING DRILLS B61
CENTERING INDICATORS D49
CENTERLESS FEED WHEELS C29
CENTERLESS GRINDING WHEELS C27-28
CERAMIC ABRASIVES
Belts C90, 92
Cartridge Rolls, Mandrels C51, C84-C85
Cut-Off Wheels C48
Discs C110, C113, C129
Flap Discs C98-C103
Mini Flap Discs C100
Quick-Change Discs C122-C125, C127-C128
Tool Room Grinding Wheels C13, C22
CERTIFIED MEASURING TOOLS
Calipers D35
Gage Blocks, Sets D120
Gage Pin Sets D117
Indicators D41-D42, D45, D50, D57
Level, Rules D142
Micrometers & Sets D2-D6, D8-D9, D11, D13, D15, D19, D32
Outside D2-6, D8, D11, D13, D15
Protractors D92
Squares D147, D152
Thread Gages D196-D199
CGW (CAMEL GRINDING WHEELS)
32A Wheels C12
Back-Up Pads C109
Bench & Pedestal Wheels C27
Bench Grinding Wheels C27
Buffing Flap Discs C167
Centerless, Cylindrical Feed C28-C29
Ceramic Wheels (AS3) C20, C22
Chop Saw Blades C53-C54
Cones & Plugs C21
Cup Wheels C21-C23
Cut-Off Wheels C50, C53-C55, C58, C61
Cylindrical Grinding Wheels C29
Depressed Center Wheels . . . C43, C54-C55, C58, C61
Diamond X Blades C43
Diamond X Depressed Center Wheels C43
EZ Strip Wheels C140
Flap Discs C102-C103, C140
Flap Wheel Drums C160
Flap Wheels C106, C160
Interleaf Flap Discs C140
Internal Wheels C24
Mattison-Thompson Type Grinding Wheels C30
Metal Back Grinding Wheels C23
Pink Tool Room Wheels C14, C23
Polishing Compound C167
Porous Grinding Wheels C17
Reinforced Cut-Off Wheels C50, C53-C55, C58
Resin Fibre Discs C112
Ruby Grain Wheels C15
Semi-Flex Disc C140
Shop Rolls C94
Snagging Wheels C21
Surface Grinding Discs C137
Surface Grinding Wheels C12, C14-C17, C20, C24, C137
Tool Room Grinding Wheels . . . C3-C6, C14, C17, C23
Trimmable Back Flap Discs C103
CHAIN HOISTS
Harrington I74
Hoist Rings I74
Strap Puller I66
CHAIN INDICATOR HOLDERS D77
CHAIN PIPE WRENCH F154, F156
CHAIN VISE F155
CHAIRS
Brewer Design I58-I59
Folding I59
Vestil I58
CHALLENGE
Steel Surface Plates D123
V-Blocks D179
CHAM-BIT A105
CHAMFER GAGES D101-D102
CHAMFER MILL INDEXABLE B65, B118
Everede B63
CHAMFERING END MILLS A121-A122, A346
CHAMFERING MACHINES
Heck Industries K69
CHAMFERING MILLS, OUTSIDE A123
CHANNELLOCK
Adjustable Wrenches, Sets F13
Diagonal Cutters F23
End Cutting Pliers F33
Flat Nose Pliers F26
Linesman Pliers F33
Nut Buster Tongue & Groove Pliers F31
Nut Driver Sets F125
Oil Filter Pliers F31
Pliers, Sets F32, F34
Slim Jaw Wrench F13
Tongue & Groove Pliers F30, F32, F34
Welding Pliers F26
CHESTS
Kennedy I3, I6, I10
Waterloo I8
CHEVELIAR MACHINERY
Surface Grinders K57
CHICAGO DIAL INDICATOR (CDI)
Indicators D41-D42
Remote Probes & Displays D87
Test Indicator Accessories D58
Thickness Gages D103
CHICAGO PNEUMATIC
Chippers E42
Die Grinders E9
Drills E3-E4
Grinders E9, E23
Impact Wrenches E37-E40
Sanders, Disc, Orbital E16-E17
Sanders, Disc, Oribital E17
Screwdrivers E38
Scribers E24
Utility Hammers E42
CHILL-ITS
Bandanas H34
Sweat Bands H34
Towels H34
CHIP BRUSHES H106
CHIP HOOK WITH SAFETY SHIELD
Lathe Chuck Parts & Accessories J160
CHIP SHIELDS, MACHINE ACCESSORIES H87-H88
CHIPPERS, PNEUMATIC E42
CHIPPING HAMMERS E42, F127
CHISELS
Brick F139
Cape F139
Cold F138-F139
Diamond Point F139
Hard Cap F139, F142
Holder F138
CHOP SAWS E33, K41-K43
CHUCK KEYS CAD-DE
Drill Chuck Accessories J153
CHUCK WRENCHES
Lathe Chuck Parts & Accessories J299
CHUCKING REAMERS & SETS A129-A133, A142-A146
CIGARETTE BUTT CONTAINERS H108
CIMCOOL
Centersaver Grease G31
Cimclean® G49
CimGuard® G42
Cimperial® G11
Cimstar® G10, G12
Cimtech® G11
Corrosion Protection G42
Machine Cleaner G49
Semi-Synthetic Coolant G10, G12
Soluble Oil Coolant G11
Synthetic Coolant G11
CIRCULAR
Jig E35
CIRCULAR COLD SAWS K38, K40
CIRCULAR SAW BLADES E36
CIRCULAR SAWS E35
CLAMP-ON INDICATOR HOLDERS D77
CLAMPING COMPONENTS
Ball Plungers J79-J82
Beveled Machine Washers J30
Brass Extra Thick Flat Washers J31
C Washers J30
Double Cams J92
Dovetail Bolts J91
Eye Bolts J37-J39, J92
Fixture Studs J85
Flat Washers Square J30
Grinder Dog J256
Hand Wheel J93, J95
Handles J93, J95
Hardened Flat Washers J32
Heavy Duty Undersized Head T-Slot Bolts J90
Jergens J84, J86, J88, J91, J94
Knobs J94
Levers J93, J95-J96
Masonry Anchoring J36
Morton J93-94
Neoprene Caps J74
Nuts J85-J88
Plain Straps J88
Polyurethane Caps J74
Pull Rings J95
Screw J94
Set-Up Studs J85
Spacer Washers J30
Spacing Washers Case Hardened J30
Spacing Washers-Steel J30
Spherical Washer Assemblies J32
Spring Plungers J80-J82
Stainless Steel Extra Thick Finished Flat Washers J31
Stainless Steel Finished Flat Washers J31
Studs J83-J85, J96
Swing Bolts Jiglatch J92
T-Bolts J91
T-Slot Bolts J91-J92
Te-Co J32, J79-J83, J85-J88, J90, J95-J96
Thick Metric Flat Washers J32
Tugger T-Bolts J90
Turnbuckle Assembly J38
Valtra J92-J93
CLAMPS
40 Pc. Kits J98
400 Series Columbian C-Clamps J106
400 Series Hi Vis Safety Yellow C-Clamps J106
400 Series Standard C-Clamps J105
4400 Series Square Throat C-Clamps J106
52 Pc Clamping Set J98
52 Pc Machinist Clamping Set J98
540 Series Ductile Alloy C-Clamps J104
540A Carriage Kit J107
60 Pc. Set-Up Kits - Aluminum Step Blocks J99
60 Pc. Set-Up Kits - Steel Step Blocks J99
800 Series Standard Depth C-Clamps J104
81L - Pneumatic Power J79
Adjustable Spindle Assemblies Cone Neoprene Cap J74
Adjustable Spindle Assemblies Flat Neoprene Cap J73
Adjustable Spindle Assemblies Swivel Foot J75
Adjustable Step Block Kits J89
Auto-Adjust Toggle J64
Basic Kits J89
Black Oxide Deep Forge C-Clamps J105
Bolt Retainers J74

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Bridgeport Clamping Set J97
Brute Force O Series C-Clamps J109
C-Clamps J104-J106
C-Clamps 4400 Series Square Throat J106
Cantilever J111
Carriage C-Clamps J106
Coarse & Fine Pitch Heel Straps J89
Deep Throat J105, J112
Drop-Forged Light Duty C-Clamps J104
Drop-Forged Plain J99
EZS J111
F-Clamps J107, J109-J110
Finger Drop-Forged J100
Fittings E46
Fixture J100, J102
Flanged Washers U-Bar Clamps J74
Forged Adjustable J99
Forged Deep Throat C-Clamps J105
Gooseneck Drop-Forged J100
Heavy Duty Double Action Edge J90
Heavy Duty Drop-Forged C-Clamps J109
Heavy Duty F J108
Hi Vis Deep Forge C-Clamps J109
Horizontal J68-J70, J76
Horizontal Hold Down J65
Horizontal Latch J70, J72
Horizontal New Generation J69
Horizontal Pull Action J72
Horizontal Pull Action Hook J70, J72
Horizontal Pull Action Latch J70
ID Xpansion J102-J103
Indicators D58, D60-D62, D64, D74
Kant-Twist J112
Keychain J112
Knife Edge J101
L-Clamps J107-J108
Large Toe Kits J97
Latch J76
Latch Plates J74
Machinable Uniforce J101
Machinist Clamping Sets J98
Machinist Set-Up J131
MightyMini Steel J107
Pipe J110
Pitbull J103
Plain Clamps J89
Plunger-matic Assemblies J74
Pneumatic Cylinder J77
Pneumatic Power Sensors J79
Pneumatic Swing J78
Pneumatic Swing Cylinder Accessories
Mounting Block J78
Pro Heavy Duty C-Clamps J104
Push/Pull Toggle J71, J76
Quick-Acting Fixture J112
Quick-Grip J111
Rite Hite Self Positioning Hold Down J99
Round Cap Spindle Assemblies J73
Series 50 Super Junior J104
Serrated End J89
Small Toe Kits J97
Spark Duty 2000S F-Clamp J110
Spark Duty 400CS Hargrave Hi Vis
C-Clamps J109
Spark Duty 400P Series C-Clamps J109
Spark Duty 4800S Series F-Clamps J110
Spark Duty Deep Reach Series
F-Clamps J109
Spark Duty J-Series F-Clamps J110
Spindle Assemblies Hex Head
Full Thread J75
Spindle Assemblies Swivel Padded J75
Spring J111
Square Throat J106
Squeeze Action J72-J73
Standard Duty J108
Steel Spring J111
Steel Step Block & Clamp Sets J89
Step Blocks J88
Straight Action Pneumatic J78
Straight Line Action J64-J65, J71
Super Clamp Sets with Steel Blocks J97
T-Handle with Cushion Handles J112
T-Nut and Stud Sets J97
T-Slot Cleaner J97
Threaded Body Straight Line Action J70
Toggle Clamp Spindle J73
Toolmaker's Parallel J104
U Clamps Drop-Forged J100
U-Bolt Spindle Accessories J75
Uniforce J101
Universal No-Mar Round Pad J112
Universal Round Handle C-Clamps J112
Universal T-Handle Stainless J112
Universal T-Handle Style J112
Vertical J66, J76-J77
Vertical 2000 Series J67-J68
Vertical Hold Down Action J64-J67
Vertical Pull Action Latch J70, J72
Vise J131
Welding J109-J110
Wilton J109-J110

CLAUSING
Drill Presses K19
Horizontal Bandsaws K28
Surface Grinders K58

CLAUSS
Scissors F163-F164
Shears F163
Snips F164

CLAW HAMMERS F132

CLEANERS
Abrasive C93
Ashburn G40, G42, G45-G47, G50
Cimcool Machine Cleaner G49
Contact G40, G42, G45-G48, G50
CRC G45, G47-G48
Crown G46-G48
Degreasers G45-G48, G56
Glass G47-G48
GoJo H113-H116
Graffiti Remover G47, H116
Graymills G49-G50
Hand H113
Loctite G46, G48, G56
LPS G45, G47
Parts Washer G49-G50
Scrubs in a bucket H116
Simple Green G46
Sump Pump G49
Wypall H116

CLOTH WIPERS H115

CLOVER ABRASIVE COMPOUNDS C166

CLUTCH STEP COLLETS 5C
5C Collets J168

CMM STYLI & ACCESSORIES D66-D67

CNC
Carts I48-I49
Wall Locker I48
Workstation I48

CNC ADJUSTABLE ANGLE HEADS J175

CNC BANDSAWS K35, K37, K39

CNC MACHINERY
Bandsaws K35, K37, K39
Cold Saws K40

CNC SAFETY COVERS I59

CNC TOOL CART I49

CO-AXIAL INDICATORS D49

COATED ABRASIVES
Back-Up Pads C108-C109
Belt Finishing Sticks C70
Belts C89, C91, C94
Bore Polishers C147
Cartridge Rolls, Mandrels C51, C84-C85
Disc Rolls C116, C118-C119
Flap Discs, Brushes, Wheels C139
Grip-On Paper Discs C119
PSA Discs, Holder C109, E15
PSA Sheets, Strips C85
Quick-Change Discs, Holders C108, C123, C127, C130, C147
Sheets C97
Shop Rolls C96
Spiral Bands C86

COATING REMOVAL WHEELS C134, C139, C141

COATINGS, TOOL PROTECTION A163

COBALT
Aircraft Extension Drills A42
Ball Nose End Mills A244-A245
Capscrew Counterbores A124-A126
Chamfering End Mills A122
Combined Drills & Countersinks A107-A108
Corner Rounding End Mills & Sets A347-A348
Countersinks A114, A119, A122
Double End Mills A242, A244-A245
Dovetail Cutters & Sets A352, A355
Drill Sets A4-A6, A28-A29, A45
Drill-Mills A345-A346
Jobber Drills A14, A20-A22
Keyseat Cutters & Sets A349-A351
Reamers A132
Reduced Shank Drills A44-A45
Roughing End Mills A245-A254
Roughing T-Slot Cutters & Sets A352, A355
Screw Machine Drills A28-A29
Shell Roughing End Mills A254
Single End Mills A233, A241, A243-A246
T-Slot Cutters A352-A353, A355
Taper Length Drills A39
Taper Shank Drills A55

COILHOSE PNEUMATICS
Connectors, Couplers, Fittings . . . . . E45, 52-54 . . . . . E13, E43, E45-E48, E52-E53, E55-E57

COLD FINISH KEYSTOCK J41

COLD SAW
Palmgren K39
Scotchman K40

COLEMAN (SEE WOODS
Extension Cords H75-H76

COLLET HOLDERS
CAT40 Style J193

COLLET ACCESSORIES
5C Adjustable Threaded Collet Stop J167
5C Collet Stand J167
5C Collet Stop Front Loading J167
5C Hex and Square Collet Blocks J167
5C Universal Collet Stop J167
Clamping Nuts J212
Collet Keyway Wrenches J167
ER Power Coat Coolant Nuts J213
ER System Clamping Nuts J213
ER System Coolant Rings J214
ER System Torque Wrench Heads J212
ER System Torque Wrenches J212
Power Chuck Wrenches J229
Rego-Fix J202
Spanner Wrenches J211
Top Clamping Nuts J212
Trays J202

COLLET CHUCKS
5C J170
Capto J226
DA Collet Holders J188
ER Style J226
TG Collet Holders J188
Zero-Z Holders J194

COLLET FIXTURE J169-J172

COLLET HOLDERS
BT40 Style J191
BT50 Style J191-J192
CAT40 Style J192
CAT50 Style J193-J194
ER Style J228
ETM J189-J190
Haimer J228
Morse Taper Shank J190
NMTB Shank ER J190
R8 ER Collet Holders J189
Rego-Fix J192, J194
Straight Shank J195

COLLET HOLDERS/RACKS
Collet & Tool Tray J163
ER Protective Collet Trays I46
R8 Collet Stand Only J163
Rotating R8 Collet Rack J163

COLLET SETS
5C J167
ER J202
ETM J202
Parlec J202
Power Collet Sets J229
R8 with Metal Stand J163
Rego-Fix J202
Techniks J202

COLLETS
Air Turbine E31
DA Style J190
Dremel E28
ER Metric Steel Sealed Coolant Spring J210
ER Spring J196-J201
ER Steel Sealed Coolant Spring J207-J209
GB Tapping J182-J183
Power J228
R8 . . . . . J162
R8 Emergency J163
R8 Hex Metric J162
R8 Square J162
R8 Square Metric J162
Rego-Fix J182-J183, J196-J201, J207-J210
Techniks J196-J201, J207-J210
TG Style J189
COLLIS
Drill Drivers J161
Extension Sockets Long J160
Magic Chucks, Collets J184
Rough Sockets J161
Tap Drivers A155, J184
COLOR CONNEX AIR TOOL COUPLERS E51
COLOR-CODED SHIM STOCK J44
COMBINATION BELT & DISC SANDERS
Kalamazoo K70-K73, K75
Palmgren K72
Shop Fox K73
COMBINATION LOCKS H123
COMBINATION MACHINES
PRM K8
COMBINATION SQUARES, COMPONENTS D146-D151, D153, D166, D188, D191, D207
Bevel D152
Heads D145
Protractor Heads D145
COMBINATION WRENCHES
Metric F3-F4, F7
Sets F2, F4
Standard F2, F6-F7
COMBINED DRILLS & COUNTERSINKS A107-A109
COMPARATORS, OPTICAL D129, D131, D171
COMPARATORS, SURFACE D114-D115
COMPARATORS, SURFACE
Roughness Testers D113
COMPARTMENT BOXES
Durham I33
COMPOUNDS
Abrasive Finishing, Lapping C166
Buffing C169
Diamond Polishing C166
Facsimile Quick Setting D127
COMPRESSORS
Ingersoll Rand K88, K90, K92
Oil G13
Puma K85, K88, K90
CONCAVE & CONVEX MILLING CUTTERS A360
CONCRETE & ASPHALT CUTTING DIAMOND SAW BLADE C39
CONES C76
CONES & PLUGS, ABRASIVE C21, C24
CONES, SAFETY H30, H108
CONNECTORS, COUPLERS, FITTINGS FOR AIR TOOLS E46-E48
CONTACT CLEANERS
CRC G47-G48
Crown G47
LPS G47
CONTINUITY TESTERS D137-D140
CONVERSION RULES
Brown & Sharpe D150
CONVOLUTE WHEELS C142-C144
COOLANT COALESCER G18, G29
COOLANT FED DRILLS A57, A75, A78, A81-A83
COOLANT HOSE & SPOUTS
Cedarberg G23
Loc-Line G23
COOLANT MISTERS
Accu-Lube G4, G13-G14, G26
Amflo G24
Cedarberg G23
Kool Mist G24-G25
Monroe G2, G4, G6, G14, G25
National G23
Noga G23, G25
Trico G19, G24
Unist G27
COOLANT PREMIXER **G18**
COOLANT PUMPS
Graymills G17-G18
Little Giant G15
Wesco G17, G19
COOLANT REFRESHER G18-G19, G29
COOLANT SKIMMERS G18-G19, G24-G25, G28
Coolant Refresher G18-G19, G29
Drum Mixers G30
COOLANTS
Ashburn G2, G5-G9, G13, G18-G19, G31, G41
Change Over Kits G25
Cimcool G10-G12, G42, G49
Cool Tool G2
Coolant Premixer G18
Coolant Refresher G18-G19, G29
Hangsterfers G8-G9, G12
Kool Mist G24-G25
Lenox Band- Ade E66
LPS G2, G6-G7, G14
Master Chemical G7-G12
Nickel G9
Rustlick G5, G9-G10, G14
Skimmers G18-G19, G24-G25, G29-G30
Stainless Steel G9
Steel G9
Trico G9, G26
Vaughan Chemical G8
COOLING TOWELS H34
COPPER HAMMERS F133
COPPER WASHER ASSORTMENTS
Maintenance Kits J4
COPPERHEAD CARBIDE CUTTERS E89-E90
CORD REELS
Bayco H69
Steelman H68
CORDED DRILLS E4-E5
CORDLESS DRILL DRIVERS E6
Impact Wrenches E7
Rotary Hammer E5
CORDLESS SCREWDRIVERS E8, E41
CORDS, EXTENSION, REELS H68-H69, H75-H76
CORE DRILLS A56-A57
CORNER ROUNDING END MILLS & SETS A347-A348, A376
CORROSION INHIBITORS G31-G32, G34, G39-G40, G42-G43, G47
CORTINA SAFETY H30
COSEN
Bandsaw Accessories K34
Horizontal Bandsaws K26, K29-K30, K34, K36
Miter Cutting K24, K26, K29-K30, K36
Vertical Bandsaws K24
COTTER PIN PULLER **F137**
COTTERMAN
Ladders H100
COTTER PIN ASSORTMENTS
Maintenance Kits J2-J3
COTTON REINFORCED ABRASIVES C78
COUNT-CLOCKS D141
COUNTER-BIT A105
COUNTERBORES
Aircraft A127-A128
Alvord-Polk A124, A126
Blades & Holders A125
Capscrew A124-A126
Carbide Tipped A127
Interchangeable Pilot A127-A128
Keo A124, A126
Metric A124-A126
Pilots A128
TiN Coated A124, A126
COUNTERBORES INDEXABLE B64
COUNTERS D168
COUNTERSINK & DEBURRING TOOLS A112-A113
COUNTERSINK GAGES D101-D102
COUNTERSINK INDEXABLE B64
Everede B62
Rapidkut B62
COUNTERSINKS
1-Flute A114-A115
3-Flute A116
3N1 Drill Point A121
6-Flute A117-A120
Carbide A109, A114-A115, A117-A121
Cham-Bit A105
Chatterless A118-A120
Cobalt A114, A118-A120, A122
Combined Drills & Countersinks A107-A109, A111
Counter-Bit A105
Countersink & Deburring Tools A112-A113
Deburring A122-A123
High Speed Steel A116-A117
Keo A107-A109, A112, A115-A120
M.A. Ford A109, A112, A114-A116, A118-A120
Noga A380
Rapidkut A107-A109, A111, A114, A116-A117, A119-A120, A122
Sets . . A107-A108, A112-A114, A116, A118-A120, A122
Severance A121-A123
Shaviv A385
Weldon A113
Zero Flute A112-A113
COUPLERS, AIR E51-E54
COUNTING SCALES D105
COVERALLS H33-H34
COVERS
Machine K102-K103
Surface Plate D124
Way K103
COXREEL HOSE REELS E50
CRAFT TOOLS, KITS E25-E26, E28-E30
CRANES
Gantry Cranes I67
CRATEX
Blocks & Sticks C74
Cone Mandrels C51, C76
Cones & Plugs C76
Point Mandrels C51, C76
Points C76
Wheel Mandrels C51, C74
Wheels C75
CRC FLUIDS
Cleaners G45, G48
Contact Cleaners G47-G48
Corrosion Inhibitors G43
Degreasers G45-G46
Grease G31, G33-G34, G43
Lithium Grease G31
Lubricants G31, G34, G39, G43
Multi-Purpose Food Grease G33
Penetrants G34, G39, G43
Spray Applicators G46
CRESCENT
Adjustable Wrenches, Sets F13-F14
Cutters F29
Diagonal Cutters F22
Pliers F24, F29, F33
Pliers, Sets F24
Pro Tool Sets F43
Sockets, Sets F43, F60
CREWS
Faceshields H14
Goggles H11, H13
Magnifiers H9
Protective Eye Wear H2-H7, H9-H12
Readers H9
Safety Glasses H43-H44
CRIMPING TOOLS F34
CRITERION BORING TOOLS
Boring Bars, Inserts B37, B39
Boring Head Sets J186-J187
Boring Heads J185
Boring Heads, Shanks J185-J186
Carbide Tipped Boring Bars B117
Indexable Boring Bars B37
Indexable Threading Tools B117

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

CROWN FLUIDS
Cleaners . . . G46-G48
Coatings . . . G42-G43
Corrision Suppresent . . . G42
Cutting Oils . . . G6
Degreasers . . . G46-G48
Fault Finders . . . D128, G57
Glass Cleaners . . . G47-G48
Lubricants . . . G34, G39-G40, G44, G46
Mold Releases . . . G46
Paints (AERVOE) . . . G62
Penetrants . . . G39-G40, G42-G44, G46
Stencil Inks . . . G57-G58
Tan Cover-Up . . . G57
Toolmakers Inks . . . G57-G58
CROWFOOT WRENCHES . . . F5
CRYSTOLON FILES . . . C68
CUP & END BRUSHES . . . C151
CUP WHEELS . . . C41
CUT OFF TOOLS . . . E12
CUT-OFF BLADES
P Style . . . B130
Abrasive . . . C49, C52-C55, C58-C59, C63
Carbide Tipped . . . B130
Cobalt . . . B130
High Speed Steel . . . B130
CUT-OFF SAW
Kalamazoo . . . K41-K43
CUT-OFF TOOL HOLDERS . . . B129
CUT-OFF TOOLS, AIR
Dynabrade . . . E12
Florida Pneumatic . . . E13
CUT-OFF WHEELS, ADAPTERS . . . C47, C49, C51-C53, C55, C57-C60, C65
Abrasive . . . C52-C56
Diamond . . . C41
Surf-Pro . . . C48
CUT-OFF/GROOVING INDEXABLE
Dorian . . . B77
Iscar . . . IMC4-IMC6, IMC8-IMC9, IMC12-IMC15, IMC17-IMC19
Tungaloy . . . IMC93
CUT-OFF/GROOVING INSERTS, INDEXABLE CARBIDE
Iscar . . . IMC4, IMC6, IMC13, IMC16
Tungaloy . . . IMC84-IMC85, IMC92
CUTTER GRINDERS . . . K66-K67, K69
CUTTERS
Concave Radius . . . A354
Convex Radius . . . A354
Double Angle . . . A353, A359
Dovetail . . . A355-A356
Marking . . . A346
Milling . . . A356-A360
Single Angle . . . A354, A359
T-Slot . . . A352
Aviation Snips . . . F28
Bolt . . . F27
Cable . . . F27, F39, F41
Diagonal . . . F22-F23, F39
Folding Knives . . . F42, F157, F160
Hatchet . . . F127
Knives . . . F39, F157-F162, F184
Machete . . . F157
Pipe . . . F155-F156
Pliers . . . F29, F33
Pocket . . . F161
Saw . . . F157
Scissors . . . F163-F164
Sheet Metal . . . F29, F164
Snips & Shears . . . F164
Strap . . . F27
Tube . . . F155-F156
Wire . . . F21-F23, F33, F42, F164
CUTTING FLUIDS
Accu-Lube . . . G4-G5, G13-G14, G26
AGS . . . C93, G31-G32
Ashburn . . . G2, G5-G9, G13, G19, G31, G41
Cimcool . . . G10-G12, G31, G42, G49
Crown . . . G6
Hangsterfers . . . G3-G4, G8-G9, G12, G41
Kool Mist . . . G24-G25
Lenox Band- Ade . . . E66
LPS . . . C93, G2, G6-G7, G14, G32
Master Fluid . . . G3, G7, G12
Mobil Oils . . . G13
Monroe . . . G2, G4, G6, G9, G14, G25
Relton . . . C93, G4, G32
Ridgid . . . G5
Rustlick . . . G4-G5, G9-G11, G14, G30, G40, G49
Tap Magic . . . G2, G4, G6
Tapmatic . . . G2, G7, G14
Trico . . . G9, G26
Vaughan Chemical . . . G8
CLEMATIC
Drill Presses . . . K20
CYCLONE
Sandblasters . . . K94-K96, K98
CYLINDER SQUARES . . . D166
CYLINDER PUMPS
Cylinder Pumps . . . I71-I73
Enerpac . . . I72
CYLINDRICAL GRINDING WHEELS . . . C29
DA COLLET HOLDERS
Collet Chucks . . . J188
DA STYLE COLLETS . . . J190
DAKE MACHINES
Air, Electric, Hydraulic H-Frame . . . K79-K82
Arbor Presses . . . K78-K80, K82
Bandsaws . . . K24, K27, K29
Drill Presses . . . K18, K20
H-Frame Presses . . . K79-K80, K82
Trade-Master . . . K24
DAREX
Drill Sharpeners . . . K66-K68
End Mill Sharpeners . . . K66-K67
Tool Sharpener . . . K66
DATA PROCESSOR, SPC . . . D87
DAZOR
High Power Lights . . . H77
LED Work Lights . . . H77, H79
Magnifiers . . . H81-H82
Replacement Bulbs . . . H80
DE-STA-CO
81L - Pneumatic Power Clamps . . . J79
Adjustable Spindle Assemblies Cone Neoprene Cap . . . J74
Adjustable Spindle Assemblies Flat Neoprene Cap . . . J73
Adjustable Spindle Assemblies Swivel Foot . . . J75
Bolt Retainers . . . J74
Flanged Washers U-Bar Clamps . . . J74
Horizontal Clamps . . . J69
Horizontal Clamps New Generation . . . J69
Horizontal Hold Down Clamps . . . J65
Horizontal Latch Clamps . . . J72
Horizontal Pull Action . . . J72
Horizontal Pull Action Hook Clamps . . . J72
Latch Plates . . . J74
Neoprene Caps . . . J74
Plunger-matic Assemblies . . . J74
Pneumatic Cylinder . . . J77
Pneumatic Power Clamp Sensors . . . J79
Pneumatic Swing Clamps . . . J78
Pneumatic Swing Cylinder Accessorie Mounting Block . . . J78
Polyurethane Caps . . . J74
Round Cap Spindle Assemblies . . . J73
Spindle Assemblies Hex Head Full Thread . . . J75
Spindle Assemblies Swivel Padded . . . J75
Squeeze Action Clamps . . . J72-J73
Straight Action Pneumatic Clamps . . . J78
Straight Line Action Clamps . . . J64-J65, J71
Threaded Body Straight Line Action Clamps . . . J70
Vertical Clamps 2000 Series . . . J67-J68
Vertical Hold Down Action Clamps . . . J64-J67
Vertical Pull Action Latch Clamps . . . J72
DEAD BLOW HAMMERS . . . F126, F128
DEAD CENTERS
Bull Nose Carbide Fast Trak SpeciaL . . . J255
Bull Nose Morse Taper . . . J254
Carbide Tipped Full and Half Lathe . . . J254
CNC Bull Nose . . . J263
CNC High Speed Steel Tipped . . . J253
CNC Nuts . . . J253
High Speed & Carbide Tipped . . . J253
Imperial Full Large Carbide Point . . . J255
Imperial Half Large Carbide Point . . . J255
Lathe, MT, B&S, Jarno Import . . . J254
Long Series Full-High Speed Steel . . . J255
Morse Taper . . . J254
Morse Taper Alloy Steel . . . J254
Morse Taper Carbide Tipped . . . J254
Morse Taper CNC Carbide Tipped . . . J253
Morse Taper Half Carbide Tipped . . . J254
Morse Taper Half Carbon Steel . . . J254
Pipe Nose Morse Taper . . . J254
DEBURRING BRUSHES . . . C149-C151
DEBURRING MACHINES
Baldor . . . K60-K62, K73
Burr-King . . . K92-K93
Heck . . . K69
Kalamazoo . . . K94
PRM . . . K60
Sandblasters . . . K94-K98
Vibratory Finishers . . . K92-K94
DEBURRING TOOLS
Burr-Bit . . . A105, A367-A369
Countersink & Deburring Tools . . . A112-A113
E Z Burr . . . A106
Noga . . . A378-A383
Severance . . . A122-A123
Shaviv . . . A383-A386
DEBURRING WHEELS . . . C146
DEEP THROAT MICROMETERS . . . D13, D16
DEGREASERS . . . G45-G48, G50
DELINEATOR POSTS . . . H30, H34
DEMAGNETIZER/MAGNETIZER . . . J150
DEMOLITION SETS . . . F134
DEPRESSED CENTER WHEELS . . . C54-C55, C58-C61, C63-C64, C146
Diamond X . . . C43
Norton Abrasives . . . C62
DEPTH & ANGLE GAGES . . . D27
DEPTH BASE ATTACHMENTS . . . D39
DEPTH GAGES, MICROMETERS . . . D21-D27
DESKS
Desks, Foreman . . . I31
Portable Lifting . . . I24
PRM PRO . . . I24
DESMOND DRESSERS . . . C33, C37
DEW RAGS . . . H34
DEWALT
Air Compressors . . . K85, K89, K91
Utility Carts . . . I51
DEWALT POWER TOOLS
Area Light . . . H67
Cordless Screw Guns . . . E41
Cordless Screwdriver . . . E8
Drills . . . E4-E8, E91
Grinder Kit . . . E22
Grinders . . . E21-E22
Hammer Drill Kit . . . E7
Heat Gun . . . E2
Impact Kit . . . E7
Impact Wrenches . . . E7, E41
Palm Sander . . . E14
Rotary Hammer Drill . . . E5
Rotary Hammer Kit . . . E6
Sanders . . . E14, E21-E22
Saws . . . E33-E35
Screw Gund . . . E7
Vacuums . . . H62, H110
DIAGONAL CUTTERS . . . F22-F23, F39
Extra Long . . . F21
DIAL BORE GAGES, ACCESSORIES . . . D95-D97
DIAL CALIPERS . . . D34-D37
DIAL DEPTH GAGES . . . D26
DIAL HEIGHT GAGES . . . D89-D90
DIAL INDICATORS
AGD Style . . . D26, D41-D46
Back Plunger . . . D57
Dial . . . D42
Fowler . . . D63
Mini . . . D46
Shockproof . . . D45
Test . . . D50-D57
Waterproof . . . D45
DIAL THICKNESS GAGES . . . D103-D104

How to use this index
LIGHTED SAFETY GLASSES . . . H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

DIAMOND
- Diamond Hand Pads . . . C44
- Diamond Quick Change Disc . . . C44
- Dressers . . . C34-C35, C39
- Files . . . C45
- Hones & Sharpening Stones . . . C67
- Mandrels, Mounted Wheels . . . C46
- Polishing Compounds . . . C166
- Saws . . . C39, C43
- Scribers . . . C44
- Sharpening Stones . . . C67
- Wheels . . . C38-C41

DIAMOND & CBN DRESSING STICKS . . . C40
DIAMOND DRESSERS . . . C34-C35
DIAMOND NIB HOLDER . . . C37
DIE
- Adapters . . . A225
- Die Grinders . . . E9-E12, E32
- Grinders . . . E9, E11-E13, E32
- Holders . . . A225
- Stocks . . . A225

DIE GRINDERS
- Air Powered . . . E11, E13, E32
- Dynabrade . . . E11

DIE SETTER BAR . . . F135
DIES
- Hexagon Threading . . . A219-A220
- Left Hand . . . A219-A220
- Metric . . . A218, A220
- Pipe Thread . . . A218
- Round Adjustable RH & LH . . . A218-A219
- Sets . . . A215-A217, A219

DIGITAL INDICATORS . . . D46-D49, D51, D58, D203
DIGITAL MICROMETERS . . . D5D-6, D11, D13-D16, D19
DIGITAL PROTRACTORS . . . D92, D156
DIGITAL READOUTS
- Acu-Rite . . . K115-K117
- Fagor . . . K112-K113
- Mitutoyo . . . K111
- Newall . . . K114-K115

DILLON MFG
- Full Wrap Aluminum Jaws . . . J272
- Jaw Nuts . . . J273
- Metric Regular Serrated Soft Jaws . . . J271
- Metric Serrated Pointed Soft Jaws . . . J271
- Metric Serrated Single Step Reversible Hard Jaws . . . J275

DISC MICROMETERS . . . D12-D13
DISC SANDERS
- Air Powered . . . E23
- Burr-King . . . K77
- Hand Held, Air . . . E15-E16, E18
- Hand Held, Corded . . . E21-E22
- Kalamazoo . . . K70-K73, K75
- PRM . . . K70
- Shop Fox . . . K70, K73

DISCONNECTS . . . J8
DISCONNECT SWITCHES . . . H72
DISCS
- Adhesive Back . . . C118
- Adhesive Back (PSA) . . . C115-C116, C119
- Disc Rolls . . . C116, C118-C119
- Film . . . C116
- Film-Backed . . . C120
- Flap . . . C98
- Gemtex . . . C114
- Grip-On Paper . . . C119
- Hook & Loop . . . C120
- Non-Woven Abrasives . . . C71, C135-C137
- Paper Back . . . C116, C118
- Quick-Change . . . C78, C122-C128, C130, C135, C137, C141, C147
- Resin Fibre . . . C110
- Sanding . . . C116, C120
- Surf Condition Disc . . . C71, C136
- Tab Film . . . C116
- Trimkut . . . C114, C169

DISPENSERS
- Burr . . . A375, I45
- Drill . . . A16, I44-I46
- Drill & Tap . . . I46
- Ear Plug . . . H21
- End Mill . . . I45
- Hand Cleaner . . . H113
- Huot . . . A16, A375, I45-I46
- Insert . . . I45
- Paper Towel . . . H116
- Reamer . . . I44-I45
- Tap . . . I46
- Tap Indexer . . . I44

DIVIDERS . . . D191-D192
DIVIDING HEADS . . . J175
DM METALLIC SEALED COLLET SETS
- Rego-Fix . . . J210

DOLLY
- Drum . . . I52, I79

DORIAN TOOL
- Adjustable Angle Head . . . J176
- Bull Nose Adapters . . . J263
- Bull Nose Live Centers . . . J263
- Carbide Inserts . . . B39
- CNC Adjustable Angle Heads . . . J175-J176
- CNC Bull Nose Dead Centers . . . J263
- CNC Live Centers . . . J262
- CNC Modular Knurling Tools . . . J245-J246
- Coolant Assembly . . . B22
- Drawbars . . . K105
- Indexable Boring Bars . . . B39-B42, B44-B49
- Indexable Chamfer Mill . . . B65
- Indexable Dovetail Cutter . . . B64-B65
- Indexable T-Slot Cutter . . . B65
- Indexable Threading Holders . . . B97-B98
- Indexable Turning Holders B22-B32, B42-B44, B76-B77
- Indexing Standard Sets . . . J243
- Knurl Pins Sets . . . J246
- Knurls . . . J247-J248
- Kool Cut . . . B76-B77
- Live Pipe Centers . . . J263
- Parting and Grooving Blades . . . B77
- Perfetta Precision Live Centers . . . J261
- Pliers . . . B22
- Positive Pipe Drivers . . . J267
- Quattro Forte Heavy Duty Live Center . . . J262
- Quick Change Posts . . . J243
- Right Angle Milling Attachments . . . K105
- Swiss Machine Holders . . . B22-B23
- Tightening Fixtures . . . J238
- Tool Presetter . . . J176
- Torx Key . . . B39
- Wedge Lock Tool Holders . . . J244
- Wedge Lock Tool Posts . . . J244

DORMER
- Carbide Drills . . . A71, A75, A78, A82
- Coolant Fed Carbide Drills . . . A71, A75, A78, A82
- Shark Taps . . . A149, A180, A183
- TiN Tip Jobber Drills . . . A13

DOTCO
- Grinders, Angle . . . E10
- Grinders, Die . . . E10
- Pencil Grinder . . . E32
- Turbine Grinders . . . E32

DOUBLE CAMS Valtra . . . J92
DOUBLE COLUMN SAWS
- Miter Cutting Bandsaws . . . K38

DOUBLE MITER BANDSAWS . . . K31, K33
DOUBLE SQUARES . . . D145-D146, D150-D151
DOVETAIL BOLT
- Clamping Components . . . J91

DOVETAIL CUTTER INDEXABLE
- Shank Style Cutters . . . B64-B65

DOVETAIL CUTTERS & SETS . . . A352, A355
DOVETAIL INDICATOR ATTACHMENTS . . . D59, D61-D63
DOWEL PIN ASSORTMENTS
- Maintenance Kits . . . J3

DOWEL PINS
- Metric . . . J25
- Pull . . . J24
- Standard . . . J24

DRAFTING INSTRUMENTS . . . D207
DRAPS . . . A164
DRAWBARS . . . K103
DRAWER LINERS
- Kennedy . . . 12
- Proto . . . 12
- Waterloo . . . 12

DREMEL
- Engravers . . . F153

DRESSERS
- Abrasive Sticks . . . C36
- Angle . . . C32-C33
- Brake Truing Devices . . . C32-33, C40
- Desmond . . . C33, C37
- Diamond . . . C33-C35, C37
- Diamond & CBN . . . C40
- Duplex Radius . . . C32
- Geiger Type . . . C32
- Hi-Lo Adjustable . . . C33
- Huntington . . . C37
- Radius . . . C32-C33
- Sine . . . C33
- Wheel . . . C32

DRESSING STICKS . . . C36, C40, C93, G32
DRILL & THREADED ROD . . . J35, J40
- Metric . . . J35, J39

DRILL BLANKS & SETS . . . A32-A33
DRILL BUSHINGS
- Fractional . . . J59-J63

DRILLING CARBIDE INSERTS, INDEXABLE CARBIDE . . . IMC78
DRILL CHUCK ACCESSORIES . . . J160
- Chuck Jaws . . . J159
- Chuck Keys . . . J153
- Chuck Removal Wedges . . . J159
- Jaw & Nut Repair Units . . . J159
- Key Cad-De Chuck Keys . . . J153
- Key Cad-De Replacment Bodies and Screws . . . J153
- Replacement Parts for Ball Bearing Chucks . . . J159
- Self-Ejecting Chuck Keys . . . J153
- Sleeves-For Plain Bearing Key Type Chucks . . . J159
- Stone Tools . . . J153

DRILL CHUCK ADAPTERS
- Jacobs Taper Adapters . . . J221

DRILL CHUCK ARBORS
- CAT-V Flange Jacobs Taper . . . J221
- Micro Drill Adapter . . . J156
- R8 Shank . . . J159
- Straight Shank Drill Chuck . . . J159
- Taper Shank Drill Chuck . . . J159
- Threaded Shank . . . J159

DRILL CHUCK KEYLEASHES . . . J160
DRILL CHUCK KEYS
- Drill Chuck Accessories . . . J153

DRILL CHUCKS
- Geared . . . J155
- Geared with Shank . . . J156
- Heavy Duty Super Ball Bearing . . . J154
- High Precision Keyless . . . J157
- Industrial Keyless . . . J157
- Key Type . . . J155-J156
- Keyless . . . J158
- Keyless with Integral Shank . . . J158
- Keys . . . J153
- Micro Drill Adapter with Drill Chuck . . . J156
- Multi-Craft Medium Duty . . . J156
- Plain Bearing . . . J155
- Plain Bearing HD Industrial . . . J155
- Plain Bearing Heavy Duty Taper Mounted . . . J154-J155
- Plain Bearing Heavy Duty Thread Mounted . . . J156
- Precision HD Industrial Keyless . . . J157
- Precision Industrial Keyless . . . J157
- Spiro Quick Action . . . J158
- Standard Accuracy HD Industrial Keyless . . . J157

DRILL DISPENSERS . . . A16
DRILL DOCTOR . . . K66-K67
DRILL DRIFTS . . . J160
DRILL DRIVERS . . . J161
DRILL EXTENSIONS . . . A104
DRILL GAGES . . . D187-D188
DRILL GRINDERS & POINTERS
- Darex . . . K66-K68
- Sterling . . . K69

DRILL GRINDING ATTACHMENT . . . E8
DRILL GUIDE, GENERAL . . . E8

How to use this index
LIGHTED SAFETY GLASSES . . . H10
This product — Is found in this section — On this page

SECTION PREFIX
- **A - Cutting Tools**
- **B - Indexable Carbide**
- **C - Abrasives**
- **D - Measuring Tools**
- **E - Power Tools**
- **F - Hand Tools**
- **G - Fluids**
- **H - Plant & Safety**
- **I - Material Handling**
- **J - Workholding**
- **K - Machinery**

DRILL INDEXES I44-I46
DRILL PRESSES
Clausing K19
Cyclematic K20
Dake K18, K20
Electronic Variable Speed K19-K20
Ellis K20
EVS K20
Floor Model K18
Geared Head K19-K21
Guards K16
Oscillating K16
Palmgren K17-K19
PRM K17, K19-K21
Radial Arm K20-K21
Shop Fox K16
Step-Pulley K17-K18
Variable Speed K19-K21
DRILL ROD
A2 . . . . . J39-J40
Metric J39
O1 . . . . . J39-J40
S7 . . . . . J40
W1 . . . . . J40
DRILL SETS
Carbide A68
Carbide Tipped A6, A58, A60
Cobalt A4-A6, A28-A29
Dyno Drill A5, A20
Extra-Long Straight Shank A46
Hi-Roc Carbide A68
Jobber A4-A6, A16, A20, A58
Left Hand A4
Masonry A60
Metric A5-A6, A16
Morse Cutting Tools A4-A6, A18, A20, A24, A45
Precision Twist Drill A4-A6, A24-A29, A45
Procut A45
Rapidkut A4-A6, A18, A24-A26, A45, A58
Reduced Shank A5, A45
Screw Machine A6, A24-A29
Silver & Deming A45
Taper Length A6
Taper Shank A6
TiN Coated A4-A5
DRILL SETS, CORDLESS E6, E8, E41
Flat Head Grinder E22
Grinder Kit E22
Impact Wrenches E7
Rotary Hammer Drill E5
DRILL SHARPENERS
Darex K66-K68
Sterling K69
DRILL SLEEVES J160-J161
DRILL STOPS A18
DRILL STORAGE I44-I46
DRILLING ATTACHMENTS
General E8
Milwaukee E8
DRILLING HAMMER F129
DRILLS
1/2 Shank & Sets A43-A45
3/4 Shank & Sets A44-A45
3/8 Shank & Sets A5, A46
Aircraft Extension A40-A42
Allied Machine A90-A103
Ambore A17
Blanks A32-A33
Body, Double End A46
Carbide A61-A69, A71-A75, A78, A81-A83, A109
Carbide Tipped A6, A58-A60
Center & Centering A107-A111
Cobalt A4-A6, A14-A16, A20-A22, A28-A29, A39, A44, A55
Combined Drills & Countersinks A107-A109, A111
Composite A69
Coolant Fed . A57, A75, A78, A81-A83, A92, A101-A102
Core A56-A57
Dormer A13, A71, A75, A78, A82
Double End A46
Drill-Mills A345-A346
Dyno Drill A5, A20
Extra-Long Straight Shank A46-A47
Extra-Long Taper Shank A53-A54
Hammer A60
Hard Steel A6, A58, A65-A69, A71, A75, A78, A81-A83
Heavy Duty 135 Degree Split Point A14-A15, A17-A18, A20-A22, A26-A29, A37, A39-A42
High Performance A22, A30-A31, A48, A66-A69, A71, A73-A89, A91, A93-A96, A98-A100, IMC91
High Speed Steel A4, A7-A20, A23-A24, A26-A27, A32, A34-A38, A53-A54, A56-A57
Jobber A4-A23, A58, A61-A63
Keo A107-A110
Left Hand A4, A23, A32
M.A. Ford A62-A63, A65-A66, A68, A70-A71, A74-A76, A78, A81-A84, A109-A110
Masonry A59-A60
Mechanic's Length A44
Metric A5-A6, A14-A16, A33, A38, A55-A56, A66-A67, A71, A75, A78, A81-A83
Morse Cutting Tools A4-A12, A14, A17-A18, A20-A22, A24-A29, A34-A36, A39, A43-A45, A49-A50, A107-A108, A110
Nachi A87, A89
NC Spotting A108, A110-A111
Oil Hole A57
OSG A31, A72, A76, A78, A82
Parabolic Flute A37
PCT A80, A86-A87
Precision Twist Drill A4-A12, A17-A22, A24-A29, A34-A37, A39, A45, A49-A50
Rapidkut A4-A6, A24-A26, A45, A58, A61, A64, A66-A67, A69, A71-A74, A76-A77, A79-A80, A84, A107-A109, A111
Reduced Shank & Sets A5, A43-A46
Replaceable Tip A90-A103
Screw Machine A6, A24-A29, A31-A32, A64-A66, A69
SDS Shank A60
Sets A4-A6, A16, A23-A29, A45-A46, A58, A60, A66, A68, A107-A108
Silver & Deming & Sets A43-A45
Spade Blades & Holders A90-A103
Split Point, HSS A14-A18, A20, A26-A27, A29, A37, A39-A41
Spotting A108, A110-A111
Step A126
Stone Tools A126
Straight Flute A66-A68
Stub Taper Shank A55
Taper Length A6, A34-A39
Taper Shank A6, A49-A56, A59
TiN Coated A4-A5, A13, A17-A18, A22, A37, A71, A75, A78, A81-A83
TiN Tip Jobber A13
Tungaloy IMC91
Unibit Step Drills A126
DRILLS INDEXABLE
Allied Machine & Eng A90-A103
Ingersoll IMC77
Iscar IMC36-IMC37
Ultra-Dex B66
DRILLS, CARBIDE
Center A109
Circuit Board A68
Dormer A71, A75, A78, A82
Fast Spiral A61
Hard Steel A6, A58, A65-A69, A71, A75, A78, A81-A83
Hi-Roc A66, A68
Hi-Tuff A66
High Performance . . A66-A68, A71, A75, A78, A81-A83
Jobber A6, A58, A61-A63
Keo A108
M.A. Ford A62-A63, A65-A66, A68, A70-A71, A73, A75-A76, A78, A81-A84, A109-A110
Micro 100 . . . . . A69
Rapidkut . . A6, A58, A61, A64, A66-A67, A69, A80, A109
Screw Machine A64-A66, A69
Spade A65, A69
Spotting A110-A111
Straight Flute A66-A68
DRILLS, CARBIDE TIPPED
Hammer A60
Hard Steel A6, A58, A66-A68
Jobber & Sets A6, A58
Masonry & Sets A59-A60
SDS Shank A60
Taper Length A59
Taper Shank A59
DRILLS, COBALT
Aircraft Extension A40, A42
Jobber A4-A6, A14, A20-A22
Metric A5-A6, A14, A16
Screw Machine A6, A28-A29
Sets A4-A6, A28-A29, A45
Silver & Deming 1/2, 3/4 Shanks A44-A45
Taper Length A6, A39
Taper Shank A6, A55
DRILLS, AIR E3-E4
DRILLS, ELECTRIC E4-E5
DRILLS, HAMMER A60, E6-E7
Rotary E5
DRILLS, INDEXABLE B66
DRIP TRAYS I80
DRIVE ADAPTERS F63
DRIVER BITS F96, F100, F104-F105, F108-F110, F117
DRO (DIGITAL READOUTS) K112-K113
DRUM HANDLING EQUIPMENT
Barrel Pump I81
Carrier I79
Cradle I80
Deheader I81
Dollies I79
Drip Trays I80
Faucets I81-I82
Grabber I80
Lid I82
Lifters I79, I82
Pumps I81
Rack I80
Truck I61, I80
Vents I82
Wrench I79, I82
DRY BLAST ABRASIVES K98
DRY BLAST ACCESSORIES K98
DRY BLAST UNITS
Speed Blaster K94
DUCK BILL PLIERS F25-F26
DUCT TAPE H117
DUMONT BROACHES & SETS A364-A365
DUMORE
Grinding Wheels J251
Hand Grinders E29
Tool Post Grinders J250-J251
DUPLEX WHEEL DRESSER C37
DUPLICATING MATERIAL, FACSIMILE D127
DURHAM
Bins I33
Cabinets I32
Clamp Racks I32
Compartment Racks I33
Hose Clamp Rack I32
Key Stock Racks I32
Literature Racks I32
Mobile Bench Cabinet I50
Mobile Wire Spool Rack I32
Parts Bins I33
Peg Board A Frame I15
Slide Racks I33
Storage Bins I33
Storage Cabinets I22, I24, I27-I29
Threaded Rod Racks I32
Trays I33
Utility Cabinets I32
Utility Carts I54
Welded I54
Wire & Terminal Storage I32
DUROMETERS D112, D113
DUST COLLECTORS
Baldor K64
Cyclone K98
DUST MASKS H17-H19
DUST PANS H106
DUTTON-LAINSON Oilers G37

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

DYNABRADE
Abrasive Belt Machines E19-E20
Abrasive Belt Tool E19-E20
Air Line Connectors E12
Buffers E18
Contact Arms E19
Die Grinders E10-E12, E32
Dynaswivel E12
Filers E12
Finishing Tools E14
Leveling Jacks K101
Sanders E14-E15, E18-E20
Sanding Pads E15, E18
E*A*R PRODUCTS H21
E Z BURR
Deburring Tools A106
E-CLIP ASSORTMENTS
Maintenance Kits J3-J4
EAGLE . . . . .
Safety Can H122
EAGLE MFG.
Butt Cans H108
Safety Cans H122
EAGLE ROCK
Bump Type A1-29 Knurling Tools J249
Bump Type A1-30 Knurling Tools J249
Scissor Type Knurling Tools J249
Swivel Head Knurling Tools J249
EAR MUFFS H23-H25
EAR PLUG DISPENSERS H21-H22
EAR PLUGS H21-H22
EDGE FINDERS D203-D204
EDGE SAFETY EYEWEAR H3, H7, H9
EDSAL
Bin Storage Cabinets I27
Carts I50
Fire Storage Cabinets I29
Heavy-Duty Cabinets I25
Lockers I30
Mobile Work Centers I51
Record Racks I34
Safety Cabinet I28
Shelving I29, I34-I37
Stock Trucks I52
Storage I34-I37
Storage Cabinets I25, I27
Tables I51
Work Benches I50-I51, I56
Work Stands I51
Work Stations I50
EDWARDS
Bending K85
Ironworkers K53-K55
Porta Power K84
Radius Rollers K84
Shop Press K83
Shop Presses K83-K84
EKLIND
Ball End Drivers F84-F85
Balldriver Fold-Ups F90
Individual Keys F86
T-Handles, Sets F87
Torx Fold-Ups F90
Torx Hex Keys F92
ELBOW SUPPORTS H32
ELECTRIC DRILLS E4-E5, E8, E91
ELECTRIC PUMPS I70, I73
ELECTRICAL
Crimping Tools F26, F28, F34
Test Lead D140
ELECTRICAL CONNECTORS
Thomas & Betts J7-J8
ELECTRICAL TAPE H120
ELECTRICAL TERMINAL ASSORTMENTS
Maintenance Kits J3
ELECTRIX
Inspection Lamps H77, H81-H82
LED Lights H77-H82
Task Lights H77
Tube Lights H79, H81
ELECTROMAGNETIC CHUCKS
Electromagnetic Fine Pole J148
NEO Micro2 . . . . . J148
Transverse J148
ELECTROMAGNETIC CONTROLS J148
ELECTROMAGNETIC DRILL STANDS E8, E91
ELECTRONIC GAGING
Bore Gages D96, D98, D100
Calipers D22, D28-D34
Depth Gages D22-D25
Detph Gages D25
Edge Finders D203
Electronic Calipers D28-D34
Height D89-D91, D93-D94
Height Gages D89, D91, D94
Indicators D46-D49, D51, D58, D203
Micrometers D3-D9, D11, D13-D14, D16, D22
Thickness Gages D103
ELEPHANT
Horizontal/Vertical Rotary Tables J173
Simple & Super Spacers J174
Tailstocks & Dividing Plates J175
ELLIS MACHINES
Bandsaws K31
Belt Grinder K75
Drill Presses K20
EMERGENCY 5C COLLET J167
EMERY CLOTH SHEETS C97
EMHART TEKNOLOGIES
Helicoil A221-A222
Pneumatic Rivet Tool J7
PS10 Manual Rivet Tool J7
EMPIRE LEVEL
Levels D163-D165
Measuring Tapes D161
Plumb Bobs D168
Protractors D153
Squares D153, D155-D156
EMPTY LARGE PLASTIC KIT BOX
Maintenance Kits J7
ENCAPSULATED WIRE BRUSH C154-C155, C157
END CUTTERS F33
END MILL HOLDERS
BT Style J216-J217
C6 Style J226
CAT Style J217-J220
Eccentric Bore J215
NMTB End Mill Adapters J220
NST40 Style J220
R8 End Mill Adapter Set J163
R8 End Mill Adapters J163
SlimFit J226
Techniks J226
END MILL SHARPENERS
Darex . . . . . J172 , K66-K67
END MILL STORAGE I44-I45
END MILLS, CARBIDE
2-Flute A256, A258-A260, A262-A263, A279, A285-A288, A290-A293, A306-A307, A343
3-Flute A264, A266, A283-A285, A287, A289-A290, A293-A299, A305, A321, A342-A344
4-Flute A267, A269-A273, A275-A278, A280, A283, A297, A300-A303, A308, A310-A313, A315-A322, A342-A343
5-Flute A323-324, 326-333, 336-337
6-Flute A336-338
7-Flute A338-340
9-Flute A341
11-Flute A341
13-Flute A341
Aluminum Cutting A281, A283-A285, A289-A290
Ball Nose A261-A264, A266, A274-A275, A277-A278, A283-A284, A289-A290, A304-A307, A316, A318, A321-A322
Chamfering A121-A123, A346
Corner Radius A271
Corner Rounding A347-A348, A376
Die and Mold A304-A307, A321
Double End A263-A264, A277-A278
Drill Mills A345
enDURO A323, A334, A339
Fullerton Tool A329, A335
General Purpose A257, A261, A263-A264, A268, A274, A277-A278, A305, A319, A321
Haimer A308
High Helix A278, A280-A281, A283-A284, A289-A290, A305, A307, A318, A325, A340, A344
High Performance A283, A305-A309, A311-A312, A314, A316-A322, A325, A327-A330, A334, A338, A343
High Spiral A334
Imco A258, A262, A269, A271, A273, A275, A277-A279, A282-A283, A285-A290, A307, A309-A310, A313, A322-A325, A334, A336-A337, A339-A343
INCONEX A337
M.A. Ford A258-A259, A262-A263, A270-A271, A275-A276, A280, A282, A289-A290, A306-A307, A312-A313, A316, A322, A326, A330, A332-A334, A338
Metric A265-A266, A304-A307, A321
Micro 100 . . . . . A264-A266, A271, A283, A305, A316, A321, A325, A344, A348, A376
Miniature A263-A264, A266, A277-A278, A291-A300, A302, A304-A305, A321
Monster Tool A280, A283-A284, A290, A314, A316, A326, A339, A342, A344
Morse Cutting Tools A257, A264, A268, A277
OSG A281, A283, A304-A307, A314-A315, A317-A319, A322
PCT A306-A307, A309, A320, A324, A335, A338
Pow-R-Feed A279, A309-A310, A313, A322, A325
Premier HP A273, A278, A280, A290, A304, A321, A322, A340, A344
Rapidkut A122, A256, A260-A261, A263-A264, A267, A270, A272-A274, A276-A279, A281, A284, A287, A289, A291-A303, A305-A306, A308, A317-A322, A325, A330-A331, A334, A340, A342, A347-A348
Rib Processing (Mold Making) . A304-A307, A318, A321
Roughing A280, A316, A340, A342, A344
Roughing-Finishing A342
Sets A278, A280
Stub A277
truCore A283, A285
Variable Helix A308-A309, A316, A322, A325, A330
END MILLS, HSS
2-Flute Double End A230, A232, A239-A240, A242, A244
2-Flute Long & Extra-Long A229-A231, A241, A244
2-Flute Miniature A229
2-Flute Single End A228-A231, A233, A239-A241, A244-A245
3-Flute A231, A246, A252-A253, A264, A266, A283-A284, A289-A290,A293-A299, A305, A321
4-, 6-, 8-Flute Long & Extra-Long A237
4-, 6-, 8-Flute Single End A233-A237, A239-A240, A243-A254
4-Flute Double End A237-A240, A242, A245
Aluminum Cutting A231, A252-A254, A281, A284, A289-A290
Aluminum Rougher A252-A254
ASP Powered Metal A241
Ball Nose Double End A244-A245
Ball Nose Single End A240, A244, A252-A253
Carbide A257-A259, A262-A266, A268, A270-A271, A273, A275-A278, A280-A281, A283-A284, A289-A300, A302, A304-A309, A316, A318, A321-A322, A325, A330, A334, A340, A342, A344, A347-A348, A376
Carbide Tipped A254
Cobalt A245-A253
Cobalt Finishing A233, A241-A248
Cobalt Roughing A245-A254
Corner Rounding A347-A348, A376
Heavy Duty A238
High Spiral A246, A334
Metric A230, A233, A265-A266, A304-A307, A321
Morse Cutting Tools A230, A234, A237, A244-A245, A250, A257, A264, A268, A277
OSG A244, A249, A304, A306-A307, A318
Premier HP A245, A273, A278, A280, A290, A304, A321, A340, A344
Rapidkut A228-A229, A232-A233, A235-A236, A238-A244, A246, A248-A249, A263-A264, A277-A278, A281, A284, A291-A300, A302, A305-A306, A308, A321-A322, A325, A330, A334, A340, A342, A347-A348

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Roughing A246-A247, A250-A251, A254, A340, A342, A344
Roughing Ball Nose A252-A253
Roughing M2 & M2-AL A253-A254
Roughing-Finishing A247-A248
Sets . A239-A240, A248-A249, A253-A254, A278, A280
Shearkut A242
Shell A254
Tapered A255
TiN & TiAlN, TiCN Coated A239, A245-A248, A250-A253
END MILLS, CARBIDE
Miniature B118
END MILLS, INDEXABLE
90 Degree B72
APT Carbide B72-B73
Ingersoll IMC44-IMC48, IMC60
Iscar IMC20
Rapidkut B69, B71
Sets B72
Tungaloy IMC94-IMC96
ENERGIZER
Batteries H65
Head Lamp H63
ENERPAC
Cylinder Pumps I71-I73
Gauge Adaptor Assembly I73
H-Frame Press K81
Hand Pumps I69
Hydraulic Pumps I69, I72-I73
Lifting Wedge I72
Pressure Gauges I73
ENGRAVERS
Air Powered E24
Dremel F153
General Tool F153
ENGRAVING BLANKS
Carbide B128
EP SERIES KNURLS
Knurling Tools J250
ER COLLET HOLDERS
BT40 . . . . . J191
BT50 . . . . . J191-J192
CAT40 . . . . . J192-J193
CAT50 . . . . . J193-J194
Morse Taper J190
NMTB J190
R8 . . . . . J189
Straight Shank J195
Zero-Z J194
ER COLLET SETS
ETM J202
Parlec J202
Rapidhold J202
Rego-Fix J202
Techniks J202
ER METRIC STEEL SEALED COOLANT SPRING COLLETS J210
ER POWER COLLET CHUCKS J228
ER POWER COLLETS J228
ER SPRING COLLETS
ETM J196-J198
ER SPRING COLLETS
Parlec J196-J201
Rapidhold J196-J198
Rego-Fix J196-J201
Techniks J196-J201
ER STEEL SEALED COOLANT SPRING COLLETS
ETM J207-J209
Rapidhold J207-J209
Rego-Fix J207-J209
Techniks J207-J209
ERGO STYLE HAND TOOLS
Adjustable Wrenches, Sets F13
Ball Driver Screwdrivers F85
Diagonal Cutters F21-F23
File Handles F182
File Sets F172
Groove Locking Pliers F30
Knives F159
Linesman Pliers F21, F33
Locking Pliers F20-F21
Needle Nose Pliers F24, F26
Nut Drivers F125
Ratchets F66
Screwdrivers, Sets F118-F123
T-Handles, Sets F89, F93
Torx Tools F93
TorxPlus Tools F83
ERGODYNE
Back Supports H30, H32
Bandanas H34
Bump Caps H26
Cooling Towels H34
Dew Rags H34
Elbow Supports H32
Gloves H51-H52
Head Protection H26
Helmet Liners H28
Knee Pads H31
Performance Wear H28
Sweat Bands H34
Tool Bags I18-I19
Wrist Supports H32
ESTIMATORS
Stanley D157
ETCH-O-MATIC
Marking Systems F153
ETCHING PENS F153
ETM
BT End Mill Holders J217
CAT End Mill Holders J218-J219
Collet Holder J193
Collet Holders J190, J192, J195
ER Collet Sets J202
ER Sealed Collets J207-J209
ER Spring Collets J196-J198
Morse Taper Shank J190
NMTB Shank ER J190
R8 ER Collet Holders J189
Rotary Tool Clamps J238
Shell Mill Holders J223
Taper Adapters J222
Toolholder Vises J238
EVENRUN BANDS, MANDRELS & KITS C86
EVEREDE
Boring Bar Kits B61
Boring Bar Sleeves B60
Boring Tools B59-B60
Carbide Turning Inserts B63
Chamfer Mills B63
Chamfermill Kits B63
Countersink Kits B62
Engraving and Spotting Drills B61
Indexable Spare Parts B59
Inserts Carbide Boring B59-B61
EVS MACHINES (ELECTRONIC VARIABLE SPEED)
Drill Presses K19-K20
Lathes K15-K16
Milling Machines K3, K5-K7
EXPANDING ARBORS, SETS J168
EXPANDING MANDRELS, SETS J168
EXPANSION REAMERS A134
EXTENSION CORDS H75-H76
EXTENSIONS, DRILL A104
EXTENSIONS, SOCKET F61
EXTRA-LONG STRAIGHT SHANK DRILLS A46-A47
EXTRA-LONG TAPER SHANK DRILLS A53-A54
EXTRACTORS
Tap A226-A227, F111-F115
Bolt F111-F115
Nut F115
Pipe F111, F113
Screw F111-F114
Stud F111-F114
EYE BOLTS
Carbon J37
Clamping Components J37-J39, J92
Eye Nuts J38-J39
Heavy Duty J38
Metric J37
Metric Short Shank J37
Nut J38-J39
Plain J37
Shoulder J37
Valtra J92
Zinc J37
EYE CLEANING STATION H15
EYE LOUPES D171-D174
EYE PROTECTION
Cleaning Stations H15
Eye Wash H15-H16
Goggles H43418
Lens Cleaning Supplies D174, H15-16
Readers H9
Safety Glasses H43144
Welding Helmet H97
EZ STRIP WHEELS C134, C140
FABRICATING
Bench Hand Notcher K52, K85
Facimile and Repo Rubber D127
Ironworkers K52-K55
Marvel K52
FABRICATING EQUIPMENT
Abrasive Cut-Off K41-K43
Bending K44-K49, K51-K52, K85
Bevel Machines K69
Burr-King K74, K77
Cold Cut Saws K40
Ellis K75
Foot Shears K49
Hand Brakes K46-K49
Hand Punches K45
Hand Shears K44-K45
Heck K44, K69
Horizontal Bandsaws K23, K27-K30
Hydraulic Notcher K50
Ironworkers K52-K55
Kalamazoo K41-K43
Marvel K52
Metal Cutting Circular Saws K40
Miter Saws K26
National K46, K48-K51
Notchers K44-K45
Ornamental Iron K44-K45
Pipe Bending K44
Press Brakes & Heavy Duty Shears K50
Roll Forming K51
Scotchman K40
Sheet Metal Benders K44-K49, K51
Sheet Metal Equipment K44-K52
Shop Fox K45-K46
Steel Angle Bending K45
Tennsmith K45-K47, K49-K51
Tube Bending K44
Woodward Fab K44
World Class Quality K46
Carbide Tipped E36
Nibblers E24
FACE DRIVERS
680 Series 4 Sided Interchangeable Driving Discs J268
680 Series Integral Tooth Driving Discs J268
680 Series Interchangeable Metal Driving Discs J268
Face Drivers for Centers J268
Replacement Drive Plates J268
Set Screws and O-Rings J268
Type 680-50 . . . . . J267
Type 680-55 . . . . . J267
Type 680-60 Flange Type J267
Type 680-65 . . . . . J267
Type 681-85 . . . . . J267
Type 688-87 Adapter Plates J267
FACE MILLS INDEXABLE
Ingersoll IMC42-IMC43, IMC45-IMC46
Iscar IMC20-IMC23
Rapidkut B69-B71
Tungaloy IMC95-IMC96
FACE PROTECTION
Balaclava H28
FACEMASKS
Safety Head Gear H14
Winter Wear H28
FACESHIELDS H14
FACSIMILE, DUPLICATING MATERIAL D127
FALL PROTECTION
Anchoring Products H28
Fall Limiters H28
Fall Protection Kits H29
Harnesses H29

Lifelines . . . H28
Retracting Lifelines . . . H28
FAGOR
Readouts . . . K112-K113
FANS . . . H73-H74
FASTENER DRIVER BITS . . . F96, F100, F104-F105, F108-F110, F117
FASTENERS
Button Head Socket Cap Screws . . . J16
Button Head Socket Cap Screws-Metric . . . J17
Dowel Pins . . . J24
Finished Hex Nuts . . . J34
Flat Head Screws . . . J17-J18
Grade 5 and Grade 8 Hex Head Cap Screws . . . J26-J28
Hex Jam Nuts-Zinc . . . J35
Lock Nuts . . . J33
Lock Washers-Zinc . . . J33
Low Head Socket Cap Screws-Standard . . . J14
Machine Screw Nuts-Zinc . . . J35
Metric Dowel Pins . . . J25
Metric Flat Head Screws . . . J19
Metric Flat Washers DIN-125 Zinc Plated . . . J31
Metric Hex Head Screws . . . J29
Metric Nuts & Metric Nylon Insert Lock Nuts . . . J34
Metric Split Lock Washers DIN-127 Zinc Plated . . . J33
Pressure Pipe Plugs . . . J19
Pull Dowels Metric . . . J25
Pull Dowels Generic USA . . . J24
S.A.E. Flat Washers-Zinc . . . J31
Shoulder Screws/Bolts . . . J22-J23
Socket Cap Screws . . . J12-J14
Socket Head Cap Screws Metric . . . J14-J15
Socket Set Screws Cup Point . . . J19-J21
Socket Set Screws Cup Point Metric . . . J21-J22
Socket Shoulder Screws Metric . . . J22
Stainless Steel & Brass Hex Nuts . . . J33
USS Flat Washers-Zinc . . . J31
FAULT FINDERS, CROWN . . . D128, G57
FEED REGULATING WHEELS . . . C29
FEELER GAGES . . . D195, J43
FEELER STOCK
Assortment . . . J42
Brass . . . J44
Plastic . . . J44
Precision Brand . . . J42
Rolls . . . J42
Starrett . . . J42
Steel . . . J42
Thickness Gages . . . J42-J44
FELT BOBS & WHEELS . . . C71, C168-C169
FENCE Barrier . . . H30
FIBRE DISCS . . . C110-C112, C129
FIBRE-METAL
Faceshields . . . H14
Hard Hats . . . H26
Head Protection . . . H26
Welding Helmets . . . H96
FILE HANDLES . . . F182
FILES
Diamond & CBN . . . C45
Needle . . . C45
Restoring . . . A219
Riffler . . . C45
Rotary . . . A367-A377
Sets . . . C45
Cards . . . F182
Hand . . . F172-F175, F177-F181
Handles . . . F182
Hardness Testing . . . D111
Needle . . . F179-F181
Nicholson . . . F173-F175
Riffler . . . F181
Sets . . . F172
Severance . . . F182
Simonds . . . F172-F177
Snap-On Bahco . . . F172-F173, F175
Swiss Pattern Needle Files . . . F174, F177-F181
FILTER BAGS
Baldor . . . K64
FILTER, LUBRICATOR, REGULATOR
Air Turbine . . . E31
Coilhose Pneumatics . . . E55-E57
Floor . . . E55-E56
FINE PROOFING ALLOY . . . D128
FINISHED HEX NUTS
Fasteners . . . J34
Grade 2 . . . J34
Grade 5 . . . J34
Grade 8 . . . J34
Metric . . . J34
FINISHING CHAMBERS
Bowls . . . K94
Chambers . . . K93
FINISHING MACHINES
Bevel-Mill . . . K69
Bowls . . . K92, K94
Buffers . . . K62-K64
Chambers . . . K92-K93
Grinders . . . K58-K59, K63-K64
Palmgren . . . K59, K62-K63, K77
Vibratory Bowls . . . K94
FIRE BLANKET . . . H121
FIRE PROTECTION STORAGE CABINETS
Durham . . . I29
Edsal . . . I28-I29
Lyon . . . I29
FIRM JOINT CALIPERS . . . D192
FIRST AID . . . H121
FISHER MACHINE
Audible Edge Finders, Sets . . . D204
Pee-Dee Thread Wires . . . D196
V-Blocks . . . D175
FISKARS
Scissors . . . F163-F164
Shears . . . F163-F164
FISKARS
Snips . . . F164
FITTINGS
Ball Swivels . . . E54
FITTINGS FOR AIR TOOLS/HOSE . . . E46-E48, E51-E54
FIXTURE CLAMPS . . . J102
Jergens . . . J100
FIXTURING ALLOYS . . . **D128**
FLANGE NUTS
Metric . . . J85
Spherical . . . J86
Swivel . . . J85
FLAP BANDS . . . C105
FLAP DISC, HOLDERS . . . C98-C104, C114-C115, C138, C140 C168
Buffing . . . C167
FLAP DISCS, MINI . . . C100
FLAP WHEEL DRUMS, ABRASIVES . . . C160
FLAP WHEEL REDUCING BUSHINGS . . . C107
FLAP WHEELS, BRUSHES C106-C107, C130, C139, C168
Trimmable . . . C105
FLARE NUT WRENCHES
Crowfeet . . . F4
Flex Head . . . F4
Standard . . . F4
FLARING TOOLS . . . F156
FLASHLIGHTS
Bayco . . . H55-H59, H61, H67-H68
Bend-A-Light . . . H56
Bright Star . . . H59-H63
Bump Lights . . . H66
Head Lamps . . . H56, H63-H64, H67
Inspectors Lights . . . H55
Koehler-Bright Star . . . H59-H62
Lanterns . . . H62-H63
Laser Lights . . . H58, H61
LED Lights . . . H55-H61, H63, H67
Lights for Eyewear . . . H10
Lisle . . . H56
MagLite . . . H55-H56, H58, H60-H61
Modular Light Kit . . . H61
Pen Lights . . . H55, H57, H61
PRM PRO . . . H56
Rayovac . . . H55, H61-H63
Rechargeable . . . H56-H57, H60-H61, H67
Spot Lights . . . H62-H63, H68
Steelman . . . H57, H60, H66
Streamlight . . . H55, H57-H64
Tactical . . . H57
Titan . . . H55-H56, H60
FLAT CALIPERS . . . D191-D192
FLAT FILES . . . F173-F174, F176
FLAT HEAD SCREWS
Fasteners . . . J17-J18
FLAT STOCK
A-2 Air Hardening, 18 OAL . . . J54
A-2 Air Hardening, 36 OAL . . . J55
A-2 Oversize, 18 & 36 OAL . . . J57-J58
Low Carbon, 24 OAL . . . J58
O-1 Oil Hardening, 18 & 36 OAL . . . J56
O-1 Oil Hardening, 18 OAL . . . J50-J51
O-1 Oil Hardening, 36 OAL . . . J52-J53
FLAT WASHERS
Clamping Components . . . J31
Fasteners . . . J31
FLATBACK AND DIRECT MOUNT . . . J288
FLATBACK SOLD HARD JAWS . . . J280
FLATBACK SOLID JAWS OR TOP REVERSIBLE JAWS . . . J282
FLATBACK TOP REVERSIBLE JAWS . . . J280
FLEXBAR
Fine Proofing Alloy . . . D128
Machinable Wax . . . D128
Panel Guard . . . H88
Shields . . . H87-H88
FLEX HONES . . . C148
FLEX MILLS . . . B64
FLEX SHAFT GRINDERS . . . E25, E29
FLEXZILLA AIR HOSE . . . E51
FLOOR MATS . . . H83, H85-H86
FLOOR SIGNS . . . H108
FLORIDA PNEUMATIC
Cut Off Tools . . . E13
Die Grinders . . . E9-E10
Drills . . . E3-E4
Files . . . E24
Impact Wrenches . . . E37-E38, E40
Sanders, Disc, Orbital . . . E16, E17
Shears & Nibblers . . . E24
Utility Hammer, Needle Scalers . . . E42
FLUID APPLICATORS
Accu-Lube . . . G4, G26
Amflo . . . G24
Ashburn . . . G18-G19
CRC . . . G46
Kool Mist . . . G24-G25
Monroe . . . G25
National . . . G23
Noga . . . G23, G25
Sure Shot . . . G48
Trico . . . G19, G24
FLUIDS & CHEMICALS
Cutting . . . G2, G4, G6, G9
Dielectric Fluid . . . G11
Fault Finder Kit . . . D128, G57
Ink & Dye . . . G57-G58
Ink Bottles . . . G58
Relton . . . G4
FLY CUTTERS . . . J164
FOLDING WOOD RULES . . . D156
FORCE GAGES, STANDS . . . D106-D108
FOREDOM GRINDERS & ACCESSORIES . . . E29-E30
FOREMAN'S DESK . . . I31
FOWLER
Alignment Indicators . . . D49
Back Plunger Indicators . . . D57
Bevel Protectors . . . D92
Bevel Squares . . . D152
Bore Gage Setting Masters . . . D96
Bore Gages . . . D88, D96-D98
Bore Gages, Scopes . . . D135
Bore Scopes . . . D135
Calipers, Accessories . . . D29, D31-D32, D35-D36
Calipers. Accessories . . . D31, D33, D35-D36
Center Gages . . . D202
Center Punches . . . D205, F142
Coaxial Indicators . . . D49
Combination Squares . . . D151
Comparator Gages . . . D49
Comparators . . . D131

How to use this index
LIGHTED SAFETY GLASSES . . . H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Computer Connect Kit D90
Contact Sensor for HG. D92
Depth Gages D23, D25
Depth Gages, Micrometers D21, D23, D25-D26
Dial Bore Gages. D96
Dial Depth Gages. D26
Dial Indicators D45, D63
Dial Thickness Gage D103
Digital Indicators. D48
Double Squares D151
Drill & Wire Gages D188
Durometers D112
Edge Finders D203-D204
Electronic Bore Gages. D96
Electronic Edge Finders. D203
Electronic Height Gages D90, D93
Electronic Level D164, D167
Electronic Protractor. D167
Electronic Test Indicators. D58
Gage Blocks, Sets D121
Height Gages. D90, D92
Height Gages, Transfer Stands D78, D90, D92
Indicator Accessories. D45, D48
Indicator Sets. D49, D79, D83-D85
Indicators D45, D48-D49, D58, D68
Internal/External Dial Calipers D104
Jack Screws. D186
Machinists Sets D68, D82-D86
Magnetic Bases, Stands D86
Micrometer Stands. D18
Micrometers & Sets D2, D5-D6, D16, D19
Microscopes. D132
Mini Mag Plus. D167
Parallels. D182, D184
Pin Gages D118
Protractors D92, D156, D167
Radius Gages D193
Screw Pitch Gages. D201
Scribers D151
Sine Bars D180
Small Hole Gages D190
Snap Calipers. D34
Snap Gages D99
Telescoping Gages. D189
Test Indicators, Points D54, D56
Thickness Gages D188, D195
Transfer Punches. F141
Thread Gages D201
USB Blue Tooth Receiver. D88
V-Blocks. D176-D177
Wireless Transmitter D88
Wyler Sprit Levels D167

FULLERTON TOOL
Chamfer Mills. A346
Chucking Reamers. A145-A146
Drill. A69
End Mills. A329, A335
Routers. A377-A378

FRAMING SQUARES D155
FULLY MACHINED ADAPTERS FOR ROTARY TABLES . . . . . .
Back Plates/Adapters. J288

FUNNELS. G36
GAGE BALLS D125-D126
GAGE BLOCKS, SETS D119-D122
GAGE PINS, ACCESSORIES, SETS D116-D118
GAGE STOCK . . . . . .
A-2 Air Hardening, 18 OAL. J54
A-2 Air Hardening, 36 OAL. J55
A-2 Oversize, 18 & 36 OAL J57-J58
Low Carbon, 24 OAL J58
O-1 Oil Hardening, 18 & 36 OAL J56
O-1 Oil Hardening, 18 OAL J50-J51
O-1 Oil Hardening, 36 OAL J52-J53

GAGES
Air Pressure E55
Alignment. D49
Angle D193
Ball. D125-D126
Blocks & Accessories. D120-D121
Bore D88, D95-D98, D102, D200
Bore Setting D95
Caliper D104
Center D200, D202
Center Line. D40
Chamfer & Countersink D102
Depth D21-D24, D26-D27
Dial Thickness Gages D103
Drill. D187-D188
Electronic Height D89-D91, D93-D94
Electronic Height Gages D89-D91, D93-D94
Feeler. D195, J43
Grinding D200
Height. D78, D89-D94
Hole D102, D189-D190, D200
Pin D116-D118
Planer & Shaper. D179
Plug & Ring D196-D199
Probe D91
Radius D193-D194, D200
Roughness Testers D113
Screw Pitch & Thread D196, D200-D202
Setting Rings D98
Snap. D99
Surface. D78
Surface Roughness D113-D115
Tachometers. D136
Taper D200
Telescoping D189
Thickness. D103, D188, D195
Vernier D89
Wire D188, D196

GARBAGE BAGS H108
GARBAGE REFUSE H109
GARBAGE REFUSE UNITS I77
GARLAND
Non-Marring Mallets. F127
Rawhide. F127, F129
Sledge Hammers. F129
Split Head Hammer F129

GAS CANS. H122
GASKET
Remover. G48, G56
Sealant. G54, G56

GB TAPPING COLLETS
Rapidkut. J182-J183
Rego-Fix. J182-J183

GEAR PULLERS, SETS F167-F168
GEARED DRILL CHUCKS J155
GEARED DRILL CHUCKS WITH SHANK
Drill Chucks J156

GEARED-HEAD DRILL PRESSES
PRM. K20-K21

GEARED-HEAD LATHES K9-K15
GEARWRENCH
Diagonal Cutter Insulated. F39
Diagonal Cutters F22, F35
Ergo Screwdrivers, Sets. F124
Flare Nut Wrenches F4
Needle Nose F35
Pivot Force. F35
Pry Bars F136
Ratchets, Gimbal F67
Screwdrivers, Sets F124
Sockets, Sets F50

GEIGER TYPE DRESSER. C32
GEM
Back Plunger Indicators D57
Depth Gages D26
Indicator Accessories D57, D60-D61, D65
Magnetic Bases, Stands D70
Swivel Clamps D60
Test Indicators, Points D57

GEMINI (NORTON) ABRASIVE PRODUCTS
Mounted Points C82-C83

GEMINI TOOLROOM WHEELS C7
GEMTEX
Mini Grind R Discs C114

GENERAL BUTTON TYPE ALNICO MAGNETS J114
GENERAL TOOL
Calipers D37
Center Punches F141-F143
Compasses D207
Continuity Testers. D137-D140
Cordless Screwdriver. E8
Depth Gages D27
Drill Gages D187
Drill Guide E8
Drill Stops. A18
Drive Pin Punches F143
Edge Finders D204
Engravers. F153
Feeler Thickness Gages D195
General Purpose Magnets J114
Grinding Attachments. E8
Hobby Blades. F162
Hobby Knives. F157
Hole Punches. F139, F143, F149
Hook & Pick Sets F137
Inspection Mirrors. D170
Jack Screws. D186
Light Meter D141
Magnifiers. D173
Mirrors D170
Multi-Testers. D111, D137-D139, D141
Multi-Use Rules & Gages. D27
ph Pen D141
Pin Vises D206
Plumb Bobs D168
Pocket Pick-Up Pen Magnets D170
Pocket Protector Kit D191
Pot Type Alnico Magnets J114
Pro/Calc Speed & Feed Calculator D137
Protractors D27
Punches. F139, F142-F143, F149
Quick Check Screw Gages D188
Scales D144
Scratch Awls. F141
Scribers F141
Sheet Metal Gages D187
Squares D152
Tap & Drill Gages. D187
Tap Wrenches A224
Test Equipment D136-D138, D141
Thickness Gages D136, D195
Trammells D191
Utility Blades F162
Utility Knives. F159
Video Scopes. D134, D136, D139
Wiggler Sets. D205

GERBER
Folding Knives F160

GIMBAL RATCHETS. F67
GK SERIES KNURLS
Knurling Tools. J250

GLASS CLEANERS G47-G48
GLASSES
Welding H3

GLOVES
All-Purpose. H36-H51, H53-H54
Anti-Vibration H51
Brown Jersey H46
Cut Resistant H39-H40, H45, H51
Cut Resistant Rating Chart H35
Disposable H43
Drivers H46-H47
Ergodyne H51-H52
Foam Coated H38
High Temperature Gloves H53, H99
Honeywell. H36, H38-H39
HPPE H37
Impact Reducing H52
Inspectors. H48
Jersey. H46
Kevlar. H41, H45, H48, H50, H53
KleenGuard H36
Knit. H48
Latex H36, H43-H44
Leather Palm H49-H51
MCR Safety H36-H37, H40-H41, H43-H46, H48-H49, H52, H54
Mechanics' H48, H51
Metal Mesh. H51
Nitrile H38, H40-H44, H48, H52
Nitrile Palm. H40
PRM PRO H42
Showa H36-H42, H52
Sleeves H54
Split Shoulder. H49-H50
Steiner H53-H54, H99

String Knit . . . H48
Synthetic Knit Shell . . . H37-H39
Terry . . . H48
Welding . . . H45-H46, H49-H50, H53-H54
Wells Lamont . . . H37-H41, H45-H52, H54
Westchester . . . H37-H39, H47, H49-H52
Winter Gloves . . . H44, H46, H51
Work Gloves . . . H36-H51, H53-H54
GLUE
3M . . . G53-G54
Epoxies . . . G52-G55
Loctite . . . G52-G54
Spray Adhesives . . . G53-G54
Vibra-Tite . . . G52-G53
GLUE GUNS & STICKS . . . F165
GOBLET BUFFS, WHEELS . . . C130, C167
GOGGLES . . . H11-H14
GOJO
Hand Cleaner Dispensers . . . H113
Hand Cleaners . . . H113
Skin Lotions . . . H113
Soap . . . H113
Wipes . . . H116
GRANITE CHECKS . . . D68-D69
GRANITE PLATES & STANDS . . . D123-D124, D131
GRANLUND ABRASIVE BELT DRESSERS . . . C93
GRAVITY FEED SAW . . . K22
GRAYMILLS
Coolant Pumps & Tanks . . . G17-G18
Fluids . . . G49
Parts Washers . . . G50
Pumps . . . G17-G18
GREASE
Cimcool . . . G31
CRC . . . G31, G33-G34, G43
Fittings . . . G35
Guns . . . G35
Isoflex . . . G33
Jet Lube . . . G32-G33
LPS . . . G31-G32, G43
Lubriplate . . . G31
Mobil Oils . . . G33
Synco Super Lube . . . G34
WD40 . . . G31-G33
GREASE FITTING ASSORTMENTS
Maintenance Kits . . . J3
GREASE GUNS, ACCESSORIES & KITS
Fittings . . . G35
Grease Fittings . . . G38
Grease Guns . . . F184, G35
Kits . . . G36
GREASE LUBRICATORS, TRICO . . . G38
GREASELESS BUFFING COMPOUND . . . C169
GREEN (GC) SILICON CARBIDE WHEELS . . . C24-C25, C27
GREEN CORPS 3M ABRASIVES . . . C59
GRIND-ALL FIXTURE . . . J171
GRINDER DOG
Clamping Components . . . J256
GRINDER EYESHIELDS (GUARDS) . . . K65
GRINDER PEDESTALS . . . K65, K99, K101
GRINDERS
Acer . . . K57-K58
Air Powered . . . E10-E11, E13, E23, E32
Air Supreme . . . E9, E13, E23
Air Turbine . . . E31
Angle . . . E21-E22
Automatic Surface . . . K57-K58
Baldor . . . K60-K62, K65, K73
Belt . . . K62, K70-K77
Belt Sanders . . . E20, K70-K75
Bench . . . K58-K63, K65, K73
Bench Grinder Accessories . . . K65-K66
Bosch . . . E21-E22
Burr-King . . . K74, K77
Carbide . . . K62, K73
Chevalier . . . K57
Chicago Pneumatic . . . E9-E10, E23
Clausing . . . K58
Cutter . . . K66-K67, K69
Darex . . . K66-K68
DeWalt . . . E21-E22, K58
Die . . . E9-E13, E32
Disc Sanders . . . K70-K75
Dremel . . . E25-E26
Drill . . . K66-K69
Dumore . . . E29
Dynabrade . . . E10-E12
Ellis . . . K75
End Mill . . . K66-K67
Foredom . . . E29-E30
Hand . . . E9-E13, E21-E23, E31-E32
Kent . . . K56
Knife . . . K66
Metabo . . . E21-E22
Milwaukee . . . E21-E22
Palmgren . . . K56-K57, K59, K61, K63, K72, K75-K76
Pneumatic . . . E9-E13, E20-E23, E31-E32
PRM . . . K56, K60
Right Angle . . . E9-10, 13, 23
Surface . . . K56-K58
Tool and Cutter . . . K66-K67, K69
Tool Post . . . J250-J251
Universal Tool . . . E23
GRINDERS, HAND . . . E21-E22, E25-E26, E28-E30
GRINDING ACCESSORIES . . . C7, C168, K58-K59
Bench Grinder Accessories . . . K65
Digital Readouts . . . K113-K118
Dumore Grinding Wheels . . . J251
Dust Collectors . . . K64
End Mill Sharpeners . . . K66-K67
Wheel Adapters . . . C7, C51, C59, C106, C168
Wheel Dressers . . . C32-C37, C40
GRINDING ATTACHMENTS, DRILL . . . E8
GRINDING FIXTURES
5C Collet . . . J169
5C Collet Indexer . . . J169-J170
5C Collet Vise . . . J169
Collet Fixture . . . J169-J172
End Mill Sharpener . . . J172
Harig Manufacturing . . . J171-J172
Heinrich . . . J170
Horizontal/Vertical Indexing Fixture . . . J169
Index Fixtures . . . J172
Kalamazoo . . . J169-J170
National . . . J169, J172
Punch Formers . . . C32
Suburban Tool . . . J171
GRINDING GAGES . . . D200
GRINDING SEGMENTS . . . C31
GRINDING WHEELS
32A & 32AR Tool Room Wheels . . . C8-C11, C13
5SG Tool Room Wheels . . . C13
Bench & Pedestal Wheels . . . C25
Buff & Blend Products . . . C133, C138, C142-C143
CBN Wheels, Mandrels . . . C42
Center Laps . . . C79
Centerless Wheels . . . C27-C28
Ceramic Tool Room Wheels . . . C13, C18, C20
Cones & Plugs . . . C24
Convolute . . . C142-C144
Cotton Reinforced Wheels . . . C78
Cup & Dish Wheels . . . C21-C22, C42
Cylindrical . . . C29
Deburring Wheels . . . C142-C144, C146
Depressed Center Wheels . . . C43, C55, C61-C64
Depressed Center Wheels (Raised Hub) & Adapters . . . C55, C61-C64, C146
Feed Regulating Wheels . . . C29
Felt Bobs, Discs . . . C167
ID Grinding . . . C24
Large Surface Grinding Wheels . . . C30
Mattison-Thompson . . . C30
Metal Back Wheels . . . C23
Mounted Points, Kits . . . C79, C81-C83
Norton . . . C83
Porous Grinding Wheels . . . C13, C17
Reducer Bushings . . . C156, C158
Regulating Wheels . . . C29
Rubberized Abrasive . . . C77, C84
Ruby Grain Wheels . . . C13, C15
Snagging Wheels . . . C21, C65
Surface . . . C137
Tool Post Wheels . . . C21, C49
Tool Room Grinding Wheels C3-C7, C13-C14, C17, C22
Trimkut . . . C114
Unitized . . . C71, C142-C143
White Tool Room Wheels . . . C3-6, C22
Wire Wheels, Brushes . . . C154-C159, C161-C162, C3-6, C12, C14, C16, C54, C56-57, C65, C160
GROBET
Files, Sets . . . F177-F181
Rifflers . . . F181
GROOVE GAGES . . . D20-D21
GROOVING INDEXABLE HOLDERS Iscar . . . IMC9
GROOVE MICROMETERS . . . D20-D21
GROOVING TOOLS & INSERTS
Micro 100 . . . B114, B127
Criterion . . . B117
Micro 100 . . . B119
Nikcole . . . B99-B100
Pro-Cut . . . B75, B94-B96
Rapidkut . . . B75, B93, B95
Tool-Flo . . . B78-B82, B84-B85
Ultra-Dex . . . B53
GROOVING TOOLS & INSERTS, INDEXABLE CARBIDE
Ingersoll . . . IMC58-IMC59
Tungaloy . . . IMC89-IMC92
GROUND FLAT STOCK
A-2 Air Hardening, 18 OAL . . . J54
A-2 Air Hardening, 36 OAL . . . J55
A-2 Oversize, 18 & 36 OAL . . . J57-J58
Low Carbon, 24 OAL . . . J58
O-1 Oil Hardening, 18 & 36 OAL . . . J56
O-1 Oil Hardening, 18 OAL . . . J50-J51
O-1 Oil Hardening, 36 OAL . . . J52-J53
GUARDIAN Eyewash Stations . . . H16
GUNS
Air . . . E43-E45
Caulk . . . G37
Grease . . . F184, G33, G35
Spray . . . G48
H & R MANUFACTURING . . .
A.S.T.G. Medium & Heavy Duty Soft Top Jaws . . . J274
A.S.T.G. Single Step Heavy Duty Reversible Hard Jaw . . . J276
Boring Mill Jaws Set Bullard Tooling . . . J276
Bullard Jaws . . . J276
Full Wrap Aluminum Jaws . . . J272
Full Wrap Jaws . . . J273
Heavy Duty Soft Top Jaws . . . J272
Jaw Nuts . . . J273
Medium Duty Soft Top Jaws . . . J270
Metric Serrated Double Step Reversible Hard Jaws . . . J275
Metric Serrated Single Step Reversible Hard Jaws . . . J275
Metric Serrated Square and Pointed Soft Jaws . . . J270
Serrated Hard Top Jaws 1/16 90 Degrees . . . J274
Serrated Soft Top Jaws Each 1/16 90 Degrees . . . J273
Steel Face Plate Jaws . . . J276
H-FRAME PRESSES
Dake . . . K79-K80, K82
Enerpac . . . K81
Press Right . . . K79, K81
PRM . . . K80
Simplex . . . K80
HACKET BRASS
Hammers . . . F133
HACKSAWS, BLADES
Carbide Grit . . . E58
Hand . . . E58
Carbide Grit . . . F171
Hand . . . F170-F171
HAIMER
Carbide End Mills . . . A308
CAT40, CAT50 Power Shrink Fit Holders . . . J232
CAT40, CAT50 Shrink Fit Tool Holders . . . J231
Power Chuck Wrenches . . . J229
Power Collet Holders . . . J228
Power Collet Sets . . . J229
Power Collets . . . J228
Power Collets with Safe-Lock . . . J229
Tool Presetters . . . J235
HALF ROUND FILES . . . F175-F177

How to use this index
LIGHTED SAFETY GLASSES . . . H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

HAMMER DRILLS E5
HAMMER DRILLS & BITS A60
HAMMERS
Air Hammers E42
Ball Pein F131
Brass F133
Chipping F127
Claw F132
Copper F133
Cross Pein F130
Dead Blow F126, F128
Double Face F130
Drilling F129-F130
Engineers F130
Garland F129
Handles F129, F132
Machinist F131
Nailing F132
No-Mar F133
PRM Pro F128, F133
Proto F126-F131, F133, F185
Rawhide F127, F129
Rip Claw F132
Rubber F127
Sledge F129
Snap-On Williams F133
Soft Face F126-F127
Split Head F126, F129
Stanley F131-F132
Tackers F166
Tekton F130, F132-F133
Vaughan F127, F130, F132-F133
Wiha F126
Wilton F130
HANDHELD LIGHTED MAGNIFIERS
Battery, Electric D172-D174
HAND BRAKES
National Sheet Metal Machines K48
Tennsmith K46-K47, K49
World Class Quality K46
HAND CLEANER DISPENSERS H113
HAND CLEANERS H113
HAND CRANK
Pneumatic tools E50
HAND CRANK REEL E50
HAND GRINDERS
Air Turbine E31
Dumore E29
Pneumatic E9-E13, E23, E31-E32
Right Angle E9-E10, E13, E23
HAND LAPS C67
HAND PADS C96, C131
HAND PIECES, FOREDOM E30
HAND PUMPS I69-I70
HAND REAMERS A135
Metric A136
HAND TAPPERS . . . . . A155 , J176, J184
HAND TRUCKS
Harper I60
Vestil I60-I61
Wesco I60
HAND WHEEL J30
Clamping Components J30, J93, J95
Te-Co J95
Valtra J93
HANDHELD LIGHTED MAGNIFIERS
Battery, Electric H80-H82
HANDLES
Brooms H104-H106
Clamping Components J93, J95
Files F182
Hammers F129, F132
Milling Machines K104
Mops H107
Morton J93
Quill Feed K104-K105
Speed F64, K104
Squeegees H108
Te-Co J95
Valtra J93
HANGSTERFERS
Coolants G8-G9, G12
Cutting Oil G3
Tapping Fluid G4
Way Oil G41
HANSON/IRWIN
Tap & Die Sets A215-A217, A219
HARDENED FLAT WASHERS
Clamping Components J32
Te-Co J32
HARDHAT
Ear Muffs H25
Helmets H26
HARDNESS TESTERS & ACCESSORIES
Digital D113
Durometers D112
Files D111
Flexbar D111
General Tool D111
Insize D110-D111
Portable D111-D113
Procheck D109
Rockwell Type D109-D110
Starrett D110
HARIG MFG
Collet Fixture J172
Grind-All Accessories J171
Grind-All Fixture J171
Spin-Indexer J172
Way Oils G41
HARNESS
Safety H28-H29
HARPER
Drum Cradle I80
Drum Hand Trucks I61
Drum Handling Equipment I61
Hand Trucks I60-I61
HARRINGTON HOISTS
Chain Hoists I74
Lever Puller I74
HARRIS
Tig Accessories H93
Welding Electronics H95
Welding Regulators H94
Welding Torch and Tips H94
Welding Wire H95
HAWKEYE BORESCOPE D133
HAZARD
Cones H30
Fence H30
Tape H119
Traffic Cones H30
Vests H27
HASSAY SAVAGE BROACHES A366
HATCHET F127
HEAD LAMPS
Flashlights H56, H63-H64
HEAD PROTECTION
Balaclava H28
Hard Hats H26
HEADGEAR
Balaclava H28
Bandannas H34
Dew Rags H34
For Faceshields H14
Winter Liners H28
HEARING PROTECTION H21-H25
HEAT BLOWER E2, H74
HEAT GUNS E2
HEAT INDEX MONITOR D137-D138
HEAT TREATMENT WRAPS J54
HEATERS H74
Ceramic H72
Electric H72
Fan Forced H72
Infared H72
Portable H72
TPI H72
HEAVY DUTY UNDERSIZED HEAD T-SLOT BOLTS
Te-Co J90
HECK INDUSTRIES
Fabricating & DeBurring Equipment K44, K69
HEIGHT GAGE ACCESSORIES
Fowler D92
Mitutoyo D92
Starrett D92
HEIGHT GAGES
Dial D89-90
Electronic D89-D91, D93-D94
Fowler D90, D92
Height Transfer Gage D78, D90
Probe D91
Vernier D89
HEINRICH
Air Vises J170
Band Saw Vises J128
Drill Press Vises J126-J127
Grip Master Fixture Locks J128
Hand Punches & Handnibs K45
Pneumatic 5C Collet Fixture J170
V-Block Attachment J127
HELICOIL THREAD REPAIR A221-A222
HELMETS, WELDING H96-H98
HEM SAW
Blades for Round Bandsaws E72
Horizontal Double Miter Bandsaws K25
Jobby Stand K26
Manual Round Cap Bandsaws K25
Roller Table K26
Work Table K26
HEMOSTATS D191
HERMAPHRODITE CALIPERS D191-D192
HEX BIT SOCKETS, SETS
Ball End F109
Snap-On Williams F109-F110
Tekton F109
Titan F104
HEX COLLETS
5C Collets J166
HEX HEAD CAP SCREWS
Fasteners J26-J29
Grade 5 Standard J26-J28
Grade 8 Standard J26-J28
Metric 10.9 . . . . . J29
Metric 8.8 . . . . . J29
HEX JAM NUTS-ZINC
Fasteners J35
HEX KEYS, SETS
Ball End F84-F89
Ball End Metric F85
Bondhus F84-F87, F89
Eklind F84-F88, F90, F92
Proto F85-F87, F89
Stanley F89
T-Handle F87
Torx F92
Wiha F84-F85, F87, F89, F92, F94
HEX NUTS
Brass J33
Lock J33
Stainless J33
HEX RETHREADING DIES A219-A220
HI-FLOW COLORCONNEX COUPLERS E51
HI-LO ADJUSTABLE DRESSER C33
HIGH FEED MILLING
Rapidkut B71-B72
HIGH PERFORMANCE
Abrasive, 32A, Ceramic Grain C8-C10, C12-C13
Drills A22, A30-A31, A48, A65-A88
End Mills A261, A278-A281, A283-A300, A302, A304-A308, A310-A316, A318-A322, A324-A330, A332-A334, A336-A344, IMC91
Spade Drills A65, A69, A90-A96, A98-A102
Taps A152-A153, A158, A161, A176-A177, A184-A187, A191-A208, A210-A211, A312
HIGH SPOT INDICATOR
Crown G57
Dykem G57
HINGED HANDLES F64
HITCH PIN CLIP ASSORTMENTS
Maintenance Kits J4
HK PORTER HAND TOOLS
Bolt Cutters F27
Cable Cutters F27
Strap Cutters F27
HOBBY GRINDERS E25, E29-E30
HOBBY KNIVES F157, F162
HOIST RINGS I74
HOISTS
Portable I66
HOLD DOWN CLAMPS J99-J101, J103
Mitee-Bite J102

HOLDERS
Gage Pin D116
Feeler Gage J42
Indicators D68, D71
Key Rings D168
Micrometer D18
Nampower Brushes C162
Turning Tool B93, IMC87-IMC89
HOLE GAGES D101-D102, D189-D190, D200
HOLE MICROMETERS D20-D21
HOLE PUNCHERS
Heinrich K45
Hook & Pick Set F140-F143, F149
HOLE SAW & ACCESSORIES
Hole Saw E83-E84
HOLE SAW ARBOR E84, E87-E88
HOLE SAW KITS
Bahco (Snap-On Industrial) E87
Lenox E84
Starrett E85
HOLE SAWS & ACCESSORIES
Bahco (Snap-On Industrial) E87
Hole Saw E83, E87-E88
Lenox E83-E84
M.K. Morse E88
Starrett E84-E87
HOLO-KROME
Button Head Socket Cap Screws J16
Button Head Socket Cap Screws-Metric J17
Flat Head Screws J18
Low Head Socket Cap Screws-Standard J14
Metric Flat Head Screws J19
Pressure Pipe Plugs J19
Shoulder Screws/Bolts J22-J23
Socket Cap Screws J12-J14
Socket Head Cap Screws Metric J14-J15
Socket Set Screws Cup Point J19-J21
HOME SHOP MACHINES
Air Compressors K85, K88, K90
Bandsaws K22-K23, K27-K29, K38
Belt Sanders K70-K75
Bench Grinders K58-K60, K62, K73
Brakes, Shears, Rolls K46-K48, K51
Cold Cut Saws K38
Drill Presses K17-K18
Drill Sharpeners K66-K67
Metal-Cutting Bandsaws K22
Sandblasters K94-K98
Sheet Metal K44-K48, K51
Wood-Cutting Bandsaws K22
Woodworking K22
HONES
Diamond Sharpening C44, C66-C67
HONEYWELL
Ear Muffs H23-H25
Eyewash Stations H15
Fall Protection H28-H29
Gloves H36-H39, H53
Goggles H43-H47
Head and Face Protection H14
Head Protection H26
Kevlar Gloves H53
Refill Eyewash H15
Safety Glasses H4-H5, H7-H8, H12-H13, H23
Safety Head Gear H14
Welders Gloves H53
Welding Helmets H97
HONING OIL C148
HOOK & EYE SCREW ASSORTMENTS
Maintenance Kits J6
HOOK & PICK SET F137
HOOK RULES D142, D150
HOPPERS I77
HORIZONTAL BANDSAWS
Ellis K31
W.F. Wells K30
Wellsaw K27-K28, K30-K31
HORIZONTAL MILLING MACHINES
Palmgren K5
HORIZONTAL/VERTICAL INDEXING FIXTURE J169
HOSE
Air E45-E48, E50-E52
Air Hose Reel E49
Hand Crank Reel E50
Reels E49-E52
Rewind Reel E50
HOSE CLAMP
Assortments J6
Kits J6
Racks I32
Pliers F21
HOSE REELS
Air, Oxy/Acetylene, Water E50-E5
HOT MELT TOOL PROTECTION A163
HOUGEN
Hole Cutters E89
Magnetic Drills E90
HOWARD LEIGHT . . . . . .
Ear Muffs H23-H25
Ear Plugs H22
HTC
Drill Press Supports K102
Machine Covers K102
Roller Table K100
Support Stands K100
HUB MICROMETERS D17
HUB WHEELS
Weiler C164
HUMIDITY TESTING D137
HUOT
Burr Dispensers . . . . . A375 , I45
CNC Cart I49
CNC Machine Mount Rack I49
CNC Safety Cover I59
CNC Tool Tower I48
Collet Racks I46
Drill & Tap Dispensers I46
Drill & Tap Indexes I44
Drill Cabinet I45
Drill Dispensers I45-I46
Drill Indexes . . . . . A16 , I44
Drill Stands I44
End Mill Dispensers I45
Insert Dispensers I45
Lathe Tooling Cart I49
Reamer Dispensers I45
Reamer Indexes I44
S&D Drill Dispensers I44, I46
Security Cart I49
Tap Dispensers I46
Tap Indexer I44
Taper Shank Drill Dispensers I45
Tool Racks I48
ToolScoot Cart I48
Wall Locker I48
Workstation I48
HYDRAULIC
Cylinders I70
Maintenance Kit I70
Pumps I70
HYDRAULIC ARBOR PRESSES K79
Arbor Presses K79-K80, K82
Dake K79-K80, K82
Enerpac K81
Simplex K80
HYDRAULIC IRONWORKERS
Sheet Metal Machines K52
HYDRAULIC JACKS I70
HYDRAULIC PUMPS I69, I71
Enerpac I73
Lifting Wedge I72
HYDRAULIC SHEARS K50
HYDRAULIC STACKER
Wesco I62
ID GRINDING & POLISHING C24, C46, C78-C81, C84-C86, C146-C153, C158, C161, C163, C168
IDENTIFICATION
Labeling Systems F151
Plates F152
Stamps, Sets F150-F152
ILLUMINATED MAGNIFIERS . . . . . D132, D135, D172-D174 , H81-H82
IMADA
Force Gages, Stands D107-D108
IMCO
End Mills A258, A262, A269, A271, A273, A275, A277-A279, A282, A285-A288, A290, A307, A309-A310, A313, A322-A325, A334, A336-A337, A339-A343
End Mills, Carbide A273
enDuro End Mills A323, A334, A339
INCONEX End Mills A337
Omega A336-A337
Pow-R-Feeds A279, A309-A310, A313, A322, A325
Pow-r-path A324, A339-A341
Roughers A342
Streakers A279, A282-A290, A343
truCORE A258, A262, A269, A271, A275, A277-A278, A307
IMPACT RETAINING RINGS
Proto F76
IMPACT SOCKETS, SETS
1 Drive F71
1/2 Drive F68-F71, F73-F74, F106, F109-F110
3/4 Drive F73-F74
3/4 Drive, Deep F74
3/8 Drive F68-F73, F109
Budd Wheel F76
Drive Adapters F76
Extensions F76
Locking Adapters F76
Swivel Adapters F76
Wobbler Adapters F76
IMPACT WRENCH, RATCHET
Rotary Hammer Kit E6
IMPACT WRENCHES, RATCHETS E7, E37-E41
IMPORT
C-Clamps Forged Deep Throat J105
C-Clamps Heavy Duty Drop-Forged J109
R8 Shank Arbors J159
Straight Shank Drill Chuck Arbors J159
Taper Shank Drill Chuck Arbors J159
IN-LINE BLOW GUNS E43
IN-LINE SANDERS E18
INCLINOMETERS D164-D167
INDEX FIXTURES J170-J172
Super Spacers Indexers J173-J175
INDEXABLE BORING BARS
APT Carbide B38
Criterion B37
Dorian B39-B42, B44-B49
Ingersoll IMC63-IMC64
Micro 100 . . . . . B38
Rapidkut B34-B36, B94
Turning Sets B32
Ultra-Dex B50-B58
INDEXABLE CARBIDE
Counterbores B61, B64
Drills B64, B66, B134
INDEXABLE CHAMFER MILL
Dorian B65
Everede B63
INDEXABLE COUNTERBORES
Countersink & Chamfering B64
INDEXABLE COUNTERSINK
Everede B62
Niko B64
Rapidkut B62
Sets B62
INDEXABLE CUT-OFF BLADES
Rapidkut B74
INDEXABLE CUT-OFF/GROOVING . . . . . .
Iscar . IMC4-IMC6, IMC9, IMC12-IMC15, IMC17-IMC19
Tungaloy IMC93
INDEXABLE CUT-OFF/GROOVING HOLDERS
Iscar IMC15, IMC17-IMC18
INDEXABLE DOVETAIL CUTTER
Dorian B64-B65
INDEXABLE DRILLS
Ingersoll IMC77
Iscar IMC36-IMC37
Ultra-Dex B66
INDEXABLE END MILLS
APT Carbide B72-B73
Ingersoll IMC44-IMC48, IMC60
Iscar IMC19-IMC20
Rapidkut B69, B71
Sets B72
Rapidkut B69-B71
Tungaloy IMC94-IMC96
INDEXABLE FACE MILLS . . . . . .
Ingersoll IMC42-IMC43, IMC45-IMC46
Iscar IMC20-IMC23

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

INDEXABLE GROOVING HOLDERS
External Holders. B84-B85
Internal Holders B84
INDEXABLE MILLING
Thread Milling Cutters B106
INDEXABLE MILLING CUTTERS
Ingersoll IMC42-IMC48, IMC60
Iscar IMC20-IMC23
Rapidkut. B71
Tungaloy IMC95-IMC96
INDEXABLE MILLING HEAD
Iscar IMC25-IMC27
INDEXABLE SOLID CARBIDE HOLDERS
Iscar IMC24
INDEXABLE SPARE PARTS IMC23-IMC24, IMC64, IMC78
Cam Pins B134
Chipbreakers B134
Clamp Screw B136
Clamps. B135
Differential Screws B135
Everede Screws. B59
Everede Torx Wrench. B59
Flat Head Cap Screws B136
Hex Keys B73
Iscar B135
Lock Pins B134-B35
Lock Screws. B136
Nikcole Torx Screw. B100
Nikcole Wrench B100
Screws B33
Shim Screws B136
Shim Seats. B134, B136-B138
Socket Head Cap Screws B136
Torx Screw B72
Ultra-Dex B57
Vargus Anvil B107
Vargus Screws B107
Vargus wrench B107
INDEXABLE T-SLOT CUTTER
Dorian. B65
INDEXABLE THREADING HOLDERS
Dorian. B97-B98
External Holders. B101, B103
Internal Holders B101, B103
INDEXABLE TURNING HOLDERS
Dorian. B22-B32, B42-B44, B76-B77
Ingersoll IMC63
Rapidkut. B20-B21, B72, B93
Tungaloy IMC87-IMC89
Ultra-Dex B23, B31
INDEXABLE TURNING HOLDERS
INGERSOLL. . . . . .
Carbide Drilling Inserts. IMC78
Carbide Turning Inserts IMC65-IMC76
Chip Surfer. IMC60-IMC62
Indexable Boring Bars IMC63-IMC64
Indexable Drilling IMC77
Indexable End Mills IMC44-IMC48, IMC60
Indexable Face Mills IMC42-IMC43, IMC45-IMC46
Indexable Spare Parts IMC64, IMC78
Indexable Turning Holders. IMC63
Milling Cutters IMC60-IMC62
Parting and Grooving Holders IMC58
Parting and Grooving Inserts IMC58-59IMC
INDEXES, DRILL, REAMER & TAP I44
INDIA STONE, FILES C68-C69
INDICATING PIN VISE ATTACHMENT. D60
INDICATING POINTS D50, D52, D61, D63-D67
INDICATOR BACKS D63-D64
INDICATOR SETS D51, D72-D73, D79-D80, D83
INDICATORS
Accessories D51, D58-D65, D70-D77, D80, D86
Back Plunger D57
Coaxial. D49
Co-Axial D49
Contact Sensor for HG. D92
Dial. D26, D41-D46, D52, D55
Dovetail Accessories D60
Electronic. D46-D49, D51, D203
Electronic Test D58
Fowler D63
Points. D50, D52, D61, D63-D67
Sets D72-D73, D79-D80, D83-D85
Test. D50-D57
Test Indicator Accessories D58
INDICOL
Indicator Accessories. D58-D59
INDUSTRIAL AIR
Air Compressors K124-K125, K127, K129
INDUSTRIAL HEAT INDEX MONITOR D137
INDUSTRIAL SHELVING. I34-I38
INDUSTRIAL SLEEVING. A163
INGERSOLL RAND
Air Compressors K88, K90, K92
INK & DYE, MARKING G57-G59
INK MARKERS
Paint Markers. G58-G60
Paint Sticks G58-G60
INK REMOVERS G58
INSERT & DRIVE BITS F96-F97, F100,
. . . . . .F104-F105, F109, F117
INSERTS, INDEXABLE CARBIDE
24N. IMC3
34F. IMC4
34L. IMC3
34N. IMC3
34R. IMC3
ADKR. IMC27-IMC28
ADKT B67
APKT B67, IMC27-IMC28
ADMM IMC27-IMC28
ADMT. IMC27-IMC28
AOMT. IMC37
APKR. IMC27-IMC28
APKT IMC27-IMC28
ASMT. IMC96
AVGT IMC86
AXKT IMC23
BCB B67
Boring Bars & Tools B37
CCGT. B5, IMC81-IMC84
CCMT. B5, B11, B36, IMC29-IMC35,
. . . . . IMC65-IMC76, IMC81-IMC84
CDCD. B59
CDGW B57
CNGA. B19
CNGG IMC65-IMC76
CNGN. B19
CNMA. B5, IMC65-IMC76
CNMG . B5-B6, B11, B18, IMC29-IMC35, IMC65-IMC76
CNMP. B11
CPG B11
CPGM B11
CPMT. B57, IMC29-IMC35, IMC65-IMC76
DCET. IMC65-IMC76
DCGT. B6
DCMT. B6, B36, IMC29-IMC35, IMC65-IMC76
DGL IMC7
DGM. IMC84
DGN IMC7
DGNM IMC7
DGR. IMC7
DNGA. B19
DNGG IMC65-IMC76
DNGN. B19
DNMA. B7, IMC65-IMC76
DNMG . . . B7, B12, B18, IMC29-IMC35, IMC65-IMC76
Drills. B66, B134
Everede B59-B60
FLG B78-B79
FLG-CB B79-B80
FLGD B80
FLGD-CB. B81
FLGP B81
FLR B82
FLRD B82
FLRP B82
FLT-CB. B83
FLTF. B83
FLTK. B83
FLTP. B83
GEPI. IMC16
GFF IMC13
GFL IMC10, IMC12
GFN IMC10, IMC12
GFN-A IMC11
GFR IMC10, IMC12
GIE. B99-B100
GIPI IMC16
GTL IMC12
GTN IMC11
GTN-A IMC11
GTN-W. IMC11
H400. . . . . IMC27-IMC28
H490. . . . . IMC27-IMC28
H491. . . . . .IMC4, IMC6, IMC11, IMC13, IMC16,
. . . . . IMC27-IMC35, IMC38-IMC39
KGTN. B75
LNMU. IMC86
MEC B67
MEGFL. B74
MEGFN B74
MEGFR B74
MEGTL. B74
MEGTN B74
MEGTR B74
MEHF. B72
Milling. B72
NG/MEG. B93
NG/PCG. B93
NGL/MEG. B93
NGR/MEG B93
NNC-N B67
NP/PCP B94
NR/PCR B94
NT/PCT B96
NT2/MET B96
NT3/MET B96
NTP/PCTP B94
ONGU IMC86
ONMU IMC96
Pro-Cut. B11-B19, B67-B68, B75, B93-B96
Rapidkut. B5-B10, B36, B67, B72, B75, B93, B95
RNG. B12
RNGN. B19
RNGU. IMC86
RNMA. B12
RNMG B12
RPC B67
RPG B12
S845. . . . . IMC27-IMC28
S890. . . . . IMC27-IMC28
SCGT. B7
SCIR/L. IMC35
SCMT. B7, B12, IMC29-IMC35, IMC65-IMC76
SDMT. IMC27-IMC28
SEAN B67
SEC B68
SEHT B67
SEHX B67
SEK IMC27-IMC28
SEKN B67
SGM. IMC84
SGS IMC85
SHC B68
SNG B12, B18
SNGA. B19
SNGN. B19
SNGU. IMC86
SNMA. B7, B13, IMC65-IMC76
SNMG . B7-B8, B13, B18, IMC29-IMC35, IMC65-IMC76
SNMX. B67
SNU B13
SNW. B68
SOMT. IMC29-IMC35, IMC37, IMC78
SOMX. IMC37
SPC B68
SPC-A B68
SPG B13, B18, IMC65-IMC76
SPMR. B13, IMC65-IMC76
SPMT. IMC27-IMC28
SPU B14, IMC65-IMC76
SRC-H B68
TAG IMC6
TAGB IMC6
TCET IMC65-IMC76
TCGT. B8
TCM IMC90
TCMT B8, B14, B36, B57, IMC29-IMC35, IMC65-IMC76
TDAB B59
TDGW B14
TDKT IMC27-IMC28
Threading Inserts. B101-B103, B105

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

TL100 . . . B63
TNG . . . B14, B18
TNGA . . . B19
TNGG . . . IMC65-IMC76
TNGN . . . B19
TNGU . . . IMC86
TNMA . . . B8, B14, B18, B95, IMC65-IMC76
TNMA-NG . . . B95
TNMA-NT . . . B96
TNMA-NV . . . B96
TNMC-NG . . . B95
TNMC-NT . . . B96
TNMC-NV . . . B96
TNMG . . . B9, B15, B18, IMC29-IMC35, IMC65-IMC76
TNMP . . . B15
TNU . . . B15
TOGT . . . IMC96
TOHT . . . IMC92
TOMT . . . IMC86
Tool-Flo . . . B78-B83
TPC/TRC . . . B68
TPG . . . B16, B18, IMC65-IMC76
TPGB . . . B16, IMC29-IMC35
TPGB2 . . . B60
TPGB3 . . . B60
TPGH . . . B16, B39, IMC29-IMC35
TPGH2 . . . B59
TPGH3 . . . B60
TPGM . . . B16
TPGN . . . B19
TPKT . . . IMC27-IMC28
TPMA . . . B95
TPMA-NG . . . B95
TPMA-NT . . . B96
TPMA-NV . . . B96
TPMC-NG . . . B95
TPMC-NT . . . B96
TPMC-NV . . . B96
TPMR . . . B16, IMC29-IMC35, IMC65-IMC76
TPMT . . . IMC29-IMC35, IMC65-IMC76
TPU . . . B17, IMC65-IMC76
TT . . . B33
Vargus . . . B103-B107
VBET . . . IMC65-IMC76
VBMT . . . B9, B17
VCGT . . . B9
VCMT . . . IMC29-IMC35
VNGA . . . B19
VNGG . . . IMC65-IMC76
VNGN . . . B19
VNMG . . . B10, B17-B18, IMC29-IMC35, IMC65-IMC76
WCGT . . . B60
VPMT . . . IMC65-IMC76
WCMT . . . B57, B66
WCMX . . . B66
WNMA . . . B10, IMC65-IMC76
WNMG . . . B10, B17, IMC29-IMC35, IMC65-IMC76
WWCW . . . IMC86
XCET . . . IMC86
XNEX . . . B67

INSPECTION LIGHTS . . . H56, H58, H60-H61
INSPECTION MAGNIFIERS . . . H81-H82
INSIDE CALIPERS . . . D191-D192
INSIDE MICROMETERS . . . D17, D20-D21, D32, D100
INSIZE
Bore Gage Sets . . . D97
Calipers, Accessories . . . D29, D36
Combination Squares . . . D149
Dial Indicators . . . D43, D51
Electronic Indicators . . . D48
Hardness Testers . . . D110-D111
Magnetic Bases, Stands . . . D70-D71
Microcscopes . . . D132
Micrometers & Sets . . . D3, D6
Microscopes . . . D132
Roughness Testers . . . D113
Scales . . . D144
Test Indicators, Points . . . D51
INSPECTION LIGHTS . . . D135, D170
INSPECTION BALLS . . . D125-D126
INSPECTION MIRRORS . . . D169-D170
INSTRUMENT OIL . . . D15
INSULATED HAND TOOLS . . . F39, F41
INTERAPID
Accessories . . . D61
Test Indicators, Points . . . D56
INTERCHANGEABLE ANVIL
MICROMETER . . . D15-D16
INTERCHANGEABLE PILOT
COUNTERBORES . . . A127-A128
INTERNAL/EXTERNAL DIAL
CALIPERS . . . D104
INTERNAL EXPANDING 5C COLLET SET
5C Collets . . . J168
IPG
Duct Tape . . . H117
Electrical Tape . . . H120
FilamentTape . . . H118
Hazard Tape . . . H119
Masking Tape . . . H117
Painters Tape . . . H117
Sealing Tape . . . H118
IRONCLAD GLOVES . . . H51
IRONWORKERS
Edwards . . . K53-K55
Marvel . . . K52
IRWIN
C-Clamps . . . J104
Quick-Grip Clamps . . . J111
Spring Clamps . . . J111
Tap and Die Sets . . . A215-A217, A219
Tap Wrenches . . . A224-A225
Unibit (Step Drills) . . . A126
Adjustable Wrenches, Sets . . . F13, F15
Angled End Cutter Pliers . . . F28
Bit Sets . . . F104
Bolt Extractors . . . F111, F114-F115
Cable Cutters . . . F27
Conduit Locknut Reaming Pliers . . . F28
Diagonal Cutting Pliers . . . F23
Diagonal Extra Long . . . F21
Diagonal Tapered Nose . . . F23
End Cutters . . . F33
Flat Nose Pliers . . . F26
Full Flush Angled End Pliers . . . F21, F28
Hand Tool Sets . . . F32, F34-F35
Hose Clamp Plier . . . F21
Impact Power Bits . . . F97
Inserts & Drive Bits . . . F96-F97, F99-F100
Jab Saws . . . F170
Knives . . . F158-F159
Magnetic Bit Holders . . . F99
Multi-Spline Extractors . . . F114
Needle Nose Pliers . . . F26
Oil Filter Pliers . . . F31
Phillips Insert Bits . . . F97
Pipe Wrenches . . . F154
Screw Extractors . . . F111, F114
Screw Grip Extractors . . . F113
Slip Joint Pliers . . . F17
Snips . . . F28
Square Insert Bits . . . F100
Tongue & Groove Pliers . . . F30, F32, F34-F35
Traverse End Cutter Pliers . . . F28
Utility Blades . . . F162
Utility Knives . . . F159
Vise-Grip . . . F17-F18, F20-F21, F26
ISCAR
Carbide Grooving Inserts . . . IMC16
Carbide Milling Inserts . . . IMC23, IMC27-IMC28
Carbide Parting and Grooving Inserts . . . IMC11
Cut-Off/Grooving . . . IMC4-IMC6, IMC9, IMC12-IMC19
Cut-Off/Grooving Carbide Inserts . . . IMC4, IMC6-IMC7, IMC13
Indexable Cut-Off Blades . . . IMC4, IMC6, IMC9, IMC13, IMC17-IMC18
Indexable Cut-Off Blocks . . . IMC5, IMC8
Indexable Cut-Off/Grooving Blades . IMC4, IMC6, IMC9, IMC13, IMC17-IMC18
Indexable Cut-Off/Grooving Holders . . . IMC15, IMC17-IMC18
Indexable Drills . . . IMC36-IMC37
Indexable End Mills . . . IMC19-IMC20
Indexable Face Mills . . . IMC21-IMC23
Indexable Milling Head . . . IMC25-IMC27
Indexable Solid Carbide Holders . . . IMC24
Indexable Spare Parts . . . IMC23-IMC24
Milling Inserts . . . IMC23
Parting & Grooving Holders . . . IMC10
Parting & Grooving Inserts . . . IMC10
Turning Inserts . . . IMC29-IMC35
ITW
Accu-Lube . . . G4, G13-G14, G26
Cleaners . . . G45, G58
Dykem . . . G57-G60
High Spot Indicator . . . G57
Layout Fluids . . . G57
LPS . G2, G7, G14, G31-G32, G39-G40, G43-G45, G47
Markers . . . G59-G60
Remover . . . G58
Rust Inhibitor . . . G43
Rustlick . . . G4-G5, G9-G11, G14, G30, G40, G49
Tapmatic . . . G2, 7, G14
J B WELD . . . G55
JAB SAW . . . F170
JACKS
Bottle . . . I68
Hydraulic . . . I68
Low Profile . . . I62
Ratchet . . . I73
Roll Around . . . I62
Screw . . . D168, I68
Simplex . . . I73
Stands . . . I68
Steelman . . . I62, I68
Trailer Stabilizing Jacks . . . I68
Vestil . . . I68
JACKSCREWS . . . D186
JACOBS
Arbors Threaded Shank . . . J159
Chuck Removal Wedges . . . J159
Extension Sockets Jacobs . . . J160
Heavy Duty Super Ball Bearing Chucks . . . J154
Jaw & Nut Repair Units . . . J159
Morse Taper Drill Sleeves . . . J160
Multi-Craft Medium Duty Chucks . . . J156
NMTB Shank Arbors . . . J221
Plain Bearing Heavy Duty Taper Mounted Drill Chucks . . . J155
Plain Bearing Heavy Duty Thread Mounted Drill Chucks . . . J156
R8 Shank Arbors . . . J159
Replacement Parts for Ball Bearing Chucks . . . J159
Sleeves-For Plain Bearing Key Type Chucks . . . J159
Straight Shank Drill Chuck Arbors . . . J159
Taper Shank Drill Chuck Arbors . . . J159
JERGENS
40 Pc. Clamping Kits . . . J98
60 Pc. Set-Up Kits - Aluminum Step Blocks . . . J99
60 Pc. Set-Up Kits - Steel Step Blocks . . . J99
Adjustable Step Block Kits . . . J89
Clamping Components . . . J86, J88, J94
Coarse & Fine Pitch Heel Straps . . . J89
Coupling Nuts . . . J86
English T-Nuts . . . J86
Fixture Clamps . . . J100
Fixture Studs . . . J85
Forged Adjustable Clamps . . . J99
Gage Balls . . . D126
Hex Nuts . . . J86
Kwik-Turn T-Nuts . . . J88
Large Toe Clamp Kits . . . J97
Metric T-Nuts . . . J86
Nuts . . . J86, J88
Plain Straps . . . J88
Set-Up Studs . . . J85
Small Toe Clamp Kits . . . J97
Spherical Flange Nut . . . J86
Stainless T-Nuts . . . J86
Step Blocks . . . J88
Studs . . . J84-85
T-Nuts . . . J86
Toggle Screws . . . J94
Tooling Balls . . . D126
JET LUBE
Anti-Seize . . . G44
Corrosion Inhibitors . . . G42
Greases . . . G32-G33
Lubricants . . . G34, G39-G40

How to use this index
LIGHTED SAFETY GLASSES . . . H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

JEWELER SLOTTING SAWS A361
JIG GRINDERS, MANDRELS C46
JIG LATCH SWING BOLTS
Valtra J92
JIG SAW BLADES
Bosch Power Tools. E60
Milwaukee E60
JIG SAWS E35
JOBBER DRILLS. . . . . .
Carbide. A61-A63, A66-A68, A72-A75, A82
Carbide Tipped. A6, A58
Cobalt. A4-A6, A14-A16, A20-A22
Dyno Drill A5, A20
Heavy Duty 135 Degree Split Point . . . . . .A4, A14, ...A17-A18, A20-A22
High Performance . . . . . A22, A66-A68, A73-A75, ... A79, A81-A83, IMC37
High Speed Steel. A4, A7-A20, A23
Left Hand A4, A23
Metric A5-A6, A14-A16, A66-A67, A75, A82
Morse Cutting Tools . . .A4-A12, A14, A17-A18, A20-A22
Precision Twist Drill A4-A12, A17-A22
Rapidkut. A4-A6, A58, A61, A67, A72-A74, A79
Reduced Shank A5, A46
Sets A4-A6, A16, A23, A58, A66, A68
TiN Coated. A4-A5, A13, A17-A18, A22, A75, A82
JUMP SUITS H34
KALAMAZOO
5C Collet Chuck. J170
5C Collet Indexer J169-J170
Collet Fixture J170
Pneumatic 5C Collet Holder. J170
KALAMAZOO INDUSTRIES
Abrasive Cut-Off. K41-K43
Belt, Disc Sanders K70-K75
Disc Sanders K70-K75
High Speed Ferrous & Non Ferrous Saws K40
KALAMAZOO/CLAUSING
Horizontal Bandsaws. K28
KALMASTER CALIPER MASTERS D38
KANT-TWIST
Deep Throat Clamps J112
Keychain J112
Quick-Acting Fixture Clamps J112
T-Handle With Cushion Handles J112
Universal No-Mar Round Pad Clamps. J112
Universal Round Handle C-Clamps. J112
Universal T-Handle Stainless Clamps J112
Universal T-Handle Style Clamps J112
KASTO
Bandsaws. K35
KENNEDY
Cabinets. I6-I7, I9-I11, I47
Carts. I9, I11
Chests I2-I3, I9
Countertop Cabiinets. I47
Kennedy. I2-I3, I6-I7, I9-I11, I15-I17, I47, I55-I56
Peg Board Systems I15
Tool Boxes I2-I3, I6, I9, I11, I16-I17
Tool Cabinets I3, I6-I7, I9, I11
Tool Chests I10
Versa-Bench. I11
Work Benches I55-I56
Worktop Cabinets. I47
KENT MACHINERY
EVS Lathes K15
Lathes K10-K11, K13,K15
Surface Grinders K56
KEO . . . . . .
Capscrew Counterbores A124-A126
Combined Drills & Countersinks A107-A109
Countersink & Center Reamers. A115-A118
Countersinks A115-A120
Countersinks, Zero Flute A112
Dovetail Cutters A355
Drills, Center & Spotting. A108
Small Diameter Keyseat Cutters A350
Spotting Drills. A110-A111
Woodruff Keyseat Cutters A349, A351-A352
KEO MILLING
Concave Radius Cutters A354
Convex Radius Cutters A354
Corner Rounding End Mills A347-A348
Double Angle Shank Style Cutters. A353
Side Chip Slitting Saws A362
Side Milling Cutters A357-A358
Single Angle Shank Style Cutters A354
Slitting Saws. A363
T-Slot Cutters. A352-A353
KEVLAR
Gloves H41, H45, H48, H54
Sleeves H54
KEY & TOOL HOLDERS. D168
KEY CAD-DE REPLACEMENT BODIES AND SCREWS
Drill Chuck Accessories J153
KEYCHAINS D168
KEYED LOCKS H123-H124
KEYLESS DRILL CHUCKS. J157
KEYSEAT CUTTERS
Arbor Type A360
Narrow Width A351
Woodruff. A349-A352
KEYSTOCK
Square Cold Finish Assortment J41
Square Cold Finished. J41
Stainless Steel J41
KEYWAY BROACHES & SETS. A364-A366
KIMBERLY-CLARK
Dispensers. H114-H116
Gloves H36, H38, H43
Protective Apparel H34
Wipers H114
Wypall H114-H116
KLEENGUARD
Gloves H36, H38, H43
KLUBER
Grease G33
KNEE MILLS
Acer K5-K7
Bridgeport. K4
PRM. K3
Summit. K6-K7
KNEE PADS. H31
KNIFE FILES F174
KNIFE SHARPENERS. K66
KNIVES F39, F42, F157-F160, F162
KNOBS
Clamping Components. J94
Morton J94
KNURLING TOOLS
Bump Type A1-29. . . . . .J249
Bump Type A1-30. . . . . .J249
CNC Modular J245-J246
EP Series Knurls J250
GK Series Knurls J250
Knurl Pins Sets. J246
Knurl Sets. B129
Knurls. J247-J248
KP Series Knurls J250
Pivot Head B129
Revolving Head B129
Scissor Type. J249
Single Head B129
Swivel Head. J249
KOEHLER-BRIGHT STAR
Flashlights H59-H62
KOMELON
Flat Tapes. D162
Magnetic Tapes D162
Measuring Tapes D162
Measuring Wheels D162
KOOL MIST COOLANT, MISTING SYSTEMS G24-G25
KRYLON PAINTS. G61-G62
Moly Lube. G31
KURT MFG
AngLock Vise Accessories. J139
AngLock Vises J138-J139
DX6 CrossOver Vise J138
Jaw Kits J139
Jaw Plate & Parallel Set. J140
Jaw Plates J140
Master Jaw Kits J141
MaxLock Vises. J142
Parallel Keepers. J141
Parallel Sets. J140
Power Drawbars. K106-K107
Pull-Type Vises J138
Riser Base Kit J137
Risers. J142
Self-Centering Vises J137
Sidewinder J140
Sine Keys. J139
Sine Parallel. J140
Speed Handle J141
Step Key. J139
Vise Towers J142
Work Stops. J141
KUTZALL CARBIDE ABRASIVE TOOLS. C43
L-CLAMPS. J107-J108
LA-CO MARKAL MARKERS G58-G60
LACO/TEMPIL
Infrared Measurement D138
Thermometers D138
LADDERS
Aluminum. H100
Cotterman H100
Fiberglass. H100
Little Giant Ladder Systems. H100
Non-Conductive H100
Step H100
LANG
Bit Wrench Set F117
Feeler Gages D195
Gasket Hole Punch F149
Hose Clamp Pliers F21
Multimeters. D139
Retaining Ring Pliers, Sets F36-F39
Snap Ring Pliers, Sets. F38
Test Lead D140
Thread Restorer Files A219
Thread Restorer Files F180
LANTERN H62-H63
LAPPING COMPOUNDS
Compounds C166
LASER
Flashlights H61
LASERS
Alignment. D157
Rotary. D157
Self-Leveling D157
LAST WORD INDICATORS. D53
LATCH CLAMPS
Rapidhold. J70
LATHE CENTERS MT, B&S, JARNO IMPORT
Dead Centers. J254
LATHE CHUCK JAWS, PARTS & ACCESSORIES
4-Jaw Independent Chuck Parts J298-J299
A.S.T.G. Medium & Heavy Duty Soft Top Jaws. J274
A.S.T.G. Single Step Heavy Duty Reversible Hard Jaw J276
Blank Jaws. J299
Boring Mill Jaws Set Bullard Tooling J276
Bullard Jaws. J276
Chuck Wrenches with Handle Square End J299
Full Wrap Aluminum Jaws J272
Full Wrap Jaws. J273
Hard Master Jaws J297
Hard Solid Jaws ID. J299
Hard Top. J297
Hard Top Jaws J297, J301
Hard Top Jaws for 3 & 6-Jaw Chucks J299
Heavy Duty Soft Top Jaws. J272
Jaw Nuts J273
Medium Duty Soft Top Jaws. J270
Metric Regular Serrated Soft Jaws J271
Metric Serrated Double Step Reversible Hard Jaws J275
Metric Serrated Pointed Soft Jaws. J271
Metric Serrated Single Step Reversible Hard Jaws J275
Metric Serrated Square and Pointed Soft Jaws J270
PRM. K8
Safety Shield Chip Hook-R J160
Scroll & Pinion for Self-Centering Chucks. J298

Self-Ejecting Lathe Chuck Keys. J284, J298
Serrated Hard Top Jaws 1/16 90 Degrees J274
Serrated Soft Top Jaws Each 1/16 90 Degrees. J273
Soft Solid Jaws. J299
Soft Top Jaws. J296, J301
Spare Parts for Self-Centering Chucks J298
Steel Face Plate Jaws J276
Toolmex J299
Wrenches for Self-Centering Chucks. J298

LATHE CHUCKS
3 & 4-Jaw 5C Precision Chucks. J290
3 & 4-Jaw Front Mount Self-Centering Scroll Chucks. J287
3-Jaw A Mount Chucks. J277-J279
3-Jaw Closed Center Direct Mount Power Chucks J302
3-Jaw Direct Mount Chucks. J278-J279
3-Jaw Direct Mount Power Chuck J302
3-Jaw Direct Mount Scroll Chucks ZSU. J280
3-Jaw Extra Large Hole Direct Mount Power Chuck J302
3-Jaw Hydraulic Chucks. J301
3-Jaw Manual Chucks J281
3-Jaw Plain Back Scroll Chucks. J281
3-Jaw Quick Change J300
3-Jaw Scroll Chucks with 2 Piece Reversible Jaws. J288
3-Jaw Scroll Chucks with 2 Sets of Solid Jaws J288
3-Jaw Scroll Chucks ZSU J282
3-Jaw Self Centering Scroll Chucks. J280
3-Jaw Self-Centering Rotating Chucks with Morse Taper Shank J289
3-Jaw Semi Steel Solid Jaw. J287
3-Jaw Wedge Power Chucks. J301
4-Jaw Combination Flatback J283
4-Jaw Forged Steel Independent. J284
4-Jaw Forged Steel Plain Back J284
4-Jaw Independent Chucks Direct Mount Type A. J285-J286
4-Jaw Independent Chucks Direct Mount Type D J285
4-Jaw Independent Extra Heavy Duty J300
4-Jaw Medium Duty - Plain Back Chucks J283
4-Jaw Plain Back Scroll Chucks. J283
4-Jaw Self Centering Scroll Chucks. J282
4-Jaw Self-Centering Machine Fixtures. J289
Chuck Grease J298
Fine Adjustment Steel Body Chucks J277
Geared Scroll Chucks ZG J282
Large Through-Hole 3-Jaw Self-Centering Scroll Chucks J300
NBK Super Thin Round Chucks. J289
Replacement Chucks for Vertex Spacers. J173

LATHE DIGITAL READOUTS
Acu-Rite K115-K118
Fagor K112-K113
Mitutoyo K111
Newall K114-K115

LATHE DOG. J256

LATHE MANDRELS
Expanding Arbor Sets J168
Expanding Arbors. J168
Expanding Mandrel Sets J168
Expanding Mandrels J168

LATHE TOOL HOLDERS B129

LATHES
Acer K9, K16
Big Bore K11-K14
EVS K15-K16
Geared-Head K9-K15
Kent K10-K11, K13, K15
PRM K8-K9
Summit. K11-K14

LAVA SOAP H113

LAYOUT DYES G57-G58, G60
Felt Markers G59

LAYOUT FLUIDS
Remover. G58

LEATHERMAN
Folding Knives F160
Knives F160
Multi-Tools F42

LEFT HAND
Adjustable Dies A219
Drills A23, A32
Hex Dies. A219-A220
Jobber Drills A23
Screw Machine Drills A32
Taps A165-A166

LEGACY
Blow Guns E43
Color Connex E51
Flexzilla Air Hose E51
Funnels G36
Grease Guns G35
Grease Hose G35
Grease System G36
Hose Reels. E51
Kits G36

LENOX
Band Saw Blades. E62-E67
Band-Ade Sawing Fluid E66
Bandsaw Blades E61-E62
Hole Saw Arbors E84
Hole Saw Kits. E83-E84
Holesaws & Accessories E83

LENS CLEANING SUPPLIES D174, H15-H16

LES STROUD
Hatchet. F127
Saw F157

LEVELING MOUNTS, PADS, JACKS K101-K102

LEVELS D163, D165-D167
Lasers D157
Torpedo D164

LEVERS
Clamping Components. J93, 95-J96
Morton J93
Te-Co J95-J96

LEVITON
Black & White Plugs. H70
Bluetooth Receptacle. H71
Connectors. H70
Disconnect Switch H72
GFCI Covers H75
GFCI Device. H76
Manual Motor Disconnects. H72
Smartlock Receptacle H71
Surge Protector H76
Toggle Switch. H71
USB/Duplex Receptacle. H71

LFA. . . . . .
Heavy Duty Super Ball Bearing Chucks. J154
Plain Bearing Heavy Duty Taper Mounted Drill Chucks. J154
Plain Bearing Heavy Duty Thread Mounted Drill Chucks. J156

LIFT ALL
Adjust A Link Chain Sling. I66
Buckle Tie Downs I66
Load Huggers. I66
Ratchet Tie Downs. I66
Slings I64-I65

LIFT TABLES. I77

LIGHTED SAFETY GLASSES H2, H10

LIGHT METER D141

LIGHTS
Bayco. H55-H59, H61, H67-H69
Bend-A-Light H56
Bump Caps H26
Clip On Lights. D172, H10
Cordless. H67
Desk Lamps H79-H80
Flashlights H55-H64, H67, H79
Flood H80
Floor Lamps H80
Fluorescent Lamps. H79
Head Lamp. H56, H63-H64
Inspection. D135, H82
Inspection Lights D170, H55-H56, H80-H81
Lamps H77-H82
Lanterns H62-H63
LED Lights H55-H58, H60-H61, H63, H67-H68, H77-H82
Machine Lamps H77-H78, H80
MagLite H55-H56, H58, H60-H61
Magnifier Lamps. H81-H82
Pen Lights H55, H57, H61
Rayovac. H55, H61-H63
Rechargeable Flashlights. H56-57, H60-H61, H67
Safety Glasses. H10
Spot Lights. H62-H63, H68
Steelman H57, H60
Streamlight. D170, H55, H57-H64
Task Lamps H77-H80
Titan H55-H56, H60
Tube Lights H79, H81
Work Lights H67-H69, H77, H79

LINEAR ENCODERS
Kits K153
Reader Head Bracket Kit K153
Reader Heads K153

LINERS
Kennedy. I7
Proto. I12
Tool Boxes I12
Tool Cabinets & Chests I7
Waste Can H108
Waterloo. I12

LINESMAN PLIERS. F33

LISLE
Bit Sets. F94
Bolt Remover F114
Circuit Tester D140
Flaring Tools. F156
Flashlights H56
Funnels G36
Hose Remover Set. F137
Impact Screwdriver F110
Master Chuck Key J153
Oil Dispenser G37
Scrapers. F183
Soldering Clamp. H98
Stud Remover F114
Tap Socket Set. A217
Torx Driver Bits, Sets F94
Vise Jaw Pads J125

LITERATURE RACKS
Durham I32

LITTLE GIANT LADDERS. H100

LITTLE GIANT PUMPS G15

LIVE CENTERS
Adjustable J258
Advantage J265
Advantage - Tracer and Long Points J266
Bull Nose J263, J269
Bull Nose Adapters. J263
CNC J262
CNC Triple Bearing Type J260
Double Bearing J258
Face Drivers. J263
Heavy Duty Pipe Nose. J269
Heavy Duty Spindle Type. J261
High Precision Quad Bearing. J264
Live Center Set J257
Long Point J265
Multi Use J266
NO Quad-Bearing J258
Perfetta Precision. J261
Pipe J263
Precision J258
Quattro Forte Heavy Duty J262
Revolving Tailstock Centers. J259
Revolving Tailstock Centers Type 604 H J264
Revolving Tailstock Centers Type 604 HVL J264
Rotating Body. J263
Slim Casing J258
Slim Standard, Extended J260
Spring Type Standard & CNC Point. J256
Standard Point J259
Super Accurate. J265
Super Precision J259-J260
Super Precision Live Center Sets, ... J257
TMX J258, J263

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Tri Bearing Standard Point J265
Tri Bearing Tracer Point J265
Triple Bearing J258
Type 8847 Inserts J257
Type 8848 Inserts J257
Type 8849 Inserts J257
Type 8850 Inserts J257
Type 8851 Inserts J257
Type 8852 Inserts J257
Type 8853 Inserts J257
Type 8854 Inserts J257
Type 8855 Inserts J257
Value-Turn J259
Versa Turn J266
LLAMBRICH
Industrial Keyless Drill Chucks J157
Keyless Drill Chucks with Integral Shank J158
Plain Bearing Drill Chucks J155
LOAD HUGGERS
Lift All I66
LOC-LINE
Clamps G22
Connectors G20-G21
Elbows G20-G21
Elements G22
Fittings G20-G21
Flare Nuts G20-G21
Hose Systems G20-G21
Kits G20-G22
Manifolds G22
Nozzles G20-G22
Pliers G22
Shields G22
Valves G20-G21
LOCATION GAGES D125-D126
LOCK NUTS
Fasteners J33
LOCK OUT KITS H125
LOCK WASHERS-ZINC
Fasteners J33
LOCKER ACCESSORIES I30
LOCKERS I11, I30-I31
LOCKING PLIERS, SETS
Irwin F18
Proto F19, F32, F36, F39
Snap-On Williams F20-F21
Stanley F19
Steelman F20
Tekton F20
Vise-Grip F18, F20-F21
LOCKS H123-H125
LOCTITE
Adhesives G52, G54
Anaerobics G52, G54
Anti-Seize G44
Cleaners, Degreasers G46, G48, G56
Epoxies G52-G54
Gasket Remover G56
Gasket Sealant G54, G56
Gasketing G52, G54, G56
Lubricants G34
Sealing Tape H120
Silicone G56
LOUVERED RACKS I40
LOW CARBON FLAT STOCK J58
LOW HEAD SOCKET CAP SCREWS-STANDARD . . . . .
Holo-Krome J14
LOW PROFILE CUP MAGNETS J114
LPS
Anti-Seize G40, G43
Cleaners G45
Contact Cleaners G47
Degreasers G45, G47
Grease G31-G32, G43
Lithium Grease G31
Lubrication . . . . . C93 , G32
LUBRICANTS
Air Tool E13, E48
Accu-Lube G4-G5, G13-G14, G26
Air Tool - Air Compressor E13, E48, G13
Ashburn G2, G5-G9, G13, G18-G19, G31, G40-G42, G45-G47, G50
Cimcool G10-G12, G31, G42, G49
CRC G31, G33-G34, G39, G43
Crown G6, G34, G40
Cutting, Grinding, Tapping C93, G2, G4-G14, G18-G19, G24-G26, G28-G32, G40-G42, G45-G47, G49-G50
Grease G13, 31-34, 39-43
Jet Lube G32-34, 39-40
Loctite G39
LPS G2, G6-G7, G14, G31-G32, G39, G43
Mobil Oils G13, G33
Moly G31
Tool & Instrument Oil D15, G42
Trico G9, G26
Way Oil G13, G31, G33, G41
WD-40 . . . . . G31, G40
LUBRICATION SYSTEMS G16, G26, G36, G38
LUFKIN TAPES D156, D159-D161
LUTZ
File Cards F182
File Handles F182
Utility Knives F159
Utiltiy Blades F159
LYNDEX
5C Collet Sets J165, J167
5C Collets J165
R8 Collet Sets J163
R8 Collets J162
LYON
Fire Flame Protection I29
Heavy-Duty Cabinets I25
Lockers I31
Rod Racks I38
Shelving I38
Storage Cabinets I25- I26, I28-I29
Welded Cabinets I26
M.A. FORD
Carbide End Mills A258-A259, A262-A263, A270-A271, A275-A276
Countersinks A112, A114-A116, A118-A120
Countersinks & Sets 6-Flute A118-A120
Countersinks & Sets Uniflute A114-A115
Drills Screw Machine A65
Drills, Carbide A65
Drills, Center A109-A110
Drills, Circuit Board A68
Drills, Hi-Roc Carbide & Sets A66, 68
Drills, Hi-Tuff Carbide A66
Drills, High Performance A66, A68, A70-A71, A73-A76, A78, A81-A84
Drills, Jobber A62-A63
Drills, Twister A71, A75, A78, A81, A83
End Mills, Aluminum Cutting . . A280, A282, A289-A290
End Mills, Carbide A258-A259, A262-A263, A270-A271, A275-A276, A306-A307, A316, A322, A330, A332-A334, A338
End Mills, TuffCut A289, A312-A313, A326
High Performance End Mills A326
Reamers A140
Coolant Thru Drills A81-A84
Drills, Coolant Thru A81-A84
M.K. MORSE
Bandsaw Blades E36, E79-E82
Hole Saw Kits E88
Hole Saws, Accessories E88
MACHINE COUNTERSINKS & SETS A107-A109, A111, A113-A122, A385
MACHINE COVERS K102
MACHINE GREASE & OILS G13, G31, G33, G41
MACHINE SCREW NUTS-ZINC
Fasteners J35
MACHINE SET-UP CLAMPS
40 Pc. Clamping Kits J98
52 Pc Clamping Set J98
52 Pc Machinist Clamping Set J98
60 Pc. Set-Up Kits - Aluminum Step Blocks J99
60 Pc. Set-Up Kits - Steel Step Blocks J99
81L - Pneumatic Power J79
Adjustable Spindle Assemblies Cone Neoprene Cap J74
Adjustable Spindle Assemblies Flat Neoprene Cap J73
Adjustable Spindle Assemblies Swivel Foot J75
Adjustable Step Block Kits J89
Auto-Adjust Toggle J64
Basic Kits J89
Bessey J64, J73
Bolt Retainers J74
Bridgeport Clamping Set J97
Coarse & Fine Pitch Heel Straps J89
Drop-Forged Plain J99
EZS J111
Finger Drop-Forged J100
Fixture J100, J102
Flanged Washers U-Bar Clamps J74
Gooseneck Drop-Forged J100
Heavy Duty Double Action Edge J90
Horizontal J68-J70, J76
Horizontal Hold Down J65
Horizontal Latch J70, J72
Horizontal New Generation J69
Horizontal Pull Action J72
Horizontal Pull Action Hook J70, J72
Horizontal Pull Action Latch J70
ID Xpansion J102-J103
Knife Edge J100-J101
Large Toe Clamp Kits J97
Latch J76
Latch Plates J74
Machinable Uniforce J101
Machinist Clamping Sets J98
Pipe J110
Pitbull J103
Plain Clamps J89
Plunger-matic Assemblies J74
Pneumatic Cylinder J77
Pneumatic Power Sensors J79
Pneumatic Swing J78
Pneumatic Swing Cylinder Accessories Mounting Block J78
Push/Pull Toggle J71, J76
Quick-Acting Fixture J112
Quick-Grip J111
Rite Hite Self Positioning Hold Down J99
Round Cap Spindle Assemblies J73
Serrated End J89
Small Toe Clamp Kits J97
Spindle Assemblies Hex Head Full Thread J75
Spindle Assemblies Swivel Padded J75
Spring J111
Squeeze Action J72-J73
Steel Spring J111
Steel Step Block & Clamp Sets J89
Step Blocks J88
Straight Action Pneumatic J78
Straight Line Action J64-65, J71
Super Clamp Sets with Steel Blocks J97
T-Nut and Stud Sets J97
T-Slot Cleaner J97
Threaded Body Straight Line Action J70
Toolmaker's Parallel J104
Turnbuckle Assembly J38
U Clamps Drop-Forged J100
U-Bolt Spindle Accessories J75
Uniforce J101
Vertical J66, J76-J77
Vertical 2000 Series J67-68
Vertical Hold Down Action J64-J67
Vertical Pull Action Latch J70, J72
Vise J131
MACHINE SET-UP GAGES D179, D182, D204-D205
MACHINEABLE CAST IRON ADAPTER PLATES . . . . . .
Back Plates/Adapters J296
MACHINABLE WAX D128
MACHINERY KEY ASSORTMENTS
Maintenance Kits J6
MACHINERY LEVELING MOUNTS K101-K102
MACHINERY'S HANDBOOKS, 30th EDITION D208
MACHINISTS SCRIBERS C44, D151, F141
MACKLANBURG-DUNCAN LEVELS D165
MAGLITE
Flashlights H55-H56, H58, H60-H61
MAG-MATE
Alnico Magnet Material J117
BasicLift Ceramic Magnets J121
Ceramic & Rare Earth Multi-Purpose

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Magnets J115
Ceramic Lift Magnet J122
Ceramic Magnet Material J117
Cup Assemblies with Bolts J114
Cup Magnets with Clamps J114
Demagnetizer J150
Grip Stick Retriever J118
Inspection Mirrors D169
Inspection Tool Kits D169
Long Reach Retriever J116
Magnetic Pick Up Tools J116, J121
Magnetic Sheet Handlers J121
Magnetic Shop Sweeper J116
Magnetic Trigger Lift J121
Magnetic Welding Ground J119
Magnetic Welding Grounds On/Off J119
Parts Retrievers J121
Polymagnet Rare Earth Discs J117
Polymagnet Rare Earth Rings J117
Power Grip J121
Power Grip On/Off J119
Powerlift Rare Earth Lift Magnets J122
Rare Earth Exposed Pole J115
Rare Earth Magnet Material J115
Rare Earth Magnets J117
Rare Earth Ring Material J115
Rectangular Rare Earth Matnets J117
Salvage Magnets J115
Tool Holders J120
VersaLift Magnets J122
Welding Squares J119

MAGAZINE RACKS
Durham I32

MAGNETIC
Bases, Stands D70-D71, D74-D75, D78, D80, D86
Blueprint Holder J114
Ceramax Magnetic Chucks J147
Chuck Parallels J150
Chucks J146-J148, J150
Cylinder Squares D166
Indicator Backs D62-D63
Indicator Bases D70-D73, D75-D77
Inspection Mirrors D169-D170
Levels D164-D165, D167
Lifts J120-J122
Pick-Ups D169-D170, H34, J113, J116
Protractors D153, D156, D167
Scribers D151
Sheet Handlers J121
Sine Plates J149
Strips J115
Surface Gages D78
V-Blocks D178-D179
Versa Hook D140
Welding Squares J118
Wheel Dressers C33

MAGNETIC BASES D78
MAGNETIC BIT HOLDERS F99
MAGNETIC CHUCKS
Ceramax J147
Longitudinal J148
Magnum Force J146
Parallels, Vee Blocks, and Angle Plate J150
Rare Earth J147
Rectangular J146-J147
Round J146

MAGNETIC DRILLS E8, E91
MAGNETIC VEE BLOCKS J150
MAGNETS
Alnico Material J117
BasicLift Ceramic J121
Ceramic & Rare Earth Multi-Purpose J115
Ceramic Lift J122
Ceramic Material J117
Cup Assemblies with Bolts J114
Cup with Clamps J114
General Button Type Alnico J114
General Purpose J114
Grip Stick Retriever J118
Lifts J120-J122
Long Reach Retriever D169, J116
Low Profile Cup J114
Magnetic Blueprint Holder J114
Magnetic Parts Trays J116
Magnetic Pocket Tools & Retrievers J113
Magnetic Retrievers J116
Magnetic Sheet Handlers J121
Magnetic Shop Sweeper J116
Magnetic Strips J115
Magnetic Trigger Lift J121
Magnetic Welding Ground J119
Magnetic Welding Grounds On/off J119
Magnetic Welding Holder J119
Magnetic Welding Squares J118
Magnetizer/Demagnetizer J150
Parts Retrievers J121
Polymagnet Rare Earth Discs J117
Polymagnet Rare Earth Rings J117
Pot Type Alnico J114
Power Grip J121
Power Grip On/Off J119
Powerlift Rare Earth Lift J122
Rare Earth J117
Rare Earth Exposed Pole J115
Rare Earth Flush Face J115
Rare Earth Material J115
Rare Earth Ring Material J115
Rectangular Rare Earth J117
Salvage J115
Spreader Bars J120
Techniks J120
Tool Holders J120
VersaLift J122
Welding Squares J118-J119

MAGNIFIERS
Goggles H13
Inspection H82
Lighted . . . . . D135, D170 , H56, H80-H82
Procheck D172-D173
Pyramex H9
Safety Glasses H9, H13

MAHR-FEDERAL
Indicators D41, D45
Surface Roughness Gages D114

MAINTENANCE KITS / ASSORTMENTS
Aluminum Rivet J6
Copper Washer J4
Cotter Pin J2-J3
Dowel Pin J3
E-Clip J3-J4
Empty Large Plastic Kit Box J7
Grease Fitting J3
Hitch Pin Clip J4
Hook & Eye Screw J6
Hose Clamp J6
Machinery Key J6
Master Auto Fuse J3
Metric Allen Head Set Screw J2
Metric O-Ring J4
Metric Set Screw J2
Metric Socket Head Cap J5
O-Ring J4
Roll Pin J5
Rubber Grommet J6
Set Screw J2
Set Screw-AS99 . . . . . J2
Shoulder Screw J23
Snap Ring J5
Socket Head Cap Screw J5
Socket Set Screw J2
Spring J6
Stripper Bolt Shim J23
Wire Nut J3
Woodruff Key J6-J7

MALLETS F127
Rubber F128
Split Head F126

MANDRELS C145, C147
MANUAL MOTOR DISCONNECTS H72
MANUAL TESTERS D106
MARKAL G58-G60
MARKING
Ball Tube Markers G58
Chalks G61
Cold Surface G57-G60
Etchers E24
Felt Markers G59
Identification Protection G57
Markers G58-G61
Paint Markers G58-G60
Paints G57, G61-G62
Removable G60
Valve Action Markers G60
Engravers F153
Etchers F153
Label Machines F151
Labels (Tape) F151
Rhino Label Systems F151
Stamps F150-F153
Tags F152

MARVEL
Ironworkers K52

MARVEL BANDSAWS
Vertical, Horizontal, Miter-Cut K24, K33, K38

MARVEL/SPARTAN BANDSAWS
Automatic K37-K38

MASKING TAPE H117
MASKS
Dust H18
Respirator H17-H19
Respirator Cartridges H20
Respirator Filters H20

MASONRY ANCHORING
Clamping Components J36

MASONRY DRILLS & SETS A59-60
MASTER FLUID
Micro-Sol G3, G7
Sump & System Cleaner G49
Trim Fluids G3, G7, G12

MASTER GRIND J171
MASTER JAW KITS
Kurt Mfg J141

MASTER LOCK H123-H125
MASTER PRECISION LEVELS D166
MASTERVIEW, OPTICAL COMPARATORS D129
MATCO TYPE SINE DRESSERS C33
MATS, FLOOR
Anti-Fatigue H83-H86
Connectable H84-H86
Cushioned H83-H86
Drainage H84-H86
Kneeling H86
Noise Reducing H83, H85-H86
Safety Mats H83, H85-H86
Welcome Mats H85-H86

MAXI-TORQUE POWER DRAWBARS K106
MAYHEW
Chisels F138
Hard Cap Chisels F139, F142
Hard Cap Punches F147
Prick Punches F147
Pry Bars F135
Punch & Chisel Sets F140, F142
Punches F144, F146-F147
Roll Pin Punch Set F142

MCR SAFETY
Faceshields H14
Gloves H36-H37, H39-H41, H43-H46, H48-H50, H52-H54
Goggles H11, H13
Magnifiers H9
Readers H9
Safety Glasses H43-H44
Sleeves H54
Work Gloves H36-H37, H39-H41, H43-H46, H48-H50, H53-H54

MEASURING TAPES D156, D158-D163
MEDI FIRST, FIRST AID KITS H121
MEMPHIS GLOVES H36-H37, H39-H46, H48-H50, H52-H54

MERIT ABRASIVE
Belts C91
Bore Polishers C147
Cartridge Rolls C84-C85
Flap Discs C100-C101, C139
Flap Wheels C106
Power Strip Type 27 Wheels C139
Quick-Change Discs C124-C125
Resin Fibre Discs C111
Spiral Bands C86
Surface Conditioning Discs C136

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

METABO
Drills E4-E6
Grinders E21-E22
Heat Gun E2
Pneumatic E21-E22
Polisher, Burnisher E17
METAL CUTTING CIRCULAR SAWS, BLADES E36
METAL DEVIL, SAWS, BLADES E36
METAL FINISHING WHEELS C134, C144
METAL SLITTING SAWS A360-A361, A363
METAL ZIP SAW STYLE SAWS K25
METRIC
Broaches & Bushings A364-A365
Bore Gages D96, D98, D100
Capscrew Counterbores A124-A125
Carbide End Mills A265-A266, A304-A307, A321
Combined Drills & Countersinks A107-A109
Depth Gages D27
Dial Indicators D41, D43-D45
Dies A218, A220
Drill Blanks A33
Drill Dispensers A16
Drill Sets A4-A6, A16
Electronic Bore Gages D96, D100
Electronic Calipers D28-D34
Electronic Height D89-D91, D93-D94
Electronic Height Gages D89-D91, D93-D94
Electronic Indicators D46-D48, D51, D58
Electronic Micrometers D5-6, D8-9, D11-D14, D17
End Mills A233, A265-A266, A304-A307, A321
Jobber Drills A14-15
Micrometers & Sets D5-D6, D8, D10, D14-D17
Reamers A131, A136
Setting Rings D98
Tap & Die Sets A216-A217, A219
Taper Length Drills A38
Taper Shank Drills A55-56
Taps A155-A157, A161-162, A164, A167-A168, A172, A178-A182, A186-A187, A191, A195, A200, A204-A205, A207-A208, A211
Test Indicators, Points D52-D55, D57
Thickness Gages D103
Thread Gages, Plug, Ring D196-D199, D202
Vernier Calipers D32, D36-D37
METRIC ALLEN HEAD SET SCREW ASSORTMENTS . . . . .
Maintenance Kits J2
METRIC DOWEL PINS
Fasteners J25
METRIC FLAT HEAD SCREWS
Holo-Krome J19
METRIC FLAT WASHERS DIN-125 ZINC PLATED
Fasteners J31
METRIC HEX COLLETS
5C J166
METRIC HEX HEAD SCREWS
Fasteners J29
METRIC NUTS & METRIC NYLON INSERT LOCK NUTS.
Fasteners J34
METRIC O-RING ASSORTMENTS
Maintenance Kits J4
METRIC ROUND COLLETS
5C J165
METRIC SET SCREW ASSORTMENTS
Maintenance Kits J2
METRIC SOCKET HEAD CAP SCREW ASSORTMENTS
Maintenance Kits J5
METRIC SPLIT WASHERS DIN-127 ZINC PLATED . . . . .
Fasteners J33
METRIC THREADED ROD
Drill & Threaded Rod J35
METROLOGY CASTING MATERIALS D127
MICRO 100
Boring Bars & Tools B38, B111-B113, B118-B119
Box Turning B126
Brazed Carbide Tool Bits B120-B122
Brazed Cut-Off B126
Carbide Blanks B131
Carbide Boring Bars B109-B110
Carbide End Mills A264-A266, A271, A321
Carbide End Mills High Performance A316
Carbide End Mills Variable Helix A316
Carbide Inserts B131
Carbide Round B131
Chamfering Tools B118
Combined Drills & Countersinks A109, A111
Concave Radius Tools B126
Convex Radius Tools B126
Cut-Off Blades B130
Dovetail Cutters A356
Drill-Mills A346
End Mills A264-A266, A271, A283, A305, A316, A321, A325, A344, A348, A376
End Mills, Carbide A264, A266, A271
End Mills, Corner Rounding A348, A376
End Mills, Die Mold A305
End Mills, High Performance . . A283, A316, A321, A325
End Mills, Metric A265-A266, A283, A321
End Mills, Miniature A266
End Mills, Roughing A344
Engraving Blanks B128
Grooving Tool Holders B114, B127
Grooving Tools B109-B113, B118-B119
Internal Threading B113, B127
Knife Sharpener C67
Profiling Tools B114-B115
Quick Change Tool Holders B115
Radius Tools B127
Round Blanks B131
Routers A348, A376
Screw Machine Tools B127
Spade Drills A69
Spotting & Centering Drills A111
Thread Mills A212
Thread Relief Tools B114
Tool Holders B33, B109-B110
MICRO DRILL ADAPTER
Precision Drill Fixture J156
MICRO DRILL ADAPTER WITH DRILL CHUCK
Drill Chucks J156
MICROMERERS, SETS
Outside D8
MICROMETER ACCESSORIES
Calibration Set D19, D38
Stand D18
MICROMETERS, SETS
Accessories D18
Ball Anvil D10-D11
Blade D12
Calibration Set D19, D38
Caliper type D7
Caliper Type D17
Deep Throat D13, D16
Depth D21-D25
Disc D12-D13
Electronic D9
Fowler D84
Groove D20-D21
Heads D19
Hub D17
Indicating D9
Inside D7, D17, D20-D21, D32, D100
Interchangeable Anvil D15-D16
Micrometers & Sets D2-D19, D22, D32, D100
Mitutoyo D82
Multi Anvil D10
Outside D2-9, D11, D13-D16
Point D13-D14
Procheck D5, D80, D82
Sheet Metal D16
Spline D14
Stand D18
Standard D19
Thread D14-D15
Tube D10-D11
Universal D17
V-Anvil D11
MICRO-RISER V-BLOCK D176
MICROSCOPES D132, D135
MIKE MASTER, MICROMETER CALIBRATION D19
MILL FILES F173, F176
MILL PWR G2 . . . . . K157
MILLER FALL PROTECTION H28-H29
MILLING & DRILLING MACHINES K2, K17-K18
MILLING & ROTARY TABLES
Adjustable Angle Plates-Tilting J173
Horizontal/Vertical J173
Simple & Super Spacers J174
Swivel Angle Plates J173
Tailstocks & Dividing Plates J175
MILLING ARBORS & ACCESSORIES
Arbor Spaces with Keyways J49
R8 Stub Milling Arbors J164
Standard and HP Reduction Bushings J229
MILLING ARBORS R8 STUB
Milling Arbors & Accessories J164
MILLING CHUCK SLEEVES
Parlec J229
Schunk J230
Techniks J227
MILLING CHUCKS
CAT40 . . . . . J227
CAT50 . . . . . J227
Milling Chuck Holders J230
Parlec J229
V-Flange Power Milling Chucks J229
MILLING CUTTERS, ARBOR TYPE
Carbide Tipped A356, A359
Concave & Convex A360
Corner Rounding A360
Double Angle A359
Keyseat Cutting A360
Side Milling A356-A359
Single Angle A359
MILLING CUTTERS, SHANK TYPE
Concave Radius A354
Convex Radius A354
Double Angle A353
Dovetail A355-A356
Single Angle A354
T-Slot A352-A353
Dovetail B64-B65
MILLING INDEXABLE
Iscar IMC19-IMC20, IMC25-IMC28
Pro-Cut B67-B68
Rapidkut B67, B69-B72
Tungaloy IMC86, IMC96
MILLING MACHINE ACCESSORIES
5-Axis Milling Stop J145
Acer K104
Center It V-Block K105
CNC Adjustable Angle Heads J176
Digital Readouts K111-K118
Drawbars K103, K105
Interface Cables K118
Leveling Mounts K101-K102
Machine Covers K102
Milling Vise Workstop K103
Millstops J145, K103, K105
Phase Converters K109-K110
Power Drawbars K106-K107
Powerfeeds K108-K109
Precision Glass Scales K117-K118
Quill Feed Handles K104-K105
Quill Free K105
Quill Stops K105
Right Angle Attachments K105
Riser Blocks K104
Speed Handles K104
Table Guards K103
T-Slot Cover Set K103
Vibratory K93
Way Covers K103
Way Oil G13, G31, G33, G41
Work Stops K103
Z-Axis Quill Readout K111
MILLING MACHINE WORK STOPS J145
MILLING MACHINES
Acer K5-K7
Bench Type K2
Bridgeport K4
Horizontal Mills K5
Palmgren K3, K5
PRM K2-K4
Summit K6-K7
Vertical Knee Mills K3-K7

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

MILWAUKEE
Circular Saws E35
Drills E4-E6, E8, E91
Drills, Drill Drivers E4-E6, E8, E91
Electromagnetic Drill Stands E8, E91
Grinders E21-E22
Heat Gun E2
Impact Wrenches E41
Jig Saws, Blades E35
Nibblers, Shears E24
Portable Band & Reciprocating Saws E34
Rotary Tool Kit E29
Sawzall, Blades E34, E59
Tool Kits E6, E29
MINI DISC WHEELS
Non-Woven Abrasives C130
MINI MULE
Cable Hoist Pullers I66
MINI VEE BLOCKS D176
MINI-RATCHETS F67
MIRRORS D169-D170
Safety Mirrors H99
MISTING SYSTEMS, UNITS G2, G4, G6, G14, G19, G23-G26, G48
MITF138
Punch & Chisel Sets F139-F140, F142
MITEE-BITE
Collet Keyway Wrenches J167
Fixture Clamps J102
ID Xpansion Clamps J102-J103
Knife Edge Clamps J101
Machinable Uniforce Clamps J101
Pitbull Clamps J103
Uniforce Clamps J101
MITER CIRCULAR CUT-OFF SAWS K26, K38, K40
MITER CUT BANDSAWS K31-K33, K35, K37-K39
Horizontal Miter Bandsaws K26, K29-K38
Vertical Miter Bandsaws K24
MITUTOYO
Accessories/Cables D30-D31
Bore Gage Accessories D100
Bore Gages D97, D100
Cables/Accessories D91
Calipers, Accessories D30-D31, D34, D36-D37
Combination Squares D149
Data Collectors D87
Depth Gages D22, D25-D26
Depth Micrometers D22, D25
Dial Bore Gages D97
Dial Indicators D41, D43-D44, D52
Digimatic Scales D130
Digital Indicators D47
Digital Protractors D165
Digital Readouts K111
Dovetail Accessories D69
Durometers D112
Edge Finders D203
Electronic Bore Gages D100
Gage Blocks, Sets D121
Groove Gages D20-D21
Height Gages D91
Indicator Accessories D47, D52, D63
Indicator Sets D51, D79, D83
Indicator Stands D69
Indicators D41, D43-D44, D47, D52
Levels D165
Machinists Sets D82
Magnetic Bases, Stands D70, D75, D77
Micrometer Standards D19
Micrometers & Sets D2-D3, D6, D8, D12-D19, D32
Pocket Rules D144
Profile Projectors D130
Protractors D92, D149
Quill Digimatic Readout Kits K111
Radius Gages D193
Scales D144
Screw Pitch Gages D201
Scribers, Probes D91
Small Hole Gages D190
Spring Calipers & Dividers D191
Surface Roughness Gages D114
Telescoping Gages D189
Test Indicators, Points D52, D54, D56
Thickness Gages D103
Tool Sets D51, D83
Verttical Digimatic Scales D130
MOBIL LUBRICATING GREASE G33
MOBIL OIL
Hydraulic Oil G41
Vactra Way Oil G41
MOBILE LADDERS H100
MOBILE WORK STATIONS I50
MODULAR CABINETS I33, I39
MODULAR VISE
Rohm J137
MOFFATT
Work Lights H77
MOISTURE METER D136
MOLD POLISHING STONES C72-C73
MONROE FLUID G4, G14
Cutting Fluids G2, G6, G9
Misting Units G25
Tapping Fluids G2
MONSTER TOOL
End Mills, Aluminum Cutting A280, A283, A290
End Mills, Ball Nose A283
End Mills, High Performance . . A284, A314, A326, A339
End Mills, Rougher/Finisher A342
End Mills, Roughing A280, A316, 3A42, A344
MOPPING SYSTEMS H107
MOPS H107-H108
MORSE CUTTING TOOL
1/2 Shank Drills & Sets A43, A45
Chucking Reamers A129-A130, A132-A134
Combined Drills & Countersinks A107-108
Drill Sets A4-6, A24, A28, A45
Drill-Mills A345
Drills, Cobalt A14, 20-22, 28-29, 39
Drills, Jobber A7-12, 14, A17-A18, A20-A22
Drills, Mechanic's Length A44
Drills, Metric A14
Drills, NC Spotting A110
Drills, Screw Machine A24-A29
Drills, Taper Length A34-A36, A39
Drills, Taper Shank A49-A50
End Mill Sets A240
End Mills, Ball A244
End Mills, Carbide A257, A264, A268, A277
End Mills, Cobalt A244-A245
End Mills, Double End . . A230, A237, A245, A264, A277
End Mills, Roughing A250
End Mills, Single End A230, A234, A237, A244
Reamers A129-A134
Tap Sets A151
Taps, Hand A149-A151, A157, A161-A162, A165
Taps, HTP A187, A191
Taps, Metric A157, A161-A162, A191-A192
Taps, Metric Spiral Point A157, A161-A162, A187, A192
Taps, Oversize +.005 . . . . . A165
Taps, Pipe A174-A175, A177
Taps, Sheartap A192
Taps, Spiral Flute A190-A192
Taps, Spiral Point . A159-A160, A187, A192, A198, A201
Thread Mills A213
MORSE TAPER SHANK HOLDERS
ER Collet Holders J190
MORSE, M.K. BANDSAW BLADES E79-E82
MORSE, M.K. HOLE SAWS E88
MORTON
Clamping Component J93-J94
Handles J93
Knobs J94
Levers J93
Screw J94
MOUNTED BRUSH KITS C157
MOUNTED FLAP WHEELS C106-C107
MOUNTED POINTS, KITS C79-C81, C146
MOUNTED WHEELS C79, C81
MULTI ANVIL MICROMETERS D10
MULTI-PURPOSE TOOLS F42
MULTI-TESTERS D139-D140
NACHI
Drills A87, A89
NAMPOWER (BRUSH RESEARCH)
ABRASIVE BRUSHES C162
NATIONAL
52 Pc Clamping Set J98
Angle Grinders E21-E22
Bridgeport Clamping Set J97
Clamp Set D186
Coolant Pumps G19
End Mill Sharpener J172
Grinders E21-E22
Misting Units G23
Parts Washers G50
Spin-Indexer J169
Center Punches F143
Chipping Hammers F127
Pin Vises D206
Punches F143
Scribers & Scrapers F141
NATIONAL PUBLIC SEATING
Folding Chairs I59
Stools I58
NATIONAL SHEET METAL MACHINES
Box Brakes K47-K49
Brakes K46-K49
Power Slip Roll K51
Sheet Metal Brakes & Shears K46, K48-K51
NATURAL GAS LEAK DETECTOR D136
NEEDLE FILES, SETS F177-F181
NEEDLE NOSE PLIERS F24-F26, F35
NEEDLE SCALER, REPLACEMENT NEEDLES E42
NEON (NORTON) ALUMINUM OXIDE ABRASIVES C123
NEWALL
Digital Readouts K114-K115
NIBBLERS, SHEARS E24, K45
NICHOLSON
Hacksaws E58
Chainsaw Files F173
File Handles F182
Files, Sets F172-F175
Hacksaws F170
Hand Files F172-F174
Lathe Files F173
Scrapers F183
NIKCOLE
Carbide Grooving Inserts B99-B100
Carbide Threading Inserts B99
Indexable Cut-Off Blades B100
Indexable Spare Parts B100
NIKO
Indexable Countersink B64
NIPPERS F164
NO-MAR . . . . .
Brass Hammers F133
Copper Hammers F133
Press On Tip F126
NOGA
Axial Support D73
Bases, Stands, Magnetic D72
Blade Holder A380
Blades A380
Countersinks A380
Deburring Tools & Blades A378-A383
Indicator Accessories D74
Magnetic Bases, Stands D73-D74
Misting Units G23, G25
Scrapers, Kits A382-A383
Soft-Cut Tool A381
Swivel Clamp D74
NON-REINFORCED CUT-OFF WHEELS C52
NON-SPARKING WIRE WHEELS C161
NON-WOVEN ABRASIVES
Belts C132-C133
Buff & Blend MTD Flap Wheels C138
Buff & Blend Products C96, C131-C132, C134-C135, C137-C138, C140
Buff & Blend Rolls C96, C131
Cleaning Discs C134
Flap Brushes C132
Flap Wheels C160
Hand Pads C96, C131
Interleaf Flap Wheels C140
Metal Finishing Wheels C144, C146
Stars C147
Surface Condition Q/C Discs C135, C137

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Unitized Deburring Wheels, Mandrels C71
Unitized Mounted Points C71, C146
NORBIDE DRESSING STICKS C36
NORTH
Bump Caps H26
Disposable Respirators H18, H20
Hard Hats H26
Head Protection H26
Respirator Filters H20
Respirator Fit Check Kit H18, H20
Respirators H19
NORTON
9 x 11 Coated Abrasive Sheets C97
AVOS See Thru Resin Fibre Discs C122
Back-Up Pad C108
Belts, Coated Abrasive C90-C91
Bench & Pedestal Wheels C26
Brake Truing Device C32
Center Laps C79
Centerless & Cylindrical Wheels, ... C27
Cones & Plugs C24
Convolute & Unitized Wheels,
Bear-Tex C142
Cup Wheels C22-C23, C38
Cut-Off Wheels C47, C63
Depressed Center Wheels C62-C63, C142
Diamond & CBN Wheels C38
Diamond Dressing Tools C34
Diamond Hand Pads C44
Diamond Quick Change Disc C44
Diamond Saw Blades C39
Disc Holders Quick-Change C109
Disc Sander E10
Dressing Sticks C36
Flap Discs C100-C101
Flap Wheels C107
Gemini Tool Room Wheels C7
Hand Pads & Shop Rolls, Bear-Tex C131
Metal Back Wheels C23
Mini Flap Discs C100
Mounted Points C79, C82-C83
Paper Back Discs C118
Quick-Change Discs C123, C142
Reinforced Cut-Off Wheels C47
Resin Fibre Discs C111
Segments C31
Sharpening & Polishing Stones C67, C69
Shop Rolls, Coated Abrasive C95
Snagging Wheels C21
Sponges Sanding C85
Surface Conditioning Quick-Change Discs, ...
BearTex C136
Tool Room Wheels, 32A Abrasive (High . . . . . .
Performance) C8-C10
Tool Room Wheels, 38A Abrasive
(White) C3-C6
Tool Room Wheels, 5SG Abrasive
(Ceramic Grain) C13, C19
NORTON BLAZE CERAMIC ABRASIVES
Belts C90
Fibre Discs C110
Quick-Change Discs C123
NORTON DIAMOND SAW BLADES C39
NOTCHERS K44-K45
NOVA ENGINEERING INDICATOR
SWIVEL D58
NU-MATIC AIR INFLATED WHEELS E12
NUT DRIVERS, SETS F125
NUT SETTERS F99
NUTS
Clamping Components J85-J88
Coupling J86
English T-Slot J86
Flange J85
Flange - Metric J85
Heavy Duty Hex J86
Kwik-Turn T-Slot J88
Spherical Flange J86
Swivel Flange J85
T-Slot J88
T-Slot - English J87
T-Slot - Metric J86-J87
T-Slot - Quarter Turn J88
T-Slot - Stainless J86
O-1 FLAT STOCK J50-J53
O-1 FLAT STOCK-OVERSIZE
O-1 Oil Hardening, 18 & 36 OAL J56
O-1, W-1 AND A2 DRILL ROD
Drill & Threaded Rod J40
O-RING
Pliers F36-F39
O-RING ASSORTMENTS
Maintenance Kits J4
O.C. WHITE
Machine Light H78, H81
Magnifiers H81
Microscopes D131
O.S. WALKER
Chucks J147-J148
Electromagnetic Chuck Control J148
Electromagnetic Fine Pole Chucks J148
NEO Micro2 Chucks J148
OHM METERS D139
OIL
3-in1 . . . . . G42
Air Tool E13, E48
Compressor G13
Honing C148
Honing G2, G5-G6, G8, G13, G41
Hydraulic G13, G41
Mobil G13, G41
Separators G18-G19, G24-G25, G28-G30
Skimmers G18-G19, G24-G25, G28-G30
Thread Cutting G5-G7, G9
Tool G42
Tool & Instrument D15, G42
OIL BRUSHES H106
OIL CANS G35, G37
OIL COUNTRY
Summit K25
Willis K26
OIL DRI
Absorbent Kits H103
Absorbents H101-H103
Spill Absorbents H101-H103
Sweeping Compounds H101
OIL HARDENING FLAT STOCK J50-J53, J56
OIL SEPARATORS G18-G19, G24-G25, G29-G30
OIL SKIMMERS G18-G19, G24-G25, G28-G30
OIL TREATED STONES C70
OIL WASTE CANS H122
OILERS G16, G37
OLFA
Knives F160
Scissors F163
Utility Blades F161
OPTICAL COMPARATORS D129-D131, D171
OPEN END WRENCHES F2, F3
Proto F4, F5
OPTI-VISOR, MAGNIFIERS D172
OPTICAL INSPECTION
Bore Inspection Scopes D133-D135
Digital D132
Eye Loupes D171-D174
Lens Cleaning Supplies D174, H15
Lights D133-D135, D170, D172-D173, H56
Magnifiers D131, D135, D171-D174
Microscopes D131-D132, D135
Mirrors D169-D170
Optical Comparators D129, D131, D171
Opti-Visor D172
Pocket Scopes D135
OPTICAL RADIUS DRESSERS C33
ORBITAL SANDERS E15-E16
Disc E10, E15-E16
OSBORN
Abrasive Nylon Filament C165
Abrasive Nylon Filament End Brush C165
ATB Abrasive Nylon Filament Brushes C165
Brush Drive Arbors C158
Nylon Filament Brushes Adapters C165
Reducer Bushings C158
Tube Brushes C153, C158
Wire Wheels, Brushes C153, C158-C159
OSCILLATING DRILL PRESS K16
OSG . . . . . .
Carbide Routers A375
Drills, Carbide A22, 72, 76, 78, 82-83
Drills, High Performance A22, A30-A31, A48
Drills, HSS A31
Drills, Screw Machine A31
End Mills, Carbide A281, A283, A305,
. . . . . A314-A315, A317-A319, A322, A329
End Mills, Cobalt Ball Nose A244
End Mills, Cobalt Roughing A249
Routers A375
STI Taps A170
Taps, +.005 . . . . . A166
Taps, Cast Iron A166
Taps, Exopipe A176
Taps, Exopro A209
Taps, Exotap A206
Taps, Exotap DC A204-A205
Taps, Exotap DC OIL A204-A205
Taps, Exotap Exotin Spiral Point A195, A199-A200,
. . . . . A203
Taps, Exotap VA3 Spiral Flute A195,
. . . . . A199-A202, A205-A208
Taps, Exotap VA3 Spiral Point A195,
. . . . . A199-A200, A203
Taps, Exotap VC10 Spiral Flute A194, A208
Taps, Exotap VC10 Spiral Point A202-A203, A208
Taps, Exotap VC10NI A201-A202, A205-A207
Taps, Exotap VC10TI A201-A202, A205-A207
Taps, Exotap XPF A210
Taps, Exotap-A A193-A194
Taps, Exotin A195, A199-A200, A203
Taps, Hand GP A149-A151
Taps, Hy-Pro Spiral Flute A206
Taps, Hypro A202
Taps, Hypro Pipe A176
Taps, Hypro Seven List 280/290 . . . . . A195,
. . . . . A199-A200, A203
Taps, Hypro-Seven DIN A195, A200, A207-A208
Taps, Hypro-Seven NRT Cobalt A210-A211
Taps, Hypro-Seven Spiral Flute A202-A203, A208
Taps, Hypro-Seven Spiral Point A202-A203, A208
Taps, Hypro-Seven Thread Form A210-A211
Taps, Left Hand GP A166
Taps, Long Spiral Flute A171
Taps, Metric Hand GP A157, A161-A162
Taps, Metric Spiral Point GP A157, A161-A162
Taps, Pipe A174-A177
Taps, Pulley A171
Taps, Spiral Flute A162-A163, A193-A194, A206
Taps, Spiral Point A159-A160, A193
Taps, STI A169
Taps, Thread Form A209
Thread Forming Taps A210
OUTSIDE CALIPERS D191
OUTSIDE CHAMFERING MILLS A123
OUTSIDE DEBURRING CUTTERS A123
OUTSIDE MICROMETERS,
SETS D2-17, D19, D82
OVERSIZE FLAT STOCK J56-J58
P.E.C.
Acme Pitch Gages D202
Center Finders D204
Combination Squares D146
Depth Gages D27
Dividers & Calipers D191
Drafting Instruments, Sets D207
Drill Gages D187
Drill Point Gages D188
Edge Finders D204
Feeler Gages D195
Parallels D184
Protractors D27
Radius Gages D194
Scales D142, D147
Screw Pitch Gages D201
Small Hole Gages D190
Squares D146
Thickness Gages D195
Wiggler Sets D205
Wire Gages D188
PACK MULE
Pallet Pullers I67
Portable Hoist/Puller I66
PACKAGING MATERIALS H118-H119
PADLOCKS H123-H125

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

PADS
Abrasive Hand C131
Back-Up, Disc Holders C141
Clamping Components J85
Norton C108
PAILS H107
PAINT MARKERS G58-G60
PAINT REMOVER TOWELS H116
PAINT SPRAYERS G46, G48, G61
PAINTS
Acrylic G62
Markers G58-G61
Spray G62
Striping G61
PAINTS, SPRAY G57, G61-G62
PALLET PULLERS I67
PALLET TRUCKS I62
PALM SANDERS E15-E16, E32
PALMGREN
5-Axis Milling Stop J142, J145
Angle Vises J132-J134
Arbor Presses K78-K79
Belt Grinders K75-K76
Belt, Disc Sanders K72, K75, K76
Bench & Pipe Vise J124
Buffers K62-K63
C-Clamps J105-J106
Cantilever Clamps J111
CNC Machine Vises J134
Cold Saw K39
Cross Slide Vises J133
Deep Throat J105
Double Station J136
Drill Press Vises J127, J129-J131
Drill Presses K17-K19
Dual Force J136
Dual Station K75
Finishing Machines K77
Grinders/Buffers K59, K61-K63
Horizontal Mills K5
L-Clamps J108
Machine Vises J127, J134, J142
Mechanical Booster J136
Milling Machine J134
Mills K3
Miter Saws K26
Multi Purpose Stands K65, K99
Quick Action Vises J126
Saw K39, K65, K99
Self Centering J136-J137
Square Throat J106
Standard Duty J108
Stands K3
Surface Grinders K56-K57
Toolmakers Vises J128
Variable Speed K3
PANEL CARTS I52
PAPER BACK VELCRO ABRASIVE DISCS C117
PAPER TOWELS H115-H116
PAPER WIPES H114-H116
PARABOLIC FLUTE DRILLS A37
PARALLELS, SETS J140
Adjustable D181-D182, D184
Matched Pairs D181-D182
Ultra Thin D183
PARLEC
Boring Kits J187
CAT End Mill Holders J220
CAT-V Flange Jacobs Taper Arbors J221
DA Style Collets J190
ER Collet Sets J202
ER Spring Collets J196-J201
Power Milling Chuck Bushings J229
Rigid Tapping Holders J181
Shrink Fit Tool Holders J234
Standard and HP Reduction Bushings J229
Tap Adapters J181
Taper Adapters J222
Tension and Compression Tap Holders J181
TG Style Collets J189
Ultra Precision Collets, Sets J203-J205
V-Flange Power Milling Chucks J229
PARTING & GROOVING INDEXABLE
Dorian B77
PARTING & GROOVING TOOLS & INSERTS
Tungaloy IMC85, IMC89-IMC90, IMC92
PARTING & GROOVING HOLDERS
Tungaloy IMC90-IMC91
PARTING & GROOVING INDEXABLE
Iscar IMC11
PARTING & GROOVING INSERTS
Ingersoll IMC58-IMC59
Tungaloy IMC90
PARTS WASHERS
Bioremediation G19, G50
Fluids G49
Graymills G49-G50
PASCO
Film-Backed C120
Hook & Loop C120
Sanding Discs C120
PCT
Drills, High Performance A80, A85-A88
End Mills . . . A306-A307, A309, A320, A324, A335, A338
PEDESTAL & BENCH GRINDER WHEELS C25
PEDESTAL GRINDERS K58-K63, K73
PEDESTALS FOR BENCH GRINDERS K61, K65
PEEL COAT TOOL PROTECTION A163
PEG BOARD SYSTEMS
Durham I15
Kennedy I15
Peg Board Systems I15
PH PEN D141
PHASE CONVERTERS K109-K110
PHASE-A-MATIC K109
Phase Converters K109-K110
Voltage Stabilizer K110
PICK & HOOK SET F137
PICK UP TOOLS, MAGNETICS D169-D170
PILOTS, COUNTERBORE A128
PIN GAGES, ACCESSORIES D116-D118
PIN VISES D206
PINS
Gage D116-D118
Vises D206
PIPE & PLUMBING HAND TOOLS F154-F156
PIPE BENDERS K44
PIPE CLAMPS J110
PIPE DRIVERS
Positive J267
PIPE EXTRACTORS F113
PIPE JACKS K100
PIPE PLUGS J19
PIPE RACKS I38
PIPE REAMERS A176
PIPE WRENCHES F154, F156
PLAIN ANGLE PLATES
Angle Plates J151
PLAIN SLITTING SAWS A362-A363
PLAIN STRAPS
Clamping Components J88
PLANER GAGES D179
PLANISHING HAMMERS K74
PLANT SAFETY PRODUCTS
PLASTIC SHIMS J45
PLATE BEVELERS K69
PLATE MOUNTED GRINDING WHEELS C23
PLATFORM SCALES D105
PLATFORM TRUCKS
Rubbermaid I52
PLIERS
Angled F31
Angled End Cutter F28
Cannon Plug F31
Chain Clamp F18
Channellock F17, F26, F30-F34
Convertible Ring F37, F39
Crescent F17, F22, F26
Crimper F25, F40
Crimping Tools F26, F28, F34
Cutting F25
Diagonal Cutting F22-F23, F34
Diagonal Tapered Nose F23
Duck F25-F26
Duckbill F25
End Cutting F33
Extra Reach F26
Flat Nose F26
Gearwrench F35
Groove Joint F30, F184
Groove Locking Pliers F30-F31, F34
Hose Clamp F17, F21
Insulated F41
Irwin F17-F18, F24, F26, F32-F35
Lineman's F33
Linesman F33, F42
Locking F18-21, F32, F36, F39
Long Nose F18, F26
Mig F26
Mini F35
Miniature F25
Needle Nose F24-F26, F35
Offset Cutting F23
Oil Filter F31
Pinch-Off F23
Plastic Cutting F22
Proto F17, F19, F22-F23, F25, F30-F34, F36-F40, F184
Retaining Ring Pliers, Sets F36-F39
Sets F32, F34-F35
Sheet Metal F18, F20
Slip Joint F17, F31, F35
Snap Ring F36-F39
Snap-On Williams F20-F21, F24, F34
Spark Plug Crimper F15
Stanley F17, F19, F22, F25, F30, F33, F35
Steelman F20
Tekton F20, F23, F26, F30
Thin Nose F17
Titan F26
Tongue & Groove F30-F32, F34
Transfer Screws F149
Vise-Grip F17-F18, F20-F21, F24, F26, F33
Welding F18, F20, F26
Wiha F24, F26, F31
Wire Strippers F40
Wire Stripping, Crimping F34
Wire Twisters F40
PLUG GAGES, THREAD, PIN D116-D118, D196, D202
PLUGS & CONES, ABRASIVES C21, C24
PLUMB BOBS D168
PLUMB
Ball Pein Hammers F131
Claw Hammer F132
PLUMBING & PIPE HAND TOOLS F154-F156
PLUNGER CANS H122
PNEUMATIC CLAMP ACCESSORIES
De-Sta-Co J78-J79
Mounting Block J78
Sensors J79
PNEUMATIC CLAMPS
81L - Power J79
De-Sta-Co J77-J79
Straight Action J78
Swing J78
Vertical J77
PNEUMATIC TOOLS
Abrasive Belt E16, E19-E20
Abrasive Belt Tool E19-E20
Air Couplers, Fittings, Hose, Reels E50-E52
Air Filters, Lubricators, Regulators E55-E57
Blow Guns E43-E44
Buffers E18
Chippers E42
Clamps E46
Cut Off Tools E12-E13
Dotco E10, E32
Drills E3-E4
Filers E24
Florida Pneumatic E13, E24
Grinders, Die E10-E13, E32
Grinders, Hand E10-E13, E23, E32
Guardaire E44
Hammers E42
Impact Wrenches, Ratchets E37-E38
Impacts Wrenches, Rachets E39-E40
Impacts, Wrenches, Ratchets E37
Legacy E43, E51

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Pencil Grinders, Engravers, Scribers E24, E32
Polishers E14, E16, E20
Sanders, Belt E14, E16, E19-E20
Sanders, Disc, Orbital E15-E16, E18, E32
Saws E34
Scalers E42
Shears E24
Tool Balancers E52
POC-KIT ASSORTMENT
Precision Brand J43-J44
POCKET KNIVES F42, F157, F160
POCKET LEVELS D165
POINT MICROMETERS D13-D14
POINTS, ABRASIVE C76
POINTS, INDICATOR D61, D64
POLISHERS E16
POLISHERS, AIR E14, E16, E20
POLISHING
Bonnets C167
Compounds C166
Stones C72-C73
POLISHING COMPOUND C167
POLISHING MACHINES K92-K94
PONY
Brick Chisels F139
Pry Bars F136
PORCELAIN & TILE CUTTING DIAMOND SAW BLADES C39
POROUS TOOL ROOM WHEELS C13
PORTA
Precision Industrial Keyless Chucks J157
PORTABLE BAND SAW BLADES E36, E67
PORTABLE BAND SAWS E35
PORTABLE SCALES D105
PORTABLE SURFACE ROUGHNESS TESTERS D113-D114
PORTABLE FILE & SANDER BELTS C94
PORTABLE MAGNETIC DRILLS E8, E85, E91
PORTABLE SHEARS
Bench K44
Plate K45
PORTABLE TOOL BOXES
Kennedy I16-I17
PRM PRO I18
Rubbermaid I19
Snap-On Williams I16-I17, I20
Waterloo I19
PORTER CABLE
Drills, Drill Drivers E4
Saws E34
POSI-LOCK F167-F168
POSTS H30
POWER CHUCKS
3-Jaw Quick Change J300
Samchully J281, J301
TMX J302
POWER DRAWBARS K106-K107
POWER FEEDS K107-K109
PRM K2, K107
POWER HACKSAW BLADES E58
POWER TOOLS
Abrasive Belt Tool E19-E20
Angle Grinders E21-E22
Buffers E18
Cordless Rotary Tools E25, E27
Cordless Screw Guns E41
Cordless Screwdriver E8
Cut-Off Tools, Shears & Nibblers E13, E24
Drills E3-E8
Drills, Accessories E5-E8
Drills, Air E3-E4
Grinders, Angle E10, E21-E22
Grinders, die E11
Grinders, Die E9-E13, E32
Grinders, Hand E9-E13, E32
Grinders, Hobby, Hand E25-E26, E28-E30
Hammer Drill Kit E7
Impact Drivers E7
Impact Kit E7
Impact Wrenches E7, E37-E41
Magnetic Drill Presses E89-E91
Palm Sander E14
Pencil Grinders, Engravers, Scribers E24, E32
Rotary Hammer Drill E5
Rotary Hammer Kit E6
Rotary Tool Kit E29
Sanders E10, E14-E22, E32
Sanders, Disc, Orbital E15-E18, E32
Saws E26, E33-E35
Saws, Band, Reciprocating E33-E34
Saws, Circular, Jig E35
Scalers E42
Shears, Nibblers E24
Turbine Grinders E32
Utility Hammers / Chippers E42
Drills, Accessories F62
POWERMATE
Air Compressors K86
PRATT BURNERD
NBK Super Thin Round Chucks J289
PRECISION BRAND
Arbor Spacers and Shims J48-J49
Big TruPunch Punch & Die Set J47
Coatings G57
Feeler Stock, Assortments J42
Feeler Thickness Gages J43
Industrial Sleeving A163
Key Stock Assortment Square Cold Finish J41
Keystock Square Cold Finished J41
Keystock Stainless Steel J41
Maintenance Kits J23
Metric 10 TruPunch Punch & Die Set J47
Plastic Thickness Gage J44
Poc-Kit Assortment J43-J44
Punch & Die Sets J47
Punch & Die Stand J47
Shim Stock J46
Shim Stock Assortments J45
Shim Stock Color Coded J44
Slotted Shims Plastic J45
Sof' Shoe Shims J45
Stainless Slotted Shim Sets J45
Tool Black G57
Tool Wraps J54
TruPunch Punch & Die Set J47
Wedgie Shims J44
PRECISION GRINDING WHEELS C3-C17, C22-C23
Surface Grinding Discs C137
PRECISION SCREWDRIVERS, SETS F118
PRECISION TOOL PRESETTERS
Dorian Tool J176
PRECISION TWIST DRILL
1/2 Shank A43-A44
3/8 Shank A5
Aircraft Extension Drills A40-A42
Cobalt Jobber Length A20, A22
Cobalt Screw Machine A28-A29
Cobalt Taper Length A39
Drill Sets A4-6, A19, A24-A29, A45
Extra Long Straight Shank A46-A47
Jobber Length A7-A12, A17-A20, A22
Parabolic Taper Length A37
Screw Machine Drill A24-A29
Silver & Deming A43-A45
Taper Length A34-A37, A39
Taper Shank A49-A50
PREMIER HP END MILLS
Carbide Ball Nose A304, A321
Carbide High Performance A273, A304, A340, A344
Carbide Rib Processing A304
Carbide Roughing A340, A344
Cobalt Alcrona Coated A245
PREMIER HP TAPS
High Performance A176, A186
Metric A186
Pipe A176
Spiral Flute A176, A186
Spiral Point A186
PRESS RIGHT
Hydraulic Presses K79, K81
PRESSES
Air Operated K81
Air, Electric, Hydraulic H-Frame K79-K82
Arbor K77-K79
Dake K78-K80, K82
Edwards K83-K84
Enerpac K81
Palmgren K78-K79
Porta Power K84
Press Right K79, K81
PRM K80
Radius Rollers K84
Shop K83-K84
Simplex K80
PRESSURE DRY BLASTERS K94-K98
PRESSURE PIPE PLUGS J19
PRESSURIZED SPRAYER G48
PRM
Surface Grinders K56
PRM MACHINERY
Bench Grinders K58
Bench Lathe Accessories K8
Bench Lathes K8
Disc Sander K70
Drill Press Guards K16
Drill Presses K17, K19-K21
Geared-Head Lathes K9
Horizontal Bandsaws K27, K29, K31-K32
Hydraulic Presses K80
Knee Mills K3-K4
Lathe/Mill Combo K8
Lathes K8-K9
Mill/Drill Powerfeed K2
Milling & Drilling Machines K2, K17
Milling Machines K2-K4
Powerfeeds K107
Radial Arm K20-K21
Radial Drill K21
Roller Tables K66, K101
Safety Guards K143
Stands K2, K8, K65, K99
Step-Pulley K3, K17
Variable Speed K4, K19, K21
Vertical Bandsaws K23, K27
Vertical Knee Mills K3
PRM PRO
Aprons H32
Barrel Pump I81
Broom Handles H104
Brooms H104
Cabinets I21
Carts I53
Desks I24
Drum Cradle I80
Dust Pans H106
Flashlights H56
Floor Mats H83-H86
Foreman's Desk I31
Gloves H38, H42-H49, H54
Grease Gun Holder G35
Hammers F128, F133
Lifting Desk I4
Mechanics Seats I57-I58
Oilers G37
Pinch Bars F134
Roll Bars F134
Safety Vests H27
Service Carts I53
Shop Stools I57
Stools I57
Storage Cabinets I21
Swivel Tractor Seat I57
Tool Bags I18
Torx® Bits F96
Utility Carts I53
Waste Can Liners H108
Welding Mig Tips H91-H92
Welding Nozzles H90
Welding Rod H89
Welding Tig Torches H89
Welding Torch H89
White Boards I50
Work Benches F92, F134, I55
Work Lights H67, H78
PRO-CUT
Carbide Grooving Inserts B75, B93-B96
Carbide Milling Inserts B67-B68
Carbide Profiling Inserts B94
Carbide Threading Inserts B94, B96

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Carbide Turning Inserts B11-B18
Ceramic Turning Inserts B19
Cermet Turning Inserts B18
Hacksaw Blades E58
Indexable Cut-Off Blades B75
PROBES, CMM D66-D67
PROCESSOR, SPC D87
PROCHECK
1-2-3 Blocks D185
Accessories D51, D58-D62, D65, D70-D71, D75-D77, D80
Alignment Indicators D49
Angle Block Sets D181
Angle Blocks D181
Bases, Stands, Magnetic D70-D71, D75-77
Bench Blocks D200
Bench Center D131
Bevel Protectors D92
Bore Gage Setting Masters D96
Bore Gages D95, D200
Bore Setting Gages D95
Cables D7, D46, D88
Caliper Accessories D40
Caliper Setting Kits D19, D38
Calipers & Dividers D13, D191
Calipers, Accessories . . . D22, D28, D31-D32, D34, D37
Center Finder D205
Center Gages D200
Center Line Gage D40
Center Squares D200
Combination Squares D145
Depth Gages, Micrometers D22, D26-D27
Depth Micrometers D22
Detph Gages D25
Dial Bore Gages D95
Dial Indicators D41-D42, D45-D46,D49-D51, D62
Dial Thickness Gage D103
Digital Indicators D46
Digital Protractors D166
Double Squares D145
Drill Gages D187
Edge Finders D204
Electronic Height Gages D89
Electronic Indicators D46, D51, D203
Engineer Squares D152
Eye Loupes D171
Feeler Thickness Gages D195, J43
Gage Block Sets D120
Gage Pin Sets D117
Granite Check D68
Grinding Gages D200
Hardness Testers D109
Height Gages D89
Indicator Accessories D41-D42, D50-D51, D58-D62, D65-D68
Indicator Sets D72-D73, D79, D83
Inside Micrometers D7, D17
Jack Screws D186
Levels D166
Machinists Sets D80-D83
Magnetic Bases, Stands D70-D71, D75-D77, D80
Magnifiers D135, D171-D173
Micrometer Calibration D19, D38
Micrometer Stands D18
Micrometers & Sets D2, D5, D7, D9-D17, D22
Microscopes D132, D135
Mini Indicators D46
Mini-V-Blocks D177
Multi-Use Rules & Gages D27
Optical Comparator D171
Parallels D181-D183
Planer Gages D179
Protractor Heads D145
Protractors D27, D92, D145, D153, D156, D166
Radius & Angle Gages D193
Radius Gages D193
Rectangular Gage Block D119
Refractometers G30
Reset Counters D168
Screw Cutting Gages D200
Screw Pitch Gages D201
Sine Bars D180-D181
Small Hole Gages D190
Squares D145, D152
Steel Checks D68
Straight Edges D154
Surface Gage D78
Surface Plate Stands D124
Surface Plates D123-D124
Telescoping Gages D189
Test Indicators D50-D51
Thickness Gages D103
Thread Wires D196
Tweezers F114
V-Blocks D177-D179, D181
Wiggler Sets D205
Wireless Data Connect D88
Z-Axis Setter D203
PROCUNIER
Tap Collets J178
Tappers Style E & F J178
PROFALOMETERS D113-D114
PROFILE PROJECTORS D130
PROFILING INSERTS, INDEXABLE CARBIDE
Pro-Cut B94
PROFILING TOOLS
Micro 100 . . . . . B114-B115
PROOFING ALLOYS D128
PROTO
1/2 Drive Sets-Sockets F55
1/2 Drive Sockets F57-F59
1/4 Drive Sets-Sockets F47
1/4 Drive Sockets F51
3/4 Drive Sockets F60
3/8 Drive Flex Sockets F54
3/8 Drive Sets-Sockets F49
3/8 Drive Sockets F52-F53
Adjustable Wrenches, Sets F13-F15
Aligning Punches F146
Angle Nose Pliers F31
Aprons H33
Backpack I18
Bags I18-I19
Ball Drivers Sets F84
Battery Post Cleaner F48
Bit Sets F103
Bolt Extractors F114
Box Wrenches F9
Cable Cutters F27
Cannon Plug Pliers F31
Center Punches F146
Chisels, Sets F138-F140
Cinch Loop Tethers F184
Combination Wrench Sets F3
Combination Wrenches F6-F7
Cotter Pin Puller F137
Crowfoot Wrenches F5
D-Ring Tape F184
Diagonal Cutters F22
Drift Punches F145-F146
Drive Adapters F63, F71
Drive Extensions F61, F75, F99
Drive Link Sockets F100
Drive Pin Punches F145
Drive Ring Pins-For Impacts F75
Drive Rings-For Impacts F75
Driver Bit Sockets F105-F108
Driver Bit Sockets-Impact F109-F110
Duck Bill Pliers F25
Electricians Scissors F40
Ell Handle F62
End Cutters F33
Flare Niut Wrenches F4
Gear Pullers F167-F169
Glove Tethers F184
Grease Guns . . . . . F184 , G35
Groove Lock Plier F31-F32
Hammer/Ratchet Kits F185
Hammers F126-F131, F133
Hard Hat Lanyards F186
Heat Shrink Loops F186
Hex Bits F96, F100, F106, F109-F110
Hex Keys, Sets F85, F87, F89
Hinge Handles F64
Hose Clamp Pliers F17
Impact Extensions F75
Impact Retaining Rings F76
Impact Sockets-Magnetic F71
Impact Sockets, Sets F68, F70-F71, F73, F106, F109-F110
Impact Universal Joints F75
Insert Bits F97, F100, F102-F103
Jaw Block Assembly F169
Knives F159
Lanyards F185-F186
Lift Bucket F159, F184
Linesman Pliers F33
Locking Extensions F61, F75
Locking Pliers F19, F32, F36, F39
Magnetic Bit Holders F99
Magnetic Bit Sets F116
Mallets F128
Minature Pliers F25
Needle Nose Pliers F25
Nut Drivers F125
Nut Setters F125
Nut Wrenches F9
O-Rings F75
Offset Screwdrivers F118
Offset Striking Wrench F16
Oil Filter Wrenches F17
Open End Wrenches F4, F9
Phillips Bits F97
Pin Punches F144-F145
Pinch-Off Pliers F23
Pipe Flarring-Sets F156
Pipe Wrenches F154
Pliers, Sets F17, F22-F23, F25-F26, F31, F33-F34, F37-F40, F184
Pouch I18
Power Bit Holders F102
Prick Punches F144
Pry Bars F134-F135, F184
Pullers F137, F167-F169
Ratchet Adapters F63
Ratchet Handles F65-F67, F116
Ratcheting Wrenches F7-F12
Retaining Pins F75
Retaining Ring Pliers F36, F38-F39
Retaining Rings F76
Roll Pin Punches F145, F147
Scissors F40
Scrapers F182
Screw Extractors F112
Screwdriver Bit Set F116-F117
Screwdrivers, Sets FF121-F124
Screwdrivers F119-F120
Skyhook Components F185
Slip Joint F17
Slotted Bits F97
Snips F28
Socket Tool Boxes I20
Sockets, Sets F48, F51-F55, F57-F60, F62-F63, F71, F100, F105-F108, F114
Soft Jaw Pliers F31
Spanner Wrenches F16
Speed Handle F64
Split Rings F186
Spud Handle F67
Square Bit Extensions F99
Square Insert Bits F100
Starting Punches F139, F144
Striking Wrenches F16
T-Handle F64
T-Handle Ball & Hex Drivers F87
Teathered Tools F184-F186
Tongue & Groove Pliers F30
Tool Bags I18-I19
Tool Boxes I16-I17
Tool Collar F186
Tool Retractor F185
Torque Screwdrivers F81, F93
Torque Wrenches F78-F80
Torx Bits F91, F96, F106
Torx Screwdrivers F93 F124
Totes I18
Tube Cutters F155-F156
Universal Joints F63, F75
Utility Bucket I19
Web Rings F185
Wire Strippers F40

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

PROTRACTORS D27, D92, D146-D150, D156
Digital D166
Heads D145
Magnetic D153
Procheck D145
PRY BARS
Gearwrench F136
Proto F134-F135, F184
Stanley F135- 136
PSA DISCS, HOLDERS C117, C121, E15
PULL DOWELS GENERIC USA
Fasteners J24
PULL DOWELS METRIC
Metric J25
PULL RINGS
Te-Co J95
PULLERS I66
PULLERS, SETS F167-F168
PUMA AIR COMPRESSORS
Puma K85, K88, K90
PUMPS
Barrel I81
Coolant G15, G17-G19
Machine G17-G19
Oilers G16, G38
Replacement G15, G17
Submersible G15
PUNCH & DIE SETS
Big TruPunch J47
Metric 10 TruPunch J47
Precision Brand J47
Stand J47
TruPunch J47
PUNCH FORMER & RADIUS DRESSERS C32
PUNCH SETS F142-F143
PUNCHERS, HAND BENCH TYPE
Heinrich K45
PUNCHES
Alignment F142, F146
Arch F149
Automatic Center F142-F143
Brass Drive Pin F143
Center D205, F141-F143, F147
Drive Pin F142, F145
Gasket F149
Gunsmith F147
Hand F142
Hard Cap F142, F147
Hollow F149
Optical Center D205
Pin F143-F145, F147
Prick F144, F147
Punch & Chisel Sets F139-F140, F142
Roll Pin F142, F145, F147
PUTTY KNIVES F183
PYRAMEX
Cleaning Wipes H15
Ear Muffs H23, H25
Ear Plugs H21
Eye Protective Wear H2, H11
Faceshields H14
Goggles H11, H13
Hard Hats H14, H26
Hearing Protection H21, H23, H25
Lighted Safety Glasses H10
Magnifiers H9
Readers H9
Safety Glasses H2-H6, H8-H13
Safety Vests H27
Welding Helmets H97
Q MARK TYPE STYLI D66-D67
QUANTUM (NORTON) ABRASIVE PRODUCTS
Mounted Points C82-C83
QUANTUMIKE DIGITAL MICROMETER, MITUTOYO D8
QUICK CHANGE TOOLING J239-J244
QUICK-CHANGE BUFFING DISCS C167
QUICK-CHANGE DISCS, HOLDERS C98, C108, C110, C123, C126-C128, C134-C136, C147
QUICK-CHANGE FLAP DISCS C139, C168
QUICK-CHANGE QDC DISCS (KLINGSPOR) C123
QUICK-CHANGE RESIN FIBRE DISCS C110
QUILL FEED HANDLES K104
QUILL KIT DIGITAL READOUTS K111
QUILL STOPS K104-K105
QUILL Z-AXIS CALIPER MOUNTING KITS K105
R-8
Power Drawbars K106-K107
R8 COLLET SETS WITH METAL STAND J163
R8 COLLET STAND ONLY
Collet Holders/Racks J163
R8 COLLETS J162
R8 END MILL ADAPTER SET
End Mill Holders J163
R8 END MILL ADAPTERS
End Mill Holders J163
R8 ER COLLET HOLDERS J189
R8 SHELL END MILL HOLDER SET
Shell Mill Holders J164
R8 SHELL END MILL HOLDERS
Shell Mill Holders J164
RACKS
Aerosol/Utility Cabinets I32
Drum I80
Durham I32-I33
Hose Clamp I32
Key Stock I32
Literature I32
Threaded Rod Rack I32
Vestil I78
Wire Spool I32
RADIAL & CUP WIRE WHEELS C151
RADIAL ARM DRILL PRESSES
PRM K21
RADIUS DRESSING TOOLS
Diamond Dressers C35
RADIUS GAGES D193-D194, D200
RADIUS, ANGLE DRESSERS C32-C33
RAFTER SQUARES D155
RAGS
Cloth H115
RAISED HUB (DEPRESSED CENTER) WHEELS C55, C61-C64, C146
RAPIDHOLD
58 Piece Clamping Kit J98
Adjustable Spindle Assemblies Flat Neoprene Cap J73
Adjustable Spindle Assemblies Swivel Foot J75
Bolt Retainers J74
BT End Mill Holders J216
CAT End Mill Holders J217-J218
CAT-V Flange Jacobs Taper Arbors J221
CNC Toolholder Bushings J252
Collet Holders J191-J193, J195
Drill Chuck Key J153
Drill Press Vises J127
ER Collet Sets J202
ER Sealed Collets J207-J209
ER Spring Collets J196-J201
Flanged Washers J74
Heavy Duty Super Ball Bearing Chucks J154
High Precision Keyless Drill Chucks J157
Horizontal Clamps J68
Horizontal Latch Clamps J70
Horizontal Pull Action Hook J70
Horizontal Pull Action Latch Clamps J70
Horizontal Toggle Clamps J76
Latch Clamps J76
Plain Bearing HD Industrial Drill Chuck J155
Precision HD Industrial Keyless Drill Chucks J157
Push/Pull Toggle Clamps J71, J76
Quick Release Drill Press Vises J126
R8 Collet Sets J163
R8 Collets J162
R8 Emergency J163
R8 End Mill Holders J163
R8 Hex Metric Collets J162
R8 Square Collets J162
R8 Square Metric Collets J162
Retention Knob J235
Shell Mill Holders J223-J224
Spindle Assemblies Hex Head Full Thread J75
Standard Accuracy HD Industrial Keyless Drill J157
Super Precision Live Center Sets, ... J257
Super Precision Live Centers J259-J260
Taper Adapters J222
U-Bolt Spindle Accessories J75
Ultra Precision Collets, Sets J203-J205, J207
Vertical Clamps J66, J76
Vertical Pull Action Latch J70
Vises J131, J135
RAPIDKUT
Adjustable Dies A218
Boring Bars B108
Carbide Burrs A367-A372, A374
Carbide Center Drills A109, A111
Carbide Die Trimmers A377
Carbide End Mill Aluminum A278
Carbide End Mill GP Double End A277-A278
Carbide End Mill High Helix A305, A325
Carbide End Mill High Performance A279, A287, A291-A303, A305-A306, A308, A318-A319, A321-A322, A325
Carbide End Mill Roughing A340, A342
Carbide End Mill Sets A278
Carbide End Mill Variable Helix A308
Carbide Grades B2
Carbide Grinding Tools A377
Carbide Grooving Inserts B75, B93, B95
Carbide Jobber Drills A61, A72
Carbide Milling inserts B67
Carbide Milling Inserts B67, B72
Carbide Miniature End Mills A291, A293-A296, A298-A300
Carbide Reamers A141-A145
Carbide Routers A376-A377
Carbide Spade Drills A69
Carbide Straight Flute Drills A67
Carbide Threading Inserts B96
Carbide Tipped Drills A58-A59
Carbide Turning Inserts B5-B10, B36
Center Reamers A115-A116
Chamfer Mills A122
Chip Breakers B3
Combined Drill & Taps A164
Combined Drills & Countersinks A107-A109, A111
Coolant Thru Drills A77, A79-A80, A84
Countersinks Single Flute A114
Countersinks Six Flute A117, A119-A120
Countersinks Three Flute A116
Cut Off Inserts B74
Die Trimmers A377
Dies A218
Drill Mills A345
Drill Sets A4-A6, A18, A24-A26, A28, A45
Drills A6, A44, A58, A67, A69, A71-A74, A76-A77, A79-A80, A84
Drills, Coolant Thru A77, A79-A80, A84
Drills, High Performance A69, A71, A73-A74, A76-A77, A79, A84
End Mills, Aluminum Cutting A278, A281, A284
End Mills, Ball Nose A244, A261, A263-A264, A274, A278, A284, A292, A297-A299, A302, A306, A321-A322
End Mills, Carbide A308, A320
End Mills, Chamfering A122
End Mills, Corner Rounding A347-A348
End Mills, Double End A263-A264, A277-A278
End Mills, Double End Cobalt A242, A244
End Mills, Double End HSS A232, A238-A240
End Mills, General Purpose A256, A260-A261, A263-A264, A267, A270, A272-A274, A276-A278, A289
End Mills, High Performance A292, A297-A299, A302, A305-A306, A308, A317-A322, A325, A330-A331, A334, A340
End Mills, Miniature Carbide A291, A293-A296, A298-A300, A308, A334
End Mills, Roughing Cobalt A248-A249
End Mills, Single End Cobalt . . A233, A241, A243, A246
End Mills, Single End HSS A228-A229, A235-A236, A239-A240, A244
Engraving Blanks B128
Grinding Tools A377

Grooving Insert . . . B95
High Performance Taps . . . A176, A184-A185
Indeable Face Mills . . . B69-B71
Indexable Boring Bars . . . B34-B36
Indexable Countersink . . . B62
Indexable Cut-Off Blades . . . B74
Indexable End Mills . . . B69, B71
Indexable Face Mills . . . B70-B71
Indexable Spare Parts . . . B20, B36, B72
Indexable Turning Holders . . . B20-B21, B72
Keyless Drill Chucks with Integral Shank . . . J158
Marking Cutters . . . A346
Metric Hand & Spiral Point . . . A161-A162
Miniature End Mills . . . A240, A291, A293-A296, A298-A300
Pipe . . . A173-A174, A176
Rapidkut . . . B5-B10, B20-B21, B34-B36, B62, B67, B69-B72, B74-B75, B93-B95, B108, B120-B122
Reamers . . . A129-A133, A141-A145
Rigid & Tension Compression Tapping Holders . . . J180
Routers . . . A376-A377
Screw Machine Drills . . . A64, A66
Silver & Deming Drills . . . A44
Small Shank Extension Taps . . . A173
Spanner Wrenches . . . J211
Spiral Flute Taps . . . A185
Spiral Point Taps . . . A184
Spotting Drills . . . A110
Tap Adapters . . . J180
Taps . . . A155-A156, A161-A162, A164, A173, A178-A182, A184-A185
Taps, Acme Tandem . . . A173
Taps, Hand GP . . . A146-A149, A154
Taps, Metric . . . A155-A156, A161-A162, A179, A182
Taps, Pipe . . . A174
Taps, Ring . . . A178, 180-A181
Taps, Spiral Flute . . . A180-182, A188-A189
Taps, Spiral Point . . . A157-A159, A161, A178-A179, A188-A189
Technical Info . . . B4
Thread Mills . . . A212-A213
Tightening Fixtures . . . J238
Tool Bits . . . B120-B122
Tool Blocks . . . B73
Top Clamping Nuts . . . J212
Top Notch Boring Bars . . . B94
Top Notch Holders . . . B93
Top Notch Threading Inserts . . . B96

RAPTOR
Clamp Kit . . . J145
Dovetail Cutters . . . J145
Dovetail Fixture . . . J143-J144
Dovetail Pinch Block . . . J145
Locating Pins . . . J145
Self Centering Vises . . . J137
Vise Accessories . . . J143-J145

RARE EARTH
Exposed Pole Magnets . . . J115
Flush Face Magnets . . . J115
Magnets . . . J117
Polymagnet Discs . . . J117
Polymagnet Rings . . . J117
Rectangular Magnets . . . J117

RATCHETS
Bit Driver . . . F67
Gimbal . . . F67
Proto . . . F65-F67
Snap-On Williams . . . F66
Socket . . . F67
Stanley . . . F65
Tekton . . . F67
Titan . . . F67
Wright Tool . . . F66

RAYOVAC
Batteries . . . H65
Flashlights . . . H55, H61
Lanterns . . . H62-H63
Spot Lights . . . H63

RAZOR BLADES & KNIVES . . . F39, F157-F162

READERS
3M . . . H9
Crews . . . H9
Goggles . . . H13
Pyramex . . . H9
Safety Glasses . . . H9, H13

READOUTS
Acu-rite . . . K115-K117
Fagor . . . K112-K113
Mitutoyo . . . K111
Newall . . . K114-K115

REAMER BLANKS . . . A32-A33

REAMER STORAGE . . . I44-I46

REAMERS
Adjustable Blade . . . A136
Arbors . . . A137-A138
Bridge . . . A137
Brown & Sharpe Taper . . . A136
Car . . . A137
Carbide . . . A141
Carbide Tipped . . . A131-A132, A137-A140
Chucking . . . A129-A133, A138-A146
Cobalt . . . A132
Construction Taper . . . A137
Decimal Size . . . A139-A140, A142-A145
Dowel Pin . . . A131, A140
Expansion . . . A134, A140
Fullerton Tool . . . A145-A146
Hand . . . A135-A136
Metric . . . A131, A136
Morse Cutting Tools . . . A129-A134
Morse Taper Finish-Roughing . . . A136
Over & Under Size . . . A132, A140
Rapidkut . . . A129-A133, A141-A145
Reamers . . . A129-A134, A136-A145
Repairman's Taper . . . A137
Rock River . . . A131-A132, A137-A140
Sets . . . A133, A136
Shell . . . A137-A138
Spiral Flute . . . A133-A135, A137-A138
Taper Pin . . . A135-A136
Taper Pipe . . . A176
Taper Shank Chucking . . . A134, A138
Tapered . . . A135-A137

RECIPROCATING SAWS, BLADES . . . E33-E34

RECOIL THREAD REPAIR . . . A223

RECOMMENDED SPEED & FEED . . . D137

RECORD CABINETS & RACKS . . . I34

RECTANGULAR, CARBIDE . . . B132

RECTANGULAR GAGE BLOCK
Procheck . . . D119

RECYCLED RAGS . . . H115

RECYCLING CONTAINERS . . . H109

RED DEVIL
Caulking Guns . . . G37
Putty Knives . . . F183
Retractable Scraper . . . F160
Scrapers . . . F183
Single Edge Razor Blades . . . F160

REDUCED SHANK DRILLS & SETS . . . A5, A43-A44, A46
Sets . . . A45

REEL RACK . . . I78

REFERENCE BOOKS . . . D207-D210

REFRACTOMETERS . . . G30

REFRACTOMETERS, PH PEN . . . D141

REGO-FIX
Collet Holders . . . J191-J192, J194
Collet Trays . . . J202
DM Metallic Sealed Sets . . . J210
ER Collet Sets . . . J202
ER Sealed Collets . . . J207-J210
ER Spring Collets . . . J196-J201
ER System Clamping Nuts . . . J213
ER System Coolant Rings . . . J214
ER System Torque Wrench Heads . . . J212
ER System Torque Wrenches . . . J212
GB Tapping Collets . . . J182-J183
Spanner Wrenches . . . J211
Ultra Precision Collets, Sets . . . J203-J205, J207
Zero-Z Holders . . . J194

REGULATING WHEELS . . . C29

REGULATORS
Air Turbine . . . E31
Coilhose Pneumatics . . . E55-E57

REINFORCED CUT-OFF WHEELS . . . C49-C50, C52

RELIEF VALVES . . . E57

RELTON
Grease . . . C93, G32

REMOTE DISPLAY & PROBES . . . D87

REMOVERS
Fasteners . . . F111-F115

RENISHAW TYPE STYLI . . . D66-D67

REPAIRMANS REAMERS . . . A137

REPLACEMENT BULBS . . . H80

REPLACEMENT HAMMER FACES
Rubber . . . F127
Soft Face . . . F127
Split Head . . . F126

REPLACEMENT KNURLS . . . B129

REPLACEMENT PART
Joint Assemblies . . . J179

RESET COUNTERS . . . D168

RESIN CLOTH FLAP DISCS . . . C101

RESIN FIBRE DISCS . . . C110
Back-Up Pads . . . C108-C109
Carborundum . . . C112

RESPIRATOR
Filter Cartridges . . . H20
Masks & Filters . . . H17-H20
Refresher Wipe Pads . . . H20

RESTORER FILES . . . A219, F180

RETAINING RING
Pliers . . . F36-F39
Proto . . . F36, F38-F39, F76
Replacement Tips . . . F37

RETENTION KNOB
Rapidhold . . . J235

RETRACTABLE KEY & TOOL HOLDERS . . . D168

REWIND
Pneumatic Tools . . . E50

REWIND REEL . . . E50

REX CUT COTTON REINFORCED ABRASIVES . . . C78

REX DUROMETER . . . D112

RIDGID
Cutting Fluids . . . G5
Bolt Cutters . . . F27
Chain Vise . . . F155
Chain Wrenches . . . F154
Die Heads . . . F155
Flaring Tools . . . F156
Pipe Cutters . . . F155-F156
Pipe Wrenches . . . F154
Strap Wrenches . . . F156
Tube Benders . . . F156
Tube Cutters . . . F155-F156

RIFFLERS . . . F181

RIGHT ANGLE ATTACHMENTS
Drills . . . E8
Milling . . . K105
Milwaukee . . . E8

RIGHT ANGLE IRONS
Angle Plates . . . J152

RIGID & TENSION COMPRESSION TAPPING HOLDERS
Rapidkut . . . J180

RIGID TAPPING HOLDERS
Parlec . . . J181

RING GAGES, THREAD . . . D197, D199

RITE-MARK
Holders . . . F152
Marking . . . F152
Stamps . . . F152

RITEN
Advantage Live Centers . . . J265
Advantage Live Centers - Tracer and Long Points . . . J266
Bull Nose Dead Centers Carbide Fast Trak SpecialL . . . J255
Bull Nose Dead Centers Morse Taper . . . J254
Bull Nose Live Centers . . . J269
CNC Dead Center Nuts . . . J253
CNC Dead Centers High Speed Steel Tipped . . . J253
Heavy Duty Pipe Nose Live Centers . . . J269
High Speed & Carbide Tipped Dead Centers . . . J253
Imperial Full Dead Centers Large Carbide Point . . . J255
Imperial Half Dead Centers Large Carbide Point . . . J255
Live Centers Long Point . . . J265

How to use this index
LIGHTED SAFETY GLASSES . . . H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Live Centers Standard Point J259
Long Series Full Dead Centers-High Speed Steel J255
Morse Taper CNC Dead Centers Carbide Tipped J253
Multi Use Live Centers J266
Pipe Nose Dead Centers Morse Taper J254
Super Accurate Live Centers J265
Tri Bearing Live Centers Standard Point J265
Tri Bearing Live Centers Tracer Point J265
RIVETING TOOLS
Pneumatic J7
PS10 Manual J7
ROCK RIVER TOOL
Counterbores A127
Dovetail Cutters A355
Milling Cutters A356, A359
Reamers A131, A138-A140
Saws A360
Shell Reamer A137
T-Slot Cutters A352
ROD . . . . .
Carbide B131
Drill J40
Threaded J35
ROD RACKS I38
ROHM
3-Jaw Direct Mount Scroll Chucks ZSU J280
3-Jaw Scroll Chucks ZSU J282
680 Series 4 Sided Interchangeable Driving Discs J268
680 Series Integral Tooth Driving Discs J268
680 Series Interchangeable Metal Driving Discs J268
Bull Nose Live Centers J269
Drill Chucks Key Type J155
Face Drivers for Centers J268
Geared Scroll Chucks ZG J282
Heavy Duty Pipe Nose Live Centers J269
Heavy Duty Super Ball Bearing Chucks J154
Key Type Drill Chucks J156
Keyless Chucks J158
Keyless Chucks-SPIRO J158
Modular Vise J137
Replacement Drive Plates J268
Revolving Tailstock Centers J259
Revolving Tailstock Centers Type 604 H J264
Revolving Tailstock Centers Type 604 HVL J264
Set Screws and O-Rings J268
Slim Standard, Extended Live Centers J260
Type 680-50 Face Drivers J267
Type 680-55 Face Drivers J267
Type 680-60 Flange Type J267
Type 680-65 Face Drivers J267
Type 681-85 Face Drivers J267
Type 688-87 Adapter Plates J267
Vises J136
ROLL BARS F134-F135
ROLL PIN ASSORTMENTS
Maintenance Kits J5
ROLL-IN BANDSAWS K22, K24, K32-K33
ROLLER STOCK STANDS K65, K99-K101
ROLLER TABLES K65, K99-K101
ROLLS
Abrasive Bench (Shop) C95
Abrasive Cartridge C51, C84-C85, C167-C168
Feeler Stock J42
Non-Woven Abrasives C96, C131
Shim J46
ROTABROACH HOLE CUTTERS E89-E90
ROTARY BROACHES A366
ROTARY FILES A367-A377
ROTARY SCREW AIR COMPRESSORS K130
ROTARY SHEET METAL FORMERS . . . . . .
Sheet Metal Machines K51
ROTARY TOOL CLAMPS J238
ROTARY TOOLS, ACCESSORIES E25-E30
ROTATING R8 COLLET RACK
Collet Holders/Racks J163
ROUGHING END MILLS
Aluminum Cutting A252-A254
Ball Nose A245, A252-A253
Carbide A340, A342, A344
Cobalt A245-A253
High Helix A252, A340, A344
M2 & M2-AL A248-A249, A253-A254
OSG A249
Premier HP A245, A340, A344
Rapidkut A248-A249, A340, A342
Sets A248-A249, A253-A254
Shell A254
ROUGHNESS GAGING D113-D115
ROUND FILES F175, F177
ROUNDS, CARBIDE B131, B133
ROUTER BITS, SOLID CARBIDE A348, A375-A377
ROYAL
5C Accu-Length Expanding Collets J168
CNC Live Centers Triple Bearing Type J260
Heavy Duty Spindle Type Live Centers J261
High Precision Quad Bearing Live Centers J264
Spring Type Live Centers-Standard & CNC Point J256
Value-Turn Live Centers J259
Versa Turn Live Centers J266
RPM CALCULATORS D137
RUBBER AIR HOSES E48-E49
RUBBER DRUMS / MANDRELS C138
RUBBER FLEX COLLETS J177
RUBBER GROMMET ASSORTMENTS
Maintenance Kits J6
RUBBER MALLET F127
RUBBERIZED ABRASIVES C77, C84
RUBBERMAID
Brooms & Handles H104-H105
Brute Products H109
Buckets H107
Butt Container H108
Caddy H107
Cleaning Cart H107
Dolly H109, I52
Dust Pans H106
Floor Signs H108
Mopping Systems H107
Portable Tool Boxes I19
Recycling Containers H109
Refuse Container H109
Rim Caddies H107
Safety Step Stool H100
Smoking Receptacles H108
Tilt Truck I77
Totes with Lids I43
Trolley I52
Utility Carts I54
Wagon I52
Wastebaskets H109
RUBY GRAIN GRINDING WHEELS C13, C15
RUBY GRAIN POROUS WHEELS C17
RULES
Adhesive Back D156
Bevel Edge D154
Certified D142
Conversion Rules D150
Easy Read Scales D142
Extra Long Scales D142
Flex Scales D142-D144, D150
Folding Wooden D156
Hook D142, D150
Magnetic D142
Pocket Scales D143-D144
Protractors D27, D149-D150, D153
Rigid Scales D142-D144
Round End Scales D142
Square Edge Rules D154
Straight Edges D154
Tape Measures D156, D158-D161
RUST INHIBITORS G14, G39-G40, G43
Corrosion Inhibitors G42-G43
RUSTLICK FLUIDS G5, G9-G11, G14, G30, G40, G49
Coolant Change Over Kit G25
Rust Inhibitor G43
SAFETY BLOW GUNS
Coilhose Pneumatics E43
Guardaire E44
Legacy E43
SAFETY GLASSES H43-H45
SAFETY GOGGLES H11, H13
SAFETY GUARDS
PRM K105
SAFETY INDUSTRIAL COUPLERS E53-E54
SAFETY SHIELDS
Bench Grinders H88, K65
CNC Safety Shields H87
Concave, Curved & Flat H87-H88
Faceshields H14
Lathe Guards H87-H88
Milling Machine H87
Panel Guard H88
Travel Guards H87
Visor Guards H87
SAFETY VESTS H27
SAMCHULLY
3-Jaw Cuick Changer Power Chucks J300
3-Jaw Hydraulic Chucks J301
3-Jaw Manual Chucks J281
3-Jaw Wedge Power chucks J301
Soft Top Jaws J301
SANDBLAST ABRASIVE MEDIA K98
SANDBLASTER REPLACEMENT PARTS K98
SANDBLASTERS
Cyclone K95-K96, K98
Portable Gravity Feed K94
Shop Fox K94
Speed Blaster K94
Trinco K95-K97
SANDERS
Air E14-E20
Angle E15, E17, E21-E22
Baldor K62, K73
Belt E16, E19-E20, K62, K70-K75, K77
Belt, Disc Sanders K70-K76
Burr-King K74, K77
Combination Belt & Disc K70-K75
Disc E10, E14-E16, E18, K70-K74, K77
Disc, Portable E14-E16, E18
Dual Station K75
Ellis K75
In-Line E18
Kalamazoo K70-K75
Orbital E10, E14- E16, E18
Pads C123
Palm E14
Palmgren K72, K76
Pencil E32
Pneumatic E14-E22, E32
Sanders E20
Shop Fox K70, K73
SANDING INSURANCE, GRANLUND ABRASIVE CLEANING STICKS C85, C93
SANDING SPONGES
Norton C85
SANDING/GRINDING LUBRICANT C93
SANITIZERS
Hand H113
SANTRONIC VOLTAGE TESTERS D139-D140
SAS SAFETY
Back Supports H30
Dust Masks H17
Ear Plugs H21
Knee Pads H31
Respirators H17-H18
Safety Cones H30
Safety Glasses H4, H7-H9
SAW ARBORS A362-A363, C43
SAW BLADES
Bahco (Snap-On Industrial) E36, E59, E74, E76-78
Bandsaw, Carbon Flexback E72, E81-E82
Bandsaw, Carbon Hardback E70, E81
Bandsaw, M42 Bi-Metal E36, E68-E71, E74, E76-E78, E80
Circular E36
Circular A360-A363
Hole Saw E83-E84, E89-E91
Jigsaw & Reciprocating E59-E60
Lenox E36, E61-E67
M.K. Morse E36, E81
Portable Bandsaw E36, E67
Power Hack E58
Reciprocating E59
Starrett E36, E59, E68-E71

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

SAWING FLUIDS
Lenox Band- Ade E66
SAWS
Abrasive Cut-Off. K41-K43
Accessories K34
Bandsaws. K22-K25, K27-K33, K35, K37-K39
Chop. E33, K41-K43
Circular. E35
Clausing K28
Cold K38, K40
Cut-Off K41-K43
Dake. K23-K24, K27, K29
Dremel E26
Ellis. K31
Ferrous & Non-Ferrous K38, K40-K43
Gravity Feed. K22
Hole E83-E84, E87-E88, E90-E91
Horizontal. K23, K26-K39
Horizontal Bandsaws K23, K26-K32, K34-K37
Horizontal Double Miter K25
Horizontal Miter Bandsaws K26, K29-K38
Jig. E35
Kalamazoo K28, K41-K43
Kalamazoo Industries. K40
Kalamazoo/Clausing K28
Kasto K35
Manual K25
Mark III K38
Marvel K24, K33, K37-K38
Marvel/Hercules and Spartan. K24, K33, K37-K38
Miter K24, K26, K29-K38, K40, K42
Palmgren K26, K39
Portaband. E34
PRM K23, K27, K29, K31-K32
PRM Mitering K32
Reciprocating E34
Roll-In Saw. K22, K24, K32-K33
Roller Table K26
Saws E35, E89, E91
Scotchman K40
Semi-Automatic K30, K32, K35, K38
Shop Fox K22
Stand K45
Table. E33
Tilt Frame K37, K39
Trade-Master, Dake K24
Vertical K22-K25, K27-K28
Vertical Bandsaws K22-K25, K27-K28
W.F. Wells K28, K30, K38-K39
Wellsaw K24-K25, K27-K28, K30-K32, K35
Work Table K26
Pocket Saw F170
SAWS, CIRCULAR
Jewelers A361
Metal Cutting A361-A363
Plain Metal Slitting A363
Screw Slotting A363
Side Chip Clearance A362-A363
Slitting A363
Metal Cutting E36
SAWZALL
Milwaukee E59
SCALES
A & D Weighing & Counting D105
Adhesive Back D156
Bevel Edge. D154
Certified D142
Conversion Rules. D150
Easy Read Rules D142
Extra Long Rules D142
Flex Scales. D142-D144, D150
Hook. D142, D150
Magnetic. D142
Pocket Rules D143-D144
Protractors D27, D149-D150, D153
Rigid Rules. D142-D144
Round End Rules. D142
Square Edge Rules D154
Straight Edges D154
Verttical Digimatic. D130
SCHUNK
Milling Chuck Holders J230
Milling Chuck Sleeves J230
SCISSOR LIFT TABLE I62, I77
SCISSORS
Clauss F163-F164
Fiskars F163-F164
Olfa. F163
Wiss F164
SCOTCHMAN
Cold Saws K40
SCRAPERS A382, F160, F183
SCRATCH AWLS. F141
SCREW
Clamping Components. J94
Jergens J94
Morton J94
SCREW BITS. F96-F97, F99-F100
SCREW EXTRACTORS & SETS F111-F114
SCREW JACKS. D186
SCREW MACHINE DRILLS
135 Split Point A26-A29
Carbide. A64-A66
Cobalt. A28-A29
High Speed Steel. A24, A26-A27, A32
Left Hand A32
Morse Cutting Tools A6, A24-A29
Precision Twist Drill A6, A24-A29
Rapidkut. A6, A24-A26, A64, A66, A69, A71
Sets A6, A24-A29
SCREW PITCH GAGES D200-D202
SCREW SLOTTING SAWS A362-A363
SCREW THREAD INSERT TAPS A167-A170
SCREW THREAD INSERTS A221-A223
SCREW THREAD MICROMETER. D14-D15
SCREWDRIVER BITS, SETS F96, F100, F104-F105, F110, F117
SCREWDRIVERS
Bahco. F119-F120
Finger Driver F103
Heavy Duty. F119
Hose Clamp Driver. F62
Offset F118
Phillips & Standard. F119-F120
Sets F103
Slotted F119
Snap-On Bahco F119-F120
Torque F81
Torque Control Drivers F81
Wiha. F118-F120
SCREWDRIVERS, AIR E38
SCREWDRIVERS, CORDLESS E8, E41
SCREWDRIVERS, SETS
Gearwrench F124
Impact F110
Jewelers. F118
Phillips & Slotted F123
Phillips & Standard. F118, F121-F123
Precision F118
Proto. F81, F93, F103, F106-F107, F116-F124, F184
Sets F118
Sloky F82
Slotted F118
Snap-On Williams F123
Stanley. F116-F118, F121, F123-F124
Tekton. F103, F117, F121, F124
Torx F123
Wiha. F118, F123
SCRIBER TOOLS, MAGNETS D151
SCRIBERS
Air. E24
Hand. C44, F141
Machinists D151
Replacement Tips F141
SCRUBS IN A BUCKET H116
SEATS
Brewer Design I58-I59
Mechanics I57-I58
National Public Seating I58
PRM PRO I57
Stools. I57-I58
Vestil. I58
SEGMENTED DIAMOND SAW BLADES C39
SEGMENTS, ABRASIVE. C31
SELF FEED BANDSAWS K22
SELF-EJECTING CHUCK KEYS
Drill Chuck Accessories J153
SELF-EJECTING LATHE CHUCK KEYS
Parts & Accessories J284, J298
SEMI-AUTOMATIC HACKSAWS K45
SEMI-FLEX DISCS C140
SERVICE CARTS I53
SERVO
Powerfeeds K108
SET SCREW ASSORTMENTS
Maintenance Kits J2
SETTING STANDARDS. D26
SEVERANCE
3N1 Drill Point Countersinks A121
Inside Deburring Cutters A122
Outside Chamfering Mills. A123
Outside Deburring Cutters A123
Threaded Arbors A123
Tube End Chamfering Mills A122
Tube End Deburring Cutters A123
Tube End Forming Cutters. A121
Carbide Files F182
SG CERAMIC ABRASIVES
Discs, Resin Fibre C110
Tool Room Grinding Wheels C13, C19
SG DIAMOND DRESSERS C34
SHANK STYLE CUTTERS
Dovetail . . . . . A355-A356 , B65
T-Slot A352-A353, B65
Fly J164
SHAPER & PLANER GAGE D179
SHARP
3-Jaw Scroll Chucks with 2 Sets of Solid Jaws J288
SHARPENERS
Drills K66-K69
End Mills. K66-K67
Knife. C67, K66
Tool. K66
Tool & Cutter K66-K67, K69
Tool Sharpener. K66
SHARPENING FIXTURES
Drill Grinding Attachment E8
SHARPENING STONES C66-70
SHARPIE
Markers G59
SHEARS. F164
Air. E24, K46, K48-K50
Fiskars F163
Foot Squaring. K49
Hand. K44-K45
Mechanical. K46, K48-K50
National K48-K50
Sheet Metal K44-K46, K48-K50
Tennsmith. K46, K49-K50
SHEARS, NIBBLERS
Florida Pneumatic E24
SHEET METAL GAGES. D188
SHEET METAL HOLE CUTTERS E89
SHEET METAL MACHINES
Bench Punch K45
Brakes K46-K49
Marvel K52
National K48, K48-K51
Notchers. K44-K45
Rotary Formers K44-K45
Shears K44-K46, K48-K50
Shrinker-Stretcher K44
Slip Rolls K51
Tennsmith. K45-K47, K49-K51
Tube Notcher K44
SHEET METAL MICROMETERS. D16
SHEET METAL PLIERS. F18, F20
SHEET METAL SHEARS, NIBBLERS . . . . . E24, F29, F164 , K44-K46
Air. E42
SHEET RACKS I78
SHEETS, ABRASIVES C97
SHELL END MILL ARBOR SCREWS
Shell Mill Holders J225
SHELL END MILLS A254
SHELL MILL HOLDERS
NMTB Shell Mill Holders J225
R8 Shell End Mill Holder Set J164
R8 Shell End Mill Holders J164
Shell End Mill Arbor Screws. J225

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

SHELL REAMERS & ARBORS A137-A138
SHELVING
Edsal I29, I34-I37
Lyon I38
Storage I34-I38
SHELVING UNITS ACCESSORIES I35
SHIELD PROTECTION H87-H88
SHIM STOCK & SPACERS
Arbor Spacers and Shims J48-J49
Shim Stock J46
Shim Stock Assortments J45
Shim Stock Color Coded J44
Shoulder Bolt Shims J23
Slotted Shims Plastic J45
Sof' Shoe Shims J45
Stainless Slotted Shim Sets J45
Wedgie Shims J44
SHINWA (TAPERED BORE GAGES) D200
SHIRTS
Hi-Vis H27
SHOP FOX MACHINERY
Belt & Disc Sanders K73
Disc Sander K70
Drill Presses K16
Sandblasters K94
Sheet Metal & Bending K45-K46
Tool Tables & Roller Stock Stands K101
SHOP MICROSCOPES D132, D135
SHOP SEATS
Stools I58
SHOP TOWELS H114-H115
SHOP-VAC H74
Accessories H112
Vacuums H110-H112
SHORE DUROMETERS D112
SHOULDER BOLTS
Fasteners J22-J23
Shims J23
SHOULDER SCREW ASSORTMENT J23
SHOWA GLOVES H36-H42, H52
SHRINK FIT HOLDERS
Briney J233
CAT40, CAT50 Holders J231, J233-J234
CAT40, CAT50 Power J232
Haimer J231-J232
Parlec J234
SHRINK WRAP H119
SIDE CHIP CLEARANCE SAWS A363
SIDE MILLING CUTTERS A356, A359
SIDE MOUNT WORKSTATION AIR HOSE REELS . . . E50
SIGHT SAVERS, LENS CLEANING STATION & TISSUES D174, H15
SIGNS, SAFETY H108
SILICON CARBIDE WHEELS, GREEN (GC) C24-C25, C27
SILVER & DEMING DRILLS & SETS A43-A45
SIMONDS FILES F172-F177
SIMPLE & SUPER SPACERS J173-J174
SIMPLE GREEN
Cleaners G46
SIMPLEX
Cylinder Pumps I71
Electirc Pumps I73
H-Frame Press K80
Hand Pumps I69
Hydraulic Pumps I69, I71, I73
Ratchet Jacks I73
SINE BARS D180-D181
SINE PLATES J128
Magnetic J149
Suburban Tool J129, J149
SINGLE LEVERAGE ARBOR PRESSES K77-K79
SINGLE POINT DIAMOND DRESSERS C34-C35
SINGLE STAGE AIR COMPRESSORS
Dewalt K85
Industrial Air K86-K87
Ingersoll Rand K88
Powermate K86
SKIMMERS, ACCESSORIES
Oil Separators G18-G19, G24-G25, G28-G30
SKIN LOTIONS H113
SLEEVES
Kevlar H54
Techniks J227
SLIDING T-HANDLES F64
SLINGS
Lift All I64-I65
SLIP JOINT PLIERS F31
SLIP ROLLS K51
SLITTING & SLOTTING SAWS A360-A363
SLOKY
Torx® Screwdrivers, Sets F82
SLOTTED ANGLE PLATES
Angle Plates J151
SMALL HOLE GAGES D190
SMOKING CANS, BUTT'S H108
SNAGGING WHEELS C21
SNAP CALIPERS D34
SNAP GAGES D99
SNAP RING ASSORTMENTS
Maintenance Kits J5
SNAP RING PLIERS F36-F39
SNAP-ON INDUSTRIAL BRANDS- BAHCO
Saw Blades E36, E76-E77
Swiss Pattern Needle Files, Sets F177-F178
Torx Screwdrivers, Sets F118
SNAP-ON INDUSTRIAL BRANDS-WILLIAMS
1/2 Drive Deep Sockets F58
1/2 Drive Impact Sockets F72, F74
1/2 Drive Sockets F57-F59, F115
1/4 Drive Deep Sockets F52
1/4 Drive Sockets F51
3/4 Drive Deep Sockets F60
3/4 Drive Impact Sockets F74
3/4 Drive Sockets F60
3/8 Drive Deep Sockets F54
3/8 Drive Flex Sockets F54
3/8 Drive Impact Sockets F72, F74
3/8 Drive Sockets F52-F54, F115
Adjustable Wrenches F15
Adjustable Wrenches, Sets F13
Angled End Cutter Pliers F28
Ball Pein Hammers F131
Box Wrenches F9
Brass Hammers F133
Breaker Bars F64
Cable Cutters F27
Chain Wrench F156
Combination Plier Sets F34
Combination Wrenches F2-F3, F6-F7
Crowfoot Wrenches F5
Deadblow Hammers F128
Diagonal Cutters F22-F23
Drive Adapters F63, F76
Driver Bit Socket Sets F108
End Cutting Pliers F33
Extensions F61-F62, F76
Fastener Extractors F115
Flare Nut Wrenches F4
Gear Pullers F167-F168
Groove Lock Pliers, Sets F34
Hand Pumps I70
Hex Bit Sockets, Sets F108-F110
Hydraulic Jacks I70
Hydraulic Pumps I70
Impact Drive Adapters F76
Impact Extensions F76
Impact Sockets, Sets F69, F72, F74
Knives F158
Linesman Pliers F33
Locking Pliers F20-F21
Master Bit Set F104
Metric Impact Sockets F72, F74
Multitorq Torque Data System F81
Nut Drivers Sets F125
Pick & Hook Sets F137
Pinch Bars F134
Pipe Wrench, Sets F154
Pliers, Sets F26, F34
Pry Bars, Sets F134
Pullers, Sets F167-F168
Ratchets F48, F66
Retaining Ring Pliers, Sets F36, F39
Roll Bars F135
Screw Extractors F112
Screwdrivers, Sets F120, F122-F123
Sledge Hammers F129
Sliding T-Handles F64
Slip Joint Pliers F17, F31
Snap Ring Pliers, Sets F36-F37
Snips F28
Socket Adapters F63
Socket Sets w/ Bolt Thru F46
Sockets, Sets F44, F46, F48, F50, F57, F59-F60, F72
Spanner Wrenches F16
Speed Handles F64
Strap Wrench F156
Swivel Impact Joint Adapters F76
Tool Boxes I16-I17, I20
Torque Multipliers F79
Torque Pre-Set Wrenches F81
Torque Screwdrivers F81
Torque Wrenches F78-F81
Torx Driver Bits, Sets F94
Universal Joints F63
Utility Carts I53
Utility Knives F158
Utility Sets, Hook & Pick F137
SNIPS F28-F29, F164
SOAP Hand H113
SOCKET ADAPTERS E8, F62
SOCKET HEAD CAP SCREW ASSORTMENTS
Maintenance Kits J5
SOCKET HEAD CAP SCREWS
Coarse J12-J13
Fasteners J12-J14
Fine J13-J14
Low Head J14
SOCKET HEAD CAP SCREWS METRIC
Fasteners J14-J15
SOCKET HEAD SHOULDER SCREWS METRIC
Brighton Best J22
SOCKET HEADCAP SCREW REMOVERS F111
SOCKET SET SCREW ASSORTMENTS
Maintenance Kits J2
SOCKET SET SCREWS CUP POINT
Fasteners J19-J21
SOCKET SET SCREWS CUP POINT METRIC
Brighton Best J21-J22
SOCKET TRAYS I13
SOCKETS, SETS
Tap Socket Set A217
1 Drive Impact Sockets F71
1/2 Drive F55, F57-F59, F68-F71, F73-F74, F100, F105-F106, F108-F110
1/2 Drive Deep F57-F58
1/2 Drive Impact Sockets F68, F70-F74, F106, F110
1/4 Drive F44-F45, F51, F63, F71, F81, F107
1/4 Drive Deep F51-F52
3/4 Drive F46, F60, F73, F106, F110
3/4 Drive Deep F60
3/4 Drive Impact Sockets F73-F74
3/8 Drive F44-F46, F48, F52-F54, F68-F73, F106-F107, F109
3/8 Drive Deep F53-F54
3/8 Drive Flex F54
3/8 Drive Impact Sockets F68, F70-F73, F109
Bolt Extractors F114
Budd Wheel F76
Combination F48, F50
Deep F48, F50, F52-F54, F57-F59, F68, F70-F71, F73, F110
Drive Adapters F62-F63, F71, F76
Drive Adapters, Impact F76
Extensions F61-F62, F75-F76, F99
Extensions, Impact F76
Extensions, Wobble F67
Flex F54
Gearwrench F67
Handles F62, F64
Hex Bit Sockets, Sets F105, F108-F110
Hex Bits F103, F105-F106, F108-F110
Hinged Handles F64
Impact F69, F72, F76
Impact Star Socket Bit Set F94
Impact, Sets F63, F75

Locking Adapters, Impact F76
Metric . . . . . F48, F51-F54, F58-F60, F70, ... F73, F106-F110
Metric Hex Bit Sets F105
Metric Impact F69, F72, F74
Metric, Sets F50, F54
Proto . . . . . F48, F51-F55, F57-F63, F68, ... F70-F71, F73, F75, F81, F99-F100, ... F105-F110, F114, F116
Ratchet Adapters F63
Ratchet Handles F65-F67, F116
Ratcheting Driver F116-F117
Ratchets F48, F65-F67, F117
Sets F44
Sliding T-Handles F64
Socket Adapters F62-F63
Sockets F59
Speed Handles F64
Standard F50-F51, F57
Stanley F68
Swivel Adapters, Impact F76
Tech Rescue F117
Tekton F67, F69, F76, F109
Tool Sets F43-F46, F136
Torx F94
Universal Joints F63, F75

SOF SHOE SHIMS J45
SOFT SOLID JAWS
Lathe Chuck Jaws & Accessories J299
SOLDER-IT
Solder Kits H98
SOLID JAWS OR TOP REVERSIBLE JAWS J285-J286
SOLUBLE OIL G5
Titanium G9
SOPKO WHEEL ADAPTERS C7
SPACER WASHERS
Clamping Components J30
SPACE BLOCKS D120
SPACERS, ARBOR SHIM J45, J49
SPACING WASHERS CASE HARDENED
Clamping Components J30
SPACING WASHERS-STEEL
Clamping Components J30
SPADE DRILL BLADE HOLDERS
Coolant Fed A92, A101-A102
T-A A101-A102
Universal A92
SPADE DRILL BLADES
Adapters A91
Flat Bottom A90, A93, A100
High Performance A91, A93-A96, A98-A100
T-A A93-A100
Universal A90
SPADE DRILLS
Blades & Holders A90-A103
Carbide A65, A69
SPANNER WRENCHES C7, F16
SPARE PARTS INDEXABLE . . . B20, B36, B72, B134-B137
Indexable Ingersoll Spare Parts IMC78
Ingersoll Cutting Tools IMC64, IMC78
Iscar IMC23-IMC24
Tungaloy IMC92
SPARTAN
Horizontal Bandsaws K37
SPC
Data Collection D87
SPEED & FEED CALCULATORS D137
SPEED BLASTER K132
SPEED HANDLES F64, J146
Milling Machine Accessories K104
Quill Feed K104
SPEED-VISE
Drill Press Vises J127
Vise Jaws J125
SPELLMACO
Blind Hole Spotter F148
Transfer Punches F148
SPHERICAL WASHER ASSEMBLIES
Te-Co J32
SPILL ABSORBENTS
3M H101-H102
Breg H103
Oil Dri H101-H103
SPIN-INDEXER J169 J172
SPIN-L-MATE
Spindle/Socket Cleaners J238
SPINDLE HEADS
Rectangular J179
Round J179
SPINDLE/SOCKET CLEANERS
Spin-L-Mate J238
SPIRIT LEVELS D166
SPLINE MICROMETERS D14
SPLIT SLEEVE DRILL & TAP DRIVERS A155, J176, J184
SPOOL RACKS
Durham I32
SPOT LIGHTS H62-H63
SPOTTING AND CENTERING DRILLS A107-A111, G53
SPRAYERS G46, G48
SPRING ASSORTMENTS
Maintenance Kits J6
SPRING CALIPERS & DIVIDERS D191-D192
SPRING CLAMPS J111
SPRING PLUNGERS
Te-Co J80-82
SQUARE-OL D78
SQUARE COLLETS
5C Collets J166
SQUARE FLAT WASHERS
Clamping Components J30
SQUARE INSERT BITS F100
SQUARES
Bevel D152
Beveled Edge D152
Carpenter D155
Center D200
Chrome D145
Combination D145, D149, D151, D153, D155
Combinaton D145
Cylinder D166
Die Maker D148, D151-D152
Double D145-D146, D150-D151
Engineer D152
Pocket D155
Procheck D145, D152
Rafter D155
Sets D145
Stair Gage Fixture Attachments D168
Stanley D153, D155
Steel D148, D151-D152
T-Squares, Bevels D155-D156
SQUEEGEES H108
STACKER
Wesco I62
STAINLESS J37
STAINLESS STEEL EXTRA THICK FINISHED FLAT WASHERS
Clamping Components J31
STAINLESS STEEL FINISHED FLAT WASHERS . . . . . .
Clamping Components J31
STAINLESS STEEL HEX NUTS
Fasteners J33
STAINLESS STEEL SHIM STOCK J46
STAMPS, SETS F150-F152
STANDARD ABRASIVES
Back-Up Pads C141
Buff & Blend Products . . C71, C131-C132, C134, C138
Buff & Blend Rolls C132
Cartridge Rolls, Mandrels C85
Coated Quick-Change Discs C71, C126-C127
Coating Removal Wheels C134
Convolute Wheels C144
Flap Brushes C132
Flap Wheels C138
Hand Pads C131
Mini Brushes C132
Quick-Change Discs, Holders . . . . . C71, ... C126-C127, C135, C141, C169
Resin Fibre Discs C110, C113, C127
Surface Condition Belts C132
Surface Condition Discs C135
Surface Condition Products . . . . . C132, ... C134-C135, C141, C144-C146
Unitized Deburring Wheels C71
Unitized Depressed Center Wheels C146
Unitized Wheels C145-C146
STANDARD POLE PERMANENT MAGNETIC CHUCKS . .
Magnetic Chucks J146
STANDS K100
Dial Gage D68-D69, D73, D78, D101
Grinder K65, K99, K101
Jack I68
Mill & Drill K2
Palmgren K3, K65, K99
PRM K65, K99
Saw K65, K99, K101
Stock K65, K99, K101
Surface Plates D124
STANLEY
Alignment Lasers D157
Center Punches F147
Chisels, Sets F138-F139
Claw Bars F136
Cutters F161
Diagonal Cutting Pliers F22
Estimators D157
Glue Guns F165
Glue Sticks F165
Groove Joint Pliers F30
Hacksaw Blades F171
Hacksaws F170
Hammers F131-F132, F166
Hex Keys, Sets F89
Jab Saw F171
Lasers D157
Levels D157, D164
Linesman Pliers F33
Locking Pliers F19
Long Nose Pliers F25
Multi-Tools F42
Needle Nose Pliers F25
Pin Punches F144-F145
Planes F171
Plier Sets F35
Pliers F33, F35
Pry Bars F135-F136
Punches F144-F147
Ratcheting Screwdrivers F116
Ratchets F65
Saws F171
Scraper Bar F136
Screwdriver Bit Set F116-F117
Screwdrivers, Sets F117-F118, F121, F123-F124
Self-Leveling Lasers D157
Slip Joint Pliers F17, F35
Snips F28
Sockets, Sets F45
Sockets, Setss F68
Squares D153, D155
Staple Guns F166
Staples F166
Tool Sets F43-F46, F136
Utility Knife Blades F162
Utility Knives F157-F159, F161-F162, F184
STAPLES & STAPLE GUNS F166
STAR DRIVE (TORX®) STYLE . . . . . F82, F91-F94, ... F104, F118, F123
STARRETT
Angle Meter D153
Back Plunger Indicators D57
Band Saw Blades E36, E70, E72
Bases, Stands, Magnetic D71
Bullseye Circular Level D163
Calipers, Accessories D33, D35-D37
Chamfer Gages D101
Combination Squares D147-D148
Comparators D129
Countersink Gages D101
Depth Gages, Micrometers D23-D24, D27
Dial Bore Gages D97
Dial Indicators D41, D43, D46, D53
Die Maker Squares D148
Digital Indicators D46
Disc Micrometers D12
Dividers D192
Drill Gages D187
Drill Point Gages D188
Durometer D113

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Edge Finders D204
Electronic Depth Gages D24
Electronic Height Gages D94
Feeler Stock J42
Feeler Stock Rolls J42
Feeler Thickness Gages D195
Force Gages, Stands D106
Gage Blocks, Sets D122
Gage Pin Sets D117
Gage Stand D101
Gage Stock J50-J58
Groove Micrometers D20
Hacksaw Blades . . . . . E58 , F171
Hardness Testers D110
Hermaphrodite Calipers D192
Hole Gages D101
Hole Saws & Accessories E86, E87
Indicator Accessories D64, D69
Indicator Stands D69, D78
Indicators D41, D43, D46, D57, D64
Inside & Out Side Calipers D192
Inside Micrometers D20-D21
Instrument Oil D15, G42
Jack Screws D186
Jig Saw Blades E60
Levels D163, D165-D166
Lubricants G34
Machinists Sets D82
Manual Tester D106
Measuring Tapes D163
Micrometer Accessories D18
Micrometers & Sets D4, D6, D9, D14, D19
Multi Anvil D10
Oil G34
Parallels D184
Penetrants G34
Pin Vises D206
Pocket Levels D165
Power Hacksaw Blades E58
Protractors D27, D92, D153, D156
Punches F143, F145
Radius Gages D193
Rafter Squares D155
Reciprocating Saw Blades E59
Rules D143
Scales D143
Screw Pitch Gages D202
Screw Thread Micrometers D15
Scribers F141
Small Hole Gages D190
Spring Calipers & Dividers D192
Squares D147, D152, D156
Stair Gage Fixture Attachments D168
Steel Checks D69
Straight Edge Rules D156
Straight Edges D154
Surface Gages D78
Surface Plate Covers D124
Surface Plate Stands D124
Surface Plates D123-D124
Surface Roughness Gages D113
T-Squares D155-D156
Tap & Drill Gages D187
Tap Wrenches A224
Taper Gages D200
Tapes D158
Telescoping Gages D189
Test Indicators, Points D53
Thickness Gage Holder J42
Thickness Gages D103
Thickness Gages J42
Tool Instrument Oil D15
Tool Instrument Oil G42
Toolmakers Flats D124
Torpedo Levels D164
Trammels D191-D192
V-Blocks D175
Wiggler Sets D205
Wire Gages D188

STEEL ADAPTER PLATES FOR ADJUSTABLE CHUCKS . . . . .
Back Plates/Adapters J291-293
STEEL ANGLE BENDING MACHINES K45
STEEL DRILL ROD J39-40
STEEL FLAT STOCK J50-58
STEEL METAL SHEARS, NIBBLERS K76
STEEL SHIM STOCK J44-46
STEEL STAMPS F150-F151
STEELMAN
Bend-A-Light H56
Bolt Cutters F27
Bump Lights H66
Clamp Light H66
Combo Flashlights H56
Cord Reels H68
Flashlights H56-H57, H60, H64, H66
Head Lamps H56, H63-H64
Impact Bit Set F103
Jacks I62, I68
Knee Pads H31-H32
Locking Pliers F20
Modular Light Kit H61
Pen Lights H55
Stamps F150-F152
Tweezers F114
TweezersJaw Clamps F114
Work Lights H66
STEINEL HEAT GUNS, BLOWERS E2
STEINER WELDING PRODUCTS . . . . .
Apron Leather H33
Blankets H96
Fire Blanket H121
Gloves H53-H54, H99
Screens H96
Welding Jackets H96
Welding Rolls H96
Welding Sleeves H99
STENCIL INK G57
STEP BLOCKS & STRAPS
Adjustable J88
Jergens J88-89
Kits J89
Plain J88
Steel Heel J89
Te-Co J88-89
STEP DRILLS
Bully Hog A126
Unibit (Step Drills) A126
STEP PULLEY DRILL PRESS
Palmgren K17
PRM K17
Shop Fox K16
STEP PULLEY MILLS K2-K3
STEP STOOL H100
STEREO MICROSCOPES D132, D135
STERLING (DRILL GRINDERS) K69
STICK ON DISCS C119, C121
STICK-ON SHEETS, STRIPS C85
STICKS, ABRASIVES C68-C70, C72-C73
STOCK STANDS, BANDSAW K65, K99-K101
STOCK TRUCKS I52
STONE TOOLS
Master Chuck Key J153
STONES, SHARPENING C68-C69
STOOL H100
STOOLS
Brewer Design I58
Heavy Duty I58
Kangaroo I59
National Public Seating I58-I59
PRM PRO I57
Swivel Tractor I57
STOP WATCHES D141
STOPS
Drill A18
Quill K103, K105
STORAGE BINS
Akro-Mils I39, I41-I43
Durham I32-I33
Racks / Carts I40
STORAGE CABINETS, ACCESSORIES
Durham I22, I24, I27-I29, I32
Edsal I25, I27-I29, I34, I36-I37
Fire Flame Protection I28-I29
Flammable Liquids I29
Kennedy I7
Lyon I25-I26, I28-I29
PRM PRO I21
Visible Storage Cabinets I28
STORAGE RACKS
Durham I32, I34-I38, I78
STRAIGHT EDGES D154
STRAP CUTTERS F27
STRAP WRENCHES F156
STRAPPING TAPE H118-H119
STREAMLIGHT
Flashlights H55, H57-H64
Head Lamps H63-H64
Inspection Lights D170
STRINGER BEAD WELD CLEANING BRUSHES C160
STRIPE APPLICATOR G61
STRIPPER BOLT SHIMS J23
STRIPS
Abrasive C85
STUD REMOVERS F113
STUDS
Clamping Components J96
Fixture J85
Jergens J84
Metric J83-84
Set-Up J85
Stainless J84
Te-Co J83, J96
STYLI, CMM D66-D67
SUBMERSIBLE PUMPS
Little Giant G15
Sump G15
SUBURBAN TOOL
1-2-3 Blocks D185
Circular Type Magnetic Chucks J146
Collet Fixture J171
Comparators D129
Electromagnetic Chucks J148
Electronic Height Gages D94
Grinding Accessories C32
Magnetic Cylinder Square D166
Magnetic Toolmaker's Chucks J150
Magnetic V-Block J150
Magnum Force Permanent Magnetic Chucks J146
Master Grind J171
Master Grind Accessories J171
Planer Gages D179
Precision Vises J129
Punches F143, F145
Rare Earth Magnetic Chucks J147
Reciprocating Saw Blades E59
Rectangular Magnetic Chucks J147
Scribers F141
Sine Bars D180
Straight Edges D154
Tap Wrenches A224
Tapes D158
Thickness Gage Holder J42
Thickness Gages J42
Tool Instrument Oil G42
Torpedo Levels D164
V-Blocks D178
SUMMIT
Lathes K11-K14
Mills K6-K7
SUMP PUMPS G15
SUPER BALL BEARING HEAVY DUTY DRILL CHUCKS J154
SUPER GLUE G53
SUPERIOR ABRASIVES
Deburring Wheels C137
Flap Mops C130
Flap Wheels C88
Goblet Buffs, Wheels C130
Mini Disc Wheels C130
Portable Belts C130
PSA Discs C121
Quick-Change Discs C128
Quick-Change Discs, Holders C128, C130, C147
Shop Rolls C95
Stripping Wheels C140
Surface Condition Discs C137
Unitized Discs C137
SUPPORT STANDS K65, K99-K100

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

SURF-PRO ABRASIVES
9 x 11 Sheets . . . C97
Alumimum Oxide Coated Abrasives . . . C122
Belts . . . C87-C89
Bench & Pedestal Wheels . . . C25
Cartridge Rolls . . . C84
Ceramic Abrasives . . . C48, C122
Cup & End Brushes . . . C151
Cut-Off Wheels . . . C48-C49, C58
Depressed Cut-Off Wheels . . . C58
Diamond Dressers . . . C35
Flap Discs . . . C98
Hand Pads . . . C131
Mounted Points . . . C80-C81
Paper Back Discs . . . C117
PSA Discs . . . C117, C121
Quick-Change Discs . . . C122
Quick-Change Discs, Holders . . . C108, C122, C137
Radial & Cup Wire Wheels . . . C151
Sanding Drum Kit . . . C86
Shop Rolls . . . C95
Spiral Bands . . . C86
Surface Condition Products . . . C131, C137
Tool Post Wheels . . . C49
Trimmable Flap Wheels . . . C105
Velcro Backed Discs . . . C117
Wheel Dressers . . . C33, C35, C40
Zirconia Aluminum Abrasives . . . C48, C89, C122
SURFACE CONDITIONING. C96, C137, C139-C140, C160
SURFACE FINISH ANALYZERS . . . D114
SURFACE FINISH COMPARATORS . . . D115
SURFACE GAGES . . . D78
SURFACE GRINDERS
Acer . . . K57-K58
Automatic/Hydraulic . . . K57-K58
Chevalier . . . K57
Clausing/Equiptop . . . K58
Kent . . . K56
Palmgren . . . K56-K57
PRM . . . K56
SURFACE GRINDING WHEELS . . . C17
SURFACE PLATE CLEANER . . . D124
SURFACE PLATE COVERS . . . D124
SURFACE PLATE STANDS . . . D124
SURFACE PLATES . . . D123
SURFTEST GAGES . . . D113-D114
SURGE PROTECTORS . . . H76
SWEEPING BROOMS . . . H104-H105
SWEEPING COMPOUNDS
Oil Dri . . . H101
SWISS MACHINE TOOL HOLDERS . . . B22-B23
SWISS PATTERN FILES . . . F174, F178-F180
SWIVEL ANGLE PLATES
Milling & Rotary Tables . . . J173
SWIVEL HOIST RINGS . . . I74
SWIVEL INDICATOR ATTACHMENTS . . . D58, D60-D62, D64, D74
SYNCO
Lubricants . . . G34
SYRINGE . . . G37
T-BEVEL . . . D156
T-BOLTS
Clamping Components . . . J91-J92
Dovetail . . . J91
Generic USA . . . J92
Jergens . . . J91
T-Slot . . . J90-J91
Te-co . . . J90
Te-Co . . . J90
Tugger . . . J90
Undersized . . . J90
T-HANDLE HEX KEYS, SETS . . . F87-F89
T-NUT KITS . . . J97-J99
T-NUTS
English . . . J86-J88
Jergens . . . J86, J88
Kwik-Turn . . . J88
Metric . . . J86-J87
Quarter Turn . . . J88
Stainless . . . J86
Te-Co . . . J87-J88
T-SLOT BOLTS
Clamping Components . . . J91-J92
T-SLOT CUTTER INDEXABLE . . . B65
T-SLOT CUTTERS
Cobalt . . . A352-A353
T-SLOT STUDS
Metric . . . J83-J84
Te-Co . . . J83
TABLES
Palmgren . . . K65, K99
PRM . . . K66, K101
Work Benches . . . I51
TACHOMETERS . . . D136
TAGS
Lockout . . . H125
TAILSTOCKS . . . J174-175
TAP . . .
Drivers . . . A155 , J176, J184
Extensions . . . A227
Extractors . . . A226-A227
Guides . . . A155
Sets . . . A147, A149, A217
Wrenches . . . A224-A225
TAP & DIE SETS . . . A215-A217, A219
TAP & DRILL GAGE . . . D187
TAP & DRILL SETS . . . A217
TAP ADAPTERS
Parlec . . . J181
Rapidkut . . . J180
TAP HOLDERS
Tru-Grip . . . J179
TAP MAGIC, FLUIDS . . . G2, G4, G6
TAP STORAGE . . . I44-I46
TAP/DRILL INDEXES . . . A217, I44-I46
TAPE
Acrylic . . . H120
Adhesive Transfer . . . H120
Aisle . . . H119
Aluminum Foil . . . H120
Box Sealing . . . H118
Carton . . . H118
Caution . . . H119
Double Sided . . . H117-H120
Duct . . . H117
Electrical . . . H120
Filament . . . H118
Flatback . . . H117
Glass Cloth . . . H120
Hazard . . . H119
Identification . . . H119
Masking . . . H117
Non-skid . . . H120
Painters . . . H117
Removable Transfer . . . H120
Safety . . . H117-H120
Sealant . . . H118-H119
Skid . . . H120
Strapping . . . H119
Stretch . . . H118-H119
Stretchable . . . H118-H119
Tape Dispensers . . . H118-H119
Urethane Foam . . . H120
TAPE MEASURES . . . D156, D158-D163
TAPER ADAPTERS
Adjustable Adapter Assemblies . . . J184
Briney . . . J222
CAT-V Flange Blank Bars . . . J225
Drill Drifts . . . J160
ETM . . . J222
Extension Sockets Jacobs . . . J160
Extension Sockets Long . . . J160
Extension Sockets Morse Taper . . . J160
Morse Taper Drill Sleeves . . . J160
Parlec . . . J222
Precision Test Bars . . . J225
R8 to MT Adapters . . . J164
Rapidhold . . . J222
Rough Sockets . . . J161
Solid Sockets . . . J161
Split Sleeve Drill Drivers . . . J161
Techniks . . . J222
TAPER FILES . . . F174, F176
TAPER LENGTH DRILLS
Carbide Tipped . . . A59
Cobalt . . . A39
Heavy Duty . . . A37
High Speed Steel . . . A34-A38
Metric . . . A38
Morse Cutting Tools . . . A34-A36, A39
Parabolic Flute . . . A37
Precision Twist Drill . . . A6, A34-A37, A39
Sets . . . A6
TiN Coated . . . A37
TAPER PIN REAMERS . . . A135-A136
TAPER SHANK DRILLS
Carbide Tipped . . . A59
Cobalt . . . A55
Coolant Fed . . . A57
Core . . . A56
Extra Long . . . A53-A54
High Speed Steel . . . A53-A54, A56-A57
Metric . . . A55-A56
Morse Cutting Tools . . . A49-A50
Oil Hole . . . A57
Precision Twist Drill . . . A49-A50
Sets . . . A6
Stub Length . . . A55
TAPERED BORE GAGES . . . D200
TAPERED END MILLS . . . A255
TAPERED REAMERS . . . A136-A137
TAPMATIC
RX Tapping Heads . . . J177
TAPPING ATTACHMENTS
CAT, ER . . . J177
TAPPING CHUCKS
Tru-Grip . . . J179
TAPPING FLUIDS . . . C93, G2, G4-G14, G19, G25-G26, G30-G32, G40-G42, G49
TAPPING HEADS . . . J177
TAPPING MACHINES
Ellis . . . K20
PRM/Cyclematic . . . K20
TAPS
Acme . . . A173, A176
Assembly Spiral Point . . . A164
British Standard Pipe . . . A174
Cleanout . . . A154
Cobalt . . . A209
Combined Drills & Taps . . . A164
Coolant Thru . . . A195, A200, A205, A207-A208
Extension Type . . . A171-A172, A177, A201-A202, A205-A207
Fast Spiral . . . A162-A163, A167-A168, A171, A176-A177, A185-A186, A191-A192, A195, A199-A203, A205-A208, A210-A211
For Aluminum . . . A162-A163, A191, A202-A203, A208, A210-A211
For Cast Iron . . . A165-A166, A177, A204-A205
For Stainless Steel . . . A184-A187, A191-A192, A195, A199-A203, A205-A208
Hand . . . A146-A157, A161-A162, A164-A168, A203-A204
High Performance . . . A149, A152-A153, A158, A161, A176-A181, A183-A187, A191-A211
Left Hand . . . A165-A166
Metric . . . A155-A157, A161-A164, A167-A168, A170, A172, A179, A182, A186-A187, A191-A192, A195, A199-A200, A202-A205, A207-A208, A210-A211
Morse Cutting Tools . . . A149-A152, A154, A157, A159-A162, A165, A175, A177, A187, A191-A192, A194, A211
OSG . . . A149-A151, A157, A159-A163, A166, A169-A170, A175-A177, A193-A195, A199-A208, A210-A211
Oversize . . . A165-167, 192
Pipe . . . A173-A177
Premier HP . . . A176, A186
Pulley . . . A171-A172
Rapidkut . . . A146-A149, A154-A159, A161, A164, A173-A174, A176, A178-A182, A184-A185, A188-A189
Reiff & Nestor . . . A167-A168, A172, A174
Roll Form . . . A164, A210-A211
Screw Thread Insert (STI) . . . A167-A170
Sets . . . A147, A149, A152, A217
Sheartap . . . A192
Slow Spiral . . . A162-A163
Small Shank . . . A173
Special Thread . . . A164
Spiral Flute . . . A161-A163, A167-A168, A171, A176-A177, A180-A183, A186, A190-A203, A205-A208, A210-A211

How to use this index
LIGHTED SAFETY GLASSES . . . H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Spiral Point . . . . . A154-A155, A157-A162, ... A164-A169, A171-A172, A178-A180, A184, ... A186-A187, A192-A193, A195, ... A198-A203, A205-A208
Thread Forming A164, A209-A211
X-Press Fluteless A164, A210-A211
TARPS I67
TE-CO
52 Pc Machinist Clamping Set J98
Ball Plungers J79-J82
Basic Clamp Kits J89
Clamping Components J85-J88, J95-J96
Coupling Nuts J86
Gage Balls D125
Hand Wheel J95
Handles J95
Hardened Flat Washers J32
Heavy Duty Double Action Edge Clamps J90
Heavy Duty Undersized Head T-Slot Bolts J90
Levers J95-J96
Machinist Clamping Sets J98
Plain Clamps J89
Pull Rings J95
Serrated End Clamps J89
Single Station Vises J135
Spherical Washer Assemblies J32
Spring Plungers J80-J82
Steel Step Block & Clamp Sets J89
Step Blocks J88
Studs J83, J96
Super Clamp Sets with Steel Blocks J97
T-Nut and Stud Sets J97
T-Nuts J87-J88
T-Slot Cleaner J97
Toggle Pads J85
Gage Balls D125
Tugger T-Bolts J90
TECHNIKS
Boring Kits J187
BT End Mill Holders J216-J217
C6 Turning Tools J226
Capto J226
CAT End Mill Holders J217-J219
CAT40 Milling Chucks J227
CAT50 Milling Chuchks J227
CAT50 Milling Chucks J227
CG Style J226
Collet Chucks J226
Collet Holders J191-J194
DA Style Collets J190
End Mill Holders J226
ER Collet Sets J202
ER Power Coat Coolant Nuts J213
ER Sealed Collets J207-J210
ER Spring Collets J196-J198
ER Style J226
ER System Coolant Rings J214
Face Mill Arbors J226
Magnetic Lifters J120
Magnets J120
Milling Chuck Sleeves J227
Shell Mill Holders J223-J224
SlimFit Holders J226
Spreader Bars J120
Taper Adapters J222
TG Style Collets J189
Long Reach Retriever J116
TECLOCK
Dial Indicators D42
TEFLON TAPE H119
TEKTON
Pro Heavy Duty C-Clamps J104
Tarps I67
Adjustable Wrenches, Sets F13, F15
Alignment Punches F146
Ball Drivers, Hex Keys F84-F85
Balldriver Fold-Ups F90
Bolt Cutters F27
Brass Hammers F133
Center Punches F143
Chisels F138
Crowfoot Wrenches F5
Deadblow Hammers F128
Diagonal Cutters F23
Drilling Hammers F129
Extension Sets F61
Extensions, Wobble F67
Flare Nut Wrenches F4
Groove Joint Pliers F30
Hammers F130, F132-F133
Hex Bit Sockets, Sets F109
Hook & Pick Sets F137
Impact Flip Sockets F69
Impact Screwdriver F110
Impact Socket Adapters F76
Impact Sockets F68, F76
Inserts & Drive Bits F99
Jeweler's Screwdriver Sets F118
Lights H67
Linesman Pliers F33
Locking Pliers F20
Mallets F128
Mini-Plier Sets F35
Needle Nose Pliers F24, F26
Offset Pliers F23
Precision Screwdriver Sets F118
Pry Bars F64, F135-F136
Puller Sets F168
Punch & Chisel Sets F140
Ratchets F67
Screwdrivers, Sets F103, F117-F118, F121, F124
Sheet Metal Pliers F20
Sledge Hammers F129
Sockets, Sets F50, F60, F62
Stamp Sets F150
Star Driver Bits, Sets F94
Star Drivers F91
Tech Rescue Kit F117
Torque Wrenches F78
Universal Joints F63
Welding Pliers F20
Wrenches, Sets F2, F3
TELESCOPING GAGES D189
TELESCOPING MAGNETIC PICK-UP TOOLS D169-D170
TEMPERATURE TESTING D137-D138
TENNSMITH, SHEET METAL MACHINES K46-K47, K49-K51
Stands K45
TENSION AND COMPRESSION TAP HOLDERS
Parlec J181
TENSION METER, BANDSAW BLADE E78
TENSOR
Desk Lamps H78-H79
Magnetic Lamps H81
Safety Shields H88
TERMINALS J7
TESA
Digital Indicators D48
Electronic Height Gages D93
TEST INDICATORS D50-D51, D56, D58
TESTERS
Continuity Testers D137-D140
Hardness D109-D113
Multi Testers D139-D140
TETHERED TOOLS F184-F186
TG COLLET HOLDERS
Collet Chucks J188
TG STYLE COLLETS
Collets J189
THERMOMETERS D137-D138
THICK METRIC FLAT WASHERS
Clamping Components J32
THICKNESS GAGES
Dial & Electronic D103
Feeler Gages, Assortment D195, J43
Holder J42
Plastic Thickness Gage J44
Procheck D103
Starrett J42
THIN ANGLES & PAIRS D181
THIN SINE BAR D181
THOMAS & BETTS
Cable Ties J11
Electrical Connectors J6-J8
THREAD CUTTING OIL G2, G5-G8, G13, G41
THREAD FILES A219
THREAD GAGING
Acme Pitch Gages D201-D202
Center Gages D200, D202
Pipe, Plug & Ring Gages D196-D199
Quick Check Screw Gages D188
Screw Pitch Gages D201-D202
Thread Anvil For Micrometers D15, D202
Triangle Micrometer Attachment D202
Wire Sets D196
THREAD MICROMETERS D10-D12
THREAD MILLS . . . . . A212-A214 , B115
THREAD RELIEF TOOLS B114
THREAD REPAIR
HeliCoil A221-A222
Recoil A223
THREAD RESTORER FILES
Thread Restorer F180
THREADED ROD
Metric J35
THREADED ROD RACKS I38
THREAD TRIANGLES D202
THREADING
Carmex A214, B101-B102, B119
Dorian B97-B98
Micro 100 . . . . . A212-A213, B115
Nikcole B99
Pro-Cut Inserts B94, B96
Tool-Flo B83-B85
Tungaloy IMC90-IMC91
Vardex B106
Vargus B103-B107
THREADING AND GROOVING BARS
Ultra-Dex B53
THREADING DIES A215-A220, J153
THREADING INSERTS, INDEXABLE CARBIDE
Iscar IMC38-IMC39
THREADLOCKERS
Vibra-Tite G52
THREE-FLUTE MICROMETERS D11
THREE SQUARE FILES F175, F177
THRU HOLE DEBURRING BRUSHES C149-151
TIE DOWNS
Buckle Tie Downs I66
Bungee Strap I67
Ratchet I66
TIGHTENING FIXTURES J238
TILT FRAME SAWS K37-K38
TILTING TABLES I77
TILTING TABLES-ADJUSTABLE ANGLE PLATES
Milling & Rotary Tables J173
TIMERS D141
TIN SNIPS F29
TIRE PRESSURE CHUCK & GAGES E55
TIRE TREAD WEAR DEPTH GAGE D25
TITAN
Automotive Syringe G37
Backscratcher Magnetic Pick-Up H34
Bit and Driver Set F103
Brake Fluid Bleeder G37
Digital Torque Adapters F82
Finger Driver F103
Flashlights H56, H60
Folding Knives F42
Hook & Pick Sets F137
Hose Clamp Driver F62
Impact Star Socket Bit Set F94
Inspectors Lights H55
Master Tool Bit Sets F104
Mini-Ratchets F67
Pen Lights H55
Pipe Cutters F156
Pliers/Crimper F25, F40
Ratcheting Driver F116-F117
Screw Extractors F111
Screwdriver Set F103
Security Bit Sets F104
Socket Adapters F62
Socket Adapters Set F76
Socket Driver Accessory F62
Spark Plug Crimper F15
Syringe G37
Welding Helmets H97

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Welding Helmets Replacement Shields H98
Wobbler Adapters Set F76
TMX . . . . . .
3-Jaw Closed Center Direct Mount Power Chucks J302
3-Jaw Direct Mount Power Chuck J302
3-Jaw Extra Large Hole Direct Mount Power Chuck J302
3-Jaw Semi Steel Solid Jaw. J287
4-Jaw Forged Steel Independent Lathe Chucks. J284
4-Jaw Forged Steel Plain Back J284
4-Jaw Independent Chucks Direct Mount Type A. J286
4-Jaw Medium Duty - Plain Back Chucks. J283
4-Jaw Plain Back Scroll Chucks. J283
Adjustable Live Center. J258
Back Plates/Adapters. J294-J295
Bull Nose Live Centers. J263
Dead Centers. J254
Face Drivers. J263
Hard Master Jaws J297
Hard Top Jaws J297
Live Centers. J258
No Quad-Bearing Live Centers J258
Pipe Live Centers. J263
Precision Live Centers J258
Rotating Body. J263
Slim Casing Live Centers. J258
Soft Top Jaws. J296
TOGGLE CLAMP ACCESSORIES
Bessey J73
De-Sta-Co J73-J75
Rapidhold. J73-J75
U-Bolt Spindle Accessories J75
TOGGLE CLAMPS
Bessey J64
De-Sta-Co J64-J73
Horizontal. J68-J69, J76
Horizontal Pull Action Hook J70, 72
Horizontal Pull Action Latch J70
Latch J76
Push/Pull Toggle J71, J76
Rapidhold. J66, J68
Vertical J66, 76
Vertical Pull Action Latch J70, 72
TOGGLE PADS J85
TOILET PAPER H116
TONGUE & GROOVE PLIERS, SETS F30-F32
TOOL & CUTTER GRINDERS
Darex K66-K67
TOOL BAGS
Ergodyne I18-I19
PRM PRO I18
Proto. I18-I19
TOOL BALANCERS E52, E55
TOOL BENCHES. I51, I53
Kennedy. I55-I56
TOOL BIT SQUARE
Cobalt. B130
High Speed Steel. B130
TOOL BITS
Box Turning B126
Brazed Cut-Off B126
Brazed Turning Tools B120-B125
Cobalt. B130
Concave Radius Tools B126
Convex Radius Tools B126
High Speed Steel. B130
Internal Threading B127
Micro 100 . . . . . B120-B122, B126-B127
Radius Tools. B127
Rapidkut. B120-B122
Tool Bits B120-B122, B125
TOOL BITS RECTANGULAR
Cobalt. B130
High Speed Steel. B130
Super Cobalt B130
TOOL BITS SQUARE
Cobalt. B130
High Speed Steel. B130
Super Cobalt B130
TOOL BOX COMBOS
Waterloo. I4-I5, I8
TOOL BOX MOUNT AIR HOSE REELS E50
TOOL BOXES
Accessories I7, I12- I13
Cabinets. I6-I7, I9, I11
Carts. I9, I11
Caster Sets I13
Chests I2-I3, I9
Dividers I12
Drawer Liners. I12
Edsal I51
Hand Carry. I16-I17
Hang-On. I7
Kennedy. I2-I3, I6-I7, I9, I11, I13, I16- I17
Locks I12-I13
Organizers I12-I13
Proto. I16-I17, I20
Slides I12
Snap-On Williams I16-I17, I20
Socket I20
Tubular Handle For Cabinets. I13
Waterloo. I4-I5, I8, I17, I19, I51
TOOL CABINETS
Kennedy. I6-I7, I9, I11
Waterloo. I8
TOOL CHESTS
Kennedy. I2-I3, I6, I9-I10
Waterloo. I4-I5, I8
TOOL HOLDERS
Turning. IMC15, IMC87-IMC89
TOOL HOLDER BUSHINGS
CNC Toolholder Bushings J252
Dorian. B22-B32, B42-B44, B76-B77, B97
Magic Chucks. J184
Rapidkut. B20-B21, B72, B93
Turning B20-B21, B53, B72, B93, B129
TOOL OIL
Air. E13, E48
Instrument D15, G42
Machine/Way G13, G31, G33, G41
TOOL POST GRINDERS
Dumore J250-J251
TOOL POST GRINDING WHEELS C21, C49
TOOL POSTS & HOLDERS
Indexing Standard Sets J243
Quick Change Holders. J240-J241
Quick Change Posts J243
Tool Posts, Sets J239-J240, 242
Wedge Lock Tool Holders J244
Wedge Lock Tool Posts J244
TOOL PRESETTERS
Haimer J235
TOOL RACKS I48
TOOL ROOM GRINDING WHEELS C3-C7, C10-C11, C13-C15, C22-C23
TOOL ROOM STICKS C70
TOOL SETS. F42-F46
TOOL SHARPENERS K66
TOOL TABLES
Lift Table. I77
TOOL WRAPS AND SLEEVING
Industrial. A163
Tool Wraps J54
TOOL-FLO
API Inserts B92
Carbide Grooving Inserts. B78-B82
Carbide Threading Inserts B83
Chasers and Chip Breakers. B90-B91
Grooving Tools External Holder. B81, B83, B85
Grooving Tools Internal Holders. B84-B85
Laydown Inserts. B86
Scarfing Inserts B89
TOOLING BALLS D125-D126
TOOLMAKERS INK. G57-G59
Markers G59-G60
TOOLMEX
3 Pc. Solid Jaw Sets J299
4-Jaw Independent Extra Heavy Duty Lathe Chuck. J300
TOOLROOM LATHES
Acer K16
Kent K10, K13, K15
PRM. K9
Summit. K11-K14
TORK
Bath Tissue H116
Cleaning Cloths H114-H115
Dispensers. H116
Hand Towels. H115
Towel Roll. H116
TORPEDO LEVELS. D164
TORQUE CONTROL TOOLS F82-F83
TORQUE WRENCHES F78-F81
TORX PLUS®
Keys, Sets F93
T-Handles, Sets F93
Wing Drivers. F93
TORX, STAR DRIVE TOOLS
Torx® F118
TORX®
Bit Sets. F94, F96
Control Drive Tools. F82-F83
Flag Drivers, Sets. F92
Fold-Ups. F91
Keys, Sets F91-F92
Screwdrivers, Sets. F93, F124
Socket Sets F94, F96, F106
T-Handles, Sets F92
Wing Handles, Sets F91
TOTALIZERS D168
TOTES I42-I43
TOWELS H114
Cooling. H34
Shop. H115
TPI FANS & HEATERS
Ceramic H72
TRADE-MASTER BANDSAWS. K24
TRAILER JACKS. I68
TRAMMELS & POINTS D191-D192
TRANSFER GAGES D78, D90
TRANSFER PUNCH SETS F148
TRANSFER SCREWS
Tri-Wing®. F149
TRASH CONTAINERS. H108-H109
TRAVEL GUARDS. H87
TRAYS Drum . . . . . .I33, I39-I41, I43 , I80
TRI SQUARES. D156
TRICO MFG
Coolant. G9, G26
Cyclic Pumps G38
Lubricants. G26
Lubricators G16
Misting Systems. G19, G24
Oilers G16, G38
TRIGA-BORE (BORE GAGES). D98
TRIM-KUT DISCS
Quick-Change Discs, Holders C114
TRINCO
Abrasive Media, Parts Accessories K98
Dry Blast Units K95-K97
TROLLEY CARTS
Huot I48-I49
Rapidhold. I49
TROLLEYS I76
TRU-GRIP
Tap Holders J179
Tapping Chucks J179
TRUCKS
Drum I79, I82
Pallet I62
Tilting Drum I79
TUBE BENDERS
Heck. K44
TUBE BRUSHES. C152-C153, C158, C161
Nylon Filament Brushes, Adapters. C149-C151, C163
TUBE END CHAMFERING MILLS A122
TUBE END DEBURRING CUTTERS A123
TUBE END FORMING CUTTERS. A121
TUBE MICROMETERS D11
TUGGER T-BOLTS
Te-Co J90
TUMBLERS, DEBURRING K92-K94
TUNGALOY
Carbide Drilling Inserts. IMC92
Carbide Grooving Inserts. IMC90
Carbide Milling Inserts IMC86, IMC96
Chamfering Mills IMC94

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Cut-Off/Grooving IMC84-IMC85, IMC92-IMC93
Drills, High Performance IMC91
Indexable Cut-Off Blocks IMC93
Indexable End Mills IMC94-IMC96
Indexable Face Mills IMC95-IMC96
Indexable Spare Parts IMC2
Parting and Grooving Holders IMC91
Parting and Grooving Inserts . . . IMC85, IMC89-IMC90, ... IMC92
Threading Inserts IMC90
Threading Toolholders IMC91
Tool Holders IMC87-IMC89
Turning Inserts IMC81-IMC84
Turning Tool Holders IMC87-IMC89
TURNBUCKLE ASSEMBLIES J38
TURNING HOLDERS INDEXABLE
Dorian. B22-B32, B42-B44, B76-B77
Ingersoll IMC63
Iscar IMC10
Sets B20-B21, B24, B27-B33, B43
Pro-Cut. B11-B19, B93
Rapidkut. B20-B21, B32, B72
TURNING INSERTS, INDEXABLE CARBIDE . . . . . .
Ingersoll IMC65-IMC76
Iscar IMC29-IMC35
Rapidkut. B5-B10, B36
Tungaloy IMC81-IMC84
TWEEZERS F114
TWO STAGE AIR COMPRESSORS
Dewalt K89, K91
Industrial Air K89, K91
Ingersoll Rand K90, K92
Puma K90
ULTIMATE BLOW GUN KIT E43
ULTRA HEAT HEAT GUNS & BLOWERS E2
ULTRA PRECISION COLLETS, SETS
Parlec. J203-J205
Rapidkut. J203-J205, 207
Rego-Fix. J203-J205, 207
ULTRA-DEX
Carbide Boring Inserts B57
Indexable Boring Bars B50-B58
Indexable Drills. B66
Indexable Turning Tool Holders B23, 31
Swiss Machine Holders B23
Threading and Grooving Bars B53
ULTRA THIN PARALLELS
Parallels, Sets D183
UNIBIT (STEP DRILLS). A126
UNISORB MACHINERY MOUNTS K102
UNIST
Fluids G26
Lubercation Systems G27
MQL Applicators. G27
UNITED ABRASIVES
Hub & Cut-Off Wheels C55, C62
UNIVERSAL GRINDING GAGE D200
UNIVERSAL JOINTS. F63
UNIVERSAL MICROMETER D17
UNIVERSAL TOOL
Belt Sanders. E16
Drills E3-E4
Impact Wrenches, Ratchets. E37-E38
UTILITY BLADES F162
UTILITY CARTS
Akro-Mils I52
Dewalt I51
Durham I15, I32, I50, I54
Edsal I52, I54
PRM PRO I53
Rubbermaid I54
Snap-On Industrial Brands-Williams I53
UTILITY KNIVES F158-F159, F162
UVEX
Faceshields H14
Goggles H43-H47
Safety Glasses. H4-H8, H12-H13
V-ANVIL MICROMETERS D11
V-BLOCKS
All-Angle. D177
Ball Bearing D184
Cast Iron. D177-D178
Magnetic. D179
Micro Riser. D176
Mini-Vee-Blocks D177
Steel. D175-D179, D181, D184
Suburban D178
Suburban Tool J150
V-Angle Blocks. D181
V-FLANGE MORSE TAPER ADAPTERS
Briney. J222
ETM J222
Parlec. J222
Rapidhold. J222
Techniks. J222
VACUUMS
DeWalt H62110
Filters H112
Shop-Vac H110-H112
Wet/Dry H110-H112
VALTRA
Clamping Components. J92-J93
Double Cams J92
Eye Bolts J92
Hand Wheel J93
Handles J93
Jiglatch Swing Bolts. J92
Tooling Balls. D125
VARDEX Thread Mills B106
VARGUS
Indexable Spare Parts B107
Threading Inserts B103-B107
Threading Tools B103, B105
VARI-ARBOR. A363
VARIABLE SPEED MILLS K4-K5
VAUGHAN
Ball Pein Hammers F131
Claw Hammers. F132
Pry Bars F136
Rubber Mallet. F127
VERMONT GAGE, GAGE PINS & SETS. D117-D118
VERNIER
Calipers D32, D36-D3
Depth Gages D26-D27
Height Gages. D89
VERNON BURR-BIT, CHAM-BIT & COUNTER-BIT. A105
VERTEX
Adjustable Tailstocks J174
Horizontal/Vertical Rotary Tables J173
Indexers, Super Spacers J173-J175
VERTICAL BANDSAWS
Dake. K24
Marvel K24
PRM K23
Roll-In. K24
Wellsaw K24
VERTICAL MILLING MACHINES
Acer K5-K7
Bridgeport. K4
PRM K3-K4
Summit. K6-K7
VERMONT GAGE, GAGE PINS & SETS D117-D118
VESTIL
Bar Cradles I78
Chairs and Stools. I58
Drum Handling Equipment. I79, I81-I82
Ergo Work Stools I58
Gantry Cranes I67
Hand Trucks. I60-I61
Hoppers I77
Jacks I68
Pallet Trucks. I63
Panel Carts I52
Platform Truck I52
Post Tables. I77
Reel Racks. I78
Scissor Lift Table I77
Sheet Racks. I78
Stands I76
Step Stands I76
Storage Racks I78
Tilting Drum I79
Work Tables I77
VESTS, GLOW SAFETY H27
VIBRA-TITE
Threadlockers G52, G53
VIBRATION METER D136
VIBRATION ISOLATION MOUNTS K101-K102
VIBRATORY BOWL FINISHERS. K92-K94
VIDEO SCOPES, CAMERAS D133-D134
VISE
All Weather Outdoor. J124
VISE ACCESSORIES
AngLock J139
Clamp Kit J145
Dovetail Cutters J145
Dovetail Fixture J143-J144
Dovetail Pinch Block J145
Jaw Kits J139
Jaw Plate & Parallel Set. J140
Jaw Plates J140
Locating Pins J145
Parallel Keepers. J141
Parallel Sets. J140
Raptor J143-J145
Riser Base Kit J137
Risers. J142
Sine Keys. J139
Sine Parallel. J140
Speed Handles. J141, J146
Step Key. J139
V-Block Attachment for Cam Action Drill Vise. J127
Vise Jaw Caps J125
Vise Jaw Pads J125
Vise Jaws. J125
Vise Mounting Kit. J146
Work Stops. J141 J145
VISE TOWERS
Kurt Mfg J142
VISE-GRIP
Combination Plier Sets. F34
Diagonal Cutters F23
End Cutters F33
Full Flush Angled End Pliers F21
Linesman Pliers F21, F33
Locking Pliers. F18, F20-F21
Sheet Metal Pliers F18
Tongue & Groove Pliers. F30, F32, F34
VISES
2-Way Angle. J132
3-Way Angle. J132
5-Axis. J142
Air. J170
Angle J132-J133
AngLock. J138-J139
ATV All-Terrain J123
Band Saw. J128
Bench. J123-J124
Bench/Pipe. J124
CNC Machine. J134
Cross Slide. J132-J133
Double Station J136
Drill Press. J126-J127, J129-J131, J133
Drill Press Vises. . . . . J126-J127, ... J129-J131, J133
Dual Force J136
DX6 CrossOver J138
General Purpose J123
Grip Master Fixture Locks J128
Kurt Mfg J137
Light Duty Clamp On J131
Low Profile Drill Press J131
Machine . . . . . J124, J127 J, 134-J135
Machine Vise J127, J142
MaxLock. J142
Mechanic's J123
Mechanical Booster J136
Milling. J132
Multi Purpose. J124
Multi Purpose Jaw J125
Precision J128-J129
Precision Milling Machine. J135
Quick Action. J126
Quick Release Drill Press J126
Rapidhold. J126-J127, J131
Rohm J136-J137
Safety. J123
Self-Centering J136-J137
Shop. J123

Sidewinder J140
Sine J129
Single Station J135
Tilting Machine J132
Toolholder J238
Toolmakers J128
Tradesman J123
Utility Workshop J123
Vacuum Base J131
Workshop J131
VISITOR SPECS H3
VISOR GUARDS
Milling Spindle Guard H87
VISOR LIGHTS D172
VIXEN FILES F174
VOLTAGE TESTERS D139-D140
W.F. WELLS BANDSAWS
Horizontal K28, K30, K38-K39
Horizontal, Automatic and CNC K30, K38-K39
WALL STORAGE CABINET
Huot I48
WALTER SURFACE TECH
Cut-Off Wheels C54, C57
Flap Discs C99
WALTON
Tap Extensions A227
Tap Extractors A226-A227
Screw Extractors F113
WASHERS
Alloy Super Strength J30
Beveled J30
Brass Extra Thick J31
C J30
Case Hardened J30
Flat J31
Hardened J30, J32
Hardened Heavy Duty J32
Heavy Duty J32
Lock J33
Metric Flat J31
Metric Lock J33
S.A.E. J31
Spherical J32
Square J30
Stainless Steel Extra Thick J31
Stainless Steel Flat J31
Steel Spacing J30
Thick J31-J32
USS J31
Cabinets I11, I23
WASTE CAN LINERS H108
WASTE CONTAINERS H107-H108
Dolly H109
WATER ALARM D136
WATERLOO
Drawer Liners I2
Lockers I11
Tool Box Organizers I12
Tool Boxes I4-I5, I8, I12, I17, I19, I51
Tool Boxes, Accessories I12
Tool Chests I8
Work Benches I23, I51, I55
WATTS & LIBERTY
Bull Nose Live Centers J269
WAVY PARALLEL SET D183
WAX, MACHINABLE D128
WAY COVERS K103
WAY OIL G41
WCMT B57, B66
WD-40
Grease G32-G33
Lithium Grease G31
Lubricants G40
Penetrant G31, G42
WEARWELL FLOOR MATS H83, H85-H86
WEBBER GAGE BLOCKS D122
WEDGIE SHIMS J44
WEIGHING DEVICES & SCALES D105
WELD COMPOUND G55
WEILER
Abrasive Nylon Filament Brushes C163
Angle Grinder Adapters C155
Brass Wire Wheels C161
Bronze Wire Wheels C161
Brooms H104-H106
Brushes H105-H106
Burr-RX Disc Brush Drive Arbor C164
Burr-RX Heavy Duty Narrow Face Wheels C164
Burr-RX Small Hub Wheels C164
Burr-RX Tube Brushes C163
Chop Saws C54
Cleaning Brush C160
Combo Wheels C57
Cut-Off Wheels C56-C58, C65
Flap Discs C104, C114-C115
Grinding Wheels C54, C56-C57, C65
Hub Wheels C164
Narrow Face Hub Wheels C164
Non-Sparking Wire Wheels C161
Quick-Change Flap Discs C104
Reducer Bushings C156
Roughneck Combo Wheels C57
Roughneck Wheels C57
Shell Mill Holder Disc Brushes C164
Snagging Wheels C65
Stringer Bead Weld Cleaning Brushes C160
Tiger Chop Saws C54
Tiger Combo Wheels C57
Tiger Cut-Off Wheels C56
Tiger Cutting Wheels C56
Tiger Grinding Wheels C65
Tiger Inox Wheels C56, C65
Tiger X Flap Disc Brush C104
Tube Brushes C152
Ultracut True Wheels C56
Wire Wheels, Brushes C152, C154-C157, C160-C161
Wolverine Flap Discs C104
Wolvering Snagging Wheels C65
WELDING CLAMPS
Bessey J109-J110
Wilton J109
WELDING MAGNETS J118-J119
WELDING PRODUCTS
Apron H33
Blanket H96
Brazing H96-H99
Butane Heat Tools H98
Clamps F18, F20
Compound G55
Curtain, Curtain Supplies H96
Electrodes H95
Gloves H45-H46, H49-H50, H53-H54
Helmets H96-H97
Jackets H96
JB Weld G55
Kits H98
Lighter Kit H98
Magnetic Soldering Clamp H98
Matting H99
Mig tips H91-H92
Nozzles H90
Regulators H94
Rod H89
Safety Glasses H3, H6
Safety Mats H99
Screens H96
Sleeves H99
Soft Flame Kits H98
Soldering H98
Soldering Stations H98
Soldering Tools H98
Steiner Products H96
Tig Accessories H93
Tig Torches H89
Torch and tips H94
Torches H98
Wire H95
WELDON
Countersink & Deburring Tools A113
WELLER
Solder Kits H98
WELLSAW
Horizontal Bandsaws K27-K28, K30-K32, K35
Miter Cutting K32
Semi-Automatic K35
Vertical K25
WELLS LAMONT
Gloves H37-H41, H45-H52, H54
Sleeves H54
WENDT
Cartridge Rolls, Mandrels C168
Flap Bands C105
Flap Discs C168
Flap Rolls C167
Interleaf Flap Wheels C139
Mini Flap Wheels C168
Mounted Flap Wheel Brushes C168
Mounted Flap Wheels C105, C168
Non Woven Flap Wheels C139
Threaded Flap Wheels C105
Unmounted Flap Wheels C168
Wheel Arbor C167
WESCO
Deheaders I81
Drum Handling Equipment I79, I81-I82
Drum Trucks I61
Drum Wrenches I82
Hand Trucks I60-I61
Hydraulic Stacker I62
Pallet Trucks I62
Platform Trucks I52
Pumps G17, G19
WESTCHESTER
Coveralls-Disposable H33
Gloves H37-H39, H47, H49-H52
WET/DRY ABRASIVE SHEETS C96-C97
WET/DRY SHEETS C85
WHEEL ADAPTERS, BUSHINGS C106
Sopko C7
Wendt C168
WHEEL CASTERS I14
WHEEL CHOCKS H30
WHEEL DRESSERS
Abrasive Sticks C36
Desmond C33, C37
Diamond C33-C34
Sine, Matco Type C32, C37
WHEELS
Burr-RX Disc Brush Drive Arbor C164
Burr-RX Heavy Duty Narrow Face C164
Burr-RX Small Hub C164
WHETSTONES
Sharpening Stones C67
WHIP HOSES, COILHOSE PNEUMATIC E54
WHITE BOARDS
PRM PRO I50
WHITE TOOL ROOM WHEELS C3-C6, C22
WHITNEY TOOL
Dovetail Cutters A355
Drill Extensions A104
Keyseat Cutters A350-A351
Shank Cutters A352, A354
T-Slot Cutters A352
Tap Extensions A227
WIDIA
End Mills A283, A307, A311-A312, A320, A327-A329, A338, A343
Taps A152-A153, A158, A161, A177, A196-A198, A203-A204, A207, A211, A312
WIGGLER SETS **D205**
WIHA
Coolant Systems G23
Ball End Drivers F84-F85
Balldriver Fold-Ups F90
BitFlip Screw Drivers F117
Deadblow Hammers F126
Electricians Knives F39
Electricians Tools, Sets F39, F41
End Cutters F33
ESD Cutters F42
Flat Nose Pliers F26
Groove Locking Pliers F31
Hammers F126
Hex Bit Sockets, Sets F109-F110
Hex Key Sets F84-F85, F92, F94
Impact Torx Bits F96
Inserts & Drive Bits F96-F97, F100
Insulated Diagonal Cutter F39
Insulated Screwdriver Bit Sets F39
Insulated Tools F41

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery

Linesman Pliers F33, F42
Magnetic Bit Holders F99
Magnetic Bit Screw Drivers F39, F97, F117
Needle Nose Pliers F24, F26
Nut Drivers F125
Phillips Terminator Bits F97
Pliers F24, F33, F36-F37
Power Bits F96-F97
Precision Screwdrivers, Sets F118
Replacement Faces F126
Retaining Ring Pliers, Sets F36-F37
Screwdrivers F118
Screwdrivers, Sets F93, F118-F123
Security Torx Fold-Ups F91
Split Head Mallets F126
Square Terminator Bits F100
Square Insert Bits F100
Standard Blades F118
T-Handles, Sets F87, F89, F92-F93
Torque Control Tools F83
Torx Driver Bits, Sets F94
Torx Flag Drivers, Sets F92
Torx Fold-Ups F90-F91
Torx Keys, Sets F92
Torx Keys, Sets F91
Torx Plus Keys, Sets F93
Torx Plus T-Handles, Sets F93
Torx Plus Tools F83, F96
Torx Plus Wing Drivers, Sets F93
Torx Screwdrivers, Sets F93, F118
Torx T-Handles, Sets F91-F92
Torx Tools F91, F93
Torx Wing Drivers, Sets F91
TorxPlus Tools F83
Wrenches, Sets F2, F3

WILLIS
Lathes K18, K26

WILTON
540A Carriage C-Clamp Kit J107
All Weather Outdoor Vises J124
ATV-All Terrain Vises J123
Bench/Pipe Vises J124
C-Clamp Brute Force O Series J109
C-Clamp Spark Duty 400CS Hargrave Hi Vis J109
C-Clamp Spark Duty 400P Series J109
C-Clamps 400 Series J105
C-Clamps 400 Series Hi Vis Safety Yellow J106
C-Clamps 800 Series Standard Depth J104
C-Clamps Columbian 400 Series J106
Carriage C-Clamps J106
Cross Slide Vises J132-J133
Drill Press Vises J126, J129-J131, J133
F-Clamp Series Kit J107
F-Clamps J107, J109-J110
Machine Vises J124
Mechanic's Vises J123
Safety Vise J123
Series 50 Super Junior Clamps J104
Shop Vises J123
Tilting Machine Vises J132
Tradesman Vises J123
Utility Workshop Vises J123
Vise Jaw Caps J125
Welding Clamps J109
Sledge Hammer F130

WINTER WEAR
Balaclava H28
Gloves H46, H51

WIPER
Wall Mount Dispenser H116

WIPES H114-H116
WIRE BRUSHES, WHEELS C154-C159
WIRE GAGES **D188**

WIRE NUT ASSORTMENTS
Maintenance Kits J3

WIRE RACKS
Durham I32

WIRE STRIPPERS, PLIERS F34

WIRELESS
Measurement D88
Transmitter D88

WISS
Scissors F164
Shears F164
Snips F29
Utility Shears F164

WOBBLE BROACHES A366
WOBBLE SETS F67

WOOD/METAL BANDSAWS
Shop Fox K22

WOODRUFF KEY ASSORTMENTS
Maintenance Kits J6-J7

WOODRUFF KEYS J41
WOODRUFF KEYSEAT CUTTERS A349-A352

WOODS
Adapters H76
Circuit Interrupter H76
Extension Cords H75-H76
Surge Protectors H76

WOODWARD FAB K69

WOODWORKING EQUIPMENT
Bandsaws K22
Circular & Jig Saws E35
Powermatic K114
Sanders E14-E20, K70-K75, K77

WORK BENCHES I50
Edsal I56
Kennedy I55-I56
Waterloo I23, I51, I55

WORK CENTER I51

WORK LIGHTS
Bayco H67-H69
Cordless H67
Desk H77, H79-H80
Electrix H77-81
Flashlights H55-H60, H63, H67, H79
Flood H80
Floor H80
High Lumens H67
LED Spot H77, H79
Machine H77-H80
Machine Lamps H77-H78, H80-H81
Magnifier Lamps H81-H82
Magnifiers H81-H82
Portable H67-H68, H79
PRM Pro H78
Prolite H68
Rechargeable H60, H67
Steelman H66
Task H77-H79
Tripod H69
Tube H81

WORK STANDS I51, I76

WORK STATION AIR HOSE REELS . . . . . .
Air Couplers, Fittings, Hose, Reels E50-E51

WORK STATIONS & STANDS
Mobile H100

WORK STOPS J145, K105

WORKHOLDING
All Angle Blocks D177
Jack Screws D186
Machinist Jack D186
V-Blocks D175-D179, D181, D184

WORKSHOP
Sockets, Sets F48

WRECKING BARS F136

WRENCH
Drum I79

WRENCHES
Combination F7
Open End F9
Tap A224-A225

WRENCHES, SETS
Adjustable F13-F15
Angled F2
Box F9
Chain F156
Check Nut F9
Combination F2-F4, F6-F7
Crowfoot F5
Flare Nut F4
Jumbo F2
Metric F3-F4, F7
Oil Filter F17
Open End F3, F4
Pipe F154
Spanner C7, F16
Spud F14
Standard F2, F4, F6, F13-F14
Strap F156
Striking F16
Stubby F2, F3
Torque F78-F81
Torque Pre-Set F81

WRIGHT TOOL
1/2 Drive Deep Sockets F58
1/2 Drive Impact Sockets F72, F74
1/2 Drive Sockets F57, F59
1/4 Drive Deep Sockets F52
1/4 Drive Sockets F51
3/4 Drive Deep Sockets F60
3/4 Drive Impact Sockets F74
3/4 Drive Sockets F60
3/8 Drive Deep Sockets F54
3/8 Drive Impact Sockets F72
3/8 Drive Sockets F52-F53
3/8 Swivel Impact Sockets F74
Box Wrenches F9
Breaker Bars F64
Budd Wheel Sockets F76
Combination Wrenches F2-F3, F6-F7
Drive Adapters F63, F76
Extensions F61
Hex Bit Sockets, Sets F108-F110
Impact Drive Adapters F76
Impact Sockets, Sets F69, F72, F74
Metric Impact Sockets F72, F74
Metric Sockets, Sets F53, F59-F60
Ratchets F48, F66
Sliding T-Handles F64
Socket Adapters F63
Sockets, Sets F48, F50, F54, F72
Speed Handles F64
Universal Joints F63

WRIST SUPPORTS H32
WYLER SPIRIT LEVELS D167
X-TEST FOWLER INDICATORS D56
YOUNG BROTHERS STAMPS F150-F151

ZEBRA SKIMMERS
Coolant Cleaning G28-G29
Drum Mixers G28-G30
Oxgenator G30
Refractometer G30
Separators G28-G30
Skimmers G28-G30

ZERK
Grease Fittings G38

ZERO SETTERS
Edge Finders D203

ZERO-Z ER COLLET HOLDERS J194

ZIRCONIA ABRASIVES
Flap Discs C103

ZIRCONIA ALUMINUM ABRASIVES
Belts C89, C94
Cut-Off Wheels C48, C50, C52-C53
Flap Discs C101-C103
PSA Strips C85
PSA, Resin Fibre Discs C112
Quick-Change Discs C122-C126, C128
Resin Fibre Discs C111-C112, C126
Threading S43-S44

How to use this index
LIGHTED SAFETY GLASSES H10
This product — Is found in this section — On this page

SECTION PREFIX
A - Cutting Tools
B - Indexable Carbide
C - Abrasives
D - Measuring Tools
E - Power Tools
F - Hand Tools
G - Fluids
H - Plant & Safety
I - Material Handling
J - Workholding
K - Machinery